

Floodplain Development Permit

The Board of Adjustment issues floodplain development permits when the requirements of Louisville Municipal Code Chapter 17.56 are met. Variances to flood regulatory district regulations may be issued provided the criteria for a variance in the floodplain ordinance are found to have been met.

The Federal Emergency Management Agency (FEMA) requires the completion of the form on pages 9-11 (the following three pages) of this packet be completed and submitted with any request for a floodplain development permit. Other FEMA forms can be obtained at the www.fema.gov website. A FEMA Elevation Certificate (EC) form must be completed by the applicant and a copy provided to the City upon completion of the work approved by the Board of Adjustment.

Floodplain development permits not involving a variance need only receive a majority vote of the members present for a hearing.

Checklist

- ☐ Land Use Application Form (page 15) - N/A
- ☒ FEMA Floodplain Development Permit Form (pages 7 – 9)
- ☐ Fees – See the attached Development Fee Schedule (page 13) - N/A
- ☐ Submit all required items for the public notice. The Planning Department will prepare the sign once the public hearing date is set. (see page 4) - N/A
- ☒ Written statement from a qualified, licensed engineer, to demonstrate compliance with Chapter 17.56 and FEMA requirements.

2 collated copies of the following:

- ☒ Plans as necessary to demonstrate compliance with Chapter 17.56, Floodplain Development Ordinance and FEMA requirements.
- ☐ Land Use Application Form - N/A
- ☒ FEMA Floodplain Development Permit Form
- ☒ Written statement from a qualified, licensed engineer, to demonstrate compliance with Chapter 17.56 and FEMA requirements.
- ☒ An electronic copy of all submittal requirements. Please create a separate pdf for each submittal requirement.



FEDERAL EMERGENCY MANAGEMENT AGENCY
NATIONAL FLOOD INSURANCE PROGRAM
FLOODPLAIN DEVELOPMENT PERMIT
CITY OF LOUISVILLE, COLORADO

APPLICATION INFORMATION

Permit: _____ Date: April 1, 2024
Owner: City of Louisville Phone: 303.335.4736
Address: 749 Main St, Louisville, CO 80027 Email: bweber@LouisvilleCO.gov
Contractor: _____ Phone: _____
Address: _____ Email: _____

Project Address: 1910 W Cherry, Louisville, CO 80027 Project Legal Description: 36.62 ACS M/L IN W 1/2 SW 1/4 17-1S-69 PER DEED 946145 10/05/88 BCR SPLIT FROM ID 30909 SPLIT SEE ID 30909

PROJECT DESCRIPTION

- | | | |
|--|--|---|
| ☐ Single Family Residential | ☒ New Construction | ☐ Channelization |
| ☐ Multifamily Residential | ☐ Substantial Improvement
(>50%) | ☐ Fill |
| ☐ Mobile Home | ☐ Improvement (<50%) | ☐ Bridge/Culvert |
| ☒ Nonresidential | ☐ Rehabilitation | ☐ Levee |
-

FLOOD HAZARD DATA

Watercourse Name: Coal Creek

☒ This project is proposed in the Floodway ☒ Floodway fringe

Base (100-year) flood elevation(s) at project site: 5383-5389 (NAVD)

Elevation required for Lowest Floor: N/A NGVD / Floodproofing N/A NGVD

Source Documents – Reports/Maps: FIRM 08013C0584K, FIS 08013CV001D, 08013CV002D, 08013CV004D

PROPOSAL REVIEW CHECKLIST

- ☒ Site development plans are complete and depict flood hazard data.
- ☐ Engineering data is/are provided for proposed map and floodway revisions. - N/A
- ☒ Floodway Certificate and data documents no increase in flood heights.
- ☐ Subdivision proposals minimize flood damage and protect utilities. - N/A
- ☐ Lowest floor elevations are above the base (100-year) flood level. - N/A
- ☐ Mobile homes address elevation and anchoring requirements. - N/A
- ☐ A Floodproofing Certificate certifies floodproofing designs. - N/A
- ☐ Other:

APPLICANT: REVIEW ONLY. DO NOT WRITE IN THIS AREA.

PERMIT ACTION

- ☐ PERMIT APPROVED. The information submitted for the proposed project was reviewed and is in compliance with approved floodplain management standards (site development plans are on file with the City).
- ☐ PERMIT DENIED. The proposed project does not meet approved floodplain management standards (explanation is on file with the City).
- ☐ VARIANCE GRANTED. A variance was granted from the base (100-year) flood elevations established by FEMA consistent with variance requirements of NFIP regulations Part 60.6 and Louisville Municipal Code § 17.56.240 (variance action is on file with the City).

Floodplain Administrator's Signature

Date

Comments: _____

COMPLIANCE DOCUMENTATION

- ☐ MAP REVISION DATA. Certified documentation by a registered professional engineer of as-built conditions for floodplain alterations were received and submitted to FEMA for a flood insurance map revision.
 - ☐ FILL CERTIFICATE. A community official certified the elevation, compaction, slope and slope protection for all fill placed in the floodplain consistent with NFIP regulations Part 65.5 for map revisions.
 - ☐ ELEVATION & FLOODPROOFING CERTIFICATES. The as-built elevation of the building's lowest floor was certified as _____ NGVD; *OR* the building's floodproofing level was certified as _____ NGVD; by a registered professional engineer or licensed surveyor and is on file with the City.
 - ☐ CERTIFICATE OF OCCUPANCY OR COMPLIANCE ISSUED ON _____
Date
-

April 4, 2024

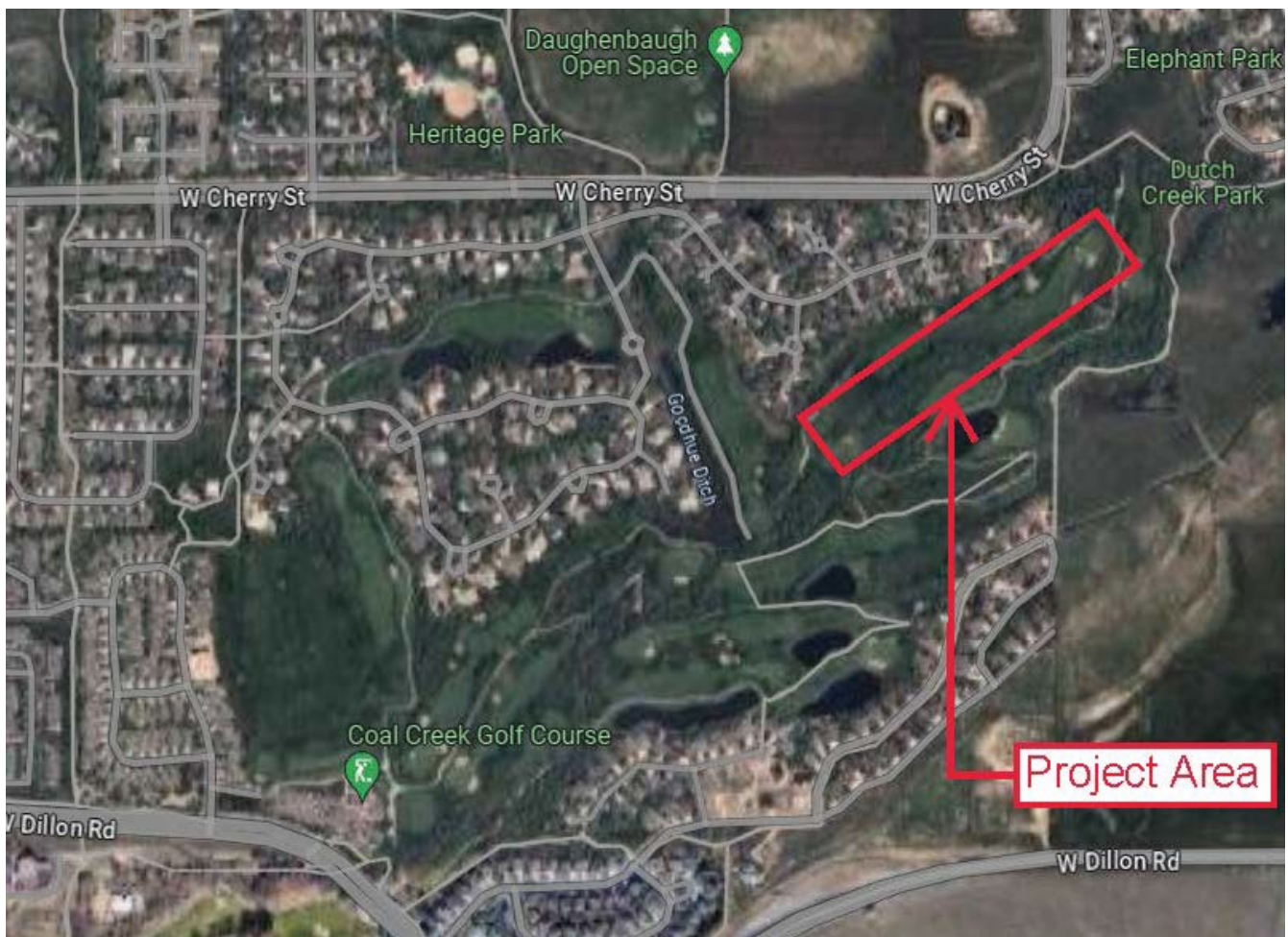
Robert Zuccaro
Director of Community Development
City of Louisville
749 Main St
Louisville, CO 80027

RE: Coal Creek Golf Course Cart Path Certification of No-Rise

Dear Mr. Zuccaro:

In accordance with the requirements of Louisville Municipal Code Chapter 17.56, this letter and the attached data serve as Registered Professional Engineer's **Certification of No Rise** in the 1% Annual Chance (base) flood elevations (BFEs) resulting from the proposed construction of a golf course cart path within the floodplain of Coal Creek. This document is submitted in support of an application to the City of Louisville for a Floodplain Development Permit.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) shows the project area located on Panel No. 08013C0584K, effective August 15, 2019, for City of Louisville, CO. The project area is located within a designated Zone AE Special Flood Hazard Area (SFHA) for Coal Creek, and a portion of the project is located within the regulatory floodway. The project area is located entirely within City of Louisville (City) property on the Coal Creek Golf Course. A Vicinity Map is included below:



VICINITY MAP

The project proposes to extend an existing golf course cart path system to connect two spurs along Hole 13 of the Coal Creek Golf Course. The proposed plans show small, localized areas of minor cut and fill along the length of the proposed path, but the City has specified the following note will be included as a field directive: *"All new finish grades shall match adjacent existing grades at the low side of the path. The new path shall have a cross slope of less than 2%."* Email documentation of the City's plan to include this directive is attached to this certification letter.

Based upon the City's directive we can reasonably conclude, without the need for a detailed hydraulic analysis, that no increase in BFEs and no floodplain or floodway revisions would result from construction of the cart path extension project. As a result, a FEMA Conditional Letter of Map Revision (CLOMR) is not required. In addition to the absence of any BFE increase, an inspection of aerial photography also found no insurable structures located within the floodplain adjacent to the project area. Therefore, no Elevation Certificate is needed for the issuance of a Floodplain Permit.

Based on the factors previously mentioned, we are able to provide certification of no-rise along Coal Creek resulting from the improvements proposed as part of the Coal Creek Golf Course Hole 13 Path Project.

In a phone conversation the afternoon of April 4, 2024, Robert Zuccaro, the City's Director of Community Development, stated that the Land Use Application Form, Development/Permit Review Fee, and Public Notice items from the Floodplain Development Permit application checklist do not need to be included in this submittal.

Thank you for your review. Please feel free to contact us with any questions or if you need any additional information related to this project or the certification of no-rise.

Sincerely,
ICON Engineering, Inc.

A handwritten signature in black ink, appearing to read "Ben Smith", with a stylized flourish at the end.

Ben Smith, P.E. | Senior Project Engineer
bsmith@iconeng.com | 303-221-0802

Floodplain Development Permit

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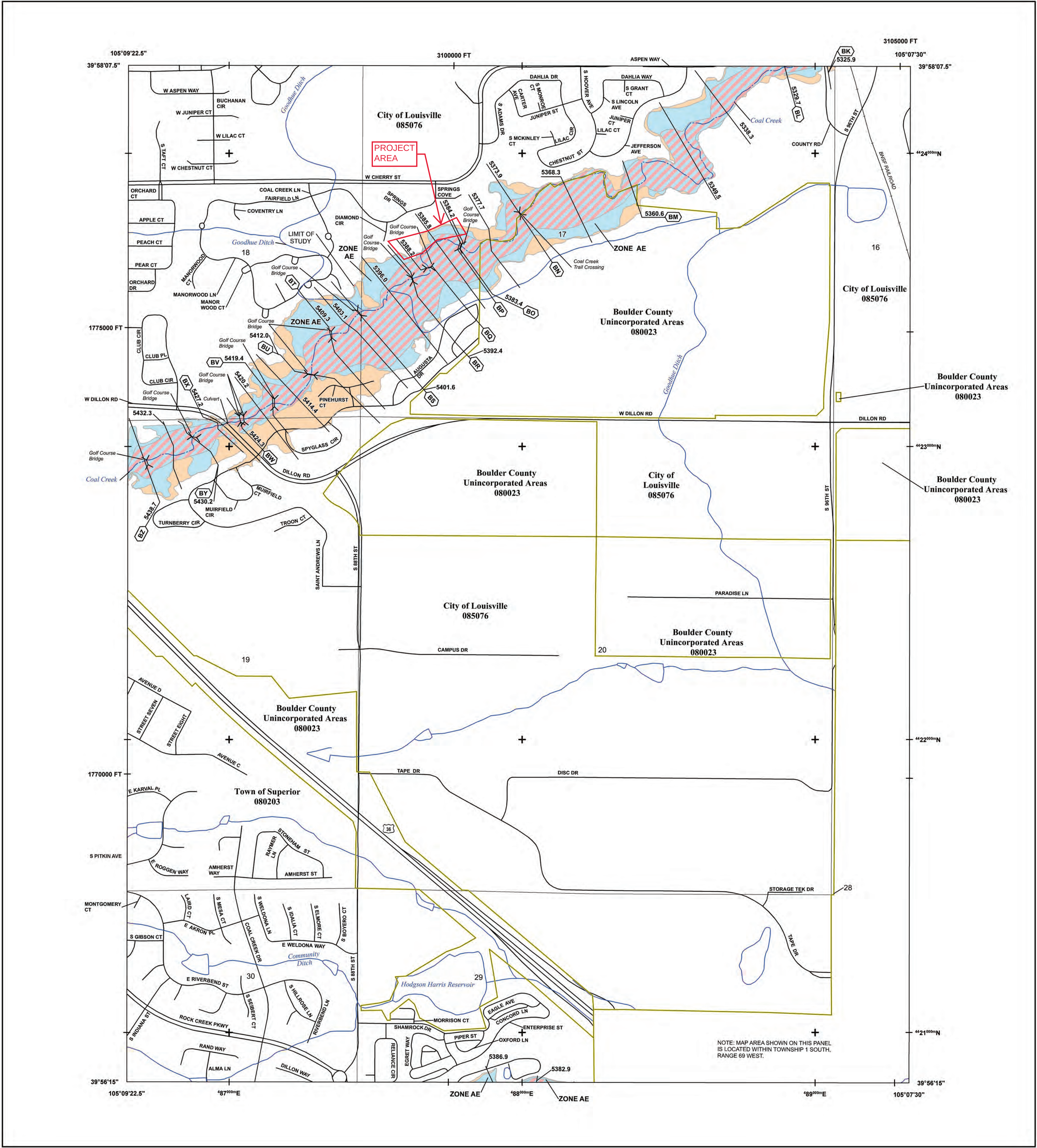
Floodplain Administrator's Signature

