City of Louisville
COLORADO • SINCE 1878

City Council

AMENDED Agenda

Tuesday, June 16, 2026
Council Chambers
749 Main Street
5:00 PM

Members of the public are welcome to attend and give comments remotely. However, the in-person meeting may continue even if technology issues prevent remote participation.

- You can call in to +1 719 359 4580 or 877 853 5247 (toll free)
  Webinar ID #876 9127 0986.
- You can log in via your computer. Please visit the City's website to link to the meeting.

City Council considers written and oral comments equally. Email comments to the Council received after the packet is posted online and before 3pm the day of the meeting will be included in the Council addendum and provided to each Council member prior to the meeting. If you prefer to address Council in person, you may attend the meeting either in person or virtually.

1. **Call to Order & Roll Call**

2. **Pledge of Allegiance**

3. **Executive Session – Real Property Acquisitions and Dispositions**
   (Louisville Charter Section 5-2(c) and C.R.S. 24-6-402(4)(a)). The City Manager is Requesting the City Council Convene an Executive Session for the Purpose of Discussing Real Property Acquisitions and Dispositions Concerning Properties in Louisville Only as to Appraisals and Other Value Estimates and Strategy.

   Request for Executive Session
   City Clerk Statement
   City Attorney Statement of Authority
   City Council Action on Motion for Executive Session
   City Council Convenes Executive Session
   Council Reconvenes in Open Meeting

4. **Executive Session Report – Discussion / Direction / Action**

5. **Approval of Agenda**

6. Public Comments on Items Not on the Agenda and Items on the Consent Agenda

Public comments are limited to 3 minutes per speaker. When several people wish to speak on the same position on a given item, a spokesperson may be used to state that position.

7. Consent Agenda

The following items on the City Council Agenda are considered routine by the City Manager and shall be approved, adopted, accepted, etc., by motion of the City Council and voice vote unless the Mayor or a City Council person specifically requests an item be considered under “Regular Business.” In such an event the item shall be removed from the “Consent Agenda” and Council action taken separately on said item in the order appearing on the Agenda. Those items so approved under the heading “Consent Agenda” will appear in the Council Minutes in their proper order.

A. Resolution No. 54, Series 2026 — A Resolution Adopting Revised Financial Policies

B. Resolution No. 55, Series 2026 — A Resolution Approving a Design Task Order for the CTC Lift Station Improvement Project Phase 2

C. Resolution No. 56, Series 2026 — A Resolution Approving an Agreement with JVA, Inc. for Engineering Services for the WWTP Solids Handling Phase 2 Digester No. 3 Design

D. Resolution No. 57, Series 2026 — A Resolution Approving a Construction Contract with Materra, LLC for the Coal Creek Golf Course Pond Liner Replacement Project

8. Council Informational Comments and Committee Reports

9. City Manager’s Report

10. Regular Business

A. Resolution No. 58, Series 2026 - A Resolution Designating the Residence Located at 733 McKinley Avenue a Historic Landmark to be Named the Hilton House and Approving a Preservation and Restoration Grant

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

B. Ordinance No. 1927, Series 2026 — An Ordinance Amending Chapter 13.08 of the Louisville Municipal Code Concerning Metering of Water Usage in Mobile Home Parks — 2nd Reading, Public Hearing (advertised City of Louisville website 06/05/2026)

The Public Hearing will be held and 2 rounds of public comment will be taken, along with Council questions and discussion. Final action may be taken on this item.

C. Discussion / Direction / Action: Potential 2026 Ballot Measure - Historic Preservation Tax

Discussion / Direction / Action provides Council with the opportunity to learn about an item, ask questions, and take action. There will be one round of public comment. Final decisions may be made on this item.

D. Discussion / Direction / Action: Potential 2026 Ballot Measure - City Charter Amendments

Discussion / Direction / Action provides Council with the opportunity to learn about an item, ask questions, and take action. There will be one round of public comment. Final decisions may be made on this item.

E. Discussion / Direction / Action: Potential 2026 Ballot Measure - Lodging Tax

Discussion / Direction / Action provides Council with the opportunity to learn about an item, ask questions, and take action. There will be one round of public comment. Final decisions may be made on this item.

F. Discussion / Direction / Action: Request from the Town of Superior to File an Amicus Brief with the Colorado Supreme Court in Support of its Petition for Certiorari Review

Discussion / Direction provides Council with the opportunity to learn about an item, ask questions, and provide feedback to staff. There will be one round of public comment. A final decision may be made on this item.

11. City Attorney's Report

12. Upcoming Agenda Items and Identification of Future Agenda Items

13. Adjourn

Upcoming Agenda Items
July 14 Special Meeting

This list is not inclusive; items are subject to change; additional items may be added.

- Presentation: Superior Remembrance Project
- Joint Meeting with Historic Preservation Commission and Historic Museum Advisory Board — Historic Preservation Tax
- Potential Ballot Questions — 1st Reading
- Upcoming Agenda Items and Identification of New Ones - July 15 to October 31

Resident Information

If you wish to speak at the City Council meeting in person, please fill out a sign-up card and present it to the City Clerk at the meeting. If you are attending remotely, please use the "raise hand" icon to show you wish to speak in appropriate public comments section.

Persons planning to attend the meeting who need sign language interpretation, translation services, assisted listening systems, Braille, taped material, or other accommodation should email the City Clerk's Office or call 303.335.4574.

A 2 business day notice is requested.

Si requiere una copia en español de esta publicación o necesita un intérprete durante la reunión del Consejo, por favor llame a la Ciudad al 303.335.4574 o email

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City Council Communication
Agenda Item 7.A.

Subject: Resolution No. 54, Series 2026 — A Resolution Adopting Revised Financial Policies

Date: June 16, 2026

Prepared By: Ryder Bailey, CPA, Finance Director
James Franks, CPA, Deputy Director

Presented By: Ryder Bailey, CPA, Finance Director

Summary:
The City of Louisville's Financial Policies are central to a strategic, long-term approach to financial management and are intended to serve as a blueprint to achieve the financial stability required to accomplish the City's goals and objectives. Management reviews financial policies at least annually. They were most recently reviewed by the Finance Committee at their May 18, 2026 meeting, and most recently updated by the City Council on May 7, 2024. Link. This item was presented to the City Council Finance Committee on Monday, May 18th, and the recommended modifications and revisions to the Policy were supported. Financial Policies can be found on our Finance Department's Website. Link.

Background / Prior Discussions:
The City of Louisville's initial Fiscal Policies were first adopted in 1984 and were updated intermittently through 1997. On December 15, 2015, the City Council formally approved the Financial Policies by Resolution 92, Series 2015. Link. They were amended on December 21, 2021. Link. They were last amended by City Council on May 7, 2024. Link.

Financial policies are central to a strategic, long-term approach to financial management and are intended to serve as a blueprint to achieve the financial stability required to accomplish the City's goals and objectives. More specifically, the intent of adopting a written set of financial policies is to institutionalize good financial management, clarify strategic intent for financial management, define certain boundaries and limits on actions that staff may take, support good bond ratings, promote long-term and strategic thinking, manage risks to financial condition, and comply with established best practices in public management.

The City's Financial Policies have been written in relatively broad terms as guidelines for financial management decisions. These policies should not be confused with administrative statements of operating procedure, which cover the detailed steps

needed to accomplish business processes.

The current set of financial policies includes an Introduction Section and the following eight Policy Sections:

1. General Policies**
2. Reserve Policies**
3. Debt Policies
4. Revenue Policies
5. Operating Budget Policies
6. Investment Policies
7. Capital Asset Management Policies
8. Accounting, Auditing, and Financial Reporting Policies**

** - Sections with recommended adjustments

Development Proposal:
NA

Analysis:
While all sections have been reviewed by Management, only the following sections are recommended to be revised.

1. General Policies**
2. Reserve Policies**
8. Accounting, Auditing, and Financial Reporting Policies**

Summary of Recommended Adjustments

Section 1. General Policies
Staff recommends removing the reference to biannual financial indicator calculations. These calculations are not readily used by management for decision-making. Many of these metrics, such as expenditures per capita and fund balances over time, are either presented in the budget document and/or the Annual Comprehensive Financial Report (ACFR) Statistical Section, and are duplicate in nature. Staff recommends removing the requirement of biannual calculation of financial indicators from the Policy.

Section 2. Reserve Policies
Purpose and Scope
The City adheres to Governmental Financial Officers Association (GFOA) best practices regarding which resources are to be spent first for expenditures when more than one resource classification is available. Staff is recommending adding to Section Reserve Policies, Purpose and Scope Section, to define the order in which resources are to be spent, with restricted amounts first, followed by committed amounts, then assigned amounts, and then unassigned amounts.

Section 2.8 - Historical Preservation Fund Reserve Policy
On November 18, 2025, Link, City Council approved Resolution 93, Series, 2025, which established an annual Contingency/Emergency Reserve for the Historical Preservation Fund to 25% of the annual sales and use tax revenue (2024 actuals). Staff is recommending adding this action to the Financial Policies, Section 2.8 - Historical Preservation Fund Reserve Policy.

Section 8. Accounting, Auditing, and Financial Reporting Policies
Staff is recommending adjustments to Section 8.6 of Financial Polices, as it relates to Capitalization Thresholds, and Section 8.7 Accounts Receivable (A/R) Write-Offs Section.

Section 8.6 - Capitalization of Assets
Capitalization thresholds have not been adjusted since November 4, 2019. The current amounts are outdated and result in significant work in capitalization and depreciation of assets during annual Financial Statement preparation. These adjustments do not modify the Director's responsibility for establishing control and inventory procedures at the department level for non-capitalized assets such as office equipment, communications equipment, fleet management inventory, firearms, etc.

Staff has conferred with our external auditors on these proposed modifications to the capitalization thresholds, for which they were supportive.

Section 8.7 - A/R Write-Off
Increasing the authority of the Finance Director or City Manager up to $50,000, from $100, to align with the thresholds consistent with the Purchasing Policy. Anything greater than $50,000 would require Finance Committee approval. Write-offs only occur after all standardized collection efforts have been exhausted. All amounts and reasons for all write-offs will be documented and made available for audit.

Minor Adjustment made since the Finance Committee presentation on May 18th, 2026.
During the May Finance Committee meeting, there was a discussion regarding the proposed changes to Section 8.7 - A/R Write Off, specifically the proposed amounts Staff could administratively write off. Council members requested that Staff perform additional research on what other nearby jurisdictions' A/R write-off thresholds were. Staff reached out to Regional Finance Directors and received one response: their maximum administrative write-up authority was capped at $75,000. While their administrative authority is similar to what Staff had proposed, Staff recommends reducing the maximum administrative write-off threshold to $50,000 (from $100,000) to be less than the entity's threshold and remain aligned with the City's Purchasing Policy thresholds.

Council Work Plan:
Core Services - Financial policies are central to a strategic, long-term approach to financial management and are intended to serve as a blueprint to achieve the financial

stability required to accomplish the City’s goals and objectives.

Fiscal Impact:
Not applicable. There is no fiscal / budget impact for this item.

Alternatives:
City Council could decline recommended adjustments and/or propose other suggested edits.

Recommendation:
The recommendation is for the City Council to adopt the revisions to the City's Financial Policies as supported by the Finance Committee recommended by Finance Department Management.

Attachments:
1. Resolution No. 54, Series 2026
2. Financial Policies Proposed Updates 6.16.26 - Clean
3. Financial Policies Proposed Updates 6.16.26 - Redline

RESOLUTION NO. 54
SERIES 2026

A RESOLUTION ADOPTING REVISED FINANCIAL POLICIES

WHEREAS, the City Council first adopted financial policies for the City by Resolution No. 19, Series1984; and

WHEREAS, the City Council thereafter amended its original financial policies by Resolution No. 1, Series 1986; Resolution No. 42, Series 1996; Resolution No. 19, Series 1997; and Resolution No. 14, Series 2012; and Resolution No. 92, Series 2015; and

WHEREAS, the City Council desires to update its financial policies as set forth in the revised Financial Polices, a copy of which accompanies this resolution.

NOW THEREFORE: BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby adopts the Financial Policies that accompany this resolution.

Section 2. Resolution No. 92, Series 2015, is hereby repealed.

PASSED AND ADOPTED this 16th day of June 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

City of Louisville
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FINANCIAL POLICIES

Introduction

The City of Louisville is an organization charged with providing a wide range of services that are supported by a wide range of revenue sources. The City's Financial Policies have been established to guide the City in providing these services in the most efficient way possible within the bounds of available revenue.

Financial policies are central to a strategic, long-term approach to financial management and are intended to serve as a blueprint to achieve the financial stability required to accomplish the City's goals and objectives. More specifically, the intent of adopting a written set of financial policies is to institutionalize good financial management, clarify strategic intent for financial management, define certain boundaries and limits on actions that staff may take, support good bond ratings, promote long-term and strategic thinking, manage risks to financial condition, and comply with established best practices in public management.

The City's Financial Policies have been written in relatively broad terms as guidelines for financial management decisions. These policies should not be confused with administrative statements of operating procedure, which cover the detailed steps needed to accomplish business processes.

The City's Financial Policies shall be adopted by resolution of the City Council. The policies shall be reviewed annually by management and any modifications made thereto must also be approved by resolution of the City Council.

Definitions

- *Advanced Refunding* – a refunding in which the outstanding bonds are callable and remain outstanding for a period of more than 90 days after the issuance of the refunding bonds. Proceeds from the sale of the refunding bonds are used to purchase permissible legal securities, which are deposited into an escrow account.

- *Agencies* – federal agency securities and/or Government-sponsored enterprises.

- *Arbitrage* – the difference between the interest paid on the tax-exempt securities and the interest earned by investing the proceeds in higher-yielding taxable securities. The Internal Revenue Service regulates arbitrage on the proceeds from the issuance of municipal securities.

- *Bankers' Acceptance* – a draft or bill or exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill, as well as the issuer.

- *Broker* – brings buyers and sellers together for a commission.

- *Capital Budget* – the first two years of the Six-Year Capital Improvement Plan. These amounts are automatically included in the annual biennial budget process.

- *Capital Improvement Plan (C-I-P)* – a plan that describes the capital projects and associated funding sources the City intends to undertake during the next six years.

- *Collateral* – securities, evidence of deposit or other property, which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies (Public Deposit Protection Act; CRS 11-10.5-101 et seq.)

- *Current Refunding* – a refunding in which the outstanding bonds are retried within 90 days after the new bonds are sold.

- *Competitive Bond Sale* – bonds are marketed to a wide audience of investment banking (underwriter) firms. Sealed bids are submitted at a specific date and time and the underwriter is selected based on its bid for the City's securities.

- *Dealer* – as opposed to a broker, acts as a principal in all transactions, buying and selling for his own account.

- *Delivery-versus-Payment* – delivery of securities with an exchange of money for the securities. Delivery-versus-receipt is delivery of securities with an exchange of a signed receipt for the securities.

- *Full Accrual Basis of Accounting* – under this basis of accounting, revenue is recognized when earned and expenses are recognized when the liability is incurred.

- *Fund* – an independent fiscal and accounting entity with a self-balancing set of accounts recording cash and/or other resources, together with all related liabilities, obligations, reserves, and equities, which are segregated for the purpose of carrying out specific activities or attaining certain objectives.

- *Fund Balance* – the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources in a governmental fund. Used as a measure of *reserves* in governmental funds.

    - *Non-spendable Fund Balance* – fund balance that is inherently non-spendable, such as the long-term portion of loans receivable, the principal of an endowment, and inventories.

    - *Restricted Fund Balance* – fund balance that has externally enforceable limitations on its use, imposed by parties such as creditors, grantors, or laws and regulations of other governments.

    - *Committed Fund Balance* – fund balance with limitations imposed by the government itself at its highest level of decision making. For example, for the City of Louisville, this would be limitations imposed on fund balance by the Council through an ordinance or resolution.

- *Assigned Fund Balance* – fund balance that is earmarked for an intended use at either the highest level of decision making or by a body or an official designated for that purpose.

- *Unassigned Fund Balance* – all fund balances that are left after considering the other four categories. Use is the least restricted in this category of fund balance.

- *Unrestricted Fund Balance* – a category of fund balance that comprises committed fund balance, assigned fund balance, and unassigned fund balance. Unrestricted fund balance is, therefore, unconstrained or the constraints are self-imposed, so they could be lifted in order to make fund balances available for other purposes.

- *General Fund Operating Expenditures* – as used in the financial indicators, this term refers to total General Fund expenditures, less non-recurring interfund transfers-out.

- *General Fund Operating Revenue* – as used in the financial indicators, this term refers to total General Fund revenue, less other financing sources (such as sales of assets) and interfund transfers-in.

- *General Fund Recurring Expenditures* – as used in the financial indicators, this term refers to total General Fund expenditures, less non-recurring interfund transfers-out.

- *General Fund Recurring Revenue* – as used in the financial indicators, this term refers to total General Fund revenue, less non-recurring building-related revenue, non-recurring and non-operational grants, other financing sources, and interfund transfers-in.

- *General Fund Sales Tax Revenue* – as used in the financial indicators, this term refers to total sales tax revenue less any sales tax rebates due to Business Assistance Packages.

- *General Obligation Bonds* – bonds backed by the "full faith and credit" of the City. Bondholders have the authority to compel the City to use its taxing power, or to use other revenue sources, to generate the revenue necessary to repay the bonds. General obligation bonds are subject to the City's debt limitation and voter approval is required.

- *Liquidity* – refers to the ease in which an asset can be converted into cash without a substantial loss of value.

- *Modified Accrual Basis of Accounting* – under this basis of accounting, revenue is recognized when it become both measurable and available. Measurable means the amount of the transaction can be determined and available means collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period. Expenditures are recognized when they are expected to draw on current spendable resources.

- *Negotiated Bond Sale* – the City selects the underwriter in advance of the bond sale. The Financial Advisor and City staff work with the underwriter to bring the issue to the market and negotiate all rates and terms of the sale.

- *Private Bond Placement* – the City sells its bonds to a limited number of sophisticated investors, and not the general public.

- *Program* – a set of activities, operations, or organizational units designed and directed to accomplish specific service outcomes or objectives for a defined customer.

- *Refunding* – refinancing an outstanding bond issue by issuing new bonds.

- *Reserves* – refers to unrestricted fund balance in governmental funds and working capital in proprietary funds.

- *Revenue Bonds* – bonds secured by revenue generated by user fees or by other non-ad valorem revenue sources typically generated by the project being financed. Only the specific revenue source is pledged for the bond repayment. No taxing power or General fund pledge is provided as security. Revenue bonds are not subject to the City's debt limitation and voter approval is not required.

- *TABOR* – the Taxpayer Bill of Rights amendment to the Colorado Constitution and other Colorado law and court decisions.

- *Treasuries* – securities issued by the U.S. Treasury to finance the national debt. Treasury Bills are non-interest bearing discount securities that mature in one year or less. Treasury Notes are coupon bearing securities having initial maturities of two to ten years. Treasury Bonds are coupon-bearing securities having initial maturities of more than ten years.

- *Underwriter* – a dealer that purchases new issues of municipal securities from the issuer and resells them to investors. The difference between the price at which the bonds are bought and the price at which they are offered to investors is the underwriter's discount.

- *Utility Fund Budgetary Basis Expenses* – as used in the financial indicators, this term refers all expenses under the City's budgetary basis of accounting, less capital outlay and interfund transfers-out.

- *Working Capital* – current assets less current liabilities. Used as a measure of *reserves* in proprietary funds. Proprietary funds, unlike governmental funds, report both capital assets and long-term debt, even though neither is directly relevant to near-term financing. Therefore, the difference between proprietary fund assets and liabilities (net position) is not equivalent to the fund balance reported in governmental funds, and is not a useful indicator of *reserves*.

- *Yield* – the rate of annual income return on an investment, expressed as a percentage. Income yield is obtained by dividing the current dollar income by the current market price for the security. Net yield or yield to maturity is the current income yield minus any premium above par or plus any discount from par in purchase price, with the adjustment spread over the period from the date of purchase to the date of maturity of the bond.

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FINANCIAL POLICIES

General Policies

Policy Section: 1
Adopted by: Council Action
Effective Date: June 16, 2026

Purpose and Scope

General Policies are financial policies that are not easily categorized under any of the other policy sections.

City of Louisville
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FINANCIAL POLICIES

Reserve Policies

Policy Section: 2
Adopted by: Council Action
Effective Date: June 16, 2026

Purpose and Scope

The City of Louisville desires to maintain an appropriate level of financial resources to guard its citizens against service disruption in the event of unexpected revenue shortfalls or unanticipated one-time expenditures. This policy is also intended to document the appropriate reserve levels to protect the City's credit worthiness and maintain its good standing with bond rating agencies.

Reserves are accumulated and maintained to provide stability and flexibility to respond to unexpected adversity and/or opportunities. This policy establishes the reserve amounts the City will strive to maintain in its General Fund and its other major operating funds. This policy also stipulates the conditions under which those reserves may be used, in which order they should be utilized, and how the reserves will be replenished if they fall below established reserve amounts.

The City's policy regarding which resources (restricted, committed, assigned, or unassigned) are considered to be spent first for expenditures for which more than one resource classification is available has determined restricted amounts to be reduced first, followed by committed amounts, then assigned amounts, and then unassigned amounts.

The City will measure its compliance with this policy as of December 31st of each year, as soon as practical after final year-end information is audited and becomes available.

Policies

2.1 **General Fund Reserves.** The minimum unrestricted fund balance of the General Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures less any one-time, non-recurring transfers to other funds. Annual, recurring support transfers to other funds will be included in the definition of current operating expenditures.

While the minimum unrestricted fund balance is set at 15% of current operating expenditures, the targeted unrestricted fund balance will be at or above 25% of current operating expenditures. This higher target is in recognition of:

- the General Fund's reliance on revenue sources that are subject to fluctuations (sales and use taxes);
- the General Fund's exposure to unexpected and significant one-time expenditure outlays (transfers to the Capital Projects Fund, mid-year changes to operations, disasters, etc.); and
- the potential drain on General Fund resources from other funds (recurring support transfers to the Parks Fund, the Cemetery Fund, and the Recreation Fund).

The use of General Fund reserves will be limited to addressing unanticipated, non-recurring needs. Reserves shall not normally be used for recurring annual operating expenditures. However, reserves may be used to provide the City time to restructure operations (as might be required in an economic downturn), but such use will only take place in the context of a long-term financial plan.

The City Council will annually consider one-time transfers of excess reserves to other funds for one-time uses. Examples include transfers to the Capital Projects Fund to help fund specific capital projects or transfers to the Open Space Fund or Parks Fund for property acquisition reserves.

Use of reserves below the 25% target requires authorization from City Council.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan. Methods of replenishing fund balance may include the use of non-recurring revenue, year-end surpluses, and, if legally permissible, excess resources from other funds.

2.2 **Open Space Fund Reserves.** The entire fund balance for the Open Space Fund is restricted by ordinance as set forth in section 3.20.600 of the Louisville Municipal Code, including for acquisition of land in and around the city for open space buffer zones, trails, wildlife habitats, wetlands preservation, and for the development, construction, operation and maintenance of such open space zones, trails, wildlife habitats, wetlands and mitigation of wildfires in open space areas.

The minimum fund balance of the Open Space Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures include only open space operations and exclude all interfund transfers and capital outlay. Use of reserves below the 15% minimum requires authorization from City Council.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan.

Within the Open Space Fund, separate and apart from the minimum fund balance, an acquisition reserve is established to fund future open space acquisitions. A minimum of 30% of the annual budgeted sales and use tax revenue proceeds from the tax established in Section 3.20.200(A)(3) of the Louisville Municipal Code shall be encumbered for acquisition of open space land in and around the city, until a target reserve is achieved. Any remaining unencumbered funds available in the Open Space Fund above the minimum fund balance once the calendar year is closed, shall also be directed into the acquisition reserve until a target reserve is achieved. The target acquisition reserve amount shall be set by City Council from time to time through the budget process. Use of acquisition reserves for purposes other than open space acquisition requires authorization from City Council.

In the event acquisition reserves are used for purposes other than open space acquisition, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan.

Transfers from the General Fund or Capital Projects Fund into the Open Space Fund for property acquisition shall be deemed committed for that purpose.

2.3 **Park Fund Reserves.** The entire fund balance for the Parks Fund is restricted by ordinance for acquisition of land in and around the city for parks; and for the development, construction, operation and maintenance of parks.

The minimum fund balance of the Parks Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures include only parks operations and exclude all interfund transfers and capital outlay. Use of reserves below the 15% minimum requires authorization from City Council.

The Parks Fund requires a recurring annual transfer from the General Fund to fund its operating deficit. This annual transfer will be calculated by taking the amount of funding provided by the General Fund for Parks in 2007 ($626,900) and inflating that amount on an annual basis by the regional Consumer Price Index for All Urban Consumers. The 2007 funding level for Parks is the starting point for the calculation. In 2024, the budgeted annual transfer from the General Fund amount was $1,017,900.

Transfers from the General Fund or Capital Projects Fund for property acquisition shall be deemed committed for that purpose.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan.

2.4 **Cemetery Fund Reserves.** The minimum unrestricted fund balance of the Cemetery Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures, excluding interfund transfers and capital outlay.

The Cemetery Fund requires a recurring annual transfer from the General Fund to fund its operational deficit. This transfer will be adjusted on an annual basis to ensure that the unrestricted fund balance of the Cemetery Fund is maintained at or above 15% of current operating expenditures.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan. Methods of replenishing fund balance may include the use of non-recurring revenue, year-end surpluses, and, if legally permissible, excess resources from other funds.

2.5 **Combined Utility Fund Reserves.** The Water, Wastewater, and Storm Water Utility Funds are enterprise funds and, therefore, the measure of reserves is based on levels of working capital rather than on levels of fund balance. It is important to maintain adequate levels of working capital in these funds to mitigate risks and to ensure a stable fee structure and service level.

The minimum working capital for the Water, Wastewater, and Storm Water Utility Funds shall be maintained at or above 25% of current operating expenses, as measured on the City's budgetary basis. For purpose of this policy, operating expenses are defined as all budgetary-basis expenses, excluding interfund transfers and capital outlay.

In the event reserves are used resulting in a working capital balance below the 25% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan. Methods of replenishing working capital may include the use of non-recurring revenue, year-end surpluses, and, if legally permissible, excess resources from other funds.

2.6 **Recreation Fund Reserves.** The minimum fund balance of the Recreation Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures, excluding interfund transfers and capital outlay.

In addition to maintaining an operating reserve, the Recreation Fund will also maintain a capital asset renewal and replacement reserve. The purpose of this reserve is to accumulate funds for the timely renewal and replacement of Recreation Center and Memory Square Pool assets. The methodology for calculating this reserve will be approved by the Finance Committee.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum and capital asset renewal and replacement reserves, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan. Methods of replenishing fund balance may include the use of non-recurring revenue, year-end surpluses, and, if legally permissible, excess resources from other funds.

The City Council recognizes that the dedicated sales tax and user fee revenues may not be sufficient and the Recreation Fund may also need to rely on annual General Fund transfers. The annual General Fund transfer will be calculated by taking the General Fund subsidy for the Recreation Center/Memory Square Pool in 2017 ($986,300) and inflating that amount on an annual basis by the regional Consumer Price Index for All Urban Consumers. The 2017 General Fund subsidy level is the starting point for the calculation, since that is the last year that the Recreation Center and Memory Square Pool were funded within the General Fund.

In addition to the annual General Fund transfer towards the annual operating costs, minimum fund balance requirements, and capital asset renewal and replacement reserves, this policy also authorizes an annual transfer from the Capital Projects Fund to the Recreation Fund in the amount of $125,000 for 2019 and each year thereafter inflated on an annual basis by the regional Consumer Price Index for All Urban Consumers. This transfer is restricted for capital outlay.

2.7 **Golf Course Fund Reserves.** The minimum working capital balance of the Golf Course Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures, excluding interfund transfers and capital outlay.

In the event reserves are used resulting in working capital balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan.

2.8 **Historic Preservation Fund Reserves.**
Resolution No 17, Series 2019 regulates the administrative procedures for the Historic Preservation Fund (HPF). Section 3 requires the establishment of an annual Contingency/Emergency Reserve Fund for the HPF:

In the first year of the existence of the HPF, 20% of the funds of the HPF shall be placed in a Contingency/Emergency Reserve. On an annual basis, the Commission and City Council shall reevaluate how much should be allocated to this Reserve. These funds shall be accessed only for incentives or acquisitions that become necessary due to exigent circumstances, upon the recommendation of the Commission and approval of City Council. "Exigent circumstances" for purposes of this section shall mean that the Commission has determined, with concurrence of City Council, that without urgent action, significant damage

will be done to the historic fabric or character of Louisville.

On November 18th, 2025, the City Council approved Resolution No. 93, Series 2025, which approved the 2025 annual Contingency/Emergency Reserve Fund for the Historic Preservation Fund (HPF) to be set at twenty-five percent (25%) of the 2024 1/8% sales and use tax revenue (or $263,292.14).

Reserve funds can only be accessed if the HPC and City Council determine urgent action is needed to prevent “significant damage…to the historic fabric or character of Louisville.” The proposed reserve would provide emergency funds available for this purpose.

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City of Louisville
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FINANCIAL POLICIES

Debt Policies

Policy Section: 3
Adopted by Resolution No. 92, Series 2015
Effective Date: December 15, 2015

Purpose and Scope

To enhance creditworthiness and engage in prudent financial management, the City of Louisville is committed to systematic capital planning and long-term financial planning. Maintaining the City's bond rating is an important objective and, to this end, the City is continually working to improve its financial policies, budgets, forecasts, and financial health.

These policies establish criteria for the issuance of debt obligations by the City so that acceptable levels of indebtedness are maintained. The objectives of these policies are to ensure that the City obtains debt financing only when necessary, that the process for identifying the timing and amount of debt financing be as efficient as possible, that the most favorable interest rates and related issuance costs are obtained, and that future financial flexibility remains relatively unconstrained.

Debt financing includes general obligation bonds, revenue bonds, notes payable to the Colorado Water Resources & Power Development Authority, leases, and any other City obligations permitted to be issued or incurred under Colorado law, the City's Municipal Code, and the City's Charter.

This policy does not apply to the Urban Revitalization District, a legally separate entity, but a component unit of the City for financial reporting purposes.

Policies

3.1 **Use of Debt Financing.** Although the City will normally finance projects on a cash basis (pay-as-you-go), the City may decide that the most equitable way of financing a project is through debt financing (pay-as-you-use).

Factors which may favor *pay-as-you-go* financing include circumstances where:

- the project can be adequately funded from available current revenue and reserves;
- the project can be completed in an acceptable timeframe given the available resources;
- additional debt levels could adversely affect the City's credit rating or repayment sources; or
- market conditions are unstable or are not conducive to marketing debt.

Factors which may favor *pay-as-you-use* financing include circumstances where:

- current revenue or reserves are insufficient to pay project costs;
- a project is immediately required;
- revenue available for debt issues are considered sufficient and reliable so that long-term financing can be marketed with an appropriate credit rating, which can be maintained;
- market conditions present favorable interest rates and demand for municipal debt financing; or
- the useful life of the project or asset is five years or greater.

The City will not use long-term debt to finance any recurring purpose such as current operations. Debt financing will be used only for capital improvement projects and large equipment purchases. Debt payments shall not extend beyond the estimated useful life of the project or the equipment being financed.

3.2 **Limitations and Constraints on Debt Financing.** Per Article 12, Section 12-1, of the City of Louisville Charter, the total amount of the City's indebtedness shall not at any time exceed three (3) percent of the actual value, as determined by the County Assessor, of taxable property within the City, except such debt as may be incurred by supplying water.

Per Article 12, Section 12-3, of the City of Louisville Charter, any lease-purchase agreement, except for the acquisition of water rights, entered into by the City shall be approved by the City Council by non-emergency ordinance.

Per the Taxpayer Bill of Rights (TABOR) amendment to the Colorado Constitution, all multiple-year debt shall first be approved by the City's taxpaying electorate unless it is issued for a TABOR-defined government enterprise, refinances bonded debt at a lower interest rate, or sufficient cash reserves are pledged irrevocably for future payments. The City's TABOR-defined enterprises include the Water Utility Fund, the Wastewater Utility Fund, the Storm Water Utility Fund, and the Golf Course Fund. Operating leases, lease-purchases, and certificates of participation (COP's) that are subject to annual appropriation are not considered multiple-year debt and are not subject to TABOR election requirements.

3.3 **Structure of Debt Financing.** City debt will be structured to achieve the lowest possible net interest cost given market conditions, the urgency of the capital project, and the nature and type of any security provided. City debt will be structured in ways that will minimize impacts on future financing flexibility. To the extent possible, repayment of debt shall be structured to rapidly recapture credit capacity for future use.

City debt will be amortized for the shortest period consistent with a fair allocation of cost to current and future beneficiaries of the project being financed, and in keeping with other related provisions of this policy. The City shall normally issue general obligation bonds or revenue bonds with a maximum life of twenty years or less.

The City will normally seek to amortize general obligation bonds and revenue bonds with level payments (principal plus interest) over the life of the issue. Pushing higher debt service costs to future years will only be considered under special circumstances. The City will also avoid repayment schedules that consist of low annual payments and a large payment of the balance due at the end of the term. There shall always be at least one interest payment in the first fiscal year after a bond sale. Principal repayment shall start no later than the second year after the bond issue.

Call provisions for bond issues shall be made as short as possible, consistent with the lowest interest cost to the City. Unless specific compelling reasons exist, all bonds shall be callable only at par.

Credit enhancements may be used if the costs of such enhancements are lower than the reduction in net debt service payments or if they provide other significant financial benefits to the City.

3.4 **Bond Counsel.** The City will retain an external bond counsel through a competitive process administered by the Finance Department and the City Attorney's Office. All debt issues of the City will include a written opinion by bond counsel on the validity of the bond offering, the security for the offering, and whether and to what extent interest on the bonds is exempt from income and other taxation.

3.5 **Financial Advisor.** The City will retain an external financial advisor through a competitive process administered by the Finance Department. For each debt issuance, the financial advisor will provide the City with information and recommendations on all aspects of the issuance, including market opportunities, method of sale, structure, term, pricing, and fees.

3.6 **Method of Sale.** As a matter of general policy, the City shall seek to issue its general and revenue bond obligations with a competitive sale process unless it is determined by the City's Financial Advisor and Finance Director that such a method will not produce the best results for the City. Other methods of sale that may be authorized by the Financial Advisor and Finance Director are a negotiated sales process and a private placement process.

Conditions that may favor a negotiated sale process are:

- The bond issue is, or contains, a refinancing that is dependent on market timing;
- At the time of the issuance, the interest rate environment or economic factors that affect the bond issue are volatile;
- The nature of the debt is unique and requires particular skills from the underwriter; or
- The debt issuance is bound by a compressed timeline due to extenuating circumstances that prevent a competitive process from being accomplished.

Whenever a negotiated sale process is determined to be in the best interests of the City, the City will use a competitive process to select its investment banking team.

In such instances where the City, through competitive bidding, deems the bids as unsatisfactory, or does not receive bids, it may, at the election of the Finance Director, immediately enter into a negotiated sale process or private placement process.

3.7 **Refunding of Debt.** Periodic reviews of all outstanding debts will be undertaken by the Finance Director and Financial Advisor to determine refunding opportunities. Refundings will be considered (within legal constraints) if and when there is a net economic benefit of the refunding, or if the refunding is essential in order to amend covenants to enhance operations and management. As a general rule, refundings will only be considered if the present value savings (net of all costs) of a particular refunding will exceed five percent (5%) of the refunded principal.

3.8 **Arbitrage Liability Management.** It is the City's policy to minimize the cost of arbitrage rebate and yield restriction while strictly complying with the law. The City will not issue obligations except for identifiable projects with very good prospects of timely initiation. Because of the complexity of the arbitrage rebate regulations and the severity of non-compliance penalties, the City will use the services of Bond Counsel and other arbitrage compliance experts when determining arbitrage liability, reporting, and exemptions.

3.9 **Financial Disclosure.** The City is committed to full and complete financial disclosure and to cooperating fully with rating agencies, institutional and individual investors, other levels of government, and the general public to share clear, comprehensible, accurate, and timely financial information. Continuing disclosure requirements under Rule 15c2-12 issued by the Securities and Exchange Commission (SEC) may apply to certain debt transactions of the City. The City will comply with all such Federal or other State reporting requirements on a timely basis. The City is committed to meeting continuing disclosure requirements of the national information repositories.

City of Louisville
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FINANCIAL POLICIES

Revenue Policies

Policy Section: 4
Adopted by: Council Action
Effective Date: November 4, 2019

Purpose and Scope

The City of Louisville collects revenue from various sources, the largest of which are from sales and use taxes, utility fees, property taxes, and intergovernmental revenue. The structure, equity, fluctuation, and collection of revenue are important for financial stability and are reviewed by bond rating agencies to determine the City's credit quality.

Policies

4.1 **Diversification and Stabilization.** The City will strive to maintain a diversified and stable revenue system to reduce the overall effects of fluctuations in any one revenue source.

4.2 **Equity.** Revenue will be derived from a fair, equitable, and adequate resource base, while minimizing tax differential burdens. Services having a City-wide benefit shall be financed with revenue sources generated from a broad base, such as sales taxes and property taxes. Services where the customer determines the use shall be fully or partially financed with user fees and charges related to the level of service provided.

4.3 **Collections.** The City will monitor all taxes, fees, and charges to make sure they are equitably administered and collections are timely and accurate. The City will pursue collection of delinquent amounts (including related penalties and interest) as authorized by the Louisville Municipal Code.

4.4 **Recurring and Non-recurring Revenue.** The City's objective is to fund all recurring expenditures with recurring revenue. Non-recurring, one-time revenue should be used to fund only non-recurring, one-time expenditures. The preferred use of non-recurring revenue is to invest in projects that will result in long-term operational cost savings.

4.5 **Intergovernmental Revenue.** The City will pursue intergovernmental aid, including grants, for those programs and activities that address a recognized need and are consistent with the City's goals and objectives, and will attempt to recover all allowable costs associated with those programs. The City will avoid using grants for ongoing service delivery needs. Any decision to pursue intergovernmental aid should only be made after consideration of the present and future funding requirements, costs of administering the funds, costs associated with special conditions or regulations attached to the aid, and ongoing operational costs after the aid period.

4.6 **User Fees and Services Charges.** The City will periodically recalculate the full cost of providing services in order to provide a basis for setting the associated user fee or service charge. Full cost shall incorporate direct and indirect costs, including operations (with City labor costs), maintenance, overhead, debt service, equipment, and capital charges. The intent of this policy is to set fees at a level that is related to the actual cost of producing the good or service. The City will also periodically examine and compare rates from other cities providing similar services. It is recognized that competing policy objectives may result in user fee levels that recover only a portion of the costs. The City Council's intent is to review all fees every year during the budget process. For years in which a complete recalculation of full costs is not done, this policy authorizes the use of an annual fee inflator to be applied to certain fees.

4.7 **Fees for Children's Recreational Services and Senior Programs.** The City may set fees for children's recreational programs and senior services at levels below the full cost of providing those services.

4.8 **Fees for Non-Resident City Services.** Non-residents may be required to pay higher fees than residents for City services.

City of Louisville
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FINANCIAL POLICIES

Operating Budget Policies

Policy Section: 5
Adopted by: Council Action
Effective Date: November 4, 2019

Purpose and Scope

The formulation of the annual operating budget, including the publication of the budget document, is one of the most important financial activities that the City of Louisville undertakes each year. The budget process provides a comprehensive plan to deliver efficient services to residents and stakeholders of the City in a manner that aligns resources with the policies, goals, mission, and vision of the City. This policy is intended to provide guidelines to assist in the formulation of financial discussion and the broader implications of financial decisions. This policy shall apply to all funds with an adopted budget.

Policies

5.1 **Budgetary Basis of Accounting.** The "basis of accounting" is a term used to describe the timing of revenue and expenditure recognition. In other words, when the effects of transactions or events should be recognized. In governmental accounting, the basis of accounting used for financial reporting purposes, as required by generally accepted accounting principles (GAAP), is not required for use in preparing a budget document. Under GAAP, governmental funds are required to utilize a modified accrual basis of accounting and proprietary funds (enterprise and internal service) are required to utilize a full accrual basis of accounting for financial reporting purposes. The City of Louisville's *budgetary* basis of accounting is a modified accrual basis for *all* fund types, including proprietary funds. Some of the differences between the City's budgetary basis of accounting and the GAAP basis of accounting for proprietary fund types are:

- *Issuance of debt* – budgeted as a revenue item, adjusted at year-end to a liability for financial reporting purposes.
- *Principal payment on debt* – budgeted as an expense item, adjusted at year-end to a reduction in the liability for financial reporting purposes.
- *Capital acquisition* – budgeted as an expense item, adjusted at year-end to an asset acquisition for financial reporting purposes.
- *Depreciation* – not recognized for budgeting purposes, recorded at year-end as an expense for financial reporting purposes.

5.2 **Level of Budgetary Control.** The level of budgetary control is the level at which spending cannot exceed the budgeted amount without City Council authorization. The level of control is also the level of detail the City Council approves in the appropriation resolution. The City's current level of budgetary control is at the fund level. However, department management is responsible for administering their respective programs within the financial constraints described by the budget as adopted.

Article 11, Section 11-6 of the City of Louisville Charter states, *"During the fiscal year, no officer or employee shall expend or contract to expend any money, or incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts appropriated by the City Council. Any contract, verbal or written, made in violation of this subsection shall be void, and no moneys of the City shall be paid on such contract; except that the City Council may ratify such a contract if it determines that ratification would be in the best interest of the City, and if it adopts a resolution making the necessary appropriation."*

5.3 **Balanced Budget.** The City's definition of a balance budget requires each fund's revenue plus appropriated fund balance/working capital to be equal to, or greater than, each fund's total appropriations. However, it is the City's intent to go further and develop *structurally* balanced budgets for the General Fund and the other major operating funds (excluding capital project funds). In a structurally balanced budget, annual recurring revenue will be projected to equal or exceed annual recurring expenditures for each fund. If a structural imbalance (recurring expenditures exceeding recurring revenue) should occur in the General Fund or in any of the major operating funds, a plan will be developed and implemented to bring the budget back into structural balance.

5.4 **Budget Form.** Article 11, Section 11-2 of the City of Louisville Charter states, *"The proposed budget shall provide a complete financial plan for the City in a format acceptable to the City Council. Except as otherwise provided by this Charter, the proposed budget shall be prepared in accordance with State statutes establishing the local government budget law and the local government uniform accounting law."*

5.5 **Capital Improvement Plan (C-I-P).** A Six-Year Capital Improvement Plan will be presented to the City Council for consideration during the biennial budget development process. The annual capital budget will be based on the first year of the approved C-I-P.

5.6 **Long-Term Financial Plan (LTFP).** Six-year financial forecasts for each of the City's major operating funds will be presented to the City Council for consideration during budget development. The LTFP will coordinate the C-I-P with the operating budget and will provide insight into potential future financial imbalances so that action can be taken before a crisis occurs.

5.7 **Budget Amendment.** The City Council may amend or supplement the budget by resolution at any time after its initial adoption. A public hearing is required.

5.8 **Budget Control System.** The City will develop and maintain a budgetary control system to help it adhere to the budget. All departments are part of the budget control system and will have access to individual department reports that compare budget-to-actual financial performance. The Finance Department will report City-wide budget-to-actual performance on a quarterly basis for both revenue and expenditures to the City Finance Committee.

City of Louisville
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FINANCIAL POLICIES

Investment Policies

Policy Section: 6
Adopted by: Council Action
Effective Date: May 7, 2024

Purpose and Scope

It is the policy of the City of Louisville to invest public funds in a manner which will provide the highest investment return with the maximum security while meeting the daily cash flow demands and conforming to all Colorado Revised Statutes, the City of Louisville Charter, and the City of Louisville Municipal Code.

The provisions of this investment policy shall apply to all funds held in the custody of the City and all of its offices. Except for cash in certain restricted and special funds, the City shall consolidate, or "pool", cash and investment balances from all funds to maximize investment earnings and to increase efficiencies with regards to investment pricing, safekeeping, and administration. The investment income derived from the pooled cash and investment accounts shall be allocated to the various funds based on their respective participation and in accordance with generally accepted accounting principles.

Policies

6.1 **Objectives.** In order of priority, the primary objectives of investment activities shall be safety, liquidity, and yield:

- *Safety.* Safety of principal is the foremost objective of the investment program. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio through the mitigation of credit risk and interest rate risk.

- *Liquidity.* The investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated. This shall be accomplished by structuring the portfolio so that securities mature concurrent with cash needs to meet anticipated demands. Furthermore, since all possible cash demands cannot be anticipated, the portfolio shall consist largely of securities with active secondary or resale markets. In addition, a portion of the portfolio may be placed in local government investment pools (LGIPs) which offer same-day, constant dollar liquidity for short-term funds.

- *Yield.* The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints and liquidity needs. Return on investment is of secondary

importance compared to the safety and liquidity objectives described above. Securities generally shall be held to maturity with the following exceptions:

- A security with a declining credit may be sold early to minimize loss of principal.
- A security swap would improve the quality, yield, or target duration of the portfolio.
- Liquidity needs of the portfolio require the security to be sold.

6.2 **Delegation of Authority.** The Finance Director shall be the designated investment officer of the City and shall be responsible for all investment decisions and activities, under the direction of the City Manager. The Finance Director shall establish investment policy procedures for the operation of the investment program consistent with this policy. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the Finance Director.

The Finance Director may delegate the authority to conduct investment transactions and manage the operation of the investment portfolio to one or more subordinates and/or an external registered investment advisor who shall act in accordance with established procedures on internal controls and in compliance with this investment policy.

6.3 **Legal Investments.** All investments shall be made in accordance with Colorado Revised Statutes (CRS) as follows: CRS 11-10.5-101, et seq., Public Deposit Protection Act; CRS 24-75-601, et seq., Funds - Legal Investments for Government Units; CRS 24-75-603, et seq., Depositories; CRS 24-75-701 and 702, et seq., Local Governments - Local Government Pooling and that the investment or deposit meets the standard established in section CRS 15-1-304. Any revisions or extensions of these sections of the CRS will be assumed to be part of this Investment Policy immediately upon enactment.

To the extent possible, the City shall attempt to match its investments with anticipated cash flow requirements. Unless matched to a specific cash flow, the City will not directly invest in securities maturing more than five (5) years from the settlement date or in accordance with state and local statutes and ordinance. Pursuant to CRS Section 24-75-601.1(1), as amended from time to time, and subject to the limitations set forth therein, the securities listed herein shall be eligible for investment of public funds by the City. In the event of a conflict between CRS 24-75-601.1(1) and this policy, other than this policy being more restrictive that CRS 24-75-601(1), CRS 24-75-601.1(1) shall control. Nothing herein shall preclude the City from adopting a policy to permit securities other than those listed in CRS 24-75-601.1(1) for investment of public funds.

CRS 24-75-601(1) and this policy authorize the following investments:

- Any security issued by, fully guaranteed by, or for which the full credit of the United States Treasury is pledged for payment; allowing for inflation indexed securities. The period from the date of settlement of this type of security to the maturity date shall be no more than five years, unless the City Council authorizes investment for a period in excess of five years.

- Any security issued by, fully guaranteed by, or for which the full credit of the following is pledged for payment: The Federal Farm Credit Bank, A Federal Home Loan Bank, the Federal Home Loan Mortgage Corporation, The Federal National Mortgage Association, the Government National Mortgage Association, or an entity or organization that is not

listed in this paragraph but that is created by, or the creation of which is authorized by, legislation enacted by the United States Congress and that is subject to control by the federal government that is at least as extensive as that which governs an entity or organization listed in this paragraph. The period from the date of settlement of this type of security to its maturity date shall be no more than three years. Any entity or organization listed in this paragraph may represent up to but not more than 35% of the investment portfolio. The total of the above mentioned entities or organizations and inclusive of corporate or bank securities cannot represent more than 95% of the investment portfolio.

- Any security that is a general or revenue obligation of any state of the United States, the District of Columbia, or any territorial possession of the United States or of any political subdivision, institution, department, agency, instrumentality, or authority of any of such governmental entities. The period from the date of settlement of this type of security to the maturity date shall be no more than three years.

- Any interest in a local government investment pool pursuant to CRS 24-75-701, et seq.

- Any guaranteed investment contract (GIC) if at the time the contract or agreement is entered into, the long-term credit rating, financial obligations rating, claims paying ability rating, or financial strength rating of the party, or of the guarantor of the party, with whom the public entity enters the contract or agreement is, at the time of issuance, rated in one of the two highest rating categories by two or more nationally recognized securities rating agencies that regularly issue such ratings. Contracts or agreements purchased under this paragraph shall not have a maturity period greater than three years.

- Any dollar-denominated corporate or bank security issued by a corporation or bank that has a maturity of less than three years from the date of settlement and, at the time of purchase, must carry at least two credit ratings from any of the nationally recognized credit rating agencies and must not be rated below “AA– or Aa3” by any credit rating agency. The aggregate value of all securities referred to in this paragraph shall equal no more than 25% of the total portfolio.

- Money market instruments, such as commercial paper or bankers' acceptance, must carry at least two credit ratings from any of the nationally recognized credit rating agencies and must not be rated below "A1, P1, or F1" by any credit rating agency.

- Any money market fund that is registered as an investment company under the federal “Investment Company Act of 1940”, as amended, at the time the investing public entity invests in such fund. The money market fund must: 1) have no commission fee on the charged on purchases or sales of shares; 2) have a constant daily net asset value per share of $1.00; 3) limit assets of the fund to U.S. Treasury Securities; 4) have a maximum stated maturity and weighted average maturity in accordance with Federal Securities Regulation 270-2A-7; and 5) have a rating at the time of purchase of at least AAAm by Standard & Poor’s or Aaa/MRI+ Moody’s

- The purchase of any repurchase agreement of marketable securities referred to in the preceding paragraphs. A Master Repurchase Agreement must be executed with the bank or dealer. The securities must be delivered to the City’s custodian or to a third-party custodian or third-party trustee for safekeeping on behalf of the City. The title to or

a perfected security interest in such securities along with any necessary transfer documents must be transferred to the City or the City's custodian. The collateral securities of the repurchase agreement must be collateralized at no less than one hundred two percent and marked to market no less frequently than weekly. Collateralization is required per the Public Deposit Protection Act, CRS 11-10.5-101 et seq. The securities subject to the repurchase agreement may have a maturity in excess of five years. The repurchase agreement itself may not have a maturity of more than five years from the date of settlement unless the City Council authorizes investment for a period in excess of five years.

- Certificates of deposit in state or national banks or in state or federally chartered savings banks, which are state-approved depositories per CRS Section 24-75-603, et seq. (as evidenced by a certificate issued by the State Banking Board) and are insured by the FDIC. Certificates of deposit, which exceed the FDIC insured amount, shall be collateralized in accordance with the Colorado Public Deposit Protection Act. Certificates of deposit must comply with CRS Section 30-10-708 (1). The aggregate value of all certificates of deposit shall equal no more than 25% of the total portfolio.

6.4 **Standards of Care and Performance.** The "reasonable prudence" standard shall be used by investment officials in the context of managing an overall portfolio. The "reasonable prudence" standard provides that investments shall be made with the judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation, but in regard to the permanent disposition of funds, considering the probable income as well as the probable safety of the capital.

Investment officers acting in accordance with written procedures and the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

In addition, officers and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions. Employees and investment officials shall disclose to the City Manager any material interests in financial institutions with which they conduct business. They shall further disclose any personal financial/investment positions that could be related to the performance of the investment portfolio. Employees and officers shall refrain from undertaking personal investment transactions with the same individual with whom business is conducted on behalf of the City.

6.5 **Authorized Financial Institutions, Depositories, and Broker-Dealers.** Unless utilizing the services of an external registered investment advisor, the Finance Department shall maintain a list of financial institutions and depositories authorized to provide investment services to the City. In addition, the Finance Department shall maintain a list of approved security broker/dealers that may include "primary" dealers or regional dealers qualifying under Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule). To qualify for consideration for investment transactions with the City, all financial institutions and broker-dealers must supply the following, as appropriate:

- Proof of state registration (except for those firms providing safekeeping and custodial services only).
- Audited financial statements demonstrating compliance with state and federal capital adequacy guidelines.
- Proof of Financial Industry Regulatory Authority (FINRA) certification.
- Evidence of adequate insurance coverage.
- Certification of having read and understood and agreeing to comply with the City's investment policy.

An annual review of the financial condition and registration of all qualified financial institutions and broker/dealers will be conducted by the Finance Director.

6.6 **Safekeeping and Custody.** All trades of marketable securities will be executed "delivery versus payment" (where applicable) to ensure that securities are deposited in an eligible financial institution prior to the release of funds.

Securities will be held by an independent third-party custodian selected by the City and evidenced by safekeeping receipts in the City's name. The safekeeping institution shall provide on an annual basis a copy of its most recent report on internal controls (Statement of Standards 70).

Moreover, management is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the City are protected from loss, theft, or misuse. The internal control structure shall be designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits likely to be derived, and (2) the valuation of costs and benefits requires estimates and judgments by management. The internal controls structure should address the following points:

- Control of collusion.
- Separation of transaction authority from accounting and recordkeeping.
- Custodial safekeeping.
- Avoidance of physical delivery securities.
- Written confirmation of transactions for investments and wire transfers.
- Dual authorization of wire transfers.

Compliance with these controls shall be reviewed and confirmed through the City's annual independent audit.

6.7 **Performance Standards & Reporting**

The investment portfolio shall be designed with the objective of obtaining a rate of return throughout budgetary and economic cycles, commensurate with the investment risk constraints and the cash flow needs.

The City's investment strategy is passive. Given this strategy, the basis used by the Finance Director to determine whether market yields are being achieved shall be the ColoTrust local government investment pool, the one-year US Treasury Bill, and the two-year Agency Benchmark.

The Finance Director shall provide the Finance Committee quarterly investment reports that provide the status and characteristics of the current investment portfolio. The investment report should include schedules on:

- Portfolio diversification.
- Maturity distribution.
- A listing of all securities held by authorized investment category.
- Par value, amortized book value, and market value for all securities held.
- Monthly activity – purchases, sales, calls, and interest received

City of Louisville
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FINANCIAL POLICIES

Capital Asset Investment & Management Policies

Policy Section: 7
Adopted by: Council Action
Effective Date: November 4, 2019

Purpose and Scope

Capital assets have a major impact on the ability of the City of Louisville to deliver services, the economic vitality of the City, and the overall quality of life for the City's citizens. The purpose of this policy is to provide general guidelines for a comprehensive process of allocating limited resources to capital investments. This policy applies to all funds included in the City's Six-Year Capital Improvement Plan.

Policies

7.1 **General Process for Six-Year Capital Improvement Plan (C-I-P).** The Finance Department is responsible for coordinating the C-I-P process within the annual budget calendar and for compiling the requested, recommended, and adopted C-I-P document.

Each year, City departments will submit a list of prioritized projects for inclusion into the C-I-P. The City Manager will review the requests and make the final recommendations to City Council. City Council will review the recommended C-I-P and direct any changes for the final C-I-P. The first two years of the C-I-P will be included in the Biennial Operating & Capital Budget presented to the City Council for formal adoption in November.

The City shall provide meaningful opportunities for all stakeholders to provide input into the C-I-P development process.

7.2 **C-I-P Project Selection.** An objective set of criteria will be used to assess and evaluate project proposals. Although specific criteria may be updated from time to time, the following concepts are core principles to be considered in the development of such criteria:

- Long-Term Forecasts – Long-term forecasts will be prepared to better understand resources available for capital spending and to assess operational impacts and eventual maintenance and replacement costs.

- Impact of Other Projects – Projects shall not be considered in isolation. One project's impact on others should be recognized and costs shared between projects where appropriate.

- Full Costing – Cost analysis of a proposed project should encompass the entire cost of the project, including annual maintenance and other impacts to the operating budget.

- Predictable Project Timing & Scope – Schedule and scope estimates should be practical and achievable within the requested resources, including financial and human.

7.3 **Balanced C-I-P.** The adopted C-I-P will be balanced. This means that for the six-year period, revenue plus the use of fund reserves will equal or exceed total project expenditures.

7.4 **Asset Maintenance & Replacement.** It is the City's intent to maintain its existing assets and a level that protects the initial capital investment and minimizes future maintenance and replacement costs. Based on an asset inventory and risk assessment, staff shall include recommendations for asset maintenance in the C-I-P. It is the City's intent to ensure that adequate resources are allocated to preserve the City's existing infrastructure to the best of its ability before allocating resources to other capital projects.

City of Louisville
COLORADO • SINCE 1878

FINANCIAL POLICIES

Accounting, Auditing, & Financial Reporting Policies

Policy Section: 8
Adopted by: Council Action
Effective Date: June 16, 2026

Purpose and Scope

The City of Louisville desires to maintain a system of financial management that safeguards City assets, promotes financial transparency, and provides timely, accurate, and relevant financial information to citizens, elected officials, and management. This policy pertains to all funds and operations of the City and, to the extent reasonably possible, all component units of the City.

Policies

8.1 **Accounting.** The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles applicable to state and local governments. The City's accounting and reporting policies will conform to the generally accepted accounting principles (GAAP).

8.2 **Auditing.** Article 11, Section 11-7 of the City of Louisville Charter states, *"The Council shall provide for a financial audit, which shall be performed at least annually by a certified public accountant selected by the Council. The Audit shall be performed in accordance with the State statutes establishing the local government audit law. Copies of the audit shall be made available for public inspection."*

In compliance with the Charter, an annual audit will be performed by an independent certified public accounting firm in accordance with Generally Accepted Governmental Auditing Standards and the auditor's opinion will be included in the City's Comprehensive Annual Financial Report (CAFR).

The City's Finance Department shall be responsible for managing the audit procurement process. The City Council will appoint the independent auditor and approve each year's audit engagement letter. The audit engagement term shall typically be for five to ten years, subject to annual review, approval, and appropriation.

8.3 **Audit Committee.** The City's Finance Committee will act as the City's Audit Committee. The Audit Committee will provide an independent review and oversight of the government's financial reporting processes, internal controls, and independent auditors. The City's independent auditors will meet with the Audit Committee at lease annually and have direct access to the Audit Committee if City staff is unresponsive to auditor recommendations or if

the auditors consider such communication necessary to fulfill their legal and professional responsibilities.

8.4 **Financial Reporting.** The City's Comprehensive Annual Financial Report (CAFR) will be published annually to present the results, financial position, and results of operations of the City for the prior year. As an additional independent confirmation of the quality of the City's financial information, the City will annually submit its CAFR to the Government Finance Officers Association's Certificate of Achievement for Excellence in Financial Reporting program.

The Finance Department will provide quarterly interim financial reports to the Finance Committee after the close of each quarter. The reports will be designed to keep the Committee continuously informed of the City's overall financial status.

8.5 **Internal Controls.** The goals and objectives of the City's internal control policies are to safeguard City assets and to foster reliance on public information for decision-making purposes at all levels both internally and externally. Management shall establish the presence of integrity, ethics, competence, and a positive control environment. Directors are responsible for establishing, executing, and maintaining control policies and procedures at the detail level within their specific departments.

The City's internal control structure will be based on the Committee of Sponsoring Organizations of the Treadway Commission on Fraudulent Financial Reporting (COSO) framework and comprised of the following elements:

- **Control Environment** – Factors include integrity and ethical values, commitment to competence, leadership philosophy and operating style, assignment of authority and responsibility, and policy and procedures;

- **Risk Assessment** – Routine assessment of risk and its impact on internal controls;

- **Control Activities** – Such as segregation of duties, authorization of transactions, retention of records, supervision and monitoring of operations, and physical safeguards;

- **Information and Communication** – Policies and procedures are documented and accessible; and

- **Monitoring** – Assessment of the quality of performance over time to determine whether controls are effective and track resolution achievements of identified problems.

8.6 **Capitalization of Assets.** The terms capital assets, capital outlay, and fixed assets are used to describe assets that are used in operations that have initial lives extending beyond a single reporting period, such as water rights, infrastructure, land, buildings, improvements other than buildings, and equipment. It is incumbent upon departments to maintain adequate control over all resources, including capital assets, to minimize the risk of loss or misuse.

Not all capital assets are required to be reported on the City's balance sheet. Specifically, capital assets with extremely short useful lives or of small monetary value are properly reported as an "expenditure" or "expense" of the period in which they are acquired. Capital

assets that are reported on the City's balance sheet are said to be "capitalized" and must meet the capitalization criteria outlined in this policy.

The City's capitalization criteria are, as follows:

- Assets should be capitalized only if they have an estimated useful life of at least two years following the date of acquisition.

- The capitalization thresholds shall normally be applied to individual items rather than to groups of similar items (e.g., chairs), unless the effect of doing so would be to eliminate a significant portion of total capital assets (e.g., library books).

- Directors are responsible for establishing control and inventory procedures at the department level for non-capitalized assets such as office equipment, communications equipment, fleet management inventory, firearms, etc.

- The capitalization threshold for each individual item is found in Table 1: Capitalization Thresholds by Asset Category.

- Should an asset be purchased through an external funding source that requires a different capitalization threshold, the City shall adhere to the Grantor's requirements.

TABLE 1: Capitalization Thresholds by Asset Category

Assets		Years	Amount
Land / Water Rights		N/A	$1
Buildings (including the right to use building)		50	$100,000
Building Improvements		30	$100,000
Streets & Sidewalks		25 – 30	$100,000
Water, Wastewater, & Storm Water Systems		25 – 50	$100,000
Vehicles		3 – 7	$50,000
Machinery & Equipment		3 – 10	$50,000
Leases / Subscription-Based Info. Tech. Arrangements (SBITA)		3 – 10	$50,000

8.7 **Accounts Receivable Write-Off.** Accounts receivable is an asset account reflecting amounts owed to the City. Staff will make every effort to collect all receivables. Only receivables deemed uncollectible can be written off. In order to be deemed uncollectible, a receivable must meet the following criteria:

- All standardized collections procedures have been exhausted;

- Further measures to collect the debt have been determined as inappropriate; and

- The characteristics of the debt are such that write-off is appropriate (e.g., the debt is

small relative to the cost of further collection efforts).

The Finance Director or City Manager is authorized to approve a write-off of up to $50,000 per account. Staff's request to write-off accounts greater than $50,000 must be approved by the Finance Committee. The amounts and reasons for all write-offs will be documented and made available for audit.

City of Louisville
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FINANCIAL POLICIES

Introduction

The City of Louisville is an organization charged with providing a wide range of services that are supported by a wide range of revenue sources. The City's Financial Policies have been established to guide the City in providing these services in the most efficient way possible within the bounds of available revenue.

Financial policies are central to a strategic, long-term approach to financial management and are intended to serve as a blueprint to achieve the financial stability required to accomplish the City's goals and objectives. More specifically, the intent of adopting a written set of financial policies is to institutionalize good financial management, clarify strategic intent for financial management, define certain boundaries and limits on actions that staff may take, support good bond ratings, promote long-term and strategic thinking, manage risks to financial condition, and comply with established best practices in public management.

The City's Financial Policies have been written in relatively broad terms as guidelines for financial management decisions. These policies should not be confused with administrative statements of operating procedure, which cover the detailed steps needed to accomplish business processes.

The City's Financial Policies shall be adopted by resolution of the City Council. The policies shall be reviewed annually by management and any modifications made thereto must also be approved by resolution of the City Council.

Definitions

- *Advanced Refunding* – a refunding in which the outstanding bonds are callable and remain outstanding for a period of more than 90 days after the issuance of the refunding bonds. Proceeds from the sale of the refunding bonds are used to purchase permissible legal securities, which are deposited into an escrow account.

- *Agencies* – federal agency securities and/or Government-sponsored enterprises.

- *Arbitrage* – the difference between the interest paid on the tax-exempt securities and the interest earned by investing the proceeds in higher-yielding taxable securities. The Internal Revenue Service regulates arbitrage on the proceeds from the issuance of municipal securities.

- *Bankers' Acceptance* – a draft or bill or exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill, as well as the issuer.

- *Broker* – brings buyers and sellers together for a commission.

- *Capital Budget* – the first two years of the Six-Year Capital Improvement Plan. These amounts are automatically included in the annual biennial budget process.

- *Capital Improvement Plan (C-I-P)* – a plan that describes the capital projects and associated funding sources the City intends to undertake during the next six years.

- *Collateral* – securities, evidence of deposit or other property, which a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies (Public Deposit Protection Act; CRS 11-10.5-101 et seq.)

- *Current Refunding* – a refunding in which the outstanding bonds are retried within 90 days after the new bonds are sold.

- *Competitive Bond Sale* – bonds are marketed to a wide audience of investment banking (underwriter) firms. Sealed bids are submitted at a specific date and time and the underwriter is selected based on its bid for the City's securities.

- *Dealer* – as opposed to a broker, acts as a principal in all transactions, buying and selling for his own account.

- *Delivery-versus-Payment* – delivery of securities with an exchange of money for the securities. Delivery-versus-receipt is delivery of securities with an exchange of a signed receipt for the securities.

- *Full Accrual Basis of Accounting* – under this basis of accounting, revenue is recognized when earned and expenses are recognized when the liability is incurred.

- *Fund* – an independent fiscal and accounting entity with a self-balancing set of accounts recording cash and/or other resources, together with all related liabilities, obligations, reserves, and equities, which are segregated for the purpose of carrying out specific activities or attaining certain objectives.

- *Fund Balance* – the difference between (a) assets and deferred outflows of resources and (b) liabilities and deferred inflows of resources in a governmental fund. Used as a measure of *reserves* in governmental funds.

    - *Non-spendable Fund Balance* – fund balance that is inherently non-spendable, such as the long-term portion of loans receivable, the principal of an endowment, and inventories.

    - *Restricted Fund Balance* – fund balance that has externally enforceable limitations on its use, imposed by parties such as creditors, grantors, or laws and regulations of other governments.

    - *Committed Fund Balance* – fund balance with limitations imposed by the government itself at its highest level of decision making. For example, for the City of Louisville, this would be limitations imposed on fund balance by the Council through an ordinance or resolution.

- *Assigned Fund Balance* – fund balance that is earmarked for an intended use at either the highest level of decision making or by a body or an official designated for that purpose.

- *Unassigned Fund Balance* – all fund balances that are left after considering the other four categories. Use is the least restricted in this category of fund balance.

- *Unrestricted Fund Balance* – a category of fund balance that comprises committed fund balance, assigned fund balance, and unassigned fund balance. Unrestricted fund balance is, therefore, unconstrained or the constraints are self-imposed, so they could be lifted in order to make fund balances available for other purposes.

- *General Fund Operating Expenditures* – as used in the financial indicators, this term refers to total General Fund expenditures, less non-recurring interfund transfers-out.

- *General Fund Operating Revenue* – as used in the financial indicators, this term refers to total General Fund revenue, less other financing sources (such as sales of assets) and interfund transfers-in.

- *General Fund Recurring Expenditures* – as used in the financial indicators, this term refers to total General Fund expenditures, less non-recurring interfund transfers-out.

- *General Fund Recurring Revenue* – as used in the financial indicators, this term refers to total General Fund revenue, less non-recurring building-related revenue, non-recurring and non-operational grants, other financing sources, and interfund transfers-in.

- *General Fund Sales Tax Revenue* – as used in the financial indicators, this term refers to total sales tax revenue less any sales tax rebates due to Business Assistance Packages.

- *General Obligation Bonds* – bonds backed by the "full faith and credit" of the City. Bondholders have the authority to compel the City to use its taxing power, or to use other revenue sources, to generate the revenue necessary to repay the bonds. General obligation bonds are subject to the City's debt limitation and voter approval is required.

- *Liquidity* – refers to the ease in which an asset can be converted into cash without a substantial loss of value.

- *Modified Accrual Basis of Accounting* – under this basis of accounting, revenue is recognized when it become both measurable and available. Measurable means the amount of the transaction can be determined and available means collectible within the current period or soon enough thereafter to be used to pay liabilities of the current period. Expenditures are recognized when they are expected to draw on current spendable resources.

- *Negotiated Bond Sale* – the City selects the underwriter in advance of the bond sale. The Financial Advisor and City staff work with the underwriter to bring the issue to the market and negotiate all rates and terms of the sale.

- *Private Bond Placement* – the City sells its bonds to a limited number of sophisticated investors, and not the general public.

- *Program* – a set of activities, operations, or organizational units designed and directed to accomplish specific service outcomes or objectives for a defined customer.

- *Refunding* – refinancing an outstanding bond issue by issuing new bonds.

- *Reserves* – refers to unrestricted fund balance in governmental funds and working capital in proprietary funds.

- *Revenue Bonds* – bonds secured by revenue generated by user fees or by other non-ad valorem revenue sources typically generated by the project being financed. Only the specific revenue source is pledged for the bond repayment. No taxing power or General fund pledge is provided as security. Revenue bonds are not subject to the City's debt limitation and voter approval is not required.

- *TABOR* – the Taxpayer Bill of Rights amendment to the Colorado Constitution and other Colorado law and court decisions.

- *Treasuries* – securities issued by the U.S. Treasury to finance the national debt. Treasury Bills are non-interest bearing discount securities that mature in one year or less. Treasury Notes are coupon bearing securities having initial maturities of two to ten years. Treasury Bonds are coupon-bearing securities having initial maturities of more than ten years.

- *Underwriter* – a dealer that purchases new issues of municipal securities from the issuer and resells them to investors. The difference between the price at which the bonds are bought and the price at which they are offered to investors is the underwriter's discount.

- *Utility Fund Budgetary Basis Expenses* – as used in the financial indicators, this term refers all expenses under the City's budgetary basis of accounting, less capital outlay and interfund transfers-out.

- *Working Capital* – current assets less current liabilities. Used as a measure of *reserves* in proprietary funds. Proprietary funds, unlike governmental funds, report both capital assets and long-term debt, even though neither is directly relevant to near-term financing. Therefore, the difference between proprietary fund assets and liabilities (net position) is not equivalent to the fund balance reported in governmental funds, and is not a useful indicator of *reserves*.

- *Yield* – the rate of annual income return on an investment, expressed as a percentage. Income yield is obtained by dividing the current dollar income by the current market price for the security. Net yield or yield to maturity is the current income yield minus any premium above par or plus any discount from par in purchase price, with the adjustment spread over the period from the date of purchase to the date of maturity of the bond.

FINANCIAL POLICIES

General Policies

Policy Section: 1
Adopted by: Council Action
Effective Date: ~~November 4, 2019~~June 16, 2026

Purpose and Scope

General Policies are financial policies that are not easily categorized under any of the other policy sections. ~~Among other things, these policies will direct management to calculate specific information about the City of Louisville's current fiscal condition, past and future trends, as well as providing guidelines for making fiscal decisions and assuring that the City continues to pursue a financially prudent course.~~

~~Policies~~

~~1.1 **Financial Indicators.** The City of Louisville shall annually calculate and publish financial indicators consistent with those listed in Appendix "A". All indicators shall be calculated as of year-end and published in the biennial budget document, along with the previous year's indicators for up to ten years. Any indicator that shows a warning trend when compared to prior years shall be more closely analyzed for reasons why a change has occurred.~~

City of Louisville, Colorado
Financial Policies
General Policy 1.1
Appendix A - Financial Indicators

Category	Description	Formula	Warning Trend
Revenue:			
	General Fund Revenue Per Capita	General Fund Operating Revenue / Population	Decrease
	General Fund Intergovernmental Revenue	General Fund Intergovernmental Revenue / General Fund Operating Revenue	Increase
	General Fund Sales Tax	General Fund Sales Tax Revenue / General Fund Operating Revenue	Decrease
	General Fund Property Tax	General Fund Property Tax Revenue / General Fund Operating Revenue	Decrease
	General Fund Actual Revenue vs. Budget	General Fund Actual Revenue / General Fund Budgeted Revenue	Decrease
Expenditures:			
	General Fund Expenditures Per Capita	General Fund Operating Expenditures / Population	Increase
	General Fund Expenditures vs. Budget	General Fund Actual Expenditures / General Fund Budgeted Expenditures	Increase
	City-Wide Employees Per Capita	City-Wide Employees (FTE's) / Population	Increase
	City-Wide Employee Benefit Cost	City-Wide Employee Benefits Cost / City-Wide Employee Wages Cost	Increase
Operating Position:			
	General Fund Operational Surplus/(Deficit)	General Fund Operating Revenue / General Fund Operating Expenditures	Decrease
	General Fund Operating Margin	General Fund Operational Surplus/(Deficit) / General Fund Operating Revenue	Decrease
	General Fund Reserves	General Fund Unrestricted Fund Balance / General Fund Operating Expenditures	Decrease
	Open Space & Parks Fund Reserves	Open Space & Parks Fund Total Fund Balance / Open Space & Parks Fund Targeted Fund Balance	Decrease
	Water Utility Fund Working Capital	Water Utility Fund Working Capital / Water Utility Fund Budgetary Basis Expenses	Decrease

(continued)

City of Louisville, Colorado
Financial Policies
General Policy 1.1
Appendix A - Financial Indicators
(continued)

Category	Description	Formula	Warning Trend
Operating Position: (continued)			
	Wastewater Utility Fund Working Capital	Wastewater Utility Fund Working Capital / Wastewater Utility Fund Budgetary Basis Expenses	Decrease
	Storm Water Utility Fund Working Capital	Storm Water Utility Fund Working Capital / Storm Water Utility Fund Budgetary Basis Expenses	Decrease
	Combined Utility Fund Debt Burden	Total Combined Utility Fund Revenue / Total Combined Utility Fund Debt Service	Decrease
	Combined Utility Fund Net Position	Combined Utility Fund Current Year Net Position / Combined Utility Fund Prior Year Net Position	Decrease
	City-Wide Cash & Investments	City-Wide Unrestricted Cash & Investments / City-Wide Current Liabilities	Decrease
	City-Wide Net Position	City-Wide Current Year Net Position / City-Wide Prior Year Net Position	Decrease
	City-Wide Accumulated Depreciation	City Wide Accumulated Depreciation / City-Wide Depreciable Assets	Increase
	City-Wide Debt Per Capita	City-Wide Total Debt / Population	Increase

City of Louisville
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FINANCIAL POLICIES

Reserve Policies

Policy Section: 2
Adopted by: Council Action
Effective Date: ~~May 7, 2024~~June 16, 2026

Purpose and Scope

The City of Louisville desires to maintain an appropriate level of financial resources to guard its citizens against service disruption in the event of unexpected revenue shortfalls or unanticipated one-time expenditures. This policy is also intended to document the appropriate reserve levels to protect the City's credit worthiness and maintain its good standing with bond rating agencies.

Reserves are accumulated and maintained to provide stability and flexibility to respond to unexpected adversity and/or opportunities. This policy establishes the reserve amounts the City will strive to maintain in its General Fund and its other major operating funds. This policy also stipulates the conditions under which those reserves may be used, in which order they should be utilized, and how the reserves will be replenished if they fall below established reserve amounts.

The City's policy regarding which resources (restricted, committed, assigned, or unassigned) are considered to be spent first for expenditures for which more than one resource classification is available has determined restricted amounts to be reduced first, followed by committed amounts, then assigned amounts, and then unassigned amounts.

The City will measure its compliance with this policy as of December 31st of each year, as soon as practical after final year-end information is audited and becomes available.

Policies

2.1 **General Fund Reserves.** The minimum unrestricted fund balance of the General Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures less any one-time, non-recurring transfers to other funds. Annual, recurring support transfers to other funds will be included in the definition of current operating expenditures.

While the minimum unrestricted fund balance is set at 15% of current operating expenditures, the targeted unrestricted fund balance will be at or above 25% of current operating expenditures. This higher target is in recognition of:

- the General Fund's reliance on revenue sources that are subject to fluctuations (sales and use taxes);
- the General Fund's exposure to unexpected and significant one-time expenditure outlays (transfers to the Capital Projects Fund, mid-year changes to operations, disasters, etc.); and
- the potential drain on General Fund resources from other funds (recurring support transfers to the Parks Fund, the Cemetery Fund, and the Recreation Fund).

The use of General Fund reserves will be limited to addressing unanticipated, non-recurring needs. Reserves shall not normally be used for recurring annual operating expenditures. However, reserves may be used to provide the City time to restructure operations (as might be required in an economic downturn), but such use will only take place in the context of a long-term financial plan.

The City Council will annually consider one-time transfers of excess reserves to other funds for one-time uses. Examples include transfers to the Capital Projects Fund to help fund specific capital projects or transfers to the Open Space Fund or Parks Fund for property acquisition reserves.

Use of reserves below the 25% target requires authorization from City Council.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan. Methods of replenishing fund balance may include the use of non-recurring revenue, year-end surpluses, and, if legally permissible, excess resources from other funds.

2.2 **Open Space Fund Reserves.** The entire fund balance for the Open Space Fund is restricted by ordinance as set forth in section 3.20.600 of the Louisville Municipal Code, including for acquisition of land in and around the city for open space buffer zones, trails, wildlife habitats, wetlands preservation, and for the development, construction, operation and maintenance of such open space zones, trails, wildlife habitats, wetlands and mitigation of wildfires in open space areas.

The minimum fund balance of the Open Space Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures include only open space operations and exclude all interfund transfers and capital outlay. Use of reserves below the 15% minimum requires authorization from City Council.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan.

Within the Open Space Fund, separate and apart from the minimum fund balance, an acquisition reserve is established to fund future open space acquisitions. A minimum of 30% of the annual budgeted sales and use tax revenue proceeds from the tax established in Section 3.20.200(A)(3) of the Louisville Municipal Code shall be encumbered for acquisition of open space land in and around the city, until a target reserve is achieved. Any remaining unencumbered funds available in the Open Space Fund above the minimum fund balance once the calendar year is closed, shall also be directed into the acquisition reserve until a target reserve is achieved. The target acquisition reserve amount shall be set by City Council from time to time through the budget process. Use of acquisition reserves for purposes other than open space acquisition requires authorization from City Council.

In the event acquisition reserves are used for purposes other than open space acquisition, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan.

Transfers from the General Fund or Capital Projects Fund into the Open Space Fund for property acquisition shall be deemed committed for that purpose.

2.3 **Park Fund Reserves.** The entire fund balance for the Parks Fund is restricted by ordinance for acquisition of land in and around the city for parks; and for the development, construction, operation and maintenance of parks.

The minimum fund balance of the Parks Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures include only parks operations and exclude all interfund transfers and capital outlay. Use of reserves below the 15% minimum requires authorization from City Council.

The Parks Fund requires a recurring annual transfer from the General Fund to fund its operating deficit. This annual transfer will be calculated by taking the amount of funding provided by the General Fund for Parks in 2007 ($626,900) and inflating that amount on an annual basis by the regional Consumer Price Index for All Urban Consumers. The 2007 funding level for Parks is the starting point for the calculation. In 2024, the budgeted annual transfer from the General Fund amount was $1,017,900.

Transfers from the General Fund or Capital Projects Fund for property acquisition shall be deemed committed for that purpose.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan.

2.4 **Cemetery Fund Reserves.** The minimum unrestricted fund balance of the Cemetery Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures, excluding interfund transfers and capital outlay.

The Cemetery Fund requires a recurring annual transfer from the General Fund to fund its operational deficit. This transfer will be adjusted on an annual basis to ensure that the unrestricted fund balance of the Cemetery Fund is maintained at or above 15% of current operating expenditures.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan. Methods of replenishing fund balance may include the use of non-recurring revenue, year-end surpluses, and, if legally permissible, excess resources from other funds.

2.5 **Combined Utility Fund Reserves.** The Water, Wastewater, and Storm Water Utility Funds are enterprise funds and, therefore, the measure of reserves is based on levels of working capital rather than on levels of fund balance. It is important to maintain adequate levels of working capital in these funds to mitigate risks and to ensure a stable fee structure and service level.

The minimum working capital for the Water, Wastewater, and Storm Water Utility Funds shall be maintained at or above 25% of current operating expenses, as measured on the City's budgetary basis. For purpose of this policy, operating expenses are defined as all budgetary-basis expenses, excluding interfund transfers and capital outlay.

In the event reserves are used resulting in a working capital balance below the 25% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan. Methods of replenishing working capital may include the use of non-recurring revenue, year-end surpluses, and, if legally permissible, excess resources from other funds.

2.6 **Recreation Fund Reserves.** The minimum fund balance of the Recreation Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures, excluding interfund transfers and capital outlay.

In addition to maintaining an operating reserve, the Recreation Fund will also maintain a capital asset renewal and replacement reserve. The purpose of this reserve is to accumulate funds for the timely renewal and replacement of Recreation Center and Memory Square Pool assets. The methodology for calculating this reserve will be approved by the Finance Committee.

In the event reserves are used resulting in an unrestricted fund balance below the 15% minimum and capital asset renewal and replacement reserves, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan. Methods of replenishing fund balance may include the use of non-recurring revenue, year-end surpluses, and, if legally permissible, excess resources from other funds.

The City Council recognizes that the dedicated sales tax and user fee revenues may not be sufficient and the Recreation Fund may also need to rely on annual General Fund transfers. The annual General Fund transfer will be calculated by taking the General Fund subsidy for the Recreation Center/Memory Square Pool in 2017 ($986,300) and inflating that amount on an annual basis by the regional Consumer Price Index for All Urban Consumers. The 2017 General Fund subsidy level is the starting point for the calculation, since that is the last year that the Recreation Center and Memory Square Pool were funded within the General Fund.

In addition to the annual General Fund transfer towards the annual operating costs, minimum fund balance requirements, and capital asset renewal and replacement reserves, this policy also authorizes an annual transfer from the Capital Projects Fund to the Recreation Fund in the amount of $125,000 for 2019 and each year thereafter inflated on an annual basis by the regional Consumer Price Index for All Urban Consumers. This transfer is restricted for capital outlay.

2.7 **Golf Course Fund Reserves.** The minimum working capital balance of the Golf Course Fund shall be maintained at or above 15% of current operating expenditures. For purpose of this policy, operating expenditures are defined as all expenditures, excluding interfund transfers and capital outlay.

In the event reserves are used resulting in working capital balance below the 15% minimum, a plan will be developed by the City Manager to replenish the reserves as quickly as reasonably possible and will be presented as part of a long-term financial plan.

2.8 **Historic Preservation Fund Reserves.**
Resolution No 17, Series 2019 regulates the administrative procedures for the Historic Preservation Fund (HPF). Section 3 requires the establishment of an annual Contingency/Emergency Reserve Fund for the HPF:

In the first year of the existence of the HPF, 20% of the funds of the HPF shall be placed in a Contingency/Emergency Reserve. On an annual basis, the Commission and City Council shall reevaluate how much should be allocated to this Reserve. These funds shall be accessed only for incentives or acquisitions that become necessary due to exigent circumstances, upon the recommendation of the Commission and approval of City Council. "Exigent circumstances" for purposes of this section shall mean that the Commission has determined, with concurrence of City Council, that without urgent action, significant damage

will be done to the historic fabric or character of Louisville.

On November 18th, 2025, the City Council approved Resolution No. 93, Series 2025, which approved the 2025 annual Contingency/Emergency Reserve Fund for the Historic Preservation Fund (HPF) to be set at twenty-five percent (25%) of the 2024 1/8% sales and use tax revenue (or $263,292.14).

Reserve funds can only be accessed if the HPC and City Council determine urgent action is needed to prevent "significant damage…to the historic fabric or character of Louisville." The proposed reserve would provide emergency funds available for this purpose.

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City of Louisville
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FINANCIAL POLICIES

Debt Policies

Policy Section: 3
Adopted by Resolution No. 92, Series 2015
Effective Date: December 15, 2015

Purpose and Scope

To enhance creditworthiness and engage in prudent financial management, the City of Louisville is committed to systematic capital planning and long-term financial planning. Maintaining the City's bond rating is an important objective and, to this end, the City is continually working to improve its financial policies, budgets, forecasts, and financial health.

These policies establish criteria for the issuance of debt obligations by the City so that acceptable levels of indebtedness are maintained. The objectives of these policies are to ensure that the City obtains debt financing only when necessary, that the process for identifying the timing and amount of debt financing be as efficient as possible, that the most favorable interest rates and related issuance costs are obtained, and that future financial flexibility remains relatively unconstrained.

Debt financing includes general obligation bonds, revenue bonds, notes payable to the Colorado Water Resources & Power Development Authority, leases, and any other City obligations permitted to be issued or incurred under Colorado law, the City's Municipal Code, and the City's Charter.

This policy does not apply to the Urban Revitalization District, a legally separate entity, but a component unit of the City for financial reporting purposes.

Policies

3.1 **Use of Debt Financing.** Although the City will normally finance projects on a cash basis (pay-as-you-go), the City may decide that the most equitable way of financing a project is through debt financing (pay-as-you-use).

Factors which may favor *pay-as-you-go* financing include circumstances where:

- the project can be adequately funded from available current revenue and reserves;
- the project can be completed in an acceptable timeframe given the available resources;
- additional debt levels could adversely affect the City's credit rating or repayment sources; or
- market conditions are unstable or are not conducive to marketing debt.

Factors which may favor *pay-as-you-use* financing include circumstances where:

- current revenue or reserves are insufficient to pay project costs;
- a project is immediately required;
- revenue available for debt issues are considered sufficient and reliable so that long-term financing can be marketed with an appropriate credit rating, which can be maintained;
- market conditions present favorable interest rates and demand for municipal debt financing; or
- the useful life of the project or asset is five years or greater.

The City will not use long-term debt to finance any recurring purpose such as current operations. Debt financing will be used only for capital improvement projects and large equipment purchases. Debt payments shall not extend beyond the estimated useful life of the project or the equipment being financed.

3.2 **Limitations and Constraints on Debt Financing.** Per Article 12, Section 12-1, of the City of Louisville Charter, the total amount of the City's indebtedness shall not at any time exceed three (3) percent of the actual value, as determined by the County Assessor, of taxable property within the City, except such debt as may be incurred by supplying water.

Per Article 12, Section 12-3, of the City of Louisville Charter, any lease-purchase agreement, except for the acquisition of water rights, entered into by the City shall be approved by the City Council by non-emergency ordinance.

Per the Taxpayer Bill of Rights (TABOR) amendment to the Colorado Constitution, all multiple-year debt shall first be approved by the City's taxpaying electorate unless it is issued for a TABOR-defined government enterprise, refinances bonded debt at a lower interest rate, or sufficient cash reserves are pledged irrevocably for future payments. The City's TABOR-defined enterprises include the Water Utility Fund, the Wastewater Utility Fund, the Storm Water Utility Fund, and the Golf Course Fund. Operating leases, lease-purchases, and certificates of participation (COP's) that are subject to annual appropriation are not considered multiple-year debt and are not subject to TABOR election requirements.

3.3 **Structure of Debt Financing.** City debt will be structured to achieve the lowest possible net interest cost given market conditions, the urgency of the capital project, and the nature and type of any security provided. City debt will be structured in ways that will minimize impacts on future financing flexibility. To the extent possible, repayment of debt shall be structured to rapidly recapture credit capacity for future use.

City debt will be amortized for the shortest period consistent with a fair allocation of cost to current and future beneficiaries of the project being financed, and in keeping with other related provisions of this policy. The City shall normally issue general obligation bonds or revenue bonds with a maximum life of twenty years or less.

The City will normally seek to amortize general obligation bonds and revenue bonds with level payments (principal plus interest) over the life of the issue. Pushing higher debt service costs to future years will only be considered under special circumstances. The City will also avoid repayment schedules that consist of low annual payments and a large payment of the balance due at the end of the term. There shall always be at least one interest payment in the first fiscal year after a bond sale. Principal repayment shall start no later than the second year after the bond issue.

Call provisions for bond issues shall be made as short as possible, consistent with the lowest interest cost to the City. Unless specific compelling reasons exist, all bonds shall be callable only at par.

Credit enhancements may be used if the costs of such enhancements are lower than the reduction in net debt service payments or if they provide other significant financial benefits to the City.

3.4 **Bond Counsel.** The City will retain an external bond counsel through a competitive process administered by the Finance Department and the City Attorney's Office. All debt issues of the City will include a written opinion by bond counsel on the validity of the bond offering, the security for the offering, and whether and to what extent interest on the bonds is exempt from income and other taxation.

3.5 **Financial Advisor.** The City will retain an external financial advisor through a competitive process administered by the Finance Department. For each debt issuance, the financial advisor will provide the City with information and recommendations on all aspects of the issuance, including market opportunities, method of sale, structure, term, pricing, and fees.

3.6 **Method of Sale.** As a matter of general policy, the City shall seek to issue its general and revenue bond obligations with a competitive sale process unless it is determined by the City's Financial Advisor and Finance Director that such a method will not produce the best results for the City. Other methods of sale that may be authorized by the Financial Advisor and Finance Director are a negotiated sales process and a private placement process.

Conditions that may favor a negotiated sale process are:

- The bond issue is, or contains, a refinancing that is dependent on market timing;
- At the time of the issuance, the interest rate environment or economic factors that affect the bond issue are volatile;
- The nature of the debt is unique and requires particular skills from the underwriter; or
- The debt issuance is bound by a compressed timeline due to extenuating circumstances that prevent a competitive process from being accomplished.

Whenever a negotiated sale process is determined to be in the best interests of the City, the City will use a competitive process to select its investment banking team.

In such instances where the City, through competitive bidding, deems the bids as unsatisfactory, or does not receive bids, it may, at the election of the Finance Director, immediately enter into a negotiated sale process or private placement process.

3.7 **Refunding of Debt.** Periodic reviews of all outstanding debts will be undertaken by the Finance Director and Financial Advisor to determine refunding opportunities. Refundings will be considered (within legal constraints) if and when there is a net economic benefit of the refunding, or if the refunding is essential in order to amend covenants to enhance operations and management. As a general rule, refundings will only be considered if the present value savings (net of all costs) of a particular refunding will exceed five percent (5%) of the refunded principal.

3.8 **Arbitrage Liability Management.** It is the City's policy to minimize the cost of arbitrage rebate and yield restriction while strictly complying with the law. The City will not issue obligations except for identifiable projects with very good prospects of timely initiation. Because of the complexity of the arbitrage rebate regulations and the severity of non-compliance penalties, the City will use the services of Bond Counsel and other arbitrage compliance experts when determining arbitrage liability, reporting, and exemptions.

3.9 **Financial Disclosure.** The City is committed to full and complete financial disclosure and to cooperating fully with rating agencies, institutional and individual investors, other levels of government, and the general public to share clear, comprehensible, accurate, and timely financial information. Continuing disclosure requirements under Rule 15c2-12 issued by the Securities and Exchange Commission (SEC) may apply to certain debt transactions of the City. The City will comply with all such Federal or other State reporting requirements on a timely basis. The City is committed to meeting continuing disclosure requirements of the national information repositories.

City of Louisville
COLORADO • SINCE 1878

FINANCIAL POLICIES

Revenue Policies

Policy Section: 4
Adopted by: Council Action
Effective Date: November 4, 2019

Purpose and Scope

The City of Louisville collects revenue from various sources, the largest of which are from sales and use taxes, utility fees, property taxes, and intergovernmental revenue. The structure, equity, fluctuation, and collection of revenue are important for financial stability and are reviewed by bond rating agencies to determine the City's credit quality.

Policies

4.1 **Diversification and Stabilization.** The City will strive to maintain a diversified and stable revenue system to reduce the overall effects of fluctuations in any one revenue source.

4.2 **Equity.** Revenue will be derived from a fair, equitable, and adequate resource base, while minimizing tax differential burdens. Services having a City-wide benefit shall be financed with revenue sources generated from a broad base, such as sales taxes and property taxes. Services where the customer determines the use shall be fully or partially financed with user fees and charges related to the level of service provided.

4.3 **Collections.** The City will monitor all taxes, fees, and charges to make sure they are equitably administered and collections are timely and accurate. The City will pursue collection of delinquent amounts (including related penalties and interest) as authorized by the Louisville Municipal Code.

4.4 **Recurring and Non-recurring Revenue.** The City's objective is to fund all recurring expenditures with recurring revenue. Non-recurring, one-time revenue should be used to fund only non-recurring, one-time expenditures. The preferred use of non-recurring revenue is to invest in projects that will result in long-term operational cost savings.

4.5 **Intergovernmental Revenue.** The City will pursue intergovernmental aid, including grants, for those programs and activities that address a recognized need and are consistent with the City's goals and objectives, and will attempt to recover all allowable costs associated with those programs. The City will avoid using grants for ongoing service delivery needs. Any decision to pursue intergovernmental aid should only be made after consideration of the present and future funding requirements, costs of administering the funds, costs associated with special conditions or regulations attached to the aid, and ongoing operational costs after the aid period.

4.6 **User Fees and Services Charges.** The City will periodically recalculate the full cost of providing services in order to provide a basis for setting the associated user fee or service charge. Full cost shall incorporate direct and indirect costs, including operations (with City labor costs), maintenance, overhead, debt service, equipment, and capital charges. The intent of this policy is to set fees at a level that is related to the actual cost of producing the good or service. The City will also periodically examine and compare rates from other cities providing similar services. It is recognized that competing policy objectives may result in user fee levels that recover only a portion of the costs. The City Council's intent is to review all fees every year during the budget process. For years in which a complete recalculation of full costs is not done, this policy authorizes the use of an annual fee inflator to be applied to certain fees.

4.7 **Fees for Children's Recreational Services and Senior Programs.** The City may set fees for children's recreational programs and senior services at levels below the full cost of providing those services.

4.8 **Fees for Non-Resident City Services.** Non-residents may be required to pay higher fees than residents for City services.

City of Louisville
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FINANCIAL POLICIES

Operating Budget Policies

Policy Section: 5
Adopted by: Council Action
Effective Date: November 4, 2019

Purpose and Scope

The formulation of the annual operating budget, including the publication of the budget document, is one of the most important financial activities that the City of Louisville undertakes each year. The budget process provides a comprehensive plan to deliver efficient services to residents and stakeholders of the City in a manner that aligns resources with the policies, goals, mission, and vision of the City. This policy is intended to provide guidelines to assist in the formulation of financial discussion and the broader implications of financial decisions. This policy shall apply to all funds with an adopted budget.

Policies

5.1 **Budgetary Basis of Accounting.** The "basis of accounting" is a term used to describe the timing of revenue and expenditure recognition. In other words, when the effects of transactions or events should be recognized. In governmental accounting, the basis of accounting used for financial reporting purposes, as required by generally accepted accounting principles (GAAP), is not required for use in preparing a budget document. Under GAAP, governmental funds are required to utilize a modified accrual basis of accounting and proprietary funds (enterprise and internal service) are required to utilize a full accrual basis of accounting for financial reporting purposes. The City of Louisville's *budgetary* basis of accounting is a modified accrual basis for *all* fund types, including proprietary funds. Some of the differences between the City's budgetary basis of accounting and the GAAP basis of accounting for proprietary fund types are:

- *Issuance of debt* – budgeted as a revenue item, adjusted at year-end to a liability for financial reporting purposes.
- *Principal payment on debt* – budgeted as an expense item, adjusted at year-end to a reduction in the liability for financial reporting purposes.
- *Capital acquisition* – budgeted as an expense item, adjusted at year-end to an asset acquisition for financial reporting purposes.
- *Depreciation* – not recognized for budgeting purposes, recorded at year-end as an expense for financial reporting purposes.

5.2 **Level of Budgetary Control.** The level of budgetary control is the level at which spending cannot exceed the budgeted amount without City Council authorization. The level of control is also the level of detail the City Council approves in the appropriation resolution. The City's current level of budgetary control is at the fund level. However, department management is responsible for administering their respective programs within the financial constraints described by the budget as adopted.

Article 11, Section 11-6 of the City of Louisville Charter states, *"During the fiscal year, no officer or employee shall expend or contract to expend any money, or incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts appropriated by the City Council. Any contract, verbal or written, made in violation of this subsection shall be void, and no moneys of the City shall be paid on such contract; except that the City Council may ratify such a contract if it determines that ratification would be in the best interest of the City, and if it adopts a resolution making the necessary appropriation."*

5.3 **Balanced Budget.** The City's definition of a balance budget requires each fund's revenue plus appropriated fund balance/working capital to be equal to, or greater than, each fund's total appropriations. However, it is the City's intent to go further and develop *structurally* balanced budgets for the General Fund and the other major operating funds (excluding capital project funds). In a structurally balanced budget, annual recurring revenue will be projected to equal or exceed annual recurring expenditures for each fund. If a structural imbalance (recurring expenditures exceeding recurring revenue) should occur in the General Fund or in any of the major operating funds, a plan will be developed and implemented to bring the budget back into structural balance.

5.4 **Budget Form.** Article 11, Section 11-2 of the City of Louisville Charter states, *"The proposed budget shall provide a complete financial plan for the City in a format acceptable to the City Council. Except as otherwise provided by this Charter, the proposed budget shall be prepared in accordance with State statutes establishing the local government budget law and the local government uniform accounting law."*

5.5 **Capital Improvement Plan (C-I-P).** A Six-Year Capital Improvement Plan will be presented to the City Council for consideration during the biennial budget development process. The annual capital budget will be based on the first year of the approved C-I-P.

5.6 **Long-Term Financial Plan (LTFP).** Six-year financial forecasts for each of the City's major operating funds will be presented to the City Council for consideration during budget development. The LTFP will coordinate the C-I-P with the operating budget and will provide insight into potential future financial imbalances so that action can be taken before a crisis occurs.

5.7 **Budget Amendment.** The City Council may amend or supplement the budget by resolution at any time after its initial adoption. A public hearing is required.

5.8 **Budget Control System.** The City will develop and maintain a budgetary control system to help it adhere to the budget. All departments are part of the budget control system and will have access to individual department reports that compare budget-to-actual financial performance. The Finance Department will report City-wide budget-to-actual performance on a quarterly basis for both revenue and expenditures to the City Finance Committee.

City of Louisville
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FINANCIAL POLICIES

Investment Policies

Policy Section: 6
Adopted by: Council Action
Effective Date: May 7, 2024

Purpose and Scope

It is the policy of the City of Louisville to invest public funds in a manner which will provide the highest investment return with the maximum security while meeting the daily cash flow demands and conforming to all Colorado Revised Statutes, the City of Louisville Charter, and the City of Louisville Municipal Code.

The provisions of this investment policy shall apply to all funds held in the custody of the City and all of its offices. Except for cash in certain restricted and special funds, the City shall consolidate, or "pool", cash and investment balances from all funds to maximize investment earnings and to increase efficiencies with regards to investment pricing, safekeeping, and administration. The investment income derived from the pooled cash and investment accounts shall be allocated to the various funds based on their respective participation and in accordance with generally accepted accounting principles.

Policies

6.1 **Objectives.** In order of priority, the primary objectives of investment activities shall be safety, liquidity, and yield:

- *Safety.* Safety of principal is the foremost objective of the investment program. Investments shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio through the mitigation of credit risk and interest rate risk.

- *Liquidity.* The investment portfolio shall remain sufficiently liquid to meet all operating requirements that may be reasonably anticipated. This shall be accomplished by structuring the portfolio so that securities mature concurrent with cash needs to meet anticipated demands. Furthermore, since all possible cash demands cannot be anticipated, the portfolio shall consist largely of securities with active secondary or resale markets. In addition, a portion of the portfolio may be placed in local government investment pools (LGIPs) which offer same-day, constant dollar liquidity for short-term funds.

- *Yield.* The investment portfolio shall be designed with the objective of attaining a market rate of return throughout budgetary and economic cycles, taking into account the investment risk constraints and liquidity needs. Return on investment is of secondary

importance compared to the safety and liquidity objectives described above. Securities generally shall be held to maturity with the following exceptions:

- A security with a declining credit may be sold early to minimize loss of principal.
- A security swap would improve the quality, yield, or target duration of the portfolio.
- Liquidity needs of the portfolio require the security to be sold.

6.2 **Delegation of Authority.** The Finance Director shall be the designated investment officer of the City and shall be responsible for all investment decisions and activities, under the direction of the City Manager. The Finance Director shall establish investment policy procedures for the operation of the investment program consistent with this policy. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions. No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the Finance Director.

