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PROGRAMMATIC AGREEMENT
AMONG
THE FEDERAL TRANSIT ADMINISTRATION,
THE COLORADO STATE HISTORIC PRESERVATION OFFICER,
AND
THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING
IMPROVEMENTS TO THE 16TH STREET MALL
CITY AND COUNTY OF DENVER, COLORADO

WHEREAS, the Federal Transit Administration (FTA), as the lead federal agency, has determined that Improvements to the 16th Street Mall (collectively, such improvements are referred to herein as the Project) constitute an Undertaking under 36 *Code of Federal Regulations* (CFR) 800.16(y), which requires compliance with Section 106 of the National Historic Preservation Act (54 United States Code [U.S.C.] § 306108) and its implementing regulations in 36 CFR Part 800; and

WHEREAS, a group of partners comprising FTA, the Regional Transportation District (RTD), the City and County of Denver (CCD), and Downtown Denver Partnership (DDP) propose to implement improvements to the 16th Street Mall (Mall), a transit way and commercial corridor in the downtown of the City and County of Denver, Colorado, to address infrastructure, mobility, safety, and public use needs, for which RTD has received financial assistance from the FTA; and

WHEREAS, the Project is a federal Undertaking that proposes to develop and implement a flexible and sustainable design for the Mall to address deteriorating infrastructure, provide equitable and sufficient space for high-quality public gathering opportunities, improve pedestrian and vehicle safety, and continue safe and accessible two-way transit shuttle service (Free MallRide) on the Mall, while honoring the Mall's use and iconic design; and

WHEREAS, the Project will reconstruct the entire 12.5 blocks of the historic Mall property, including the following anticipated improvements: (1) the transit way will be realigned, pedestrian walkways will be expanded, new amenity zones will be added, and existing patio spaces will be maintained; (2) subsurface drainage systems, utilities, and tree boxes and irrigation systems will be replaced; (3) the pavement surface, including granite pavers and mortar, will be replaced with similar appearing granite pavers; (4) trees will be replaced, and new trees will be added; and (5) replica light fixtures will be added and relocated as needed; and

WHEREAS, the Colorado State Historic Preservation Officer (SHPO) is authorized to enter into this Programmatic Agreement (PA) to fulfill its role of advising and assisting federal agencies in carrying out their responsibilities under 36 CFR § 800.2(c)(1)(i) and § 800.6(b); and

WHEREAS, CCD owns 16th Street, RTD operates transit service, and CCD and RTD maintain and finance maintenance for the transit way on the Mall through an intergovernmental agreement between RTD and CCD; and

WHEREAS, the Downtown Denver Partnership (DDP), through its management of the Downtown Denver Business Improvement District (BID), operates, maintains, and finances maintenance for the pedestrian zones of the Mall through an intergovernmental agreement between the BID and CCD; and

WHEREAS, RTD has received federal financial assistance from FTA and will coordinate with CCD as the sub-recipient of such federal funds. CCD will manage the design and construction of the Project; and

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WHEREAS, RTD has participated with FTA in consultation for the Undertaking and has been invited to sign this PA as an Invited Signatory; and

WHEREAS, FTA and SHPO have consulted with CCD regarding the effects of the Undertaking on historic properties and have invited CCD to sign this PA as an Invited Signatory; and

WHEREAS, FTA and SHPO have consulted with DDP regarding the effects of the Undertaking on historic properties and have invited DDP to sign this PA as an Invited Signatory; and

WHEREAS, FTA and SHPO have requested the Concurring Parties to concur in this PA, indicating acceptance of the process leading to the PA and a desire and willingness to participate in future consultations if needed, but the PA may be executed, amended and/or terminated without concurrence from the Concurring Parties; and

WHEREAS, FTA and SHPO have consulted with Historic Denver, Colorado Preservation, Inc., the National Trust for Historic Preservation, the Landmark Preservation Commission, and the Lower Downtown Design Review Board as "Consulting Parties" regarding the Undertaking on historic properties, in accordance with and as defined by 36 CFR 800.6(b)(2) and have invited these parties to sign this PA as Concurring Parties; and

WHEREAS, FTA has provided for public involvement in accordance with 36 CFR 800.8(a)(1) by coordinating Section 106 consultation with public review and participation via an Environmental Assessment for the Undertaking under provisions of the National Environmental Policy Act (NEPA), 42 U.S.C. §4321 et. seq.; and

WHEREAS, this PA was developed with appropriate public involvement pursuant to 36 CFR 800.2(d) and 800.6(a), and the public was provided the opportunity to comment on the Undertaking and the draft PA during the comment period for the Environmental Assessment; and

WHEREAS, FTA, in consultation with the SHPO and other Consulting Parties, in accordance with 36 CFR § 800.4(a)(1), has established the Project's Area of Potential Effects (APE), which includes 16th Street from Market Street to Broadway and one parcel on each side of the corridor (Attachment 1); and

WHEREAS, FTA, in consultation with the SHPO and other Consulting Parties, and in accordance with 36 CFR §§ 800.4(b) and 800.4(c), has identified 32 historic properties within the APE, where historic property is defined as a property listed on or eligible for listing on the National Register of Historic Places (NRHP), Attachment 1 contains a map book showing the locations of the historic properties within the APE, and Attachment 2 is a summary table of the historic properties within the APE; and

WHEREAS, the Mall, an 80-foot-wide linear transit way and pedestrian/commercial corridor of 12.5 blocks with three distinct zones (asymmetrically aligned end blocks and symmetrically aligned center blocks) was built between 1980 and 1982. The Mall is an NRHP-eligible historic property under Criterion A in the areas of Transportation and Community Planning and Development, under Criterion C as an award-winning landscape design by I.M. Pei & Partners, and under Criteria Consideration G, as exceptionally significant at the state and local level, because of the Mall's role in shaping downtown Denver and the Mall's distinctive design by a team of master designers, which is unique in the state; and

WHEREAS, FTA, in consultation with the SHPO and other Consulting Parties, has identified the following character-defining features of the Mall transit way historic property: consistent paving pattern design; granite paver units/modules that are square (1-foot-5-inch by 1-foot-5-inch), in three shades~~:~~ charcoal gray, light gray, and "Colorado red" (specified as White, Black, and Red on the 1980 plans); granite special units of charcoal and light gray for curbs, cuts, drains, and other applications;

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red oak and honey locust trees planted in specially designed under-pavement concrete root boxes and ringed at the surface with custom-designed grates; custom-designed and -built light standards; street furniture of custom-designed and custom-built fiberglass trash and flower receptacles; and custom metal street signs on traffic signals and overhead lights; and

WHEREAS, FTA, in consultation with the SHPO, has determined the Undertaking will have an Adverse Effect on the Mall historic property from known effects to character-defining features, including shifts in the historic alignment, removal of existing granite pavers and replacing with new granite pavers, removal of original street furniture and some fixtures, removal and replacement of existing trees, shifts in some tree locations, removal of the specifically designed tree boxes, a change in the number and kinds of tree species, and introduction of an additional row of trees on the asymmetrical end blocks, increasing the overall number of trees; and

WHEREAS, the FTA, in consultation with the SHPO, has determined the Undertaking would result in No Adverse Effect on 30 of the remaining historic properties and No Historic Properties Affected on 1 remaining historic property in the APE, and SHPO concurred with this effect finding on June 29, 2018; and

WHEREAS, in accordance with 36 CFR § 800.6(a)(1), FTA notified the Advisory Council on Historic Preservation (ACHP) on July 5, 2018, of the finding of adverse effect for the Undertaking with specified documentation, and ACHP responded on July 31, 2018, agreeing to participate in the consultation pursuant to 36 CFR § 800.6(a)(1)(iii); and

WHEREAS, for the purpose of this PA, "Signatories" are defined as the above-identified Signatories (FTA, SHPO and ACHP) and includes the Invited Signatories (RTD, CCD and DDP); and

WHEREAS, FTA, in consultation with the SHPO and ACHP, has determined that the development of this PA in accordance with 36 CFR 800.14(b)(1)(ii) is warranted because effects on the Mall's character-defining features will require further consultation as the design of the Undertaking moves forward; and

NOW, THEREFORE, FTA, the SHPO, ACHP, RTD, CCD and DDP will ensure that the following Stipulations are implemented in order to take into account the effect of the Undertaking on historic properties, and that these Stipulations will govern the Undertaking and all of its parts.

STIPULATIONS

FTA will ensure that the stipulations of this PA are carried out and will require, as a condition of any approval of federal funding for the Undertaking, adherence to the stipulations set forth herein.

I. DESIGN COMMITMENTS

A. FTA, RTD, and CCD commit to include the following elements in the Project design of the Mall between Market Street and Broadway as shown in the drawings in Attachment 3:

1. Paving Pattern
    a. Retain a granite paver surface in the same three colors of granite pavers as the current design.
    b. Maintain overall design concept of a carpet covering the 80-foot-wide Mall property by retaining the pattern.
    c. Retain the geometric and spatial relationships within the design.
    d. Retain the 45-degree diagonal grid pattern in the design.

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e. Retain the small, medium, and large diamond patterns in the same (or approximately the same) spatial relationship as the original design.
f. Maintain spatial relationship between trees and light standards.

2. Light Standards
   a. Reuse existing replicated light standards.
   b. Replicate new light standards (on narrow side of asymmetrical blocks) per the specifications shown in Attachment 3.
   c. Light levels may be adjusted.
3. Trees
   a. Place one single row of aligned trees for 12 blocks between Market Street and Cleveland Place as shown in Attachment 3.
   b. Maintain alternating trees and light standards within rows.
4. Transit way
   a. Retain two-way transit service along the Mall.
   b. Retain the existing locations of symmetrical to asymmetrical alignment shifts in the transit way cross-sections, which occur at Arapahoe Street (to Market Street) and Tremont Street (to Broadway), in keeping with the beginning, middle, and end in the original design.
   c. Close the 22-foot medians on symmetrical blocks and 6-foot medians on asymmetrical blocks to remove median areas between the transit lanes (and reallocate the space from the median to provide safe and comfortable public and pedestrian uses) as shown in Attachment 3 drawings.
5. Signage
   a. Retain extant custom metal street name signs at intersections and overhead traffic signals.

6. 16th Street: Cleveland Place to Broadway (triangle block)
   Rebuild the eastern half-block of the Mall between Cleveland Place and Broadway in its historic configuration. The reconstruction will include the following elements:
   a. Maintain the transit way alignment in current location.
   b. Maintain 6-foot median with light fixtures between transit way lanes.
   c. Replace granite pavers in existing pattern and location as shown in Attachment 3.
   d. Rebuild granite curb at the edges of transit way with existing materials and profile as shown in Attachment 3.
   e. Maintain replicated light standards in existing locations as shown in Attachment 3.
   f. Provide trees in the locations specified in the original design. Replace trees and add new species in locations where trees were removed.
   g. The repair and reconfiguration of the fountain on the north side of the plaza will be reviewed separately as part of the design review under Stipulation II.

B. It is recognized that Attachment 3 provides a design concept that will be refined as the design progresses and that other constraints, such as Americans with Disabilities Act (ADA) compliance, unforeseen site conditions, identification of underground hazards or conflicts, drainage and/or maintenance needs, and/or public safety concerns may

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necessitate changes to the commitments outlined in Stipulation I.A and the matters addressed in Stipulation II.

C. To help ensure compliance with the design commitments in Stipulation I.A, the Signatories and Concurring Parties to this PA will have an opportunity to review and consult on design plans at 30, 60, and 90 percent completion for the representation of character-defining features of the Undertaking included in Attachment 3. This consultation will occur together with, and follow the process for, the design review process outlined in Stipulation II.B below.