Date

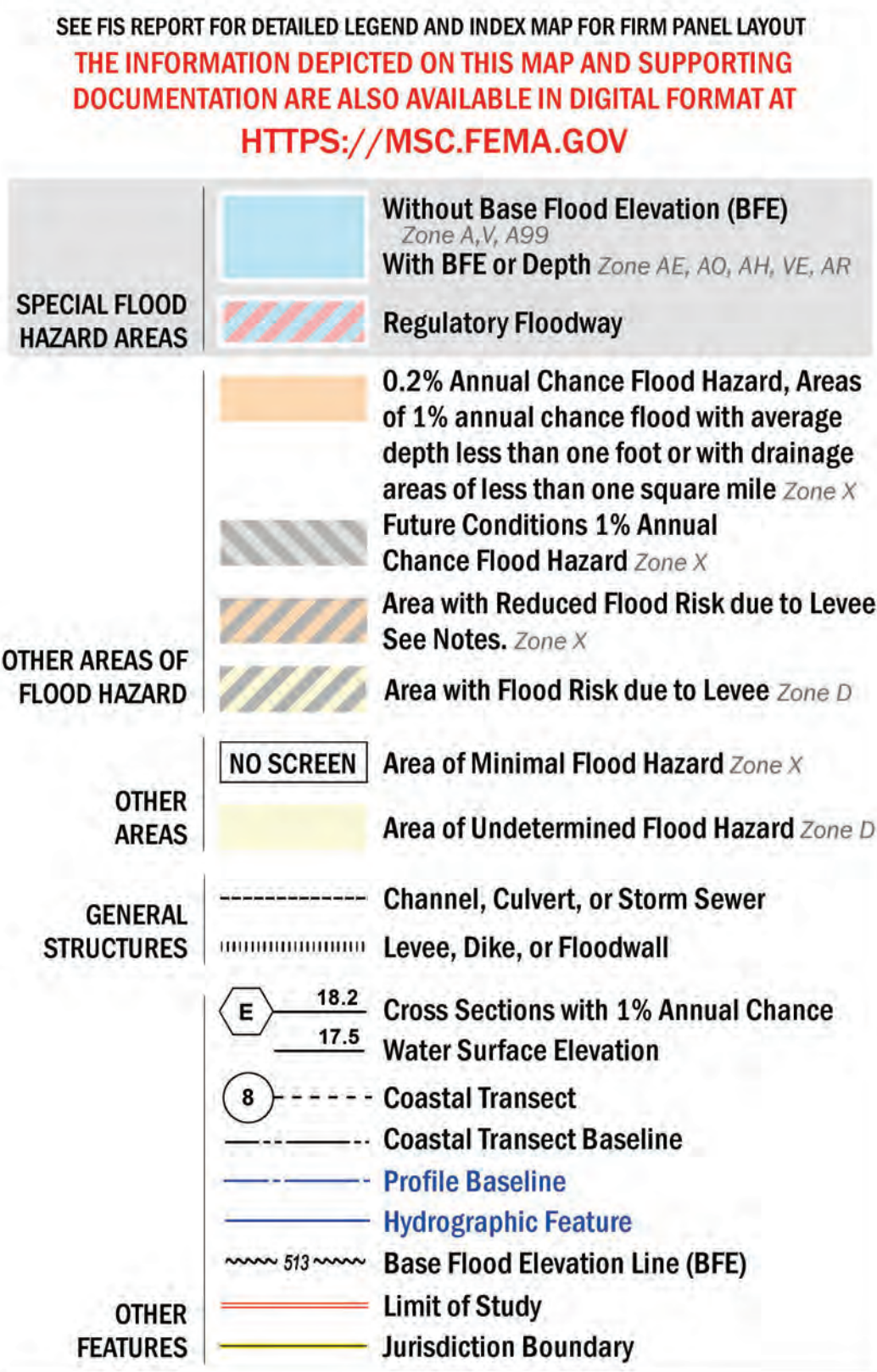
Comments: _____

COMPLIANCE DOCUMENTATION

- ☐ MAP REVISION DATA. Certified documentation by a registered professional engineer of as-built conditions for floodplain alterations were received and submitted to FEMA for a flood insurance map revision.
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 - ☐ CERTIFICATE OF OCCUPANCY OR COMPLIANCE ISSUED ON _____
Date
-



FLOOD HAZARD INFORMATION



NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

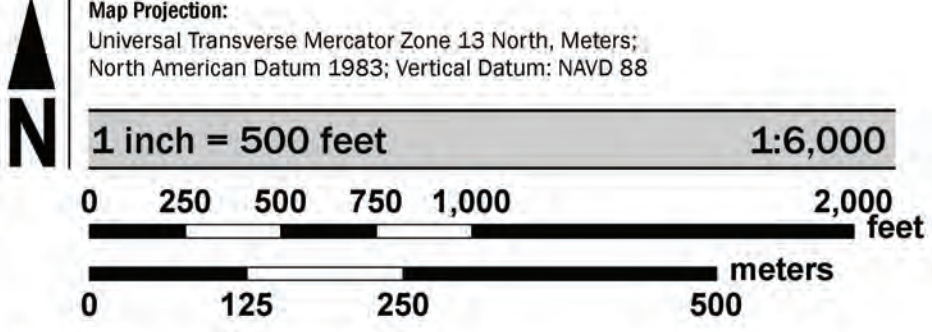
Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

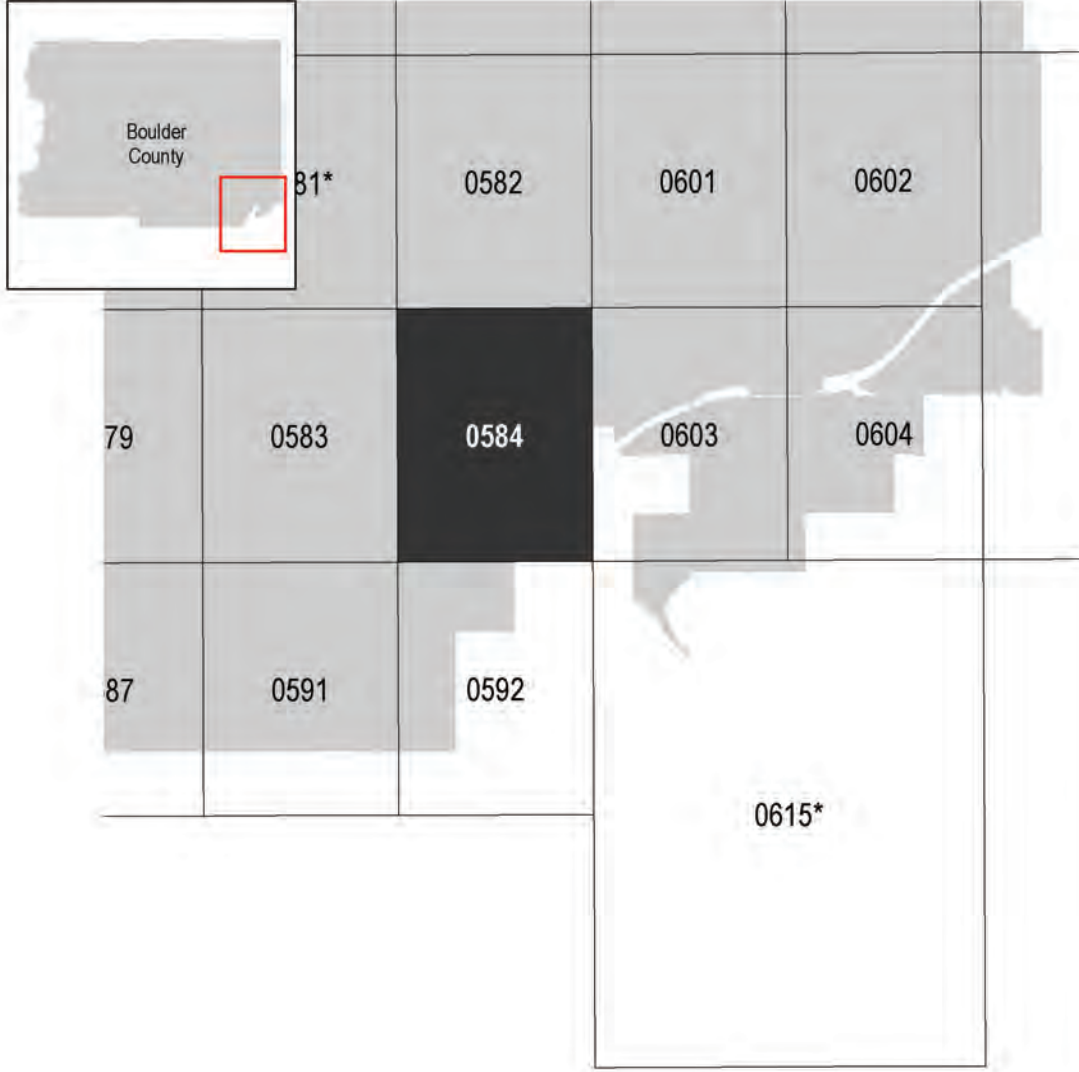
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on the FIRM was provided by the FEMA Map Service Center, the Bureau of Land Management and Boulder County.

SCALE



PANEL LOCATOR



*PANEL NOT PRINTED



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

BOULDER COUNTY,
COLORADO
and Incorporated Areas

PANEL 584 OF 615

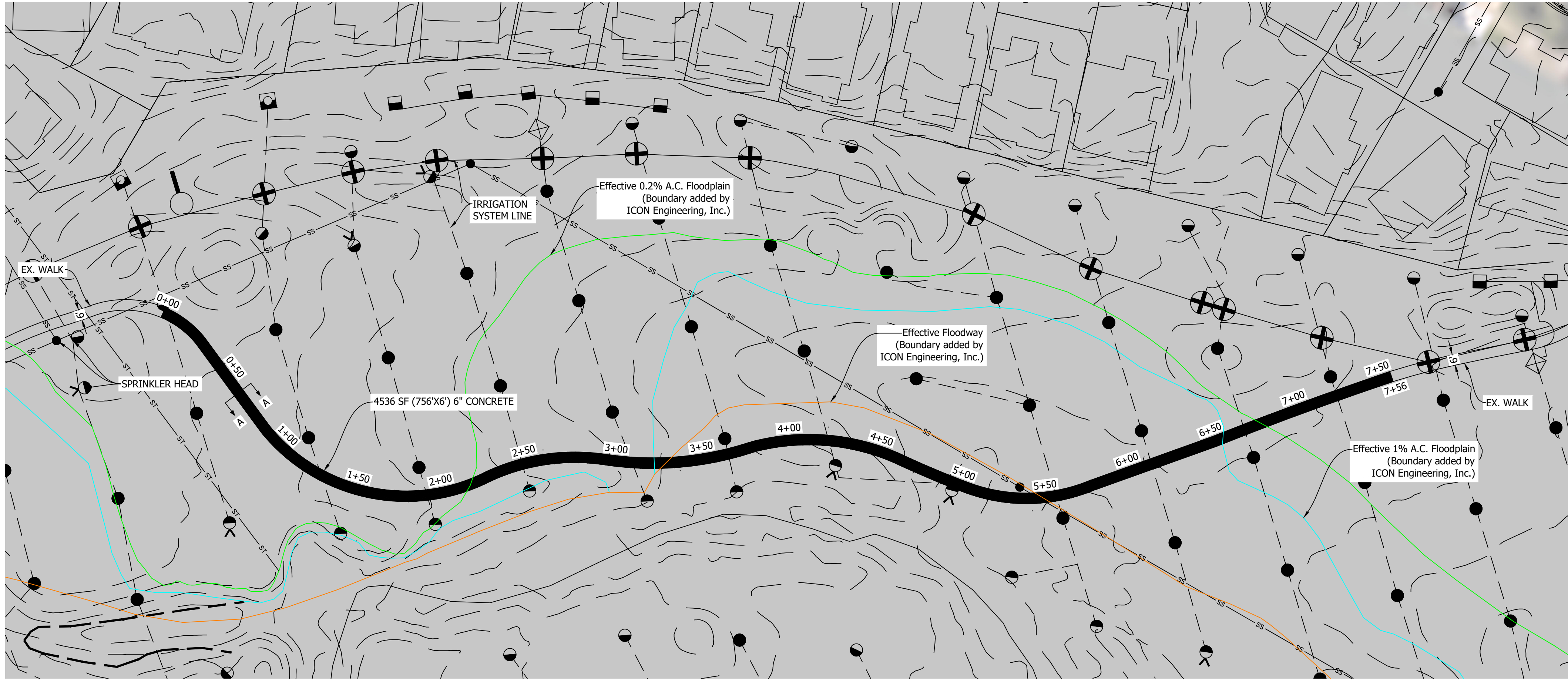
COMMUNITY	NUMBER	PANEL	SUFFIX
BOULDER COUNTY	080023	0584	K
LOUISVILLE, CITY OF	085076	0584	K
SUPERIOR, TOWN OF	080203	0584	K

Notice: This map was reissued on 8/26/2019 to make a correction. This version replaces any previous versions. See the Notice-to-User Letter that accompanied this correction for details.

