STAFF REPORT

Minor Development/Replat and Site Plan Application

Main Street Depot Parking Lot

392 & 444 S Main Street

Applicant: Town of Elizabeth & Don and Linda Bulmer

Location: Northeast corner of Main Street and Spruce Street

Attachment A: Applicant's submittal documents and proposed plans

Attachment B: Referral agency compiled comments letters and redlines

Attachment C: Public Notice

Executive Summary

The Town of Elizabeth and Don and Linda Bulmer request approval for a minor development (replat) and site plan for the Main Street Depot project at 392 and 444 S Main Street. The proposal would reconfigure approximately 3 acres of downtown property into three lots: one maintaining the existing Carriage Shoppes, one preserving Main Street frontage for future commercial development, and one adjacent to Running Creek Park for a 116-space public parking facility with restrooms.

The Main Street Streetscape Project requires alternative parking solutions to address the reduction in on-street parking capacity. This need has been identified as a priority since the 2009 Community Revitalization Partnership Report and was reinforced in the 2015 Downtown Strategic Plan. The proposed facility's location will provide safe pedestrian connections between Main Street and Running Creek Park while serving downtown businesses, supporting public events, and accommodating parking for historic properties that cannot meet current requirements due to their original lot configurations.

The project timing aligns with both identified downtown infrastructure needs and the Streetscape construction timeline. The facility will support businesses directly impacted by the Streetscape Project, including Antelope Alpacas and Fiber Arts Center, while providing necessary parking capacity for downtown events and daily business operations. The development incorporates dual access points from Main Street and Spruce Street, pedestrian connections, and public restrooms. This public-private

collaboration maximizes land use efficiency while preserving prime Main Street frontage for future development.

Staff has completed review of the application materials and received approvals from all required referral agencies. The proposal has successfully addressed all technical requirements and standards. The Planning Commission reviewed this proposal at their February 3, 2025 meeting and voted 4-1 to recommend approval.

Staff recommends the Board of Trustees approve Resolution 25R08, approving the minor development, and Resolution 25R09, approving the site plan for the Main Street Depot project.

Applicant Request:

The Town of Elizabeth, owner of 444 S Main Street, and Don and Linda Bulmer, owners of 392 S Main Street and associated back lots, request Board of Trustees approval for a minor development and site plan. The proposal would reconfigure the properties into three lots and develop a public parking facility with 116 spaces (111 standard, 5 ADA-accessible), public restrooms, and pedestrian connections to Main Street and Running Creek Park.

Proposal and Background Summary:

Downtown parking has been identified as a priority in Elizabeth since the 2009 Community Revitalization Partnership Report and was reinforced in the 2015 Downtown Strategic Plan. The majority of downtown's historic properties cannot meet current parking requirements due to their original lot configurations, and the existing fee-in-lieu system creates financial barriers to property improvements. These constraints have highlighted the need for a centralized public parking solution.

In late 2023, the Town acquired 444 S Main Street to develop public parking. The subsequent purchase of the adjacent Carriage Shoppes property by Don and Linda Bulmer created an opportunity to optimize the configuration of these connected properties. This collaboration enables preservation of Main Street frontage while addressing downtown parking needs.

The parking facility development aligns with the Main Street Streetscape Project, scheduled for completion in May 2025. The facility will provide necessary parking capacity to support existing downtown businesses, potential infill development along Main Street, and increasing attendance at community events. The design incorporates pedestrian connections to Main Street and Running Creek Park, public restrooms, and includes space for community events. This infrastructure investment addresses current parking demands while supporting downtown Elizabeth's role as a community destination.

Surrounding Zoning Districts:

North: DT, Downtown District

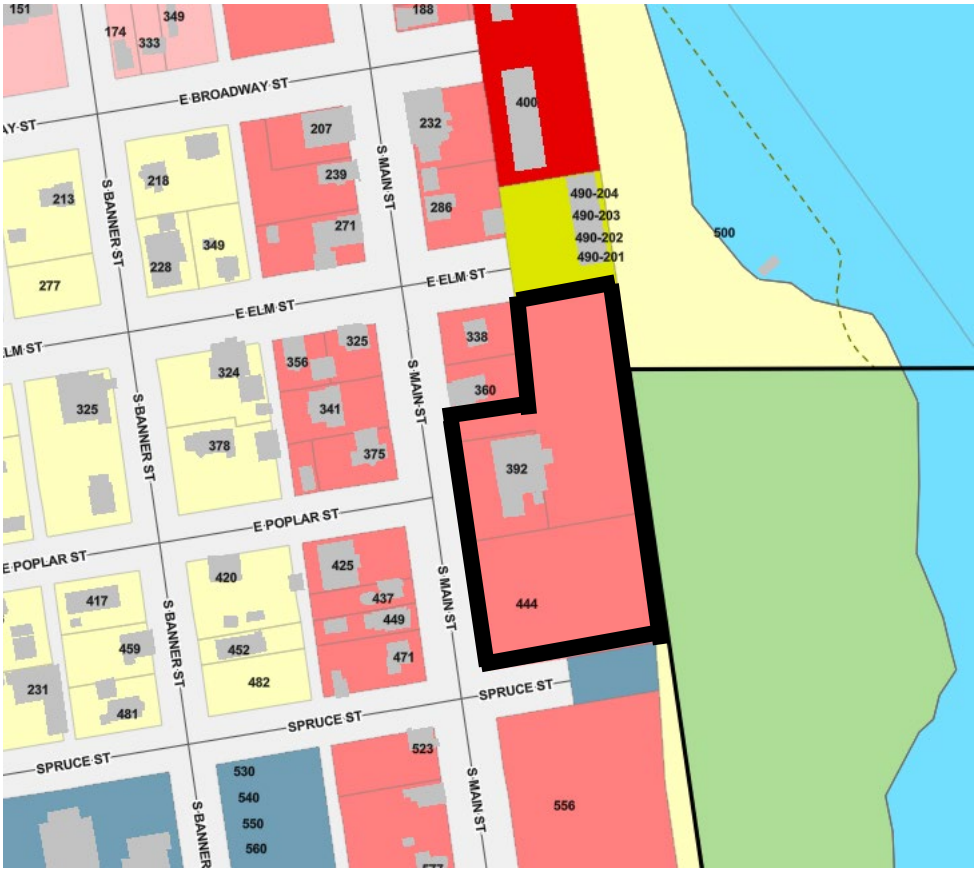
South: DT, Downtown District

East: DT, Downtown District / R-1, Single Family Residential District

West: DT, Downtown District

Subject Property: DT, Downtown District

General Project Location



Approval Criteria:

Minor Development:

The Land Use and Development code, Article III and Sec. 16-3-80, does not stipulate criteria for approval of a replat application; therefore, staff has established a set of criteria for the Planning Commission and Board of Trustees to consider when providing a recommendation to the Board of Trustees. The list of recommendations includes a review against all applicable standards as found in the EMC Land Use and Development code, and the Elizabeth Comprehensive Plan.

Site Plan:

Section 16-2-40 of the EMC includes criteria for the Planning Commission and Board of Trustees to consider for site plans in order to offer a favorable recommendation for approval to the Board of Trustees. This includes review against all applicable standards as found in the EMC Land Use and Development code, the Elizabeth Comprehensive Plan, and the Town of Elizabeth Design Guidelines.

Case Analysis

Staff finds that both the minor development and site plan display conformance with the applicable provisions of the EMC and the Elizabeth Comprehensive Plan. The applications were reviewed and referred to various agencies, with all comments successfully addressed.

Minor Development Analysis:

The proposed replat strategically reconfigures approximately 3 acres of downtown property into three lots that optimize both public and private interests. The configuration maintains existing commercial uses at the Carriage Shoppes, preserves valuable Main Street frontage for future development, and creates an appropriately sized lot for public parking infrastructure. This arrangement supports the Comprehensive Plan's goals for downtown vitality while making efficient use of land resources.

Site Plan Analysis:

The proposed public parking facility is a permitted use in the Downtown (DT) district. The following topics outline the specific analysis:

- Bulk Standards: The proposed restroom facility complies with all setback and height requirements of the DT District.
- Drainage: The drainage plan includes an extended detention basin and has been reviewed for compliance with Town standards.
- Floodplain: The floodplain has been considered in site design and appropriate measures have been incorporated.

- Traffic and Access: Site access is provided via two points: one from Main Street and one from Spruce Street. The access points have been designed to accommodate both daily traffic and event circulation.
- Parking: The site provides 116 total spaces, including 111 standard spaces and 5 ADA-accessible spaces, meeting Town standards for public parking facilities.
- Right-of-Way (ROW): Public sidewalk improvements are proposed along both street frontages to meet Town standards.
- Landscaping: The proposed landscape plan meets Town requirements.

The Old Town Circulation Study confirms both the need for and appropriate location of this facility. The development timing aligns with the Main Street Streetscape project, ensuring continuous parking availability for downtown businesses and events. The site design creates safe pedestrian routes to Running Creek Park and downtown businesses, addressing current safety concerns along Highway 86. Public amenities include restroom facilities and a location for community gatherings and events.

Elizabeth Comprehensive Plan:

The proposals implement several Comprehensive Plan goals:

- Supports Goal 2's emphasis on focusing improvements near the Town's core
- Enhances downtown infrastructure while preserving prime development parcels, consistent with Policy 1.1 promoting diverse commercial development
- Creates pedestrian connections that support Policy 3.3's emphasis on enhanced connectivity

Findings and Staff Recommendation:

Findings and Staff Recommendation:

Staff finds that both the minor development and site plan applications meet the applicable review criteria:

Findings:

1. The replat provides an efficient reconfiguration of lots that supports both public and private interests while maintaining compliance with the EMC.
2. The proposed layout preserves valuable Main Street frontage for future commercial development while creating appropriate lots for existing and planned uses.

3. The site plan meets all technical requirements including access, circulation, drainage, and landscaping.
4. The proposals align with Comprehensive Plan goals for downtown development and infrastructure.
5. The development timing coordinates with other downtown projects including the Main Street Streetscape improvements.
6. The project provides essential public infrastructure to support downtown businesses, events, and community gatherings with key elements: 116 spaces, ADA accessibility, dual access points, and pedestrian connections.

Staff Recommendation:

Based on the analysis above, staff finds that the proposed minor development and site plan for the Main Street Depot project meet all applicable criteria set forth in Chapter 16 of the Elizabeth Municipal Code. The Planning Commission recommended approval of both the minor development and site plan at their February 3, 2025 meeting with a vote of 4-1. Staff recommends the Board of Trustees approve Resolution 25R08, approving the minor development, and Resolution 25R09, approving the site plan for the Main Street Depot project.

ATTACHMENT(S)

Resolution 25R08

Resolution 25R09

Attachment A

Attachment B

Attachment C

RESOLUTION 25R08

A RESOLUTION APPROVING THE MINOR DEVELOPMENT PLAT FOR THE BULMER FILING NO. 1 SUBDIVISION

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ELIZABETH, COLORADO AS FOLLOWS:

Section 1. The Minor Development Plat for the Bulmer Filing No. 1 Subdivision, attached hereto as **Exhibit A**, is hereby approved by the Board of Trustees pursuant to Section 16-3-70 of the Town of Elizabeth Municipal Code.

PASSED, APPROVED, and ADOPTED this ____ day of _____, 2025, by the Board of Trustees of the Town of Elizabeth, Colorado, on first and final reading, by a vote of _____ for and _____ against.

_____
Angela Ternus, Mayor

ATTEST

_____
Michelle M. Oeser, Town Clerk

EXHIBIT A

BULMER FILING NO. 1

A REPLAT OF LOTS 5 AND 6, BLOCK 3 AND LOTS 1–6, INCLUSIVE, BLOCK 13, AND
A PART OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
TOWN OF ELIZABETH, COUNTY OF ELBERT, STATE OF COLORADO.

PROPERTY DESCRIPTION

A PARCEL OF LAND BEING LOTS 5 AND 6, BLOCK 3 TOWN OF ELIZABETH, LOTS 1 THOUGH 6 INCLUSIVE BLOCK 13, PHILLIPS ADDITION TO THE TOWN OF ELIZABETH, A PORTION OF THE COLORADO AND SOUTHERN RAILWAY RIGHT–OF–WAY AND VACATED POPLAR STREET, ALL IN THE TOWN OF ELIZABETH, COUNTY OF ELBERT, STATE OF COLORADO, LOCATED IN THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 8, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN, SAID TOWN, COUNTY, AND STATE, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 18, WHENCE THE NORTH LINE OF SAID NORTHEAST QUARTER BEARS NORTH 89°12'42" EAST, A DISTANCE OF 2642.37 FEET, ALL BEARINGS HEREIN ARE REFERENCED THERETO;

THENCE ALONG SAID NORTH LINE, NORTH 89°12'42" EAST, A DISTANCE OF 1140.98 FEET;

THENCE DEPARTING SAID NORTH LINE, SOUTH 00°47'18" EAST, A DISTANCE OF 572.03 FEET TO THE NORTHEAST CORNER OF LOT 1, BLOCK 3 AS SHOWN ON SAID TOWN OF ELIZABETH AND THE POINT OF BEGINNING;

THENCE NORTH 80°23'06" EAST, A DISTANCE OF 130.14 FEET TO THE EASTERLY LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED RECORDED IN BOOK 22 AT PAGE 123, IN THE OFFICIAL RECORDS OF SAID COUNTY;

THENCE ALONG SAID EASTERLY LIEN THE FOLLOWING 3 COURSES;

1. SOUTH 09°26'52" EAST, A DISTANCE OF 237.96 FEET;

2. SOUTH 05°06'01" EAST, A DISTANCE OF 53.08 FEET;

3. SOUTH 05°09'41" EAST, A DISTANCE OF 167.82 FEET TO THE EASTERLY PROLONGATION OF THE SOUTHERLY LINE OF SAID LOT 6, PHILLIPS ADDITION TO THE TOWN OF ELIZABETH;

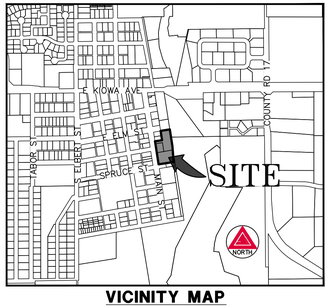
THENCE ALONG SAID EASTERLY PROLONGATION AND SAID SOUTHERLY LINE, SOUTH 80°30'04" WEST, A DISTANCE OF 213.19 FEET TO THE SOUTHWEST CORNER OF SAID BLOCK 13;

THENCE ALONG THE WESTERLY LINE OF SAID LOTS 1–6, PHILLIPS ADDITION TO THE TOWN OF ELIZABETH, THE WESTERLY LINE OF SAID VACATED POPLAR STREET AND THE WESTERLY LINE OF SAID LOTS 5 AND 6, TOWN OF ELIZABETH, NORTH 09°27'48" WEST, A DISTANCE OF 326.06 FEET TO THE SOUTHWEST CORNER OF LOT 4, BLOCK 3, TOWN OF ELIZABETH;

THENCE ALONG THE SOUTHERLY LINE OF SAID LOT 4, NORTH 80°34'41" EAST, A DISTANCE OF 99.83 FEET TO THE SOUTHEAST CORNER OF SAID LOT 4, BLOCK 3;

THENCE ALONG THE EASTERLY LINE OF SAID BLOCK 3, NORTH 09°30'20" WEST, A DISTANCE OF 132.04 FEET TO THE POINT OF BEGINNING;

CONTAINING AN AREA OF 2.072 ACRES, (90,267 SQUARE FEET), MORE OR LESS.



VICINITY MAP
SCALE 1" = 1000'

TITLE VERIFICATION

I/WE_____,

OF_____ DO HEREBY CERTIFY THAT I/WE HAVE EXAMINED THE TITLE OF ALL LAND PLATTED HEREON AND THAT TITLE O SUCH LAND IS IN DEDICATOR(S) FREE AND CLEAR OF ALL LIENS, TAXES AND ENCUMBRANCES, EXCEPT AS FOLLOWS:

_____
(NOTARIZED SIGNATURE)

_____ _____
DATE COMPANY NAME

OWNERSHIP AND DEDICATION STATEMENT

THE UNDERSIGNED, BEING ALL THE OWNERS, MORTGAGEES, BENEFICIARIES OF DEEDS OF TRUST AND HOLDERS OF OTHER INTERESTS OF THE LANDS DESCRIBED HEREIN, HAVE LAID OUT, SUBDIVIDED AND PLATTED SAID LANDS INTO LOTS, TRACTS AND EASEMENTS AS SHOWN HEREON UNDER THE NAME AND STYLE OF BULMER FILING NO. 1. THE UTILITY EASEMENTS AS SHOWN HEREON ARE HEREBY DEDICATED FOR PUBLIC UTILITIES AND CABLE COMMUNICATION SYSTEMS AND OTHER PURPOSES AS SHOWN HEREON. THE ENTITIES RESPONSIBLE FOR PROVIDING THE SERVICES FOR WHICH THE EASEMENTS ARE ESTABLISHED ARE HEREBY GRANTED THE PERPETUAL RIGHT OF INGRESS AND EGRESS FROM AND TO ADJACENT PROPERTIES FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF UTILITY LINES AND RELATED FACILITIES. ALL STREETS AND RIGHTS OF WAY, SHOWN HEREON ARE DEDICATED AND CONVEYED TO THE TOWN OF ELIZABETH, COLORADO, IN FEE SIMPLE ABSOLUTE, FOR PUBLIC USES AND PURPOSES.

_____
SIGNATURE

_____
(OWNER)

BY: _____

TITLE: _____

ATTEST
SECRETARY _____
SIGNATURE

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 20_____

BY _____

WITNESS MY HAND AN OFFICIAL SEAL

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

PLANNING COMMISSION

THIS FINAL PLATT WAS REVIEWED BY THE ELBERT COUNTY PLANNING COMMISSION ON THE

_____ DAY OF _____, 20_____, A.D.

_____
CHAIR, PLANNING COMMISSION

GENERAL NOTES

1. THE FIELD WORK FOR THIS SURVEY WAS PERFORMED BY AN AZTEC CONSULTANTS, INC. SURVEY CREW AND COMPLETED ON JULY 16, 2024
2. PER C.R.S. 38–51–106, "ALL LINEAL UNITS DEPICTED ON THIS LAND SURVEY PLAT ARE U.S. SURVEY FEET. ONE METER EQUALS 39.37/12 U.S. SURVEY FEET, EXACTLY ACCORDING TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY."
3. THE SURVEYED PARCEL CONTAINS A TOTAL OF 2.072 ACRES OR 90,267 SQUARE FEET, MORE OR LESS.
4. _____ TITLE GUARANTEE COMPANY TITLE COMMITMENT ORDER NO. _____ WITH AN EFFECTIVE DATE OF _____ __, 2024 AT 5:00 P.M. WAS RELIED UPON FOR RECORD INFORMATION REGARDING EASEMENT(S) AND ENCUMBRANCES(S). THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH BY AZTEC CONSULTANTS, INC. TO DETERMINE OWNERSHIP, RIGHT(S)–OF–WAY, EASEMENT(S), OR OTHER MATTERS OF PUBLIC RECORD.
5. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR ACCESSORY COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18–4–508, C.R.S.
6. THE SURVEYED PROPERTY SHOWN HEREIN LIES WITHIN OTHER AREAS–ZONE X, AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP INDEX NO. 08039C0480C, MAP REVISED MARCH 17, 2011.
7. NO LOT WITHIN THIS SUBDIVISION SHALL BE BUILT UPON OR ANY IMPROVEMENTS CONSTRUCTED WITHIN A LOT, UNTIL A SITE PLAN IS REVIEWED AND APPROVED BY THE TOWN OF ELIZABETH.

BOARD OF TRUSTEES

THIS PLAT WAS APPROVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ELIZABETH, COLORADO ON THE _____ DAY OF _____, 20_____, FOR FILING. THE DEDICATIONS ARE HERY ACCEPTED.

ALL EXPENSES INCURRED WITH RESPECT TO IMPROVEMENTS FOR ALL UTILITY SERVICES, PAVING, GRADING, CURBS, GUTTER, SIDEWALKS, ROAD LIGHTING, ROAD SIGNS, FLOOD PROTECTION DEVICES, DRAINAGE STRUCTURES AND ALL OTHER IMPROVEMENTS THAT MAY BE REQUIRED SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER AND NOT THE TOWN OF ELIZABETH. THE TOWN SHALL ONLY ACCEPT MAINTENANCE OF THE ROADWAY IMPROVEMENTS AFTER CONSTRUCTION HAS BEEN COMPLETED, AND AFTER THE WARRANTY PERIOD, IN ACCORDANCE WITH TOWN REGULATIONS.

THIS ACCEPTANCE DOES NOT GUARANTEE THAT THE SOIL CONDITIONS, SUBSURFACE, GEOLOGY, GROUNDWATER CONDITIONS OF FLOODING CONDITIONS OF ANY LOT SHOWN HEREON ARE SUCH THAT A BUILDING PERMIT WILL BE ISSUED.

_____
MAYOR, TOWN OF ELIZABETH

ATTEST:
TOWN CLERK _____
SIGNATURE

SURVEYOR'S CERTIFICATION

I, MICHAEL J. NOFFSINGER, A DULY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS PLAT TRULY AND CORRECTLY REPRESENTS THE RESULTS OF A SURVEY MADE ON _____ _____, 2024, BY ME OR UNDER MY DIRECT SUPERVISION AND THAT ALL MONUMENTS EXIST AS SHOWN HEREON; THAT MATHEMATICAL CLOSURE ERRORS ARE LESS THAN 1:50,000 (SECOND ORDER); AND THAT SAID PLAT HAS BEEN PREPARED IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS OF THE STATE OF COLORADO DEALING WITH MONUMENTS, SUBDIVISIONS OR SURVEYING OF LAND AND ALL PROVISIONS, WITHIN MY CONTROL, OF THE TOWN SUBDIVISION REGULATIONS.

I ATTEST THE ABOVE ON THIS_____ DAY OF _____, 20_____.

FOR REVIEW
DO NOT RECORD

_____
COLORADO REGISTERED PROFESSIONAL LAND SURVEYOR

_____
PRINTED NAME

ELBERT COUNTY CLERK AND RECORDER'S CERTIFICATE

THIS PLAT WAS FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF ELBERT COUNTY AT _____M. ON THE _____ DAY OF _____, 20__,

RECEPTION NO._____.

ELBERT COUNTY CLERK AND RECORDER

BY: _____
DEPUTY

AzTEC CONSULTANTS, INC.
300 East Mineral Ave., Suite 1
Littleton, Colorado 80122
Phone: (303) 713-1898
Fax: (303) 713-1897
www.aztecconsultants.com

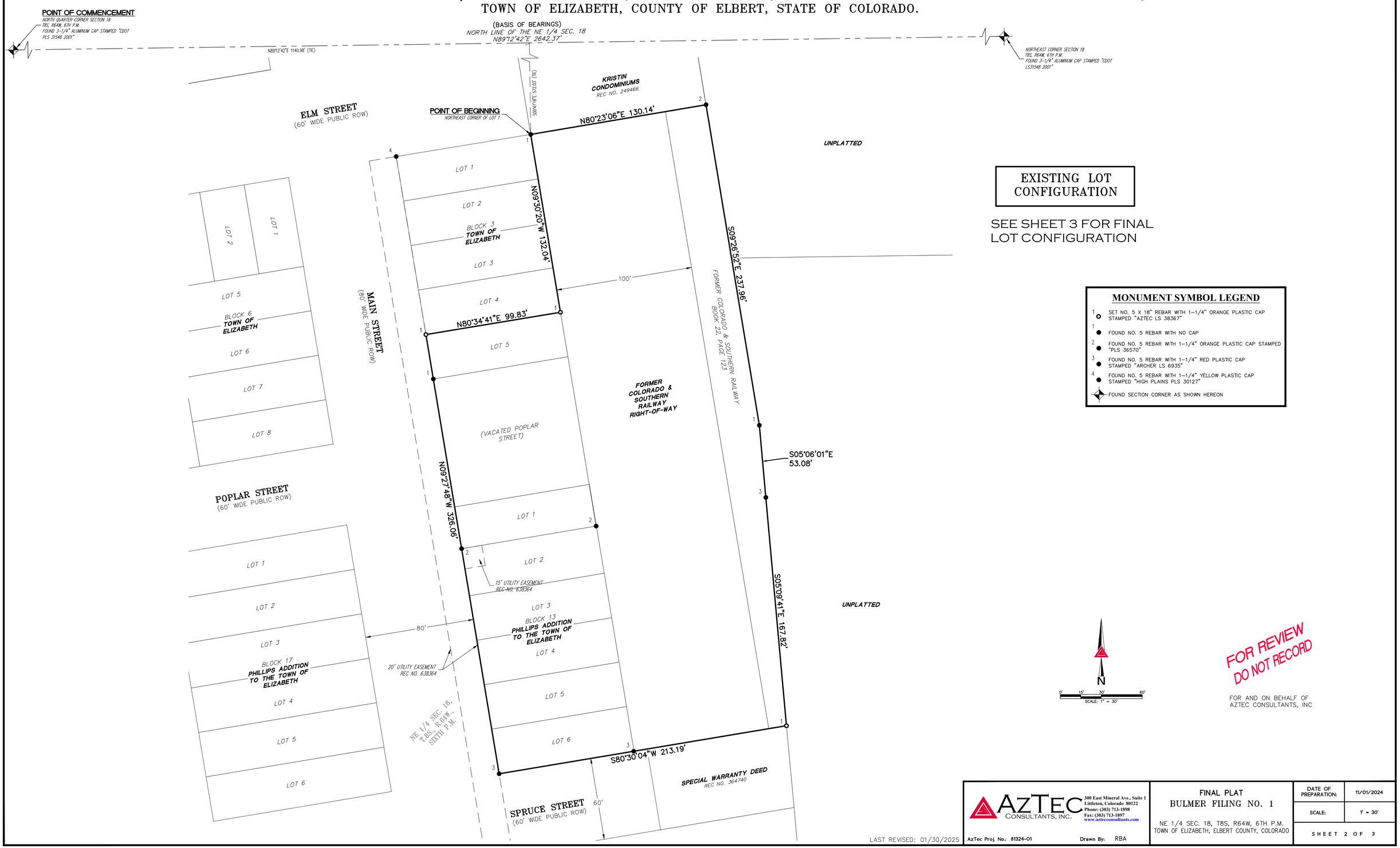
AzTec Proj. No.: 81324-01 Drawn By: RBA

FINAL PLAT
BULMER FILING NO. 1
NE 1/4 SEC. 18, T8S, R64W, 6TH P.M.
TOWN OF ELIZABETH, ELBERT COUNTY, COLORADO

DATE OF PREPARATION:	11/01/2024
SCALE:	N/A

BULMER FILING NO. 1

A REPLAT OF LOTS 5 AND 6, BLOCK 3 AND LOTS 1–6, INCLUSIVE, BLOCK 13, AND
A PART OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
TOWN OF ELIZABETH, COUNTY OF ELBERT, STATE OF COLORADO.



EXISTING LOT CONFIGURATION

SEE SHEET 3 FOR FINAL LOT CONFIGURATION

MONUMENT SYMBOL LEGEND

- 1 ○ SET NO. 5 X 18" REBAR WITH 1-1/4" ORANGE PLASTIC CAP STAMPED "AZTEC LS 38367"
- 1 ● FOUND NO. 5 REBAR WITH NO CAP
- 2 ● FOUND NO. 5 REBAR WITH 1-1/4" ORANGE PLASTIC CAP STAMPED "PLS 36570"
- 3 ● FOUND NO. 5 REBAR WITH 1-1/4" RED PLASTIC CAP STAMPED "ARCHER LS 6935"
- 4 ● FOUND NO. 5 REBAR WITH 1-1/4" YELLOW PLASTIC CAP STAMPED "HIGH PLAINS PLS 30127"
- ✦ FOUND SECTION CORNER AS SHOWN HEREON

N

0' 15' 30' 60'
SCALE: 1" = 30'

FOR REVIEW
DO NOT RECORD

FOR AND ON BEHALF OF
AZTEC CONSULTANTS, INC

LAST REVISED: 01/30/2025

AZTEC CONSULTANTS, INC.
300 East Mineral Ave., Suite 1
Littleton, Colorado 80122
Phone: (303) 713-1898
Fax: (303) 713-1897
www.aztecconsultants.com

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TOWN OF ELIZABETH, ELBERT COUNTY, COLORADO

DATE OF PREPARATION:	11/01/2024
SCALE:	1" = 30'
SHEET 2 OF 3	

BULMER FILING NO. 1

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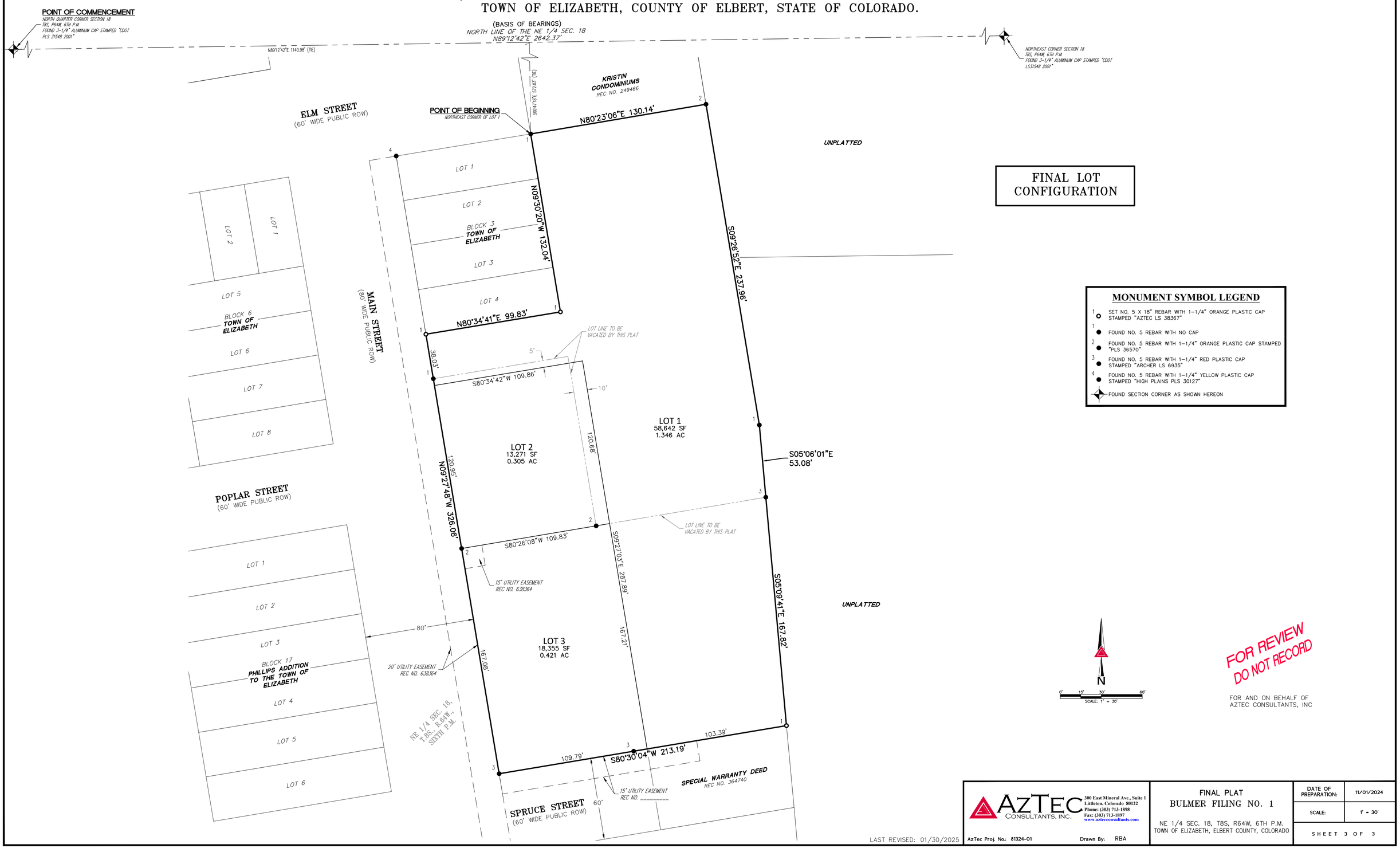
TOWN OF ELIZABETH, COUNTY OF ELBERT, STATE OF COLORADO.



FINAL LOT CONFIGURATION

MONUMENT SYMBOL LEGEND

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1 ● FOUND NO. 5 REBAR WITH NO CAP

2 ● FOUND NO. 5 REBAR WITH 1-1/4" ORANGE PLASTIC CAP STAMPED "PLS 36570"

3 ● FOUND NO. 5 REBAR WITH 1-1/4" RED PLASTIC CAP STAMPED "ARCHER LS 6935"

4 ● FOUND NO. 5 REBAR WITH 1-1/4" YELLOW PLASTIC CAP STAMPED "HIGH PLAINS PLS 30127"

FOUND SECTION CORNER AS SHOWN HEREON

N

0' 15' 30' 60'
SCALE: 1" = 30'

FOR REVIEW
DO NOT RECORD

FOR AND ON BEHALF OF
AZTEC CONSULTANTS, INC

LAST REVISED: 01/30/2025

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Littleton, Colorado 80122
Phone: (303) 713-1898
Fax: (303) 713-1897
www.aztecconsultants.com

AzTec Proj. No.: 81324-01 Drawn By: RBA

FINAL PLAT
BULMER FILING NO. 1
NE 1/4 SEC. 18, T8S, R64W, 6TH P.M.
TOWN OF ELIZABETH, ELBERT COUNTY, COLORADO

DATE OF PREPARATION:	11/01/2024
SCALE:	1" = 30'
SHEET 3 OF 3	

RESOLUTION 25R09

A RESOLUTION APPROVING THE SITE DEVELOPMENT PLAN FOR THE MAIN STREET OFF-STREET PARKING LOT

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ELIZABETH, COLORADO AS FOLLOWS:

Section 1. The Site Development Plan for the Main Street Off-Street Parking Lot, attached hereto as **Exhibit A**, is hereby approved pursuant to Section 16-2-40 of the Town of Eliabeth Municipal Code.

PASSED, APPROVED, and ADOPTED this ____ day of _____, 2025, by the Board of Trustees of the Town of Elizabeth, Colorado, on first and final reading, by a vote of _____ for and _____ against.

_____
Angela Ternus, Mayor

ATTEST

_____
Michelle M. Oeser, Town Clerk

EXHIBIT A

MAIN STREET OFF-STREET PARKING LOT

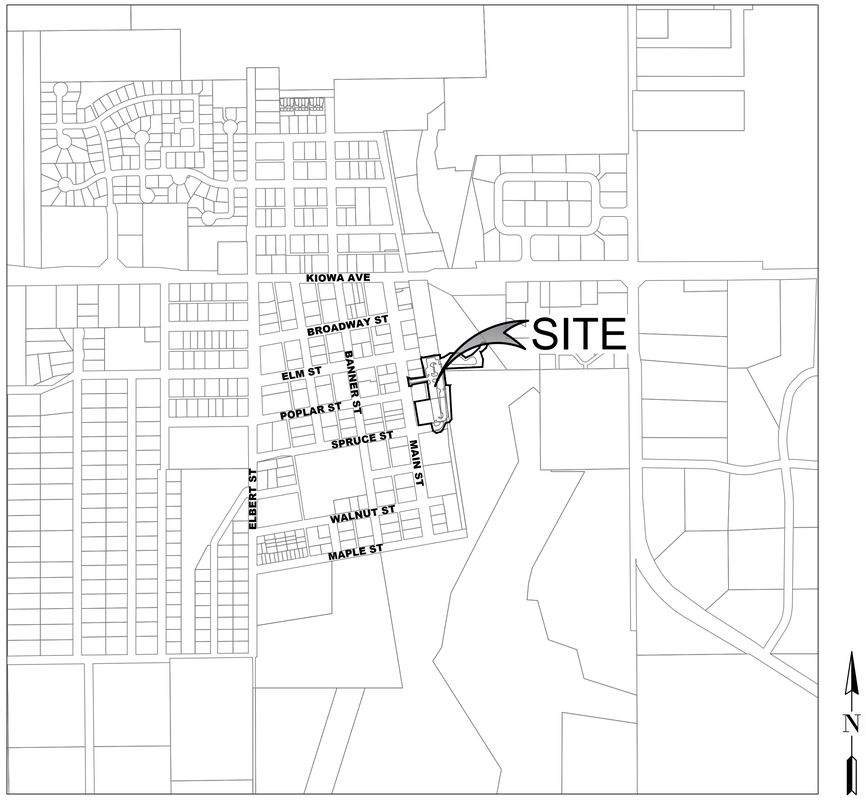
LOTS 2-6 OF BLOCK 13
WITHIN THE NE QUARTER OF SECTION 18, T8S, R64W, 6TH P.M.,
TOWN OF ELIZABETH, ELBERT COUNTY, COLORADO

OWNER
TOWN OF ELIZABETH
151 S BANNER ST
P.O. BOX 159
ELIZABETH, CO 80107
CONTACT: ZACH HIGGINS
ZHIGGINS@TOWNOFELIZABETH.ORG

ENGINEER
TERRACINA DESIGN
10200 E. GIRARD AVE., SUITE A-314
DENVER, CO 80231
CONTACT: MARTIN METSKER
303.632.8867
MMETSKER@TERRACINADESIGN.COM

SURVEYOR
AZTEC CONSULTANTS
300 EAST MINERAL AVE, SUITE 1,
LITTLETON, CO 80122
(303) 713-1898
CONTACT: MIKE NOFFSINGER

UTILITY PROVIDERS
CORE ELECTRIC
168 CTC BLVD SUITE A
LOUISVILLE, CO 80027
(303) 887-3877



VICINITY MAP

0 1000' 2000'
1 inch = 1000'

BASIS OF BEARINGS
THE BEARINGS SHOWN HEREON ARE BASED UPON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN, ASSUMED TO BEAR SOUTH 89°12'42" WEST, A DISTANCE OF 2642.37 FEET.

BENCHMARK
PROJECT BENCHMARK (AZTEC #400):
PROJECT BENCHMARK IS A NGS MONUMENT DESIGNATION H 53 (POINT ID KK0312). SAID MONUMENT IS AN NGS STANDARD DISK SET ON THE TOP OF A CONCRETE PORCH, STAMPED "H 53 1934." MONUMENT IS LOCATED ON 188 S. MAIN ST., NORTH EAST SIDE OF THE FORMER BANK, 4 FT EAST OF THE CENTERLINE OF SIDEWALK AND 5 INCHES NORTH OF A BRICK PILLAR.
NGS PUBLISHED ELEVATION = 6451.58 FT (NAVD 88)

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8	HORIZONTAL CONTROL & GRADING PLAN (2 OF 4)
9	HORIZONTAL CONTROL & GRADING PLAN (3 OF 4)
10	HORIZONTAL CONTROL & GRADING PLAN (4 OF 4)
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12	STORM - POND F
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17	GESC - INITIAL PLAN
18	GESC - INTERIM PLAN
19	GESC - INTERIM PLAN
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22	DETAILS
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30	DETAILS
31	DETAILS

PROFESSIONAL ENGINEER CERTIFICATION

THESE CONSTRUCTION PLANS FOR THE MAIN STREET OFF-STREET PARKING LOT WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF ELIZABETH DESIGN REVIEW STANDARDS AND GUIDELINES, WATER AND SEWER STANDARDS, STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA, AND THE GRADING, EROSION AND SEDIMENT CONTROL MANUAL.

MARTIN METSKER, PE #41743 DATE
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DENVER, CO 80231
PHONE (303) 632-8867 EXT.110

THESE DESIGNS, PLANS, AND CONTRACT DOCUMENTS ARE REVIEWED FOR CONCEPT AND GENERAL CONFORMANCE TO THE TOWN'S MINIMUM STANDARDS ONLY, AND THE PRIMARY RESPONSIBILITY FOR DESIGN ADEQUACY IS TO REMAIN WITH THE ENGINEER OF RECORD. THIS REVIEW DOES NOT IMPLY RESPONSIBILITY BY THE TOWN OF ELIZABETH, OR THE TOWN ENGINEER FOR COMPLETENESS, ACCURACY OR CORRECTNESS OF CALCULATION. THE REVIEW DOES NOT IMPLY THAT QUANTITIES OF ITEMS INDICATED ON THE PLANS ARE THE FINAL QUANTITIES REQUIRED. THE REVIEW SHALL NOT BE CONSTRUED FOR ANY REASON AS ACCEPTANCE OF FINANCIAL RESPONSIBILITY BY THE TOWN FOR ADDITIONAL ITEMS AND ADDITIONAL QUANTITIES OF ITEMS SHOWN THAT MAY BE REQUIRED DURING THE CONSTRUCTION PHASE.