II. DESIGN REVIEW AND CONSULTATION

A. CCD, in coordination with FTA and RTD, will provide the other Signatories and Concurring Parties the opportunity to review and provide ongoing consultation on all design elements affecting the character-defining features of the Mall that are not defined in Stipulation I according to the process described in Stipulation II.B below.

B. The design consultation process, with respect to the items described in Stipulation I and Stipulation II, will proceed as follows: CCD will submit the 30, 60, and 90 percent design development plans to Signatories and Concurring Parties for review and comment.

1. At each design stage, Signatories and Concurring Parties will be provided advance notice of the upcoming available plans by email at least one week before the plans are made available for review;
2. For each design review, Signatories and Concurring Parties will have 15 calendar days from receipt of a printed copy of the materials to provide written comments to CCD.
3. Signatories and Concurring Parties may request a meeting with CCD, RTD, and FTA to discuss their comments.
4. For each design review, CCD will provide an explanation of how the comments were evaluated and to what extent they can be incorporated into the design to the Concurring Parties within 15 calendar days after receiving the comments.

C. The following are excluded from design review:

1. Sub-base design, including underground safety related elements, underground utilities; underground infrastructure, including drainage and electrical conduit; and underground tree boxes;
2. Vehicular and pedestrian traffic signals, visual and tactile aids for bus drivers, and safety-related or bus stop signage.
3. Tree species selection beyond the location of trees as specified in Stipulation I: Consultation regarding preferred tree species and the agreed-upon intent to replicate the features of the original tree design plan occurred during earlier consultation. The parties recognize that the final tree species selection will be made through a process led by qualified horticulturists in the interest of long-term viability of tree species on the Mall, while attempting to be consistent with the original tree design. The location of trees has been defined in the conceptual design plans included in Attachment 3 and referenced in Stipulation I.A.3.

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III. HISTORIC PROPERTIES ENHANCEMENT PROGRAM

A. Historic Property Façade Enhancement Program

1. CCD will assist DDP in establishing a program to enhance historic building façades along the 16th Street Mall, through the funding of grants for lighting and/or façade improvements such as restoration. Grants will require equivalent matching contributions from property owners or occupants.
2. If and when a program is established, CCD will contribute $450,000 to funding the program by separate agreement, which is inclusive of administration and grant costs.
3. CCD will assist DDP in exploring options for agency or agencies to administer the program and CCD will assist DDP in creating the organizational documents for the program. DDP will be the fiscal agent and market the program to Mall property owners.
4. If a lighting program is established:
    a. The program will be generally based on the DDP *Lighting Study for 16th Street Denver Mall – Concept Design Report* published May 24, 2013.
    b. The program will require updates to the Landmark Preservation Commission (LPC) *Design Guidelines for Denver Landmark Structures and Districts*, published January 27, 2016. CCD and DDP will coordinate with LPC, following the appropriate process for design guideline changes.
5. Work under the program shall commence once construction of the Project is complete.
6. The program will last up to three years, after which time any remaining funds will be reallocated as provided under the terms of the governing documents for the program.

IV. CONSTRUCTION COMMITMENTS

A. Protection of Historic Properties During Construction

CCD will provide and fund a third-party contractor to monitor construction-related vibration. CCD will ensure that the contractor:

1. Establishes a baseline vibration threshold that takes into account any specific tolerances or sensitivities of the historic properties adjacent to the Mall;
2. Measures vibration levels during construction;
3. Alerts the construction contractor and CCD, if vibration reaches or exceeds the baseline vibration threshold;
4. If the baseline vibration threshold is continually broken, CCD will require its contractor to choose another construction method, if practical and feasible;
5. If no another construction method is practical and feasible, CCD will require its contractor to work with the property owner(s) of the affected historic property(s) to ensure the property is properly monitored during construction and that no damage occurs; and
6. CCD will provide reports and other applicable documentation from Stipulations IV.A.2 – IV.A.5 annually to FTA and the SHPO.

B. Access to Historic Properties During Construction

CCD, in coordination with property and business owners, shall ensure reasonable access to historic properties in the APE during construction. CCD, in coordination with RTD, CCD's construction contractor, and business owners will implement the Project Management Plan developed in advance of Project construction consistent with the environmental mitigation commitments in accordance with NEPA and the construction contract documents for the Project.

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1. This Plan will establish access to properties adjacent to the Mall, as much as practicable.
2. CCD will take steps to ensure that its construction contractor adheres to the Project Management Plan and to CCD ordinances and standards for maintaining access to historic properties during construction.

V. NATIONAL REGISTER OF HISTORIC PLACES EVALUATION

A. After construction of the Project is complete, RTD will prepare an updated Colorado Office of Archaeology and Historic Preservation Form 1403 for the Mall, recording the changes to the property from the Project and including assessment of post-Project NRHP eligibility status.
B. FTA and RTD will submit the completed form to Signatories and Concurring Parties for review and comment.
C. Signatories and Concurring Parties will be provided 30 days to provide comments to RTD.
D. FTA and RTD will respond to comments within 30 days of receipt of comments.

VI. UPDATE MALL MAINTENANCE GUIDELINES

A. CCD, in coordination with RTD and DDP, will develop new or update existing policies, plans, manuals, and/or guidelines for maintenance of the Mall to ensure the condition of the rebuilt Mall is maintained long-term.
B. These new or updated policies, plans, manuals, and/or guidelines will include instructions for maintaining the design commitments in Stipulations I and II.
C. CCD will complete the appropriate plans, manuals, or guidance within one year of the completion of the Project construction.
D. CCD will provide Signatories and Concurring Parties with the opportunity to review and comment on the new or updated policies, plans, manuals, and/or guidelines related to maintenance of elements that convey the Mall's historic significance, as defined in the revised Form 1403 per Stipulation V above. CCD will consider input from the Signatories and Concurring Parties when finalizing the new or updated policies, plans, manuals, and/or guidelines.

VII. DURATION

This PA will be null and void if its terms are not carried out within ten (10) years from the date of its execution. Prior to such time, FTA may consult with the other Signatories to reconsider the terms of the PA and amend it in accordance with Stipulation XIII below.

VIII. POST-REVIEW DISCOVERIES

See the Unanticipated Discoveries Plan (UDP) in Attachment 4 for more detailed information regarding the following steps and procedures.

A. Inadvertent Discovery of Cultural Resources
1. If, during Project implementation, CCD uncovers any unanticipated, previously unidentified historic archaeological, or paleontological materials, CCD will proceed in accordance with the procedures outlined in the UDP in Attachment 4 and notify FTA and other Signatories. CCD will not proceed with construction within 30 feet of the discovery until the requirements of 36 CFR 800.13 have been satisfied.
2. Cultural resources include remains of prehistoric or historic structures, prehistoric or historic artifacts, and plant or animal bones and fossils.

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B. Human Remains

1. In the event of the discovery of any human remains, funerary objects, sacred objects, or objects of cultural patrimony, as defined in 43 CFR § 10.2(d), CCD will stop work within 50 feet of the discovery until a qualified archaeologist can examine the resources and assess their significance. CCD will follow the procedures outlined in Colorado Revised Statutes (CRS) 24-80-1301 to 1304, Unmarked Human Graves.
2. Construction will not resume in the location of the discovery until the requirements of CRS 24-80-1302 are met.

IX. PROFESSIONAL QUALIFICATIONS

RTD and CCD shall ensure that all historic preservation and archaeological activities carried out pursuant to this PA shall be accomplished by or under the direct supervision of a person or persons who meet(s) or exceed(s) the pertinent qualifications in the Secretary of the Interior's *Professional Qualification Standards* (48 Federal Register [FR] §§44738-44739) in those areas in which the qualifications are applicable for the specific work performed.

X. MONITORING AND REPORTING

Each year following the execution of this PA until it expires or is terminated, RTD and CCD shall provide the other Signatories and Concurring Parties a Summary Report detailing work undertaken pursuant to its terms. Such report shall include any material Project problems encountered, reports from Stipulation IV.A, and any disputes and objections received by FTA during efforts to carry out the terms of this PA.

XI. DISPUTE RESOLUTION

Should any Signatory to this PA object at any time to any actions proposed by another Signatory or Concurring Parties or the manner by which the terms of this PA are implemented, such party shall consult with FTA to resolve the objection. If FTA determines that such objection cannot be resolved, FTA will:

A. Forward all documentation relevant to the dispute, including the FTA's proposed resolution, to the ACHP. ACHP shall provide FTA with its advice on the resolution of the objection within thirty (30) days of receiving adequate documentation. Prior to reaching a final decision on the dispute, FTA shall prepare a written response that considers any timely advice or comments regarding the dispute from ACHP, Signatories and Concurring Parties and provide the applicable party with a copy of this written response. FTA will then proceed according to the FTA's final decision.

B. If the ACHP does not provide its advice regarding the dispute within thirty (30) days, FTA may make a final decision on the dispute and proceed accordingly. Prior to reaching such a final decision, FTA shall prepare a written response that considers any timely comments regarding the dispute from the Signatories and Concurring Parties and provide the applicable party and ACHP with a copy of such written response.

C. FTA's responsibility to comply with the terms of this PA that are not the subject of the dispute remain unchanged.

XII. AMENDMENTS

This PA may be amended by an amendment executed by all Signatories. The amendment will be effective on the date a fully executed copy is filed with the ACHP.

XIII. TERMINATION

If any Signatory to this PA determines that such Signatory cannot comply with the terms hereof, such Signatory shall immediately consult with the other Signatories to amend this PA

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per Stipulation XIII, above. If the Signatories do not amend the PA within thirty (30) days (or another time period agreed to by all Signatories), any Signatory may terminate the PA upon written notification to the other Signatories.

Once the PA is terminated, and prior to continuing work on the Undertaking, FTA must either (a) execute a new PA or MOA pursuant to 36 CFR § 800.6 or (b) request, consider and respond to the comments of the ACHP under 36 CFR § 800.7. FTA shall notify the Signatories as to the course of action it will pursue.

EXECUTION of this PA by FTA, ACHP, SHPO, RTD, DDP, and CCD, the submission of documentation and filing of this PA with the ACHP pursuant to 36 CFR § 800.6(b)(1)(iv) prior to FTA's approval of the Undertaking, and implementation of the terms of this PA provide evidence that FTA has taken into account the effects of this Undertaking on historic properties and afforded the ACHP an opportunity to comment.

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THE COLORADO STATE HISTORIC PRESERVATION OFFICER,
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THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
REGARDING
IMPROVEMENTS TO THE 16TH STREET MALL
CITY AND COUNTY OF DENVER, COLORADO

SIGNATORIES:

Federal Transit Administration

_____ Date
Cindy Terwilliger, Regional Administrator

Advisory Council on Historic Preservation

_____ Date
John M. Fowler, Executive Director

Colorado State Historic Preservation Officer

_____ Date
Steve Turner, AIA, State Historic Preservation Officer

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REGARDING
IMPROVEMENTS TO THE 16TH STREET MALL
CITY AND COUNTY OF DENVER, COLORADO

INVITED SIGNATORIES:

City and County of Denver

_____ Date
[insert name and title]

Regional Transportation District

_____ Date
[insert name and title]

Downtown Denver Partnership

_____ Date
[insert name and title]

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PROGRAMMATIC AGREEMENT
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REGARDING
IMPROVEMENTS TO THE 16TH STREET MALL
CITY AND COUNTY OF DENVER, COLORADO

CONCURRING PARTIES:

Historic Denver

_____ Date
[insert name and title]

Landmark Preservation Commission

_____ Date
[insert name and title]

Colorado Preservation, Inc.