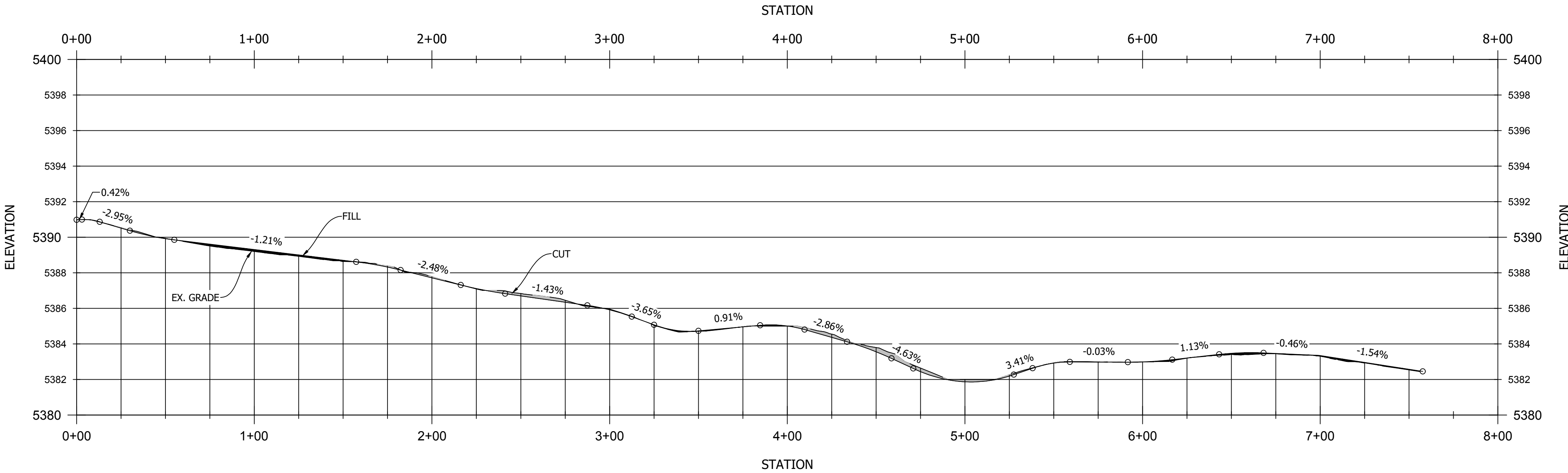
VERSION NUMBER
2.3.3.0

MAP NUMBER
08013C0584K

MAP REVISED
AUGUST 15, 2019

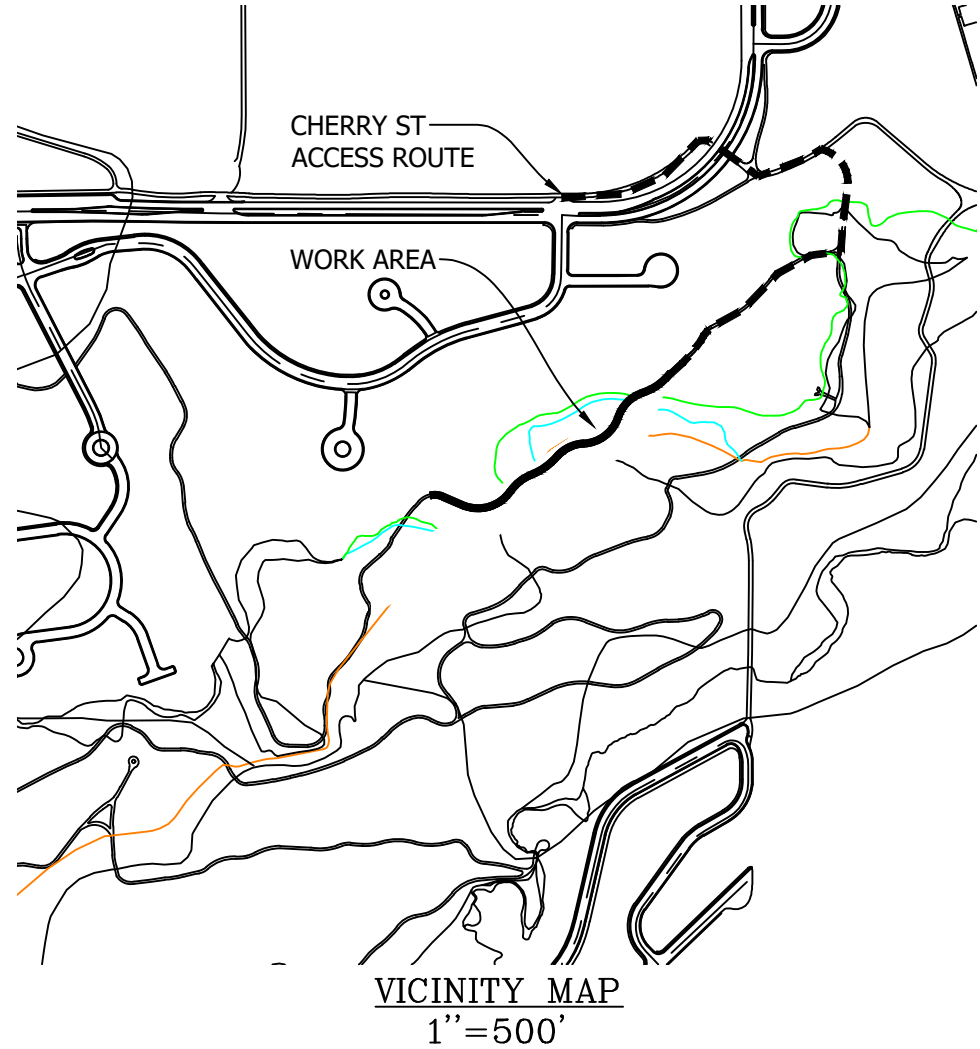


COAL CREEK GOLF COURSE HOLE 13 - PLAN



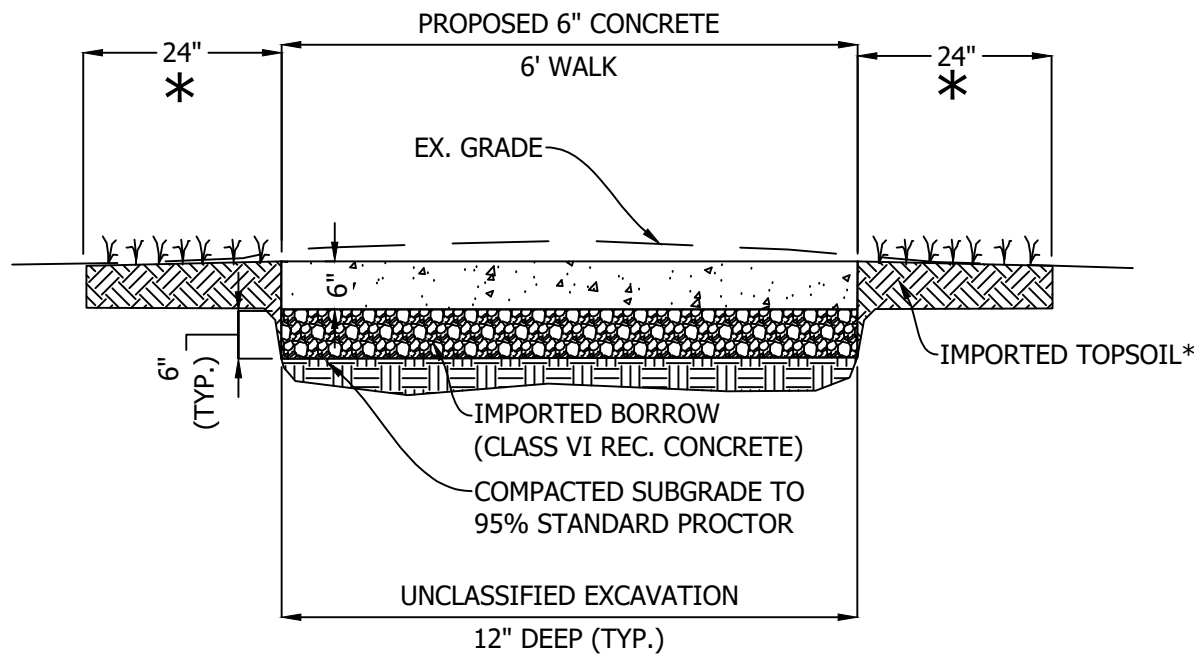
PROFILE

1" = 40' HORIZONTAL
1" = 4' VERTICAL



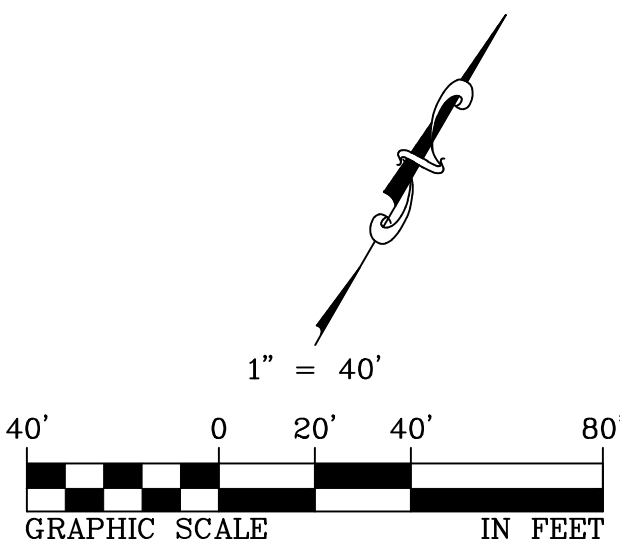
NOTES

1. PROVIDE #4 REBAR, CONTINUOUS, 18" ON CENTER, IN WALK AND CURB ADJACENT TO TREES AT LOCATIONS DIRECTED BY THE ENGINEER. REBAR SHALL EXTEND BEYOND EACH SIDE OF TREE, 10' MINIMUM, UNLESS OTHERWISE APPROVED BY THE ENGINEER. PROVIDE MASONITE OR OTHER APPROVED FORM MATERIAL IN CLOSE PROXIMITY TO TREES.
2. PROVIDE SAW CUT JOINTS AT 6' O.C.
3. PROVIDE 1/2" EXPANSION JOINT MATERIAL EVERY 96 FT (WITH SEALER).



* REMOVE EXISTING SOD AND 4" EXISTING MATERIAL BELOW SOD. INSTALL IMPORTED TOPSOIL (4") AND INSTALL NEW SOD.

SECTION A



PLAN AND PROFILE

COAL CREEK GOLF COURSE HOLE 13 CART PATH PROJECT

Ben Smith

From: Bryon Weber <bweber@louisvilleco.gov>
Sent: Thursday, February 29, 2024 9:08 AM
To: Ben Smith
Cc: Brian LeDoux; Matt Ursetta
Subject: RE: Clarification on Surveying for Cart Path

Thank you!

Bryon Weber

Project Manager
Parks, Recreation & Open Space

303.335.4736 (office)
720.786.3460 (cell)
bweber@LouisvilleCO.gov



From: Ben Smith <bsmith@iconeng.com>
Sent: Thursday, February 29, 2024 9:07 AM
To: Bryon Weber <bweber@louisvilleco.gov>
Cc: Brian LeDoux <bledoux@iconeng.com>; Matt Ursetta <mursetta@iconeng.com>
Subject: RE: Clarification on Surveying for Cart Path

You don't often get email from bsmith@iconeng.com. [Learn why this is important](#)

Good morning Bryon,

Sorry for the slow response – we just wanted to make sure we took a good look at the trail profile and the location of the trail alignment within the effective Floodway boundary.

Based on the field direction the City will give- that existing grades be matched- there should be no fill within the floodway and no pre-project survey will be needed.

Thank you,



Ben Smith, P.E.

Project Manager | ICON Engineering, Inc.
7000 S. Yosemite St, Suite 120, Centennial, CO 80112
o: (303) 221-0802 | www.iconeng.com | bsmith@iconeng.com

From: Bryon Weber <bweber@louisvilleco.gov>
Sent: Thursday, February 29, 2024 8:42 AM
To: Ben Smith <bsmith@iconeng.com>

Cc: Brian LeDoux <bledoux@iconeng.com>; Matt Ursetta <mursetta@iconeng.com>

Subject: RE: Clarification on Surveying for Cart Path

Ben,

Sorry to bug you, but we're trying to get answers back to contractors ASAP for their bidding deadline on 3/5. Any guidance is appreciated.

As a follow-up thought, the civil designer suggested having the layout be field directed in lieu of requiring survey with the following note: "All new finish grades shall match adjacent existing grades at the low side of the path. The new path shall have a cross slope of less than 2%."

If we go that route, I'm wondering if we just have you come out and gather some spot elevations along the route once it's staked out but prior to excavation. That way you could have before and after from exact locations and based on your data versus relying on interpolations from a 2' interval survey.

Bryon Weber

Project Manager

Parks, Recreation & Open Space

303.335.4736 (office)

720.786.3460 (cell)

bweber@LouisvilleCO.gov



From: Bryon Weber

Sent: Wednesday, February 28, 2024 10:11 AM

To: Ben Smith <bsmith@iconeng.com>

Cc: Brian LeDoux <bledoux@iconeng.com>; Matt Ursetta <mursetta@iconeng.com>

Subject: Clarification on Surveying for Cart Path

Ben,

Can you confirm whether pre-construction survey is required for your analysis?

I know your contract has some post-construction survey verification, but I'm wanting to clarify how you envision that process working. My understanding is that the design drawings were produced using City-wide survey as opposed to site specific, so only good to ~2' intervals.

As part of a revised bid form, we're including a line item for contractors to survey as needed for layout. We could expand that survey request if you need contractors to capture some 'before' conditions. We don't want to pay for duplicate services, but also want to ensure we've got the bases covered.

Please advise.

Bryon Weber

Project Manager
Parks, Recreation & Open Space

303.335.4736 (office)
720.786.3460 (cell)
bweber@LouisvilleCO.gov



==CAUTION: EXTERNAL EMAIL==

This email originated from outside the City of Louisville's email environment. Do not click links or open attachments unless you validate the sender and know the content is safe. Please contact IT if you believe this email is suspicious.

COAL CREEK GOLF COURSE HOLE 13 PATH PROJECT



LEGEND

EXISTING:

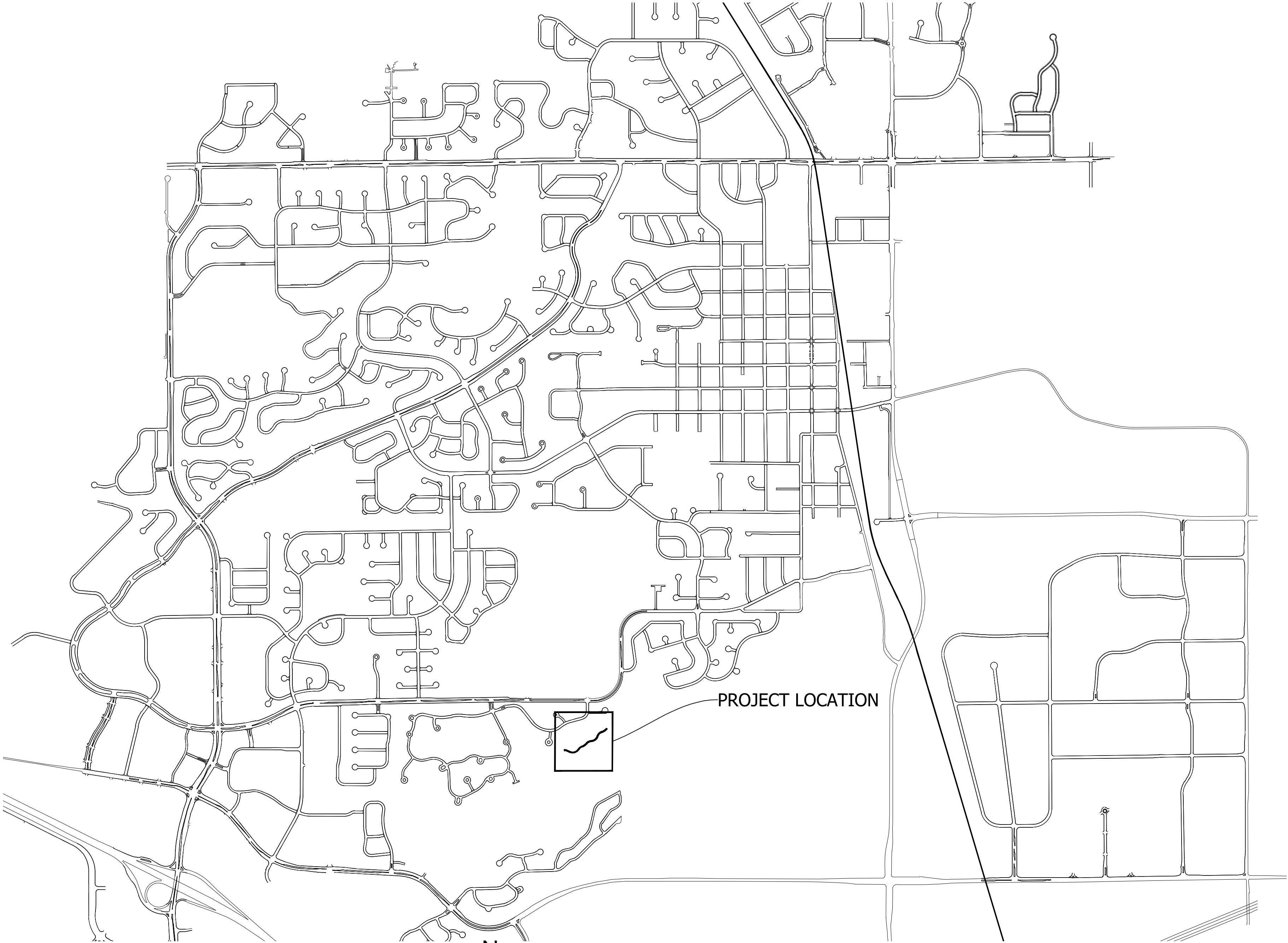
- WALK
- CURB & GUTTER
- ROW
- WATER MAIN & VALVE
- FIRE HYDRANT
- SANITARY SEWER & MANHOLE
- INLET
- STORM SEWER & MANHOLE
- GAS LINE
- ELECTRIC LINE
- FIBER OPTIC LINE
- CABLE TV
- POWER POLE
- TRAFFIC SIGN

PROPOSED:

- 4" CONCRETE
- 6" CONCRETE
- 8" CONCRETE
- 10" CONCRETE
- 12" CONCRETE
- CURBWALK
- CURB AND GUTTER
- ASPHALT PATCH
- EDGE COLD MILLING 0" TO 1 1/2"

SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER
2	GENERAL NOTES
3	PLAN AND PROFILE



LOCATION MAP
1"=1000'



MARK-UP SET
01/30/2024

SHEET
1
OF
3

GENERAL NOTES (ALL CONSTRUCTION):

1.

ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS OF THE CITY OF LOUISVILLE AND THESE CONTRACT SPECIFICATIONS. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS, STANDARDS, AND CONTRACT SPECIFICATIONS AS APPROVED BY THE CITY. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ANY VARIANCE TO THE ABOVE DOCUMENTS.
2.

THE CONTRACTOR SHALL MAINTAIN ONE RECORD COPY OF ALL DRAWINGS WHICH ARE TO BE READILY AVAILABLE TO THE ENGINEER AT ALL TIMES. THE FINAL RECORD DRAWINGS (AS-BUILTS) SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL PAYMENT.
3.

CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARDS, SPECIFICATIONS, PERMITS, BONDS, ETC. WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK. THE CONTRACTOR, ALONG WITH ALL SUBCONTRACTORS SHALL BE LICENSED IN THE CITY OF LOUISVILLE. CONTRACTOR SHALL SUBMIT A LIST OF ALL SUBCONTRACTORS INVOLVED IN THE PROJECT AND THEIR LICENSE NUMBERS TO THE ENGINEER. THE CONTRACTOR SHALL OBTAIN A RIGHT OF WAY PERMIT FROM THE CITY OF LOUISVILLE PUBLIC WORKS DEPARTMENT FOR THE PROJECT. A COPY OF THE RIGHT OF WAY PERMIT SHALL BE ON SITE AT ALL TIMES AND THE CONTRACTOR SHALL FORWARD A COPY TO ALL SUBCONTRACTORS.
4.

IF WATER IS REQUIRED FOR THE PROJECT, THE CONTRACTOR SHALL OBTAIN A BULK WATER PERMIT FROM THE CITY OF LOUISVILLE PUBLIC WORKS DEPARTMENT IN ACCORDANCE WITH THE PERMIT REQUIREMENTS.
5.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING STREETS, CURBS, SIDEWALKS, BUILDINGS, DRIVEWAYS, ALLEYS, LAWNS, PARKING LOTS, ETC. ADJACENT TO THE PROJECT FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGES CAUSED BY THE CONTRACTORS OPERATIONS SHALL BE RECONSTRUCTED OR REPAIRED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER AND AT THE CONTRACTOR'S EXPENSE.
6.

THE CONTRACTOR SHALL PROVIDE DAILY CLEANUP OF THE SITE INCLUDING BUT NOT LIMITED TO REMOVAL OF ALL TRASH AND DEBRIS AND REMOVAL OF MUD, DIRT, ETC. FROM SIDEWALK AND PAVEMENT SURFACES WITHIN AND ADJACENT TO THE SITE. CLEANUP WILL INCLUDE SWEEPING ADJACENT SURFACES ACCESSIBLE TO THE GENERAL PUBLIC.
7.

THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS/RESIDENTS TO PHASE WORK SUCH THAT EMERGENCY ACCESS IS PROVIDED AT ALL TIMES AND RESIDENCE ACCESS IS AVAILABLE DURING NON-WORKING HOURS.
8.

WHERE IT IS REQUIRED TO CUT EXISTING ASPHALT OR CONCRETE, THE CUTTING SHALL BE DONE TO NEAT, STRAIGHT LINE BY SAW CUTTING.
9.

COMPACTION FOR THE PROJECT SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
10.

WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED BY THE ENGINEER. THIS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
11.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY ENGINEER AND PROJECT ENGINEER OF ANY PROBLEM IN CONFORMING TO THE APPROVED PLANS OR ANY ELEMENT OF THE PROPOSED IMPROVEMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
12.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE CITY ENGINEER AT LEAST 48 HOURS PRIOR TO START OF ANY CONSTRUCTION. IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER 48 HOURS PRIOR TO RESTART.
13.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING BOULDER COUNTY COMMUNICATION AND THE LOUISVILLE FIRE DEPARTMENT OF ALL STREETS CLOSINGS AND OF EXISTING FIRE HYDRANTS TAKEN OUT OF SERVICE AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
14.

THE CONTRACTOR SHALL NOTIFY ALL PUBLIC UTILITY COMPANIES AND DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO PROCEEDING WITH CONSTRUCTION. ALL WORK PERFORMED IN THE AREA OF PUBLIC UTILITIES SHALL BE PERFORMED ACCORDING TO THE REQUIREMENTS OF THESE AGENCIES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ANY EXISTING UTILITY (INCLUDING DEPTH) WHICH MAY CONFLICT WITH THE PROPOSED INSTRUCTION, 72 HOURS PRIOR TO COMMENCEMENT OF THE IMPROVEMENTS DESCRIBED IN THE PROJECT. THE CONTRACTOR SHALL PROTECT, AT HIS OWN EXPENSE, ALL EXISTING UTILITIES AND BE RESPONSIBLE FOR THEIR REPAIR IF THEY ARE DAMAGED DURING CONSTRUCTION. ALL KNOWN EXISTING UTILITIES ARE SHOWN IN APPROXIMATE LOCATIONS ON THE PLANS. THE ACTUAL LOCATION MAY VARY FROM THE PLANS, ESPECIALLY IN THE CASE OF UNDERGROUND UTILITIES. WHENEVER THE CONTRACTOR DISCOVERS A DISCREPANCY IN LOCATIONS, HE SHALL CONTACT THE ENGINEER IMMEDIATELY.
15.

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EXCEPT WHERE OTHERWISE PROVIDED FOR IN THESE PLANS AND SPECIFICATIONS, THE COLORADO DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, LATEST EDITION, AND THE CITY OF LOUISVILLE DESIGN AND CONSTRUCTION STANDARDS, 1994 EDITION, SHALL APPLY.
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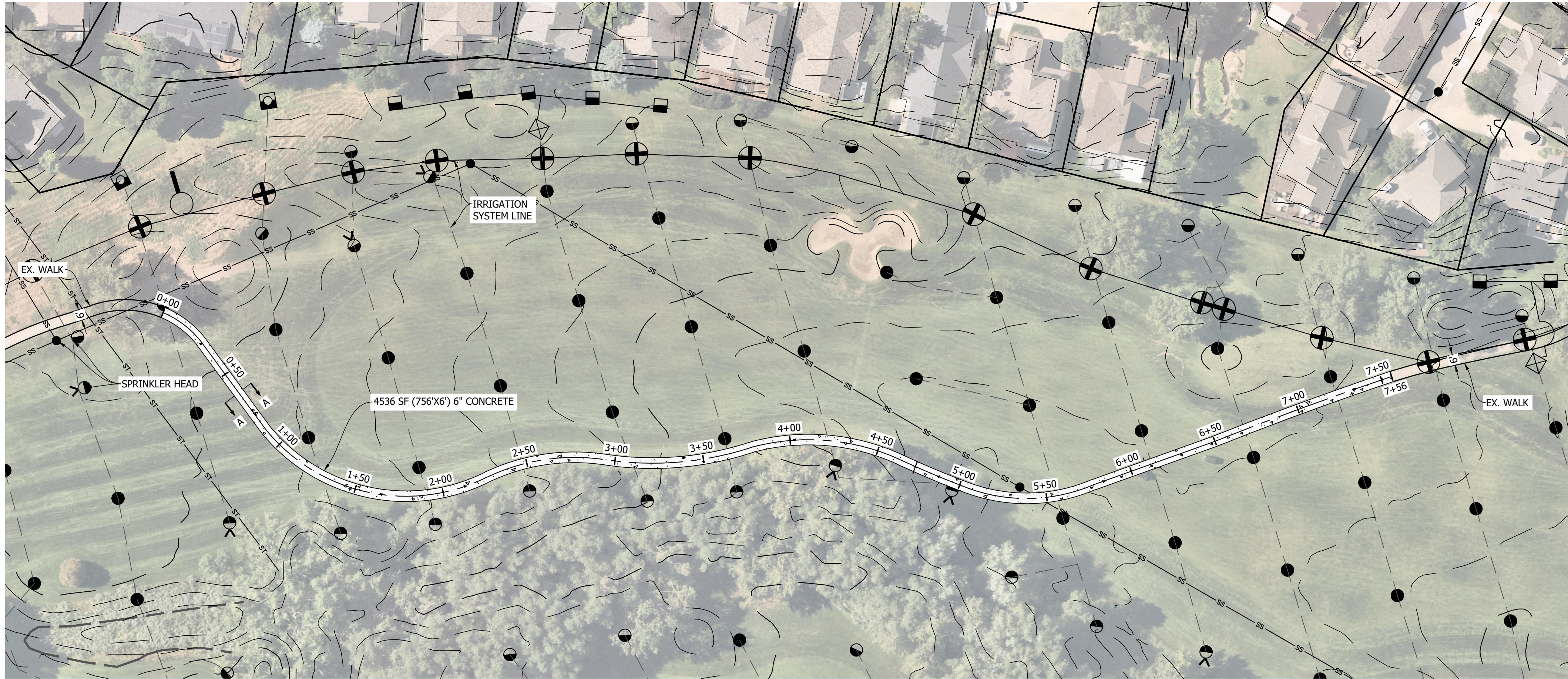
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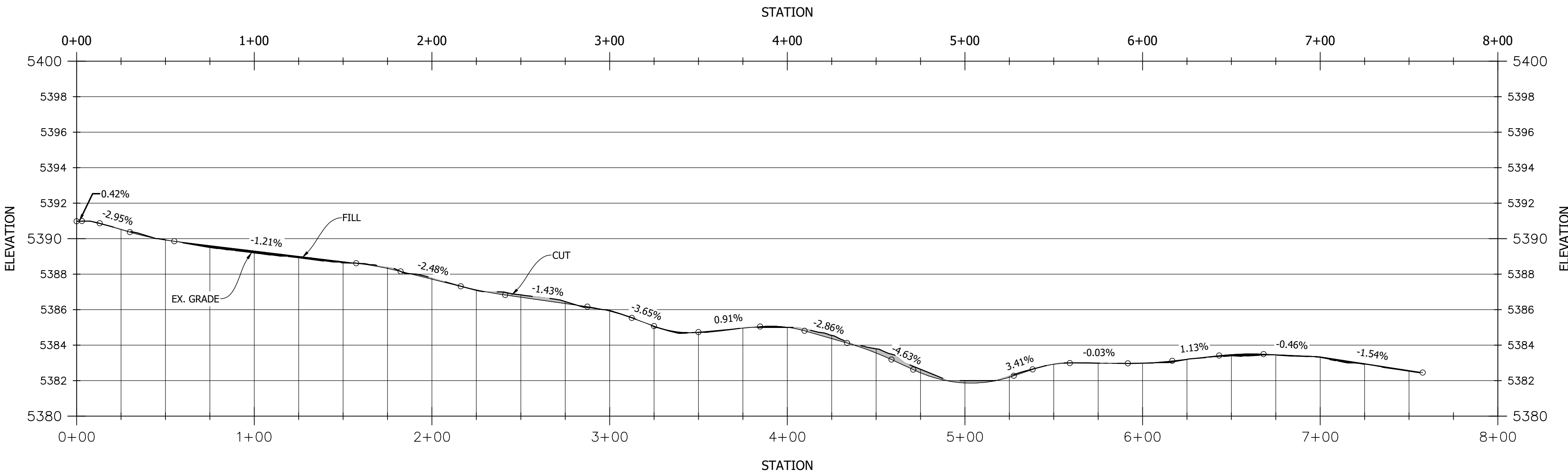
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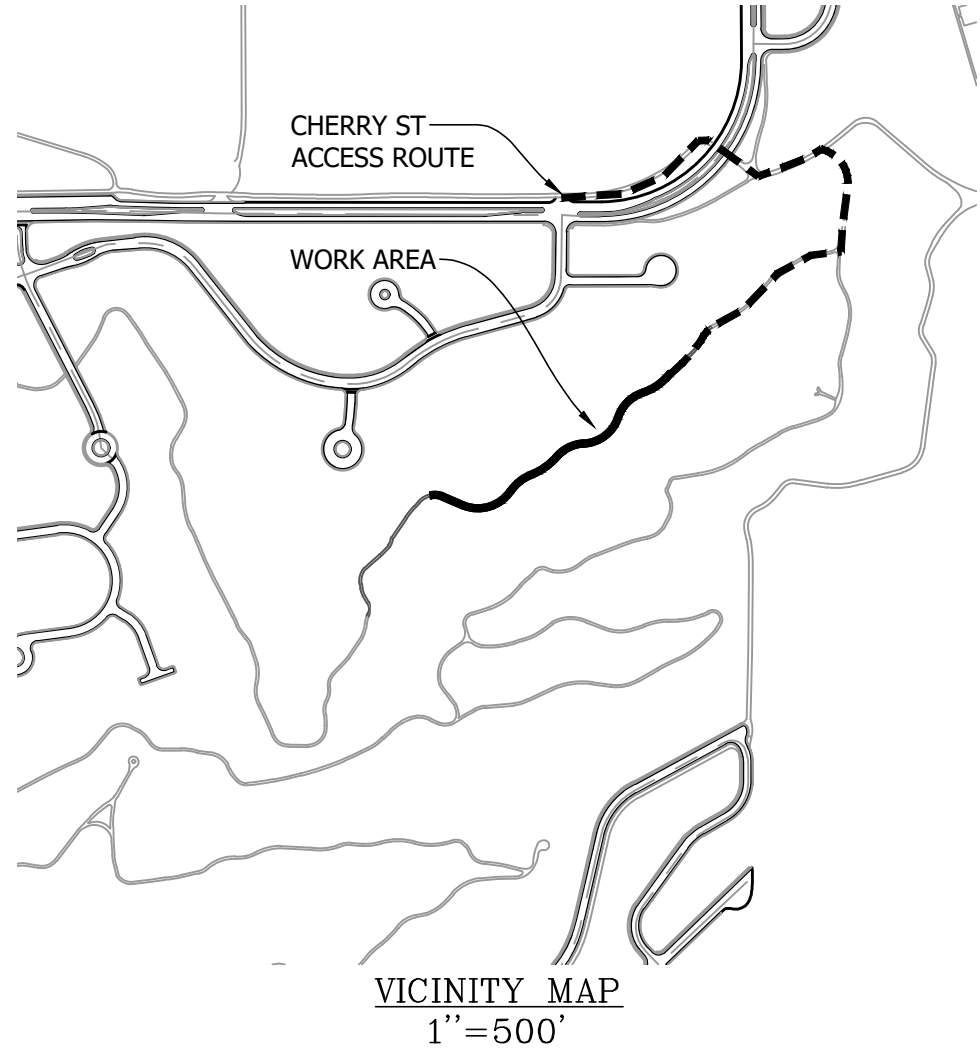