APPROVED FOR CONSTRUCTION WITHIN ONE YEAR OF THE EARLIEST OF THESE DATES:

BY: _____
TOWN ENGINEER DATE

BY _____
TOWN OF ELIZABETH-PUBLIC WORKS DIRECTOR DATE

BY _____
TOWN OF ELIZABETH-TOWN ADMINISTRATOR DATE

BY _____
ELIZABETH FIRE DEPARTMENT DATE

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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
COVER SHEET

Know what's below. Call before you dig. 811

SHEET 1 OF 31

1/30/2025 11:23 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS COVER DWG 1

GENERAL NOTES:

1. UNLESS OTHERWISE MODIFIED HEREIN, ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS SET FORTH BY THE GOVERNING MUNICIPALITY, DISTRICT, AGENCY OR ENTITY. IF THE GOVERNING MUNICIPALITY, DISTRICT, AGENCY OR ENTITY DOES NOT HAVE A STANDARD, AN APPLICABLE STANDARD FROM THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT)STANDARDS (M &S STANDARDS, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION) SHALL BE ADHERED TO. FURTHER ALL OTHER APPLICABLE STATE AND FEDERAL REGULATIONS ARE TO BE FOLLOWED. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS OR REGULATIONS, THE MOST RESTRICTIVE STANDARD SHALL APPLY.
2. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.
3. EXISTING UTILITIES SHOWN ON THIS PLAN ARE BASED UPON THE BEST INFORMATION AVAILABLE AS SUPPLIED BY SURFACE EVIDENCE AND UTILITY COMPANY MAPS. UTILITIES THAT EXIST MAY NOT BE SHOWN HEREIN. THE SIZE, LOCATION, TYPE AND NUMBER OF UTILITY SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND NOTIFICATION OF ANY DISCREPANCY SHALL BE MADE TO THE OWNER AND ENGINEER BEFORE ANY OTHER WORK IS PERFORMED.
4. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO(UNCC) AT 811, AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING,TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH / IRRIGATION COMPANY) ARE TO BE LOCATED BY CONTACTING THERE SPECTIVE REPRESENTATIVE. UTILITY SERVICE LATERALS ARE ALSO TO BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES DURING CONSTRUCTION AND FOR COORDINATING WITH THE APPROPRIATE UTILITY COMPANY FOR ANY UTILITY CROSSINGS REQUIRED.
6. A STATE CONSTRUCTION DEWATERING WASTEWATER DISCHARGE PERMIT IS REQUIRED IF DEWATERING IS REQUIRED IN ORDER TO INSTALL UTILITIES OR WATER IS DISCHARGED INTO A STORM SEWER, CHANNEL, IRRIGATION DITCH OR ANY WATERS OF THE UNITED STATES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF JOB SITE SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
8. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE DESIGNER FOR CLARIFICATION, AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
9. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE DEVELOPER SHALL CONTACT THE DESIGNER AND THE LOCAL ENTITY ENGINEER IMMEDIATELY.
10. THE CONTRACTOR SHALL REFER TO AN APPROVED GEOTECHNICAL STUDY FOR ADDITIONAL INFORMATION PERTAINING TO THE SITE CONSTRUCTION, MATERIALS AND PAVEMENTS.
11. CONTRACTOR SHALL REFER TO THE APPROVED EROSION CONTROL MANAGEMENT PLAN FOR IMPLEMENTATION OF BEST MANAGEMENT PRACTICES TO MINIMIZE OR ELIMINATE EROSION AND SEDIMENT TRANSPORT AT ALL TIMES.

GRADING NOTES:

1. REFER TO THE ROADWAY PLANS FOR GRADING AND CONSTRUCTION DETAIL IN THE PUBLIC RIGHT OF WAY.
2. REFER TO APPROVED GEOTECHNICAL REPORT FOR ADDITIONAL CONSTRUCTION AND GRADING REQUIREMENTS.
3. STOCKPILE ONSITE TOPSOIL FOR REUSE ONSITE. LOCATIONS OF TOPSOIL REUSE SHALL BE IN LANDSCAPE AREAS, OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
4. WOOD FRAMING MEMBERS, INCLUDING WOOD SHEATHING, THAT ARE IN CONTACT WITH EXTERIOR FOUNDATION WALLS AND ARE LESS THAN EIGHT (8) INCHES FROM EXPOSED EARTH SHALL BE OF NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD.
5. FOR ALL AREAS ADJACENT TO STRUCTURES THAT ARE HARD SURFACE, THE FINAL FINISH GRADE SHALL FALL AWAY FROM THE BUILDING AT A GRADE OF 1.8% (MIN) FOR PEDESTRIAN PATHS OR 3% FOR NON-PEDESTRIAN AREAS.
6. FOR ALL AREAS ADJACENT TO STRUCTURES THAT ARE NOT HARD SURFACE, THE FINAL FINISH GRADE SHALL FALL AWAY FROM THE BUILDING AT A GRADE OF 10% (MIN) FOR 10-FT (MIN.), UNLESS MODIFIED BY AN APPROVED GEOTECHNICAL STUDY.
7. STEPS AND GRADES SHOWN INSIDE BUILDING ENVELOPES AND GARAGES ARE FOR INFORMATION ONLY. REFER TO ARCHITECTURAL PLANS FOR CONSTRUCTION DETAILS.
8. REFER TO THE ARCHITECTURAL AND/OR STRUCTURAL PLANS FOR THE LOCATION AND EXTENT OF FOUNDATION STEM WALLS AND/ OR EXPOSED FOUNDATION.
9. REFER TO THE LANDSCAPE PLANS FOR RETAINING WALL MATERIALS AND CONSTRUCTION DETAILS.
10. SPOT ELEVATIONS TAKE PRECEDENCE OVER CONTOURS.
11. SPOT ELEVATIONS ARE FLOWLINE OR FINISH GRADE UNLESS OTHERWISE INDICATED.
12. SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF FIVE PERCENT (5%).
13. RAMP AND SIDEWALK CROSS-SLOPES SHALL NOT EXCEED 2%.
14. RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 12:1 (8.33%) AND SHALL NOT EXCEED THIRTY FEET IN LENGTH OR THIRTY INCHES IN HEIGHT, WITHOUT INTERMEDIATE LANDINGS.
15. RAMPS, EXCEPT CURB RAMPS, SHALL HAVE HAND RAILS ON BOTH SIDES.
16. ALL SITE STEP TREADS ARE 11-INCHES DEEP UNLESS OTHERWISE NOTED.
17. STAIRWAY AND RAMP LANDINGS SHALL HAVE A MAXIMUM SLOPE, IN ANY DIRECTION, OF TWO PERCENT AND SHALL NOT BE LESS THAN THE WIDTH OF THE STAIRS AND 5-FT LONG, UNLESS OTHERWISE INDICATED ON THE PLAN.
18. ALL RAMPS AND STAIRS SHALL BE CONSTRUCTED, INCLUDING THE USE OF RAILINGS, IN ACCORDANCE WITH APPLICABLE ADA (ADAAG), FAIR HOUSING STANDARDS, AND BUILDING CODE STANDARDS.
19. EDGE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH APPLICABLE CODES AT ALL LOCATIONS WHICH REQUIRE HANDRAILS.
20. RE: LANDSCAPE PLANS AND/OR ARCHITECTURAL PLANS FOR HANDRAIL DETAIL.
21. RETAINING WALL ELEVATIONS ARE SHOWN TO THE EXPOSED FACE OF WALL AT THE TOE AND THE TOP OF WALL.
22. RETAINING WALLS ARE TO BE DESIGNED BY OTHERS.
23. THE CONTRACTOR SHALL REVIEW ALL ELEVATIONS WITH THEIR SURVEYOR PRIOR TO STAKING AND CONSTRUCTION OF THE BUILDINGS.
24. REFER TO LANDSCAPE PLANS FOR PLANTER DESIGN INCLUDING HEIGHT ABOVE FINISH GRADE.
25. ALL ROOF DOWNSPOUTS MUST CONNECT TO THE ROOF DRAIN PIPING SYSTEM OR DOWNSPOUTS THAT DISCHARGE TO THE SURFACE SHALL SPILL ONTO THE SPLASH BLOCKS THAT EXTEND A MINIMUM OF FIVE (5) FEET AWAY FROM THE FOUNDATION.

PAVING, SIGNING & STRIPING NOTES:

1. PAVING OF PUBLIC STREETS AND SIDEWALKS SHALL BE IN ACCORDANCE WITH THE GOVERNING AGENCY CRITERIA.
2. ALL ONSITE CURB AND GUTTER IS 6-IN VERTICAL WITH 1-FT SPILL PAN UNLESS OTHERWISE INDICATED.
3. ON SITE SIDEWALK SHALL BE 4-IN THICK MIN. AND 6-IN THICK (MIN) IF IT CROSSES A DRIVING SURFACE).
4. CONCRETE PAVING JOINTS SHALL BE IN CONFORMANCE WITH GOVERNING AGENCY ROADWAY STANDARDS OR, IN THE ABSENCE OF A STANDARD, THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) M & S STANDARDS, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. UNLESS SPECIFICALLY DETAILED ON THESE PLANS AND REFERENCED TO AN APPROVED GEOTECHNICAL STUDY, THESE PLANS DO NOT DETAIL THE REQUIRED PAVING SECTIONS.
6. SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH CDOT CRITERIA AND COMPACTED TO 95% OPTIMUM DENSITY IN ACCORDANCE WITH AASHTO T-99, UNLESS FURTHER RESTRICTED BY THE APPROVED PAVING DESIGN.
7. ALL PAVEMENT IS ASPHALT UNLESS OTHERWISE INDICATED. NO CONTRACTION OR EXPANSION JOINTS SHALL BE LOCATED WITHIN TWELVE INCHES (LONGITUDINALLY) OF THE FLOWLINE.
8. CONCRETE FOR DRIVING SURFACES SHALL BE CDOT CLASS P UNLESS OTHERWISE INDICATED OR APPROVED BY THE ENGINEER.
9. TOOLED OR SAWED CONTRACTION JOINTS AT 8-FT ON CENTER (MAX) OR AS SHOWN ON PLAN.
10. ALL CONCRETE JOINTS PER CDOT STANDARDS.
11. ALL EXPANSION JOINTS SHALL BE SEALED PER CDOT STANDARDS.
12. ALL NEW OR RELOCATED STREET/TRAFFIC SIGNS SHALL BE INSTALLED PER CURRENT GOVERNING MUNICIPALITY STANDARDS.
13. SIGNAGE AND STRIPING SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS. IN THE ABSENCE OF A STANDARD IT SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION.
14. STRIPING OUTSIDE OF THE RIGHT-OF-WAY SHALL BE EPOXY PAINT. SYMBOLS SHALL BE METHYL METHACRYLATE, HOT APPLIED THERMOPLASTIC (90 MIL), PREFORMED PLASTIC (90 MIL) OR INLAYED TAPE (STAMARK), OR APPROVED EQUAL.

DEMOLITION NOTES:

1. THE WORK GENERALLY INCLUDES REMOVAL/DEMOLITION OF INDICATED EXISTING SURFACE FEATURES (I.E. STRUCTURES, CURB, GUTTER, DRAINAGE STRUCTURES, ASPHALT, LIGHTS, VEGETATION, ETC.) AND UNDERGROUND UTILITIES (I.E. ELECTRIC LINES, GAS LINES, FIBER OPTIC LINES, DRAINAGE LINES, ETC), WITHIN THE PROPERTY BOUNDARY. NO WORK UNLESS SPECIFICALLY NOTED SHALL BE OUTSIDE OF THE SUBJECT PROPERTY. SEE PLANS FOR LIMITS OF REMOVAL/ DEMOLITION.
2. LIMITS OF REMOVAL SHOWN ARE APPROXIMATE.
3. CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS INCLUDING SITE SAFETY FOR ALL ASPECTS OF DEMOLITION INCLUDING OPERATION WITHIN THE REGULATIONS OF GOVERNING AGENCIES.
4. ALL UNDERGROUND STORM SEWER, WATER, SANITARY SEWER, GAS, ELECTRIC, OTHER UTILITY LOCATIONS, AND EXISTING SITE APPURTENANCES ARE BASED ON THE ALTA SURVEY PREPARED FOR THE SITE AND ARE TO BE CONSIDERED APPROXIMATE ONLY. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
5. ALL ITEMS NOTED AS "REMOVE" SHALL BE DEMOLISHED/REMOVED FROM THE SITE. ALL ITEMS NOTED "VERIFY/REMOVE" SHALL BE REMOVED ONLY AFTER VERIFICATION THAT THE UTILITY IS NO LONGER NEEDED TO PROVIDE SERVICE TO ANY ADJACENT PROPERTIES OR USERS. COORDINATE WITH LOCAL UTILITY PROVIDER. ALL ITEMS NOTED FOR REUSE SHALL BE REPLACED AS DIRECTED. HOWEVER, THE GOVERNING AGENCY (IN THE INSTANCE OF PUBLIC INFRASTRUCTURE) OR THE ENGINEER SHALL DETERMINE IF THE ITEM IS IN ADEQUATE CONDITION TO BE REUSED.
6. ITEMS TO BE REUSED SHALL BE REMOVED AND SAFELY STORED AS NECESSARY PRIOR TO REPLACEMENT.
7. UNLESS SPECIFICALLY DIRECTED, THE CONTRACTOR SHALL DISPOSE OF CONCRETE, ASPHALT RUBBLE AND ANY OTHER DEMOLISHED/ REMOVED MATERIALS OFFSITE.
8. CONTRACTOR SHALL DISPOSE OF AND TRANSPORT DEBRIS TO OFFSITE IN A SAFE AND LEGAL MANNER AND SHALL NOT STORE OR BURN MATERIALS ONSITE. CONTRACTOR SHALL HANDLE AND DISPOSE OF ALL DEBRIS IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS. DISPOSAL SHALL BE TRANSPORTED TO AN APPROVED LANDFILL OR OTHER APPROVED FACILITY.
9. CONCRETE SHALL BE REMOVED TO THE NEAREST JOINT.
10. THE CONTRACTOR SHALL VERIFY ALL UTILITIES HAVE BEEN DISCONNECTED AS REQUIRED FOR THE WORK.
11. CONTRACTOR SHALL ERECT BARRIERS, FENCES, GUARDRAILS, ENCLOSURES, ETC. TO PROTECT THE SITE AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN.
12. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL (SIGNS, BARRICADES, FLAGMEN, LIGHTS, ETC) IN ACCORDANCE WITH THE MUTCD, CURRENT EDITION, AS REQUIRED FOR THE WORK.
13. CONTRACTOR SHALL OBTAIN ALL PERMITS AND LICENSES REQUIRED FOR DEMOLITION OF WORK SHOWN.
14. CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION AND BENCHMARK(S). CONTRACTOR SHALL HAVE A LICENSED SURVEYOR REPLACE ANY DAMAGED OR DISTURBED MONUMENTATION AT THE CONTRACTOR'S COST.

DEMOLITION NOTES (CONT.):

15. CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, FEATURES, IMPROVEMENTS, AND UTILITIES (OVERHEAD OR UNDERGROUND) AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION NOT INTENDED TO BE REMOVED OR DEMOLISHED. CONTRACTOR WILL BE RESPONSIBLE FOR ALL RESULTANT COSTS DUE TO SUCH DAMAGES.
16. REFER TO SHEET C3.10 FOR DEMOLITIONS IN THE RIGHT OF WAY.

GENERAL UTILITY NOTES:

1. DESIGN OF UTILITIES WITHIN FIVE (5) FEET OF THE BUILDING ARE EXCLUDED FROM THESE PLANS. UTILITIES, INCLUDING DOWNSPOUT CONNECTIONS, CLEAN-OUTS, ETC WITHIN FIVE (5) FEET OF THE BUILDING SHALL BE DETAILED BY THE ARCHITECT OR MECHANICAL ENGINEER.

SANITARY NOTES:

1. CONCRETE USED IN SANITARY SEWER STRUCTURES SHALL BE AS SPECIFIED BY THE GOVERNING AGENCY OR CLASS B AS DEFINED BY CDOT STANDARDS AND SPECIFICATIONS FOR ROAD AN BRIDGE CONSTRUCTION, IN THE ABSENCE OF AN AGENCY SPECIFICATION.
2. SEWER SERVICE CONNECTIONS WITH THE MAIN LINE SHALL BE IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS. IF NO STANDARD EXISTS, WYE OR TEE (AS NOTED ON PLANS) SHALL BE CUT INTO THE MAIN LINE AND INSTALLED WITH FLEXIBLE NON-SHEAR REINFORCED COUPLINGS ON THE MAIN.
3. IF NOT SPECIFIED BY THE UTILITY DISTRICT, SANITARY SEWER SERVICE CONNECTIONS TO THE MAINLINE SHALL CONNECT AT 2:00 OR 10:00 ON THE MAIN.
4. MINIMUM DROP FROM THE SERVICE LINE BEND TO THE MAIN SHALL BE EQUAL TO THE SIZE OF THE MAINLINE.
5. SLOPE OF SERVICE LINES SHALL BE AS NOTED ON PLANS.
6. PIPE AND FITTINGS SHALL BE PER GOVERNING AGENCY STANDARD AN IN THE ABSENCE OF A STANDARD SHALL BE PVC SDR 35, MEETING ASTM D3034.
7. BEDDING SHALL BE PROVIDED AND PLACED IN ACCORDANCE WITH GOVERNING AGENCY STANDARD OR APPROVED EQUAL.
8. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
9. ALL PIPE LENGTHS ARE MEASURED TO CENTER OF MANHOLES.
10. COORDINATES FOR MANHOLES ARE TO CENTER OF STRUCTURE, UNLESS OTHERWISE INDICATED.

STORM NOTES:

1. CONCRETE USED IN STORM SEWER STRUCTURES SHALL BE AS SPECIFIED BY THE GOVERNING AGENCY OR CLASS B AS DEFINED BY CDOT STANDARDS AND SPECIFICATIONS FOR ROAD AN BRIDGE CONSTRUCTION, IN THE ABSENCE OF AN AGENCY SPECIFICATION.
2. REFER TO STORM SEWER PLANS FOR LANDSCAPE/ ROOF DRAINS AND DETENTION POND FACILITIES, INCLUDING OUTFALLS.
3. IF CONNECTED TO AN UNDERGROUND SYSTEM, DOWNSPOUTS SHALL HAVE AN OVERFLOW PROTECTION. REFER TO ARCHITECTURAL PLANS.
4. ALL PVC PIPE SHALL BE PVC SCHEDULE 40, OR APPROVED EQUAL.
5. ALL CONCRETE PIPE SHALL BE REINFORCED AND CLASS III (MIN).
6. SLOPE OF SERVICE LINES SHALL BE AS NOTED ON PLANS.
7. BEDDING SHALL BE PROVIDED AND PLACED IN ACCORDANCE WITH GOVERNING AGENCY STANDARD OR APPROVED EQUAL.
8. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
9. ALL PIPE LENGTHS ARE MEASURED TO CENTER OF MANHOLES AND LANDSCAPE INLETS, AND INSIDE FACE OF OTHER STRUCTURES.
10. COORDINATES FOR TYPE R INLETS ARE TO FLOWLINE AT MIDPOINT OF INLET.
11. COORDINATES FOR ALL OTHER STRUCTURES ARE TO CENTER OF STRUCTURE, UNLESS OTHERWISE INDICATED.
12. LANDSCAPE DRAINS (18" SQUARE OR SMALLER) SHALL BE NDS CATCH BASINS WITH ADA COMPLIANT GRATES THAT MEET HS-20 LOADING OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

ABBREVIATIONS

AC	ASPHALTIC CONCRETE
B.O.P.	BOTTOM OF PIPE
CC	CONCRETE
CL	ROADWAY CENTERLINE
CMP	CORRUGATED METAL PIPE
CR	CURB RAMP
DE / DEMO	DEMOLITION
DIA	DIAMETER
DWG	DRAWING
DRNG	DRAINAGE
ESMT	EASEMENT
E / ELEC	ELECTRICAL
E	EAST
EC	EDGE OF CONCRETE
EG	EXISTING GRADE
EL / ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EX / EXIST	EXISTING
FES	FLARED END SECTION
FG	FINISHED GRADE
FL	FLOWLINE
FH	FIRE HYDRANT
FO	FIBER OPTIC
G	GAS
GND	GROUND
GRV	GRAVEL
HGL	HYDRAULIC GRADE LINE
HORIZ	HORIZONTAL
HP	HIGH POINT
INT	INTERSECTION
INV	INVERT
LP	LOW POINT
LF	LEFT
LN	LANE
LS	LIFT STATIO
MAT	MATERIAL
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
N	NORTH
NO.	NUMBER
NTS	NOT TO SCALE
OH	OVERHEAD
OHEL	OVERHEAD ELECTRICAL
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURVATURE, REVERSE
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PLS	PROFESSIONAL LAND SURVEYOR
PR	PROPOSED
PT	POINT OF TANGENCY / POINT
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS / RIGHT
REC	RECORDING
RCP	REINFORCED CONCRETE PIPE
R.O.W.	RIGHT-OF-WAY
RD	ROAD / ROADWAY
RT	RIGHT
S	SOUTH
SD	STORM DRAIN
SEC	SECTION
SHT	SHEET
SI	SIGNING & STRIPING
SS	SANITARY SEWER
ST	STREET
STA	STATION
STD	STANDARD
SW	SIDEWALK
T / TELE	TELEPHONE
TBC	TOP BACK OF CURB
TC	TOP OF CURB / TRAFFIC CONTROL
TOE	TOE OF SLOPE
TOW	TOP OF WALL
T.O.P.	TOP OF PIPE
TYP	TYPICAL
TV	TELEVISION
UE	UTILITY EASEMENT
VERT	VERTICAL
VC	VERTICAL CURVE
W	WEST / WATER
WT	WATER
XC	CROSS-SECTION
Y1	SINGLE YELLOW STRIPE
Y2	DOUBLE YELLOW STRIPE

LEGEND

- 6350 — PROPOSED MAJOR CONTOUR
- 6349 — PROPOSED MINOR CONTOUR
- 6350 — EXISTING MAJOR CONTOUR
- 6349 — EXISTING MINOR CONTOUR
- FG — FINISHED GRADE
- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- CENTERLINE
- LOT / TRACT / PARCEL BOUNDARY
- SIGHT / SAFETY TRIANGLE
- 1 LOT 1 — BLOCK NUMBER / LOT NUMBER
- DRAINAGE SWALE
- GUARDRAIL
- STREET LIGHT
- STREET SIGNS
- CURB RAMPS
- TOWNHOMES
- ROAD WARPING
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- RIPRAP
- SOIL RIPRAP
- SAWCUT
- STORM (FES, MH, & INLET)
- SANITARY
- OHUE — WATER (HYDRANT, VALVE, BEND, MH)
- RAW WATER (VALVE, BEND, ARV)
- FOREBAY
- STORM INLETS (TYPE C, D, 13, & R)
- STORM 100 YEAR HGL
- STORM 5 YEAR HGL
- A — A LOT
- B — B LOT
- WO — WALKOUT LOT
- T — TRANSITION LOT
- EX STORM (FES, MH, & INLET)
- EX SANITARY
- EX WATER (HYDRANT, VALVE, BEND, MH)
- OHUT — EXISTING OVERHEAD ELECTRIC
- UE — EXISTING UNDERGROUND ELECTRIC
- EXISTING STORM
- EXISTING SWALE
- EXISTING SANITARY CLEAN OUT
- EXISTING TREE
- EXISTING SIGN
- W — EXISTING WATER
- G — EXISTING GAS
- FO — EXISTING FIBER OPTIC
- UE — EXISTING ELECTRIC
- T — T — EXISTING TELEPHONE
- X — EXISTING FENCE
- WET — WET — EXISTING WETLAND
- EX BOLLARD
- EB — EX ELECTRIC BREAKER BOX
- EX FIBER OPTIC VAULT
- EX GAS METER
- MP — EX METAL POST
- EX OIL & GAS WELL
- EX TELEPHONE PEDESTAL
- EXISTING POWER POLE & GUY WIRE
- EX WATER MH, METER, & VENT PIPE
- EX WATER VALVE & HYDRANT

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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

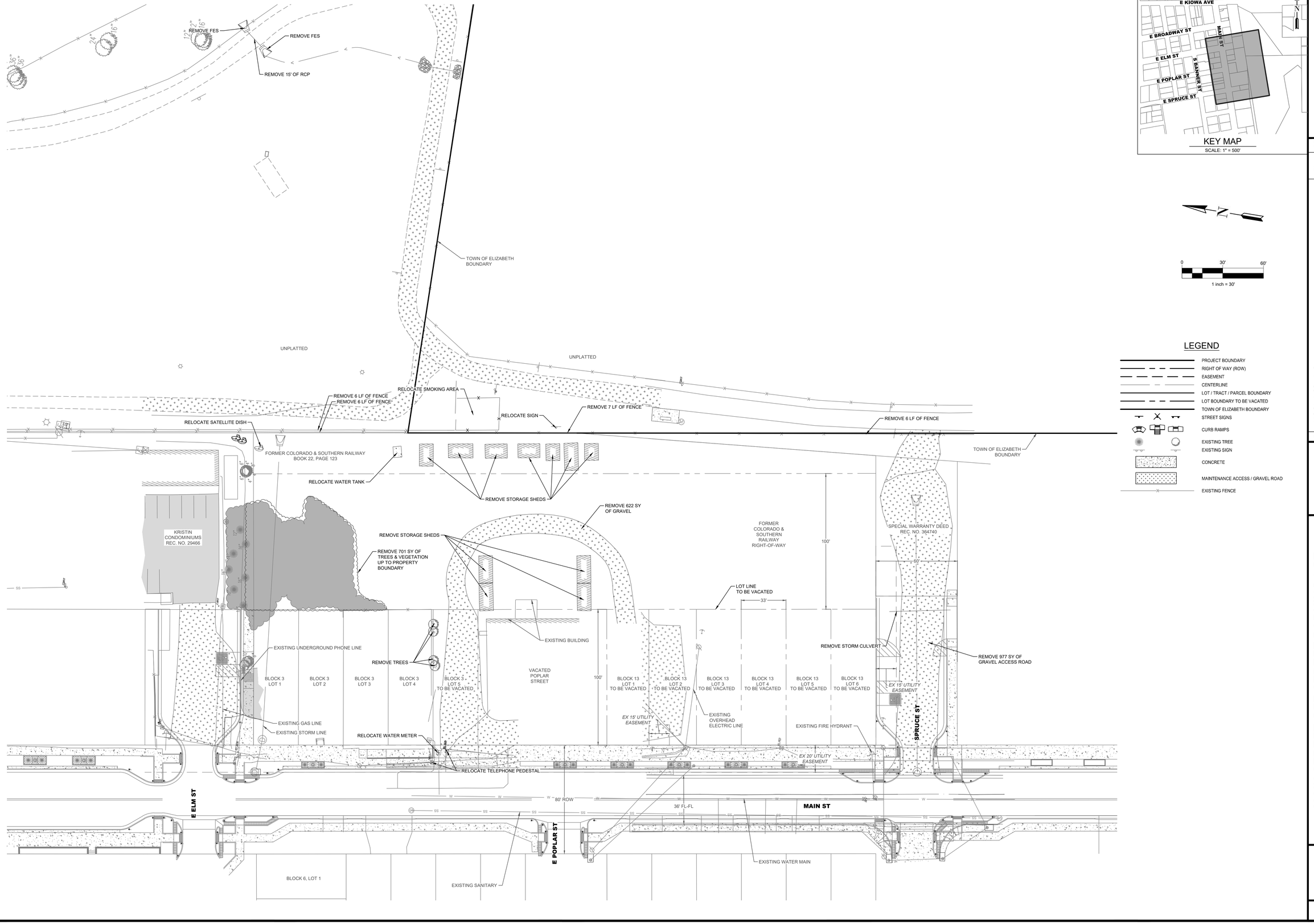
NOT FOR CONSTRUCTION

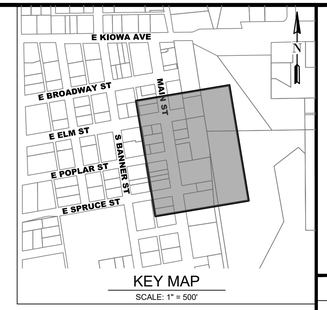
MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
GENERAL NOTES

Know what's **below.** **Call** before you dig. 811

SHEET 2 OF 31

1/30/2025 11:23 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS GENERAL NOTES.DWG 1





KEY MAP
SCALE: 1" = 500'

0 30' 60'
1 inch = 30'

LEGEND

- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- CENTERLINE
- LOT / TRACT / PARCEL BOUNDARY
- LOT BOUNDARY TO BE VACATED
- TOWN OF ELIZABETH BOUNDARY
- STREET SIGNS
- CURB RAMPS
- EXISTING TREE
- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE

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NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

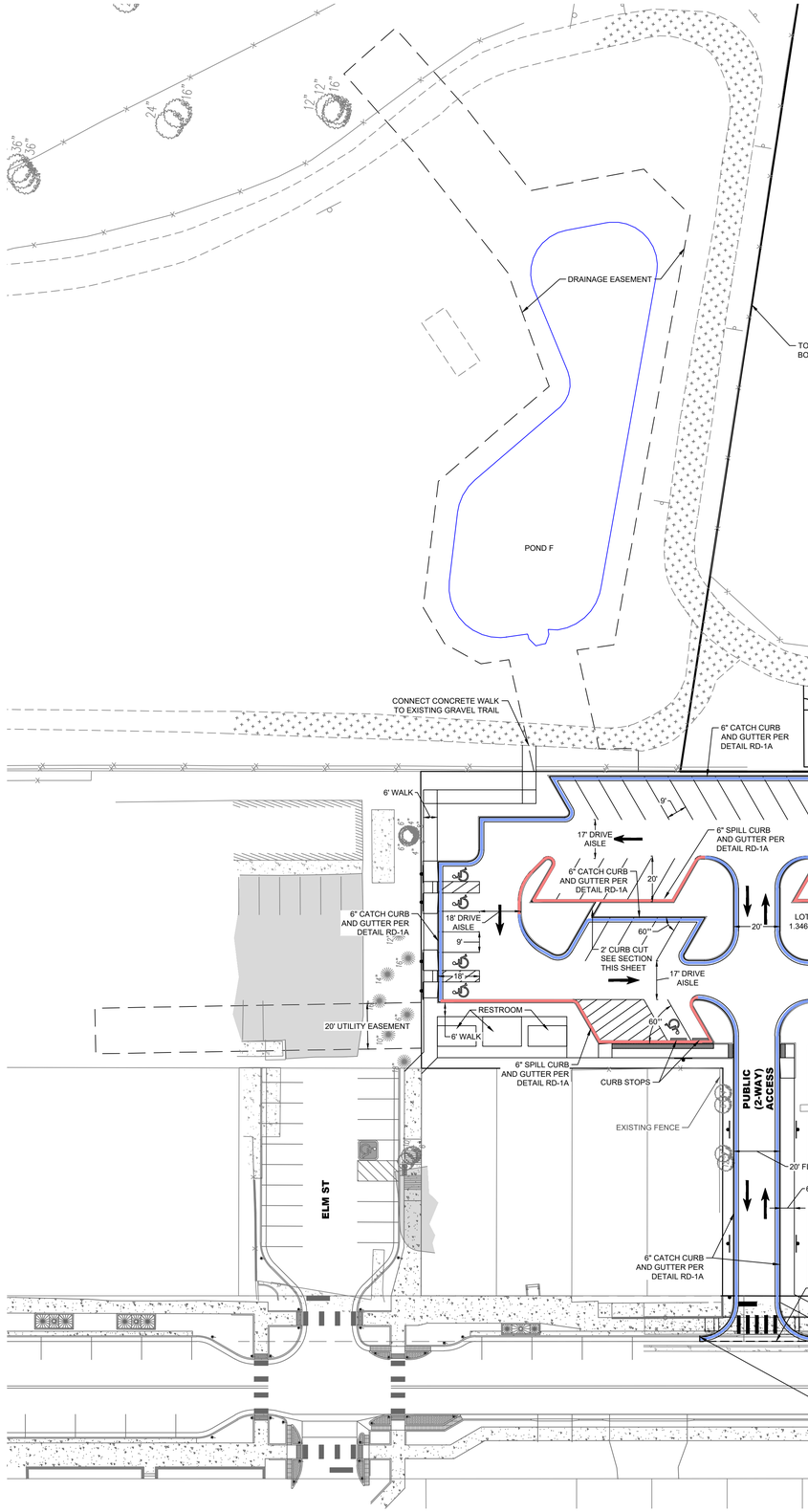
TOWN OF ELIZABETH, COLORADO

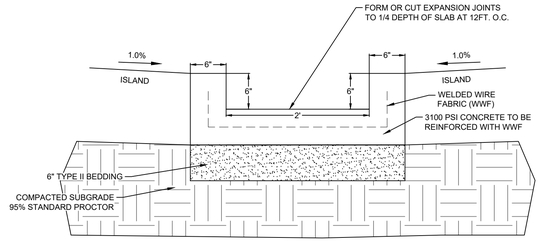
CONSTRUCTION DOCUMENTS
EXISTING SITE & DEMO PLAN

Know what's **below.** **Call** before you dig. 811

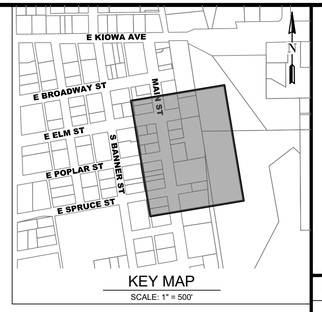
SHEET 3 OF 31

1/20/2025 11:23 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS EXISTING&DEMO.DWG 1





SECTION 1
CURB CUT DETAIL
NTS



KEY MAP
SCALE: 1" = 500'

0 30' 60'
1 inch = 30'

LEGEND

- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- CENTERLINE
- LOT / TRACT / PARCEL BOUNDARY
- LOT BOUNDARY TO BE VACATED
- TOWN OF ELIZABETH BOUNDARY
- STREET SIGNS
- CURB RAMPS
- EXISTING TREE
- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE

LEGEND:
SPILL CURB -
CATCH CURB -

PARKING LOT COUNT:

STANDARD - 111
HANDICAP - 5

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO

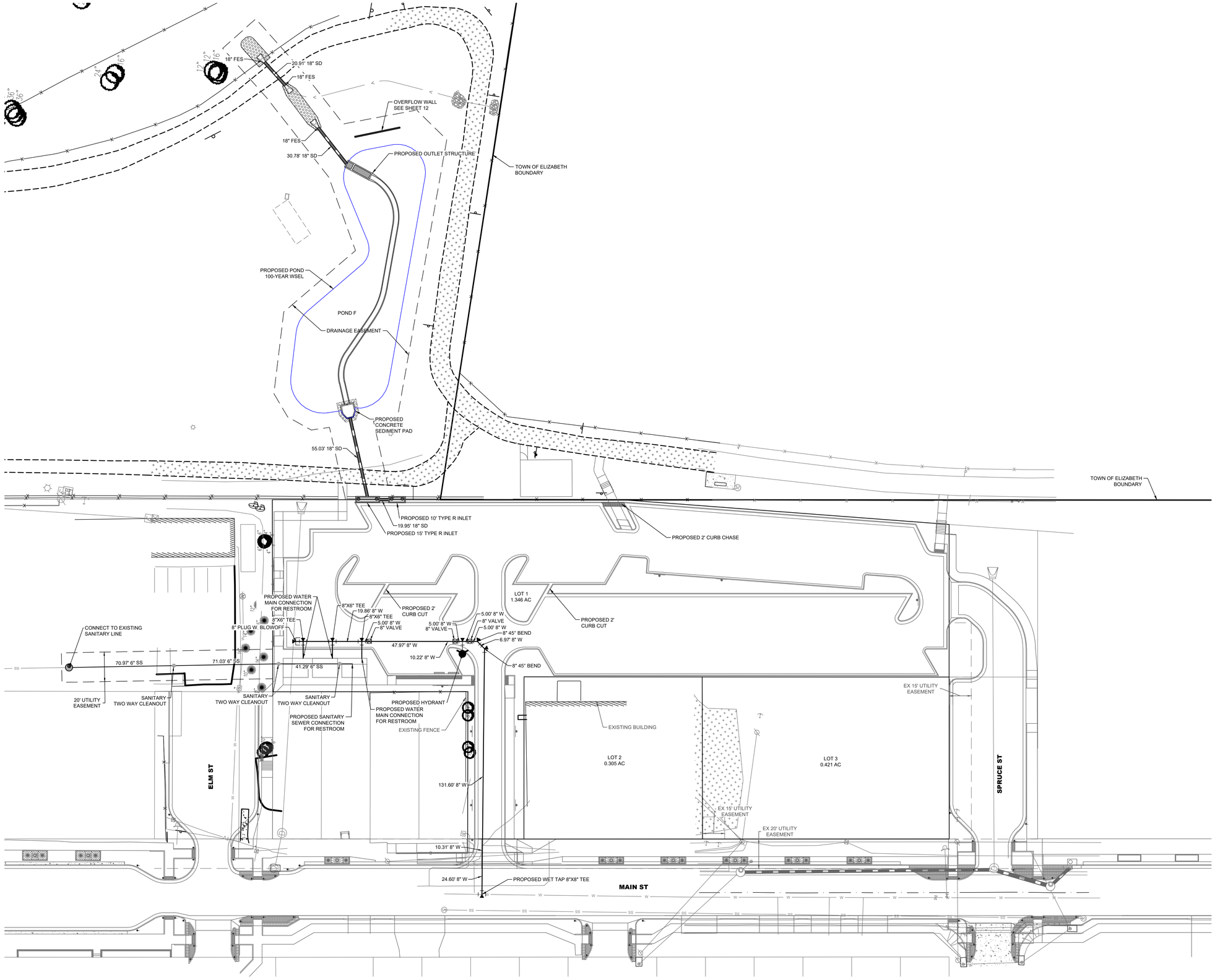
CONSTRUCTION DOCUMENTS
OVERALL SITE PLAN

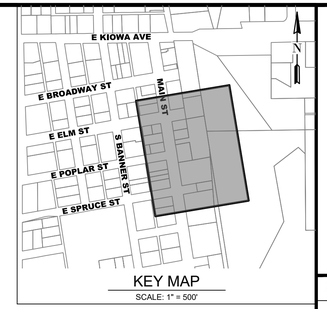
Know what's below. Call before you dig. 811

SHEET 4 OF 31

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

1/30/2025 11:23 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS SITE PLAN.DWG 1





KEY MAP
SCALE: 1" = 500'

0 30' 60'
1 inch = 30'

LEGEND

- STORM (FES, MH, & INLET)
- STORM INLETS (TYPE C, D, 13, & R)
- SANITARY
- WATER (HYDRANT, VALVE, BEND, MH)
- 100-YR WSEL
- OHUT — EXISTING OVERHEAD ELECTRIC
- UE — EXISTING UNDERGROUND ELECTRIC
- X — EXISTING FENCE
- FO — EXISTING FIBER OPTIC
- G — EXISTING GAS
- O — EXISTING STORM
- UT — EXISTING TELEPHONE
- W — EXISTING WATER
- EXISTING SWALE
- EXISTING SANITARY CLEAN OUT
- EXISTING WATER MANHOLE
- MAINTENANCE ACCESS / GRAVEL TRAIL
- RIPRAP
- CONCRETE

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
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2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

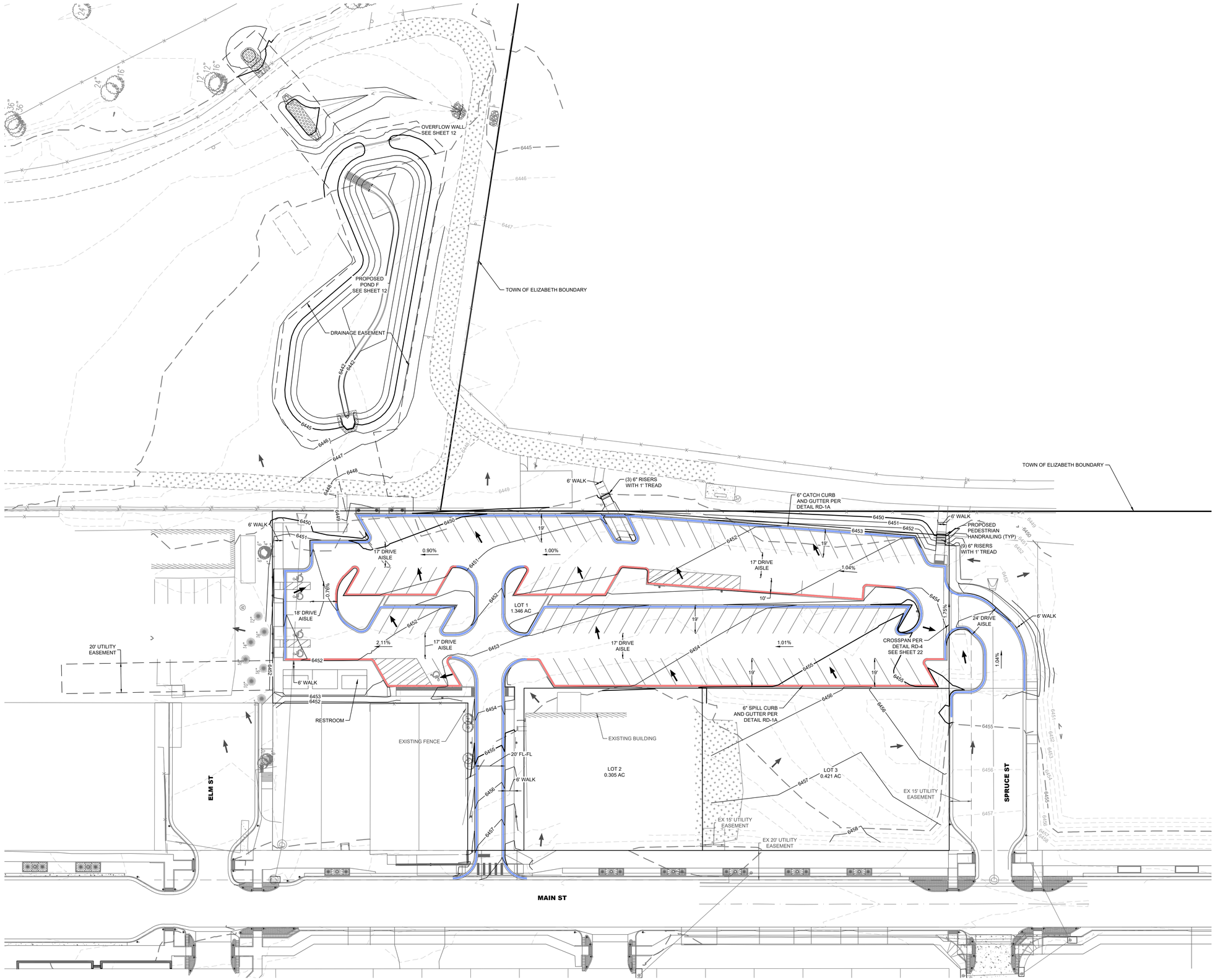
TOWN OF ELIZABETH, COLORADO

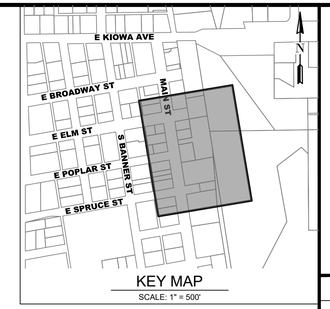
CONSTRUCTION DOCUMENTS
OVERALL UTILITY PLAN

Know what's below. Call before you dig. 811

SHEET
5 OF 31

1/30/2025 11:23 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS UTILITY PLAN.DWG 1