_____ Date
[insert name and title]

National Trust for Historic Preservation

_____ Date
[insert name and title]

Lower Downtown Design Review Board

_____ Date
[insert name and title]

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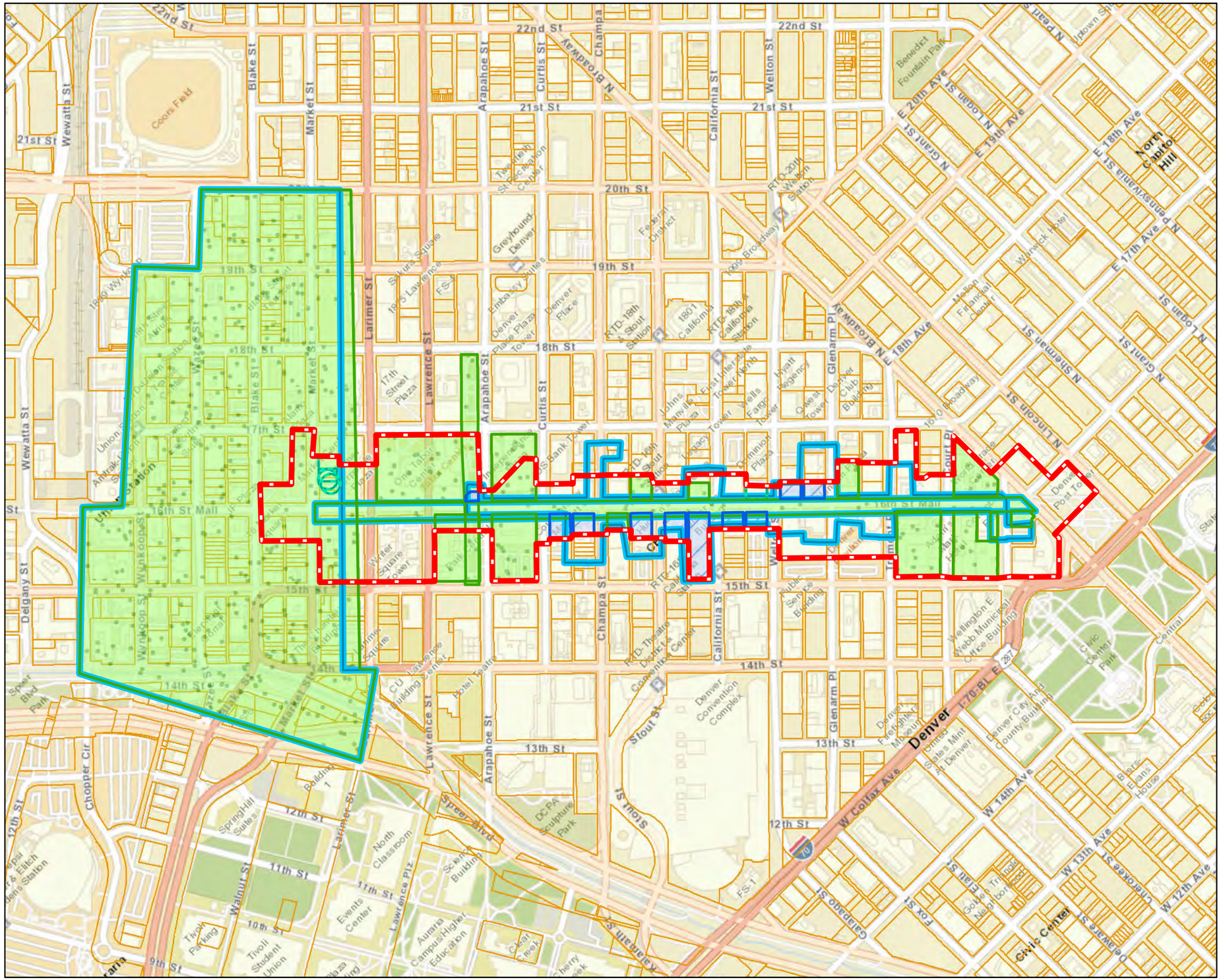
ATTACHMENT 1
Area of Potential Effects and Locations of Historic Properties



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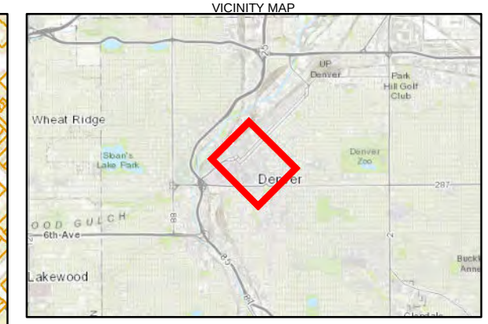

LEGEND

- Area of Potential Effects
- Parcel Boundary

Historic Properties

NRHP Status

- Listed on NRHP
- Eligible for NRHP

Historic Districts

- Eligible for NRHP
- Contributes to Historic District

0 600
Feet

Overview
Identified Historic Properties

16th Street Mall

March 2018

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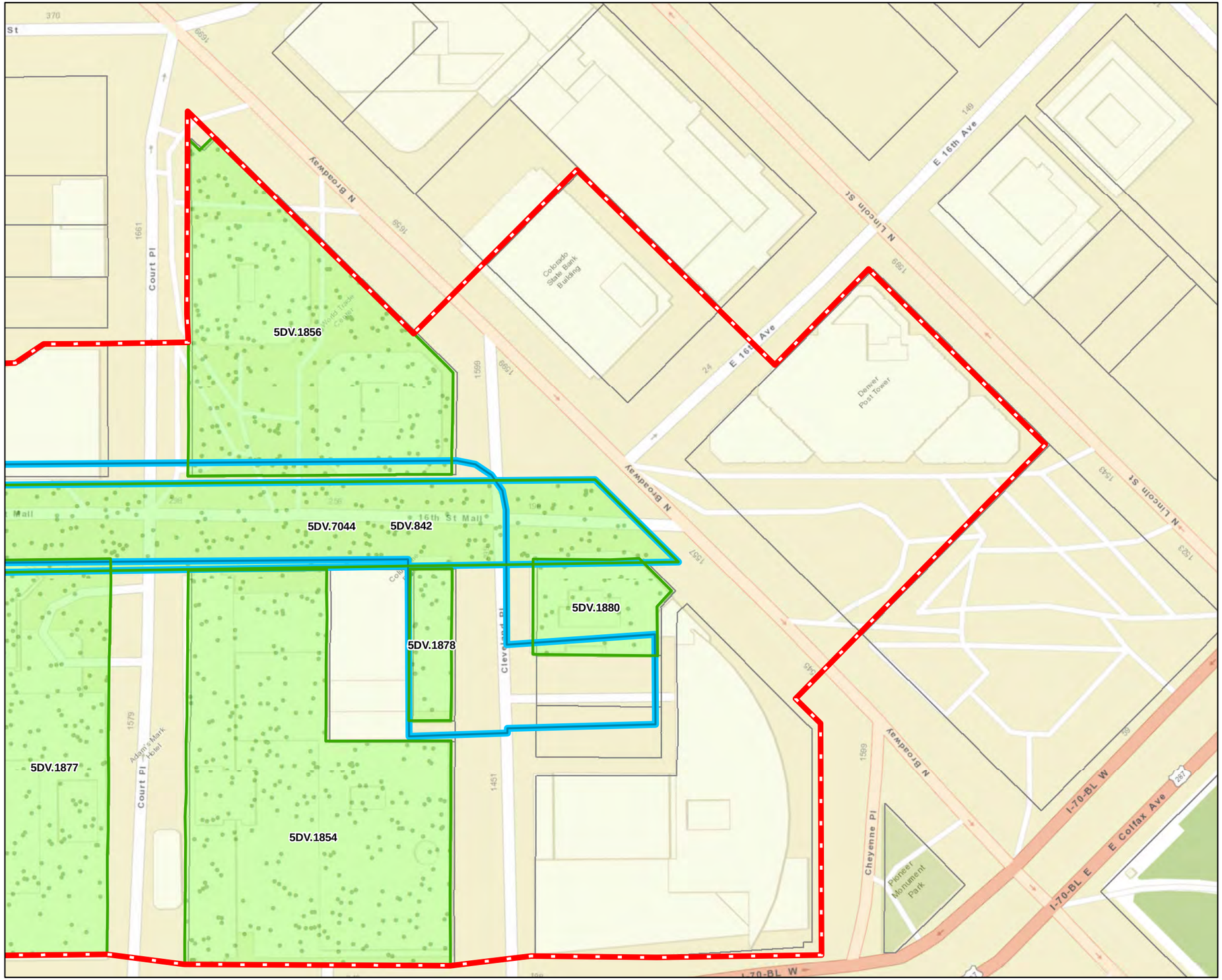

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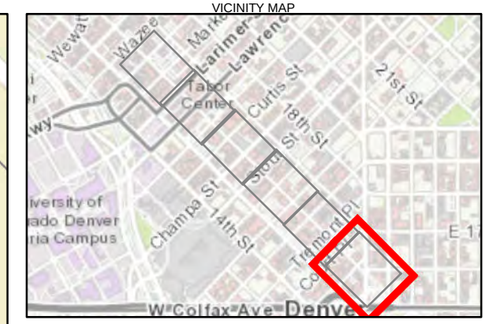

LEGEND

- Area of Potential Effects
- Parcel Boundary

Historic Properties

NRHP Status

- Listed on NRHP
- Eligible for NRHP

Historic Districts

- Eligible for NRHP
- Contributes to Historic District

N

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Feet

Map Book 1
Identified Historic Properties
16th Street Mall
March 2019

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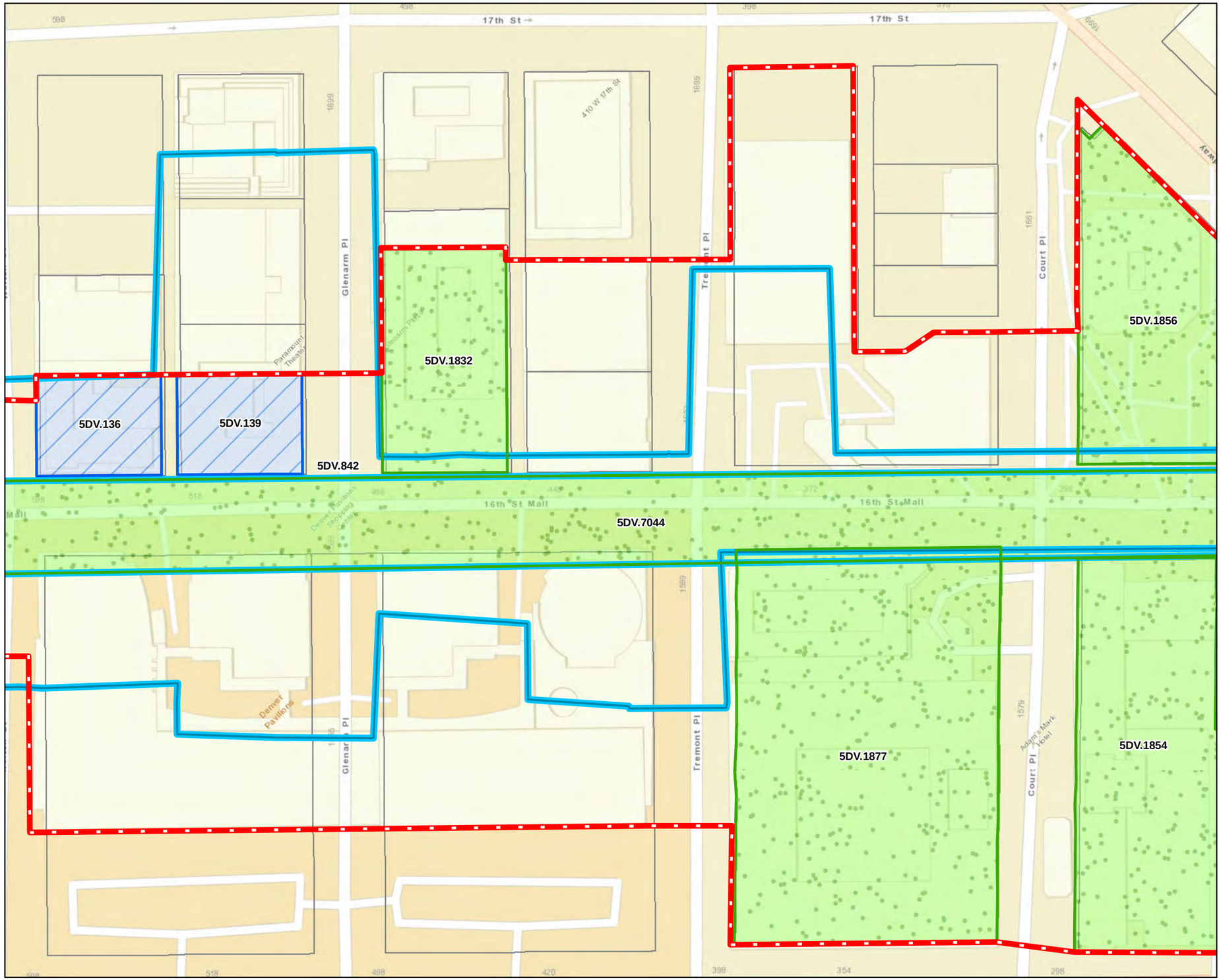