COAL CREEK GOLF COURSE HOLE 13 - PLAN



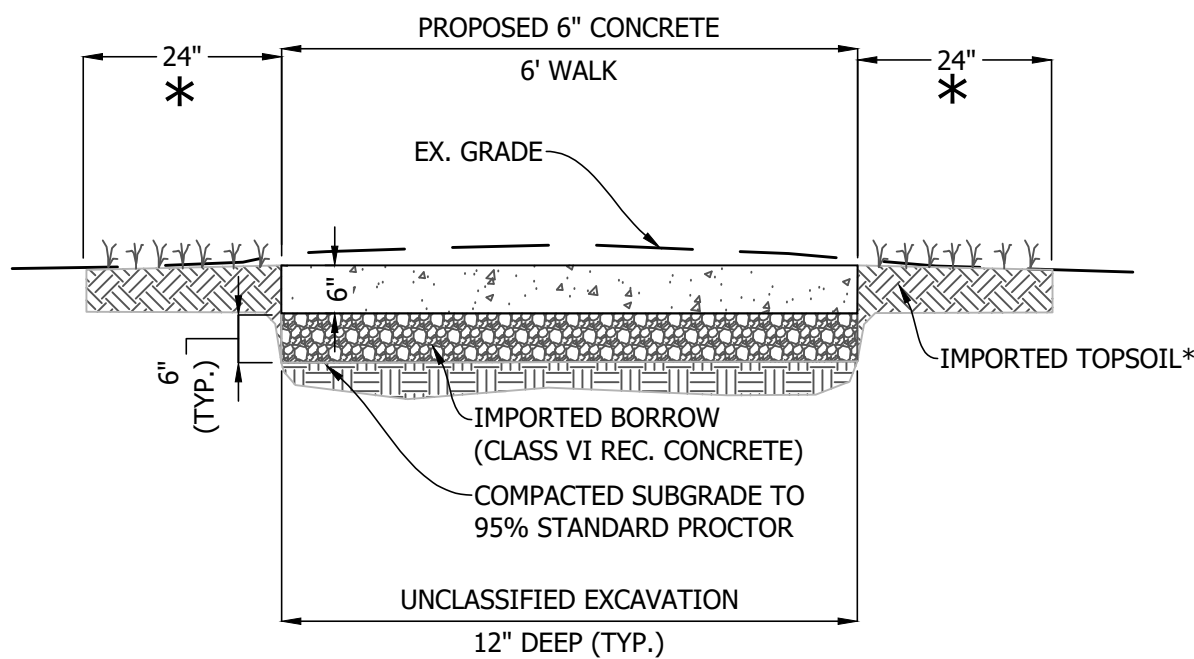
PROFILE

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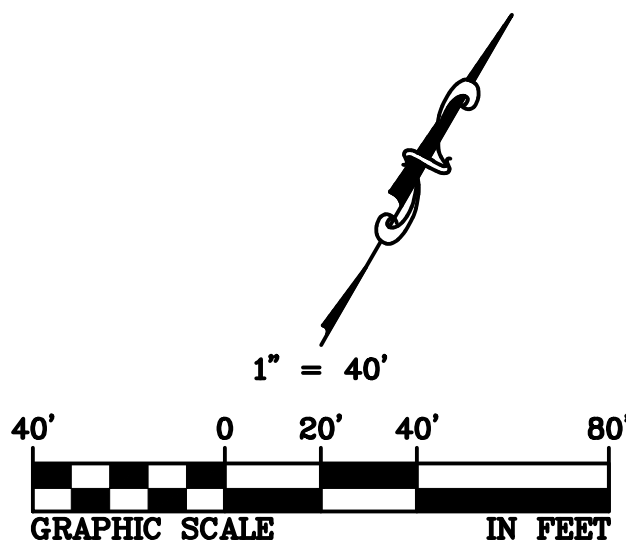
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2. PROVIDE SAW CUT JOINTS AT 6' O.C.
3. PROVIDE 1/2" EXPANSION JOINT MATERIAL EVERY 96 FT (WITH SEALER).



* REMOVE EXISTING SOD AND 4" EXISTING MATERIAL BELOW SOD. INSTALL IMPORTED TOPSOIL (4") AND INSTALL NEW SOD.

SECTION A



April 4, 2024

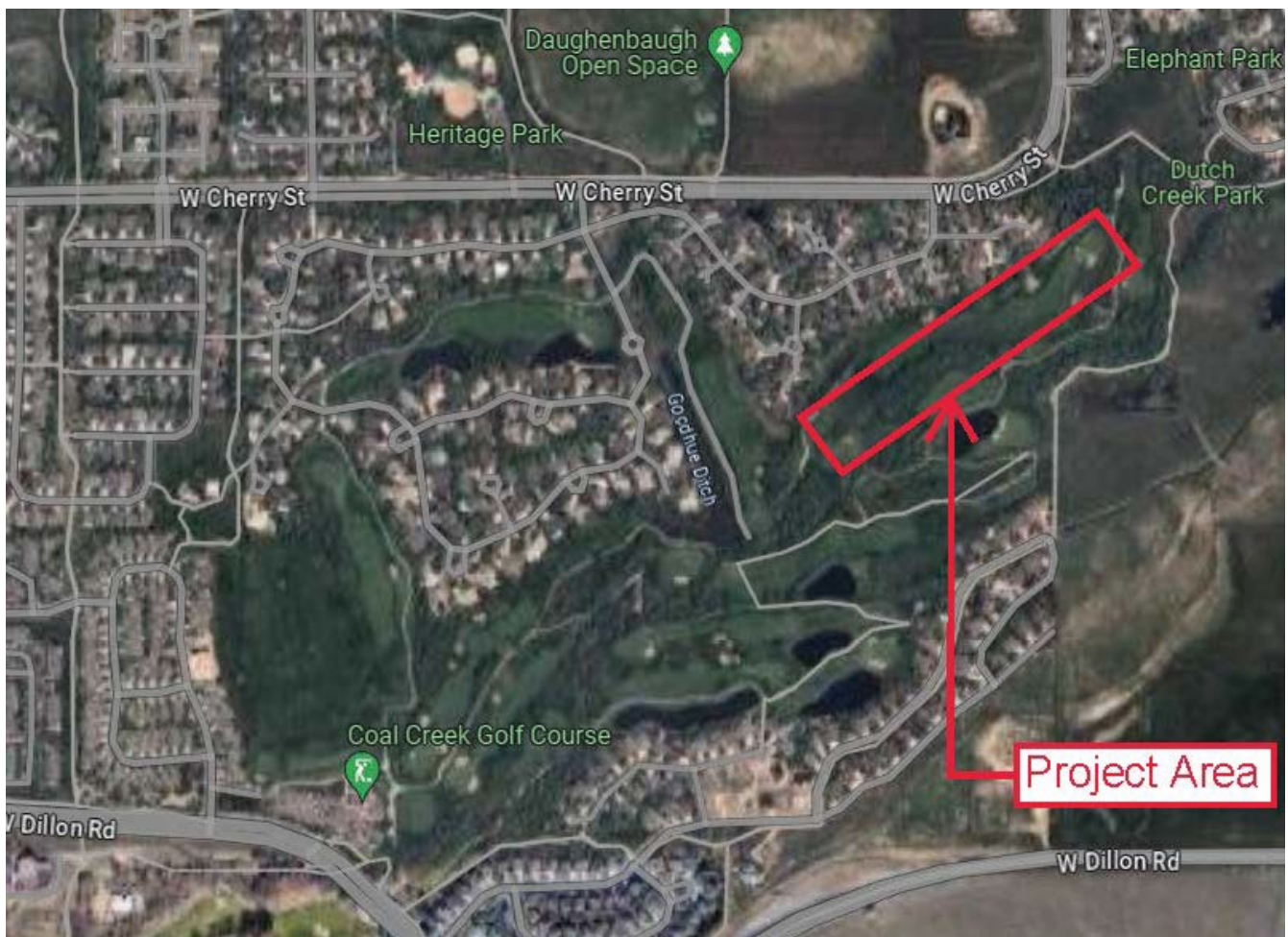
Robert Zuccaro
Director of Community Development
City of Louisville
749 Main St
Louisville, CO 80027

RE: Coal Creek Golf Course Cart Path Certification of No-Rise

Dear Mr. Zuccaro:

In accordance with the requirements of Louisville Municipal Code Chapter 17.56, this letter and the attached data serve as Registered Professional Engineer's **Certification of No Rise** in the 1% Annual Chance (base) flood elevations (BFEs) resulting from the proposed construction of a golf course cart path within the floodplain of Coal Creek. This document is submitted in support of an application to the City of Louisville for a Floodplain Development Permit.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) shows the project area located on Panel No. 08013C0584K, effective August 15, 2019, for City of Louisville, CO. The project area is located within a designated Zone AE Special Flood Hazard Area (SFHA) for Coal Creek, and a portion of the project is located within the regulatory floodway. The project area is located entirely within City of Louisville (City) property on the Coal Creek Golf Course. A Vicinity Map is included below:



VICINITY MAP

The project proposes to extend an existing golf course cart path system to connect two spurs along Hole 13 of the Coal Creek Golf Course. The proposed plans show small, localized areas of minor cut and fill along the length of the proposed path, but the City has specified the following note will be included as a field directive: *"All new finish grades shall match adjacent existing grades at the low side of the path. The new path shall have a cross slope of less than 2%."* Email documentation of the City's plan to include this directive is attached to this certification letter.

Based upon the City's directive we can reasonably conclude, without the need for a detailed hydraulic analysis, that no increase in BFEs and no floodplain or floodway revisions would result from construction of the cart path extension project. As a result, a FEMA Conditional Letter of Map Revision (CLOMR) is not required. In addition to the absence of any BFE increase, an inspection of aerial photography also found no insurable structures located within the floodplain adjacent to the project area. Therefore, no Elevation Certificate is needed for the issuance of a Floodplain Permit.

Based on the factors previously mentioned, we are able to provide certification of no-rise along Coal Creek resulting from the improvements proposed as part of the Coal Creek Golf Course Hole 13 Path Project.

In a phone conversation the afternoon of April 4, 2024, Robert Zuccaro, the City's Director of Community Development, stated that the Land Use Application Form, Development/Permit Review Fee, and Public Notice items from the Floodplain Development Permit application checklist do not need to be included in this submittal.

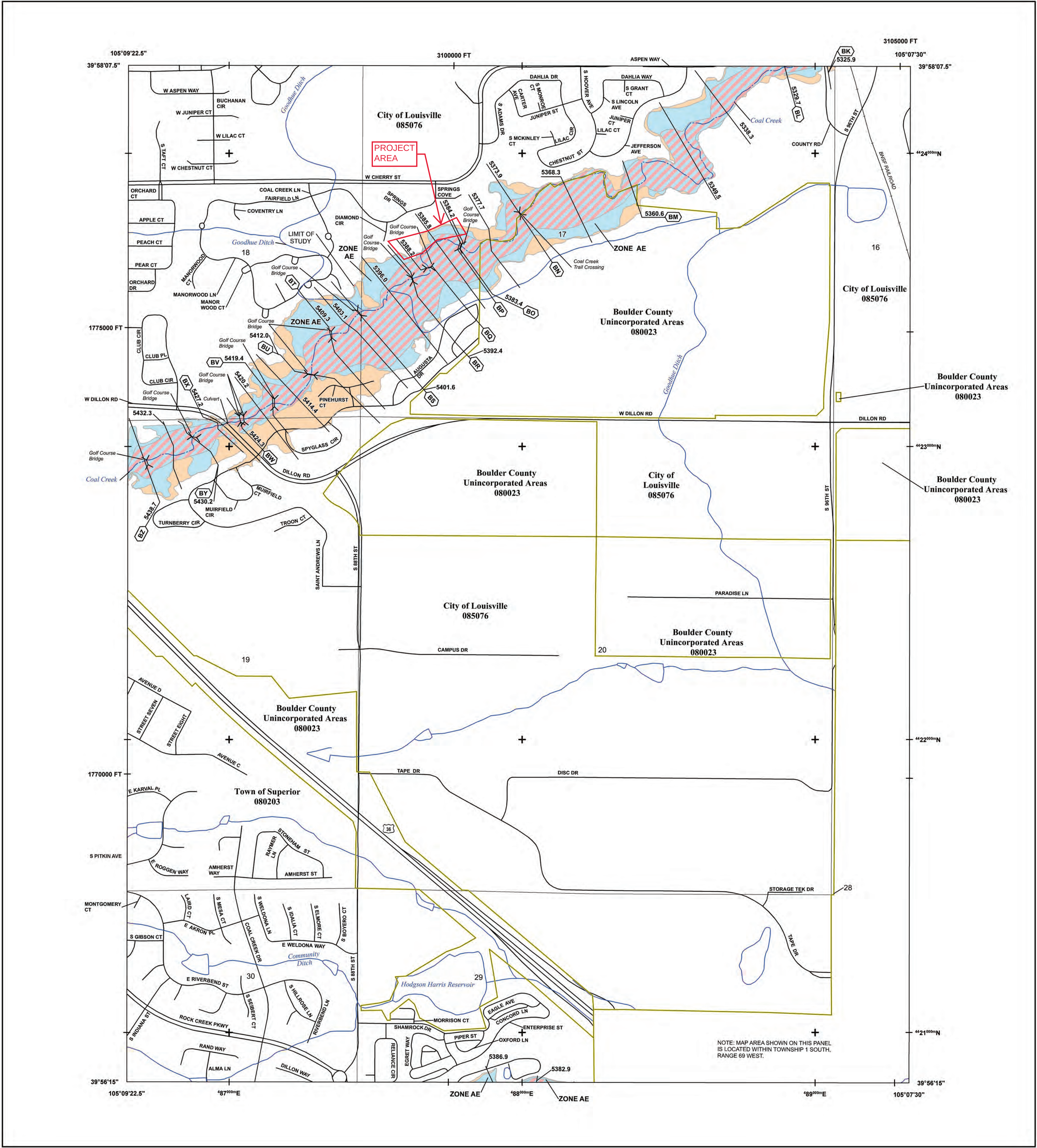
Thank you for your review. Please feel free to contact us with any questions or if you need any additional information related to this project or the certification of no-rise.

Sincerely,
ICON Engineering, Inc.