0 30' 60'

1 inch = 30'

LEGEND

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- RIGHT OF WAY (ROW)
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- LOT / TRACT / PARCEL BOUNDARY
- 4880 PROPOSED MAJOR CONTOUR
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- STREET SIGNS
- CURB RAMPS
- EXISTING TREE
- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE

LEGEND:

SPILL CURB -

CATCH CURB -

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
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NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

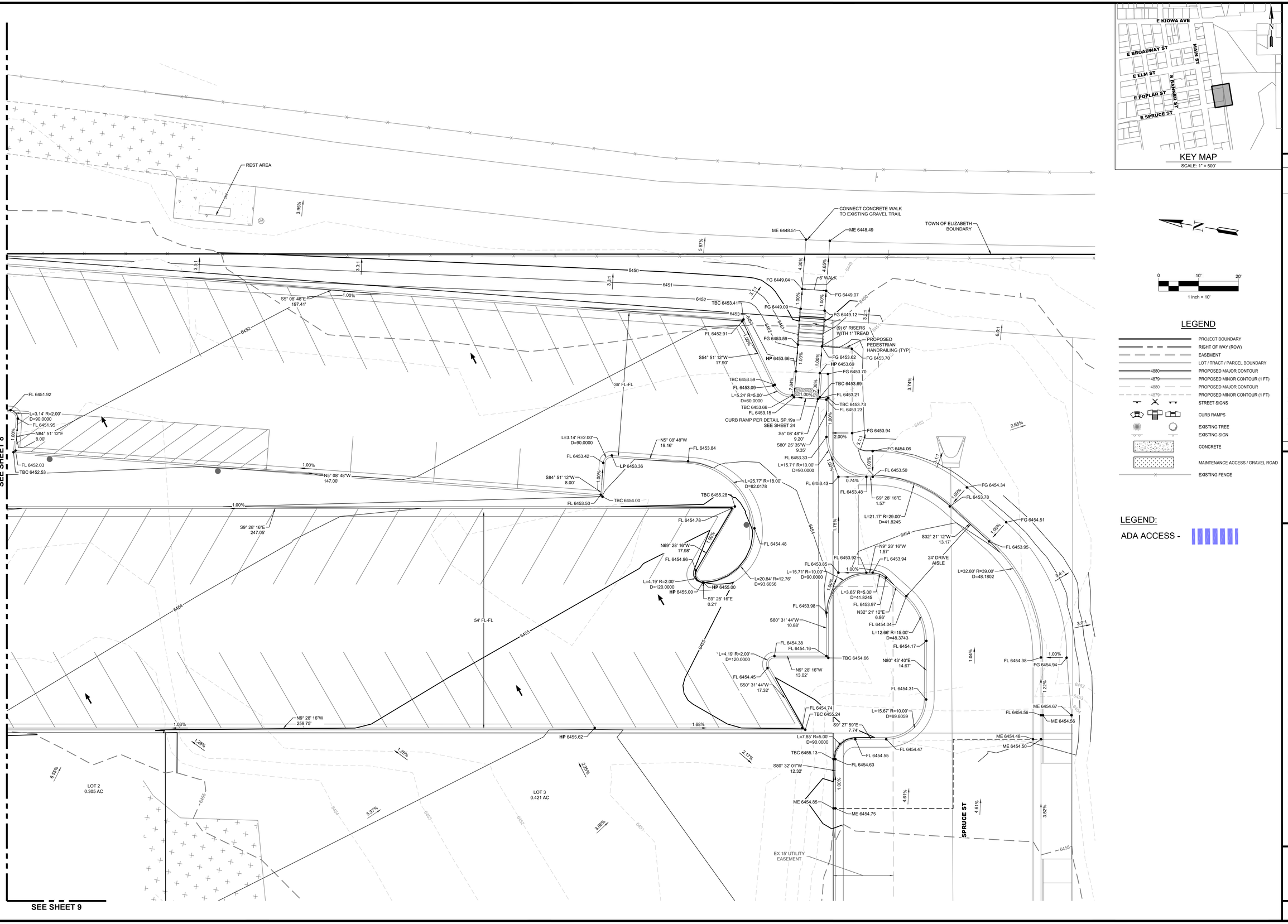
TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
OVERALL GRADING PLAN

Know what's below. Call before you dig. 811

SHEET
6 OF 31

1/30/2025 11:23 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS GRADING PLAN.DWG 1



KEY MAP
SCALE: 1" = 500'

0 10' 20'
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- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE

LEGEND:

ADA ACCESS -

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS

HORIZONTAL CONTROL & GRADING PLAN (1 OF 4)

Know what's **below.** **Call** before you dig. 811

SHEET 7 OF 31

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

1/30/2025 11:23 AM X:\TOWN OF ELIZABETH\CAD\PLANSET\1 - MAIN ST PARKING\PRELIMINARY CDS DETAILED GRADING PLAN.DWG 1

SEE SHEET 10

SEE SHEET 9

SEE SHEET 7

DRAINAGE EASEMENT

TOWN OF ELIZABETH BOUNDARY

CONNECT CONCRETE WALK TO EXISTING GRAVEL TRAIL

CONNECT CONCRETE WALK TO EXISTING GRAVEL TRAIL

DESIGNATED SMOKING AREA

PROPOSED PEDESTRIAN HANDRAILING (TYP)

(3) 6" RISERS WITH 1' TREADS

6' WALK

CURB CHASE

CURB RAMP PER DETAIL SP.19a ON SHEET 24

CURB RAMP PER DETAIL SP.20 ON SHEET 24

20' UTILITY EASEMENT

RESTROOM (SEE ARCHITECTURE PLANS)

RESTROOM (SEE ARCHITECTURE PLANS)

RESTROOM (SEE ARCHITECTURE PLANS)

2' WIDE INLAYED PATTERN OF TRUNCATED DOMES PER DETAIL RD-3A SEE SHEET 22

DRIVEWAY CUT PER DETAIL RD-2 SEE SHEET 22

EXISTING FENCE

EXISTING BUILDING

LOT 1
1.346 AC

LOT 2
0.305 AC

ME 6446.86
ME 6447.25
ME 6448.09
ME 6448.57
ME 6448.70
ME 6448.77
ME 6449.12
ME 6449.15
ME 6449.17
ME 6452.44
ME 6452.54

FG 6448.35
FG 6448.47
FG 6449.14
FG 6449.35
FG 6449.47
FG 6449.47
FG 6449.49
FG 6449.57
FG 6449.62
FG 6449.63
FG 6449.68
FG 6449.97
FG 6450.77
FG 6450.86
FG 6450.86
FG 6450.92
FG 6451.12
FG 6451.18
FG 6451.27
FG 6451.29
FG 6451.64
FG 6451.76
FG 6451.83
FG 6451.94
FG 6452.00
FG 6452.16
FG 6452.21
FG 6452.23
FG 6452.55
FG 6452.77
FG 6453.01
FG 6453.03
FG 6453.17

TBC 6449.49
TBC 6451.21
TBC 6451.27
TBC 6451.41
TBC 6451.60
TBC 6451.76
TBC 6451.88
TBC 6451.94
TBC 6452.00
TBC 6452.11
TBC 6452.17
TBC 6452.22
TBC 6452.23
TBC 6452.49
TBC 6452.55
TBC 6452.71
TBC 6452.73
TBC 6453.11
TBC 6453.89
TBC 6453.98
TBC 6454.27
TBC 6454.37
TBC 6454.45

FL 6450.57
FL 6450.63
FL 6450.71
FL 6450.76
FL 6450.80
FL 6450.83
FL 6451.04
FL 6451.06
FL 6451.10
FL 6451.16
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FL 6451.44
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FL 6451.54
FL 6451.57
FL 6451.61
FL 6451.65
FL 6451.78
FL 6451.80
FL 6451.85
FL 6451.95
FL 6451.96
FL 6452.01
FL 6452.09
FL 6452.14
FL 6452.24
FL 6452.30
FL 6452.31
FL 6452.32
FL 6452.42
FL 6452.45
FL 6452.59
FL 6452.61
FL 6452.81
FL 6452.82
FL 6452.91
FL 6453.07
FL 6453.15
FL 6453.26
FL 6453.28
FL 6453.36
FL 6453.39
FL 6453.45
FL 6453.48
FL 6453.64
FL 6453.71
FL 6453.77

HP 6451.73
HP 6451.76
HP 6451.88
HP 6452.23
HP 6452.37
HP 6452.85
HP 6453.48

LP 6449.11
LP 6450.52
LP 6450.77
LP 6451.59
LP 6451.77
LP 6452.17
LP 6453.06
LP 6453.19

L=4.19' R=2.00' D=120.0000
L=5.76' R=2.00' D=165.0000
L=7.85' R=5.00' D=90.0000
L=14.14' R=18.00' D=45.0000
L=18.85' R=18.00' D=60.0000
L=2.09' R=2.00' D=59.9998
L=20.42' R=13.00' D=90.0002
L=4.19' R=2.00' D=119.9707
L=2.25' R=2.00' D=64.3243
L=2.09' R=2.00' D=60.0000
L=25.13' R=16.00' D=90.0000
L=23.56' R=15.00' D=90.0000
L=2.09' R=2.00' D=59.8849

N80° 31' 44"E 14.42'
N80° 31' 44"E 61.50'
N80° 31' 44"E 4.53'
N20° 31' 44"E 5.73'
N50° 31' 44"E 17.32'
N50° 31' 44"E 19.63'
N9° 28' 16"W 58.90'
N9° 28' 16"W 0.37'
N9° 28' 16"W 0.43'
N9° 28' 16"W 50.24'
N9° 28' 16"W 16.41'
N9° 28' 16"W 49.64'
N9° 28' 16"W 7.10'
N9° 28' 16"W 35.66'
N9° 28' 16"W 16.18'
N9° 28' 16"W 2.31'
N9° 28' 16"W 20.71'
N50° 24' 50"E 19.66'
N54° 51' 12"E 15.10'
N5° 08' 48"W 14.67'
N69° 28' 16"W 18.29'
N69° 28' 16"W 7.99'
N69° 28' 16"W 16.41'
S9° 28' 16"E 37.61'
S9° 28' 16"E 1.38'
S9° 28' 16"E 13.00'
S9° 28' 16"E 28.22'
S9° 28' 16"E 31.81'
S9° 28' 16"E 20.78'
S9° 28' 16"E 7.85'
S9° 28' 16"E 20.78'
S9° 28' 16"E 1.20'
S9° 28' 16"E 18.34'
S9° 28' 16"E 3.37'
S9° 28' 16"E 6.96'
S9° 28' 16"E 18.48'
S9° 28' 16"E 7.99'
S9° 28' 16"E 7.10'
S9° 28' 16"E 7.78'
S9° 28' 16"E 13.00'
S9° 28' 16"E 6.84'
S9° 28' 16"E 15.99'
S9° 28' 16"E 16.18'
S9° 28' 16"E 15.10'
S9° 28' 16"E 1.38'
S50° 31' 44"W 17.32'
S54° 28' 16"E 7.78'
S69° 28' 16"E 20.78'
S69° 28' 16"E 7.85'
S69° 28' 16"E 18.34'
S80° 31' 44"W 18.80'
S50° 31' 44"W 18.48'
S50° 08' 48"E 6.84'
S69° 30' 01"E 18.47'

4.34%
3.04%
3.87%
3.28%
1.67%
3.58%
4.04%
3.04%
4.61%
4.53%
2.00%
3.87%
1.51%
4.08%
4.54%
4.08%
4.78%
4.99%
4.34%
4.99%
4.03%
7.98%
2.87%
2.98%
2.94%
2.91%
2.59%
2.99%
1.18%
2.59%
2.99%
6.58%
6.61%
4.55%
1.51%
1.58%
1.73%
1.69%
1.51%
1.25%
1.58%
2.55%
2.61%
2.48%
1.78%
1.67%
1.89%
2.88%
1.34%
1.51%
5.98%
6.87%
6.54%
3.6:1
3.4:1
2.1:1
1.00%
0.10%

56' FL-FL

6450
6451
6452
6453
6454
6455

KEY MAP
SCALE: 1" = 500'

E KIOWA AVE
E BROADWAY ST
MAIN ST
E ELM ST
S BANNER ST
E POPLAR ST
E SPRUCE ST

0 10' 20'
1 inch = 10'

LEGEND

- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- LOT / TRACT / PARCEL BOUNDARY
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- EXISTING FENCE

LEGEND:

ADA ACCESS -

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

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NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS

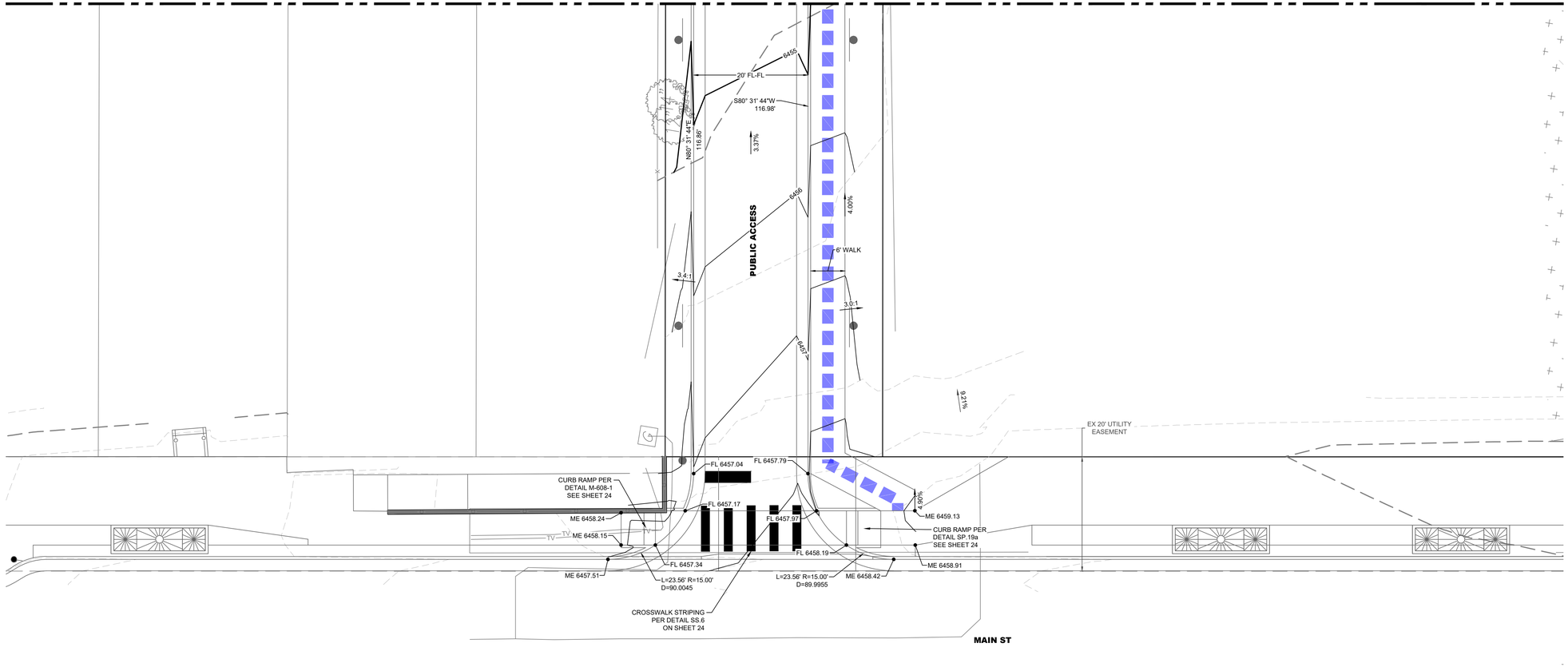
HORIZONTAL CONTROL & GRADING PLAN (2 OF 4)

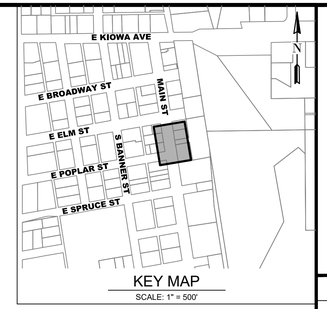
Know what's below. Call before you dig. 811

1/30/2025 11:24 AM - X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS - DETAILED GRADING PLAN.DWG - 2

SEE SHEET 8

SEE SHEET 7





KEY MAP

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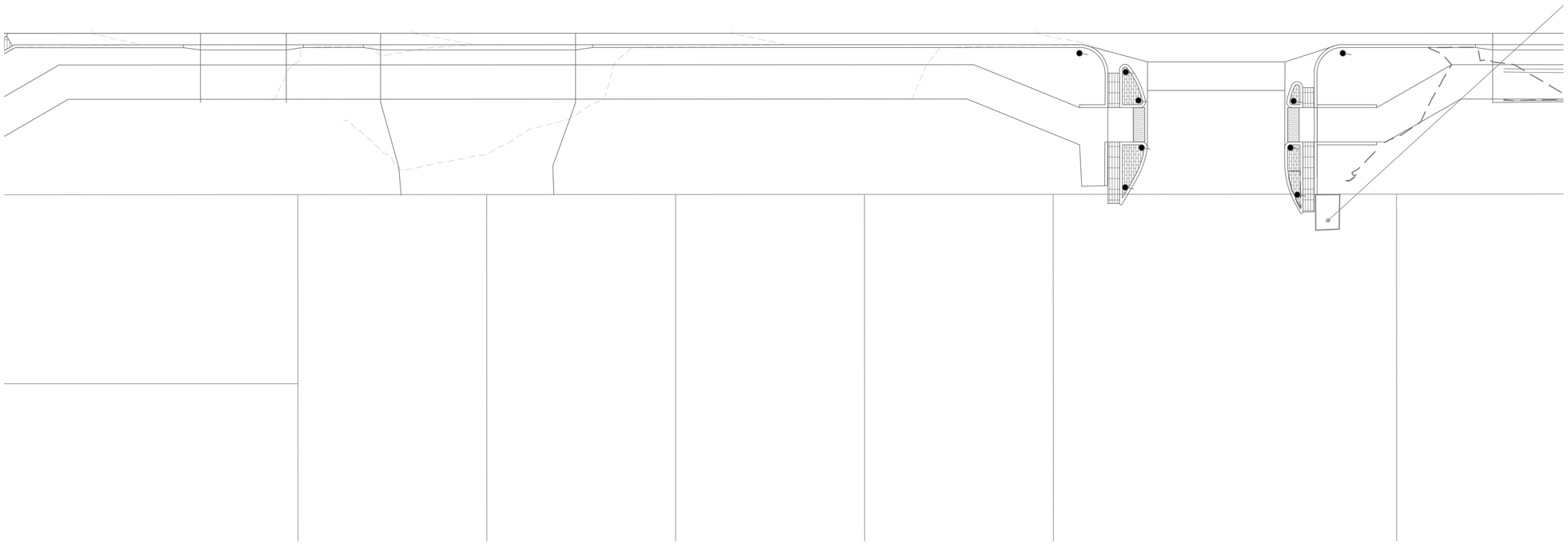

LEGEND:

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MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS

HORIZONTAL CONTROL & GRADING PLAN (3 OF 4)

Know what's **below.** **Call** before you dig. 811

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS DETAILED GRADING PLAN.DWG 3

SEE BOTTOM VIEW

12"
16"

LOW TAILWATER BASIN
SEE SHEET 25
23 SY OF TYPE M SOIL RIPRAP

18"
16"
18"
16"
42"

SEE TOP VIEW

31 SY OF
TYPE M SOIL
RIPRAP

ME 6446.86

4.34%

4.0:1

6445
6444
6446
6447
6448

DRAINAGE EASEMENT

3.26%

3.87%

DRAINAGE EASEMENT

6442
6443
6444
6445
6446
6447

POND F
FOR POND DETAIL
SEE SHEET 12

3' CONCRETE
TRICKLE CHANNEL

6442
6443
6444
6441

EXISTING TRAIL
(WIDTH VARIES)

4.4:1

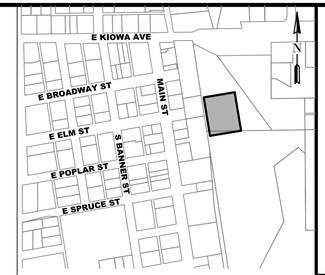
6440
6441
6442
6443
6444
6445

9.65%

OVERFLOW WALL
SEE SHEET 12

6.27%

SEE SHEET 8



KEY MAP
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LEGEND:

ADA ACCESS -

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MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

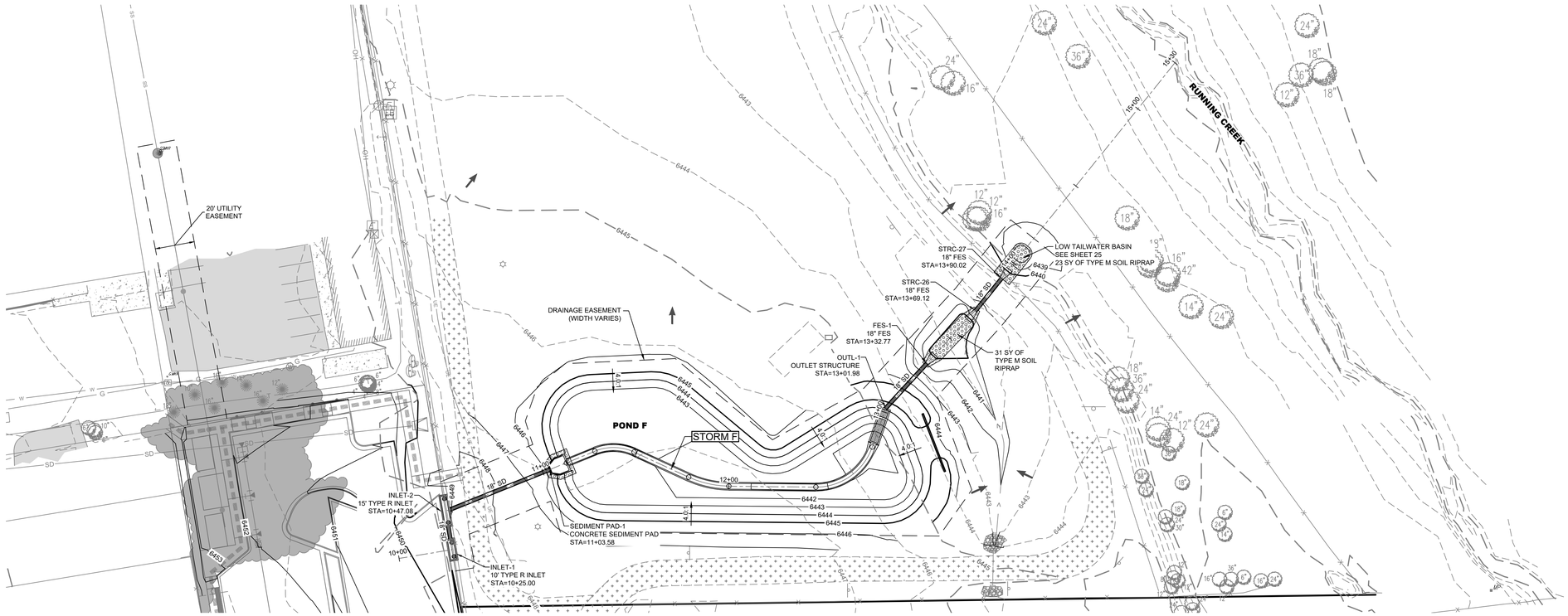
CONSTRUCTION DOCUMENTS

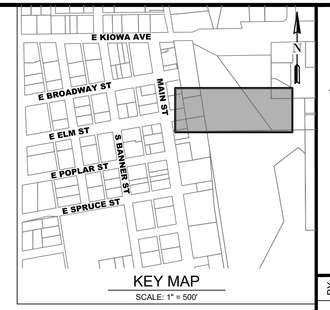
HORIZONTAL CONTROL & GRADING PLAN (4 OF 4)

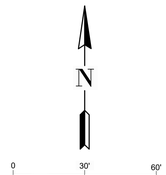
Know what's **below.**
Call before you dig.
811

SHEET
10 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS DETAILED GRADING PLAN.DWG 4





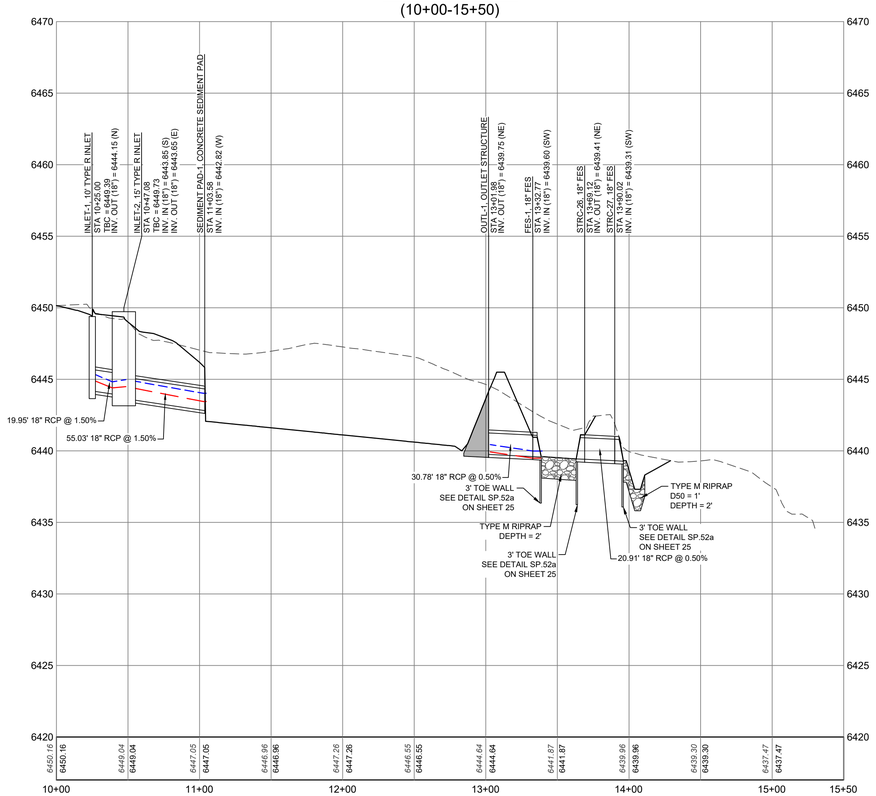


PROFILE LEGEND

EXIST GRADE	
PROP GRADE	
1"=50' (HORZ)	1"=5' (VERT)

STORM F

(10+00-15+50)



terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

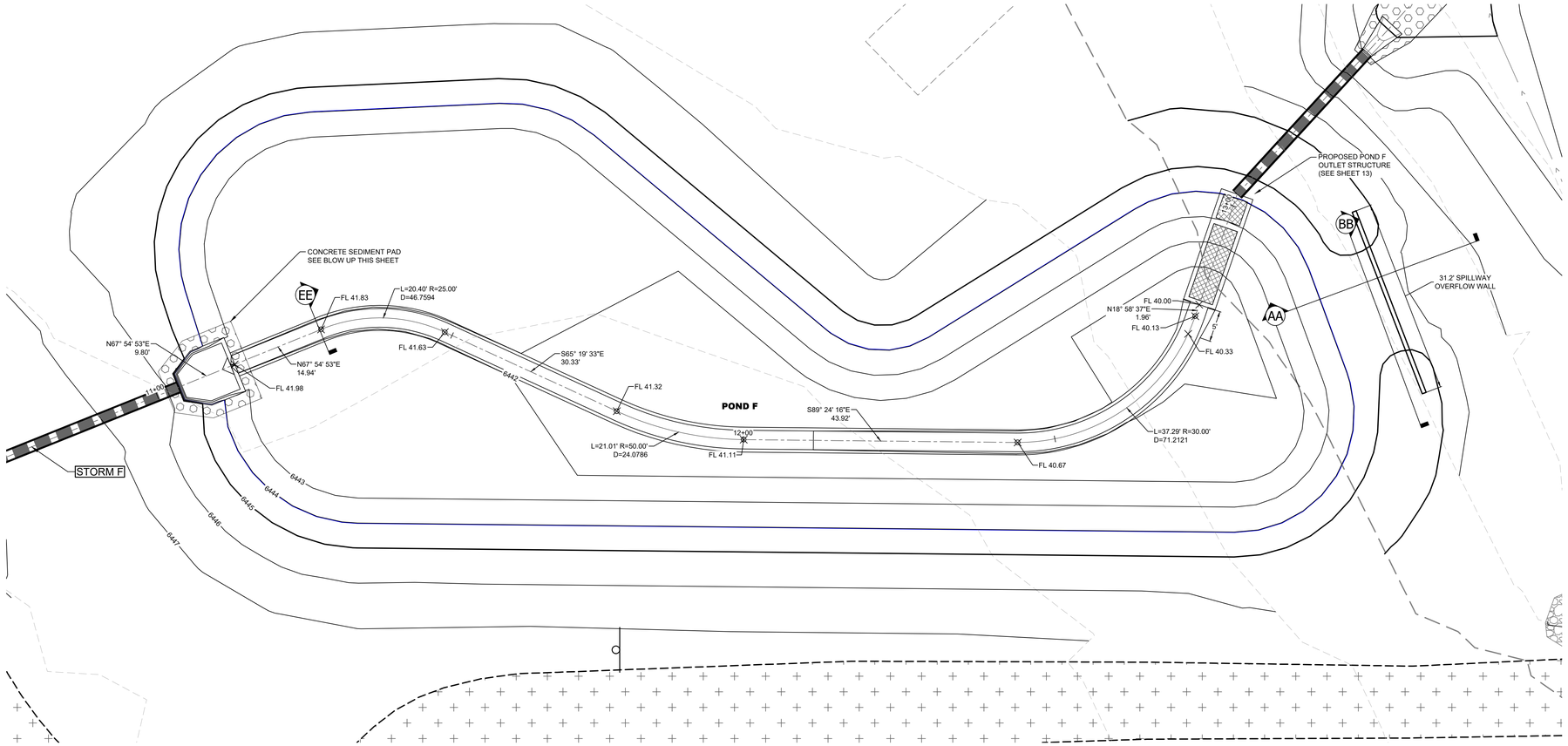
MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO

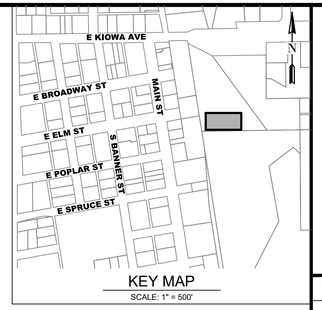
CONSTRUCTION DOCUMENTS
STORM P&P - STORM F

Know what's **below.** **Call** before you dig. 811

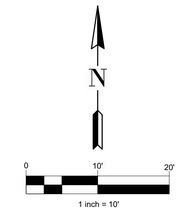
SHEET
11 OF 31

1/30/2025 11:24 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS STORM P&P.DWG 1



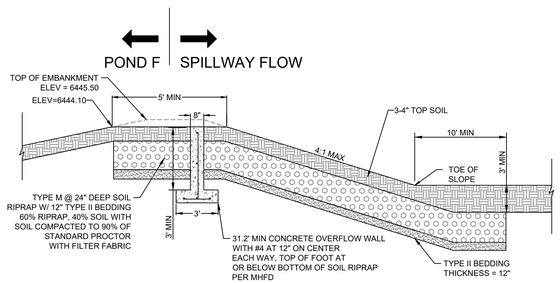


KEY MAP
SCALE: 1" = 500'

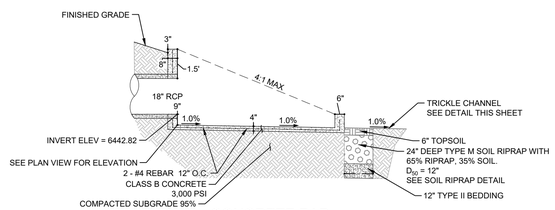


LEGEND

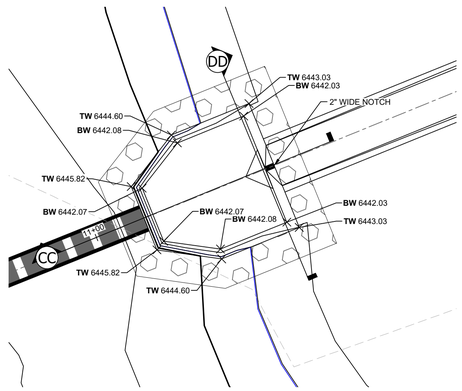
- PROPOSED MAJOR CONTOUR (6350)
- PROPOSED MINOR CONTOUR (6349)
- EXISTING MAJOR CONTOUR (6350)
- EXISTING MINOR CONTOUR (6349)
- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- LOT BOUNDARY
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- RIPRAP
- SOIL RIPRAP
- STORM (FES, MH, & INLET)
- SANITARY
- WATER (HYDRANT, VALVE, BEND, MH)
- FOREBAY
- STORM INLETS (TYPE C, D, 13, & R)
- STORM 100 YEAR HGL
- STORM 5 YEAR HGL
- EX STORM (FES, MH, & INLET)
- EXISTING UTILITY
- EXISTING SWALE
- EXISTING SIGN
- EXISTING WATER
- EXISTING FENCE
- EXISTING POWER POLE & GUY WIRE
- EX WATER MH, METER, & VENT PIPE
- EX WATER VALVE & HYDRANT



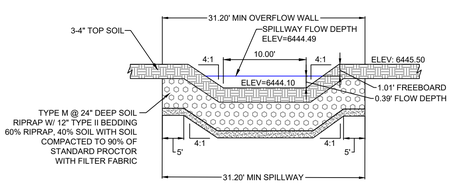
SPILLWAY
SECTION A-A
NTS



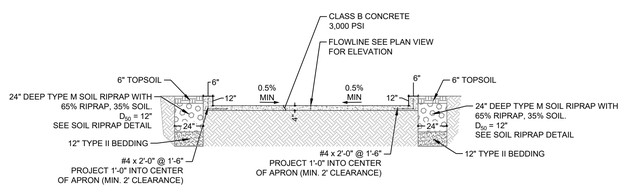
CONCRETE PAD
SECTION C-C
NTS



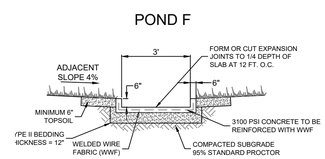
CONCRETE PAD BLOW UP
SCALE = 1" = 5'



SPILLWAY
SECTION B-B
NTS



CONCRETE PAD
SECTION D-D
NTS



CONCRETE TRICKLE CHANNEL
SECTION E-E
NTS

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

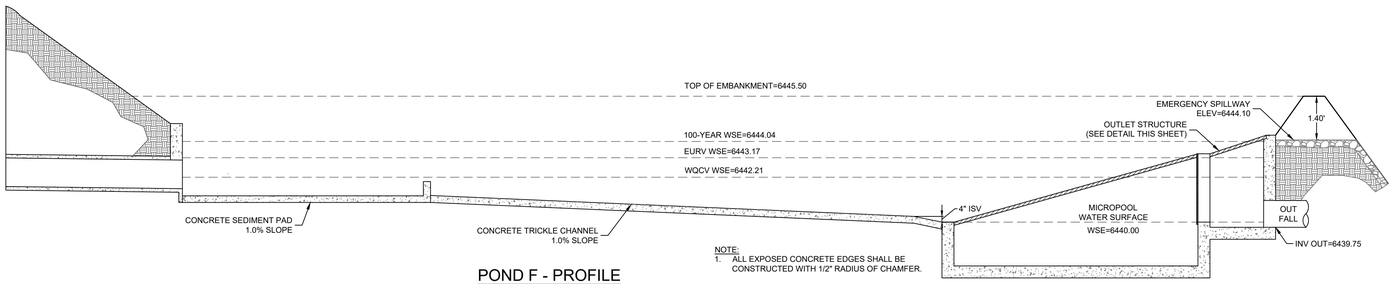
NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
STORM - POND F

Know what's **below.** **Call** before you dig.
811

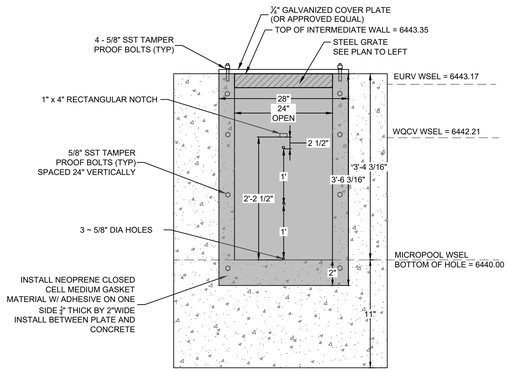
SHEET
12 OF 31

10/2/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS POND SHEETS.DWG POND

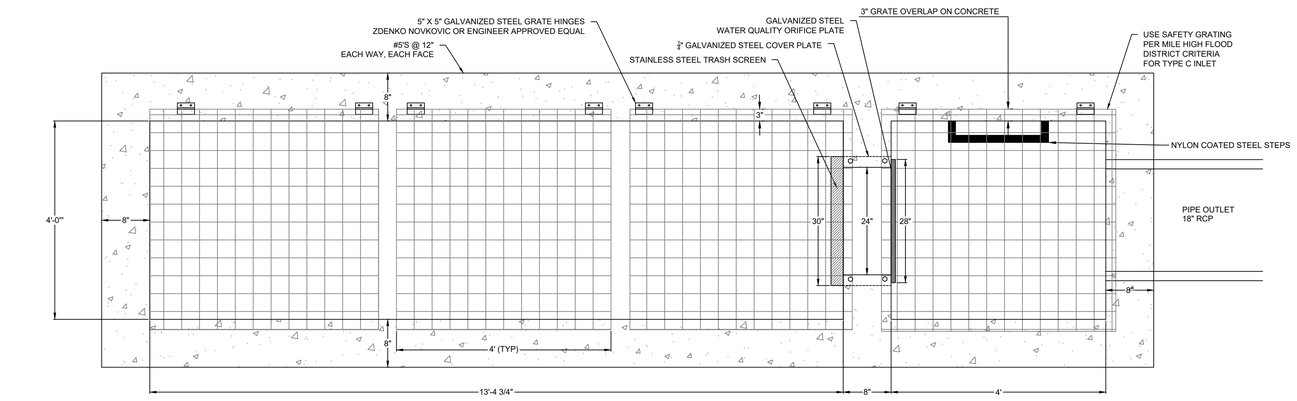


NOTE:
1. ALL EXPOSED CONCRETE EDGES SHALL BE CONSTRUCTED WITH 1/2" RADIUS OF CHAMFER.

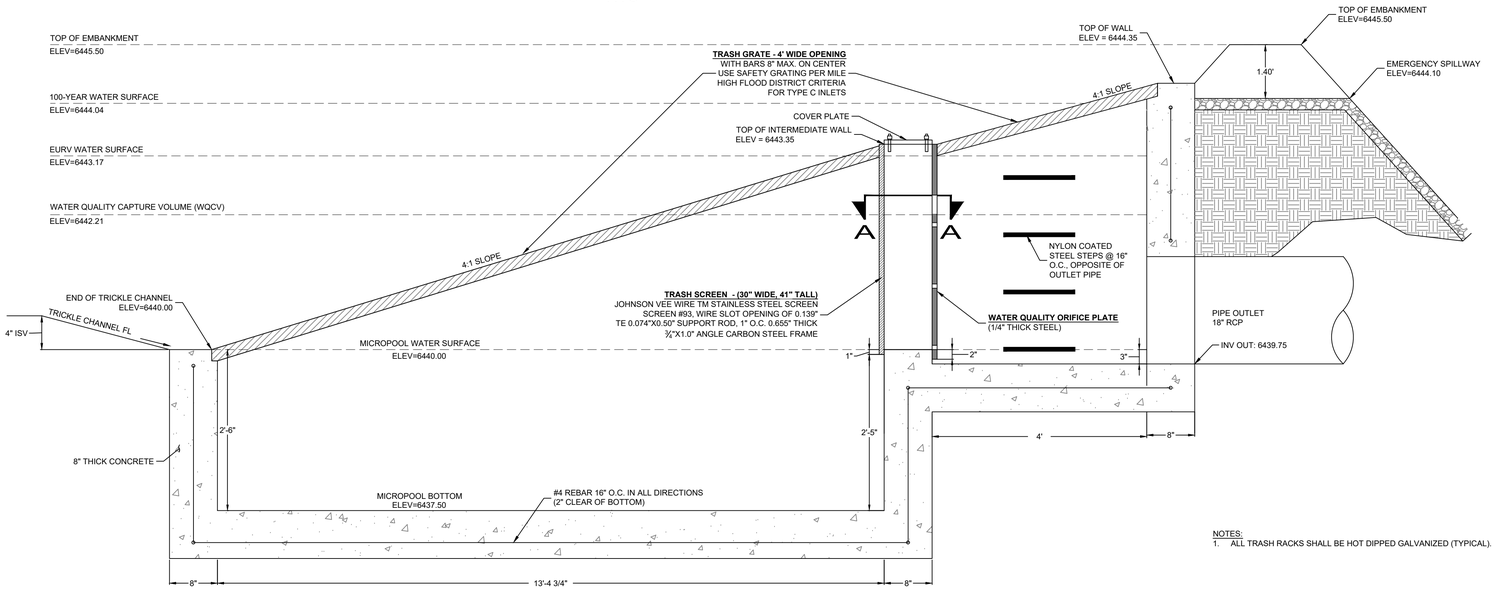
POND F - PROFILE
NTS



ORIFICE PLATE - ELEVATION
NTS

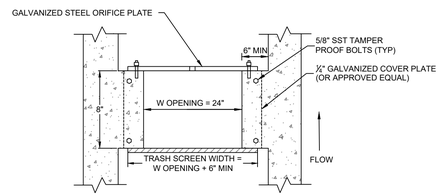


POND F - OUTLET STRUCTURE PLAN
NTS



NOTES:
1. ALL TRASH RACKS SHALL BE HOT DIPPED GALVANIZED (TYPICAL).