The Finance Director may delegate the authority to conduct investment transactions and manage the operation of the investment portfolio to one or more subordinates and/or an external registered investment advisor who shall act in accordance with established procedures on internal controls and in compliance with this investment policy.

6.3 **Legal Investments.** All investments shall be made in accordance with Colorado Revised Statutes (CRS) as follows: CRS 11-10.5-101, et seq., Public Deposit Protection Act; CRS 24-75-601, et seq., Funds - Legal Investments for Government Units; CRS 24-75-603, et seq., Depositories; CRS 24-75-701 and 702, et seq., Local Governments - Local Government Pooling and that the investment or deposit meets the standard established in section CRS 15-1-304. Any revisions or extensions of these sections of the CRS will be assumed to be part of this Investment Policy immediately upon enactment.

To the extent possible, the City shall attempt to match its investments with anticipated cash flow requirements. Unless matched to a specific cash flow, the City will not directly invest in securities maturing more than five (5) years from the settlement date or in accordance with state and local statutes and ordinance. Pursuant to CRS Section 24-75-601.1(1), as amended from time to time, and subject to the limitations set forth therein, the securities listed herein shall be eligible for investment of public funds by the City. In the event of a conflict between CRS 24-75-601.1(1) and this policy, other than this policy being more restrictive that CRS 24-75-601(1), CRS 24-75-601.1(1) shall control. Nothing herein shall preclude the City from adopting a policy to permit securities other than those listed in CRS 24-75-601.1(1) for investment of public funds.

CRS 24-75-601(1) and this policy authorize the following investments:

- Any security issued by, fully guaranteed by, or for which the full credit of the United States Treasury is pledged for payment; allowing for inflation indexed securities. The period from the date of settlement of this type of security to the maturity date shall be no more than five years, unless the City Council authorizes investment for a period in excess of five years.

- Any security issued by, fully guaranteed by, or for which the full credit of the following is pledged for payment: The Federal Farm Credit Bank, A Federal Home Loan Bank, the Federal Home Loan Mortgage Corporation, The Federal National Mortgage Association, the Government National Mortgage Association, or an entity or organization that is not

listed in this paragraph but that is created by, or the creation of which is authorized by, legislation enacted by the United States Congress and that is subject to control by the federal government that is at least as extensive as that which governs an entity or organization listed in this paragraph. The period from the date of settlement of this type of security to its maturity date shall be no more than three years. Any entity or organization listed in this paragraph may represent up to but not more than 35% of the investment portfolio. The total of the above mentioned entities or organizations and inclusive of corporate or bank securities cannot represent more than 95% of the investment portfolio.

- Any security that is a general or revenue obligation of any state of the United States, the District of Columbia, or any territorial possession of the United States or of any political subdivision, institution, department, agency, instrumentality, or authority of any of such governmental entities. The period from the date of settlement of this type of security to the maturity date shall be no more than three years.

- Any interest in a local government investment pool pursuant to CRS 24-75-701, et seq.

- Any guaranteed investment contract (GIC) if at the time the contract or agreement is entered into, the long-term credit rating, financial obligations rating, claims paying ability rating, or financial strength rating of the party, or of the guarantor of the party, with whom the public entity enters the contract or agreement is, at the time of issuance, rated in one of the two highest rating categories by two or more nationally recognized securities rating agencies that regularly issue such ratings. Contracts or agreements purchased under this paragraph shall not have a maturity period greater than three years.

- Any dollar-denominated corporate or bank security issued by a corporation or bank that has a maturity of less than three years from the date of settlement and, at the time of purchase, must carry at least two credit ratings from any of the nationally recognized credit rating agencies and must not be rated below “AA– or Aa3” by any credit rating agency. The aggregate value of all securities referred to in this paragraph shall equal no more than 25% of the total portfolio.

- Money market instruments, such as commercial paper or bankers' acceptance, must carry at least two credit ratings from any of the nationally recognized credit rating agencies and must not be rated below "A1, P1, or F1" by any credit rating agency.

- Any money market fund that is registered as an investment company under the federal “Investment Company Act of 1940”, as amended, at the time the investing public entity invests in such fund. The money market fund must: 1) have no commission fee on the charged on purchases or sales of shares; 2) have a constant daily net asset value per share of $1.00; 3) limit assets of the fund to U.S. Treasury Securities; 4) have a maximum stated maturity and weighted average maturity in accordance with Federal Securities Regulation 270-2A-7; and 5) have a rating at the time of purchase of at least AAAm by Standard & Poor’s or Aaa/MRI+ Moody’s

- The purchase of any repurchase agreement of marketable securities referred to in the preceding paragraphs. A Master Repurchase Agreement must be executed with the bank or dealer. The securities must be delivered to the City’s custodian or to a third-party custodian or third-party trustee for safekeeping on behalf of the City. The title to or

a perfected security interest in such securities along with any necessary transfer documents must be transferred to the City or the City's custodian. The collateral securities of the repurchase agreement must be collateralized at no less than one hundred two percent and marked to market no less frequently than weekly. Collateralization is required per the Public Deposit Protection Act, CRS 11-10.5-101 et seq. The securities subject to the repurchase agreement may have a maturity in excess of five years. The repurchase agreement itself may not have a maturity of more than five years from the date of settlement unless the City Council authorizes investment for a period in excess of five years.

- Certificates of deposit in state or national banks or in state or federally chartered savings banks, which are state-approved depositories per CRS Section 24-75-603, et seq. (as evidenced by a certificate issued by the State Banking Board) and are insured by the FDIC. Certificates of deposit, which exceed the FDIC insured amount, shall be collateralized in accordance with the Colorado Public Deposit Protection Act. Certificates of deposit must comply with CRS Section 30-10-708 (1). The aggregate value of all certificates of deposit shall equal no more than 25% of the total portfolio.

6.4 **Standards of Care and Performance.** The "reasonable prudence" standard shall be used by investment officials in the context of managing an overall portfolio. The "reasonable prudence" standard provides that investments shall be made with the judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not in regard to speculation, but in regard to the permanent disposition of funds, considering the probable income as well as the probable safety of the capital.

Investment officers acting in accordance with written procedures and the investment policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

In addition, officers and employees involved in the investment process shall refrain from personal business activity that could conflict with the proper execution and management of the investment program, or that could impair their ability to make impartial decisions. Employees and investment officials shall disclose to the City Manager any material interests in financial institutions with which they conduct business. They shall further disclose any personal financial/investment positions that could be related to the performance of the investment portfolio. Employees and officers shall refrain from undertaking personal investment transactions with the same individual with whom business is conducted on behalf of the City.

6.5 **Authorized Financial Institutions, Depositories, and Broker-Dealers.** Unless utilizing the services of an external registered investment advisor, the Finance Department shall maintain a list of financial institutions and depositories authorized to provide investment services to the City. In addition, the Finance Department shall maintain a list of approved security broker/dealers that may include "primary" dealers or regional dealers qualifying under Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule). To qualify for consideration for investment transactions with the City, all financial institutions and broker-dealers must supply the following, as appropriate:

- Proof of state registration (except for those firms providing safekeeping and custodial services only).
- Audited financial statements demonstrating compliance with state and federal capital adequacy guidelines.
- Proof of Financial Industry Regulatory Authority (FINRA) certification.
- Evidence of adequate insurance coverage.
- Certification of having read and understood and agreeing to comply with the City's investment policy.

An annual review of the financial condition and registration of all qualified financial institutions and broker/dealers will be conducted by the Finance Director.

6.6 **Safekeeping and Custody.** All trades of marketable securities will be executed "delivery versus payment" (where applicable) to ensure that securities are deposited in an eligible financial institution prior to the release of funds.

Securities will be held by an independent third-party custodian selected by the City and evidenced by safekeeping receipts in the City's name. The safekeeping institution shall provide on an annual basis a copy of its most recent report on internal controls (Statement of Standards 70).

Moreover, management is responsible for establishing and maintaining an internal control structure designed to ensure that the assets of the City are protected from loss, theft, or misuse. The internal control structure shall be designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits likely to be derived, and (2) the valuation of costs and benefits requires estimates and judgments by management. The internal controls structure should address the following points:

- Control of collusion.
- Separation of transaction authority from accounting and recordkeeping.
- Custodial safekeeping.
- Avoidance of physical delivery securities.
- Written confirmation of transactions for investments and wire transfers.
- Dual authorization of wire transfers.

Compliance with these controls shall be reviewed and confirmed through the City's annual independent audit.

6.7 **Performance Standards & Reporting**

The investment portfolio shall be designed with the objective of obtaining a rate of return throughout budgetary and economic cycles, commensurate with the investment risk constraints and the cash flow needs.

The City's investment strategy is passive. Given this strategy, the basis used by the Finance Director to determine whether market yields are being achieved shall be the ColoTrust local government investment pool, the one-year US Treasury Bill, and the two-year Agency Benchmark.

The Finance Director shall provide the Finance Committee quarterly investment reports that provide the status and characteristics of the current investment portfolio. The investment report should include schedules on:

- Portfolio diversification.
- Maturity distribution.
- A listing of all securities held by authorized investment category.
- Par value, amortized book value, and market value for all securities held.
- Monthly activity – purchases, sales, calls, and interest received

City of Louisville
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FINANCIAL POLICIES

Capital Asset Investment & Management Policies

Policy Section: 7
Adopted by: Council Action
Effective Date: November 4, 2019

Purpose and Scope

Capital assets have a major impact on the ability of the City of Louisville to deliver services, the economic vitality of the City, and the overall quality of life for the City's citizens. The purpose of this policy is to provide general guidelines for a comprehensive process of allocating limited resources to capital investments. This policy applies to all funds included in the City's Six-Year Capital Improvement Plan.

Policies

7.1 **General Process for Six-Year Capital Improvement Plan (C-I-P).** The Finance Department is responsible for coordinating the C-I-P process within the annual budget calendar and for compiling the requested, recommended, and adopted C-I-P document.

Each year, City departments will submit a list of prioritized projects for inclusion into the C-I-P. The City Manager will review the requests and make the final recommendations to City Council. City Council will review the recommended C-I-P and direct any changes for the final C-I-P. The first two years of the C-I-P will be included in the Biennial Operating & Capital Budget presented to the City Council for formal adoption in November.

The City shall provide meaningful opportunities for all stakeholders to provide input into the C-I-P development process.

7.2 **C-I-P Project Selection.** An objective set of criteria will be used to assess and evaluate project proposals. Although specific criteria may be updated from time to time, the following concepts are core principles to be considered in the development of such criteria:

- Long-Term Forecasts – Long-term forecasts will be prepared to better understand resources available for capital spending and to assess operational impacts and eventual maintenance and replacement costs.

- Impact of Other Projects – Projects shall not be considered in isolation. One project's impact on others should be recognized and costs shared between projects where appropriate.

- Full Costing – Cost analysis of a proposed project should encompass the entire cost of the project, including annual maintenance and other impacts to the operating budget.

- Predictable Project Timing & Scope – Schedule and scope estimates should be practical and achievable within the requested resources, including financial and human.

7.3 **Balanced C-I-P.** The adopted C-I-P will be balanced. This means that for the six-year period, revenue plus the use of fund reserves will equal or exceed total project expenditures.

7.4 **Asset Maintenance & Replacement.** It is the City's intent to maintain its existing assets and a level that protects the initial capital investment and minimizes future maintenance and replacement costs. Based on an asset inventory and risk assessment, staff shall include recommendations for asset maintenance in the C-I-P. It is the City's intent to ensure that adequate resources are allocated to preserve the City's existing infrastructure to the best of its ability before allocating resources to other capital projects.

City of Louisville
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FINANCIAL POLICIES

Accounting, Auditing, & Financial Reporting Policies

Policy Section: 8
Adopted by: Council Action
Effective Date: ~~November 4~~June 16 , 20~~19~~26

Purpose and Scope

The City of Louisville desires to maintain a system of financial management that safeguards City assets, promotes financial transparency, and provides timely, accurate, and relevant financial information to citizens, elected officials, and management. This policy pertains to all funds and operations of the City and, to the extent reasonably possible, all component units of the City.

Policies

8.1 **Accounting.** The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles applicable to state and local governments. The City's accounting and reporting policies will conform to the generally accepted accounting principles (GAAP).

8.2 **Auditing.** Article 11, Section 11-7 of the City of Louisville Charter states, *"The Council shall provide for a financial audit, which shall be performed at least annually by a certified public accountant selected by the Council. The Audit shall be performed in accordance with the State statutes establishing the local government audit law. Copies of the audit shall be made available for public inspection."*

In compliance with the Charter, an annual audit will be performed by an independent certified public accounting firm in accordance with Generally Accepted Governmental Auditing Standards and the auditor's opinion will be included in the City's Comprehensive Annual Financial Report (CAFR).

The City's Finance Department shall be responsible for managing the audit procurement process. The City Council will appoint the independent auditor and approve each year's audit engagement letter. The audit engagement term shall typically be for five to ten years, subject to annual review, approval, and appropriation.

8.3 **Audit Committee.** The City's Finance Committee will act as the City's Audit Committee. The Audit Committee will provide an independent review and oversight of the government's financial reporting processes, internal controls, and independent auditors. The City's independent auditors will meet with the Audit Committee at lease annually and have direct access to the Audit Committee if City staff is unresponsive to auditor recommendations or if

the auditors consider such communication necessary to fulfill their legal and professional responsibilities.

8.4 **Financial Reporting.** The City's Comprehensive Annual Financial Report (CAFR) will be published annually to present the results, financial position, and results of operations of the City for the prior year. As an additional independent confirmation of the quality of the City's financial information, the City will annually submit its CAFR to the Government Finance Officers Association's Certificate of Achievement for Excellence in Financial Reporting program.

The Finance Department will provide quarterly interim financial reports to the Finance Committee after the close of each quarter. The reports will be designed to keep the Committee continuously informed of the City's overall financial status.

8.5 **Internal Controls.** The goals and objectives of the City's internal control policies are to safeguard City assets and to foster reliance on public information for decision-making purposes at all levels both internally and externally. Management shall establish the presence of integrity, ethics, competence, and a positive control environment. Directors are responsible for establishing, executing, and maintaining control policies and procedures at the detail level within their specific departments.

The City's internal control structure will be based on the Committee of Sponsoring Organizations of the Treadway Commission on Fraudulent Financial Reporting (COSO) framework and comprised of the following elements:

- **Control Environment** – Factors include integrity and ethical values, commitment to competence, leadership philosophy and operating style, assignment of authority and responsibility, and policy and procedures;

- **Risk Assessment** – Routine assessment of risk and its impact on internal controls;

- **Control Activities** – Such as segregation of duties, authorization of transactions, retention of records, supervision and monitoring of operations, and physical safeguards;

- **Information and Communication** – Policies and procedures are documented and accessible; and

- **Monitoring** – Assessment of the quality of performance over time to determine whether controls are effective and track resolution achievements of identified problems.

8.6 **Capitalization of Assets.** The terms capital assets, capital outlay, and fixed assets are used to describe assets that are used in operations that have initial lives extending beyond a single reporting period, such as water rights, infrastructure, land, buildings, improvements other than buildings, and equipment. It is incumbent upon departments to maintain adequate control over all resources, including capital assets, to minimize the risk of loss or misuse.

Not all capital assets are required to be reported on the City's balance sheet. Specifically, capital assets with extremely short useful lives or of small monetary value are properly reported as an "expenditure" or "expense" of the period in which they are acquired. Capital

assets that are reported on the City's balance sheet are said to be "capitalized" and must meet the capitalization criteria outlined in this policy.

The City's capitalization criteria are, as follows:

- Assets should be capitalized only if they have an estimated useful life of at least two years following the date of acquisition.
- The capitalization thresholds shall normally be applied to individual items rather than to groups of similar items (e.g., chairs), unless the effect of doing so would be to eliminate a significant portion of total capital assets (e.g., library books).
- Directors are responsible for establishing control and inventory procedures at the department level for non-capitalized assets such as office equipment, communications equipment, fleet management inventory, firearms, etc.
- The capitalization threshold for each individual item is ~~$10,000.~~found in Table 1: Capitalization Thresholds by Asset Category.
- Should an asset be purchased through an external funding source that requires a different capitalization threshold, the City shall adhere to the Grantor's requirements.

TABLE 1: Capitalization Thresholds by Asset Category

	Current			Proposed	
Assets	**Years**	**Amount**		**Years**	**Amount**
Land / Water Rights				N/A	$1
Buildings (including the right to use building)	50	$10,000		50	$100,000
Building Improvements	30	$10,000		30	$100,000
Streets & Sidewalks	25 – 30	$10,000		25 – 30	$100,000
Water, Wastewater, & Storm Water Systems	25 – 50	$10,000		25 – 50	$100,000
Vehicles	3 – 7	$10,000		3 – 7	$50,000
Machinery & Equipment	5 – 10	$10,000		3 – 10	$50,000
~~Computer Equipment~~	~~3 – 10~~	~~$10,000~~			
Leases / Subscription-Based Info. Tech. Arrangements (SBITA)	3 – 10	$10,000		3 – 10	$50,000

8.7 **Accounts Receivable Write-Off.** Accounts receivable is an asset account reflecting amounts owed to the City. Staff will make every effort to collect all receivables. Only receivables deemed uncollectible can be written off. In order to be deemed uncollectible, a receivable must meet the following criteria:

- All standardized collections procedures have been exhausted;
- Further measures to collect the debt have been determined as inappropriate; and

- The characteristics of the debt are such that write-off is appropriate (e.g., the debt is small relative to the cost of further collection efforts).

The City Manager or Finance Director is authorized to approve a write-off of up to $50,000~~100~~ per ~~individual~~ account~~.~~ Staff's request to write-off accounts greater than $~~100~~ 50,000 must be approved by the Finance Committee. The amounts and reasons for all write-offs will be documented and made available for audit.

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 7.B.

Subject: Resolution No. 55, Series 2026 — A Resolution Approving a Design Task Order for the CTC Lift Station Improvement Project Phase 2

Date: June 16, 2026

Prepared By: Justin Ferron, Civil Engineer III

Presented By: Cory Peterson, Deputy Director of Utilities

Summary:
Staff recommends the approval of a design task order with JVA, Inc. in the amount of $60,000 inclusive of a $5,000 contingency for the CTC Lift Station Improvement Project Phase 2. This item is being presented to City Council for approval because a budget amendment is required.

Background / Prior Discussions:
Staff identified several needed improvements and repairs at the CTC lift station. As the project scope developed, it was determined that a phased approach was the most effective direction. The critical installation of an emergency bypass connection occurred in 2023. The remaining Phase 1 scope was awarded at the June 4, 2024, council meeting for the rebuilding or replacement of the pumps, motors, variable frequency drives, valving and painting of all piping. Construction of Phase 1 was completed in 2024 within budget.

Development Proposal:
N/A

Analysis:
The Phase 2 scope of work includes the following:

1. Provide physical inspection of the two wet wells and document findings and any relining recommendations
2. Remove ladders and install submersible mixers at the ladder locations
3. Provide fixed suction pipe for maintenance dewatering
4. Replace slide gates
5. New auto-sampler
6. Electrical and Control for the mixer and sampler installation
7. Concrete/lining rehabilitation if required based on findings of the inspection

Phase 2 scope requires technical analysis assistance from a consultant engineer to

inspect concrete, evaluate coatings and determine equipment selection for autosampling and Fats, Oils and Grease (FOG) control. At the end of 2024, staff reached out to multiple consultant engineers for proposals and availability shown in the table below:

Consultant	Proposal Cost 2024
JVA, Inc.	$50,000
Consor	$57,574
Providence Infrastructure Consultants	$77,871

Phase 2 design solicitation was put on hold in 2025 due to other projects taking priority. Resuming the project in 2026, staff engaged multiple consultants under the on-call contracts. JVA, Inc. was the only on-call consultant able to respond in a timely manner with availability and a cost proposal. Updated pricing is shown below:

Consultant	Proposal Cost 2026
JVA, Inc.	$55,000

Staff recommends proceeding with this design work with JVA via task order under the existing on-call contract. With approval the City will begin the design as outlined in the schedule below:

Project Phase	Estimated Timeline
Design Completion and Project Bid for Construction	Q3 2026 to Q4 2026
Council Construction Award	Q4 2026 to Q1 2027
Construction Completion	Q2 2027 to Q3 2027

JVA's scope of services includes the design for the process, structural, and electrical components, bidding services, and meetings to coordinate the data collection and design. Deliverables include 90% design drawings and specifications, final design drawing and specifications, and bidding services.

Council Work Plan:

This project supports the 2026 Council Work Plan under Core Services. It is also aligned with the Utility System Infrastructure Plan.

Fiscal Impact:

Funding Description	Account	Budget Amount
Total Budget (2023) Phase 1 (Previously Approved)	502498-660296	$200,000
Total Budget (2026) Phase 2 (This Approval)	**502498-660296**	**$0**

Projected Expense Summary		
Description		**Amount**
Design Phase 2		($55,000)
Contingency (10%)		($5,000)
	Total Design Expenses:	**($60,000)**
	Funding Shortage:	**$60,000**

This project will reuse the prior budget account 502498-660296. The previous budget had a total of $500,000 with $200,000 in 2023 for Phase 1 and $300,000 remaining for Phase 2. With the delay and uncertainty of Phase 2, funding was not carried forward and instead was returned to wastewater fund reserves. The reinstatement of Phase 2 requires a budget amendment to begin design work along with the future construction award.

Full funding impacts are summarized in the table below:

Estimated CTC Lift Station Improvement Project Phase 2 Costs	
Engineering Design and Contingency (This Approval)	**$60,000**

Estimated Construction Management	$40,000
Estimated Construction Cost with Contingency	$300,000
Total Estimated Wastewater Fund Impact	**$400,000**

A budget amendment in the amount of $400,000 will be needed and will be coordinated with the Finance Department as part of a future approval process. The full project cost, estimated at $400,000, has already been incorporated into the approved Utility Rate Model for 2026. No utility rate adjustments are required to fund this project.

Alternatives:
City Council could modify the Phase 2 scope or take no action. Under a no-action alternative, Phase 2 would not proceed at this time. This would avoid immediate project costs but leave known maintenance needs unresolved, increasing the risk of higher future costs, emergency repairs, or sewer system failure.

The Phase 2 scope could also be modified by delaying or removing less critical items, such as the autosampler and wet well mixing improvements. While these items would improve staff efficiency and reduce manual cleaning, they are secondary to the concrete and liner rehabilitation work needed for continued lift station operation.

Recommendation:
Staff recommends City Council approval of a design task order with JVA, Inc. in the amount of $60,000 inclusive of a $5,000 contingency, authorize project manager to execute change orders for project contingency, and authorize the Mayor to sign and execute the Task Order on behalf of the City.

Attachments:
1. Resolution No. 55, Series 2026
2. Engineering On-call Contract Awards JVA with Exhibit B Task order

RESOLUTION NO. 55
SERIES 2026

A RESOLUTION APPROVING A DESIGN TASK ORDER FOR THE CTC LIFT STATION IMPROVEMENT PROJECT PHASE 2

WHEREAS, the City previously entered into a Professional Services Contract for On-Call Engineering Services with JVA, Inc. dated June 3, 2025, which authorizes the City to issue Task Orders setting forth specific services and tasks to be performed by JVA and a budget for such services; and

WHEREAS, a Task Order has been proposed for JVA to provide engineering services for the second phase of the CTC Lift Station Project (the "Project"); and

WHEREAS, the City Council desires to approve the Task Order and to authorize additional contingency for the Project.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Task Order by and between the City of Louisville and JVA, Inc. for the Project (the "Task Order") in substantially the same form as the copy of such Task Order accompanying this Resolution.

Section 2. The Mayor is hereby authorized to execute the Task Order on behalf of the City, and the Mayor is hereby further authorized to negotiate and approve such revisions to the Task Order as the Mayor determines are necessary or desirable for the protection of the City, so long as the essential terms and conditions of the Task Order are not altered.

Section 3. The City Council hereby approves an additional $5,000 in Project contingency. The City's Project Manager for the Task Order is authorized to execute change orders to the Task Order in an amount not to exceed $5,000 if deemed necessary for the Project.

PASSED AND ADOPTED this 16th day of June 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

PROFESSIONAL SERVICES AGREEMENT
BY AND BETWEEN THE CITY OF LOUISVILLE
AND JVA, INC.
FOR ON-CALL ENGINEERING SERVICES

1.0 PARTIES

This Agreement is entered into this 6/3 day of 2025 ("**Effective Date**"), by and between the **City of Louisville**, a Colorado home rule municipal corporation (the "**City**"), and **JVA, Inc.**, a Colorado corporation (the "**Consultant**").

2.0 RECITALS AND PURPOSE

2.1 The City desires to engage the Consultant for the purpose of providing on-call engineering services (the "**Services**").

2.3 The Consultant represents that it has the special expertise, qualifications and background necessary to complete the Services.

3.0 SCOPE OF SERVICES

3.1 The Consultant agrees to provide the City with the specific Services and to perform the specific tasks, duties and responsibilities set forth in each task order approved in writing by the City (each a "Task Order"). Task Orders shall be approved by the City Manager or City Council, as applicable, in accordance with the purchasing levels for professional services set forth in the City's Purchasing Policies.

3.2 When approved in writing by the City, each Task Order shall become a part of and be incorporated into this Agreement. A blank Task Order template is included as **Exhibit B**. A Task Order may be changed only by a properly authorized amendment to the Task Order. The Consultant shall furnish all tools, labor and supplies in such quantities and of the proper quality as are necessary to professionally and timely perform the Services under each Task Order.

3.3 The Consultant acknowledges that this Agreement does not grant any exclusive privilege or right to supply Services to the City. In its sole discretion, the City may contract with other Consultants to provide the same or similar services during the term of this Agreement. The terms and conditions of this Agreement shall control in the event of any conflict between the terms and conditions of this Agreement and the terms and conditions of any specific Task Order.

3.4 No specific task or work under this Agreement shall be commenced until the City has in writing instructed the Consultant to commence work on a specific Task Order, and, if requested by the City, until after a meeting between the Consultant and City representatives. The City shall have no obligation to pay the Consultant

for Services performed without a written Task Order, or for work done prior to a meeting when such meeting has been requested by the City.

3.5 The Consultant shall complete each Task Order on or before the completion deadline established by the City in writing for the specific Task Order. Prompt completion of the Services is essential to the City, regarding this Agreement and the Services. Payment for the Services shall only be made after the Services have been finally completed and accepted by the City.

4.0 COMPENSATION

4.1 For each Task Order approved by the City, the City shall pay the Consultant for Services a total not to exceed the amounts set forth in the applicable Task Order and the hourly rates set forth on **Exhibit A.** The City shall not pay mileage and other reimbursable expenses (such as meals, parking, travel expenses, necessary memberships, etc.), unless such expenses are (1) clearly set forth in the Task Order, and (2) necessary for performance of the Services ("Pre-Approved Expenses"). The foregoing amounts of compensation shall be inclusive of all costs of whatsoever nature associated with the Consultant's efforts, including but not limited to salaries, benefits, overhead, administration, profits, expenses, and outside contractor fees.

4.2 The Consultant shall submit monthly an invoice to the City for Services rendered and a detailed expense report for Pre-Approved Expenses incurred during the previous month. The invoice shall document the Services provided during the preceding month, identifying by work category and subcategory the work and tasks performed and such other information as may be required by the City. The Consultant shall provide such additional backup documentation as may be required by the City. The City shall pay the invoice within thirty (30) days of receipt unless the Services or the documentation therefor are unsatisfactory. Payments made after thirty (30) days may be assessed an interest charge of one percent (1%) per month unless the delay in payment resulted from unsatisfactory work or documentation therefor.

4.3 No City employee has the authority to bind the City with regard to any payment for any Services which exceeds the amount payable under the applicable Task Order.

5.0 PROJECT REPRESENTATION

5.1 The City designates Cameron Fowlkes, City Engineer, as the responsible City staff to provide direction to the Consultant during the conduct of the Services. The Consultant shall comply with the directions given by the City's representative and designees.

5.2 The Consultant designates **Rob Anderson and Josh McGibbon** as its project manager and as the principal in charge who shall be providing the Services under

this Agreement. Should any of Consultant's representatives be replaced, and such replacement require the City or the Consultant to undertake additional reevaluations, coordination, orientations, etc., the Consultant shall be fully responsible for all such additional costs and services.

6.0 TERM

6.1 The term of this Agreement shall be from the Effective Date to December 31, 2026, unless sooner terminated pursuant to Section 6.2 or 13, below.

6.2 Nothing in this Agreement is intended or shall be deemed or construed as creating any multiple-fiscal year direct or indirect debt or financial obligation on the part of the City within the meaning of Colorado Constitution Article X, Section 20 or any other constitutional or statutory provision. All financial obligations of the City under this Agreement are subject to annual budgeting and appropriation by the Louisville City Council, in its sole discretion. Notwithstanding anything in this Agreement to the contrary, in the event of non-appropriation, this Agreement shall terminate effective December 31 of the then-current fiscal year.

7.0 INSURANCE

7.1 The Consultant agrees to procure and maintain, at its own cost, the policies of insurance set forth in Subsections 7.1.1 through 7.1.4. The Consultant shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Agreement by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types. The coverages required below shall be procured and maintained with forms and insurers acceptable to the City. All coverages shall be continuously maintained from the date of commencement of Services hereunder. The required coverages are:

7.1.1 Workers' Compensation insurance as required by the Labor Code of the State of Colorado and Employers Liability Insurance. Evidence of qualified self-insured status may be substituted.

7.1.2 General Liability insurance with minimum combined single limits of ONE MILLION DOLLARS ($1,000,000) each occurrence and TWO MILLION DOLLARS ($2,000,000) aggregate. The policy shall include the City of Louisville, its officers and its employees, as additional insureds, with primary coverage as respects the City of Louisville, its officers and its employees, and shall contain a severability of interests provision.

7.1.3 Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than THREE HUNDRED AND FIFTY THOUSAND DOLLARS ($350,000) per person in any one occurrence and ONE MILLION DOLLARS ($1,000,000) for two or

more persons in any one occurrence, and auto property damage insurance of at least FIFTY THOUSAND DOLLARS ($50,000) per occurrence, with respect to each of Consultant's owned, hired or non-owned vehicles assigned to or used in performance of the Services. If the Consultant has no owned automobiles, the requirements of this paragraph shall be met by each officer or employee of the Consultant providing services to the City of Louisville under this contract.

7.1.4 Professional Liability coverage with minimum combined single limits of ONE MILLION DOLLARS ($1,000,000) each occurrence and TWO MILLION DOLLARS ($2,000,000) aggregate.

7.2 The Consultant's general liability insurance and automobile liability and physical damage insurance shall be endorsed to include the City, and its elected and appointed officers and employees, as additional insureds, unless the City in its sole discretion waives such requirement. Every policy required above shall be primary insurance, and any insurance carried by the City, its officers, or its employees, shall be excess and not contributory insurance to that provided by the Consultant. Such policies shall contain a severability of interests provision. The Consultant shall be solely responsible for any deductible losses under each of the policies required above.

7.3 Certificates of insurance shall be provided by the Consultant as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be subject to review and approval by the City. No required coverage shall be cancelled, terminated or materially changed until at least thirty (30) days prior written notice has been given to the City. The City reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

7.4 Failure on the part of the Consultant to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of contract upon which the City may immediately terminate this Agreement, or at its discretion may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the City shall be repaid by Consultant to the City upon demand, or the City may offset the cost of the premiums against any monies due to Consultant from the City.

7.5 The parties understand and agree that the City is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, § 24-10-101 et seq., C.R.S., as from time to time amended, or otherwise available to the City, its officers, or its employees.

8.0 INDEMNIFICATION

To the fullest extent permitted by law and subject to the limitations in C.R.S. § 13-50.5-102, the Consultant agrees to indemnify and hold harmless the City, and its elected and appointed officers and its employees, from and against liability, on account of any injury, loss, or damage, which arise out of or are connected with the Services hereunder, if such injury, loss, or damage is determined by adjudication, alternative dispute resolution, or mutual agreement between Consultant and the City to have been caused by the negligent act, omission, or other fault of the Consultant or any subcontractor of the Consultant, or any officer, employee, or agent of the Consultant or any subcontractor, or any other person for whom Consultant is responsible. The Consultant shall investigate, handle, respond to, and provide defense for and defend itself against any such liability. The Consultant shall further bear other costs and expenses incurred by the City or Consultant and related to any such liability, including but not limited to court costs, expert witness fees and reasonable attorneys' fees if the court determines that these incurred costs and expenses are to the extent caused by the negligent acts, errors, and omissions or other fault of the Consultant. The City shall be entitled to its costs and attorney fees incurred in any action to enforce the provisions of this Section 8.0.. The Consultant's indemnification obligation shall not be construed to extend to any injury, loss, or damage which is determined by adjudication, alternative dispute resolution, or mutual agreement between Consultant and the City to have been caused by the act, omission, or other fault of the City.

9.0 QUALITY OF WORK

Consultant's professional services shall be in accordance with the standard of practice normally exercised in the performance of services of a similar nature in the Denver metropolitan area.

10.0 INDEPENDENT CONTRACTOR

It is the expressed intent of the parties that the Consultant is an independent contractor and not the agent, employee or servant of the City, and that:

10.1. **CONSULTANT SHALL SATISFY ALL TAX AND OTHER GOVERNMENTALLY IMPOSED RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, PAYMENT OF STATE, FEDERAL AND SOCIAL SECURITY TAXES, UNEMPLOYMENT TAXES, WORKERS' COMPENSATION AND SELF-EMPLOYMENT TAXES. NO STATE, FEDERAL OR LOCAL TAXES OF ANY KIND SHALL BE WITHHELD OR PAID BY THE CITY.**

10.2. **CONSULTANT IS NOT ENTITLED TO WORKERS' COMPENSATION BENEFITS EXCEPT AS MAY BE PROVIDED BY THE INDEPENDENT CONSULTANT NOR TO UNEMPLOYMENT INSURANCE BENEFITS UNLESS UNEMPLOYMENT COMPENSATION COVERAGE IS PROVIDED BY THE INDEPENDENT CONSULTANT OR SOME ENTITY OTHER THAN THE CITY.**

10.3. Consultant does not have the authority to act for the City, or to bind the City in any respect whatsoever, or to incur any debts or liabilities in the name of or on behalf of the City.

10.4. Consultant has and retains control of and supervision over the performance of Consultant's obligations hereunder and control over any persons employed by Consultant for performing the Services hereunder.

10.5. The City will not provide training or instruction to Consultant or any of its employees regarding the performance of the Services hereunder.

10.6. Neither the Consultant nor any of its officers or employees will receive benefits of any type from the City.

10.7. Consultant represents that it is engaged in providing similar services to other clients and/or the general public and is not required to work exclusively for the City.

10.8. All Services are to be performed solely at the risk of Consultant and Consultant shall take all precautions necessary for the proper and sole performance thereof.

10.9. Consultant will not combine its business operations in any way with the City's business operations and each party shall maintain their operations as separate and distinct.

11.0 ASSIGNMENT

Consultant shall not assign or delegate this Agreement or any portion thereof, or any monies due to or become due hereunder without the City's prior written consent.

12.0 DEFAULT

Each and every term and condition hereof shall be deemed to be a material element of this Agreement. In the event either party should fail or refuse to perform according to the terms of this Agreement, such party may be declared in default.

13.0 TERMINATION

13.1 This Agreement may be terminated by either party for material breach or default of this Agreement by the other party not caused by any action or omission of the other party by giving the other party written notice at least thirty (30) days in advance of the termination date. Termination pursuant to this subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

13.2 In addition to the foregoing, this Agreement may be terminated by the City for its convenience and without cause of any nature by giving written notice at least fifteen (15) days in advance of the termination date. In the event of such termination, the Consultant will be paid for the reasonable value of the Services rendered to the date of termination, not to exceed a pro-rated daily rate, for the Services rendered to the date of termination, and upon such payment, all obligations of the City to the Consultant under this Agreement will cease. Termination pursuant to this Subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

14.0 INSPECTION AND AUDIT

The City and its duly authorized representatives shall have access to any books, documents, papers, and records of the Consultant that are related to this Agreement for the purpose of making audits, examinations, excerpts, and transcriptions.

15.0 DOCUMENTS

All computer input and output, analyses, plans, documents photographic images, tests, maps, surveys, electronic files and written material of any kind generated in the performance of this Agreement or developed for the City in performance of the Services are and shall remain the sole and exclusive property of the City. All such materials shall be promptly provided to the City upon request therefor and at the time of termination of this Agreement, without further charge or expense to the City and in hardcopy or an electronic format acceptable to the City, or both, as the City shall determine. Consultant shall not provide copies of any such material to any other party without the prior written consent of the City. Consultant shall not use or disclose confidential information of the City for purposes unrelated to performance of this Agreement without the City's written consent.

16.0 ENFORCEMENT

16.1 In the event that suit is brought upon this Agreement to enforce its terms, the parties shall each bear and be responsible for their own attorneys' fees and court costs.

16.2 This Agreement shall be deemed entered into in Boulder County, Colorado, and shall be governed by and interpreted under the laws of the State of Colorado. Any action arising out of, in connection with, or relating to this Agreement shall be filed in the District Court of Boulder County of the State of Colorado, and in no other court. Consultant hereby waives its right to challenge the personal jurisdiction of the District Court of Boulder County of the State of Colorado over it.

17.0 COMPLIANCE WITH LAWS

17.1 Consultant shall be solely responsible for compliance with all applicable federal, state, and local laws, including the ordinances, resolutions, rules, and regulations of the City; for payment of all applicable taxes; and obtaining and keeping in force all applicable permits and approvals.

17.2 Consultant acknowledges that the City of Louisville Code of Ethics provides that independent contractors who perform official actions on behalf of the City which involve the use of discretionary authority shall not receive any gifts seeking to influence their official actions on behalf of the City, and that City officers and employees similarly shall not receive such gifts. Consultant agrees to abide by the gift restrictions of the City's Code of Ethics.

17.3 It is assumed that the Consultant is familiar with all applicable laws, codes, ordinances, and regulations which in any manner affect those engaged or employed in the Services or the material or equipment used in or upon the site, or in any way affect the Services. No pleas or claims of misunderstanding or ignorance by the Consultant shall in any way serve to modify the provisions of the Agreement.

18.0 INTEGRATION AND AMENDMENT

This Agreement represents the entire Agreement between the parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the parties.

19.0 NOTICES

All notices required or permitted under this Agreement shall be in writing and shall be given by hand delivery, by United States first class mail, postage prepaid, registered or certified, return receipt requested, by national overnight carrier, or by facsimile transmission, addressed to the party for whom it is intended at the following address:

If to the City:

City of Louisville
Attn: City Manager
749 Main Street
Louisville, Colorado 80027
Telephone: (303) 335-4533
Fax: (303) 335-4550

If to the Consultant:

JVA, Inc.
1319 Spruce Street

Boulder, CO 80302
Telephone: (303) 444-1951

Any such notice or other communication shall be effective when received as indicated on the delivery receipt, if by hand delivery or overnight carrier; on the United States mail return receipt, if by United States mail; or on facsimile transmission receipt. Either party may by similar notice given, change the address to which future notices or other communications shall be sent.

20.0 EQUAL OPPORTUNITY EMPLOYER

20.1 Consultant will not discriminate against any employee or applicant for employment because of race, sex, color, religion, age, national origin, disability, genetic information, sexual orientation, veteran status, or any other applicable status protected by state or local law. Consultant will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to any status set forth in the preceding sentence. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notice to be provided by an agency of the federal government, setting forth the provisions of the Equal Opportunity Laws.

20.2 Consultant shall be in compliance with the applicable provisions of the American with Disabilities Act as enacted and from time to time amended and any other applicable federal, state, or local laws and regulations. A signed, written certificate stating compliance with the Americans with Disabilities Act may be requested at any time during the life of this Agreement or any renewal thereof.

21.0 NO THIRD PARTY BENEFICIARIES

It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to City and Consultant, and nothing contained in this Agreement shall give or allow any such claim or right of action by any other third party on such Agreement. It is the express intention of the parties that any person other than City or Consultant receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

22.0 SUBCONTRACTORS

Consultant may utilize subcontractors identified in its qualifications submittal to assist with non-specialized works as necessary to complete projects. Consultant will submit any proposed subcontractor and the description of its services to the City for approval. The City will not work directly with subcontractors.

23.0 AUTHORITY TO BIND

Each of the persons signing below on behalf of any party hereby represents and warrants that such person is signing with full and complete authority to bind the party on whose behalf of whom such person is signing, to each and every term of this Agreement.

In witness whereof, the parties have executed this Agreement to be effective on the date first above written.

CITY OF LOUISVILLE,
a Colorado Municipal Corporation

By:_____
Christopher M. Leh, Mayor

Attest:_____
Genny Kline, Interim City Clerk

CONSULTANT:
JVA, Inc.

By:_____
Title:___Vice President_____

Exhibit A
Hourly Rates for Services

Environmental Department
2025 Hourly Billing Rate Schedule

POSITION	RATE
Principal	$216 – $264
Expert Witness	$264 – $352
Senior Project Manager	$208 – $216
Project Manager	$168 – $184
Senior Engineer	$180 – $184
Electrical Senior Project Engineer	$200 – $208
Construction Services Manager	$172 – $180
Senior Project Engineer	$152 – $156
Electrical Project Engineer	$156 – $160
Project Engineer	$144 – $148
Design Engineer	$132 – $136
Senior Designer	$160 – $168
CAD Designer	$136 – $140
Administrative Support	$116 – $136

Auto travel shall be reimbursed at a rate set by the IRS. Costs for express delivery, airfare, car rental, meals, lodging, printing, copying, and shipping shall be reimbursed at 1.1 times direct cost.

Exhibit B – Task Order No. 2

CTC Lift Station Improvement Project

Task – Phase 2 Design Services

This Task Order is issued pursuant to the Professional Services Contract between the City of Louisville and JVA Inc. for On-Call Engineering Services (The "Contract") dated June 3, 2025.

1. Contactor: JVA, Inc.
2. Requested By: Public Works – Utilities – Justin Ferron, P.E. – Civil Engineering III
3. Start Date: June 16, 2026
4. Completion Date: December 31, 2026
5. Task/Deliverables
   1.) 90% Design (drawings and technical specifications)
   2.) Final Design for Bidding (drawings and technical specifications)
   3.) Bidding Services (pre-bid notes and recommendation of award)
6. Total Budget: $55,000

Except as specifically modified by this Task Order, the Contract remains in full effect.

Approval:

City Mayor _____ **Date:**_____

General Description

1) Provide physical inspection of the two wet wells and document findings and any relining recommendations. City to provide ventilation and/or air monitoring as needed for safe entry of the confined space.
2) Remove ladders and install submersible mixers at the ladder locations (2).
3) Provide fixed suction pipe for maintenance dewatering.
4) Replace slide gates (2) – 24-inch square
5) New auto-sampler
6) Electrical and Control for the mixer and sampler installation only.
7) Assume the City will provide CAD base drawings
8) Concrete/lining rehabilitation if required based on findings of the inspection.

See Attached Proposal Letter for additional details.

JVA, Incorporated
1319 Spruce Street
Boulder, CO 80302
303.444.1951
info@jvajva.com

www.jvajva.com

May 15, 2026

Mr. Justin Ferron, P.E.
Civil Engineer III
City of Louisville
749 Main Street
Louisville, CO 80027

RE: City of Louisville Colorado Technology Center Lift Station Improvements
Letter Agreement for Engineering Services – Rev 1

Dear Justin:

We met in the field in 2024 to review the proposed Colorado Technology Center (CTC) Lift Station Improvements (Project) for the City of Louisville (City). We provided a letter proposal at that time, but the project was put on hold. The City has reactivated the project and JVA, Incorporated (JVA) is pleased to submit this revised letter agreement to provide engineering services for the design and bidding of the proposed lift station improvements.

The CTC Lift Station has a wet-well/dry-well configuration with two centrifugal 75 hp pumps each at a capacity of 960 gpm. The dry-well pump/pipe gallery was improved and the City would like to proceed with select improvements for the wet-well. There are two wet-wells which will allow for isolation and maintaining operations during the construction activities. JVA has assumed that approval from the Colorado Department of Environment and Public Health (CDPHE) will not be required. The Project specifics and assumptions are as follows.

1) Provide physical inspection of the two wet wells and document findings and any relining recommendations. City to provide ventilation and/or air monitoring as needed for safe entry of the confined space.
2) Remove ladders and install submersible mixers at the ladder locations (2).
3) Provide fixed suction pipe for maintenance dewatering.
4) Replace slide gates (2) – 24-inch square
5) New auto-sampler
6) Electrical and Control for the mixer and sampler installation only.
7) Assume the City will provide CAD base drawings
8) Concrete/lining rehabilitation if required based on findings of the inspection.

SCOPE OF SERVICES

Our project scope includes design through bidding phase services. The following major tasks and deliverables are proposed:

Project Tasks:

1.) Meetings
   a. Field kick-off and data collection
   b. "Teams" remote coordination meetings – two assumed
   c. Field back check design layout
2.) Design – Process, Structural & Electrical
   a. Design Drawings
   b. Technical Specifications

c. Develop opinion of probable cost (OPC)
d. Submitted at 90% and Final

3.) Bidding Services
a. Attend pre-bid meeting.
b. Answer contractor questions.
c. Provide recommendations of award.

Deliverables:

1.) 90% Design (drawings and technical specifications)
2.) Final Design for Bidding (drawings and technical specifications)
3.) Bidding Services (pre-bid notes and recommendation of award)

BASIS OF PAYMENT

JVA proposes to complete the scope of work for the not-to-exceed amount of $55,000. The basis of payment will be billed monthly based on the work completed to date.

This fee is based upon the above assumptions and discussions to date. Services resulting from significant changes to the project scope will be considered additional services. The proposed fee does not include surveying, geotechnical investigations, water quality sampling, or construction phase services.

SCHEDULE

JVA can begin immediately upon authorization. We estimate 3-months to complete the wet well inspection and design of the improvements. Depending on project variables, the project could be bid in the fall of 2026.

If you agree with this proposal, please indicate by signing below and returning a copy to our office, confirming our authorization to proceed. We greatly value our relationship with the City and look forward to working with you on this important project.

Sincerely,
JVA, Incorporated

By: _____
Robert Anderson, P.E.
Senior Project Manager

Accepted by:
City of Louisville

By: _____

Date: _____

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 7.C.

Subject: Resolution No. 56, Series 2026 — A Resolution Approving an Agreement with JVA, Inc. for Engineering Services for the WWTP Solids Handling Phase 2 Digester No. 3 Design

Date: June 16, 2026

Prepared By: Justin Ferron, Civil Engineer III

Presented By: Cory Peterson, Deputy Director of Utilities

Summary:
Staff recommends the approval of a design contract with JVA, Inc. in the amount of $400,000 along with a 10% contingency of $40,000 for the Wastewater Treatment Plant (WWTP) Digester No.3 Design. Construction of this project will provide wastewater treatment capacity for both Redtail Ridge Development (Redtail) and other future growth within the City. 50% of the design cost has been provided by Redtail.

Background / Prior Discussions:
Council has considered numerous items related to Redtail. Items associated with the WWTP include design, equipment pre-purchase, and the first phase of construction for the Solids Handling improvements. Phase 1 construction activities were completed in 2025, with a primary focus on the dewatering building and replacement of the centrifuge.

Development Proposal:
N/A

Analysis:
The remaining components of the Phase 2 Solids Handling Project are blower equipment upgrades, associated piping, thickening building improvements, and new WAS storage. These Phase 2 improvements have already been designed.

Per the Wastewater Agreement between the City and Redtail, digester improvements were anticipated to be included in the WWTP Expansion. As the scope has been further refined, these improvements have grown to address both Redtail and City needs and are now identified as Digester No. 3.

Based on this change, the City has assumed the lead design role. As a result, separate design approval is being requested.

Since timing is critical, and the design work benefits both the City and Redtail, a 50/50

cost share split was determined. With approval, the City will begin design of Digester No. 3, with anticipated completion in four to six months. Staff will also include this work in the Construction Manager at Risk (CMAR) process with the Phase 1 contractor, Aslan Construction, for design review, value engineering, cost estimating and ultimately for construction.

Council Work Plan:
The Solids Handling project is included in the City's current Capital Improvement Program and supports the 2026 Council Work Plan under Core Services. It is also aligned with the Utility System Infrastructure Plan.

Fiscal Impact:

Funding Description	**Account**	**Budget Amount**
Existing Budget (2026)	502499-660285	$1,222,368
Developer Contribution (Budget Amendment)	502032-464100	$220,000
TOTAL		$1,442,368

Projected Expense Summary		
Description		**Amount**
Digester No. 3 Design		($400,000)
Contingency (10%)		($40,000)
	Total Design Expenses:	($440,000)
	Remaining Budget:	$1,002,368

Funding for improvements to the solids handling process at the wastewater plant is budgeted under account 502499-660285. An increase in appropriation of $220,000 will be included in the next budget amendment. This increase will be offset by a developer contribution of $220,000, resulting in a net impact of zero. Final construction costs may

exceed existing funding, and any additional budget adjustments will accompany future Council approvals. With this award of the 50% cost share the City will have a remaining budget of just over $1M.

Alternatives:
Digester No. 3 is needed to provide additional wastewater treatment capacity and system redundancy. There are two available alternatives:

- Limit future development to the capacity of the existing wastewater treatment system.
- Delay the improvement to a later date, likely resulting in a higher overall capital cost and greater uncertainty.

Recommendation:
Staff recommends City Council approval of a design contract with JVA, Inc. in the amount of $400,000 along with a 10% contingency of $40,000. Redtail Ridge Development has provided 50% of the funding ($220,000) to the City. Authorize project manager to execute change orders for project contingency, and authorize the Mayor to sign and execute the contract on behalf of the City.

Attachments:
1. Resolution No. 56, Series 2026
2. 2026-06-16 WWTP Solids Handling Phase 2 Digester No.3 Design Contract JVA

RESOLUTION NO. 56
SERIES 2026

A RESOLUTION APPROVING AN AGREEMENT WITH JVA, INC. FOR ENGINEERING SERVICES FOR THE WWTP SOLIDS HANDLING PHASE 2 DIGESTER NO.3 DESIGN

WHEREAS, an Agreement has been proposed between the City and JVA, Inc. for engineering services for the WWTP Solids Handling Phase 2 Digester No. 3 Design Project (the "Project"); and

WHEREAS, by this resolution, the City Council desires to approve the Agreement and to authorize contingency for the Project.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Agreement by and between the City of Louisville and JVA, Inc. for the Project (the "Agreement") in substantially the same form as the copy of such Agreement accompanying this Resolution.

Section 2. The Mayor is hereby authorized to execute the Agreement on behalf of the City, and the Mayor is hereby further authorized to negotiate and approve such revisions to the Agreement as the Mayor determines are necessary or desirable for the protection of the City, so long as the essential terms and conditions of the Agreement are not altered.

Section 3. The City Council hereby approves an additional ten percent contingency for the Project in the amount of $40,000 for a total authorized amount of $440,000.00. The City's Project Manager for the Contract may approve change orders deemed necessary for the Project, subject to the cost limits set forth in this Resolution.

PASSED AND ADOPTED this 16th day of June, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

AN AGREEMENT BY AND BETWEEN THE CITY OF LOUISVILLE AND JVA, INC FOR CONSULTING SERVICES

1.0 PARTIES

This AGREEMENT FOR CONSULTING SERVICES (this "Agreement") is made and entered into this **16th** day of **June**, **2026** (the "Effective Date"), by and between the **City of Louisville**, a Colorado home rule municipal corporation, hereinafter referred to as the "City", and **JVA, Inc.**, a **Colorado Corporation,** referred to as the "Consultant".

2.0 RECITALS AND PURPOSE

2.1 The City desires to engage the Consultant for the purpose of providing professional engineering services as further set forth in the Consultant's Scope of Services (which services are hereinafter referred to as the "Services").

2.2 The Consultant represents that it has the special expertise, qualifications and background necessary to complete the Services.

3.0 SCOPE OF SERVICES

The Consultant agrees to provide the City with the specific Services and to perform the specific tasks, duties and responsibilities set forth in Scope of Services attached hereto as Exhibit "A" and incorporated herein by reference.

4.0 COMPENSATION

4.1 The City shall pay the Consultant for services under this agreement a total not to exceed the amounts set forth in Exhibit "B" attached hereto and incorporated herein by this reference. The City shall not pay mileage and other reimbursable expenses (such as meals, parking, travel expenses, necessary memberships, etc.), unless such expenses are (1) clearly set forth in the Scope of Services, and (2) necessary for performance of the Services ("Pre-Approved Expenses"). The foregoing amounts of compensation shall be inclusive of all costs of whatsoever nature associated with the Consultant's efforts, including but not limited to salaries, benefits, overhead, administration, profits, expenses, and outside consultant fees. The Scope of Services and payment therefor shall only be changed by a properly authorized amendment to this Agreement. No City employee has the authority to bind the City with regard to any payment for any services which exceeds the amount payable under the terms of this Agreement.

4.2 The Consultant shall submit monthly an invoice to the City for Services rendered and a detailed expense report for Pre-Approved Expenses incurred during the previous month. The invoice shall document the Services provided during the

preceding month, identifying by work category and subcategory the work and tasks performed and such other information as may be required by the City. The Consultant shall provide such additional backup documentation as may be required by the City. The City shall pay the invoice within thirty (30) days of receipt unless the Services or the documentation therefor are unsatisfactory. Payments made after thirty (30) days may be assessed an interest charge of one percent (1%) per month unless the delay in payment resulted from unsatisfactory work or documentation therefor.

5.0 PROJECT REPRESENTATION

5.1 The City designates **Justin Ferron** as the responsible City staff to provide direction to the Consultant during the conduct of the Services. The Consultant shall comply with the directions given by **Justin Ferron** and such person's designees.

5.2 The Consultant designates **Robert Anderson** as its project manager and as the principal in charge who shall be providing the Services under this Agreement. Should any of the representatives be replaced, particularly **Robert Anderson**, and such replacement require the City or the Consultant to undertake additional reevaluations, coordination, orientations, etc., the Consultant shall be fully responsible for all such additional costs and services.

6.0 TERM

6.1 The term of this Agreement shall be from the Effective Date to **December 31**, **2026**, unless sooner terminated pursuant to Section 13, below. The Consultant's Services under this Agreement shall commence on the Effective Date and Consultant shall proceed with diligence and promptness so that the Services are completed in a timely fashion consistent with the City's requirements.

6.2 Nothing in this Agreement is intended or shall be deemed or construed as creating any multiple-fiscal year direct or indirect debt or financial obligation on the part of the City within the meaning of Colorado Constitution Article X, Section 20 or any other constitutional or statutory provision. All financial obligations of the City under this Agreement are subject to annual budgeting and appropriation by the Louisville City Council, in its sole discretion. Notwithstanding anything in this Agreement to the contrary, in the event of non-appropriation, this Agreement shall terminate effective December 31 of the then-current fiscal year.

7.0 INSURANCE

7.1 The Consultant agrees to procure and maintain, at its own cost, the policies of insurance set forth in Subsections 7.1.1 through 7.1.4. The Consultant shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to this Agreement by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts,

durations, or types. The coverages required below shall be procured and maintained with forms and insurers acceptable to the City. All coverages shall be continuously maintained from the date of commencement of services hereunder. The required coverages are:

7.1.1 Workers' Compensation insurance as required by the Labor Code of the State of Colorado and Employers Liability Insurance. Evidence of qualified self-insured status may be substituted.

7.1.2 General Liability insurance with minimum combined single limits of ONE MILLION DOLLARS ($1,000,000) each occurrence and TWO MILLION DOLLARS ($2,000,000) aggregate. The policy shall include the City of Louisville, its officers and its employees, as additional insureds, with primary coverage as respects the City of Louisville, its officers and its employees, and shall contain a severability of interests provision.

7.1.3 Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than FOUR HUNDRED THOUSAND DOLLARS ($400,000) per person in any one occurrence and ONE MILLION DOLLARS ($1,000,000) for two or more persons in any one occurrence, and auto property damage insurance of at least FIFTY THOUSAND DOLLARS ($50,000) per occurrence, with respect to each of Consultant's owned, hired or non-owned vehicles assigned to or used in performance of the services. The policy shall contain a severability of interests provision. If the Consultant has no owned automobiles, the requirements of this paragraph shall be met by each employee of the Consultant providing services to the City of Louisville under this Agreement.

7.1.4 Professional Liability coverage with minimum combined single limits of ONE MILLION DOLLARS ($1,000,000) each occurrence and ONE MILLION DOLLARS ($1,000,000) aggregate.

7.2 The Consultant's general liability insurance, automobile liability and physical damage insurance shall be endorsed to include the City, and its elected and appointed officers and employees, as additional insureds, unless the City in its sole discretion waives such requirement. Every policy required above shall be primary insurance, and any insurance carried by the City, its officers, or its employees, shall be excess and not contributory insurance to that provided by the Consultant. Such policies shall contain a severability of interests provision. The Consultant shall be solely responsible for any deductible losses under each of the policies required above.

7.3 Certificates of insurance shall be provided by the Consultant as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be subject to review and approval by the City. No required coverage shall be cancelled, terminated or materially changed until at

least 30 days' prior written notice has been given to the City. The City reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

7.4 Failure on the part of the Consultant to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of contract upon which the City may immediately terminate this Agreement, or at its discretion may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the City shall be repaid by Consultant to the City upon demand, or the City may offset the cost of the premiums against any monies due to Consultant from the City.

7.5 The parties understand and agree that the City is relying on, and does not waive or intend to waive by any provision of this Agreement, the monetary limitations or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, § 24-10-101 et seq., C.R.S., as from time to time amended, or otherwise available to the City, its officers, or its employees.

8.0 INDEMNIFICATION

To the fullest extent permitted by law, the Consultant agrees to indemnify and hold harmless the City, and its elected and appointed officers and its employees, from and against all liability, claims, and demands, on account of any injury, loss, or damage, which arise out of or are connected with the services hereunder, if and to the extent such injury, loss, or damage is caused by the negligent act, omission, or other fault of the Consultant or any subcontractor of the Consultant, or any officer, employee, or agent of the Consultant or any subcontractor, or any other person for whom Consultant is responsible. The Consultant shall investigate, handle, respond to, and provide defense for and defend against any such liability, claims, and demands. The Consultant shall further bear all other costs and expenses incurred by the City or Consultant and related to any such liability, claims and demands, including but not limited to court costs, expert witness fees and attorneys' fees if the court determines that these incurred costs and expenses are related to such negligent acts, errors, and omissions or other fault of the Consultant. Notwithstanding the foregoing, Consultant's duty to defend, indemnify and hold harmless the City, and its elected and appointed officials and employees as set forth in this section shall only arise upon determination, by adjudication, alternative dispute resolution, or mutual agreement between Consultant and the City, of the Consultant's liability or fault. The City shall be entitled to its costs and attorneys' fees incurred in any action to enforce the provisions of this Section 8.0. The Consultant's indemnification obligation shall not be construed to extend to any injury, loss, or damage which is caused by the act, omission, or other fault of the City.

If the Consultant is providing architectural, engineering, surveying or other design services under this Agreement, the extent of the Consultant's obligation to indemnify and hold harmless the Town may be determined only after the Consultant's liability or fault

has been determined by adjudication, alternative dispute resolution or otherwise resolved by mutual agreement between the parties, as provided by C.R.S. § 13-50.5-102(8)(c).

9.0 QUALITY OF WORK

Consultant's professional services shall be in accordance with the prevailing standard of practice normally exercised in the performance of services of a similar nature in the Denver metropolitan area.

10.0 INDEPENDENT CONTRACTOR

It is the expressed intent of the parties that the Consultant is an independent contractor and not the agent, employee or servant of the City, and that:

10.1. Consultant shall satisfy all tax and other governmentally imposed responsibilities including but not limited to, payment of state, federal, and social security taxes, unemployment taxes, worker's compensation and self-employment taxes. No state, federal or local taxes of any kind shall be withheld or paid by the City.

10.2. **Consultant is not entitled to worker's compensation benefits except as may be provided by the Consultant nor to unemployment insurance benefits unless unemployment compensation coverage is provided by the Consultant or some entity other than the City.**

10.3. Consultant does not have the authority to act for the City, or to bind the City in any respect whatsoever, or to incur any debts or liabilities in the name of or on behalf of the City.

10.4. Consultant has and retains control of and supervision over the performance of Consultant's obligations hereunder and control over any persons employed by Consultant for performing the Services hereunder.

10.5. The City will not provide training or instruction to Consultant or any of its employees regarding the performance of the Services hereunder.

10.6. Neither the Consultant nor any of its officers or employees will receive benefits of any type from the City.

10.7. Consultant represents that it is engaged in providing similar services to other clients and/or the general public and is not required to work exclusively for the City.

10.8. All Services are to be performed solely at the risk of Consultant and Consultant shall take all precautions necessary for the proper and sole performance thereof.

10.9. Consultant will not combine its business operations in any way with the City's business operations and each party shall maintain their operations as separate and distinct.

11.0 ASSIGNMENT

Consultant shall not assign or delegate this Agreement or any portion thereof, or any monies due or to become due hereunder without the City's prior written consent.

12.0 DEFAULT

Each and every term and condition hereof shall be deemed to be a material element of this Agreement. In the event either party should fail or refuse to perform according to the terms of this Agreement, such party may be declared in default.

13.0 TERMINATION

13.1 This Agreement may be terminated by either party for material breach or default of this Agreement by the other party not caused by any action or omission of the other party by giving the other party written notice at least thirty (30) days in advance of the termination date. Termination pursuant to this subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

13.2 In addition to the foregoing, this Agreement may be terminated by the City for its convenience and without cause of any nature by giving written notice at least fifteen (15) days in advance of the termination date. In the event of such termination, the Consultant will be paid for the reasonable value of the services rendered to the date of termination, not to exceed a pro-rated daily rate, for the services rendered to the date of termination, and upon such payment, all obligations of the City to the Consultant under this Agreement will cease. Termination pursuant to this subsection shall not prevent either party from exercising any other legal remedies which may be available to it.

14.0 INSPECTION AND AUDIT

The City and its duly authorized representatives shall have access to any books, documents, papers, and records of the Consultant that are related to this Agreement for the purpose of making audits, examinations, excerpts, and transcriptions.

15.0 DOCUMENTS

All computer input and output, analyses, plans, documents photographic images, tests, maps, surveys, electronic files and written material of any kind generated in the

performance of this Agreement or developed for the City in performance of the Services are and shall remain the sole and exclusive property of the City. All such materials shall be promptly provided to the City upon request therefor and at the time of termination of this Agreement, without further charge or expense to the City. Consultant shall not provide copies of any such material to any other party without the prior written consent of the City.

16.0 ENFORCEMENT

16.1 In the event that suit is brought upon this Agreement to enforce its terms, the prevailing party shall be entitled to its reasonable attorneys' fees and related court costs.

16.2 This Agreement shall be deemed entered into in Boulder County, Colorado, and shall be governed by and interpreted under the laws of the State of Colorado. Any action arising out of, in connection with, or relating to this Agreement shall be filed in the District Court of Boulder County of the State of Colorado, and in no other court. Consultant hereby waives its right to challenge the personal jurisdiction of the District Court of Boulder County of the State of Colorado over it.

17.0 COMPLIANCE WITH LAWS

17.1 Consultant shall be solely responsible for compliance with all applicable federal, state, and local laws, including the ordinances, resolutions, rules, and regulations of the City; for payment of all applicable taxes; and obtaining and keeping in force all applicable permits and approvals.

17.2 Consultant acknowledges that the City of Louisville Code of Ethics provides that independent contractors who perform official actions on behalf of the City which involve the use of discretionary authority shall not receive any gifts seeking to influence their official actions on behalf of the City, and that City officers and employees similarly shall not receive such gifts. Consultant agrees to abide by the gift restrictions of the City's Code of Ethics.

18.0 INTEGRATION AND AMENDMENT

This Agreement represents the entire Agreement between the parties and there are no oral or collateral agreements or understandings. This Agreement may be amended only by an instrument in writing signed by the parties.

19.0 NOTICES

All notices required or permitted under this Agreement shall be in writing and shall be given by hand delivery, by United States first class mail, postage prepaid, registered or certified, return receipt requested, by national overnight carrier, or by facsimile

transmission, addressed to the party for whom it is intended at the following address:

If to the City:

City of Louisville
Attn: Justin Ferron
749 Main Street
Louisville, Colorado 80027
Telephone: (303) 335-4607
Email: jferron@louisvilleco.gov

If to the Consultant:

JVA, Inc.
Attn: Robert Anderson
1319 Spruce St.
Boulder, Colorado 80302
Telephone: 303-444-1951
Email: randerson@jvajva.com

Any such notice or other communication shall be effective when received as indicated on the delivery receipt, if by hand delivery or overnight carrier; on the United States mail return receipt, if by United States mail; or on facsimile transmission receipt. Either party may by similar notice given, change the address to which future notices or other communications shall be sent.

20.0 EQUAL OPPORTUNITY EMPLOYER

20.1 Consultant will not discriminate against any employee or applicant for employment because of race, color, religion, age, sex, disability or national origin. Consultant will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard to their race, color, religion, age, sex, disability, or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notice to be provided by an agency of the federal government, setting forth the provisions of the Equal Opportunity Laws.

20.2 Consultant shall be in compliance with the applicable provisions of the American with Disabilities Act of 1990 as enacted and from time to time amended and any other applicable federal, state, or local laws and regulations. A signed, written certificate stating compliance with the Americans with Disabilities Act may be requested at any time during the life of this Agreement or any renewal thereof.

21.0 NO THIRD PARTY BENEFICIARIES

It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement, and all rights of action relating to such enforcement, shall be strictly reserved to City and Consultant, and nothing contained in this Agreement shall give or allow any such claim or right of action by any other third party on such Agreement. It is the express intention of the parties that any person other than City or Consultant receiving services or benefits under this Agreement shall be deemed to be an incidental beneficiary only.

22.0 SUBCONTRACTORS

Consultant may utilize subcontractors identified in its qualifications submittal to assist with non-specialized works as necessary to complete projects. Consultant will submit any proposed subcontractor and the description of its services to the City for approval. The City will not work directly with subcontractors.

23.0 AUTHORITY TO BIND

Each of the persons signing below on behalf of any party hereby represents and warrants that such person is signing with full and complete authority to bind the party on whose behalf of whom such person is signing, to each and every term of this Agreement.

In witness whereof, the parties have executed this Agreement to be effective on the date first above written.

CITY OF LOUISVILLE,
a Colorado Municipal Corporation

By:_____
Christopher M. Leh, Mayor

Attest:_____
Genny Kline, City Clerk

CONSULTANT:
JVA, Inc.
By: Rob Anderson
Title: Sr. Project Manager

Exhibit A – Scope of Services

See attached design proposal letter.

JVA, Incorporated
1319 Spruce Street
Boulder, CO 80302
303.444.1951
info@jvajva.com

www.jvajva.com

February 9, 2026

Mr. Justin Ferron, P.E.
Civil Engineer III
City of Louisville
749 Main Street
Louisville, CO 80027

RE: City of Louisville Wastewater Treatment Plant
Phase 2 Solids Handling Improvements
Letter Agreement for Design Phase Services

Dear Justin:

JVA, Incorporated (JVA) is pleased to submit this letter agreement to the City of Louisville (City) for the Wastewater Treatment Plant (WWTP) Phase 2 Solids Handling Improvements Project (Project). JVA, Aslan Construction and the City collaborated in the recent completion of the Phase 1 Solids Handling upgrades including thickening and dewatering improvements, specifically the addition of a new centrifuge and horizontal conveyor for truck loading.

The WAS (waste active sludge) operations building and storage tank included in the Phase 1 design were not constructed. The City would like to proceed with the WAS holding facilities and the addition of a third digester to provide redundancy in anticipation of the added organic and solids loading from the Redtail development which was projected in the JVA 2025 Digester Improvements Technical Memorandum. The Phase 2 Solids Handling Improvements Project includes the following:

1) WAS storage facilities – refresh and review Phase 1 design for contractor pricing.
2) WAS Thickening Building upgrades including
    a. Second RTD Unit
    b. Polmer handling improvements
    c. Thickened solids chutes and pumping
    d. Drumate pumping upgrades
    e. Centrifuge pumping upgrades
    f. Improve automation
3) Aerobic Digestion Improvements & Addition of Third Digester
    a. Addition of dedicated blower for existing Digester No. 2
    b. Third digester – same size as Digester No. 1
    c. Blower building for Digester No. 3 aeration and mixing systems

JVA is proposing to design and permit the identified improvements to a 30 percent level for a Construction Manager at Risk (CMAR) contract. JVA assumes the City will negotiate with the already selected CMAR contractor, Aslan Construction. The City and JVA will work with the current CMAR contractor to set a Guaranteed Maximum Price (GMP) for the Project.

The following detailed scope of work is based on our discussions to date, knowledge of the Louisville WWTP, and the recommended improvements outlined above.

SCOPE OF WORK

Task I – Site Location Application – Amendment No. 2

A. JVA will perform sizing calculations and preliminary layout of all equipment and document the proposed improvements in a Engineering Report as required by Regulation 22.
B. JVA will prepare a Site Location Application Amendment for submission to the applicable review agencies and CDPHE. The Site Location Application will be prepared in accordance with CDPHE Regulation 22.10, which includes:
    a. Description/purpose of project and summary of proposed change.
    b. Map identifying the site of the proposed facilities.
    c. Site Plan
    d. Process Flow Diagram (before and after proposed change).
    e. Analysis of the loading, capacity and performance of the existing treatment
    f. Description of how the proposed project will impact the performance of other parts of the treatment works and the impact on the facility's ability to meet effluent limitations (existing and proposed).
    g. Estimated cost of project and funding source.
    h. Facility classification implications of project and staff or contractual facility operator certification.
    i. Project schedule.
C. JVA will submit the Site Location Application Amendment to the City for review and signature. We will meet to discuss the report and sizing calculations. JVA will incorporate the City's comments into the final submittal to CDPHE.

Task II – Process Design Report and 30 % Design

A. JVA will develop a 30 percent design for the Project including:
    a. Hydraulic profile and Process and Instrumentation diagram
    b. Design criteria
    c. Civil site plan
    d. Site Piping Plan
    e. Process Plan and Sections
    f. Preliminary structural and architectural
    g. Electrical One-line Diagrams
B. Preliminary technical specifications will be prepared as part of the 30 percent design.
C. JVA will develop design criteria for the improvements and compare them to the CDPHE Design Criteria for Domestic Wastewater Treatment Works, Policy WPC-DR-1 (Design Criteria).
D. JVA will prepare a Process Design Report (PDR) update for submission to the applicable review agencies and CDPHE. The PDR will be prepared in accordance with the Design Criteria
E. JVA will work with Martinez Associates in completing two borings at the third digester proposed location.
F. JVA will coordinate the required utility locates and site survey for the third digester.
G. JVA will attend a design review meeting for the PDR and 30 percent design with City staff. And incorporate comments into the final submittal.

Task III – Final Design

A. JVA assumes the current selected CMAR contractor, Aslan Construction, will review the 30 percent design. The contract documents will be finalized for construction as detailed below.
B. 60 percent design
    a. JVA will respond to requests for information from CDPHE regarding the review of the Site Application Amendment and Process Design Report Update. Since the project schedule requires a streamlined permitting response from CDPHE, JVA plans to pursue self-certification of the design after approval of the Process Design Report.
    b. JVA will prepare 60 percent design plans and specifications. The project manual will include technical specifications (CSI Divisions 1 through 16). JVA will review the specifications with the City.
    c. JVA will work with Moen Engineering Consultants (MEC) to develop 60 percent mechanical sheets. The mechanical sheets will cover heating, ventilation, and plumbing.
    d. JVA will complete the electrical power and controls design in house.
    e. JVA will work with Short and Brennan (S&B) Architects to develop 60 percent architectural drawings and renderings for the third digester blower building.
    f. JVA will schedule and chair a virtual design review meeting with staff and the CMAR contractor for the 60 percent design package.
C. Final Design
    a. Incorporating comments and value engineering ideas from the 60 percent phase, JVA will prepare the final construction documents that will form the basis of the CMAR's GMP. The construction documents will be developed to a 90 percent level for review by the City and the CMAR contractor.
    b. JVA will coordinate and attend value engineering and constructability work sessions with the CMAR contractor and City prior to finalizing the construction documents.
    c. Once the GMP is reviewed and approved, JVA will deliver construction documents and assist with the Notice to Proceed (NTP) and execution of the contract between the City and the CMAR contractor.
    d. JVA will prepare and submit the necessary documentation to update the already approved building permit with the City.

BASIS OF PAYMENT

The proposed fee is $400,000 and includes reimbursables and subconsultants. The basis of payment for the scope of work described above will be monthly billings based on the percentage lump sum completed to date. An approximate design fee breakdown is as follows:

- Phase 1 WAS Operations Building & Storage (reissued) $ 10,000
- Thickening Facility Upgrades $ 140,000
- Third Digester $ 250,000

This fee is based upon the above assumptions and discussions to date. JVA assumes that only the Digester No. 3 addition will require a second Site Application amendment and CDPHE Process Design Report. Services resulting from significant changes to the project scope will be considered additional services. The proposed fee does not include water quality sampling or construction phase services

SCHEDULE

JVA can begin immediately upon authorization. We estimate a two-month time frame to complete and submit the 2nd Site Application Amendment, followed by a three-month time frame to compete the 30 percent design and CDPHE submittal. The final design phases are estimated to be completed within four to six additional months depending on CDPHE and local permitting approvals.

If you agree with this proposal, please indicate by signing below and returning a copy to our office, confirming our authorization to proceed. We greatly value our relationship with the City and look forward to working with you on this important project.

Sincerely,
JVA, Incorporated

By: _____
Robert Anderson, P.E.
Senior Project Manager

Accepted by:
City of Louisville

By: _____

EXHIBIT B

Not to Exceed $400,000

The proposed fee for engineering services is $400,000 and includes reimbursables and subconsultants. The basis of payment will be monthly billings based on the work completed to date. Services shall be billed on the basis of the following rates:



Environmental Department

2026 Hourly Billing Rate Schedule

POSITION	RATE
Principal	$240 – $288
Expert Witness	$280 – $368
Senior Project Manager	$196 – $228
Specialist	$196 - $216
Project Manager	$180 – $192
Senior Engineer	$184 – $192
Electrical Senior Project Engineer	$216 – $224
Construction Services Manager	$180 – $192
Senior Project Engineer	$156 – $168
Electrical Project Engineer	$164 – $176
Project Engineer	$148 – $156
Electrical Design Engineer	$144 - $156
Design Engineer	$136 – $144
Senior Designer	$168 – $176
CAD Designer	$144 – $164
Administrative Support	$124 – $144

Auto travel shall be reimbursed at a rate set by the IRS. Costs for express delivery, airfare, car rental, meals, lodging, printing, copying, and shipping shall be reimbursed at 1.1 times direct cost.

City of Louisville
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City Council Communication
Agenda Item 7.D.

Subject: Resolution No. 57, Series 2026 — A Resolution Approving a Construction Contract with Materra, LLC for the Coal Creek Golf Course Pond Liner Replacement Project

Date: June 16, 2026

Prepared By: Adam Blackmore, Parks, Recreation and Open Space Director

Presented By: Ryder Bailey, CPA, Finance Director
Adam Blackmore, Parks, Recreation and Open Space Director
Bryon Weber, Parks Project Manager

Summary:
Staff are seeking City Council direction for a requested budget amendment that would add $108,559 in funding for the planned liner replacement for the stormwater retention/aesthetic pond project on former hole 11 (now hole 2) of the Coal Creek Golf Course. This budget amendment request seeks direction for next steps of the project.

After a public bidding process earlier this spring, the lowest qualified bid received was $367,800 which exceeds the project budget of $309,241 by $58,559. Staff's budgetary estimate of $309,241 was based on a 2022 estimate of $283,759 + inflationary factors provided by a contractor familiar with these types of projects. This contractor elected not to submit an updated bid for this project in 2026.

If directed to move forward with the project via the requested budget amendment, this item also seeks direction/approval for the funding source to be used for the project cost differential plus contingency of $50,000 (~13.5%) for a total construction allowance of $417,800. Anticipated construction timeline would be an approximate 45-days for pond drainage beginning on or around August 14, 2026 and an anticipated liner project installation notice to proceed date of September 28, 2026 with sixty-four (64) contract days for completion (not including adverse weather condition provisions) after this date.

This item also seeks consideration for a potential project scope increase to manually refill the pond with city raw water supply following construction. While the exact depth of pond (and resulting volume of water needed) will be finalized during construction, it's currently projected to require 1.5-2 million gallons. Using raw water, the anticipated cost at the rate of $2.67/1,000 gallons would be between $4,000-$5,500. At this time staff do not recommend committing to an immediate re-fill and recommend evaluating available supply and drought conditions/impacts after the completion of the project in late 2026.

Background / Prior Discussions:

- Staff started to notice that pond #2 (green side pond on hole #11) was losing water in August of 2020. As storms filled ponds #1 and #2, pond #1 remained full while pond #2 dropped relatively quickly to a sustained lower than usual water level. Since that time PROS & Public Works have coordinated periodic “re-fills” using available Raw or Hydrant water to assist with maintaining water levels and the fish population. Raw water was coordinated and sent to the pond in early September 2020. In 2021 a contractor dove the pond and looked for any obvious leaks but with the amount of sludge and plant material in the pond there was no discovery of any obvious cause of the water loss. However, with the lifespan of the current liner coming to an end, staff and subject matter expert contractors have deduced that the liner and/or water retention system was failing and needed replacement. An original CIP project request, using the 2022 estimate noted above was submitted and subsequently denied in City Council’s approved 2023 budget and the project funding request was moved to a later date. After the project was initially denied, staff used hydrant water and operating funds to restore the water level to original depths in 2023. Upon resubmitting the project in 2024 for the 2025-2026 budget the project was approved and incorporated into the 2026 Golf Fund budget as noted below.

- November 4, 2024 – Council Approval of 2025-2026 Budget and revision to the 2023-2028 Capital Improvements Plan
  Approval of the budget included the Pond Liner Replacement—Hole 11 project with $309,241 allocated in fiscal year 2026.

- 2026 (January to Present)
  - A formal Request for Proposal (RFP) was published on February 26.
  - As result of the RFP, two bids were obtained in the amounts of $367,800 from Materra LLC and $407,513 from RCD Construction.
  - Follow-up discussions were held with the low bidder, Materra LLC, to discuss potential cost savings through value engineering, however the only real possibility was reducing the thickness, and potential quality, of the liner for an approximate $15,000 savings.
  - With no potential cost reductions identified to bring the project within budget, staff engaged the City Manager for further direction.
  - Finance Committee discussion and direction to add to a future City Council agenda 5/18/26.
  - Item added to 6/16 Council meeting for discussion and contract approval.

Development Proposal:
N/A

Analysis:

A vote by Council for project funding, scope direction and contract approval is needed at

this time. As noted in the project background, staff have worked with the contractor who submitted the low bid for value engineering options with, in staff's opinion, no viable alternative outcomes relative to the projected savings. Staff have also solicited previously interested contractors who did not submit a formal bid to re-consider submitting a bid/quote and received no interest at this time.

Funding Options for Consideration:
Staff recommends utilizing the Capital Projects Fund balance for project amendment costs of $108,559.
Anticipated year-end fund balances:
Capital Projects Fund projected end of year fund balance: $11,000,000
Golf Fund projected end of year fund balance: $302,000* (Below Minimum Reserve)

Staff is recommending utilizing the capital fund and not recommending utilizing the golf fund, as utilizing golf reserves would project the Current Year-ending fund balance/reserves to fall below the 15% minimum operating reserve set by City Financial Policy 2.7 Golf Fund Reserves.

Council Work Plan:
The maintaining of city assets and infrastructure could be considered components of Core Services as well as with this specific project alignment with Safety & Sustainability components of the work plan.

Fiscal Impact:
As outlined, the project budget amendment request of $108,559 (including contingency funds) for the project in its current scope along with the approximate $5,500 water expense to re-fill the pond if the scope is expanded, are not allocated in the 2026 budget(s) and require additional approvals and financial allocations.

Alternatives:

- Do not move forward with the project as proposed due to over-budget bids and present a revised request for future budget cycles.
- Move forward with the project as scoped with an amended project budget but without the additional expense and water usage to re-fill the pond.
- Consider alternative design of the stormwater infrastructure area and consider transitioning the pond from retention to detention use via a future project request.

Recommendation:
Staff recommend approval of the accompanying resolution and the project contract with the requested funding amendment with Materra, LLC. Additionally, staff recommend council refrain from committing/directing staff to re-fill the pond with the City's raw water supply until supply determinations and drought conditions can be assessed after the completion of the liner replacement project.

Attachments:

1. Resolution No. 57, Series 2026
2. Pond Relining Agreement
3. Pond Relining Scope & RFP
4. Presentation

RESOLUTION NO. 57
SERIES 2026

A RESOLUTION APPROVING A CONSTRUCTION CONTRACT WITH MATERRA, LLC

WHEREAS, a Construction Contract has been proposed between the City and Materra, LLC for the Pond Liner Replacement – Hole 2 Coal Creek Golf Course Project (the "Project"); and

WHEREAS, by this resolution the City Council desires to approve the Construction Contract.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The City Council hereby approves the Construction Contract between the City and Materra, LLC for the Project (the "Contract") in substantially the same form as the copy of such Contract accompanying this Resolution.

Section 2. The Mayor is hereby authorized to execute the Contract on behalf of the City, and the Mayor is hereby further authorized to negotiate and approve such revisions to the Contract as the Mayor determines are necessary or desirable for the protection of the City, so long as the essential terms and conditions of the Contract are not altered.

Section 3. The City Council hereby approves contingency for the Project in the amount of $50,000 for a total authorized amount of $417,800.00 for the Project. The City's Project Manager for the Contract may approve change orders deemed necessary for the Project, subject to the cost limits set forth in this Resolution.

PASSED AND ADOPTED this 16th day of June 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

City of Louisville
COLORADO • SINCE 1878

AGREEMENT

THIS AGREEMENT is made and entered into this **16th day of June** in the year **2026** by and between:

CITY OF LOUISVILLE, COLORADO
(hereinafter called OWNER)

and

MATERRA, LLC
(hereinafter called CONTRACTOR)

OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows.

ARTICLE 1. WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

PROJECT: Pond Liner Replacement – Hole 2 Coal Creek Golf Course
PROJECT NUMBER: 26-630184

ARTICLE 2. CONTRACT TIMES

2.1 The CONTRACTOR shall substantially complete all work within **64 Contract Days** from the date when the Contract Time commences to run as identified in the Notice to Proceed. The Work shall be completed and ready for final payment in accordance with paragraph 14.13 of the General Conditions.

2.2 LIQUIDATED DAMAGES. The OWNER and the CONTRACTOR agree and recognize that time is of the essence in this contract and that the OWNER will suffer financial loss if the Work is not substantially complete by the date specified in paragraph 2.1 above, plus any extensions thereof allowed in accordance with the Article 12 of the General Conditions. OWNER and CONTRACTOR also agree that such damages are uncertain in amount and difficult to measure accurately. Accordingly, the OWNER and CONTRACTOR agree that as liquidated damages, and not as a penalty, for delay in performance the CONTRACTOR shall pay the OWNER **ONE HUNDRED and 00/100 dollars ($100.00)** for each and every **Contract Day** and portion thereof that expires after the time specified above for substantial completion of the Work until the same is finally complete and ready for final payment. The liquidated damages herein specified shall only apply to the CONTRACTOR's delay in performance, and shall not include litigation or attorneys' fees incurred by the OWNER, or other incidental or consequential damages suffered by the OWNER due to the CONTRACTOR's performance. If the OWNER charges liquidated damages to the CONTRACTOR, this shall not preclude the OWNER from commencing an action against the CONTRACTOR for other actual harm resulting from the CONTRACTOR's performance, which is not due to the CONTRACTOR's delay in performance.

ARTICLE 3. CONTRACT PRICE

3.1 The OWNER shall pay in current funds, and the CONTRACTOR agrees to accept in full payment for performance of the Work, subject to additions and deductions from extra and/or omitted work and determinations of actual quantities as provided in the Contract Documents, the Contract Price of **THREE HUNDRED SIXTY-SEVEN THOUSAND EIGHT HUNDRED and 00/100 dollars ($367,800.00)** set forth in the Cost Proposal of the CONTRACTOR dated April 7, 2026.

As provided in paragraph 11.9 of the General Conditions estimated quantities are not guaranteed, and determinations of actual quantities and classification are to be made by PROJECT MANAGER as provided in paragraph 9.10 of the General Conditions. Unit prices have been computed as provided in paragraph 11.9 of the General Conditions.

ARTICLE 4. PAYMENT PROCEDURES

4.1 CONTRACTOR shall submit Applications for Payment in accordance with the following schedule:

25%	Project Acceptance/Scheduling - **Required Quote Deposit**	$91,950.00
25%	Material Ordering (Liner/Geo)	$91,950.00
25%	Project Start/Demo	$91,950.00
25%	Completion	$91,950.00

4.2 Applications for Payment shall be processed by OWNER as provided in the General Conditions.

4.3 FINAL PAYMENT. Upon final completion and acceptance of the Work in accordance with paragraph 14.13 of the General Conditions, OWNER shall pay the remainder of the Contract Price as provided in said paragraph 14.13 of the General Conditions.

ARTICLE 5. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement CONTRACTOR makes the following representations:

5.1 CONTRACTOR has examined and carefully studied the Contract Documents, (including the Addenda listed in paragraph 6.8) and the other related data identified in the Bidding Documents including "technical".

5.2 CONTRACTOR has inspected the site and become familiar with and is satisfied as to the general, local and site conditions that may affect cost, progress, performance or furnishing of the Work.

5.3 CONTRACTOR is familiar with and is satisfied as to all federal, state and local Laws and Regulations that may affect cost, progress and furnishing of the Work.

5.4 CONTRACTOR has carefully studied all reports of exploration and tests of subsurface conditions at or contiguous to the site and all drawings of physical conditions relating to surface or subsurface structures at or contiguous to the site (Except Underground facilities) which have been identified in the General Conditions as provided in paragraph 4.2.1 of the General Conditions. CONTRACTOR accepts the determination set forth in paragraph 4.2 of the General Conditions. CONTRACTOR acknowledges that such reports and drawings are not Contract Documents and may not be complete for CONTRACTOR's purposes.

CONTRACTOR acknowledges that OWNER and PROJECT MANAGER do not assume responsibility for the accuracy or completeness of information and data shown or indicated in the Contract Documents with respect to such reports, drawings or to Underground Facilities at or contiguous to the site. CONTRACTOR has conducted, obtained and carefully studied (or assume responsibility for having done so) all necessary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface and Underground Facilities) at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto. CONTRACTOR does not consider that any additional examinations, investigations, explorations, tests, studies or data are necessary for the performance and furnishing of the Work at the Contract Price, within the Contract Times and in accordance with the other terms and conditions of the Contract Documents.

5.5 CONTRACTOR has reviewed and checked all information and data shown or indicated on the Contract Documents with respect to existing Underground Facilities at or contiguous to the site and assumes responsibility for the accurate location of said Underground Facilities. No additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said Underground Facilities are or will be required by CONTRACTOR in order to perform and furnish the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of paragraph 4.3 of the General Conditions.

5.6 CONTRACTOR is aware of the general nature of work to be performed by OWNER and others at the site that relates to the Work as indicated in the Contract Documents.

5.7 CONTRACTOR has correlated the information known to CONTRACTOR, information and observations obtained from visits to the site, reports and drawings identified in the Contract Documents and all additional examinations, investigations, explorations, tests studies and data with the Contract Documents.

5.8 CONTRACTOR has given PROJECT MANAGER written notice of all conflicts, errors, ambiguities or discrepancies that CONTRACTOR has discovered in the Contract Documents and the written resolution thereof by PROJECT MANAGER is acceptable to CONTRACTOR, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing the Work.

ARTICLE 6. CONTRACT DOCUMENTS

The Contract Documents, which constitute the entire agreement between OWNER and CONTRACTOR concerning the Work, are all written documents, which define the Work and the obligations of the Contractor in performing the Work and the OWNER in providing compensation for the Work. The Contract Documents include the following:

6.1 This Agreement

6.2 Documentation submitted by CONTRACTOR prior to Notice of Award, as applicable:

6.2.1 Cover Letter with work examples
6.2.2 Disclosure Statement (Anti-Collusion Affidavit)
6.2.3 Pricing Form
6.2.4 Quote

6.3 Project Specifications

6.3.1 General Conditions
6.3.3 Supplementary Conditions
6.3.3 General Requirements
6.3.4 Technical Specifications

6.4 Drawings with each sheet bearing the title: Pond Liner Replacement – Hole 2

6.5 Other documents which may be required or specified including:

6.5.1 Addenda No. 0 to 0 exclusive
6.5.2 Notice of Award
6.5.3 Performance Bond
6.5.4 Labor and Material Payment Bond
6.5.5 Certificates of Insurance
6.5.6 Notice to Proceed
6.5.7 Change Order
6.5.8 Field Order
6.5.9 Work Change Directive
6.5.10 Application for Payment
6.5.11 Contractor Proposal Request
6.5.12 Contractor Overtime Request
6.5.13 Certificate of Substantial Completion
6.5.14 Claim Release
6.5.15 Claim Release for Subcontractors
6.5.16 Final Inspection Report
6.5.17 Certificate of Final Completion
6.5.18 Guarantee Period Inspection Report

6.6 The following which may be delivered or issued after the Effective Date of the Agreement and are attached hereto: All Written Amendments and other documents amending, modifying, or supplementing the Contract Documents pursuant to paragraphs 3.5 and 3.6 of the General Conditions.

6.7 In the event of conflict between the above documents, the prevailing document shall be as follows:

1. Permits from other agencies as may be required.

2. Special Provisions and Detail Drawings.

3. Technical Specifications and Drawings. Drawings and Technical Specifications are intended to be complementary. Anything shown or called for in one and omitted in another is binding as if called for or shown by both.

4. Supplementary Conditions.

5. General Conditions.

6. City of Louisville Design and Construction Standards.

7. Reference Specifications.

In case of conflict between prevailing references above, the one having the more stringent requirements shall govern.

There are no Contract Documents other than those listed above in this Article 6. The Contract Documents may only be amended, modified or supplemented as provided in paragraphs 3.5 and 3.6 of the General Conditions.

ARTICLE 7. MISCELLANEOUS

7.1 Terms used in this Agreement, which are defined in Article 1 of the General Conditions, shall have the meanings indicated in the General Conditions.

7.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment no assignment will release or discharge that assignor from any duty or responsibility under the Contract Documents.

7.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

ARTICLE 8. OTHER PROVISIONS

IN WITNESS WHEREOF, OWNER and CONTRACTOR have signed this Agreement in duplicate. One counterpart each has been delivered to OWNER and CONTRACTOR. All portions of the Contract Documents have been signed, initialed or identified by OWNER and CONTRACTOR.

This Agreement will be effective on **June 16, 2026.**

OWNER: CITY OF LOUISVILLE, COLORADO

By: Christopher Leh, Mayor

(CORPORATE SEAL)

Attest: Genny Kline, City Clerk

_____

Address for giving notices:

749 Main Street
Louisville, Colorado
80027

Attention: City Manager

CONTRACTOR: MATERRA, LLC

By: _____ 6/4/2026
Matt McReavy, Owner

(CORPORATE SEAL)

Attest:

Name: Jimmie Lacy Title: Manager

Address for giving notices:

1800 West Oxford Avenue Unit H
Englewood, Colorado
80110

Attention: Owner

6.2.1 Cover Letter

Letter of Interest
City of Louisville – Pond Reline Project

To Whom It May Concern,

Materra Waterscapes (Materra LLC) is submitting this letter of interest for the City of Louisville pond reline project. We specialize in large-scale water feature construction, restoration, and lining systems, including municipal ponds, stormwater infrastructure, and private irrigation ponds.

Our team has extensive experience converting failing or unlined ponds into fully engineered liner systems, including projects requiring grading, subgrade stabilization, dam construction, and coordination with municipalities and inspectors. We understand the importance of durability, proper compaction, and long-term performance in public water systems.

Below are examples of relevant projects that align closely with the scope of work for this project:

Ramah in the Rockies – Deckers, Colorado

1.6 million gallon pond conversion



This project involved transforming an existing flat, non-functional space into a fully lined RPE pond with approximately 12 inches of topsoil cover.

Key challenges included:

- Construction of a structural dam on the east side of the pond
- Dam compaction testing to meet engineering requirements
- Remote location with limited access to materials and fuel
- Full regrading and shaping prior to liner installation
- Blasting & removal of several boulders larger than box trucks.

Despite the logistical and engineering complexity, the project was completed successfully with all compaction and performance requirements met.

Seville Development – Aurora, Colorado
150-foot pond reline and expansion



This project involved relining an existing pond while increasing depth and improving overall function.

Site conditions were challenging:

- Several feet of saturated clay beneath the pond
- Significant accumulation of sludge above the existing base
- Rip Rap Edges of Pond for Structural Support

We worked directly with the City of Aurora to coordinate removal of unsuitable materials within the project scope. Once stabilized, we completed the reline and reshaping of the pond to meet updated performance expectations.

Private Irrigation Pond – Golden, Colorado

100-foot pond, approximately 200,000 gallons



This project involved relining and restoring a private irrigation pond approximately 7.5 feet deep.

Scope included:

- Excavation and reshaping of the pond
- Installation of a new liner system
- Preparation for long-term irrigation use

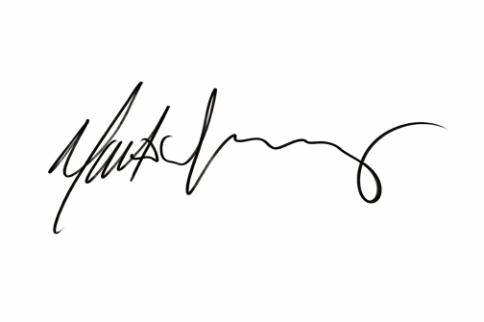
The result was a clean, functional water storage system with improved reliability and reduced water loss.

Materra Waterscapes brings a practical, field-driven approach to projects like this. We are comfortable working through unknown site conditions, coordinating with municipalities, and ensuring that the final product performs as intended for years to come.

We would welcome the opportunity to participate in this project and are confident in our ability to deliver a high-quality result that meets the City of Louisville's expectations.

Thank you for your consideration.

Sincerely,
Matt McReavy



Materra Waterscapes

Project References

Ramah in the Rockies – Deckers, Colorado
Contact: Donald Skupsky
Phone: 303-204-3800

Seville Development – Aurora, Colorado
Contact: Roger Barbe
Phone: 303-918-5295

Private Pond – Foxfield, Colorado
Contact: Michelle Weeks
Phone: 720-840-4075

6.2.2 Disclosure Statement

EXHIBIT A - DISCLOSURE STATEMENT

Vendor must disclose any possible conflict of interest with the City of Louisville including, but not limited to, any relationship with any City of Louisville elected official or employee.

Your response must disclose if a known relationship exists between any principal of your firm and any City of Louisville elected official or employee. If, to your knowledge, no relationship exists, this should also be stated in your response.

Failure to disclose such a relationship may result in cancellation of a contract as a result of your response. This form must be completed and returned in order for your proposal to be eligible for consideration.

☒ NO KNOWN RELATIONSHIPS EXIST

☐ RELATIONSHIP EXISTS (Please explain relationship)

_____

_____

I CERTIFY THAT:

1. I, as an officer of this organization, or per the attached letter of authorization, am duly authorized to certify the information provided herein are accurate and true as of the date; and

2. My organization shall comply with all State and Federal Equal Opportunity and Non-Discrimination requirements and conditions of employment.

Matt McReavy — Printed or Typed Name

Owner — Title

Signature

9/7/2026 — Date

6.2.3 Pricing Form

EXHIBIT B - PRICING FORM

PROJECT: Pond Liner Replacement - Hole 2
OWNER: Coal Creek Golf Course - City of Louisville, Colorado

FIRM: _____ **SUBMISSION DATE:** _____

PROPOSED CONSTRUCTION TIMEFRAME: _____ (# of Days from start to finish)

LINE	SERVICE ITEM	SERVICE FEE	NOTES
1	Pre-construction Services / Mobilization	$ 25,750	
2	General Conditions	$ 140,250	
3	Erosion Control / BMPs	$ 4800	
4	Demolition / Hauling	$ 25,500	
5	Pond Liner (incl. installation)	$ 106,750	
6	Cover Soil (Import)	$ 14,500	
7	Restoration - Sod	$ 9800	
8	Restoration - Misc (Allowance)	$ 7200	
9	Bonding/Insurance	$ 14,500	
10	Other: Overlayment	$ 18,750	if applicable
	Total:	$ 367,800	sum of lines 1-10

SCHEDULE OF SUBCONTRACTORS (as applicable)	
Firm Name	**Involvement** (Demolition, Drainage, Installation, Other as noted)
McTerra LLC	All

SIGNATURE: _____

NAME: Matt McRory

TITLE: Owner

6.2.4 Quote

QUOTE #35667

SENT ON:

Apr 07, 2026

RECIPIENT:

City of Louisville - Coal Creek Golf Course

1800 South Natches Court
Sheridan, Colorado 80110

1800 West Oxford Avenue Unit H
Englewood, Colorado 80110

Phone: 303-214-2688

Email: admin@materraservices.com

Website: www.materraservices.com

Pond Liner Replacement at Hole 2 of the Coal Creek Golf Course

Quote provided per details in RFP labeled " Pond Liner Replacement at Hole 2 of the Coal Creek Golf Course". Materra to coordinate with City/Golf Course on execution of the scope including draining the pond, water diversion, sludge removal, liner replacement, and restoration.

Materra requires additional liner protection for warranty: geotextile on top of the liner (overlayment) to protect it as it's covered with topsoil and protect the liner moving forward. Cost is expressed in the "other" category.

Product/Service	Description	Qty.	Unit Price
Pre-Construction Services/Mobilization		1	$25,750.00
General Conditions		1	$140,250.00
Erosion Control / BMPs		1	$4,800.00
Demolition Hauling	Removal of up to 12" of sludge to offset 12" of topsoil.	1	$25,500.00
Pond Liner/Geo Underlayment	40 Mil RPE Liner & Geo Drainage Underlayment on base. Base geo promotes drainage under the pond due to high water table. No less than 40 mil RPE would be recommended.	1	$106,750.00
12" Cover Soil Screened (Import)		1	$14,500.00
Restoration Sod		1	$9,800.00
General Restoration	Cobblestone	1	$7,200.00
Performance Bond Insurance		1	$14,500.00

QUOTE #35667

SENT ON:

Apr 07, 2026

Product/Service	Description	Qty.	Unit Price
Other - Overlayment	Materra requires a geotextile overlayment to be installed over the liner to protect it. With 12" of soil over top, our machines will have to interact closely with this liner which can be easily damaged. Even screened soil has random objects that can puncture the liner - this overlayment ensures protection during installation and beyond.	1	$18,750.00

* Non-taxable

A deposit of $91,950.00 will be required to begin.

Subtotal	$367,800.00
EXEMPT (0.0%)	$0.00
Total	$**367,800.00**

Payment Schedule

25%	Project Acceptance/Scheduling - **Required Quote Deposit**	$91,950.00
25%	Material Ordering (Liner/Geo)	$91,950.00
25%	Project Start/Demo	$91,950.00
25%	Completion	$91,950.00

COMMUNICATION GUIDELINES
Please do not text workers directly as we would like to keep track of customer communications in the office.
Please utilize this number for all SMS text: 720-815-3212 or email admin@materraservices.com.

Please review this estimate carefully, as it may differ from any verbal agreements. Due to uncertainties in product availability and pricing, estimates including products are only valid for 30 days from submission, after which pricing may need to be re-evaluated.