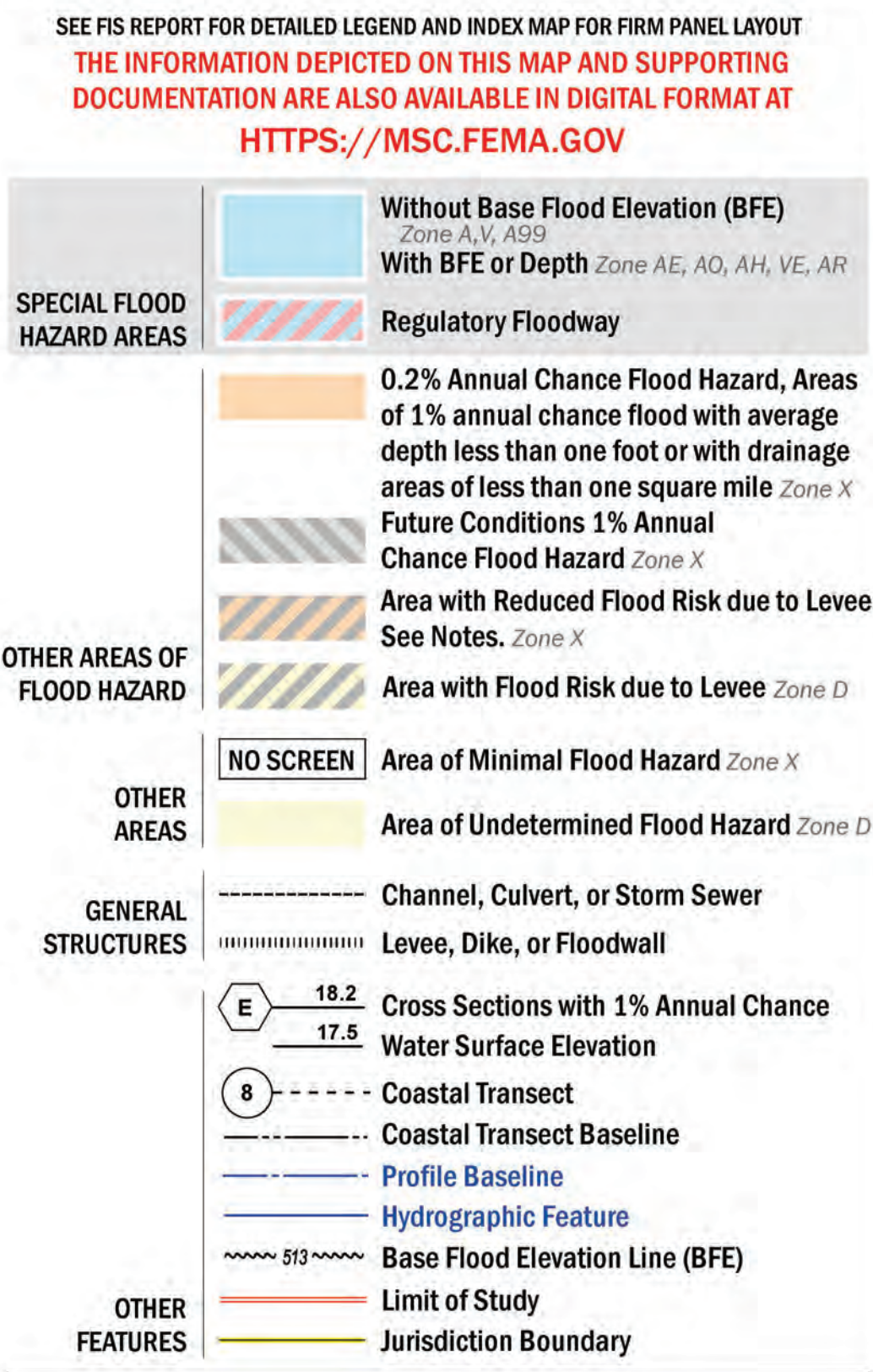
A handwritten signature in black ink, appearing to read "Ben Smith", with a stylized flourish at the end.

Ben Smith, P.E. | Senior Project Engineer
bsmith@iconeng.com | 303-221-0802





FLOOD HAZARD INFORMATION



NOTES TO USERS

For information and questions about this Flood Insurance Rate Map (FIRM), available products associated with this FIRM, including historic versions, the current map date for each FIRM panel, how to order products, or the National Flood Insurance Program (NFIP) in general, please call the FEMA Map Information eXchange at 1-877-FEMA-MAP (1-877-336-2627) or visit the FEMA Flood Map Service Center website at <https://msc.fema.gov>. Available products may include previously issued Letters of Map Change, a Flood Insurance Study Report, and/or digital versions of this map. Many of these products can be ordered or obtained directly from the website.

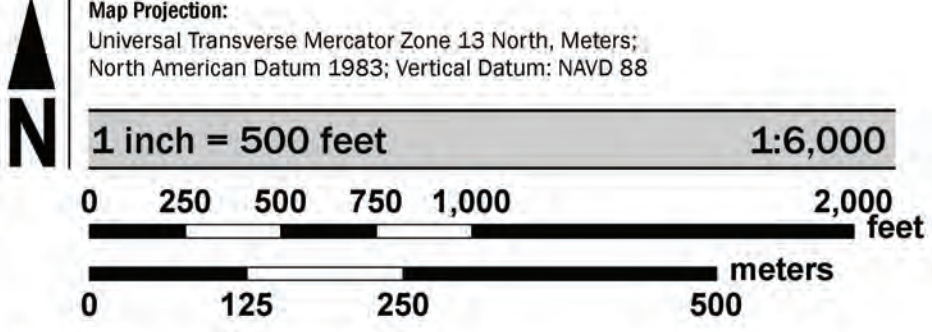
Communities annexing land on adjacent FIRM panels must obtain a current copy of the adjacent panel as well as the current FIRM Index. These may be ordered directly from the Flood Map Service Center at the number listed above.

For community and countywide map dates refer to the Flood Insurance Study Report for this jurisdiction.

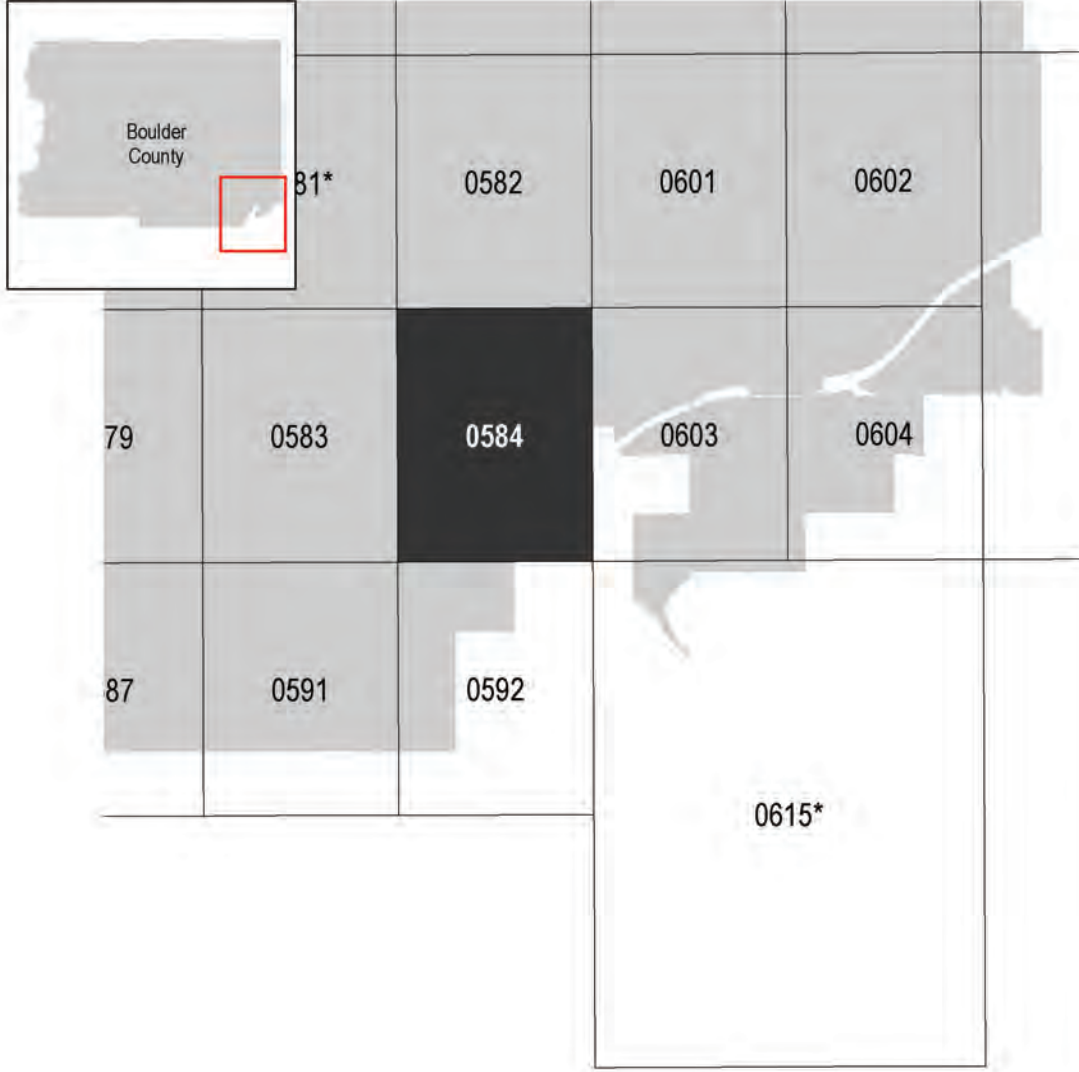
To determine if flood insurance is available in this community, contact your insurance agent or call the National Flood Insurance Program at 1-800-638-6620.

Base map information shown on the FIRM was provided by the FEMA Map Service Center, the Bureau of Land Management and Boulder County.

SCALE



PANEL LOCATOR



*PANEL NOT PRINTED



NATIONAL FLOOD INSURANCE PROGRAM
FLOOD INSURANCE RATE MAP

BOULDER COUNTY,
COLORADO
and Incorporated Areas

PANEL 584 OF 615

COMMUNITY	NUMBER	PANEL	SUFFIX
BOULDER COUNTY	080023	0584	K
LOUISVILLE, CITY OF	085076	0584	K
SUPERIOR, TOWN OF	080203	0584	K

Notice: This map was reissued on 8/26/2019 to make a correction. This version replaces any previous versions. See the Notice-to-User Letter that accompanied this correction for details.

VERSION NUMBER
2.3.3.0

MAP NUMBER
08013C0584K

MAP REVISED
AUGUST 15, 2019

COAL CREEK GOLF COURSE HOLE 13 PATH PROJECT



LEGEND

EXISTING:

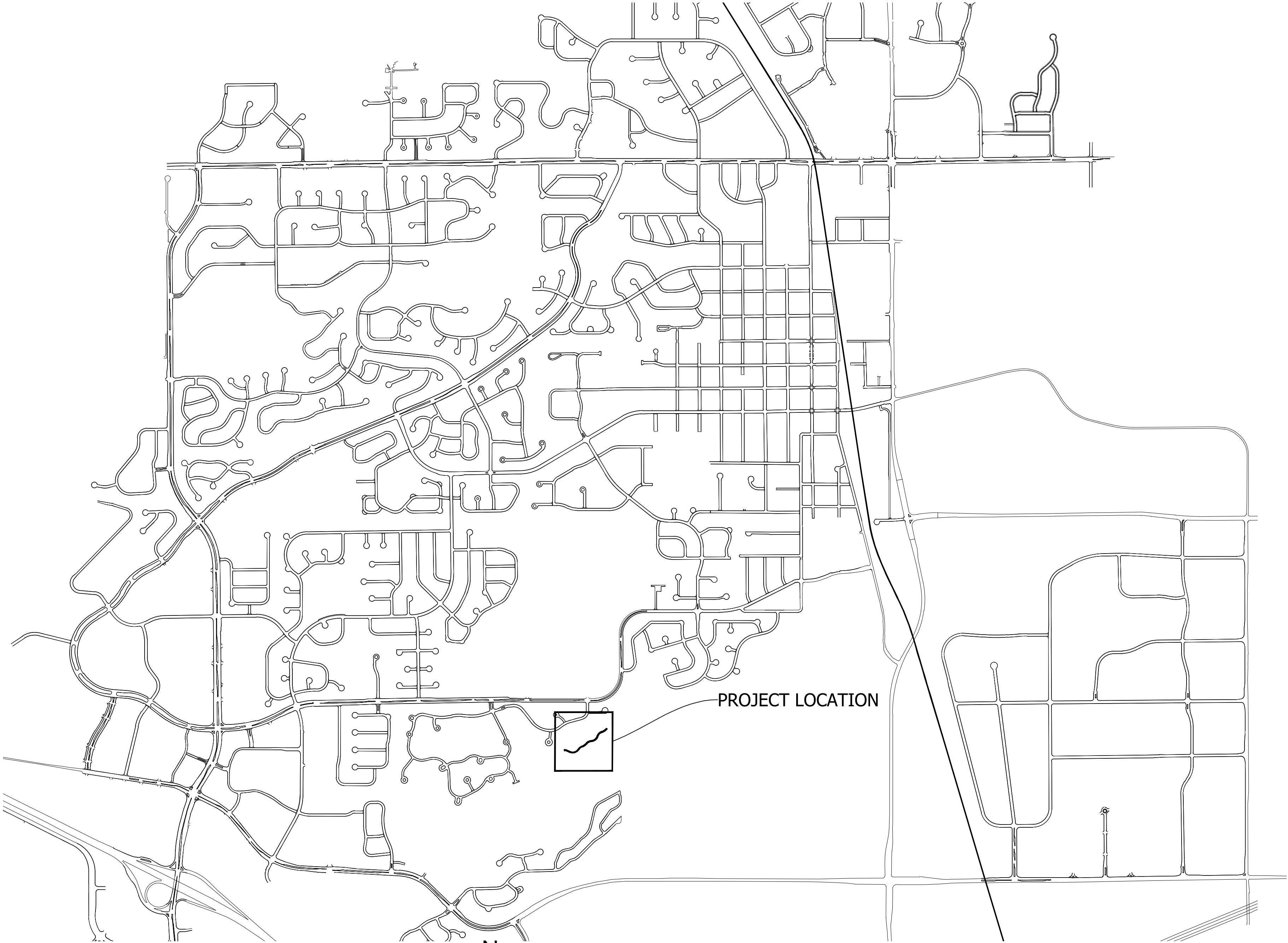
- WALK
- CURB & GUTTER
- ROW
- WATER MAIN & VALVE
- FIRE HYDRANT
- SANITARY SEWER & MANHOLE
- INLET
- STORM SEWER & MANHOLE
- GAS LINE
- ELECTRIC LINE
- FIBER OPTIC LINE
- CABLE TV
- POWER POLE
- TRAFFIC SIGN

PROPOSED:

- 4" CONCRETE
- 6" CONCRETE
- 8" CONCRETE
- 10" CONCRETE
- 12" CONCRETE
- CURBWALK
- CURB AND GUTTER
- ASPHALT PATCH
- EDGE COLD MILLING 0" TO 1 1/2"

SHEET INDEX

SHEET NO.	DESCRIPTION
1	COVER
2	GENERAL NOTES
3	PLAN AND PROFILE



LOCATION MAP
1"=1000'



MARK-UP SET
01/30/2024

SHEET
1
OF
3

GENERAL NOTES (ALL CONSTRUCTION):

1.

ALL MATERIALS AND WORKMANSHIP SHALL BE IN CONFORMANCE WITH THE DESIGN AND CONSTRUCTION STANDARDS OF THE CITY OF LOUISVILLE AND THESE CONTRACT SPECIFICATIONS. THE CONTRACTOR SHALL HAVE IN HIS POSSESSION AT ALL TIMES ONE (1) SIGNED COPY OF THE PLANS, STANDARDS, AND CONTRACT SPECIFICATIONS AS APPROVED BY THE CITY. THE CONTRACTOR SHALL OBTAIN WRITTEN APPROVAL FOR ANY VARIANCE TO THE ABOVE DOCUMENTS.
2.