POND F - OUTLET STRUCTURE SECTION
NTS



TRASH SCREEN/ORIFICE PLATE SECTION (A)
NTS

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#	REVISION DESCRIPTION	DATE	BY
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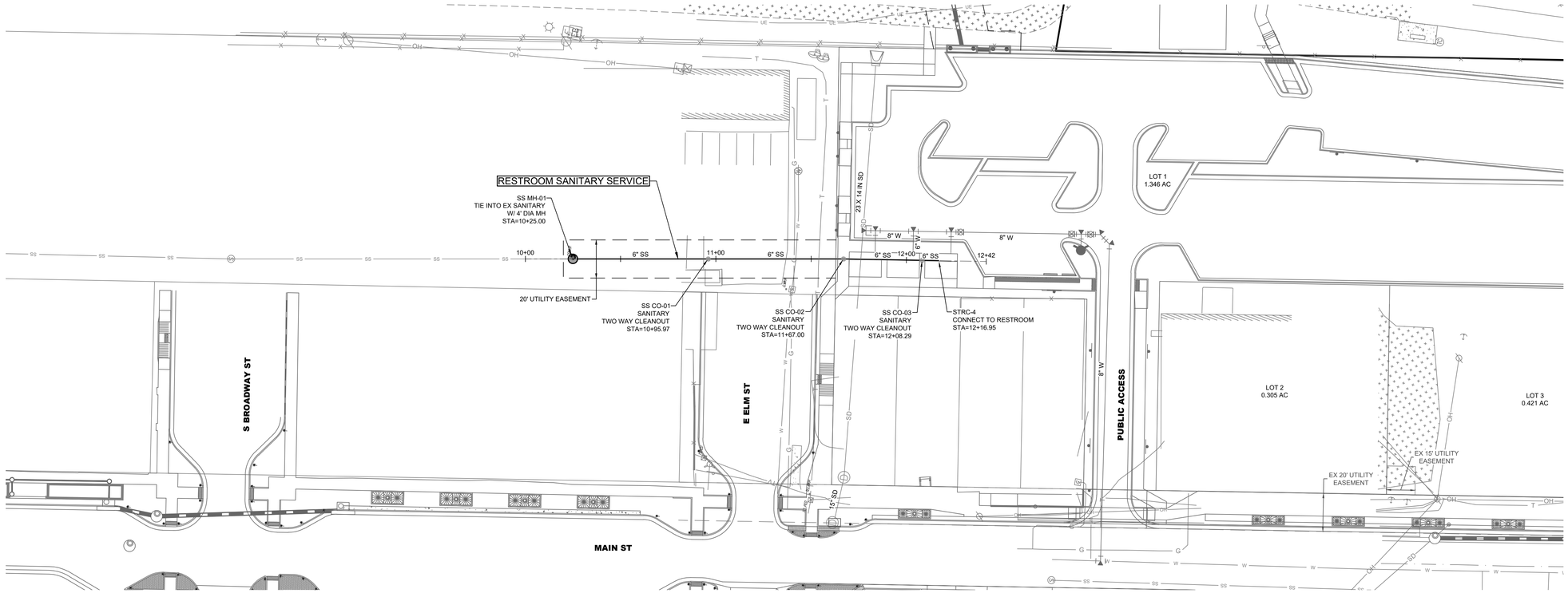
NOT FOR CONSTRUCTION

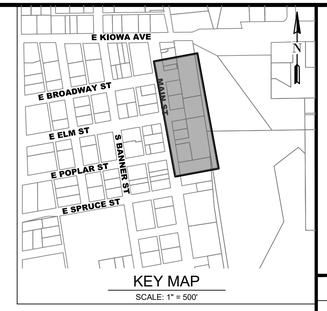
MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
STORM - OUTLET STRUCTURE - POND F

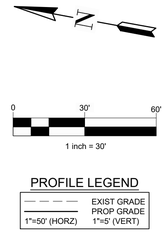
Know what's **below.** **Call** before you dig. 811

SHEET
13 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS POND SHEETS.DWG OUTLET STUCTURE

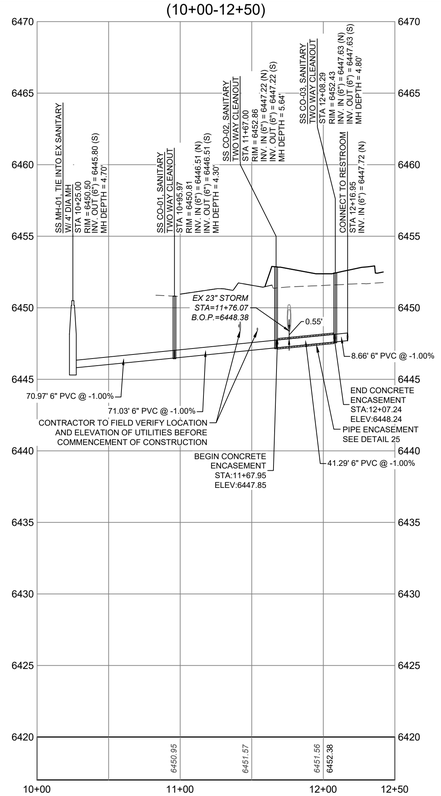






RESTROOM SANITARY SERVICE

(10+00-12+50)



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Denver, CO 80231
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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

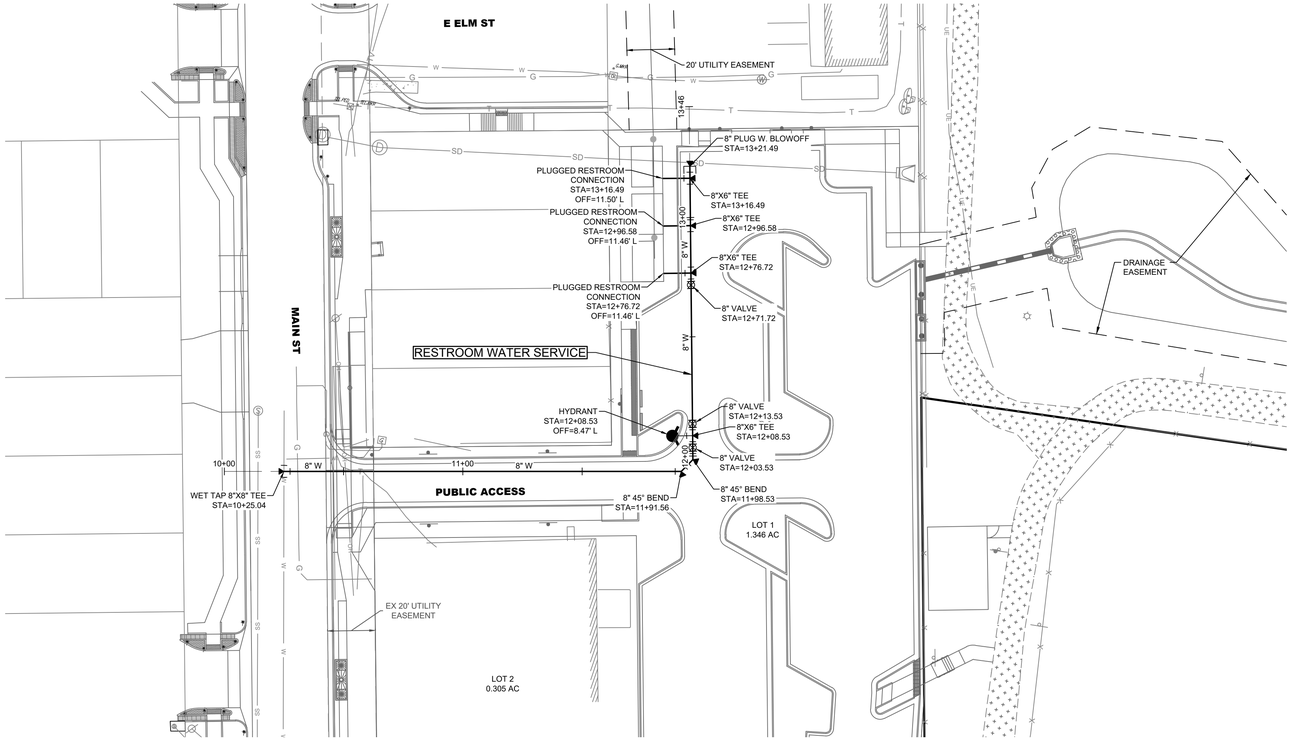
NOT FOR CONSTRUCTION

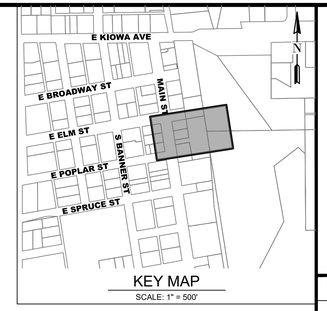
MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
SANITARY P&P - RESTROOM SANITARY SERVICE

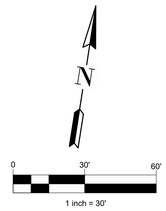
Know what's **below.** **Call** before you dig. 811

SHEET 14 OF 31

1/30/2025 11:24 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS SANITARY P&P.DWG 1





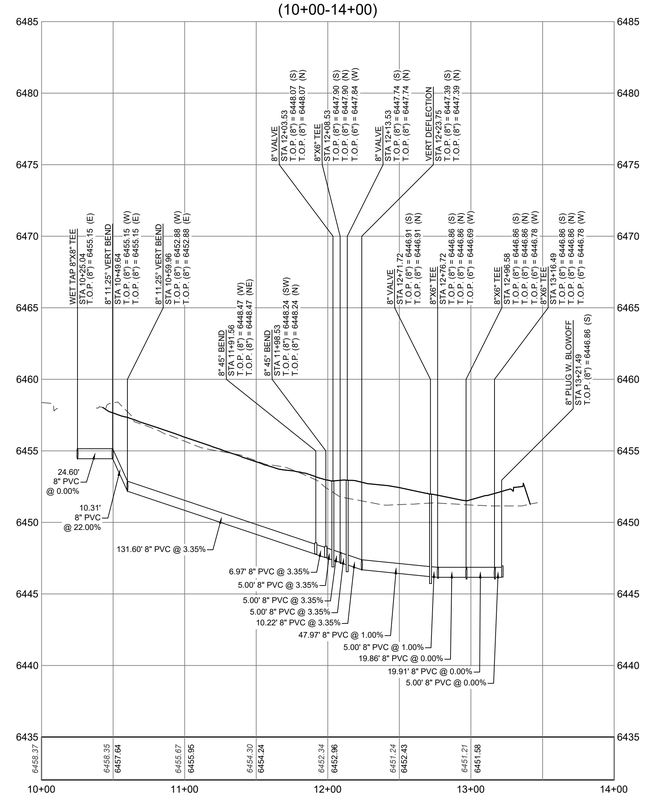


PROFILE LEGEND

EXIST GRADE	
PROP GRADE	
1"=50' (HORZ)	1"=5' (VERT)

RESTROOM WATER SERVICE

(10+00-14+00)



#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
WATER P&P - RESTROOM WATER SERVICE

Know what's **below.** **Call** before you dig. 811

SHEET 15 OF 31

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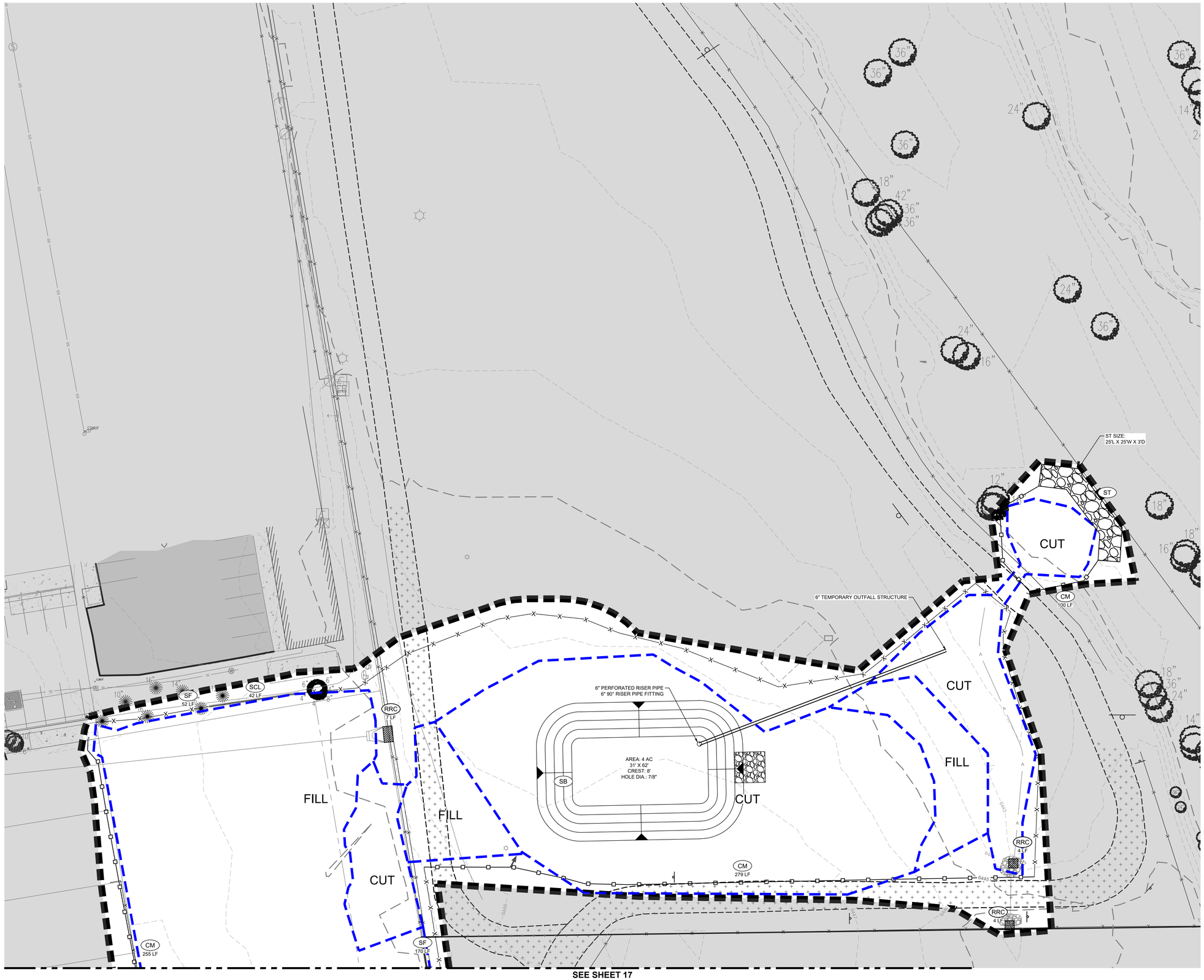
10/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS WATER R&P.DWG 1



NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

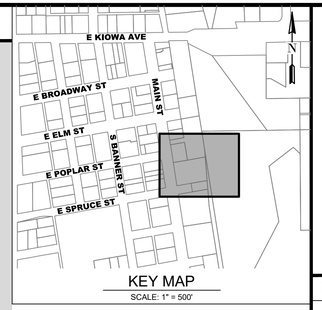
CONSTRUCTION DOCUMENTS
GESC - INITIAL PLAN

Know what's below. Call before you dig. 811

SHEET 16 OF 31

1/30/2025 11:24 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS GESC - INITIAL.DWG 1

SEE SHEET 16



KEY MAP
SCALE: 1" = 500'

N

0 20' 40'

1 inch = 20'

LEGEND

- OUTSIDE LIMITS OF CONSTRUCTION
- CD — CHECK DAM
- CWA — CONCRETE WASHOUT AREA
- CM — CONSTRUCTION MARKER
- CS — CURB SOCK / ROCK SOCK
- DD — DIVERSION DITCH
- ECB — EROSION CONTROL BLANKET
- IP — INLET PROTECTION
- RRC — REINFORCED ROCK BERM FOR CULVERT PROTECTION
- SB — TEMPORARY SEDIMENT BASIN
- SCL — SEDIMENT CONTROL LOG
- SF — SILT FENCE
- ST — SEDIMENT TRAP
- SM — SEEDING AND MULCHING
- SSA — STABILIZED STAGING AREA
- SR — SURFACE ROUGHENING
- VTC — VEHICLE TRACKING CONTROL
- LOC — LIMITS OF CONSTRUCTION

NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

terracina design
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#	REVISION DESCRIPTION	DATE	BY
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2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
GESC - INITIAL PLAN

Know what's below. Call before you dig. 811

SHEET 17 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS GESC - INITIAL.DWG 2

NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

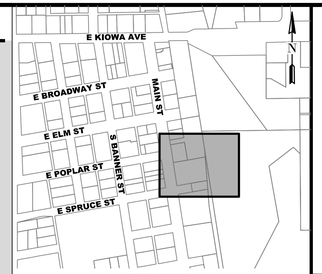
CONSTRUCTION DOCUMENTS
GESC - INTERIM PLAN

Know what's below. Call before you dig. 811

SHEET 18 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS GESC - INTERIM.DWG 1

SEE SHEET 18



KEY MAP
SCALE: 1" = 500'

N

0 20' 40'

1 inch = 20'

LEGEND

- OUTSIDE LIMITS OF CONSTRUCTION
- CD — CHECK DAM
- CWA — CONCRETE WASHOUT AREA
- CM — CONSTRUCTION MARKER
- CS — CURB SOCK / ROCK SOCK
- DD — DIVERSION DITCH
- ECB — EROSION CONTROL BLANKET
- IP — INLET PROTECTION
- RRC — REINFORCED ROCK BERM FOR CULVERT PROTECTION
- SB — TEMPORARY SEDIMENT BASIN
- SCL — SEDIMENT CONTROL LOG
- SF — SILT FENCE
- ST — SEDIMENT TRAP
- SM — SEEDING AND MULCHING
- SSA — STABILIZED STAGING AREA
- SR — SURFACE ROUGHENING
- VTC — VEHICLE TRACKING CONTROL
- LOC — LIMITS OF CONSTRUCTION

NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

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#	REVISION DESCRIPTION	DATE	BY
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2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
GESC - INTERIM PLAN

Know what's **below.** **Call** before you dig. 811

1/30/2025 11:24 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIM\MAY CDS GESC - INTERIM.DWG 2

LEGEND

- OUTSIDE LIMITS OF CONSTRUCTION
- CD — CHECK DAM
- CWA — CONCRETE WASHOUT AREA
- CM — CONSTRUCTION MARKER
- CS — CURB SOCK / ROCK SOCK
- DD — DIVERSION DITCH
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- SSA — STABILIZED STAGING AREA
- SR — SURFACE ROUGHENING
- VTC — VEHICLE TRACKING CONTROL
- LOC — LIMITS OF CONSTRUCTION

NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

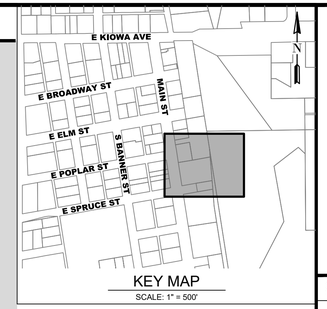
CONSTRUCTION DOCUMENTS
GESC - FINAL PLAN

Know what's below. Call before you dig. 811

SHEET 20 OF 31

1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS GESC - FINAL.DWG 1

SEE SHEET 20



KEY MAP
SCALE: 1" = 500'

N

0 20' 40'

1 inch = 20'

LEGEND

- OUTSIDE LIMITS OF CONSTRUCTION
- CD — CHECK DAM
- CWA — CONCRETE WASHOUT AREA
- CM — CONSTRUCTION MARKER
- CS — CURB SOCK / ROCK SOCK
- DD — DIVERSION DITCH
- ECB — EROSION CONTROL BLANKET
- IP — INLET PROTECTION
- RRC — REINFORCED ROCK BERM FOR CULVERT PROTECTION
- SB — TEMPORARY SEDIMENT BASIN
- SCL — SEDIMENT CONTROL LOG
- SF — SILT FENCE
- ST — SEDIMENT TRAP
- SM — SEEDING AND MULCHING
- SSA — STABILIZED STAGING AREA
- SR — SURFACE ROUGHENING
- VTC — VEHICLE TRACKING CONTROL
- LOC — LIMITS OF CONSTRUCTION

NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

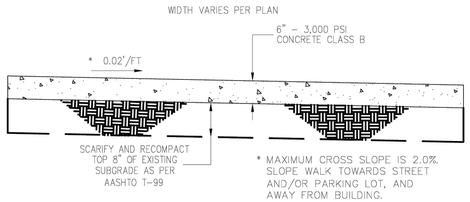
TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
GESC - FINAL PLAN

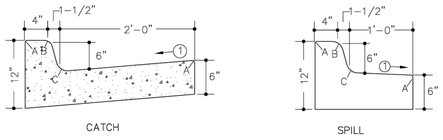
Know what's **below.** **Call** before you dig. 811

SHEET 21 OF 31

1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS GESC - FINAL.DWG 2



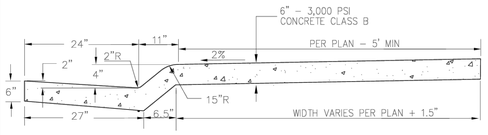
SIDEWALK DETAIL



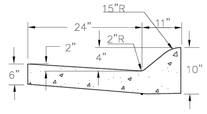
CURB DETAIL LEGEND	
A	RADIUS = 1/8"
B	RADIUS = 1-1/2"
C	RADIUS = 1-1/2" - 2"
1	CROSS SLOPE SHALL BE 1/2" PER FOOT WHEN DRAINING AWAY FROM CURB, AND 1" PER FOOT WHEN DRAINING TOWARD THE CURB

CURB DETAIL

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB, GUTTER, & SIDEWALK DETAILS	
SCALE: NOT TO SCALE DATE: 02/10/09	
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-1A



COMBINATION CURB, GUTTER & SIDEWALK



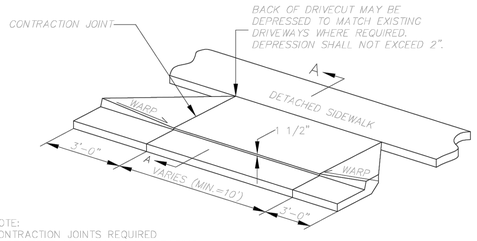
LOCAL MOUNTABLE CURB & GUTTER

NOTES:

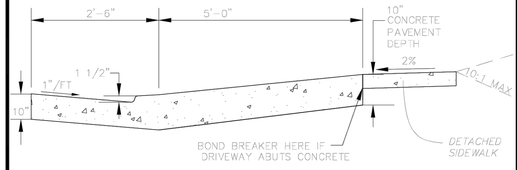
1) IF A SIDEWALK IS PLACED BEHIND THE CURB BUT IS NOT PLACED MONOLITHICALLY, EXPANSION JOINT MATERIAL AND A SILICONE BASE SEALER MUST BE APPLIED BETWEEN THE SIDEWALK AND CURB.

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB, GUTTER, & SIDEWALK DETAILS	
SCALE: NOT TO SCALE DATE: 09/06/17	
APPROVED: CORE CONSULTANTS INC. TOWN ENGINEER	RD-1B

NOTE: CURBCUTS ARE TO BE PLACED MONOLITHIC WITH CURB & GUTTER.

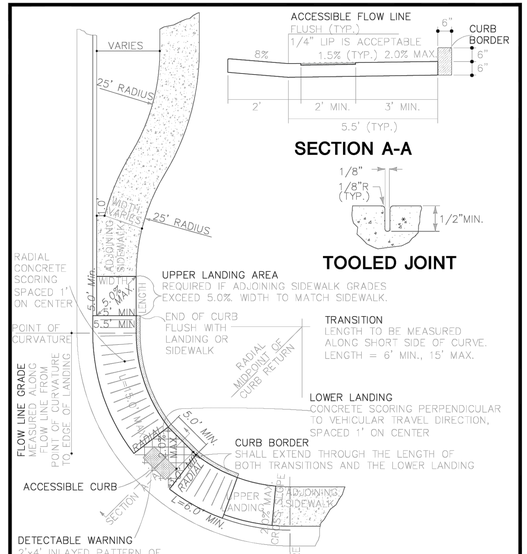


NOTE:
CONTRACTION JOINTS REQUIRED IN DRIVECUT AT MAXIMUM 10' SPACING



SECTION A-A

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
DRIVEWAY CUT DETAIL	
SCALE: NOT TO SCALE DATE: 02/10/09	
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-2



TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
HANDICAP RAMP DETAIL	
SCALE: NOT TO SCALE DATE: 02/10/09	
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-3A

NOTES

SLOPED TRANSITIONS SHALL COMPLY WITH ALL APPLICABLE RULES AND GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

SLOPED TRANSITIONS SHALL BE CONSISTENT WITH THE CURRENT PUBLICATION OF FEDERAL GUIDELINES FOR ACCESSIBLE RIGHTS OF WAY.

LONGITUDINAL SLOPES WITHIN THE TRANSITION SHALL NOT EXCEED 1:12 (8.33%).

CROSS SLOPES, OR SLOPES PEPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:50 (2.0%)

THE LOWER LANDING AREA IS A REQUIRED ELEMENT.
SLOPED TRANSITIONS ARE A REQUIRED ELEMENT AND SHALL:
A. NOT EXCEED 1:12 (8.3%) LONGITUDINAL SLOPE ALONG THE SHORTEST SIDE UNLESS TRANSITION LENGTH EXCEEDS 15.0'
B. NOT EXCEED 1:50 (2.0%) SLOPE PERPENDICULAR TO THE TRAVELED DIRECTION.
C. NOT EXCEED 15.0' IN LENGTH AS MEASURED ALONG THE SHORTEST SIDE. MAXIMUM LONGTITUDINAL SLOPE SHALL BE ADJUSTED TO ACCOMODATE THE LENGTH.
D. NOT BE LESS THAN 6.0' IN LENGTH.

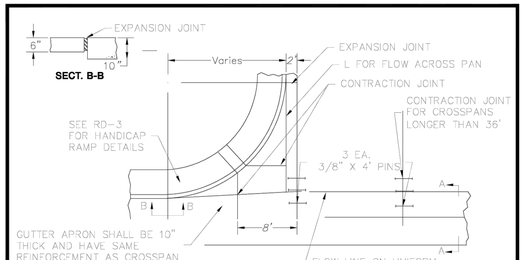
THE UPPER LANDING AREA IS REQUIRED IF:
A. THE ADJOINING SIDEWALK HAS A LONGTITUDINAL GRADE (DIRECTION OF TRAVEL) IN EXCESS OF 1:20 (5.0%). SAID LANDING SHALL NOT EXCEED A 1:20 (5.0%) SLOPE IN ANY DIRECTION.
B. A CHANGE IN DIRECTION IS REQUIRED TO ENTER OF EXIT THE SLOPED TRANSITION. SAID LANDING SHALL SHALL NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION.

LANDINGS AND SLOPED TRANSITIONS SHALL MATCH THE WIDTH OF THE ADJOINING SIDEWALK, 3.0' MINIMUM.

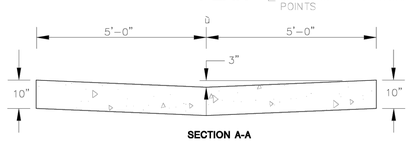
ALL TOOLED JOINTS WITHIN THE SLOPED TRANSITIONS SHALL RUN PERPENDICULAR TO THE DIRECTION OF TRAVEL.

ALL TOOLED JOINTS WITHIN THE LOWER LANDING AREA SHALL RUN PARALLEL TO AND/OR PERPENDICULAR TO THE DIRECTION OF VEHICULAR TRAVEL WITHIN THE TRAVELED WAY.

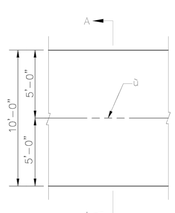
TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
HANDICAP RAMP DETAIL NOTES	
SCALE: NOT TO SCALE DATE: 02/10/09	
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-3B



PLAN



SECTION A-A



PAN LENGTH	REBAR HAVING END AREA OF
36'	.10 Sq. In. Per Ft. (#4 @ 18" E.W.)
46'	.13 Sq. In. Per Ft. (#4 @ 18" E.W.)
64'	.20 Sq. In. Per Ft. (#4 @ 18" E.W.)
84'	.26 Sq. In. Per Ft. (#4 @ 18" E.W.)

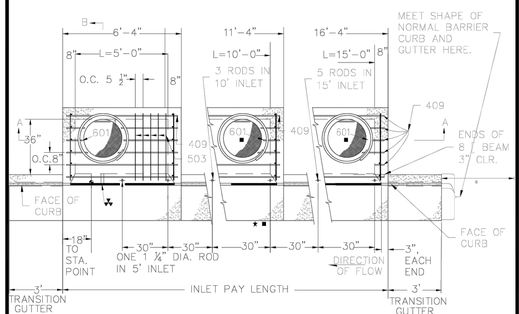
PLAN

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CROSSPAN	
SCALE: NOT TO SCALE DATE: 02/10/09	
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-4

■ADDITIONAL MANHOLE, RING AND COVER REQUIRED WHEN L=10' OR MORE. CUT REINFORCEMENT BAR ACCORDINGLY.

☘ A 2" DIAMETER TEMPORARY HOLE FOR DRAINAGE SHALL BE PLACED AT SUBGRADE ELEVATION OR A MINIMUM THREE INCHES BELOW ROAD BASE. THE HOLE SHALL BE PLUGGED WITH CONCRETE BEFORE ACCEPTANCE OF THE INLET.

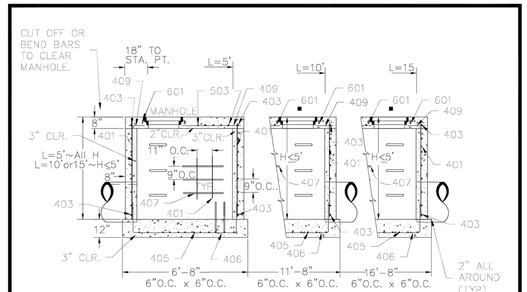
★ FOR LENGTH GREATER THEN 5 FT. PROVIDE ACCESS AT BOTH ENDS.



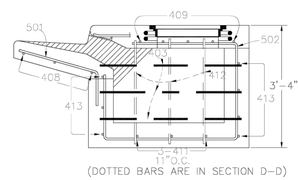
TYPICAL PLAN VIEW

NOTE:
MANHOLE RING & COVER, STATION POINT AND OUTFLOW PIPE SHALL BE LOCATED AT THE SAME END OF THE INLET.

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB INLET - TYPE R	
SCALE: NOT TO SCALE DATE: 02/10/09	
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-5A



SECTION A-A REGULAR INLET



(DOTTED BARS ARE IN SECTION D-D)

SECTIONS C-C & D-D

■ADDITIONAL MANHOLE, RING AND COVER REQUIRED WHEN L=10' OR MORE. CUT REINFORCEMENT BAR ACCORDINGLY.

NOTE:
MANHOLE RING & COVER, STATION POINT AND OUTFLOW PIPE SHALL BE LOCATED AT THE SAME END OF THE INLET.

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB INLET - TYPE R	
SCALE: NOT TO SCALE DATE: 02/10/09	
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-5B

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

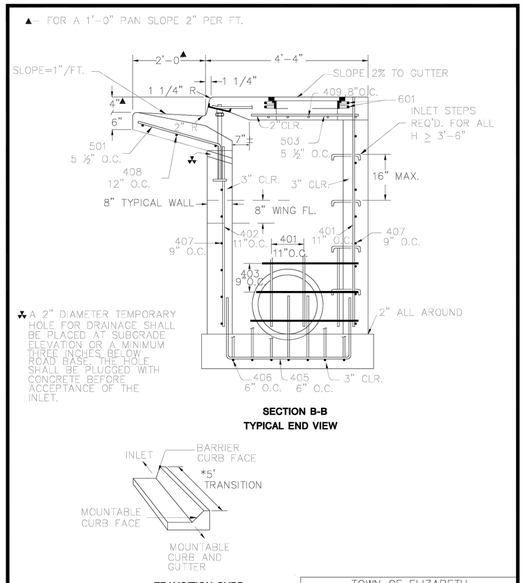
NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 22 OF 31

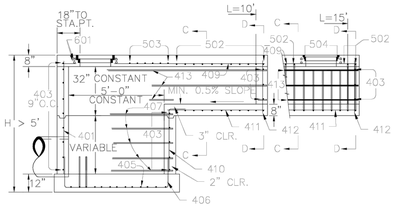
1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS DETAILS.DWG 1



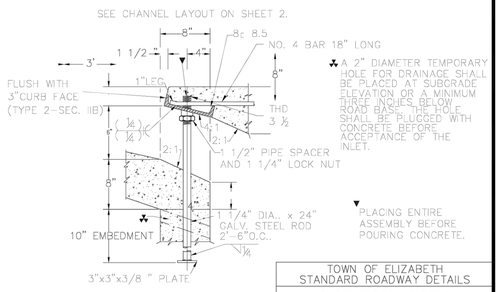
SECTION B-B
TYPICAL END VIEW

TRANSITION CURB

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB INLET – TYPE R	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-5C

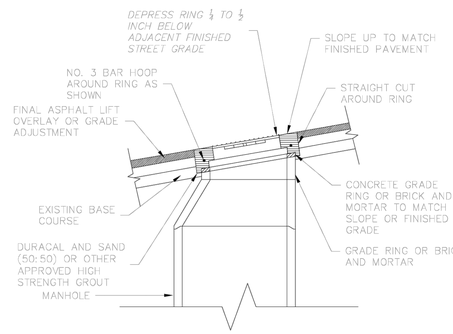


SECTION A-A
INLET WITH DROP BOX~H>5'



CURB FACE ASSEMBLY

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB INLET – TYPE R	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-5D



NOTES:
1. ADEQUATE BARRICADES SHALL BE PLACED AND MAINTAINED UNTIL THE COLLAR ATTAINS A COMPRESSIVE STRENGTH OF 3000 PSI.
2. DURACAL GROUT SHALL BE A MIXTURE OF 100 LBS. DURACAL, 26 LBS. WATER (3.12 GAL.) AND 100 LBS. OF SAND CONFORMING TO ASTM C-35.
3. MANHOLES SHALL NOT BE LOCATED IN CROSSPANS OR GUTTERS

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
MANHOLE RING AND COVER	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-7

THE FOLLOWING NOTES ARE APPLICABLE TO ALL ROADWAY SECTIONS IDENTIFIED ON THE FOLLOWING PAGES (LOCAL, MINOR COLLECTOR, MAJOR COLLECTOR, MINOR ARTERIAL AND MAJOR ARTERIAL), UNLESS MODIFICATIONS ARE APPROVED IN WRITING BY THE DIRECTOR OF PUBLIC WORKS.

NOTES:

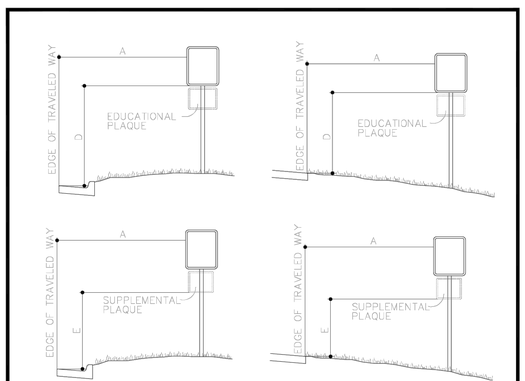
1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL COMBINATION CURB, GUTTER, AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER MAY BE 4" THICK.
3. TOTAL PAVEMENT THICKNESS TO BE DETERMINED BY PAVEMENT DESIGN PROCEDURES IN SECTION 5.4.
4. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE AND SURFACING MATERIALS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
5. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
6. LEGEND

P = PARKING ALLOWED

NP = NO PARKING ALLOWED

▲ = LANEAGE

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
STREET CROSS SECTIONS NOTES	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-8

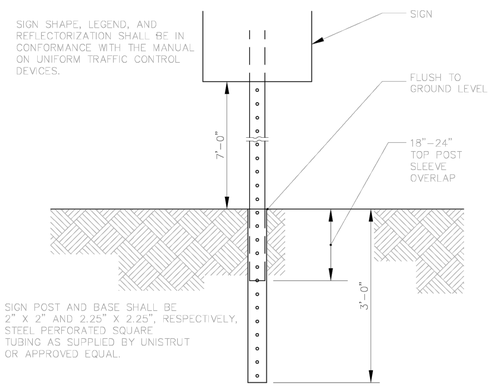


LATERAL PLACEMENT				
KEY	LOCAL STREETS		COLLECTORS & ARTERIALS	
	MINIMUM	NORMAL	MINIMUM	NORMAL
A	8'-0"	12'-0"	10'-0"	14'-0"

VERTICAL PLACEMENT			
KEY	URBAN		RURAL
	W/ SIDEWALKS	W/OUT SIDEWALKS	W/OUT SIDEWALKS
D	7'-0"	7'-0"	9'-0"
E	7'-0"	6'-0"	4'-0"

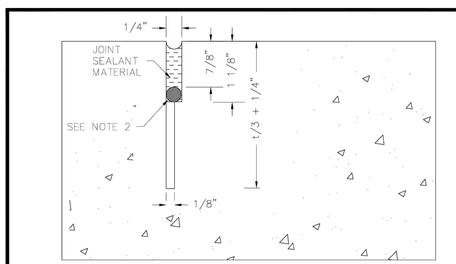
REGULATION SIGN PLACEMENT

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
REGULATION SIGN PLACEMENT	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-15



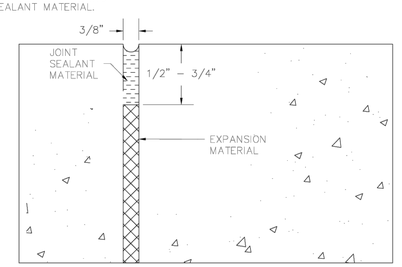
SIGN BASE DETAIL

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
SIGN BASE DETAIL	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-16



NOTE:
WASH & BLOW OUT WITH FORCED AIR UNTIL DRY BEORE APPLYING SEALANT MATERIAL.

SAWED JOINT



EXPANSION JOINT

NOTE:
JOINT SEALANT MATERIAL MUST MEET ASTM 3406, NYLON ROPE OR OPEN CEL POLYURETHANE STRAND.

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
SAWED JOINT AND EXPANSION JOINT	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-20

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

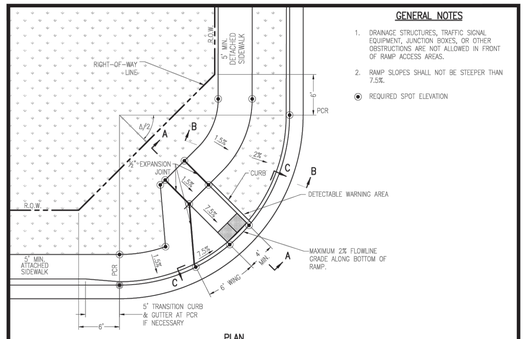
NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

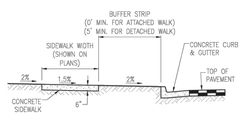
Know what's below. Call before you dig. 811

SHEET 23 OF 31

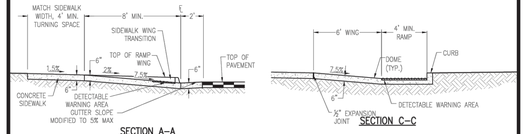
1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS DETAILS.DWG 2



PLAN



SECTION B–B

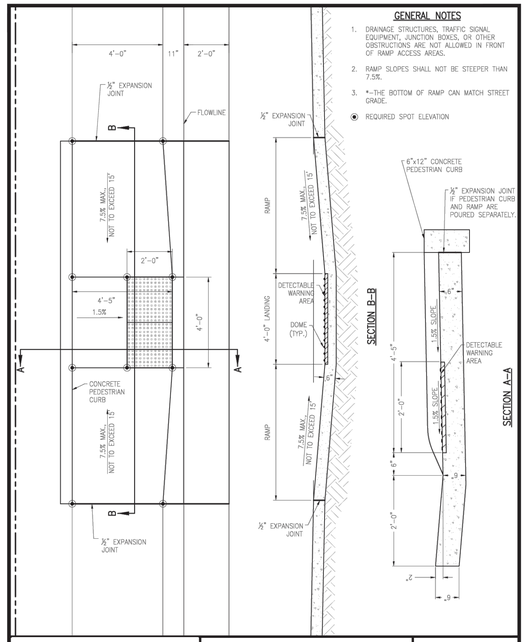


SECTION A–A

SECTION C–C

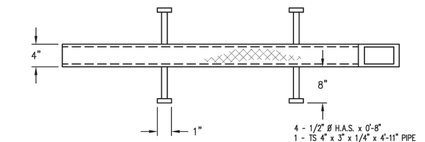
CURB RAMP FOR CURB RETURN RADIUS OF 20' TO 30'

Issued: 05/2013
Revised: 07/2021
Drawing No. **SP.19a**

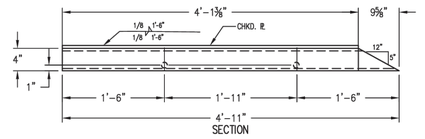


MID-BLOCK CURB RAMP

Issued: 05/2013
Revised: 07/2020
Drawing No. **SP.20**



PLAN

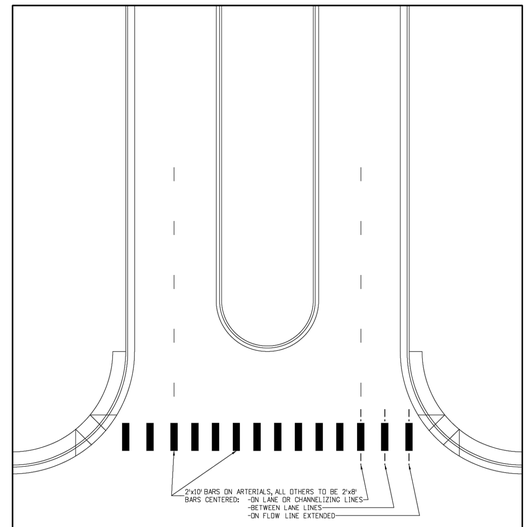


SECTION

GALV. AFTER FAB.
M 111-68 / A 123-68

RESIDENTIAL SIDEWALK CURB CHASE DETAIL

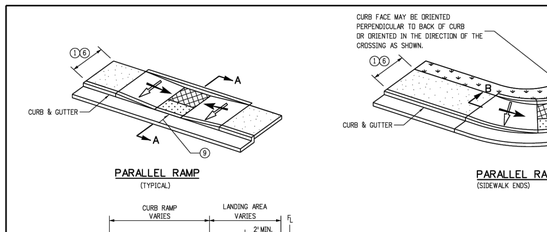
Issued: 05/2013
Revised:
Drawing No. **SP.53b**

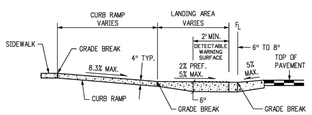


NOTES:
CROSSWALK BARS TO BE SPACED 12" TO 60" APART, CENTER CROSSWALKS ON CURB RAMPS, IF CURB RAMPS ARE NOT PRESENT, CENTER ON SIGNAL POLES WHEREVER PRACTICAL.