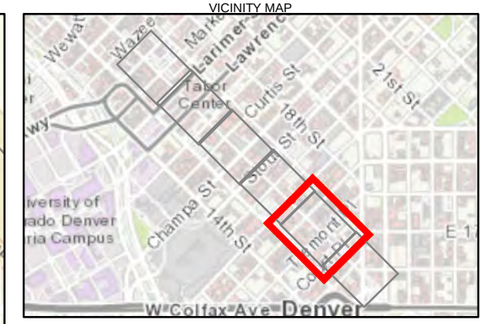

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- Parcel Boundary

Historic Properties

NRHP Status

- Listed on NRHP
- Eligible for NRHP

Historic Districts

- Eligible for NRHP
- Contributes to Historic District

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Feet

Map Book 2
Identified Historic Properties
16th Street Mall
March 2019

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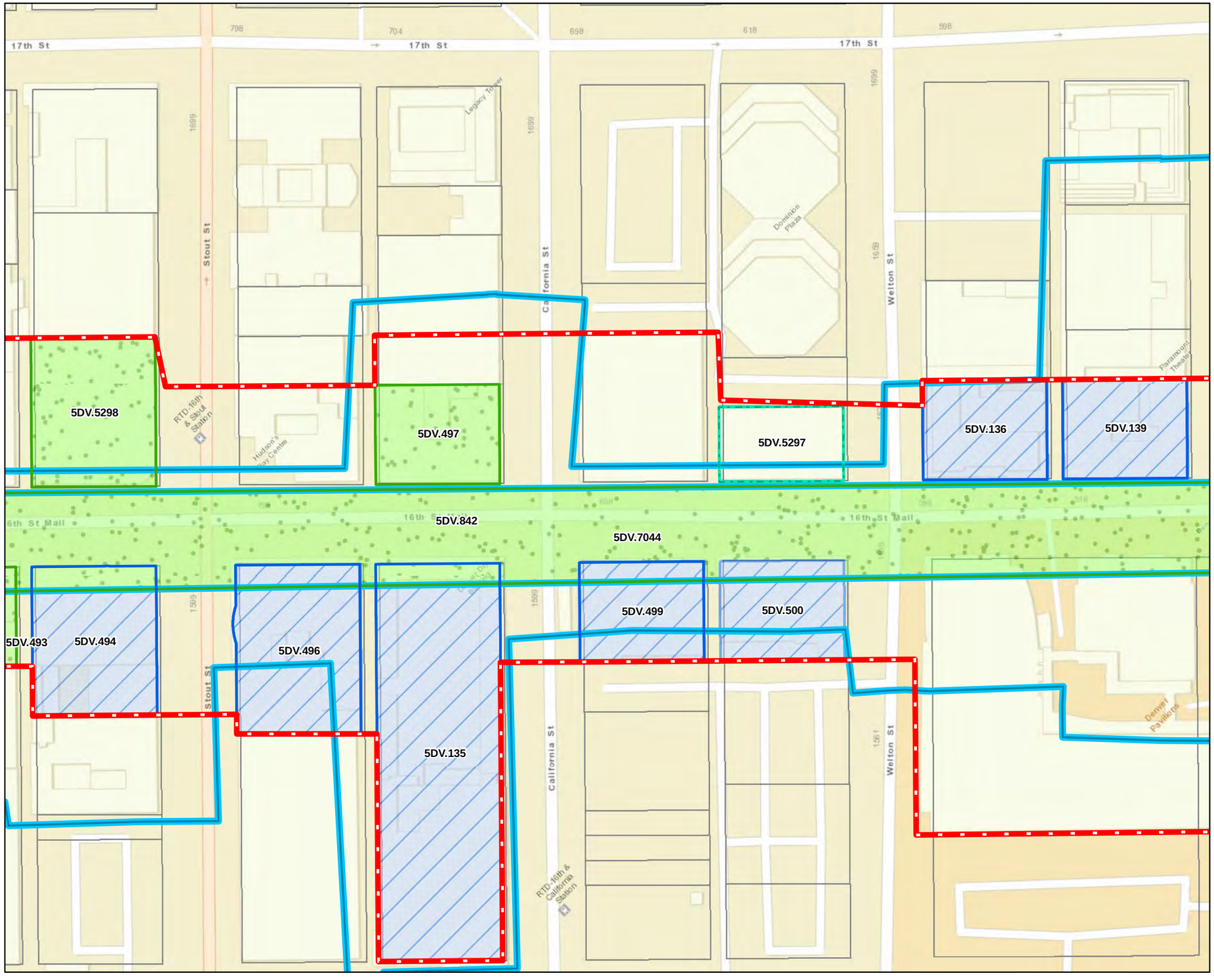

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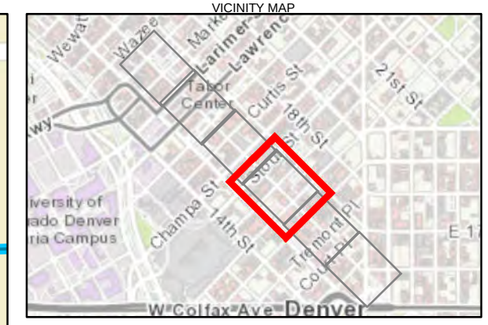

LEGEND

- Area of Potential Effects
- Parcel Boundary

Historic Properties

NRHP Status

- Listed on NRHP
- Eligible for NRHP

Historic Districts

- Eligible for NRHP
- Contributes to Historic District

N

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Map Book 3
Identified Historic Properties
16th Street Mall
March 2019

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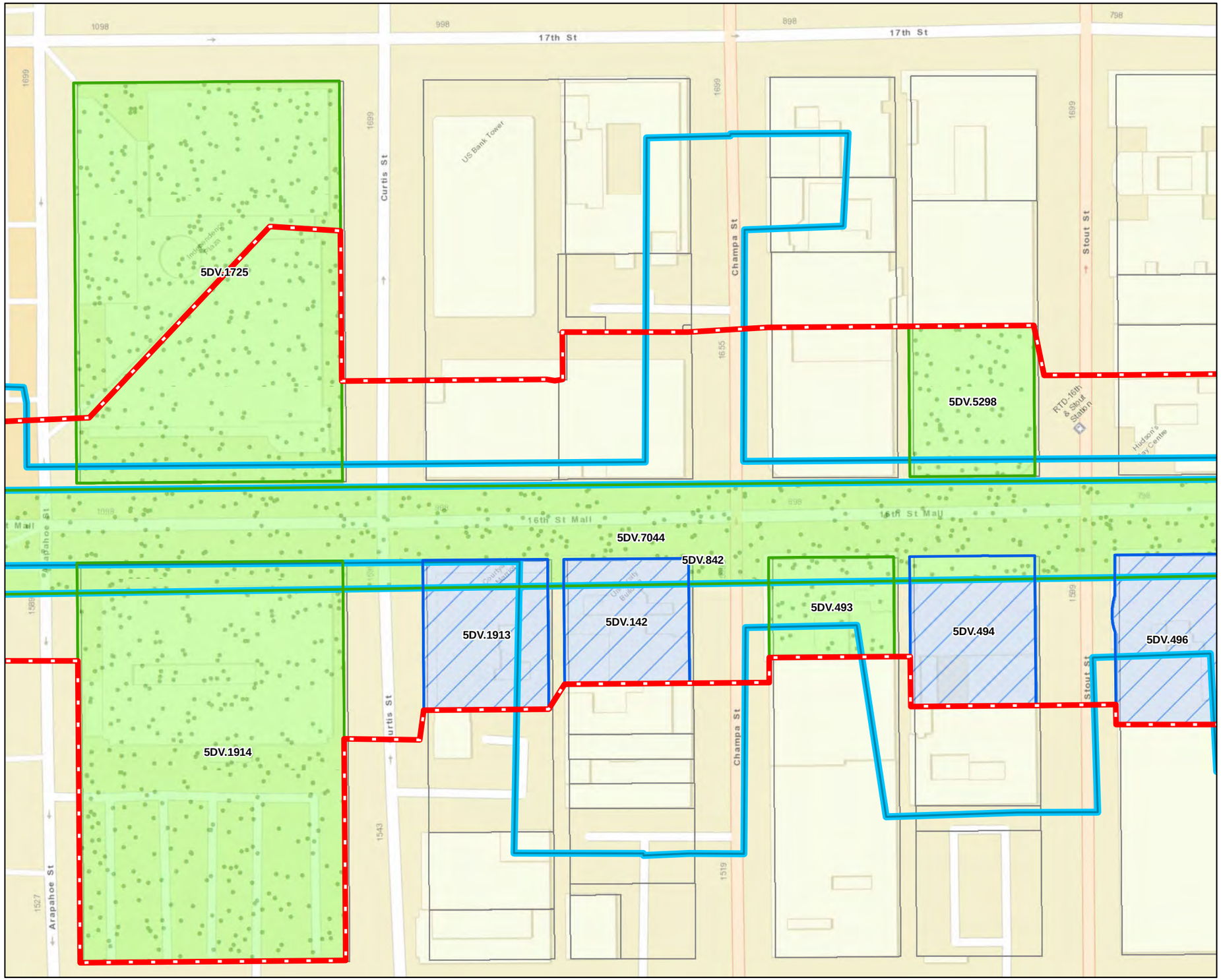
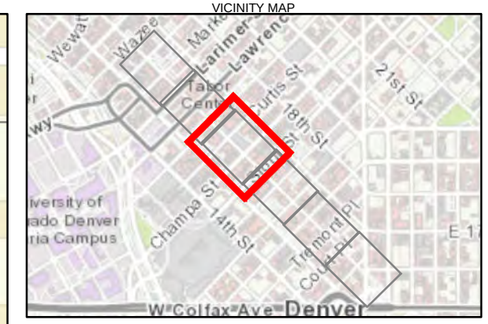