THE CONTRACTOR SHALL MAINTAIN ONE RECORD COPY OF ALL DRAWINGS WHICH ARE TO BE READILY AVAILABLE TO THE ENGINEER AT ALL TIMES. THE FINAL RECORD DRAWINGS (AS-BUILTS) SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL PAYMENT.
3.

CONTRACTOR SHALL OBTAIN, AT HIS OWN EXPENSE, ALL APPLICABLE CODES, LICENSES, STANDARDS, SPECIFICATIONS, PERMITS, BONDS, ETC. WHICH ARE NECESSARY TO PERFORM THE PROPOSED WORK. THE CONTRACTOR, ALONG WITH ALL SUBCONTRACTORS SHALL BE LICENSED IN THE CITY OF LOUISVILLE. CONTRACTOR SHALL SUBMIT A LIST OF ALL SUBCONTRACTORS INVOLVED IN THE PROJECT AND THEIR LICENSE NUMBERS TO THE ENGINEER. THE CONTRACTOR SHALL OBTAIN A RIGHT OF WAY PERMIT FROM THE CITY OF LOUISVILLE PUBLIC WORKS DEPARTMENT FOR THE PROJECT. A COPY OF THE RIGHT OF WAY PERMIT SHALL BE ON SITE AT ALL TIMES AND THE CONTRACTOR SHALL FORWARD A COPY TO ALL SUBCONTRACTORS.
4.

IF WATER IS REQUIRED FOR THE PROJECT, THE CONTRACTOR SHALL OBTAIN A BULK WATER PERMIT FROM THE CITY OF LOUISVILLE PUBLIC WORKS DEPARTMENT IN ACCORDANCE WITH THE PERMIT REQUIREMENTS.
5.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING STREETS, CURBS, SIDEWALKS, BUILDINGS, DRIVEWAYS, ALLEYS, LAWNS, PARKING LOTS, ETC. ADJACENT TO THE PROJECT FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGES CAUSED BY THE CONTRACTORS OPERATIONS SHALL BE RECONSTRUCTED OR REPAIRED WITH LIKE MATERIALS TO THE SATISFACTION OF THE ENGINEER AND AT THE CONTRACTOR'S EXPENSE.
6.

THE CONTRACTOR SHALL PROVIDE DAILY CLEANUP OF THE SITE INCLUDING BUT NOT LIMITED TO REMOVAL OF ALL TRASH AND DEBRIS AND REMOVAL OF MUD, DIRT, ETC. FROM SIDEWALK AND PAVEMENT SURFACES WITHIN AND ADJACENT TO THE SITE. CLEANUP WILL INCLUDE SWEEPING ADJACENT SURFACES ACCESSIBLE TO THE GENERAL PUBLIC.
7.

THE CONTRACTOR SHALL COORDINATE WITH PROPERTY OWNERS/RESIDENTS TO PHASE WORK SUCH THAT EMERGENCY ACCESS IS PROVIDED AT ALL TIMES AND RESIDENCE ACCESS IS AVAILABLE DURING NON-WORKING HOURS.
8.

WHERE IT IS REQUIRED TO CUT EXISTING ASPHALT OR CONCRETE, THE CUTTING SHALL BE DONE TO NEAT, STRAIGHT LINE BY SAW CUTTING.
9.

COMPACTION FOR THE PROJECT SHALL BE AS SPECIFIED IN THE TECHNICAL SPECIFICATIONS.
10.

WATER SHALL BE USED AS A DUST PALLIATIVE WHERE REQUIRED. LOCATIONS SHALL BE AS ORDERED BY THE ENGINEER. THIS WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE WORK.
11.

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE CITY ENGINEER AND PROJECT ENGINEER OF ANY PROBLEM IN CONFORMING TO THE APPROVED PLANS OR ANY ELEMENT OF THE PROPOSED IMPROVEMENTS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
12.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE CITY ENGINEER AT LEAST 48 HOURS PRIOR TO START OF ANY CONSTRUCTION. IF WORK IS SUSPENDED FOR ANY PERIOD OF TIME AFTER INITIAL START-UP, THE CONTRACTOR SHALL NOTIFY THE CITY ENGINEER 48 HOURS PRIOR TO RESTART.
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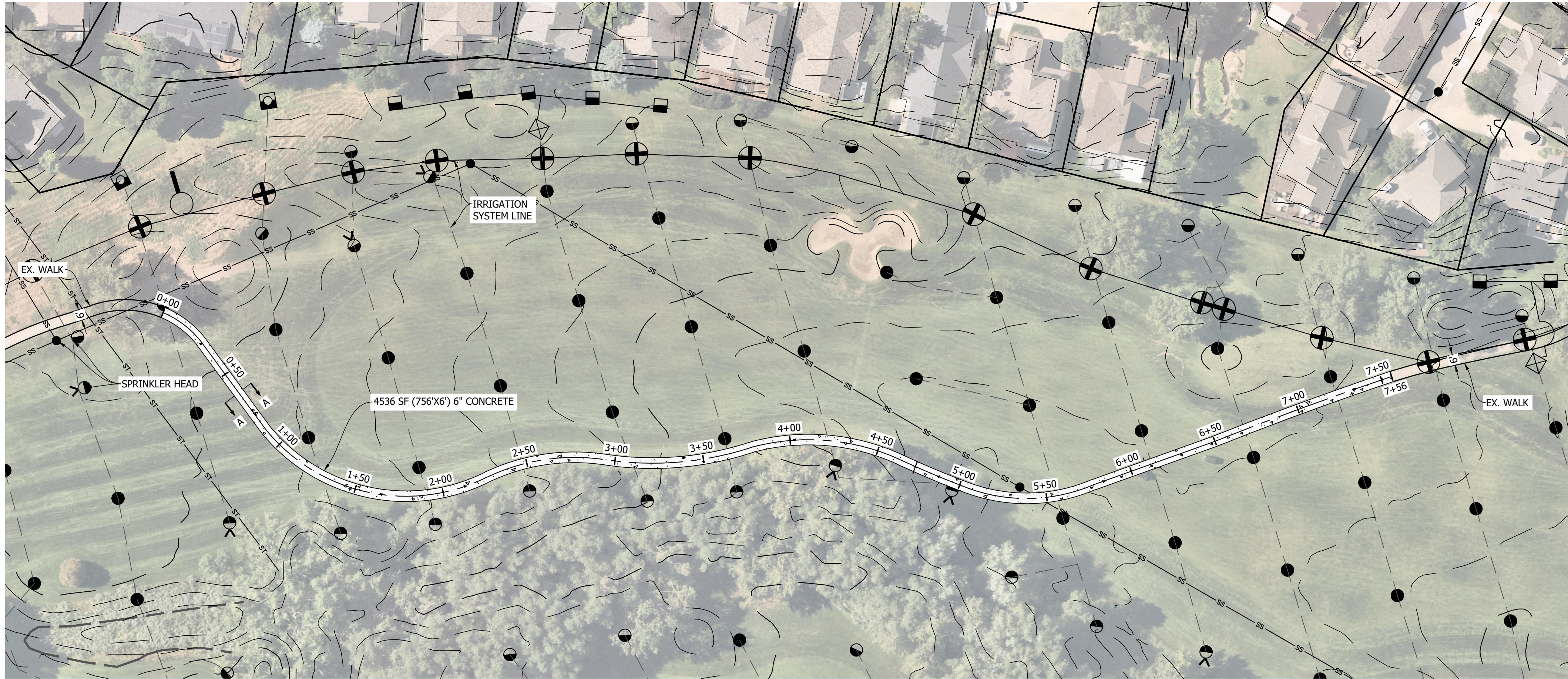
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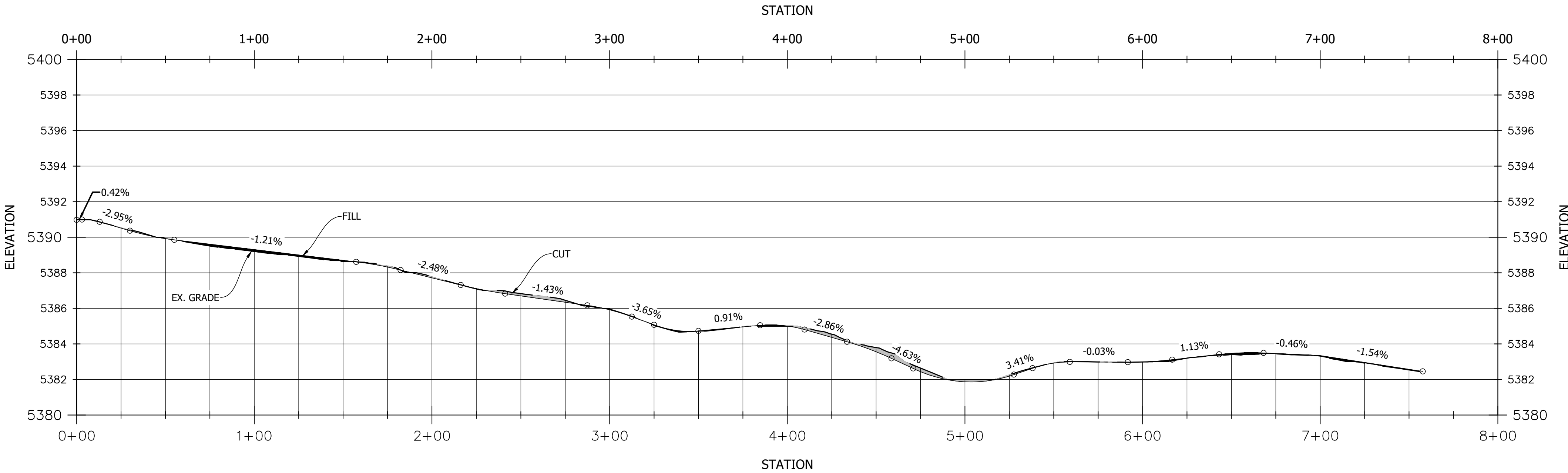
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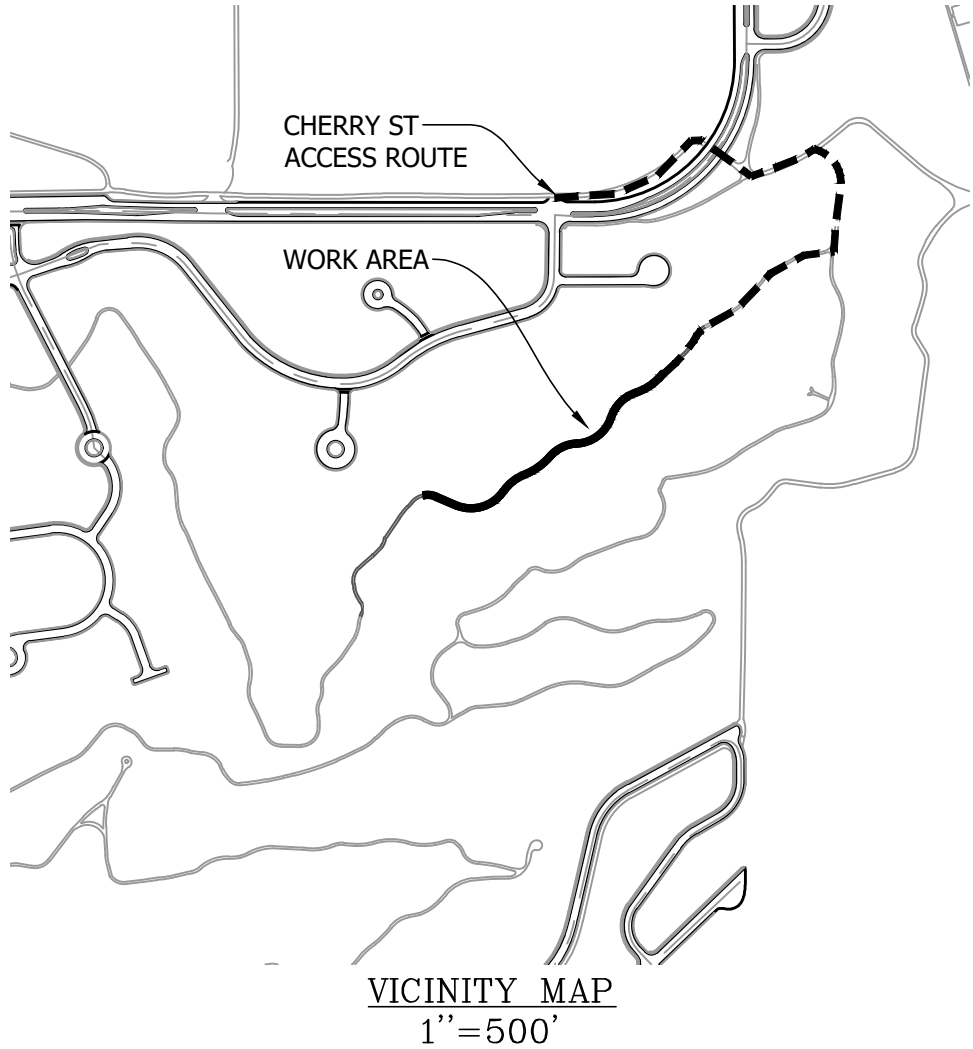