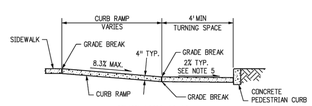
TYPICAL CROSSWALK MARKING

Issued: 6/15/2022
Revised:
Standard Drawing No. **SS.6**

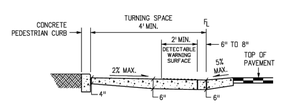




SECTION C–C



SECTION B–B



SECTION A–A

TYPE 2 PARALLEL CURB RAMPS

PARALLEL RAMP NOTES

1. RAMP WIDTH - PROVIDE A RAMP WIDTH EQUAL TO THE ADJOINING SIDEWALK, PROVIDE 4 FT. WIDTH MINIMUM. RAMPS SERVICING SHARED USE PATHS SHALL MATCH THE WIDTH OF THE PATH.
2. RAMP RUNNING SLOPE - 8.3% MAX.
3. RAMP CROSS SLOPE - 2.0% MAX.
4. TURNING SPACE RUNNING SLOPE - 2.0% MAX. TURNING SPACE RUNNING SLOPE IS MEASURED PERPENDICULAR TO THE BACK OF CURB.
5. TURNING SPACE CROSS SLOPE - 2.0% TYPICAL, AT CROSSINGS WITHOUT YIELD OR STOP CONTROL, OR WITH A SIGNAL WHERE VEHICLES CAN PROCEED THROUGH THE INTERSECTION WITHOUT SLOWING OR STOPPING, THE CROSS SLOPE OF THE TURNING SPACE MAY EQUAL THE HIGHWAY GRADE. AT MIDBLOCK PEDESTRIAN STREET CROSSINGS THE TURNING SPACE CROSS SLOPE MAY EQUAL THE HIGHWAY GRADE. TURNING SPACE CROSS SLOPE IS MEASURED IN THE DIRECTION OF THE RAMP RUN.
6. TURNING SPACE DIMENSIONS - PROVIDE A TURNING SPACE AT THE BOTTOM OF PARALLEL RAMPS WITH A WIDTH EQUAL TO THE WIDTH OF THE CURB RAMP. PROVIDE 4 FT. MINIMUM, MEASURED IN THE DIRECTION OF THE RAMP RUN. IF THE TURNING SPACE IS CONSTRAINED ON TWO SIDES, PROVIDE 5 FT. MEASURED IN THE DIRECTION OF PEDESTRIAN STREET CROSSING. THE TURNING SPACE MAY CONTAIN THE DETECTABLE WARNING SURFACE.
7. RAMP ALIGNMENT - RAMPS SHALL BE ALIGNED SO THE TURNING SPACE IS FULLY CONTAINED WITHIN THE CROSSWALK OR STREET CROSSING THEY SERVE. PROVIDE ONE RAMP FOR EACH STREET CROSSING DIRECTION. IN ALTERATIONS, WHERE EXISTING PHYSICAL CONSTRAINTS PREVENT PROVIDING ONE CURB RAMP FOR EACH CROSSING DIRECTION, A SINGLE DIAGONAL CURB RAMP (ON THE APEX OF A CORNER) SHALL BE PERMITTED TO SERVE BOTH PEDESTRIAN STREET CROSSINGS. DIAGONAL RAMPS ARE NOT ACCEPTABLE IN NEW CONSTRUCTION, OR FULL-DEPTH RECONSTRUCTION.
8. RAMP LENGTH - PARALLEL RAMP LENGTH IS DEPENDENT UPON THE RAMP SLOPE AND THE CHANGE OF ELEVATION FROM THE TURNING SPACE TO THE SIDEWALK. WHERE TERRAIN IS SLOPING A RAMP IS NOT REQUIRED TO CHASE GRADE MORE THAN 15 FT. REGARDLESS OF THE RESULTING RAMP SLOPE.
9. GUTTER COUNTER SLOPE - 5.0% MAX.

SIDEWALK
TURNING SPACE 4 5 6
DETECTABLE WARNING SURFACE (DWS)

Computer File Information		Sheet Revisions	
Creation Date: 07/31/19		Date:	Comments
Designer Initials: JBK			
Last Modification Date: 07/31/19			
Detailer Initials: LTA			
CAD Ver.: MicroStation V8 Scale: Not to Scale Units: English			

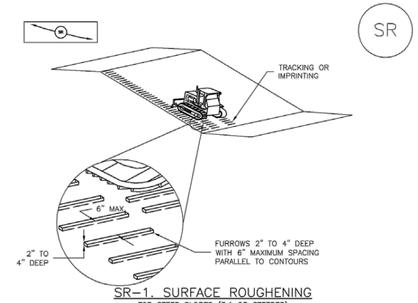
Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Project Development Branch JBK

CURB RAMPS

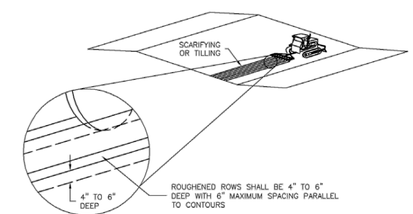
Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO.
M-608-1
Standard Sheet No. 4 of 10
Project Sheet Number:

Surface Roughening (SR) EC-1



SR–1. SURFACE ROUGHENING
FOR STEEP SLOPES (3:1 OR STEEPER)



SR–2. SURFACE ROUGHENING
FOR LOW SLOPES (LESS THAN 3:1)

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 24 OF 31

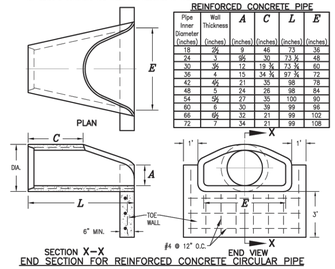
1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS DETAILS.DWG 3

GENERAL NOTES

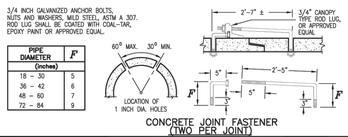
1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. CONCRETE END SECTIONS ARE TO BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF CULVERT OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY AND AT THE EXPENSE OF THE CONTRACTOR.
4. INSIDE CONFIGURATION AND JOINT OF CONCRETE END SECTION END PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH CULVERT SHALL MATCH THE DIMENSIONS OF THE CULVERT SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN, WILL BE REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH ⅜" GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL BE IN CONFORMANCE WITH AASHTO M 111, M 218 OR M 232.
8. FOR TYPE SD END SECTIONS, BARS SHALL BE FABRICATED FROM NPS-3 GALVANIZED STEEL SCHEDULE 40 PIPE WHICH SHALL BE IN CONFORMANCE WITH ASTM A 53.
9. FOR A TYPE SD END SECTION, THE INSTALLATION OF ALTERNATIVE 1 OR ALTERNATIVE 2 END SECTION SHALL BE THE CONTRACTOR'S OPTION.
10. CONCRETE PIPE JOINT FASTENERS SHALL BE INSTALLED AT THE FLARED END SECTION AND LAST TWO PIPE JOINTS OF ALL RCP OUTFALLS.
11. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER.
12. CLASS D CONCRETE TOE WALLS ARE REQUIRED AT THE ENDS OF ALL FLARED END SECTIONS.

REINFORCED CONCRETE PIPE

Pipe Inner Diameter (inches)	Wall Thickness (inches)	A (inches)	C (inches)	L (inches)	E (inches)
18	2⅜	9	46	73	38
24	3	9½	30	73 ⅜	48
30	3½	12	19 ⅜	72 ⅜	60
36	4	15	34 ⅝	97 ⅜	72
42	4½	21	35	98	78
48	5	24	28	98	84
54	5½	27	35	100	90
60	6	30	39	99	96
66	6½	32	21	99	102
72	7	34	21	99	108



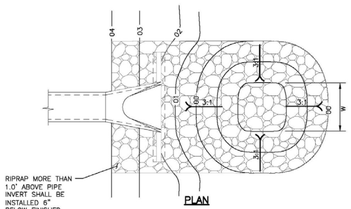
END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE

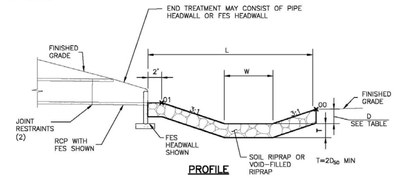


CONCRETE JOINT FASTENER (TWO PER JOINT)

CONCRETE OR METAL END SECTIONS

Issued: 05/2013
Revised: 09/2017
Drawing No. **SP.52a**

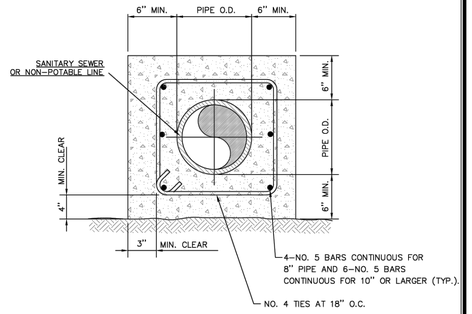




PIPE SIZE OR BOX HEIGHT	D	W*	L
18" – 24"	1'–0"	4'	15'
30" – 36"	1'–6"	6'	20'
42" – 48"	2'–0"	7'	24'
54" – 60"	2'–6"	8'	28'
66" – 72"	3'–0"	9'	32'

* IF OUTLET PIPE IS A BOX CULVERT WITH A WIDTH GREATER THAN W, THEN W = CULVERT WIDTH

Figure 9-37. Low tailwater riprap basin



PIPE ENCASEMENT DETAIL

NOTE:

1. CONCRETE SHALL NOT BE LEANER THAN 1 CEMENT; 2–1/2 SAND; 5 STONE AND SHALL NOT HAVE LESS THAN 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. PLACE CONCRETE AGAINST EITHER SOLID FORMWORK OR UNDISTURBED SOIL.
3. USE GR. 40 REINFORCING BARS.
4. USE ONLY IF SANITARY SEWER IS BELOW THE WATER LINE. DO NOT PLACE OR SPILL CONCRETE ON WATER LINE.

Pipe Encasement Detail

THESE DETAILS ARE PROVIDED FOR STANDARDIZATION PURPOSES ONLY. THIS DETAIL REPRESENTS MINIMUM DESIGN STANDARDS WHICH MAY REQUIRE UPGRADING FOR SPECIFIC APPLICATIONS. REFER TO TOWN OF FRASER MINIMUM DESIGN CRITERIA AND CONSTRUCTION STANDARDS FOR SPECIFIC MATERIAL AND INSTALLATION REQUIREMENTS.

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's **below.** **Call** before you dig. 811

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Description

Temporary seeding can be used to stabilize disturbed areas that will be inactive for an extended period. Permanent seeding should be used to stabilize areas at final grade that will not be otherwise stabilized. Effective seeding includes preparing a seedbed, selecting an appropriate seed mixture, using proper planting techniques, and protecting the seeded area with mulch, geotextiles, or other appropriate measures.

Photograph TS/PS -1. Equipment used to drill seed. Photo courtesy of Douglas County.

Appropriate Uses

When the soil surface is disturbed and will remain inactive for an extended period (typically determined by local government requirements), proactive stabilization measures, including planting a temporary seed mix, should be implemented. If the inactive period is short-lived (on the order of two weeks), techniques such as surface roughening may be appropriate. For longer periods of inactivity of up to one year, temporary seeding and mulching can provide effective erosion control. Permanent seeding should be used on finished areas that have not been otherwise stabilized.

The USDCM Volume 2 *Revegetation* Chapter contains suggested annual grains and native seed mixes to use for temporary seeding. Alternatively, local governments may have their own seed mixes and timelines for seeding. Check jurisdictional requirements for seeding and temporary stabilization.

Design and Installation

Effective seeding requires proper seedbed preparation, selecting an appropriate seed mixture, using appropriate seeding equipment to ensure proper coverage and density, and protecting seeded areas with mulch or fabric until plants are established.

The USDCM Volume 2 *Revegetation* Chapter contains detailed seed mixes, soil preparation practices, and seeding and mulching recommendations that should be referenced to supplement this Fact Sheet.

Drill seeding is the preferred seeding method. Hydroseeding is not recommended except in areas where steep slopes prevent use of drill seeding equipment, and even in these instances it is preferable to hand seed and mulch. Some jurisdictions do not allow hydroseeding or hydromulching.

Temporary and Permanent Seeding	
Functions	
Erosion Control	Yes
Sediment Control	No
Site/Material Management	No

Seedbed Preparation

Prior to seeding, ensure that areas to be revegetated have soil conditions capable of supporting vegetation. Overlot grading can result in loss of topsoil and compaction, resulting in poor quality subsoils at the ground surface that

have low nutrient value, little organic matter content, few soil microorganisms, rooting restrictions, and conditions less conducive to infiltration of precipitation. As a result, it is typically necessary to provide stockpiled topsoil, compost, or other soil amendments and rototill them into the soil to a depth of 6 inches or more.

Topsoil should be salvaged during grading operations for use and spread on areas to be revegetated later. Topsoil should be viewed as an important resource to be utilized for vegetation establishment, due to its water-holding capacity, structure, texture, organic matter content, biological activity, and nutrient content. The rooting depth of most native grasses in the semi-arid Denver metropolitan area is 6 to 18 inches. If present, at a minimum of the upper 6 inches of topsoil should be stripped, stockpiled, and ultimately respread across areas that will be revegetated.

Where topsoil is not available, subsoils should be amended to provide an appropriate plant-growth medium. Organic matter, such as well digested compost, can be added to improve soil characteristics conducive to plant growth. Other treatments can be used to adjust soil pH conditions when needed. Soil testing, which is typically inexpensive, should be completed to determine and optimize the types and amounts of amendments that are required.

If the disturbed ground surface is compacted, rip or rototill the upper 12 inches of the surface prior to placing topsoil. If adding compost to the existing soil surface, rototilling is necessary. Surface roughening will assist in placing a stable topsoil layer on steeper slopes, and allow infiltration and root penetration to greater depth. Topsoil should not be placed when either the salvaged topsoil or receiving ground are frozen or snow covered.

Prior to seeding, the soil surface should be rough and the seedbed should be firm, but neither too loose nor compacted. The upper layer of soil should be in a condition suitable for seeding at the proper depth and conducive to plant growth. Seed-to-soil contact is the key to good germination.

Refer to MHFD's Topsoil Management Guidance for detailed information on topsoil assessment, design, and construction.

Temporary Vegetation

To provide temporary vegetative cover on disturbed areas which will not be paved, built upon, or fully landscaped or worked for an extended period (typically 30 days or more), plant an annual grass appropriate for the time of planting and mulch the planted areas. Temporary grain seed mixes suitable for the Denver metropolitan area are listed in Table TS/PS-1. Native temporary seed mixes are provided in USDCM Volume 2, Chapter 13, Appendix A. These are to be considered only as general recommendations when specific design guidance for a particular site is not available. Local governments typically specify seed mixes appropriate for their jurisdiction.

Permanent Revegetation

To provide vegetative cover on disturbed areas that have reached final grade, a perennial grass mix should be established. Permanent seeding should be performed promptly (typically within 14 days) after reaching final grade. Each site will have different characteristics and a landscape professional or the local jurisdiction should be contacted to determine the most suitable seed mix for a specific site. In lieu of a specific recommendation, one of the perennial grass mixes appropriate for site conditions and growth season listed in seed mix tables in the USDCM Volume 2 *Revegetation* Chapter can be used. The pure live seed (PLS) rates of application recommended in these tables are considered to be absolute minimum rates for seed applied using proper drill-seeding equipment. These are to be considered only as general

recommendations when specific design guidance for a particular site is not available. Local governments typically specify seed mixes appropriate for their jurisdiction.

If desired for wildlife habitat or landscape diversity, shrubs such as rubber rabbitbrush (*Chrysothamnus nauseosus*), fourwing saltbush (*Atriplex canescens*) and skunkbrush sumac (*Rhus trilobata*) could be added to the upland seed mixes at 0.25, 0.5 and 1 pound PLS/acre, respectively. In riparian zones, planting root stock of such species as American plum (*Prunus americana*), woods rose (*Rosa woodsii*), plains cottonwood (*Populus sargentii*), and willow (*Salix spp.*) may be considered. On non-topsoiled upland sites, a legume such as Ladak alfalfa at 1 pound PLS/acre can be included as a source of nitrogen for perennial grasses.

Timing of seeding is an important aspect of the revegetation process. For upland and riparian areas on the Colorado Front Range, the suitable timing for seeding is from October through May. The most favorable time to plant non-irrigated areas is during the fall, so that seed can take advantage of winter and spring moisture. Seed should not be planted if the soil is frozen, snow covered, or wet.

Seeding dates for the highest success probability of perennial species along the Front Range are generally in the spring from April through early May and in the fall after the first of September until the ground freezes. If the area is irrigated, seeding may occur in summer months, as well. See Table TS/PS-2 for appropriate seeding dates.

Table TS/PS-1. Minimum Drill Seeding Rates for Various Temporary Annual Grasses

Species[a] (Common name)	Growth Season[b]	Pounds of Pure Live Seed (PLS)/acre[c]	Planting Depth (inches)
1. Oats	Cool	35 - 50	1 - 2
2. Spring wheat	Cool	25 - 35	1 - 2
3. Spring barley	Cool	25 - 35	1 - 2
4. Annual ryegrass	Cool	10 - 15	½
5. Millet	Warm	3 - 15	½ - ¾
6. Winter wheat	Cool	20–35	1 - 2
7. Winter barley	Cool	20–35	1 - 2
8. Winter rye	Cool	20–35	1 - 2
9. Triticale	Cool	25–40	1 - 2

[a] Successful seeding of annual grass resulting in adequate plant growth will usually produce enough dead-plant residue to provide protection from wind and water erosion for an additional year. This assumes that the cover is not disturbed or mowed closer than 8 inches.

Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1 or where access limitations exist. When hydraulic seeding is used, hydraulic mulching should be applied as a separate operation, when practical, to prevent the seeds from being encapsulated in the mulch.

[b] See Table TS/PS-2 for seeding dates. Irrigation, if consistently applied, may extend the use of cool season species during the summer months.

[c] Seeding rates should be doubled if seed is broadcast, or increased by 50 percent if done using a Brillion Drill or by hydraulic seeding.

Table TS/PS-2. Seeding Dates for Annual and Perennial Grasses

	Annual Grasses (Numbers in table reference species in Table TS/PS-1)		Perennial Grasses	
Seeding Dates	**Warm**	**Cool**	**Warm**	**Cool**
January 1–March 15			✓	✓
March 16–April 30		1,2,3	✓	✓
May 1–May 15			✓	
May 16–June 30	5			
July 1–July 15	5			
July 16–August 31				
September 1–September 30		6, 7, 8, 9		
October 1–December 31			✓	✓

Mulch

Cover seeded areas with mulch or an appropriate rolled erosion control product to promote establishment of vegetation. Anchor mulch by crimping, netting or use of a non-toxic tackifier. See the USDCM Volume 2 *Revegetation* Chapter and Volume 3 Mulching BMP Fact Sheet (EC-04) for additional guidance.

Maintenance and Removal

Monitor and observe seeded areas to identify areas of poor growth or areas that fail to germinate. Reseed and mulch these areas, as needed.

If a temporary annual seed was planted, the area should be reseeded with the desired perennial mix when there will be no further work in the area. To minimize competition between annual and perennial species, the annual mix needs time to mature and die before seeding the perennial mix. To increase success of the perennial mix, it should be seeded during the appropriate seeding dates the second year after the temporary annual mix was seeded. Alternatively, if this timeline is not feasible, the annual mix seed heads should be removed and then the area seeded with the perennial mix.

An area that has been permanently seeded should have a good stand of vegetation within one growing season if irrigated and within three growing seasons without irrigation in Colorado. Reseed portions of the site that fail to germinate or remain bare after the first growing season.

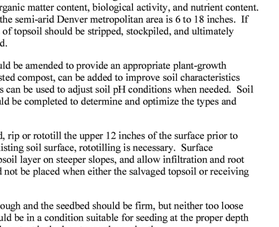
Seeded areas may require irrigation, particularly during extended dry periods. Targeted weed control may also be necessary.

Protect seeded areas from construction equipment and vehicle access.

Description

Mulching consists of evenly applying straw, hay, shredded wood mulch, rock, bark or compost to disturbed soils and securing the mulch by crimping, tackifiers, netting or other measures. Mulching helps reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff. Although often applied in conjunction with temporary or permanent seeding, it can also be used for temporary stabilization of areas that cannot be reseeded due to seasonal constraints.

Mulch can be applied either using standard mechanical dry application methods or using hydromulching equipment that hydraulically applies a slurry of water, wood fiber mulch, and often a tackifier.



Photograph MU-1. An area that was recently seeded, mulched, and crimped.

Appropriate Uses

Use mulch in conjunction with seeding to help protect the seedbed and stabilize the soil. Mulch can also be used as a temporary cover on low to mild slopes to help temporarily stabilize disturbed areas where growing season constraints prevent effective reseeding. Disturbed areas should be properly mulched and tacked, or seeded, mulched and tacked promptly after final grade is reached (typically within no longer than 14 days) on portions of the site not otherwise permanently stabilized.

Standard dry mulching is encouraged in most jurisdictions; however, hydromulching may not be allowed in certain jurisdictions or may not be allowed near waterways.

Do not apply mulch during windy conditions.

Design and Installation

Prior to mulching, surface-roughen areas by rolling with a crimping or punching type roller or by track walking. Track walking should only be used where other methods are impractical because track walking with heavy equipment typically compacts the soil.

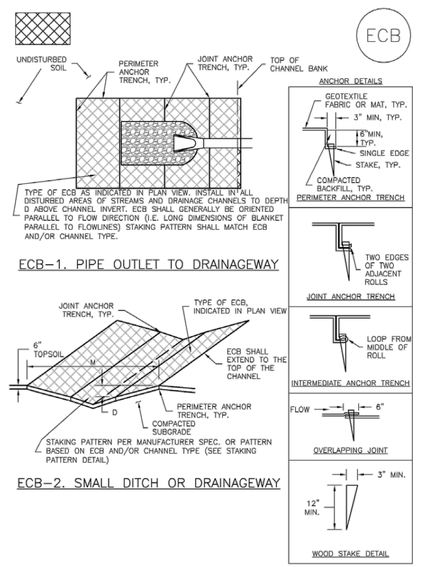
A variety of mulches can be used effectively at construction sites. Consider the following:

Mulch	
Functions	
Erosion Control	Yes
Sediment Control	Moderate
Site/Material Management	No

- Clean, weed-free and seed-free cereal grain straw should be applied evenly at a rate of 2 tons per acre and must be tacked or fastened by a method suitable for the condition of the site. Straw mulch must be anchored (and not merely placed) on the surface. This can be accomplished mechanically by crimping or with the aid of tackifiers or nets. Anchoring with a crimping implement is preferred, and is the recommended method for areas flatter than 3:1. Mechanical crimpers must be capable of tucking the long mulch fibers into the soil to a depth of 3 inches without cutting them. An agricultural disk, while not an ideal substitute, may work if the disk blades are dull or blunted and set vertically; however, the frame may have to be weighted to afford proper soil penetration.
- Grass hay may be used in place of straw; however, because hay is comprised of the entire plant including seed, mulching with hay may seed the site with non-native grass species which might in turn out-compete the native seed. Alternatively, native species of grass hay may be purchased, but can be difficult to find and are more expensive than straw. Purchasing and utilizing a certified weed-free straw is an easier and less costly mulching method. When using grass hay, follow the same guidelines as for straw (provided above).
- On small areas sheltered from the wind and heavy runoff, spraying a tackifier on the mulch is satisfactory for holding it in place. For steep slopes and special situations where greater control is needed, erosion control blankets anchored with stakes should be used instead of mulch.
- Hydraulic mulching consists of wood cellulose fibers mixed with water and a tackifying agent and should be applied at a rate of no less than 1,500 pounds per acre (1,425 lbs of fibers mixed with at least 75 lbs of tackifier) with a hydraulic mulcher. For steeper slopes, up to 2000 pounds per acre may be required for effective hydroseeding. Hydromulch typically requires up to 24 hours to dry; therefore, it should not be applied immediately prior to inclement weather. Application to roads, waterways and existing vegetation should be avoided.
- Erosion control mats, blankets, or nets are recommended to help stabilize steep slopes (generally 3:1 and steeper) and waterways. Depending on the product, these may be used alone or in conjunction with grass or straw mulch. Normally, use of these products will be restricted to relatively small areas. Biodegradable mats made of straw and jute, straw-coconut, coconut fiber, or excelsior can be used instead of mulch. (See the ECM/TRM BMP for more information.)
- Some tackifiers or binders may be used to anchor mulch. Check with the local jurisdiction for allowed tackifiers. Manufacturer's recommendations should be followed at all times. (See the Soil Binder BMP for more information on general types of tackifiers.)
- Rock can also be used as mulch. It provides protection of exposed soils to wind and water erosion and allows infiltration of precipitation. An aggregate base course can be spread on disturbed areas for temporary or permanent stabilization. The rock mulch layer should be thick enough to provide full coverage of exposed soil on the area it is applied.

Maintenance and Removal

After mulching, the bare ground surface should not be more than 10 percent exposed. Reapply mulch, as needed, to cover bare areas.



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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 26 OF 31

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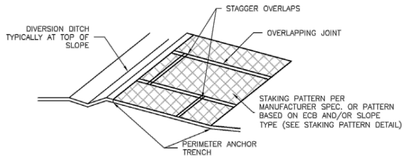
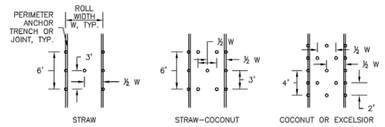
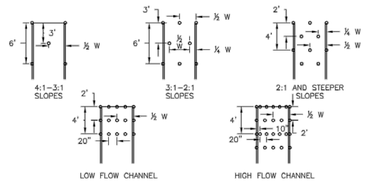


ECB–3. OUTSIDE OF DRAINAGEWAY



STAKING PATTERNS BY ECB TYPE



STAKING PATTERNS BY SLOPE OR CHANNEL TYPE

EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF ECB.
   –TYPE OF ECB (STRAW, STRAW–COCONUT, COCONUT, OR EXCELSIOR).
   –AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.

2. 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPs, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.

3. IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.

4. PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.

5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.

6. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE–HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs.

7. OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES.

8. MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB–1.

9. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBS SHALL BE RESEEDED AND MULCHED.

10. DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

TABLE ECB–1. ECB MATERIAL SPECIFICATIONS

TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	–	100%	–	DOUBLE/ NATURAL
STRAW–COCONUT	30% MIN	70% MAX	–	DOUBLE/ NATURAL
COCONUT	100%	–	–	DOUBLE/ NATURAL
EXCELSIOR	–	–	100%	DOUBLE/ NATURAL

*STRAW ECBs MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNEL.
**ALTERNATE NETTING MAY BE ACCEPTABLE IN SOME JURISDICTIONS

EROSION CONTROL BLANKET MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

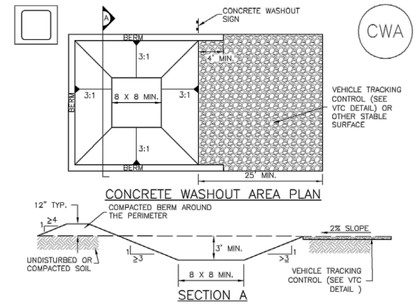
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.

5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND TOWN OF PARKER COLORADO, NOT AVAILABLE IN AUTOCAD)



CONCRETE WASHOUT AREA PLAN

SECTION A

CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (16 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

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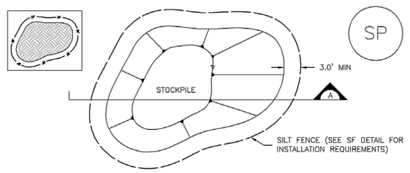
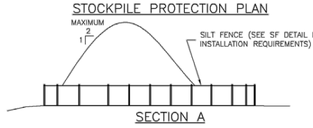


STOCKPILE PROTECTION PLAN



SECTION A

SP–1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF STOCKPILES.
   –TYPE OF STOCKPILE PROTECTION.

2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.

3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30–60 DAYS).

4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

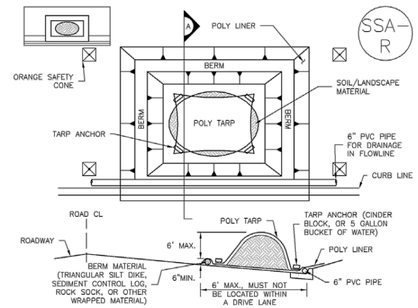
STOCKPILE PROTECTION MAINTENANCE NOTES

4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SP–2. MATERIALS STAGING IN ROADWAY

MATERIALS STAGING IN ROADWAYS INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF MATERIAL STAGING AREA(S).
   –CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. FEATURE MUST BE INSTALLED PRIOR TO EXCAVATION, EARTHWORK OR DELIVERY OF MATERIALS.

3. MATERIALS MUST BE STATIONED ON THE POLY LINER, ANY INCIDENTAL MATERIALS DEPOSITED ON PAVED SECTION OR ALONG CURB LINE MUST BE CLEANED UP PROMPTLY.

4. POLY LINER AND TARP COVER SHOULD BE OF SIGNIFICANT THICKNESS TO PREVENT DAMAGE OR LOSS OF INTEGRITY.

5. SAND BAGS MAY BE SUBSTITUTED TO ANCHOR THE COVER TARP OR PROVIDE BERMING UNDER THE BASE LINER.

6. FEATURE IS NOT INTENDED FOR USE WITH WET MATERIAL THAT WILL BE DRAINING AND/OR SPREADING OUT ON THE POLY LINER OR FOR DEMOLITION MATERIALS.

7. THIS FEATURE CAN BE USED FOR:
   –UTILITY REPAIRS.
   –WHEN OTHER STAGING LOCATIONS AND OPTIONS ARE LIMITED.
   –OTHER LIMITED APPLICATION AND SHORT DURATION STAGING.

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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 27 OF 31

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MATERIALS STAGING IN ROADWAY MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

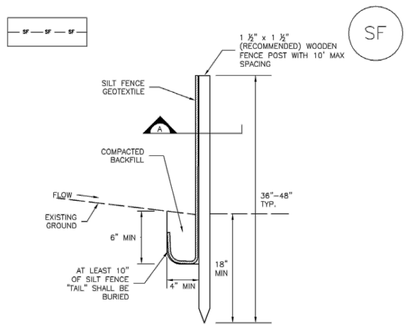
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. INSPECT PVC PIPE ALONG CURB LINE FOR CLOGGING AND DEBRIS. REMOVE OBSTRUCTIONS PROMPTLY.

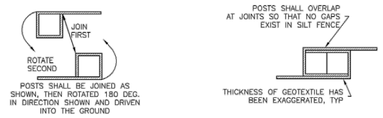
5. CLEAN MATERIAL FROM PAVED SURFACES BY SWEEPING OR VACUUMING.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM AURORA, COLORADO)



SILT FENCE



SECTION A

SF-1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

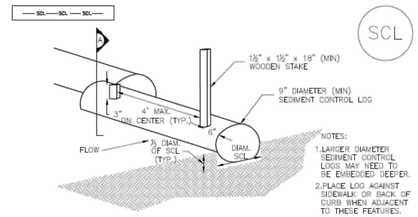
5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

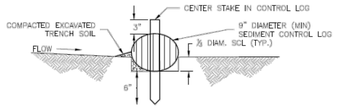
7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

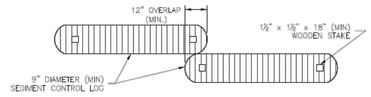
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



TRENCHED SEDIMENT CONTROL LOG

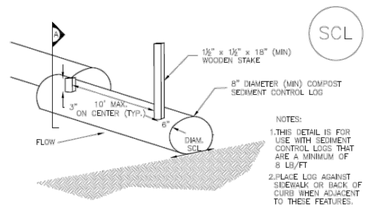


SECTION A
TRENCHED SEDIMENT CONTROL LOG

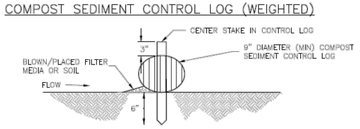


LOG JOINTS

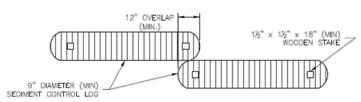
SCL-1. TRENCHED SEDIMENT CONTROL LOG



COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

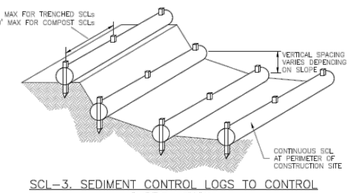


SECTION A
COMPOST SEDIMENT CONTROL LOG



LOG JOINTS

SCL-2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)



SCL-3. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.

2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND-DISTURBING ACTIVITIES.

3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.

4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS.

5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ⅓ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED.

6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE.

7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS SHOULD BE STAKED 10' ON CENTER.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

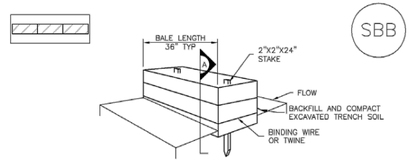
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.

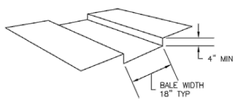
5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION.COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BAGS ARE REMOVED AND THE AREA SEEDED. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

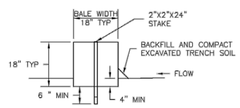
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



STRAW BALE



TRENCH FOR STRAW BALE



SECTION A

SBB-1. STRAW BALE

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 28 OF 31

1/30/2025 11:25 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS DETAILS.DWG 6

STRAW BALE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION(S) OF STRAW BALES.

2. STRAW BALES SHALL CONSIST OF CERTIFIED WEED FREE STRAW OR HAY. LOCAL JURISDICTIONS MAY REQUIRE PROOF THAT BALES ARE WEED FREE.

3. STRAW BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF STRAW OR HAY AND WEIGH NOT LESS THAN 35 POUNDS.

4. WHEN STRAW BALES ARE USED IN SERIES AS A BARRIER, THE END OF EACH BALE SHALL BE TIGHTLY ABUTTING ONE ANOTHER.

5. STRAW BALE DIMENSIONS SHALL BE APPROXIMATELY 36"X18"X18".

6. A UNIFORM ANCHOR TRENCH SHALL BE EXCAVATED TO A DEPTH OF 4". STRAW BALES SHALL BE PLACED SO THAT BINDING TWINE IS ENCOMPASSING THE VERTICAL SIDES OF THE BALE(S). ALL EXCAVATED SOIL SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALE(S) AND COMPACTED.

7. TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE 2"X2"X24". WOODEN STAKES SHALL BE DRIVEN 6" INTO THE GROUND.

STRAW BALE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. STRAW BALES SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR DAMAGED BEYOND REPAIR.

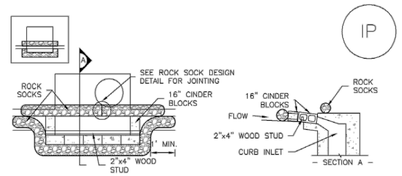
5. SEDIMENT ACCUMULATED UPSTREAM OF STRAW BALE BARRIER SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ¼ OF THE HEIGHT OF THE STRAW BALE BARRIER.

6. STRAW BALES ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

7. WHEN STRAW BALES ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



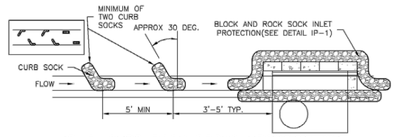
IP–1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP–2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

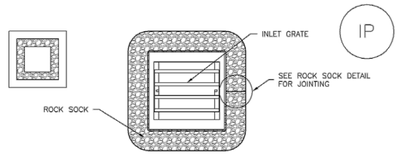
CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

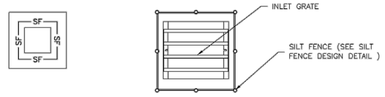
4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON–GRADE INLETS.



IP–3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



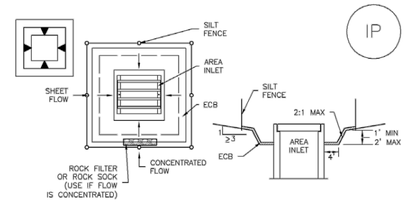
IP–4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



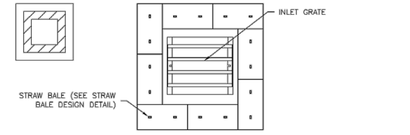
IP–5. OVEREXCAVATION INLET PROTECTION

OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES

1. THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.

2. WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.

3. SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.

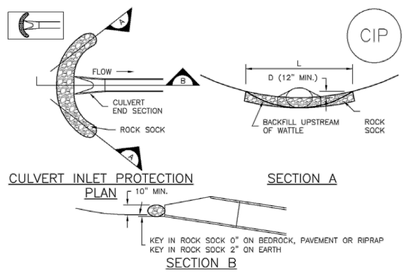


IP–6. STRAW BALE FOR SUMP INLET PROTECTION

STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES

1. SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.



CIP–1. CULVERT INLET PROTECTION

CULVERT INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF CULVERT INLET PROTECTION.

2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING DETAIL.

CULVERT INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS ½ THE HEIGHT OF THE ROCK SOCK.

5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF INLET PROTECTION.
   –TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

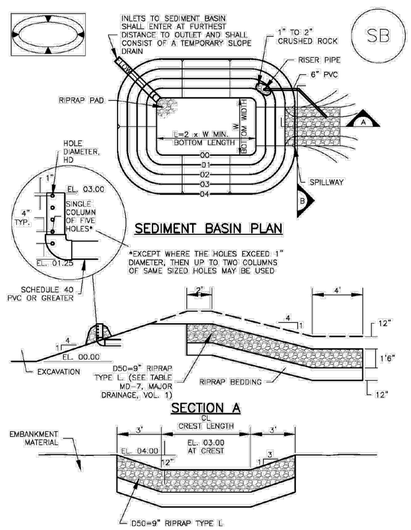


TABLE SB–1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN

Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 ½	2	9/32
2	21	3	13/16
3	28	5	½
4	33 ½	6	9/16
5	38 ½	8	27/32
6	43	9	27/32
7	47 ¾	11	27/32
8	51	12	27/32
9	55	13	⅞
10	58 ¾	15	15/16
11	61	16	31/32
12	64	18	1
13	67 ½	19	1 1/16
14	70 ½	21	1 ⅛
15	73 ¼	22	1 3/16

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF SEDIMENT BASIN.
   –TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
   –FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
   –FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.

2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.

3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND–DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AS A STORMWATER CONTROL.

4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.

5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

6. PIPE SCH 40 OR GREATER SHALL BE USED.

7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 29 OF 31

1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS DETAILS.DWG 7

SEDIMENT BASIN MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

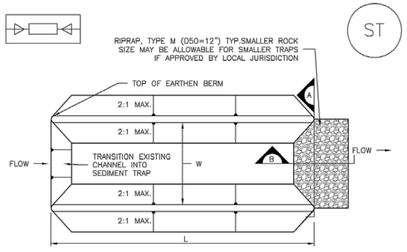
4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).

5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.

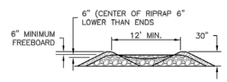
6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

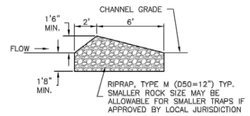
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SEDIMENT TRAP PLAN



SECTION A



SECTION B

ST-1. SEDIMENT TRAP

SEDIMENT TRAP INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION, LENGTH AND WIDTH OF SEDIMENT TRAP.

2. ONLY USE FOR DRAINAGE AREAS LESS THAN 1 ACRE.

3. SEDIMENT TRAPS SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND–DISTURBING ACTIVITIES.

4. SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

5. SEDIMENT TRAP OUTLET TO BE CONSTRUCTED OF RIPRAP, TYPE M (D50=12") TYP.SMALLER ROCK SIZE MAY BE ALLOWABLE FOR SMALLER TRAPS IF APPROVED BY LOCAL JURISDICTION.

6. THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RIPRAP OUTLET STRUCTURE.

7. THE ENDS OF THE RIPRAP OUTLET STRUCTURE SHALL BE A MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.

SEDIMENT TRAP MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. REMOVE SEDIMENT ACCUMULATED IN TRAP AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN THE SEDIMENT DEPTH REACHES ½ THE HEIGHT OF THE RIPRAP OUTLET.

5. SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

6. WHEN SEDIMENT TRAPS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

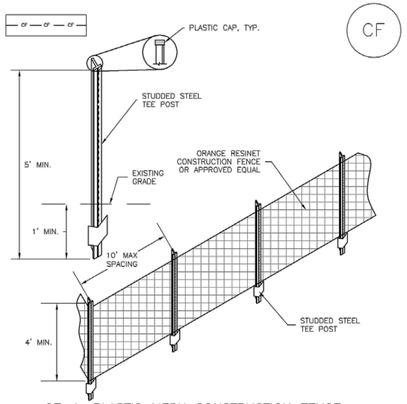
(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Table CP-1. Typical Phased BMP Installation for Construction Projects

Project Phase	BMPs
Pre-disturbance, Site Access	▪ Install sediment controls downgradient of access point (on paved streets this may consist of inlet protection). ▪ Establish vehicle tracking control at entrances to paved streets. Fence as needed. ▪ Use construction fencing to define the boundaries of the project and limit access to areas of the site that are not to be disturbed. **Note: it may be necessary to protect inlets in the general vicinity of the site, even if not downgradient, if there is a possibility that sediment tracked from the site could contribute to the inlets.**
Site Clearing and Grubbing	▪ Install perimeter controls as needed on downgradient perimeter of site (silt fence, wattles, etc). ▪ Limit disturbance to those areas planned for disturbance and protect undisturbed areas within the site (construction fence, flagging, etc). ▪ Preserve vegetative buffer at site perimeter. ▪ Create stabilized staging area. ▪ Locate portable toilets on flat surfaces away from drainage paths. Stake in areas susceptible to high winds. ▪ Construct concrete washout area and provide signage. ▪ Establish waste disposal areas. ▪ Install sediment basins. ▪ Create dirt perimeter berms and/or brush barriers during grubbing and clearing. ▪ Separate and stockpile topsoil, leave roughened and/or cover. ▪ Protect stockpiles with perimeter control BMPs. Stockpiles should be located away from drainage paths and should be accessed from the upgradient side so that perimeter controls can remain in place on the downgradient side. Use erosion control blankets, temporary seeding, and/or mulch for stockpiles that will be inactive for an extended period. ▪ Leave disturbed area of site in a roughened condition to limit erosion. Consider temporary revegetation for areas of the site that have been disturbed but that will be inactive for an extended period. ▪ Water to minimize dust but not to the point that watering creates runoff.

Project Phase	BMPs
Utility And Infrastructure Installation	**In Addition to the Above BMPs:** ▪ Close trench as soon as possible (generally at the end of the day). ▪ Use rough-cut street control or apply road base for streets that will not be promptly paved. ▪ Provide inlet protection as streets are paved and inlets are constructed. ▪ Protect and repair BMPs, as necessary. ▪ Perform street sweeping as needed.
Building Construction	**In Addition to the Above BMPs:** ▪ Implement materials management and good housekeeping practices for home building activities. ▪ Use perimeter controls for temporary stockpiles from foundation excavations. ▪ For lots adjacent to streets, lot-line perimeter controls may be necessary at the back of curb.
Final Grading	**In Addition to the Above BMPs:** ▪ Remove excess or waste materials. ▪ Remove stored materials.
Final Stabilization	**In Addition to the Above BMPs:** ▪ Seed and mulch/tackify. ▪ Seed and install blankets on steep slopes. ▪ Remove all temporary BMPs when site has reached final stabilization.



CF–1. PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF CONSTRUCTION FENCE.

2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR–GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.

4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.

5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

CONSTRUCTION FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

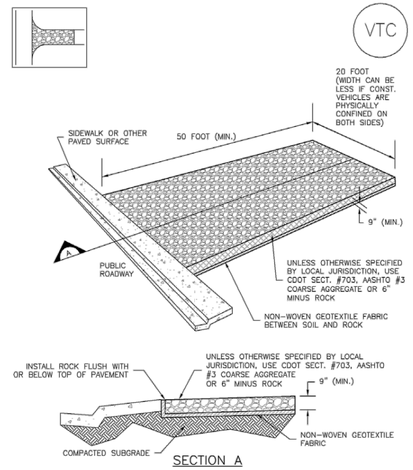
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

5. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)



SECTION A

VTC–1. AGGREGATE VEHICLE TRACKING CONTROL

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

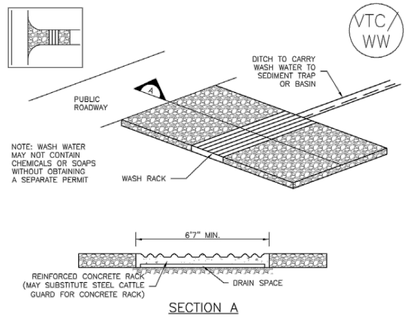
NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

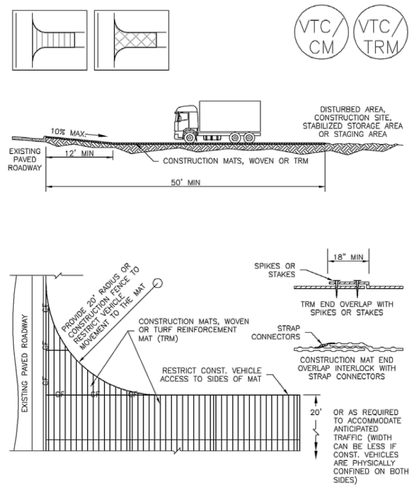
SHEET 30 OF 31

1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS DETAILS.DWG 8



SECTION A

VTC–2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK



VTC–3. VEHICLE TRACKING CONTROL W/ CONSTRUCTION MAT OR TURF REINFORCEMENT MAT (TRM)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
   –TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT–OF–WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON–WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

Description

A stabilized construction roadway is a temporary method to control sediment runoff, vehicle tracking, and dust from roads during construction activities.

Photograph SCR-1. Stabilized construction roadway.

Appropriate Uses

Use on high traffic construction roads to minimize dust and erosion.

Stabilized construction roadways are used instead of rough-cut street controls on roadways with frequent construction traffic.

Design and Installation

Stabilized construction roadways typically involve two key components: 1) stabilizing the road surface with an aggregate base course of 3-inch-diameter granular material and 2) stabilizing roadside ditches, if applicable. Early application of road base is generally suitable where a layer of coarse aggregate is specified for final road construction.

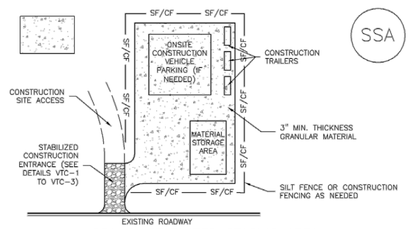
Maintenance and Removal

Apply additional gravel as necessary to ensure roadway integrity.

Inspect drainage ditches along the roadway for erosion and stabilize, as needed, through the use of check dams or rolled erosion control products.

Gravel may be removed once the road is ready to be paved. Prior to paving, the road should be inspected for grade changes and damage. Regrade and repair as necessary.

Stabilized Construction Roadway	
Functions	
Erosion Control	Yes
Sediment Control	Moderate
Site/Material Management	Yes



SSA–1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF STAGING AREA(S).
   –CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE–ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

Description

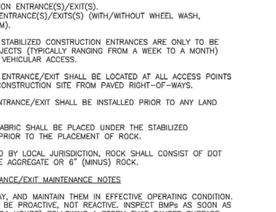
Street sweeping and vacuuming remove sediment that has been tracked onto roadways to reduce sediment transport into storm drain systems or a surface waterway.

Appropriate Uses

Use this practice at construction sites where vehicles may track sediment offsite onto paved roadways.

Design and Installation

Street sweeping or vacuuming should be conducted when there is noticeable sediment accumulation on roadways adjacent to the construction site. Typically, this will be concentrated at the entrance/exit to the construction site. Well-maintained stabilized construction entrances, vehicle tracking controls and tire wash facilities can help reduce the necessary frequency of street sweeping and vacuuming.



Photograph SS-1. A street sweeper removes sediment and potential pollutants along the curb line at a construction site. Photo courtesy of Tom Gore.

On smaller construction sites, street sweeping can be conducted manually using a shovel and broom. Never wash accumulated sediment on roadways into storm drains.

Maintenance and Removal

- Inspect paved roads around the perimeter of the construction site on a daily basis and more frequently, as needed. Remove accumulated sediment, as needed.
- Following street sweeping, check inlet protection that may have been displaced during street sweeping.
- Inspect area to be swept for materials that may be hazardous prior to beginning sweeping operations.

Street Sweeping/ Vacuuming	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	Yes

Description

Manage runoff from paving and grinding operations to reduce pollutants entering storm drainage systems and natural drainageways.

Appropriate Uses

Use runoff management practices during all paving and grinding operations such as surfacing, resurfacing, and saw cutting.

Photograph PGO-1. Paving operations on a Colorado highway. Photo courtesy of CDOT.

Design and Installation

There are a variety of management strategies that can be used to manage runoff from paving and grinding operations:

- Establish inlet protection for all inlets that could potentially receive runoff.
- Schedule paving operations when dry weather is forecasted.
- Keep spill kits onsite for equipment spills and keep drip pans onsite for stored equipment.
- Install perimeter controls when asphalt material is used on embankments or shoulders near waterways, drainages, or inlets.
- Do not wash any paved surface into receiving storm drain inlets or natural drainageways. Instead, loose material should be swept or vacuumed following paving and grinding operations.
- Store materials away from drainages or waterways.
- Recycle asphalt and pavement material when feasible. Material that cannot be recycled must be disposed of in accordance with applicable regulations.

See BMP Fact Sheets for Inlet Protection, Silt Fence and other perimeter controls selected for use during paving and grinding operations.

Maintenance and Removal

Perform maintenance and removal of inlet protection and perimeter controls in accordance with their respective fact sheets.

Promptly respond to spills in accordance with the spill prevention and control plan.

Paving and Grinding Operations	
Functions	
Erosion Control	No
Sediment Control	No
Site/Material Management	Yes

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 31 OF 31

1/30/2025 11:25 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS DETAILS.DWG 9

ATTACHMENT A

▪ PO Box 159, 151 S. Banner Street ▪ Elizabeth, Colorado 80107 ▪ (303) 646-4166 ▪ Fax: (303) 646-9434 ▪
www.townofelizabeth.org

BULMER FILING NO. 1

A REPLAT OF LOTS 5 AND 6, BLOCK 3 AND LOTS 1–6, INCLUSIVE, BLOCK 13, AND
A PART OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
TOWN OF ELIZABETH, COUNTY OF ELBERT, STATE OF COLORADO.

PROPERTY DESCRIPTION

A PARCEL OF LAND BEING LOTS 5 AND 6, BLOCK 3 TOWN OF ELIZABETH, LOTS 1 THOUGH 6 INCLUSIVE BLOCK 13, PHILLIPS ADDITION TO THE TOWN OF ELIZABETH, A PORTION OF THE COLORADO AND SOUTHERN RAILWAY RIGHT–OF–WAY AND VACATED POPLAR STREET, ALL IN THE TOWN OF ELIZABETH, COUNTY OF ELBERT, STATE OF COLORADO, LOCATED IN THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 8, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN, SAID TOWN, COUNTY, AND STATE, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTH QUARTER CORNER OF SAID SECTION 18, WHENCE THE NORTH LINE OF SAID NORTHEAST QUARTER BEARS NORTH 89°12'42" EAST, A DISTANCE OF 2642.37 FEET, ALL BEARINGS HEREIN ARE REFERENCED THERETO;

THENCE ALONG SAID NORTH LINE, NORTH 89°12'42" EAST, A DISTANCE OF 1140.98 FEET;

THENCE DEPARTING SAID NORTH LINE, SOUTH 00°47'18" EAST, A DISTANCE OF 572.03 FEET TO THE NORTHEAST CORNER OF LOT 1, BLOCK 3 AS SHOWN ON SAID TOWN OF ELIZABETH AND THE POINT OF BEGINNING;

THENCE NORTH 80°23'06" EAST, A DISTANCE OF 130.14 FEET TO THE EASTERLY LINE OF THE PARCEL OF LAND DESCRIBED IN THE DEED RECORDED IN BOOK 22 AT PAGE 123, IN THE OFFICIAL RECORDS OF SAID COUNTY;

THENCE ALONG SAID EASTERLY LIEN THE FOLLOWING 3 COURSES;

1. SOUTH 09°26'52" EAST, A DISTANCE OF 237.96 FEET;

2. SOUTH 05°06'01" EAST, A DISTANCE OF 53.08 FEET;

3. SOUTH 05°09'41" EAST, A DISTANCE OF 167.82 FEET TO THE EASTERLY PROLONGATION OF THE SOUTHERLY LINE OF SAID LOT 6, PHILLIPS ADDITION TO THE TOWN OF ELIZABETH;

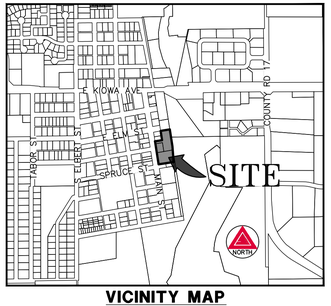
THENCE ALONG SAID EASTERLY PROLONGATION AND SAID SOUTHERLY LINE, SOUTH 80°30'04" WEST, A DISTANCE OF 213.19 FEET TO THE SOUTHWEST CORNER OF SAID BLOCK 13;

THENCE ALONG THE WESTERLY LINE OF SAID LOTS 1–6, PHILLIPS ADDITION TO THE TOWN OF ELIZABETH, THE WESTERLY LINE OF SAID VACATED POPLAR STREET AND THE WESTERLY LINE OF SAID LOTS 5 AND 6, TOWN OF ELIZABETH, NORTH 09°27'48" WEST, A DISTANCE OF 326.06 FEET TO THE SOUTHWEST CORNER OF LOT 4, BLOCK 3, TOWN OF ELIZABETH;

THENCE ALONG THE SOUTHERLY LINE OF SAID LOT 4, NORTH 80°34'41" EAST, A DISTANCE OF 99.83 FEET TO THE SOUTHEAST CORNER OF SAID LOT 4, BLOCK 3;

THENCE ALONG THE EASTERLY LINE OF SAID BLOCK 3, NORTH 09°30'20" WEST, A DISTANCE OF 132.04 FEET TO THE POINT OF BEGINNING;

CONTAINING AN AREA OF 2.072 ACRES, (90,267 SQUARE FEET), MORE OR LESS.



VICINITY MAP
SCALE 1" = 1000'

TITLE VERIFICATION

I/WE_____,

OF_____ DO HEREBY CERTIFY THAT I/WE HAVE EXAMINED THE TITLE OF ALL LAND PLATTED HEREON AND THAT TITLE O SUCH LAND IS IN DEDICATOR(S) FREE AND CLEAR OF ALL LIENS, TAXES AND ENCUMBRANCES, EXCEPT AS FOLLOWS:

_____
(NOTARIZED SIGNATURE)

_____ _____
DATE COMPANY NAME

OWNERSHIP AND DEDICATION STATEMENT

THE UNDERSIGNED, BEING ALL THE OWNERS, MORTGAGEES, BENEFICIARIES OF DEEDS OF TRUST AND HOLDERS OF OTHER INTERESTS OF THE LANDS DESCRIBED HEREIN, HAVE LAID OUT, SUBDIVIDED AND PLATTED SAID LANDS INTO LOTS, TRACTS AND EASEMENTS AS SHOWN HEREON UNDER THE NAME AND STYLE OF BULMER FILING NO. 1. THE UTILITY EASEMENTS AS SHOWN HEREON ARE HEREBY DEDICATED FOR PUBLIC UTILITIES AND CABLE COMMUNICATION SYSTEMS AND OTHER PURPOSES AS SHOWN HEREON. THE ENTITIES RESPONSIBLE FOR PROVIDING THE SERVICES FOR WHICH THE EASEMENTS ARE ESTABLISHED ARE HEREBY GRANTED THE PERPETUAL RIGHT OF INGRESS AND EGRESS FROM AND TO ADJACENT PROPERTIES FOR INSTALLATION, MAINTENANCE AND REPLACEMENT OF UTILITY LINES AND RELATED FACILITIES. ALL STREETS AND RIGHTS OF WAY, SHOWN HEREON ARE DEDICATED AND CONVEYED TO THE TOWN OF ELIZABETH, COLORADO, IN FEE SIMPLE ABSOLUTE, FOR PUBLIC USES AND PURPOSES.

_____
SIGNATURE

_____
(OWNER)

BY: _____

TITLE: _____

ATTEST
SECRETARY _____
SIGNATURE

SUBSCRIBED AND SWORN TO BEFORE ME THIS _____ DAY OF _____, 20_____

BY _____

WITNESS MY HAND AN OFFICIAL SEAL

_____
NOTARY PUBLIC

MY COMMISSION EXPIRES: _____

PLANNING COMMISSION

THIS FINAL PLATT WAS REVIEWED BY THE ELBERT COUNTY PLANNING COMMISSION ON THE

_____ DAY OF _____, 20_____, A.D.

_____
CHAIR, PLANNING COMMISSION

GENERAL NOTES

1. THE FIELD WORK FOR THIS SURVEY WAS PERFORMED BY AN AZTEC CONSULTANTS, INC. SURVEY CREW AND COMPLETED ON JULY 16, 2024
2. PER C.R.S. 38–51–106, "ALL LINEAL UNITS DEPICTED ON THIS LAND SURVEY PLAT ARE U.S. SURVEY FEET. ONE METER EQUALS 39.37/12 U.S. SURVEY FEET, EXACTLY ACCORDING TO THE NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY."
3. THE SURVEYED PARCEL CONTAINS A TOTAL OF 2.072 ACRES OR 90,267 SQUARE FEET, MORE OR LESS.
4. _____ TITLE GUARANTEE COMPANY TITLE COMMITMENT ORDER NO. _____ WITH AN EFFECTIVE DATE OF _____ __, 2024 AT 5:00 P.M. WAS RELIED UPON FOR RECORD INFORMATION REGARDING EASEMENT(S) AND ENCUMBRANCES(S). THIS SURVEY DOES NOT REPRESENT A TITLE SEARCH BY AZTEC CONSULTANTS, INC. TO DETERMINE OWNERSHIP, RIGHT(S)–OF–WAY, EASEMENT(S), OR OTHER MATTERS OF PUBLIC RECORD.
5. ANY PERSON WHO KNOWINGLY REMOVES, ALTERS OR DEFACES ANY PUBLIC LAND SURVEY MONUMENT OR ACCESSORY COMMITS A CLASS TWO (2) MISDEMEANOR PURSUANT TO STATE STATUTE 18–4–508, C.R.S.
6. THE SURVEYED PROPERTY SHOWN HEREIN LIES WITHIN OTHER AREAS–ZONE X, AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN, AS SHOWN ON FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP INDEX NO. 08039C0480C, MAP REVISED MARCH 17, 2011.
7. NO LOT WITHIN THIS SUBDIVISION SHALL BE BUILT UPON OR ANY IMPROVEMENTS CONSTRUCTED WITHIN A LOT, UNTIL A SITE PLAN IS REVIEWED AND APPROVED BY THE TOWN OF ELIZABETH.

BOARD OF TRUSTEES

THIS PLAT WAS APPROVED BY THE BOARD OF TRUSTEES OF THE TOWN OF ELIZABETH, COLORADO ON THE _____ DAY OF _____, 20_____, FOR FILING. THE DEDICATIONS ARE HERY ACCEPTED.

ALL EXPENSES INCURRED WITH RESPECT TO IMPROVEMENTS FOR ALL UTILITY SERVICES, PAVING, GRADING, CURBS, GUTTER, SIDEWALKS, ROAD LIGHTING, ROAD SIGNS, FLOOD PROTECTION DEVICES, DRAINAGE STRUCTURES AND ALL OTHER IMPROVEMENTS THAT MAY BE REQUIRED SHALL BE THE RESPONSIBILITY OF THE SUBDIVIDER AND NOT THE TOWN OF ELIZABETH. THE TOWN SHALL ONLY ACCEPT MAINTENANCE OF THE ROADWAY IMPROVEMENTS AFTER CONSTRUCTION HAS BEEN COMPLETED, AND AFTER THE WARRANTY PERIOD, IN ACCORDANCE WITH TOWN REGULATIONS.

THIS ACCEPTANCE DOES NOT GUARANTEE THAT THE SOIL CONDITIONS, SUBSURFACE, GEOLOGY, GROUNDWATER CONDITIONS OF FLOODING CONDITIONS OF ANY LOT SHOWN HEREON ARE SUCH THAT A BUILDING PERMIT WILL BE ISSUED.

_____
MAYOR, TOWN OF ELIZABETH

ATTEST:
TOWN CLERK _____
SIGNATURE

SURVEYOR'S CERTIFICATION

I, MICHAEL J. NOFFSINGER, A DULY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS PLAT TRULY AND CORRECTLY REPRESENTS THE RESULTS OF A SURVEY MADE ON _____ _____, 2024, BY ME OR UNDER MY DIRECT SUPERVISION AND THAT ALL MONUMENTS EXIST AS SHOWN HEREON; THAT MATHEMATICAL CLOSURE ERRORS ARE LESS THAN 1:50,000 (SECOND ORDER); AND THAT SAID PLAT HAS BEEN PREPARED IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS OF THE STATE OF COLORADO DEALING WITH MONUMENTS, SUBDIVISIONS OR SURVEYING OF LAND AND ALL PROVISIONS, WITHIN MY CONTROL, OF THE TOWN SUBDIVISION REGULATIONS.

I ATTEST THE ABOVE ON THIS_____ DAY OF _____, 20_____.

FOR REVIEW
DO NOT RECORD

_____
COLORADO REGISTERED PROFESSIONAL LAND SURVEYOR

_____
PRINTED NAME

ELBERT COUNTY CLERK AND RECORDER'S CERTIFICATE

THIS PLAT WAS FILED FOR RECORD IN THE OFFICE OF THE COUNTY CLERK AND RECORDER OF ELBERT COUNTY AT _____M. ON THE _____ DAY OF _____, 20__,

RECEPTION NO._____.

ELBERT COUNTY CLERK AND RECORDER

BY: _____
DEPUTY

AzTEC CONSULTANTS, INC.
300 East Mineral Ave., Suite 1
Littleton, Colorado 80122
Phone: (303) 713-1898
Fax: (303) 713-1897
www.aztecconsultants.com

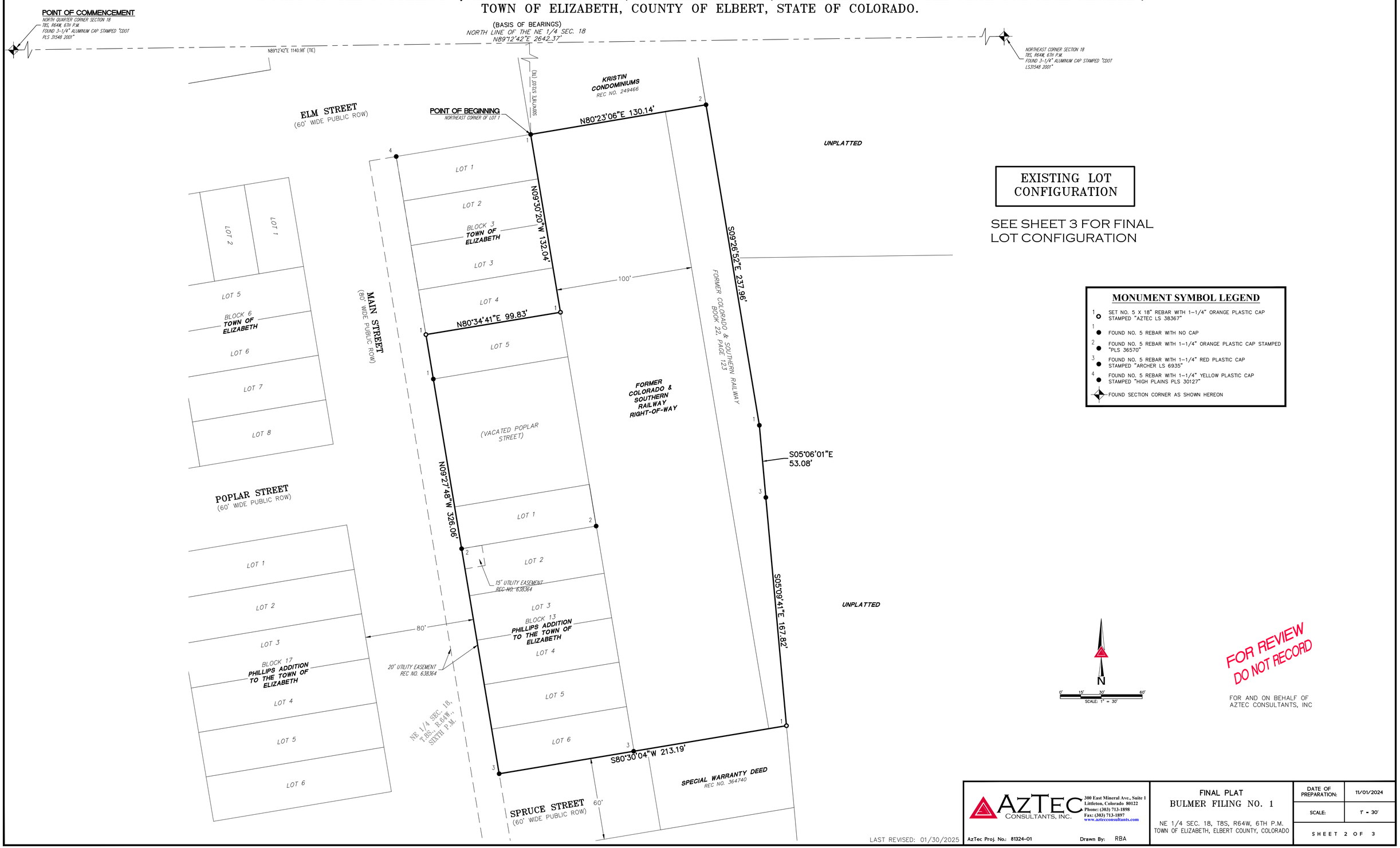
AzTec Proj. No.: 81324-01 Drawn By: RBA

FINAL PLAT
BULMER FILING NO. 1
NE 1/4 SEC. 18, T8S, R64W, 6TH P.M.
TOWN OF ELIZABETH, ELBERT COUNTY, COLORADO

DATE OF PREPARATION:	11/01/2024
SCALE:	N/A
SHEET 1 OF 3	

BULMER FILING NO. 1

A REPLAT OF LOTS 5 AND 6, BLOCK 3 AND LOTS 1–6, INCLUSIVE, BLOCK 13, AND
A PART OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
TOWN OF ELIZABETH, COUNTY OF ELBERT, STATE OF COLORADO.



EXISTING LOT CONFIGURATION

SEE SHEET 3 FOR FINAL LOT CONFIGURATION

MONUMENT SYMBOL LEGEND

- SET NO. 5 X 18" REBAR WITH 1-1/4" ORANGE PLASTIC CAP STAMPED "AZTEC LS 38367"
- FOUND NO. 5 REBAR WITH NO CAP
- FOUND NO. 5 REBAR WITH 1-1/4" ORANGE PLASTIC CAP STAMPED "PLS 36570"
- FOUND NO. 5 REBAR WITH 1-1/4" RED PLASTIC CAP STAMPED "ARCHER LS 6935"
- FOUND NO. 5 REBAR WITH 1-1/4" YELLOW PLASTIC CAP STAMPED "HIGH PLAINS PLS 30127"
- FOUND SECTION CORNER AS SHOWN HEREON

N

0' 15' 30' 60'
SCALE: 1" = 30'

FOR REVIEW
DO NOT RECORD

FOR AND ON BEHALF OF
AZTEC CONSULTANTS, INC

LAST REVISED: 01/30/2025

AZTEC CONSULTANTS, INC.
300 East Mineral Ave., Suite 1
Littleton, Colorado 80122
Phone: (303) 713-1898
Fax: (303) 713-1897
www.aztecconsultants.com

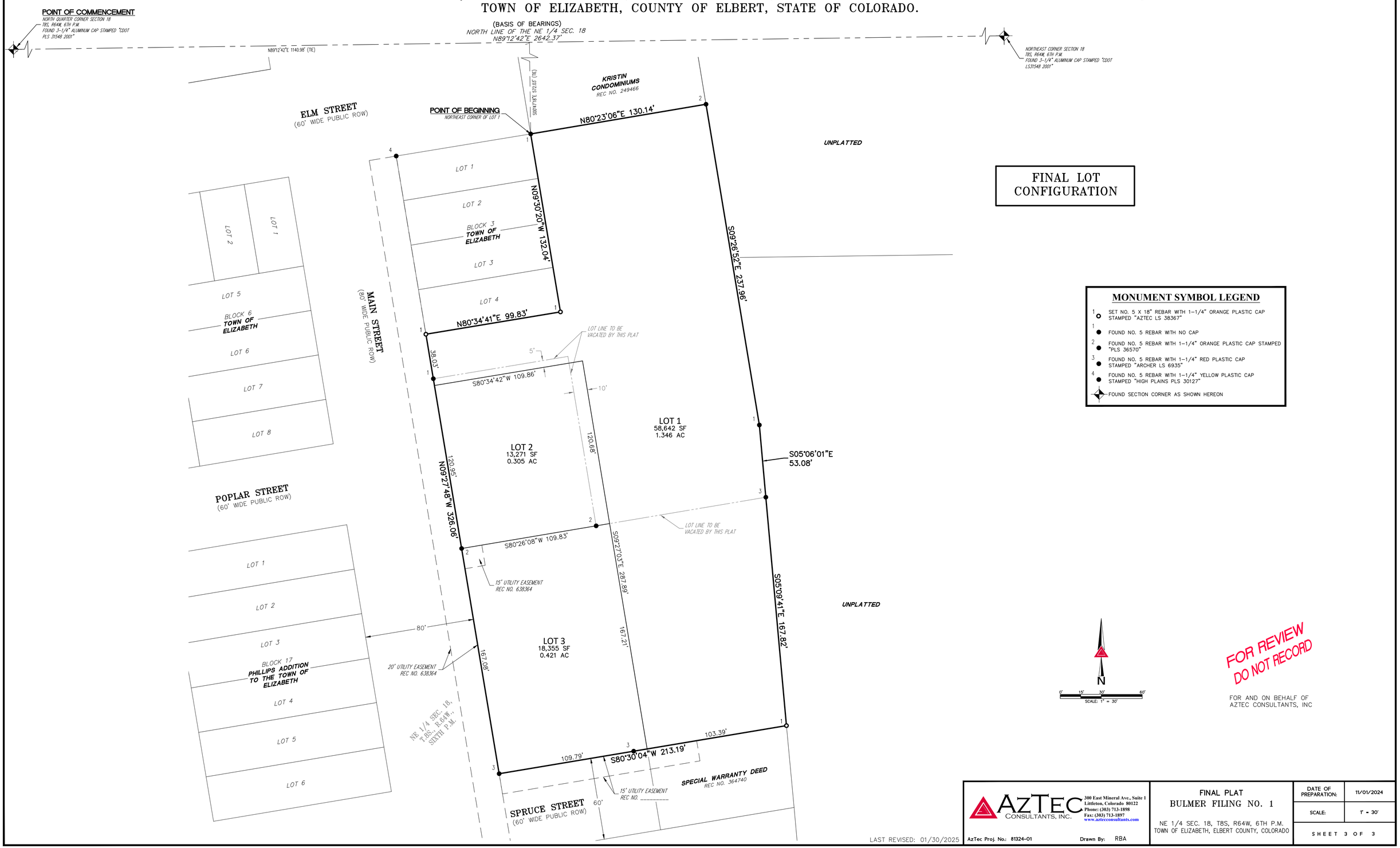
AzTec Proj. No.: 81324-01 Drawn By: RBA

FINAL PLAT
BULMER FILING NO. 1
NE 1/4 SEC. 18, T8S, R64W, 6TH P.M.
TOWN OF ELIZABETH, ELBERT COUNTY, COLORADO

DATE OF PREPARATION:	11/01/2024
SCALE:	1" = 30'
SHEET 2 OF 3	

BULMER FILING NO. 1

A REPLAT OF LOTS 5 AND 6, BLOCK 3 AND LOTS 1–6, INCLUSIVE, BLOCK 13, AND
A PART OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE SIXTH PRINCIPAL MERIDIAN,
TOWN OF ELIZABETH, COUNTY OF ELBERT, STATE OF COLORADO.



FINAL LOT CONFIGURATION

MONUMENT SYMBOL LEGEND

1. SET NO. 5 X 18" REBAR WITH 1-1/4" ORANGE PLASTIC CAP STAMPED "AZTEC LS 38367"
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- FOUND SECTION CORNER AS SHOWN HEREON

FOR REVIEW
DO NOT RECORD

FOR AND ON BEHALF OF
AZTEC CONSULTANTS, INC

LAST REVISED: 01/30/2025

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FINAL PLAT
BULMER FILING NO. 1
NE 1/4 SEC. 18, T8S, R64W, 6TH P.M.
TOWN OF ELIZABETH, ELBERT COUNTY, COLORADO

DATE OF PREPARATION:	11/01/2024
SCALE:	1" = 30'
SHEET 3 OF 3	

MAIN STREET OFF-STREET PARKING LOT

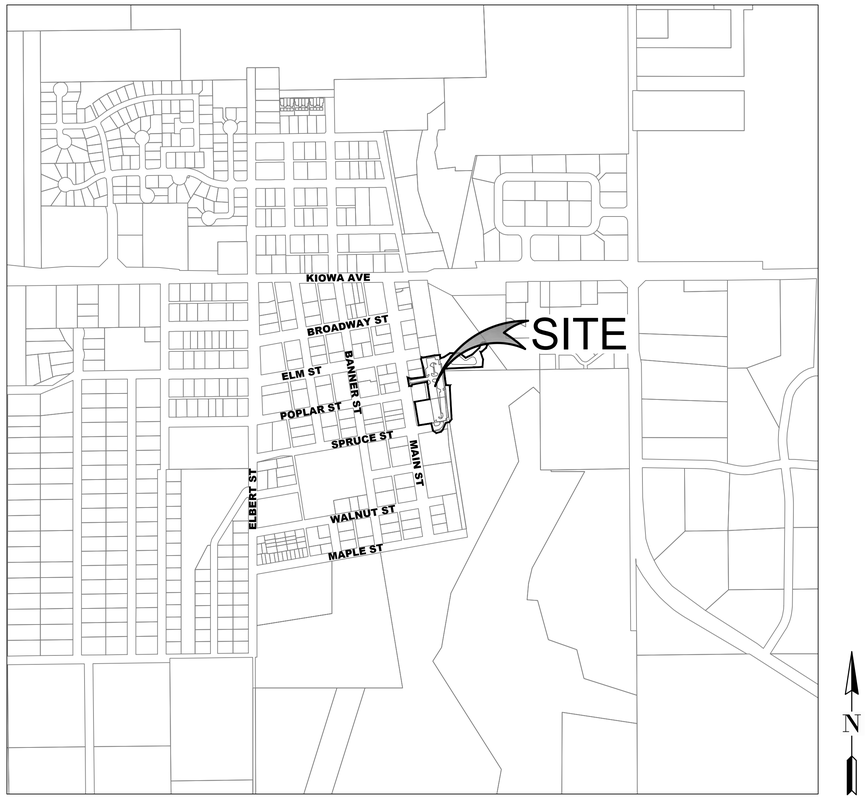
LOTS 2-6 OF BLOCK 13
WITHIN THE NE QUARTER OF SECTION 18, T8S, R64W, 6TH P.M.,
TOWN OF ELIZABETH, ELBERT COUNTY, COLORADO

OWNER
TOWN OF ELIZABETH
151 S BANNER ST
P.O. BOX 159
ELIZABETH, CO 80107
CONTACT: ZACH HIGGINS
ZHIGGINS@TOWNOFELIZABETH.ORG

ENGINEER
TERRACINA DESIGN
10200 E. GIRARD AVE., SUITE A-314
DENVER, CO 80231
CONTACT: MARTIN METSKER
303.632.8867
MMETSKER@TERRACINADESIGN.COM

SURVEYOR
AZTEC CONSULTANTS
300 EAST MINERAL AVE, SUITE 1,
LITTLETON, CO 80122
(303) 713-1898
CONTACT: MIKE NOFFSINGER

UTILITY PROVIDERS
CORE ELECTRIC
168 CTC BLVD SUITE A
LOUISVILLE, CO 80027
(303) 887-3877



VICINITY MAP

0 1000' 2000'

1 inch = 1000'

BASIS OF BEARINGS
THE BEARINGS SHOWN HEREON ARE BASED UPON THE NORTH LINE OF THE NORTHEAST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE 6TH PRINCIPAL MERIDIAN, ASSUMED TO BEAR SOUTH 89°12'42" WEST, A DISTANCE OF 2642.37 FEET.

BENCHMARK
PROJECT BENCHMARK (AZTEC #400):
PROJECT BENCHMARK IS A NGS MONUMENT DESIGNATION H 53 (POINT ID KK0312). SAID MONUMENT IS AN NGS STANDARD DISK SET ON THE TOP OF A CONCRETE PORCH, STAMPED "H 53 1934." MONUMENT IS LOCATED ON 188 S. MAIN ST., NORTH EAST SIDE OF THE FORMER BANK, 4 FT EAST OF THE CENTERLINE OF SIDEWALK AND 5 INCHES NORTH OF A BRICK PILLAR.
NGS PUBLISHED ELEVATION = 6451.58 FT (NAVD 88)

SHEET INDEX

NO	SHEET TITLE
1	COVER SHEET
2	GENERAL NOTES
3	EXISTING SITE & DEMO PLAN
4	OVERALL SITE PLAN
5	OVERALL UTILITY PLAN
6	OVERALL GRADING PLAN
7	HORIZONTAL CONTROL & GRADING PLAN (1 OF 4)
8	HORIZONTAL CONTROL & GRADING PLAN (2 OF 4)
9	HORIZONTAL CONTROL & GRADING PLAN (3 OF 4)
10	HORIZONTAL CONTROL & GRADING PLAN (4 OF 4)
11	STORM P&P - STORM F
12	STORM - POND F
13	STORM - OUTLET STRUCTURE - POND F
14	SANITARY P&P - RESTROOM SANITARY SERVICE
15	WATER P&P - RESTROOM WATER SERVICE
16	GESC - INITIAL PLAN
17	GESC - INITIAL PLAN
18	GESC - INTERIM PLAN
19	GESC - INTERIM PLAN
20	GESC - FINAL PLAN
21	GESC - FINAL PLAN
22	DETAILS
23	DETAILS
24	DETAILS
25	DETAILS
26	DETAILS
27	DETAILS
28	DETAILS
29	DETAILS
30	DETAILS
31	DETAILS

PROFESSIONAL ENGINEER CERTIFICATION
THESE CONSTRUCTION PLANS FOR THE MAIN STREET OFF-STREET PARKING LOT WERE PREPARED BY ME (OR UNDER MY DIRECT SUPERVISION) IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF ELIZABETH DESIGN REVIEW STANDARDS AND GUIDELINES, WATER AND SEWER STANDARDS, STORM DRAINAGE DESIGN AND TECHNICAL CRITERIA, AND THE GRADING, EROSION AND SEDIMENT CONTROL MANUAL.

MARTIN METSKER, PE #41743 DATE
TERRACINA DESIGN
10200 E. GIRARD AVE., SUITE A-314
DENVER, CO 80231
PHONE (303) 632-8867 EXT.110

THESE DESIGNS, PLANS, AND CONTRACT DOCUMENTS ARE REVIEWED FOR CONCEPT AND GENERAL CONFORMANCE TO THE TOWN'S MINIMUM STANDARDS ONLY, AND THE PRIMARY RESPONSIBILITY FOR DESIGN ADEQUACY IS TO REMAIN WITH THE ENGINEER OF RECORD. THIS REVIEW DOES NOT IMPLY RESPONSIBILITY BY THE TOWN OF ELIZABETH, OR THE TOWN ENGINEER FOR COMPLETENESS, ACCURACY OR CORRECTNESS OF CALCULATION. THE REVIEW DOES NOT IMPLY THAT QUANTITIES OF ITEMS INDICATED ON THE PLANS ARE THE FINAL QUANTITIES REQUIRED. THE REVIEW SHALL NOT BE CONSTRUED FOR ANY REASON AS ACCEPTANCE OF FINANCIAL RESPONSIBILITY BY THE TOWN FOR ADDITIONAL ITEMS AND ADDITIONAL QUANTITIES OF ITEMS SHOWN THAT MAY BE REQUIRED DURING THE CONSTRUCTION PHASE.