Due to high material costs and to secure today's pricing a 50% deposit is required to proceed with projects. Spring Cleanings require full payment for priority scheduling. Large projects require a 35% deposit to schedule, 35% at project start, 15% upon water filling, and remaining balance upon substantial completion (unless otherwise specified above). The remaining balance is due upon receipt of the final invoice. Products are ordered, and scheduling is finalized once a deposit is received. Checks are preferred; additional fees may apply for credit card transactions. Checks can be mailed to the address above with the invoice or estimate number. Service dates are subject to change due to weather and other conditions. Accounts over 30 days past due are subject to a 5% late fee per month. Accounts with a card on file will be automatically billed. Estimates assume normal working conditions and may change based on unforeseen conditions. Unexpected costs due to existing or concealed conditions are not included; please notify us in writing if you are aware of such conditions. Estimates do not account for poor site access, traffic management, bedrock, irrigation repair, site restoration, re-grading, groundwater issues, drainage issues, or material removal unless specified. Dimensions are liner dimensions, not post-rock placement, and are not guaranteed to

be exact. Materra is not responsible for damaged plants near the construction area; we recommend relocating or potting them before service. Damaged grass will be repaired with overseed. Mark all sprinkler heads, drip lines, surface wiring, and remove yard decor to prevent damage. Customers are responsible for all fill/rinse water and power required for the project. Estimates do not include natural gas or electrical work unless stated. Materra, LLC is not responsible for permits required by local authorities or HOAs but can produce required documents for an additional fee. Homeowners must verify the safety of the installation and add any necessary safety signage/barriers during and after construction. For warranty and safety reasons, only Materra workers should work on the project during construction. Customers must contact local utilities to mark underground lines before service. Materra, LLC is not liable for injuries resulting from requested landscape features during or after construction (except for Materra workers).

Product & Materials
Products & Materials shown above may vary in color/size/aesthetics depending on batch. Products and materials may change for an alternate based on availability. This is due to limited supplies of typical product with tariffs in place around the world. Additional product (pumps, etc.) is sold at the price on aquascapeinc.com + and additional taxes/fees + 15% for our warranty. Products sold my Materra and their installation include a 1 year worry free warranty with manufacture warranty taking over after. Warranty claims after one year are subject to service call fees & shipping charges. Product warranties are ultimately determined by the Manufacturer. Warranties start at substantial completion of the project.

Scheduling & Access:
Scheduling is based on estimate approval order and deposit. Projects are done in sequence and may be delayed if previous projects run over schedule—remember, this is an art! Rain, snow, and other conditions can also cause delays. Materra operates from 8 AM to 5 PM. Teams start loading for projects at 8 AM and may leave early to return by 5 PM or earlier for unloading. We are closed on weekends and most federal holidays, including the week between Christmas and New Year's. Locations with gate or security access restrictions must whitelist Materra for the project's duration. Same-day cancellations, being turned away on-site, or restricted access will incur a $75 return fee.

Recurring Service:
Monthly service is supplemental; customers should monitor and service the water feature between our visits (i.e. emptying the skimmer and topping off water levels). Repairs, parts, and labor are NOT included in the recurring service fee. Additional services will be quoted per job. Repairs over $100 require customer authorization in advance. Fish health issues? We are not Vets. Contact a professional for help such as: https://www.drqandu.org/services/aquatic-pet-care.

Construction:
Deposits on construction projects are generally non-refundable as they secure materials, equipment, and resources. Check with your salesperson regarding refund eligibility if you need to cancel your project. Work may halt if additional payments are not received per the schedule, and other projects may commence, incurring additional equipment transportation and other fees. Pond/Natural Pool dimensions are based on liner (pre-rock) dimensions. **Landscaping, Mulch, Flowers/Plants, Sprinkler Repair and Restoration is not included unless otherwise specified above.

General:
Customers authorize Materra, LLC to use video and photos of water features and surrounding areas for marketing purposes. Review estimates thoroughly before accepting, as they may differ from verbal discussions. Direct any questions to admin@materraservices.com. Materra, LLC transfers factory warranties if available and offers a limited 1-year warranty starting from the final invoice date for non-maintenance related leaks and repairs. Customer-provided products are not warrantied. Warranty does not cover negligence, damage from rodents, or acts of God. Product warranties are subject to manufacturer approval. Pumps, lights, and accessories can be swapped at our office or during a paid service visit if covered by the manufacturer's warranty. Plants and fish are not warrantied. By accepting this estimate verbally or online, you agree to our terms and conditions and accept being added to our mailing list. See all terms and conditions at www.materraservices.com.

Legal Fees Clause
In the event that any legal action is required to enforce the terms of this contract, including but not limited to collection of unpaid balances, the customer agrees to pay all reasonable attorney fees, court costs, mediation fees, and any other expenses incurred by Materra, LLC in connection with such action. Projects & customers that are not paid in full with bad debt or past due invoices are not subject to warranty repairs.

QUOTE #35667

SENT ON:

Apr 07, 2026

- This agreement is governed by the laws of the state in which Materra, LLC is located.
- Any disputes arising out of or related to this agreement shall be resolved in the appropriate court in the jurisdiction where Materra, LLC is located.
- The customer acknowledges and agrees that they have read, understood, and accepted all terms and conditions outlined in this contract.

Communication Guidelines:
Save the number (720) 815-3212 for all text communications. This number is for existing customers only and is prioritized over our office number (303) 214-2688, which receives over 40 calls per day during the season.

Respect Materra workers' cell phone numbers and use them only if necessary within business hours (9 AM-5 PM, Monday-Friday). Communication outside of business hours using worker cell phones may incur emergency fees. Call (720) 815-3212 and leave a message outside business hours if not an emergency, or email admin@materraservices.com.

Signature: _____ **Date:** _____

Technical Specifications for
Construction of:

POND LINER REPLACEMENT
Hole 2 at the
Coal Creek Golf Course

THE CITY OF LOUISVILLE
749 MAIN STREET
LOUISVILLE CO, 80027

Prepared by:

City of Louisville

Issued: February 26, 2026
Revised: June 4, 2026

PROJECT DIRECTORY

Pond Liner Replacement Hole 2

OWNER: **City of Louisville**
Parks, Recreation & Open Space Department
749 Main St
Louisville CO, 80027
Tel: 303-335-4735

Coal Creek Golf Course

CONTACTS:

Bryon Weber, Project Manager
Email: bweber@louisvilleco.gov

David Dean, Superintendent
Email: ddean@louisvilleco.gov

Mark Jensen, General Manager
Email: mjensen@louisvilleco.gov

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PROJECT: *Pond Liner Replacement – Hole 2 Coal Creek Golf Course*

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SECTION 01 00 00

GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

1.0 **Abnormal Weather** - Snowfall, rainfall, freezing temperatures, or wind conditions, in excess of those encountered in the project area of Boulder County during the past 10 years that necessitates cessation of Work and causes consequence to the project.

1.1 **Addenda** - Written or graphic instruments issued prior to the opening of Bids, which clarify, correct or change the Bidding Requirements or the Contract Documents.

1.2 **Agreement** - The written contract between OWNER and CONTRACTOR covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.

1.3 **Application for Payment** - The form accepted by OWNER'S REPRESENTATIVE which is to be used by CONTRACTOR in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

1.4 **Asbestos** - Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

1.5 **Bid** - The offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

1.6 **Bidding Documents** - The advertisement or invitation to Bid, instructions to Bidders, the Bid form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).

1.7 **Bidding Requirements** - The advertisement or invitation to Bid, instructions to bidders, and the Bid form.

1.8 **Bonds** - Performance and Payment bonds and other instruments of security.

1.9 **Change Order** - A document recommended by OWNER'S REPRESENTATIVE, which is signed by CONTRACTOR and OWNER and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.

1.9.1 **Contract Day** – A Contract Day specifies that construction will be completed Monday through Sunday, excluding OWNER-observed holidays and Abnormal Weather days.

1.10 **Contract Documents** - The Agreement, Addenda (which pertain to the Contract Documents), CONTRACTOR's Bid (including documentation accompanying the Bid and any

post Bid documentation submitted prior to the Notice Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders and OWNER'S REPRESENTATIVE's written interpretations and clarifications issued pursuant to paragraphs 3.5, 3.6.1, and 3.6.3 on or after the Effective Date of the Agreement. Shop Drawing submittals approved pursuant to paragraphs 6.26 and 6.27 and the reports and drawings referred to in paragraphs 4.2.1.1 and 4.2.2.2 are not Contract Documents.

1.11 Contract Price - The moneys payable by OWNER to CONTRACTOR for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.9.1 in the case of Unit Price Work).

1.12 Contract Times - The numbers of days or the dates stated in the Agreement: (i) to achieve Substantial Completion, and (ii) to complete the Work so that it is ready for final payment as evidenced by OWNER'S REPRESENTATIVE's written recommendation of final payment in accordance with paragraph 14.13.

1.13 CONTRACTOR - The person, firm or corporation with whom OWNER has entered into the Agreement.

1.14 Defective - An adjective which when modifying the work refers to Work that is unsatisfactory, faulty or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to OWNER'S REPRESENTATIVE's recommendation of final payment (unless responsibility for the protection thereof has been assumed by OWNER at Substantial Completion in accordance with paragraph 14.8 or 14.10).

1.15 Drawings - The drawings that show the scope, extent and character of the Work to be furnished and performed by CONTRACTOR and which have been prepared or approved by OWNER'S REPRESENTATIVE and are referred to in the Contract Documents. Shop drawings are not Drawings as so defined.

1.16 Effective Date of the Agreement - The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.

1.17 OWNER'S REPRESENTATIVE - The word "OWNER'S REPRESENTATIVE" refers to the City of Louisville, authorized representative, designated by the OWNER as its representative.

1.18 OWNER'S Consultant - A person, firm or corporation having a contract with OWNER to furnish services as OWNER's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions.

1.19 Field Order - A written order issued by OWNER'S REPRESENTATIVE which orders minor changes in the Work in accordance with paragraph 9.5 but which does not involve a change in the Contract Price or the Contract Times.

1.20 General Requirements - Sections of Division 1 of the Specifications.

1.21 **Hazardous Waste** - The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

1.22 **Laws and Regulation: Laws or Regulations** - Any and all applicable laws, rules, regulations, ordinances, codes and orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.

1.23 **Liens** - Liens, charges, security interests or encumbrances upon real property or personal property.

1.24 **Milestone** - A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.

1.25 **Notice of Award** - The written notice by OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the conditions precedent enumerated therein, within the time specified, OWNER will sign and deliver the Agreement.

1.26 **Notice to Proceed** - A written notice given by OWNER to CONTRACTOR (with a copy to OWNER'S REPRESENTATIVE) fixing the date on which the Contract Times will commence to run and on which CONTRACTOR shall start to perform CONTRACTOR's obligations under the Contract Documents.

1.27 **OWNER** - The public body or authority, corporation, association, firm or person with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be provided.

1.28 **Partial Utilization** - Use by OWNER of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.

1.29 **PCBs** - Polychlorinated biphenyls.

1.30 **Petroleum** - Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Wastes and crude oils.

1.31 **Plans** - The term plans as used in these Contract Documents shall have the same meaning as Drawings.

1.32 **Product** - Includes materials, equipment and systems.

1.33 **Project** - The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

1.34 **Provide** - Furnish and install specified materials and equipment, unless the context requires otherwise.

1.35 Radioactive Material - Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.

1.36 Resident Project Representative - The authorized representative of OWNER'S REPRESENTATIVE who may be assigned to the site or any part thereof.

1.37 Samples - Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.

1.38 Shop Drawings - All drawings, diagrams, illustrations, schedules and other data or information which are specifically prepared or assembled by or for CONTRACTOR and submitted by CONTRACTOR to illustrate some portion of the Work.

1.39 Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

1.40 Subcontractor - An individual, firm or corporation having a contract with CONTRACTOR or with any other Subcontractor for the performance of a part of the Work at the site.

1.41 Substantial Completion - The Work (or a specified part thereof) has progressed to the point where, in the opinion of OWNER'S REPRESENTATIVE as evidenced by OWNER'S REPRESENTATIVE's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if no such certificate is issued, when the Work is complete and ready for final payment as evidenced by OWNER'S REPRESENTATIVE's written recommendation of final payment in accordance with paragraph 14.13. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.

1.42 Supplementary Conditions - The part of the Contract Documents, which amends or supplements these General Conditions.

1.43 Supplier - A manufacturer, fabricator, supplier, distributor, material man or vendor having a direct contract with CONTRACTOR or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by CONTRACTOR or any Subcontractor.

1.44 Underground Facilities - All pipeline, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

1.45 Unit Price Work - Work to be paid for on the basis of unit prices.

1.46 Work - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work includes and is the result of performing or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents.

1.47 Work Change Directive - A written directive to CONTRACTOR, issued on or after the Effective Date of the Agreement and signed by OWNER and recommended by OWNER'S REPRESENTATIVE, ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 4.2 or 4.3 or emergencies under paragraph 6.23. A Work Change Directive will not change the Contract Price or the Contract Times, but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times as provided in paragraph 10.2.

1.48 Written Amendment - A written amendment of the Contract Documents, signed by OWNER and CONTRACTOR on or after the Effective Date of the Agreement and normally dealing with the non-OWNER'S REPRESENTATIVE or non-technical rather than strictly construction-related aspects of the Contract Documents.

END ARTICLE 01

ARTICLE 2 - PRELIMINARY MATTERS

Delivery of Bonds:

2.1 When CONTRACTOR delivers the executed Agreement to OWNER, CONTRACTOR shall also deliver to OWNER such Bonds and Certificates of Insurance as CONTRACTOR may be required to furnish in accordance with Article 5.

Copies of Documents:

2.2 OWNER shall furnish to CONTRACTOR up to four copies of the contract documents for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

Commencement of Contract Times; Notice to Proceed:

2.3 The Contract Times will commence to run on the day indicated in the Notice to Proceed. Timing and completion of the **Joe Carnival & Meadows Park Playground Improvements** is required on or prior to **August 30th, 2024**. The OWNER has set the proposed project schedule and plans to implement the following schedule for this project. The CONTRACTOR shall be required to start construction on or before the start date listed below:

Anticipated Project Schedule:

City Council Contract Approval	May 5th
Notice of Award	May 6th
Notice to Proceed, Bonds, Insurance, etc.	May 15th
Substantial Completion	TBD 2026
Final Project Completion	TBD 2026

Starting the Work:

2.4 CONTRACTOR shall start to perform the Work on the date when the Contract Times commence to run, but no Work shall be done at the site prior to the date on which the Contract Times commence to run.

Before Starting Construction:

2.5 Before undertaking each part of the Work, CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. CONTRACTOR shall promptly report in writing to OWNER'S REPRESENTATIVE any conflict, error, ambiguity or discrepancy which CONTRACTOR may discover and shall obtain a written interpretation or clarification from OWNER'S REPRESENTATIVE before proceeding with any Work affected thereby; however, CONTRACTOR shall not be liable to OWNER or OWNER'S REPRESENTATIVE for failure to report any conflict, error, ambiguity or discrepancy in

the Contract Documents, unless CONTRACTOR knew or reasonably should have known thereof.

2.6 Within ten days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), CONTRACTOR shall submit to OWNER'S REPRESENTATIVE for review:

2.6.1 a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestone specified in the Contract Documents;

2.6.2 a preliminary schedule of Shop Drawing and Sample submittals which will list each required submittal and the times for submitting, reviewing and processing such submittal.

Preconstruction Conference:

2.7 Before any Work at the site is started, a conference attended by CONTRACTOR, OWNER'S REPRESENTATIVE and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.6, procedures for handling Shop Drawings and other submittal, processing Applications for Payment and maintaining required records.

Initially Acceptable Schedules:

2.8 Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by CONTRACTOR, OWNER'S REPRESENTATIVE and others as appropriate will be held to review the Application for Payment for acceptability to OWNER'S REPRESENTATIVE. No progress payment shall be made to CONTRACTOR until the schedules are submitted to and acceptable to OWNER'S REPRESENTATIVE as provided below. The progress schedule will be acceptable to OWNER'S REPRESENTATIVE as providing an orderly progression of the Work to completion within any specified Milestones and the Contract Times, but such acceptance will neither impose on OWNER'S REPRESENTATIVE responsibility for the sequencing, scheduling or progress of the Work nor interfere with or relieve CONTRACTOR from CONTRACTOR's full responsibility therefor. CONTRACTOR's schedule of Shop Drawing and Sample submissions will be acceptable to OWNER'S REPRESENTATIVE as providing a workable arrangement for reviewing and processing the required submittals.

END ARTICLE 02

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

Intent:

3.1 The Contract Documents comprise the entire agreement OWNER and CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

3.2 It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be furnished and performed whether or not specifically called for. When words or phrases, which have a well-known technical or construction industry or trade meaning, are used to describe Work, materials or equipment, such words or phrases shall be interpreted in accordance with that meaning. Clarifications and interpretations of the Contract Documents shall be issued by OWNER'S REPRESENTATIVE as provided in paragraph 9.4.

3.3 Reference to Standards & Specifications of Technical Societies; Reporting and Resolving Discrepancies:

3.3.1. Reference to standards, specifications, manuals or codes of any technical society, organization or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard, specification, manual, code or Laws or Regulations in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

3.3.2 If, during the performance of the Work, CONTRACTOR discovers any conflict, error ambiguity or discrepancy within the Contract Documents or between the Contract Documents and any provision of any such Law or Regulation applicable to the performance of the Work or of any such standard, specification, manual or code or of any instruction of any Supplier referred to in paragraph 6.5, CONTRACTOR shall report it to OWNER'S REPRESENTATIVE in writing at once, and, CONTRACTOR shall not proceed with the Work affected thereby (except in an emergency as authorized by paragraph 6.23) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.5 or 3.6; provided, however, that CONTRACTOR shall not be liable to OWNER or OWNER'S REPRESENTATIVE for failure to report any such conflict, error, ambiguity or discrepancy unless CONTRACTOR knew or reasonably should have known thereof. Upon notification to the OWNER'S REPRESENTATIVE, the CONTRACTOR shall proceed with other parts of the Work not affected by the conflict, error, ambiguity or discrepancy.

3.3.3 Except as otherwise specifically stated in the Contract Documents or as may be provided by amendment or supplement thereto issued by one of the methods indicated in paragraph 3.5 or 3.6, the provisions of the Contract Documents shall

take precedence in resolving any conflict, error, ambiguity or discrepancy between the provisions of the Contract Documents and:

3.3.3.1 the provisions of any such standard, specification, manual, code or instruction (whether or not specifically incorporated by reference in the Contract Documents); or

3.3.3.2 the provisions of any such Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

No provision of any such standard, specification, manual, code or instruction shall be effective to change the duties and responsibilities of OWNER, CONTRACTOR or OWNER'S REPRESENTATIVE, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to OWNER, OWNER'S REPRESENTATIVE or any of OWNER'S REPRESENTATIVE's Consultants, agents or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of paragraph 9.13 or any other provision of the Contract Documents.

3.4 Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper" or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of OWNER'S REPRESENTATIVE as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to OWNER'S REPRESENTATIVE any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.13 or any other provision of the Contract Documents.

Amending and Supplementing Contract Documents:

3.5 The Contract Documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

3.5.1 a formal Written Amendment,
3.5.2 a Change Order (pursuant to paragraph 10.4), or
3.5.3 a Work Change Directive (pursuant to paragraph 10.1)

3.6 In addition, the requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, in one or more of the following ways:

3.6.1 a Field Order (pursuant to paragraph 9.5)

3.6.2 OWNER'S REPRESENTATIVE's approval of a Shop Drawing or Sample (pursuant to paragraphs 6.26 and 6.27), or

3.6.3 OWNER'S REPRESENTATIVE's written interpretation or clarification (pursuant to paragraph 9.4).

Reuse of Documents:

3.7 CONTRACTOR, and any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with OWNER (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications or other documents (or copies of any thereof) prepared by or bearing the seal of OWNER'S REPRESENTATIVE or OWNER'S REPRESENTATIVE's Consultant, and (ii) shall not reuse any of such Drawings, Specifications, other documents or copies on extensions of the Project or any other project without written consent of OWNER and OWNER'S REPRESENTATIVE and specific written verification or adaption by OWNER'S REPRESENTATIVE.

END ARTICLE 03

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

Availability of Lands:

4.1 OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of CONTRACTOR. OWNER shall identify any encumbrances or restrictions not of general application but specifically related to use of lands so furnished with which CONTRACTOR will have to comply in performing the Work. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by OWNER, unless otherwise provided in the Contract Documents. If CONTRACTOR and OWNER are unable to agree on entitlement to or the amount or extent of any adjustments in the Contract Price or the Contract Times as a result of any delay in OWNER's furnishing these lands, rights-of-way or easements, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12. CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

Subsurface and Physical Conditions:

4.2 BIDDER'S are responsible for examining and determining for themselves the location and nature of the proposed Work, the amount and character of the labor and materials required therefor, and the difficulties, which may be encountered. BIDDER's may not rely on oral or written representations made by the OWNER, including reports and drawings identified pursuant to 4.2.1 and subparagraphs thereof, unless the OWNER has guaranteed in writing that such representation is factually accurate, and by submitting a Bid, each BIDDER waives all liability for any error in any representation made by the OWNER to the BIDDER. BIDDER's shall inspect the site and its surroundings and conduct such supplementary examinations, investigations, and tests concerning conditions at or contiguous to the site (including surface, and subsurface) which may affect cost, progress, performance, or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by BIDDER and safety precautions and programs incident thereto for performing the Work in accordance with the Contract Documents. By failing to make such an inspection, the BIDDER waives all rights to claim extra payment or time extensions due to unexpected conditions, which could have been determined had the site been reasonably inspected. If concealed or unknown conditions differ materially from those ordinarily encountered and generally recognized as inherent in the Work, or differ materially from the conditions indicated in the Contract Documents, then an equitable adjustment in the Contract Price or in the Contract Time will be allowed by change order as provided in Article 11 or Article 12 respectively. By submitting a Bid, the BIDDER represents that the BIDDER's observations at the site are not inconsistent with the requirements of the proposed Contract Documents, unless otherwise noted by the BIDDER.

4.2.1 **Reports and Drawings:** Reference is made to the Supplementary Conditions for identification of:

The following reports of explorations and tests of subsurface conditions at the site of the Work:

4.2.1.1 **Subsurface Conditions:** Those reports of explorations and tests of subsurface conditions at or contiguous to the site that have been utilized by the Engineer in preparing the Contract Documents; and

Report dated **N/A** , **N/A**, prepared by **N/A** entitled: **N/A** . The technical data contained in such report upon which CONTRACTOR may rely is **N/A** .

Copies of these reports that are not included with Bidding Documents may be examined at OWNER'S REPRESENTATIVE's office during regular business hours. Please call for appointment. Copies of such reports are not available for distribution. These reports and drawings are not part of the Contract Documents, but the technical data contained therein upon which CONTRACTOR is entitled to rely as provided in GC-4.2 and as identified and established above are incorporated therein by reference.

4.2.1.2 **Physical Conditions:** Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) that have been utilized by OWNER'S REPRESENTATIVE in preparing the Contract Documents.

4.2.2 **Limited Reliance by CONTRACTOR authorized; Technical Data:** Reports and drawings identified pursuant to paragraph 4.2 are not Contract Documents. Unless otherwise set forth in the Contract Documents or OWNER has otherwise guaranteed in writing that such representation is factually accurate, CONTRACTOR may not rely upon or make any claim against the OWNER, OWNER'S REPRESENTATIVE or OWNER'S REPRESENTATIVE's consultants with respect to the accuracy of any "technical data" contained in reports and drawings and CONTRACTOR may not rely upon or make any claim against the OWNER, OWNER'S REPRESENTATIVE or OWNER'S REPRESENTATIVE's consultants with respect to:

4.2.2.1 The completeness of such reports and drawings for CONTRACTOR's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by CONTRACTOR and safety precautions and programs incident thereto, or

4.2.2.2 other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings, or

4.2.2.3 any CONTRACTOR interpretation of or conclusion drawn from any "technical data" or any such data, interpretations, opinions or information.

4.2.3 CONTRACTOR shall not be entitled to any adjustment in the Contract Price or Times if:

4.2.3.1 CONTRACTOR knew of the existence of such conditions at the time CONTRACTOR made a final commitment to OWNER in respect of Contract Price and Contract Times by the submission of a bid or becoming bound under a negotiated contract; or

4.2.3.2 the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test or study of the site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for CONTRACTOR prior to CONTRACTOR's making such final commitment.

If OWNER and CONTRACTOR are unable to agree on entitlement to or as to the amount or length of any such equitable adjustment in the Contract Price or Contract Times, a claim may be made therefor as provided in Articles 11 and 12. However, OWNER, OWNER'S REPRESENTATIVE and OWNER'S REPRESENTATIVE's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses or damages sustained by CONTRACTOR on or in connection with any other project or anticipated project.

4.3 Physical Conditions - Underground Facilities:

4.3.1 **Shown or Indicated:** The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to OWNER or OWNER'S REPRESENTATIVE by the owners of such Underground Facilities or by others.

4.3.1.1 OWNER and OWNER'S REPRESENTATIVE shall not be responsible for the accuracy or completeness of any such information or data; and

4.3.1.2 The cost of all of the following will be included in the Contract Price and CONTRACTOR shall have full responsibility for: (i) reviewing and checking all such information and data, (ii) locating all Underground Facilities shown or indicated in the Contract Documents, (iii) coordination of the Work with the owners of such Underground Facilities during construction, and (iv) the safety and protection of all such Underground Facilities as provided in paragraph 6.20 and repairing any damage thereto resulting from the Work.

4.3.2 **Not Shown or Indicated:** If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents, CONTRACTOR shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.23),

identify the owner of such Underground Facility and give written notice to that owner and to OWNER and OWNER'S REPRESENTATIVE. CONTRACTOR shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 6.20. CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, to the extent that they are attributable to the existence of any Underground Facility that was not shown or indicated in the Contract Documents and that CONTRACTOR did not know of and could not reasonably have been expected to be aware of or to have anticipated. If OWNER and CONTRACTOR are unable to agree on entitlement to or the amount or length of any such adjustment in Contract Price or Contract Times, CONTRACTOR may make a claim therefor as provided in Articles 11 and 12. However, OWNER, OWNER'S REPRESENTATIVE and OWNER'S REPRESENTATIVE's Consultants shall not be liable to CONTRACTOR for any claims, costs, losses or damages incurred or sustained by CONTRACTOR on or in connection with any other project or anticipated project.

Reference Points:

4.4 OWNER shall provide Engineering surveys to establish baseline and benchmarks for construction, which in OWNER'S REPRESENTATIVE's judgment are necessary to enable CONTRACTOR to proceed with the Work. CONTRACTOR shall be responsible for laying out the Work, shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of OWNER, CONTRACTOR shall report to OWNER'S REPRESENTATIVE whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.

OWNER shall provide survey reference points for the CONTRACTOR to locate construction stakes, lines and grades required for the completion of the work specified in the specifications, on the plans, or in the Special Conditions. Additional staking required will be at the CONTRACTOR'S expense. When the CONTRACTOR requires staking review, he shall notify the OWNER in a reasonable length of time in advance of starting work. Under no circumstances, shall a notice of less than 2 contract days be considered a reasonable length of time. Failure of the CONTRACTOR to provide 2 contract days' notice to the OWNER of his staking requests shall relieve the OWNER from any responsibility for additional costs or delays caused by such failure. The CONTRACTOR shall carefully preserve all stakes. When stakes are destroyed or damaged, the CONTRACTOR will be charged for the cost of necessary replacement or restoration of stakes.

4.5 Asbestos, PCB's Petroleum, Hazardous Waste or Radioactive Material:

4.5.1 OWNER shall be responsible for any Asbestos, PCB's, Petroleum, Hazardous Waste or Radioactive Material uncovered or revealed at the site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work and which may present a substantial danger to persons or property exposed thereto in connection with the Work at the site. OWNER shall not be responsible for any such materials brought to the site by CONTRACTOR, Subcontractor, Suppliers or anyone else for whom CONTRACTOR is responsible.

4.5.2 CONTRACTOR shall immediately: (i) stop all Work in connection with such hazardous condition and in any area affected thereby (except in an emergency as required by paragraph 6.23), and (ii) notify OWNER and OWNER'S REPRESENTATIVE (and thereafter confirm such notice in writing). OWNER shall promptly consult with OWNER'S REPRESENTATIVE concerning the necessity for OWNER to retain a qualified expert to evaluate such hazardous condition or take corrective action, if any. CONTRACTOR shall not be required to resume Work in connection with such hazardous condition or in any such affected area until after OWNER has obtained any required permits related thereto and delivered to CONTRACTOR special written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (ii) specifying any special conditions under which such Work may be resumed safely. If OWNER and CONTRACTOR cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of such Work stoppage or such special conditions under which Work is agreed by CONTRACTOR to be resumed, either party may make a claim therefor as provided Articles 11 and 12.

4.5.3 If after receipt of such special written notice CONTRACTOR does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then OWNER may order such portion of the Work that is in connection with such hazardous condition or in such affected area to be deleted from the Work. If OWNER and CONTRACTOR cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a claim therefor as provided in Articles 11 and 12. OWNER may have such deleted portion of the Work performed by OWNER's own forces or others in accordance with Article 7.

4.5.4 The provisions of paragraphs 4.2 and 4.3 are not intended to apply to Asbestos, PCB's, Petroleum, Hazardous Waste or Radioactive Material uncovered or revealed at the site.

END ARTICLE 04

ARTICLE 5 - BONDS AND INSURANCE

Performance, Payment and Other Bonds:

5.1 CONTRACTOR shall furnish Performance and Payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all CONTRACT-OR's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act. The CONTRACTOR shall furnish the performance and payment bond in the form provided in the Contract Documents or approved by the OWNER; the earlier of ten (10) days after the OWNER has issued the notice of award or delivery of the executed Agreement. The OWNER reserves the right to exclude any Surety Company on any ground it deems appropriate. The cost of the bonds shall be included in the bid.

5.2 If the surety on any Bond furnished by CONTRACTOR is declared a bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.1, CONTRACTOR shall within ten days thereafter substitute another Bond and surety, both of which must be acceptable to OWNER.

5.3 Licensed Sureties and Insurers; Certificates of Insurance:

5.3.1 All Bonds and insurance required by the Contract Documents to be purchased and maintained by CONTRACTOR shall be obtained from surety or insurance companies acceptable to OWNER that are duly licensed to transact business in the State of Colorado and to issue Bonds or insurance policies for the limits and coverage so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.3.2 CONTRACTOR shall deliver to OWNER, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by OWNER or any other additional insured) which CONTRACTOR is required to purchase and maintain accordance with paragraph 5.4. The certificates shall be reviewed and approved by OWNER prior to execution of the Agreement. The OWNER shall have the right to request and obtain copies of any insurance policies required under paragraph 5.4 of the General Conditions. The completed certificates of insurance shall be sent to: City of Louisville, 749 Main Street, Louisville, Colorado 80027, attention: CITY OWNER'S REPRESENTATIVE.

CONTRACTOR's Liability Insurance:

5.4 (a) The CONTRACTOR agrees to procure and maintain, at its own cost, a policy or policies of insurance sufficient to insure against all liability, claims, demands, and other obligations assumed by the CONTRACTOR pursuant to paragraphs 6.12, 6.16, 6.31, 6.32 and 6.33, and 6.5 in addition to any other insurance requirements imposed by the Contract Documents or by law. The CONTRACTOR shall not be relieved of any liability, claims, demands, or other obligations assumed pursuant to paragraphs 6.12, 6.16, 6.31, and 6.33 by reason of its failure to procure or maintain insurance, or by reason of its failure to procure or maintain insurance in sufficient amounts, durations, or types.

(b) CONTRACTOR shall procure and maintain, and shall cause any Subcontractor or Supplier of the CONTRACTOR to procure and maintain or insure the activity of his Subcontractors and Suppliers in his own policy, the minimum insurance coverages listed below. Such coverages shall be procured and maintained with forms and insurers acceptable to the OWNER. All coverages shall be continuously maintained from the date of commencement of the Work to cover all liability, claims, demands, and other obligations assumed by the CONTRACTOR pursuant to paragraphs 6.31 and 6.33. In the case of any claims-made policy, the necessary retroactive dates and extended reporting periods shall be procured to maintain such continuous coverage.

(1) Workers' Compensation insurance to cover obligations imposed by the Workers' Compensation Act of Colorado and any other applicable laws for any employee engaged in the performance of Work under this contract, and Employers' Liability insurance with minimum limits of FIVE HUNDRED THOUSAND DOLLARS ($500,000) each accident, FIVE HUNDRED THOUSAND DOLLARS ($500,000) disease - policy limit, and FIVE HUNDRED THOUSAND DOLLARS ($500,000) disease - each employee. Evidence of qualified self-insured status may be substituted for the Workers' Compensation requirements of this paragraph.

(2) Comprehensive General Liability insurance with minimum combined single limits of ONE MILLION DOLLARS ($1,000,000) each occurrence and TWO MILLION DOLLARS ($2,000,000) aggregate. The policy shall be applicable to all premises and operations. The policy shall include coverage for bodily injury, broad form property damage (including completed operations), personal injury (including coverage for contractual and employee acts), blanket contractual, independent contractors, products, and completed operations. The policy shall include coverage for explosion, collapse, and underground hazards. The policy shall contain a severability of interests' provision.

(3) Comprehensive Automobile Liability insurance with minimum combined single limits for bodily injury and property damage of not less than ONE MILLION DOLLARS ($1,000,000) each occurrence and ONE MILLION DOLLARS ($1,000,000) aggregate with respect to each of CONTRACTOR's owned, hired or non-owned vehicles assigned to or used in performance of the services. The policy shall contain a severability of interests' provision.

(4) The CONTRACTOR shall provide and maintain builder's risk insurance upon the entire project equal to one hundred percent (100%) of the insurable value

thereof. Such insurance shall cover any and all physical damage including, without limitation, damage caused by fire, vandalism, malicious mischief, blasting, excessive surface runoff or storm water, high winds and other occurrences covered in a standard extended coverage endorsement. The policy shall remain in effect until the Work is accepted as substantially complete.

(c) The policy required by paragraph (2) above, by paragraph (3) and by (4) above shall be endorsed to include the OWNER, the OWNER'S REPRESENTATIVE and its consultants, and each of their officers, agents and employees as additional insureds. Every policy required above shall be primary insurance, and any insurance carried by the OWNER, its officers, or its employees, shall be excess and not contributory insurance to that provided by CONTRACTOR. No additional insured endorsement to the policy required by paragraph (1) above shall contain any exclusion for bodily injury or property damage arising from completed operations. The CONTRACTOR shall be solely responsible for any deductible losses under any policy required above.

(d) The certificate of insurance provided to OWNER shall be completed by the CONTRACTOR's insurance agent as evidence that policies providing the required coverages, conditions, and minimum limits are in full force and effect, and shall be reviewed and approved by the OWNER prior to commencement of the contract.

(e) Failure on the part of the CONTRACTOR to procure or maintain policies providing the required coverages, conditions, and minimum limits shall constitute a material breach of contract upon which the OWNER may immediately terminate this contract, or at its discretion may procure or renew any such policy or any extended reporting period thereto and may pay any and all premiums in connection therewith, and all monies so paid by the OWNER shall be repaid by CONTRACTOR to the OWNER upon demand, or the OWNER may offset the cost of the premiums against any monies due to CONTRACTOR from the Owner.

(f) The OWNER reserves the right to request and receive a certified copy of any policy and any endorsement thereto.

(g) The parties hereto understand and agree that the OWNER, the City of Louisville, is relying on, and does not waive or intend to waive by any provision of this contract, the monetary limitations (presently $150,000 per person and $600,000 per occurrence) or any other rights, immunities, and protections provided by the Colorado Governmental Immunity Act, § 24-10-101 et seq., 10 C.R.S., as from time to time amended, or otherwise available to the City of Louisville, its officers, or its employees.

OWNER's Liability Insurance:

5.5 In addition to the insurance required to be provided by CONTRACTOR under paragraph 5.4, OWNER, at OWNER's option, may purchase and maintain at OWNER's expense OWNER's own liability insurance as will protect OWNER against claims which may arise from operations under the Contract Documents.

Property Insurance:

5.6 The OWNER shall be responsible for maintaining its own property insurance and, at its option, may maintain such insurance as will protect it against claims which may arise from operations under the Contract Documents.

END ARTICLE 05

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

Supervision and Superintendence:

6.1 CONTRACTOR shall supervise, inspect and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but CONTRACTOR shall not be responsible for the negligence of others in the design or specification of a specific means, method, technique, sequence or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. CONTRACTOR shall be responsible to see that the completed Work complies accurately with the Contract Documents.

6.2 CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent, who shall not be replaced without written notice to OWNER and OWNER'S REPRESENTATIVE except under extraordinary circumstances. The superintendent will be CONTRACTOR's representative at the site and shall have authority to act on behalf of CONTRACTOR. All communications to the superintendent shall be as binding as if given to CONTRACTOR.

Labor, Materials and Equipment:

6.3 CONTRACTOR shall provide competent, suitably qualified personnel to survey, layout and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. Except as otherwise required for the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours and CONTRACTOR will not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday without OWNER's written consent given after prior written notice to OWNER'S REPRESENTATIVE. No extra payment will be paid to the CONTRACTOR by the OWNER due to labor overtime or other increased costs of performing the Work on Saturdays, Sundays, OWNER- observed holidays, or at night. Should the CONTRACTOR desire to work on Saturdays, Sundays, OWNER-observed holidays, or at night between the hours of 5:00 p.m. and 7:00 a.m. on **Contract Days** the CONTRACTOR shall submit a written request to the OWNER'S REPRESENTATIVE 24 hours prior. If approval is given by OWNER'S REPRESENTATIVE to CONTRACTOR for authorized overtime work, OWNER'S REPRESENTATIVE's and OWNER'S REPRESENTATIVE's authorized personnel will charge overtime and other incidental administrative expenses necessary for performing inspections on Saturdays, Sundays, OWNER-observed holidays, or at night between the hours of 5:00 p. m. and 7:00 a. m., the CONTRACTOR will be responsible to pay for all such rates and charges, and shall not be granted a Contract Price increase for such charges.

6.4 Unless otherwise specified in the General Requirements, CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

6.5 All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called

for by the Specifications shall expressly run to the benefit of OWNER. If required by OWNER'S REPRESENTATIVE, CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with instructions of the applicable Supplier, except as otherwise provided in the Contract Documents.

Progress Schedule:

6.6 CONTRACTOR shall adhere to the progress schedule established in accordance with paragraph 2.8 as it may be adjusted from time to time as provided below:

6.6.1 CONTRACTOR shall submit to OWNER'S REPRESENTATIVE for acceptance (to the extent indicated in paragraph 2.8) proposed adjustments in the progress schedule that will not change the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

6.6.2 Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of paragraph 12.1. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.7 Substitutes and "Or-Equal" Items:

6.7.1 Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent or "or-equal" item or no substitution is permitted, other items of material or equipment of other Suppliers may be accepted by OWNER'S REPRESENTATIVE under the following circumstances:

6.7.1.1 **"Or-Equal"**: If in OWNER'S REPRESENTATIVE's sole discretion an item of material or equipment proposed by CONTRACTOR is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by OWNER'S REPRESENTATIVE as an "or-equal" item, in which case review and approval of the proposed item may, in OWNER'S REPRESENTATIVE's sole discretion, be accomplished without compliance with some or all of the requirements for acceptance of proposed substitute items.

6.7.1.2 **Substitute Items:** If in OWNER'S REPRESENTATIVE's sole discretion an item of material or equipment proposed by CONTRACTOR does not qualify as an "or-equal" item under subparagraph 6.7.1.1, it will be considered a proposed substitute item. CONTRACTOR shall submit sufficient information as provided below to allow OWNER'S REPRESENTATIVE to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute

therefor. The procedure for review by the OWNER'S REPRESENTATIVE will include the following as supplemented in the General Requirements and as OWNER'S REPRESENTATIVE may decide is appropriate under the circumstances. Requests for review of proposed substitute items of material or equipment will not be accepted by OWNER'S REPRESENTATIVE from anyone other than CONTRACTOR. If CONTRACTOR wishes to furnish or use a substitute items of material or equipment, CONTRACTOR shall first make written application to OWNER'S REPRESENTATIVE for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified and be suited to the same use as that specified. The application will state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice CONTRACTOR's achievement of Substantial Completion on time, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by OWNER'S REPRESENTATIVE in evaluating the proposed substitute. OWNER'S REPRESENTATIVE may require CONTRACTOR to furnish additional data about the proposed substitute.

6.7.1.3 **CONTRACTOR's Expense:** All data to be provided by CONTRACTOR in support of any proposed "or-equal" or substitute item will be at CONTRACTOR's expense.

6.7.2 **Substitute Construction Methods or Procedures:** If a specific means, method, technique, sequence or procedure of construction is shown or indicated in and expressly required by the Contract Documents, CONTRACTOR may furnish or utilize a substitute means, method, technique, sequence or procedure of construction acceptable to OWNER'S REPRESENTATIVE. CONTRACTOR shall submit sufficient information to allow OWNER'S REPRESENTATIVE, in OWNER'S REPRESENTATIVE's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by OWNER'S REPRESENTATIVE will be similar to that provided in subparagraph 6.7.1.2.

6.7.3 **OWNER'S REPRESENTATIVE's Evaluation**: OWNER'S REPRESENTATIVE will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.7.1.2 and 6.7.2. OWNER'S REPRESENTATIVE will be the sole judge of acceptability. No "or-equal" or

substitute will be ordered, installed or utilized without OWNER'S REPRESENTATIVE's prior written acceptance, which will be evidenced, by either a Change Order or an approved Shop Drawing. OWNER may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any "or-equal" or substitute. OWNER'S REPRESENTATIVE will record time required by OWNER'S REPRESENTATIVE and OWNER'S REPRESENTATIVE's Consultants in evaluating substitutes proposed or submitted by CONTRACTOR pursuant to paragraphs 6.7.1.2 and 6.7.2 and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby. Whether or not OWNER'S REPRESENTATIVE accepts a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of OWNER'S REPRESENTATIVE and OWNER'S REPRESENTATIVE's Consultants for evaluating each such proposed substitute item.

6.8 Concerning Subcontractors, Suppliers and Others:

6.8.1 CONTRACTOR shall not employ any Subcontractor, Supplier or other person or organization, whether initially or as a substitute, against whom OWNER or OWNER'S REPRESENTATIVE may have reasonable objection. CONTRACTOR shall not be required to employ any Subcontractor, Supplier or other person or organization to furnish or perform any of the Work against whom CONTRACTOR has reasonable objection.

6.8.2 The Contract Documents require the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of materials or equipment) to be submitted to OWNER with the Bid in the Bid Form prior to the Effective Date of the Agreement for acceptance by OWNER and OWNER'S REPRESENTATIVE, and if CONTRACTOR has submitted a list thereof in accordance with the Contract Documents, OWNER'S or OWNER'S REPRESENTATIVE's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in Contract Documents) of any such Subcontractor, Supplier, or other person or organization so identified may be revoked on the basis of reasonable objection after due investigation, in which case CONTRACTOR shall submit an acceptable substitute. No acceptance by OWNER or OWNER'S REPRESENTATIVE of any such Subcontractor, Supplier or other person or organization shall constitute a waiver of any right of OWNER or OWNER'S REPRESENTATIVE to reject defective Work.

6.8.3 Subletting of Contract. The Contractor shall not sublet, sell, transfer, assign, or dispose of the Contract or Contracts, or any portion thereof without written consent of the OWNER'S REPRESENTATIVE. The Contractor will be permitted to sublet a portion of the Contract, however, the Contractor's organization shall perform work amounting to not less than 50 percent of the total contract cost.

The calculation of the percentage of subcontracted work shall be based on the prime contract unit prices rather than subcontract unit prices. Proportional value for a subcontracted partial contract item shall be verified by the OWNER'S REPRESENTATIVE. For the purpose of calculating the value of subcontracted work, the cost of procuring materials and manufactured products can be included in either the prime contract or subcontract. However, when a firm both sells

material to a prime contractor and performs the work of incorporating the materials into the project, these two phases shall be considered in combination and as constituting a single subcontract.

Subcontracts, or transfer of Contract shall not release the Contractor of liability under the Contract and bonds.

6.9.1 CONTRACTOR shall be fully responsible to OWNER and OWNER'S REPRESENTATIVE for all acts and omissions of the Subcontractors. Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions. OWNER or OWNER'S REPRESENTATIVE may furnish to any such Subcontractor, Supplier or other person or organization, to the extent practicable, evidence of amounts paid to CONTRACTOR in accordance with CONTRACTOR's Applications for Payment. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier or other person or organization any contractual relationship between OWNER or OWNER'S REPRESENTATIVE and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of OWNER or OWNER'S REPRESENTATIVE to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Laws and Regulations.

6.9.2 CONTRACTOR shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR. CONTRACTOR shall require all Subcontractors, Suppliers and such other persons and organizations performing or furnishing any of the Work to communicate with the OWNER'S REPRESENTATIVE through CONTRACTOR.

6.10 The divisions and sections of the Specifications and the identifications of any Drawings shall not control CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

6.11 All Work performed for CONTRACTOR by a Subcontractor or Supplier will be pursuant to an appropriate agreement between CONTRACTOR and the Subcontractor or Supplier, which specifically binds the Subcontractor or Supplier to the applicable terms and, conditions of the Contract Documents for the benefit of OWNER and OWNER'S REPRESENTATIVE.

Patent Fees and Royalties:

6.12 CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of OWNER or OWNER'S REPRESENTATIVE its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by OWNER in the Contract Documents. To the fullest extent permitted by Laws and Regulations, CONTRACTOR shall indemnify and hold harmless OWNER, OWNER'S REPRESENTATIVE, OWNER'S

REPRESENTATIVE's Consultants and the officers, directors, employees, agents and other consultants of each and any of them from and against all claims, costs, losses and damages arising out of or resulting from any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents.

Permits:

6.13 Unless otherwise provided in the Supplementary Conditions, CONTRACTOR shall obtain and pay for all construction permits and licenses. OWNER shall assist CONTRACTOR, when necessary, in obtaining such permits and licenses. CONTRACTOR shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. CONTRACTOR shall pay all charges of utility owners for connections to the Work, and OWNER shall pay all charges of such utility owners for capital costs related thereto such as plant investment fees.

6.13.1 Prior to the commencement date for the Work set forth in the Notice to Proceed, The CONTRACTOR and all subcontractors shall be or shall become a CONTRACTOR licensed in accordance with the applicable ordinance of the City of Louisville, Colorado.

6.13.2 If water is required for the project, CONTRACTOR shall obtain a bulk water permit from the City of Louisville, Public Works Department in accordance with the permit requirements.

6.13.3 CONTRACTOR shall obtain a Right-of-Way Permit from the City of Louisville, Public Works Department for all Work to be completed within the City right-of-way.

6.13.4 CONTRACTOR shall obtain and pay for all other necessary construction permits and licenses.

Laws and Regulations:

6.14.1 CONTRACTOR shall give all notices and comply with all Laws and Regulations applicable to furnishing and performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither OWNER nor OWNER’S REPRESENTATIVE shall be responsible for monitoring CONTRACTOR's compliance with any Laws or Regulations.

6.14.2 If CONTRACTOR performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, CONTRACTOR shall bear all claims, costs, losses and damages caused by, arising out of or resulting therefrom: however, it shall not be CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve CONTRACTOR of CONTRACTOR's obligations under paragraph 3.3.2.

Taxes:

6.15 CONTRACTOR shall pay all sales, consumer, use and other similar taxes required to be paid by CONTRACTOR in accordance with the Laws and Regulations of the place of the Project, which are applicable during the performance of the Work. City of Louisville municipal taxes shall be waived upon application for and acceptance of "tax exemption."

The CONTRACTOR shall apply for and receive a Certificate of Exemption from the Colorado Department of Revenue for construction materials to be physically incorporated into the Work. This Certificate of Exemption provides that the CONTRACTOR shall neither pay nor include in his bid prices Sales and Use Taxes collected by the State of Colorado on those building and construction materials physically incorporated into the Work. Sales and Use Taxes of the State of Colorado, RTD and the County are collected by the State of Colorado. All applicable Sales and Use Taxes (including State collected taxes) on any items other than construction and building materials physically incorporated into the Work are to be paid by the Contractor and are to be included in the appropriate bid items. CONTRACTOR and any Subcontractor assume all liability for the nonpayment of taxes, or the payment of exempt taxes resulting from a failure to use the Certificate of Exemption required by this paragraph.

Use of Premises:

6.16 CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the site and land and areas identified in and permitted by the Contract Documents and other land and areas permitted by Laws and Regulations, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any adjacent land or areas, resulting from the performance of the Work. Should any claim be made by any such owner or occupant because of the performance of the Work, CONTRACTOR shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law. CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless OWNER, OWNER’S REPRESENTATIVE, OWNER’S REPRESENTATIVE's Consultant and anyone directly or indirectly employed by any of them from and against all claims, costs, losses and damages arising out of or resulting from any claim or action, legal or equitable, brought by any such owner or occupant against OWNER, OWNER’S REPRESENTATIVE, or any other party indemnified hereunder to the extent caused by or based upon CONTRACTOR's performance of the Work.

6.17 During the progress of the Work, CONTRACTOR shall keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work. At the completion of the Work, CONTRACTOR shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery and surplus materials. CONTRACTOR shall leave the site clean and ready for occupancy by OWNER at Substantial Completion of the Work. CONTRACTOR shall restore to original condition all property not designated for alteration by the Contract Documents.

6.18 CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

Record Documents:

6.19 CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to OWNER'S REPRESENTATIVE for reference. Upon completion of the Work, these record documents, Samples and Shop Drawings will be delivered to OWNER'S REPRESENTATIVE for OWNER.

Safety and Protection:

6.20 CONTRACTOR shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.20.1 all persons on the Work site or who may be affected by the Work:

6.20.2 all the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and

6.20.3 other property at the site or adjacent thereto, including but not limited to trees, shrubs, lawns, walks, pavements, roadways, structures, fences, gates, ditches, utilities, and underground facilities not designated for removal, relocation, or replacement in and during the course of construction.

6.20.4 The CONTRACTOR shall take all measures necessary to mitigate the impact of weather so that the project may continue on schedule. In no event shall OWNER be liable for extra costs incurred on materials and any part of the Work due to CONTRACTOR's failing to take all measures necessary protect the Work from weather and CONTRACTOR shall not be entitled to such claims. Also, no extension of the Contract Time shall be allowed if the CONTRACTOR is able, notwithstanding the weather, to proceed with other Work of the Contract.

CONTRACTOR shall comply with all applicable Laws and Regulations of any public body having jurisdiction for safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. CONTRACTOR shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph 6.20.2 or 6.20.3 caused, directly or indirectly, in whole or in part, by CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by CONTRACTOR. CONTRACTOR's duties and responsibilities for safety and for protection of the work shall continue until such time as all the Work is completed and OWNER'S REPRESENTATIVE has issued a notice to OWNER and

CONTRACTOR in accordance with paragraph 14.13 that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

Safety Representative:

6.21 CONTRACTOR shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

Hazard Communication Programs:

6.22 CONTRACTOR shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the site in accordance with Laws or Regulations.

Emergencies:

6.23 In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, CONTRACTOR, without special instruction or authorization from OWNER or OWNER'S REPRESENTATIVE, is obligated to act to prevent threatened damage, injury or loss. CONTRACTOR shall give OWNER'S REPRESENTATIVE prompt written notice if CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If OWNER'S REPRESENTATIVE determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such an emergency, a Work Change directive or Change order will be issued to document the consequences of such action.

6.24 Shop Drawings and Samples:

6.24.1 After checking and verifying all field measurements, CONTRACTOR shall submit to OWNER'S REPRESENTATIVE for review and approval in accordance with the accepted schedule of shop drawings and sample submittal (see paragraph 2.8), three copies (or at OWNER'S REPRESENTATIVES option, one reproducible copy) of all shop drawings, which shall have been checked and approved by the CONTRACTOR. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to show OWNER'S REPRESENTATIVE the materials and equipment CONTRACTOR proposes to provide and to enable OWNER'S REPRESENTATIVE to review the information for the limited purposes required by paragraph 6.26.

6.24.2 CONTRACTOR shall also submit Samples to OWNER'S REPRESENTATIVE for review and approval in accordance with said accepted schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended and otherwise as OWNER'S REPRESENTATIVE may require to enable OWNER'S REPRESENTATIVE to review the submittal for the limited purposes required by paragraph 6.26. The numbers of each Sample to be submitted will be as specified in the Specifications.

6.26 Submittal Procedures:

6.25.1 Before submitting each Shop Drawing or Sample, CONTRACTOR shall have determined and verified:

6.25.1.1 all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar information with respect thereto,

6.25.1.2 all materials with respect to intended use, fabrication, shipping, handling, storage, assembly and installation pertaining to the performance of the Work, and

6.25.1.3 all information relative to CONTRACTOR's sole responsibilities in respect of means, methods, techniques, sequences and procedures of construction and safety precautions and programs incident thereto.

CONTRACTOR shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

6.25.2 Each submittal will bear a stamp or specific written indication that CONTRACTOR has satisfied CONTRACTOR's obligations under the Contract Documents with respect to CONTRACTOR's review and approval of that submittal.

6.25.3 At the time of each submission, CONTRACTOR shall give OWNER'S REPRESENTATIVE specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to OWNER'S REPRESENTATIVE for review and approval of each such variation.

6.26 OWNER'S REPRESENTATIVE will review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals accepted by OWNER'S REPRESENTATIVE as required by paragraph 2.8. OWNER'S REPRESENTATIVE's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. OWNER'S REPRESENTATIVE's review and approval will not extend to means, methods, techniques, sequences or procedures of construction (except where a particular means, method, technique, sequence or procedure of construction is specifically and expressly called for by the Contract documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by OWNER'S REPRESENTATIVE, and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for review and approval. CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by OWNER'S REPRESENTATIVE on previous submittals.

6.27 OWNER'S REPRESENTATIVE's review and approval of Shop Drawings or Samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless CONTRACTOR has in writing called OWNER'S REPRESENTATIVE's attention to each such variation at the time of submission as required by paragraph 6.25.3 and OWNER'S REPRESENTATIVE has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample approval; nor will any approval by OWNER'S REPRESENTATIVE relieve CONTRACTOR from responsibility for complying with the requirements of paragraph 6.25.1.

6.28 Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submissions accepted by OWNER'S REPRESENTATIVE as required by paragraph 2.8, any related Work performed prior to OWNER'S REPRESENTATIVE's review and approval of the pertinent submittal will be at the sole expense and responsibility of CONTRACTOR.

Continuing the Work:

6.29 CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with OWNER. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.5 or as OWNER and CONTRACTOR may otherwise agree in writing.

6.30 CONTRACTOR's General Warranty and Guarantee:

6.30.1 CONTRACTOR warrants and guarantees to OWNER, OWNER'S REPRESENTATIVE and OWNER'S REPRESENTATIVE's Consultants that all Work will be in accordance with the Contract Documents and will not be **defective**. CONTRACTOR's warranty and guarantee hereunder excludes defects or damage caused by:

6.30.1.1 abuse, modification or improper maintenance or operation by persons other than CONTRACTOR, Subcontractors or Suppliers; or

6.30.1.2 normal wear and tear under normal usage.

6.30.2 CONTRACTOR's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of CONTRACTOR's obligation to perform the work in accordance with the Contract Documents:

6.30.2.1 observations by OWNER'S REPRESENTATIVE;

6.30.2.2 recommendation of any progress or final payment by OWNER'S REPRESENTATIVE;

6.30.2.3 the issuance of a certificate of Substantial Completion or any payment by OWNER to CONTRACTOR under the Contract Documents;

6.30.2.4 use or occupancy of the Work or any part thereof by OWNER;

6.30.2.5 any acceptance by OWNER or any failure to do so;

6.30.2.6 any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by OWNER'S REPRESENTATIVE pursuant to paragraph 14.13;

6.30.2.7 any inspection, test or approval by others; or

6.30.2.8 any correction of **defective** Work by OWNER.

6.30.3 The CONTRACTOR warrants that, unless otherwise specified in the Contract Documents, the materials and equipment installed in the Work will be new, merchantable, and fit for the purpose for which they are intended, and that the Work will be performed in a workmanlike manner. The CONTRACTOR also warrants the workers who perform the Work will be sufficiently skilled to produce a high quality product which is free of blemishes, (surface defects) and flaws (internal defects).

The CONTRACTOR is under a continuing duty to warn the OWNER and OWNER'S REPRESENTATIVE of any possible defect in the design of the Work and materials incorporated in the Work and against potentially unsafe uses of products incorporated in the Work which may cause personal injury or property damage, as soon as the CONTRACTOR discovers the possible defect or has notice that the product may be unsafe. The CONTRACTOR's duty under this paragraph shall be continuing, and shall not expire when the OWNER accepts the Work or when the CONTRACTOR's guarantee expires. If the CONTRACTOR fails to warn the Owner of a design or product defect of which the CONTRACTOR is aware, and if personal or property damage thereafter results from such design or product defect, the CONTRACTOR shall be liable jointly and severally with any other party responsible at law for all damages resulting from such defect.

6.31 Indemnification:

The CONTRACTOR agrees to indemnify and hold harmless the OWNER (City of Louisville), OWNER'S REPRESENTATIVE, OWNER'S REPRESENTATIVE's consultants, and their officers, employees, agents and insurers, from and against all liability, claims, and demands, on account of injury, loss, or damage, including without limitation claims arising from bodily injury, personal injury, sickness, disease, death, property loss or damage, or any other loss of any kind whatsoever, which arise out of or are in any manner connected with this contract, if such injury, loss, or damage is caused in whole or in part by, or is claimed to be caused in whole or in part by, the act, omission, error, professional error, mistake, negligence, or other fault of the CONTRACTOR, any Subcontractor of the CONTRACTOR, or any officer, employee, representative, or agent of the CONTRACTOR or of any Subcontractor of the CONTRACTOR, or which arise out of any workers' compensation claim of any employee of the CONTRACTOR or of any employee of any subcontractor of the CONTRACTOR. The CONTRACTOR agrees to investigate, handle, respond to, and to provide defense for and defend against, any such liability, claims or demands at the sole expense of the CONTRACTOR. The CONTRACTOR also agrees to bear all other costs and expenses related thereto,

including court costs and attorney fees, whether or not any such liability, claims, or demands alleged are groundless, false, or fraudulent.

6.32 In any and all claims against OWNER or OWNER'S REPRESENTATIVE or any of their respective consultants, agents, officers, directors or employees by any employee (or the survivor or personal representative of such employee) of CONTRACTOR, any Subcontractor, any Supplier, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.31 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for CONTRACTOR or any such Subcontractor, Supplier or other person or organization under workers' compensation acts, disability benefit acts or other employee benefit acts.

Survival of Obligations:

6.33 All representations, indemnifications, warranties and guarantees made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion and acceptance of the work and termination or completion of the Agreement.

END ARTICLE 06

ARTICLE 7 - OTHER WORK

Related Work at Site:

7.1 OWNER may perform other work related to the Project at the site by OWNER's own forces, or let other direct contracts therefor which shall contain General Conditions similar to these, or have other work performed by utility owners. If the fact that such other work is to be performed was not noted in the Contract Documents, then: (i) written notice thereof will be given to CONTRACTOR prior to starting any such other work, and (ii) CONTRACTOR may make a claim therefor as provided in Articles 11 and 12 if CONTRACTOR believes that such performance will involve additional expense to CONTRACTOR or requires additional time and the parties are unable to agree as to the amount or extent thereof.

7.2 CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (and OWNER, if OWNER is performing the additional work with OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly connect and coordinate the Work with theirs. Unless otherwise provided in the Contract Documents, CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of OWNER'S REPRESENTATIVE and the others whose work will be affected. The duties and responsibilities of CONTRACTOR under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of CONTRACTOR in said direct contracts between OWNER and such utility owners and other contractors.

7.3 If the proper execution or results of any part of CONTRACTOR's work depends upon work performed by others under this Article 7, CONTRACTOR shall inspect such other work and promptly report to OWNER'S REPRESENTATIVE in writing any delays, defects or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of CONTRACTOR's Work. CONTRACTOR's failure so to report will constitute an acceptance of such other work as fit and proper for integration with CONTRACTOR's Work except for latent or non-apparent defects and deficiencies in such other work.

Coordination:

7.4 Unless otherwise provided in the Supplementary Conditions, OWNER shall have sole authority and responsibility in respect of such coordination.

Should CONTRACTOR cause damage to the Work or property of any separate CONTRACTOR at the site, or should any claim arising out of CONTRACTOR's performance of the Work at the site be made by any separate contractor against CONTRACTOR, OWNER, OWNER'S REPRESENTATIVE, or any other person, CONTRACTOR shall promptly attempt to settle with such other contractor by agreement, or to otherwise resolve the dispute by arbitration or at law. CONTRACTOR shall, to the fullest extent permitted by Laws, and Regulations, indemnify and hold OWNER and OWNER'S REPRESENTATIVE harmless from and against all claims, damages, losses and expenses (including, but not limited to, fees of OWNER'S

REPRESENTATIVEs, architects, attorneys and other professionals and court and arbitration costs) arising directly, indirectly or consequentially out of any action, legal or equitable, brought by any separate contractor against OWNER or OWNER'S REPRESENTATIVE to the extent based on a claim arising out of CONTRACTOR's performance of the Work. Should a separate contractor cause damage to the Work or property of CONTRACTOR or should the performance of Work by any separate CONTRACTOR at the site give rise to any other claim, CONTRACTOR shall not institute any action, legal or equitable, against OWNER or OWNER'S REPRESENTATIVE or permit any action against any of them to be maintained and continued in its name or for its benefit in any court or before any arbiter which seeks to impose liability on or to recover damages from OWNER or OWNER'S REPRESENTATIVE on account of any such damage or claim. If CONTRACTOR is delayed at any time in performing or furnishing Work by any act or neglect of a separate contractor and OWNER and CONTRACTOR are unable to agree as to the extent of any adjustment in Contract Time attributable thereto, CONTRACTOR may make a claim for an extension of time in accordance with Article 12. An extension of the Contract Time shall be CONTRACTOR's exclusive remedy with respect to OWNER and OWNER'S REPRESENTATIVE for any delay, disruption, interference or hindrance cause by any separate contractor. This paragraph does not prevent recovery from OWNER or OWNER'S REPRESENTATIVE for activities that are their respective responsibilities.

END ARTICLE 07

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.1 Except as otherwise provided in these General Conditions, OWNER shall issue all communications to CONTRACTOR through OWNER'S REPRESENTATIVE.

8.2 In case of termination of the employment of OWNER'S REPRESENTATIVE, OWNER shall appoint an OWNER'S REPRESENTATIVE whose status under the Contract Documents shall be that of the former OWNER'S REPRESENTATIVE.

8.3 OWNER shall furnish the data required of OWNER under the Contract documents promptly and shall make payments to CONTRACTOR promptly when they are due as provided in paragraphs 14.4 and 14.13.

8.4 OWNER's duties in respect of providing lands and easements and providing OWNER'S REPRESENTATIVE surveys to establish reference points are set forth in paragraphs 4.1 and 4.4.

8.5 OWNER is obligated to execute Change Orders as indicated in paragraph 10.4.

8.6 OWNER's responsibility in respect of certain inspections, tests and approvals is set forth in paragraph 13.4.

8.7 In connection with OWNER's right to stop Work or suspend Work, see paragraphs 13.10 and 15.1. Paragraph 15.2 deals with OWNER's right to terminate services of CONTRACTOR under certain circumstances.

8.8 The OWNER shall not supervise, direct or have control or authority over, nor be responsible for, CONTRACTOR's means, methods, techniques, sequences or procedures of construction or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the furnishing or performance of the Work. OWNER will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

8.9 OWNER's responsibility in respect of undisclosed Asbestos, PCBs, Petroleum, Hazardous Waste or Radioactive Materials uncovered or revealed at the site is set forth in paragraph 4.5.

8.10 If and to the extent OWNER has agreed to furnish CONTRACTOR reasonable evidence that financial arrangements have been made to satisfy OWNER's obligations under the Contract Documents, OWNER's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

END ARTICLE 08

ARTICLE 9 - OWNER'S REPRESENTATIVE'S STATUS DURING CONSTRUCTION

OWNER's Representative:

9.1 OWNER'S REPRESENTATIVE will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of OWNER'S REPRESENTATIVE as OWNER's representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER and OWNER'S REPRESENTATIVE.

Visits to Site:

9.2 OWNER'S REPRESENTATIVE will make visits to the site at intervals appropriate to the various stages of construction as OWNER'S REPRESENTATIVE deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of CONTRACTOR's executed Work. Based on information obtained during such visits and observations, OWNER'S REPRESENTATIVE will endeavor for the benefit of OWNER to determine, in general, if the Work is proceeding in accordance with the Contract Documents. OWNER'S REPRESENTATIVE will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. OWNER'S REPRESENTATIVE's efforts will be directed toward providing for OWNER a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and on-site observations, OWNER'S REPRESENTATIVE will keep OWNER informed of the progress of the Work and will endeavor to guard OWNER against **defective** Work. OWNER'S REPRESENTATIVE's visits and on-site observations are subject to all the limitations on OWNER'S REPRESENTATIVE's authority and responsibility set forth in paragraph 9.13 and particularly, but without limitation, during or as a result of OWNER'S REPRESENTATIVE's on-site visits or observations of CONTRACTOR's Work OWNER'S REPRESENTATIVE will not supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the furnishing or performance of the Work.

Project Representative:

9.3 OWNER'S REPRESENTATIVE will furnish a Resident Project Representative, assistants and other field staff to assist OWNER'S REPRESENTATIVE in observing the performance of the Work of the CONTRACTOR. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.13 and in the Supplementary Conditions. If OWNER designates another representative or agent to represent OWNER at the site who is not OWNER'S REPRESENTATIVE's Consultant, agent or employee, the responsibilities and authority and limitations thereon of such other person will be as provided in the Supplementary Conditions.

9.3.1 Resident Project Representative is OWNER'S REPRESENTATIVE's Agent and will act as directed by and under the supervision of OWNER'S REPRESENTATIVE, and will confer with OWNER'S REPRESENTATIVE regarding his actions. His dealings in matters pertaining to the on-site Work will

in general be with OWNER'S REPRESENTATIVE and CONTRACTOR keeping the OWNER'S REPRESENTATIVE advised as necessary. His dealings with Subcontractors will only be through or with the full knowledge and approval of CONTRACTOR.

Duties and Responsibilities:

Resident Project Representative will:

Schedules:

Review the progress schedule, schedule of Shop Drawing submittal, schedule of values and other schedules prepared by CONTRACTOR and consult with OWNER'S REPRESENTATIVE concerning acceptability.

Conferences and Meetings:

Attend meetings with CONTRACTOR, such as preconstruction conferences, progress meetings and other job conferences and other project related meetings.

Liaison:

Serve as OWNER'S REPRESENTATIVE's liaison with CONTRACTOR, working principally through CONTRACTOR's superintendent and assist him in understanding the intent of the Contract Documents. Assist OWNER'S REPRESENTATIVE in serving as OWNER's liaison with CONTRACTOR when CONTRACTOR's operations affect OWNER's on-site operations.

Assist in obtaining from OWNER'S REPRESENTATIVE additional details or information, when required for proper execution of the Work.

Shop Drawings and Samples:

Record date of receipt of Shop Drawings and samples.
Receive samples, which are furnished at the site by CONTRACTOR for OWNER'S REPRESENTATIVE's review, and notify OWNER'S REPRESENTATIVE of their availability for examination.

Advise OWNER'S REPRESENTATIVE and CONTRACTOR of the commencement of any Work requiring a Shop Drawing or sample submission if the submission has not been approved by OWNER'S REPRESENTATIVE.

Review of Work, Rejection of Defective Work, Inspections and Tests:

Conduct on-site observations of the Work in progress to assist OWNER'S REPRESENTATIVE in determining that the Work is proceeding in accordance with the Contract Documents.

Report to OWNER'S REPRESENTATIVE whenever he believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspections, tests or approvals required to be made; and advise OWNER'S REPRESENTATIVE when he believes Work should be corrected or rejected or

should be uncovered for observation, or requires special testing, inspection or approval.

Verify that tests, equipment and systems startups and operating and maintenance training are conducted in presence of the appropriate personnel, and that CONTRACTOR maintains adequate records thereof; observe, record and report to OWNER'S REPRESENTATIVE appropriate details relative to the test procedures and start-ups.

Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to OWNER'S REPRESENTATIVE.

Interpretation of Contract Documents:

Report to OWNER'S REPRESENTATIVE when clarifications and interpretations of the Contract Documents are needed and Transmit to CONTRACTOR clarification and interpretation of the Contract Documents as issued by OWNER'S REPRESENTATIVE.

Modifications:

Consider and evaluate CONTRACTOR's suggestions for modification in Drawings or Specifications and report with his recommendations to OWNER'S REPRESENTATIVE. Transmit to CONTRACTOR decisions issued by OWNER'S REPRESENTATIVE.

Records:

Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and samples, reproductions or original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Agreement, OWNER'S REPRESENTATIVE's clarifications and interpretations of the Contract Documents, progress reports and other Project related documents.

Keep a diary, daily report form, or log book, recording hours on the job site, weather conditions, data relative to questions of Work Directive Changes, Change Orders, or changed conditions, list of job site visitors, daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures.

Record names, addresses and telephone numbers of all CONTRACTOR's, subcontractors and major suppliers of equipment and materials.

Reports:

Furnish OWNER'S REPRESENTATIVE periodic reports as required of progress of the Work and of CONTRACTOR's compliance with the progress schedule and schedule of Shop Drawings and sample submittal.

Consult with OWNER'S REPRESENTATIVE in advance of scheduled major tests, inspections or start of important phases of the Work.

Draft proposed Change Orders and Work Directive Changes, obtaining backup material from CONTRACTOR and recommend to OWNER'S REPRESENTATIVE Change Orders, Work Directive Changes, and Field Orders.

Report immediately to OWNER'S REPRESENTATIVE upon the occurrence of any accident.

Payment Requests:

Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward with his recommendations to OWNER'S REPRESENTATIVE, noting particularly the relationship of the payment requested to the schedule of values, Work completed and materials and equipment delivered at the site but not incorporated in the Work.

Certificates, Maintenance and Operations Manuals:

During the Course of Work verify that certifications, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to OWNER'S REPRESENTATIVE for review and forwarding to OWNER prior to final payment of the Work.

Completion:

Before OWNER'S REPRESENTATIVE issues a Certificate of Substantial Completion, submit to CONTRACTOR a list of observed items requiring correction or completion.

Conduct final inspection in the company of OWNER'S REPRESENTATIVE and CONTRACTOR and prepare a final list of items to be corrected or completed.

Observe that all items on final list have been corrected or completed and make recommendations to OWNER'S REPRESENTATIVE concerning acceptance.

Limitation of Authority:

Resident Project Representative shall not:

Authorize any deviations from the Contract Documents or accept any substitute materials or equipment, unless authorized by OWNER'S REPRESENTATIVE.

Exceed limitations of OWNER'S REPRESENTATIVE's authority as set forth in the Contract Documents.

Undertake any of the responsibilities of CONTRACTOR, Subcontractors, or CONTRACTOR's superintendent.

Advise on, or issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures for construction unless such is specifically called for in the Contract Documents.

Advise on or issue directions regarding or assume control over safety precautions and programs in connection with the Work.

Shall not accept Shop Drawings or sample submittals from anyone other than CONTRACTOR.

Authorize OWNER to occupy the Work in whole or in part.

Participate in specialized field or laboratory tests or inspections conducted by others except as specifically authorized by OWNER'S REPRESENTATIVE.

Clarifications and Interpretations:

9.4 OWNER'S REPRESENTATIVE will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as OWNER'S REPRESENTATIVE may determine necessary, which shall be consistent with the intent of and reasonably inferable from Contract Documents. Such written clarifications and interpretations will be binding on OWNER and CONTRACTOR. If OWNER or CONTRACTOR believes that a written clarification or interpretation justifies an adjustment in the Contract Price or the Contract Times and the parties are unable to agree to the amount or extent thereof, if any, OWNER or CONTRACTOR may make a written claim therefor as provided in Article 11 or Article 12.

Authorized Variations in Work:

9.5 OWNER'S REPRESENTATIVE may authorize minor variations in the work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on OWNER and also on CONTRACTOR who shall perform the Work involved promptly.

Rejecting Defective Work:

9.6 OWNER'S REPRESENTATIVE will have authority to disapprove or reject Work which OWNER'S REPRESENTATIVE believes to be **defective**, or that OWNER'S REPRESENTATIVE believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. OWNER'S REPRESENTATIVE will also have authority to require special inspection or testing of the work as provided in paragraph 13.9, whether or not the work is fabricated, installed or completed.

Shop Drawings, Change Orders and Payments:

9.7 In connection with OWNER'S REPRESENTATIVE's authority as to Shop Drawings and Samples, see paragraphs 6.24 through 6.28 inclusive.

9.8 In connection with OWNER'S REPRESENTATIVE's authority as to Change Orders, see Articles 10, 11, and 12.

9.9 In connection with OWNER'S REPRESENTATIVE's authority as to Applications for Payment, see Article 14.

Determinations for Unit Prices:

9.10 OWNER'S REPRESENTATIVE will have authority to determine the actual quantities and classifications of items of Unit Price Work performed by CONTRACTOR, and the written decisions of OWNER'S REPRESENTATIVE on such matters will be final, binding on OWNER and CONTRACTOR and not subject to appeal (except as modified by OWNER'S REPRESENTATIVE to reflect changed factual conditions).

Decisions on Disputes:

9.11 OWNER'S REPRESENTATIVE will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and Claims under Articles 11 and 12 in respect of changes in the Contract Price or Contract Times will be referred initially to OWNER'S REPRESENTATIVE in writing with a request for a formal decision in accordance with this paragraph. Written notice of each such claim, dispute or other matter will be delivered by the claimant to OWNER'S REPRESENTATIVE and the other party to the Agreement promptly (but in no event later than fifteen days) after the start of the occurrence or event giving rise thereto, and written supporting data will be submitted to OWNER'S REPRESENTATIVE and the other party within thirty days after the start of such occurrence or event unless OWNER'S REPRESENTATIVE allows an additional period of time for the submission of additional or more accurate data in support of such claim, dispute of other matter. The opposing party shall submit any response to OWNER'S REPRESENTATIVE and the claimant within thirty days after receipt of the claimant's last submittal (unless OWNER'S REPRESENTATIVE allows additional time). OWNER'S REPRESENTATIVE will render a formal decision in writing within thirty days after receipt of the opposing party's submittal, if any, in accordance with this paragraph. OWNER'S REPRESENTATIVE's written decision on such claim, dispute or other matter will be final and binding upon OWNER and CONTRACTOR.

9.12 When functioning under paragraphs 9.10 and 9.11, OWNER'S REPRESENTATIVE will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by OWNER'S REPRESENTATIVE pursuant to paragraphs 9.10 or 9.11 with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.15) will be a condition precedent to any exercise by OWNER or CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations.

9.13 Limitations on OWNER'S REPRESENTATIVE's Authority and Responsibilities:

9.13.1 Neither OWNER'S REPRESENTATIVE's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by OWNER'S REPRESENTATIVE in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise or performance of any authority or responsibility by OWNER'S REPRESENTATIVE shall create, impose or give rise to any duty owned by OWNER'S REPRESENTATIVE to CONTRACTOR, any Subcontractor, any Supplier, any other person or organization, or to any surety for or employee or agent of any of them.

9.13.2 OWNER'S REPRESENTATIVE will not supervise, direct, control or have authority over or be responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the furnishing or performance of the Work. OWNER'S REPRESENTATIVE will not be responsible for CONTRACTOR's failure to perform or furnish the Work in accordance with the Contract Documents.

9.13.3 OWNER'S REPRESENTATIVE will not be responsible for the acts or omissions of CONTRACTOR or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

9.13.4 OWNER'S REPRESENTATIVE's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection, tests and approvals and other documentation required to be delivered by paragraph 14.12 will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests and approvals that the results certified indicate compliance with, the Contract Documents.

9.13.5 The limitations upon authority and responsibility set forth in this paragraph 9.13 shall also apply to OWNER'S REPRESENTATIVE's Consultants, Resident Project Representative and Assistants.

END ARTICLE 09

ARTICLE 10 - CHANGES IN THE WORK

10.1 Without invalidating the Agreement and without notice to any surety, OWNER may, at any time or from time to time, order additions, deletions or revisions in the Work. A Written Amendment, a Change Order, or a Work Change Directive will authorize such additions, deletions or revisions. Upon receipt of any such document, CONTRACTOR shall promptly proceed with the Work involved, which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

10.2 If OWNER and CONTRACTOR are unable to agree as to the extent, if any, of an adjustment in the Contract Price or an adjustment of the Contract Times that should be allowed as a result of a Work Change Directive, a claim may be made therefor as provided in Article 11 or Article 12.

10.3 CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraphs 3.5 and 3.6 except in the case of an emergency as provided in paragraph 6.23 or in the case of uncovering Work as provided in paragraph 13.9.

10.4 OWNER and CONTRACTOR shall execute appropriate Change Orders recommended by OWNER'S REPRESENTATIVE (or Written Amendments) covering:

10.4.1 changes in the Work which are (i) ordered by OWNER pursuant to paragraph 10.1., (ii) required because of acceptance of **defective** Work under paragraph 13.13 or correcting **defective** Work under paragraph 13.14, or (iii) agreed to by the parties:

10.4.2 changes in the Contract Price or Contract Times which are agreed to by the parties; and

10.4.3 changes in the Contract Price or Contract Times, which embody the substance of any written decision rendered by OWNER'S REPRESENTATIVE pursuant to paragraph 9.11;

10.5 If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be CONTRACTOR's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

END ARTICLE 10

ARTICLE 11 - CHANGE OF CONTRACT PRICE

11.1 The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by CONTRACTOR shall be at CONTRACTOR's expense without change in the Contract Price.

11.2 The Contract Price may only be changed by a Change Order or by a Written Amendment. Any claim for an adjustment in the Contract Price shall be based on written notice delivered by the party making the claim to the other party and to OWNER'S REPRESENTATIVE promptly (but in no event later than fifteen days) after the start of the occurrence or event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within thirty days after the start of such occurrence or event (unless OWNER'S REPRESENTATIVE allows additional time for claimant to submit additional or more accurate data in support of the claim) and shall be accompanied by claimant's written statement that the adjustment claimed covers all known amounts to which the claimant is entitled as a result of said occurrence or event. OWNER'S REPRESENTATIVE shall determine all claims for adjustment in the Contract Price in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree on the amount involved. No claim for ad adjustment in the Contract Price will be valid if not submitted in accordance with this paragraph 11.2.

11.3 The value of any Work covered by a Change Order or of any claim for an adjustment in the Contract Price will be determined as follows:

11.3.1 where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraphs 11.9.1 through 11.9.3 inclusive);

11.3.2 where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 11.6.2);

11.3.3 where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 11.3.2, on the basis of the Cost of the Work (determined as provided in paragraphs 11.4 and 11.5) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 11.6).

Cost of the Work:

11.4 The term Cost of the Work means the sum of all costs necessarily incurred and paid by CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5:

11.4.1 Certified payroll record costs for employees in the direct employment of CONTRACTOR in the performance of the Work under schedules of job classifications shall be submitted to the OWNER'S REPRESENTATIVE with the claim. Such employees shall include without limitation superintendents, foremen and other

personnel employed full-time at the site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by OWNER.

11.4.2 Invoices for cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith shall be submitted to the OWNER'S REPRESENTATIVE with the claim. All cash discounts shall accrue to CONTRACTOR unless OWNER deposits funds with CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to OWNER. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall be in accordance with the State Department of Highways, Division of Highways, and State of Colorado Standard Specifications for Road and Bridge Construction 1991 Edition. If the materials used in performing the extra Work are taken from the CONTRACTOR's stock, then in lieu of invoices the CONTRACTOR shall furnish an affidavit, certifying that such materials were taken from its stock, that the quantity claimed was actually used in the Work, and that the price and transportation claimed represent the actual cost to the CONTRACTOR shall be submitted to the OWNER'S REPRESENTATIVE with the claim.

11.4.3 Payments made by CONTRACTOR to the Subcontractors for Work performed or furnished by Subcontractors. If required by OWNER, CONTRACTOR shall obtain competitive bids from subcontractors acceptable to OWNER and CONTRACTOR and shall deliver such bids to OWNER who will then determine, with the advice of OWNER'S REPRESENTATIVE, which bids, if any, will be accepted. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as CONTRACTOR's Cost of the Work and fee as provided in paragraphs 11.4, 11.5, 11.6 and 11.7. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4 Costs of special consultants (including but not limited to OWNER'S REPRESENTATIVEs, architects, testing laboratories, surveyors, attorneys and accountants) employed for services specifically related to the Work.

11.4.5 Supplemental costs including the following:

11.4.5.1 The proportion of necessary transportation, travel and subsistence expenses of CONTRACTOR's employees incurred in discharge of duties connected with the Work.

11.4.5.2 Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost

less market value of such items used but not consumed which remain the property of CONTRACTOR.

11.4.5.3 Rentals rates of all construction equipment and machinery and the parts thereof which has been authorized by the OWNER'S REPRESENTATIVE, the CONTRACTOR will be paid for the use of equipment in the manner hereinafter specified. Rental rates will be from the current edition of the Rental Rate Blue Book for Construction Equipment and will be determined as follows:

Hourly rate: RR = (ADJ BB/176)(RF)(SAF)+EOC

Where: RR = Hourly rental rate
ADJ BB/176 = Blue Book Monthly Rate adjusted for year of manufacture/176
RF = Regional Factor of 1.06
SAF = State Adjustment Factor of 1.05
EOC = Estimated Hourly Operating Costs from Blue Book

With each claim, the CONTRACTOR shall submit the rental rate calculations including copies of the appropriate pages of the Blue Book for each piece of equipment listed in the claim.

Rental of equipment not owned by the CONTRACTOR will be paid for by invoice cost plus operating cost (EOC). Copies of the applicable pages of the Rental Rate Blue Book for Construction Equipment shall be submitted to the OWNER'S REPRESENTATIVE with the claim.

The costs of transportation, loading, unloading, installation, dismantling, and removal thereof all in accordance with the terms of said rental agreements. If equipment is used intermittently and when not in use could be returned to its rental source at less expense to the OWNER than holding it at the Work site, it shall be returned unless the CONTRACTOR elects to keep it at the Work site at no expense to the OWNER. The rental of any such equipment, machinery or parts shall cease when the use of the equipment is no longer necessary for the Work. No payment will be made for the use of tools, which have a replacement value of $200.00 or less. Operators will be paid for separately as provided in paragraph 11.4.1. Certified invoices for rental cost of all construction equipment and machinery incorporated in the Work shall be submitted to the OWNER'S REPRESENTATIVE with the claim.

11.4.5.4 Sales, consumer, use or similar taxes related to the Work, and for which CONTRACTOR is liable, imposed by Laws and Regulations.

11.4.5.5 Deposits lost for causes other than negligence of CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable.

11.4.5.6 Losses and damages (and related expenses) caused by damage to the work, not compensated by insurance or otherwise, sustained by CONTRACTOR in connection with the performance and furnishing of the Work, (except losses and damages within the deductible amounts of property insurance established by OWNER in accordance with paragraph 5.9), provided they have resulted from causes other than the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of OWNER. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining CONTRACTOR's fee. If, however, any such loss or damage requires reconstruction and CONTRACTOR is placed in charge thereof, CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.7 The cost of utilities, fuel and sanitary facilities at the site.

11.4.5.8 Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.5 The term Cost of the Work shall not include any of the following:

11.5.1 Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, OWNER'S REPRESENTATIVEs, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expediters, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.4.1 or specifically covered by paragraph 11.4.4--all of which are to be considered administrative costs covered by the CONTRACTOR's fee.

11.5.2 Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.

11.5.3 Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.

11.5.4 Cost of premiums for all Bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same. (except for the cost of premiums covered by subparagraph 11.4.5.9 above).

11.5.5 Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of **defective** Work, disposal

of materials or equipment wrongly supplied and making good any damage to property.

Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

11.6 The CONTRACTOR's fee allowed to CONTRACTOR for overhead and profit shall be determined as follows:

11.6.1 a mutually acceptable fixed fee; or

11.6.2 if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the work:

11.6.2.1 for costs incurred under paragraphs 11.4.1 and 11.4.2, the CONTRACTOR's fee shall be fifteen percent;

11.6.2.2 for costs incurred under paragraph 11.4.3, the CONTRACTOR's fee shall be five percent;

11.6.2.3 where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraphs 11.4.1, 11.4.2, 11.4.3 and 11.6.2 is that the Subcontractor who actually performs or furnishes the Work, at whatever tier, will be paid a fee of fifteen percent of the costs incurred by such Subcontractor under paragraphs 11.4.1 and 11.4.2 and that any higher tier Subcontractor and CONTRACTOR will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

11.6.2.4 no fee shall be payable on the basis of costs itemized under paragraphs 11.4.4, 11.4.5 and 11.5;

11.6.2.5 the amount of credit to be allowed by CONTRACTOR to OWNER for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in CONTRACTOR's fee by an amount equal to five percent of such net decrease; and

11.6.2.6 when both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 11.6.2.1 through 11.6.2.5, inclusive.

11.7 Whenever the cost of any Work is to be determined pursuant to paragraphs 11.4 and 11.5, CONTRACTOR will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in form acceptable to OWNER'S REPRESENTATIVE an itemized cost breakdown together with supporting data.

Cash Allowances:

11.8 It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be furnished

and performed for such sums as may be acceptable to OWNER and OWNER'S REPRESENTATIVE. CONTRACTOR agrees that:

11.8.1 the allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and

11.8.2 CONTRACTOR's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances and no demand for additional payment on account of any of the foregoing will be valid.

Prior to final payment, an appropriate Change Order will be issued as recommended by OWNER'S REPRESENTATIVE to reflect actual amounts due CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.9 Unit Price Work:

11.9.1 Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by CONTRACTOR will be made by OWNER'S REPRESENTATIVE in accordance with paragraph 9.10.

11.9.2 Each unit price will be deemed to include an amount considered by CONTRACTOR to be adequate to cover CONTRACTOR's overhead and profit for each separately identified item.

11.9.3 OWNER or CONTRACTOR may make a claim for an adjustment in the contract Price in accordance with Article 11 if:

11.9.3.1 the quantity of any item of Unit Price Work performed by CONTRACTOR differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

11.9.3.2 there is no corresponding adjustment with respect to any other item of Work; and

11.9.3.3 if CONTRACTOR believes that CONTRACTOR is entitled to an increase in Contract Price as a result of having incurred additional expense of, OWNER believes that OWNER is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

11.9.4 In no event shall a claim be made or an adjustment of Unit Price allowed if a variation in actual quantities used does not equal or exceed 25 percent (25%) of the total Bid Price.

END ARTICLE 11

ARTICLE 12 - CHANGE OF CONTRACT TIMES

12.1 The Contract Times (or Milestones) may only be changed by a Change Order or a Written Amendment. Any claim for an adjustment of the Contract Times (or Milestones) shall be based on written notice delivered by the party making the claim to the other party and to OWNER'S REPRESENTATIVE promptly (but in no event later than fifteen days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within thirty days after such occurrence (unless OWNER'S REPRESENTATIVE allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Times (or Milestones) shall be determined by OWNER'S REPRESENTATIVE in accordance with paragraph 9.11 if OWNER and CONTRACTOR cannot otherwise agree. No claim for an adjustment in the Contract Times (or Milestones) will be valid if not submitted in accordance with the requirements of this paragraph 12.1.

12.2 Liquidated damages. The OWNER and the CONTRACTOR agree and recognize that time is of the essence for every time period set forth in the Contract Documents and that the OWNER will suffer financial loss if the Work is not substantially complete within the time set forth in the Contract Documents, plus any extensions thereof allowed in accordance with this Article 12 of the General Conditions. If the CONTRACTOR fails to perform the Work within the specified time set forth in the Contract Documents as adjusted pursuant to Article 12, the OWNER and CONTRACTOR agree that as liquidated damages, and not as a penalty, for delay in performance the Contractor shall pay OWNER in the amount stipulated below for each and every contract day that expires after the time set forth in the Contract Documents for Substantial Completion of the Work until the same is finally complete and ready for Final Payment. The OWNER shall have the right to deduct liquidated damages from any amount due or that may become due to the CONTRACTOR, or to collect such liquidated damages from the CONTRACTOR or the Surety. The OWNER has the option to enforce liquidated damages or to waive such damages. The liquidated damages herein specified shall only apply to the CONTRACTOR's delay in performance. Liquidated damages are intended only to compensate the OWNER for additional OWNER personnel efforts in administering the Contract after normally scheduled completion dates, and for City governmental and citizen inconvenience, lost opportunities, and lost confidence in government and morale of government when work is not completed on time. Such damages are uncertain in amount and difficult to measure and prove accurately. By executing this contract, the CONTRACTOR agrees that the liquidated damages specified in the Contract Documents are reasonable in amount and are not disproportionate to actual anticipated damages. Liquidated damages do not include any sums of money to reimburse the OWNER for extra costs which the OWNER may become obligated to pay on other contracts which are delayed or extended because of CONTRACTOR's failure to complete the Work within the time periods set forth in the Contract Documents. Liquidated damages are not intended to include litigation or attorneys' fees incurred by the OWNER, or other incidental or consequential damages suffered by the OWNER due to the Contractor's performance. If the OWNER charges liquidated damages to the CONTRACTOR, this shall not preclude the Owner from commencing an action against the CONTRACTOR for other actual harm resulting from the CONTRACTOR's performance, which is not due to the CONTRACTOR's delay in performance. In order to recover liquidated damages, OWNER is under no obligation to prove the actual

damages sustained by OWNER due to the CONTRACTOR's delay in performance. In no event shall the CONTRACTOR be assessed liquidated damages if the contract is suspended or terminated for events beyond the control of the CONTRACTOR for which a time extension beyond the original schedule of performance could be granted under 12.3.

The parties agree that liquidated damages shall be in the amount set forth in Article 2 of the Agreement.

12.3 Where CONTRACTOR is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a claim is made therefor as provided in paragraph 12.1. Delays beyond the control of CONTRACTOR shall include, but not be limited to, acts or neglect by OWNER, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions or acts of God. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.

12.4 The CONTRACTOR specifically waives any and all claims against the OWNER for damages resulting from any hindrance or delay caused by circumstances beyond the control of CONTRACTOR that prevents completing any part of the Work within the Contract Times (or Milestones), whether or not caused by the OWNER. The CONTRACTOR may instead be granted an extension of the Contract Times for which the OWNER will not claim liquidated damages, provided that the hindrance or delay is beyond the control of the CONTRACTOR. An extension of the Contract Times (or Milestones) in an amount equal to the time lost due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay. In no event shall OWNER be liable to CONTRACTOR, any subcontractor, any supplier, any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from delays caused by or within the control of Contractor, or delays beyond the control of CONTRACTOR whether or not caused by the OWNER.

END ARTICLE 12

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.1 **Notice of Defects:** Prompt notice of all **defective** Work of which OWNER or OWNER'S REPRESENTATIVE has actual knowledge will be given to CONTRACTOR. All **defective** Work may be rejected, corrected or accepted as provided in this Article 13.

Access to Work:

13.2 OWNER, OWNER'S REPRESENTATIVE, OWNER'S REPRESENTATIVE's Consultants, other representatives and personnel of OWNER, independent testing laboratories and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's site safety procedures and programs so that they may comply therewith as applicable.

Tests and Inspections:

13.3 CONTRACTOR shall give OWNER'S REPRESENTATIVE timely notice of readiness of the Work for all required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

13.4 OWNER shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:

13.4.1 for inspections, tests or approvals covered by paragraph 13.5 below:

13.4.2 that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.9 below shall be paid as provided in said paragraph 13.9; and

13.4.3 as otherwise specifically provided in the Contract Documents.

13.4.4 any and all retesting of soil necessitated by the CONTRACTOR's operations or inability to obtain specified density test results on the first attempt shall be the sole responsibility and costs of the CONTRACTOR to achieve required passing test results. Retesting required because of non-conformance to specified requirements shall be performed by the independent firm employed by the OWNER. Payment for retesting will be charged to the CONTRACTOR by deducting inspection, testing and administrative charges from the Contract Price.

13.5 If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, CONTRACTOR shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, pay all costs in connection therewith, and furnish OWNER'S REPRESENTATIVE the required certificates of inspection, or approval. CONTRACTOR shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required for OWNER's and OWNER'S REPRESENTATIVE's acceptance of materials or equipment to be incorporated in the Work, or of materials, mix designs, or equipment submitted for approval prior to CONTRACTOR's purchase thereof for incorporation in the Work.

13.6 If any Work (or the work of others) that is to be inspected, tested or approved is covered by CONTRACTOR without written concurrence of OWNER'S REPRESENTATIVE, it must, if requested by OWNER'S REPRESENTATIVE, be uncovered for observation.

13.7 Uncovering Work as provided in paragraph 13.6 shall be at CONTRACTOR's expense unless CONTRACTOR has given OWNER'S REPRESENTATIVE timely notice of CONTRACTOR's intention to cover the same and OWNER'S REPRESENTATIVE has not acted with reasonable promptness in response to such notice.

Uncovering Work:

13.8 If any Work is covered contrary to the written request of OWNER'S REPRESENTATIVE, it must, if requested by OWNER'S REPRESENTATIVE, be uncovered for OWNER'S REPRESENTATIVE's observation and replaced at CONTRACTOR's expense.

13.9 If OWNER'S REPRESENTATIVE considers it necessary or advisable that covered Work be observed by OWNER'S REPRESENTATIVE or inspected or tested by others, CONTRACTOR, at OWNER'S REPRESENTATIVE's request, shall uncover, expose or otherwise make available for observation, inspection or testing as OWNER'S REPRESENTATIVE may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is **defective,** CONTRACTOR shall pay all claims, costs, losses and damages caused by, arising out of or resulting from such uncovering, exposure, observation, inspection and testing and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, may make a claim therefor as provided in Article 11.

OWNER May Stop the Work:

13.10 If the Work is **defective**, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of OWNER to stop the Work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any surety or other party.

Correction or Removal of Defective Work:

13.11 If required by OWNER'S REPRESENTATIVE, CONTRACTOR shall promptly, as directed, either correct all **defective** Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by OWNER'S REPRESENTATIVE, remove it from the site and replace it with Work that is not **defective.** CONTRACTOR shall pay all claims, costs, losses and damages caused by or resulting from such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.12 Correction Period:

13.12.1 If within one year after the date of Final Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or

by any specific provision of the Contract Documents, any Work is found to be defective, CONTRACTOR shall within seven calendar days after receiving notice from OWNER, without cost to OWNER and in accordance with OWNER's written instructions: (i) correct such defective Work, or if it has been rejected by OWNER, remove it from the site and replace it with WORK that is not defective, and (ii) satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If CONTRACTOR does not within seven calendar days after receiving notice from OWNER comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, OWNER may have the defective Work corrected or the rejected Work removed and replaced, and all claims, costs, losses and damages caused by or resulting from such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by CONTRACTOR.

13.12.2 In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

13.12.3 Where **defective** Work (and damage to other Work resulting therefrom) has been corrected, removed or replaced under this paragraph 13.12, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

Acceptance of Defective Work:

13.13 If, instead of requiring correction or removal and replacement of **defective** Work, OWNER (and, prior to OWNER'S REPRESENTATIVE's recommendation of final payment, also OWNER'S REPRESENTATIVE) prefers to accept it, OWNER may do so. CONTRACTOR shall play all claims, costs, losses and damages attributable to OWNER's evaluation of and determination to accept such **defective** Work (such costs to be approved by OWNER'S REPRESENTATIVE as to reasonableness). If any such acceptance occurs prior to OWNER'S REPRESENTATIVE's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. If the acceptance occurs after such recommendation, CONTRACTOR will pay an appropriate amount to OWNER.

OWNER May Correct Defective Work:

13.14 If CONTRACTOR fails within a reasonable time after written notice from OWNER'S REPRESENTATIVE to correct **defective** Work or to remove and replace rejected Work as required by OWNER'S REPRESENTATIVE in accordance with paragraph 13.11, or if CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if CONTRACTOR fails to comply with any other provision of the Contract Documents, OWNER may, after seven days' written notice to CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph OWNER shall proceed expeditiously. In connection with such corrective and remedial

action, OWNER may exclude CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend CONTRACTOR's services related thereto, take possession of CONTRACTOR's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere. CONTRACTOR shall allow OWNER, OWNER's representatives, agents and employees, OWNER's other contractors and OWNER'S REPRESENTATIVE and OWNER'S REPRESENTATIVE's Consultants access to the site to enable OWNER to exercise the rights and remedies under this paragraph. All claims, costs, losses and damages incurred or sustained by OWNER in exercising such rights and remedies will be charged against CONTRACTOR and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and OWNER shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, OWNER may make a claim therefor as provided in Article 11. Such claims, costs, losses and damages will include but not be limited to all costs of repair or replacement of work of others destroyed or damaged by correction, removal or replacement of CONTRACTOR's **defective** Work. CONTRACTOR shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by OWNER of OWNER's rights and remedies hereunder.

END ARTICLE 13

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

Schedule of Values:

14.1 Progress payments on account of Unit Price Work will be based on the number of units completed.

Application for Progress Payment:

14.2 At least twenty days before the date established for each progress payment (but not more often than once a month), CONTRACTOR shall submit to OWNER'S REPRESENTATIVE for review an Application for Payment filled out and signed by CONTRACTOR covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that OWNER has received the materials and equipment free and clear of all Liens, claims, security interests, or encumbrances and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect OWNER's interest therein, all of which will be satisfactory to OWNER. The amount of retainage with respect to progress payments will be as stipulated in the Agreement. With each application for payment the CONTRACTOR shall submit a notarized waiver(s) of claim signed by the CONTRACTOR acceptable in form to the OWNER'S REPRESENTATIVE. The waiver of claim for payment for the work of the CONTRACTOR shall equal the amount of the previous payment distributed to the CONTRACTOR for work of the CONTRACTOR and the amount of the total previous payment distributed to the CONTRACTOR.

CONTRACTOR's Warranty of Title:

14.3 CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to OWNER no later than the time of payment free and clear of all Liens.

Review of Applications for Progress Payment:

14.4 OWNER'S REPRESENTATIVE will, within ten days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to OWNER, or return the Application to CONTRACTOR indicating in writing OWNER'S REPRESENTATIVE's reasons for refusing to recommend payment. In the latter case, CONTRACTOR may make the necessary corrections and resubmit the Application. Ten days after presentation of the Application for Payment to OWNER with OWNER'S REPRESENTATIVE's recommendation, the amount recommended will (subject to the provisions of the last sentence of paragraph 14.7) become due and when due will be paid by OWNER to CONTRACTOR.

14.5 OWNER'S REPRESENTATIVE's recommendation of any payment requested in an Application for Payment will constitute a representation by OWNER'S REPRESENTATIVE to OWNER, based on OWNER'S REPRESENTATIVE's on-site observations of the executed Work as an experienced and qualified design professional and on OWNER'S REPRESENTATIVE's review of the Application for Payment and the

accompanying data and schedules, that to the best of OWNER'S REPRESENTATIVE's knowledge, information and belief:

14.5.1 the Work has progressed to the point indicated.

14.5.2 the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.10 and to any other qualifications stated in the recommendation), and

14.5.3 the conditions precedent to CONTRACTOR's being entitled to such payment appear to have been fulfilled insofar as it is OWNER'S REPRESENTATIVE's responsibility to observe the Work.

However, by recommending any such payment OWNER'S REPRESENTATIVE will not thereby be deemed to have represented that: (i) exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to OWNER'S REPRESENTATIVE in the Contract Documents or (ii) that there may not be other matters or issues between the parties that might entitle CONTRACTOR to be paid additionally by OWNER or entitle OWNER to withhold payment to CONTRACTOR.

14.6 OWNER'S REPRESENTATIVE's recommendation of any payment, including final payment, shall not mean that OWNER'S REPRESENTATIVE is responsible for CONTRACTOR's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of CONTRACTOR to comply with Laws and Regulations applicable to the furnishing or performance of Work, or for any failure of CONTRACTOR to perform or furnish Work in accordance with the Contract Documents.