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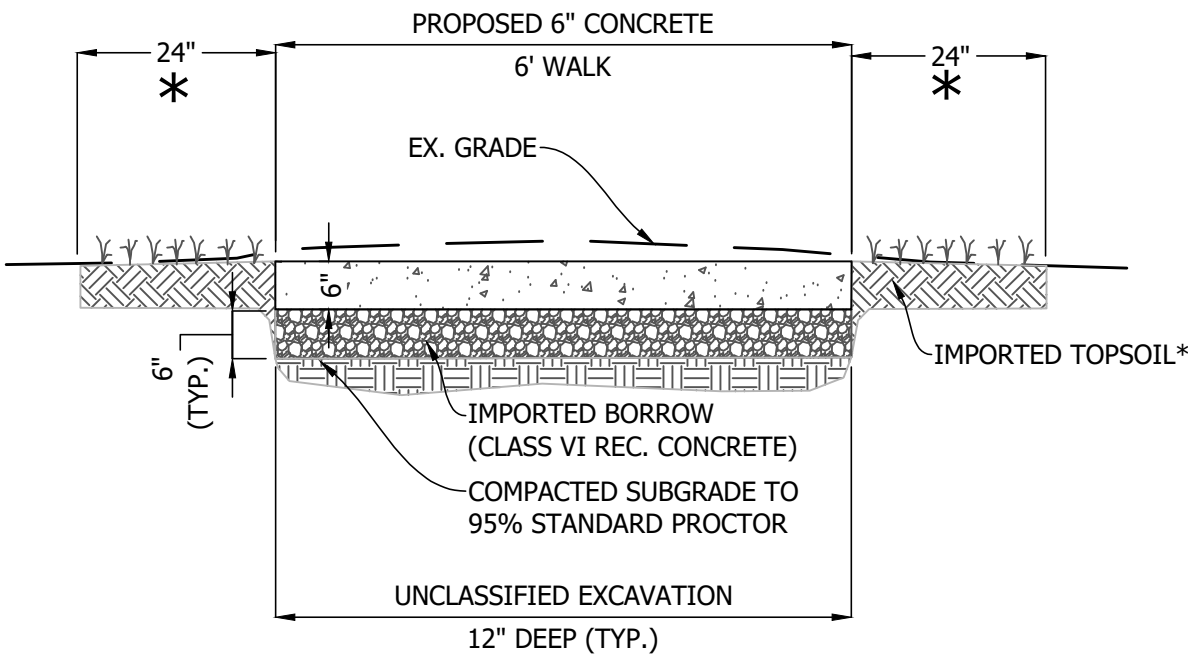
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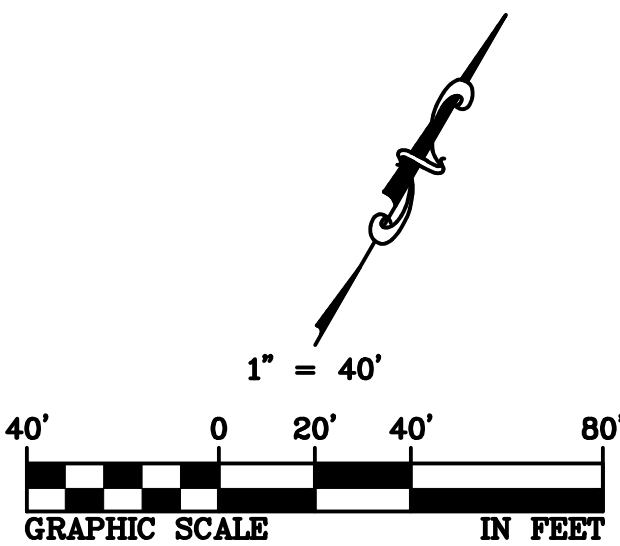
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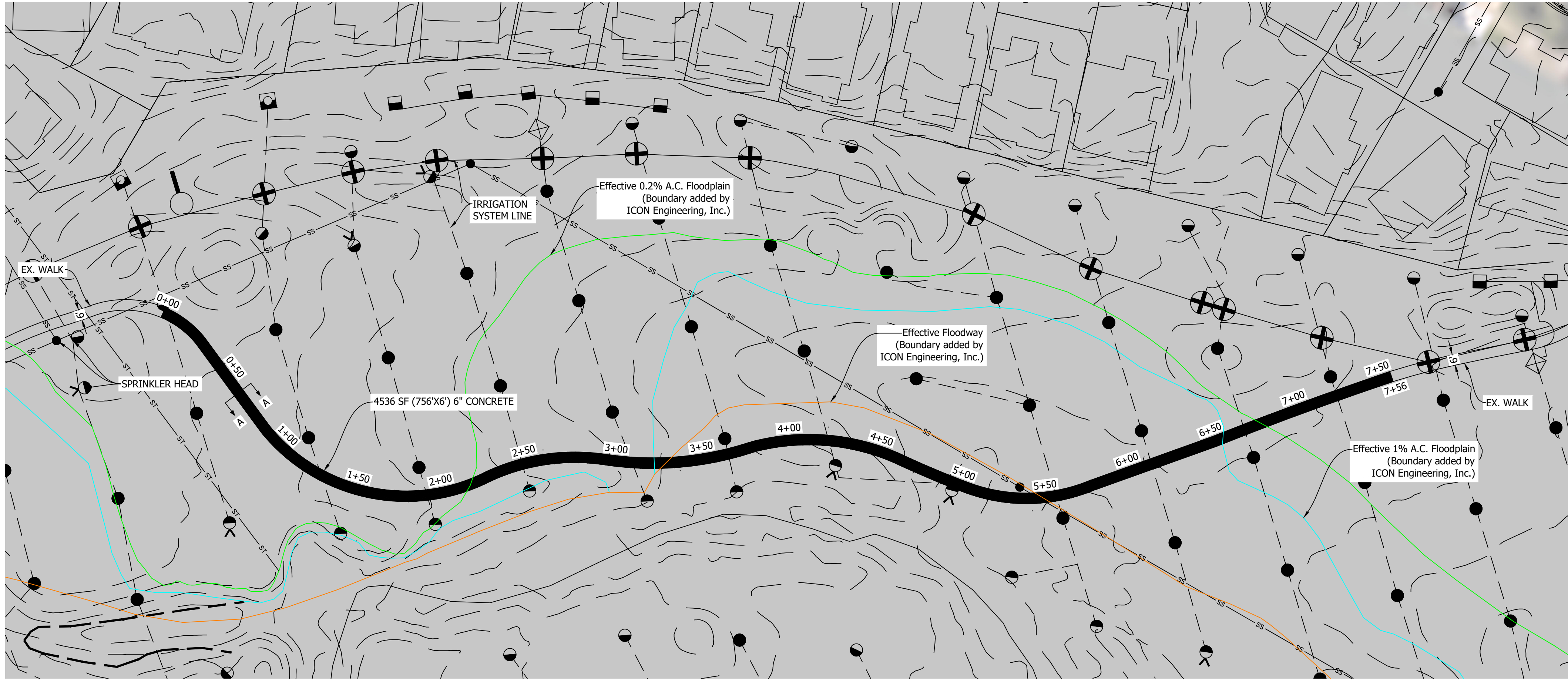
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3. PROVIDE 1/2" EXPANSION JOINT MATERIAL EVERY 96 FT (WITH SEALER).



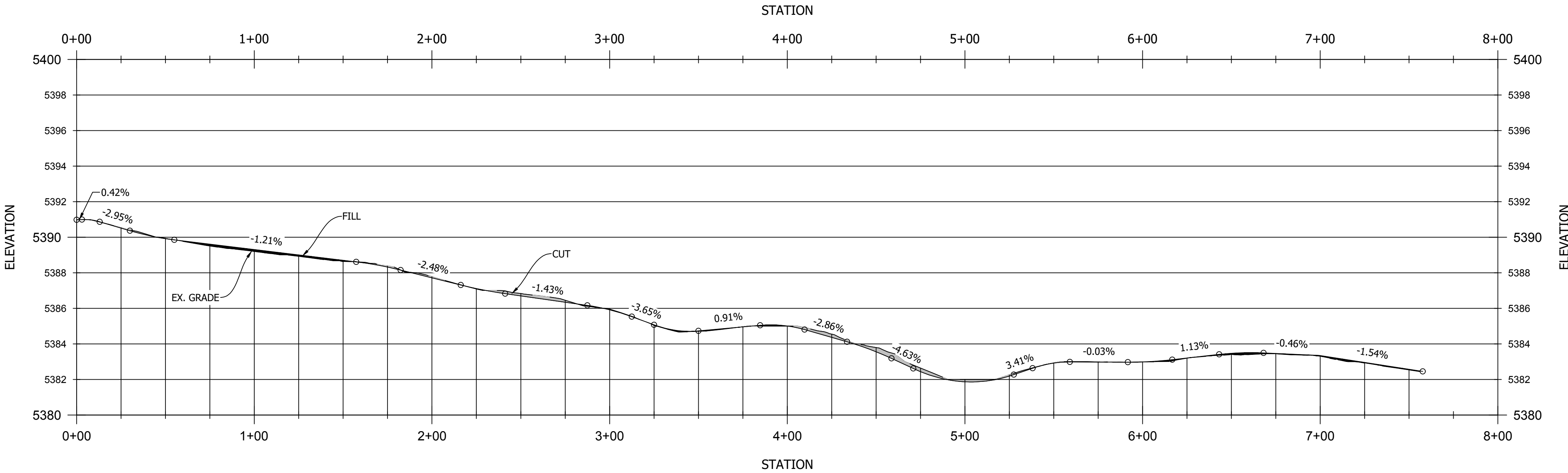
* REMOVE EXISTING SOD AND 4" EXISTING MATERIAL BELOW SOD. INSTALL IMPORTED TOPSOIL (4") AND INSTALL NEW SOD.

SECTION A



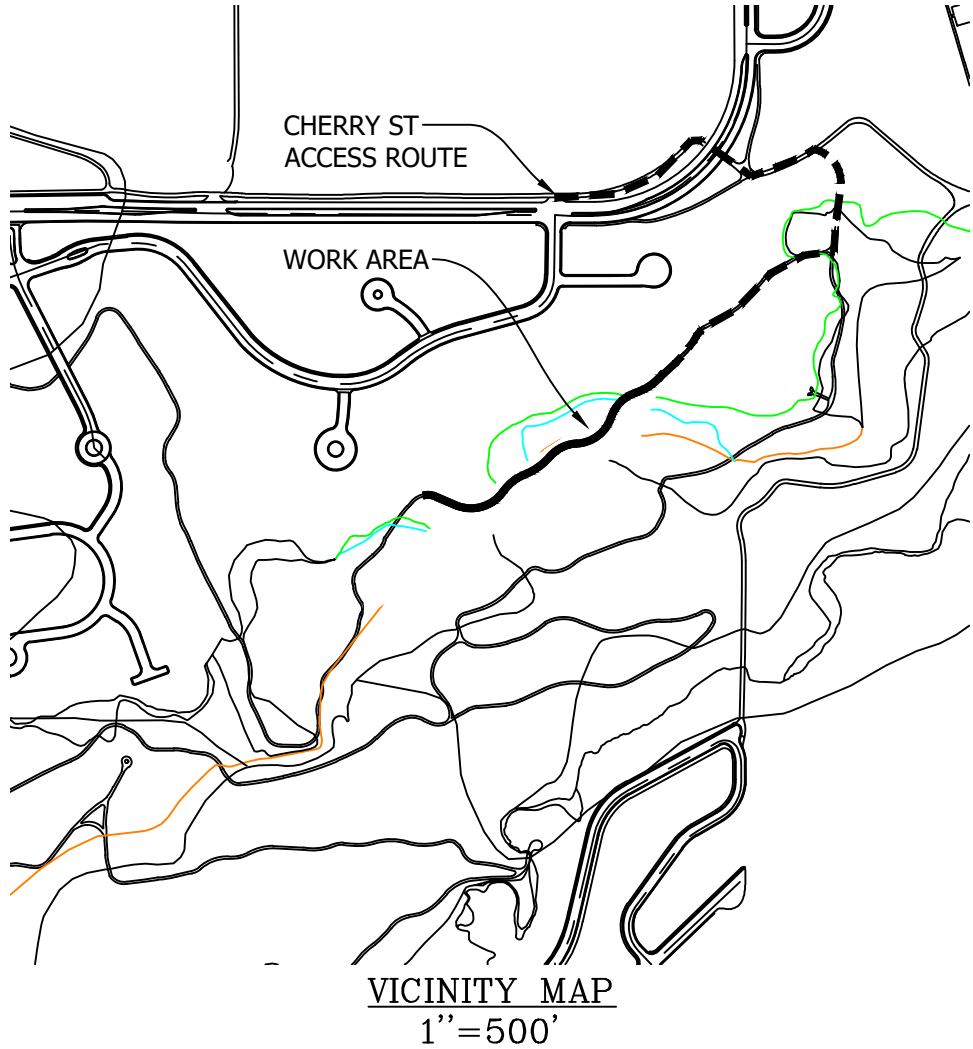


COAL CREEK GOLF COURSE HOLE 13 - PLAN



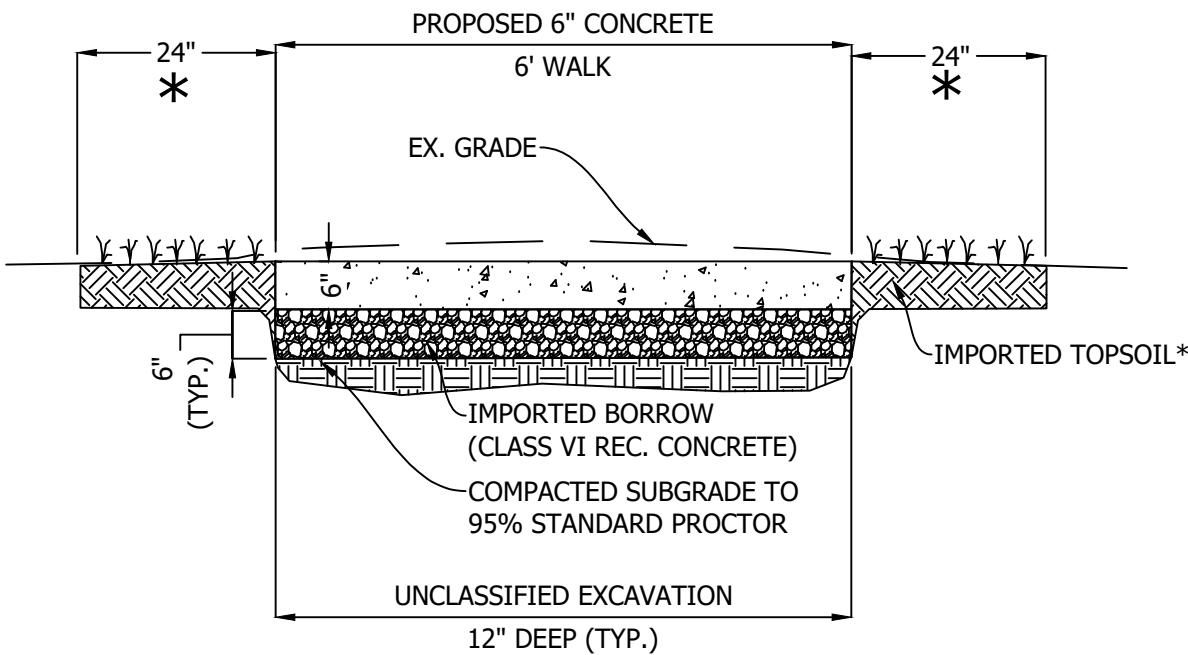
PROFILE

1" = 40' HORIZONTAL
1" = 4' VERTICAL



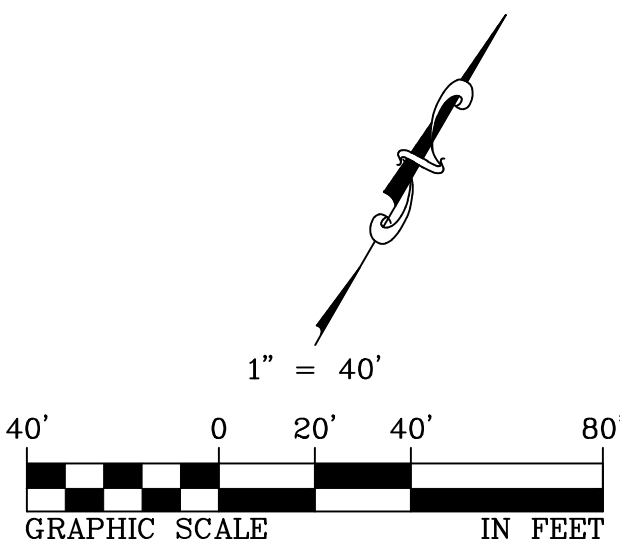
NOTES

1. PROVIDE #4 REBAR, CONTINUOUS, 18" ON CENTER, IN WALK AND CURB ADJACENT TO TREES AT LOCATIONS DIRECTED BY THE ENGINEER. REBAR SHALL EXTEND BEYOND EACH SIDE OF TREE, 10' MINIMUM, UNLESS OTHERWISE APPROVED BY THE ENGINEER. PROVIDE MASONITE OR OTHER APPROVED FORM MATERIAL IN CLOSE PROXIMITY TO TREES.
2. PROVIDE SAW CUT JOINTS AT 6' O.C.
3. PROVIDE 1/2" EXPANSION JOINT MATERIAL EVERY 96 FT (WITH SEALER).



* REMOVE EXISTING SOD AND 4" EXISTING MATERIAL BELOW SOD. INSTALL IMPORTED TOPSOIL (4") AND INSTALL NEW SOD.

SECTION A



PLAN AND PROFILE

COAL CREEK GOLF COURSE HOLE 13 CART PATH PROJECT