APPROVED FOR CONSTRUCTION WITHIN ONE YEAR OF THE EARLIEST OF THESE DATES:

BY: _____
TOWN ENGINEER DATE

BY _____
TOWN OF ELIZABETH-PUBLIC WORKS DIRECTOR DATE

BY _____
TOWN OF ELIZABETH-TOWN ADMINISTRATOR DATE

BY _____
ELIZABETH FIRE DEPARTMENT DATE

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
COVER SHEET

Know what's below. Call before you dig. 811

SHEET 1 OF 31

1/30/2025 11:23 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS COVER DWG 1

GENERAL NOTES:

1. UNLESS OTHERWISE MODIFIED HEREIN, ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION SHALL MEET OR EXCEED THE STANDARDS AND SPECIFICATIONS SET FORTH BY THE GOVERNING MUNICIPALITY, DISTRICT, AGENCY OR ENTITY. IF THE GOVERNING MUNICIPALITY, DISTRICT, AGENCY OR ENTITY DOES NOT HAVE A STANDARD, AN APPLICABLE STANDARD FROM THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT)STANDARDS (M &S STANDARDS, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION) SHALL BE ADHERED TO. FURTHER ALL OTHER APPLICABLE STATE AND FEDERAL REGULATIONS ARE TO BE FOLLOWED. WHERE THERE IS CONFLICT BETWEEN THESE PLANS AND THE SPECIFICATIONS, OR ANY APPLICABLE STANDARDS OR REGULATIONS, THE MOST RESTRICTIVE STANDARD SHALL APPLY.
2. ALL REFERENCES TO ANY PUBLISHED STANDARDS SHALL REFER TO THE LATEST REVISION OF SAID STANDARD, UNLESS SPECIFICALLY STATED OTHERWISE.
3. EXISTING UTILITIES SHOWN ON THIS PLAN ARE BASED UPON THE BEST INFORMATION AVAILABLE AS SUPPLIED BY SURFACE EVIDENCE AND UTILITY COMPANY MAPS. UTILITIES THAT EXIST MAY NOT BE SHOWN HEREIN. THE SIZE, LOCATION, TYPE AND NUMBER OF UTILITY SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND NOTIFICATION OF ANY DISCREPANCY SHALL BE MADE TO THE OWNER AND ENGINEER BEFORE ANY OTHER WORK IS PERFORMED.
4. THE CONTRACTOR SHALL CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO(UNCC) AT 811, AT LEAST 2 WORKING DAYS PRIOR TO BEGINNING EXCAVATION OR GRADING,TO HAVE ALL REGISTERED UTILITY LOCATIONS MARKED. OTHER UNREGISTERED UTILITY ENTITIES (I.E. DITCH / IRRIGATION COMPANY) ARE TO BE LOCATED BY CONTACTING THERE SPECTIVE REPRESENTATIVE. UTILITY SERVICE LATERALS ARE ALSO TO BE LOCATED PRIOR TO BEGINNING EXCAVATION OR GRADING.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL UTILITIES DURING CONSTRUCTION AND FOR COORDINATING WITH THE APPROPRIATE UTILITY COMPANY FOR ANY UTILITY CROSSINGS REQUIRED.
6. A STATE CONSTRUCTION DEWATERING WASTEWATER DISCHARGE PERMIT IS REQUIRED IF DEWATERING IS REQUIRED IN ORDER TO INSTALL UTILITIES OR WATER IS DISCHARGED INTO A STORM SEWER, CHANNEL, IRRIGATION DITCH OR ANY WATERS OF THE UNITED STATES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ASPECTS OF JOB SITE SAFETY INCLUDING, BUT NOT LIMITED TO, EXCAVATION, TRENCHING, SHORING, TRAFFIC CONTROL, AND SECURITY.
8. DIMENSIONS FOR LAYOUT AND CONSTRUCTION ARE NOT TO BE SCALED FROM ANY DRAWING. IF PERTINENT DIMENSIONS ARE NOT SHOWN, CONTACT THE DESIGNER FOR CLARIFICATION, AND ANNOTATE THE DIMENSION ON THE AS-BUILT RECORD DRAWINGS.
9. IF, DURING THE CONSTRUCTION PROCESS, CONDITIONS ARE ENCOUNTERED WHICH COULD INDICATE A SITUATION THAT IS NOT IDENTIFIED IN THE PLANS OR SPECIFICATIONS, THE DEVELOPER SHALL CONTACT THE DESIGNER AND THE LOCAL ENTITY ENGINEER IMMEDIATELY.
10. THE CONTRACTOR SHALL REFER TO AN APPROVED GEOTECHNICAL STUDY FOR ADDITIONAL INFORMATION PERTAINING TO THE SITE CONSTRUCTION, MATERIALS AND PAVEMENTS.
11. CONTRACTOR SHALL REFER TO THE APPROVED EROSION CONTROL MANAGEMENT PLAN FOR IMPLEMENTATION OF BEST MANAGEMENT PRACTICES TO MINIMIZE OR ELIMINATE EROSION AND SEDIMENT TRANSPORT AT ALL TIMES.

GRADING NOTES:

1. REFER TO THE ROADWAY PLANS FOR GRADING AND CONSTRUCTION DETAIL IN THE PUBLIC RIGHT OF WAY.
2. REFER TO APPROVED GEOTECHNICAL REPORT FOR ADDITIONAL CONSTRUCTION AND GRADING REQUIREMENTS.
3. STOCKPILE ONSITE TOPSOIL FOR REUSE ONSITE. LOCATIONS OF TOPSOIL REUSE SHALL BE IN LANDSCAPE AREAS, OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.
4. WOOD FRAMING MEMBERS, INCLUDING WOOD SHEATHING, THAT ARE IN CONTACT WITH EXTERIOR FOUNDATION WALLS AND ARE LESS THAN EIGHT (8) INCHES FROM EXPOSED EARTH SHALL BE OF NATURALLY DURABLE OR PRESERVATIVE-TREATED WOOD.
5. FOR ALL AREAS ADJACENT TO STRUCTURES THAT ARE HARD SURFACE, THE FINAL FINISH GRADE SHALL FALL AWAY FROM THE BUILDING AT A GRADE OF 1.8% (MIN) FOR PEDESTRIAN PATHS OR 3% FOR NON-PEDESTRIAN AREAS.
6. FOR ALL AREAS ADJACENT TO STRUCTURES THAT ARE NOT HARD SURFACE, THE FINAL FINISH GRADE SHALL FALL AWAY FROM THE BUILDING AT A GRADE OF 10% (MIN) FOR 10-FT (MIN.), UNLESS MODIFIED BY AN APPROVED GEOTECHNICAL STUDY.
7. STEPS AND GRADES SHOWN INSIDE BUILDING ENVELOPES AND GARAGES ARE FOR INFORMATION ONLY. REFER TO ARCHITECTURAL PLANS FOR CONSTRUCTION DETAILS.
8. REFER TO THE ARCHITECTURAL AND/OR STRUCTURAL PLANS FOR THE LOCATION AND EXTENT OF FOUNDATION STEM WALLS AND/ OR EXPOSED FOUNDATION.
9. REFER TO THE LANDSCAPE PLANS FOR RETAINING WALL MATERIALS AND CONSTRUCTION DETAILS.
10. SPOT ELEVATIONS TAKE PRECEDENCE OVER CONTOURS.
11. SPOT ELEVATIONS ARE FLOWLINE OR FINISH GRADE UNLESS OTHERWISE INDICATED.
12. SIDEWALKS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF FIVE PERCENT (5%).
13. RAMP AND SIDEWALK CROSS-SLOPES SHALL NOT EXCEED 2%.
14. RAMPS SHALL HAVE A MAXIMUM LONGITUDINAL SLOPE OF 12:1 (8.33%) AND SHALL NOT EXCEED THIRTY FEET IN LENGTH OR THIRTY INCHES IN HEIGHT, WITHOUT INTERMEDIATE LANDINGS.
15. RAMPS, EXCEPT CURB RAMPS, SHALL HAVE HAND RAILS ON BOTH SIDES.
16. ALL SITE STEP TREADS ARE 11-INCHES DEEP UNLESS OTHERWISE NOTED.
17. STAIRWAY AND RAMP LANDINGS SHALL HAVE A MAXIMUM SLOPE, IN ANY DIRECTION, OF TWO PERCENT AND SHALL NOT BE LESS THAN THE WIDTH OF THE STAIRS AND 5-FT LONG, UNLESS OTHERWISE INDICATED ON THE PLAN.
18. ALL RAMPS AND STAIRS SHALL BE CONSTRUCTED, INCLUDING THE USE OF RAILINGS, IN ACCORDANCE WITH APPLICABLE ADA (ADAAG), FAIR HOUSING STANDARDS, AND BUILDING CODE STANDARDS.
19. EDGE PROTECTION SHALL BE PROVIDED IN ACCORDANCE WITH APPLICABLE CODES AT ALL LOCATIONS WHICH REQUIRE HANDRAILS.
20. RE: LANDSCAPE PLANS AND/OR ARCHITECTURAL PLANS FOR HANDRAIL DETAIL.
21. RETAINING WALL ELEVATIONS ARE SHOWN TO THE EXPOSED FACE OF WALL AT THE TOE AND THE TOP OF WALL.
22. RETAINING WALLS ARE TO BE DESIGNED BY OTHERS.
23. THE CONTRACTOR SHALL REVIEW ALL ELEVATIONS WITH THEIR SURVEYOR PRIOR TO STAKING AND CONSTRUCTION OF THE BUILDINGS.
24. REFER TO LANDSCAPE PLANS FOR PLANTER DESIGN INCLUDING HEIGHT ABOVE FINISH GRADE.
25. ALL ROOF DOWNSPOUTS MUST CONNECT TO THE ROOF DRAIN PIPING SYSTEM OR DOWNSPOUTS THAT DISCHARGE TO THE SURFACE SHALL SPILL ONTO THE SPLASH BLOCKS THAT EXTEND A MINIMUM OF FIVE (5) FEET AWAY FROM THE FOUNDATION.

PAVING, SIGNING & STRIPING NOTES:

1. PAVING OF PUBLIC STREETS AND SIDEWALKS SHALL BE IN ACCORDANCE WITH THE GOVERNING AGENCY CRITERIA.
2. ALL ONSITE CURB AND GUTTER IS 6-IN VERTICAL WITH 1-FT SPILL PAN UNLESS OTHERWISE INDICATED.
3. ON SITE SIDEWALK SHALL BE 4-IN THICK MIN. AND 6-IN THICK (MIN) IF IT CROSSES A DRIVING SURFACE).
4. CONCRETE PAVING JOINTS SHALL BE IN CONFORMANCE WITH GOVERNING AGENCY ROADWAY STANDARDS OR, IN THE ABSENCE OF A STANDARD, THE COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) M & S STANDARDS, AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.
5. UNLESS SPECIFICALLY DETAILED ON THESE PLANS AND REFERENCED TO AN APPROVED GEOTECHNICAL STUDY, THESE PLANS DO NOT DETAIL THE REQUIRED PAVING SECTIONS.
6. SUBGRADE SHALL BE PREPARED IN ACCORDANCE WITH CDOT CRITERIA AND COMPACTED TO 95% OPTIMUM DENSITY IN ACCORDANCE WITH AASHTO T-99, UNLESS FURTHER RESTRICTED BY THE APPROVED PAVING DESIGN.
7. ALL PAVEMENT IS ASPHALT UNLESS OTHERWISE INDICATED. NO CONTRACTION OR EXPANSION JOINTS SHALL BE LOCATED WITHIN TWELVE INCHES (LONGITUDINALLY) OF THE FLOWLINE.
8. CONCRETE FOR DRIVING SURFACES SHALL BE CDOT CLASS P UNLESS OTHERWISE INDICATED OR APPROVED BY THE ENGINEER.
9. TOOLED OR SAWED CONTRACTION JOINTS AT 8-FT ON CENTER (MAX) OR AS SHOWN ON PLAN.
10. ALL CONCRETE JOINTS PER CDOT STANDARDS.
11. ALL EXPANSION JOINTS SHALL BE SEALED PER CDOT STANDARDS.
12. ALL NEW OR RELOCATED STREET/TRAFFIC SIGNS SHALL BE INSTALLED PER CURRENT GOVERNING MUNICIPALITY STANDARDS.
13. SIGNAGE AND STRIPING SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS. IN THE ABSENCE OF A STANDARD IT SHALL COMPLY WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), CURRENT EDITION.
14. STRIPING OUTSIDE OF THE RIGHT-OF-WAY SHALL BE EPOXY PAINT. SYMBOLS SHALL BE METHYL METHACRYLATE, HOT APPLIED THERMOPLASTIC (90 MIL), PREFORMED PLASTIC (90 MIL) OR INLAYED TAPE (STAMARK), OR APPROVED EQUAL.

DEMOLITION NOTES:

1. THE WORK GENERALLY INCLUDES REMOVAL/DEMOLITION OF INDICATED EXISTING SURFACE FEATURES (I.E. STRUCTURES, CURB, GUTTER, DRAINAGE STRUCTURES, ASPHALT, LIGHTS, VEGETATION, ETC.) AND UNDERGROUND UTILITIES (I.E. ELECTRIC LINES, GAS LINES, FIBER OPTIC LINES, DRAINAGE LINES, ETC), WITHIN THE PROPERTY BOUNDARY. NO WORK UNLESS SPECIFICALLY NOTED SHALL BE OUTSIDE OF THE SUBJECT PROPERTY. SEE PLANS FOR LIMITS OF REMOVAL/ DEMOLITION.
2. LIMITS OF REMOVAL SHOWN ARE APPROXIMATE.
3. CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS INCLUDING SITE SAFETY FOR ALL ASPECTS OF DEMOLITION INCLUDING OPERATION WITHIN THE REGULATIONS OF GOVERNING AGENCIES.
4. ALL UNDERGROUND STORM SEWER, WATER, SANITARY SEWER, GAS, ELECTRIC, OTHER UTILITY LOCATIONS, AND EXISTING SITE APPURTENANCES ARE BASED ON THE ALTA SURVEY PREPARED FOR THE SITE AND ARE TO BE CONSIDERED APPROXIMATE ONLY. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER.
5. ALL ITEMS NOTED AS "REMOVE" SHALL BE DEMOLISHED/REMOVED FROM THE SITE. ALL ITEMS NOTED "VERIFY/REMOVE" SHALL BE REMOVED ONLY AFTER VERIFICATION THAT THE UTILITY IS NO LONGER NEEDED TO PROVIDE SERVICE TO ANY ADJACENT PROPERTIES OR USERS. COORDINATE WITH LOCAL UTILITY PROVIDER. ALL ITEMS NOTED FOR REUSE SHALL BE REPLACED AS DIRECTED. HOWEVER, THE GOVERNING AGENCY (IN THE INSTANCE OF PUBLIC INFRASTRUCTURE) OR THE ENGINEER SHALL DETERMINE IF THE ITEM IS IN ADEQUATE CONDITION TO BE REUSED.
6. ITEMS TO BE REUSED SHALL BE REMOVED AND SAFELY STORED AS NECESSARY PRIOR TO REPLACEMENT.
7. UNLESS SPECIFICALLY DIRECTED, THE CONTRACTOR SHALL DISPOSE OF CONCRETE, ASPHALT RUBBLE AND ANY OTHER DEMOLISHED/ REMOVED MATERIALS OFFSITE.
8. CONTRACTOR SHALL DISPOSE OF AND TRANSPORT DEBRIS TO OFFSITE IN A SAFE AND LEGAL MANNER AND SHALL NOT STORE OR BURN MATERIALS ONSITE. CONTRACTOR SHALL HANDLE AND DISPOSE OF ALL DEBRIS IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS. DISPOSAL SHALL BE TRANSPORTED TO AN APPROVED LANDFILL OR OTHER APPROVED FACILITY.
9. CONCRETE SHALL BE REMOVED TO THE NEAREST JOINT.
10. THE CONTRACTOR SHALL VERIFY ALL UTILITIES HAVE BEEN DISCONNECTED AS REQUIRED FOR THE WORK.
11. CONTRACTOR SHALL ERECT BARRIERS, FENCES, GUARDRAILS, ENCLOSURES, ETC. TO PROTECT THE SITE AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN.
12. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY TRAFFIC CONTROL (SIGNS, BARRICADES, FLAGMEN, LIGHTS, ETC) IN ACCORDANCE WITH THE MUTCD, CURRENT EDITION, AS REQUIRED FOR THE WORK.
13. CONTRACTOR SHALL OBTAIN ALL PERMITS AND LICENSES REQUIRED FOR DEMOLITION OF WORK SHOWN.
14. CONTRACTOR SHALL PROTECT ALL EXISTING SURVEY MONUMENTATION AND BENCHMARK(S). CONTRACTOR SHALL HAVE A LICENSED SURVEYOR REPLACE ANY DAMAGED OR DISTURBED MONUMENTATION AT THE CONTRACTOR'S COST.

DEMOLITION NOTES (CONT.):

15. CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, FEATURES, IMPROVEMENTS, AND UTILITIES (OVERHEAD OR UNDERGROUND) AT ALL TIMES DURING DEMOLITION AND CONSTRUCTION NOT INTENDED TO BE REMOVED OR DEMOLISHED. CONTRACTOR WILL BE RESPONSIBLE FOR ALL RESULTANT COSTS DUE TO SUCH DAMAGES.
16. REFER TO SHEET C3.10 FOR DEMOLITIONS IN THE RIGHT OF WAY.

GENERAL UTILITY NOTES:

1. DESIGN OF UTILITIES WITHIN FIVE (5) FEET OF THE BUILDING ARE EXCLUDED FROM THESE PLANS. UTILITIES, INCLUDING DOWNSPOUT CONNECTIONS, CLEAN-OUTS, ETC WITHIN FIVE (5) FEET OF THE BUILDING SHALL BE DETAILED BY THE ARCHITECT OR MECHANICAL ENGINEER.

SANITARY NOTES:

1. CONCRETE USED IN SANITARY SEWER STRUCTURES SHALL BE AS SPECIFIED BY THE GOVERNING AGENCY OR CLASS B AS DEFINED BY CDOT STANDARDS AND SPECIFICATIONS FOR ROAD AN BRIDGE CONSTRUCTION, IN THE ABSENCE OF AN AGENCY SPECIFICATION.
2. SEWER SERVICE CONNECTIONS WITH THE MAIN LINE SHALL BE IN ACCORDANCE WITH GOVERNING AGENCY STANDARDS. IF NO STANDARD EXISTS, WYE OR TEE (AS NOTED ON PLANS) SHALL BE CUT INTO THE MAIN LINE AND INSTALLED WITH FLEXIBLE NON-SHEAR REINFORCED COUPLINGS ON THE MAIN.
3. IF NOT SPECIFIED BY THE UTILITY DISTRICT, SANITARY SEWER SERVICE CONNECTIONS TO THE MAINLINE SHALL CONNECT AT 2:00 OR 10:00 ON THE MAIN.
4. MINIMUM DROP FROM THE SERVICE LINE BEND TO THE MAIN SHALL BE EQUAL TO THE SIZE OF THE MAINLINE.
5. SLOPE OF SERVICE LINES SHALL BE AS NOTED ON PLANS.
6. PIPE AND FITTINGS SHALL BE PER GOVERNING AGENCY STANDARD AN IN THE ABSENCE OF A STANDARD SHALL BE PVC SDR 35, MEETING ASTM D3034.
7. BEDDING SHALL BE PROVIDED AND PLACED IN ACCORDANCE WITH GOVERNING AGENCY STANDARD OR APPROVED EQUAL.
8. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
9. ALL PIPE LENGTHS ARE MEASURED TO CENTER OF MANHOLES.
10. COORDINATES FOR MANHOLES ARE TO CENTER OF STRUCTURE, UNLESS OTHERWISE INDICATED.

STORM NOTES:

1. CONCRETE USED IN STORM SEWER STRUCTURES SHALL BE AS SPECIFIED BY THE GOVERNING AGENCY OR CLASS B AS DEFINED BY CDOT STANDARDS AND SPECIFICATIONS FOR ROAD AN BRIDGE CONSTRUCTION, IN THE ABSENCE OF AN AGENCY SPECIFICATION.
2. REFER TO STORM SEWER PLANS FOR LANDSCAPE/ ROOF DRAINS AND DETENTION POND FACILITIES, INCLUDING OUTFALLS.
3. IF CONNECTED TO AN UNDERGROUND SYSTEM, DOWNSPOUTS SHALL HAVE AN OVERFLOW PROTECTION. REFER TO ARCHITECTURAL PLANS.
4. ALL PVC PIPE SHALL BE PVC SCHEDULE 40, OR APPROVED EQUAL.
5. ALL CONCRETE PIPE SHALL BE REINFORCED AND CLASS III (MIN).
6. SLOPE OF SERVICE LINES SHALL BE AS NOTED ON PLANS.
7. BEDDING SHALL BE PROVIDED AND PLACED IN ACCORDANCE WITH GOVERNING AGENCY STANDARD OR APPROVED EQUAL.
8. PIPE SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
9. ALL PIPE LENGTHS ARE MEASURED TO CENTER OF MANHOLES AND LANDSCAPE INLETS, AND INSIDE FACE OF OTHER STRUCTURES.
10. COORDINATES FOR TYPE R INLETS ARE TO FLOWLINE AT MIDPOINT OF INLET.
11. COORDINATES FOR ALL OTHER STRUCTURES ARE TO CENTER OF STRUCTURE, UNLESS OTHERWISE INDICATED.
12. LANDSCAPE DRAINS (18" SQUARE OR SMALLER) SHALL BE NDS CATCH BASINS WITH ADA COMPLIANT GRATES THAT MEET HS-20 LOADING OR APPROVED EQUAL, UNLESS OTHERWISE SPECIFIED ON THE PLANS.

ABBREVIATIONS

AC	ASPHALTIC CONCRETE
B.O.P.	BOTTOM OF PIPE
CC	CONCRETE
CL	ROADWAY CENTERLINE
CMP	CORRUGATED METAL PIPE
CR	CURB RAMP
DE / DEMO	DEMOLITION
DIA	DIAMETER
DWG	DRAWING
DRNG	DRAINAGE
ESMT	EASEMENT
E / ELEC	ELECTRICAL
E	EAST
EC	EDGE OF CONCRETE
EG	EXISTING GRADE
EL / ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EX / EXIST	EXISTING
FES	FLARED END SECTION
FG	FINISHED GRADE
FL	FLOWLINE
FH	FIRE HYDRANT
FO	FIBER OPTIC
G	GAS
GND	GROUND
GRV	GRAVEL
HGL	HYDRAULIC GRADE LINE
HORIZ	HORIZONTAL
HP	HIGH POINT
INT	INTERSECTION
INV	INVERT
LP	LOW POINT
LF	LEFT
LN	LANE
LS	LIFT STATIO
MAT	MATERIAL
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
N	NORTH
NO.	NUMBER
NTS	NOT TO SCALE
OH	OVERHEAD
OHEL	OVERHEAD ELECTRICAL
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
PCR	POINT OF CURVATURE, REVERSE
PE	PROFESSIONAL ENGINEER
PI	POINT OF INTERSECTION
PLS	PROFESSIONAL LAND SURVEYOR
PR	PROPOSED
PT	POINT OF TANGENCY / POINT
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVMT	PAVEMENT
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS / RIGHT
REC	RECORDING
RCP	REINFORCED CONCRETE PIPE
R.O.W.	RIGHT-OF-WAY
RD	ROAD / ROADWAY
RT	RIGHT
S	SOUTH
SD	STORM DRAIN
SEC	SECTION
SHT	SHEET
SI	SIGNING & STRIPING
SS	SANITARY SEWER
ST	STREET
STA	STATION
STD	STANDARD
SW	SIDEWALK
T / TELE	TELEPHONE
TBC	TOP BACK OF CURB
TC	TOP OF CURB / TRAFFIC CONTROL
TOE	TOE OF SLOPE
TOW	TOP OF WALL
T.O.P.	TOP OF PIPE
TYP	TYPICAL
TV	TELEVISION
UE	UTILITY EASEMENT
VERT	VERTICAL
VC	VERTICAL CURVE
W	WEST / WATER
WT	WATER
XC	CROSS-SECTION
Y1	SINGLE YELLOW STRIPE
Y2	DOUBLE YELLOW STRIPE

LEGEND

- 6350 — PROPOSED MAJOR CONTOUR
- 6349 — PROPOSED MINOR CONTOUR
- 6350 — EXISTING MAJOR CONTOUR
- 6349 — EXISTING MINOR CONTOUR
- FG — FINISHED GRADE
- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- CENTERLINE
- LOT / TRACT / PARCEL BOUNDARY
- SIGHT / SAFETY TRIANGLE
- 1 LOT 1 — BLOCK NUMBER / LOT NUMBER
- DRAINAGE SWALE
- GUARDRAIL
- STREET LIGHT
- STREET SIGNS
- CURB RAMPS
- TOWNHOMES
- ROAD WARPING
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- RIPRAP
- SOIL RIPRAP
- SAWCUT
- STORM (FES, MH, & INLET)
- SANITARY
- WATER (HYDRANT, VALVE, BEND, MH)
- RAW WATER (VALVE, BEND, ARV)
- FOREBAY
- STORM INLETS (TYPE C, D, 13, & R)
- STORM 100 YEAR HGL
- STORM 5 YEAR HGL
- A — A LOT
- B — B LOT
- WO — WALKOUT LOT
- T — TRANSITION LOT
- EX STORM (FES, MH, & INLET)
- EX SANITARY
- EX WATER (HYDRANT, VALVE, BEND, MH)
- OHUT — EXISTING OVERHEAD ELECTRIC
- UE — EXISTING UNDERGROUND ELECTRIC
- EXISTING STORM
- EXISTING SWALE
- EXISTING SANITARY CLEAN OUT
- EXISTING TREE
- EXISTING SIGN
- W — EXISTING WATER
- G — EXISTING GAS
- FO — EXISTING FIBER OPTIC
- UE — EXISTING ELECTRIC
- T — T — EXISTING TELEPHONE
- X — EXISTING FENCE
- WET — WET — EXISTING WETLAND
- EX BOLLARD
- EB — EX ELECTRIC BREAKER BOX
- EX FIBER OPTIC VAULT
- EX GAS METER
- MP — EX METAL POST
- EX OIL & GAS WELL
- EX TELEPHONE PEDESTAL
- EXISTING POWER POLE & GUY WIRE
- EX WATER MH, METER, & VENT PIPE
- EX WATER VALVE & HYDRANT

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2	01/17/2025	MM	2ND SUBMITTAL

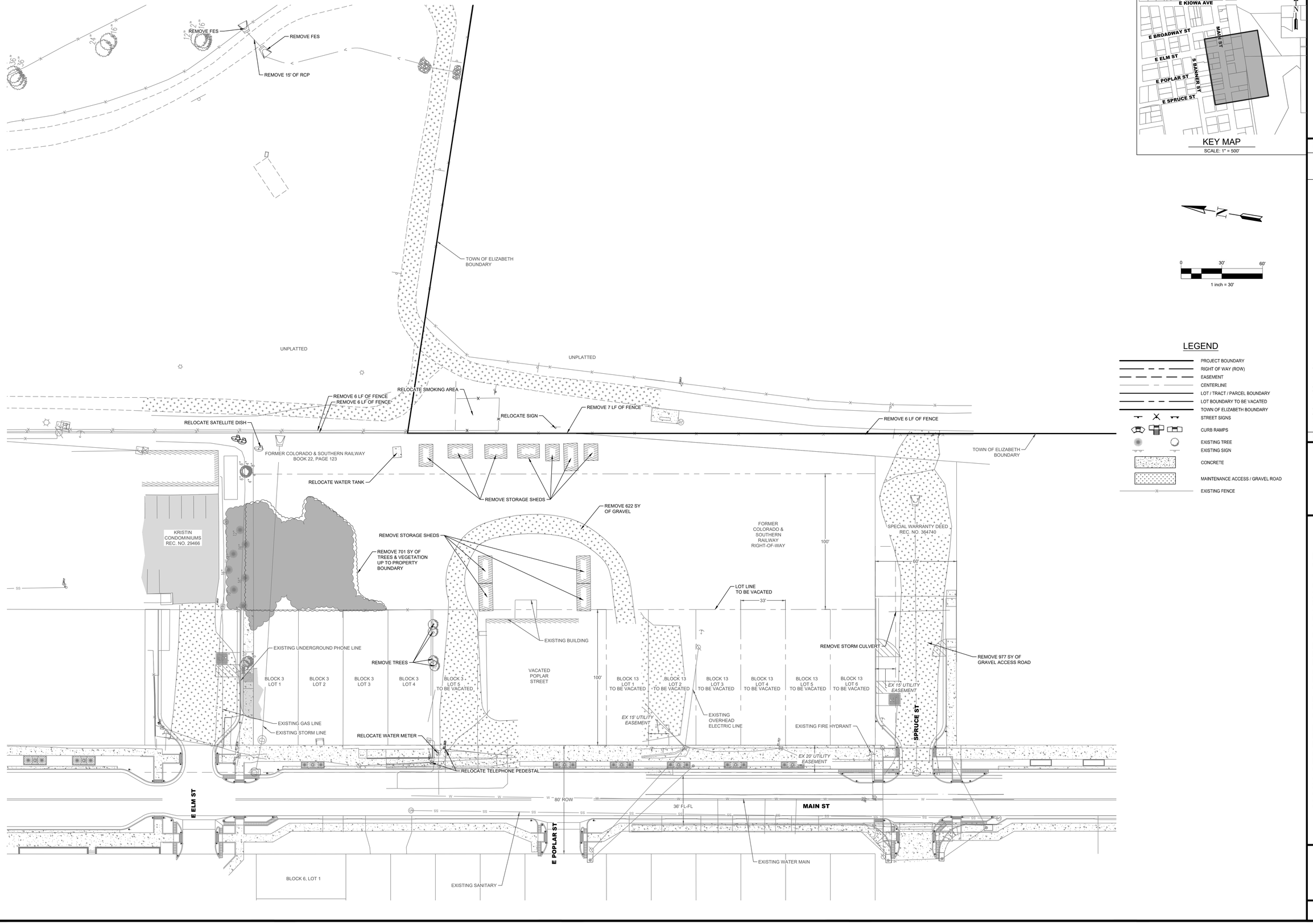
NOT FOR CONSTRUCTION

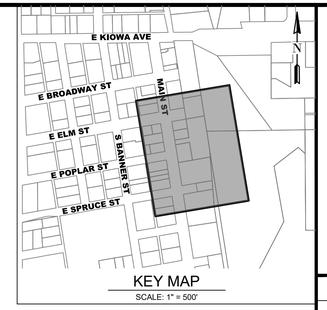
MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
GENERAL NOTES

Know what's **below.** **Call** before you dig. 811

SHEET 2 OF 31

1/30/2025 11:23 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS GENERAL NOTES.DWG 1





KEY MAP
SCALE: 1" = 500'

0 30' 60'
1 inch = 30'

LEGEND

- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- CENTERLINE
- LOT / TRACT / PARCEL BOUNDARY
- LOT BOUNDARY TO BE VACATED
- TOWN OF ELIZABETH BOUNDARY
- STREET SIGNS
- CURB RAMPS
- EXISTING TREE
- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE

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MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
EXISTING SITE & DEMO PLAN

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SHEET
3 OF 31

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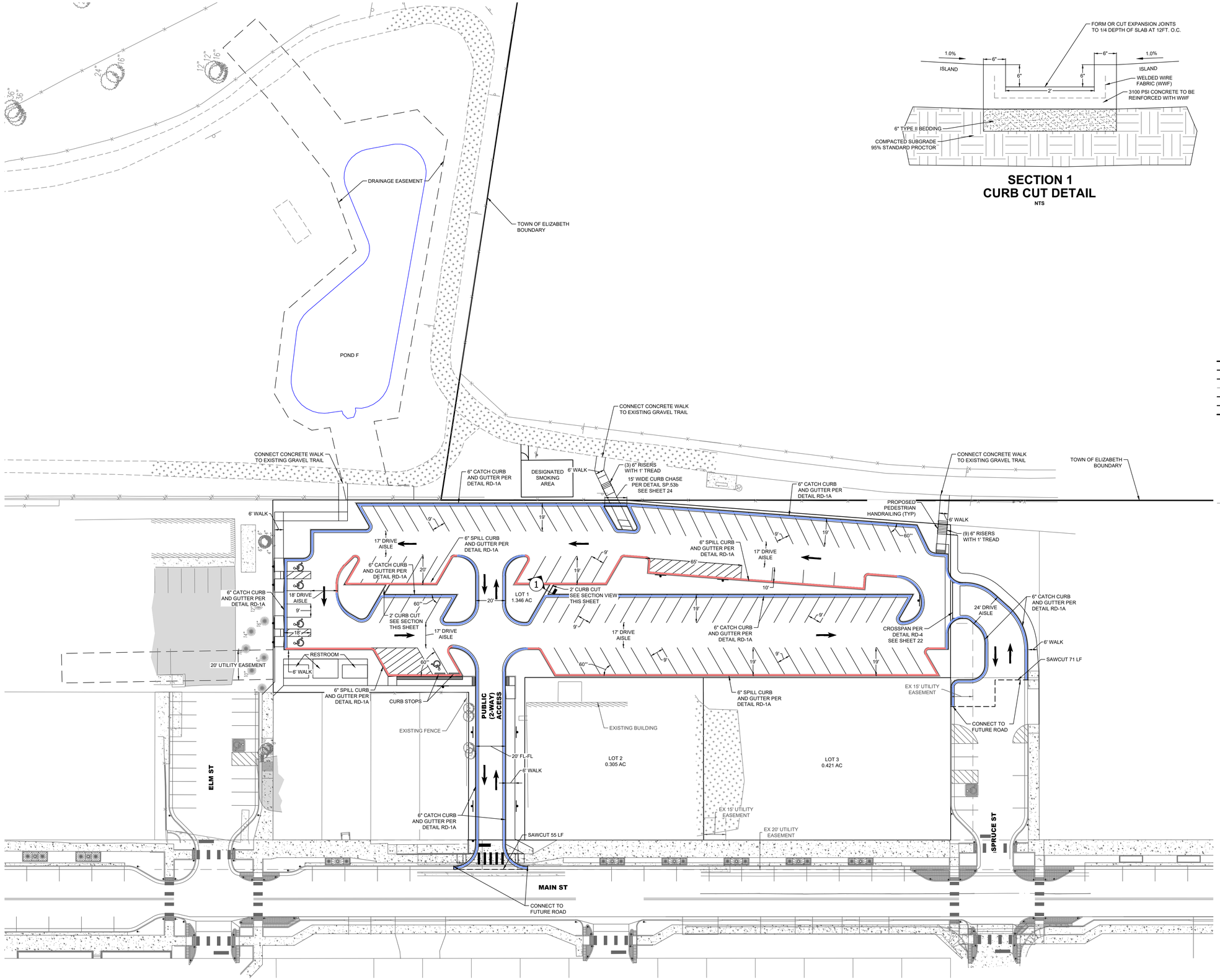
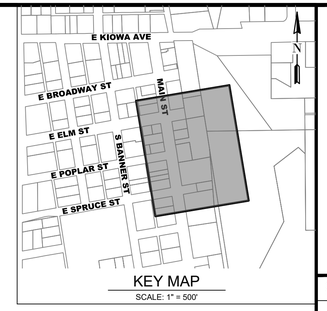


SECTION 1
CURB CUT DETAIL
NTS



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- CURB RAMPS
- EXISTING TREE
- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE

LEGEND:
SPILL CURB -
CATCH CURB -

PARKING LOT COUNT:

STANDARD - 111
HANDICAP - 5

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MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
OVERALL SITE PLAN

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SHEET 4 OF 31

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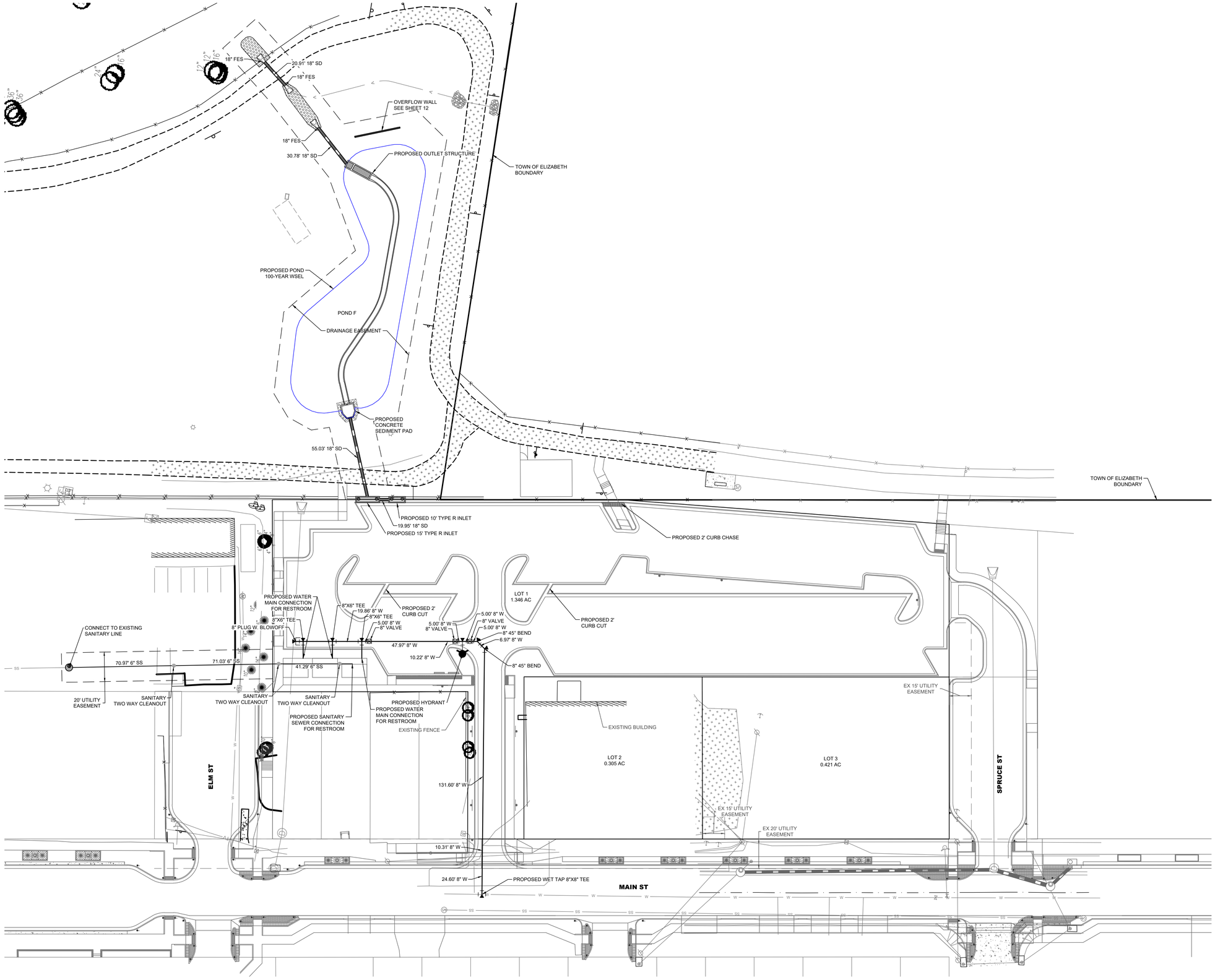

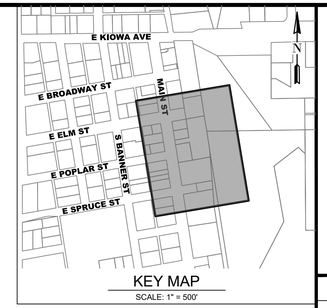

KEY MAP
SCALE: 1" = 500'

0 30' 60'
1 inch = 30'

LEGEND

- STORM (FES, MH, & INLET)
- STORM INLETS (TYPE C, D, 13, & R)
- SANITARY
- WATER (HYDRANT, VALVE, BEND, MH)
- 100-YR WSEL
- OHUT — EXISTING OVERHEAD ELECTRIC
- UE — EXISTING UNDERGROUND ELECTRIC
- X — EXISTING FENCE
- FO — EXISTING FIBER OPTIC
- G — EXISTING GAS
- O — EXISTING STORM
- UT — EXISTING TELEPHONE
- W — EXISTING WATER
- EXISTING SWALE
- EXISTING SANITARY CLEAN OUT
- EXISTING WATER MANHOLE
- MAINTENANCE ACCESS / GRAVEL TRAIL
- RIPRAP
- CONCRETE

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MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
OVERALL UTILITY PLAN

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SHEET
5 OF 31

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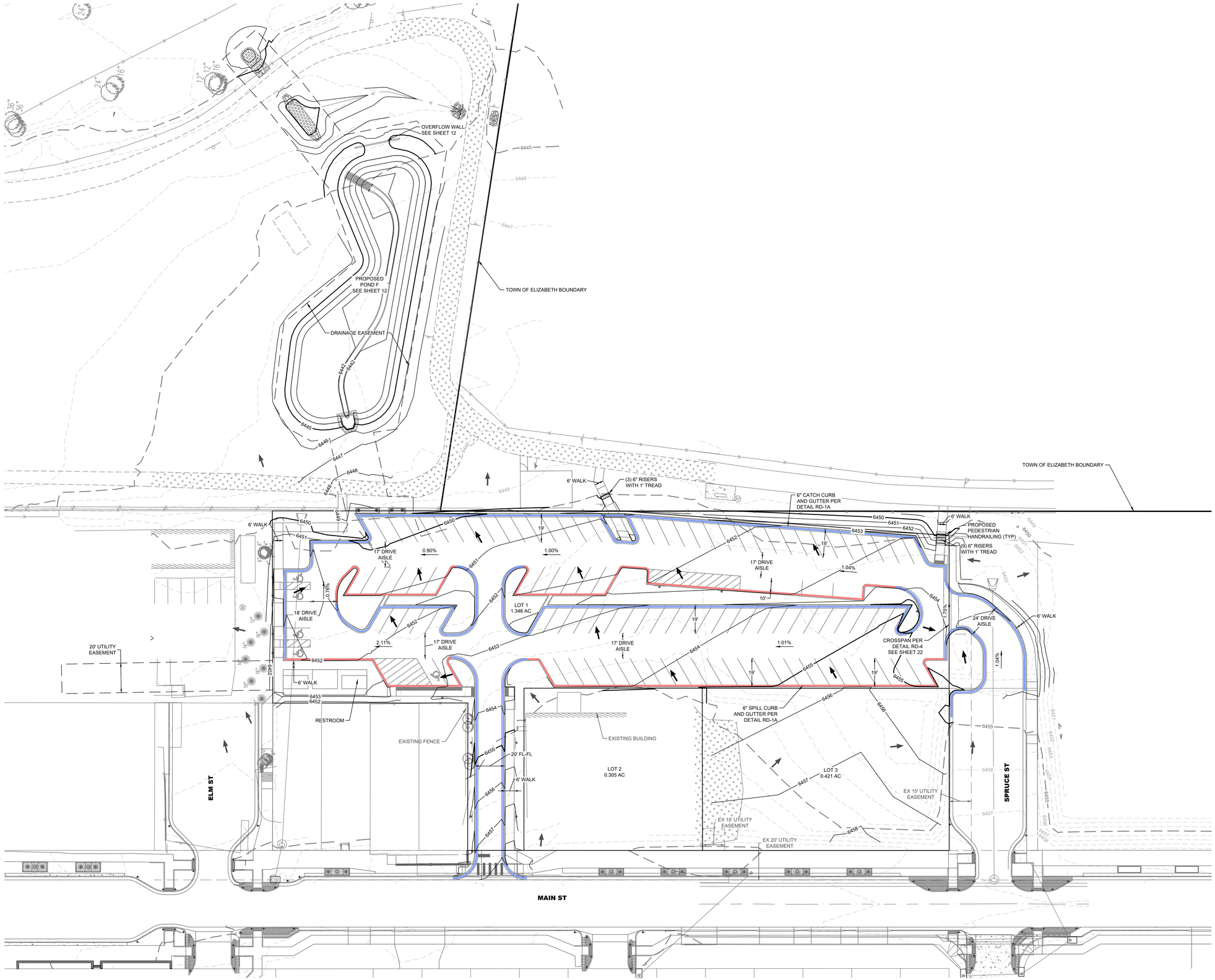