14.7 OWNER'S REPRESENTATIVE may refuse to recommend the whole or any part of any payment if, in OWNER'S REPRESENTATIVE's opinion, it would be incorrect to make the representations to OWNER referred to in paragraph 14.5. OWNER'S REPRESENTATIVE may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in OWNER'S REPRESENTATIVE's opinion to protect OWNER from loss because:

14.7.1 the Work is **defective**, or completed Work has been damaged requiring correction or replacement,

14.7.2 the Contract Price has been reduced by Written Amendment or Change Order,

14.7.3 OWNER has been required to correct **defective** Work or complete Work in accordance with paragraph 13.14, or

14.7.4 OWNER'S REPRESENTATIVE has actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.2.1 through 15.2.3 inclusive.

In addition to the retainages set forth in the Contract Documents, the Owner may retain one hundred percent (100%) of all progress payments for any

unsatisfactory performance of the Work and any payment recommended by the OWNER'S REPRESENTATIVE, including without limitation:

Defective work or failure to repair or replace defective work;

Claims filed against the CONTRACTOR, or reasonable evidence indicating probable filing of such claims;

Failure of the CONTRACTOR to make adequate or proper payments to subcontractors or suppliers for materials, equipment or labor;

Failure to obtain necessary permits or licenses, or to comply with applicable laws, ordinances, codes, or regulations, unless such noncompliance is due to reasons beyond the control of the CONTRACTOR, or due to act of the OWNER or and OWNER'S REPRESENTATIVE hired by the OWNER, or agents or employees thereof:

Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Price then unpaid;

Reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay;

Persistent failure to carry out the Work in accordance with the Contract Documents;

As a set off for amounts due the Owner on other items;

Collusion with other bidders in preparing the bid;

Actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.7.1 through 14.7.3 or paragraphs 15.2.1 through 15.2.3 inclusive.

When the above reasons for withholding payment are removed and corrected to the OWNER's satisfaction, OWNER shall make payment to the CONTRACTOR of the sums withheld pursuant to this paragraph, subject to the amounts required to be retained by the Contract Documents.

Progress Payments to Suppliers and Subcontractors. The CONTRACTOR shall make partial payments of the amount due to each of the CONTRACTOR's suppliers and subcontractors in the same manner as the OWNER is required to pay the CONTRACTOR under Article 4 of the Agreement and Article 14 of the General Conditions, provided that the suppliers and subcontractors are performing to the CONTRACTOR's satisfaction. If the OWNER is notified that the CONTRACTOR is in arrears in payments to the CONTRACTOR's suppliers or subcontractors, the OWNER shall notify the CONTRACTOR and determine why such funds are being withheld. If the OWNER determines that no legitimate basis exists for the CONTRACTOR's withholding of such payments, the OWNER may, five (5) days after the mailing of written notice to the CONTRACTOR, make such payments directly to the CONTRACTOR's suppliers or subcontractors from funds which otherwise would be due the CONTRACTOR.

Substantial Completion:

14.8 When CONTRACTOR considers the entire Work ready for its intended use CONTRACTOR shall notify OWNER and OWNER'S REPRESENTATIVE in writing that the entire Work is substantially complete (except for items specifically listed by CONTRACTOR as incomplete) and request that OWNER'S REPRESENTATIVE issue a certificate of Substantial Completion. Within a reasonable time thereafter, OWNER, CONTRACTOR and OWNER'S REPRESENTATIVE shall make an inspection of the Work to determine the status of completion. If OWNER'S REPRESENTATIVE does not consider the Work substantially complete, OWNER'S REPRESENTATIVE will notify CONTRACTOR in writing giving the reasons therefor. If OWNER'S REPRESENTATIVE considers the Work substantially complete, OWNER'S REPRESENTATIVE will prepare and deliver to OWNER a tentative certificate of Substantial Completion, which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. OWNER shall have seven days after receipt of the tentative certificate during which to make written objection to OWNER'S REPRESENTATIVE as to any provisions of the certificate or attached list. If, after considering such objections, OWNER'S REPRESENTATIVE concludes that the Work is not substantially complete, OWNER'S REPRESENTATIVE will within fourteen days after submission of the tentative certificate to OWNER notify CONTRACTOR in writing, stating the reasons therefor. If, after consideration of OWNER's objections, OWNER'S REPRESENTATIVE considers the Work substantially complete, OWNER'S REPRESENTATIVE will within said fourteen days execute and deliver to OWNER and CONTRACTOR a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as OWNER'S REPRESENTATIVE believes justified after consideration of any objections from OWNER. At the time of delivery of the tentative certificate of Substantial Completion, OWNER'S REPRESENTATIVE will deliver to OWNER and CONTRACTOR a written recommendation as to division of responsibilities pending final payment between OWNER and CONTRACTOR with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties and guarantees. Unless OWNER and CONTRACTOR agree otherwise in writing and so inform OWNER'S REPRESENTATIVE in writing prior to OWNER'S REPRESENTATIVE's issuing the definitive certificate of Substantial Completion. OWNER'S REPRESENTATIVE's aforesaid recommendation will be binding on OWNER and CONTRACTOR until final payment.

14.9 OWNER shall have the right to exclude CONTRACTOR from the Work after the date of Substantial Completion, but OWNER shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

Partial Utilization:

14.10 Use by OWNER at OWNER's option of any substantially completed part of the Work which: (i) has specifically been identified in the Contract Documents, or (ii) OWNER, OWNER'S REPRESENTATIVE, and CONTRACTOR agree constitutes a separately functioning and usable part of the Work that can be used by OWNER for its intended purpose without significant interference with CONTRACTOR's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:

14.10.1 OWNER at any time may request CONTRACTOR in writing to permit OWNER to use any such part of the Work which OWNER believes to be ready for its intended use and substantially complete. If CONTRACTOR agrees that such part of the Work is substantially complete, CONTRAC-

TOR will certify to OWNER and OWNER'S REPRESENTATIVE that such part of the Work is substantially complete and request OWNER'S REPRESENTATIVE to issue a certificate of Substantial Completion for that part of the Work. CONTRACTOR at any time may notify OWNER and OWNER'S REPRESENTATIVE in writing that CONTRACTOR considers any such part of the Work ready for its intended use and substantially complete and request OWNER'S REPRESENTATIVE to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, OWNER, CONTRACTOR and OWNER'S REPRESENTATIVE shall make an inspection of that part of the Work to determine its status of completion. If OWNER'S REPRESENTATIVE does not consider that part of the Work to be substantially complete, OWNER'S REPRESENTATIVE will notify OWNER and CONTRACTOR in writing giving the reasons therefor. If OWNER'S REPRESENTATIVE considers that part of the Work to be substantially complete, the provisions of paragraphs 14.8 and 14.9 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof land access thereto.

Final Inspection:

14.11 Upon written notice from CONTRACTOR that the entire Work or an agreed portion thereof is complete, OWNER'S REPRESENTATIVE will make a final inspection with OWNER and CONTRACTOR and will notify CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or **defective.** CONTRACTOR shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

Final Application for Payment:

14.12 After CONTRACTOR has completed all such corrections to the satisfaction of OWNER'S REPRESENTATIVE and delivered in accordance with the Contract Documents all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance required by paragraph 5.4, certificates of inspection, marked-up record documents (as provided in paragraph 6.19) and other documents. CONTRACTOR may make application for final payment following the procedure for progress payments. The final application for payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence satisfactory to the OWNER of the continuation of completed operations insurance and any insurance coverage written on a claims-made basis at final payment and one year thereafter; (ii) the consent of surety to final payment and that the performance bond shall remain in effect throughout the guarantee period; (iii) complete and legally effective claim releases signed by all suppliers and subcontractors in the form provided in the Contract Documents certifying that all outstanding claims for payment have been paid. The CONTRACTOR shall not receive final payment due under the Agreement until the CONTRACTOR obtains and files the foregoing items (i), (ii), and (iii).

14.12.1 LIENS. Colorado Statutes do not provide for any right of lien against public buildings. In lieu thereof, §38-26-107, Colorado Revised Statutes, as amended, provides adequate relief for any claimant having furnished labor, materials, rental machinery, tools, equipment, or services toward construction of the particular public work in that final payment may not be made to a CONTRACTOR until all such creditors have been put on notice by publication of such pending payment and given opportunity to stop payment to the CONTRACTOR in the amount of such claims. Pursuant to §38-26-107, C.R.S., any supplier may bring a suit and file a notice of lis pendens against the OWNER within ninety (90) days after the date set for final settlement. If any such supplier or person files any such claim and notice of lis pendens, the OWNER shall withhold retained amounts from final payments to the CONTRACTOR as are necessary to satisfy fully such claims. References to liens appearing in Article 14 shall be deemed as references to claims made pursuant to C.R.S §38-26-101 et seq. unless the context requires otherwise.

Final Payment and Acceptance:

14.13 If, on the basis of OWNER'S REPRESENTATIVE's observation of the Work during construction and final inspection, and OWNER'S REPRESENTATIVE's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, OWNER'S REPRESENTATIVE is satisfied that the Work has been completed and CONTRACTOR's other obligations under the Contract Documents have been fulfilled, OWNER'S REPRESENTATIVE will, within ten days after receipt of the final Application for Payment, indicate in writing OWNER'S REPRESENTATIVE's recommendation of payment and present the Application to OWNER for payment. At the same time OWNER'S REPRESENTATIVE will also give written notice to OWNER and CONTRACTOR that the Work is acceptable subject to the provisions of paragraph 14.15. Otherwise, OWNER'S REPRESENTATIVE will return the Application to CONTRACTOR, indicating in writing the reasons for refusing to recommend final payment, in which case CONTRACTOR shall make the necessary corrections and resubmit the Application. Upon receipt of the OWNER'S REPRESENTATIVE's recommendation for payment and the final Application for Payment, OWNER shall order the publication of Notice of Final Payment as required by C.R.S. §38-26-107(1) and shall make final payment in accordance with C.R.S. 38-26-107(3).

14.14 If, through no fault of CONTRACTOR, final completion of the Work is significantly delayed and if OWNER'S REPRESENTATIVE so confirms, OWNER shall, upon receipt of CONTRACTOR's final Application for Payment and recommendation of OWNER'S REPRESENTATIVE, and without terminating the Agreement, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by OWNER for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.1, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by CONTRACTOR to OWNER'S REPRESENTATIVE with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

Waiver of Claims:

14.15 The making and acceptance of final payment will constitute:

14.15.1 a waiver of all claims by OWNER against CONTRACTOR, except claims arising from unsettled Liens, from **defective** Work appearing after final inspection pursuant to paragraph 14.11, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from CONTRACTOR's continuing obligations under the Contract Documents; and

14.15.2 a waiver of all claims by CONTRACTOR against OWNER other than those previously made in writing and still unsettled.

END ARTICLE 14

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

OWNER May Suspend Work:

15.1 At any time and without cause, OWNER may suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to CONTRACTOR and OWNER'S REPRESENTATIVE, which will fix the date on which Work will be resumed. CONTRACTOR shall resume the Work on the date so fixed. CONTRACTOR shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if CONTRACTOR makes an approved claim therefor as provided in Articles 11 and 12.

OWNER May Terminate:

15.2 Upon the occurrence of any one or more of the following events:

15.2.1 if CONTRACTOR persistently fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.8 as adjusted from time to time pursuant to paragraph 6.6);

15.2.2 if CONTRACTOR disregards Laws or Regulations of any public body having jurisdiction;

15.2.3 if CONTRACTOR otherwise violates in any substantial way any provisions of the Contract Documents;

OWNER may, after giving CONTRACTOR (and the surety, if any,) seven days' written notice and to the extent permitted by Laws and Regulations, terminate the services of CONTRACTOR, exclude CONTRACTOR from the site and take possession of the Work and of all CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by CONTRACTOR (without liability to CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which OWNER has paid CONTRACTOR but which are stored elsewhere, and finish the Work as OWNER may deem expedient. In such case CONTRACTOR shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses and damages sustained by OWNER arising out of or resulting from completing the Work such excess will be paid to CONTRACTOR. If such claims, costs, losses and damages exceed such unpaid balance, CONTRACTOR shall pay the difference to OWNER. Such claims, costs, losses and damages incurred by OWNER will be reviewed by OWNER'S REPRESENTATIVE as to their reasonableness and when so approved by OWNER'S REPRESENTATIVE incorporated in a Change Order, provided that when exercising any rights or remedies under this paragraph OWNER shall not be required to obtain the lowest price for the Work performed.

15.3 Where CONTRACTOR's services have been so terminated by OWNER, the termination will not affect any rights or remedies of OWNER against CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due CONTRACTOR by OWNER will not release CONTRACTOR from liability.

15.4 Upon seven days' written notice to CONTRACTOR and OWNER'S REPRESENTATIVE, OWNER may, without cause and without prejudice to any other right or remedy of OWNER, elect to terminate the Agreement. In such case, CONTRACTOR shall be paid (without duplication of any items):

15.4.1 for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

15.4.2 for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

15.4.3 for all claims, costs, losses and damages incurred in settlement of terminated contracts with Subcontractors, Suppliers and others; and

15.4.4 for reasonable expenses directly attributable to termination.

CONTRACTOR shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

CONTRACTOR May Stop Work or Terminate:

15.5 If, through no act or fault of CONTRACTOR, the Work is suspended for a period of more than ninety days by OWNER or under an order of court or other public authority, or OWNER'S REPRESENTATIVE fails to act on any Application for Payment within thirty days after it is submitted or OWNER fails for thirty days to pay CONTRACTOR any sum finally determined to be due, then CONTRACTOR may, upon seven days' written notice to OWNER and OWNER'S REPRESENTATIVE, and provided OWNER or OWNER'S REPRESENTATIVE do not remedy such suspension or failure within that time, terminate the Agreement and recover from OWNER payment on the same terms as provided in paragraph 15.4. In lieu of terminating the Agreement and without prejudice to any other right or remedy, if OWNER'S REPRESENTATIVE has failed to act on an Application for Payment within thirty days after it is submitted, or OWNER has failed for thirty days to pay CONTRACTOR any sum finally determined to be due, CONTRACTOR may upon seven days' written notice to OWNER and OWNER'S REPRESENTATIVE stop the Work until payment of all such amounts due CONTRACTOR, including interest thereon. The provisions of this paragraph 15.5 are not intended to preclude CONTRACTOR from making claim under Articles 11 and 12 for an increase in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to CONTRACTOR's stopping Work as permitted by this paragraph.

END ARTICLE 15

ARTICLE 16 - MISCELLANEOUS

Giving Notice:

16.1 Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

Computation of Times:

16.2.1 When any period of time is referred to in the Contract Documents by days, it will be computed to include the first and the last day of such period.

Notice of Claim:

16.3 Should OWNER or CONTRACTOR suffer injury or damage to person or property because of any error, omission or act of the other party or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party within a reasonable time of the first observance of such injury or damage. The provisions of this paragraph 16.3 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

Cumulative Remedies:

16.4 The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon CONTRACTOR by paragraphs 6.12, 6.16, 6.30, 6.31, 6.32, 13.1, 13.12, 13.14, 14.3 and 15.2 and all of the rights and remedies available to OWNER and OWNER'S REPRESENTATIVE thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

Professional Fees and Court Costs Included:

16.5 Whenever reference is made to "claims, costs, losses and damages," it shall include in each case, but not be limited to, all fees and charges of OWNER'S REPRESENTATIVEs, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs.

Interest:

16.6 In the event that any payment of interest is to be made pursuant to any provision of the Contract Documents, excluding any bid bond, labor and materials bond or performance bond entered into by the CONTRACTOR, interest shall be paid at the average rate

earned by the City of Louisville on its invested funds during the quarterly fiscal period prior to the period during which the interest was accrued.

Third Parties:

16.7 The contract is not intended to create any right in or for the public or any member thereof, any subcontractor or supplier, or any other third party, or to authorize anyone not a party to the contract to maintain a suit to enforce its terms. The duties, obligations, and responsibilities of the parties to the contract, with respect to third parties, shall remain as imposed by law. This paragraph shall not apply to any surety to the extent it is acting under any labor and materials bond or performance bond entered into by the CONTRACTOR.

Severability:

16.8 To the extent that the performance of the parties' obligations may be accomplished within the intent of the contract, the terms of the contract are severable, and should any term or provision of the contract be declared invalid or become inoperative for any reason, such invalidity or failure shall not affect the validity of any other contract term or provision.

Equal Opportunity Employer:

16.9 The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, color, religion, age, sex, disability or national origin. The CONTRACTOR will take affirmative action to ensure that applicants are employed and that employees are treated during employment without regard for their race, color, religion, age, sex, disability or national origin. Such action shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training, including apprenticeship. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notice to be provided by an agency of the federal government, setting forth the provisions of the Equal Opportunity Laws.

The CONTRACTOR shall be in compliance with the appropriate areas of the Americans with Disabilities Act of 1990 as enacted and from time to time amended and any other applicable federal regulation. A signed, written certificate stating compliance with the Americans with Disabilities Act may be requested at any time during the life of any contract and with any contract entered by the OWNER.

END ARTICLE 16

SECTION 01 00 10

SUPPLEMENTAL CONDITIONS

CONDITIONS OF THE CONTRACT

These Supplementary Conditions amend or supplement the General Conditions of the Project Manual as indicated below. All provisions, which are not so amended or supplemented, remain in full force and effect.

1. GC-1 DEFINITIONS

A. Section 1.0, **ABNORMAL WEATHER** of Article 1 of the General Conditions, delete the definition in its entirety and add the following language:

ABNORMAL WEATHER & SITE CONDITIONS

- Contractor has included reasonable anticipated weather delays based upon normal seasonal conditions for the project region.
- Contractor shall be entitled to an extension of contract time for abnormal or severe weather conditions that materially impact safety, site access, material installation, equipment operation, or quality of work.
- Qualifying weather conditions include, but are not limited to:
    - Rainfall exceeding 1.5 inches within a 24-hour period.
    - Snowfall exceeding 6 inches within a 24-hour period.
    - Sustained temperatures below 20°F or above 100°F.
    - Sustained winds exceeding 35 MPH
    - Saturated, frozen, muddy, or otherwise unstable soil conditions preventing safe construction operations.
    - Manufacturer installation restrictions due to weather conditions.
- Contractor shall be entitled to reasonable drying, thawing, stabilization, and cleanup time necessary to safely resume work following such events.
- Weather-related delays qualifying under this provision shall constitute excusable delays and shall not be considered Contractor default.

B. Section 1.9.1, **CONTRACT DAY** of Article 1 of the General Conditions, delete the definition in its entirety and add the following language:

CONTRACT DAY - A calendar day of 24 hours each, excluding Saturdays, Sundays, OWNER observed holidays and Abnormal Weather days.

C. Section 1.41, **SUBSTANTIAL COMPLETION** of Article 1 of the General Conditions,

Add the following language:

The Work will not be considered suitable for Substantial Completion review until all project Bid Items and incidentals in the Work are completed and operational as designed, all designated or required governmental inspections and certifications have been made and posted, designated instruction of Owner's personnel in the operation of systems has been completed, and all final finishes within the Contract are in place. In general, the only remaining work shall be minor in nature, so that the Owner could occupy the building or utilize the improvements on that date and the completion of the Work by the Contractor would not materially interfere or hamper the Owner's normal operations. As a further condition of Substantial Completion acceptance, the Contractor shall certify that all remaining "punch list" work will be completed within twenty (20) Contract Days after receipt of notification or as agreed upon following the date of issuance of Certificate of Substantial Completion.

2. GC-2 PRELIMINARY MATTERS

Add the following language to Section 2.4 of Article 2 of the General Conditions:

- A right-of-way permit shall be obtained for any on-street storage/staging needed. Right-of-way permit does not reserve rights to parking of vehicles/equipment in areas otherwise available to public.
- Contractor shall park equipment and/or vehicles (including employee vehicles) directly adjacent to City/Golf Course property. Parking shall not take place in front of private residences.
- The access road, Coal Creek Lane, becomes a private road at the traffic circle just east of the project work area. Other than turning around, no construction traffic, activities, staging, etc. should be located within the traffic circle or roadways to the east/south of the traffic circle.

All Locations

a. Provide ingress, egress to private drives and single access developments.

b. No work shall be performed on the follow dates and timeframes:

5pm November 10th through 8am November 12th (Veterans Day)
5pm November 25th through 8am November 30th (Thanksgiving)
5pm December 23rd through 8am December 28th (Christmas)

3. GC-4 AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS

A. Section 4.4, **REFERENCE POINTS,** of Article 4 of the General Conditions, delete the second paragraph in its entirety and add the following language: The OWNER shall not provide survey reference points, construction stakes, lines and grade for the work unless otherwise noted.

4. GC-6 CONTRACTOR'S RESPONSIBILITIES

A. **Labor, Materials and Equipment**, delete paragraph 6.3 in its entirety and insert the following:

6.3 CONTRACTOR shall provide competent, suitably qualified personnel to survey, layout and construct the Work as required by the Contract Documents. CONTRACTOR shall at all times maintain good discipline and order at the site. Except as otherwise required for the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours and CONTRACTOR will not permit overtime work or the performance of Work, or at night without OWNER's written consent given after prior written notice to PROJECT MANAGER. No extra payment will be paid to the CONTRACTOR by the OWNER due to labor overtime or other increased costs of performing the Work on Friday afternoons, or at night. Should the CONTRACTOR desire to work at night between the hours of 5:00 p.m. and 8:00 p.m., Monday-Thursday, from 5 p.m. to 8:00 p.m. Friday, the CONTRACTOR shall submit a written request to the PROJECT MANAGER 24 hours prior. If approval is given by PROJECT MANAGER to CONTRACTOR for authorized overtime work, PROJECT MANAGER and PROJECT MANAGER'S authorized personnel will charge overtime and other incidental administrative expenses necessary for performing inspections between the hours of 5:00 p. m. and 8:00 p.m., Monday-Thursday and 3:30 p.m. to 8:00 p.m. Friday, the CONTRACTOR will be responsible to pay for all such rates and charges, and shall not be granted a Contract Price increase for such charges. Overtime and other incidental administrative expenses for PROJECT MANAGER and PROJECT MANAGER'S authorized personnel are as follows:

DESCRIPTION	HOURLY RATE
Engineer	$60.00
Construction Inspector	$45.00
Operations Supervisor	$45.00
Operations Technician	$30.00
Clerical	$25.00
Vehicle	$15.00

ARTICLE 6 – Page 78, Permits:

a. Paragraph 6.13.2, add the following language

"A deposit is required for the 2" water meter in an amount of $2500 and the deposit is reimbursed when the 2" meter is returned, in good condition. Charges for water consumption are waived when water is used for this project. Bulk Water Permit and meter are available from the City of Louisville Operations Division, located at 739 S. 104th St."

b. Paragraph 6.13.3, add the following language:

"Right of Way Permit fee is waived for this project."

5. GC-12 CHANGES OF CONTRACT TIMES

A. Add the following language to Article 12 of the General Conditions:

12.4 EXTENSIONS OF TIME

a. The OWNER and CONTRACTOR are both aware that construction will be conducted during spring and summer and that variable weather conditions are typical for the site of the work.

b. The CONTRACTOR expressly agrees that the Contract Price is based on completion of the work within the times specified in the Agreement and under weather conditions typically encountered during the contemplated construction period at the site of the work.

D. For purposes of evaluating requests for extensions of time due to abnormal weather conditions, the following conditions, and no others, will be considered unusually severe:

1) Precipitation volume exceeding the historical mean for the months of the construction period by more than one standard deviation.

2) Isolated abnormal weather occurrences of a severely destructive nature, which in fact, cause such destruction at the site of the work.

E. For the purpose of determining mean conditions, all available data contained in the records of the National Weather Service for reporting from Denver, as well as data available from the State Climatologist for the same areas.

F. The CONTRACTOR further agrees that should a request for time extension due to abnormal weather conditions, the CONTRACTOR shall submit all necessary historical and detailed daily data during the construction period to support the claim.

7. GC-13 TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

Section 13.11, **CORRECTION OR REMOVAL OF DEFECTIVE WORK** of Article 13 of the General Conditions, add the following language:

Failure or neglect on the part of the PROJECT MANAGER to condemn unsatisfactory material or reject inferior workmanship will in no way release the CONTRACTOR, nor shall it be construed to mean the acceptance of such work, nor shall Final Acceptance bar the OWNER from recovering damages in case fraud was practiced, or for defective work resulting from the CONTRACTOR'S dishonesty.

Work done contrary to or regardless of the instructions of the PROJECT MANAGER, work done without lines, grade and/or cross section stakes and grades shown on the Plans or as given by the PROJECT MANAGER, or any deviation made from the Plans and Specifications without written authority will be considered unauthorized and at the expense of the CONTRACTOR, and will not be measured or paid for by the OWNER. Any and all work so done may be ordered removed and replaced immediately at the CONTRACTOR'S expense.

SECTION 01 00 20

SUMMARY OF WORK

PART 1 - GENERAL

1.1 SUMMARY:

1.1.1 PROJECT NAME: Pond Liner Replacement – Hole 2 Coal Creek Golf Course

1.1.2 PROJECT LOCATION: Coal Creek Golf Course – Louisville, Colorado

1.1.3 OWNER: City of Louisville

1.1.4 WORK INCLUDED:

The consists of demo and removal of the existing pond sediments and liner. Installation of new RPE liner with anchor trench and landscape restoration of all impacted work areas including rock cobble and turfgrass sod.

1.1.5 EXHIBIT A – OVERVIEW OF PROJECT AREAS

Vicinity Map – Google Maps



Map Enlargement – Google Maps



SECTION 01 00 30

MEASUREMENT AND PAYMENT

1.1 GENERAL

A. Measurement and payment criteria applicable to (portions of) the Work performed under a unit price payment method.

B. Defect assessment and non-payment for rejected work.

1.2 AUTHORITY

A. Measurement methods delineated in the individual specification sections complements the criteria of this section. (In the event of conflict, the requirements of the individual specification section govern.)

B. Take all measurements and compute quantities. The Project Manager will verify measurements and quantities.

1.3 UNIT QUANTITIES SPECIFIED

A. Quantities indicated in the Bid Form are for bidding and contract purposes only. Quantities and measurements supplied or placed in the Work and verified by the City's Project Manager determine payment.

B. If the actual Work requires more or fewer quantities than those quantities indicated, provide the required quantities at the unit/lump sum prices contracted.

C. If the actual Work requires a change that is equal to an increase or decrease that is 25 percent (25%) or more of the Bid Price, then the Owner or Contractor may claim for a Contract Price adjustment.

D. The Owner reserves the right to remove work from the Contract. If an item is removed from the contract, no payment will be made for said item.

1.3.1 LUMP SUM SCHEDULES

A. There will be no measurement for lump sum items included in the lump sum schedule.

1.3.2 FORCE ACCOUNT – MINOR CONCTRACT REVISIONS

A. Force account items include the Project Manager's estimate for items included in the Contract. The estimated amounts marked with "AL" will be added to the total bid to determine the amount of performance and payment bonds. Force Account work shall be performed as directed and approved by the City's Project Manager. This is not a lump sum bid item, but rather an allowance for work not reasonably anticipated in the above items.

B. Payment will be made in accordance with the General Conditions. If additional work as described above is not encountered, this item will not be used.

C. Force Account Descriptions

i. F/A Minor Contract Revisions – This work consists of minor work and approved by the Project Manager, which is not included in the Contract drawings or specifications, and is necessary to accomplish the scope of work of this contract.

1.4 MEASUREMENT OF QUANTITIES

A. Measurement by volume: Measured by cubic dimension using mean length, width and height or thickness.

B. Measurement by area: Measured by square dimension, using mean length and width or radius.

C. Linear measurement: Measured by linear dimension, at the item centerline or mean chord.

D. Measurement by weight: The term "ton" will mean the short ton consisting of 2000 pounds avoirdupois.

Materials measured or proportioned by weight shall be weighed on accurate scales. Scales shall be accurate within the allowable tolerances as prescribed by State law. The scales shall be sealed by the measurement Standards Section of the Colorado Department of Agriculture at least once each year, each time the scales are relocated, and as often as the Engineer may deem necessary. Scales shall be furnished by the Contractor or the contractor may utilize commercial scales.

Scales shall be operated according to the Colorado Department of Agriculture's regulations. Weighers, scales, scale tickets, scale house, and verification of the scales' accuracy will not be measured and paid for separately, but shall be included in the work.

The Contractor may use either certified hopper scales or certified platform scales.

When platform scales are used to weigh vehicles carrying material paid for by weight, each vehicle shall be weighed by a certified weigher. Hopper scales used to directly measure material paid for by weight shall be operated by certified weighers and provide an accurate net weight.

The operator of each vehicle carrying material measured and paid for by weight shall obtain a scale ticket (certificate of correct weight) from the certified weigher and deliver the ticket to the Engineer at the point of delivery of the material.

The scale ticket shall include the following information:

1. Project Number
2. Date
3. Ticket Number
4. Haul Unit Number
5. Gross weight
6. Tare Weight
7. Net Weight
8. Material Type
9. Certified Weigher's Name

1.5 PAYMENT

A. Payment includes: Full compensation for all required labor, products, tools, equipment, plant, transportation, services and incidentals; erection, application or installation of an item of the Work; overhead and profit.

B. Final payment for Work governed by unit prices will be made on the basis of the actual measurements and quantities accepted by the Engineer multiplied by the unit price for Work which is incorporated in or made necessary by the Work.

1.6 DEFECT ASSESSMENT

A. Replace the Work, or portions of the Work, not conforming to specified requirements.

1.7 NON-PAYMENT FOR REJECTED PRODUCTS

A. Payment will not be made for any of the following:

1. Products wasted or disposed of in a manner that is not acceptable.
2. Products determined as unacceptable before or after placement.
3. Products not completely unloaded from the transporting vehicle.
4. Products placed beyond the lines and levels of the required Work.
5. Products remaining on hand after completion of the Work.
6. Loading, hauling and disposing of rejected Products.

2.0 PRODUCTS - Not Used

3.0 EXECUTION - Not Used

SECTION 01 00 40

REFERENCE STANDARDS

PART 1 - SUMMARY

1.1 SUMMARY:

1.1.1 WORK INCLUDED:

A. This Section contains a summary of industry-accepted and recognized standards published by trade associations, government, and institutional organizations, which are referred to in the various sections of these specifications or elsewhere in the Contract Documents.

B. Standards listed herein are included in the Contract Documents by this reference, and become a part of the Contract Documents to the same extent as though included in their entirety unless specific limitations are noted in the individual Specifications Sections.

C. Listings of reference standards include name and address of the organization publishing the standard, plus the full name and designator of each of the standards referenced herein.

D. If a publication date or edition number is listed with the reference standard, that publication date or edition number shall apply; otherwise, the publication date of edition number in effect at the Contract Date shall apply.

E. Inclusion of reference standards herein does not make the Engineer an agent of the publishing agency, nor does it obligate the Engineer to perform inspections required by or enforce rules or regulations contained in the reference standards.

1.2 REFERENCES:

1.2.1 RELATED DOCUMENTS: General Conditions, Supplementary Conditions, and applicable provisions of other Division 1 sections apply to this section.

1.2.2 PRECEDENCE OF REQUIREMENTS**:** In the event of a conflict between the requirements of a published reference standard and the specific requirements of the general conditions, supplementary conditions, or other Contract Documents, or between one reference standard and another reference standard, the more stringent requirements shall take precedence.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1.1 INTERNATIONAL ASSOCIATION OF GEOSYNTHETIC INSTALLERS (IAGI)
8601 West Cross Drive Suite F5 #220 Littleton, CO 80123 (720)353-4977

3.1.2 FLEXIBLE GEOMEMBRANE INSTITUTE (FGI)

2215 Newmark Civil Eng Lab 205 N Mathews Ave Urbana IL 61801 (217)333-3929

3.1.3 AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

1916 Race Street, Philadelphia, PA 19103 (215) 299-5585

3.1.4 AMERICAN WATER WORKS ASSOCIATION (AWWA):

6666 W. Quincy Ave., Denver, CO 80235 (303) 794-7711

Specifications and Test Methods Specifically Referenced Herein.

3.1.5 PORTLAND CEMENT ASSOCIATION (PCA)

5420 Old Orchard Road, Skokie, IL 60077

(312) 966-6200

Design and Control of Concrete Admixtures.

3.1.6 CITY OF LOUISVILLE

Department of Public Works - Engineering Division

749 Main Street Louisville, Colorado 80027 (303) 335-4608

Design and Construction Standards, 1994 Edition

3.1.7 COLORADO DEPARTMENT OF TRANSPORTATION (CDOT)

4201 E. Arkansas Avenue, Denver, CO 80222

(303) 757-9011

Standard Specification for Road and Bridge Construction, current Edition.

- END OF SECTION -

SECTION 01 00 50

SUBMITTALS

PART 1 - GENERAL

1.1 SUMMARY:

1.1.1 WORK INCLUDED:

A. This section contains a summary of submittals required by the Contract Documents, and establishes the general procedures and requirements for submittals.

B. Submittals covered under this section include, but are not necessarily limited to, schedules, reports, product data, shop drawings, samples, and miscellaneous data specifically prepared for the work by the Contractor or any subcontractor, manufacturer, or supplier, to illustrate some portion of the work.

1.1.2 RELATED WORK: Specific requirements for submittals are included in the individual specification sections.

1.2 REFERENCES:

1 .2.1 RELATED DOCUMENTS: General conditions, supplementary conditions, and applicable provisions of Division 1 sections apply to this section.

1.3 DEFINITIONS:

1 .3.1 PRODUCT DATA: As used herein, the term "product data" includes standard printed information published by the manufacturer describing materials, products, systems, and installation instruction not specifically prepared for this project, other than designation of selections from among available choices printed.

1.3.2 SHOP DRAWINGS: As used herein, the term "shop drawings" includes specially prepared technical data forms including drawings, diagrams, performance curves, data sheets, schedules templates, patterns, reports, calculations, instructions, measurements and similar information not in standard printed form for application to more tan one project. Supplier's standard component drawings may be submitted if they clearly show the exact items required for the work, in context with adjacent materials and with such relationships clearly shown. Shop drawings are not part of Contract Documents.

1 .3.3 SAMPLES: As used herein, the term "samples" includes fabricated and unfabricated physical examples of materials, products, and units of work; as complete units or smaller portions of units of work; either for limited visual inspection or, where in indicated, for more detailed testing and analysis.

1.3.4 MOCK-UPS: As used herein, the term "mock-ups" means special on-site of off-site forms of samples, which are too large or otherwise inconvenient for handling in transmittal or submittal form.

1.3.5 MISCELLANEOUS DATA: As used herein, the term "miscellaneous data" means various documents related directly to the work, including project photographs, survey data and reports, physical work records, statements of applicability, copies of certificates, bonds, quality testing and certifying reports, copies of industry standards, record drawings, field measurement data, operation and maintenance materials, overrun stock, security/protection/safety keys, and similar information, devices, materials, which are applicable to the work but not processed as shop drawings, product data, or samples.

1.4 QUALITY ASSURANCE:

1.4.1 GENERAL

A. No extension of time will be granted, nor will consideration be given to claims arising out of the Contractor's failure to submit shop drawings, product data, samples, or related submittals which do not allow adequate lead time for Engineer's review, and also do not allow ample time for revision, resubmission, and subsequent review by Engineer as required.

1.4.2 PERFORMANCE: Promptly check each submittal for accuracy, completeness, and applicability, and review, approve, and submit - in sequence according to the submittal schedule so as to cause no delay in the work or in the work of the OWNER or any separate Contractor - all submittals required by the Contract Documents. Identify each submittal to include name of project, specification section, supplier, source, finish, and location of use in the project.

1.4.3 VERIFICATION:

A. By making a submittal to the ENGINEER, the Contractor represents that he has approved such submittals and has determined and verified:

1. The applicability of the submittal to the project,

2. all quantities and sizes of materials, detailed fabricating dimensions, temporary erection connections or closures, tolerances and the proper fit and mating with adjacent materials,

3. related field measurements and field construction criteria, and

4. information pertaining to fabrication processes and techniques of construction and erection.

B. The Contractor further represents that he has checked and coordinated information contained within such submittal with requirements of the work and of the Contract Documents.

1.4.4 RESPONSIBILITY: The Contractor shall not be relieved of responsibility for any deviation from requirements of the Contract Documents by the Engineer review of submittals, unless the Contractor has specifically informed the Engineer in writing of such deviation at the time of submission, and the Engineer has taken no written exception to the specific deviation. The

Contractor shall not be relieved from responsibility for errors or omissions in submittals by the Engineer's review of or action upon such submittals.

1.4.5 SUBMITTAL VALIDITY: Submittals submitted which are not required to be submitted or are submitted without the Contractor's approval will not be processed by the Engineer, but will be returned to the Contractor for his compliance with Contract Document requirements, in which event it shall be deemed that the Contractor has not complied with requirements of the Contract Documents, and the Contractor shall bear responsibility for all delays as if no submittals had been submitted.

1.4.6 COMMENCEMENT OF WORK: No portion of the work requiring submittals shall be commenced until submittals have been acted on by the Engineer. All such portions of the work shall be in accordance with appropriate, required submittals. **All submittals shall be submitted to the Project Manager prior to commencement of project construction**.

1.5 GENERAL SUBMITTAL REQUIREMENTS:

1.5.1 SCHEDULING: Where appropriate in various required administrative submittals (listing of products, manufacturers, suppliers, sub Contractors, and in the progress schedule), show principal work-related submittal requirements and time schedules for coordination and integration of submittal activity with related work.

1.5.2 COORDINATION AND SEQUENCING: Coordinate preparation and processing of submittals with performance of work so that the work will not be delayed by submittals. Coordinate and sequence different categories of submittals for the same work, and for interfacing units of work, so that one will not be delayed by coordination with another. No extension of time will be allowed because of failure to properly coordinate and sequence submittals.

1.5.3 PREPARATION OF SUBMITTALS: Provide permanent marking on each submittal to identify project, date, Contractor, subcontractor, submittal name, applicable specification section, and similar information to distinguish it form other submittals. Show evidence of Contractor's review by clearly exhibiting check marks and stamped approval marking acceptance, and provide space for the Engineer's and Engineer's consultant's review or action marking. Package each submittal appropriately for transmittal and handling.

1.5.4 SPECIFIC CATEGORY SUBMITTAL REQUIREMENTS: Except as otherwise indicated in individual specifications sections, comply with general requirements specified herein for each indicated submittal category. Furnish and process intermediate submittals, where required between initial and final, similar to initial submittals(s).

1.5.5 PROGRESS SCHEDULE: Refer to supplementary conditions for progress schedule requirements.

1.5.6 DAILY REPORTS: Furnish copies of each daily report prepared by the Contractor's Project Superintendent to the Engineer and the OWNER "Transmit reports on a daily basis.

1.5.7 SHOP DRAWINGS:

A. Furnish newly-prepared information, on reproducible sheets, with graphic information at accurate scale (except as otherwise indicated), with name of preparer (firm name) indicated thereon. Affix seal of Contractor's or fabricator's design Engineer where applicable. Show all dimensions, and note which are based on field measurement. Identify materials and products in the work shown. Indicate compliance with standards, and special coordination requirements.

B. Where shop drawings are normally required, and where specifically called for in the specifications, submit to the Engineer four (4) blueline or blackline prints of each shop drawing and/or schedule required. Two prints will be returned.

C. Subsequent submittal(s) if required for correction or confirmation of corrective items shall be same as initial submittal except as otherwise requested by Engineer or specified in conditions of the contract.

D. Shop drawings and schedules will be reviewed for general conformance with the design concept contained within the Contract Documents.

E. Do not allow shop drawing copies into field without appropriate final markings by Engineer.

1.5.8 PRODUCT DATA:

A. Collect required data into one submittal for each unit of work or system. Mark each copy in a legible and reproducible manner to show which choices and options are applicable to the project; "highlighting" with colored markers not acceptable. Include manufacturer's standard printed recommendations for application and use, compliance with standards, application of labels and seals, notation of field measurements which have been checked, and special coordination requirements.

B. Do not submit product data, or allow its use on the project, until compliance with requirements of Contract Documents has been confirmed by Contractor. Submittals of product data are for information and record, unless otherwise indicated.

C. The initial submittal will be the only submittal required unless returned promptly by the Engineer, marked with an action which indicated an observed noncompliance. Submit 4 copies, each marked or labeled with project name, date, Contractor, subcontractor, submittal name, applicable specification section, and similar information to distinguish it from other submittals. Provide sufficient space for Engineers action stamp. The Engineer will retain two copies for himself and return the rest.

D. Do not proceed with installation of materials, products, or systems, until a copy of applicable product data is in the possession of the installer.

E. Maintain one set of product data for each submittal at the project site.

1.5.9 PUBLISHED STANDARDS: Where submittal of published standards is required, except where specified integrally with "Product Data" submittals, submit a single copy for the Engineers use. Where workmanship at the project site and elsewhere is governed by published standards, furnish additional copies to fabricators, installers and others involved in performance of the work.

1.5.10 CONSTRUCTION PHOTOGRAPHS: Unless otherwise provided in the Contract Documents, the OWNER will arrange and pay for construction photographs, and/or videotapes.

PART 2- PRODUCTS (Not Used)

(Not Used)

PART 3 - EXECUTION

3.1 SCHEDULES:

3.1.1 SUBMITTAL SCHEDULE: The following scheduled is included as a checklist for convenience only, and may not include all submittals required. Failure to include submittals in this schedule does not relieve the Contractor from providing submittals if required by individual specification sections.

General Requirements		
Section	**Title**	**Submittals Required**
01 00 60	Testing and Inspections	Liner Inspection, Concrete Inspection (if needed)
01 00 80	Contract Closeout	Record documents, Certificates of Compliance, Certificates of Inspection, Warranties, Guaranties, Bonds, Insurance Certificates, Consent of Surety, Releases of Liens, List of subcontractors and suppliers Acknowledgment of date of commencement of warranties and guaranties.
Technical Specifications		
Section	**Title**	**Submittals Required**
02 40 00	Concrete	Mix Design, as needed for repairs
02 60 00	Traffic Control	Diagrams for lane/sidewalk/access closures
02 50 00	Asphalt	As needed for repairs
03 84 00	Irrigation	As needed for repairs
Drawings	Landscape Cobble Rock	Source, Size, Color (Photo of materials)
32 91 13	Soil prep	Soil import for amendment
32 92 00	Turfgrass sod	Source, variety, size
32 93 13	Groundcover	Fabric, Cobble Bed Materials if needed
33 47 13	Cover soil	Source, type
33 47 13	Liner and Underlayment	Manufacturer, Specifications, Source

- END OF SECTION -

SECTION 01 00 60
TESTING AND INSPECTIONS

PART 1 - SUMMARY:

1.1.1 WORK INCLUDED:

A. This section defines the responsibilities of the various agencies or parties performing testing and inspection services as specified herein or required by the Contract Documents.

B. Quality assurance testing and inspections will be provided by an independent testing and inspections agency selected and paid for by the OWNER.

C. Cooperate with the selected testing and inspections agency and all others who may be responsible for testing and inspection of the work.

1.1.2 RELATED WORK: Specific testing and inspection requirements are described in the various sections of these specifications. Failure to list specific testing or inspection requirements does not relieve the Contractor from providing all tests, which are indicated to be his responsibility, or from cooperating with the testing and inspections agency.

1.1.3 LIMITATION OF AUTHORITY: The testing and inspections agency is not authorized to release, revoke, or alter the requirements of the Contract Documents, or to approve or accept any portion of the work without the Engineers written consent.

1.2 REFERENCES:

1.2.1 RELATED DOCUMENTS: General conditions, supplementary conditions, and applicable provisions of other Division 1 Sections apply to this Section.

1.2.2 REFERENCE STANDARDS: Comply with the requirements of all reference standards, codes, ordinances, rules, and regulations contained in the various sections of these specifications, except where more stringent requirements are listed herein or otherwise required by the Contract Documents. A complete listing of applicable reference standards, including full name of publishing agency and date or number is contained in section 01 00 40.

1.3 DEFINITIONS:

1.3.1 QUALITY ASSURANCE TESTS AND INSPECTIONS: All tests and inspections specified herein or elsewhere in the Contract Documents which are performed by an independent testing and inspections agency to determine compliance of materials, products, equipment, or completed work with the requirements of the Contract Documents.

1.3.2 CODE COMPLIANCE TESTS AND INSPECTIONS: Mandatory tests or inspections required by codes or ordinances, or other authorities having jurisdiction over the work.

1.3.3 CONTRACTOR'S CONVENIENCE TESTS AND INSPECTIONS: Tests or inspections informed exclusively for the Contractor's convenience or information.

1.3.4 **RE-TESTING**: Subsequent testing or inspections of the work or any portion of the work for which initial testing has indicated non-compliance with the Contract Documents or with applicable codes, ordinances, rules, and regulations.

1.4 SUBMITTALS:

1.4.1 **TEST AND INSPECTION REPORTS**: Copies of all test and inspection reports will be promptly delivered by the testing and inspections agency directly to the OWNER and ENGINEER.

1.5 PAYMENT FOR TESTS AND INSPECTIONS:

1.5.1 **INITIAL QUALITY ASSURANCE TESTS AND INSPECTIONS:** Paid for by the OWNER.

1.5.2 **CODE COMPLIANCE TESTS AND INSPECTION:** Paid for by the Contractor**.**

1.5.3 **CONTRACTOR'S CONVENIENCE TESTS AND INSPECTIONS: Paid for by the Contractor.**

1.5.4 **ADDITIONAL OR ALTERNATIVE TESTS AND INSPECTIONS:** Paid for by the OWNER if the materials or work tested is found to be in compliance with the Contract Documents; otherwise paid for by the Contractor.

1.5.5 **RE-TESTING**: Paid for by the Contractor.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 COOPERATION WITH TESTING AND INSPECTIONS AGENCY:

3.1.1 **ACCESS TO THE WORK:** Representatives of the testing and inspections agency or other legally constituted testing or inspections personnel shall have unrestricted access to the site and all other locations where the work is in progress, including borrow pits, batch plants, material yards, or other locations where materials are being obtained, fabricated, or stored.

3.1.2 **FACILITIES FOR TESTING**: Provide all necessary facilities required for testing and inspecting the work, including but not limited to, lifts, and suitable safe storage areas for freshly poured concrete test cylinders.

3.1.3 **NOTIFICATION**: Notify the ENGINEER not less than forty-eight (48) hours prior to tentative date or time when testing and inspection services will be required. Re-confirm date and time not less than twenty-four (24) hours prior to time when such services will be required. Engineer will schedule testing and inspection agency.

3.2 TEST AND INSPECTION PROCEDURES:

3.2.1 **GENERAL**: Gathering of specimens or samples, measuring, and testing of all materials, products, or other work shall be performed according to the procedures of the referenced standard test method.

3.2.2 **TAKING SPECIMENS**: Unless otherwise indicated, all specimens and samples for testing will be taken by the testing and inspections agency personnel, either at the source of the material or at the site for work in progress.

3.2.3 **DELIVERY OF SPECIMENS**: Unless otherwise indicated, pick-up and delivery of specimens or samples to the testing and inspections agency's laboratory will be done by the agency's personnel. This includes concrete test cylinders, which have been stored on site for the initial curing period.

3.2.4 **RE-TESTING**: When initial tests or inspections indicate non-compliance of the work or any portion thereof, the non-complying portion shall be removed, replaced, or reworked (re-compacted in the case of subgrade, fill, or backfill material), and re-tested by the same agency performing the initial test or inspection. Do not proceed with additional work until the non-complying work has re-tested and found to be in compliance.

3.2.5 ADDITIONAL OR ALTERNATIVE TESTS:

A. The Owner and the Engineer reserve the right to require additional or alternative tests or inspections of materials or work for which either has reason to believe may not be in compliance with the requirements of the Contract Documents.

B Examples of such additional tests may include, but are not limited to, additional sieve analysis of aggregates or granular fill material; additional field density tests of subgrade, fill, or backfill materials; additional slump tests of concrete as it is being placed; core tests of in-place structural concrete; load testing of concrete structures; x-ray or other non-destructive testing of structural steel; and field-cut test strips of membrane roofing.

C. Payment for additional or alternative tests will be determined as provided herein above.

3.3 SCHEDULES:

3.3.1 SCHEDULE OF QUALITY CONTROL TESTS AND INSPECTIONS:

A. The following schedule is included for information only, as a convenience to the Contractor, and is not intended to limit the number and type of tests to be performed by the testing and inspections agency.

B. Carefully examine the individual sections of these specifications for additional or complete quality control testing and inspections requirements. Failure to include any test or inspection in this schedule does not relieve the Contractor from the testing and inspection requirements contained in the individual sections of the specifications.

C. This schedule includes quality control tests and inspections only, which will be performed by the selected testing and inspections agency and paid for as previously mentioned in Article 13 of the General Conditions. Code compliance tests and inspections, Contractor's convenience tests and inspections, and additional or alternative tests and inspections requested by the City are not included.

Section	Description of Test or Inspection	Test Qty/Interval
Earthwork	Fill and Backfill Material (Lab):	1 each test/soil type
	Moisture Content - ASTM D2216	
	Max. Index Density - ASTM D4253	
	Moisture/Density Rel. - ASTM D698 or ASTM D1557	
	Plasticity Index - ASTM D4318	
	Particle Size Analysis - ASTM D422	
	Field Density Tests - ASTM D 1556, D2167, or D2922, Field Moisture	
	Tests - ASTM D3017:	
	Subgrade:	One/500 sf
	Fill, Bldg and Paved Areas:	One/500 sf per lift
	Backfill:	One/250 sf/2 ft vert.
	Site and Misc. Fills:	One/500 sf/1 ft vert.

Section	Description of Test or Inspection	Test Qty/Interval
Utilities	Bedding material (Laboratory):	
	Particle Size Analysis -	
	ASTM D422	1/soil type
	Backfill Material (Laboratory):	
	Moisture/Density Relation -	
	ASTM D698 or D1557	1/soil type
	Field Density Tests - ASTM D1556, D2167, or D2922; Field Moisture	
	Tests - ASTM D3017:	One/150 lf @ trench bottom at 2 ft. vert intervals, and at top
Paving	Asphalt Content - ASTM D 2172; Asphalt Gradation - ASTM in C136; Bulk specific gravity - ASTM D1188; AASHTO T 166;	
	Marshall Test - ASTM D 1559:	
		One each/500 tons, min 2/day
Concrete	Concrete Quality:	
	Fresh Concrete - ASTM C172	One each/50 C.Y. or
	Compressive Strength - ASTM C39	major fraction thereof;
	Unit Weight - ASTM C138	min 1/pour
	Slump - ASTM C143;	
	Air Content - ASTM C173 or C231:	
	Hardened Concrete (failings only) ASTM C42, C803, C805, or load tests:	One each/truck As determined by Engineer

- END OF SECTION -

SECTION 01 00 70
TEMPORARY FACILITIES, CONTROLS AND SERVICES

PART 1 - GENERAL

1.1 SUMMARY:

1.1.1 WORK INCLUDED: Provide temporary utilities and miscellaneous temporary facilities required during construction, including installation, maintenance, and removal upon completion of the work.

1.2 REFERENCES:

1.2.1 RELATED DOCUMENTS:

A. General conditions, supplementary conditions, and applicable provisions of other Division 1 sections apply to this section.

B. Section 02600 Construction Zone Traffic Control.

PART 2 - PRODUCTS

2.1 TEMPORARY CONSTRUCTION FACILITIES:

2.1.1 STORAGE STRUCTURES: Provide enclosed, weather tight storage facilities for materials and equipment, which require protection from the elements.

2.1.2 SANITARY FACILITIES:

A. Provide temporary toilet facilities for duration of work, for use by any and all employees engaged in the work. Comply with requirements of applicable codes, regulations, laws, and ordinances.

B. **PROJECT MANAGER shall approve locations of all temporary toilet facilities for the work. Contractor shall instruct any and all employees engaged in the work to use the designated temporary toilet facility or other approved toilet facility**.

2.1.3 FENCES AND BARRICADES:

A. Provide temporary orange fences along the property owner side of the construction limits as shown on the plans. In the remaining work areas and streets provide traffic control devices as may be specified elsewhere within certain sections of the specifications, and as may be required by local code or authority and as required to maintain safety of work place.

B. Maintain temporary fences, bulkheads, and other protective facilities in good condition throughout the term of the work. Remove at completion of the work and replace or repair all work damaged thereby. Repair or replace on a daily basis safety facilities or devices damaged or removed during the course of the work.

2.1.4 CONSTRUCTION STAGING

A. Coordinate construction activities with the property and business owners to minimize impacts.

B. The Contractor will not be permitted to operate trucks and equipment or store equipment and supplies on private property unless he has written permission to do so.

2.1.5 STORAGE OF MATERIALS/EQUIPMENT ETC.

A. CONTRACTOR shall not be allowed to park any vehicles (including worker's personal vehicles) or equipment in any on-street parking spaces that are open to traffic.

B. No construction trailers or storage yards will be allowed in the work area and neighborhood. Contractor shall locate trailer/storage yard subject to approval of ENGINEER.

2.3 TEMPORARY CONTROLS

A. Noise Control. Equip construction machinery and vehicles with practical sound and muffling devices and operate in a manner to minimize noise consistent with efficient performance of the work.

B. Dust Control.

1. Take reasonable measures to prevent unnecessary dust.

2. Moisten dirt roads used for transportation and haul with water or apply a chemical dust suppressant to control dust.

3. Cover dusty material in transit when necessary to prevent blowing.

C. Pollution Control.

1. Prevent the pollution of drains and watercourses by sanitary wastes, sediment, debris and other substances resulting from construction activities.

2. Retain all spent oils, hydraulic fluids and other petroleum fluids in containers for disposal off the site.

3. Do not perform equipment maintenance or fueling within 50 feet of any water course.

D. Erosion Control.

1. Take such measures as are necessary to prevent erosion of soil on the site and adjacent properties that might result from construction activities.

2. Provide temporary materials such as hay bales, sand bags or plastic sheets, to prevent the erosion of banks or excavation where runoff may be increased or concentrated due to construction activities.

3. Take such measures as are necessary to prevent soil, mud, debris, etc. from entering the storm sewer system. Contractor shall be responsible for cleaning existing storm sewer downstream of the site if any soil, mud, debris, etc. enter it from the site. Engineer shall inspect system prior to final inspection and required cleaning will be noted on the punch list. Contractor shall clean to the satisfaction of the engineer.

2.4 OTHER TEMPORARY SERVICES:

2.4.1 CLEANING:

A. Provide daily sweeping and cleanup of dust, debris, litter, trash containers, and other items required to maintain a clean, orderly, and accessible site. Hauling of debris to legal dump or landfill is required daily as a minimum.

B. Provide daily sweeping or cleaning of adjacent streets and walkways as required to prevent accumulation of mud, dust, or soil thereon from construction traffic and personnel.

C. The CONTRACTOR shall at his/her own expense clean up and removed all refuse and unused materials of any kind resulting from the work. Upon failure to do so within seventy-two (72) hours after request by the ENGINEER, the work may be done by the OWNER and the cost thereof be charged to the CONTRACTOR and deducted from his/her final estimate.

2.4.2 ACCESS RAMPS:

A. During resurfacing activities (milling and leveling) provide hard surface ramps as directed by the Engineer to access private property, public property, pedestrian crossings, streets and alleys.

2.4.3 OWNER MAINTAINED FACILITIES:

A. During construction activities including but not limited to demolition, unclassified excavation, subgrade cement treatment, and asphalt paving, CONTRACTOR shall protect from damage all OWNER maintained facilities. Street signage, storm sewer inlets and manholes, sanitary sewer manholes, water main valve boxes and water service curb stop boxes damaged or backfilled during construction shall be repaired, replaced and made accessible. Backfilled manholes and inlets shall be cleaned immediately. Upon failure to repair, replace or clean OWNER maintained facilities promptly, the work may be completed by the OWNER and the cost thereof be charged to the Contractor and deducted from his/her final estimate.

PART 3 - EXECUTION

3.1 MAINTENANCE OF TEMPORARY FACILITIES:

3.1.1 TEMPORARY STRUCTURES: Maintain temporary offices, storage facilities, sanitary facilities, fire protection facilities, trailers, fences, barricades, and other structures in a neat, orderly appearance for the duration of the work.

3.1.2 REMOVAL OF TEMPORARY FACILITIES: Remove temporary facilities and structures from the site as soon as practicable or when no longer required by the Contractor or subcontractors. Restore areas occupied by temporary facilities to like new condition, or to match surrounding areas.

PART 4 - MEASUREMENT AND PAYMENT

4.1 SUMMARY

4.1.1 Temporary Facilities and Controls and Services will not be paid for separately but shall be included in the work.

- END OF SECTION -

SECTION 01 00 80
CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 SUMMARY:

1.1.1 WORK INCLUDED: This section includes administrative procedures and closeout submittals required at substantial completion and final completion of the work.

1.1.2 RELATED WORK: Additional specific requirements are specified in the various sections of these specifications.

1.2 REFERENCES:

1.2.1 RELATED DOCUMENTS: General conditions, supplementary conditions, and applicable provisions of these specifications apply to this section.

1.3 DEFINITIONS:

1.3.1 CONTRACT CLOSEOUT: Contract close-out is defined to include general administrative requirements near the end of the contract time, in preparation for final acceptance, final payment, normal completion of the contract, occupancy by Owner, and similar actions evidencing completion of the work. Time of close-out is directly related to substantial completion, and therefore may be either a single time period for the entire work or a series of time periods for individual parts of the work which have been certified as substantially complete at different dates. That time variation, if any, shall be applicable to other provisions of this section.

1.4 SUBMITTALS

1.4.1 RECORD DOCUMENTS - GENERAL:

A. Additional or specific requirements for record documents are indicated in individual sections of these specifications.

B. Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire resistive location.

C. Provide access to record documents for Engineer's or Owner's reference during normal working hours.

D. Review record documents for progress and accuracy at regularly scheduled job progress meetings.

E. Upon completion of mark-up, submit record documents to the Engineer for the Owner's records.

1.4.2 RECORD DRAWINGS (FIELD SET):

A. Maintain at the project site during the course of the work a white print set (blueline or blackline) of contract drawings and shop drawings in clean, undamaged condition, with mark-ups of actual installations which vary substantially form the work as originally shown.

B. Mark whichever drawing is most capable of showing "field" condition fully and accurately; however, where shop drawings are used for mark up, record a cross reference at corresponding locations on the contract drawings.

C. Mark changes or deviations with red erasable pencil. Where feasible, use other colors to distinguish between variations in separate categories of work.

D. Record new information, which is recognized to be of importance to the Owner, but was not shown on either the contract drawings or shop drawings. "Give particular attention to concealed work which would be difficult to measure and record at a later date. Note related change order of field order numbers where applicable.

E. Record all deviations in sizes, locations, or other features of work from the Contract Documents. It shall be possible, using these drawings, to correctly and easily locate, identity, and establish sizes of all piping, directions of flow, and other features of the work which will be concealed in finished work or underground.

F. Establish locations of concealed and underground work by accurate dimensions to column lines or permanent walls, locating all bends or turns, and properly referencing invert elevations and rates of fall.

G. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates, and other identification on cover of each set.

1.4.3 FINAL RECORD DRAWINGS (AS-BUILTS):

A. Submit the final marked-up field copy of record drawings to the Engineer for review and approval.

1.4.4 RECORD SPECIFICATIONS:

A. Maintain one copy of specifications, including addenda, change orders, and similar modifications issued in printed form during construction. Mark up variations of substance in actual work in comparison with text of specifications and modifications as issued.

B. Give particular attention to substitutions, selection of options, and similar information on work where it is concealed or cannot otherwise be readily discerned at a later date by direct observation.

C. Note related record drawing information and product data where applicable.

D. Label record specifications with the words "RECORD COPY" and the date submitted, stamped or neatly printed in block letters on the cover.

1.4.5 OTHER DOCUMENTS: Submit the required number of the following additional documents, which may be required by the various specification sections:

1) Certificates of compliance with applicable reference standards.
2) Certificates of inspection or other evidence of compliance with governmental agencies or authorities having jurisdiction over the work.
3) Warranties, guarantees, and bonds.
4) Certificates of insurance for products and completed operations.
5) Written consent of surety.
6) Evidence of payment and release of liens for subcontractors, suppliers, and other goods and services (Claims Release Forms).
7) Certificate of substantial completion form signed by Contractor accepting the date of substantial completion.
8) Final Inspection report signed by Contractor.
9) Certificate of final completion signed by the CONTRACTOR acknowledging the date of final completion.
10) Operations and maintenance manuals as required.

PART 2 - PRODUCTS - (Not Used)

PART 3 - EXECUTION

3.1 PREREQUISITES:

3.1.1 FINAL COMPLETION: Prior to requesting the City's final observation for certification of final acceptance and payment, as required by the general and supplemental conditions, complete the following:

1) Submit final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required. List known exceptions to final completion of the work, if any, in the request.
2) Submit updated final statement, accounting for additional changes to contract sum.
3) Submit certified copy of final punch list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance.
4) Submit written consent of surety.
5) Revise and submit evidence of final, continuing insurance coverage complying with insurance requirements.

- END OF SECTION -

SECTION 02 40 00

CONCRETE AND CONCRETE REPLACEMENT

1.0 SCOPE OF WORK

A. The work shall consist of, but not be limited to, removal and replacement of the following: sidewalk, vertical curb and gutter, curb walk, bike trail, modified curb and gutter, median curb and gutter, ramp drives, crosspans, handicap ramps and truncated domes as shown on the plans.

2.0 CITY DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS

Any and all materials required for this project shall be pursuant to the requirements of the City of Louisville, Colorado "Design and Construction Standards, adopted February 15, 1994 and the latest revisions thereto except as modified by these plans and/or specifications.

3.0 MATERIALS

CEMENT

All cement used in concrete work shall be Portland cement Type II or Type IIA conforming to all requirements of AASHTO M85. **Fly ash and water reducer shall not be permitted to be used as a substitute for any portion of the cement content required in the mix, unless otherwise approved by the City Engineer.**

The concrete mix shall not contain less than 660 lbs. (7 sacks) of cement per cubic yard.

WATER

Water used in mixing shall be reasonably clean and free of oil, salt, acid, alkali, sugar, organic matter, or other substance injurious to the finished product. Water shall be in accordance with and shall meet the suggested requirements of AASHTO T-26. Where the source of water is relatively shallow, the intake shall be so enclosed as to exclude silt, mud, grass, or other foreign materials. In addition the pH shall be between 4.5 and 8.5. Neutralization by chemical additives will not be permitted. Water known to be of potable quality may be used without test.

The water to cement ratio including surface water on the aggregates shall not exceed 0.45 upon placement of the concrete.

ADMIXTURES

Water Reducing Agent shall be incorporated in the dense medium strength concrete mix (CDOT Class D) for high-early mix only.

AIR-ENTRAINING AGENTS

An air-entraining agent shall be added to the concrete mixture. Air entraining admixtures shall conform to ASTM C 260. All air-entraining agents shall be reasonably new material, thoroughly mixed and protected at all times from freezing. The air content in the concrete mix shall be 5 to 8 percent as determined by ASTM C 231 or ASTM C 173.

FINE AGGREGATE

1) Composition: Fine aggregate shall consist of natural sand, composed of clean, hard, durable, uncoated grains, preferably of siliceous materials.

	Maximum Percent by Weight
CLAY LUMPS	1.0
COAL, LIGNITE, OR SHALE	1.0
MATERIAL PASSING NO. 200 SIEVE	4.0

The sum of the above materials and other deleterious substances such as shale, alkali, mica, coated grains or soft and flaky particles shall not exceed four percent by weight.

2) Deleterious Substances: The maximum percentage of deleterious substances shall not exceed the following values:

Material finer than 200 mesh sieve	3% by weight
Shale	1% by weight
Coal and lignite	1/4% by weight
Clay lumps	1% by weight
Other deleterious substances	2% by weight

The sum of the percentages of the above deleterious substances shall not exceed five per cent (5%) by weight. All fine aggregate shall be free from injurious amounts of alkali and organic impurities.

3) Grading: Fine aggregate shall be well graded from coarse to fine, and when tested by standard laboratory sieves, shall conform to the following:

	Percent by Weight
Passing 3/8"	100
Passing No. 4 Sieve	95-100
Passing No. 16 Sieve	45-80
Passing No. 50 Sieve	10-30
Passing No. 100 Sieve	2 -10

4) Other Requirements: The fine aggregate shall conform to AASHTO M6.

COARSE AGGREGATE

1) Composition: Coarse aggregate shall consist of crushed limestone, trap rock, granite, washed gravel or other approved inert materials having clean, hard, strong, durable pieces, free from adherent coatings and conforming to the requirements of these specifications.

2) Deleterious Substances: The maximum percentage of deleterious substances shall not exceed the following values:

Material finer than 200 mesh sieve	1% by weight
Coal and lignite	1/4% by weight
Clay lumps	1/4% by weight
Soft fragments	3% by weight
Other deleterious substances	2% by weight

The sum of the percentages of the above deleterious substances shall not exceed five per cent (5%) by weight.

3) Grading: Coarse aggregate shall be well graded between the limits specified and shall conform to the following requirements:

Nominal Maximum Maximum Size	Percentages by Weight Passing Standard Laboratory Sieve having Square Openings				
1 1/2"	1"	3/4"	1/2"	3/8"	No. 4
3/4"	100	90-100		20-55	0-10

Not more than 5% shall pass a No. 8 sieve.

4) Wear and Soundness: Coarse aggregates for concrete shall have a percentage of wear of not more than 40 when tested in accordance with AASHTO T-96 or show a sodium sulfate loss not to exceed 12 percent (12%) when tested in accordance with AASHTO T-104. The wear and soundness requirements may be waived, or modified, by the Engineer provided that the coarse aggregate has a proven service record for similar service and exposure.

5) Other Requirements: Coarse aggregate shall conform to the requirements of AASHTO M80.

MIX DESIGN

A mix design is required to be made by a certified testing laboratory, and submitted to the Engineer for approval two weeks prior to the placing of any concrete. The minimum 28 day compressive strength shall be 4500 psi based on field cast cylinders. Compressive strength shall be as determined by ASTM C 39. The maximum slump of the delivered concrete shall be 4”. Batching proportions shall conform to the approved mix design. If any concrete fails to conform to the proportions of the approved mix design, such concrete shall not be incorporated in the work, but shall be discarded off the project site as waste material at the Contractor's expense.

CONCRETE CROSSPANS

Regarding repair of crosspans, only one half of a crosspan shall be closed to traffic at anytime unless secondary access is available to the streets and businesses impacted or unless otherwise approved by the engineer. **When individual panels or when one half of a**

crosspan is constructed, contractor shall provide high early strength concrete at no additional compensation.

HIGH EARLY MIX

CONCRETE MIX PROPORTIONS:

	ASTM	Varies	Cubic Yard	Units	
Cement	C-150		705	lbs	
Sand	C-33		1210	lbs	
#57/67 Agg.	C-33		1770	lbs	
AEA	C-260	0 to 8 oz/cy	4.5	oz	
MRWR	C-494	0 to 10 oz/cwt	50.0	oz	
HRWR	C-494	0 to 10 oz/cwt	7.0	oz	
Hyd Stab.	C-494	0 to 9 oz/cwt	0.0	oz	
Water	C-94		266.6	lbs	32 Gal.

PHYSICAL PROPERTIES OF MIX	**TARGET**
Slump	5.00-800”
Air content	4.5-7.5%
Unit Weight	143.30
Water/Cement Ratio	.40 Max
Yield	27

4.0 EXECUTION

CONCRETE REMOVAL

The Engineer will delineate the limits to which the existing concrete is to be removed and replaced. Removal and replacement of existing concrete beyond the limits designated by the Engineer shall be at the Contractor's expense. The minimum length of replacement concrete shall be 5 feet on vertical curb and gutter and curbwalk and 4 feet on sidewalk. All removals shall be full depth saw cut or removed at existing cold or expansion joints. Sections of concrete that are removed shall be replaced the same day. When weather conditions restrict replacing sections of concrete the same day, lighted barricades must be provided.

Where repairs are made in existing concrete all edges of the existing concrete and asphalt to remain shall be a full depth saw cut. No rough, chipped or broken edges will be permitted where new construction joins old. The Contractor shall maintain a straight, true break line. The Contractor shall be responsible for removal and replacement of all over break. The Contractor will be responsible for damage to existing asphalt and concrete adjacent to concrete replacement. Damages to existing asphalt and concrete due to Contractor's operations, shall be removed and replaced by the Contractor at his expense.

No pruning shall be allowed wherever concrete is adjacent to hedges, evergreens or other landscaping that overhangs existing concrete marked for replacement. The Contractor shall tie back hedges, evergreens or other landscaping.

Contractor shall not remove asphalt adjacent to concrete unless approved by the Engineer. Saw cutting between existing asphalt and concrete for removal shall not be paid for separately but included in the work.

Prior to concrete removal the Contractor shall locate all water service and sewer service crossings where previously designated or inscribed on the curb and gutter. Owner will paint water and sanitary sewer service crossings on non-inscribed concrete. Contractor shall inscribe on the curb face the service crossing locations with “V” for water services and “X” for sewer service.

If construction involves a driveway, the Contractor shall schedule arrangements of construction with the resident.

The Contractor shall properly dispose of broken concrete, unusable materials and surplus excavated materials due to concrete replacement off site the same day and the construction site shall be left clean and orderly. All parts of the construction site shall be left in a condition acceptable to the Engineer. The Contractor shall make all necessary arrangements for obtaining suitable disposal locations.

COMPACTION

All areas in which concrete has been removed shall receive compaction by vibrating, tamping, or combination to achieve the degree of compaction specified.
Maximum dry density of all soil types encountered or to be used will be determined in accordance with AASHTO T99, or AASHTO T 180.

The amount of water to be used in compacting all materials shall not deviate from optimum by more than two percentage points as determined by AASHTO T 99 or T 180.

The percent of compaction specified shall be equal to or greater than minimum values as shown in the following table for the various classes of soil and type of compaction.

	AASHTO T 99	AASHTO T 180
Soil Classification (AASHTO M 145)	Minimum Relative (Percent)	Minimum Relative (Percent)
A-1 through A-5		95
All Others	95	

Density testing will be performed by an independent soils testing firm employed by the Owner. Any and all retesting of soil to achieve required passing test results necessitated by the Contractors operations or inability to obtain specified results on the first attempt shall be the sole responsibility and cost of the Contractor.

WATER QUALITY

Contractor shall provide labor, equipment, and materials required to contain concrete spoils, concrete slurry, dirt, tack, asphalt, construction debris, etc. and protect the City's storm sewer facilities from construction contaminants. Contractor shall promptly remove from the site any potential storm water contaminants. Removal and disposal methods shall meet local and state regulations.

AIR QUALITY

The Contractor shall be responsible to see that dust from waste concrete be kept to a minimum during removal, loading, transferring and disposal of concrete.

EXCAVATION

Excavation on concrete replacement shall be made to a minimum depth of 8 inches below the proposed concrete subgrade to provide a stable, uniform subgrade. All soft and yielding material shall be removed and replaced with acceptable material. **No separate payment will be made for excavation to depth mentioned and replacement of unacceptable material.** All excess excavated materials shall become the property of the Contractor.

SUBGRADE PREPARATION AND FILL

Fill shall be placed in lifts, brought to proper moisture and compacted to the percent specified. The Contractor will provide backfill material if required. The Contractor will be responsible for loading, haul, installation and placing fill material, subgrade preparation, compaction and grading.

BACKFILL AND LANDSCAPE RESTORATION

Upon removal of the concrete forms, all concrete replacement items shall be backfilled with suitable material (topsoil) and landscaping restored. Contractor shall restore the entire surface area that has been disturbed by the Work to match the condition that existing prior to the construction.

Should the Contractor fail to backfill and restore landscaping within ten (10) days after receiving written notice from the Engineer, the Owner may backfill and restore landscaping at the Contractor's expense.

The landscaped area to be restored shall be 18" wide or as determined by the Engineer. The Contractor shall clean the area of all debris (i.e. concrete spoils, rocks, etc.) to a minimum depth of six (6) inches, prepare all edges to be clean and vertical and backfill (place topsoil), compact, grade and restore landscaping (e.g. topsoil, sod, mulch, gravel, etc.).

Topsoil shall consist of loose friable loam free of subsoil, refuse, stumps, roots, rocks, brush, weeds, heavy clay, hard clods, toxic substances, or other material which would be detrimental to its use for landscaping restoration. The topsoil placed shall be fine graded to eliminate rough and low areas, match existing levels profiles, contours and ensure positive drainage prior to re-sodding.

Sod shall be placed behind all replaced concrete where it abuts existing grassed areas, as directed by the ENGINEER. The minimum width of sodded areas (as measured perpendicular to the replaced concrete) shall be 18", unless otherwise approved by the ENGINEER.

Sod shall be Colorado-grown, 100% certified Kentucky Bluegrass, or a mixture approved by the OWNER. The sod source shall be made known to and approved by the OWNER prior to installation.

Re-sodding shall be completed with sod of high quality and shall not be dried out or dying when placed. Re-sodding shall be rolled and thoroughly watered once by the Contractor. The Contractor shall notify the property owner in writing of the nature of the work that has been performed and inform the property owner that the sod will only be watered once. The notification format shall be approved by the Engineer prior to distribution to the property owner.

Mulch and gravel shall be replaced with similar material.

STREET BACKFILL – ASPHALT PATCHING

Excavations in paved streets caused by concrete replacement work shall be backfilled with 8" of approved base course material provided by the Contractor and is incidental and shall be merged into the pay items shown in the Schedule of Unit Prices.

Upon removal of the forms, the Contractor will be responsible for loading, haul, installation and placing fill material, compaction and grading to the existing street surface and maintained until hot asphalt patching is installed.

Hot asphalt patching shall occur at concrete replacement locations after 7 days of concrete placement and continue as construction progresses unless otherwise directed by the Engineer.

READY-MIXED CONCRETE

All concrete shall be ready-mixed in accordance with ASTM C 94 and shall conform to the requirements of these specifications.

Ready-mixed concrete shall be continuously mixed or agitated from the time the water is added until the time of use. The concrete shall be completely discharged from the truck mixer or truck agitator within one and one half (l 1/2) hours or before the drum has revolved 300 revolutions after the cement comes in contact with the mixing water, or with the aggregates (retempered concrete shall not be allowed).

The 90 minute time limit for mixer or agitating trucks may be extended to 120 minutes if:

(1) No water is added after 90 minutes.
(2) The concrete temperature prior to placement is less than 90° F.

The Contractor shall collect delivery or batch tickets from the ready-mix driver for all concrete used on the project and submit them to the Engineer daily. Batch tickets shall provide the following information: Weight and type of cement, weights of fine and coarse aggregates, weight (or gallons) of water, including surface water of aggregates and water added by the truck, quantity (cu. yd.) of batch, times of batching and discharging of the concrete, name of batch plant, name of Contractor, starting revolution count, name and amount of all admixtures used, date and truck number. Deletion of any item listed above for inclusion on the batch ticket shall be cause for rejection of the entire load of concrete.

PLACING CONCRETE

Before placing concrete, debris shall be removed from the space to be occupied by the concrete, and the forms, including any existing concrete surfaces, shall be thoroughly wetted. Concrete shall not be placed until all forms and reinforcing steel have been inspected and approved by the Engineer.

The concrete temperature shall be between 50 degrees F and 90 degrees F at time of placement. If the concrete does not fall within the specified temperature range, the concrete shall not be used or placed on the project and shall be immediately returned to the batch plant or an appropriate dumpsite.

Concrete shall be placed in a manner that will avoid segregation and shall not be dropped freely more than five (5) feet. If segregation occurs, the Engineer will require the concrete to be removed and replaced at the Contractor's expense. Concrete shall be placed monolithically in one continuous operation, except where keyed or doweled construction joints are shown on the plans or as approved by the Engineer. Delays in excess of 30 minutes shall require removal and replacement of that pour, at the Contractor's expense.
Concrete shall not be placed on soft, spongy, frozen, or otherwise unsuitable subgrade. The finished subgrade shall be kept smooth and compacted prior to placing concrete.

WORKABILITY

The consistency of concrete shall be kept uniform for each class of work and shall be checked by means of slump tests conforming to ASTM C 143. **NO WATER MAY BE ADDED AT THE JOB SITE WITHOUT THE PERMISSION OF THE ENGINEER.** If approval is obtained and water is added at the job site, the concrete shall be mixed for not less than 20 revolutions. The added water shall not cause the water/cement ratio to exceed 0.51 and shall not cause the maximum

slump to be exceeded. Slump tests shall be run and test cylinders cast following the addition of the water as required by the Engineer. Any expense incurred, in excess of ordinary tests, in such testing will be borne by the Contractor.

PUMPING CONCRETE

Pumping of concrete shall be permitted.

SAMPLING

1) AGGREGATE: The Contractor shall, before starting concrete work, furnish representative samples of concrete aggregate proposed for use to a testing laboratory designated by the Engineer and sampled in accordance with ASTM D 75.

2) CONCRETE: Concrete shall be sampled in accordance with ASTM C 172, "Sampling Fresh Concrete".

FIELD QUALITY CONTROL

1. General: An approved testing laboratory shall perform all testing, with the exception of slump tests. The following tests and procedures are subject to change during construction at the discretion of the Owner's Representative.

2. Test Priority: Control tests shall be used to determine the concrete quality throughout the project, however, special tests shall have precedence over control tests, and core tests shall have precedence over all previous tests.

3. Control Tests: Control tests of concrete work shall be made at such times and in such manner as directed by the Owner's Representative at the expense of the Owner. Each test shall consist of 4 standard 6" test cylinders cast and cured in accordance with C31 and C172. One cylinder shall be broken at the end of 7 days after placing, two cylinders shall be broken at the end of 28 days after placing and the remaining cylinder shall be stored until their disposition is determined by the Owner's Representative. The remaining cylinder will be broken only when the previous test reports indicate unsatisfactory results. The Owner's Representative reserves the right to stop all future concrete work when the 7 or 28 day tests indicate unsatisfactory results; until, in his opinion, proper corrective measures have been taken to assure quality concrete in future work. Tests shall be made at the time test cylinders are taken, and recorded on the reports to determine the slump, air content, unit weight, and temperature of the concrete. All tests shall be made in accordance with C39, C138 or C231. Minimum 28-day compressive strength shall be **4,500 psi**, based on field cast cylinders.

CONCRETE THICKNESS

It is the intent of the specifications that Concrete shall be constructed in accordance with the thickness requirements of the plans and specifications. Tolerances allowed for subgrade construction and other specification provisions, which may affect thickness, shall not be construed to modify such thickness requirements. Thickness measurements will be made at the rate of not less than one measurement for each one 500 linear feet or fraction thereof, of concrete placed.

Insufficient thickness' from 0.20 to 0.60 inches will be price reduced for each lot of 500-foot, in accordance to PRICE REDUCTIONS.

If the concrete is deficient by more than 0.6 inches, additional measurements will be made to identify the boundary of insufficient thickness. The boundary shall be at longitudinal or transverse joints and pavement edges. After the deficient area is identified the Engineer will determine as to whether the concrete shall remain in place or be removed in accordance with the following procedures:

a. The CONTRACTOR shall, at his expense, remove and replace the concrete in the area determined by the Engineer with new concrete meeting the thickness requirements. Subgrade shall be lowered as necessary to meet full thickness requirements.

b. The CONTRACTOR shall leave the concrete in place without payment, if it meets all of the other requirements.

COMPRESSIVE STRENGTH

When a compressive strength test fails below the specified 28-day compressive strength on field cast cylinders, the Engineer shall make a determination whether the concrete shall be removed and replaced or allowed to remain in place. This determination shall be based on an evaluation of the durability and other qualities of the concrete necessary to the integrity of the pavement. If after review, the concrete is allowed to remain in place, price reductions for each lot of 100 cubic yards or fraction thereof, will be in accordance with PRICE REDUCTIONS.

REINFORCING STEEL (DOWELS)

Reinforcing steel dowels are required at all concrete replacement items.
1) Bars: Reinforcing steel bars shall conform to the requirements of the "Standard Specifications for Deformed Billet-Steel Bars for Concrete Reinforcement" of ASTM. Bars shall be new billet steel conforming to AASHTO M31. Bars shall be #4 rebar with minimum lengths of 18 inches.
2) Placing: Reinforcing steel, before being placed, shall be thoroughly cleaned of coatings that will destroy or reduce bond. A light coating of rust may be allowed by the Engineer. Reinforcement shall be carefully formed to the dimensions indicated on the Plans. It shall not be bent or straightened in a manner that will injure the material. THE USE OF HEAT IN BENDING BARS SHALL NOT BE PERMITTED. Bars with kinks or bends not shown on the plans shall not be used. All reinforcing steel shall be placed in the position and at the spacing shown on the plans with the tolerance specified in ACI 301 Section 5.4.

FIBERMESH

1) Fibermesh: Concrete Engineered Reinforcing Fibers shall be commercial grade, 100% virgin polypropylene, collated, fibrillated fibers from Fibermesh Co. or approved equal. Fibermesh shall be used in all concrete as indicated on the detail drawings or as specified. Fibermesh fibers shall be added to the concrete mix at the rate of 1 1/2 lbs. per cubic yard of concrete.

FORMS

Forms shall be straight and true and conform to the shape, lines and dimensions as shown on the plans. Damaged forms shall be rejected and replaced. Approved flexible forms shall be used for construction where the radius is 150 feet or less. Unexposed surfaces shall have forms of No. 2 common (or better) lumber. Forms shall not be disturbed until the concrete has adequately hardened. In no case shall the minimum time between placing concrete and removal of forms be less than 12 hours.

JOINTS

EXPANSION JOINTS

Expansion joint materials: expansion joints shall be constructed with preformed cork expansion joint filler, conforming to Federal Specification MR-F-341, or wood fiberboard conforming to AASHTO Designation M59. Expansion shall extend to the full depth of the concrete sections. All expansion joints shall be one-half inch (1/2") thick, unless otherwise stated.

Expansion joint material shall be one half inch preformed joint filler (Bituminous Type) and shall be provided as shown on the plans or as directed by the Engineer. Expansion joints shall be installed at existing joints, structures, PCR's, every 100 feet, and as shown on the plans or as directed by the Engineer.

On new sidewalk, storm sewer Type R inlets, bike path installation, and at 18" median curb and gutter/median cover interface, expansion joint material shall be installed with a removable plastic spacer cap to be removed prior to joint sealing. Joints shall be sealed a minimum depth of one half inch with Sonneborn Sonolastic SL 1 one-part self-leveling polyurethane sealant (Color - gray) or approved equal.

CONTRACTION JOINTS

Transverse joints shall be placed at maximum intervals of ten (10) feet to control random cracking. The joints shall be formed, sawed or tooled to a minimum depth of one-quarter (1/4) of the total thickness.

If divider plates are used, the maximum depth of plates shall not be greater than one-half (1/2) the total thickness.

The joints shall be finished with a jointer having a width no greater than 5/16 inch and a depth not less than 3/4 inch. A maximum joint width at the finished surface shall be no greater than 5/16 inch. **Jointing tools shall be in good condition. Worn or damaged jointing tools shall be rejected and replaced.**

Contraction joints must be straight (± 1/4") and perpendicular (± 1/2") to the longitudinal axis of work. If contraction joints are not provided as specified, Contractor shall saw cut contraction joints as directed by Engineer.

SAW CUT JOINTS

Contraction joints in bike path shall be saw cut a minimum of 1/8" wide and 1/3 of the depth; no tooled joints will be permitted. Saw cut joints are required at 8-foot intervals for 8-foot wide paths and at 10-foot intervals for 10-foot wide paths, as directed by the Engineer. Joints shall be saw cut within 24 hours of construction.

TOOL JOINTS

Tool joints shall be spaced as follows:

1) Not more than ten (10) feet nor less than five (5) feet apart in curb and gutter and curbwalk.
2) Not more than five (5) feet nor less than four (4) feet apart in sidewalk.
3) In ramp drives as shown on the details.
4) To match existing adjacent concrete.
5) As directed by the Engineer.

FINISHING

Exposed faces of concrete shall be finished to true lines and grade as shown on the plans. The surface shall be floated, troweled, edged and broomed. The completed surface shall have a light/medium broomed surface. Contractor shall provide an ACI Flatwork Certified Finisher on each crew performing concrete finish work.

No dusting or topping of the surface, or sprinkling with water retardant, or evaporation reducer to facilitate finishing shall be permitted.
All concrete spoils and overburden that accumulates on existing concrete and asphalt from concrete replacement shall be removed immediately after concrete finishing.

MARKINGS

The letters “W” and “S” or “V” and “X” shall be stamped in the face of the curb at the locations marked by the Engineer to designate a water service or sanitary service, respectively, The letters shall be 3 inches long by ½ inch deep.

CURING
All concrete, regardless of temperature, weather or season, shall be protected from premature drying for a period of not less than seven (7) days after the concrete is placed, except that where concrete is being protected from freezing, the time period for concrete saturation shall be one (1) day less than that of the frost protection.

The application rate shall be as per manufacturer's recommendation (approximately 150 sq. ft./gal.). Curing will not be required longer than 72 hours if high-early strength concrete is used. It shall be the Contractor's responsibility to protect the concrete being cured, from the elements, traffic, and vandalism. Curing methods applied to other surfaces shall be applied to those surfaces covered by forms as soon as the latter are removed. Inadequate protection by the Contractor shall be cause for suspension of the Work and damaged concrete shall be replaced at the expense of the Contractor.

CURING NON PIGMENTED CONCRETE

Clear pigmented, Liquid, Membrane-forming compounds shall conform to ASTM C-309, Type I, Class A and B, AASHTO M148, and meet local, state and federal VOC and air quality regulations.

HOT AND COLD WEATHER REQUIREMENTS

COLD WEATHER PROTECTION

When concrete is placed when ambient temperatures are expected to fall below 40 degrees F, the Contractor shall provide satisfactory methods and means to protect the mix from injury by freezing.

Aggregates and mixing water shall be heated to a temperature of at least 70 degrees F., but not more than 150 degrees F., the aggregates may be heated by either steam or dry heat. Heating equipment or methods which alter or prevent the entrainment of the required amount of air or which develop hot spots in the aggregate shall not be used. Placing of concrete may be started in the morning if the contractor desires, but shall be discontinued at 3 P.M. of the same day if freezing weather threatens. The concrete or aggregates shall be protected during transit, mixing and before and after placing, as directed by the Engineer, to retain all heat possible in the concrete mix.

After the concrete has been placed, the contractor shall provide sufficient protection such as insulating blankets, canvas, framework, heating apparatus, etc., to enclose and protect the concrete and maintain the temperature of the concrete at not less than 50° F. for 7 days.

Cold weather protection shall not be paid for separately but be included in the work.

Except as provided above, cold weather concreting shall be in accordance with ACI 306. If in the opinion of the Engineer, the protection provided is inadequate, concreting shall cease until conditions or procedures are satisfactory to the Engineer.

HOT WEATHER CONCRETING

The placement of concrete in hot weather shall comply with ACI 305.

MISCELLANEOUS

FINAL SURFACE TEST

Prior to acceptance of the work, the Contractor shall test the surfaces with a 10' straightedge. All surfaces varying more than 1/8" from line and grade of the correct surface shall be removed and replaced by the Contractor at his expense.

Any areas, which hold or cause water to pond shall be removed and replaced at the expense of the Contractor.

REPAIRS

If after stripping of forms any concrete is found to be not formed as shown on the plans, or is out of alignment or level, or shows a defective surface, it shall be considered as not conforming with the intent of these Specifications and shall be removed and replaced by the Contractor at his expense.

CONNECTION WITH EXISTING SIDEWALKS

Where new sidewalk construction abuts existing sidewalks, the work shall be accomplished so that no change in grade results.

OPENING TO TRAFFIC

Walks shall not be opened to pedestrian traffic for at least twenty-four (24) hours after placement. Driveways, curb-gutter, and crosspans shall not be opened to vehicular traffic for at least seven (7) days after placement. The Contractor shall provide and maintain suitable barricades to comply with foregoing requirements.

The Contractor, with approval of the Engineer may use high early for ramp drives. There will be no additional payment to the Contractor for the use of high early concrete.

PRICE REDUCTIONS

Insufficient Thickness' and compressive strengths shall be subjected to price reductions at the following rates:

Average Thickness Deficiency (inches)	Price Reduction* %
0.00 to 0.20	0
0.21 to 0.30	10
0.31 to 0.40	15
0.41 to 0.50	25
0.51 to 0.60	30

* Price reduction is equal to the full price of the entire pavement system. Price reductions reflect reduced fatigue life as a result of the deficiency.

Percent of Specified 28-Day Compressive Strength*	Price Reduction** %
100	0
95	0
94	3
93	6
92	9
91	12
90	15
89	18
88	21
87	24
86	27
85	30

* Strengths less than 85 percent of the design strength shall be removed and replaced.
** Price reduction is equal to the full price of the entire pavement system. Price reductions reflect reduced fatigue life as a result of the deficiency.

5.0 SPECIAL CONDITIONS

TREE ROOT REMOVAL

When any tree roots are encountered during construction operations, the Contractor shall immediately notify the Engineer prior to the disturbance of any of the roots. The Engineer shall then make a determination regarding removal. In the locations where trees roots are anticipated, the Contractor shall take the necessary precautions to prevent any damage to the root with tools or equipment.

Tree roots shall not be removed or disturbed unless directed by the Engineer. Tree roots shall be removed with a sharpened, sanitized saw to leave the freshly cut root surface in a clean and smooth condition. Axes, backhoes, bobcats and other blunt objects shall not be used to remove the tree roots.

PIGMENTED/PATTERNED CONCRETE

An air-entraining agent complying with ASTM C-260 and/or a normal set or retarded-set water-reducing admixture complying with ASTM C-494 may be used, but nothing containing calcium chloride is permitted in the mix. Air-entrainment shall be five (5) to eight (8) percent. Concrete mix design shall be as follows:

MIX PROPORTIONS:

Materials:	Type or Size	ASTM Standard	Design Weights per Cubic Yard
Total Cementitious Cement	1-2	C-150	705 lb. min.
SCM		C-618	100 % min.
Total Aggregate			0 % max.
Coarse Aggregate	#8	C-33	2725 lb.
Int. Aggregate		C-33	35-40 %
Fine Aggregate	Sand	C-33	
AEA		C-260	60-65 %
WRA	A	C-494	0.5 oz.
MRWR	A	C-494	oz/cwt
HRWR	F	C-494	oz/cwt
Water	City	C-94	oz/cwt
Special Material			320 lb. 38.4 gal.

The above weights are based upon aggregates in a saturated, surface dry (SSD) condition. Batch plant corrections must be made for moisture in aggregates. Mix proportions may be adjusted in accordance with ACI 301-05, section 4.2.3.5.

PATTERN

While the concrete is still in the plastic stage BRICKFORM ANTIQUE POWDER RELEASE BLACK shall be applied and imprinted with a BRICKFORM BASKET WEAVE NEW BRICK to make the desired pattern surface. **The pattern-forming tool shall be supplied by and returned**

to the City. Pattern-forming tool shall be replaced when damaged or lost when in the Contractor's possession. The concrete shall be imprinted with the long dimension of each brick perpendicular to the back of curb line.

Patterned Concrete – Aggregates shall conform to ASTM C33 and be less than 3/8 inch. Mixing water shall be fresh, clean, and potable. An air-entraining agent complying with ASTM C260 or a normal-set or retarded-set water-reducing mixture complying with ASTM C494 may be used. Nothing containing calcium chloride is permitted in the mix. **Patterned Concrete shall be Soloman No. 417 (Brick Red) Colors Inc. or approved equal.**

Patterned Concrete shall be colored integrally. Pigment shall be added by weight directly into the mixer along with the aggregate, cement, and water. While adding color, the transit mixer should operate at charging speed or at mixing speed for 5 to 10 minutes or from 50 to 100 revolutions. Design slump shall be 2 inches. Field slump shall be within ¾ inch of design slump. The mix shall be placed and struck off to the proper grade and wood floated to a uniform surface.

There will be no separate payment for concrete pigmentation.

TEST SECTIONS

When pigmented concrete is specified, the Contractor shall provide and place a minimum of 3 pigmented concrete test sections, apply a medium broom finish and cure compound sealer on a 4 foot x 4 foot test panel for approval by the OWNER prior to commencing the work. The location of constructing the pigmented concrete test sections will be on City of Louisville property in an area designated by the Engineer. If the test panels are unacceptable to the OWNER, the Contractor shall construct additional test panels until the correct color and finish is approved by the OWNER. The Engineer requires a 3-day review and approval of the concrete test sections. Labor and equipment used on the test panel shall be the same as that used in the final construction of the pigmented concrete. Contractor shall submit the concrete mix designs to the ENGINEER for approval prior to test panel placement.

CURING PIGMENTED CONCRETE

All pigmented concrete shall be cured with BRICKFORM Satin Cure and Seal 1315 or approved equal All concrete, regardless of temperature, weather or season, shall be protected from premature drying for a period of not less than seven (7) days after the concrete is placed, except that where concrete is being protected from freezing, the time period for concrete saturation shall be one (1) day less than that of the frost protection.

The application rate shall be as per manufacturer's recommendation. Curing will not be required longer than 72 hours if high-early strength concrete is used. It shall be the Contractor's responsibility to protect the concrete being cured from the elements, traffic and vandalism. Curing methods applied to other surfaces shall be applied to those surfaces covered by forms as soon as the latter are removed. Inadequate protection by the Contractor shall be cause for suspension of the Work and damaged concrete shall be replaced at the expense of the Contractor.

Curing compound shall be applied to the surface of existing (remaining) patterned concrete and the proposed patterned concrete.

EXPOSED AGGREGATE CONCRETE MIX DESIGN

An air-entraining agent complying with ASTM C-260 and/or a normal set or retarded-set water-reducing admixture complying with ASTM C-494 may be used, but nothing containing calcium chloride is permitted in the mix. Air-entrainment shall be five (5) percent (□ 2). Concrete mix design shall be as follows:

MIX PROPORTIONS:

		(Per Cubic Yard of Concrete)
Cement	ASTM C-150	564 lbs.
Sand	ASTM C-33	1075 lbs.
Size #57 Agg.	ASTM C-33	1100 lbs
Size #4 Agg.	ASTM C-33	900 lbs.
AEA	ASTM C-260	6.2 oz.
Water	ASTM C-94	275 lbs. (33.0 gal.)

EXPOSED AGGREGATE SURFACE RETARDANT

Surface retarding agent for exposed aggregate concrete shall be “Retard-X” SRO-5 manufactured by Protex Industries, Inc., Denver, Colorado, or approved equal. Approved equal products shall meet the following composition and material requirements: the retarding agent shall be that which retards the set of the concrete matrix on the surface to allow for the exposing of the aggregate, containing thixotropic agents and shall be in a liquid form.

EXPOSED AGGREGATE CONCRETE ETCHER

Exposed aggregate concrete etcher and cleaner shall be 5% muriatic acid solution. Acid neutralizer shall be sodium bicarbonate.

EXPOSED AGGREGATE ACRYLIC SEALER

Exposed aggregate acrylic sealer shall be “Acry-seal” manufactured by Protex Industries, Inc., Denver, Colorado, or approved equal meeting ASTM D-156 and C-309. Approved equal products shall meet the following composition and material requirements: the acrylic sealer shall contain a selected acrylic resin that resists yellowing and is suspended in a mineral carrier. The sealer shall be that which is used as a cure and seal on exposed aggregate concrete that is subject to abrasion and spillage of common chemicals and deicers.

JOINT SEALER

Cold-applied joint sealer shall be of such character that a homogeneous mix can be obtained by combining the separate substances, either mechanically or manually, without having to heat the blended material above a temperature of 100° F. The material shall pour or extrude readily at a temperature of 70° F immediately after preparation for use and shall remain in a condition suitable for application for at least one hour. Joint sealant shall be Sonolastic SL1 or approved equal.

RESIDENT/BUSINESS/RTD NOTIFICATION

At least 48 hours prior to the start of construction at each location, the Contractor shall notify in writing the residents or businesses adjacent to the work. The notification shall include a description of the work, a schedule for completion of the work and the name and phone number

of the Contractor's contact person. **The notification format shall be approved by the Engineer prior to distribution.**

Contractor shall notify RTD (michelle.sims@rtd-denver.com and lindsey.smith@rtd-denver.com) a minimum of 10 business days before construction at bus stop locations. RTD will post rider alerts and coordinate removal and re-installation of bus stop signs.

CONCRETE MIXER TRUCKS

Concrete Mixer trucks shall be restricted to public roadways when transporting concrete material within the City of Louisville. Concrete material delivery to Parks and Recreation Concrete Replacement shall accomplished utilizing a concrete buggy, unless otherwise approved by the owner.

6.0 BASIS OF PAYMENT - CONCRETE

The entire cost of the work and material necessary to complete all items in the Schedule of Unit Prices, shown or implied or specified herein shall be included and merged into the pay items shown in the Schedule of Unit Prices. All associated work necessary for the proper and complete installation of this project and associated bonding, maintenance and guarantees shall be merged into the pay items shown in the Schedule of Unit Prices. All payments shall be subject to the conditions of these specifications.

BACKFILL AND LANDSCAPE RESTORATION shall include but not limited to backfill, compaction, top soil, grading, sod, seed/mulch and sprinkler system repairs. BACKFILL AND LANDSCAPE RESTORATION is incidental and shall be merged into the pay items shown in the Schedule of Unit Prices, unless otherwise noted.

Front face and back forms shall be used for handicap ramp concrete vertical curbhead construction.

No payment will be made for any removal beyond the limits marked by the Engineer. Payment for concrete shall include the cost of fibermesh reinforcement at crosspans, ramp drives and alley aprons. Fibermesh reinforcement is required for 8" Concrete.

No separate payment will be made for inscribing curb face at water and sewer service crossings, but shall be included in the work.

No separate payment will be made for steel reinforcement but shall be included in the work.

No separate payment will be made for cold weather protection, expansion material, pigmentation, curing compound, sealant and incidentals but shall be included in the work. Minor items and minor details are not listed but shall be part of the complete contract.

No additional payment will be made to the Contractor for the use of high early strength concrete, unless otherwise noted.

No additional payment will be made to the contractor for the use of concrete shuttle buggies and shall be incidental and included in the work.

The following items in this section are representative of all work items required and therefore are not referred to by proposal or item number for each individual work item.

MOBILIZATION

1. Scope of Work

This item consists of the mobilization of personnel, equipment, and supplies to the project sites. This item also includes obtaining of all permits and conformance to all permit requirements, bonds, insurance, public and media relations, administrative items, furnishing and erecting temporary construction facilities, project signs, and all other work and operations that must be performed or costs incurred before beginning work on the project site, as well as demobilization and project closeout, all as required for the complete and proper performance and completion of the work. All gasoline, oil, fuel hydraulic fluids, and other contaminating fluids shall be properly removed and disposed of offsite. No objectionable materials shall be allowed to blow from, wash off or drain off of the staging area on to adjacent property.

2. Method of Measurement and Payment

Payment will be made based on the lump sum price in the Bid Form.

Bid price for mobilization shall not exceed, in any case, 6% of the total bid price (Items 4 through 33) for the project.

EROSION CONTROL

1. Scope of Work

This work shall consist of furnishing all labor, materials, equipment, installation and removal of curb socks, concrete washout, silt fence, and other BMPs as required by the Project Manager. Contractor shall provide submittal sheet for approval of BMPs as requested.

2. Method of Measurement and Payment

Payment for EROSION CONTROL shall be made on a lump sum basis and shall be full compensation to all work necessary to complete the item.

UNCLASSIFIED EXCAVATION

1. Scope of Work

This work shall consist of furnishing all labor, materials, equipment for UNCLASSIFIED EXCAVATION and shall include saw cutting, removal, loading, and haul of existing crusher fines and landscape fabric to a disposal site. The work shall also include removal, loading, haul and disposal of existing base course sub base and other miscellaneous material to the depth of final finished subgrade. The work shall include subgrade preparation to a minimum depth of 12” as specified on the drawings or in the specifications and recompacted in accordance with the city of Louisville Construction Standards, unless otherwise noted. Existing asphalt shall become the property of the Contractor.