VICINITY MAP



LEGEND

Area of Potential Effects

Parcel Boundary

Historic Properties

NRHP Status

Listed on NRHP

Eligible for NRHP

Historic Districts

Eligible for NRHP

Contributes to Historic District

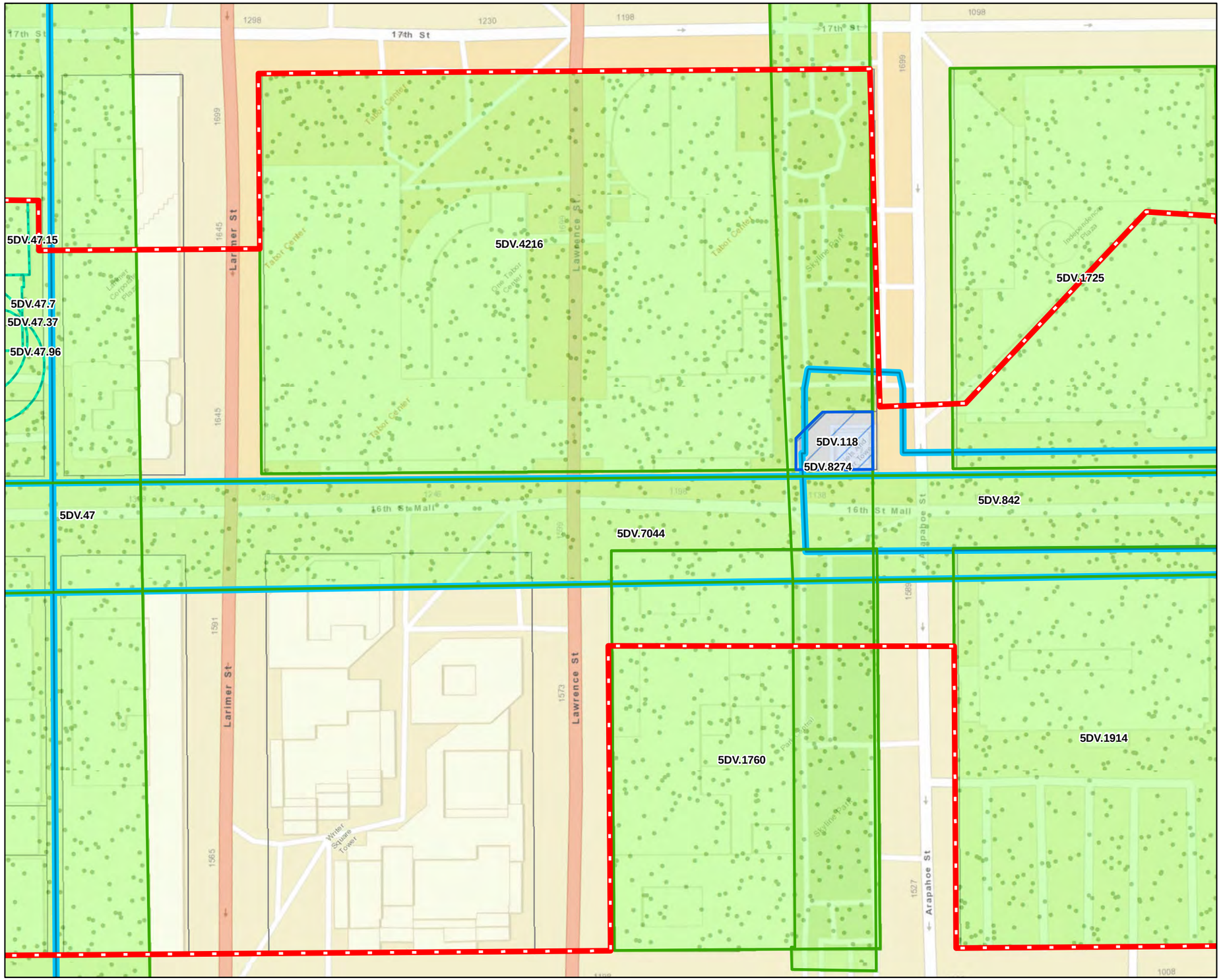
0 100
Feet

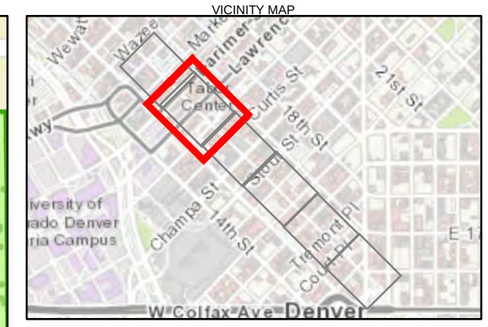
Map Book 4
Identified Historic Properties

16th Street Mall

March 2019

ch2m





LEGEND

- Area of Potential Effects
- Parcel Boundary

Historic Properties

NRHP Status

- Listed on NRHP
- Eligible for NRHP

Historic Districts

- Eligible for NRHP
- Contributes to Historic District

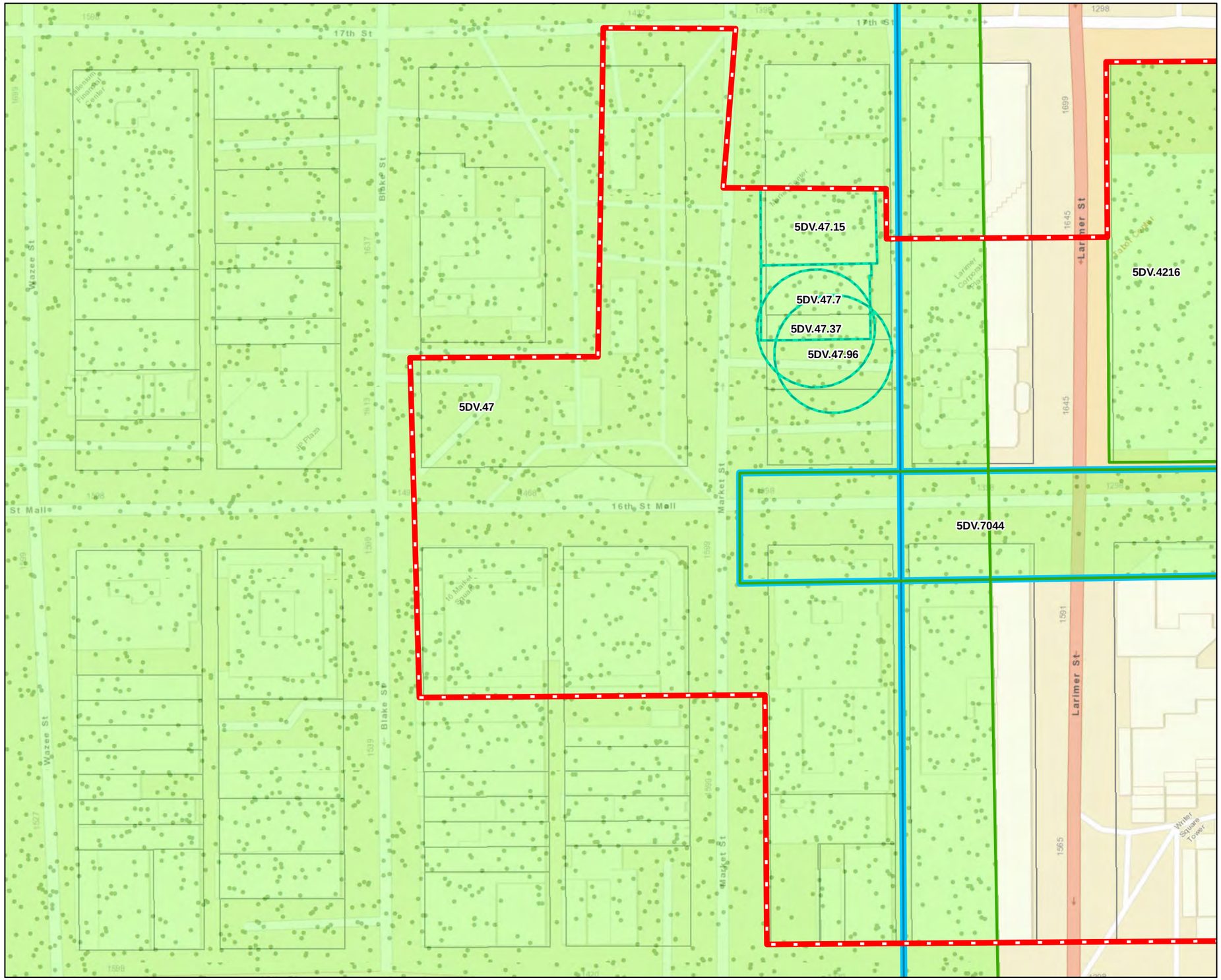
0 100
Feet

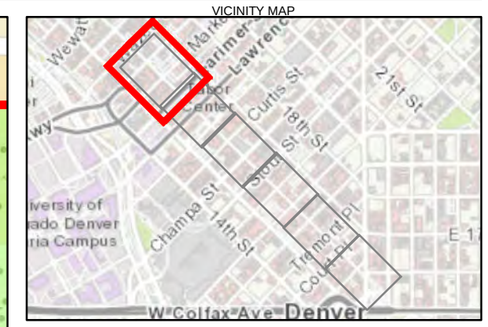
Map Book 5
Identified Historic Properties

16th Street Mall

March 2019

ch2m





LEGEND

- Area of Potential Effects
- Parcel Boundary

Historic Properties

NRHP Status

- Listed on NRHP
- Eligible for NRHP

Historic Districts

- Eligible for NRHP
- Contributes to Historic District

0 100
Feet

Map Book 6
Identified Historic Properties
16th Street Mall
March 2019

ch2m

ATTACHMENT 2
Summary of Historic Properties within the Area of Potential Effects

ATTACHMENT 2

TABLE OF IDENTIFIED HISTORIC PROPERTIES WITHIN THE AREA OF POTENTIAL EFFECTS

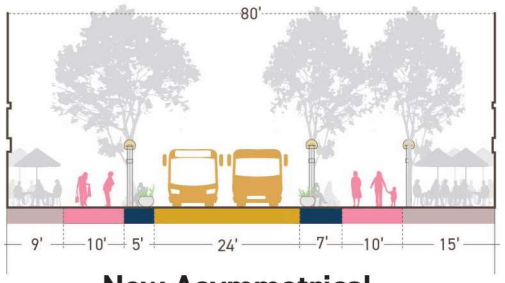
Site ID	Site Name	Address	NRHP Eligibility Status	Finding of Effect
5DV.118	Daniels & Fisher Tower	1101 16th Street; 1601 Arapahoe Street	Listed on NRHP	No Adverse Effect
5DV.135	Denver Dry Goods Company Building	702 16th Street; California Street; and 16th Street	Listed on NRHP	No Adverse Effect
5DV.136	Masonic Temple Building	1614 Welton Street, 535 16th Street	Listed on NRHP	No Adverse Effect
5DV.139	Kittredge Building	511 16th Street	Listed on NRHP	No Adverse Effect
5DV.142	A.C. Foster Building; University Building	910-918 16th Street	Listed on NRHP	No Adverse Effect
5DV.1725	Independence Plaza Prudential Plaza	1001 16th St. 1050 17th St.	NRHP-eligible	No Adverse Effect
5DV.1760	Bridgepoint Plaza; Park Central	1110 16th Street; 1515 Arapahoe Street; 1111 15th Street	NRHP-eligible	No Adverse Effect
5DV.1832	Security Life Building; 1600 Glenarm Place	1616 Glenarm Place	NRHP-eligible	No Adverse Effect
5DV.1854	Hilton Hotel; Radisson Hotel; Adams Mark Hotel	1550 Court Place	NRHP-eligible	No Adverse Effect
5DV.1856	Dome Tower; Great West Plaza; World Trade Center	1625 Broadway	NRHP-eligible	No Adverse Effect
5DV.1877	Zeckendorf Plaza; May D & F Plaza; Hyperbolic Paraboloid	350 16th Street; 1550 Court Place	NRHP-eligible	No Adverse Effect
5DV.1878	Colorado Federal Savings	200 16th Street	NRHP-eligible	No Adverse Effect
5DV.1880	Petroleum Club Building; Petroleum Building; 110 Building	110 16th Street	NRHP-eligible	No Adverse Effect