2. Method of Measurement and Payment

Payment will be made on a field measured removed square yard basis. Payment for UNCLASSIFIED EXCAVATION and shall be full compensation of all work necessary to complete the item.

No payment will be made for over excavation beyond plan limits.

IMPORTED BORROW (COMPLETE IN PLACE)

1. Scope of Work

This work shall consist of furnishing all labor, materials, equipment, loading, haul, placing, shaping, and compaction of IMPORTED BORROW (COMPLETE IN PLACE). Imported Borrow shall be **recycled concrete base** course and conform to the requirements of Colorado Department of Transportation Standard Specifications for Road and Bridge Construction, 2011 Edition Class 6 Classification for Aggregate Base Course Section 703. Samples and test data on material to be used shall be submitted to the Engineer stating the borrow meets these requirements.

2. Method of Measurement and Payment

Payment will be paid by the ton for IMPORTED BORROW (COMPLETE IN PLACE) and shall be full compensation for all work necessary to complete the item.

REMOVE 6” CONCRETE

1. Scope of Work

Work shall consist of furnishing all labor, materials, equipment, demolition, saw cutting, removal of concrete, excavation, load, haul, disposal, incidentals and construction necessary to provide REMOVE 6” CONCRETE to the limits as shown on the plans and as directed by the Engineer.

2. Method of Measurement and Payment

Payment for REMOVE 6” CONCRETE will be made on a field measured square foot basis and shall be full compensation for all work necessary to complete the item.

NEW 6” CONCRETE

1. Scope of Work

Work shall consist of furnishing all labor, materials, equipment, demolition, saw cutting, removal of subgrade material, excavation, concrete removal, subgrade preparation, load, haul, disposal, compaction, backfill, grading, concrete, admixtures, expansion material, steel reinforcement, curing compound, sealant, incidentals and construction necessary to provide NEW 6” CONCRETE to the limits as shown on the plans and as directed by the Engineer.

2. Method of Measurement and Payment

Payment for NEW 6” CONCRETE will be made on a field measured square foot basis and shall be full compensation for all work necessary to complete the item.

NEW 8'' CONCRETE WITH FIBERMESH

1. Scope of Work

Work shall consist of furnishing all labor, materials, equipment, demolition, saw cutting, removal of subgrade material, excavation, concrete removal, subgrade preparation, load, haul, disposal, compaction, furnish and install fill material, backfill, grading, concrete, admixtures, fibermesh, expansion material, steel reinforcement, curing compound, sealant, incidentals and construction necessary to provide NEW 8" CONCRETE WITH FIBERMESH to the limits as shown on the plans and as directed by the Engineer.

2. Method of Measurement and Payment

Payment for NEW 8" CONCRETE WITH FIBERMESH will be made on a field measured square foot basis and shall be full compensation for all work necessary to complete the item.

NEW 30'' VERTICAL CURB AND GUTTER

1. Scope of Work

Work shall consist of furnishing all labor, materials, equipment, demolition, saw cutting, removal of subgrade material, excavation, concrete removal, subgrade preparation, load, haul, disposal, compaction, furnish and install fill material, backfill, grading, concrete, admixtures, fibermesh, expansion material, steel reinforcement, curing compound, sealant, incidentals and construction necessary to provide NEW 30'' VERTICAL CURB AND GUTTER to the limits as shown on the plans and as directed by the Engineer.

2. Method of Measurement and Payment

Payment for NEW 30'' VERTICAL CURB AND GUTTER will be made on a field measured lineal foot basis and shall be full compensation for all work necessary to complete the item.

REMOVE 30" CURB AND GUTTER

1. Scope of Work

Work shall consist of furnishing all labor, materials, equipment, demolition, saw cutting, removal of concrete, excavation, load, haul, disposal, incidentals and construction necessary to provide REMOVE 30" CURB AND GUTTER to the limits as shown on the plans and as directed by the Engineer.

2. Method of Measurement and Payment

Payment for REMOVE 30" CURB AND GUTTER will be made on a field measured lineal foot basis and shall be full compensation for all work necessary to complete the item.

END OF SECTION 02 40 00

SECTION 02 41 00

DEMOLITION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Demolition, removal, salvage and disposal of existing site features, fences, structures and materials where indicated on the drawings and as specified in this section.

B. Demolition and removal of concrete foundations, sidewalks, concrete and asphaltic paving

1.2 RELATED SECTIONS

A. Section 01 50 00 - Temporary Construction Facilities

B. Section 31 00 00 - Earthwork

C. Section 32 92 11 - Seeding

1.3 SUBMITTALS

A. Permits and Certificates.

1. Permits and notices authorizing building demolition.

2. Certificates of severance of utility service.

3. Permit for transport and disposal of debris.

1.4 PROJECT RECORD DOCUMENTS

A. Submit under provisions of Division One specifications.

B. Accurately record actual locations of capped utilities and subsurface obstructions.

1.5 REGULATORY REQUIREMENTS

A. Conform to applicable State and local codes for demolition of structures, safety of adjacent structures, dust control, and disposal.

B. Obtain required permits from authorities.

C. Notify affected utility companies before starting work and comply with their requirements.

D. Do not close or obstruct roadways, sidewalks, or hydrants without written permission from Owner.

E. Conform to applicable regulatory procedures when discovering hazardous or contaminated materials.

1.6 SCHEDULING

A. Schedule and submit under provisions of Division One specifications.

B. Provide detailed descriptions for demolition and removal procedures.

PART 2 - PRODUCTS

2.1 FILL MATERIALS

A. Fill Material: Use on site fill material under provisions of Section 31 00 00.

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify areas to be demolished are unoccupied and discontinued in use.

B. Do not commence work until conditions are acceptable to Engineer.

3.2 PREPARATION

A. Provide, erect, and maintain temporary barriers, enclosures, security fences and shoring at demolition locations in accordance with Division One and other related specifications to protect personnel.

B. Protect existing structures and utilities which are not to be demolished.

C. Provide temporary wiring and connections to maintain existing telephone, electrical, instrumentation and control systems in service during construction.

D. Protect designated trees and plants from damage.

E. Mark location of existing utilities.

3.3 GENERAL REQUIREMENTS

A. Sprinkle Work with water to minimize dust where applicable. Provide hoses and water connections for this purpose.

B. Do not use water to extent causing flooding, contaminated runoff, or icing.

C. Remove demolished material from the site.

D. Repair damage to adjacent structures.

E. Remove existing exposed piping and electrical wiring and conduit to be abandoned to structural surface, cut flush, and finish to match existing surfaces.

F. Remove buried piping, wiring, and conduit to be abandoned as required for the Work. Plug the remainder flush.

3.4 DISPOSAL

A. Do not store or burn waste materials on-site.

B. Transport demolition debris to designated off-site disposal area.

3.5 SITE DEMOLITION

A. Disconnect, remove, cap and identify designated utilities within demolition area.

B. Remove asphalt paving, parkway, curb, gutter, sidewalk and other concrete work to facilitate construction. Remove concrete to nearest joint beyond demolition area.

C. Remove and dispose of all existing site fencing

D. Remove storm sewer items where shown on the drawings.

E. Backfill areas excavated caused as a result of demolition, in accordance with Section 31 00 00.

F. Rough grade and compact areas affected by demolition to maintain site grades and contours as shown on drawings.

G. Remove demolished materials from site.

H. Do not burn or bury materials on site, unless otherwise directed by Owner. Leave site in clean condition.

3.6 ELECTRICAL DEMOLITION

A. General:

1. Remove, relocate and extend existing installation to accommodate new construction.

B. Existing electrical service:

1. Work by Public Service Company

a. Remove and relocate light poles as detailed on the electrical plans and specifications.

2. Work by Contractor:

   a. Provide standby power conduit and cables for temporary use during construction. Completely remove temporary service after new permanent service is installed.

3.7 TREE REMOVAL

A. Use caution to prevent disturbances to the roots of existing trees that are to remain. Stumps of trees that are removed shall be ground to a depth of two feet below surface elevation, using caution to avoid damage to any utilities. Coordinate with landscape architect.

END OF SECTION 02 41 00

SECTION 02 60 00

CONSTRUCTION ZONE TRAFFIC CONTROL

PART 1 - GENERAL

1.1 DESCRIPTION

Construction zone traffic control shall apply to any and all construction and related construction on the Pond Liner Replacement Project to complete the work.

This work consist of furnishing, installing, moving, maintaining and removing temporary traffic signs, advance warning arrow panels, variable message boards, flashing portable beacons, barricades, channelizing devices, delineators, and flagging as required by the Manual on Uniform traffic Control Devices for Streets and Highways and the Colorado Supplement thereto, in accordance with the plans and these specifications. When a device is not in use, the contractor may remove it from the project for the period it is not needed. Devices temporarily not in use shall not be stored in the roadway or walkways.

1.2 GENERAL REQUIREMENTS

Pertinent provisions of the following listed documents shall apply to this work, except as they may be modified herein, and are hereby made a part of this specification to the extent required.

A. Standard Specifications for Road and Bridge Construction by the Colorado Department of Transportation (CDOT), Section 630, Construction Zone Traffic Control, and Section 627, Pavement Marking.

B. Manual on Uniform Traffic Control Devices for Streets and Highways, FHWA, and the latest revision of the Colorado Supplement thereto.

C. CDOT Standard Plan S-630-1 (sheets 8 and 9), S-630-2 and S-630-3.

1.3 SUBMITTALS

A. Five (5) CONTRACT DAYS prior to the start of any construction activity, submit copies of the following:

1. Proposed detour plan and traffic control elements as described under Section 3.2.
2. Schedule of proposed duration and sequence of operations.

PART 2 - PRODUCTS

2.1 MATERIALS

A. In accordance with CDOT Section 627.02 regarding pavement marking tape.
B. In accordance with CDOT Section 630.02 regarding signs and barricades.
C. In accordance with CDOT Section 630.05 regarding traffic cones.

PART 3 - EXECUTION

3.1 GENERAL

In accordance with CDOT, Subsection 630.09 through Subsection 630.13, Construction Zone Traffic Control - Construction Requirements, except as modified herein.

In accordance with CDOT, Section 627.10, Pavement Marking Tape.

3.2 METHOD OF HANDLING TRAFFIC

Delete the second paragraph of Subsection 630.09.

Subsection 630.08 shall include the following:

ALL TRAFFIC CONTROL DEVICES MUST BE IN GOOD AND CLEAR CONDITION, INSTALLED PRIOR TO ALL AND ANY CONSTRUCTION ACTIVITY. THE ENGINEER MAY DIRECT MINOR MODIFICATIONS TO THE APPROVED TRAFFIC CONTROL PLAN BASED ON OBSERVATIONS OF FIELD CONDITIONS AT ANY TIME OR SUSPEND WORK UNTIL APPLICABLE SAFETY MEASURES ARE TAKEN WITHOUT ANY CHANGES TO THE COST OF THE PROJECT.

DEFICIENCIES IN TRAFFIC CONTROL SHALL BE CORRRECTED IMMEDIATELY OR WORK SHALL BE SUSPENDED. THE OWNER WILL REQUEST A REDUCTION IN COST IF TRAFFIC CONTROL IS NOT PROVIDED PER APPROVED METHOD OF HANDLING TRAFFIC.

In Subsection 630.09, add the following:

The City Engineer must approve all street closures. At least 24 hours before a street closure, it shall be the responsibility of the Contractor to notify the following agencies:

1. Police Department 303-441-4444
2. Louisville Fire Protection District 303-666-8809
3. City of Louisville Operations and Maintenance Department 303-335-4750
4. AMR Ambulance Service 303-665-6623
5. Boulder Valley School District 303-447-1010
6. Boulder County Communications 303-441-4444
7. Regional Transportation District 303-443-0100

In addition to the above agencies and organizations, the Contractor shall notify the Post Office and local Trash Companies.

At the completion of work, the agencies must be notified of resumption of normal service.

Changes to the approved traffic control plan necessitated by unforeseen circumstances, such as utility conflicts, must be reviewed and authorized by the Engineer.

Contractor shall include the cost for purchasing “NO PARKING” signs necessary to restrict parking within the work limits. "NO PARKING" signs shall be placed not less than 24 hours in advance of commencement of work in a work zone. The sign shall state, for example "No Parking 7 a.m. to 7 p.m.", together with the day of the week.

A copy of the Right of Way Permit and the approved MHT shall be available at the project site in order that City personnel may verify compliance with the specified traffic control requirements.

The specified elements of the MHT shall also include the number of flag persons to be used.

Approval of the proposed MHT does not relieve the Contractor of liability specifically assigned to him under the contract. The Contractor shall erect and maintain warning lights, signs, barricades, and sufficient safeguards around all excavations, embankments, and obstructions.

The Contractor shall coordinate and cooperate fully with agents of the City of Louisville, utility owners, and other contractors. He shall also coordinate and cooperate fully with agents of other entities to assure adequate and proper traffic control is provided.

The Contractor is advised that other significant construction might be occurring in the area and that he shall cooperate fully with the City of Louisville and all other contractors occupying public right-of-way in terms of work location, work schedule and traffic control requirements.

Through traffic shall be carried on a paved surface at all times unless otherwise approved by the Engineer. The Contractor shall maintain at his own expense that portion of the existing roadway being used to carry traffic so that traffic may readily pass over it.

All traffic control devices supplied by the contractor must be maintained in good and clear condition and meet minimum national standards for reflectivity. Devices shall comply with minimum size and shape as specified in the MUTCD. **No bent, broken, damaged, defaced, dented, dirty, discolored, faded, non-conforming traffic control devices and/or supports shall be used in this project.**

All traffic control devices shall bear the name, address, and phone number of the barricade company that owns them. The phone number shall be a 24-hour a day dispatched hotline in the event an emergency situation occurs where additional devices are needed or existing devices must be removed.

The Contractor shall install construction traffic control devices in locations that do not block or impede sidewalks for pedestrians, or bicyclists or other existing traffic control devices. This strategy shall include, but is not limited to, strapping signs to streetlight or utility poles. Devices may only be attached to wooden street light and utility poles.

All existing traffic control devices, including traffic signs and pavement markings that are compatible with the construction zone traffic control shall remain visible and fully operational. If any devices are incompatible with the temporary construction traffic control devices, they shall be covered, relocated or removed.

The Contractor shall not be allowed to begin operations, which require traffic control until the setup of traffic control devices is completed. Also, the Contractor shall clear his operations allowing 30 minutes for removals of traffic control devices in accordance with the designated hours of work and roadway closures.

During non-working hours, the roadways shall be restored to safe pre-construction travel conditions for the free flow of traffic. Any maintenance required to restore the roadways to this condition, including pavement patching and grading, shall be done prior to opening the areas to traffic or completing work for the day. Temporary pavement markings shall be placed at the direction of the Engineer. All costs incidental to the foregoing requirements in this paragraph shall be included in the original contract prices for the project, including any additional traffic control items required for haul routes into or away from the project.

Any existing signs damaged due to Contractor operations shall be replaced in kind or repaired to the satisfaction of the Engineer by the Contractor at no cost to the project.

Any existing traffic signs removed or relocated during construction as part of the approved traffic control plan are the responsibility of the Contractor to reset upon completion of construction, unless noted otherwise in the plans or specifications. Existing signs may not be removed without prior approval of the Engineer.

The Contractor shall not have construction equipment or materials in the lanes open to traffic at any time. Brief lane closures (of 5 minutes or less), as approved by the Engineer, may be permitted for moving construction equipment. Flaggers will be required for such operations. All personal vehicles and construction equipment parking will be prohibited where it conflicts with safety, access, or flow of traffic.

During non-construction periods (evenings, weekends, holidays, etc.) all work shall be adequately protected to ensure the safety of vehicular and pedestrian traffic, using materials meeting the approval of the Engineer.

Lane widths in work zones shall be 12 feet, minimum.

The vertical cut or fill, including rotomilling over 1" height differences resulting from construction operations adjacent to traffic lanes shall be temporarily sloped at a 3:1 or flatter slope, or as shown on the typical plan section, and barrier protected, or delineated at 25-foot intervals immediately after grading or removal operations. The 3:1 slope requirement applies to roadway construction projects and would not generally apply to

utility construction or rehabilitation projects. Slope or shoring requirements for these type projects shall be reviewed on a project by project basis.

The Contractor shall equip all vehicles operating within the moving lanes with flashing amber lights visible from all directions.

Any portable device that requires weight to prevent overturning shall be weighted with appropriate sized sand bags. Rocks, asphalt, or any other debris will not be permitted.

MAINTENANCE OF ACCESS

The Contractor shall maintain access to the parking lot at all times unless otherwise approved by the Engineer. During non working hours the Contractor shall maintain access to the roadways and driveways within the construction zone with temporary ramps.

Protection of Adjacent Property and Drives. The Contractor shall use extra care so as to minimize disruption to adjacent property and drives and shall leave the construction site clean, with all debris and concrete removed. If the Engineer determines that the Contractor did not exercise reasonable care to protect the parking areas or street sections from unnecessary damage while accomplishing his work, the Contractor will be required to restore the damaged items to their original condition at his own expense. The Contractor will not be permitted to operate trucks and equipment or store equipment and supplies on private property unless he has written permission to do so.

Work Limits. Work limits shall be marked by the Contractor with orange plastic fencing in pedestrian areas and other suitable materials in the street prior to beginning work. He shall confine all work to within these limits except as provided in the contract documents. If work limits are not established by permit or contract documents, said limits shall be determined by the Engineer and shall be suitably marked by the Contractor, prior to beginning work.

Should the Contractor be unable to obtain written approval of property owners or occupants, documentation of a “Good Faith Effort” to obtain said approval must be submitted.

CONTACTS

The Contractor shall notify the Owner following 72 hours prior to beginning construction and 48 hours prior to changing traffic patterns. The Contractor shall also notify these persons in case of an emergency.

City of Louisville Operations Division – 303-335-4750
City of Louisville Police Department – Boulder Dispatch 303-441-4444
City of Louisville Fire Department - Fire Marshall 303-666-8809

3.3 TRAFFIC CONTROL MANAGEMENT

Subsection 630.10(6) shall include the following: A day shall be defined as the time from 12:00 midnight to 12:00 midnight. The log shall list all devices and personnel

deployed within the limits of construction for each day and shall be available for review by the Engineer at all times.

In subsection 630.09, first paragraph, delete the first sentence and replace with the following:

The Contractor shall designate an individual, other than the superintendent, to be the traffic control supervisor.

In subsection 630.09, second paragraph, delete parts (1), (5) and (6) and replace with the following:

(1) Preparing, revising, and implementing each required method of handling traffic in accordance with the traffic control plan.

(5) Preparing traffic control diary on every calendar day traffic control devices are in use. This dairy shall be submitted to the Engineer daily and become a part of the Department's project records.

(6) Inspecting traffic control devices on every calendar day that traffic control devices are in use, masked, or turned away from traffic. These inspections shall include at least one night inspection per week. These inspections shall be performed by the traffic control supervisor or another representative who is certified as a worksite traffic supervisor.

(10) Supervising the cleaning and maintenance of all traffic control devices.

In subsection 630.09, delete the third paragraph and replace with the following:

Traffic control management shall be provided by a certified traffic control supervisor on a 24-hour-per-day basis. The traffic control supervisor or another representative who is certified as a worksite traffic supervisor shall be available and reasonably accessible to the job site on every working day, on call at all times, and available upon The Engineer's request at other than normal working hours. During non-work periods, the traffic control supervisor or another representative shall respond to the job site within 45 minutes. The traffic control supervisor or another representative who is certified as a worksite traffic control supervisor shall arrive at the job site within two hours after notification. The Contractor shall maintain a 24-hour telephone number at which the traffic control supervisor can be contacted. The traffic control supervisor shall not act as a flagger except in an emergency or in relief for short periods of time.

In subsection 630.11, delete the first paragraph and replace with the following:

630.11 General. Portable construction traffic signs shall be removed when temporarily not required. Permanently mounted construction traffic signs shall be masked or turned away form traffic when temporarily not required. When work is suspended, or the project is in free time, and there is no condition requiring traffic control devices or construction traffic signs, all of the construction traffic signs shall be masked or turned away from traffic. If this condition is to exist for more than 30 days, all construction traffic signs shall be removed. When storing portable signs or supports within the project they shall be stored laying flat and

the location shall be at least four feet outside the edge of the shoulder and not on landscaped areas or sidewalks. When masking is used, it shall be done in accordance with subsection 630.10.

The retroreflective surfaces of all signs and other traffic control devices shall be cleaned as frequently as necessary to preserve their legibility and retro reflectivity. However, all devices shall be cleaned a minimum of once every two weeks.

In subsection 630.12, first paragraph, delete the fifth sentence and replace with the following:

When storing portable signs or supports within the project they shall be removed beyond the clear zone and shall not be visible to traffic. All storage areas shall be approved. The minimum clear zone distance shall be 18 feet, measured from the edge of traveled way. If the signs cannot be stored at least 18 feet from the traveled way, they shall be removed. Under no circumstances shall signs be stored on the paved surface.

3.4 FLAGGING

Subsection 630.13(a) shall include the following:

The flagger's STOP/SLOW sign paddle shall be 18 inches with letters six inches high.

Delete Subsection 630.13(a) and replace with the following:

(a) The Contractor shall provide all flagging through the project necessary to assure proper safety to traffic. All flagging personnel shall be certified by the American Traffic Safety Services Association (ATSSA).

PART 4 - MEASUREMENT AND PAYMENT

4.1 Delete Subsection 630.14, 630.15 and replace with the following:

4.2 CONSTRUCTION ZONE TRAFFIC CONTROL

Construction Zone Traffic Control shall be paid for at the lump sum price indicated in the Schedule of Unit Prices. The lump sum price shall be full compensation for flagging and for furnishing, erecting, cleaning, maintaining, moving, removing and disposing of construction traffic control devices, including labor, material equipment and incidentals necessary to complete the work. All construction traffic control devices, which are not permanently incorporated into the project, will remain the property of the Contractor.

Traffic Control Supervisor will not be paid for separately, but shall be included in the work.

Preparation of the MHT will not be paid for separately but shall be included in the work.

Construction fencing and temporary walkways will not be paid for separately but shall be included in the work.

Construction phasing and staging will not be paid for separately but shall be included in the work.

End of Section 02 60 00

SECTION 31 11 00

SITE PREPARATION

PART 1 - GENERAL

1.1 WORK INCLUDED

A. Remove and dispose according to plans all site elements including trees, shrubs, fences, pavements, pipes, utilities, wells and structures indicated to be removed. If there is a question as to the removal of an item, contact the Owner's Representative prior to removal.

B. Clear area to be graded of plant life, grass, gravel and surface debris.

C. Remove all irrigation heads and valves and reuse or return to owner.

D. Remove all signs made unnecessary by construction and reuse or return to Owner. Remove no signs which belong to another government agency.

1.2 RELATED WORK

A. Section 31 00 00: Earthwork.

B. Drawings and general provisions of the Construction Contract, and Division-01 Specification sections apply to work of this section.

1.3 PROTECTION

A. Protect bench marks, existing structures, roads, sidewalks, paving, and curbs that are to remain.

B. Protect above or below grade utilities that are to remain.

C. Protect all trees to remain using a strong barrier at least ten feet from the trunk throughout construction.

D. Maintain and protect existing utilities to remain which pass through work area.

PART 2 - PRODUCTS

2.1 MATERIALS TO BE REMOVED

A. All items within the construction area indicated to be removed and not indicated for reinstallation or removal by Owner shall become the property of the Contractor who shall remove them from the site.

PART 3 - EXECUTION

3.1 PREPARATION

A. Locate and identify all existing utilities prior to any demolition. Arrange and pay for disconnecting, removing, and capping utility services within areas of demolition if required. Notify the affected utility company in advance and obtain approval before starting this work.

B. Place markers to indicate location of disconnected services. Identify service lines and capping locations on project record documents.

3.2 DEMOLITION

A. Remove existing materials as indicated on plan. Where new concrete wall, concrete paving, or asphalt adjoin existing asphalt, cut existing asphalt to a straight line using a masonry saw or similar tool.

B. At areas to be landscaped, remove existing paving and base course in preparation for finish grading under Earthwork.

C. At areas to be graded, landscaped, or paved, clear and grub area prior to grading operations to remove all rocks, roots, stolons, seeds, vegetative and deleterious material. Contractor to remove from site.

D. Site Clearing: Limits of site clearing are as indicated on the drawings. The Contractor shall repair any injury to vegetation or other objects beyond the limits of work as directed by the Owner, or replace the items without additional compensation for such repair or replacement. Complete repairs within two days after the cutting. Paint required for cut or scarred surfaces of trees or shrubs designated to remain shall be an approved asphaltum base paint prepared especially for tree surgery.

1. Cut, mow, rake, collect, haul, and dispose of all vegetation not designated to remain within the limits of the work. The stumps of all trees, large brush (larger than 4 inches) and major roots shall be grubbed and chipped. Chips shall not have any nominal dimension larger than 4 inches in any direction. All material which cannot be chipped shall be removed from the site and disposed of in a legal manner in accordance with local regulations.
2. Use caution to prevent disturbances to the roots of existing trees that are to remain. Stumps of trees that are removed shall be ground to a depth of two feet below surface elevation, using caution to avoid damage to any utilities. Coordinate with landscape architect.

E. Remove all fences, wire, posts and rails. Fill post holes.

F. Remove all underground tanks and cisterns. Fill holes.

G. Remove structures including foundation and surrounding paving and appurtenances unless specified to remain.

H. Conduct demolition operations and debris removal in a manner to ensure minimum interference with streets, walks, and other adjacent facilities. Do not close, block, or otherwise obstruct streets, walks, or other facilities without written permission from authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.

I. Provide, erect and maintain barricades, lighting, and guard rails as required by applicable regulatory requirements to protect the public and workers.

J. If unanticipated mechanical, electrical, or structural elements which conflict with intended function or design are encountered, investigate the nature and extent of the conflict and submit to the Owner's Representative in written, accurate detail. Pending receipt of directive from Owner's Representative rearrange demolition schedule as necessary to continue overall job progress without delay.

3.3 CLEAN UP AND REPAIR

A. During the demolition operations, keep the premises free from accumulated waste material or rubbish caused by employees or work, and at the completion of the work remove rubbish, tools, and surplus material and leave the premises clean and ready for subsequent work. Promptly remove waste, rubbish, or debris from the site.

B. Repair all demolition performed in excess of that required and all damage to remaining elements due to demolition, at no cost to the Owner.

END OF SECTION 31 11 00

SECTION 31 00 00

EARTHWORK

PART 1- GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, and Division One and other related specification sections apply to work of this section.

1.2 SECTION INCLUDES

A. Clearing, grubbing and site preparation

B. Removal and disposal of debris

C. Handling, storage, transportation, and disposal of excavated material

D. Sheeting, shoring, bracing and protection work

E. Pumping and dewatering as required or necessary

F. Backfilling

G. Pipe embedment

H. Construction of fills and embankments

I. Excavation for buildings & structures

J. Pavement Subgrade preparation

K. Trench Stabilization

L. Final grading

M. Slope Stabilization

N. Erosion Control

O. Appurtenant work

1.3 RELATED SECTIONS

A. Section 32 13 00 – Rigid Paving

1.4 REFERENCES

A. AASHTO – American Association of State Highway and Transportation Officials

B. ASTM – American Society for Testing and Materials

1. C33 – Concrete Aggregates
2. C136 – Sieve Analysis of Fine and Coarse Aggregates
3. D698 – Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 5.5 lb Rammer and 12-Inch Drop
4. D1241 – Material for Soil Aggregate Subbase, Base and Surface Courses
5. D4253 – Test Methods for Maximum Index Density of Soils and Unit Weight of Soils Using a Vibratory Table
6. D4254 – Test Methods for Minimum Index Density and Unit Weight of Soils and Calculations of Relative Density
7. D6938 – Test Method for In-Place Density and Water Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth)

C. ACI – American Concrete Institute

1. 229 – Controlled Low-Strength Materials

D. CABO/ANSI – Council of American Building Officials/American National Standards Institute

1. A117.1 – Accessible and Useable Buildings and Facilities Standards

E. CDOT – Colorado Department of Transportation

F. OSHA – Occupational Safety and Health Administration

1.5 SUBMITTALS

A. Submit under provisions of Division One specifications.

B. Product Data: Submit on all products or materials supplied herein

C. Test Reports: Indicate supplier, sieve analysis, optimum moisture content and density in accordance with ASTM D698 if appropriate for crushed rock or gravel, pipe embedment and material for fills and embankment

1.6 REGULATORY REQUIREMENTS

A. Burning will not be allowed on-site. Comply with all applicable codes, regulations, and laws.

B. Comply with applicable requirements of CABO/ANSI A117.1 for accessibility requirements related to walks, ramps, parking areas, drives, curb ramps, etc.

C. Obtain and comply with all requirements of City of Louisville and CDPHE Stormwater and/or Groundwater Discharge Permits, as required.

D. For public improvements only, in the event of a conflict between municipal standards and this specification, municipal standards for products and installation will govern.

E. Excavation work shall be performed in compliance with City of Louisville and current OSHA requirements.

1.7 ENVIRONMENTAL REQUIREMENTS

A. Protect adjacent structures and surrounding areas from damage during excavation, filling, and backfilling

B. Protect work from erosion or other similar types of damage until the project has been accepted. Leave protection in place for building contractors use.

C. Do not backfill or construct fills during freezing weather. Backfill or construct fills only when temperature is 35°F and rising

D. Do not use frozen materials, snow, or ice in any backfill or fill area

E. Do not backfill or construct fill on frozen surfaces

F. Protect excavated material from becoming frozen

G. Do not remove trees from outside excavation or fill areas unless authorized by the Owner; protect from permanent damage by construction activities

H. Provide temporary bridges for roadways, walkways, driveways, etc.

1.8 QUALITY ASSURANCE

A. All imported material to be free of hazardous and organic wastes, “clean” as defined by EPA, and approved for its intended use by the Owner or project Geotechnical Owner.

PART 2 - PRODUCTS

1.9 MATERIALS

A. General - Soil materials, whether from sources on or off the site must be approved by the soils Owner as suitable for intended use and specifically for required location or purpose.

B. Classification of Excavated Materials:

1. No classification applies. Remove and handle all excavated materials regardless of its type, character, composition, condition, or depth. This includes the sandstones and claystones encountered onsite which can be ripped from place using a Caterpillar Model 235 trackhoe or equivalent, rippers, chisels, breaker bars, and/or other hand or mechanical methods.
2. Excavation of rock that cannot be excavated as outlined above will be considered rock excavation and may require alternative means that may include drilling, blasting, or expansive compounds.
3. Transport and properly dispose of any rubble and waste materials found in excavation off the Owner’s property

a. If transite or asbestos containing materials are found in excavation, notify the Owner immediately and comply with special handling requirements.

C. Fills and Embankments

1. To the maximum extent practical use excess earth from onsite excavation for fills and embankments.
2. Free from rocks or stones larger than 12 inch in greatest dimension and free from brush, stumps, logs, roots, debris, and organic and other deleterious materials
3. Fill and embankment material must be acceptable to Owner
4. No rocks or stones larger than 6 inch in upper 18 inches of fill or embankment. Where allowed, distribute rocks and stones through the fill to not interfere with compaction.

D. Imported Fill for Fills and Embankments:

1. The contractor is responsible for obtaining additional material for fills and embankments as necessary to meet the requirements shown on the plans.
2. Imported fill conforming to the following:

a. Gradation (percent finer by weight ASTM C136): 3” – 100% passing, No. 4 Sieve – 50-100% passing, and No. 200 Sieve – 35% passing (max)
b. Liquid Limit: 35 (max), Plasticity Index: 15 (max), Group Index: 10 (max)

E. Structural Fill

1. Imported structural fill, such as a ½-inch minus, CDOT Class 7 Aggregate Road Base, conforming to the following:

a. Gradation: 1” – 100% passing (percent finer by weight ASTM C136), No. 8 Sieve – 20-85% passing, and No. 200 Sieve – 20% (max)
b. Liquid Limit: 35 (max), Plasticity Index: 15 (max), R- Value: 50 (min)

F. Topsoil

1. Topsoil is defined as fertile, friable, natural loam, surface soil, reasonably free of subsoil, clay lumps, brush, weeds and other litter, and free of rocks, stumps, stones larger than 2" in any dimension, and other extraneous or toxic matter harmful to plant growth for areas to be seeded or planted. Coordinate testing requirements with Landscape Architect and Owner.

G. Grubbings
1. Grubbings are defined as the first 1 inch of surface vegetation and topsoil consisting of primarily existing grass groundcover free of roots, brush, and other objectionable material and debris.

H. Pipe Embedment: Graded gravel

1. Comply with City of Louisville requirements for pipe embedment for public utilities.
2. 3/4” – 1” Crushed rock – AASHTO 57/67

Sieve Size (Inch)	Percent Passing by Weight
1	100
3/4”	90-100
1/2”	25-60
3/8”	20-55
NO. 4	0-10
NO. 8	0-5
NO. 200	0-2

3. Squeegee

Sieve Size	Percent Passing by Weight
3/8”	100
No. 4	85-100
No. 8	30-70
No. 16	5-40
No. 30	0-15
No. 50	0-10
No. 100	0-5
No. 200	<1

I. Compacted Trench Backfill

1. Job excavated material finely divided, free of debris, organic material, and stones larger than 6 inch in greatest dimension without masses of moist, stiff clay, or topsoil

J. Controlled Low Strength Material (Flow Fill)

1. Comply with City of Louisville requirements and ACI 229 for the use of flowable fill within the right-of-way or for public utility trench backfill.
2. Product shall be a lean, sand-cement slurry, “flowable fill” or similar material with a 28-day unconfined compressive strength between 50 and 200 psi.

K. Non-woven geotextile fabric

1. Needle-punched nonwoven geotextile composed of polypropylene fibers, which are formed into a stable network such that the fibers retain their relative position. Product must be inert to biological degradation and resists naturally encountered chemicals, alkalis, and acids. Product must meet AASHTO M288-06 Class 3 for elongation > 50%.

a. Mirafi 140N or accepted substitution

1.10 EROSION AND SEDIMENT CONTROL ACCESSORIES

A. Comply with all applicable municipal or local Municipal Separate Storm Sewer System (MS4) requirements.

B. Silt Fence Fabric: woven polypropylene

1. Mirafi 100X, "Envirofence"
2. Or accepted substitution

C. Temporary Slope Stabilization Mat (short term): 1.5 pound photodegradable polypropylene top and bottom nets, 100% straw fiber matrix, with a longevity of 12 months.

1. North American Green S150
2. Or accepted substitution

PART 2 EXECUTION

2.1 EXAMINATION

A. Field verify the location of all underground utilities, pipelines and structures prior to excavation

2.2 PERFORMANCE—GENERAL

A. Contractor to verify quantities of cuts and fills and perform all earthwork required to meet the grades as shown on the plans, including but not limited to, additional import or export required to handle compaction, building and pavement subgrade preparation, and pipe bedding.

B. Perform work in a safe and proper manner with appropriate precautions against hazard

C. Provide adequate working space and clearances for work performed within excavations and for installation and removal of utilities

D. Contain all construction activity on the designated site and within the limits of work. Cost of restoration off site will be the responsibility of the Contractor

2.3 PRESERVATION OF TREES

A. Do not remove trees outside fill or excavated areas, except as authorized by Owner

B. Protect trees and their roots within the drip line that are to remain from permanent damage by construction operation

C. Trim standing trees in conflict with construction operations as directed by Owner and Landscape Architect

2.4 PREPARATION

A. Clear all site areas within the limits of work of grasses, roots, brush, and other objectionable material and debris.

B. Strip subgrade for fills and embankments of surface vegetation, sod, tree stumps and organic topsoil. Strip and stockpile all on-site material meeting the topsoil definition for all areas receiving grading where shown on drawings

C. Remove all waste materials from site and dispose. Stockpile all acceptable grubbings for reuse in revegetation areas.

D. Remove debris including all demolished trees, underbrush, stumps, roots and other combustible materials from site and dispose of off-site; on-site burning is not permitted

2.5 TOPSOIL

A. At the completion of work in each area, place and grade topsoil to maintain gradient as indicated and required.

B. Clean topsoil, free of plants and seed will be spread to 4 inch minimum depth, or as specified by landscaping specifications and plans, whichever is greater, for areas of the site as detailed by the landscape plans.

C. Reuse grubbings and surface topsoil containing plants and seeds in designated revegetation areas only.

2.6 DEWATERING

A. Provide and maintain adequate dewatering equipment (including power supply, if necessary) to remove and dispose of surface and groundwater entering excavations, trenches, and other parts of the work

B. Keep each excavation dry during subgrade preparation and continually thereafter until the structure to be built or the pipe to be installed is completed to the extent that no damage from hydrostatic pressure, flotation, or other cause will result

C. Dewater excavations which extend to or below groundwater by lowering and keeping the groundwater level beneath such excavation at least 12 inches below the bottom of the excavation

D. Divert surface water or otherwise prevent it from entering excavated areas or trenches to the extent practical without damaging adjacent property

E. Maintain all drainage pipes, keep clean and free of sediment during construction and final cleanup

F. Dewatering to surface waterways requires Colorado Department of Public Health and Environment dewatering permit. Contractor must obtain dewatering permit and comply with discharge requirements therein, if necessary

2.7 SHEETING, SHORING AND BRACING

A. Provide proper and substantial sheeting, shoring, and bracing, in accordance with OSHA Standards as required, to prevent caving or sliding, to protect workmen and the Work, and to protect existing structures and facilities

B. Design and build sheeting, shoring, and bracing to withstand all loads that might be caused by earth movement or pressure, and to be rigid, maintaining shape and position under all circumstances

C. Do not pull trench sheeting before backfilling unless pipe strength is sufficient, to carry trench loads based on trench width to the back of sheeting

D. Do not brace sheeting left in place against the pipe, but support it in a manner that precludes concentrated loads or horizontal thrusts on pipe

E. Cross braces installed above the pipe to support sheeting may be removed after pipe embedment is completed

F. Contractor responsible for obtaining all required permits or easements for encroachments into the public right-of-way and for coordinating any encroachments onto adjacent properties.

2.8 TRENCH STABILIZATION

A. Thoroughly compact and consolidate subgrades for concrete structures, precast structures, and utility trench bottoms so they remain firm, dense and intact during required construction activities

B. Remove all mud and muck during excavation

C. Reinforce subgrades with crushed rock or gravel if they become mucky during construction activities

D. Finished elevation of stabilized subgrades are to be at or below subgrade elevations indicated on drawings

E. Allow no more than ½ inch depth of mud or muck to remain on trench bottoms when pipe bedding material is placed thereon

2.9 EXCAVATION FOR STRUCTURES

A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 0.10 foot

B. Remove existing unsuitable/uncompacted fill, old foundations, rubble/debris, soft or otherwise unsuitable material, and replace with suitable material in excavation

C. Provide dewatering and temporary drainage as required to keep excavations dry.

D. Reshape subgrade and wet as required

2.10 PAVEMENT OVEREXCAVATION AND SUBGRADE PREPARATION

A. Excavate subgrade for asphalt pavement areas per the lines, grades, and dimensions indicated on drawings within a tolerance of plus or minus 0.10 foot. Excavate subgrade for concrete pavement areas per the lines, grades, and dimensions indicated on drawings within a tolerance of plus or minus 0.05 foot.

B. Overexcavate and scarify existing soil as required under pavement areas, slabs, curbs and walks to meet the moisture and compaction specifications herein to depth shown on drawings.

C. Extend subgrade preparation a minimum of 1 foot beyond back of proposed pavement, slabs, curbs and walks.

D. Proof roll with a pneumatic tire equipment with a minimum axle load of 18 kips per axle a maximum of 24 hours prior to paving to locate any soft spots that exhibit instability and deflection beyond subgrade tolerances listed above. Areas that are observed to have soft spots in the subgrade, where deflection is not uniform or is excessive as determined by the Geotechnical Owner, shall be ripped, scarified, dried or wetted as necessary and recompacted to the requirements for density and moisture at the Contractor's expense. After recompaction, these areas shall be proof rolled again and all failures again corrected at the Contractor's expense.

E. If the Contractor fails to place the sub base, base course, or initial pavement course within 24 hours or the condition of the subgrade changes due to weather or other conditions, proof rolling and correction shall be performed again at the Contractor's expense.

2.11 FILLS AND EMBANKMENTS

A. Level and roll subgrade so surface materials will be compact and bond with the first layer of fill or embankment

B. Place in horizontal layers at maximum uncompacted depth per compaction specifications herein.

C. Spread and level material deposited in piles and windrows before compacting

D. Thoroughly compact each layer by rolling or other means acceptable to Geotechnical Owner to meet the moisture and compaction specifications herein.

E. Alter compaction methods if material fails to meet specified density

F. Where a trench passes through a fill or embankment, place and compact fill or embankment to 12 inch above the top of the pipe before excavating the trench

G. Add water and harrow, disc, blade, or otherwise work each layer to obtain the uniform moisture content and adequate compaction

H. Refer to geotechnical report for additional requirements for fill and subgrade preparation requirements.

2.12 COMPACTION

A. Place backfill and fill materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.

B. Place backfill and fill materials evenly on all sides of structures to required elevations. Place backfill and fill uniformly along the full length of each structure as described herein.

C. Refer to geotechnical report for additional requirements for site development material, subexcavation, compaction, etc.

D. Percentage of Maximum Dry Density Requirements: Moisture treat and compact soil to not less than the following percentages of maximum dry density and to within the specified moisture content range of optimum moisture content according to ASTM D 698 as follows:

Surface Improvement	Compaction %	Moisture Content
Structures	98%	-2 to +2
Paved Areas	95%	-2 to +2
Synthetic Turf Fields	95%	-2 to +2
Utility Trenches	95%	-2 to +2
Lawns or Unpaved Areas	90%	-2 to +2
Public Right-of-way	Per municipal standards	

1. Do not deposit or compact tamped or otherwise mechanically compacted backfill if frozen or if in water.
2. Take particular care to compact backfill which will be beneath slabs, pipes, drives, roads, parking areas, curb, gutters, or other surface construction.

2.13 BORROW OR SPOIL AREA

A. Obtain suitable material required to complete fill and embankments from excavation, on-site areas.

B. The location, size, shape, depth, drainage, and surfacing of borrow or spoil pits shall be acceptable to Owner.

C. Make all areas regular in shape with graded and surfaced side and bottom slopes when completed

D. Cut side slopes not steeper than 1:1 and uniform for the entire length of any one side

E. Final grade disturbed areas of borrow to uniform slope (maximum slope = 4:1, minimum slope = 50:1).

F. Use material free of debris and deleterious material

G. Provide erosion and sediment control measures for borrow or spoil areas as required by municipal or local Municipal Separate Storm Sewer System (MS4) requirements.

2.14 DISPOSAL OF EXCESS EXCAVATED MATERIALS

A. Use excess excavated materials in fills and embankments as indicated on the drawings to the extent needed. Coordinate with Owner and Owner on locations for excess material placement.

B. The Contractor is responsible for disposing of excess excavated materials from the site to a location approved by the Owner or Owner and permitted with the local authorities.

C. Remove debris, junk, broken concrete, broken asphalt, rock, stones, stumps, logs, roots, and other unsuitable material from the site and dispose of it

2.15 BLASTING

A. Blasting or other use of explosives is not permitted without City of Louisville approval

2.16 TRENCH EXCAVATION

A. Establish alignment and grade or elevation from offset stakes provided by the contractor's surveyor.

B. Excavate trenches so pipes can be laid straight at uniform grade without dips or bumps, between the terminal elevations indicated on the drawings

C. Comply with pipe specification sections regarding vertical and horizontal alignment and max joint deflection

D. Where grades or elevations are not fixed on the drawings, excavate trenches to provide a minimum depth of backfill cover over the top of pipe as follows. Coordinate depth of cover with utility owners. Increase depth as required by utility owner and at crossings.

1. 2.5 feet for gas piping
2. 2.5 feet for electric, telecom, and fiber optic conduit.
3. 2.0 feet for irrigation piping
4. Increase depth as required at vertical curves and for clearance beneath existing pipes, conduits, drains, drainage structures, or other obstructions encountered at normal pipe grades

E. Measure pipe cover depth vertically from top of pipe to finished ground or surface elevation

F. Do not open more trench in advance of pipe laying than is necessary to expedite the work; not more than 200 feet

G. Except where tunneling or boring is indicated on the drawings, specified, or permitted by Owner, excavate trenches by open cut from the surface

H. Limiting trench widths

1. Excavate to a width which will provide adequate working space and pipe clearances for proper pipe installation, jointing, embedment
2. If needed to reduce earth loads to prevent sliding, cut banks back on slopes which extend not lower than 1 foot above the top of the pipe
3. Stipulated minimum clearances are minimum clear distances, not minimum average distances
4. Maximum trench width from 1 foot above the top of pipe to trench bottom is the pipe outside diameter plus 24 inches
5. If the width of the lower portion of the trench exceeds the max permitted, provide special pipe embedment, or concrete encasement as required by loading conditions

I. Mechanical excavation

1. Do not use where its operation would damage buildings, culverts, or other existing property, structures, or utilities above or below ground; hand excavate only in such areas
2. Use mechanical equipment of a type, design, and construction and operated so that

    a. Rough trench bottom elevation can be controlled
    b. Uniform trench widths and vertical sidewalls are obtained from 1 foot above the top of the installed pipe to the bottom of the trench
    c. Trench alignment is such that pipe is accurately laid to specified alignment and is centered in the trench with adequate clearance between pipe and trench sidewalls
3. Do not undercut trench sidewalls
4. Recompact trench bottom disturbed by bucket teeth prior to placement of embedment material

J. Except as otherwise required, excavate trenches below the underside of pipes as indicated in the drawings to provide for installation of granular embedment pipe foundation material

K. Where in earth, trench bottoms for 6 inches and smaller pipe may be excavated below pipe subgrade and granular embedment provided or the trench may be graded to provide uniform and continuous support (between bell holes or end joints) of the installed pipe, Contractor's option

L. Whenever so directed by Owner, excavate to such depth below grade as Owner directs and bring the trench bottom to grade with such material as Owner may direct

M. For unstable soils, provide concrete or other bedding as directed by Owner

N. Do not allow any part of bells or couplings to contact the trench bottom, walls, or granular embedment when pipe is joined

O. Cuts in existing surface construction

1. No larger than necessary to provide adequate working space
2. Cut a clean groove not less than 1½ inch deep along each side of trench or around perimeter of excavation area
3. Remove pavement and base pavement to provide shoulder not less than 6 feet wide between cut edge and top edge of trench
4. Make pavement cuts to and between straight or accurately marked curved lines parallel to trench centerline or limits of excavation
5. Remove pavement for connections to existing lines or structures only to the extent required for the installation
6. Replace the pavements between saw cuts to match original surface construction

2.17 PIPE EMBEDMENT

A. Embed pipes above and below the bottom of pipe as indicated in the drawings and as specified herein

B. Spread and surface grade granular embedment to provide continuous and uniform support beneath pipe at all points between pipe joints

C. After grading, aligning, and placing pipe in final position, and shoring home, deposit and compact sufficient embedment under and around each side of the pipe and to hold the pipe in proper position and alignment during subsequent operations

D. Place and compact embedment material uniformly and simultaneously on both sides of pipe to prevent lateral displacement

E. Granular embedment compact by slicing with shovel or vibrating

1. Maximum uncompacted thickness of layers: 6 inch

F. Compacted embedment: Place in horizontal layers at maximum uncompacted depth per compaction specifications herein. Thoroughly compact each layer to meet the moisture and compaction specifications herein.

2.18 TRENCH BACKFILL

A. Compacted backfill needed for all trench excavations

B. Where the trench for one pipe passes beneath the trench of another pipe, compact the backfill for the lower trench to the bottom of the upper trench

C. Place job excavated materials in 8 inch max uncompacted thickness, uniform layers

1. Increased layer thickness may be permitted for uncohesive material if Contractor demonstrates to Owner's satisfaction that specified compacted density will be achieved
2. Thoroughly compact each layer to meet the moisture and compaction specifications herein.

D. Use methods and equipment appropriate to the material to be compacted to prevent transmission of damaging shocks to pipe

E. Graded gravel

1. Deposit in uniform layers of 12 inch max uncompacted thickness
2. Compact with suitable vibrating roller or platform vibrator to not less than 70 percent relative density per ASTM D4253/D4254

F. Finish the top portion of backfill with at least 4 inches of topsoil or as specified by landscaping specifications, whichever is greater, corresponding to, or better than, that underlying adjoining turf areas.

G. Trench backfill within the public right-of-way shall conform to municipal street and utility standards.

H. Trench backfills through unimproved areas should be restored to previous conditions and left 3” above adjacent grades to allow for settlement. Seed all disturbed areas according to landscape specifications.

2.19 PROTECTION OF TRENCH BACKFILL

A. Where trenches are constructed in ditches or other water courses, protect backfill from erosion

B. Install ditch checks where the ditch grade exceeds 1 percent

1. Minimum depth: 2 feet below the original ditch or water course bottom for the full bottom width
2. Minimum width: 18 inches into the side slopes
3. Minimum thickness: 12 inches

2.20 DRAINAGE MAINTENANCE

A. Do not backfill trenches across roadways, drives, walks or other trafficways adjacent to drainage ditches or water courses prior to backfilling the trench on the upstream side of the trafficway to prevent impounding water after pipe is laid

B. Backfill so that water does not accumulate in unfilled or partially filled trenches

C. Remove materials deposited in roadway ditches or other water courses crossed by the trench line immediately after backfilling is completed and restore ditches and water courses to original section, grade, and contours

D. Do not obstruct surface drainage any longer than necessary

E. Provide and maintain temporary bridges and other structures across unfilled trenches as required to maintain traffic

F. Provide adequate storm flow conveyance through the site at all times during construction to avoid flooding of any buildings or adjacent property. Provide overland drainage routing when storm sewer inlets are not fully functioning due to erosion and sediment control measures.

2.21 FINAL GRADING

A. After completion of all other outside work and after backfilling is completed and settled, bring to grade at the indicated elevations

B. Graders and other power equipment may be used for final grading and slope dressing if the result is uniform and equivalent to hand work

C. Grade all surfaces for effective drainage, provide a 2 percent minimum slope except as otherwise shown on the plans

D. Provide a smooth transition between adjacent existing grades and new grades

E. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances

F. Slope grades to direct water away from buildings and prevent ponds from forming where not intended.

G. Finish subgrades at lawns and unpaved areas to required elevations within a tolerance of plus or minus one (1) inch.

H. Coordinate final subgrade depth with finish landscape treatment.

2.22 SLOPE AND CHANNEL STABILIZATION

A. Cover channel banks, slopes, bottom and thalweg (water flowline at lowest point in channel) with erosion control fabric mat where grade is steeper than 3H to 1V and where indicated on the Drawings

B. Lay fabric smoothly on surface, bury top end of each section in 6-inch deep excavated topsoil trench. Provide 6-inch overlap minimum of adjacent rolls. Backfill trench and rake smooth, level with adjacent soil

C. Secure outside edges and overlaps at 48 inch intervals with 4-inch to 6-inch U-shaped type pins or wooden stakes depending on ground condition

D. Lightly dress slopes with topsoil to ensure close contact between fabric and soil

E. At sides of ditches, lay fabric laps in direction of water flow. Lap ends and edges minimum 6 inches

F. Maintain integrity of erosion control fabric

G. Prior to laying fabric, seed disturbed areas under provisions of related seeding and landscaping specification sections

2.23 SETTLEMENT

A. Warranty for settlement of all fills, embankments, and backfills is stipulated in the General Conditions from final completion of Contract under which Work is performed

B. Repair or replace within 30 days after notice by Owner

2.24 FIELD QUALITY CONTROL

A. Provide under provisions of General Conditions and Division One Specifications

B. Coordinate testing with Owner. Coordinate testing with Owner. Contractor shall provide all field testing (pass or fail) using Owner approved testing agency to determine compliance of in-place and backfill materials and compaction in accordance with the specifications, and to verify design bearing capacities.

C. Fills and Embankment Testing

1. Two moisture-density relationship tests, ASTM D698, on each type of fill material
2. One in-place compaction test for each 5,000 square feet every 1.5 feet of vertical lift of material placed
3. Additional in-place compaction tests at the discretion of the Owner

D. Pipe Embedment and Backfill Testing

1. Two moisture-density relationship tests, ASTM D698, or two relative density tests, ASTM D4253/D4254, as appropriate for each type of embedment on backfill material proposed, except granular embedment material
2. One in-place compaction test every 200 lineal feet of trench in the compacted embedment zone and at every 1.5 feet of vertical lift of backfill materials, ASTM D2922/D3017
3. One in-place compaction test near top of trench for trench depth of 2 feet or less, ASTM D2922/D3017
4. Additional in-place compaction tests at the discretion of the Owner

E. Pavement and Structural Subgrade Testing

1. At a minimum, two moisture-density relationship tests, ASTM D698, or two relative density tests, ASTM D4253/D4254, as appropriate and adequate for each type backfill material proposed.
2. Perform tests for each footing, concrete site feature, and drainage structure subgrade. Perform tests at every 100 linear feet of subgrade of foundation walls, retaining walls, and every 150 feet for curbing, pans, drainage features, walks, etc. (or portions thereof). Perform tests every 2,000 square feet required of building slab area, exterior slabs and pavement/flatwork areas (with no less than 3 tests). Test at subgrade and at every vertical lift of backfill materials placed.
3. Additional in-place compaction tests at the discretion of the Owner

END OF SECTION 31 00 00

SECTION 31 25 00

EROSION AND SEDIMENTATION CONTROLS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. This work consists of temporary measures needed to control erosion and water pollution. These temporary measures will include, but not be limited to, berms, dikes, dams, sediment basins, fiber mats, netting, gravel, mulches, grasses, slope drains, and other erosion control devices or methods. These temporary measures shall be installed at the locations where needed to control erosion and water pollution during the construction of the project and during site restoration, as shown on the drawings, and as required by jurisdictional inspector. The Contractor shall provide measures as required to obtain the required protection.

B. Contractor shall include in the bid price for erosion control a minimum of measures required by the City for this project and any additional items that may be needed to control erosion and water pollution.

1.2 RELATED SECTIONS

A. Section 31 00 00 – Earthwork
B. Section 32 13 00 – Rigid Paving

1.3 REFERENCES AND STANDARDS

A. CDOT – Colorado Department of Transportation
B. UDFCD – Urban Drainage and Flood Control District
C. CDPHE – Colorado Department of Public Health and Environment

1.4 SUBMITTALS

A. Submit under provisions of the Project Manual.

B. Submit the following information:
1. Erosion Control Plan,
2. Construction schedule for Erosion Control per Article Scheduling,
3. Sequencing Plan per Article Scheduling,
4. All applicable permits for Erosion Control.

C. Product data: Submit on all products or materials supplied herein.

1.5 REGULATORY REQUIREMENTS

A. Obtain and comply with all requirements of City of Aurora and CDPHE Stormwater and/or Groundwater Discharge Permits, as required.

B. In the event of conflict between these requirements and erosion and pollution control laws, rules, or regulations of other Federal, State, or local agencies, the more restrictive laws, rules, or regulations shall apply.

1.6 SCHEDULING

A. Sequencing Plan:
   1. Contractor shall submit a sequencing plan for approval for erosion control in conformance with Contractor's overall Construction Plan for approval by City of Aurora.
   2. Changes to the Erosion Control Sequencing Plan may be considered by City of Aurora only if presented in writing by the Contractor.

B. Temporary Erosion Control:
   1. When directed by the City of Aurora, Contractor shall prepare construction schedules for accomplishing temporary erosion control work including all maintenance procedures.
   2. These schedules shall be applicable to clearing and grubbing, grading, structural work, construction, etc.

C. Contractor shall submit for acceptance the proposed method of erosion control on haul roads and borrow pits and a plan for disposal of waste material.

D. Contractor shall be required to incorporate all permanent erosion control features into the project at the earliest practicable time as outlined in the accepted schedule. Temporary erosion control measures shall then be used to correct conditions that develop during construction.

E. Work shall not be started until the erosion control schedules and methods of operations have been accepted.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Comply with all applicable municipal or local Municipal Separate Storm Sewer System (MS4) requirements.

B. All materials shall be submitted for approval prior to installation.

C. Natural or biodegradable materials shall be reasonably clean, free of deleterious materials, and certified weed free. Materials may include, but are not limited to, hay bales, straw, fiber mats, fiber netting, wood cellulose, fiber fabric, gravel.

D. Grass Seed:
   1. Temporary grass cover (if required) shall be a quick growing species, suitable to the area, in accordance with local criteria and permit requirements, which will provide temporary cover, and not compete with the grasses sown for permanent cover.
   2. All grass seed shall be approved by Landscape Architect, City of Aurora, and in accordance with local regulations prior to installation.

E. Fertilizer and soil conditioners shall be approved by Landscape Architect, City of Aurora and in accordance with local regulations prior to installation.

F. Silt Fence Fabric: woven polypropylene
   1. Mirafi 100X, "Envirofence", or accepted substitution

G. Temporary Slope Stabilization Mat (short term): 1.5 pound photodegradable polypropylene top and bottom nets, 100% straw fiber matrix, with a longevity of 12 months.
   1. North American Green S150, or accepted substitution

H. Temporary Slope Stabilization Mat (extended term): 3.0 pound UV-stable polypropylene top net, 1.5 pound photodegradable polypropylene bottom net, 70% straw/30% coconut fiber matrix with a longevity of 24 months.
   1. North American Green SC150, or accepted substitution

I. Biodegradable Slope Stabilization Mat (short term): 9.3 pound leno-woven biodegradable jute top net, 7.7 pound woven biodegradable jute bottom net, 100% straw fiber matrix with a longevity of 12 months.
   1. North American Green S150BN, or accepted substitution

J. Biodegradable Slope Stabilization Mat (extended term): 9.3 pound leno-woven biodegradable jute top net, 7.7 pound woven biodegradable jute bottom net, 70% straw/30% coconut fiber matrix with a longevity of 18 months.
   1. North American Green SC150BN, or accepted substitution

PART 3 - EXECUTION

3.1 GENERAL

A. All temporary and permanent erosion and sediment control practices will be maintained and repaired as needed to ensure continued performance of their intended function.

B. City of Aurora will monitor Contractor’s erosion control methods. If the overall function and intent of erosion control is not being met, City of Aurora will require Contractor to provide additional measures as required to obtain the desired results.

C. The erosion control features installed by Contractor shall be adequately maintained by Contractor until the project is accepted.

3.2 PROTECTION OF ADJACENT PROPERITES

A. Properties adjacent to the site of a land disturbance shall be protected from sediment deposition.

B. In addition to the erosion control measures required on the drawings, perimeter controls may be required if damage to adjacent properties is likely, and may include, but is not limited to:
   1. Vegetated buffer strip around the lower perimeter of the land disturbance.
      a. Vegetated buffer strips may be used only where runoff in sheet flow is expected and should be at least twenty (20) feet in width.
   2. Sediment barriers such as straw bales, erosion logs, and silt fences.
   3. Sediment basins and porous landscape detention ponds.
   4. Combination of above measures.

3.3 CONSTRUCTION

A. Stabilization of Disturbed Areas:
   1. Temporary sediment control measures shall be established within five (5) days from time of exposure or disturbance.
   2. Permanent erosion protection measures shall be stablished within five (5) days after final grading of areas.

B. Stabilization of Sediment and Erosion Control Measures:
   1. Sediment barriers, perimeter dikes, and other measures intended to either trap sediment or prevent runoff from flowing over disturbed areas shall be constructed as a first step in grading and be made functional before land disturbance takes place.
   2. Earthen structures such as dams, dikes, and diversions shall be stabilized within five (5) days of installation.
   3. Stormwater outlets shall also be stabilized prior to any upstream land disturbing activities.

C. Stabilization of Waterways and Outlets:
   1. All onsite stormwater conveyance channels used by Contractor for temporary erosion control purposes shall be designed and constructed with adequate capacity and protection to prevent erosion during storm and runoff events.
   2. Stabilization adequate to prevent erosion shall also be provided at the outlets of all pipes and channels.

D. Storm Sewer Inlet Protection: All storm sewer inlets which are made operable during construction or which drain stormwater runoff from a construction site shall be protected from sediment deposition by the use of filters.

E. Construction Access Routes:
   1. Wherever construction vehicles enter or leave a construction site, a Stabilized Construction Entrance is required.
   2. Where sediment is transported onto a public road surface, the roads shall be cleaned thoroughly at the end of each day.
   3. Sediment shall be removed from roads by shoveling or sweeping and be transported to a sediment controlled disposal area.
   4. Street washing shall be allowed only after sediment is removed in the manner described above.

3.4 DISPOSITION OF TEMPORARY MEASURES

A. All temporary erosion and sediment control measures shall be disposed of within thirty (30) days after final site stabilization is achieved or after the temporary measures are no longer needed as determined by City of Aurora.

B. Trapped sediment and other disturbed soil areas resulting from the disposition of temporary measures shall be permanently stabilized to prevent further erosion.

C. Substantial Completion of Erosion Control Measures:
   1. At the time specified in the Contract Documents, and subject to compliance with specified materials and installation requirements, Contractor shall receive a Substantial Completion Certificate for temporary erosion control measures.

2. Maintenance of Erosion Control Measures after Substantial Completion: Contractor shall be responsible for maintaining temporary erosion control measures as specified in the drawings and Contract Documents until such time as work has been accepted by City of Aurora and as specified in Division 1 for Closeout Procedures.

END OF SECTION 31 25 00

SECTION 32 91 00

LANDSCAPE MAINTENANCE

PART 1 - GENERAL

1.1 WORK INCLUDED

A. Section includes maintaining the following items through final acceptance:

1. Irrigation System.
2. Sod areas and seeded areas.
3. Trees and shrubs.
4. Mulch and cobble.

1.2 RELATED SECTIONS AND DOCUMENTS

A. Section 32 84 00: Planting Irrigation.

B. Section 32 92 19: Seeding.

C. Section 32 93 00: Plants.

D. Drawings and general provisions of the Construction Contract, and Division-01 Specification sections apply to work of this section.

1.3 SUBMITTALS

A. Notices - Submit the following written notices to the Owner:

1. A minimum of one (1) week prior to the start-up and/or winterization of the irrigation system.
2. A minimum of one (1) week prior to fertilization and/or the broad application of any chemicals or insecticides of any kind.

1.4 QUALITY ASSURANCE

A. Applicable Codes and Standards

1. Abide by the codes, specifications, and standards of all governmental and industry regulations including but not limited City, County, State of Colorado, and the standards of the American Association of Nurserymen (ANN), American Society for Testing and Materials (ASTM), National Plumbing Code (NPC), Colorado Technical Plumbing Code, Uniform Building Code (UBC), Sprinkler Irrigation Association (SIA), National Electric Code (NEC), American Sod Producers Association (ASPA), United States Department of Agriculture (USDA), and the Association of American Seed Control Officials (AASCO).
2. All labor shall be United States citizens or have current, valid work permits for work within the United States.
3. At all times when work is being performed, Contractor shall have an individual who has successfully completed the Standard First Aid and Personal Safety Course

(intermediate level) offered by the American Red Cross or other training as accepted by the Owner.

4. No chemicals or fertilizers shall be utilized on the work without a state licensed operator in attendance.

B. Equipment:

1. All equipment shall be well maintained and equipped with current safety features including audible reverse warning, trimming guards, etc.

1.5 MAINTENANCE PERIOD

A. Required maintenance for all items shall extend until date of final acceptance of the entire project. This period will last through a minimum of two lawn cuttings for sodded areas.

B. After acceptance of the entire project, the Owner will assume responsibility for maintenance. A one year warranty will begin at date of acceptance of all landscape construction.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 IRRIGATION SYSTEM

A. Start-Up:

1. The Contractor shall be responsible for the start-up of the automatic irrigation system. Unless modified by extreme weather conditions, the system shall be activated not before April 1 and not later than April 30.
2. To activate system, pressurize and then run each zone a minimum of 15 minutes. Each zone shall be observed for leaks, pressure defects, adequate coverage, and other conditions which shall impact the effective operations of the system. Any leaks or defects shall be corrected immediately.

B. Controller Settings:

1. Properly program the irrigation controller to insure adequate but not excessive watering throughout the year.
2. Following acceptance of the entire project by Owner, the Owner will assume responsibility for controller settings. Contractor may monitor controller settings during the warranty period, but shall not alter the settings without first notifying the Owner in writing.

C. Testing System:

1. At a minimum of once each month between May and October, manually operate each and every irrigation zone to insure continued and adequate coverage, pressure, and the absence of leaks. All system leaks or defects shall be corrected immediately.

D. Winterization:

1. The Contractor shall be responsible for the first winterization of the automatic irrigation system. Unless modified by extremely mild weather conditions, the system may be shutdown and winterized by November 25. The requirement shall remain in effect even if the Owner has accepted the project.
2. In the week immediately prior to closing of the system, all landscape areas shall receive a minimum of 1.5" of watering (either through natural conditions or through operation of the system).
3. Winterize the system by closing the main pressure valve opening, all stop and waste valves, removing water from the lines, de-energizing the controller, and all other actions deemed prudent. Remove water from drip lines by opening flushing points and blowing out all water.

3.2 SODDED AREAS

A. Fertilization:

1. Fertilize all sodded areas four (4) weeks minimum after installation.
2. Fertilizer shall be a Urea based only mixture with the following chemical composition: 46 percent nitrogen, 0 percent phosphorous, and 0 percent potash. All applications shall be at a rate of 5 lbs. nitrogen per 1000 square feet.
3. These feedings are specifically in addition to those required by the installation specification.
4. All fertilizer applications shall occur using a commercial spreader on a calm, dry morning. The sod should be moist. Never fill the spreader over the lawn areas or when "on". Sweep all concrete and asphalt areas that may have been pelleted with fertilizer.
5. In addition to the lawn fertilization, one (1) application of elemental iron shall be made at a rate of 0.5 lbs. per 1000 square feet.

B. Weeding and Insect Toxins: Contractor is responsible for weed control until acceptance of the entire project. No application of weed killer, insecticides, or antifungal chemicals are specified. Apply these elements as necessary to maintain healthy, weed free sod throughout the year. Apply as per manufacturer's recommendations whenever necessary to protect the sod condition.

1. If site is open to the public, post notice of the applications.
2. Take all precautions when applying weed killers, insecticides or antifungal remedies, including gloves, masks, goggles, etc., and shall not apply on windy or rainy days.
3. This section includes insects, molds, fungus, broadleaf, and viney weeds and specifically includes grasshoppers.

C. Cuttings: Cut sod with a reel or rotary type mower. Keep grass an average of 2 inches in height and cut whenever the clippings will measure approximately 0.5 inch or 25

percent of the grass plant. Never cut off more than 33 percent of the plant height. Between May 1 an September 15, cut grass a minimum of once every two weeks.

1. If mowing creates visible accumulations of clippings, clippings must be removed. Remove all clippings immediately. Cross slope all mowing. All areas around walks, buildings, curbs, walls, rocks, plants, lights, or other structures must be trimmed by hand or mechanical trimmer each time the grass is cut. All cuttings must be done diagonal to the way the sod was laid. Clean cuttings from walks, plazas, drives, etc.

3.3 SEEDED AREAS

A. General: The maintenance period shall begin immediately after each area is seeded and continue until final acceptance of entire project. During this time, the Contractor shall be responsible for watering, mowing, spraying, weeding and all related work as necessary to ensure that seeded areas are in a vigorous growing condition. Provide all supervision, labor, material, and equipment to maintain seeded areas.

B. Materials: Conform to specifications or to be acceptable to by Owner.

C. Watering: Water irrigated areas at regular schedule to be accepted by Owner until stand of grass is established. Water in repeated short time periods. After grass is established, water irrigated grass at a regular schedule to be accepted by Owner. Native and dryland grasses are not required to be watered. Water shall be free of substances harmful to plant growth. Be responsible for furnishing water from underground sprinkler system, quick couplers or other source.

D. Reseeding: Per Section 32 92 19.

E. Fertilization: Per Section 32 91 13.

F. Weed Control: Native Seed/Dryland Grasses: As required, using selective herbicides approved by Owner.

G. Insect and Disease Control: As required, apply insecticide and fungicide approved by Owner.

3.4 TREE AND SHRUB CARE

A. Maintenance crew shall inspect the plant material on a monthly basis. A written report of problems shall occur after each inspection.

B. Immediately remove any dead plant or dead part of the plants. Maintenance crew shall remove all tree suckers and leafing on main stems.

C. Each spring, no later than June 1, shall trim all winter dieback, undesirable shoots, and correct branching problems.

D. Replace at no cost to the Owner any plant material which dies due to failure to comply with this specification or negligence or insect damage. This guarantee applies to trees which are damaged due to maintenance crew's mowing operations.

E. Remove tree stakes, tree guys, guy wire, and tree wrap prior to completion of one-year warranty period.

3.5 WINTER WATERING

A. Contractor's maintenance crew to water all sod, irrigated seed and plant material areas once each month during December, January, February, and March as needed to adequately sustain plant material through the winter, unless the Owner has accepted the project.

B. This watering shall occur from sillcocks of the building or quick couplers and must include the cost of supplying all necessary hoses and fittings. If sillcocks are frozen or cannot be activated Contractor shall utilize a water truck.

END OF SECTION 32 91 00

SECTION 32 91 13

FINE GRADING AND SOIL PREPARATION

PART 1 - GENERAL

1.1 WORK INCLUDED

A. Ripping.

B. Fertilizer.

C. Soil amendments.

D. Fine grading.

1.2 RELATED SECTIONS AND DOCUMENTS

A. Section 31 00 00: Earthwork.

B. Section 32 84 00: Planting Irrigation.

C. Section 32 92 19: Seeding.

D. Section 32 93 00: Plants.

E. Drawings and General and Special Conditions of the Contract, including Division One and other related specification sections apply to work of this section.

1.3 SUBMITTALS

A. Quality Control Submittals:
   1. Provide minimum three representative soil samples to help determine amendments.
   2. Certificates: State, federal and other inspection certificates shall accompany invoice for all materials showing source or origin. Submit to Owner's Representative prior to acceptance of materials.
   2. Soil Amendment Test Report: Submit soil conditioner test analysis to Owner's Representative 3 weeks prior to delivery to site with laboratory analysis specific to the sample dated within thirty days of date of submittal.
   3. Submit load tickets of all amendments.

1.4 QUALITY ASSURANCE

A. The work of this section shall be performed by an experienced landscape Installer having not less than 5 years successful experience in landscape projects of similar size and scope as this project. Include work of Sections 32 92 19, 32 92 23, and 32 93 00 for undivided responsibility.

1.5 DELIVERY, STORAGE AND HANDLING

A. General: Comply with Section 01 60 00.

B. Fertilizer: Deliver inorganic or chemical fertilizer to site in original unopened containers bearing manufacturer's guaranteed chemical analysis, name, trade name, trademark and conformance to state law, bearing name and warranty of producer.

C. Notify Owner's Representative of delivery schedule in advance so material can be inspected upon arrival at project site. Immediately remove unacceptable material from project site.

1.6 PROJECT/SITE CONDITION

A. General: Do not perform work when climate and existing site conditions will not provide satisfactory results.

B. Vehicular accessibility on site shall be as directed by owner's representative. Repair damage to prepared ground and surfaces caused by vehicular movement during work under this section to original condition at no additional cost to Owner.

C. Perform soil preparation just prior to planting operations and in accordance with final planting schedule. Coordinate with irrigation system installation to avoid damage to work of one by the other.

D. Utilities: Determine location of underground utilities and perform work in a manner which will avoid damage. Hand excavate, as required.

PART 2 - PRODUCTS

2.1 SOIL AMENDMENTS

A. Composted Amendment: ‘Biocomp’ Class 1 non-manure based compost as supplied by A-1 Organics, Eaton, CO or approved equal, meeting the following:

1. Organic Matter Content	> 20% and < 35%
2. Soluble Salts	< 5 mmhos/cm
3. pH units	6.0 to 7.0
4. Nitrogen total	> 0.75%
5. Phosphorus total	> 0.5%
6. Potassium total	> 0.25%
7. Calcium total	> 0.8%
8. Magnesium total	> 0.15%
9. Carbon to Nitrogen ratio	12:1 to 16:1
10. Particle size	99.8% < 9.5mm. No silt or clay. Screened to 3/8” minus.

Apply at a rate of 6 cubic yards per 1,000 square feet, tilled to a minimum of 9” depth, for sod and planting bed areas. For native seed areas, apply at a rate of 3 cubic yards per 1,000 square feet, tilled to a minimum of 9” depth.

B. Compost Certification Specifications:

1. Composted soil amendments must be produced at a facility permitted and regulated under the State of Colorado Department of Public Health and Environment and/or the county in which the facility operates for the production of compost and soil amendments.
2. The product must be certified to have been produced in a manner that meets the US EPA 40CFR 503.13 minimum standards for pathogen destruction under a controlled, monitored, and documented process.
3. The supplier must certify that no supplemental nitrogen or other chemicals have been added to the compost to alter or enhance the results of the laboratory analysis, unless specifically requested by the design architect.
4. The contractor must supply a letter of certification from the manufacturer which confirms that the product being supplied has met the referenced requirements and that supporting documentation exists and is available for inspection (if requested).

2.3 FERTILIZER

A. Commercial Fertilizer:
   1. Native Seeded Areas:
      a. Commercial fertilizer as 1200 lb/Ac if high organic results up to 1800 lbs/Ac if low organic results Biosol min 800lb/Ac topically applied after drilling (Pawnee Buttes Seed Company, Rocky Mountain Bio Products or equal).
      b. Humate at minimum 400 lb/Ac or ½ the amount/Ac Biosol

   2. Sodded Lawns:
   a. Commercial granular fertilizer as 18-46-0 at the rate of 3 lb/1000 square feet with the following composition by weight: Nitrogen, eighteen percent (18%) and phosphoric acid (P205), forty-six percent (46%). These elements may be organic, inorganic, or a combination of the two, and shall be measured according to the methods of the Association of Official Chemists.

2.3 HERBICIDE

A. To be approved by Owner

PART 3 - EXECUTION

3.1 EXAMINATION

A. General: Verify that existing site conditions are as specified and indicated before beginning work under this section.
   1. Grades: Inspect to verify rough grading is within + 0.1 foot of grades indicated and specified.
   2. Damaged Earth: Inspect to verify that earth rendered unfit to receive planting due to concrete water, mortar, limewater or any other contaminant dumped on it has been removed and replaced with clean earth from a source approved by the Owner's Representative.

B. Unsatisfactory Conditions: Report in writing to General Contractor with copy to Owner's Representative.

C. Acceptance: Beginning of installation means acceptance of existing conditions by installer.

3.2 PREPARATION

A. Protection:
   1. Locate sewer, water, irrigation, gas, electric, phone and other pipelines or conduits and equipment prior to commencing work.
   2. Be responsible for proper repair to landscape, utilities, walls, pavements and other site improvements damaged by operations under this section.
   3. Pay for repairs made by contractor(s) designated by Owner.

B. Weed Control: Remove perennial weeds by applying herbicide 2 weeks before grading and as needed. Remove annual weeds by tilling. Water prepared soil for two weeks if possible and apply herbicide to exposed weeds. Owner shall approve planting areas as substantially weed free before addition of amendment.

C. Surface Grade: Remove weeds, debris and rocks larger than 1/2". Dispose of accumulated debris from site.

D. Runoff: Take measures and furnish equipment and labor necessary to control the flow, drainage, and accumulation of water to run off the grounds as is intended by the grades.

E. Erosion Control: Take measures and furnish equipment and labor necessary to control and prevent soil erosion, blowing soil and accumulation of wind-deposited material on the site throughout duration of work.

3.3 INSTALLATION

A. Soil Amendment

   1. Limit preparation to areas which will be planted promptly after preparation.
   2. Before tilling, clean topsoil of stones, clay lumps, and other extraneous materials harmful or toxic to plant growth.
   3. Sodded Lawns: Spread soil amendments and phosphate at the rate specified after topsoil (if specified) is spread. Till in thoroughly to a minimum depth of 9", and grade to meet lines, grades and elevations shown, allowing for natural settlement.
   4. Native Seed: Spread soil amendments and fertilizer at the rate specified after topsoil (if specified) is spread. Till in thoroughly to a minimum depth of 9", and grade to meet lines, grades and elevations shown, allowing for natural settlement.

B. Fine Grading in all Landscape Areas:
   1. Do fine grading for areas immediately prior to planting.
   2. For ground surface areas surrounding buildings to be landscaped, maintain required positive drainage away from buildings.
   3. Establish finish grades to within 0.05 foot of grades indicated. The intent of this spec is to prevent 'bird baths' or ponding.
   4. Finish grade to be below edge of pavement prior to sodding, seeding or planting.
      b. Shrub Beds: Allow 4" for mulch.
      c. Seeded Areas: Allow 1" for seed.
   5. Noxious weeds or parts thereof shall not be present in the surface grade prior to landscaping.

6. Compaction of Surface Grade Prior to Landscape Installation: Firm, but not hard (80% standard Proctor density within 2% optimum moisture).
7. Prior to acceptance of grades, rake to smooth, even surface free of debris, clods, rocks, and vegetable matter greater than 1". Native seed areas should not be raked smooth but left in a uniform condition after tilling. Rough raking may occur parallel to the contour only.
9. Restore planting areas to specified condition if eroded or otherwise disturbed after fine grading and prior to planting.

3.4 NOTIFICATION AND INSPECTION

A. Inspection: Provide notice to Owner's Representative requesting inspection at least 7 days prior to anticipated date of completion.

B. Deficiencies: Owner's Representative will specify deficiencies to Contractor who shall make satisfactory adjustments and shall again notify Owner's Representative for final inspection.

3.5 CLEANING

A. General: Remove debris and excess materials from site. Clean out drainage inlet structures. Clean paved and finished surfaces soiled as a result of work under this section, in accordance with direction given by Owner's Representative.

3.6 PROTECTION

A. General: Provide and install barriers as required to protect completed areas against damage from pedestrian and vehicular traffic until acceptance by Owner. Contractor is responsible for malicious destruction caused by others.

3.7 WARRANTY

A. Contractor to warrant for a period of two years that puddling, sinking or caving directly due to earthwork operations does not occur.

END OF SECTION 32 91 13

SECTION 32 92 00
TURFGRASS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
   1. Sodding.

1.2 RELATED SECTIONS AND DOCUMENTS

A. Section 32 91 13 – Fine Grading and Soil Preparation.

B. Drawings and General and Special Conditions of the Contract, including Division One and City of Louisville Design and Construction Standards and other related specification sections apply to work of this section.

1.3 DEFINITIONS

A. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.

B. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 32 91 13 "Soil Preparation" and drawing designations for planting soils.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Conference: Conduct conference at Project site.

1.5 INFORMATIONAL SUBMITTALS

A. Certification of grass seed.
   1. Certification of each seed mixture for turfgrass sod.
   2. Load tickets.

B. Product certificates.

C. Seed mixture for each product, including application rates and ratios.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: A qualified landscape Installer whose work has resulted in successful turf establishment.
   1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
   2. Pesticide Applicator: State licensed, commercial.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Seed and Other Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and indication of compliance with state and Federal laws, as applicable.

B. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.

PART 2 - PRODUCTS

2.1 TURFGRASS SOD

A. Turfgrass Sod: Certified, Approved, Number 1 Quality/Premium, including limitations on thatch, weeds, diseases, nematodes, and insects, complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture that is strongly rooted and capable of vigorous growth and development when planted.

B. Sod: Provide strongly rooted sod, not less than two years old, free of weeds and undesirable native grasses and machine cut to pad thickness of 3/4" (+ 1/4"), excluding top growth and thatch. Provide only sod capable of vigorous growth and development when planted (viable, not dormant).
   1. Provide sod of uniform pad sizes with maximum 5% deviation in either length or width. Broken pads or pads with uneven ends will not be acceptable. Sod pads incapable of supporting their own weight when suspended vertically with a firm grasp on upper 10% of pad will be rejected. No netting allowed.
   2. Provide large rolls of sod for areas over 4,000 SF.

C. Turfgrass Species Characteristics:
   1. Provide Short Cut Blue from Green Valley Turf Company or approved equal.

2.2 FERTILIZERS

A. Granular fertilizer 18-46-0 at the rate of 3 lb/1000 SF with the following composition by weight: Nitrogen, eighteen percent (18%) and phosphoric acid (P205), forty-six percent

(46%). These elements may be organic, inorganic, or a combination of the two, and shall be measured according to the methods of the Association of Official Chemists.

B. Apply commercial nitrogen fertilizer as specified in Section 32 91 13. Apply after fine grading and prior to compaction.

C. Lightly water to aid the breakdown of fertilizer.

D. Apply fertilizer within 48 hours before laying sod.

2.3 PESTICIDES

A. General: Pesticide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

PART 3 - EXECUTION

3.1 TURF AREA PREPARATION

A. General: Prepare planting area for soil placement and mix planting soil according to Section 32 91 13 "Soil Preparation."

B. Reduce elevation of planting soil to allow for soil thickness of sod.

C. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.

D. Before planting, obtain Owner’s acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.2 SODDING

A. Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.

B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to soil or sod during installation. Tamp and roll lightly to ensure contact with soil, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.
   1. Lay sod across slopes exceeding 1:3.
   2. Anchor sod on slopes exceeding 3:1 with wood pegs spaced as recommended by sod manufacturer but not less than two anchors per sod strip to prevent slippage.

C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

D. Rolling: When soil and sod are moist, roll sod lightly as soon as possible after it is laid. Delay rolling until just before the second watering.

E. Topsoil: Add along exposed edges to match adjacent grade. Feather topsoil out approximately 1 ft. from edge of sod.

F. Drainage: Assure finished areas of sod are such that positive drainage of storm and irrigation water will occur and ponding of water will be minimized.

3.3 TURF MAINTENANCE

A. General: Maintain and establish turf by watering, fertilizing, weeding, mowing, trimming, replanting, and performing other operations as required to establish healthy, viable turf until Initial Acceptance by Owner, as specified in the Appendix of these specifications. Roll, regrade, and replant bare or eroded areas and remulch to produce a uniformly smooth turf. Provide materials and installation the same as those used in the original installation.

B. Mow turf as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than one-third of grass height. Remove no more than one-third of grass-leaf growth in initial or subsequent mowings. Mow to maintain a grass height of 2½-3 inches.

C. Minimum of three (3) weekly mowings or 21 days, whichever is longest, and including one establishment fertilization application.

D. Apply fertilizer after initial mowing (within approximately 20 days after sodding), when grass is dry, using fertilizer that will provide actual nitrogen of at least 1 lb/1000 SF, 20-10-5 plus iron and 8% sulfur fertilizer (50% sulfur coated urea)

Continue fertilizer applications every 30 days thereafter at the rate of ½ lb actual nitrogen per 1000 SF until Initial Acceptance of project--in March, April, May, June, August, September, October and November (no fertilizer in July, December, January, and February).

3.4 SATISFACTORY TURF

A. Turf installations shall meet the following criteria as determined by Owner:
1. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored green typical of the improved turf types installed, viable turf has been established, free of weeds, open joints, bare, dead or discolored spots larger than six (60 inches in any dimension and surface irregularities. No standing water and substantially (less than 5%) free of weeds.

B. Use specified materials to reestablish turf that does not comply with requirements, and continue maintenance until turf is satisfactory.

C. Sod will be considered established when fully rooted and capable of healthy growth with normal 1½" per week post-establishment watering schedules.

END OF SECTION 32 92 00

SECTION 33 47 13
POND AND RESERVOIR LINERS

PART 1 – GENERAL

1.01 SUMMARY

A. Furnish and install reinforced polyethylene (RPE) geomembrane liner system for golf course storm-water and aesthetic pond(s).
B. Work includes:

1. RPE geomembrane liner
2. Geotextile underlayment
3. Anchor trenches
4. Pipe penetrations and appurtenances
5. Field seaming and testing
6. Quality control documentation

1.02 PERFORMANCE REQUIREMENTS

A. The liner system shall:

1. Provide a continuous watertight barrier.
2. Resist long-term UV exposure in exposed pond conditions.
3. Withstand hydrostatic loading from full pond depth indicated on Drawings.
4. Resist installation stresses without tearing, puncturing, or seam failure.
5. Maintain flexibility and structural integrity under seasonal temperature fluctuations typical for project location.

B. Design Life:

- Minimum 20 years exposed service life.

1.03 REFERENCES

- IAGI / FGI – Guidelines for Installation of Factory Fabricated Heavyweight (>25mil) Thickness Fabric-Supported Geomembranes
- ASTM D5199 – Thickness of Geomembranes
- ASTM D751 – Tensile Properties of Coated Fabrics
- ASTM D4833 – Puncture Resistance
- ASTM D4437 – Seam Strength
- ASTM D5820 – Shear Strength of Seams
- ASTM D5885 – Oxidative Induction Time (if applicable)

1.04 SUBMITTALS

A. Product Data including:

- Manufacturer technical data sheet
- Physical and mechanical properties
- Installation instructions

B. Independent laboratory test results verifying compliance with this specification.

C. Shop drawings:

- Panel layout
- Anchor trench details
- Penetration details

D. Installer qualifications documentation.

E. Sample warranty.

1.05 QUALITY ASSURANCE

A. Installer shall have minimum 5 years documented experience installing reinforced geomembranes of similar size (minimum .5 acre water surface area).

B. Installation supervisor shall be manufacturer-trained.

C. Conduct pre-installation meeting.

1.06 WARRANTY

A. Material warranty: Minimum 20 years against UV degradation and manufacturing defects.
B. Workmanship warranty: Minimum 2 years.

PART 2 – PRODUCTS

2.01 REINFORCED POLYETHYLENE (RPE) GEOMEMBRANE

A. Material: Scrim-reinforced polyethylene geomembrane suitable for exposed pond applications.

B. Thickness:

- Minimum 36 mil (0.90 mm), unless otherwise approved.

C. Minimum Physical Properties:

Property	Test Method	Minimum Requirement
Thickness	ASTM D5199	36 mil
Grab Tensile Strength	ASTM D751	250 lb/in (MD & TD)
Elongation at Break	ASTM D751	15%
Tear Resistance	ASTM D751	60 lb
Puncture Resistance	ASTM D4833	100 lb
Seam Shear Strength	ASTM D5820	≥ 90% parent material
Seam Peel Strength	ASTM D4437	Film tear bond

D. UV Resistance:

- Minimum 90% retained tensile strength after 5,000 hours accelerated UV exposure (ASTM G154 or approved equivalent).

E. Hydrostatic Resistance:

- No leakage under full design water depth.

F. Color:

- Black or dark green unless otherwise approved.

2.02 GEOTEXTILE UNDERLAYMENT

A. Nonwoven needle-punched geotextile.
B. Minimum weight: 8 oz/sy (increase if subgrade contains angular material).
C. Minimum puncture resistance: 180 lb (ASTM D4833).

2.03 ACCESSORIES

A. Pipe boots fabricated from compatible RPE material.
B. Stainless steel batten bars and fasteners where required.
C. Manufacturer-approved sealants and adhesives.

PART 3 – EXECUTION

3.01 SUBGRADE PREPARATION

A. Subgrade shall be smooth, compacted, and free of sharp objects, vegetation, or debris.
B. Maximum particle size in top 6 inches: 1/2 inch.
C. Compact to minimum 90% Standard Proctor.
D. Subgrade shall be approved prior to liner deployment.

3.02 INSTALLATION

A. Install geotextile underlayment prior to liner placement.
B. Deploy liner panels to minimize field seams.
C. Install liner without tension or bridging.
D. Anchor liner in perimeter trench:
- Minimum trench dimensions: 12 inches wide x 18 inches deep
- Backfill and compact after inspection

3.03 FIELD SEAMING

A. Seaming method:

- Thermal wedge welding or extrusion welding per manufacturer recommendations.

B. Trial welds:

- At beginning of each shift and when conditions change.

C. Non-destructive testing:

- Air channel testing for dual-track seams
- Vacuum box testing where applicable

D. Destructive testing:

- Minimum 1 sample per 500 LF of seam
- Seam strength must meet Part 2 requirements

3.04 REPAIRS

A. Patch all defects with compatible RPE material.
B. Retest repaired areas.

3.05 FIELD QUALITY CONTROL

A. Provide:

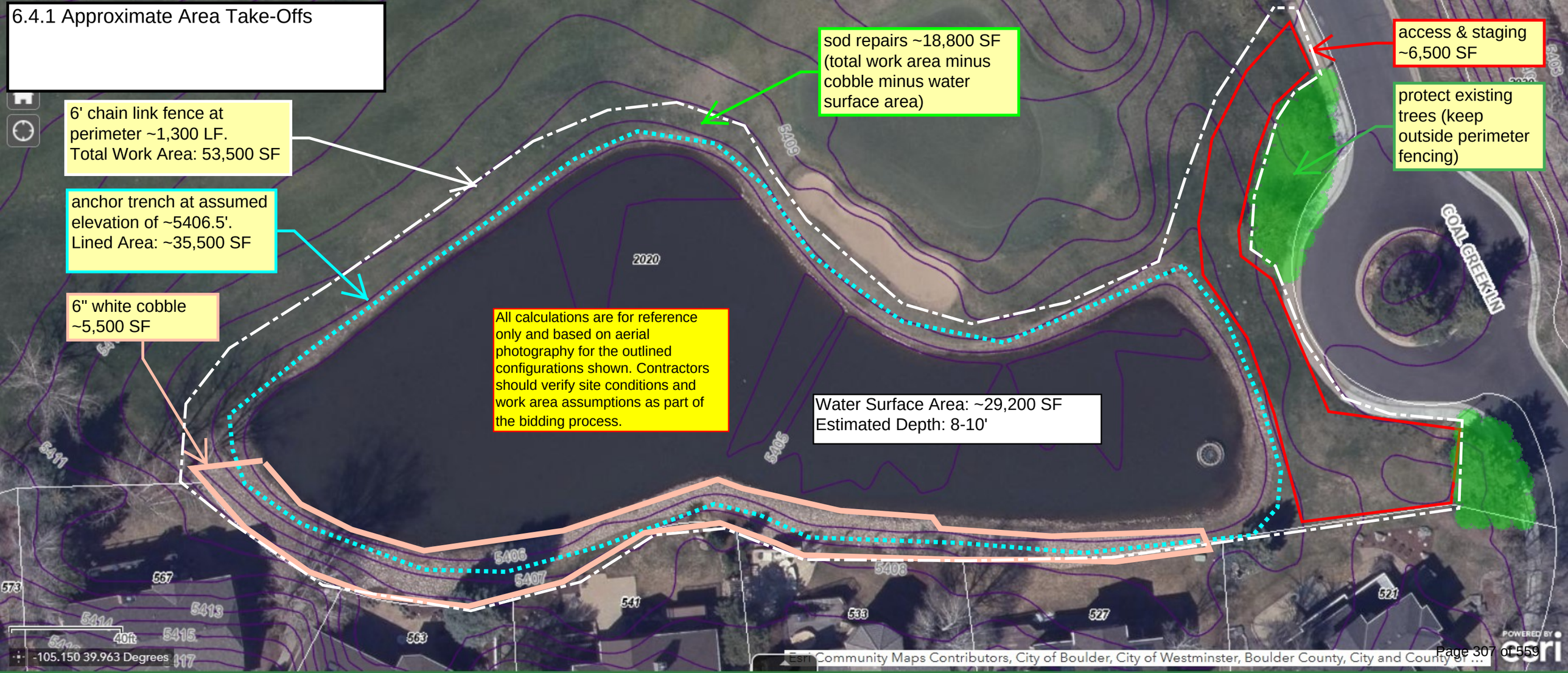
- Daily seam logs
- Test reports
- As-built panel layout

B. Final inspection by Owner/Engineer prior to filling pond.

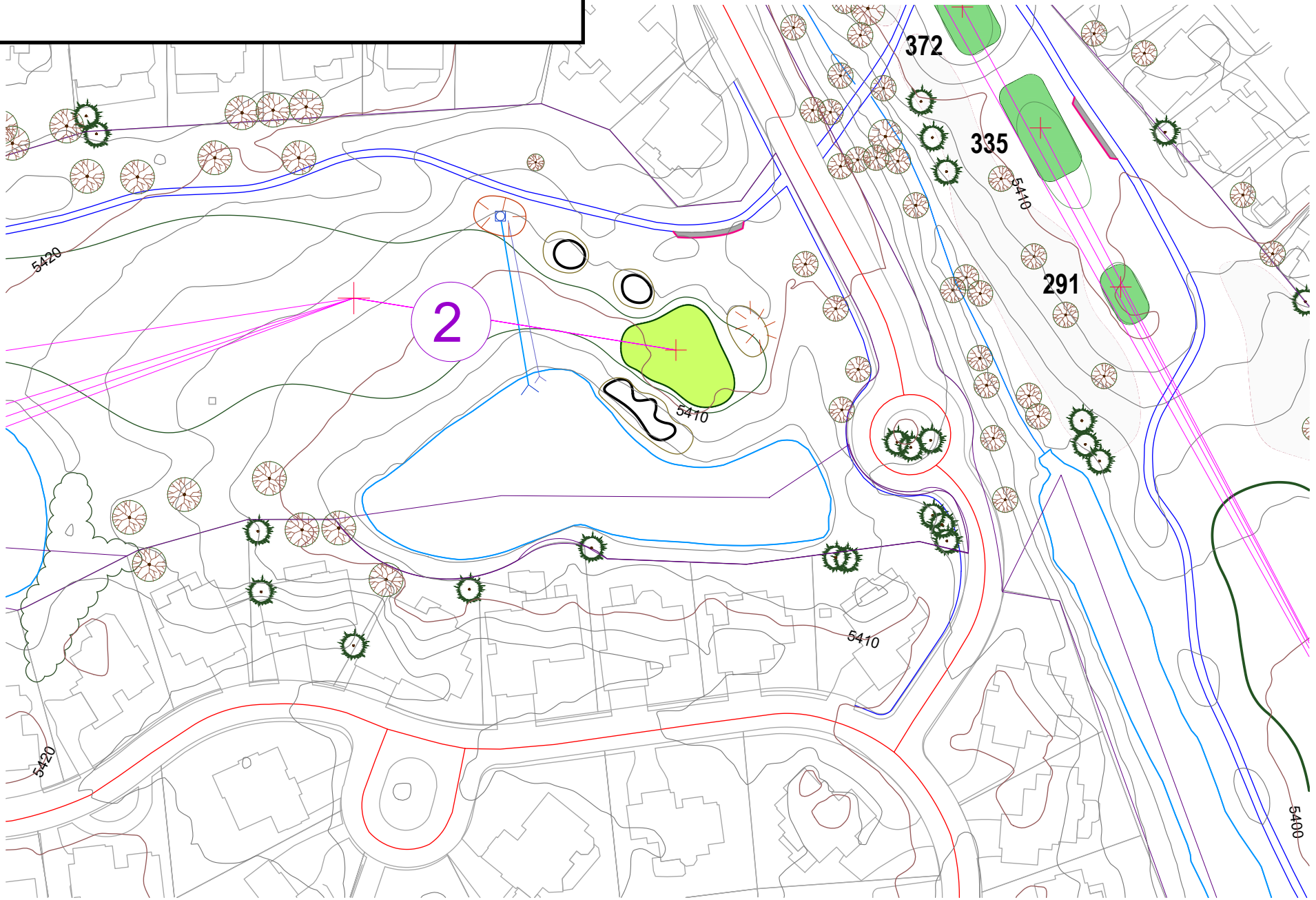
3.06 PROTECTION

A. Protect installed liner from damage by construction equipment.
B. No vehicular traffic directly on exposed liner.
C. Repair damage immediately.

END OF SECTION 33 47 13


6.4.1 Approximate Area Take-Offs
6' chain link fence at perimeter ~1,300 LF. Total Work Area: 53,500 SF
anchor trench at assumed elevation of ~5406.5'. Lined Area: ~35,500 SF
6" white cobble ~5,500 SF
sod repairs ~18,800 SF (total work area minus cobble minus water surface area)
access & staging ~6,500 SF
protect existing trees (keep outside perimeter fencing)
All calculations are for reference only and based on aerial photography for the outlined configurations shown. Contractors should verify site conditions and work area assumptions as part of the bidding process.
Water Surface Area: ~29,200 SF
Estimated Depth: 8-10'
COAL CREEK LN
5409
2020
5406
5411
5406
5407
5408
541
533
527
521
567
563
5413
5414
5415
40ft
-105.150 39.963 Degrees
Esri Community Maps Contributors, City of Boulder, City of Westminster, Boulder County, City and County of ...
POWERED BY esri

6.4.2 Site Plan (AutoCAD.dwg)



Scale: 1:100

City of Louisville
COLORADO • SINCE 1878

NOTICE OF AWARD

DATE

NAME
COMPANY

NAME

Please be advised that on _____ the City of Louisville, Colorado City Council awarded the **construction of playground replacements at _____** to your company in the amount of **_____** per your bid submitted _____.

In accordance with the Contract Documents, you are required to execute the Agreement and return a copy with the required bonds and certificates of insurance within **10 days** of the date of this Notice of Award by _____.

Failure to comply with these conditions within the time specified will entitle OWNER to consider your bid abandoned, to annul this Notice of Award and to declare your Bid Security forfeited.

CITY OF LOUISVILLE, COLORADO

By: _____
Bryon Weber

Title: Project Manager – PROS

ACCEPTED BY:

By: _____
NAME

Title: TITLE

City of Louisville
COLORADO • SINCE 1878

PERFORMANCE BOND

_____, as Principal, hereinafter called the Contractor,

And _____, as Surety, with general offices in

_____
a Corporation organized under the laws of the State of _____, and authorized to transact business in the State of Colorado, are hereby bound unto the City of Louisville, Colorado, as Obligee, hereinafter called the City, in the penal sum of _____

($_____) in the United States currency, for the payment of which sum the Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

WHEREAS, the Contractor has entered into a written contract with the City dated _____, 2023, for _____ in accordance with plans and specifications contained in the Contract, a copy of which Contract is attached hereto and made a part hereof and is hereinafter referred to as the Contract;

NOW, THEREFORE, the conditions of this performance bond are such that, if the Contractor shall satisfactorily perform the Contract, then this bond shall be null and void; otherwise, the Surety shall promptly remedy the default, or shall promptly 1) Complete the Contract in accordance with its terms and conditions, or 2) Obtain a Bid or Bids for completing the contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or if the City elects, upon determination by the City and the Surety jointly of the lowest responsible bidder, arrange for a Contract between such Bidder and the City, and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the costs of completion plus liquidated damages additional costs pursuant to Section 12.2 of the General Conditions of the Contract less the balance of the contract price, but not exceeding the amount set forth in the first paragraph hereof. The term "balance of the contract price", as used in this paragraph, shall mean the total amount payable by the City to the Contractor under the Contract and any amendments thereto, less the amount paid by the City to Contractor.

In addition, if the Contractor or a subcontractor shall fail to duly pay for any labor, materials, team hire, sustenance, provisions, provender, or other supplies used or consumed by such Contractor or subcontractor in performance of the Contract, or shall fail to duly pay any person who supplies rental machinery, tools, or equipment, all amounts due as the result of the use of such machinery, tools or equipment in the prosecution of the Work, then the Surety shall pay the same in the amount not exceeding the sum specified in the bond together with interest at a rate of eight percent per annum.

In addition to the other conditions hereof, this bond shall include all provisions set forth in Section 38-26-106, C.R.S.

City of Louisville
COLORADO • SINCE 1878

Performance Bond (Continued)

THE UNDERSIGNED SURETY for value received hereby agrees that no extension of time, change in, addition to, or other modification of the terms of the Contract of Work to be performed thereunder or the specifications of the Contract Documents shall in any way affect its obligation on this bond and the Surety does hereby waive notice of any such extension of time, change, addition, or modifications.

SIGNED AND SEALED this_____day of _____, 2023.