Site ID	Site Name	Address	NRHP Eligibility Status	Finding of Effect
5DV.1913	Joslin Dry Goods Company Building; Tritch Building; Savoy Grille	934-938 16th Street	Listed on NRHP	No Adverse Effect
5DV.1914	Federal Reserve	1020 16th Street	NRHP-eligible	No Adverse Effect
5DV.47	Lower Downtown Denver Historic District	Multiple	NRHP-eligible	No Adverse Effect
5DV.47.15	Waters Building - Market Center	1642 - 1644 Market Street	Contributes to Lower Downtown Historic District	No Adverse Effect
5DV.47.37	Hitchings Block	1620 Market Street	Contributes to Lower Downtown Historic District	No Adverse Effect
5DV.47.7	Liebhardt-Linder Building- Market Center	1624 Market Street	Contributes to Lower Downtown Historic District	No Adverse Effect
5DV.47.96	McCrary Block - Market Center	1628 Market Street	Contributes to Lower Downtown Historic District	No Adverse Effect
5DV.493	Symes Building; F.W. Woolworth Company	820 16th Street	NRHP-eligible	No Adverse Effect
5DV.494	A.T. Lewis and Son Department Store; Holtzman and Appel Block	800-816 16th Street	Listed on NRHP	No Adverse Effect
5DV.496	Neusteter Building	720-726 16th Street	Listed on NRHP	No Adverse Effect
5DV.497	Hayden, Dickinson & Feldhauser Building; Colorado Building	1609-1615 California Street	NRHP-eligible	No Adverse Effect
5DV.499	McClintock Building	1554 California Street	Listed on NRHP	No Adverse Effect

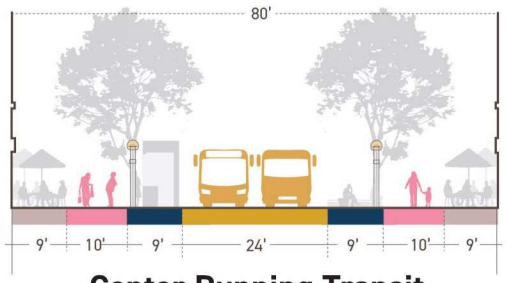
Site ID	Site Name	Address	NRHP Eligibility Status	Finding of Effect
5DV.500	Steel Building; Fontius Building; Sage Building	1555 Welton; 600 16th Street	Listed on NRHP	No Adverse Effect
5DV.5297	Liebhardt Building; Cottrell Clothing Company	601 16th Street	Listed on NRHP	No Adverse Effect
5DV.5298	Walgreens	801 16th Street	NRHP-eligible	No Adverse Effect
5DV.7044	16th Street Mall	1-1300 16th Street	NRHP-eligible	No Adverse Effect
5DV.8274	Skyline Park	1500-1800 Arapahoe Street	NRHP-eligible	No Adverse Effect
5DV.842	16th Street Historic District	Multiple	NRHP-eligible	No Adverse Effect
5.DV.9217.1	Denver Tramway Trolley Lines archeological site	Broadway	NRHP-eligible	No Historic Property Affected

ATTACHMENT 3
Design Drawings

LPA Plan and Typical Section



New Asymmetrical

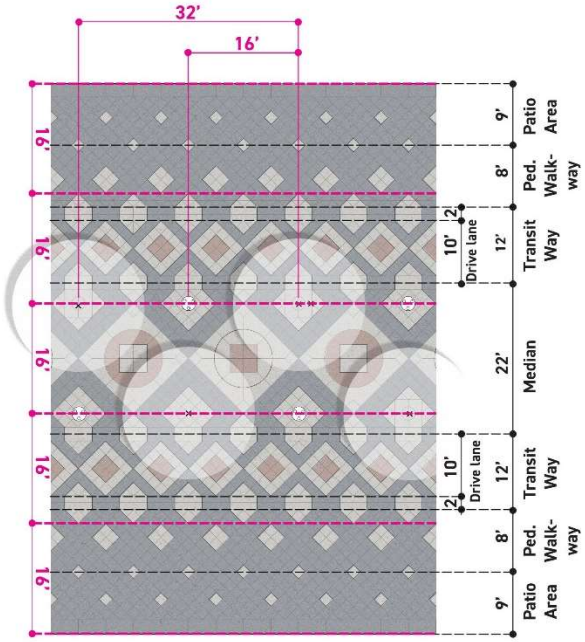


Center Running Transit

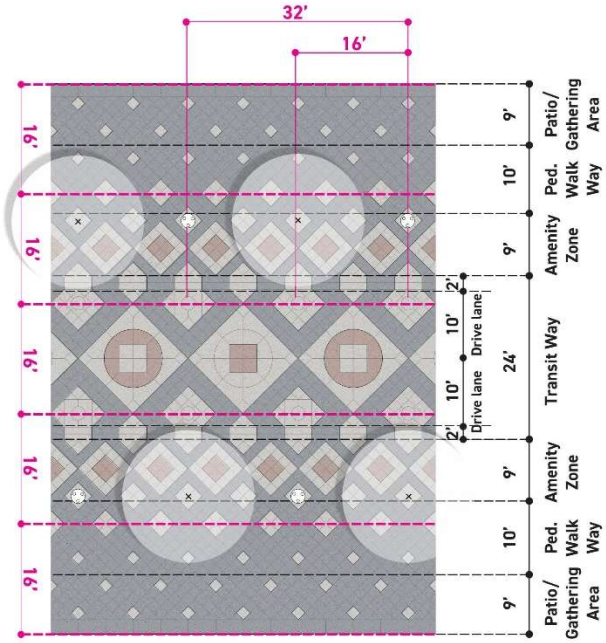
Legend

- Transit Way
- Pedestrian Walkway
- Amenity Zone
- Patio/Gathering Area

Existing and LPA Symmetrical Block Pattern



Existing Median

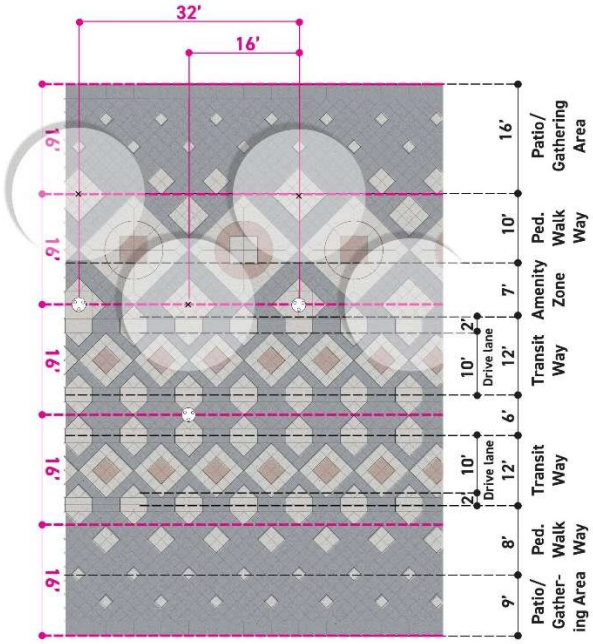


Proposed Center Running

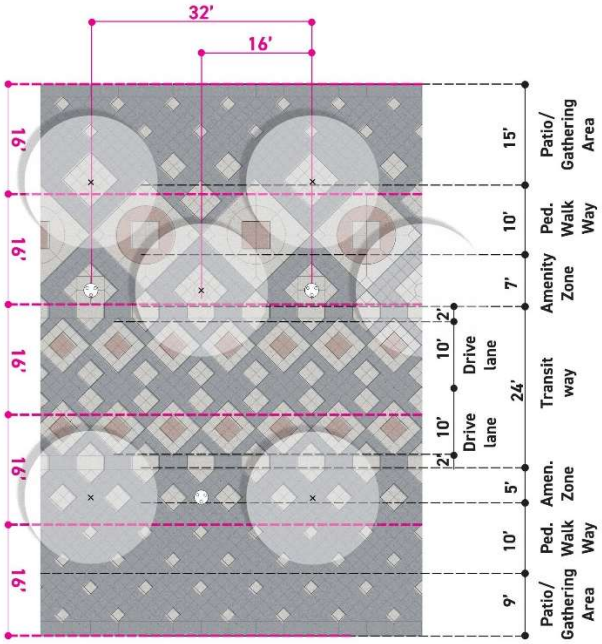
Legend

- Historic Replica Light Standard
- Granite Paver Unit - Diamond (colors vary)
- Granite Special Unit - Abutting Curbs/Drains (colors vary)
- Granite Special Unit - Transit Way Delineation (colors vary)

Existing and LPA Asymmetrical Block Pattern



Existing Asymmetrical



LPA New Asymmetrical

Legend

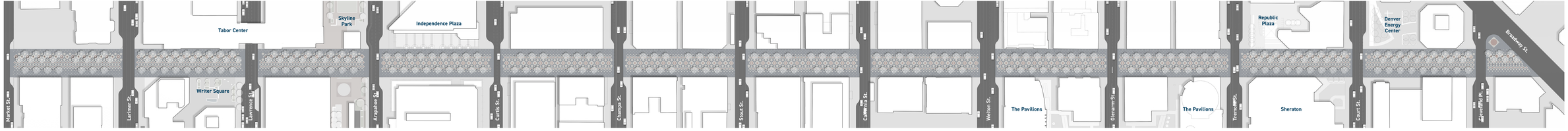
Historic Replica Light Standard

Granite Paver Unit - Diamond (colors vary)

Granite Special Unit - Abutting Curbs/Drains (colors vary)

Granite Special Unit - Transit Way Delineation (colors vary)

Locally Preferred Alternative



Tree Candidates

Honeylocust and Similar

ID	Family	Botanical Name	Acceptable Cultivar	Common Name	Hardiness Zone	Moisture Level	Soil Salt Tolerance	Aerosol Salt Tolerance	Water Quality Area	Height at Maturity	Canopy Spread at Maturity	Growth Form/ Shape	Flowers	Leaf Color – Spring	Leaf Color – Fall	Subject to Change[a]	Additional Notes (includes compaction/tolerances/restrictions)
49	Bignoniaceae	Catalpa speciosa	–	Western Catalpa	5	Xeric to Min	Intermediate	Intermediate	Yes	50	35	Irregular pyramidal to rounded oval	Large, white flowers in spring to summer; showy	Green	Yellow	No	Heat, drought, and alkaline soil tolerant. Decay when wounded or as tree ages may be an issue.
15	Fabaceae	Gleditsia triacanthos inermis	Harve	Northern Acclaim Honeylocust	3b	Xeric	Tolerant	Tolerant	Yes	40	30	Broad pyramidal	Insignificant	Green	Yellow	No	Thornless and fruitless cultivar. Genus overplanted in Denver region.
7	Fabaceae	Gymnocladus dioicus	Espresso	Kentucky Coffeetree	4	–	Tolerant	Tolerant	Yes	–	–	Spreading vase	Greenish-white clusters in late spring	Blue-green	Yellow	Yes	Male (fruitless) cultivar. Tolerant of urban growing conditions. No known insect or disease issues. Leaves, seeds, and pulp reported to be poisonous if ingested.
16	Fabaceae	Gleditsia triacanthos inermis	Shademaster	Shademaster Honeylocust	4	Xeric	Tolerant	Tolerant	Yes	40	30	Vase to rectangular	Insignificant	Green	Yellow	Yes	Thornless and fruitless cultivar. Central leader less present than Skyline. Genus overplanted in Denver region.
52	Platanaceae	Platanus occidentalis	Bismarck	Northern Advance American Sycamore	3	Mod	Intermediate	Intermediate	Yes	75	60	Pyramidal to rounded	Insignificant	Green	Yellow	No	Cold hardy cultivar of parent species. Large root system requires large tree lawn. NDSU introduced – availability may be limited.
54	Platanaceae	Platanus x acerifolia	Morton Circle	Exclamation London Planetree	5	Mod	Intermediate	Intermediate	Yes	50	30	Pyramidal	Insignificant	Green	Yellow	No	Upper branches display showy bark. Cultivar more resistant to anthracnose than parent species. Large root system requires large tree lawn.
18	Sapindaceae	Koelreuteria paniculata	–	Goldenraintree	5	Xeric	Intermediate	Intermediate	Yes	30	30	Open, rounded vase	Yellow in summer, very showy	Green	Yellow	No	Volunteer seedlings could be an issue in mulched areas.
34	Fabaceae	Styphnolobium japonica	Halka	Millstone Japanese Pagodatree	5	Min	Intermediate	Intermediate	Yes	40	30	Broad oval to rounded	Creamy white in summer, showy	Dark green	Yellow	Yes	Tolerant of urban conditions, including heat, drought, and compacted soils. More upright branching habit than parent species. Greatest canker resistance of pagodatree species.
126	Rutaceae	Phellodendron amurense	Macho	Macho Amur Corktree	4	Min to mod	Intermediate	Intermediate	No	40	40	Upright to rounded	Green-white in spring, insignificant	Green	Yellow	No	Male, seedless cultivar of parent species. Large, shallow root system requires large tree lawn.