_____	_____
(Contractor)	**(Surety Company)**
By: _____	Address: _____
(President)	
_____	By: _____
(Attest)	(Attorney-in-fact)

City of Louisville
COLORADO • SINCE 1878

LABOR AND MATERIAL PAYMENT BOND

BOND NUMBER:

KNOW ALL MEN BY THESE PRESENCES: that

(Firm) _____
(Address) _____
(an Individual), (a Partnership), (a Corporation), hereinafter referred to as "the Principal", and

(Firm)_____
(Address)_____
hereinafter referred to as "the Surety", are held and firmly bound unto the
CITY OF LOUISVILLE, 749 MAIN STREET, LOUISVILLE, COLORADO a Municipal Corporation, hereinafter referred to as "the Owner", in the penal sum of
_____ Dollars
($_____) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITIONS OF THIS OBLIGATION are such that whereas the Principal entered into a certain Agreement with the Owner, dated the _____ day of _____, 2023, a copy of which is hereto attached and made a part hereof for the performance of

_____

NOW, THEREFORE, if the Principal shall make payment to all persons, firms, subcontractors and corporations furnishing materials for or performing labor in the prosecution of the Work provided for in such Agreement, and any authorized extension or modification thereof, including all amounts due for materials, lubricants, repairs on machinery, equipment and tools, consumed, rented or used in connection with the construction of such work, and all insurance premiums on said Work, and for all labor, performed in such Work whether by Subcontractor or otherwise, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Agreement or to the Work to be performed thereunder or the specifications accompanying the same shall in any way affect its obligation on this Bond; and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Agreement or to the Work or to the Specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

In addition to the other conditions hereof, this bond shall include all provisions set forth in Section 38-26-105, C.R.S.

Labor and Material Payment Bond (Continued)

IN WITNESS WHEREOF, this instrument is executed in (3) counterparts, each one of which shall be deemed an original, this _____ day of _____, 2023.

IN THE PRESENCE OF:

PRINCIPAL

_____

_____

PRINCIPAL:

BY: _____

_____

(Title)

(Corporate Seal)

Addresses:

_____

_____

_____

IN THE PRESENCE OF:

_____

_____

OTHER PARTNERS:

By: _____

By: _____

IN THE PRESENCE OF:

_____

_____

SURETY:

By: _____

(Attorney-in fact)

(Surety Seal)

Address:

_____

_____

NOTE: Date of Bond must not be prior to date of Agreement.
If Contractor is a Partnership, all partners must execute Bond.

IMPORTANT: Surety Company must be authorized to transact business in the state of Colorado and be acceptable to the Owner.

City of Louisville
COLORADO • SINCE 1878

NOTICE TO PROCEED

DATE

NAME
COMPANY

You are hereby notified that the Contract Time under the above Contract will commence to run on _____. On that date, you are to begin performing the Work in accordance with the Contract Documents and you are to complete the Work within _____ **Contract Days** thereafter. The date of substantial completion of all Work is therefore _____.

OWNER: CITY OF LOUISVILLE, COLORADO

By: _____
Bryon Weber

Title: Project Manager – Parks, Recreation & Open Space

ACKNOWLEDGEMENT

Receipt of the above Notice to Proceed is hereby acknowledged.

CONTRACTOR: _____

By: _____

Title: _____

Date: _____

City of Louisville
COLORADO • SINCE 1878

CHANGE ORDER

CHANGE ORDER #: 02

DATED:

AGREEMENT DATE:

The following changes are hereby made to the Contract Documents:
Description: _____

			Unit S	$ COST
	TOTAL			

Attachments: _____

ADJUSTMENT TO CONTRACT PRICE:

Original contract price $_____
Set change previous Change Orders No. 0 to 0 $_____
Contract price prior to this Change Order $_____
Net adjustment resulting from this Change Order (+/-) $_____
Current contract price including this Change Order $_____

ADJUSTMENT TO CONTRACT TIME:

Original contract time (days or date) _____
Net change previous Change Orders No. __ to __ (days) _____
Contract time prior to this Change Order (days or date) _____
Net Adjustment Resulting from this Change Order (days) _____
Current contract time including this Change Order (days or date) _____

The Contractor's signature below indicates acceptance of full settlement for the work described, both direct and indirect costs. Any claims for additional costs associated with this Change Order will not be considered.

Recommended:	Approved:	Accepted:
CITY OF LOUISVILLE, COLORADO	CITY OF LOUISVILLE, COLORADO	_____
PROJECT MANAGER	OWNER	CONTRACTOR
By: _____	By: _____	By: _____
Date: _____	Date: _____	Date: _____

City of Louisville
COLORADO • SINCE 1878

FIELD ORDER

No._____

TO: _____

DATE ISSUED: _____

You are hereby directed and instructed to execute promptly minor variations in the Work by this Field Order as follows:

Attachments:

This form shall be used to authorize minor variations in the Work from the requirements of the Contract Documents, which do not include an adjustment in the Contract Price or the Contract Times.

CITY OF LOUISVILLE		**ACCEPTED BY CONTRACTOR**	
BY:	_____	BY:	_____
TITLE:	_____	TITLE:	_____
DATE:	_____	DATE:	_____

City of Louisville
COLORADO • SINCE 1878

WORK CHANGE DIRECTIVE INSTRUCTIONS

A. GENERAL INFORMATION

This document was developed for use in situations involving changes in the Work that, if not processed expeditiously, might delay the Project. These changes are often initiated in the field and may affect the Contract Price or the Contract Times. This is not a Change Order, but only a directive to proceed with Work that may be included in a subsequent Change Order.

For supplemental instructions and minor changes not involving a possible change in the Contract Price or the contract Times a Field Order may be used.

B. COMPLETING THE WORK CHANGE DIRECTIVE FORM

Engineer initiates the form, including a description of the items involved and attachments.

Based on conversations between Engineer and Contractor, Engineer completes the following:

METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT PRICE. Mark the method to be used in determining the final cost of Work involved and the estimated net effect on the Contract Price. If the change involves an increase in the Contract Price and the estimated amount is approached before the additional or changed Work is completed, another Work Change Directive must be issued to change the estimated price or Contractor may stop the changed Work when the estimated price is reached. If the Work Change Directive is not likely to change the Contract Price, the space for estimated increase (decrease) should be marked "Not Applicable.

METHOD OF DETERMINING CHANGE, IF ANY, IN CONTRACT TIMES: Mark the method to be used in determining the change in Contract Times and the estimated increase or decrease in Contract Times. If the change involves an increase in the Contract Times and the estimated times are approached before the additional or changed Work is completed, another Work Change Directive must be issued to change the times or Contractor may stop the changed Work when the estimated times are reached. If the Work Change Directive is not likely to change the Contract Times, the space for estimated increase (decrease) should be marked "Not Applicable".

Once authorized by Engineer a copy will be sent to Contractor. Price and Times may only be changed by Change Order signed by Owner and Contractor.

Once the Work covered by this directive is completed or final cost and times are determined, Contractor should submit documentation for inclusion in a Change Order.

THIS IS A DIRECTIVE TO PROCEED WITH A CHANGE THAT MAY AFFECT THE CONTRACT PRICE OR THE CONTRACT TIMES. A CHANGE ORDER, IF ANY, SHOULD BE CONSIDERED PROMPTLY.

City of Louisville
COLORADO • SINCE 1878

WORK CHANGE DIRECTIVE

DIRECTIVE No. _____

DATE ISSUED: _____ EFFECTIVE DATE: _____

You are directed to proceed promptly with the following change(s):

Description:

_____
_____
_____

Purpose of Work Change Directive:

_____
_____
_____

Attachments (List documents supporting change):

_____
_____
_____

If a claim is made that the above change(s) have affected Contract Price of Contract Times any claim for a Change Order based thereon will involve one or more of the following methods of determining the effect of the change(s).

Method of determining change in Contract Price:

____ Unit Prices
____ Lump Sum
____ Other _____
_____
_____

Method of determining change in Contract Times:

____ Contractor's Records
____ Engineer's Records
____ Other _____
_____
_____

Estimated increase (decrease) in Contract Price:
$_____
If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Estimated increase (decrease) in Contract Times
Substantial Completion: _____days;
Ready for final payment: _____days.
If the change involves an increase, the estimated times are not to be exceeded without further authorization.

RECOMMENDED:

_____
ENGINEER

BY: _____

ACCEPTED:

_____
CONTRACTOR

BY: _____

City of Louisville
COLORADO • SINCE 1878

APPLICATION FOR PAYMENT

SAMPLE – SEE DIGITAL FILE PROVIDED BY PROJECT MANAGER

APPLICATION FOR PAYMENT

PROGRESS PAYMENT NO. _____ FOR WORK THROUGH THE DATE OF: _____, 20___
PROJECT: CONCRETE REPLACEMENT PROJECT
PROJECT NUMBER: 301312-660022

DATE SUBMITTED: _____, 20___

OWNER: CITY OF LOUISVILLE
749 MAIN STREET
LOUISVILLE, CO 80027

CONTRACTOR: _____

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL PRICE	QUANTITY			AMOUNT			PERCENT (%) COMPLETE
						QUANTITY PREVIOUS PERIOD	QUANTITY THIS PERIOD	QUANTITY TOTAL TO DATE	PREVIOUS PAYMENT	THIS PAYMENT	TOTAL PAYMENT	
				$_____	$_____				$_____	$_____	$_____	
				$_____	$_____				$_____	$_____	$_____	
				$_____	$_____				$_____	$_____	$_____	
				$_____	$_____				$_____	$_____	$_____	
				$_____	$_____				$_____	$_____	$_____	
				$_____	$_____				$_____	$_____	$_____	
				$_____	$_____				$_____	$_____	$_____	
				$_____	$_____				$_____	$_____	$_____	
				$_____	$_____				$_____	$_____	$_____	
				$_____	$_____				$_____	$_____	$_____	
TOTAL BID PRICE					$_____							

TOTAL AMOUNT TO DATE $_____
AMOUNT PREVIOUS PAYMENT(S) $_____
RETAINAGE TO DATE
PROGRESS PAYMENT NO. ____ AMOUNT TO CONTRACTOR THIS INVOICE $_____

CONTRACTOR'S CERTIFICATION:

The undersigned CONTRACTOR certifies that:

1. All previous progress payments received from OWNER on account of Work completed under the Contract referred to above have been applied to discharge in full all obligations of CONTRACTOR incurred in connection with Work covered by prior Applications for Payment numbered 1 through _____ inclusive.
2. Title to all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to OWNER at time of payment free and clear of all liens, claims, security interest and encumbrances (except such as are covered by Bond acceptable to OWNER indemnifying OWNER against any such claim, security interest or encumbrance.)
3. Work covered by this Application for Payment is in accordance with the Contract Documents and not DEFECTIVE as that term is defined in the Contract Documents.

CONTRACTOR: _____
TOTAL AMOUNT ACCEPTED FOR COMPLETED WORK DESCRIBED ABOVE.

OWNER: CITY OF LOUISVILLE
APPROVED FOR PAYMENT

NAME: _____ DATE: _____
TITLE: _____

NAME: _____ DATE: _____
TITLE: _____

City of Louisville
COLORADO • SINCE 1878

CONTRACTOR'S PROPOSAL REQUEST
(Not a Change Order)

DATE SUBMITTED: _____ **No.** _____

TO: _____

We hereby request the cost of the following proposed change in the Contract. A breakdown of the proposed cost is attached.

Description of the proposed change:

_____

_____

_____

_____

_____

All work shall be in accordance with the terms, stipulations, and conditions of the Contract Documents. If the Work herein requested is approved by Change Order, the time of completion will be (increased), (decreased), (unchanged) by _____ calendar days.

New Substantial Completion Date: _____, 2023

This change will:

___ Increase the Contract by $_____
___ Decrease the Contract by $_____
___ No change in the Contract

SUBMITTED BY CONTRACTOR

BY: _____

TITLE:_____

DATE:_____

CITY OF LOUISVILLE

___ Contractor's Proposal Request Accepted

___ Contractor's Proposal Request Not Accepted

BY: _____

TITLE:_____

DATE:_____

City of Louisville
COLORADO • SINCE 1878

CONTRACTOR'S OVERTIME REQUEST

DATE SUBMITTED: _____

TO: _____

We hereby request to perform work on overtime in accordance with the terms, stipulations, and conditions of the Contract Documents.

Requested date of overtime work: _____

Requested hours of overtime work: _____ **(a. m./p. m.) to** _____ **(a. m./p. m.)**

Description of proposed overtime work:

_____

_____

No extra payment will be paid to the CONTRACTOR by the OWNER due to labor overtime or other increased costs of performing the Work on Friday afternoons, Saturdays, or at night. Should the CONTRACTOR desire to work on Friday afternoons or at night between the hours of 5:00 p.m. and 8:00 p.m., Monday-Thursday, or from 3:30 p.m. to 8:00 p.m. Friday, the CONTRACTOR shall submit a written request to the ENGINEER 24 hours prior. If approval is given by ENGINEER to CONTRACTOR for authorized overtime work, ENGINEERs and ENGINEER's authorized personnel will charge overtime and other incidental administrative expenses necessary for performing inspections on Friday afternoons, or at night between the hours of 5:00 p. m. and 8:00 p.m., Monday-Thursday and 3:30 p.m. to 8:00 p.m. Friday, the CONTRACTOR will be responsible to pay for all such rates and charges, and shall not be granted a Contract Price increase for such charges.

Hours of overtime work shall only be allowed from 5:00 p.m. to 8:00 p.m. Monday thru Thursday, and from 3:30 p.m. to 8:00 p.m. Friday.

SUBMITTED BY CONTRACTOR

BY: _____

TITLE: _____

DATE: _____

CITY OF LOUISVILLE

____ Contractors Proposal Request Accepted

____ Contractors Proposal Request Not Accepted

BY: _____

DATE: _____

TITLE: _____

City of Louisville
COLORADO • SINCE 1878

CERTIFICATE OF SUBSTANTIAL COMPLETION

TO: CONTRACTOR

This Certificate of Substantial Completion applies to all Work under the Contract Documents or to the following specified parts thereof:

_____

_____

_____

The Work to which this Certificate applies has been inspected by authorized representatives of OWNER, and that Work is hereby declared to be substantially complete in accordance with the Contract Documents on:

<DATE>
DATE OF SUBSTANTIAL COMPLETION

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in the list does not alter the responsibility of CONTRACTOR to complete all the Work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within _____ days of the issuance of this Certificate of Substantial Completion.

CONTRACTOR shall maintain all contractual responsibilities until Final Acceptance.

The following documents are attached to and made a part of this Certificate of Substantial Completion:

Attachments:

_____

_____

_____

(For items to be attached see definition of Substantial Completion as supplemented and other specifically noted conditions precedent to achieving Substantial Completion as required by the Contract Documents.)

(CONTINUED NEXT PAGE)

City of Louisville
COLORADO • SINCE 1878

CERTIFICATE OF SUBSTANTIAL COMPLETION (CONTINUED)

This certificate does not constitute an acceptance of Work or start of the guarantee period nor its release of CONTRACTOR's obligation to complete the Work in accordance with the Contract Documents. Issuance of Substantial Completion does not commence the guarantee period with this certificate.

CITY OF LOUISVILLE, COLORADO		**ACCEPTED BY CONTRACTOR**	
BY:	_____	BY:	_____
TITLE:	_____	TITLE:	_____
DATE:	_____	DATE:	_____

City of Louisville
COLORADO • SINCE 1878

FINAL INSPECTION REPORT

DATE:

TO:

The OWNER has performed final inspection of the Work, and accepts the Work subject to the Contractor's performance and completion of the following repairs, corrections and/or replacements:

_____

_____

_____

_____

_____

The OWNER **does**/does not (circle) hereby finally accept the work, and hereby certifies that the Contractor is eligible to receive final payment of the Work.

CITY OF LOUISVILLE, COLORADO	**CONTRACTOR**
BY: _____	BY: _____
TITLE: Project Manager _____	TITLE: _____
DATE: _____	DATE: _____

City of Louisville
COLORADO • SINCE 1878

CERTIFICATE OF FINAL COMPLETION

DATE:

TO:

This Certificate of Final Completion applies to all Work under the Contract Documents, or to the following specified parts thereof:

_____

_____

The Work to which this Certificate applies has been inspected by authorized representatives of the Project Manager and the Work is hereby declared to be complete in accordance with the Contract Documents on

_____
DATE OF FINAL COMPLETION

In consideration therefor, the OWNER agrees to make Final Payment to Contractor of all amounts retained by OWNER, except such amounts that are subject to verified claims pursuant to Section 38-26-107, C.R.S, if any.

CITY OF LOUISVILLE, COLORADO	**CONTRACTOR**
BY: _____	BY: _____
TITLE: Project Manager _____	TITLE: _____
DATE: _____	DATE:

City of Louisville
COLORADO • SINCE 1878

GUARANTEE PERIOD INSPECTION REPORT

DATE:

TO:

The City of Louisville's authorized representative performed the guarantee period inspection on _____, 20 ___, which guarantee was originally due to expire on _____, 20___.

The OWNER hereby determines that the project has ___/ has not ___ satisfactorily met the conditions required to pass the guarantee period inspection.

The identified following items of Work are defective and must be repaired, corrected and/or replaced:

_____

_____

_____

_____

_____

The guarantee period shall be extended for the items listed above until the following date:

_____

CITY OF LOUISVILLE, COLORADO	**CONTRACTOR**
BY: _____	BY: _____
TITLE: _____	TITLE: _____
DATE: _____	DATE: _____

City of Louisville
COLORADO • SINCE 1878

FINAL CLAIM RELEASE & ACCEPTANCE

Application for Payment Number: _____
Application for Payment Amount: _____
Application for Payment Date: _____

For valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned hereby releases the City of Louisville, Colorado, and waives all rights of the undersigned to file a claim for material, equipment, tools, machinery or services heretofore furnished for use in and for labor heretofore performed upon the construction, alteration, addition to or repair of the structure or improvements described in the Contract Documents as:

Project: PROJECT NAME

Description of Property: PROJECT LOCATION, CITY OF LOUISVILLE

Owner: CITY OF LOUISVILLE, COLORADO

We acknowledge that the foregoing is an adequate description of the real property and improvements to which this Claim Release pertains inasmuch as the foregoing description is the description given in the Contract Documents, which govern the performance of the Work for which consideration has been received.

In executing this release, we certify that all claims for labor or materials, or both, furnished or performed by the undersigned or on our behalf by our material suppliers or subcontractors have been paid or that satisfactory arrangements for payment have been made and we hereby waive and release any and all rights, claims and liens which the undersigned may now or hereafter have, claim or assert against the project, the Owner, or any funds in Owner's possession or control concerning the project, or against all land and any improvements and appurtenances to the land improved by the project.

In consideration of the final payment made or to be made to the undersigned and to induce said payment, we hereby further release and forever discharge the City of Louisville, its officers and employees, from any and all liability, actions, causes of action, claims, demands, damages, costs, loss of services, loss of properties, expenses, compensation and any and all consequential damages or injuries, which the undersigned may now or hereafter have, claim or assert on account of, relating to, or in any way arising out of the above described project.

In further consideration of the payment made or to be made to the undersigned and to induce said payment, we agree to defend and indemnify the City of Louisville, its officers and employees from any claim or claims on the part of our material suppliers, laborers, employees, servants, and agents, or subcontractors arising from our work on this project, and we further agree to fully satisfy any such claim brought against the City of Louisville and reimburse the City of Louisville for any and all costs, including reasonable attorney fees, which it may incur as a result of such claims.

City of Louisville
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FINAL CLAIM RELEASE & ACCEPTANCE (CONTINUED)

As contactor on the above described project, we further accept the pay quantities and final payment indicated on the final payment application as correct. The above noted final payment of $_____ results in total cumulative payment of $_____ for this project. By accepting this final payment, we accept that the final payment application is full and complete, that no other or further amounts are due to the undersigned, and we hereby waive and release all rights, claims and liens arising from the completion of work under the Contract Documents.

The undersigned representative certifies to have full authority to execute this instrument and to bind the contractor to all statement and provisions herein contained.

_____ _____

PRIME CONTRACTOR

By: _____ _____

President

Date: _____ _____

City of Louisville
COLORADO • SINCE 1878

CLAIM RELEASE – SUBCONTRACTOR/SUPPLIER

For valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned hereby releases the City of Louisville, Colorado, and waives all rights of the undersigned to file a claim for material, equipment, tools, machinery or services heretofore furnished for use in and for labor heretofore performed upon the construction, alteration, addition to or repair of the structure or improvements described in the Contract Documents as:

Project: PROJECT NAME

Description of Property: PROJECT LOCATION, CITY OF LOUISVILLE

Owner: CITY OF LOUISVILLE, COLORADO

We acknowledge that the foregoing is an adequate description of the real property and improvements to which this Claim Release pertains inasmuch as the foregoing description is the description given in the Contract Documents, which govern the performance of the Work for which consideration has been received.

In executing this release, we certify that all claims for labor or materials, or both, furnished or performed by the undersigned or on our behalf by our material suppliers or subcontractors have been paid or that satisfactory arrangements for payment have been made, and we hereby waive and release any and all rights, claims and liens which the undersigned may now or hereafter have, claim or assert against the project, the Owner, or any funds in Owner's possession or control concerning the project, or against all land and any improvements and appurtenances to the land improved by the project.

In consideration of the final payment made or to be made to the undersigned and to induce said payment, we hereby further release and forever discharge the City of Louisville, its officers and employees, from any and all liability, actions, causes of action, claims, demands, damages, costs, loss of services, loss of properties, expenses, compensation and any and all consequential damages or injuries, which the undersigned may now or hereafter have, claim or assert on account of, relating to, or in any way arising out of the above described project.

In further consideration of the payment made or to be made to the undersigned and to induce said payment, we agree to defend and indemnify the City of Louisville, its officers and employees from any claim or claims on the part of our material suppliers, laborers, employees, servants, and agents, or subcontractors arising from our work on this project, and we further agree to fully satisfy any such claim brought against the City of Louisville and reimburse the City of Louisville for any and all costs, including reasonable attorney fees, which it may incur as a result of such claims.

SUPPLIER OR SUBCONTRACTOR	**PRIME CONTRACTOR**
By: _____	By: _____
President	President
Date: _____	Date: _____

REQUEST FOR PROPOSAL

Pond Liner Replacement at Hole 2 of the Coal Creek Golf Course

A <u>recommended pre-proposal meeting</u> will be conducted on-site at:
1:00 PM MT on Monday March 16th, 2026

<u>Proposals should be submitted via email</u> to the enclosed
Parks, Recreation & Open Space Department contact(s) no later than:
1:00 PM MT on Wednesday April 8th, 2026.

City of Louisville | Parks, Recreation & Open Space
749 Main Street Louisville, CO 80027
PH: (303) 335-4735 www.louisvilleco.gov

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1.0 INVITATION TO BID

The City of Louisville ("the City") is soliciting bids from qualified vendors and contractors ("Respondents") to assist City staff with Pond Liner Replacement at the Coal Creek Golf Course through an integrated project delivery (design/build) agreement.

Digital copies of the Bidding Documents will be available after March 2, 2026 through the department office, on-line via the Rocky Mountain Bid System and on the City's website: https://www.louisvilleco.gov/doing-business/bidding-opportunities-requests-for-proposals

A recommended pre-proposal meeting will be held at pond location on Monday March 16th at 1:00 PM MT. Bids will be accepted electronically by the department until 1pm MT on Monday April 6th, 2026. See bidding documents for submission requirements and contact information.

2.0 PROJECT SUMMARY

Coal Creek Golf Course is an award-winning facility located in Louisville, Colorado. Originally designed by Dick Phelps in 1990, Coal Creek was redesigned by Kevin Norby after being heavily damaged by a 2013 flood and was reopened in June of 2015.

Hole 2 of the course is the location of a series of stormwater drainage ponds, including one directly adjacent to the green. The liner of the existing pond has been leaking for many years causing the water to routinely drop below desired levels and leading to complaints from course users and nearby residences. Efforts to locate the leak have been deterred by sediment accumulating on the liner and staff now desire to completely replace it to resolve the issue.

The existing pond is approximately .7 acres (29,200 SF) and estimated to be 8-10' deep depending on cover soil and accumulated sediments. The northern half is comprised of fairway rough and a green side bunker. The southern half is rock cobble bank adjacent to private residences. Access for the project will come from Coal Creek Lane, with a relatively flat and approximately 40-yard-long route from the roadway to the pond's northeastern corner. It is desired that the hole remains playable during the majority of construction, unless otherwise arranged.

3.0 SCOPE OF WORK

The selected respondent (or team) will work closely with City staff to deliver pre-construction coordination and then furnish all materials, tools, equipment, labor and supervision needed to complete the work. The work includes all aspects of design, demolition, procurement, and construction to deliver a liner replacement and restoration of surrounding landscape, unless otherwise noted.

Scope of services should include:

- Regular communications with City staff throughout the project lifecycle, with frequency varying by project phase.
- Review of existing conditions, including a site visit(s) to confirm site conditions, site access and construction feasibility prior to the finalization of bidding.
- Determinations of project materials, means and methods in coordination with course management.
- All expenses pertaining to mobilization, travel, BMPs and site access needs.
- Securing the work area with a temporary perimeter fence.
- Remove, store in place and reinstall landscape cobble rock on south side of pond.
- Demolition of existing liner and accumulated soils, including existing cover soils. Hauling and off-site disposal of demolished materials.
- Installation of new pond liner with anchor trench per specifications. Liner to be 36 mil Reinforced Polyethylene (RPE) over a geocomposite underlayment or approved equal.
- Import and installation of 12” cover soil. Soil to be clean and free of debris.
- Restoration of impacted areas with soil prep, fine grade, and turfgrass sod per Owner specifications (Green Valley Turf Short Cut Blue, or approved equal)
- Coordination with Owner on repairs to irrigation systems, if impacted by construction.
- Removal and off-site disposal of all construction debris and related materials.

4.0 ANTICIPATED SCHEDULE / KEY DATES

Daily Camera Submission..... 2/27/26
Rocky Mountain E- Purchasing Posting 3/2/26
First Publication 3/4/26
Second Publication..... 3/18/26
Optional Pre-Proposal Meeting..... 1 p.m. MT 3/16/26
Inquiry Deadline. ..... 1 p.m. MT 3/18/26
Inquiry Response Deadline 3/23/26
Proposals Due ..... 1 p.m. MT 4/8/26
Proposal Review..... 4/9/26
City Council Packet Submission 4/24/26
City Council Meeting / Contract Award 5/5/26
Notice of Award 5/6/26
Notice to Proceed, Bonds, Insurance, etc. ..... TBD 2026
Construction..... TBD Fall 2026

5.0 SELECTION PROCESS AND CRITERIA

The following criteria will be used to evaluate all proposals:

- The respondent's interest in the services which are the subject of this RFP, as well as their understanding of the scope of such services and the specific requirements of the City of Louisville.
- The reputation, experience, and efficiency of the respondent(s).
- The ability of the respondent to provide quality services within time and funding constraints.
- The general organization of the proposal: Special consideration will be given to submittals which are appropriate, address the goals; and provide in a clear and concise format the requested information.
- Such other factors as the City determines are relevant to consideration of the best interests of the City.

6.0 PERIOD OF SERVICE

The Respondent Team should be available to perform work per the above scheduled dates upon approval of their proposal. Any foreseen limitations and/or conflicts impacting the proposed project schedule should be addressed in the cover letter of the submission.

7.0 BUDGET, COMPENSATION & PAYMENT

Payment for the Respondent Team services will be based on a lump sum proposal to include the scope of services identified in the Request for Proposal. The lump sum proposal shall include costs for all overhead, profit, deliverables, travel and other expenses incidental to the project. Payments will be made on a monthly basis upon receipt and acceptance of an invoice indicating the services for which payment is due. Hourly rate and unit pricing schedules shall be included in the contract for possible additions or deletions to the services. The City of Louisville is tax exempt.

8.0 STANDARD TERMS AND CONDITIONS

Respondents should be aware of the following terms and conditions what have been established by the City of Louisville:

- The request for proposal is not an offer of contract. The provisions in the RFP and any purchasing policies or procedures of the City are solely for the fiscal responsibility of the City, and confer no rights, duties or entitlements to any party submitting proposals.
- The City of Louisville reserves the right to reject any and all proposals, to consider alternatives, to waive any informalities and irregularities, and to re-solicit proposals.
- The City of Louisville reserves the right to conduct such investigations of and discussions with those who have submitted proposals or other entities as they deem necessary or appropriate to assist in the evaluation of any proposal or to secure maximum clarification and completeness of any proposal.
- The City of Louisville assumes no responsibility for payment of any expenses incurred by any proponent as part of the RFP process.
- All submittals become the property of the City, a matter of public record and will not be returned. Proprietary information included in submittals must be clearly identified and will be protected, if possible. Unit pricing and total cost information will not be considered proprietary.
- The City has the right to use any or all ideas presented in response to this invitation to bid. Disqualification of the respondent does not eliminate this right. The City reserves the right to select the proposal that is most advantageous to the City, even if it is not the least expensive.

- No Bid may be withdrawn within a period of sixty (60) days after proposal submission deadline.
- The successful proposer shall be required to sign a contract with the City in a form provided by and acceptable to the City. The contractor shall be an independent contractor of the City. A sample contract is enclosed, see attached exhibits.
- As part of the contract agreement, respondents should be able to satisfy the following criteria:
    - Obtain a Performance Bond and Labor and Material Payment Bond, each with a value equal to 100% of the contract amount
    - Provide a Certificate of Insurance which names the City of Louisville, CO as additional insured. (See terms in attached Sample Agreement)
    - Possess, or obtain, a Class D (or higher) Contractor License with the City of Louisville, CO

9.0 REQUIRED SUBMITTALS

One digital copy (single PDF file preferred) should be submitted to the enclosed contacts prior to the Proposal Deadline. Proposals should include the following in the order given:

1. Letter of Interest
    a. Provide a brief cover letter stating the Respondent's interest and reflecting an understanding of the proposed scope of services.
    b. The letter must be signed by an authorized agent for the Respondent.
2. Capabilities & Experience
    a. Provide a review of your qualifications and include three (3) examples of past or present work which best demonstrate your ability to successfully complete the proposed services.
    b. Focus, to the greatest extent possible, on projects similar to the scope of services herein delivered within the past 5 years.
3. References
    a. Provide three (3) Client references (including contact person and phone number) for projects of similar size/scope.
4. Required Forms
    a. Signed Disclosure Statement (Exhibit A)
    b. Signed Submission Form (Exhibit B) Please include a separate submission form for each design, not to exceed three (3) designs total.

10.0 INQUIRIES

Prospective submitters may make written inquiries by email prior to the inquiry deadline. Inquiries will also be accepted at the pre-proposal meeting. An addendum will be released to all pre-proposal meeting attendees with any required clarifications, revisions and/or associated documents prior to the inquiry response deadline. Inquiries should be sent via email to the contacts listed below.

11.0 SUBMISSIONS & CONTACT INFORMATION

Proposals will be accepted until the **Proposal Deadline** listed in section 4 above. Late proposals will not be accepted. Please keep submissions to 10mb file size or less.

Proposals shall be submitted via email to the department contact(s) below:

Bryon Weber
Project Manager | Parks, Recreation & Open Space
bweber@louisvilleco.gov

12.0 LIST OF EXHIBITS

Exhibit A - Disclosure Statement
Exhibit B - Pricing Form
Exhibit C - Site Drawings (CAD file available on Bidnet and via request)
Exhibit D - Sample Standard Agreement
Exhibit E – Project Specifications



Pond Liner Project
Hole #2(11)
Coal Creek Golf Course

*Budget & Scope Amendment Request(s)

City Council Presentation
June 16, 2026

Adam Blackmore, CPRE, PROS(G) Director
Ryder Bailey, CPA, Finance Director
Bryon Weber, PROS Project Manager

City of Louisville

Project Background

- **City Council Review & Requests**
  - Original project request submitted in 2022 for 2023-2024 budget consideration. Project was not approved for 2023-2024 budget.
  - Project was resubmitted and approved in 2024 as a capital improvement project included in the 2025-2026 Golf Fund budget total appropriation of $309,241
- **Request for Proposal & Bid process**
  - Public bidding RFP process completed in April 2026 with two (2) qualified bids received and a low-bid of $367,800 ($58,559 over the budget allocation of $309,241).

Project Budget Amendment Request

- Staff request funding and contract approval for low-bid proposal.
  - Requesting additional $108,559 in project budget which includes $58,559 in bid proposal costs and ~13.5% ($50,000) contingency funding.

- If approved, staff recommend funding the amendment via the Capital Projects Fund balance
  - Golf Fund (projected fund balance at year end is $302,000, below minimum operating reserve per Financial Policy 2.7)
  - Capital Projects Fund (projected fund balance at year end is $11,000,000)

Total Project Spending

$309,241 Original Construction Budget (Source: 2026 Golf Capital)

+$58,559 Amended Construction Budget (Source: CPF)

$367,800 Construction Contract Amount

+$50,000 Amended Budget for Construction Contingency (Source: CPF)

$417,800 Construction Budget Total

An additional $108,559 Budget Amendment Request.

City of Louisville

Recommendations

- Accept lowest acceptable bid to replace the liner, with construction contingency (~13.5%, $50,000); and
- Approve a budget amendment from Capital Projects Fund for $108,559.
- Direct staff to re-evaluate pond re-fill with city raw water supply after the completion of construction with evaluation of available supply and drought impacts.

City of Louisville

Alternatives

- Direct staff to Re-submit Capital Project request for future year budget consideration with modified budget and/or scope.
- Direct staff to Re-post RFP with clear budget availability to seek new potential bids/contractor interest.
- Do not proceed with project as proposed at this time.

City of Louisville

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City Council Communication
Agenda Item 10.A.

Subject: Resolution No. 58, Series 2026 - A Resolution Designating the Residence Located at 733 McKinley Avenue a Historic Landmark to be Named the Hilton House and Approving a Preservation and Restoration Grant

This will be the only reading of this item and final action may be taken. There will be one round of public comment.

Date: June 16, 2026

Prepared By: Jessica Daniels, Senior Planner

Presented By: Jessica Daniels, Senior Planner

Summary:
Approval of Resolution No. 58, Series 2026, approving the landmark designation and a Preservation and Restoration Grant request at 733 McKinley Avenue.

Background / Prior Discussions:
HPC Recommendation

- Approval of Resolution No. 3, Series 2026, recommending approval to City Council of a landmark designation at 733 McKinley Avenue, to be named the Hilton House and a landmark incentive of $7,700.00 (Attachment No. 2).
- Approval of Resolution No. 4, Series 2026, approving the Alteration Certificate (Attachment No. 3).
- Approval of Resolution No. 5, Series 2026, recommending approval to City Council of a Preservation and Restoration Grant of up to $18,555.05, a matching credit of $7,405.06, and a new construction grant of up to $19,500.00 (Attachment No. 4).

Staff Recommendation

- Approval of Resolution No. 58, Series 2026, approving the landmark designation at 733 McKinley Avenue, to be named the Hilton House and a landmark incentive of $7,700.00, and approvals of a Preservation and Restoration Grant of up to $18,555.05, a matching credit of $7,405.06, and a new construction grant of up to $19,500.00 (Attachment No. 1) for grants totaling $53,160.11.

HISTORICAL BACKGROUND:

Information from Bridget Bacon, Louisville Historical Museum

The original residence, built in 1939, was the home of Elmer Hilton and Muriel Thompson Hilton between 1939 to 1957. Elmer Hilton built the house. Its history is connected with that of the longtime Royal and Lula Belle Thompson residence next door at 741 McKinley. In 1937, Muriel Thompson married Elmer Hilton. In 1938, Lula Belle Thompson conveyed the lots for 733 McKinley to her daughter and son-in-law, Muriel and Elmer Hilton. Elmer Hilton had grown up in Louisville as the son of William Hilton and Elizabeth Barker. Both the Hiltons and the Barkers were pioneer families of Louisville. Like Muriel, Elmer was born in 1913.

Elmer Hilton's obituary states that he built the house in 1939. Elmer Hilton worked at a variety of jobs in Louisville. He worked for the Industrial Mine, Monarch Mine, and Black Diamond Mine, and for Rocky Flats as an operations engineer. He also had at least two businesses as a woodworker. The owners of 733 McKinley from 1957 to 1963 were Eugene and Palmena DiCarlo. The current owners, Robert Tully and Genevieve Braus, purchased 733 McKinley in 1993.

Please see Social History Report for more information (Attachment No. 5).



Image of 733 McKinley Avenue from 1948 Boulder Assessors Card



Recent images of 733 Mckinley from Historic Structure Assessment, 2024



Recent photos from Historic Structure Assessment, 2024

ARCHITECTURAL INTEGRITY:

The PaleoWest Historic Context Report, *Stories in Places*, identifies 733 McKinley Avenue as a Minimal Traditional form architectural style. No further information exists for the property. Minimal Traditional Form (1930s–1950) houses were very common from just before WWII until the Ranch form became dominant in the 1950s. Minimal Traditional houses represent forms that are transitional between earlier cottages and bungalows and later ranches.

HISTORIC STRUCTURE ASSESSMENT

A Historic Structure Assessment (HSA) was competed in May 2024 by DAJ Design (Attachment No. 6). Per the HSA, 733 McKinley is a typical wood frame vernacular house of the Louisville area. The foundation is essentially original, and the house has had only one campaign of renovation in the 1970's. The wood frame construction style of the original house is typical of early 20th century construction techniques found in the Louisville area. The HSA notes that 733 McKinley has the potential to be restored to a high degree of architectural integrity when compared to historic photos. Overall, the home is well maintained, with items that require prioritization, as outlined in the analysis of the HSA.

Development Proposal:

Request to landmark the property and a Preservation and Restoration Grant for the approved Alteration Certificate scope of work:

- New construction request for a new studio shed/ office space
- Remove detached woodshed in rear yard
- Partial enclosure of rear porch
- Replace 420 square feet of cracked non-sloping concrete apron adjacent to the house on the west side in the backyard and replace with proper sloping apron and a window well
- Regrade non sloping lawn
- Replace two northeast windows with mullion, 4 over 1 panes and larger five piece trim to match historical photos as recommended in the HSA.

The recommended eligible preservation and restoration grant is $18,555.05, as well as approval of a matching credit for eligible work completed prior to landmarking of $7,405.06, approval of a New Construction grant of up to $19,500.00, and approval of a landmark designation bonus of $7,700.00 for a total grant of $45,755.05.

Analysis:

HISTORICAL SIGNIFICANCE ANALYSIS AND CRITERIA FOR LISTING AS LOCAL LANDMARK

In order to receive a City Landmark designation, landmarks must be at least 50 years old and meet one or more of the criteria for architectural, social or geographic/environmental significance as described in Louisville Municipal Code (LMC) Section 15.36.050(A).

Staff analysis of the criteria is as follows:

Sec. 15.36.050. - Criteria for Designation

Criteria	Meets Criteria	Evaluation
A. Landmarks must be at least 50 years old and meet one or more of the criteria for architectural, social or geographic/environmental significance as described in this chapter.	**Yes**	733 McKinley Avenue was constructed around 1939, making it approximately 87 years old.

1. a. Architectural. 1. ***Exemplifies specific elements of an architectural style or period.*** 2. *Example of the work of an architect or builder who is recognized for expertise nationally, statewide, regionally, or locally.* 3. *Demonstrates superior craftsmanship or high artistic value.* 4. *Represents an innovation in construction, materials or design.* 5. *Style particularly associated with the Louisville area.* 6. *Represents a built environment of a group of people in an era of history that is culturally significant to Louisville.* 7. *Pattern or grouping of elements representing at least one of the above criteria.* 8. *Significant historic remodel.*	**Yes**	Architectural Significance - *Exemplifies specific elements of an architectural style or period.* • 733 McKinley Avenue exemplifies Minimal Tradition Style form common for the period.
1. b. Social. 1. *Site of historic event that had an effect upon society.* 2. ***Exemplifies cultural, political, economic or social heritage of the community.*** 3. ***Association with a notable person or the work of a notable person.***	**Yes**	Social Significance - *Exemplifies cultural, political, economic or social heritage of the community.* • Provided housing for community members that contributed to the economic or social heritage of the community.
1. c. Geographic/environmental. 1. ***Enhances sense of identity of the community.*** 2. *An established and familiar natural setting or visual feature that is culturally significant to the history of Louisville.*	**Yes**	The historic location of the house helps to create a sense of neighborhood identity.

3. All properties will be evaluated for physical integrity and shall meet one or more of the following criteria: 1. ***Shows character, interest or value as part of the development, heritage or cultural characteristics of the community, region, state, or nation.*** 2. ***Retains original design features, materials and/or character.*** 3. ***Remains in its original location, has the same historic context after having been moved, or was moved more than 50 years ago.*** *Has been accurately reconstructed or restored based on historic documentation.*	**Yes**	*Shows character, interest or value as part of the development, heritage or cultural characteristics of the community, region, state, or nation.* • The house is located in the Louisville Heights Subdivision and has historical ties to Louisville's mining industry. *Retains original design features, materials and/or character.* • Has good integrity and same design features and character of Minimal Traditional Architectural style homes. *Remains in its original location, has the same historic context after having been moved, or was moved more than 50 years ago.* • The structure has not been moved.

GRANT REQUEST:
The applicant is requesting approval of a Preservation and Restoration Grant for the alteration certificate scope of work.

Preservation and Restoration Grant:
Under Resolution No. 102, Series 2025, residential applicants are eligible for a $7,700 unmatched incentive grant as a Landmark bonus. This grant would be in addition to the $7,500 grant for the Historic Structure Assessment previously approved for the property. Owners of a landmarked property will be eligible for grants following the signing of the Landmark and grant agreements for approved work that must fall under the categories of preservation, rehabilitation, and restoration:

> *Preservation is the act or process of applying measures necessary to sustain the existing form, integrity, and materials of an historic property as they now exist. Approved work focuses upon the repair of exterior historic materials and features rather than extensive replacement and new construction.*
>
> *Rehabilitation is the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features which convey its historical, cultural, or architectural values. Rehabilitation acknowledges*

the need to alter or add to a historic property to meet continuing or changing uses while retaining the property' s historic character. The limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate.

Restoration is the act or process of accurately depicting the form, features, and character of a property as it appeared at a particular period of time. Approved work focuses on exterior work and includes the removal of features from other periods in its history and reconstruction of missing features from the restoration period.

Staff reviewed the Preservation and Restoration Grant request by evaluating whether each request line item qualified for grant funding as either preservation, rehabilitation, or restoration.

Findings are summarized in the following table:

Table 1. Staff analysis of Preservation Grant Requests

Requests		**Analysis**		
Description	Amount	Preservation, Restoration, or Rehabilitation?	In HSA?	Work Already Completed
Wall and rim joist insulation	$3,703.00	Preservation	Yes	Yes
Replace electrical panel and main cable	$5,175.11	Rehabilitation	Yes	Yes
Remove cracked nonsloping concrete apron in back; replace with slabs sloping away from house	$14,800.00	Preservation	Yes	No
Regrade non-sloping lawn	$1,000.00	Preservation	Yes	No
New heat pumps and water heater, new A/C unit	$20,740.61	Not eligible - interior work	Yes	Yes
Replace two non-original windows at rear with 2 Double Hung 1:1 window	$5,932.00	Restoration	Yes	Yes

Replace two non-original windows at front northeast corner with 4-over-1 pane windows with mullions and wider five-piece trim (to match 1948 photo)	$6,500.00	Restoration	Yes	No
Total Project Cost	$57,850.72			
Total Eligible Preservation and Restoration Costs	**$37,110.11**			
Total Eligible Preservation and Restoration Work Already Paid For (Prior to Landmarking)	$14,810.11			
Half of Eligible Preservation and Restoration Costs	**$18,555.05**			
Total Match Credit Recommended	$7,405.06	Half of eligible work already paid for prior to landmarking		
Total Grant Recommended	$18,555.05*	*Matching Requirement $11,149.90 due to matching credit of $14,810.11.		

Staff finds that the following items are not eligible for grant funds:

- Heat pumps
- Air conditioning unit
- Hot water tank
- Permit fees

As per the Historic Preservation Fund Resolution No. 102, Series 2025, only exterior scope of work is eligible for historic preservation expenses, except for t*he limited and sensitive upgrading of mechanical, electrical, and plumbing systems and other code-required work to make properties functional is appropriate.* Heat pumps, water heaters and A/C units are not required by the 2024 International Building Code (IBC), and are not identified as a treatment option for preservation in the Secretary of Interior's Standards for the Treatment of Historic Properties. Previously, permit fees have not been considered an eligible expense for use of preservation funds. For these reasons, staff do not consider these items in the scope of work to be eligible preservation expenses. However, the homeowners have received a number of energy related state and federal incentives, rebates, and tax credits totaling $10,980.00 for the heat pump, air conditioning and water heater work to assist in offsetting the costs of this work.

Section 12. of Resolution No. 102, Series 2025 outlines the time limits and procedures for work already completed prior to landmarking:

Section 12.

8. *An applicant may request that the value of stabilization, restoration or preservation* ***work completed on the structure prior to landmarking be considered as a credit against the matching requirement*** *of this Section.*

Credit for such previously completed work is at the discretion of the City Council. Credit may only be considered under the following circumstances:

1. *Only work completed within five years prior to the effective date of landmarking may be considered for potential credit against the matching requirement.*

2. *The work previously performed was for stabilization, restoration, or preservation of the historic structure. No landscaping or site work may be considered for potential credit against the matching requirement. No interior work, except for structural work, sensitive upgrading of mechanical, electrical, and plumbing systems, and other code -required work to make the property functional, may be considered for potential credit against the matching requirement.*
3. *Consideration for credit against the matching requirement may only be given to costs of previously completed work which is documented by paid receipts or invoices. The applicant shall provide the City with complete copies of all such receipts or invoices together with proof of payment, and shall also provide any available supporting documentation upon City request. The request for consideration of previously completed work shall also be accompanied by applicant's written certification that the work for which credit is requested was completed and the costs thereof were incurred and paid, and that the information in such request is true and accurate to the best of applicant's knowledge and belief. The value of in- kind services completed by the applicant shall not be considered. iv. The amount of credit given for any previously completed work shall be determined by the City Council with input from the Commission, considering such factors as the nature, extent and useful life of the work, the time it was completed, the appreciated or depreciated value of the work, and such other factors as determined relevant.*

As per Section 12. H, staff recommend approval of a matching credit in the amount of $7,405.06. This means that the applicant would have to match $11,149.99 for the current grant recommendation of $18,555.05.

New Construction Grant Request

Owners of landmarked property on which additions to existing residential structures are proposed are eligible for matching grants of up to $23,000 as set forth in Section 8, Table 1 of Resolution No.102, Series 2025 for new residential construction that, beyond mandatory requirements, substantially limits mass, scale, and number of stories, preserves setbacks in a manner that protects the historic integrity of the property and its environment by differentiating new work from the old. Qualifying new construction must maintain the existing height of the historic structure over the first 1/ 3 of the overall structure and have a floor area ratio (FAR) 10% below what is allowed by zoning.

A proposed new construction grant is requested for an office, connector roof (i.e. breezeway), and porch enclosure. The proposed material is cedar siding and the structure meets the requirements in terms of limited, mass, scale, and number of stories. See Figure 1 for proposed studio drawing and dimensions.



Figure 1: Proposed New Construction

Table 2. Analysis of New Construction Grant Request	
Requests	
Description	Amount
New construction grant for 96 sq. ft. detached studio shed and enclosed 70 square feet of rear porch for work niche	$39,000.00
Half of Project Cost	$19,500.00
Total Requested	$19,500.00

Total Recommended	$19,500.00

Summary of Grant Requests

LANDMARK INCENTIVE:
$7,700.00

STAFF RECOMMENDED PRESERVATION/RESTORATION GRANT:
$18,555.05

STAFF RECOMMENDED MATCHING CREDIT:
$7,405.06

STAFF RECOMMENDED NEW CONSTRUCTION GRANT:
$19,500.00

TOTAL OF GRANTS RECOMMENDED: $53,160.11

Council Work Plan:
N/A

Fiscal Impact:

The recommended grant total is $53,160.11. The encumbered fund balance is estimated at $2.5 M and the average income of the fund over the past two years is approximately $885,000, thus, staff finds there are adequate funds to support the request.

Alternatives:
1. That Council deny the request.
2. That Council approve an altenative amount.

Recommendation:
Approval of Resolution No. 58, Series 2026, approving the landmark designation at 733 McKinley Avenue, to be named the Hilton House and a landmark incentive of $7,700.00, and approvals of a Preservation and Restoration Grant of up to $18,555.05, a matching credit of $7,405.06, and a new construction grant of up to $19,500.00.

Attachments:
1. Resolution No. 58, Series 2026
2. HPC Landmark Resolution 733 McKinley Avenue
3. HPC Alteration Certificate Resolution 733 McKinley Ave
4. HPC Grant Resolution 733 McKinley Ave V3 - Final
5. 733 McKinley Avenue Social History
6. 733 McKinley Avenue Historic Structure Assessment
7. 733 McKinley Ave Presentation

RESOLUTION NO. 58
SERIES 2026

A RESOLUTION DESIGNATING THE RESIDENCE LOCATED AT 733 MCKINLEY AVENUE A HISTORIC LANDMARK TO BE NAMED THE HILTON HOUSE AND APPROVING A PRESERVATION AND RESTORATION GRANT

WHEREAS, there has been submitted to the City Council an application requesting a landmark eligibility determination and a preservation and restoration grant for a historical residential structure located at 733 McKinley Avenue on property legal described as the South Half of Lot 4 and all of Lot 5, Block 9, Louisville Heights Subdivision, City of Louisville, County of Boulder, State of Colorado; and

WHEREAS, City staff and the Louisville Historic Preservation Commission have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code;

WHEREAS, the Louisville Historic Preservation Commission held a properly noticed public hearing on the proposed landmark application and grant application and has forwarded to the City Council its recommendation of approval; and

WHEREAS, the City Council has duly considered the proposed landmark and grant applications and the Commission's recommendation and report, and has held a properly noticed public hearing on the applications; and

WHEREAS, the City Council finds the residence at 733 McKinley Avenue meets the criteria set forth in Section 15.36.050.A.1.a of the Louisville Municipal Code for architectural significance because of the architectural integrity that is representative of the built environment in 1900s Louisville; and

WHEREAS, the City Council finds the residence at 733 McKinley Avenue meets the criteria set forth in Section 15.36.050.A.1.b of the Louisville Municipal Code for social significance because it exemplifies the cultural, political, economic, or social heritage of the community considering its association with various Louisville families and Louisville's cultural heritage; and

WHEREAS, the City Council finds this architectural and social significance justifies the approval of the historic landmark application; and

WHEREAS, the City Council finds the repairs to the existing structure to be funded by the preservation and restoration grant will assist in the preservation of the Hilton House, and the requested grant for the same should be approved.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. The proposed historic landmark application for the residence located at 733 McKinley Avenue is hereby approved and is hereby designated a historic landmark to be known as the Hilton House.

Section 2. As a historic landmark, the Hilton House is eligible for incentives offered by the City for historic landmarks, including a $7,700 landmark incentive grant that is hereby approved by the City Council.

Section 3. The City Council hereby approves the preservation and restoration grant application for the Hilton House in the amount of **$18,555.05, a matching credit in the amount of $7,405.06, and a new construction grant in the amount of $19,500.00**, for work as described in **Exhibit A** attached hereto and incorporated herein by this reference.

Section 4. The City Clerk shall provide written notification of such designation to the property owners and cause a copy of this resolution to be recorded with the Boulder County Clerk and Recorder.

PASSED AND ADOPTED this 16th day of June, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

EXHIBIT A

Preservation Grant				
Requests		**Analysis**		
Description	Amount	Preservation, Restoration, or Rehabilitation?	In HSA?	Work Already Completed
Wall and rim joist insulation	$3,703.00	Preservation	Yes	Yes
Replace electrical panel and main cable	$5,175.11	Rehabilitation	Yes	Yes
Remove cracked non-sloping concrete apron in back; replace with slabs sloping away from house	$14,800.00	Preservation	Yes	No
Regrade non-sloping lawn	$1,000.00	Preservation	Yes	No
New heat pumps and water heater, new A/C unit	$20,740.61	Not eligible	Yes	Yes
Replace two non-original windows at rear with 2 Double Hung 1:1 window	$5,932.00	Restoration	Yes	Yes
Replace two non-original windows at front northeast corner with 4-over-1 pane windows with mullions and wider five-piece trim (to match 1948 photo)	$6,500.00	Restoration	Yes	No
Total Project Cost	$57,850.72			
Eligible Preservation and Restoration Costs	$37,110.11			
Eligible Preservation and Restoration Work	$14,810.11			

Already Paid For (Prior to Landmarking)			
Half of Eligible Preservation and Restoration Costs	$18,555.05		
Total Match Credit Recommended	$7,405.06		
Total Grant Recommended	$18,555.05*	*Matching Requirement $11,149.99 due to matching credit of $7,405.06.	

New Construction Grant Request	
Requests	
Description	Amount
New construction grant for 96 sq. ft. detached studio shed and enclosed 70 square feet of rear porch for work niche	$39,000.00
Half of Project Cost	$19,500.00
Total Requested	$19,500.00
Total Recommended	$19,500.00

RESOLUTION NO. 3
SERIES 2026

A RESOLUTION MAKING FINDINGS AND RECOMMENDATIONS REGARDING THE LANDMARK DESIGNATION FOR A HISTORICAL RESIDENTIAL PROPERTY LOCATED AT 733 MCKINLEY AVENUE.

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a landmark eligibility determination for a historical property located at 733 McKinley Avenue, legally described as S1/2 LOT 4 & ALL LOT 5 BLK 9 LOUISVILLE HEIGHTS, City of Louisville, State of Colorado; and

WHEREAS, the HPC have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code, including Section 15.36.050.A, establishing criteria for landmark designation; and

WHEREAS, the HPC has held a properly noticed public hearing on the proposed landmark application; and

WHEREAS, 733 McKinley Avenue (the Hilton House) has social significance because it exemplifies the cultural, political, economic, or social heritage of the community considering its association with various Louisville families and Louisville's cultural heritage; and

WHEREAS, the property has architectural significance because it has architectural integrity that is representative of the built environment in 1900s Louisville; and

WHEREAS, the HPC finds that these and other characteristics specific to the Hilton House have social and architectural significance as described in Section 15.36.050.A of the Louisville Municipal Code; and

NOW, THEREFORE, BE IT RESOLVED BY THE HISTORIC PRESERVATION COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

1. The application to landmark the property at 733 McKinley Avenue be approved for the following reasons:
    a. Architectural integrity has been largely maintained over time.
    b. Association with Louisville's heritage.
2. The Historic Preservation Commission recommends the City Council approve the landmark incentive grant in the amount of $7,700.
3. With the amendment that the structure be named the Hilton House.

PASSED AND ADOPTED this 16th day of March, 2026.



Sloane K. Whidden
Sloane Widden, Chairperson

RESOLUTION NO. 4
SERIES 2026

A RESOLUTION APPROVING OF AN ALTERATION CERTIFICATE FOR THE UNGER HOUSE LOCATED AT 733 MCKINLEY AVENUE FOR EXTERIOR ALTERATIONS.

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting an alteration certificate for a historic residential structure located at 733 McKinley Avenue, on property legally described as S1/2 LOT 4 & ALL LOT 5 BLK 9 LOUISVILLE HEIGHTS, City of Louisville, State of Colorado; and

WHEREAS, the City Staff and the HPC have reviewed the application and found it to be in compliance with Chapter 15.36 of the Louisville Municipal Code, including Section 15.36.120, establishing criteria for alteration certificates; and

WHEREAS, the HPC held a properly noticed public hearing on the proposed alteration certificate on March 16, 2026, where evidence and testimony were entered into the record, including findings in the Louisville Historic Preservation Commission Staff Report.

NOW, THEREFORE, BE IT RESOLVED THAT THE HISTORIC PRESERVATION COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

Does hereby recommend approval of the application for an alteration certificate for the Hilton House as described in the Staff Report:

PASSED AND ADOPTED this 16th day of March, 2026.

Sloane K. Whidden

_____

Sloane Whidden, Chairperson

RESOLUTION NO. 5
SERIES 2026

A RESOLUTION MAKING FINDINGS AND RECOMMENDATIONS REGARDING A PRESERVATION AND RESTORATION GRANT FOR THE HILTON HOUSE LOCATED AT 733 MCKINLEY AVENUE

WHEREAS, there has been submitted to the Louisville Historic Preservation Commission (HPC) an application requesting a preservation and restoration grant for the Hilton House, a historic residential structure located at 733 McKinley Avenue on property legally described as S1/2 LOT 4 & ALL LOT 5 BLK 9 LOUISVILLE HEIGHTS, City of Louisville, State of Colorado; and

WHEREAS, the City Staff and the HPC have reviewed the application and found it to be in compliance with Section 3.20.605.D and Section 15.36.120 of the Louisville Municipal Code; and

WHEREAS, the HPC has held a properly noticed public hearing on the preservation and restoration grant; and

WHEREAS, the preservation and restoration work being requested includes making repairs to the existing structure; and

WHEREAS, the Historic Preservation Commission finds these proposed improvements will assist in the preservation of the Hilton House, which is to be landmarked by the City;

NOW, THEREFORE, BE IT RESOLVED BY THE HISTORIC PRESERVATION COMMISSION OF THE CITY OF LOUISVILLE, COLORADO:

1. The Historic Preservation Commission recommends the City Council approve the proposed preservation and restoration grant application for the Hilton House, in the amount of **$18,555.05 and a matching credit of $7,405.06, and a new construction grant of up to $19,500.00** for work as described in the attached Exhibit A.

PASSED AND ADOPTED this 16th day of March 2026.



Sloane K. Whidden

Sloane Whidden, Chair Person

EXHIBIT A

Preservation Grant				
Requests		**Analysis**		
Description	Amount	Preservation, Restoration, or Rehabilitation?	In HSA?	Work Already Completed
Wall and rim joist insulation	$3,703.00	Preservation	Yes	Yes
Replace electrical panel and main cable	$5,175.11	Rehabilitation	Yes	Yes
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Regrade non-sloping lawn	$1,000.00	Preservation	Yes	No
New heat pumps and water heater, new A/C unit	$20,740.61	Not eligible	Yes	Yes
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Replace two non-original windows at front northeast corner with 4-over-1 pane windows with mullions and wider five-piece trim (to match 1948 photo)	$6,500.00	Restoration	Yes	No
Total Project Cost	$57,850.72			
Eligible Preservation and Restoration Costs	$37,110.11			
Eligible Preservation and Restoration Work Already Paid For (Prior to Landmarking)	$14,810.11			

Half of Eligible Preservation and Restoration Costs	$18,555.05		
Total Match Credit Recommended	$7,405.06	Half of eligible work already paid for	
Total Grant Recommended	$18,555.05*	*Matching Requirement $11,149.99 due to matching credit of $7,405.06	

New Construction Grant Request	
Requests	
Description	Amount
New construction grant for 96 sq. ft. detached studio shed and enclosed 70 square feet of rear porch for work niche	$39,000.00
Half of Project Cost	$19,500.00
Total Requested	$19,500.00
Total Recommended	$19,500.00

City of Louisville
COLORADO • SINCE 1878

733 McKinley Ave. History

Legal Description: South half of Lot 4 & All of Lot 5, Block 9, Louisville Heights

Year of Construction: 1939

Architect: Unknown; however, records indicate that the house was constructed by then-owner, Elmer Hilton.

Previous addresses used to refer to this property: none

Summary: This home, built in 1939, was the home of Elmer Hilton and Muriel Thompson Hilton from 1939 to 1957. Elmer Hilton built the house. Its history is connected with that of the longtime Royal and Lula Belle Thompson residence next door at 741 McKinley.

Development of the Louisville Heights Subdivision; Wintle Ownership of Lots

The Louisville Heights Addition in which this house sits was first developed in 1904 by the Colorado Mortgage and Investment Co. Ltd.

James and Augusta Wintle purchased the lots at 741 McKinley in 1905, according to Boulder County records. These included what is now 733 McKinley. James and Augusta lived at 741 McKinley until circa 1918-1920. Following the death of James Wintle, Augusta Wintle then sold the lots to Royal Thompson, by a deed recorded in 1924, though records show that the Thompsons began living there in around 1920.

Connected History of 733 McKinley to 741 McKinley

The house at 733 McKinley is on property that was part of the original 741 McKinley property. The properties also have a family connection. Muriel Thompson, who grew up at 741 McKinley, married Elmer Hilton and they lived at 733 McKinley. This arrangement was made possible by Muriel's parents, Royal and Lula Belle Thompson.

Royal Thompson was born in Nebraska in 1881, while Lula Belle (sometimes stated in the records to be Lulu Belle, Lulu Bell, or with other similar spellings) Fletcher was born in Iowa in about 1888. Records indicate that Royal's work over the years included being a "Grain Mill Elev. Foreman," watchman, and hoisting engineer at a coal mine. (Though another Thompson family historically lived catty-corner at 301

Spruce, no family connection between the two Thompson families has been found.) Their daughter, Muriel, was born in 1913.

Property records indicate that in 1936, Royal Thompson conveyed ownership to the lots that now comprise both 733 McKinley and 741 McKinley to his wife, Lula Belle Thompson.

Elmer and Muriel Hilton, Ownership 1939-1957

In 1937, Muriel Thompson married Elmer Hilton. In 1938, Lula Belle Thompson conveyed the lots for 733 McKinley to her daughter and son-in-law, Muriel and Elmer Hilton.

Elmer Hilton had grown up in Louisville as the son of William Hilton and Elizabeth Barker. Both the Hiltons and the Barkers were pioneer families of Louisville. Like Muriel, Elmer was born in 1913.

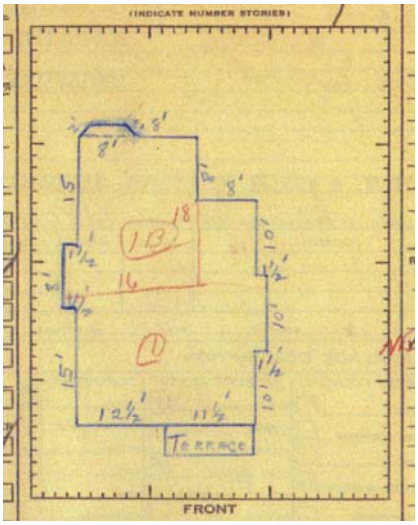
The house at 733 McKinley was constructed in 1939. Elmer Hilton's obituary states that he built the house.

Elmer Hilton worked at a variety of jobs in Louisville. He worked for the Industrial Mine, Monarch Mine, and Black Diamond Mine, and for Rocky Flats as an operations engineer. He also had at least two businesses as a woodworker. The 1949 directory shows that he was in business with his father-in-law, Royal Thompson. The business was called Hilton Wood Products and it was located at 741½ McKinley, behind Royal Thompson's house. The 1951 directory also shows Elmer to have been in business with Louisville resident Ralph Harmon. The business was "The Woodshop" and it was located on Main Street. By the time of the 1955 directory, however, Ralph Harmon had the business by himself and Elmer Hilton was back to working at the Black Diamond Mine. The 1958 directory listed Elmer as being a cabinetmaker.

The 1940 Louisville directory shows that Muriel Hilton worked at Bungalow Drug on Main Street in Louisville. She later worked for the University of Colorado Wardenburg Medical Center as a nurse's aide, and retired from there.

The following images are from the 1948 Boulder County Assessor card and show the house from that time, when it was owned by Elmer and Muriel Hilton, along with a sketch of the layout. The photo is believed to date from 1948. Notations on the card indicate that the blue markings on the layout sketch were made in 1948 and the red markings in 1950.





The Hiltons sold the house in 1957. Muriel Hilton died in 1973 and Elmer Hilton died in 1995. Elmer Hilton's obituary states that they had a daughter. Elmer remarried after Muriel's death.

Eugene and Palmena DiCarlo, Ownership 1957-1963

The owners of 733 McKinley from 1957 to 1963 were Eugene and Palmena DiCarlo. They had been married in 1951 and likely raised their children at 733 McKinley. Directories from the time show them to be living in this location. Eugene DiCarlo worked for Dow Chemical. He is still a Louisville resident. Palmena Ferrera DiCarlo passed away in 2006.

Robert and Margaret Sneddon, Ownership 1963-1978

Robert and Margaret Sneddon next owned and resided at 733 McKinley. Their children were Alyson and Heather. Bob Sneddon worked for Public Service Company of Colorado for 32 years. He passed away in 2006.

Later Owners

Later owners and residents of the house were Chris and Barbara Bratton; Richard Jelinek and Linda Mallinoff; Katherine Vaughan; Dorothy Vaughan; and Robert Metz. The current owners, Robert Tully and Genevieve Braus, purchased 733 McKinley in 1993.

The preceding research is based on a review of relevant and available online County property records, census records, oral history interviews, Louisville directories, and Louisville Historical Museum maps, files, obituary records, and historical photographs from the collection of the Louisville Historical Museum.

DAJDESIGN
ARCHITECTURE+INTERIORS

HISTORIC STRUCTURAL ASSESSMENT

733 McKINLEY AVENUE, LOUISVILLE, COLORADO

May 29, 2024



Evaluated by:

Andy Johnson, AIA
DAJ Design
922A Main Street, Louisville, CO 80027
303-527-1100; andy@dajdesign.com

This Project was paid for by the Louisville Preservation Fund grant.

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1.0 INTRODUCTION

1.1 RESEARCH BACKGROUND / PROJECT PARTICIPANTS

DAJ Design conducted an Historic Structural Assessment for the structure located at 733 McKinley Ave., Louisville, Colorado to determine its feasibility as a candidate for historic landmark designation as defined under the Historic Preservation program of the City of Louisville. The structure is a residential property. The City of Louisville Historic Preservation Commission found probable cause that the building may be eligible for landmarking under criteria in section 15.36.050 of the Louisville Municipal Code. Therefore, the Commission approved the Historic Structural Assessment to be paid for by the Louisville Preservation Fund grant.



The primary purpose of this HSA is to evaluate the property's current condition and to identify preservation priorities for the best use of rehabilitation funds. DAJ Design inspected 733 McKinley visually to identify areas of necessary maintenance and repair. It is possible that complications exist that were not visible and therefore it is recommended that the property owner includes contingency funding in any repair budget.

DAJ Design inspected 733 McKinley on May 2nd, 2024, with GFE Structural. The weather for the visit was warm and sunny. Adequate access to the basement and attic were available, though not all areas were entirely visible. Additionally, there are two detached structures on the property including a treehouse and a shed. Neither the treehouse nor the shed was inspected and are not believed to be historic structures.

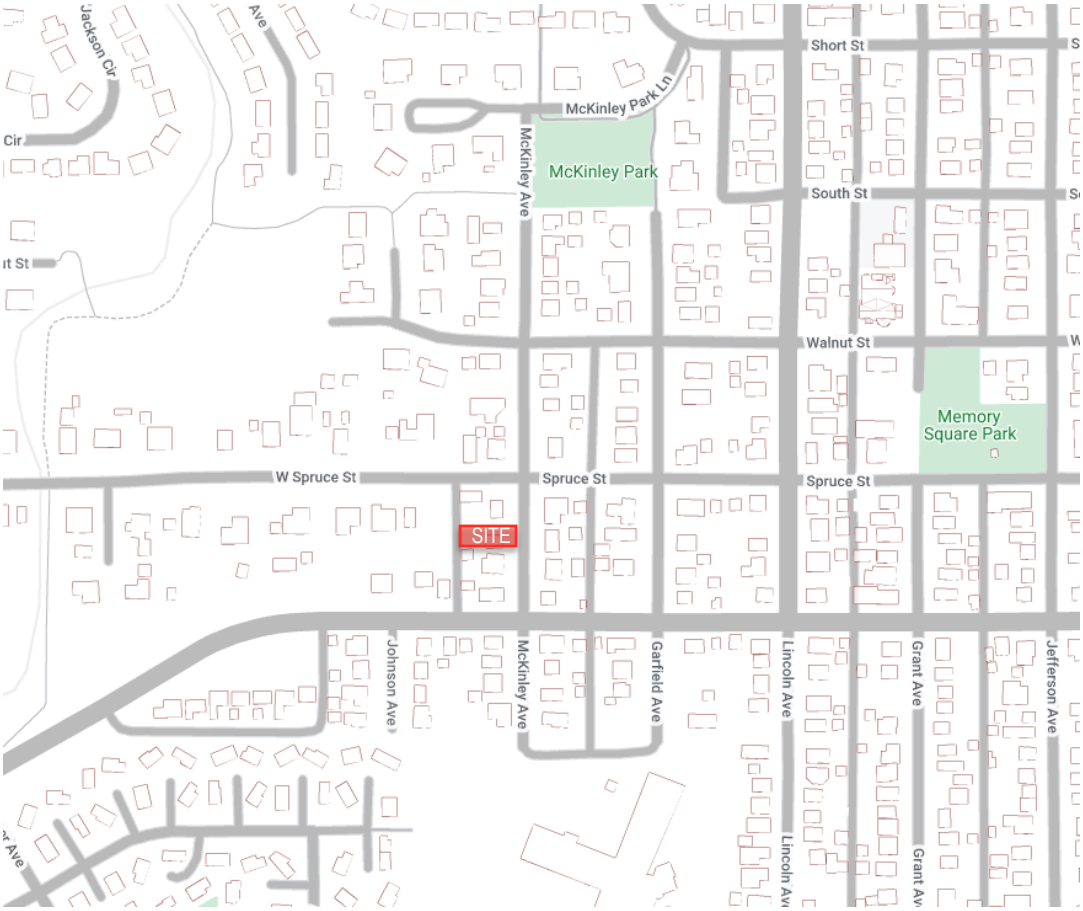
LIST OF CONSULTANTS AND SOURCES:

STRUCTURAL ENGINEER
VIGNAN BEESAM, PE
GFE STRUCTURAL, INC.
PO BOX 20708
BOULDER, CO 80308
303.554.9591

SOURCES
"Louisville Historic Preservation Commission Staff Report," February 22, 2024.

1.2 BUILDING LOCATION

VICINITY MAP



LEGAL DESCRIPTION: South half of Lot 4 & All of Lot 5, Block 9, Louisville Heights

2.0 HISTORY AND USE

The following report was written by Bridget Bacon of the Louisville Historical Museum in 2012 as part of a survey project.

733 McKinley Ave. History

Legal Description: South half of Lot 4 & All of Lot 5, Block 9, Louisville Heights

Year of Construction: 1939

Architect: Unknown; however, records indicate that the house was constructed by then-owner, Elmer Hilton.

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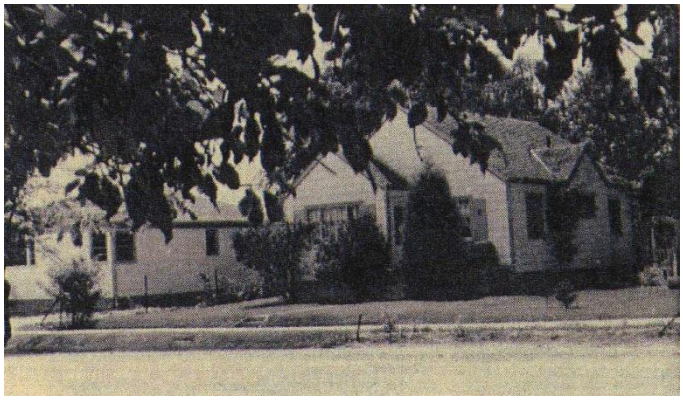
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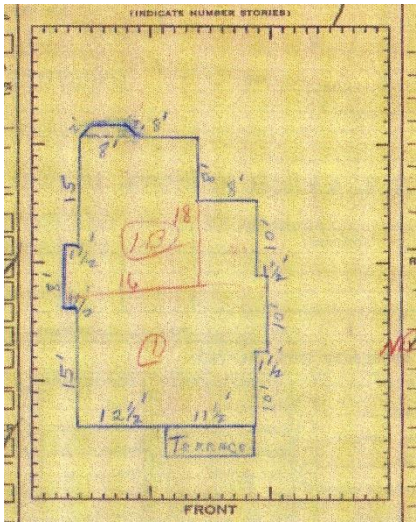
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Later Owners

Later owners and residents of the house were Chris and Barbara Bratton; Richard Jelinek and Linda Mallinoff; Katherine Vaughan; Dorothy Vaughan; and Robert Metz. The current owners, Robert Tully and Genevieve Braus, purchased 733 McKinley in 1993.

The preceding research is based on a review of relevant and available online County property records, census records, oral history interviews, Louisville directories, and Louisville Historical Museum maps, files, obituary records, and historical photographs from the collection of the Louisville Historical Museum.

2.1 ARCHITECTURAL SIGNIFICANCE & CONSTRUCTION HISTORY

The residential property at 733 McKinley was built in the mid to late 1930's and is a typical wood frame vernacular house of the Louisville area. In 2024 the structure is clad in steel siding, although evidence remains of the original painted wood siding existing beneath. The foundation is essentially original, and the house has had only one campaign of renovation in the 1970's. The front door was originally located on the north side of the house. Moreover, the 1948 assessor's card mentions a concrete terrace. The relocation of the front door, the removal of the terrace, and the construction of a new front porch are the only significant structural changes from the original build date.

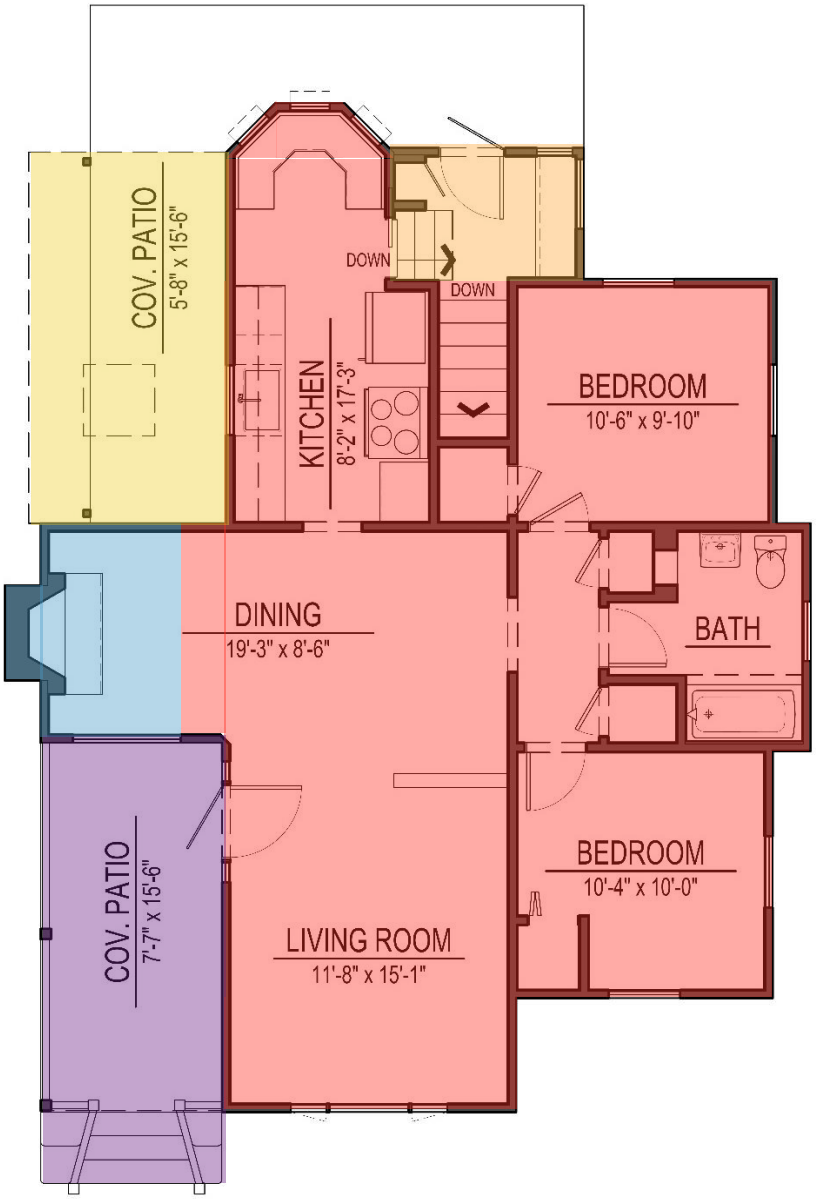
The primary façade faces east to McKinley Avenue and the original form of the house is apparent when viewed from the northeast. The overall mass of the house has increased slightly to the south with two porch additions. The wood frame construction style of the original house is typical of early 20th century construction techniques found in the Louisville area. Many of the original materials remain and are consistent with other building materials and details used on other houses built around the same time in the Louisville area.

733 McKinley has the potential to be restored to a high degree of architectural integrity when compared to historic photos. Overall, the home is well maintained, with items that require prioritization, as outlined in the analysis of this report. The original house is essentially intact with few modifications since the original construction in the 1930's. Based on site measurements and observations, it is believed that the original wood siding, a shiplap with a Dutch cove profile, is present under the existing steel siding . Further investigative deconstruction has the potential to reveal a larger extent of original materials.

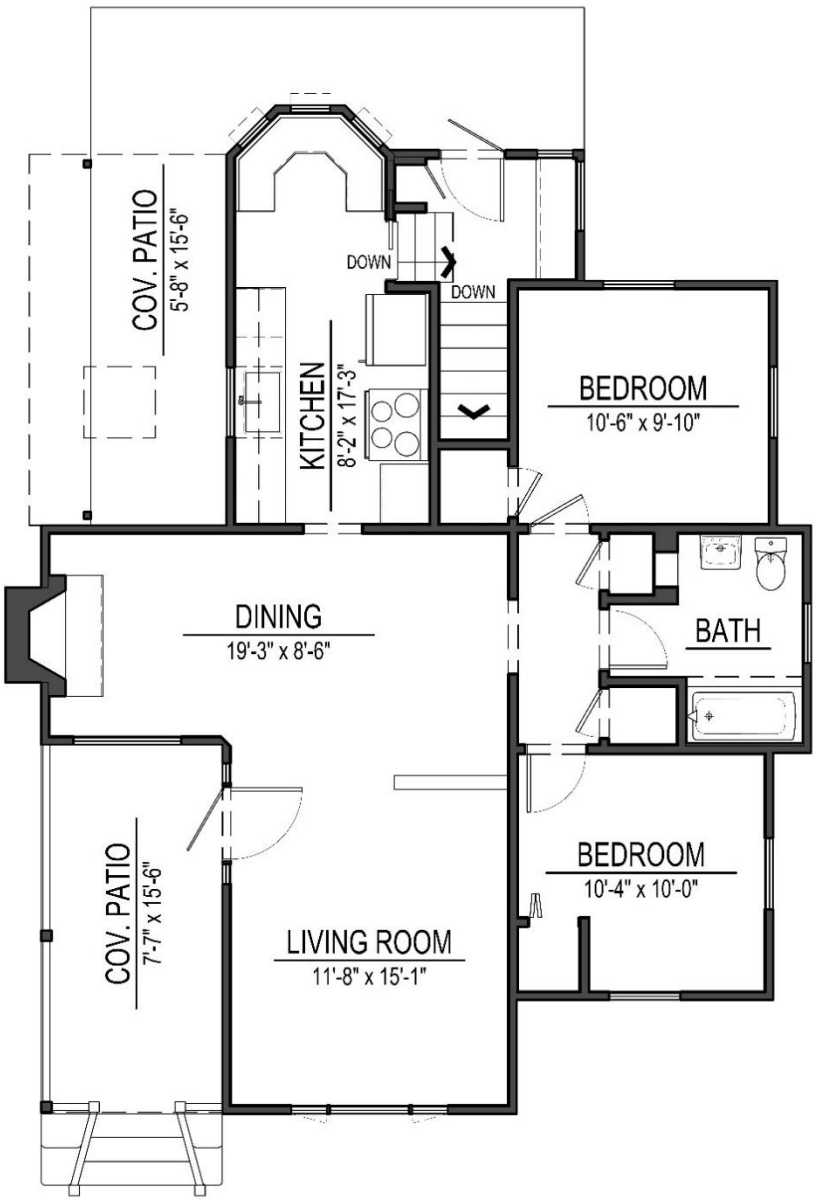
733 McKinley is not listed on the National, State, or Local Register.

Primary Changes Occurring Over Time:

- Original house (RED): ca. 1939
- Enclosed Porch (ORANGE): Unknown
- Covered Patio (YELLOW): Unknown, post-1948
- South addition (BLUE): Likely 1974
- New front porch (PURPLE): 1974
- New steel siding: 1975
- Mechanical upgrades: 2001
- Plumbing upgrades: 2001
- New asphalt roof: 2019
- New windows: Unknown
- New doors: Unknown
- New gutters & downspouts: Unknown



2.2 FLOOR PLANS



Main Level Floor Plan

2.3 PROPOSED USE

There is no proposed change of use at this time.

3.0 STRUCTURE CONDITION ASSESSMENT

3.1 SITE

ASSOCIATED LANDSCAPE FEATURES

Description:

733 McKinley Avenue is set on a typical downtown Louisville lot approximately 37.5 feet wide by 125 feet deep (per Boulder County Records) running lengthwise in the east-west direction and totaling approximately 4,687 sf. The property is bordered on the east by McKinley Avenue, to the north and south by residential properties, and on the west by an alley. The property is enclosed along the alley by a CMU fence and on all sides except the front by wood fencing of various heights and styles.

Approximately 1/4 of the lot is covered by the footprints of the main house and the shed. The main house sits about 30 feet from the street on the east side of the lot. The shed sits at the northwest corner of the property near the alley.

There is no driveway on the site, but there is an older concrete slab that surrounds the rear of the house. The remainder of the site is primarily grass, with small shrubs and ground cover to the north of the house and around the shed, and a garden bed in the southeast corner of the lot. There are several young deciduous trees located throughout the site. There is a small, elevated treehouse along the south property line.



Looking southwest towards the "treehouse".



Looking northwest towards the shed.

Condition Evaluation:

Overall, the landscape features are in good condition. None of the listed features meet historic requirements, nor were any historic features discovered, and therefore assessment was minimal.

Recommendations:

No recommendations at this time.

GRADING

Description:

Overall, the site is relatively flat with slight grade changes apparent in some areas. Grade generally slopes away from the house though minimally in most areas. There do not appear to be any areas of negative drainage towards the house, though this assessment was limited as there were no recent rain or snow events. The siding sits well above grade, at a foot or more, in most areas around the entire house perimeter. However, the portion of the house at the rear that was originally a porch and later enclosed does not have exposed foundation due to the concrete patio. The siding runs down to the top of the concrete path in this area.



The foundation is exposed in most areas except for at the rear entry.



Grading and growth at the northeast corner.

Condition Evaluation:

The overall site grading is in fair condition, but it does not meet the expected code requirements and geotechnical engineering requirements for grading away from a building's foundation. It is important that the grading around the house should be a minimum of 6 inches below the top of the foundation and slope away from the foundation for at least the first 5 feet. There is enough clearance between the top of grade and the bottom of the siding to allow for regrading in most areas. However, the concrete slab along the south and west of the house does not appear to have adequate drainage away from the foundation. There are limited visible indications of poor or negative drainage, though not all areas of the home's foundation and sub-slab areas are visible for analysis without some level of deconstructive investigation. Furthermore, the northeast corner of the original foundation appears to have been eroded due to poor drainage and a downspout discharge in this location. However, after speaking with the homeowner this seems to have been remedied by the addition of a downspout extension and it is apparent in the paint that erosion no longer occurs in this location.

Recommendations:

1. Continue to monitor the drainage around the perimeter of the house. The perimeter should be observed after snow and significant rain events to assess for any areas of pooling water.
2. Finished grade around the house perimeter should be re-graded to create positive drainage away from the house. The top of finished grade should be a minimum of 6 inches below the top of the foundation and slope away from the foundation for at least the first 5 feet. Coordinate slope with a licensed geotechnical engineer.
3. Consider replacing the concrete slabs on the south and west sides of the house with a new concrete slab that meets code minimums for drainage away from the house.

PARKING

Description:

There is no parking on the site. The shed may have served as a garage, but it is no longer in use.

Condition Evaluation:

None of the potential parking features are historic so assessment was minimal.

Recommendations:

No recommendations at this time. The City of Louisville zoning code does require 2 parking spaces per dwelling unit, and if changes were to occur with this property the City may require that the code minimum parking be provided.

3.2 STRUCTURAL SYSTEM

FOUNDATION SYSTEMS

Description:

The house foundation was observed from within the original basement and crawlspace areas as well as from the exterior of the house, though not all areas are fully accessible or visible for analysis. Access to the basement is through a staircase at the rear of the house. Parts of the basement appear to be original to the house and have a ceiling height of approximately seven feet. However, the east portions were originally crawlspace areas with the northern portion having been dug out at a later, unknown date. The entire basement appears to have a poured concrete slab floor of unknown thickness, although some areas of the basement are finished, and the floor structure is not visible. Furthermore, the presence of a footing is unknown as no footing was visible in either the basement or crawlspace areas.

The original house foundation is board-formed concrete. There is a small addition on the south side of the house that has a CMU foundation. The covered front porch also has a CMU foundation, although there is a joint between this foundation and the other CMU foundation that indicates the foundations were not constructed at the same time. According to the homeowner, the brick chimney on the south side of the house was showing signs of movement in the past and piers were added to help stabilize the chimney.

There is a crawlspace area in the southeast portion of the house with a CMU retaining wall on the north side and no retaining wall on the west side. The crawlspace area in the northeast portion of the house was dug out at some point. The north, east, and south walls of this dig-out are supported with CMU retaining “sister” walls that are approximately 51 inches tall and set in approximately 18 inches from the original foundation.

The foundation wall insulation type could not be determined, if any exists. It is likely that there is minimal to no insulation on the exterior of the foundation walls or within the wall cavities where the basement is finished.



CMU porch foundation.



Original board formed concrete foundation.

Condition Evaluation:

Overall, the poured concrete foundation appears to be in fair condition. It is unknown what size and type of footings support the foundation walls, if any. It is also unknown whether the foundation has steel reinforcing included in the wall construction. Furthermore, the northeast corner of the original foundation appears to have been compromised due to poor drainage and a downspout discharge in this location. However, after speaking with the homeowner this seems to have been remedied by the addition of a downspout extension and it is apparent in the paint that erosion no longer occurs in this location.

The concrete masonry unit foundations of the south addition and covered front porch also appear to be in fair condition. However, it is unknown if these foundation walls are supported by footings and whether the walls, or portions of the walls, are solid grouted.

There is a significant crack in the main floor ceiling near the front door. The location of this crack is near where three different foundations meet. It is likely that the different foundations move independently of one-another throughout the year, thus causing the cracking in finish materials.

Recommendations:

1. A retaining wall should be installed in the basement area adjacent to the crawlspace to retain the basement cut soil.
2. The CMU retaining walls should be further evaluated by a licensed structural engineer to determine if a footing is present or if the walls have solid grouting.
3. The foundation walls showed various signs of damage that require further evaluation. No additional load should be added to the existing foundation system without a full analysis of the current foundation walls/footings.
4. The main floor ceiling cracking is likely due to different foundation types moving independently of one another. Consult a licensed structural engineer for recommendations on foundation bracing in this area if the ceiling cracks worsen or return after repair.
5. The footings were not visible during the observation and should be verified and evaluated prior to any remodel or new construction.
6. The requirement of piers at the chimney in the past indicates the foundation is prone to movement and future similar movement should be expected. This does not pose an immediate structural deficiency and should be monitored over the course of the house and further structural evaluation should occur if additional movement is observed.
7. Foundation wall insulation should be added to achieve an R-value as close as possible to current code standards.



Foundation deterioration at the northeast corner. The added downspout extension appears to have remedied the issue.

FLOOR & CEILING SYSTEMS

Description:

The floor framing of the original house is constructed of 2x8 floor joists running north-south at 16 inches on-center. The floor joists are supported on the perimeter of the house by the foundation wall with a 2x sill plate and a rim board is present. The floor joists are spliced on a center bearing beam, supported by three 6x8 wood columns. The center bearing line is partially buried within a framed wall and is not entirely visible for analysis. The center beam appears to bear on the foundation wall at the east and west ends. It is unclear if the wood columns supporting the beam are supported by footings or the concrete slab floor. The original floor sheathing is 1x8 boards run at a diagonal to the floor joists.



Original floor joists and sheathing.

The floor construction in the crawlspace areas appears to be the same as the basement areas, though not all the floor framing is visible. The floor framing of the south addition and the covered front porch are not visible for analysis.

There is no insulation at the main floor rim joist nor in the floor cavity of the crawlspace. It could not be determined if the crawlspace is a conditioned space.

Condition Evaluation:

The 2x8 floor joists are in fair condition. The 2x8 size of the joists are typical for houses built around the same time in the Louisville area. The joist sizing and spacing generally meet IRC code requirements for today's standards. The main level floor felt sturdy, and no areas of bulging or sagging were observed.

The center beam and columns supporting the floor joists are in fair condition. The spacing and sizing of the beams and columns are not adequate for the current loads that they are supporting and are not properly attached to their supports. The beam sizing, spacing, and spans does not meet minimum IRC code requirements for today's standards.

The floor sheathing appears to be in good condition though not all areas were exposed for review. The floor sheathing does meet minimum IRC code requirements for today's standards and appears to be performing adequately.



Floor framing in the crawlspace.

Recommendations:

1. The center beam and beam supports should be replaced or reinforced as prescribed by a structural engineer. The best method is to construct new beams and beam supports that support the existing floor joists and remove the existing beams and beam supports as prescribed by a licensed structural engineer. These new supports should bear on footings as prescribed by a licensed structural engineer and located at a depth and soil bearing capacity as specified by a licensed geotechnical engineer.
2. The floor framing should be observed by a licensed engineer and repaired as needed. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition.
3. It is likely that the non-visible portions of the floor structure are constructed in a similar manner to those areas that are exposed. However, the entire floor structure should be verified and evaluated by a licensed structural engineer prior to any remodel or addition.
4. If the main floor deflection is inadequate, consult a licensed structural engineer for additional support design options.
5. Rim joist insulation should be added to achieve an R-value as close as possible to current code standards. Verify that the crawlspace is a conditioned area otherwise insulation should be added to achieve an R-value as close as possible to current code standards.



Floor framing bears on a 2x sill plate with an uninsulated rim joist.

ROOF FRAMING SYSTEMS

Description:

The roof framing over the original house forms a main east-west facing gable. There are also smaller gables that sit at a lower height overall than the roof ridge of the original house. There is a north facing gable over the north bump-out and there are both an east and west facing nested gables. The roof structure over most of the house is visible from within an attic that is accessed from a ceiling hatch near the back of the house.



Original roof framing with newer collar ties.

The original roof gables are constructed of 2x4 rafters at 24 inches on-center with 1x original sheathing and an additional layer of OSB sheathing on top of the original sheathing. There is a 1x ridge plate. 2x4 collar ties were added later than the original construction and are connected to the original roof rafters with OSB plates. The collar ties are located at every main gable rafter and sit approximately 3'-8" below the gable ridge. There are also 2x6 partial height sister rafters that were added to the south facing roof, likely to support the rafters for the added load of newer solar panels. There is also intermittent bracing down the ridge plate as well as gable cross bracing of various wood sizes. The ceiling joists are 2x4 at 16 inches on-center.

There is also a shed roof over the south side covered patio. The rafters of this shed roof are exposed from beneath and are constructed of 2x6 members at 16 inches on-center with a double 2x8 beam spanning between two 4x4 posts and connected to the posts with two through bolts at each location.

The covered front porch framing was not exposed for review. This roof is a hipped roof that appears to have been over-framed on top of an existing shed roof.

Where observed, the insulation in the attic is blown-in cellulose insulation with a depth of approximately one foot. This insulation appears to cover the entire house roof above conditioned space. It is unclear when the roof insulation was added, though it is not original.



Roof bracing of the ridge beam and rafters, attic insulation throughout.

Condition Evaluation:

The main house roof is in fair condition and is constructed of typical materials and methods for houses built around the same time in the Louisville area. There is no evidence of water damage on the rafters and original sheathing where the roof was able to be observed.

The front porch roof was minimally assessed due to no access to observe the structural members.

The attic insulation is in good condition, although the insulation r-value does not meet current code standards.

Recommendations:

The roof and ceiling structure does not meet the current code standards. However, it has performed adequately to date and if it is not revised, it will likely perform in a similar manner to how it has for over 100 years. Since Louisville did not likely have a building code at the time of construction, we are unable to determine if it was built to a code or engineered. The original roof is built to a similar standard of other buildings typical of this type and age.

All new repairs should be specified by a licensed structural engineer. Repair details should be provided and submitted to the City of Louisville for review and be observed by the engineer and city inspectors during construction.

1. The front porch roof framing was not visible during the observation. Further analysis would be required once this roof structure is exposed.
2. Hurricane clips (or toenails) may need to be added where roof framing members bear on exterior walls to meet the minimum IRC code requirements of today.
3. It is not recommended to add additional roofing materials such as an additional layer of shingles (code allows for up to two layers), or solar panels without the additional structural support mentioned above.
4. Attic insulation should be added to achieve an R-value as close as possible to current code standards. The maximum insulation possible should be added at the perimeter of the roof as the roof depth in this location does not allow for the minimum required by code. Any energy upgrades, such as increased insulation in the attic, could result in prolonged snow retention on the roof and could ultimately affect roof performance without first completing structural reinforcement.
5. Purlins and braces could be added to the existing roof structure down to a load bearing wall or new beam in the ceiling system to support the roof to todays standards. This should be evaluated and designed by a structural engineer.



Exposed roof structure of the south side covered patio.

3.3 ENVELOPE – EXTERIOR WALLS

EXTERIOR WALL CONSTRUCTION

Description:

The main level wall framing was not exposed for review. The wall framing is likely a 2x4 stud wall with studs on regular spacing (site measurements support this assumed wall thickness). The original wood siding appears to be attached directly to the wall framing, as seen in the attic. The wall insulation type could not be determined, if any exists. It is likely that there is minimal to no insulation in the original house walls.



West gable showing gable end wall studs and original wood siding attached directly to the wall studs.

Condition Evaluation:

Since the wall structure was not exposed for observation, we are unable to evaluate the condition or determine if there is any structural damage. The wall heights are approximately 8 feet tall which is an acceptable height for 2x4 wood stud construction. Wall finish cracks were observed on several of the interior wall surfaces. The cause of this cracking could be from foundation movement or from improper application of textured surfaces atop the original plaster over gypsum board. Further deconstructive analysis may be required to determine the cause of the wall cracks. Furthermore, the insulation type and R-value within the walls could not be determined, if any is present. It is likely that there is minimal to no wall insulation.

Recommendations:

1. Without the opportunity to observe the exterior wall structure, we do not have any recommendations currently. If the opportunity presents itself, the exterior walls should be assessed by a licensed structural engineer. The owner is to note that the walls will need to be evaluated if any remodels or additional load is to be added. It is likely that additional studs may need to be added for the increased loads above in combination with the wind load on the building.
2. Wall cavity insulation should be added to achieve an R-value as close as possible to current code standards. Any energy upgrades, such as increased insulation in the attic, could result in prolonged snow retention on the roof and could ultimately affect roof performance without first completing structural reinforcement.

EXTERIOR FINISHES

Description:

The entirety of the house is clad in painted steel siding. The steel siding wraps the original house as well as the south addition and the siding runs from the top of the foundation to the gable ends. Beneath the steel siding there is a layer of rigid foam, likely applied at the time of the steel siding, followed by a layer of asbestos siding. The asbestos siding is visible in the 1948 image.



Steel siding wraps the entire house.

Beneath the asbestos siding there is a layer of wood shiplap siding with, most likely, a Dutch cove profile. The wood siding is visible in the attic. The wood siding is likely original and appears to be attached directly to the wall framing. It is unclear if the wood siding exists at the south addition or only on the original portion of the house.



Asbestos siding is visible below the new patio roof.

Condition Evaluation:

The steel siding is in fair condition as there are a few bent or chipped panels and some areas have been removed for the construction of the south patio roof. The condition of the wood shiplap siding is difficult to assess as very little of the siding was exposed for analysis.

Recommendations:

1. Remove the steel siding, foam backer, and asbestos siding to expose the original wood siding.
2. Repair, refinish, or replace the original wood siding.

EXTERIOR MASONRY

Description:

A brick chimney is present on the exterior south side of the house. The brick chimney is likely original to this part of the house, the south addition and chimney likely having been built in 1975. The brick chimney is not original to the building and serves an interior wood burning fireplace.

There is what appears to be an older chimney in the basement that is coated in plaster. This was likely a brick chimney, but it is unclear as there is no longer a chimney on the main floor or in the attic.



South addition chimney.

Condition Evaluation:

According to the homeowner, the current chimney was detaching from the house and concrete piers were added to stabilize the chimney. Since the piers were added, the chimney appears to be in good condition.

Recommendations:

1. Consider adding a new false chimney on top of the main house gable. The location of this chimney may be determined by patchwork in the roof sheathing as seen in the attic or by the location of the chimney remnants in the basement.
2. The current chimney is not original to the house, nor is the south addition that it is attached to. However, the south addition is minor in comparison to the overall house form and is an extension of the original south facing gable. For this reason, consider removing the existing brick chimney as it does not match the historic nature of the house.

EXTERIOR APPENDAGES

Description:

A covered porch is attached to the southeast corner of the house that is roughly 15'-6" deep and 7'-7" wide. The porch roof is a low-pitched hipped roof that slopes upward to the north and west. The porch roof appears to have been over-framed on top of an original shed roof. The porch is supported by two wood columns, the ceiling is wood tongue and groove, and the floor is a concrete slab supported by a CMU foundation. The porch sits well above grade with east facing steps and a wood guardrail. Building records for the front porch were approved in 1974, and this was built at that time, or shortly thereafter.



Covered front porch.

There is also a covered patio in the southwest corner. This patio has a concrete slab that may be original, but the roof framing (outlined above) is of more recent construction. There is evidence that there was a pre-existing roof over this area where the steel siding stops short of the roof structure, exposing the asbestos siding beneath. The current porch roof structure appears to be similar to the previous roof structure though set slightly higher. According to building records, this roof was replaced in 1995.



Southwest porch roof structure.

Condition Evaluation:

The front porch roof is in good condition. The structure was not entirely visible for analysis, but it appears to be performing adequately.

The southwest covered porch is in poor condition. The wood framing members are exposed and untreated and weathering has occurred where the members are exposed to the elements at the outer perimeter of the roof.

Recommendations:

1. Consider removing the southwest covered patio. It is unclear if a roof in this area was part of the original construction, but the current roof is not original. However, the southwest covered porch does not significantly impact the building massing when viewed from McKinley Avenue. For this reason, if a covered porch in this area is desired, repair or replace the roof framing members that are exposed and weathered.
2. The original front porch roof should be determined through deconstructive investigation. Evidence of the original roof likely remains beneath the current hipped roof. The original front porch roof should be repaired or replaced once the construction has been determined.

3.4 ENVELOPE – ROOFING & WATERPROOFING

ROOFING SYSTEMS

Description:

The entire house roof is covered with an asphalt composite shingle roof that was added in 2019, according to building records. This roof was likely replaced due to hail damage, as was common in the Louisville area at this time. The 1948 Boulder County Assessor's card shows that in 1948 the roof material was asphalt which is visible in the associated photograph.

There is a gable ridge vent at the main gable ridge and low roof shingle vents are located on the north facing surface of the main gable roof. There are also gable end vents on all main gables. However, the gable end vents at the east-facing and north facing gables of the house are slits in the siding, whereas the vent at the west-facing gable is a framed opening. The roof vents were likely added in 2018 to meet current codes while the gable end vents were likely added when the steel siding was applied. Aluminum drip edges along the rakes and eaves were also likely added in 2018 as was required by code.

Condition Evaluation:

The asphalt composition shingle roof is in good condition.

Recommendations:

No recommendations at this time.



Asphalt composition shingle roof, ridge vents, and low roof shingle vents.

SHEET METAL FLASHING

Description:

There is step flashing on the back side of the chimney. It is also possible that there is flashing beneath the aluminum siding. This flashing is likely in areas where the lower roofs meet the upper roofs or where the porch roofs meet the exterior wall face.

Condition Evaluation:

The condition of metal flashing is indeterminable at this time.

Recommendations:

No recommendations at this time.

PERIMETER FOUNDATION DRAINAGE

Description:

A perimeter foundation drain was not observed during the inspection. Due to the construction period and construction methods used, it is unlikely that a perimeter foundation drain exists.

DRAINAGE SYSTEM, GUTTERS & DOWNSPOUTS

Description:

Painted white, k-style gutters are found throughout the entire house, covered front porch, and side porch roof. The gutters are located at the end of all eaves in appropriate locations and of appropriate lengths for adequate water collection. Painted 2x3 downspouts are located throughout and appear to be of an adequate amount for proper drainage where located.


Typical gutter detail

All downspouts appear to have downspout extensions or drain directly onto hard-surface patios. The owner notes that many downspout extensions were missing upon their purchase of the home. The lack of extensions appears to have caused some damage to the foundation, as described above, but this seems to have been halted. There is a direct burial downspout at the back of the house that daylights in the back yard, away from the house.

Condition Evaluation:

The gutters are in good condition. The downspouts are in good condition as they appear to be of an adequate amount, in proper locations, and discharge away from the house foundation with extensions or direct burial.

Recommendations:

1. Ensure that all gutters, downspouts, and downspout extensions are maintained to discharge water away from the building foundation and are kept clear of debris.
2. The gutters and downspouts are not historic. Consider replacing the gutters with ½ round gutters and the downspouts with round downspouts. Though not historic, these styles will more appropriately match the historic nature of the house.

SKYLIGHTS / CUPOLAS

Description:

There is one skylight in the southwest covered patio roof. This skylight was likely installed to allow light to reach the south facing kitchen window. According to building records, the skylight was added at the same time as the patio roof in 1995.

Condition Evaluation:

The skylight is in good condition.

Recommendations:

No recommendations at this time.


South facing skylight in patio roof.

3.5 WINDOWS & DOORS

DOORS

Description:

The front door is a painted wood door with a semicircular window. Additionally, the front door has an aluminum, full-lite storm door. At some point, the entrance was moved from the north side of the original house as seen in the 1948 Boulder County Assessor's card image. Therefore, the current entry location is not original. It is difficult to identify the appearance of the original door, but it would have been wood and of a similar style to other Louisville examples from the 1930's. The new front entry was most likely created when the porch was constructed ca. 1974. Additionally, the front door may have been replaced since it was added. The side lights on either side of the front door appear to be wood hopper windows that have been rotated 90 degrees. These would have been installed at the same time as the new door opening.



Front door, storm door and sidelights.

The west rear entrance door to the mudroom is a half-lite painted wood door with three panels below and three horizontal mullions. It is believed that this area was a porch that was later enclosed, so the door opening is not original. However, the door appears to be older than the current front door. It is possible that this door is original and was located at the opening between the kitchen and the mudroom (the original porch). Additionally, this door has an aluminum, full-lite storm door.



Rear door and storm door.

Condition Evaluation:

The two wood doors are in fair condition. Both wood doors work properly and appear to create acceptable seals. The aluminum storm doors are in fair condition and appear to operate properly.

Recommendations:

Remove the aluminum storm doors from the front door. This door is in a well-covered area that does not need storm doors for weather protection. If screen doors are desired, a minimally framed screen door could be added.

WINDOWS

Description:

733 McKinley has a wide variety of windows. These date from many different renovations as outlined below.

The 1948 Boulder County Assessor's card shows a similar window in the main east facing gable compared to what exists today. However, the current window is a replacement from the original. It is unclear when this window was replaced but it is likely from the 1970s. The original window arrangement is uncertain, but it was probably a tripartite arrangement of 3-over-1 or 4-over-1 single-hung windows. All windows on the front façade appear to have had decorative wood shutters, based on the 1948 Boulder County Assessor's card image.



Tripartite east facing window.

Most windows on the east and north facades are modern wood single-hung windows. Although modern replacements, these windows are approximately the original sizes and in original locations. The original windows were likely 3-over-1 or 4-over-1 single-hung windows as was typical for the period in the Louisville area. Another window on the front (east) is a modern, vinyl, single-hung window. Neither the window nor the opening is historic. There is a casement window in the center of the west wall that is an historic opening, although the window itself is a replacement. It is unclear what the original window here looked like.



Modern wood single-hung

The south side of the building has a vinyl casement window with decorative mullions. Although the window is newer, it appears to be in an original location, as it retains a likely original five-piece trim. Like the other original windows, this window was likely a wood single-hung window.

The bay window on the rear façade retains the original wood casement windows and original wood storm windows. The windows are true divided lite units with 6 panes of glass, and all are single glazed. The storm windows are fastened at the top and each storm window has a horizontal mullion.



Modern Vinyl single-hung

All the original windows would have had a five-piece trim, as seen on the south window in the kitchen. Window operability was not tested, but it appears that most of the windows are operable, even if only partially so.



Modern Vinyl casement on south wall

Condition Evaluation:

Most of the windows are in fair to poor condition. Operation was not tested but appears to be minimal. The vinyl and wood windows are beyond the expected lifespan of such windows and do not perform well thermally in Louisville's climate. However, the wood windows appear to have been somewhat protected since the addition of the storm windows. The modern wood windows also appear to be in fair condition. There was some flaking paint, but no signs of rot. The tripartite window appears to be showing some deterioration as it is exposed to direct sunlight.

Recommendations:

1. Determine the original window opening sizes and locations when the framing or original siding is revealed with the removal of the aluminum and composite siding.
2. Windows should be replaced with new window units that match the appearance of those in the historic photo from 1948. Typical 3-over-1, or 4-over-1 single-hung windows can be found on several houses in the Louisville area built at a similar time.



Bay window and storm window.

3.6 EXTERIOR DETAILS

SOFFIT & FASCIA

Description:

1x painted wood fascia is used at the original house which is partially covered by the drip edge of the roof. The south addition has an identical or similar fascia. All fascia components appear to be original or replaced to match the original. There are no roof eaves on the house and therefore there are no soffits, except for the covered front porch soffit as described above. Although the lack of eaves is atypical for the 1930's, examples do exist in Louisville and there are no eaves visible in the 1948 photograph.



Front gable showing painted wood fascia that is partially covered by the metal drip edge and gutters.

Condition Evaluation:

The painted wood fascia appears to be in fair condition although not all areas are visible. Some of the fascia areas are covered with gutters and the more recently applied metal drip edge.

Recommendations:

With the removal of the steel and composite siding, determine the condition of all wood fascia. Repair, refinish, or replace the fascia as necessary.

TRIM

Description:

The current corner trim is standard painted steel siding trim, 2 ½" wide. Standard painted metal j-trim wraps the siding where it meets the bottom of the fascia. The trim was likely added at the same time as the steel siding. Corner trim is visible in the 1948 photograph that is likely painted wood trim. This trim may still exist beneath the added layers of siding, or if removed, evidence of the original corner trim size is likely apparent.

Some of the windows retain a wood five-piece window trim, consisting of a sill, matching jamb and head trim and drip cap. This wood trim appears to be original. The non-original windows have a 1x picture frame trim.

Condition Evaluation:

The existing metal corner and j-trim are in good condition. The original wood window trim is in fair condition.

Recommendations:

Remove the aluminum trim with the aluminum siding exposing the original window, door, and corner trim sizes below. The original trim may still exist in some areas, or evidence of the sizing will be apparent as the original wood siding is exposed. Add new trim according to the determined sizes.

3.7 MECHANICAL SYSTEMS

HEATING & AIR-CONDITIONING

Description:

Heating is provided to the entire house through a gas-fired forced-air furnace located in the basement. The furnace is a 70,000 btu, 96% efficient, sealed combustion unit that has direct-vent exhaust piping through the roof. According to building records, the furnace is a replacement that was added in 2016. The furnace sits on the concrete slab floor with adequate space for servicing. Rigid ductwork runs throughout the basement to floor vents servicing the main floor. No means of air conditioning was observed.



Gas furnace located in the basement.

Condition Evaluation:

The furnace and air delivery system appear to be in good condition but were not tested. Building records indicate that the furnace was installed in 2016, therefore, the furnace is likely in good condition if properly maintained.

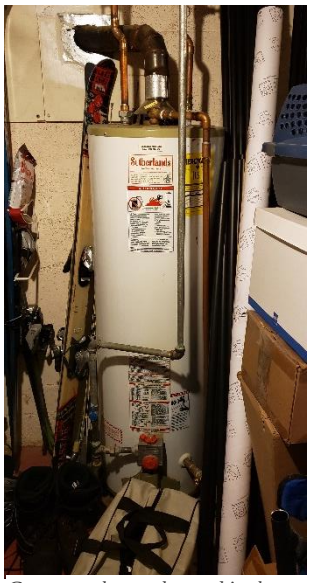
Recommendations:

Consider adding an air-condition unit that supplies the entire house as the house is likely poorly insulated.

WATER SERVICE, PLUMBING, & SEWER UTILITIES

Description:

A standard 40-gallon, gas-fired water heater is in the crawlspace and is atmospherically vented through the roof. The water delivery system is copper, and the waste lines are a combination of pvc, abs plastic, and cast-iron. According to building records, ten feet of sewer line was replaced in 2021. Additionally, there is no fire sprinkler system in the house.


Gas water heater located in the crawlspace.

Condition Evaluation:

The water heater, supply and waste lines, and sewer appear to be in good condition, but were not tested.

Recommendations:

Consider replacing the water heater with a high-efficiency unit with a sealed combustion intake/exhaust system.

3.8 ELECTRICAL SYSTEMS

ELECTRICAL SERVICE & PANELS



Overhead electrical service, panel, and meter.

Description:

Electrical service to the house is brought in overhead from an electrical pole near the southwest corner of the lot. The 100-amp electrical service panel and meter are located on the west exterior of the house. There is a subpanel located in the basement that may be an older panel that was later repurposed as a subpanel.

Additionally, there are solar panels on the south face of the main gable. It is unclear when these panels were added, but they appear to be newer and the roof rafters were braced to support the panels, as noted above. The solar panel meter is located on the south side of the house, near the rear.

Condition Evaluation:

The electrical service was not tested during the site visit but appears to be in working condition. The panel appears to be sized appropriately for the existing house requirements but will likely need to be upgraded for any future improvements.

Recommendations:

1. The electrical service panel should be replaced by a licensed electrical engineer with a new 200-amp panel compliant with current codes.
2. Replace the electrical sub-panel in the basement.
3. The overhead electrical service should be replaced by a licensed electrical engineer with a new underground electrical line compliant with current codes.

ELECTRICAL DISTRIBUTION SYSTEM

Description

Electrical distribution throughout the house is Romex wiring that is visible in the basement. It appears that this wiring serves the entire house, though not all areas are visible for analysis. The Romex wiring replaced knob and tube wiring that was common in similar houses in the Louisville area. Some knob and tube remnants are visible in the basement.



Romex wiring with knob and tube remnants.

Condition Evaluation:

The electrical distribution was not tested during the site visit but appears to be in good condition.

Recommendations:

No recommendations at this time.

LIGHTING

Description:

There is a ceiling sconce style light fixture in the porch soffit above the front door. Additionally, there is a wall sconce next to the back entrance door. These light fixtures were not tested but appear to be on switched circuits.

Condition Evaluation:

The light fixtures were not tested but appear to be in working condition. Neither of the exterior light fixtures are historic. The front porch ceiling fixture was likely added at the time that this roof was modified with a tongue-and-groove soffit. It is unclear if the wall sconce at the back door is a replacement in a historic location.

Recommendations:

1. Removal of the aluminum and composite siding may reveal original light fixture locations apparent on the original wood siding. If the siding is removed and historic light fixture locations are determined, replace the exterior light fixtures with a full cutoff, high-efficiency unit.
2. Consider installing new exterior lighting that complies with Dark Sky regulations.



Rear door and light fixture

4.0 ANALYSIS AND COMPLIANCE

4.1 HAZARDOUS MATERIALS

Due to the age of the building, the finish coatings may contain lead-based paint and asbestos may be present in the plaster topcoat. Asbestos is likely present in the composite siding that has been covered with a layer of steel siding. A professional evaluation should be conducted to determine the presence of any hazardous materials.

4.2 MATERIALS ANALYSIS

Does not apply.

4.3 ZONING CODE COMPLIANCE

Notes:

- It is recommended that the owner have a survey of the property conducted to verify the *Lot Size*. All *Lot Coverage* and *Floor Area Ratio* percentages are based on the actual property size and are subject to change from what is specified in this report.
- Building area square footages are taken from:
  - Boulder County Property Records (R)
  - As-built measurements as measured from the interior face of wall, by DAJ Design (M)
- Some areas are taken from the Boulder County Property Records. These records are found to be inaccurate at times. All areas are subject to change based on actual measurements.
- Only the main floor of the house was measured by DAJ Design as this is the main historic structure located on the specified property.

Legal Description:	South half of Lot 4 & All of Lot 5, Block 9, Louisville Heights City of Louisville, County of Boulder, State of Colorado
Year Built (Main House):	1939
Lot Dimensions:	Approx. 37.5' x 125'
Lot Size:	4,687.5 sf (R)
Zoning:	RL (one residential unit per 7,000 sf) Property is subject to the Old Town Overlay Zoning District Regs

Areas of levels in square feet (sf):

First (above ground) finished area:	943 sf (M)
Basement (below ground) area:	648 sf (R)
Front porch area:	118 sf (M)
Side porch area:	92 sf (M)

Allowable Building Height (from existing grade):

Primary Structure:	27'
Accessory Structure:	20'

Lot Coverage:			
Existing:	1,153 sf	24.6%	House
Allowable:	1,757.8 sf	37.5%	604.8 sf remain
Preservation:	1.955 sf	42.5%	839 sf remain
Landmark:	2,226.6 sf	47.5%	1,073 sf remain
Floor Area Ratio:			
Existing:	900 sf	19.2%	First floor
Allowable:	2,109 sf	45%	1,209 sf remain
Preservation:	2,343 sf	50%	1,443.8 sf remain
Landmark:	2,578 sf	55%	1,678 sf remain
Setbacks:			
Front:	20’		(could be different depending on the front of neighboring house locations)
Front Porch:	14’		(6’ encroachment into front yard & street side yard setback)
Rear:	25’		
Side (interior lot line):	7’		
Accessory Rear:	3’		
Accessory Side:	3’		

5.0 PRESERVATION PLAN

5.1 PRIORITIZED WORK

CRITICAL DEFICIENCY

- Continue to monitor the drainage around the perimeter of the house. The perimeter should be observed after snow and significant rain events to assess for any areas of pooling water.
- Finished grade around the house perimeter should be re-graded to create positive drainage away from the house. The top of finished grade should be a minimum of 6 inches below the top of the foundation and slope away from the foundation for at least the first 5 feet. Coordinate slope with a licensed geotechnical engineer.
- A retaining wall should be installed in the basement area adjacent to the crawlspace to retain the basement cut soil.
- The CMU retaining walls should be further evaluated by a licensed structural engineer to determine if a footing is present or if the walls have solid grouting.
- The main floor ceiling cracking is likely due to different foundation types moving independently of one another. Consult a licensed structural engineer for recommendations on foundation bracing in this area if the ceiling cracks worsen or return after repair.
- The center beam and beam supports should be replaced or reinforced as prescribed by a structural engineer. The best method is to construct new beams and beam supports that support the existing floor joists and remove the existing beams and beam supports as prescribed by a licensed structural engineer. These new supports should bear on footings as prescribed by a licensed structural engineer and located at a depth and soil bearing capacity as specified by a licensed geotechnical engineer.
- The floor framing should be observed by a licensed engineer and repaired as needed. Special attention should be given to the connections between the foundation walls, floor joists, beams, and beam supports. The floors are not suitable for additional load resulting from a remodel or addition.
- It is likely that the non-visible portions of the floor structure are constructed in a similar manner to those areas that are exposed. However, the entire floor structure should be verified and evaluated by a licensed structural engineer prior to any remodel or addition.
- Attic & wall cavity insulation should be added to achieve an R-value as close as possible to current code standards. The maximum insulation possible should be added at the perimeter of the roof as the roof depth in this location does not allow for the minimum required by code. Any energy upgrades, such as increased insulation in the attic, could result in prolonged snow retention on the roof and could ultimately affect roof performance without first completing structural reinforcement.
- Foundation wall insulation should be added to achieve an R-value as close as possible to current code standards.
- Rim joist insulation should be added to achieve an R-value as close as possible to current code standards. Verify that the crawlspace is a conditioned area otherwise insulation should be added to achieve an R-value as close as possible to current code standards.
- The front porch roof framing was not visible during the observation. Further analysis would be required once this roof structure is exposed.
- Hurricane clips (or toenails) may need to be added where roof framing members bear on exterior walls to meet the minimum IRC code requirements of today.
- Remove the steel siding, foam backer, and asbestos siding to expose the original wood siding.
- Repair, refinish, or replace the original wood siding.
- Consider adding a new false chimney on top of the main house gable. The location of this chimney may be determined by patchwork in the roof sheathing as seen in the attic or by the location of the chimney remnants in the basement.
- The current chimney is not original to the house, nor is the south addition that it is attached to. However, the south addition is minor in comparison to the overall house form and is an extension of

the original south facing gable. For this reason, consider removing the existing brick chimney as it does not match the historic nature of the house.

- The original front porch roof should be determined through deconstructive investigation. Evidence of the original roof likely remains beneath the current hipped roof. The original front porch roof should be repaired or replaced once the construction has been determined.
- The gutters and downspouts are not historic. Consider replacing the gutters with ½ round gutters and the downspouts with round downspouts. Though not historic, these styles will more appropriately match the historic nature of the house.
- Remove the aluminum storm doors from the front door. This door is in a well-covered area that does not need storm doors for weather protection. If screen doors are desired, a minimally framed screen door could be added.
- Determine the original window opening sizes and locations when the framing or original siding is revealed with the removal of the aluminum and composite siding.
- Windows should be replaced with new window units that match the appearance of those in the historic photo from 1948. Typical 3-over-1, or 4-over-1 single-hung windows can be found on several houses in the Louisville area built at a similar time.
- With the removal of the steel and composite siding, determine the condition of all wood fascia. Repair, refinish, or replace the fascia as necessary.
- Remove the aluminum trim with the aluminum siding exposing the original window, door, and corner trim sizes below. The original trim may still remain in some areas, or evidence of the sizing will be apparent as the original wood siding is exposed. Add new trim according to the determined sizes.

SERIOUS DEFICIENCY

- Consider replacing the concrete slabs on the south and west sides of the house with a new concrete slab that meets code minimums for drainage away from the house.
- The requirement of piers at the chimney in the past indicates the foundation is prone to movement and future similar movement should be expected. This does not pose an immediate structural deficiency and should be monitored over the course of the house and further structural evaluation should occur if additional movement is observed.
- Purlins and braces could be added to the existing roof structure down to a load bearing wall or new beam in the ceiling system to support the roof to todays standards. This should be evaluated and designed by a structural engineer.
- Without the opportunity to observe the exterior wall structure, we do not have any recommendations currently. If the opportunity presents itself, the exterior walls should be assessed by a licensed structural engineer. The owner is to note that the walls will need to be evaluated if any remodels or additional load is to be added. It is likely that additional studs may need to be added for the increased loads above in combination with the wind load on the building.
- Consider removing the southwest covered patio. It is unclear if a roof in this area was part of the original construction, but the current roof is not original. However, the southwest covered porch does not significantly impact the building massing when viewed from McKinley Avenue. For this reason, if a covered porch in this area is desired, repair or replace the roof framing members that are exposed and weathered.
- The electrical service panel should be replaced by a licensed electrical engineer with a new 200-amp panel compliant with current codes.
- Replace the electrical sub-panel in the basement.
- The overhead electrical service should be replaced by a licensed electrical engineer with a new underground electrical line compliant with current codes.
- Removal of the aluminum and composite siding may reveal original light fixture locations apparent on the original wood siding. If the siding is removed and historic light fixture locations are determined, replace the exterior light fixtures with a full cutoff, high-efficiency unit.
- Consider installing new exterior lighting that complies with Dark Sky regulations.

MINOR DEFICIENCY

- The foundation walls showed various signs of damage that require further evaluation. No additional load should be added to the existing foundation system without a full analysis of the current foundation walls/footings.
- The footings were not visible during the observation and should be verified and evaluated prior to any remodel or new construction.
- If the main floor deflection is inadequate, consult a licensed structural engineer for additional support design options.
- It is not recommended to add additional roofing materials such as an additional layer of shingles (code allows for up to two layers), or solar panels without the additional structural support mentioned above.
- Consider adding an air-condition unit that supplies the entire house as the house is likely poorly insulated.
- Consider replacing the water heater with a high-efficiency unit with a sealed combustion intake/exhaust system.

5.2 PHASING PLAN

A phasing plan is not available at this time.

5.3 ESTIMATE OF PROBABLE COST OF CONSTRUCTION

A probable cost of construction is not available at this time.

6.0 PHOTOGRAPHS AND ILLUSTRATIONS



1948 Boulder County Assessor's Card Image



2024 Northwest Corner



2024 Northwest Corner



2024 Rear Façade, Looking East.



2024 Southwest Corner



2024 Southeast Corner

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Structural Engineering Consultants
P.O. Box 20708
Boulder, Colorado 80308
303.554.9591

May 29, 2024

Attn: Josh Johnston
DAJ Design
Louisville, CO

Dear Josh,

We visited the residence at 733 McKinley, Louisville, CO on May 2, 2024 to review the existing building for the purpose of documenting and evaluating the existing structure. It was at this time that we reviewed the building with DAJ Design and coordinated our findings with the report created by DAJ Design.

On May 29, 2024 we reviewed the final report and made any necessary modifications to the structural sections. All findings, evaluations and recommendations are in the report. Below, in this letter, are our structural conclusions and a summary of our scope of work. Please feel free to contact us for any further information.

Structural Conclusions:

A. In our professional opinion, the building's structure is adequate for its continued safe use. A portion of the remaining construction does not meet all modern code standards; however, it has performed adequately up to this point. We recommend that a licensed Structural Engineer be retained to further evaluate the structure, provide the repairs recommended in each of the sections of this report and assist in any modifications to the structure proposed by the owner and an architect.

Please see the recommendations sections of the report for any required or recommended structural recommendations, to be completed by a licensed structural engineer and contractor.

It is also important to note that a significant portion of the building's structure was not exposed for our review. There may be damaged structure that we were not able to observe due to finish materials. Also, additional cosmetic imperfections could arise, which is normal for an old structure.

B. An extreme event occurring at the site, such as a tornado, a serious (rare) earthquake or other unforeseen event could significantly damage the structure. But this is also true for most old structures in Louisville and is only mentioned for the completeness of this report.

C. The drainage around the home should be addressed to allow for water to flow away from the building. Poor drainage could result in water infiltration or excessive movement and damage to the foundation and wood framing.

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P.O. Box 20708
Boulder, Colorado 80308
303.554.9591

Summary and Limitations:

A. Summary:

1. The goal of our site observation and the structural portion of the report is to provide an overview of the building's structure and foundation and identify areas where remedial work in the near future is prudent.

2. The recommended remedial measures are intended to promote the building's continued safe use and are not intended to eliminate all existing and potential future cosmetic defects.

B. Limitations:

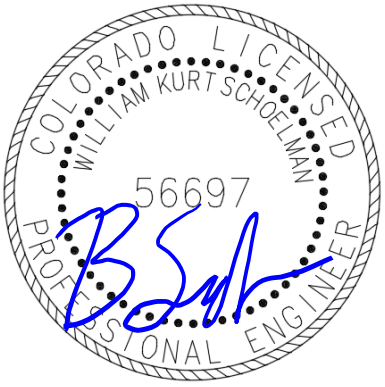
1. The information contained in the report is the author's professional opinion based on visual evidence readily available at the site, without the removal of existing finish materials. Of course, this means there could be hidden defects which are not discoverable at this time, without demolition of finish materials. That is true for most buildings, and an inherent limitation for this kind of report. Should additional information become available or additional movement is perceived, we recommend that our firm be contacted for further review.

2. The issuance of the report does not provide the building's current or future owners with a guarantee, certification, or warranty of future performance. Acceptance and use of this report do not transfer financial liability for the building or the property to the author or this engineering firm.

3. The report is also only preliminary to make note of areas that need to be addressed. A licensed Structural Engineer should be retained to provide a more thorough investigation and provide appropriate repair details for all necessary repairs.

Sincerely,

William Schoelman, P.E.



05/29/2024

City of Louisville
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733 McKinley Avenue - Landmark and Grant Request

Summary

HPC Recommendation

- Landmark designation at 733 McKinley Avenue, to be named the Hilton House and a landmark incentive of $7,700.00
- Approval of Alteration Certificate
- A Preservation and Restoration Grant of up to $18,555.05, a matching credit of $7,405.06, and a new construction grant of up to $19,500.00

Staff Recommendation

- Approval of Resolution No. 58, Series 2026, approving the landmark designation at 733 McKinley Avenue, to be named the Hilton House and a landmark incentive of $7,700.00, and approvals of a Preservation and Restoration Grant of up to $18,555.05, a matching credit of $ 7,405.06, and a new construction grant of up to $19,500.00 (Attachment No. 4) for grants totaling $53,160.11

Conditions Over Time



1948 Boulder County Assessor Card photo



Present-day images of the subject property.

City of Louisville

Landmark Criteria

Age

- Ca.1939 - 87 years old.

Social Significance

- Provided housing for community members that contributed to the economic or social heritage of the community.
- Ties to mining history

Physical Integrity

- Exemplifies Minimal Traditional Style
- Has good integrity and potential to be restored to high degree of historic integrity
- Has maintained historic footprint

City of Louisville

Grant Request – Scope of Work

- Replace 420 square feet of cracked non-sloping concrete apron adjacent to the house on the west side in the backyard and replace with proper sloping and a window well
- Regrade lawn
- Replace two northeast windows to match historical photos
- Remove the detached woodshed in rear yard
- Construct a new studio shed/office space
- Partial enclosure of rear porch

Preservation and Restoration Grant Request

Description	Amount	Preservation, Restoration, or Rehabilitation	In HSA	Work Already Complete
Wall and rim joist insulation	$3,703.00	Preservation	Yes	Yes
Replace electrical panel and main cable	$5,175.11	Rehabilitation	Yes	Yes
Remove cracked nonsloping concrete apron in back; replace with slabs sloping away from house	$14,800.00	Preservation	Yes	No
Regrade non-sloping lawn	$1,000.00	Preservation	Yes	No
New heat pumps and water heater, new A/C unit	$20,740.61	Not eligible - interior work	Yes	Yes
Replace two non-original windows at rear with 2 Double Hung 1:1 window	$5,932.00	Restoration	Yes	Yes
Replace two non-original windows at front northeast corner with 4-over-1 pane windows with mullions and wider five-piece trim (to match 1948 photo)	$6,500.00	Restoration	Yes	No

City of Louisville

Preservation and Restoration Grant

- Ineligible items for grant funds:
  - Heat pumps, Air Conditioning unit, hot water tank, permit fees
- Total Project Cost: $57,850.72
- Eligible Costs: $37,110.11
- **Half of Eligible Preservation and Restoration Costs: $18,555.05**
- Eligible Work Already Paid for Prior to landmarking: $14,810.11
- **Total Match Credit Recommended: $7,405.06**
- **Total Grant Recommended: $18,555.05**
  - Applicant match requirement: $11,149.99

City of Louisville

New Construction Grant Request

- Office/studio shed (96 sq ft) with connector roof (i.e. breezeway) and porch enclosure (70 sq ft)
- Cedar siding
- **Total cost: $39,000.00**
- **Total recommended: $19,500.00**



Figure 1: Proposed New Construction

City of Louisville

Staff Recommendation

- Approval of Resolution No. 58, Series 2026, approving the landmark designation at 733 McKinley Avenue, to be named the Hilton House, a landmark incentive of $7,700.00, and approvals of a Preservation and Restoration Grant of $18,555.05, a matching credit of $7,405.06, and a new construction grant of $19,500.00 for grants totaling $53,160.11

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City Council Communication
Agenda Item 10.B.

Subject: Ordinance No. 1927, Series 2026 — An Ordinance Amending Chapter 13.08 of the Louisville Municipal Code Concerning Metering of Water Usage in Mobile Home Parks — 2nd Reading, Public Hearing (advertised City of Louisville website 06/05/2026)

The Public Hearing will be held and 2 rounds of public comment will be taken, along with Council questions and discussion. Final action may be taken on this item.

Date: June 16, 2026

Prepared By: Cory Peterson, Deputy Director of Utilities

Presented By: Kurt Kowar, Director
Cory Peterson, Deputy Director of Utilities

Summary:

Staff recommends the City Council approve Ordinance No. 1927, Series 2026. The ordinance amends Chapter 13.08 of the Louisville Municipal Code to establish specific provisions regarding water metering and utility service responsibilities within mobile home parks.

The proposed ordinance authorizes the City to require mobile home parks to be served through one or more primary water meters where determined necessary for utility operations, public health protection, regulatory compliance, or consistency with utility best practices. The ordinance also clarifies ownership, maintenance, billing, and operational responsibilities associated with private water infrastructure located within mobile home parks.

The proposed updates are intended to improve long-term utility system management, clearly define responsibilities between the City and mobile home park operators, remove hazardous conditions from staff, and align utility operations with modern water system standards and practices.

Background / Prior Discussions:

The ordinance establishes a framework allowing the Superintendent to require primary metering for existing or new mobile home parks when necessary for operational, regulatory, or public health reasons.

Staff have had numerous conversations with the City's existing mobile home park on the proposed change and will issue a formal notice (sample attachment) following

adoption of the ordinance.

Staff plan to convert the existing mobile home park to a primary metering configuration during the City's systemwide water meter replacement program currently underway and should be complete by early Fall 2026.

Development Proposal:
N/A

Analysis:

The proposed ordinance creates a new Section 13.08.190 within the Louisville Municipal Code establishing special provisions related to water service and metering within mobile home parks. Over time, expansions and additions to existing mobile homes have increasingly encroached over existing meter pits and utility infrastructure, creating operational challenges for the City. In several locations, meter pits are no longer safely or reasonably accessible for routine meter reading, maintenance, inspection, repair, or replacement activities. Existing configurations also create difficulties in clearly identifying the separation point between the City's public water system and privately owned infrastructure.

The current configuration may also require City staff to access confined or unsanitary areas beneath mobile homes or additions in order to inspect or maintain water infrastructure. These conditions can expose staff to hazardous working environments, including limited access, poor ventilation, animal waste, standing water, deteriorated structures, and other unsafe conditions within private property areas not intended for routine public utility operations. The proposed primary metering approach would establish a clearly defined separation between the City-owned and privately owned systems, improve accessibility for utility operations, enhance protection of the public water system through proper backflow separation, and align utility practices with modern operational and regulatory standards.

Council Work Plan:
These actions support Core Services, Financial Stewardship & Asset Management, and Environmental Sustainability through improved utility system management, infrastructure accountability, and protection of the public water system.

Fiscal Impact:
Conversion of the existing mobile home park to a primary metering configuration will result in costs to the City associated with installation of the primary meter and related infrastructure improvements. These costs have been anticipated and budgeted as part of the City's ongoing water meter replacement and waterline replacement programs in 2026.

Utility costs to the mobile home park are expected to remain generally consistent following conversion and may potentially be reduced depending on operational efficiencies and internal management practices.

No other significant fiscal impacts have been identified.

Alternatives:

Take no action and leave Chapter 13.08 unchanged:

- Existing service configurations will continue to fall out of date with current utility operational practices and standards.
- Staff may remain potentially exposed to unsafe working conditions.
- The separation point between the City's public water system and the private mobile home park water system will remain undefined, which could result in future regulatory concerns, operational challenges, and potential liabilities.

Recommendation:
Approve Ordinance No. 1927, Series 2026.

Attachments:
1. Ordinance No. 1927, Series 2026
2. 2026-05 Notice and Order Meter Conversion

ORDINANCE NO. 1927
SERIES 2026

AN ORDINANCE AMENDING CHAPTER 13.08 OF THE LOUISVILLE MUNICIPAL CODE CONCERNING METERING OF WATER USAGE IN MOBILE HOME PARKS

WHEREAS, due to the distinctive aspects of mobile home park ownership and water infrastructure, the City Council finds that such properties require special consideration and a unique regulatory approach; and

WHEREAS, the City Council desires to amend Chapter 13.08 of the Louisville Municipal Code to set forth specific regulations concerning the metering of water usage in mobile home parks.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LOUISVILLE, COLORADO:

Section 1. Section 13.08.030.A of the Louisville Municipal Code is hereby amended to read as follows (words added are underlined; words deleted are ~~stricken through~~):

Sec. 13.08.030. Separate connection required.

A. Except as provided in subsection B or section 13.08.190, two or more premises may not be supplied from one and the same connection unless the structures on the premises are served in such a manner on the effective date of the ordinance codified in this chapter. In the addition of a building or structure which adds a complete living unit in the case of a multifamily residence, or which adds a pad or pads to a mobile home court, or which adds rooms or apartments to an apartment house in the event such rooms are served by plumbing fixtures, or any addition not listed in this section which adds more than five plumbing fixture points, such addition shall require the payment of an extension charge to be computed according to the method of computing tap fees as outlined in chapter 13.12. This section shall apply to extensions to all existing water services as well as to future services.

Section 2. Chapter 13.08 of the Louisville Municipal Code is hereby amended by the addition of a new Section 13.08.190 to read as follows:

Sec. 13.08.190. Special provisions concerning mobile home parks.

A. *Definitions.* As used in this Section, the following terms shall be defined as follows:

1. *Existing mobile home park* shall mean any mobile home park existing prior to the effective date of the ordinance codified in this Section.

2. *Mobile home and mobile home park* shall have the meanings set forth in Chapter 15.24 of this Code.

3. *Manager* shall mean the owner of a mobile home park or person responsible for operating and managing a mobile home park or an agent, employee, or representative authorized to act on the manager's behalf in connection with matters relating to tenancy in the park.

B. *Primary metering.* The Superintendent may require any new or existing mobile home park to be served by one or more primary meters upon a determination that:

1. Separate metering of each mobile home within a mobile home park creates an undue burden on the City or is inconsistent with utility best practices;

2. A primary meter is needed to provide separation between the City's public water system and a private water system;

3. A primary meter is required by federal, State, or local law or regulation; or

4. A primary meter is necessary to protect public health or water quality or for safe utility operations and maintenance.

C. *Conversion of existing mobile home parks.*

1. *Order.* If the Superintendent orders an existing mobile home park to be converted to one or more primary meters, a written order shall be served on the manager by any of the following methods: (a) personal service; (b) by first class mail to the address of the manager as reflected in the records of the County Assessor, the County Clerk and Recorder, or the City; (c) posting in a conspicuous place at the mobile home park.

2. *Compliance.* After receiving a written order from the Superintendent, the manager shall follow the instructions in the order by contacting the City to schedule the meter installation by the required date. If the manager fails to schedule or allow the City to install the primary meter by the required date, the manager shall be guilty of a violation of this Section and shall be subject to the penalty provisions in Section 1.28.010. Failure of the manager to allow installation of the primary meter shall also constitute a violation for which water service to the mobile home park may be discontinued.

3. *Cost of installation.* If the Superintendent orders an existing mobile home park to be converted to one or more primary meters, the City shall be responsible for the cost of installing the primary meter or meters and backflow prevention devices in such quantities, sizes, and locations as the Superintendent determines in the Superintendent's discretion.

D. *New mobile home parks.* If the Superintendent determines that a new mobile home park shall be served by one or more primary meters, the developer or manager of the mobile home park shall be responsible for the cost of installing the primary meter or meters, backflow prevention devices, and other infrastructure necessary for connection.

E. *Responsibilities.* Following the installation of one or more primary meters in accordance with this Section:

1. The City shall be responsible for all maintenance and repairs to the service pipes and fixtures installed between the City main and the primary meter pits, and the manager, at its own expense, shall be responsible for the maintenance and repair of service pipes, fixtures, and other infrastructure connected from the primary meter pit or pits and used to service water to the mobile homes and other water uses within the mobile home park.

2. All City utility accounts within the mobile home park shall be migrated into a single account in the name of the manager, and the manager shall be responsible for paying all water rates and charges to the City, which rates and charges may include, without limitation, surcharges for excessive use of water or drought.

3. The manager shall be responsible for complying with all requirements of the Mobile Home Park Act, Part 2, Article 12, Title 38, C.R.S. and other laws and regulations applicable to water usage and billing.

F. *Remedies.* The City shall have all rights and remedies as set forth in this Title to enforce the requirements of this Section against the manager, including without limitation: (i) the rights of entry and inspection; (ii) the imposition of late charges and penalties; (iii) the certification of delinquent rates, rents, charges, and penalties to the County Treasurer for collection in the same manner as taxes on the property comprising the mobile home park; and (iv) the discontinuance of water service to the mobile home park.

G. *Right of entry.* By previously arranged appointment with the manager, and upon presentation of proper credentials, a representative of the department of Public Works shall have the right of entry to inspect any mobile home park for the purpose of determining compliance with this Section, or for any other purpose reasonably necessary to serve the intent of this Section. This right

of entry shall be a condition of water service in order to protect the health, safety and welfare of the customers throughout the City's distribution system. Questions regarding proper credentials should be directed to the department of Public Works.

Section 3. If any portion of this ordinance is held to be invalid for any reason, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council hereby declares it would have passed and approved this ordinance and each part hereof irrespective of the fact that any one part be declared invalid.

Section 4. The repeal or modification of any provision of the Municipal Code of the City of Louisville by this ordinance shall not release, extinguish, alter, modify, or change in whole or in part any penalty, forfeiture, or liability, either civil or criminal, which shall have been incurred under such provision, and each provision shall be treated and held as still remaining in force for the purpose of sustaining any and all proper actions, suits, proceedings, and prosecutions for the enforcement of the penalty, forfeiture, or liability, as well as for the purpose of sustaining any judgment, decree, or order which can or may be rendered, entered, or made in such actions, suits, proceedings, or prosecutions.

Section 5. All other ordinances or portions thereof inconsistent or conflicting with this ordinance or any portion hereof are hereby repealed to the extent of such inconsistency or conflict.

INTRODUCED, READ, PASSED ON FIRST READING AND ORDERED PUBLISHED THIS _____ DAY OF _____, 2026.

PUBLIC HEARING AND SECOND READING WILL BE THE _____DAY OF _____, 2026, AT 6:00 P.M. AT LOUISVILLE CITY HALL, 749 MAIN STREET, LOUISVILLE, CO 80027.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

PASSED AND ADOPTED ON SECOND AND FINAL READING, THIS ___ DAY OF ___, 2026.

_____
Christopher M. Leh, Mayor

ATTEST:

_____
Genny Kline, City Clerk

APPROVED AS TO FORM:

KELLY PC

By: _____
Melinda Culley, Deputy City Attorney

NOTICE AND ORDER
FOR METER CONVERSION AT MOBILE HOME PARK

DATE: _____

TO: _____
_____
_____

FROM: City of Louisville
Public Works Director
749 Main Street
Louisville, Colorado

MOBILE HOME PARK INFORMATION:
Park Name:
Manager:
Property Address:
Legal Description

NOTICE is hereby given that, pursuant to Louisville Municipal Code Section 13.08.190 (a copy of which is enclosed), the City of Louisville (the "**City**") will be removing the individual/separate water meters serving the _____ Mobile Home Park (the "**Mobile Home Park**") and replacing them with one or more primary meters to serve the Mobile Home Park. The cost of the meter conversion and backflow prevention device will be paid for by the City.

The City's determination to require meter conversion is based on the following (check all that apply):

____ Separate metering of each mobile home creates an undue burden on the City.
____ Separate metering is inconsistent with utility best practices.
____ A primary meter is needed to provide separation between the City's public water system and a private water system.
____ A primary meter is required by federal, State, or local law or regulation.
____ A primary meter is necessary to protect public health or water quality or for safe utility operations and maintenance.

The City plans to install the primary meter(s) on approximately _____ ____, 20___. After installation of the primary meter, all City utility accounts within the Mobile

Home Park will be migrated into a single account in the name of the above-referenced Manager, and the Manager shall be responsible for paying all City utility rates and charges to the City, which rates and charges may include, without limitation, surcharges for excessive use of water, drought, etc.

You are hereby ORDERED to contact the Public Works Department by no later than **_____ _____, 2026** in order to coordinate the installation of the primary meter. Failure to contact the City by this date or to allow the installation of the primary meter may subject the Manager to penalties of up to $2,650 (adjusted for inflation) per day and/or result in discontinuance of water service to the Mobile Home Park.

CITY OF LOUISVILLE

By: _____

Title: _____

Sec. 13.08.190. Special provisions concerning mobile home parks.

A. *Definitions.* As used in this Section, the following terms shall be defined as follows:

1. *Existing mobile home park* shall mean any mobile home park existing prior to the effective date of the ordinance codified in this Section.

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4. A primary meter is necessary to protect public health or water quality or for safe utility operations and maintenance.

C. *Conversion of existing mobile home parks.*

1. *Order.* If the Superintendent orders an existing mobile home park to be converted to one or more primary meters, a written order shall be served on the manager by any of the following methods: (a) personal service; (b) by first class mail to the address of the manager as reflected in the records of the County Assessor, the County Clerk and Recorder, or the City; (c) posting in a conspicuous place at the mobile home park.

2. *Compliance.* After receiving a written order from the Superintendent, the manager shall follow the instructions in the order by contacting the City to schedule the meter installation by the required date. If the manager fails to schedule or allow the City to install the primary meter by the required date, the

manager shall be guilty of a violation of this Section and shall be subject to the penalty provisions in Section 1.28.010. Failure of the manager to allow installation of the primary meter shall also constitute a violation for which water service to the mobile home park may be discontinued.

3. *Cost of installation.* If the Superintendent orders an existing mobile home park to be converted to one or more primary meters, the City shall be responsible for the cost of installing the primary meter or meters and backflow prevention devices in such quantities, sizes, and locations as the Superintendent determines in the Superintendent's discretion.

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E. *Responsibilities.* Following the installation of one or more primary meters in accordance with this Section:

1. The City shall be responsible for all maintenance and repairs to the service pipes and fixtures installed between the City main and the primary meter pits, and the manager, at its own expense, shall be responsible for the maintenance and repair of service pipes, fixtures, and other infrastructure connected from the primary meter pit or pits and used to service water to the mobile homes and other water uses within the mobile home park.

2. All City utility accounts within the mobile home park shall be migrated into a single account in the name of the manager, and the manager shall be responsible for paying all water rates and charges to the City, which rates and charges may include, without limitation, surcharges for excessive use of water or drought.

3. The manager shall be responsible for complying with all requirements of the Mobile Home Park Act, Part 2, Article 12, Title 38, C.R.S. and other laws and regulations applicable to water usage and billing.

F. *Remedies.* The City shall have all rights and remedies as set forth in this Title to enforce the requirements of this Section against the manager, including without limitation: (i) the rights of entry and inspection; (ii) the imposition of late charges and penalties; (iii) the certification of delinquent rates, rents, charges, and penalties to the County Treasurer for collection in the same manner as taxes on the property comprising the mobile home park; and (iv) the discontinuance of water service to the mobile home park.

G. *Right of entry.* By previously arranged appointment with the manager, and upon presentation of proper credentials, a representative of the department of Public Works shall have the right of entry to inspect any mobile home park for the purpose of determining compliance with this Section, or for any other purpose reasonably necessary to serve the intent of this Section. This right of entry shall be a condition of water service in order to protect the health, safety and welfare of the customers throughout the City's distribution system. Questions regarding proper credentials should be directed to the department of Public Works.

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 10.C.

Subject: Discussion / Direction / Action: Potential 2026 Ballot Measure - Historic Preservation Tax

Discussion / Direction / Action provides Council with the opportunity to learn about an item, ask questions, and take action. There will be one round of public comment. Final decisions may be made on this item.

Date: June 16, 2026

Prepared By: Samma Fox, Deputy City Manager
Rob Zuccaro, Director
Brandi Cummings, Director

Presented By: Diana Langley, City Manager
Rob Zuccaro, Director
Brandi Cummings, Director

Summary:
To receive an update on the Historic Preservation Tax Task Force and provide direction to staff on potential 2026 ballot questions related to the Historic Preservation Tax Extension.

Background / Prior Discussions:
The General Election is scheduled for November 3, 2026. The City Council has expressed a desire to consider potential ballot questions related to the Historic Preservation Tax, City Charter, and a Local Marketing District Tax. Currently, the City has no ballot questions or Council races for the 2026 ballot. If Council decides to move ahead with any potential ballot questions, the following deadlines must be maintained:

- July 21 — the last City Council meeting at which to pass (on 2nd reading) any non-emergency ordinances referring ballot questions to the voters.
- July 24 — Boulder County Elections must receive, in writing, our intent to participate in the 2026 coordinated election.
- August 18 — the last City Council meeting at which to pass an emergency ordinance or resolution referring ballot questions to the voters.
- September 4 — the last day for ballot content to be submitted to the Boulder County Elections Office.

The City's Historical Preservation Tax is a one-eighth of one percent (0.125%) tax for the purpose of preserving the historic character of Louisville. The existing temporary tax is set to expire on December 31, 2028.

Original Tax – Approved in 2008

In November 2008, voters approved Ballot Issue 2A which levied a .125% sales tax, collected for a ten-year period commencing January 1, 2009, with proceeds spent exclusively for historic preservation purposes within the historic Old Town and Downtown Louisville. Measure passed — Yes 55% / 6,037 votes and No 45% / 4,890 votes.

Continuation of Tax – Extended in 2017

In November 2017, voters approved the continuation of the tax which levied a .125% sales and use tax, to be collected for a ten-year period commencing January 1, 2019, with proceeds spent for historic preservation purposes within the historic Old Town and Downtown Louisville, with updated provisions to include funding of the Historical Museum Campus (20% of the annual tax revenues) and citywide expansion of the boundaries with a super majority of Council (no less than 5 council members). Measure passed — Yes 64% / 4,460 votes and No 36% / 2,558 votes.

Awards and Accomplishments

Dating back to 2016, the City has awarded over $3.8M in Grants to 40 unique recipients. Over $405,000 in Pre-Landmarking assessments to 73 recipients. From 2019-2025, provided over $1.1M in total funding for the Historical Museum.

City's Voluntary Local Landmark Program

The City started its local landmark program in 2005 and since that time has designated 67 residential and commercial properties as local landmarks. The landmark program is voluntary, utilizing grants and low-interest loans for preservation and rehabilitation of historic properties as an incentive to designate the property as a local landmark and to make such projects financially attractive to property owners. The City periodically updates the grant program to ensure that the grant and loan program account for inflation and to strengthen the available financial incentives. The grant program was recently updated by Resolution No. 102, Series 2025 to increase available grant amounts. The program also includes zoning incentives for landmark properties, allowing building additions to the historic properties that may exceed the maximum lot coverage and floor area allowances.

Historic Preservation Tax Task Force

On April 28, 2026 Council provided direction to staff to create and complete the Historic Preservation Tax Task Force (Task Force) for a recommendation to City Council by their June 16, 2026 meeting, in order to make the deadlines to consider placing an item on the 2026 ballot. Staff then built a timeline based off of this extremely tight schedule, and solicited candidates for the Task Force from Council members. There were thirteen potential members put forward, and eight originally requested. Staff confirmed availability of each potential member and Council chose to add an additional community member to the task force. On May 12, 2026, City Council approved the task force with nine members and the below purpose.

Members:

- 2 Council Members: Mayor Leh and Council Member Fahey
- 1 HPC Member: Sloane Whidden
- 1HMAB Member: Barbara Taylor
- 1 Architect: Peter Stewart
- 1 Chamber Member: Mike Deborski
- 3 Community Members: Denise Montagu, Lee Scriggins. Kristi Gitkind

Purpose
The purpose of the Historic Preservation Tax (HPT) Task Force is to consider and advise Council on possible extension of, use of, and future amount of the City's Historic Preservation Tax. With the goal of providing City Council a recommendation regarding:

- Extension of the Historic Preservation Tax – Should this be placed on the 2026 ballot for voter consideration?
- Use of the Historic Preservation Tax – Should adjustments be made to the allocation of revenues from this tax?
- Amount of the Historic Preservation Tax

Prior Meetings:

- April 28 - City Council - Direction to Create Task Force: City Council Meeting • Agendas & Minutes • CivicClerk
- May 12 - City Council - Creates Task Force: City Council Meeting • Agendas & Minutes • CivicClerk
- May 13 - Task Force 1st Meeting: Revitalization Commission • Agendas & Minutes • CivicClerk
- May 28 - Task Force 2nd Meeting: Historic Preservation Tax Task Force • Agendas & Minutes • CivicClerk

Development Proposal:
N/A

Analysis:
Ballot Considerations
TABOR
The Taxpayer's Bill of Rights (TABOR) Amendment, or Article X, Section 20, was approved by voters in 1992. This amendment to the Constitution of the State of Colorado generally limits the amount of revenue governments in the state can retain and spend. Absent voter approval, it requires excess revenue to be refunded to taxpayers. TABOR also requires voter approval for certain tax increases (including the potential Historic Preservation Tax Extension) and includes election provisions such as

language requirements for ballot questions and limitation to a single subject.

GENERAL BALLOT INFORMATION
Historic Preservation Tax extension would likely be be one ballot question. While the City could place any number of questions on the ballot, and success can vary across communities, in Staff's experience, 10 is the absolute maximum, any more than six questions can be too many, and three or four seems to be the sweet spot. Additionally, City staff is proposing to coordinate the election with Boulder County. This is significantly more affordable than running a City-specific special election.

Historic Preservation Tax
With the temporary tax slated to expire on December 31, 2028, the City Council has expressed interest in exploring placing a tax extension on the November 2026 Ballot. Council created a Historical Preservation Tax Task Force to consider this.

The task force held two meetings, and completed this task in just six hours of meetings. The first meeting, May 13, 2026, focused on introductions, information about the tax, prior uses, and City programs it supports, to build a baseline for the new group. The second meeting, May 28, 2026, focused on getting to the questions Council asked for the Task Force's recommendations on and included significant discussion over the three hours about the use of the tax and the amount of the tax. Task force members in general supported the tax, but had thoughtful conversation about equity and public benefit, as well as priorities and other opportunities. By the end of the meeting, the Task Force recommended Council bring the extension question before voters (and confirmed a 10 year extension), at the same level as before, and recommended the following adjustments to the allocation of revenues.

- No less than 30-40% for Museum
- Add flexibility beyond use for incentives (including programs, staffing, and/or capital/city-owned facilities, that can be used by the Museum or other areas)

The ballot language should speak to effective dates for the tax, for example, if placed on the 2026 ballot, the language can specify it is effective 2029, after the current tax expires.

Council Work Plan:
The 2026 Louisville City Council Work Plan includes consideration of potential charter amendments and consideration of alternatives and potential next steps ahead of the Historic Preservation Tax's 2028 expiration. Both of these are under the Core Services priority.

Fiscal Impact:
At a high level, the cost to place items on the coordinated ballot is dependent on the length of the question. In 2025 regular ballot questions, like the potential charter amendments, cost ~$6,000 each and in 2023 the TABOR related question was

~$15,000, while in 2021 a TABOR question was ~$32,000. Staff anticipates costs in 2026 to be >$32,000 per TABOR (tax related) question. There is $110,000 in the 2026 budget for elections.

Historic Preservation Tax Extension
The Historical Preservation Tax, is a one-eighth of one percent (0.125%) tax for the purpose of preserving the historic character of Louisville. This amounts to a little over $0.01 for every $10 spent. The existing temporary tax is set to expire on December 31, 2028. The tax generates approximately $1M annually, of which 20% is allocated to fund the Louisville Historical Museum Campus.

Alternatives:
As this tax does not expire until 2028, Council may choose to delay consideration for a future ballot cycle. It is important to consider what may also occur on future ballots. In 2027 Council seats will be up for election and 2028 is a presidential election year.

Recommendation:
Historic Preservation Tax Extension
Staff recommends Council provide direction on interest in pursing a 2026 ballot question and, if interested, provide direction to staff on alignment with the HPT Task Force recommendation or adjustments. This will allow staff to work with counsel to draft ballot language and begin the process to coordinate an election with Boulder County.

Attachments:
1. 2026-04-21 Election Calendar 2026
2. 2026.06.16_HPT Task Force Presentation

DRAFT – SUBJECT TO CHANGE
Prepared 4/21/26

CITY OF LOUISVILLE REGULAR ELECTION CALENDAR FOR NOVEMBER 3, 2026 ELECTION CONDUCTED AS A COORDINATED MAIL BALLOT ELECTION

The following is a timeline for a regular municipal election to be held on November 3, 2026, to be conducted as a coordinated mail ballot election with Boulder County, in accordance with the Uniform Election Code of 1992, as amended. Deadlines required under Colo. Const. Art. X, Sec. 20 (TABOR) are included. Citations provided are to the Colorado Revised Statutes, as amended through 2026.

July 14, 2026	City Council meeting at which to pass on first reading any non-emergency ordinances referring ballot questions to the voters. **[Note: Ordinances referring ballot questions to voters must be effective by no later than September 4, the last day for the City to certify the ballot content to the County Clerk. Section 4-9(b) of the Charter provides ordinances are effective 30 days after publication following final adoption.]**
July 21, 2026	City Council meeting at which to pass on second reading any non-emergency ordinances referring ballot questions to the voters.
July 24, 2026	Last day to notify Boulder County Clerk and Recorder ("County Clerk"), in writing, of the City's intent to participate in the November 3, 2026 Coordinated Election. [1-7-116(5)] (100 days prior to election – shifts to the Friday before).
July 28, 2026	If needed, last City Council meeting to pass on second reading any non-emergency ordinances referring ballot questions to the voters.
August 3, 2026	Last day for City Clerk to have prepared the petition forms for nominations for municipal officers. [1-4-805] (92 days prior to election).
August 4, 2026	First day Municipal Candidates may circulate nominating petitions. [1-4-805] (91 days prior to election).

August 5, 2026	Last day to publish non-emergency ordinances referring ballot questions to the voters.
August 18, 2026	Last regular City Council meeting at which to pass a resolution approving the coordinated election IGA with County Clerk for coordinated election. [1-7-116(2)] (IGA must be signed by August 25, not less than 70 days prior to election). Last City Council meeting at which to pass an emergency ordinance or resolution referring ballot questions to the voters.
August 24, 2026	Last day Municipal Candidates may file nominating petitions with the City Clerk. [1-4-805] (71 days prior to the election).
August 25, 2026	Last day to sign IGA with County Clerk for conducting coordinated election. [1-7-116(2)] (70 days prior to election).
August 27, 2026	Last day nomination petitions may be amended to correct or replace signatures that the City Clerk finds are not in apparent conformity. [1-4-805] (before the 67th day before election).
August 31, 2026	Last day affidavit of intent to accept write-in candidacy may be filed with the City Clerk. Provide County Clerk with copies of affidavits received. [1-4-1102(2)] (64 days prior to election).
September 4, 2026	Last day for City Clerk to establish by lot the order of ballot names. [1-5-406] (Prior to the certification of the ballot). Last day for City Clerk to certify the ballot content to the County Clerk; including ballot issues, questions and all TABOR ballot issue notice information except pro/con summaries. The certification shall be delivered to the County Clerk. [1-5-203(3)(a)] (60 days prior to the election).
September 14, 2026	1st deadline for filing of Contribution and Expenditures Reports for municipal candidates and committees active in 2026

Coordinated Election. Reporting Period: beginning of campaign–9/14/26. [LMC 2.17.030 and CRS 1-45-108] (50 days prior to the election by the close of business; reports are also required to be filed 25 days prior to the election; the Friday before the election; and 30 days after the election).

September 18, 2026 Deadline to send mail-in ballots to overseas military voters. To be performed by election official in each jurisdiction charged with distributing balloting materials. [1-8.3-110] (Must be mailed no later than 45 days prior to the election, which is Saturday, September 19. If ballot application is received after September 18, 2026, send balloting materials within 72 hours after receipt of application).

Written comments for or against ballot issue must be filed with City Clerk. [Const. Art. X, Sec. 20(3)(b)(v); 1-7-901(4))] (By Friday before the 45th day before the election).

September 21, 2026 City Clerk prepares summaries of comments filed in favor of and in opposition to any referred TABOR ballot issue. Last day to transmit TABOR Notice, including pro/con summaries, to County Clerk. [1-7-903(1) and 1-7-904] (No later than 43 days before the election).

October 2, 2026 County clerk mails TABOR Notice. [Const. Art. X, Sec. 20(3)(b); 1-7-906] (At least 30 days before election – shifts to Friday before).

October 9, 2026 2nd deadline for filing of Contribution and Expenditures Reports for municipal candidates and committees active in 2026 Coordinated Election. Reporting Period: 9/14/26 – 10/9/26. [LMC 2.17.030 and CRS 1-45-108] (25 days prior to the election; also required the Friday before the election and 30 days after the election).

October 9–16, 2026 County Clerk mails mail ballot packets to electors [1-7.5-107(3)(a)(I)] (No earlier than 22 days before election and no later than 18 days before election).

October 14, 2026 For TABOR ballot questions concerning the creation of debt or other financial obligation, last day to post specified financial information on City's website. [1-7-908(1)] (Not later than 20 days before the election).

Last day for designated election official, or coordinated election official if so provided in IGA, to provide notice by publication of the election stating information required by C.R.S. § 1-5-205(1). If completed by the City Clerk, a copy of the notice shall be mailed to the County Clerk. If notice is to be published in the *Boulder Daily Camera*, it must be submitted several days in advance. [1-5-205] (Not later than 20 days before the election).

October 19, 2026 Counting of mail-in ballots may begin and continue until counting is complete. No results to be released until after 7 p.m. on Election Day. [1-7.5-107.5] (15 days prior to election).

October 23, 2026 Coordinated election official to provide notice of election by posting. Posting shall be at a conspicuous place in the office of the county clerk and recorder if the election is coordinated by the county and shall be posted until two days after the election. [1-5-205(1.3)] (at least 10 days before election – shifts to Friday before).

October 26, 2026 Last day to register to vote if voter wants to receive ballot by mail. [1-2-201(4)] (8 days before the election). A person may register to vote up to and including Election Day at a voter service and polling center. [1-2-201(3)(a)].

Last day for voter to change address if using on-line voter registration system. [1-2-216(4)(a)(II)] (8 days before the election). A voter can change his or her address up to and

including Election Day at a voter service and polling center [1-2-216(4)(a)(I)].

October 30, 2026 3rd deadline for filing of Contribution and Expenditures Reports for municipal candidates and committees active in 2026 Coordinated Election. Reporting Period 10/9/26 to 10/30/26. [LMC 2.17.030 and 1-45-108] (Friday preceding the election by the close of business; also required 30 days after the election).

November 3, 2026 **Election Day.**

Emergency or replacement mail-in ballot requests must be made before 5:00 p.m. and returned no later than 7:00 p.m. [1-7.5-115].

All ballots, including emergency or replacement ballots must be returned to the County Clerk by 7:00 p.m. when polls close. [1-7.5-115].

Voters may register to vote or make a change of address up to and including Election Day at a voting service and polling center. [1-2-201 and 1-2-217.7].

November 25, 2026 Last day to canvass the votes. The County Clerk conducts the canvass, but the City may participate. Canvass board shall certify the official abstract of votes cast to the designated election official. [1-10-203(1)] (no later than 22 days after election).

December 3, 2026 Final Contribution and Expenditures report due for filed municipal candidates and committees active in 2026 Coordinated Election. Reporting Period 10/30/26 to 12/3/26. [LMC 2.17.030 and 1-45-108] (30 days after the election).

City of Louisville

Historic Preservation Tax Task Force



JUNE 16, 2026

Rob Zuccaro, Community Development Director

Brandi Cummings, Cultural Services Director

Historic Preservation Tax Background

- 1/8% (0.125%) tax for the purpose of preserving the historic character of Louisville in Old Town and Downtown
- Approved via Ballot Issue 2A in 2008 (Yes 55%, No 45%)
- Effective January 1, 2009 for 10 years
- Extended by voters in 2017, use expanded to include Historical Museum Campus (20%) and citywide boundaries (with Council super majority) (Yes 64%, No 36%)
- Existing temporary tax expires December 31, 2028

Task Force Background

- Council direction received April 28
- Created by Resolution 43, Series 2026
- Must provide a recommendation to Council by June 30th
  - Scheduled for June 16th
- Sunsets July 31st

Task Force Purpose

Provide a Recommendation to Council on:

- Extension of the Historic Preservation Tax – *Should this be placed on the 2026 ballot for voter consideration?*
- Use of the Historic Preservation Tax – *Should adjustments be made to the allocation of revenues from this tax?*
- Amount of the Historic Preservation Tax – *Should it remain the same, or change? If change, to what?*

Task Force Members

- 2 Council Members: Mayor Leh and Council Member Fahey
- 1 HPC Member: Sloane Whidden
- 1HMAB Member: Barbara Taylor
- 1 Architect: Peter Stewart
- 1 Chamber Member: Mike Deborski
- 3 Community Members: Denise Montagu, Lee Scriggins. Kristi Gitkind

Task Force Meetings

- Task Force Created May 12, 2026
- First Meeting: 4-7 PM May 13, 2026
  - Introductions & information sharing
- Second Meeting: 4-7 May 28, 2026
  - Focused on answering Council's questions
  - Conversations about equity, public benefit, priorities, opportunities, and alternatives

Task Force – Items for Future Consideration

The Task force created a parking lot with additional items they were interested in:

- Recommend revisiting the program and considering adjustments (more creativity)
- Desire for more education and programming
- Desire for clear and concise ballot language
- History on Louisville on Channel 8 – want to see more often

Task Force Recommendation

- Does the HPT Task Force recommend to Council that voters be asked to approve an extension of the expiring Historic Preservation Tax? Yes

- Does the HPT Task Force recommend the same amount for the Historic Preservation tax? Same %

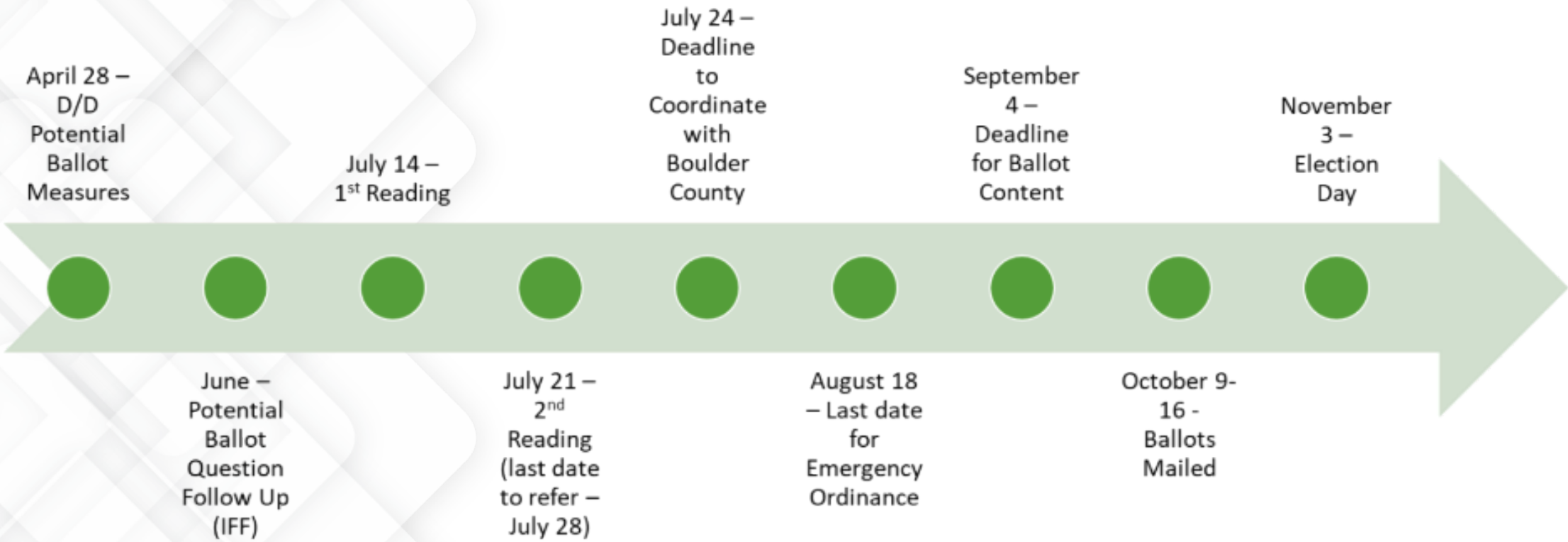
- Does the HPT Task Force recommend adjustments to the allocation of revenues from this tax? Yes
  - No less than 30-40% for Museum
  - Add flexibility beyond incentives (a fourth item - including programs and/or capital/city owned facilities, that can be used by Museum or other areas)

- 10 Years – Confirmed by group

Discussion

- Questions?
- Does Council want to pursue an Historic Preservation Tax Extension ballot question in 2026?
- If yes, following the Task Force's recommendation?
  - If no – Please provide direction.

Election Timeline



City of Louisville

Next Steps

- Next Meeting: July 14, 2026
  - Joint HPC/HMAB Meeting w/ Council
  - First reading of the potential ballot question

- July 21
  - Second Reading
  - Other election related items

City of Louisville
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City Council Communication
Agenda Item 10.D.

Subject: Discussion / Direction / Action: Potential 2026 Ballot Measure - City Charter Amendments

Discussion / Direction / Action provides Council with the opportunity to learn about an item, ask questions, and take action. There will be one round of public comment. Final decisions may be made on this item.

Date: June 16, 2026

Prepared By: Genny Kline, City Clerk
Samma Fox, Deputy City Manager

Presented By: Genny Kline, City Clerk

Summary:
Provide direction to staff on potential 2026 ballot questions related to the following proposed Charter amendments:

- Align when Council takes office with current election procedures
- Align authorized topics for Executive Sessions with State Open Meetings Law
- Align initiative and referendum signature requirements with surveyed municipalities
- Add a review and comment requirement for initiatives
- Update outdated language (citizen to resident, he/she to they) and add clarifying language (document availability / locations)
- Update to meeting locations

Background / Prior Discussions:
The General Election is scheduled for November 3, 2026. The City Council has expressed a desire to consider potential ballot questions related to the City Charter. Currently, the City has no ballot questions or Council races for the 2026 ballot. If Council decides to move ahead with any potential ballot questions, the following deadlines must be maintained:

- July 21 — the last City Council meeting at which to pass (on 2nd reading) any non-emergency ordinances referring ballot questions to the voters.
- July 24 — Boulder County Elections must receive, in writing, our intent to participate in the 2026 coordinated election.
- August 18 — the last City Council meeting at which to pass an emergency ordinance or resolution referring ballot questions to the voters.
- September 4 — the last day for ballot content to be submitted to the Boulder

County Elections Office.

City Charter Amendments

In 1902, Colorado voters authorized home rule governance for cities and towns by amending the state constitution. Home rule empowers local governments to act and legislate on local matters. A petition, signed by 5% of the registered voters in a municipality, or the adoption of an ordinance by the municipal governing body begins the process to establish home rule governance. Then, the municipality must hold an election to decide if a charter commission will be formed. If approved by voters and after electing the charter members, the commission must create a charter and submit it to the governing body within 180 days after election. The municipality must then hold another election to consider the adoption of the proposed charter.

For the City of Louisville, a special election was held on May 1, 2001, to elect Home Rule Charter Commission members. On August 21, 2001, the Home Rule Charter Commission submitted a home rule Charter to the City Council. The Charter was submitted to the registered electors at the regular municipal election held on November 6, 2001, and was approved. Since then, amendments have been approved by the registered electors on November 2, 2004 (topics included study sessions, records, and agendas) and November 3, 2009 (topics included definition of "public body," electronic delivery of meeting notices, and to allow Council to enter into lease-purchase agreements).

On April 28, 2026, staff presented to Council the following proposed Charter amendments:

- Align when Council takes office with current election procedures
- Align authorized topics for Executive Sessions with State Open Meetings Law
- Align initiative and referendum signature requirements with surrounding communities
- Add a review and comment requirement for initiatives
- Update outdated language (citizen to resident, he/she to they) and add clarifying language (document availability / locations)

Council directed staff to return with additional information and to include information on meeting locations.

Development Proposal:

N/A

Analysis:

Charter amendments should be presented as ballot questions that address single subjects, even if the ballot question would affect multiple sections of the Charter. The

proposed amendments below are not an exhaustive list of all possible Charter amendments, but a short list of possible 2026 amendments based on Council's direction and priorities, and Staff's expertise.

Recommended Charter Amendments:

Align when Council Takes Office to Current Election Procedures
Section 3-4(b) of the Charter currently states, "The Mayor and each Council member shall take office at the first regular meeting of the Council following their election..." This is prior to results being certified and may be especially problematic for races that may be too tight to immediately call.

Staff surveyed 17 other municipalities based on their proximity to Louisville, their similar population size, and/or their utilization for guidance during the Comprehensive Plan Process. Those municipalities are: Superior, Fruita, Frederick, Firestone, Durango, Golden, Johnstown, Montrose, Evans, Fountain, Lafayette, Wheat Ridge, Erie, Broomfield, Longmont, Boulder, and Ft. Collins.

Of those municipalities surveyed, 11 of the 17 wait until after election certification, or longer, to seat elected officials.

- Staff recommends a revision stating the Mayor and each council member take office at the first regular meeting following certification of municipal election results. Most likely the first regular meeting in December.

Align Initiative and Referendum Signature Requirements
Section 7-1(c) — Initiatives — currently requires petitioners to obtain signatures equal to 5% of the total number of electors of the City's registered voters.

Staff surveyed 17 other municipalities based on their proximity to Louisville, their similar population size, and/or their utilization for guidance during the Comprehensive Plan Process. Those municipalities are: Superior, Fruita, Frederick, Firestone, Durango, Golden, Johnstown, Montrose, Evans, Fountain, Lafayette, Wheat Ridge, Erie, Broomfield, Longmont, Boulder, and Ft. Collins.

The average percentage of signatures needed for an initiative is 10%.

- Staff recommends an increase from 5% to 7.5% — which will still keep Louisville below the average of the municipalities surveyed.

Section 7-2(c) — Referendums — currently requires petitioners to obtain signatures equal to 2.5% of the total number of electors of the City's registered voters.

Staff surveyed the 17 previously noted municipalities and the average percentage of signatures needed for an initiative is 8.5%.

- Staff recommends an increase from 2.5% to 5% — which will still keep Louisville below the average of the municipalities surveyed.

NOTE: Both recommendations will result in an increase of approximately 403 signatures for both initiative and referendum petitions.

Amend Article 7 to Allow for "Review and Comment" for Resident Initiatives
The change will require petitioners to attend a session with the City Attorney and City Staff concerning their proposed submission as to format and/or contents — prior to submission to the City Clerk. Petitioners may revise the text in response to the questions / comments posed by the City, but are not required to. If revisions are made, the revised draft with changes highlighted or otherwise noted, and a "clean" version will be submitted to the City Clerk for consideration of approval as to form. This will not guarantee approval of the petition submission or replace the approval / disapproval requirement by the City Clerk.

This would help the City understand the petitioners' position as well as alleviate some of the petition edits that are needed prior to final petition approval by the City Clerk.

For reference, of the two most recent initiatives received by the City Clerk, one was disapproved twice before being approved, and one was disapproved once before being approved. A Review and Comment session prior to submission to the City Clerk may alleviate the necessity for the Clerk to disapprove as to form. Thus, allowing the rest of the initiative process to proceed more easily.

For reference, please see the City and County of Denver Charter and Municipal Code regarding their Review and Comment Process.

- Staff recommends adding a Review and Comment Process to Article 7 of the Charter.

Update Acceptable Meeting Locations
At Council's direction, staff researched possible changes to City meeting locations. Section 4-5(d) states that "all meetings of any public body shall occur in public buildings and public facilities accessible to all members of the public." This addition was added by the approved Initiative on 11/02/2004. While well-intentioned, this has been problematic as it has restricted public meetings from being held in other accessible venues or allowing Council to have joint meetings in neighboring municipalities.

Staff surveyed 17 other municipalities based on their proximity to Louisville, their similar population size, and/or their utilization for guidance during the Comprehensive Plan Process. Those municipalities are: Superior, Fruita, Frederick, Firestone, Durango, Golden, Johnstown, Montrose, Evans, Fountain, Lafayette, Wheat Ridge, Erie, Broomfield, Longmont, Boulder, and Ft. Collins.

Of those municipalities surveyed, the location of meetings are set by ordinance, resolution, or some other means.

- Staff recommends revising language to allow for meetings to occur in other locations as agreed to by Council.

Align Executive Session Authorized Topics with State

Section 5-2 of the Charter includes a limited scope of authorized topics for the Council to meet in executive session. Council may wish to consider a measure aligning the list of authorized topics with the State, which allows for broader topics related to property, consultation with an attorney, security, and negotiations.

- Council has been provided a memo from City Attorney Kelly. Staff has no additional information to add to this item.

Revise Language to Provide Clarity or Update Terminology

- Update language in Sections 4-14(b) and 11-4(b) to remove references to "city offices" and replace them with "the City's Website and in the City Clerk's Office."
- Staff recommends changing "Citizen" to "Resident" throughout the Charter (15 occurrences)
- Staff recommends changing "he/she" to "they" (4 occurrences)

Council Work Plan:

Potential Charter Amendments are part of Council's 2026 Work Plan under Core Services.

Fiscal Impact:

At a high level, the cost to place items on the coordinated ballot is dependent on the length of the question. In 2025, regular ballot questions, like the potential charter amendments, cost ~$6,000 each and in 2023 the TABOR related question was ~$15,000, while in 2021 a TABOR question was ~$32,000. Staff anticipates costs in 2026 to be >$32,000 per TABOR (tax related) question and >$6,000 for potential charter amendments. There is $110,000 in the 2026 budget for elections.

Aside from the impact to add Charter Amendments on the ballot, there is no fiscal impact as a result of these changes.

Alternatives:

Council may:

- Direct staff to come back with ballot language for some or all proposed Charter amendments.

- Make additional recommendations beyond what is included in the current list.
- Choose not to seek any Charter amendments for the 2026 ballot.

Recommendation:
Staff recommends Council consider prioritizing revisions to when Council takes office that align with current election procedures, initiative and referendum petition signature requirements, and if supported by Council, executive session amendments.

Attachments:
1. Election Calendar 2026
2. Council Swearing In Comparison
3. Initiave Refer Signature Comparison
4. Meeting Location Comparison
5. Presentation

DRAFT – SUBJECT TO CHANGE
Prepared 4/21/26

CITY OF LOUISVILLE REGULAR ELECTION CALENDAR FOR NOVEMBER 3, 2026 ELECTION CONDUCTED AS A COORDINATED MAIL BALLOT ELECTION

The following is a timeline for a regular municipal election to be held on November 3, 2026, to be conducted as a coordinated mail ballot election with Boulder County, in accordance with the Uniform Election Code of 1992, as amended. Deadlines required under Colo. Const. Art. X, Sec. 20 (TABOR) are included. Citations provided are to the Colorado Revised Statutes, as amended through 2026.

July 14, 2026	City Council meeting at which to pass on first reading any non-emergency ordinances referring ballot questions to the voters. **[Note: Ordinances referring ballot questions to voters must be effective by no later than September 4, the last day for the City to certify the ballot content to the County Clerk. Section 4-9(b) of the Charter provides ordinances are effective 30 days after publication following final adoption.]**
July 21, 2026	City Council meeting at which to pass on second reading any non-emergency ordinances referring ballot questions to the voters.
July 24, 2026	Last day to notify Boulder County Clerk and Recorder ("County Clerk"), in writing, of the City's intent to participate in the November 3, 2026 Coordinated Election. [1-7-116(5)] (100 days prior to election – shifts to the Friday before).
July 28, 2026	If needed, last City Council meeting to pass on second reading any non-emergency ordinances referring ballot questions to the voters.
August 3, 2026	Last day for City Clerk to have prepared the petition forms for nominations for municipal officers. [1-4-805] (92 days prior to election).
August 4, 2026	First day Municipal Candidates may circulate nominating petitions. [1-4-805] (91 days prior to election).

August 5, 2026	Last day to publish non-emergency ordinances referring ballot questions to the voters.
August 18, 2026	Last regular City Council meeting at which to pass a resolution approving the coordinated election IGA with County Clerk for coordinated election. [1-7-116(2)] (IGA must be signed by August 25, not less than 70 days prior to election). Last City Council meeting at which to pass an emergency ordinance or resolution referring ballot questions to the voters.
August 24, 2026	Last day Municipal Candidates may file nominating petitions with the City Clerk. [1-4-805] (71 days prior to the election).
August 25, 2026	Last day to sign IGA with County Clerk for conducting coordinated election. [1-7-116(2)] (70 days prior to election).
August 27, 2026	Last day nomination petitions may be amended to correct or replace signatures that the City Clerk finds are not in apparent conformity. [1-4-805] (before the 67th day before election).
August 31, 2026	Last day affidavit of intent to accept write-in candidacy may be filed with the City Clerk. Provide County Clerk with copies of affidavits received. [1-4-1102(2)] (64 days prior to election).
September 4, 2026	Last day for City Clerk to establish by lot the order of ballot names. [1-5-406] (Prior to the certification of the ballot). Last day for City Clerk to certify the ballot content to the County Clerk; including ballot issues, questions and all TABOR ballot issue notice information except pro/con summaries. The certification shall be delivered to the County Clerk. [1-5-203(3)(a)] (60 days prior to the election).
September 14, 2026	1st deadline for filing of Contribution and Expenditures Reports for municipal candidates and committees active in 2026

Coordinated Election. Reporting Period: beginning of campaign–9/14/26. [LMC 2.17.030 and CRS 1-45-108] (50 days prior to the election by the close of business; reports are also required to be filed 25 days prior to the election; the Friday before the election; and 30 days after the election).

September 18, 2026 Deadline to send mail-in ballots to overseas military voters. To be performed by election official in each jurisdiction charged with distributing balloting materials. [1-8.3-110] (Must be mailed no later than 45 days prior to the election, which is Saturday, September 19. If ballot application is received after September 18, 2026, send balloting materials within 72 hours after receipt of application).

Written comments for or against ballot issue must be filed with City Clerk. [Const. Art. X, Sec. 20(3)(b)(v); 1-7-901(4))] (By Friday before the 45th day before the election).

September 21, 2026 City Clerk prepares summaries of comments filed in favor of and in opposition to any referred TABOR ballot issue. Last day to transmit TABOR Notice, including pro/con summaries, to County Clerk. [1-7-903(1) and 1-7-904] (No later than 43 days before the election).

October 2, 2026 County clerk mails TABOR Notice. [Const. Art. X, Sec. 20(3)(b); 1-7-906] (At least 30 days before election – shifts to Friday before).

October 9, 2026 2nd deadline for filing of Contribution and Expenditures Reports for municipal candidates and committees active in 2026 Coordinated Election. Reporting Period: 9/14/26 – 10/9/26. [LMC 2.17.030 and CRS 1-45-108] (25 days prior to the election; also required the Friday before the election and 30 days after the election).

October 9–16, 2026 County Clerk mails mail ballot packets to electors [1-7.5-107(3)(a)(I)] (No earlier than 22 days before election and no later than 18 days before election).

October 14, 2026 For TABOR ballot questions concerning the creation of debt or other financial obligation, last day to post specified financial information on City's website. [1-7-908(1)] (Not later than 20 days before the election).

Last day for designated election official, or coordinated election official if so provided in IGA, to provide notice by publication of the election stating information required by C.R.S. § 1-5-205(1). If completed by the City Clerk, a copy of the notice shall be mailed to the County Clerk. If notice is to be published in the *Boulder Daily Camera*, it must be submitted several days in advance. [1-5-205] (Not later than 20 days before the election).

October 19, 2026 Counting of mail-in ballots may begin and continue until counting is complete. No results to be released until after 7 p.m. on Election Day. [1-7.5-107.5] (15 days prior to election).

October 23, 2026 Coordinated election official to provide notice of election by posting. Posting shall be at a conspicuous place in the office of the county clerk and recorder if the election is coordinated by the county and shall be posted until two days after the election. [1-5-205(1.3)] (at least 10 days before election – shifts to Friday before).

October 26, 2026 Last day to register to vote if voter wants to receive ballot by mail. [1-2-201(4)] (8 days before the election). A person may register to vote up to and including Election Day at a voter service and polling center. [1-2-201(3)(a)].

Last day for voter to change address if using on-line voter registration system. [1-2-216(4)(a)(II)] (8 days before the election). A voter can change his or her address up to and

including Election Day at a voter service and polling center [1-2-216(4)(a)(I)].

October 30, 2026 3rd deadline for filing of Contribution and Expenditures Reports for municipal candidates and committees active in 2026 Coordinated Election. Reporting Period 10/9/26 to 10/30/26. [LMC 2.17.030 and 1-45-108] (Friday preceding the election by the close of business; also required 30 days after the election).

November 3, 2026 **Election Day.**

Emergency or replacement mail-in ballot requests must be made before 5:00 p.m. and returned no later than 7:00 p.m. [1-7.5-115].

All ballots, including emergency or replacement ballots must be returned to the County Clerk by 7:00 p.m. when polls close. [1-7.5-115].

Voters may register to vote or make a change of address up to and including Election Day at a voting service and polling center. [1-2-201 and 1-2-217.7].

November 25, 2026 Last day to canvass the votes. The County Clerk conducts the canvass, but the City may participate. Canvass board shall certify the official abstract of votes cast to the designated election official. [1-10-203(1)] (no later than 22 days after election).

December 3, 2026 Final Contribution and Expenditures report due for filed municipal candidates and committees active in 2026 Coordinated Election. Reporting Period 10/30/26 to 12/3/26. [LMC 2.17.030 and 1-45-108] (30 days after the election).

Council Swearing In Comparison

Municipality	Population	Council Swearing In	Notes
Superior	13,654	First regular meeting following election certification	Regional
Fruita	13,912	First regular meeting following election certification	Used for Comp Plan Guidance
Frederick	17,937	First regular meeting following election certification	Comparable Size (Statutory)
Firestone	19,396	First regular meeting following election certification	Comparable Size (Statutory)
Durango	19,811	Third Tuesday in April following the first Tuesday in April Election	Comparable Size
Golden	20,151	First regular meeting in the month of January	Comparable Size
Johnstown	20,639	First regular meeting after the election	Comparable Size
Louisville	**20,811**	At the first regular meeting of the Council following their election	
Montrose	21,646	First regular council meeting following election certification	Comparable Size
Evans	22,394	At the next regular or special meeting after the election	Comparable Size
Fountain	29,457	First regular meeting after the election	Comparable Size
Lafayette	30,587	First regular meeting following election certification	Comparable Size / Regional / Comp Plan
Wheat Ridge	31,999	First meeting after the election	Comparable Size / Used for Comp Plan
Erie	38,594	First meeting in the new year after certification of election	Regional
Broomfield	78,323	First regular meeting after the eleciton	Regional
Longmont	99,818	First Tuesday in December following election	Regional
Boulder	106,803	First meeting in December following election	Regional / Used for Comp Plan Guidance
Ft. Collins	170,924	Second Tuesday in January following election	Used for Comp Plan Guidance

11 of the 18 municipalities wait until after the election has been certified or longer.

Initiative and Referendum Signature Requirement Comparison

Municipality	Population	Initiatives	Referendums	Determination	Notes
Superior	13,654	5	5	Total # registered voters day of	Regional
Fruita	13,912	15	10	Votes cast last regular election	Used for Comp Plan Guidance
Frederick	17,937	5	5	Total # registered voters day of	Comparable Size (Statutory)
Firestone	19,396	5	5	Total # registered voters day of	Comparable Size (Statutory)
Durango	19,811	15	10	Votes cast last regular election	Comparable Size
Golden	20,151	10	10	Total # registered voters last election	Comparable Size
Johnstown	20,639	15	10	Total # registered voters last election	Comparable Size
Louisville	**20,811**	**5**	**2.5**	Total # registered voters day of	
Montrose	21,646	5	10	Total # registered voters day of	Comparable Size
Evans	22,394	10	10	Total # registered voters last election	Comparable Size
Fountain	29,457	5	5	Total # registered voters last election	Comparable Size
Lafayette	30,587	10	10	Total # registered voters day of	Comparable Size / Regional / Comp Plan
Wheat Ridge	31,999	15	10	Total # registered voters in last gov	Comparable Size / Used for Comp Plan
Erie	38,594	5	5	Total # registered voters day of	Regional
Broomfield	78,323	15	10	Total # registered voters last election	Regional
Longmont	99,818	10	10	Total # registered voters last election	Regional
Boulder	106,803	10	10	Average # of voters in past 2 elect.	Regional / Used for Comp Plan Guidance
Ft. Collins	170,924	15	10	Total ballots cast in the last elect.	Used for Comp Plan Guidance
	Average	10	8.5		
	Proposal	7.5	5		

On June 1, 2026 there were **16,133** Active Registered Voters in the City of Louisville.

	Current	Proposed	Difference
Initiative	807	1210	403
Referendum	404	807	403

Council Meeting Location Comparison

Municipality	Population	Meeting Location	Notes
Superior	13,654	Date, hour, and place fixed by Town Council	Regional
Fruita	13,912	May relocate to an alternative location	Used for Comp Plan Guidance
Frederick	17,937	Council Chambers	Comparable Size (Statutory)
Firestone	19,396	Board Room at Firestone PD/Court Building	Comparable Size (Statutory)
Durango	19,811	Time and place prescribed by ordinance	Comparable Size
Golden	20,151	May be held elsewhere by council with notice	Comparable Size
Johnstown	20,639	Town Hall or Remote	Comparable Size
Louisville	**20,811**	Shall occur in public buildings and public facilities - Charter	
Montrose	21,646	Chambers or a suitable place designated by Council	Comparable Size
Evans	22,394	May change time and place by resolution	Comparable Size
Fountain	29,457	Day and hour fixed by council, but no mention of place	Comparable Size
Lafayette	30,587	Time and place determined by resolution	Comparable Size / Regional / Comp Plan
Wheat Ridge	31,999	Day and hour fixed by council, but no mention of place	Comparable Size / Used for Comp Plan
Erie	38,594	Day, time and place fixed by ordinance	Regional
Broomfield	78,323	Day and hour fixed by council, but no mention of place	Regional
Longmont	99,818	City Hall	Regional
Boulder	106,803	Council may prescribe date, time or place for meetings / month	Regional / Used for Comp Plan Guidance
Ft. Collins	170,924	Time and place prescribed by ordinance - City Hall but may relocate	Used for Comp Plan Guidance



City of Louisville

Discussion & Direction Potential Ballot Question – Charter Amendments

July 16, 2026

Genny Kline, City Clerk

Purpose

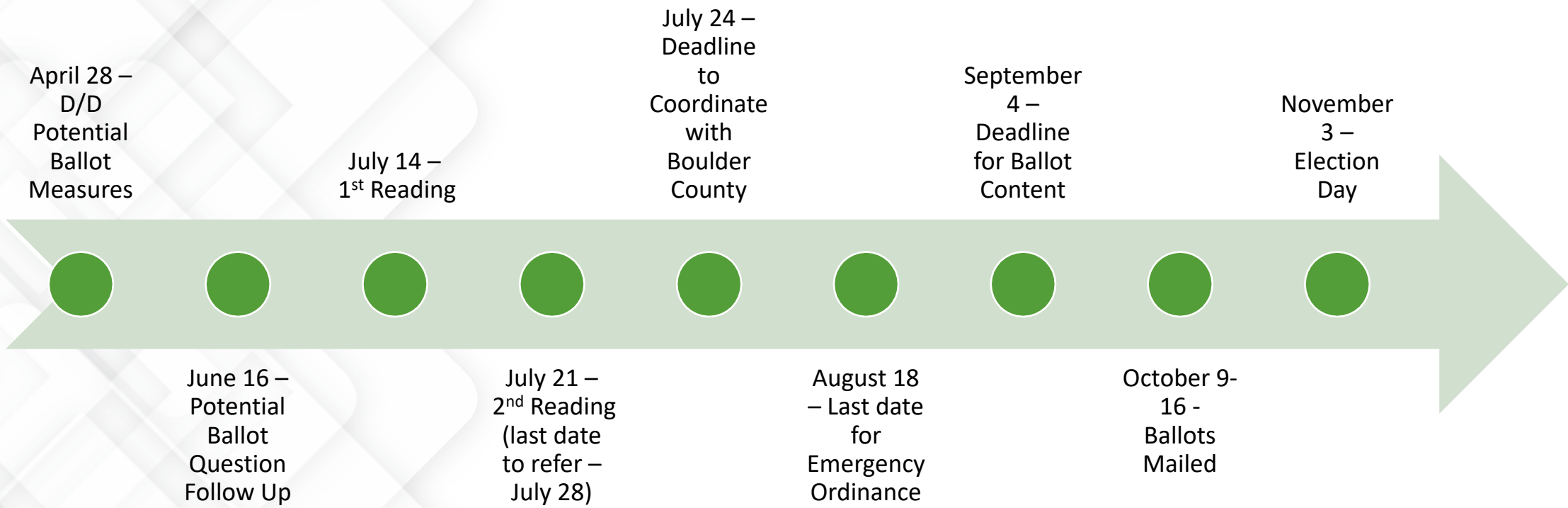
To provide direction to staff on potential 2026 ballot questions amending the City of Louisville's Home Rule Charter.

City of Louisville

Background & Prior Discussions

- During the February 2026 Council Workshop Council expressed desire to consider potential ballot questions
- Currently, the City has no ballot questions or Council races on the 2026 ballot
- July 21, 2026 is the last meeting Council can pass (on second reading) any non-emergency ordinances referring ballot questions to the voters
- Note – Limited to 10 ballot questions (recommended we do less)

Timeline – Ballot Measures



City of Louisville

Ballot Considerations

- 2026 Election
  - Propose coordinating with Boulder County
  - Recommend:
    - 10 questions max
    - 6 may be too many
    - 3-4 typically the sweet spot
      - If Council chooses to proceed with the Historic Preservation Tax and the Lodging Tax, this will limit the number of proposed Charter Amendments for the ballot.

City Charter Amendments

City of Louisville

Background

- 1902 – CO Authorizes home rule governance
- May 2001– Louisville special election for Home Rule Chater Commission members
- August 2001 – Commission presents Home Rule Charter to City Council
- November 2001 – Louisville Home Rule Charter approved by voters
- November 2004 – Voters approve amendments
- November 2009 – Voters approve amendments

Municipalities Surveyed

- At Council's request from the April 28, 2026 meeting, the Clerk expanded the scope of surveyed municipalities from those neighboring Louisville to include those of similar size. Municipalities that were used as reference for the Comprehensive Plan were also included.

- Those municipalities include: Superior, Fruita, Frederick, Firestone, Durango, Golden, Johnstown, Montrose, Evans, Fountain, Lafayette, Wheat Ridge, Erie, Broomfield, Longmont, Boulder and Ft. Collins.

- These responses were used to frame the recommendations for the following proposed Charter amendments:
  - Timing of when newly elected council members / mayor take office
  - Initiative / referendum signature requirements
  - Meeting locations

Proposed Amendments

- Align when Council Takes Office to Current Election Procedures
  - Currently the Charter states members shall take office the first regular meeting following their election.
  - 11 of the 17 survey municipalities wait until after the election is certified, or longer, to seat elected officials.
    - Staff recommends a revision for members to take office at the first regular meeting following election certification.

- Align Initiative and Referendum Signature Requirements
  - Current - 5% of voters for an initiative and 2.5% for a referendum
  - Average of surveyed municipalities – 10% for initiative & 8.5% for referendum
    - Staff recommendation: 7.5% for initiatives and 5% for referendums

Proposed Amendments

- Executive Session Authorized Topics
  - A memo was provided by City Attorney Kelly, and staff has no additional information to provide on this proposed amendment.

- Update Acceptable Meeting Locations
  - Currently Council and boards / commissions are limited to holding meetings in public buildings and public facilities.
  - This restricts Council and boards from holding meetings in other accessible venues or to have joint meetings in neighboring municipalities.
    - Staff recommends a proposed amendment to allow for public bodies to hold meetings in other locations as agreed to by the Council / board / commission.

Proposed Amendments

- Allow for Review and Comment for Resident Initiatives
  - Will require petitioners to attend a session with the City Attorney and staff concerning the proposed initiative as to form and/or contents prior to submission to the City Clerk.
    - This may alleviate the necessity for the Clerk to disprove as to form and allowing for a smoother process.

- Revise Language to Update Terminology or Provide Clarity
  - Change “he/she” to “they – 4 occurrences
  - Change “Citizen” to “Resident” – 15 occurrences
  - Change references of “City Offices” to “City’s website and in the City Clerk’s Office”

Recommendations

- Consider prioritizing
  - Alignment with current election practices
  - Alignment with initiative and referendum requirements
  - Executive Session alignment with state Open Meetings Law

Alternatives:

- Council may progress with some or all for the 2026 ballot
- Council may delay for future ballots
- Council may identify different amendments for consideration

Direction Needed

Does Council wish to pursue potential Charter Amendments in 2026?

If yes, which one(s)?

City of Louisville



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City of Louisville

City of Louisville
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City Council Communication
Agenda Item 10.E.

Subject: Discussion / Direction / Action: Potential 2026 Ballot Measure - Lodging Tax

Discussion / Direction / Action provides Council with the opportunity to learn about an item, ask questions, and take action. There will be one round of public comment. Final decisions may be made on this item.

Date: June 16, 2026

Prepared By: Diana Langley, City Manager

Presented By: Diana Langley, City Manager

Summary:
Provide direction to staff on a potential 2026 ballot question to consider increasing the City's Lodging Tax.

Background / Prior Discussions:
The General Election is scheduled for November 3, 2026. The City Council has expressed a desire to consider potential ballot questions related to the Historic Preservation Tax, City Charter, and a Local Marketing District Tax. Currently, the City has no ballot questions or Council races for the 2026 ballot. If Council decides to move ahead with any potential ballot questions, the following deadlines must be maintained:

- July 21 — the last City Council meeting at which to pass (on 2nd reading) any non-emergency ordinances referring ballot questions to the voters.
- July 24 — Boulder County Elections must receive, in writing, our intent to participate in the 2026 coordinated election.
- August 18 — the last City Council meeting at which to pass an emergency ordinance or resolution referring ballot questions to the voters.
- September 4 — the last day for ballot content to be submitted to the Boulder County Elections Office.

On April 28, 2026, Council considered a Discussion / Direction item regarding potential 2026 Ballot Measures including a Local Marketing District Tax (p. 58 of packet). Council did not express interest in pursuing a Local Marketing District Tax at this time, but did request that staff bring forward information regarding potentially increasing the City's current Lodging Tax.

Lodging Tax
In 2002, Louisville voters approved the creation of a 3% excise tax on the leasing or renting of any lodging, with the net proceeds of such tax to be collected, retained, and

spent for operating and maintaining recreational and cultural facilities and for any lawful municipal purpose. Between 2003 - 2025, the City has collected $8,509,678.41 in lodging excise tax revenues.

As of January 2026, the lodging tax rate of all towns/cities within Boulder County is as follows:

Agency	Tax Rate	Length of Stay Taxable	Notes
Boulder	7.5%	29 days	
Erie	None		Erie is currently conducting a lodging tax survey
Lafayette	2%	30 days	
Longmont	2%	29 days	Also charge a 3% vendor fee for timely filing and payment, capped at $100.
Louisville	3%	29 days	
Lyons	5%	30 days	
Nederland	$4/bedroom/day	30 days	
Superior	$4/night/occupied room	29 days	

Development Proposal:
N/A

Analysis:
Ballot Considerations
TABOR
The Taxpayer's Bill of Rights (TABOR) Amendment, or Article X, Section 20, was approved by voters in 1992. This amendment to the Constitution of the State of

Colorado generally limits the amount of revenue governments in the state can retain and spend. Absent voter approval, it requires excess revenue to be refunded to taxpayers. TABOR also requires voter approval for certain tax increases (including increasing the lodging tax) and includes election provisions such as language requirements for ballot questions and limitation to a single subject.

GENERAL BALLOT INFORMATION
Increasing the lodging tax would be one ballot question. While the City could place any number of questions on the ballot, and success can vary across communities, in Staff's experience, 10 is the absolute maximum, any more than six questions can be too many, and three or four seems to be the sweet spot. Additionally, City staff is proposing to coordinate the election with Boulder County. This is significantly more affordable than running a City-specific special election.

Lodging Tax
Chapter 3.22 of the Municipal Code governs the City's lodging tax, which applies to anyone who leases or rents lodging in the City for less than one month or 30 consecutive days. Entities currently exempt from the tax include the United States Government, the State of Colorado, its departments and institutions, and the political subdivision thereof, including the city, when acting in their governmental capacities and performing governmental functions and activities.

Key items for Council consideration when evaluating a lodging tax increase include:

1. Legal and Procedural Considerations - Voter approval is required.
2. Purpose and Use of Revenue - Articulate what the revenue will fund.
3. Economic Impact on the Local Tourism Sector - How does the City's lodging tax compare to nearby cities? Will a tax increase affect occupancy rates and visitors' likelihood to choose Louisville over other locations?
4. Community Impact - Public perception of tourism in the community and whether residents feel that visitors positively contribute to the local economy.
5. Fiscal Impact and Projections - Historical lodging tax performance and administrative costs of collection, compliance, and potential enforcement.
6. Alignment with Council's Work Plan - Will an increase support goals outlined in Council's Work Plan?
7. Timing Considerations - Does the economic climate support a rate increase without suppressing demand?
8. Communication - Messaging for residents, businesses, and visitors. Provide transparency around uses and benefits of the tax.
9. Number of Ballot Questions on the 2026 Ballot - If Council decides to proceed with ballot questions related to the extension of the Historic Preservation Tax and Charter Amendments, should a ballot question to increase the lodging tax also be included in 2026?

Council Work Plan:

While the 2026 Work Plan does not specifically call out consideration of increasing the City's lodging tax, this item does support Economic Vitality.

Fiscal Impact:
At a high level, the cost to place items on the coordinated ballot is dependent on the length of the question. In 2023, the TABOR related question was ~$15,000, while in 2021 a TABOR question was ~$32,000. Staff anticipates costs in 2026 to be >$32,000 per TABOR (tax related) question. There is $110,000 in the 2026 budget for elections.

Lodging Tax
Based on current returns for the 3% lodging tax, the City anticipates ~$133,000 per each percent increase in lodging tax. The allowance of short-term rentals during the Sundance Film Festival and the impact of the festival itself could increase these numbers.

Alternatives:
1. Direct staff to prepare ballot language for consideration at the July 14 City Council meeting. Provide direction as to the recommended increase.
2. Do not proceed with consideration of increasing the City's lodging tax.

Recommendation:
Provide direction to staff regarding developing ballot language to place before the voters during the 2026 General Election a measure to increase the City's lodging tax, including the proposed increase amount.

Attachments:
1. 2026-04-21 Election Calendar 2026
2. Potential Lodging Tax Increase 2026.06.16

DRAFT – SUBJECT TO CHANGE
Prepared 4/21/26

CITY OF LOUISVILLE REGULAR ELECTION CALENDAR FOR NOVEMBER 3, 2026 ELECTION CONDUCTED AS A COORDINATED MAIL BALLOT ELECTION

The following is a timeline for a regular municipal election to be held on November 3, 2026, to be conducted as a coordinated mail ballot election with Boulder County, in accordance with the Uniform Election Code of 1992, as amended. Deadlines required under Colo. Const. Art. X, Sec. 20 (TABOR) are included. Citations provided are to the Colorado Revised Statutes, as amended through 2026.

July 14, 2026	City Council meeting at which to pass on first reading any non-emergency ordinances referring ballot questions to the voters. **[Note: Ordinances referring ballot questions to voters must be effective by no later than September 4, the last day for the City to certify the ballot content to the County Clerk. Section 4-9(b) of the Charter provides ordinances are effective 30 days after publication following final adoption.]**
July 21, 2026	City Council meeting at which to pass on second reading any non-emergency ordinances referring ballot questions to the voters.
July 24, 2026	Last day to notify Boulder County Clerk and Recorder ("County Clerk"), in writing, of the City's intent to participate in the November 3, 2026 Coordinated Election. [1-7-116(5)] (100 days prior to election – shifts to the Friday before).
July 28, 2026	If needed, last City Council meeting to pass on second reading any non-emergency ordinances referring ballot questions to the voters.
August 3, 2026	Last day for City Clerk to have prepared the petition forms for nominations for municipal officers. [1-4-805] (92 days prior to election).
August 4, 2026	First day Municipal Candidates may circulate nominating petitions. [1-4-805] (91 days prior to election).