Shade Trees

ID	Family	Botanical Name	Acceptable Cultivar	Common Name	Hardiness Zone	Moisture Level	Soil Salt Tolerance	Aerosol Salt Tolerance	Water Quality Area	Height at Maturity	Canopy Spread at Maturity	Growth Form/ Shape	Flowers	Leaf Color – Spring	Leaf Color – Fall	Subject to Change[a]	Additional Notes (includes compaction/tolerances/restrictions)
11	Fagaceae	Quercus macrocarpa	JFS-KW14	Cobblestone Oak	3	Xeric	Intermediate	Intermediate	Yes	50	40	Broad oval	Insignificant	Dark green	Yellow	No	Bark displays more cork-like features than parent species.
130	Fagaceae	Quercus muehlenbergii	–	Chinkapin Oak	3	Mod	Intermediate	Intermediate	No	45	50	Upright oval to rounded	Insignificant	Yellow-green	Yellow	Yes	Tolerant of alkaline soils. Transplant in spring for best survival. Prune to develop central leader.
31	Ulmaceae	Celtis laevigata	All Seasons, Magnifica	Sugar Hackberry	5	Xeric to Min	Tolerant	Intermediate	Yes	45	40	Rounded vase to broad oval	Green in spring, insignificant	Dark green	Yellow	No	Varieties are more hardy than parent species. Magnifica has similar growth habit to elm and improved insect resistance.
47	Ulmaceae	Celtis occidentalis	Chicagoland	Common Hackberry	3	Xeric to Min	Tolerant	Intermediate to Sensitive	Yes	45	35	Rounded vase, strong central leader	Green in spring, insignificant	Green	Yellow	Yes	Tolerant of urban growing conditions. Nipple gall may be an aesthetic issue. Intolerant of mechanical damage. Transplant in spring (B&B).
25	Ulmaceae	Ulmus americana	Princeton	Princeton American Elm	4	Mod	Intermediate	Intermediate	Yes	60	45	Upright vase	Insignificant	Dark glossy green	Yellow	Yes	Fast growing cultivar. Resistant to Dutch elm disease and elm leaf beetle. Per CSU elm trials, tree may susceptible to scale. Prune to develop strong branching structure.
30	Ulmaceae	Ulmus (wilsoniana x pumila Accolade) x carpinifolia x glabra	Patriot	Patriot Elm	4	Mod	Tolerant	Tolerant	Yes	45	35	Upright, narrow vase	Insignificant	Dark green	Yellow	No	Fast growth rate. Highly resistant to Dutch elm disease. Per CSU elm trials, tree may be susceptible to scale. Not as drought tolerant as other hybrids. Prune to develop strong branching structure.
29	Ulmaceae	Ulmus glabra x carpinifolia	Pioneer	Pioneer Elm	4	Mod	Tolerant	Tolerant	Yes	50	45	Rounded	Insignificant	Dark green	Yellow	Yes	Resistant to Dutch elm disease. Highly susceptible to elm leaf beetle. Per CSU elm trials, tree may be susceptible to scale. Prune to develop strong branching structure.
23	Ulmaceae	Ulmus pumila x japonica x wilsoniana	Morton Glossy	Triumph Elm	4	Min to mod	Tolerant	Tolerant	Yes	50	40	Upright oval to vase	Insignificant	Dark glossy green	Yellow	No	Cold hardy. Excellent resistance to Dutch elm disease. Resistant to elm leaf beetle. Per CSU elm trials, tree may be moderately resistant to scale. Prune to develop strong branching structure.
24	Ulmaceae	Ulmus japonica x wilsoniana	Morton	Accolade Elm	4	Min to mod	Intermediate	Intermediate	Yes	60	50	Vase with arching limbs	Insignificant	Dark glossy green	Yellow	Yes	Cold hardy. Resistant to Dutch elm disease and elm leaf beetle. Per CSU elm trials, tree shows high scale resistance. Prune to develop strong branching structure.
92	Ulmaceae	Ulmus davidiana var. japonica	Discovery	Discovery Elm	3	Mod	Tolerant	Tolerant	No	40	30	Upright oval to arching vase	Insignificant	Dark green	Yellow	Yes	Slow growing, cold hardy variety. Resistant to Dutch elm disease and elm leaf beetle. Resitance to scale unknown. Large root system requires large tree lawn. Growth habit requires consistent crown-thinning. Prune to develop strong branching structure.
91	Ulmaceae	Ulmus pumila x hollandica x carpnifolia	Homestead	Homestead Elm	5	Min to mod	Tolerant	Tolerant	No	50	30	Pyramidal to oval	Insignificant	Dark green	Yellow	No	Fast growth rate. Resistant to Dutch elm disease. Susceptible to elm leaf beetle. Per CSU elm trials, tree may be moderately resistant to scale. Prune to develop strong branching structure.

Tree Candidates

Asymmetrical – Red Oak and Similar

ID	Family	Botanical Name	Acceptable Cultivar	Common Name	Hardiness Zone	Moisture Level	Soil Salt Tolerance	Aerosol Salt Tolerance	Water Quality Area	Height at Maturity	Canopy Spread at Maturity	Growth Form/ Shape	Flowers	Leaf Color – Spring	Leaf Color – Fall	Subject to Change[a]	Additional Notes (includes compaction/tolerances/restrictions)
85	Aceraceae	Acer buergeranum	Streetwise	Trident Maple	5	Min	Tolerant	Intermediate	No	30	30	Oval to rounded	Small green-yellow in spring, insignificant	Dark green	Orange-red	Yes	Slow growing. No pests or disease problems at this time. Snow and ice damage may be a concern.
86	Aceraceae	Acer campestre	–	Hedge Maple	5	Min	Tolerant	Tolerant	No	30	30	Oval to rounded, dense	Small green-yellow in spring, insignificant	Dark green	Yellow	Yes	Tolerates dry soil. Intolerant of soil compaction. Prune to develop strong branching structure and overhead clearance.
3	Aceraceae	Acer miyabei	Morton	State Street Maple	4	Mod	Intermediate	Intermediate	Yes	45	35	Upright pyramidal to rounded	Small green-yellow in spring, insignificant	Green	Yellow-orange	Yes	Cold hardy and drought tolerant, chlorosis resistant; pest free.
101	Hippocastana-ceae	Aesculus x Bergeson	–	Prairie Torch Buckeye	3	Mod	Intermediate	Intermediate	No	27	27	Slightly weeping, globose	Yellow-green in spring, showy	Dark green	Orange-red	No	Excellent cold hardiness. Resistant to leaf scorch. Intolerant of drought.
100	Hippocastana-ceae	Aesculus x 'Homestead'	–	Homestead Buckeye	4	Mod	Intermediate	Unknown	No	35	22	Broad oval to rounded, low branching	Yellow-red flowers in spring, showy	Dark green	Bright red-orange	No	Intolerant of excess heat and drought. Powdery mildew, leaf scorch, and leaf drop may be issues. Prune to develop overhead clearance.
62	Rosaceae	Pyrus calleryana	Glen's Form	Chanticleer Pear	4	Min to Mod	Intermediate	Intermediate	Yes	30	15	Upright pyramidal	White in spring, showy	Glossy green	Red	Yes	Greater fireblight resistance than other cultivars. Overplanting is a concern. Prune to develop strong branching structure
118	Fagaceae	Quercus alba	–	White Oak	3	Mod	Tolerant	Tolerant	No	60	60	Oval to rounded	Insignificant	Green	Copper-orange	Yes	Relatively slow growing. May be intolerant of alkaline soils. Chlorosis may be an issue.
115	Fagaceae	Quercus buckleyi	–	Texas Red Oak	5b	Min	Tolerant	Unknown	No	35	35	Broad rounded	Insignificant	Glossy green	Orange-red	No	Native of Texas is closely related to shumard oak. Tolerant of alkaline soils and drought. Check seed source for hardiness and soil tolerance.
112	Fagaceae	Quercus robur x alba	Tabor PP21382	Forest Knight Oak	4	Xeric to Min	Intermediate	Tolerant	No	45	35	Broad oval	Insignificant	Glossy dark green	Orange-red	No	Columnar hybrid of English and white oak. Tolerant of urban conditions. Kermes scale may be an issue.
121	Fagaceae	Quercus shumardii	–	Shumard Oak	5	Mod	Intermediate	Intermediate	No	60	40	Pyramidal to oval	Insignificant	Green	Orange-red	No	Due to large growth range, source as locally as possible for pH, drought, and hardiness tolerance. Large root system requires large tree lawn. Prune to develop central leader.
96	Fagaceae	Quercus x bimundorum	Midwest	Prairie Stature Oak	3	Min to Mod	Intermediate	Intermediate	No	45	35	Broad pyramidal	Insignificant	Insignificant	Dark green	Yes	Cold hardy hybrid of English and white oak. Tolerant of alkaline soils.
120	Ulmaceae	Ulmus davidiana var. japonica	Burgundy Glow	Northern Empress Japanese Elm	3	Mod	Tolerant	Tolerant	No	28	24	Rounded, open	Insignificant	Green	Red	No	Medium growth rate. Resitant to Dutch elm disease and elm leaf beetle. Resistance to scale unknown. Prune to develop strong branching structure.
4	Ulmaceae	Ulmus parvifolia	Dynasty	Dynasty Elm	5	Mod	Intermediate	Intermediate	Yes	35	35	Vase	Insignificant	Green	Yellow-orange	No	Fast growth rate. Resistance to Dutch elm disease, scale, and elm leaf beetle unknown. Prune to develop strong branching structure. Availability may be limited. Unproven in Denver region.
63	Ulmaceae	Ulmus parvifolia	Emer II PP7552	Allee Lacebark Elm	5	Mod	Intermediate	Intermediate	Yes	45	30	Upright vase with arching limbs	Insignificant	Green	Orange-red	Yes	High resistance to Dutch elm disease and elm leaf beetle. Resistance to scale unknown. Thin, showy bark. Prune to develop strong branching structure.
64	Ulmaceae	Ulmus parvifolia	Corticosa	Cork Bark Elm	6	Mod	Intermediate	Intermediate	Yes	40	40	Vase	Insignificant	Dark green	Orange	No	Resistance to Dutch elm disease, scale, and elm leaf beetle unknown. Prune to develop strong branching structure. Cold hardiness may be an issue. Availability may be limited. Unproven in Denver region.
5	Ulmaceae	Zelkova serrata	Halka	Halka Zelkova	5b	Xeric to Mod	Intermediate	Intermediate	Yes	50	35	Upright vase, open & loose form	Insignificant	Green	Yellow-orange	No	Growth rate is fastest of zelkova cultivars. Tolerant of urban conditions. Susceptible to canker from mechanical injury. Plant in spring. Prune in fall to develop strong branching structure.
65	Ulmaceae	Zelkova serrata	Green Vase	Green Vase Zelkova	5b	Xeric to Mod	Intermediate	Intermediate	Yes	45	30	Vase, upright arching branches	Insignificant	Green	Orange	No	Faster growth rate, but less cold hardy than Village Green. Tolerant of urban conditions. Susceptible to canker from mechanical injury. Plant in spring. Prune in fall to develop strong branching structure.
2	Ulmaceae	Zelkova sinica	–	Chinese Zelkova	5b	Xeric to Mod	Intermediate	Intermediate	Yes	35	35	Vase	Insignificant	Dark green	Yellow-orange	No	Resistant to elm leaf beetle. Exfoliating cinnamon-colored bark. Prune in fall to develop strong branching structure. Availability may be limited. Unproven in Denver region.