August 5, 2026	Last day to publish non-emergency ordinances referring ballot questions to the voters.
August 18, 2026	Last regular City Council meeting at which to pass a resolution approving the coordinated election IGA with County Clerk for coordinated election. [1-7-116(2)] (IGA must be signed by August 25, not less than 70 days prior to election). Last City Council meeting at which to pass an emergency ordinance or resolution referring ballot questions to the voters.
August 24, 2026	Last day Municipal Candidates may file nominating petitions with the City Clerk. [1-4-805] (71 days prior to the election).
August 25, 2026	Last day to sign IGA with County Clerk for conducting coordinated election. [1-7-116(2)] (70 days prior to election).
August 27, 2026	Last day nomination petitions may be amended to correct or replace signatures that the City Clerk finds are not in apparent conformity. [1-4-805] (before the 67th day before election).
August 31, 2026	Last day affidavit of intent to accept write-in candidacy may be filed with the City Clerk. Provide County Clerk with copies of affidavits received. [1-4-1102(2)] (64 days prior to election).
September 4, 2026	Last day for City Clerk to establish by lot the order of ballot names. [1-5-406] (Prior to the certification of the ballot). Last day for City Clerk to certify the ballot content to the County Clerk; including ballot issues, questions and all TABOR ballot issue notice information except pro/con summaries. The certification shall be delivered to the County Clerk. [1-5-203(3)(a)] (60 days prior to the election).
September 14, 2026	1st deadline for filing of Contribution and Expenditures Reports for municipal candidates and committees active in 2026

Coordinated Election. Reporting Period: beginning of campaign–9/14/26. [LMC 2.17.030 and CRS 1-45-108] (50 days prior to the election by the close of business; reports are also required to be filed 25 days prior to the election; the Friday before the election; and 30 days after the election).

September 18, 2026 Deadline to send mail-in ballots to overseas military voters. To be performed by election official in each jurisdiction charged with distributing balloting materials. [1-8.3-110] (Must be mailed no later than 45 days prior to the election, which is Saturday, September 19. If ballot application is received after September 18, 2026, send balloting materials within 72 hours after receipt of application).

Written comments for or against ballot issue must be filed with City Clerk. [Const. Art. X, Sec. 20(3)(b)(v); 1-7-901(4))] (By Friday before the 45th day before the election).

September 21, 2026 City Clerk prepares summaries of comments filed in favor of and in opposition to any referred TABOR ballot issue. Last day to transmit TABOR Notice, including pro/con summaries, to County Clerk. [1-7-903(1) and 1-7-904] (No later than 43 days before the election).

October 2, 2026 County clerk mails TABOR Notice. [Const. Art. X, Sec. 20(3)(b); 1-7-906] (At least 30 days before election – shifts to Friday before).

October 9, 2026 2nd deadline for filing of Contribution and Expenditures Reports for municipal candidates and committees active in 2026 Coordinated Election. Reporting Period: 9/14/26 – 10/9/26. [LMC 2.17.030 and CRS 1-45-108] (25 days prior to the election; also required the Friday before the election and 30 days after the election).

October 9–16, 2026 County Clerk mails mail ballot packets to electors [1-7.5-107(3)(a)(I)] (No earlier than 22 days before election and no later than 18 days before election).

October 14, 2026 For TABOR ballot questions concerning the creation of debt or other financial obligation, last day to post specified financial information on City's website. [1-7-908(1)] (Not later than 20 days before the election).

Last day for designated election official, or coordinated election official if so provided in IGA, to provide notice by publication of the election stating information required by C.R.S. § 1-5-205(1). If completed by the City Clerk, a copy of the notice shall be mailed to the County Clerk. If notice is to be published in the *Boulder Daily Camera*, it must be submitted several days in advance. [1-5-205] (Not later than 20 days before the election).

October 19, 2026 Counting of mail-in ballots may begin and continue until counting is complete. No results to be released until after 7 p.m. on Election Day. [1-7.5-107.5] (15 days prior to election).

October 23, 2026 Coordinated election official to provide notice of election by posting. Posting shall be at a conspicuous place in the office of the county clerk and recorder if the election is coordinated by the county and shall be posted until two days after the election. [1-5-205(1.3)] (at least 10 days before election – shifts to Friday before).

October 26, 2026 Last day to register to vote if voter wants to receive ballot by mail. [1-2-201(4)] (8 days before the election). A person may register to vote up to and including Election Day at a voter service and polling center. [1-2-201(3)(a)].

Last day for voter to change address if using on-line voter registration system. [1-2-216(4)(a)(II)] (8 days before the election). A voter can change his or her address up to and

including Election Day at a voter service and polling center [1-2-216(4)(a)(I)].

October 30, 2026 3rd deadline for filing of Contribution and Expenditures Reports for municipal candidates and committees active in 2026 Coordinated Election. Reporting Period 10/9/26 to 10/30/26. [LMC 2.17.030 and 1-45-108] (Friday preceding the election by the close of business; also required 30 days after the election).

November 3, 2026 **Election Day.**

Emergency or replacement mail-in ballot requests must be made before 5:00 p.m. and returned no later than 7:00 p.m. [1-7.5-115].

All ballots, including emergency or replacement ballots must be returned to the County Clerk by 7:00 p.m. when polls close. [1-7.5-115].

Voters may register to vote or make a change of address up to and including Election Day at a voting service and polling center. [1-2-201 and 1-2-217.7].

November 25, 2026 Last day to canvass the votes. The County Clerk conducts the canvass, but the City may participate. Canvass board shall certify the official abstract of votes cast to the designated election official. [1-10-203(1)] (no later than 22 days after election).

December 3, 2026 Final Contribution and Expenditures report due for filed municipal candidates and committees active in 2026 Coordinated Election. Reporting Period 10/30/26 to 12/3/26. [LMC 2.17.030 and 1-45-108] (30 days after the election).



City of Louisville

Discussion & Direction Potential Ballot Question- Lodging Tax Increase

June 16, 2026

Diana Langley, City Manager

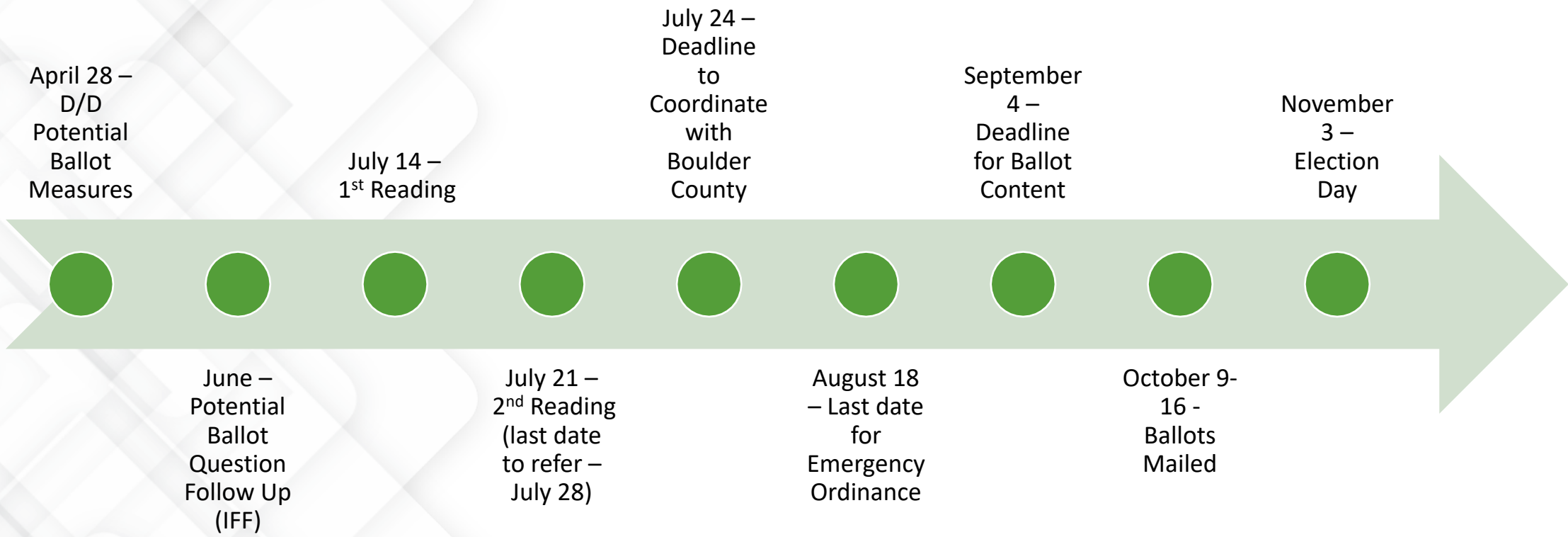
Purpose

To provide direction to staff on a potential ballot measure to increase the City's lodging tax, currently set at 3%

Background & Prior Discussions

- During the February 2026 Council Workshop Council expressed desire to consider potential ballot questions
- Currently, the City has no ballot questions or Council races on the 2026 ballot
- July 21, 2026 is the last meeting Council can pass (on second reading) any non-emergency ordinances referring ballot questions to the voters

Timeline – Ballot Measures



City of Louisville

Ballot & TABOR Considerations

- TABOR
  - Requires voter approval for certain tax increases
  - Requires specific ballot language
  - Sets single subject requirement for ballot

- 2026 Election
  - Propose coordinating with Boulder County
  - Recommend:
    - 10 questions max
    - 6 may be too many
    - 3-4 typically the sweet spot

Background

- The City has an existing lodging tax (3%) outlined and defined in the Municipal Code – Chapter 3.22 – Lodging Tax
  - Applies to accommodations that are rented to persons for a period of less than one month or 30 consecutive days
- In November 2002, residents passed the 3% lodging tax
  - (56% Yes, 44% No)
- Since January 1, 2003, the tax has generated ~$8.5M, or approximately $370K annually.
  - In 2025, the amount collected was $407K.
- Note: this is an addition to Sales/Use Tax (3.775%)

Analysis

Key items for Council consideration when evaluating a lodging tax increase include:

- Legal and Procedural Considerations - Voter approval is required.
- Purpose and Use of Revenue - Articulate what the revenue will fund.
- Economic Impact on the Local Tourism Sector
  - How does the City's lodging tax compare to nearby cities?
  - Will a tax increase affect occupancy rates and visitors' likelihood to choose Louisville over other locations?
- Community Impact - Public perception of tourism in the community and whether residents feel that visitors positively contribute to the local economy.
- Fiscal Impact and Projections - Historical lodging tax performance and administrative costs of collection, compliance, and potential enforcement.
- Alignment with Council's Work Plan - Will an increase support goals outlined in Council's Work Plan?
- Timing Considerations - Does the economic climate support a rate increase without suppressing demand?
- Communication - Messaging for residents, businesses, and visitors. Provide transparency around uses and benefits of the tax.
- Number of Ballot Questions on the 2026 Ballot

Fiscal Analysis

- Between 2003 - 2025, the City has collected $8,509,678.41 in short-term lodging excise tax revenues.
- Based on current returns for the 3% lodging tax, the City anticipates ~$133,000 per each percent increase in lodging tax.
  - The allowance of short-term rentals during the Sundance Film Festival and the impact of the festival itself could increase these numbers.

Direction Requested

1. Does Council want to place a ballot measure on the 2026 ballot proposing an increase of the City's lodging tax, currently set at 3%?
2. If yes:
   a. What percentage would Council like to propose?
   b. Where would the collected funds be directed?

City of Louisville

City of Louisville
COLORADO • SINCE 1878

City Council Communication
Agenda Item 10.F.

Subject: Discussion / Direction / Action: Request from the Town of Superior to File an Amicus Brief with the Colorado Supreme Court in Support of its Petition for Certiorari Review

Discussion / Direction provides Council with the opportunity to learn about an item, ask questions, and provide feedback to staff. There will be one round of public comment. A final decision may be made on this item.

Date: June 16, 2026

Prepared By: Kathleen Kelly, City Attorney

Presented By: Kathleen Kelly, City Attorney

Summary:

The Town of Superior has requested the City file an amicus brief with the Colorado Supreme Court in support of its petition for certiorari review of the Colorado Court of Appeals decision in its lawsuit seeking injunctive relief against the Jefferson County Board of County Commissioners and the Airport Director of the Rocky Mountain Metropolitan Airport.

Background / Prior Discussions:

As we have previously discussed, state and local regulation of aircraft operations such as noise is preempted by federal law. However, federal law recognizes limited authority of an airport proprietor to impose noise and even safety restrictions, when approved by the Federal Aviation Administration ("FAA").

The attached Complaint for Injunctive Relief was filed by Superior and Boulder County in the Boulder County District Court on March 12, 2024. The Complaint focuses on touch-and-go operations at the airport where an aircraft lands and immediately takes off without stopping, which is a common flight training maneuver. Touch-and-go operations are often repeated several times in a single flight and, because the aircraft generally gets closer to the end of the runway, these aircraft fly at lower speed and altitude than typical flight operations and so can have a greater impact to those on the ground in terms of noise and pollution.

In the Complaint, Superior and Boulder County assert Jefferson County has caused a public nuisance by allowing these touch-and-go operations by piston-engine aircraft at the airport, which operations have created excessive noise and hazardous lead exposure for their residents. They requested the District Court issue an injunction to prohibit touch-and-go operations at the airport.

The District Court did not determine whether the touch-and-go operations at RMMA constituted a public nuisance. But the Court found that even though RMMA could, as the proprietor of the airport, impose both noise and, with approval of the FAA, safety limitations on aircraft operations, any injunctive order by the Court would constitute local regulation of an area preempted by the federal government and thus be unenforceable. The District Court's Order Re: Motion to Dismiss is attached.

The Colorado Court of Appeals agreed with the District Court regarding preemption of noise regulations, finding an injunction by a state court to impose certain noise restrictions would constitute impermissible local control over aircraft noise. An injunction would not be a restriction imposed by the airport proprietor, it would be a restriction imposed by the District Court. And whatever authority Jefferson County has to voluntarily restrict touch-and-go operations, the state cannot compel it to adopt such a restriction because to do so would be to exert governmental control over aircraft noise, which is preempted by federal law.

But the Court of Appeals also found the District Court did not address Jefferson County's argument that the Federal Clean Air Act preempts a ban on aircraft operations to abate lead emissions, instead combining it with the noise claim and concluding that federal law preempts all state or local limitations on aircraft flight operations, including for noise or pollution. The Court of Appeals reversed the District Court order to the extent it dismissed the request for an injunction to abate lead emissions and sent the case back to the District Court to determine whether the lead emissions portion of Superior and Boulder County's claim is also preempted by federal law.

Before the District Court resumes its review of the case, either of the parties may request the Colorado Supreme Court to review the decision by the Court of Appeals in what is called "certiorari review." Certiorari review is discretionary by the Colorado Supreme Court, meaning the parties do not have a right to appeal to the Colorado Supreme Court; rather, the Court must agree to review the case.

We understand Superior and Boulder County will be filing a petition with the Colorado Supreme Court requesting the Court take up its appeal. Superior and Boulder County have requested Louisville support their request for the Colorado Supreme Court to hear their appeal, by filing an amicus brief in support of their certiorari petition.

If the Colorado Supreme Court decides to grant certiorari review, the parties will have the opportunity to brief the Colorado Supreme Court on their respective arguments. Superior's legal counsel has said Superior will also request the City to file a substantive amicus brief at this later stage, but that request is not before the City Council at this time. The question for now is only whether to file an amicus brief in support of the certiorari petition.

Development Proposal:
NA

Analysis:
An amicus ("friend of the court") brief may be filed by someone who is not a party to the case, only by leave of the court or at the court's request. Since the Colorado Supreme Court has not requested the City file an amicus brief, the City would need to file a motion for leave to file the brief, along with the brief itself.

At this stage, the request is for the City to file an amicus brief in support of Superior and Boulder County's request for the Colorado Supreme Court to review the Court of Appeals decision. Appellate review by the Colorado Supreme Court is discretionary, so Superior and Boulder County must convince the Supreme Court there is a reason to review the decision rendered by the Court of Appeals. Superior has requested the City's amicus brief state Louisville's interest and perspective.

At the time of packet publication, Superior and Boulder County's request for certiorari review has not yet been filed with the Colorado Supreme Court, but we understand it will be filed on Thursday, June 11th. This means the City's motion and amicus brief would need to be filed on or before Thursday, June 18th.

Generally speaking, the reasons why a non-party may choose to file an amicus brief could include the following:

- If the legal issues involved have implications beyond the specific parties to the case;
- To provide context on how the Court of Appeals ruling may create confusion or harm specific communities;
- To provide historical context;
- To provide additional legal arguments not made in the supported party's brief;
- To explain how the outcome would set a legal precedent that would affect the non-party;
- If the non-party has subject matter expertise that would benefit the Court; and/or
- To educate the Court about specific issues.

Amicus briefs can assist the Court by offering additional relevant information to help the Court decide the issues before it. The City will need to state its purpose and interest in the brief, such as how its interests or the interests of its residents are affected. Amicus briefs that simply repeat the arguments of a party are not generally helpful. So if the City Council wants to have an impact on the Court's decision, it should offer something not already found in Superior and Boulder County's brief.

Once Superior and Boulder County's certiorari petition has been filed with the Colorado Supreme Court, the City will be in a better position to evaluate whether there is some perspective the City could add by filing an amicus brief encouraging the Supreme Court to review the Court of Appeals decision.

Council Work Plan:

This is not on the City Council Work Plan.

Fiscal Impact:
If the City Council desires to file an amicus brief in support of the certiorari petition, legal fees will be incurred for the drafting and filing of such brief.

Alternatives:
The only method by which the City may formally support Superior and Boulder County's petition for certiorari review by the Colorado Supreme Court is by requesting the Court to allow the City to file an amicus brief. Although the original request was for the City Council to file a letter with the Colorado Supreme Court in support of Superior and Boulder County's position, the Colorado Appellate Rules do not permit a letter to be filed.

It has been suggested the City Council could adopt a resolution in support of Superior and Boulder County's position, but that also would have no impact on the proceeding before the Colorado Supreme Court.

Recommendation:
The City Council should determine whether it has an interest in or perspective to add in the proceeding before the Colorado Supreme Court. If so, the City Council should direct the drafting of a motion for leave to file an amicus brief with the Colorado Supreme Court and an amicus brief stating such position.

Attachments:
1. 2024-03-12 Complaint for Injunctive Relief
2. 2025-03-28 Order Re Motion to Dismiss - 2024cv30221
3. 2026-03-12 COA _Superior_Jeffco

DISTRICT COURT, BOULDER COUNTY STATE OF COLORADO 1777 6th Street Boulder, Colorado 80302 (303) 441-3750	
Plaintiff: TOWN OF SUPERIOR, a municipal corporation of the State of Colorado, and THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF BOULDER, COLORADO, a County government in the State of Colorado, v. **Defendants:** THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF JEFFERSON, COLORADO, as successors in interest to the Jefferson County Airport Authority, and DR. STEPHANIE CORBO in her official capacity as acting Airport Director of the Rocky Mountain Metropolitan Airport.	**▲COURT USE ONLY▲**
Attorneys for Plaintiffs: Andrew Barr, #49644 Lindsay Aherne, #48391 John Wharton, #47776 GREENBERG TRAURIG, LLP 1144 15th Street, Suite 3300 Denver, Colorado 80202 (303) 572-6500 Andrew.Barr@gtlaw.com; AherneL@gtlaw.com; John.Wharton@gtlaw.com	Case No.: Division:
COMPLAINT FOR INJUNCTIVE RELIEF	

Plaintiffs Town of Superior (the "Town") and the Board of County Commissioners of the County of Boulder, Colorado ("Boulder County," collectively with the Town, "Plaintiffs"), by and through their undersigned attorneys at Greenberg Traurig, LLP, allege as follows:

NATURE OF THE ACTION

1. Plaintiffs bring this public nuisance lawsuit against the Board of County Commissioners of the County of Jefferson, Colorado, and Dr. Stephanie Corbo, the acting Airport Director of the Rocky Mountain Metropolitan Airport, (collectively, "Jefferson County")

for the substantial role that Jefferson County has played, and continues to play, in causing, contributing to, and otherwise creating an unreasonable injury to the Plaintiffs' residents' health, safety, and welfare.

2. Plaintiffs bring this suit to protect a public right and to prevent future potential injury to the public at large, including their residents.

3. Plaintiffs seek preliminary and permanent injunctions requiring Jefferson County to abate the public nuisance caused by piston-engine aircraft performing "touch and go" operations on Runway 30L and Runway 30R at Rocky Mountain Metropolitan Airport ("Airport"). These operations deposit unsafe levels of lead particulates on Plaintiffs and expose Plaintiffs' residents to repeated and excessive noise and thus create unreasonable health and safety hazards for their residents, constitute a public nuisance, and must be enjoined.

PARTIES, JURISDICTION, AND VENUE

4. The Town is a Colorado statutory municipal corporation with an address of 124 East Coal Creek Drive, Superior, Colorado 80027. The Town is located in Boulder County and Jefferson County.

5. Boulder County, a subdivision of the State of Colorado, is a body corporate and politic empowered to sue and be sued. It has a principal office located at 1325 Pearl St., Boulder, Colorado 80302. Nearly all of the Town's residents are also residents of Boulder County.

6. Defendant the Board of County Commissioners of the County of Jefferson, Colorado, has a principal office located at 100 Jefferson County Parkway, Golden, CO 80419, and is a successor in interest to the Jefferson County Airport Authority.

7. Jefferson County is the owner, operator, and sponsor of the Airport, which has a physical address of 11755 Airport Way, Broomfield, CO 80021.

8. Defendant Dr. Stephanie Corbo is the Chief Financial Officer of Jefferson County and is the acting Airport Director ("Airport Director"). Dr. Corbo has a principal office located at 100 Jefferson County Parkway, Golden, CO 80419. As Airport Director, Dr. Corbo has the authority to implement safety and operational rules at the Airport.

9. Venue is proper in this Court pursuant to Colorado Rule of Civil Procedure 98 because the public nuisance caused by Jefferson County occurs in Boulder County, the subject matter of the action is located in Boulder County, Plaintiffs and their residents are harmed in Boulder County, and Plaintiffs are primarily located in Boulder County.

10. Jefferson County is subject to personal jurisdiction in Colorado pursuant to C.R.S. § 13-1-124 because it is located in Colorado, it transacts business in Colorado, and has caused substantial injury to Plaintiffs' residents in Colorado. The Airport Director is subject to personal

jurisdiction in Colorado for the additional reason that the Airport Director is a natural person who resides in Colorado and is employed in Colorado.

BACKGROUND AND GENERAL ALLEGATIONS

The Town

11. The Town lies in central Colorado on the eastern slopes of the Rocky Mountains in the Front Range.

12. The Town is located immediately northwest of the Airport, with the Town's southern boundary less than one mile from where the Airport's property ends.

13. The Town encompasses approximately four square miles and has thousands of private residences that house approximately 13,000 residents.

14. The Town manages and maintains all Town-owned natural and developed open spaces, park areas, and athletic surfaces. The Town has approximately 630 acres of public parks, green space, and open space and approximately 35 miles of trails for its residents to use and enjoy. The Town's amenities also include 13 playgrounds, three multipurpose fields, three baseball/softball fields, two outdoor pools, four tennis courts, one skate park, and three basketball courts.

15. Several daycares, preschools, and elementary schools are located in the Town.

16. The Town has future development plans, including the construction of additional private residences and public outdoor spaces.

17. As a governmental entity, the Town has the authority and responsibility to protect the public health, safety, and general welfare of its residents. The Town takes this responsibility seriously.

18. The Town brings this suit to protect a public right—air and soil free from lead contaminants and the quiet enjoyment of each resident's property—to prevent future injury to its residents and the public at large.

Boulder County

19. The Town is primarily located in Boulder County and nearly all of the Town's residents are also residents of Boulder County.

20. Boulder County is home to more than 300,000 residents, encompassing 753 square miles. Land within Boulder County contains sub-alpine and alpine ecosystems and a shrinking glacier. Boulder County's west contains forests, slopes, mountain communities and canyons, which hold creeks that bring water to the cities, high plains, grasslands and farmlands of Boulder County's east.

21. The Boulder County seat is the City of Boulder. Other incorporated towns and cities include: the Town, Erie, Jamestown, Lafayette, Longmont, Louisville, Lyons, Nederland, and Ward.

22. Boulder County has long held a commitment to stewardship of the land, environment, and community. The eastern plains are rich in agricultural farmland, lakes and rolling pastures filled with distinctly defined cities and communities, while the foothills and mountains to the west feature prominent rock formations, forests and high-altitude valleys and sweeping vistas. Preserving Boulder County's future in a way that maintains its agricultural landscape, character and unique way of life is a top priority Boulder County residents.

23. Boulder County owns or holds conservation easements over a substantial amount of real and other property for its own benefit and for that of its residents. This includes more than 100,000 acres of publicly owned "open space", *i.e.*, Boulder County owned public land and conservation easements preserved for recreation, conservation, and agricultural purposes. Boulder County has a duty to preserve and maintain this open space for future generations. Boulder County owns or co-owns a significant amount of open space near the Airport.

24. As a governmental entity, Boulder County has the authority and responsibility to protect the public health, safety, and general welfare of its residents. Boulder County takes this responsibility seriously.

25. Boulder County brings this suit to protect a public right—air and soil free from lead contaminants and the quiet enjoyment of each resident's property—to prevent future injury to its residents and the public at large.

The Airport

26. The Airport is owned, operated, and located in Jefferson County. However, due to its location, as soon as aircraft depart to the north, they leave Jefferson County and enter the airspace of the Town and Boulder County.

27. The Airport has two primary runways and one alternative, or "crosswind," runway. The crosswind runway is in the process of being decommissioned by Jefferson County.

28. The Airport's primary runways are parallel and oriented 300° northwest and 120° southeast. These primary runways are called Runway 30L/12R and Runway 30R/12L.

29. Runway 30L/12R is 7,002 feet long.

30. Runway 30R/12L is 9,000 feet long.

31. Due to prevailing wind patterns, a majority of operations at the Airport takeoff or land to the north and use Runway 30L or Runway 30R.

32. An aircraft taking off on Runway 30L or Runway 30R will fly directly over the Town as soon as it flies beyond the end of the runway.

33. Subject only to adverse weather, the Airport is open for nearly any type of aircraft to takeoff or land 24 hours a day, 365 days a year.

34. In 2022, the Airport experienced 262,348 operations (an operation is a takeoff or a landing). This is an average of 718 operations each day.

35. In 2022, on average the Airport had at least one operation every two minutes *for the entire year* (24 hours a day, 365 days a year).

36. In 2022, due to the seasonal trends of operations at the Airport, there were 801 operations per day in May – September, and 660 per day in October – April.

37. During summer 2022 (May – September), the Airport experienced approximately 33 operations per hour, 24 hours per day. But due to the high percentage of training operations at the Airport, these flights were largely concentrated in the daylight hours.

38. In 2023, the Airport experienced 281,806 operations. This is an average of 772 operations each day and a 7.4% increase in operations when compared to 2022.

39. In 2023, on average the Airport had more than one operation every two minutes *for the entire year* (24 hours a day, 365 days a year).

40. In 2023, due to the seasonal trends of operations at the Airport, there were 857 operations per day in May – September, and 711 per day in October – April.

41. During summer 2023 (May – September), the Airport experienced approximately 36 operations per hour, 24 hours per day. But due to the high percentage of training operations at the Airport, these flights were largely concentrated in the daylight hours.

42. An annual increase in operations is regularly experienced at the Airport. For example, in 1990, the Airport experienced 142,341 operations. In 2000, 172,460 operations occurred. In 2019 (pre-COVID), 191,533 operations occurred. And in 2023, 281,806 operations occurred.

43. It is typical for the Airport to experience a 7% (or more) increase in operations year-over-year.

44. On information and belief, Jefferson County expects that the Airport will continue to experience an increase in operations year-over-year.

45. Moreover, Jefferson County is actively trying to build new infrastructure to facilitate more operations. For example, in 2023 Jefferson County petitioned the FAA for permission to add a new taxiway so that the Airport can build new hangars at the Airport. If

approved, Jefferson County has stated that an *additional* 34,944 operations could occur each year. This increase is in addition to the annual increase that would otherwise occur.

46. Although the Airport is busy all year, it is especially busy during the summer.

47. Because use of the Airport is skewed towards the summer, the Airport may experience more than 1,500 operations on any given summer day.

48. Of the 2022 operations at the Airport, 249,063 are reported to be "general aviation," with 153,295 classified as "local general aviation."

49. Of the 2023 operations at the Airport, 255,682 are reported to be "general aviation," with 155,178 classified as "local general aviation."

50. As used in FAA Form 5010-1, "local general aviation" refers to "an operation within the airport traffic pattern or the aircraft is known to be from within 20 miles of the airport."

51. It is not typical for an aircraft to have a final destination that is different than, but located within 20 miles of, its originating airport.

52. Therefore, of the "local general aviation" operations at the Airport, an overwhelming majority represent "operations within the airport traffic pattern" by aircraft based at the Airport. These are largely "touch-and-go" operations performed by flight schools located at the Airport.

53. In a recent application Jefferson County submitted to the FAA, "local general aviation flights" at the Airport were "presumed to be almost entirely training operations" performed by the flight schools based at the Airport.

54. There are four flight schools located at the Airport and they utilize (or lease on an hourly basis) approximately 60 aircraft. Nearly all of these aircraft are piston-engine training aircraft.

55. In its 2023 Adopted Budget, Jefferson County "estimated" that it would sell 5.5 million gallons of fuel in 2023. This amount will continue to increase as operations increase.

Aircraft at the Airport

56. Most types of aircraft use fuel that does not contain lead.

57. All jets and turboprops use fuel that does not contain lead.

58. Fixed-wing aircraft with one or more piston engines, however, almost exclusively use "avgas" which contains lead ("piston-engine aircraft"). *See* Federal Aviation Administration, *Aviation Gasoline* (available at https://www.faa.gov/about/initiatives/avgas).

59. As the FAA acknowledges, "avgas remains the only transportation fuel in the United States to contain lead."

60. Many piston-engine aircraft are permitted to use sustainable aviation fuel ("SAF") instead of avgas, but on information and belief, nearly all of the piston-engine aircraft operating at the Airport use avgas (which is leaded).

61. The FAA is hoping to eliminate avgas by 2030, largely because of the negative health impacts known to be caused by lead particulates contained in the exhaust of aircraft using avgas.

62. Jefferson County has announced that it is attempting to fully transition from offering avgas to SAF by 2027. However, that announcement was made by the Airport's former airport director, and it is unclear whether this transition remains a priority. It is also unclear if Jefferson County will be able to stop offering avgas even if it is capable of fully transitioning to SAF in 2027.

63. Generally, piston-engine aircraft operating at the Airport are small and used for flight training or recreational use.

64. The National Academies of Sciences, Engineering, and Medicine ("National Academies") describes piston-engine aircraft as "the predominant aircraft used for personal and recreational flying, typically in the smallest, most basic airplanes."

65. Most piston-engine aircraft operating at the Airport have four or fewer seats, are not pressurized, and travel at speeds less than (usually considerably less than) 200 miles per hour.

Typical Takeoffs at the Airport

66. One of the most dangerous aspects of any flight occurs between takeoff and when the aircraft reaches approximately 500 feet above the ground.

67. To mitigate risk, pilots are trained to takeoff and climb using pre-determined power settings, speeds, and maneuvers. This training teaches pilots how to climb as quickly and safely as possible until the aircraft reaches a safe maneuvering altitude.

68. For this reason, in nearly all piston-engine aircraft, the takeoff and climb out sequence occurs with full engine power applied.

69. Generally, piston-engine aircraft taking off at the Airport will stop short of the assigned runway on the taxiway until cleared to enter the runway. Then, when cleared, the piston-engine aircraft will taxi onto the end of the assigned runway. Finally, when cleared, the piston-engine aircraft will utilize full power and takeoff using the least amount of runway as

safely possible. For purposes of this Complaint, this type of takeoff is referred to as a "Typical Takeoff" (as opposed to a "touch-and-go," which is discussed *infra*).

70. Because of prevailing winds and the Airport's configuration (*e.g.*, location of hangars), most piston-engine aircraft performing a Typical Takeoff at the Airport will be assigned to use Runway 30R.

71. An aircraft taking off at the Airport using Runway 30R or Runway 30L will fly directly over the Town just seconds after it departs the Airport.

72. A piston-engine aircraft performing a Typical Takeoff at the Airport generally needs less than one-third of the length of Runway 30R to get airborne.

73. A piston-engine aircraft taking off at the Airport will fly straight ahead until it reaches at least 500 feet above the ground and clears the departure end of the runways (meaning the northernmost end of the runway if Runway 30L or Runway 30R is in use).

74. Once a piston-engine aircraft reaches 500 feet above the ground, it may reduce its power, flight configurations may be adjusted, forward speed may increase, and the aircraft may turn towards its initial waypoint.

75. When a piston-engine aircraft reduces power, its engine utilizes less fuel and creates less emissions.

76. When a piston-engine aircraft reduces power, the noise associated with its overflight is lower when compared to the same aircraft at full power.

77. When a piston-engine aircraft performs a Typical Takeoff, it overflies Plaintiffs' airspace only once before continuing on to its destination.

78. Due to Plaintiffs' geographic proximity to the Airport, when an aircraft performing a Typical Takeoff enters airspace over the Town and Boulder County, the aircraft may be high enough to use a reduced power setting and/or travel faster when compared to its power setting and speed during initial climb out.

Touch-and-Go Operations at the Airport

79. In contrast to a Typical Takeoff, pilots flying piston-engine aircraft may request permission to perform a "touch-and-go."

80. The air traffic control tower is authorized to approve or deny the request to conduct a touch-and-go for a variety of safety or operational reasons, including if the Airport has made an operating rule that prohibits touch-and-go operations.

81. If the tower is not operating at the time of the operation (*e.g.*, overnight), the pilot will announce that a touch-and-go will be performed. The pilot is permitted to make this decision assuming that touch-and-go operations are permitted at the Airport.

82. During a touch-and-go operation, an aircraft lands and departs without stopping on or exiting the runway.

83. Nearly all touch-and-go operations are performed by piston-engine aircraft conducting training flights.

84. On information and belief, approximately 99% or more of touch-and-go operations at the Airport are performed by piston-engine aircraft.

85. A touch-and-go operation requires the pilot of a piston-engine aircraft to complete all of the following: safely land the aircraft, recover the aircraft (*i.e.*, adjust flaps, trim, carburetor heat, and/or other settings from landing configuration to takeoff configuration), initiate a takeoff (*i.e.*, apply full power, rotate, etc.), and climb out straight ahead at the pre-defined speed until the aircraft reaches a safe maneuvering altitude.

86. Typically, pilots engaged in touch-and-go operations conduct several touch-and-goes during a single flight.

87. The result of piston-engine aircraft conducting touch-and-go operations on Runway 30L or Runway 30R is that the aircraft gets airborne closer to the departure end (northern end) of the runway when compared to the same aircraft completing a Typical Takeoff.

88. When a piston-engine aircraft takes off closer to the departure end of Runway 30R or Runway 30L, it will overfly Plaintiffs at a lower altitude when compared to the same aircraft engaged in a Typical Takeoff.

89. During these touch-and-go operations, when in Plaintiffs' airspace, the piston-engine aircraft are utilizing full power and flying at low speeds in order that they may climb as quickly as possible.

90. This combination of low altitude, low speed, and maximum power creates maximum lead and noise exposure for an extended time over Plaintiffs' residents.

91. When a piston-engine aircraft creates maximum exhaust for an extended time over Plaintiffs, these aircraft unreasonably expose Plaintiffs' residents to hazardous lead-based particulates.

92. If an aircraft overflies Plaintiffs' residents at higher altitudes, higher speeds, and lower power settings, the lead-based particulates are more diffuse and less hazardous to Plaintiffs' residents.

93. If an aircraft overflies Plaintiffs' residents at higher altitudes, higher speeds, and lower power settings, the noise impacts are more diffuse and less hazardous to Plaintiffs' residents.

94. Because of the nature of touch-and-go operations, the same aircraft will overfly Plaintiffs' residents several times during a single flight, leading to additional and unreasonable exposure to lead particulates and noise.

95. During days with high density altitude at the Airport—which is very common during the summer—the unreasonable exposure to lead-based particulates and noise is exacerbated due to the impaired performance of piston-engine aircraft.

Lead Pollution Caused by Piston-Engine Aircraft

96. The FAA recognizes the need to "eliminate lead and its potential harmful effects from fuel for piston-engine aircraft."

97. The Centers for Disease Control and Prevention has concluded that there is no known safe level of lead in blood.

98. Because of the susceptibility of children's developing nervous systems, exposure to even low concentrations of lead, including prenatal exposure, has been linked to decreased cognitive performance.

99. The FAA Reauthorization Act of 2018 required the Secretary for the Department of Transportation to commission the National Academies to issue a report regarding avgas.

100. In 2021, the National Academies issued their report. (National Academies of Sciences, Engineering, and Medicine. 2021. *Options for Reducing Lead Emissions from Piston-Engine Aircraft*. Washington, DC: The National Academies Press. *available at* https://doi.org/10.17226/26050.)

101. In the report, the National Academies urge the FAA, airport sponsors (like Jefferson County), and the general-aviation industry to reduce lead emissions from piston-engine aircraft as soon as possible. The National Academies stated that "ample evidence and knowledge exist about the harm caused by lead pollution to highlight the need to initiate a comprehensive set of aviation lead mitigations *now*."

102. The National Academies noted that avgas has been "the country's primary source of lead emissions" since 1996, when lead additives in automotive gasoline were banned.

103. The National Academies stated that "because lead does not appear to exhibit a minimum concentration in blood below which there are no health effects"—meaning that any level of exposure is detrimental to one's health—"there is a compelling reason to reduce or eliminate aviation lead emissions and sources of exposure."

104. The National Academies continues: "Airborne lead, which is usually in the form of particulate matter, can be inhaled by people in communities surrounding airports. In addition, particles containing lead can deposit onto soil and other surfaces and be ingested through activities, such as hand-to-mouth contact with surfaces where the particles have deposited. Deposited lead can also be resuspended into the air as dust and inhaled. Therefore, past emissions from piston-engine aircraft that deposited into soil and other surfaces can contribute to present-day lead exposures within and near airports."

105. The National Academies recognized that piston-engine aircraft utilizing full power generate the most exhaust which "can create geographic areas with higher lead concentrations."

106. The National Academies recognized that piston-engine aircraft can create especially large emissions during touch-and-go operations, even when compared to other phases of piston-engine aircraft flight. For example, at Centennial Airport (located just south of Denver), an estimated 29% of lead pollution at the airport is directly tied to piston-engine aircraft performing touch-and-go operations.

107. The National Academies recommended that, in order to protect "public health, safety, and the environment" at or near airports, airport sponsors and other stakeholders should coordinate "efforts to reduce lead pollution and exposures at airports." This includes the "need to account for … the geographic distribution of lead emissions at the airport."

108. The National Academies concluded that "[t]here are no known safe lead exposures" and "lead's adverse effects on human health, and particularly on the development of children, are well established. While the elimination of lead pollution has been a U.S. public policy goal for decades, the [general aviation] sector continues to be a major source of lead emissions."

109. The U.S. Environmental Protection Agency ("EPA") announced a final determination on October 18, 2023, that "emissions of lead from aircraft that operate on leaded fuel cause or contribute to air pollution which may reasonably be anticipated to endanger public health and welfare."

110. The EPA stated that "[a]ircraft that use leaded fuel are the dominant source of lead emissions in our air" and "[t]he science is clear: exposure to lead can cause irreversible and life-long health effects in children."

111. The EPA also stated that "[l]ead emissions from aircraft are an important and urgent public health issue. Protecting children's health and reducing lead exposure are two of EPA's top priorities. Lead exposure can have harmful effects on cognitive function, including reduced IQ, decreased academic performance, as well as increased risk for additional health concerns. ***There is no evidence of a threshold below which there are no harmful effects on cognition from lead exposure***."

112. Given how many piston-engine aircraft operations overfly Plaintiffs' residents, Jefferson County knows, or should know, that lead particulates in piston-engine aircraft emissions stemming from operations at the Airport pose an unreasonable hazard to Plaintiffs' residents.

113. Given how many piston-engine aircraft operations overfly Plaintiffs' residents, Jefferson County knows, or should know, that lead particulates stemming from operations at the Airport are more concentrated over Plaintiffs when a piston-engine aircraft is utilizing full power.

114. Given how many piston-engine aircraft operations overfly Plaintiffs' residents, Jefferson County knows, or should know, that lead particulates stemming from operations at the Airport are more concentrated over Plaintiffs when a piston-engine aircraft is flying slowly.

115. Given how many piston-engine aircraft operations overfly Plaintiffs' residents, Jefferson County knows, or should know, that lead particulates stemming from operations at the Airport are more concentrated over Plaintiffs when a piston-engine aircraft is flying at low altitudes.

116. Given how many piston-engine aircraft operations overfly Plaintiffs' residents, Jefferson County knows, or should know, that piston-engine aircraft performing touch-and-go operations on Runway 30L or Runway 30R expose Plaintiffs' residents to increased and unreasonable levels of lead particulates when compared to any other flight operation at the Airport.

117. Given how many piston-engine aircraft operations overfly Plaintiffs' residents, Jefferson County knows, or should know, that it can stop exposing Plaintiffs' residents to these unreasonable levels of lead particulates by prohibiting piston-engine aircraft from performing touch-and-go operations on Runway 30L or Runway 30R.

Lead Pollution Caused by Piston-Engine Aircraft Performing Touch-and-Go Operations at the Airport

118. Operations conducted by piston-engine aircraft utilizing Runway 30L or Runway 30R, especially touch-and-go operations, expose Plaintiffs' residents to lead particulates, raising health and safety concerns and unreasonably interfering with the residents' use and enjoyment of Plaintiffs' property and their own property.

119. The Town conducted preliminary tests of airborne lead levels in the Town in 2023. The Town will continue to test lead levels in the future.

120. Based on the 2023 tests, Plaintiffs believe that their airborne lead levels are directly impacted by piston-engine aircraft overflights stemming from piston-engine aircraft operations at the Airport.

121. For example, on a day in which the Airport experienced approximately 1,400 operations, the Town's airborne lead levels appear to be significantly higher than measurements that had been taken in the Town on a day with little to no overflight activity.

122. Plaintiffs are not aware of any source of airborne lead in the Town other than emissions from piston-engine aircraft overflying the Town.

123. Meaningfully reducing the number of overflights performed by piston-engine aircraft would mitigate some or all of the unreasonable health concerns caused by airborne lead exposure.

124. Plaintiffs' residents, especially children, are put at risk by the deposit of lead particulates from piston-engine aircraft overflights.

125. On information and belief, touch-and-go operations deposit materially more lead particulates in the Town and Boulder County when compared to piston-engine aircraft performing Typical Takeoffs because piston-engine aircraft performing touch-and-go operations will overfly Plaintiffs several times an hour and piston-engine aircraft performing Typical Takeoffs are higher, faster, may be at reduced power settings, and will depart the immediate vicinity of the Airport after a single overflight.

126. The increased exposure of lead emissions from touch-and-go operations performed by piston-engine aircraft threatens Plaintiffs' residents and poses an unreasonable risk to their residents' health, safety, and welfare.

Noise Pollution and Negative Health Effects Caused by Aircraft Noise

127. Lead pollution is not the only unreasonable injury created by piston-engine aircraft conducting touch-and-go operations on Runway 30L or Runway 30R.

128. It is well-established that aircraft noise has serious impacts on human health.

129. Several studies demonstrate a higher prevalence of cardiovascular disease and medication intake in persons exposed to serial aircraft noise.

130. Other studies uncovered an increased risk of stroke and coronary heart disease among those exposed to more aircraft noise than others.

131. Researchers have concluded that noise not only causes annoyance, sleep disturbance, and reductions in quality of life, but also contributes to a higher prevalence of the most important cardiovascular risk factor arterial hypertension and the incidence of cardiovascular diseases.

132. Studies also show that nighttime aircraft noise disturbs and fragments sleep, leads to changes in sleep structure, increases sleepiness during the following day, and leads to

impairments of cognitive performance. This sleep disruption affects cardiovascular health and, with long term exposure, may predispose individuals to the development of hypertension and cardiovascular disease.

133. To remedy these avoidable health effects, researchers recommend that airport sponsors (like Jefferson County) employ noise mitigation strategies for takeoff and landing procedures. This includes reducing or eliminating exposure to unreasonable sound events.

134. The World Health Organization ("WHO") has made clear that "[e]nvironmental noise is an important public health issue, featuring among the top environmental risks to health." The WHO specifically referenced aircraft noise when making this warning.

135. The WHO recommended several policies to ensure individuals are not exposed to undue risk from aircraft noise: reducing population exposure to noise levels produced by aircraft (1) below 45 dB during the day and (2) below 40 dB at night.

136. According to the WHO, decibel levels above 45dB/40dB are associated with adverse health effects and have adverse effects on sleep.

137. WHO thus "strongly recommends that policymakers implement suitable measures to reduce noise exposure from aircraft in the population exposed to levels above the guideline values for average and night noise exposure."

138. Serial exposure to aircraft noise can even increase the chance of death.

Noise Pollution Caused by Piston-Engine Aircraft Performing Touch-and-Go Operations at the Airport

139. Touch-and-go operations conducted by piston-engine aircraft utilizing Runway 30L or Runway 30R expose Plaintiffs' residents to unreasonable noise, raising serious health and safety concerns and unreasonably interfering with the residents' use and enjoyment of Plaintiffs' property and their own property.

140. Noise generated by piston-engine aircraft performing touch-and-go operations is at its maximum during the summer season because (a) more operations occur and (b) piston-engine aircraft performance is reduced during hot temperatures and/or days with a high-density altitude. Hot temperatures and high density-altitude conditions are uncommon in the winter, spring, and fall; both conditions are common in the summer, especially in the afternoon.

141. As Jefferson County recognizes in its most recent RMMA Strategic Business Plan, decibels on an "A-weighted scale," or dBa, which is the FAA's accepted measurement to consider aircraft noise, are measured on a logarithmic scale. This means that an increase in 10 decibels is equivalent to a tenfold increase in sound energy, and an increase in 20 decibels is equivalent to 100x sound energy, etc.

142. Data collected by the Town shows that an average touch-and-go operation by a piston-engine aircraft can expose the Town's residents to an approximately 20 dBa or more increase in noise levels when compared to ambient noise levels in the Town. This means that the overflight is 100x louder than ambient noise levels.

143. Some piston-engine touch-and-go operations meet or exceed 70 dBa over the Town. This can be *more than 1,000 times louder* than ambient.

144. This noise exposure is directly caused by piston-engine aircraft performing touch-and-go operations at the Airport.

145. This noise exposure is creating unreasonable health impacts on the Plaintiffs' residents.

146. The Town's residents, especially at night, are put at risk by the noise exposure from piston-engine aircraft overflights.

147. The noise levels are so excessive that in 2023 a Colorado state appellate court affirmed a Colorado state district court order that vacated several avigation easements that Plaintiffs' residents had entered into with Jefferson County for the benefit of the Airport. The basis for the court vacating several easements was increased noise impacts caused by the Airport.

148. As a result of the 2023 court ruling that vacated several easements, on information and belief, tens of thousands of operations (or more) at the Airport constitute a trespass of Plaintiffs' property and Plaintiffs' residents' property.

149. On information and belief, touch-and-go operations create a materially larger noise impact on Plaintiffs' residents when compared to piston-engine aircraft performing Typical Takeoffs because piston-engine aircraft performing touch-and-go operations will overfly Plaintiffs' residents several times an hour and piston-engine aircraft performing Typical Takeoffs are higher, faster, may be at reduced power settings, and will depart the immediate vicinity of the Airport after a single overflight.

Jefferson County Is Causing Unreasonable Injury

150. Plaintiffs have taken, and are taking, all reasonable and necessary measures to address and abate these unreasonable injuries within their jurisdictions.

151. Plaintiffs have asked Jefferson County, several times, to abate this nuisance by limiting or eliminating touch-and-go operations and their associated noise and pollution.

152. For example, Plaintiffs were instrumental in forming a "Community Noise Roundtable" at the Airport. (https://www.jeffco.us/4109/Noise-Roundtable.) The stated purpose of the Noise Roundtable "is to provide for and promote a regional, coordinated approach to

collaborate on and address the noise impacts to the community surrounding the Rocky Mountain Metropolitan Airport" and to consider "operational changes … for associated noise impacts."

153. Despite the Noise Roundtable being in existence for several years, no meaningful changes have occurred at the Airport.

154. It recently became known that Jefferson County was not participating in the Noise Roundtable in good faith.

155. For example, on information and belief, Jefferson County's former airport director stated that the Noise Roundtable was "useless" and a "waste of money." He continued: "I want [several communities, including Plaintiffs] to waste their money and time" with the Noise Roundtable; "nothing gets done, it just makes people feel happy that they're part of the Roundtable and they get to bitch" while wasting "a couple hundred thousand dollars of taxpayer's money."

156. It is thus no surprise that the Noise Roundtable has been unable to garner any traction with Jefferson County and has led to no "operational changes … for associated noise impacts."

157. The former airport director also stated that Jefferson County "do[es] not have to worry about" lead impacts on children near the Airport because the affected communities "can't prove that it's coming from the airport."

158. It is thus no surprise that Plaintiffs' (and the State's) concerns regarding the hazards of lead-particulate emissions have gone unaddressed by Jefferson County.

159. The Town has explained to Jefferson County that Jefferson County has the authority to create and enforce an operating rule at the Airport that prohibits unsafe or inefficient operations.

160. Jefferson County has the ability to abate the public nuisance by prohibiting touch-and-go operations by piston-engine aircraft on Runway 30R or Runway 30L.

161. No federal law or regulation prevents Jefferson County from implementing an Airport operating rule that prohibits touch-and-go operations by piston-engine aircraft.

162. No state law or regulation prevents Jefferson County from implementing an Airport operating rule that prohibits touch-and-go operations by piston-engine aircraft.

163. Jefferson County has an obligation to protect and maintain safe operations at the Airport. This includes protecting the public health and safety of the local community that is located within the Airport's operating area.

164. The Town, including portions located within Boulder County, is located within the Airport's operating area.

165. The Town, including portions located within Boulder County, is located within the Airport's designated Class D airspace and is located within the runway protection zone for both Runway 30L and Runway 30R.

166. The Town, including portions located within Boulder County, is located within the highest noise corridors reflected in the Airport's most recent Master Plan (which itself is outdated and underrepresents the actual noise corridors present today).

167. Plaintiffs' residents are included in the group of stakeholders whose health and safety must be considered and protected by Jefferson County if threatened by aeronautical operations at the Airport.

168. The lead particulate deposits from piston-engine aircraft conducting touch-and-go operations on Runway 30R or Runway 30L create an unreasonable health and safety hazard for Plaintiffs' residents.

169. Excessive and repetitive aircraft noise from piston-engine aircraft conducting touch-and-go operations on Runway 30R or Runway 30L create an unreasonable health and safety hazard for Plaintiffs' residents.

170. Protecting the local community's health and safety is an adequate justification to impose a prohibition on an aeronautical activity at the Airport.

171. As recognized by the FAA, EPA, and CDC, mitigating exposure to lead particulates is necessary to protect human health, especially children.

172. Jefferson County refuses to mitigate or eliminate the harm and nuisance it is causing, despite the fact that it knows or has reason to know of the unreasonable negative impacts that the piston-engine aircraft touch-and-go operations have on Plaintiffs' residents.

173. Jefferson County knows, or should know, the negative impacts of the piston-engine aircraft touch-and-go operations because the Town has notified Jefferson County of these negative impacts.

174. Jefferson County knows, or should know, the negative impacts of lead particulates in piston-engine aircraft emissions.

175. Jefferson County knows, or should know, the negative impacts of the piston-engine aircraft touch-and-go operations because the FAA and the National Academies have made it clear that "[t]here are no known safe lead exposures . . . [and] the GA sector continues to be a major source of lead emissions."

176. Jefferson County knows, or should know, the negative effects of aviation noise on human health and welfare given myriad warnings raised by health researchers and national publications.

177. Jefferson County knows, or should know, the negative effects of aviation noise, given that the Town has discussed this very issue with Jefferson County several times, and a Noise Roundtable was established at the Airport to try and ameliorate health impacts associated with aircraft noise.

178. According to Jefferson County's former airport director, Jefferson County has not acted in good faith with the Noise Roundtable and has had no intention of doing anything to assist the Town or other affected communities.

179. Despite Plaintiffs' expressed concerns about the impacts of the Airport, Jefferson County continues to try and expand the number of operations at the Airport, including the number of piston-engine aircraft operations.

180. As a result of the foregoing public nuisance, Plaintiffs seek preliminary and permanent injunctions requiring Jefferson County to abate the continuing nuisance created by piston-engine aircraft performing touch-and-go operations at the Airport.

CLAIM FOR INJUNCTIVE RELIEF
(Public Nuisance)

181. Plaintiffs incorporate all prior and other allegations of this Complaint as if fully set forth herein.

182. Plaintiffs bring this suit to protect a public right and to prevent future potential injury to their residents and the public at large.

183. Plaintiffs bring this suit to protect a public good, namely, safe and non-hazardous air and soil within their jurisdictions.

184. Plaintiffs bring this suit to protect a public good, namely, their residents' ability to enjoy the quiet use of their homes and avoid negative health impacts caused by unreasonable exposure to aircraft noise.

185. Jefferson County is causing a continuing public nuisance by not passing and enforcing an airport operating rule that prohibits touch-and-go operations by piston-engine aircraft using Runway 30R and Runway 30L.

186. In the absence of an operating rule prohibiting touch-and-go operations by piston-engine aircraft using Runway 30R and Runway 30L, Jefferson County is directly causing and contributing to an unreasonable injury to Plaintiffs' residents caused by unlawful deposit of hazardous lead particulates in the Town and Boulder County.

187. The deposit of hazardous lead particulates over the Town and Boulder County is causing or unnecessarily exposing Plaintiffs' residents to unreasonable health and safety risks, especially for the children who reside in or recreate in the Town.

188. In the absence of an operating rule prohibiting touch-and-go operations by piston-engine aircraft using Runway 30R and Runway 30L, Jefferson County is directly causing and contributing to an unreasonable injury to Plaintiffs' residents caused by noise pollution that unreasonably harms Plaintiffs' residents.

189. Jefferson County has the lawful authority to abate this nuisance.

190. Jefferson County's decision not to prohibit touch-and-go operations by piston-engine aircraft that overfly Plaintiffs' residents constitutes a continuing public nuisance because such operations—which materially increase each year—unreasonably damage the safety, health, and welfare of Plaintiffs' residents.

191. Jefferson County's decision not to prohibit touch-and-go operations by piston-engine aircraft that overfly Plaintiffs' residents constitutes a continuing public nuisance because such operations—which materially increase each year—are a substantial and unreasonable annoyance, inconvenience, interference, or injury to Plaintiffs' residents.

192. Jefferson County's decision not to prohibit touch-and-go operations by piston-engine aircraft that overfly Plaintiffs' residents constitutes a continuing public nuisance because such operations—which materially increase each year—are an unlawful and unreasonable invasion of Plaintiffs' residents' interest in the use and enjoyment of Town property, Boulder County property, and their own property.

193. Jefferson County's decision not to prohibit touch-and-go operations by piston-engine aircraft that overfly Plaintiffs' residents constitutes a continuing public nuisance because such operations—which materially increase each year—violate the Town's Municipal Code (*e.g.*, Code § 7-1-10).

194. Jefferson County's decision to not prohibit touch-and-go operations by piston-engine aircraft that overfly Plaintiffs' residents constitutes a continuing public nuisance because piston-engine aircraft touch-and-go operations—which materially increase each year—unlawfully and unreasonably contaminate the surface, soil, and air and threatens the health, safety, and welfare of Plaintiffs' residents.

195. Jefferson County's decision to not prohibit touch-and-go operations by piston-engine aircraft that overfly Plaintiffs' residents constitutes a continuing public nuisance because piston-engine aircraft touch-and-go operations—which materially increase each year—unlawfully and unreasonably expose Plaintiffs' residents to unreasonable noise pollution and threatens the health, safety, and welfare of Plaintiffs' residents.

196. Jefferson County's decision to not prohibit touch-and-go operations by piston-engine aircraft that overfly Plaintiffs constitutes a continuing public nuisance because piston-engine aircraft operations, including touch-and-go operations, continue to increase at an unreasonable rate year-over-year.

197. All of the above actions constitute an intentional, knowing, and substantial invasion of Plaintiffs' residents' interest in the use and enjoyment of their property.

198. Plaintiffs are entitled to preliminary and permanent injunctive relief because there is no other remedy at law that will address this public nuisance and irreparable harm will result if injunctive relief is not granted.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs respectfully request that this Court:

A. Grant a preliminary injunction requiring Jefferson County to abate the public nuisance caused by piston-engine aircraft performing "touch and go" operations on Runway 30L and Runway 30R at Rocky Mountain Metropolitan Airport; and

B. Grant a permanent injunction requiring Jefferson County to abate the public nuisance caused by piston-engine aircraft performing "touch and go" operations on Runway 30L and Runway 30R at Rocky Mountain Metropolitan Airport.

PLAINTIFFS DEMAND A JURY TRIAL PURSUANT TO C.R.C.P. 38

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Respectfully submitted this 12th day of March 2024.

GREENBERG TRAURIG, LLP

/s/ Andrew Barr
Andrew Barr, #49644
Lindsay Aherne, #48391
John Wharton, #47776

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DISTRICT COURT, BOULDER COUNTY STATE OF COLORADO 1777 6th Street Boulder, Colorado 80302 (303) 441-3750	DATE FILED March 28, 2025 5:06 PM CASE NUMBER: 2024CV30221
Plaintiff: TOWN OF SUPERIOR, a municipal corporation of the State of Colorado, and THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF BOULDER, COLORADO, a County government in the State of Colorado, v. **Defendants:** THE BOARD OF COUNTY COMMISSIONERS OF THE COUNTY OF JEFFERSON, COLORADO, as successors in interest to the Jefferson County Airport Authority, and ERICK DAHL in his official capacity as Airport Director of the Rocky Mountain Metropolitan Airport.	**▲COURT USE ONLY▲** Case No.: 2024CV30221 Division: 2
ORDER RE: MOTION TO DISMISS	

This matter is before the court for consideration of defendants' motion to dismiss. The court has considered the parties' submissions and finds and orders as follows:

1. This is an action in which plaintiffs seek an injunction requiring defendants to abate a public nuisance caused by piston-engine aircraft performing "touch and go" operations on two runways at Rocky Mountain Metropolitan Airport ("Airport").
2. The complaint alleges that the touch and go operations at the Airport constitute a public nuisance because the operations deposit unsafe levels of lead, expose residents to repeated and excessive noise and create unreasonable health and safety hazards.
3. Defendant's motion to dismiss argues that federal law preempts any state or local regulation of aircraft operations or the use of leaded aviation fuel so that the court cannot grant the requested relief.

4. The motion to dismiss does not address whether the allegations, if proven, would establish a public nuisance.[1] Instead, defendants argue that plaintiffs' claims are barred because federal laws concerning airport operations leave no room for local control, citing *Burbank v. Lockheed Air Terminal, Inc.*, 411 U.S. 624, 638 (1973). The *Burbank* case held that a city ordinance prohibiting flights between 11:00 p.m. and 7:00 a.m. was invalid because the Federal Aviation Act and Noise Control Act in effect at the time, preempted any state or local control over management of the navigable airspace.

5. The parties have cited many cases dealing with the preemption issue. Many of the cases deal with the authority of a local or state government to pass laws impacting the operation of an airfield. The claim in this case is postured differently than many of those cases in that the plaintiffs assert the touch and go operations constitute a public nuisance that can be enjoined. They seek an order directing defendants, as the airport operators, to restrict touch and go operations for noise and pollution reasons. They also ask the court to order defendants to seek approval of the FAA to restrict touch and go operations for both noise and safety reasons.

6. 49 U.S.C.A. § 40103(a)(1) provides: "The United States Government has exclusive sovereignty of airspace of the United States." Subsection (b)(1) then goes on to state: "The Administrator of the Federal Aviation Administration shall develop plans and policy for the use of the navigable airspace and assign by regulation or order the use of the airspace necessary to ensure the safety of aircraft and the efficient use of airspace." Subsection (b)(2)

[1] The parties' submissions include arguments about whether any claim related to the use of lead-based fuel is preempted by federal law. The issue before the court is whether plaintiffs' claim to enjoin the use of the airport for touch and go operations should be dismissed due to federal preemption. The issue can be resolved without addressing whether the impacts of the use of lead-based fuel can be a basis for a public nuisance claim.

directs the Administrator to prescribe regulations on the aircraft flights for reasons including protecting individuals and property on the ground.

7. The case of *City of Burbank v. Burbank-Glendale-Pasadena Airport Authority*, 85 Cal. Rptr. 2d 28 (Cal. App. 1999), held that a statute requiring city approval of an airport expansion plan did not intrude into areas of exclusive federal regulation. The court reasoned that federal preemption precluded local regulation of the use of air space or direct control of emissions but that land use regulations not affecting flight safety were within the city's inherent police power and could be regulated. In *San Diego Unified Port District v. Gianturco*, 651 F.2d 1306 (9th Cir. 1981), the local port district sought to enjoin a flight curfew. The 9th Circuit held that local governments can control land use to deal with noise concerns but cannot impact flight operations or the source of noise from aircraft. These cases appear to state a general rule recognized by many courts although the application of the rule is often disputed.
8. In *Arapahoe County Public Airport Authority v. F.A.A.*, 242 F.3d 1213 (10th Cir, 2001), the FAA concluded that a local airport authority's ban on scheduled air carrier service violated the authority's grant assurances and federal law. The 10th Circuit referenced the Airline Deregulation Act of 1978 ("ADA") The ADA may not be directly applicable to this case because it does not involve an air carrier. However, the 10th Circuit noted in its decision that the issue was whether the airport authority complied with conditions imposed by federal law and its agreements with the FAA and that in the arena of aviation regulation federal concerns are preeminent. The Court concluded that the ban was preempted by federal statute and the Supremacy Clause.
9. In *City of Santa Monica v. F.A.A.*, 631 F. 3d 550 (D.C. Cir. 2011), the City of Santa Monica,

as owner and operator of a regional airport, appealed a final agency decision by the FAA concluding that an ordinance limiting the types of planes that could use the airport violated the grant assurances which Santa Monica had given for operation of the airport and that the ordinance was preempted by federal law. The Circuit Court found that the FAA had not acted arbitrarily in concluding that the ordinance breached the grant assurances. As a result, the Circuit Court did not reach the preemption issue.

10. In 1982 Congress passed the Airport and Airway Improvement Act ("AAIA"). It appears to be undisputed that under the AAIA, the touch and go operations which plaintiffs seek to enjoin are aeronautical activities that cannot be limited unless the FAA finds there is an adequate justification for concluding that the activity should not be accommodated at a particular airport.

11. *Krueger v. Mitchell*, 332 N.W. 2d 733 (Wis. 1983), held that a property owner adjacent to a private airport could bring a suit for damages against the airport's owner on the basis that the airport was a nuisance but that any claim for injunctive relief relating to aviation noise was preempted by the Federal Aviation Act. The Court stated that state and local government cannot regulate noise levels by regulating the flight of aircraft which could completely disrupt the flow of air commerce. However, the court concluded that Congress did not intend to preempt airport proprietors' control of facilities to control noise in light of the needs of the community. Therefore, proprietors may be required to compensate injured parties who bring nuisance actions for unreasonable noise levels as a cost of doing business.

12. *Northeast Phoenix Homeowners' Assn v. Scottsdale Municipal Airport,* 130 Ariz. 487, 636 P.2d 1269 (1981) is a case strikingly like the present case. Homeowners living near the

Scottsdale airport sued alleging that low-flying aircraft created excessive and unreasonable noise, dust and vibration resulting in physical danger and discomfort and disruption of peaceable enjoyment of their properties. Plaintiffs sought an injunction against airport operations, including non-standard turns, and brought alternative claims for damages. The trial court granted a motion to dismiss the claims for injunctive relief and the homeowners appealed. The Arizona Court of Appeals, relying on the *Burbank* case, ruled that federal preemption precluded any injunction concerning the operation of flights, the methods of landing or takeoff of aircraft or any other aspect of actual aircraft operation technique or scheduling. The homeowners argued that airport proprietors retain some power to adopt noise-related regulations and that the judiciary can use its injunctive power to prescribe rules and regulations relative to airport operations under the "proprietary regulation" exemption from federal preemption. The court noted that the rationale for the limited residual power of airport proprietors to adopt noise-related regulations regarding their airport operations arose in part from the potential liability of airport proprietors for damages resulting from aircraft noise. The Court rejected the homeowners' argument, concluding that rules mandated by a court through its injunctive powers would not be coming from the airport proprietor and that the Burbank preemption holding applies to judicially made rules and regulations governing airport operations.[2]

13. In *Village of Bensenville v. City of Chicago,* 389 Ill. App. 3d 446 (2009) several

[2] As authority for it holding the Arizona Court of Appeals cited *Luedtke v. County of Milwaukee*, 521 F.2d 387 (7th Cir. 1975). In 1988, the *Luedtke* case was overruled by *Bieneman v. City of Chicago*, 864 F.2d 463 (7th Cire. 1988). Specifically, the *Bieneman* case overruled the holding that federal preemption of aviation operations eliminated all state remedies citing §1106 of the Federal Aviation Act. However, the *Bieneman* holding allowing certain state remedies was limited to saying that "the state may employ damages remedies only to enforce federal requirements … or to regulate aspects of airport operation over which the state has discretionary authority. 864 F.2d at 473.

municipalities sued to enjoin the expansion of airport facilities at O'Hare Airport due to intensive noise and air pollution. The Illinois Court of Appeals affirmed the dismissal of the suit on the basis that the federal government had preempted the regulation of aircraft noise and air pollution, noting that the municipalities had the right to take appropriate action before the EPA and FAA and that property owners may have claims for inverse condemnation.

14. Plaintiffs argue that, other than *Krueger*, the foregoing cases and other cases cited by defendants are distinguishable, for various reasons. However, the cases cited by defendants establish the general rule that federal law preempts any limitation on aircraft flight operations, including noise or pollution, by any local or state government or individual. The touch and go operations which plaintiffs seek to enjoin are such flight operations notwithstanding plaintiffs' assertion to the contrary.

15. Defendants cite the 1990 Airport Noise and Capacity Act ("ANCA") as prohibiting local noise and access restrictions for certain aircraft. Plaintiffs argue that ANCA does not apply to the aircraft they are seeking to enjoin from touch and go operations and that ANCA made it clear that proprietors can impose noise restrictions on non-stage-rated aircraft. However, the ability of this court to issue an injunction is a different issue than whether a proprietor can choose to limit noise or pollution. As stated above, a court order directing an airport proprietor to conduct flight operations in a particular way would constitute local regulation of operations that the federal government has preempted and would not fall under the proprietor exception to preemption. See *Northeast Phoenix Homeowners' Assn., supra*. The *Arapahoe County Airport Authority* and *Bensenville* cases also support this conclusion.

16. Plaintiffs argue that the exclusion of "non-stage" aircraft from the provisions of ANCA reflects congress' intent that federal law does not preempt local regulation of non-stage aircraft. It is true that 49 U.S.C § 47523 establishes a national aviation noise policy which, under 49 U.S.C § 47524, provides a program for reviewing airport noise and access restrictions on the operation of stage 2 and stage 3 aircraft. However, the congressional findings in 49 U.S.C. 47521 are not limited to stage 2 and stage 3 aircraft. Those findings include that "community noise concerns have led to uncoordinated and inconsistent restrictions on aviation that could impede the national air transportation system" and that "a noise policy must be carried out at the national level," Contrary to plaintiffs' position, ANCA supports federal preemption of aircraft operation noise restrictions such as the injunction sought by plaintiffs. Furthermore, 49 U.S.C. § 47533, addressing the relationship of ANCA to other laws, makes clear that local noise or access restrictions in effect or proposed after 1990 are preempted.
17. Plaintiffs cite several cases as establishing that an airport interference with the use and enjoyment of adjacent property can constitute a nuisance. The issue before the court is not whether defendants' operation of the airport constitutes a nuisance. The issue is whether the court can enter an injunction limiting airport operations if the airport operations do constitute a nuisance. The cases cited by plaintiffs are distinguishable as dealing with claims for damages, whether a zoning ordinance (land use) was preempted, an individual operating a helicopter from his residence, etc.
18. Plaintiffs reference several provisions of the "Airport Compliance Manual" that authorize airport proprietors to implement noise restrictions. They acknowledge that after noise

restrictions are imposed, the FAA can evaluate whether the restrictions place an undue burden on commerce or affect the proprietor's ability to meet its federal obligations. They argue that touch and go operations are entirely local so any restriction would not burden interstate commerce and that the federal obligations would be satisfied because the restriction would apply to all similarly situated airport users.

19. In essence, plaintiffs argue that defendants can impose noise restrictions, and that the FAA would likely approve the restrictions. However, as noted above, the fact that the defendants could impose noise restrictions does not mean that the court can order them to do so. Again, any such order would constitute local regulation of an area preempted by the federal government.

20. Plaintiffs also assert that defendants can implement restrictions based on safety if the FAA approves the restriction as justified. The defendants can propose regulations for safety reasons but cannot implement them without FAA approval. Again, any injunctive order by this court would be unenforceable as a local government attempt to regulate operations that have been preempted by the federal government.

21. The requirement that the FAA approve any restriction proposed by a proprietor to address noise or safety concerns emphasizes that the federal government ultimately controls any such regulation. The FAA is not a party to this action and the court is in no position to determine what restrictions the FAA would or would not approve.[3]

[3] The FAA appears to be a necessary party to this action because complete relief cannot be afforded to the parties without including the FAA. For example, in *Arapahoe County Airport Authority, supra,* the Airport Authority obtained a state court injunction banning scheduled passenger service. The injunction was affirmed by the Colorado Supreme Court, concluding that federal law did not preempt the ban. The FAA was not a party to the state court action. The FAA then suspended the Airport Authority's eligibility for federal grants. The 10th Circuit ruled in favor

22. Plaintiffs argue that the FAA Act savings clause expressly preserves state law remedies including plaintiffs' claim for injunctive relief. Initially, the language of the savings clause does not address preemption. There are multiple cases holding that the savings clause simply preserves state law remedies that are not preempted by pervasive federal regulation. See, e.g., *Barnett v. Cass*, 522 F.Supp.3d 780 (D. Hawaii 2021) (plaintiffs' state law claims arising out of a helicopter crash were preempted be federal law as to the standard of care but whether the standard of care was breached and what remedies might be appropriate are to be determined under state law); *Abdullah v. American Airlines*, 181 F. 3d 363 (3d Cir. 1999) (federal law preempts the field of aviation safety from state or local regulation but state law remedies continue to exist for actions seeking damages for violation of the federal standards).

23. Plaintiffs cite *Aviation Cadet Museum, Inc. v. Hammer*, 373 Ark. 202, 203 (2008) in support of their claim that injunctive relief is not preempted by the FAA Act. The *Hammer* case does enjoin as a nuisance a property owner's use of his property as a private airport. The case involved a dispute between adjoining landowners. The *Hammer* court referenced an FAA letter granting permission to build an airport, and noted in a footnote that, "although the Federal Aviation Act gives the federal government exclusive sovereignty over United States airspace, the area of land-use regulation is still within the purview of state government." However, the opinion contains no discussion about the issue of preemption and it is not clear that the issue of preemption was raised or considered. It may be that Hammer can be distinguished as a dispute between property owners that did not involve federal grant assurances (the opinion refers to donations, not grants). In any event, the court finds more

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of the FAA, finding that the state court injunction was preempted by federal law notwithstanding the prior state court decision to the contrary. However, nonjoinder of a necessary party is not grounds for dismissal. C.R.CD.P. 21.

persuasive the cases holding that federal law preempts any injunction limiting flight activity at the defendant's airport.

24. Plaintiffs cite a second Arkansas case, *Emerald Development Co. v. McNeill*, 82 Ark. App. 193 (2003) which affirmed an injunction against operation of an airport that was under construction. The court held that the federal government has exclusive sovereignty over air space, but that operation of the airport could be enjoined as a land use decision. That is a different issue than what is currently before the court. In *McNeill*, the evidence established that the plaintiff seeking the injunction operated a nearby private airport, that neither airport had a tower or ground control of any kind and that the FAA objected to the construction of the airport. The case is easily distinguished as a land use decision given that the airport was not yet operating, unlike the aviation operation at issue here. In addition, there were no FAA grant assurances involved and FAA opposed the construction of the airport.

25. Other cases cited by plaintiffs are also easily distinguished. The *Abdullah* case cited above, *Ellsworth v Beech Aircraft Corp*., 37 Cal. 3d. 540 (1984), and *Carter v. Central Reg'l West Virginia Airport Auth*, (S.D. W. Virginia 2016) (not published in F. Supp.) all involve claims for damages, not injunctions. The first two cases involved tort claims under state law based on alleged violations of the federal standard of care for aircraft. The *Carter* case found that a state law damages claim was improperly removed from state court and should be remanded for lack of an exclusive federal cause of action.

26. In summary, this court concludes that the injunction sought by plaintiffs would involve local regulation of aircraft operations, an issue preempted by the federal government. For the reasons set forth above, the court concludes that defendants' motion to dismiss should be,

and it hereby is, granted.[4]

DATED: March 28, 2025.

BY THE COURT:



Senior District Court Judge

[4] This ruling does not affect plaintiffs' right to pursue relief in an administrative proceeding with the FAA as suggested in the *Bensenville* case.

The summaries of the Colorado Court of Appeals published opinions constitute no part of the opinion of the division but have been prepared by the division for the convenience of the reader. The summaries may not be cited or relied upon as they are not the official language of the division. Any discrepancy between the language in the summary and in the opinion should be resolved in favor of the language in the opinion.

DATE FILED
March 12, 2026
CASE NUMBER: 2025CA836

SUMMARY
March 12, 2026

2026COA14

No. 25CA0836, *Town of Superior v. Board of County Commissioners of Jefferson County* — Constitutional Law — Federal Supremacy — Preemption; Remedies — Injunctive Relief

A division of the court of appeals holds that federal law preempts a claim for injunctive relief requiring an airport to ban certain aircraft operations to abate aircraft noise. Under *City of Burbank v. Lockheed Air Terminal Inc.*, 411 U.S. 624, 638 (1973), state and local regulation of aircraft noise is preempted by federal law. And although the proprietor of an airport retains authority to impose certain noise restrictions in its role as airport proprietor, a state court may not order it to do so because such an injunction would constitute impermissible local control over aircraft noise.

The division remands the case to the district court to determine whether the plaintiffs' request for an injunction to abate lead emissions is preempted by the Clean Air Act, 42 U.S.C. § 7573.

COLORADO COURT OF APPEALS **2026COA14**

Court of Appeals No. 25CA0836
Boulder County District Court No. 24CV30221
Honorable Stephen E. Howard, Judge

Town of Superior, a municipal corporation of the State of Colorado, and the Board of County Commissioners of the County of Boulder, Colorado, a county government in the State of Colorado,

Plaintiffs-Appellants,

v.

The Board of County Commissioners of the County of Jefferson, Colorado, as successors in interest to the Jefferson County Airport Authority, and Erick Dahl, in his official capacity as Airport Director of the Rocky Mountain Metropolitan Airport,

Defendants-Appellees.

JUDGMENT AFFIRMED IN PART AND REVERSED IN PART,
AND CASE REMANDED WITH DIRECTIONS

Division VI
Opinion by JUDGE SCHOCK
Grove and Yun, JJ., concur

Announced March 12, 2026

Greenberg Traurig, LLP, John A. Wharton, Andrew D. Barr, Elliot Anderson, Denver, Colorado, for Plaintiffs-Appellants

Kaplan Kirsch LLP, W. Eric Pilsk, Steven L. Osit, Denver, Colorado, for Defendants-Appellees

¶ 1 Federal law generally preempts state and local regulation of aircraft noise. *See City of Burbank v. Lockheed Air Terminal Inc.*, 411 U.S. 624, 638 (1973). But an airport proprietor retains the authority to impose noise restrictions at its airport — even when the proprietor is a governmental entity. *See Arapahoe Cnty. Pub. Airport Auth. v. Centennial Express Airlines, Inc.*, 956 P.2d 587, 595 (Colo. 1998). The question in this case is whether a state court, consistent with principles of federal preemption, may order the proprietor to exercise that authority. We conclude that it cannot.

¶ 2 Plaintiffs, the Town of Superior (Superior) and the Board of County Commissioners of Boulder County, allege that certain aircraft operations at the nearby Rocky Mountain Metropolitan Airport (the Airport) cause excessive noise and hazardous lead exposure for their residents. They sued defendants, the Board of County Commissioners of Jefferson County and Erick Dahl, in his official capacity as Airport Director of the Airport (collectively, Jefferson County), under a public nuisance theory, requesting an injunction requiring them to prohibit such operations. The district court dismissed the action on grounds of federal preemption.

¶ 3 We agree with the district court that plaintiffs' request for an injunction to abate aircraft noise is preempted by the pervasive federal scheme of aviation noise regulation, as recognized in *City of Burbank*. But *City of Burbank* does not resolve the pollution-based component of plaintiffs' claim. And the district court did not address Jefferson County's argument that the federal Clean Air Act, 42 U.S.C. § 7573, preempts a ban on aircraft operations to abate lead emissions.

¶ 4 We therefore (1) affirm the order to the extent it dismissed plaintiffs' request for an injunction to abate aircraft noise; (2) reverse the order to the extent it dismissed plaintiffs' request for an injunction to abate lead emissions; and (3) remand the case to the district court for further consideration of whether the lead emissions portion of plaintiffs' claim is preempted by federal law.

I. Background

¶ 5 The Airport is located in, and owned and operated by, Jefferson County. Superior is less than a mile away, primarily in Boulder County. Aircraft departing the Airport from its primary runways fly over Superior and Boulder County upon takeoff.

¶ 6 Four flight schools operate at the Airport using piston engine aircraft — a type of small plane that is generally used for flight training or recreation. Unlike most other types of aircraft, piston engine aircraft typically use fuel that contains lead.

¶ 7 A common flight training maneuver is called a "touch-and-go." In a touch-and-go operation, an aircraft lands and immediately takes off again without stopping. The operation is often repeated several times within a single flight. Because an aircraft gets closer to the end of the runway in a touch-and-go than in a typical takeoff, the aircraft flies over Superior at a lower altitude and lower speed than it otherwise would. Plaintiffs allege that this results in excessive noise and hazardous lead exposure for their residents.

¶ 8 Plaintiffs sued Jefferson County for causing a public nuisance, seeking to enjoin touch-and-go operations by piston engine aircraft at the Airport. Jefferson County moved to dismiss the complaint under C.R.C.P. 12(b)(5) based on federal preemption. Citing *City of Burbank*, 411 U.S. at 638, it argued that federal law preempts state and local regulation of aircraft operations, noise levels, and emissions. Plaintiffs responded that their requested injunction fell under the "proprietor's exception," which they argued allows airport

proprietors to impose restrictions to abate a nuisance that a state or local government could not impose pursuant to its police power.

¶ 9 The district court granted the motion to dismiss. It concluded that federal law preempts any local or state limitation on aircraft flight operations, including as to noise or pollution. And it ruled that a court order enjoining touch-and-go operations would constitute such a local regulation. Addressing plaintiffs' argument about Jefferson County's proprietary rights, the court explained that "the ability of [the district] court to issue an injunction is a different issue than whether a proprietor can choose to limit noise or pollution. . . . [T]he fact that the defendants could impose noise restrictions does not mean that the court can order them to do so."

II. Noise Abatement

¶ 10 Plaintiffs contend that the district court erred by concluding that their claim for injunctive relief is preempted by federal law governing aviation noise. Although they concede that federal law preempts state and local governments' use of their police powers to regulate airport noise, they argue that Jefferson County has the authority as the airport proprietor to impose noise restrictions. From this premise, they posit that the district court could order

Jefferson County to do what it has the power to do on its own. It is this final step in plaintiffs' argument with which we disagree.

A. Preemption Principles and Standard of Review

¶ 11 The Supremacy Clause of the United States Constitution gives Congress the power to preempt state law. *Cnty. Comm'rs v. Suncor Energy USA, Inc.*, 2025 CO 21, ¶ 33, *cert. granted*, ___ U.S. ___, 2026 WL 490537 (Feb. 23, 2026) (No. 25-170). In determining whether state law is preempted, the "ultimate touchstone" is Congress's intent. *Fuentes-Espinoza v. People*, 2017 CO 98, ¶ 22 (citation omitted). We will not presume that federal law preempts "the states' historic police powers" — particularly in "a field that states have traditionally occupied" — unless "the law reveals Congress's clear and manifest purpose to do so." *Suncor*, ¶ 34.

¶ 12 There are three types of preemption. First, "state law is expressly preempted when a federal statute contains an express preemption provision." *Id.* at ¶ 36. Second, field preemption occurs when "Congress intended the federal government to occupy a field of law exclusively," which may be demonstrated by (1) a framework of federal regulation "so pervasive" that it leaves "no room for states to supplement it," or (2) a federal interest "so dominant that the

federal system will be assumed to preclude enforcement of state laws on the same subject." *Id.* at ¶ 37. Third, conflict preemption applies when a state law "actually conflicts with federal law" or "stands as an obstacle to the accomplishment and execution of Congress's purposes and objectives." *Id.* at ¶ 38.

¶ 13 We review de novo the district court's ruling on a C.R.C.P. 12(b)(5) motion to dismiss. *Id.* at ¶ 25. In doing so, we accept all material factual allegations in the complaint as true and view them in the light most favorable to the plaintiff to determine whether the complaint states a plausible claim for relief. *Id.* Federal preemption is an issue of law that we review de novo. *Fuentes-Espinoza*, ¶ 20.

B. Preemption of Local Noise Regulations

¶ 14 Plaintiffs do not seriously contest the premise that federal law preempts state and local aviation noise restrictions as a general matter. Although they dispute the source and scope of that preemption, they acknowledge that state and local governments cannot regulate aircraft noise via their police powers. We agree.

¶ 15 The Federal Aviation Act of 1958 gives the United States government "exclusive sovereignty of airspace of the United States." 49 U.S.C. § 40103(a)(1). In *City of Burbank*, the Supreme Court

held that this and other federal statutes create a "comprehensive scheme of federal control of the aircraft noise problem" that preempts state and local control. 411 U.S. at 629, 633. The Court noted the lack of any express statutory preemption provision. *Id.* at 633. It also recognized that noise control is "deep-seated in the police power of the States." *Id.* at 638. But it nevertheless concluded that the federal government's "pervasive control" over aircraft noise "leave[s] no room for . . . local controls." *Id.*[1]

¶ 16 Since *City of Burbank*, courts have consistently held that state and local aviation noise restrictions are preempted by federal law. *See, e.g.*, *Friends of E. Hampton Airport, Inc. v. Town of East Hampton*, 841 F.3d 133, 139 (2d Cir. 2016); *S.D. Unified Port Dist. v.*

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[1] The parties dispute the applicability and relevance of other federal statutes relating to aircraft operations and noise. *See* 49 U.S.C. § 41713(b)(1) (prohibiting state or local law "related to a price, route, or service of an air carrier"); 49 U.S.C. §§ 47521(3), 47523, 47524 (providing for the creation of a "national aviation noise policy" for certain aircraft); 49 U.S.C. § 47107(a)(1) (conditioning grant funds on assurance that airport "will be available for public use on reasonable conditions and without unjust discrimination"). Because *City of Burbank v. Lockheed Air Terminal Inc.*, 411 U.S. 624, 638 (1973), unequivocally holds that local aviation noise regulations are preempted, and because plaintiffs do not attempt to challenge or distinguish that holding, we need not address the extent to which subsequent legislation reinforces that holding.

Gianturco, 651 F.2d 1306, 1315 n.22 (9th Cir. 1981) ("The proposition that the federal government has preempted the area of flight control regulation to eliminate or reduce noise has been accepted without contrary authority by numerous courts which have addressed the subject."); *see also French v. Pan Am Express, Inc.*, 869 F.2d 1, 6 (1st Cir. 1989) (noting that *City of Burbank* held that "aircraft noise was wholly subject to federal hegemony, thereby preempting state or local enactments in the field"); *cf. Bieneman v. City of Chicago*, 864 F.2d 463, 472-73 (7th Cir. 1988) (holding that "regulation" is preempted but allowing limited claims for damages).

¶ 17 In light of *City of Burbank*, it appears to be beyond dispute that a state law or local ordinance prohibiting touch-and-go operations at the Airport to abate aircraft noise would be preempted by federal law. Indeed, plaintiffs make no argument to the contrary.

C. Proprietor's Exception

¶ 18 There is also no real dispute about the second step in our analysis: A governmental entity that owns and operates an airport may, in its role as airport proprietor, impose restrictions to regulate noise that it could not impose through the exercise of its police powers. *See Arapahoe Cnty. Pub. Airport Auth.*, 956 P.2d at 595.

¶ 19 This so-called "proprietor's exception" emanates from an oft-cited footnote in *City of Burbank*. In that footnote, the Court quoted a letter from the Secretary of Transportation, which stated that proposed federal legislation governing aviation noise control would "not affect the rights of a State or local public agency, as the proprietor of an airport, from issuing regulations or establishing requirements as to the permissible level of noise which can be created by aircraft using the airport." *City of Burbank*, 411 U.S. at 635 n.14 (citation omitted). The Court went on to clarify that a municipality's authority "as a landlord is not necessarily congruent with its police power." *Id.*

¶ 20 In *Arapahoe County Public Airport Authority*, the Colorado Supreme Court recognized the "proprietor's exception," citing *City of Burbank* and other federal case law for the proposition that "because they may be held liable for excessive noise, airport proprietors may restrict aircraft operations to accommodate permissible noise levels under the proprietor's exception." 956 P.2d at 595. Other courts have likewise confirmed this proprietary authority. *See, e.g.*, *Nat'l Helicopter Corp. of Am. v. City of New York*, 137 F.3d 81, 88-89 (2d Cir. 1998); *Alaska Airlines, Inc. v. City*

of Long Beach, 951 F.2d 977, 982 (9th Cir. 1991). And it has been codified to a large degree in 49 U.S.C. § 41713(b)(3), which provides that federal preemption of laws relating to an air carrier's price, route, or service "does not limit a State [or] political subdivision of a State . . . from carrying out its proprietary powers and rights."

¶ 21 Plaintiffs devote much of their appellate briefs to arguing that the proprietor's exception survives and is not preempted by other federal statutes. But that much is clear, and Jefferson County does not argue otherwise. Instead, Jefferson County primarily disputes the *scope* of the proprietor's exception and its applicability to the circumstances of this case. Citing the admonition that an airport proprietor's role in regulating noise is "extremely limited," *Friends of E. Hampton Airport*, 841 F.3d at 139 (citation omitted), Jefferson County suggests that it could not unilaterally ban touch-and-go operations at the Airport. It argues that such a ban could infringe on other federal laws and the terms of its federal grant agreements.

¶ 22 We need not decide whether the proprietor's exception would *permit* Jefferson County to prohibit touch-and-go operations at the Airport because it did not do so. The question before us, which we turn to below, is whether the district court could *require* it to

implement such a prohibition. We agree with the district court that these are two different questions. We therefore assume, without deciding, that Jefferson County has the authority as the airport proprietor to prohibit touch-and-go operations if it chooses to do so.

D. Injunctive Relief

¶ 23 So far, we have done little more than lay out two baseline premises on which the parties fundamentally agree — (1) state and local governments cannot regulate aviation noise, and (2) airport proprietors can (at least to some degree). Where the rubber hits the road is on the conclusion that plaintiffs draw from those premises. Specifically, they argue that because Jefferson County could ban touch-and-go operations at the Airport as a noise abatement measure, the district court can order it to do so. We disagree.

¶ 24 An injunction is not a restriction imposed by the airport proprietor. It is a restriction imposed on the proprietor by the district court. A state court can no more impose such a restriction in an area of federal preemption than can a state or local legislative body. *See Brown v. Kerr-McGee Chem. Corp.*, 767 F.2d 1234, 1242 (7th Cir. 1985) (holding that request for injunctive relief based on state law was preempted where it would interfere with federal

regulation); *cf. Cipollone v. Liggett Grp., Inc.*, 505 U.S. 504, 515, 522 (1992) (holding that a federal statute barring any "requirement or prohibition . . . imposed under State law" preempted state "common law as well as statutes and regulations" (citation omitted)).

¶ 25 In other words, whatever authority Jefferson County has to restrict touch-and-go operations at the Airport, the state — whether through the executive, legislative, or judicial branch — cannot compel it to adopt such a restriction. *See Williams v. Marinelli*, 987 F.3d 188, 198 (2d Cir. 2021) ("Although preemption often applies to state statutes, preemption can also invalidate actions of state executive branch officials and state courts that conflict with federal law."); *cf. In re Marriage of Anderson*, 252 P.3d 490, 494 (Colo. App. 2010) (holding that federal preemption divests state courts of power to enforce private agreements that are inconsistent with federal law). To do so would be to exert state governmental control over aircraft noise — a result *City of Burbank* forbids. 411 U.S. at 638.

¶ 26 On this point, we are persuaded by *Northeast Phoenix Homeowners' Ass'n v. Scottsdale Municipal Airport*, 636 P.2d 1269 (Ariz. Ct. App. 1981). In that case, individuals living under the flight path of low-flying aircraft sued the municipality that owned

and operated the nearby airport under a nuisance theory, seeking injunctive relief to curtail the noise. *Id.* at 1270-72. As in this case, the plaintiffs argued that the requested injunction fell within the proprietor's exception to federal preemption. *Id.* at 1273.

¶ 27 In rejecting this argument, the court first noted that the proprietor's exception allows "airport proprietors, whether they be private or public entities, to *voluntarily* adopt noise-related regulations regarding the operation of their airports and the aircraft using their airports." *Id.* (emphasis added). But it explained that "rules mandated by a court through its injunctive powers would in no sense emanate from the airport proprietor." *Id.* at 1275. Rather, such "judicially made rules and regulations" contravene *City of Burbank*'s preemption holding, just as do state and local legislation. *Id.* Thus, although an airport proprietor may choose to adopt noise mitigation measures, a state court may not order it to do so based on state law. *Id.*; *see also Krueger v. Mitchell*, 332 N.W.2d 733, 740 (Wis. 1983) ("[I]njunctions prohibiting such proprietorial decisions are completely preempted . . . ."). We agree with this analysis.

¶ 28 Plaintiffs' barrage of attacks on *Scottsdale Municipal Airport* all miss their mark. For example, plaintiffs dispute its characterization

of an injunction as a "judicially made" regulation, but in doing so, they elide the distinction between what an airport proprietor has the legal authority to do and what a state court can make it do. They chide *Scottsdale Municipal Airport* for failing to clearly identify the source of federal preemption, but federal preemption in the area of aviation noise is well established. *See City of Burbank*, 411 U.S. at 638. And they note that *City of Burbank* concerned legislation rather than an injunction, but they fail to explain why this matters when federal law "leave[s] no room for . . . local controls."[2] *Id.*

¶ 29 They also criticize *Scottsdale Municipal Airport* for distinguishing damages from injunctive relief, 636 P.2d at 1277,

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[2] Plaintiffs' contention that Congress must expressly preempt state injunctive relief is inconsistent with *City of Burbank*'s holding that preemption in this area is premised on field preemption. *City of Burbank*, 411 U.S. at 633. No express preemption provision is required when Congress has preempted the field. *Cnty. Comm'rs v. Suncor Energy USA, Inc.*, 2025 CO 21, ¶ 37, *cert. granted*, ___ U.S. ___, 2026 WL 490537 (Feb. 23, 2026) (No. 25-170).

even though damages are not at issue in this case.[3] Along the same lines, they point out that *Scottsdale Municipal Airport* relied on a case that was later overruled to the extent it precluded a claim *for damages* — a point that, again, is immaterial since this case does not involve damages. *See Luedtke v. County of Milwaukee*, 521 F.2d 387, 390-91 (7th Cir. 1975), *cited with approval in Scottsdale Mun. Airport*, 636 P.2d at 1275, *overruled in part by Bieneman*, 864 F.2d at 472 (overruling *Luedtke* to the extent it holds that damages are preempted, but distinguishing damages from "regulation").

¶ 30 None of these attempts to discount or distinguish *Scottsdale Municipal Airport* undermine its fundamental holding that a state court cannot do through an injunction what a state legislative body could not — a conclusion that flows from *City of Burbank* itself.

¶ 31 Indeed, plaintiffs do not cite a single case in which a state court has enjoined aircraft flight operations — or required an

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[3] Several cases have drawn a distinction between a claim for injunctive relief and a claim for damages, with only the former being preempted. *See, e.g.*, *Bieneman v. City of Chicago*, 864 F.2d 463, 472-73 (7th Cir. 1988); *Krueger v. Mitchell*, 332 N.W.2d 733, 739-40 (Wis. 1983); *cf. Suncor*, ¶ 59 (rejecting contention that claim for damages amounted to regulation). Because plaintiffs do not seek damages, we express no opinion as to whether such a claim would be preempted.

airport proprietor to do so — to abate aviation noise. Instead, the cases on which they rely generally involve one of three scenarios that are not implicated in this case: (1) a restriction imposed by the airport proprietor itself, *see Nat'l Helicopter*, 137 F.3d at 89; *Alaska Airlines*, 951 F.2d at 982; *British Airways Bd. v. Port Auth.*, 558 F.2d 75, 83-84 (2d Cir. 1977); (2) a claim for damages, *see Bieneman*, 864 F.2d at 472; *Greater Westchester Homeowners Ass'n v. City of Los Angeles*, 603 P.2d 1329, 1335-36 (Cal. 1979); or (3) a land use regulation prohibiting the use of property as an airport, *see Aviation Cadet Museum, Inc. v. Hammer*, 283 S.W.3d 198, 201 n.2, 202-03 (Ark. 2008); *Emerald Dev. Co. v. McNeill*, 120 S.W.3d 605, 609 (Ark. Ct. App. 2003).[4] To the extent any of these cases could be read to suggest that a state court could order an airport

[4] The closest plaintiffs come to invoking an on-point case is *Wood v. City of Huntsville*, 384 So. 2d 1081, 1084-85 (Ala. 1980), which they cite once in a footnote string cite. But that case too involved an injunction on the *use of property* (as a helipad) — not on particular aircraft operations. *See id.* at 1083 (noting that state and local governments retain control over "ground usage"). To the extent its holding that "municipalities are authorized to regulate the operation of private airports," *id.* at 1084, would allow local regulation of the operations at issue, even plaintiffs do not go that far.

proprietor to restrict flight operations to mitigate noise — and we do not think they can — we disagree for the reasons above.

¶ 32 Finally, plaintiffs rely on 49 U.S.C. § 40120(c), which provides that "[a] remedy under [the Federal Aviation Act] is in addition to any other remedies provided by law." But this provision simply preserves *remedies* for otherwise actionable wrongs — such as acts that violate federal standards or that lie outside the purview of federal control. *See Abdullah v. Am. Airlines, Inc.*, 181 F.3d 363, 375-76 (3d Cir. 1999) ("Federal preemption of the standards of care can coexist with state . . . tort remedies."); *Bieneman*, 864 F.2d at 473 (allowing common law remedies for "operations that offend federal law, or that federal norms do not govern"). It does not allow the state — whether by legislative or judicial fiat — to impose a separate state law standard in an area of federal preemption.

¶ 33 Thus, insofar as plaintiffs' request for injunctive relief sought a state-law-based restriction on aircraft noise, the district court correctly concluded that the claim was preempted by federal law.

III. Clean Air Act

¶ 34 Plaintiffs also alleged that their requested injunction was necessary to abate the lead pollution caused by piston engine

aircraft performing touch-and-go operations at the Airport. The district court did not separately address this aspect of plaintiffs' claim, instead lumping it together with the noise claim and concluding that federal law preempts all state or local limitations on aircraft flight operations, including for noise *or* pollution.

¶ 35 But *City of Burbank* is limited to federal preemption of state and local aviation *noise* control. 411 U.S. at 629, 633, 638. It says nothing about federal preemption of state and local aviation *pollution* control. And Jefferson County does not otherwise develop any argument on appeal that federal law preempts that field.

¶ 36 Jefferson County contends that plaintiffs' emissions claim is *expressly* preempted by the Clean Air Act, 42 U.S.C. § 7573, which precludes any state or local "standard respecting emissions of any air pollutant from any aircraft or engine thereof" that differs from a federal standard. But although Jefferson County argued this point in its motion to dismiss, the district court did not address it.[5]

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[5] We reject plaintiffs' argument that Jefferson County waived its argument that plaintiffs' claim is preempted by the Clean Air Act. Jefferson County raised the issue in its motion to dismiss "to such a degree that the court ha[d] the opportunity to rule on it." *Brown v. Am. Standard Ins. Co. of Wis.*, 2019 COA 11, ¶ 21.

¶ 37 We recognize that we have discretion to address the issue in the first instance, but for two reasons, we decline to do so. *See LTCPRO, LLC v. Johnson*, 2024 COA 123, ¶ 46. First, the parties' briefing of the issue in the district court and on appeal is scant, with both parties effectively treating it as a tag-along issue to the primary *City of Burbank*-based issue we address above. Second, the controlling question — whether an emissions-based restriction on aircraft operations is a "standard respecting emissions," 42 U.S.C. § 7573 — is a novel one for which there does not appear to be any on-point authority in Colorado or elsewhere. Under these circumstances, resolution of the issue would benefit from further development of the parties' arguments and analysis by the district court. *See Doe v. Wellbridge Club Mgmt. LLC*, 2022 COA 137, ¶ 30. "After all, we are a court of review, not of first view." *Id.* at ¶ 31.

¶ 38 We therefore remand the case to the district court for consideration of Jefferson County's argument that plaintiffs' emissions-based claim is preempted by the Clean Air Act.

IV. Disposition

¶ 39 The dismissal of plaintiffs' request for injunctive relief to abate aircraft noise is affirmed. The dismissal of plaintiffs' request for

injunctive relief to abate aircraft emissions is reversed, and the case is remanded to the district court for further consideration of whether that portion of plaintiffs' claim is preempted by federal law.

JUDGE GROVE and JUDGE YUN concur.

Court of Appeals

STATE OF COLORADO
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TIFFANY MORTIER
CLERK OF THE COURT

NOTICE CONCERNING ISSUANCE OF THE MANDATE

Pursuant to C.A.R. 41(b), the mandate of the Court of Appeals will issue no earlier than 42 days after entry of the judgment. Pursuant to C.A.R. 3.4(m) and C.A.R. 3.5(m), the mandate of the Court of Appeals will issue 29 days after entry of the judgment in appeals from proceedings in dependency or neglect, or appeals of mental health orders.

Filing of a Petition for Rehearing, within the time permitted by C.A.R. 40, will stay the mandate until the court has ruled on the petition. The mandate will issue no earlier than 28 days after the court denies the petition for rehearing. In appeals from proceedings in dependency or neglect, or appeals of mental health orders, if the petition is denied, the mandate must issue 14 days after entry of the order denying the petition.

In workers' compensation and unemployment insurance cases, the mandate will issue no earlier than 28 days after entry of the judgment, or 14 days after the court denies a timely petition for rehearing, whichever occurs later.

A timely filed petition for writ of certiorari or a timely filed motion for extension of time to file a petition for writ of certiorari transfers jurisdiction from the court of appeals to the supreme court under C.A.R. 52(b).

BY THE COURT: Gilbert M. Román
Chief Judge

DATED: December 26, 2025

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