[a] Trees are subject to change based on design changes, Department of Forestry recommendations, and availability.

Note: The tree species listed are preliminary candidates for future use on the 16th Street Mall, based on design and health/resiliency criteria. Criteria are subject to change based on design changes, Department of Forestry recommendations, and availability.

ATTACHMENT 4
Unanticipated Discoveries Plan

DRAFT

Unanticipated Discovery Plan for 16th Street Mall Denver, Denver County, Colorado

December 2018

Contents

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Acronyms and Abbreviations.....v

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1.2 Procedure for Discovery of Human Remains..... 1-2

2 Federal, State, and Local Agency Information 2-1

Acronyms and Abbreviations

ARPA	Archeological Resources Protection Act
CCD	City and County of Denver
CFR	Code of Federal Regulations
CO	Colorado
Council	Advisory Council on Historic Preservation
CRS	Colorado Revised Statutes
DDP	Downtown Denver Partnership
FTA	Federal Transit Administration
LA	Louisiana
MOA	Memorandum of Agreement
NAGPRA	Native American Graves Protection and Repatriation Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRHP	National Register of Historic Places
Project	Improvements to the 16th Street Mall, Denver, Colorado
QPA	Qualified Professional Archeologist
RTD	Regional Transportation District
SHPO	State Historic Preservation Officer
UDP	Unanticipated Discovery Plan
U.S.C.	United States Code

SECTION 1

Unanticipated Discovery Plan

The Federal Transit Administration (FTA), as the lead federal agency, has determined that the Improvements to the 16th Street Mall (Project) constitute an Undertaking under 36 Code of Federal Regulations (CFR) 800.16(y), which requires compliance with Section 106 of the National Historic Preservation Act (NHPA) (54 United States Code [U.S.C.] § 306108) and its implementing regulations in 36 CFR Part 800.

FTA, in coordination with the Regional Transportation District (RTD) and the City and County of Denver (CCD), proposes to implement improvements to the 16th Street Mall (Mall). The Project proposes to develop and implement a flexible and sustainable design for the Mall to address deteriorating infrastructure, provide equitable and sufficient space for high-quality public gathering opportunities, improve pedestrian and vehicle safety, and continue safe and accessible two-way transit shuttle service on the Mall while honoring the Mall's use and iconic design through improved drainage, realignment of the 16th Street Mall's asymmetrical ends, relocation of the transit lanes, conversion of the current median to transit lanes, installation of new street furniture and fixtures, and replacement of the existing granite pavers with new granite pavers;

The FTA is the lead federal agency responsible for the Undertaking and for ensuring that the requirements of Section 106 of the NHPA are fulfilled in accordance with 36 CFR Part 800. Following Section 106 consultation with the Colorado State Historic Preservation Officer (SHPO), identified federally recognized tribes, local consulting parties, and the FTA, it was determined that the Mall is eligible for the National Register of Historic Places (NRHP). The FTA has determined that the Undertaking will result in an adverse effect on the 16th Street Mall historic property.

There is Memorandum of Agreement (MOA) among the FTA, Advisory County on Historic Preservation (Council), and Colorado SHPO to record the resolution measures to resolve the adverse effect to the Mall; the CCD and RTD are Invited Signatories to the MOA. Stipulation IX of the MOA requires that in the event of an unanticipated discovery of cultural resources or historic properties during Project implementation, the CCD will proceed in accordance with the procedures outlined in an Unanticipated Discovery Plan (UDP) and notify the FTA and other signatories. Therefore, this UDP has been developed for use during improvements to the 16th Street Mall.

This UDP will be implemented if new or additional historic properties or cultural resources are encountered during construction, related excavation, or other ongoing activities on the proposed Undertaking. For the purposes of this UDP, cultural resources may include archaeological resources (any site that contains material remains of past human life or activities), historic structures, (any building or structure greater than 50 years of age), linear features (such as a rail line), or other items that possess cultural importance to individuals or a group.

This UDP has been developed through reference to the regulations embodied in the Protection of Historic Properties issued by the Council (revised August 2004, https://www.achp.gov/sites/default/files/regulations/2017-02/regs-rev04.pdf. CH2M HILL

Engineers, Inc. (CH2M), now part of Jacobs Engineering Group, Inc., reviewed Colorado legislation (Colorado Revised Statues CRS 24-80-401-411 and CRS 24-80-1301-1305, as well as 8 Colorado Code of Regulations 1504-7) that was used in the development of this UDP.

1.1 Procedure when Cultural Materials are Observed

Termed "unanticipated discovery" or "post-review discovery," the identification of new or additional cultural resources during implementation of an undertaking typically occurs in the case of projects that involve excavation or ground-disturbing activities. The following measures will be implemented if an unanticipated cultural resource discovery is made by CCD, RTD, Downtown Denver Partnership (DDP), FTA, CH2M, any other contractor, or any subcontractor during construction of the proposed Undertaking:

1. Construction activities or related excavation within 30 feet of an unanticipated discovery will be halted and the discovery protected from further disturbance.
2. Within 24 hours of an unanticipated discovery, CCD will notify by telephone the FTA and Colorado SHPO and, in the case of human remains, the Denver County coroner and sheriff.
3. CCD will consult with the FTA and SHPO on the most appropriate course of action for treatment of the unanticipated discovery. This may involve further archaeological study to record, document, or evaluate potential NRHP-eligibility of the inadvertently discovered cultural resources.
4. Specific FTA and SHPO instructions concerning an unanticipated discovery resulting from the notification as previously described will be followed by an Qualified Professional Archaeologist (QPA) or will be under the direct supervision of a person or persons who meet(s) or exceed(s) the pertinent qualifications in the Secretary of the Interior's Professional Qualification Standards (48 CFR §§44738-44739) in those areas in which the qualifications are applicable for the specific work performed.
5. At a minimum, sufficient archaeological work will be performed on the unanticipated discovery location to stabilize deposits, protect deposits from scavengers or looters, and collect readily available samples (for example, for radiocarbon dating), which may help pinpoint the age of deposits.
6. FTA will also consult with any consulting Indian tribes that may ascribe traditional cultural and religious significance to affected historic properties.
7. If neither the SHPO, consulting parties, nor consulting tribes submit any objection to FTA's plan for addressing the discovery within 48 hours, FTA may carry out the requirements of 36 CFR 800.13, and the Council need only be notified in the event there is an adverse effect.
8. Construction activities will remain halted in the area of the unanticipated discovery until the FTA and SHPO indicate that it may proceed in the area of a specific unanticipated discovery and the requirements of 36 CFR 800.13 have been fulfilled.

1.2 Procedure for Discovery of Human Remains

In the case of an unanticipated discovery of human remains and/or cultural items (such as funerary objects, sacred objects, or objects of cultural patrimony) that are subject to the Native American Graves Protection and Repatriation Act (NAGPRA) (25 U.S.C. § 3001-3013, 18 U.S.C.

§ 1170) and the Archeological Resources Protection Act (ARPA) (16 U.S.C. § 470aa Remains and Funerary/Sacred Objects), the CCD and CH2M propose to follow all relevant state and federal laws and recommendations regarding treatment of human remains as referenced in Section 1.1. The CCD recognizes the importance of providing careful and respectful treatment for human remains recovered as an unanticipated discovery or as part of an archaeological investigation. In the event of an unanticipated discovery of human remains, CCD will consult with the FTA and SHPO as to the appropriate federally recognized tribes or other groups with which to consult. In coordination with the FTA, SHPO, and other interested parties, a decision will be made for the treatment of the remains (for example, reburial, preservation in place, scientific study, sacred ritual, or a combination thereof). Pursuant to CRS 24-80-1302, this protocol includes the following:

1. If human remains are encountered, work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance. During construction activity, the area is to be marked off with clear evident means, such as flagging or tape.
2. All human remains or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.
3. The county coroner and medical examiner, local law enforcement, the FTA, the SHPO, and appropriate Indian tribes will be notified immediately. The coroner will conduct an onsite examination within 48 hours of notification to determine whether skeletal remains are human and the degree of their forensic value. If the coroner is unable to make these determinations, local law enforcement, the FTA, or the coroner may request the forensic anthropologist of the Colorado Bureau of Investigation to assist.
4. If the remains are determined to be human but have no forensic value, the coroner will notify the Colorado State Archaeologist of the discovery, who will in turn recommend security measures for the discovery location.
5. The Colorado State Archaeologist will facilitate the remains to be examined by a QPA who meet(s) or exceed(s) the pertinent qualifications in the Secretary of the Interior's Professional Qualification Standards (48 CFR §§44738-44739). The QPA will determine if the remains are more than 100 years old, evaluate the integrity of their archaeological context, and complete necessary documentation within a timely manner.
6. If human remains are determined to be Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. The State Archaeologist will notify the Colorado Commission of Indian Affairs (Commission). The FTA will consult with the SHPO, Commission, and federally recognized tribal groups to develop a plan of action that is consistent with the NAGPRA guidance.
7. If human remains are determined to be non-Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated in consultation with the National Park Service (NPS), the SHPO and other appropriate parties. Historic research and consultation with local authorities and historic experts will be conducted by a QPA to try to determine the possible identity and affiliation of the remains and determine if there are any lineal descendants who should be consulted

concerning the treatment of the remains. Notice of the discovery will be published in local media outlets for at least 3 days to assist in identification of lineal descendants.

SECTION 2

Federal, State, and Local Agency Information

Table 2-1 identifies the agency representatives to be contacted in case of unanticipated discoveries.

Table 2-1. Contact List

Name	Title/Agency	Phone	Address	Email
Federal Transit Administration				
Cindy Terwilliger	Regional Administrator/FTA	303-362-2400	Federal Transit Administration, Byron Rogers Federal Building, 1961 Stout Street, Suite 13-301 Denver, CO 80294	
Colorado State Historic Preservation Officer				
Steve Turner	State Historic Preservation Officer	303-866-3355	History Colorado 1200 Broadway, Denver, CO 80203	steve.turner@state.co.us
Holly Norton	State Archaeologist Deputy SHPO	303-866-2736	History Colorado 1200 Broadway, Denver, CO 80203	holly.norton@state.co.us
Denver County Coroner				
	Office of the Medical Examiner	303-866-2736	500 Quivas Street Denver, CO 80204	medcomments@denvergov.org
Local Law Enforcement				
	Denver Police Department	720-913-2000	Police Administration Building 1331 Cherokee Street Denver, CO 80204-4507	dpdpio@denvergov.org
Colorado Commission of Indian Affairs				
Ernest House	Executive Director/ Colorado Commission of Indian Affairs	303-866-5470	Office of the Lt. Governor 130 State Capitol, Denver CO 80203	ernest.house@state.co.us
City and County of Denver				
Jacobs				
Amy C. Favret	Senior Archaeologist/ Principal Investigator	513-595-5642	1880 Waycross Road Cincinnati, Ohio 45240	amy.favret@jacobs.com
Sara S. Orton	Cultural Resources Specialist	504-810-0017	3330 W. Esplanade Avenue Suite 612 New Orleans, LA 70002	sara.orton@jacobs.com
Contractor **(TBD)**				