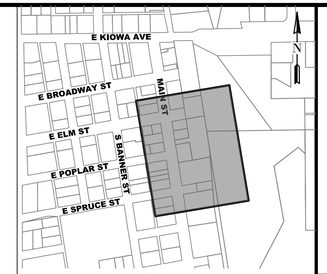

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LEGEND

- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
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- 4880 PROPOSED MAJOR CONTOUR
- 4879 PROPOSED MINOR CONTOUR (1 FT)
- 4880 PROPOSED MAJOR CONTOUR
- 4879 PROPOSED MINOR CONTOUR (1 FT)
- STREET SIGNS
- CURB RAMPS
- EXISTING TREE
- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE

LEGEND:

SPILL CURB -
CATCH CURB -

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MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
OVERALL GRADING PLAN

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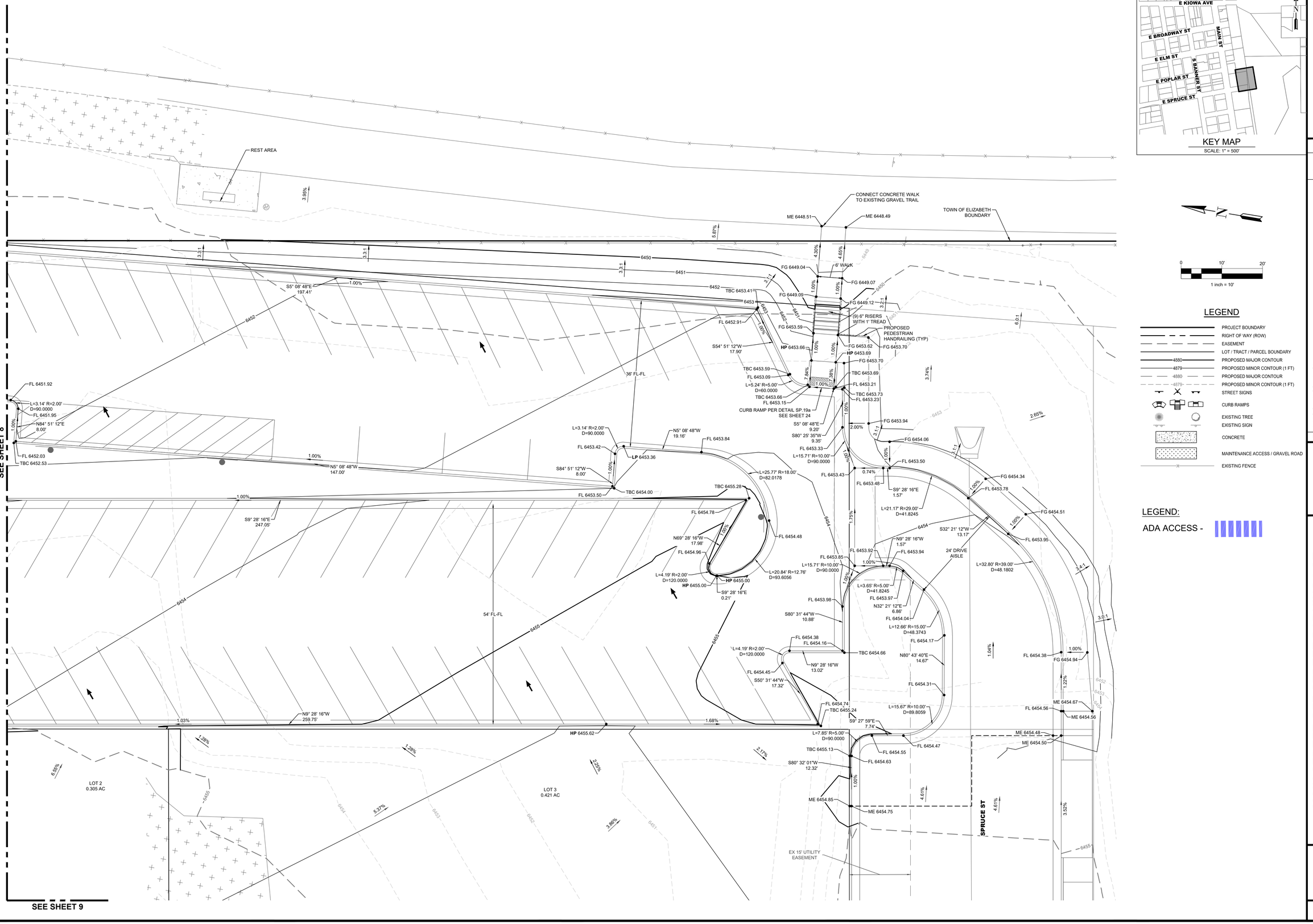

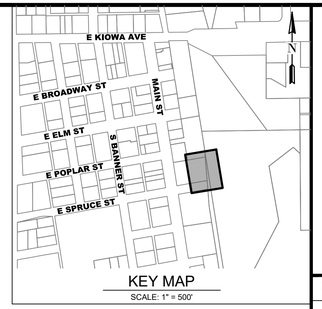

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- EXISTING FENCE

LEGEND:

ADA ACCESS -

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MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS

HORIZONTAL CONTROL & GRADING PLAN (1 OF 4)

Know what's **below.** **Call** before you dig. 811

1/30/2025 11:23 AM X:\TOWN OF ELIZABETH\CAD\PLANSET\1 - MAIN ST PARKING\PRELIMINARY CDS DETAILED GRADING PLAN.DWG 1

SEE SHEET 10

SEE SHEET 7

SEE SHEET 9

DRAINAGE EASEMENT

TOWN OF ELIZABETH BOUNDARY

CONNECT CONCRETE WALK TO EXISTING GRAVEL TRAIL

CONNECT CONCRETE WALK TO EXISTING GRAVEL TRAIL

DESIGNATED SMOKING AREA

LOT 1 1.346 AC

LOT 2 0.305 AC

6' WALK

RESTROOM (SEE ARCHITECTURE PLANS)

RESTROOM (SEE ARCHITECTURE PLANS)

RESTROOM (SEE ARCHITECTURE PLANS)

20' UTILITY EASEMENT

CURB RAMP PER DETAIL SP.20 ON SHEET 24

CURB RAMP PER DETAIL SP.19a ON SHEET 24

CURB RAMP PER DETAIL SP.20 ON SHEET 24

2' WIDE INLAYED PATTERN OF TRUNCATED DOMES PER DETAIL RD-3A SEE SHEET 22

DRIVEWAY CUT PER DETAIL RD-2 SEE SHEET 22

EXISTING FENCE

EXISTING BUILDING

PROPOSED PEDESTRIAN HANDRAILING (TYP)

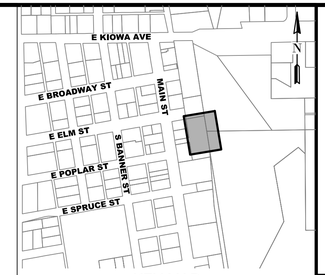
(3) 6" RISERS WITH 1' TREADS

CURB CHASE

56' FL-FL

LEGEND:

ADA ACCESS -



KEY MAP

SCALE: 1" = 500'

0 10' 20'

1 inch = 10'

LEGEND

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- EXISTING TREE
- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE

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MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS

HORIZONTAL CONTROL & GRADING PLAN (2 OF 4)

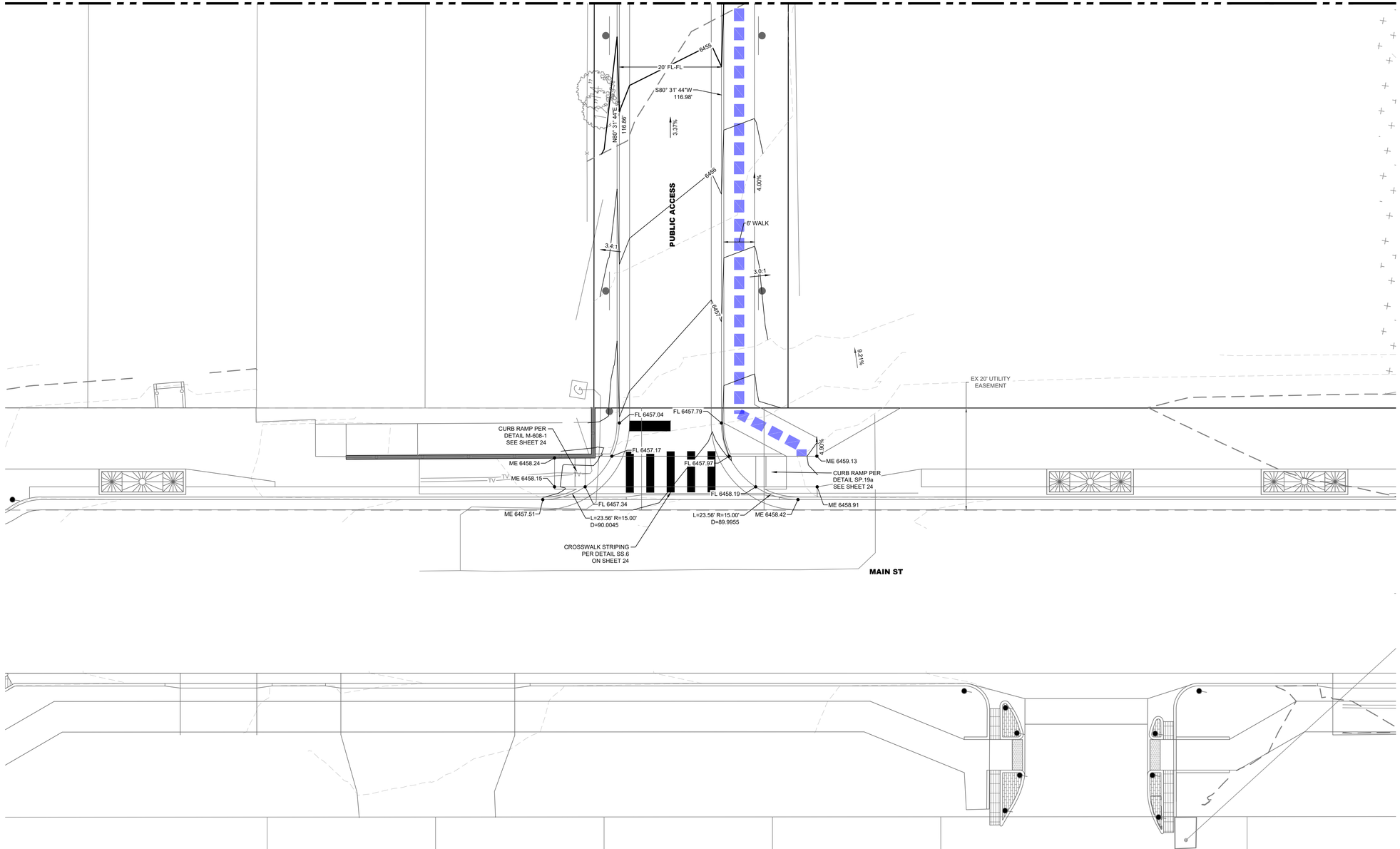
Know what's below. Call before you dig. 811

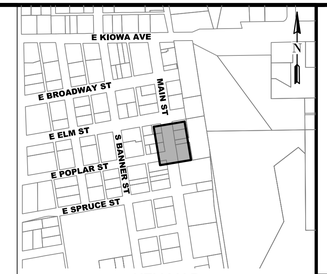
SHEET 8 OF 31

1/30/2025 11:24 AM - X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS - DETAILED GRADING PLAN.DWG - 2

SEE SHEET 8

SEE SHEET 7





KEY MAP

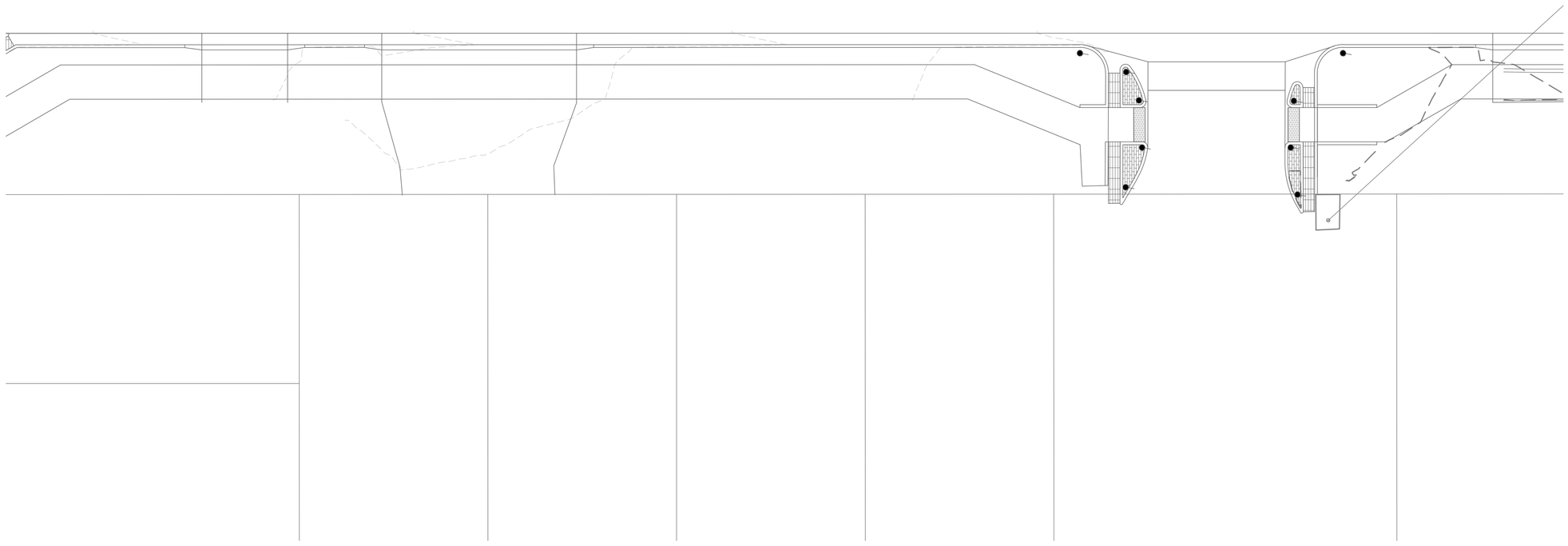
SCALE: 1" = 500'

0 10' 20'

1 inch = 10'

LEGEND

- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- LOT / TRACT / PARCEL BOUNDARY
- 4880 PROPOSED MAJOR CONTOUR
- 4879 PROPOSED MINOR CONTOUR (1 FT)
- 4880 PROPOSED MAJOR CONTOUR
- 4879 PROPOSED MINOR CONTOUR (1 FT)
- STREET SIGNS
- CURB RAMPS
- EXISTING TREE
- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE



LEGEND:

ADA ACCESS -

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

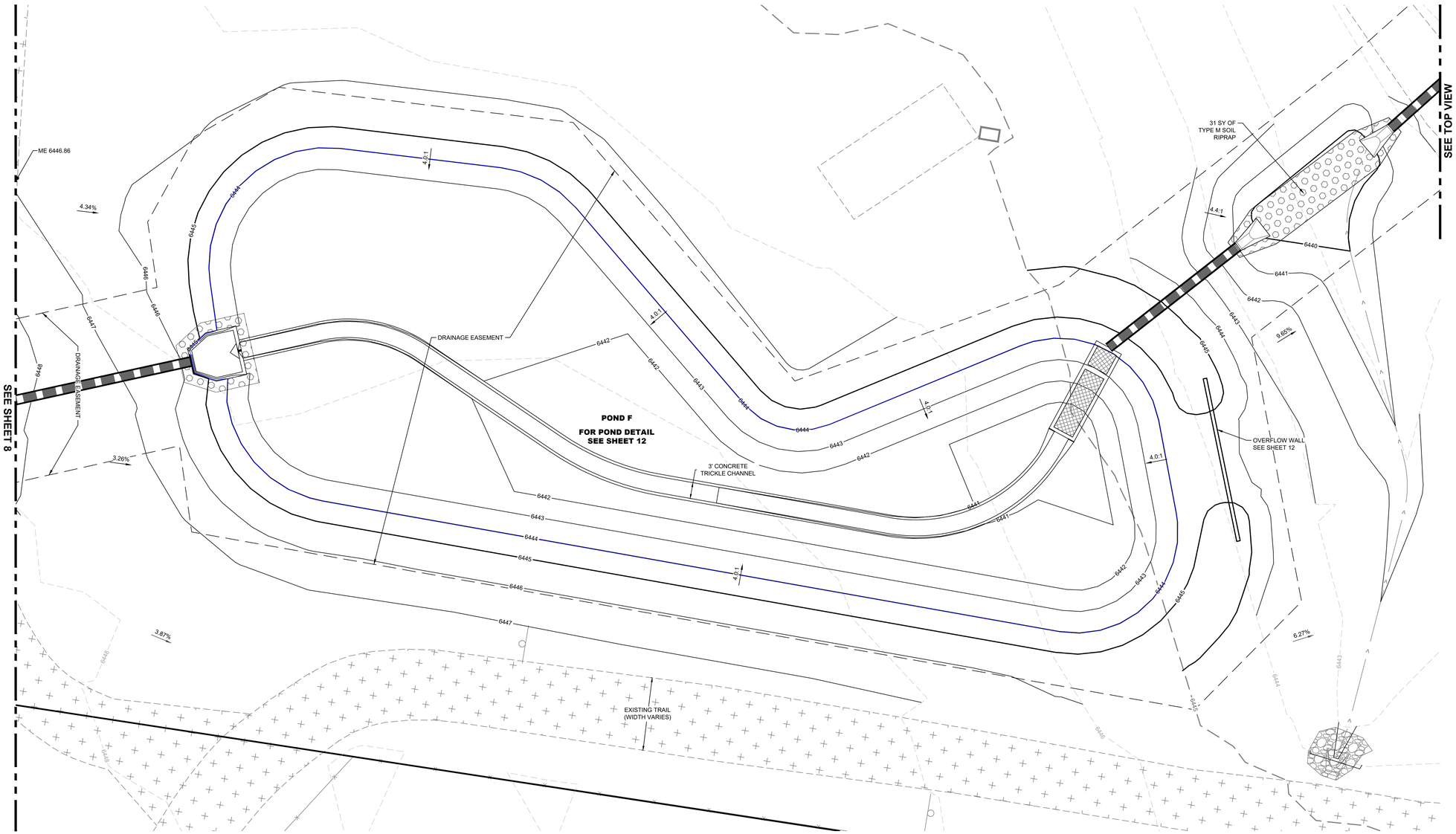
CONSTRUCTION DOCUMENTS

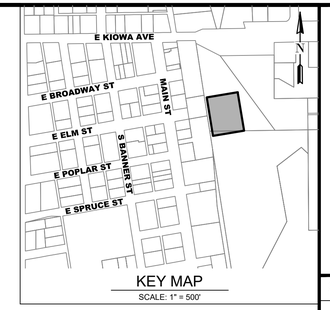
HORIZONTAL CONTROL & GRADING PLAN (3 OF 4)

Know what's **below.** **Call** before you dig. 811

SHEET 9 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS DETAILED GRADING PLAN.DWG 3





N

0 10' 20'

1 inch = 10'

LEGEND

- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- LOT / TRACT / PARCEL BOUNDARY
- 4880 PROPOSED MAJOR CONTOUR
- 4879 PROPOSED MINOR CONTOUR (1 FT)
- 4880 PROPOSED MAJOR CONTOUR
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- STREET SIGNS
- CURB RAMPS
- EXISTING TREE
- EXISTING SIGN
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- EXISTING FENCE

LEGEND:

ADA ACCESS -

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Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

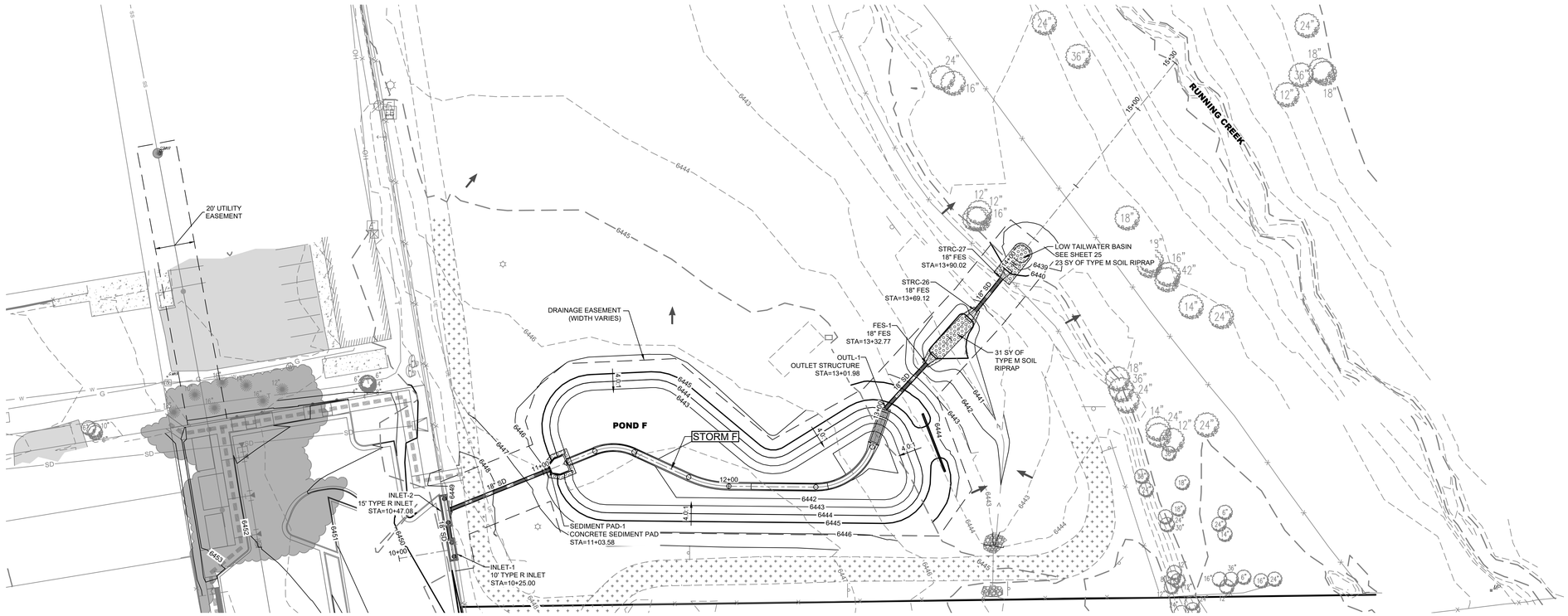
CONSTRUCTION DOCUMENTS

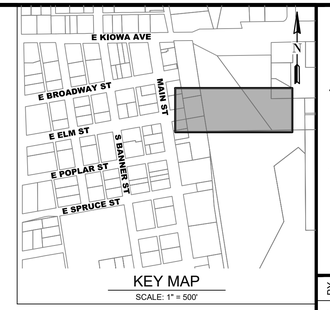
HORIZONTAL CONTROL & GRADING PLAN (4 OF 4)

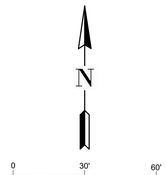
Know what's **below.** **Call** before you dig. 811

SHEET 10 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS DETAILED GRADING PLAN.DWG 4





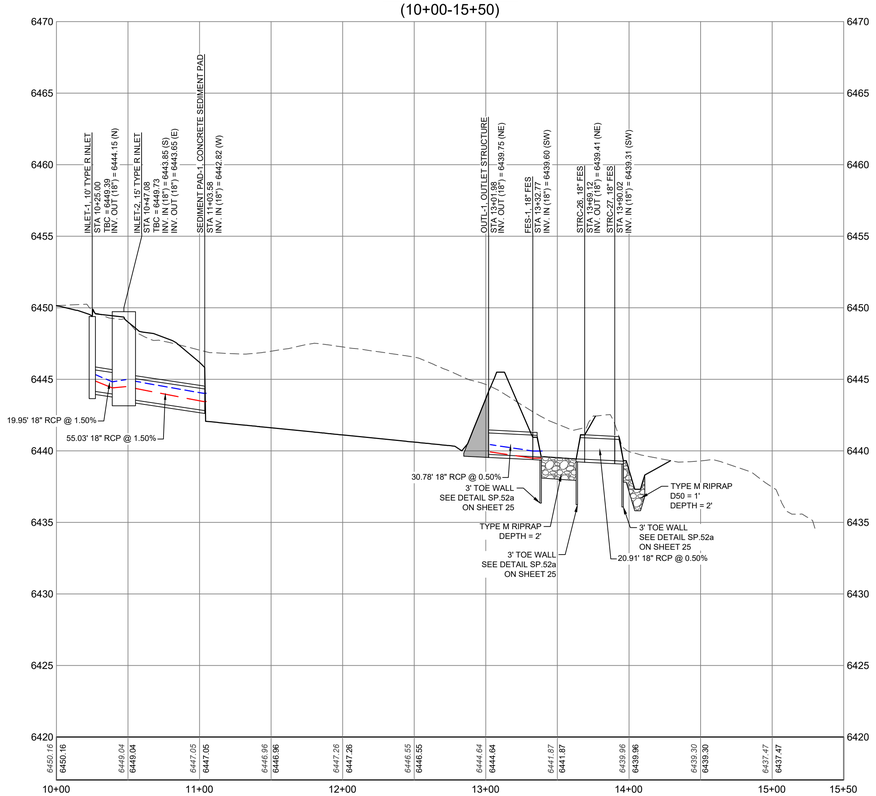


PROFILE LEGEND

EXIST GRADE	
PROP GRADE	
1"=50' (HORZ)	1"=5' (VERT)

STORM F

(10+00-15+50)



terracina design
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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
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NOT FOR CONSTRUCTION

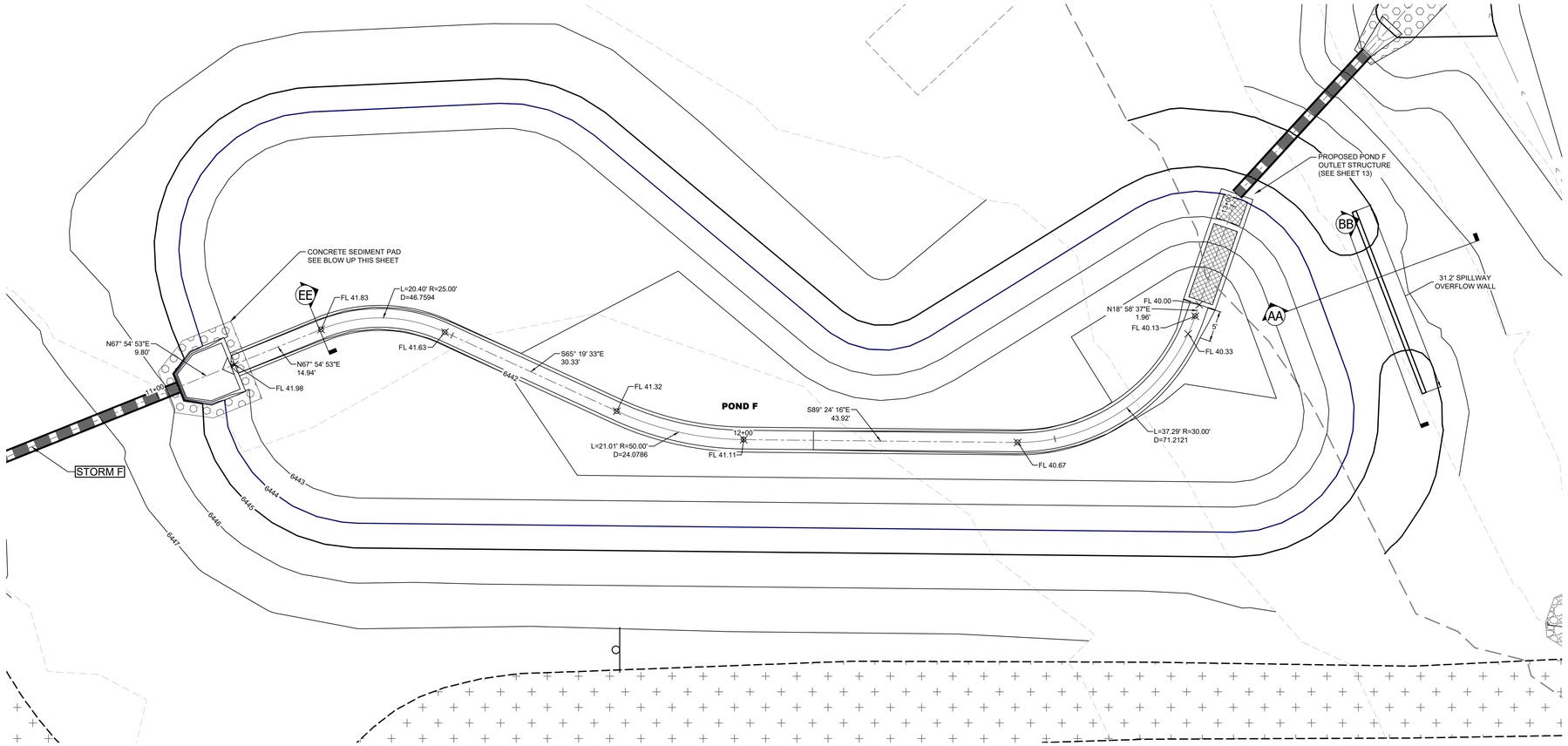
MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO

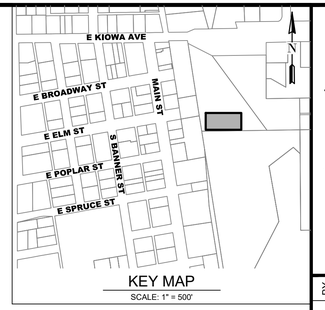
CONSTRUCTION DOCUMENTS
STORM P&P - STORM F

Know what's **below.** **Call** before you dig. 811

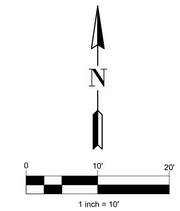
SHEET
11 OF 31

1/30/2025 11:24 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS STORM P&P.DWG 1



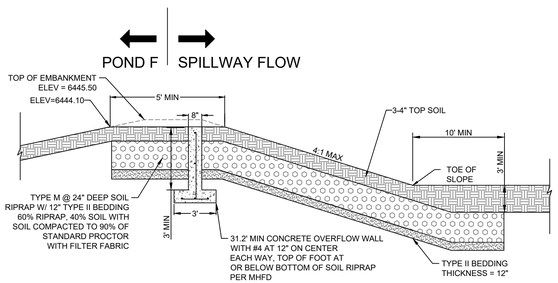


KEY MAP
SCALE: 1" = 500'

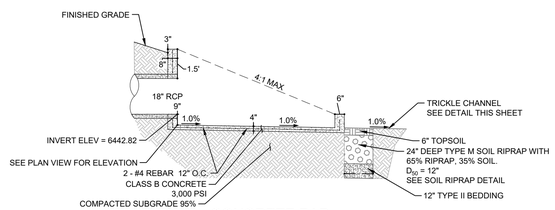


LEGEND

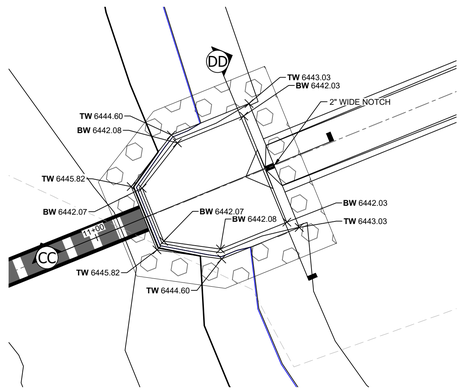
- PROPOSED MAJOR CONTOUR (6350)
- PROPOSED MINOR CONTOUR (6349)
- EXISTING MAJOR CONTOUR (6350)
- EXISTING MINOR CONTOUR (6349)
- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- LOT BOUNDARY
- CONCRETE
- MAINTENANCE ACCESS / GRAVEL ROAD
- RIPRAP
- SOIL RIPRAP
- STORM (FES, MH, & INLET)
- SANITARY
- WATER (HYDRANT, VALVE, BEND, MH)
- FOREBAY
- STORM INLETS (TYPE C, D, 13, & R)
- STORM 100 YEAR HGL
- STORM 5 YEAR HGL
- EX STORM (FES, MH, & INLET)
- EXISTING UTILITY
- EXISTING SWALE
- EXISTING SIGN
- EXISTING WATER
- EXISTING FENCE
- EXISTING POWER POLE & GUY WIRE
- EX WATER MH, METER, & VENT PIPE
- EX WATER VALVE & HYDRANT



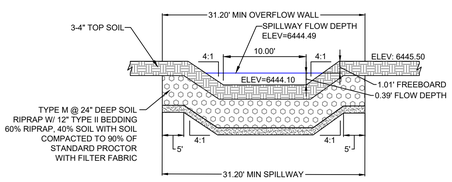
SPILLWAY
SECTION A-A
NTS



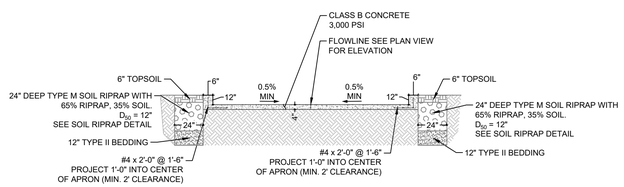
CONCRETE PAD
SECTION C-C
NTS



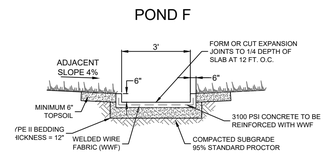
CONCRETE PAD BLOW UP
SCALE = 1" = 5'



SPILLWAY
SECTION B-B
NTS



CONCRETE PAD
SECTION D-D
NTS



CONCRETE TRICKLE CHANNEL
SECTION E-E
NTS

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

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10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

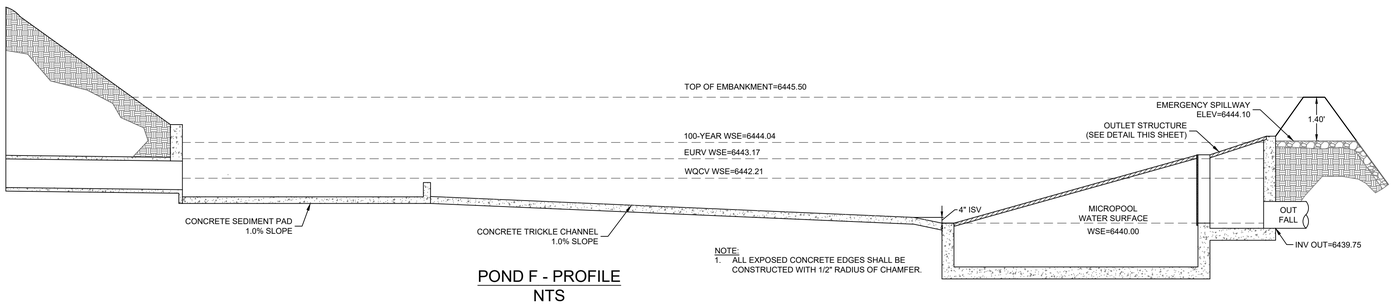
NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
STORM - POND F

Know what's **below.** **Call** before you dig.
811

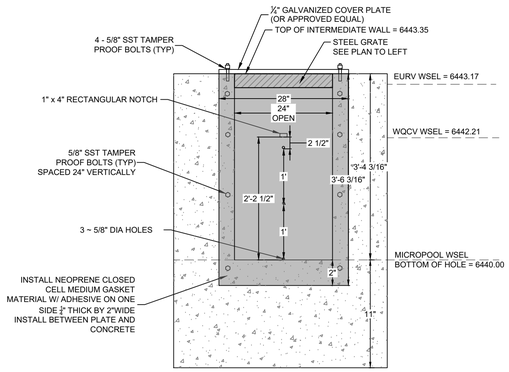
SHEET
12 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS POND SHEETS.DWG POND

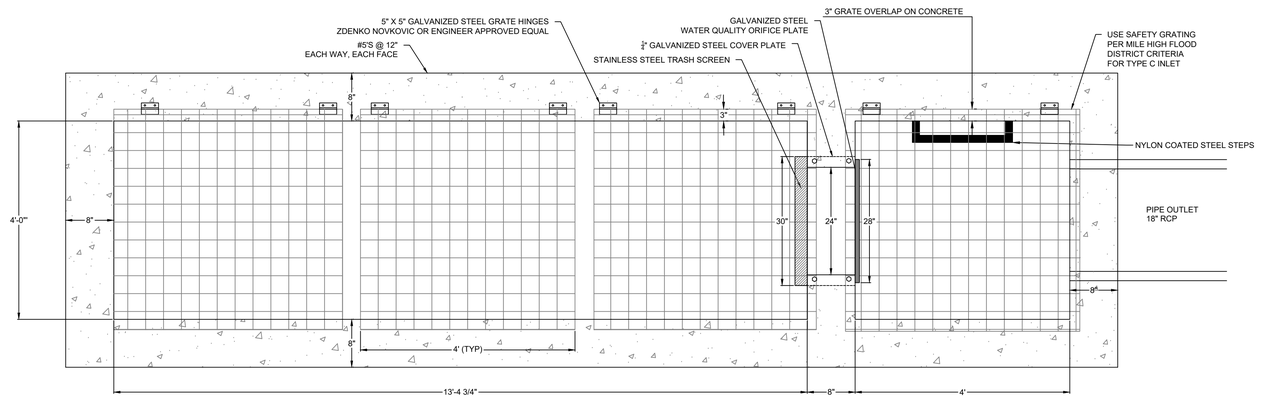


NOTE:
1. ALL EXPOSED CONCRETE EDGES SHALL BE CONSTRUCTED WITH 1/2" RADIUS OF CHAMFER.

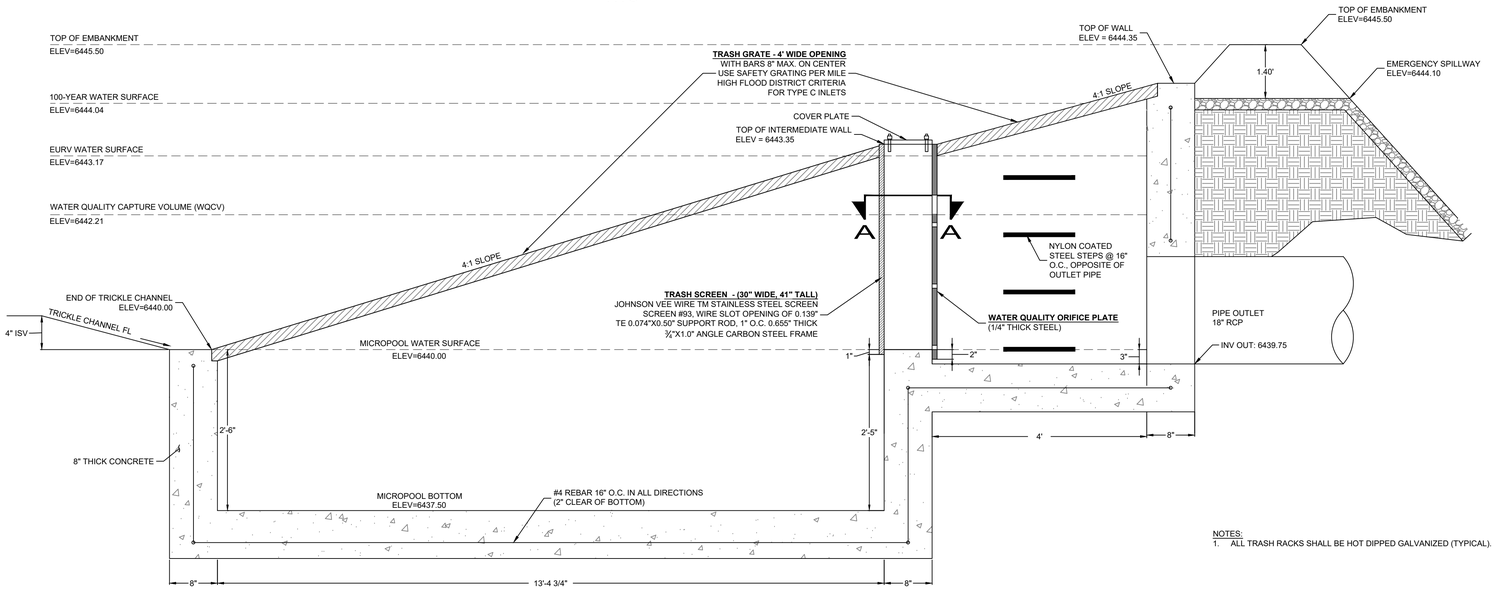
POND F - PROFILE
NTS



ORIFICE PLATE - ELEVATION
NTS

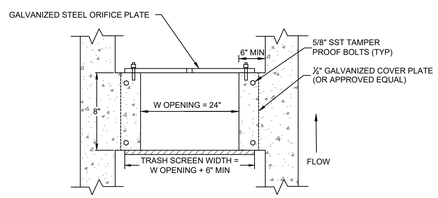


POND F - OUTLET STRUCTURE PLAN
NTS



POND F - OUTLET STRUCTURE SECTION
NTS

NOTES:
1. ALL TRASH RACKS SHALL BE HOT DIPPED GALVANIZED (TYPICAL).



TRASH SCREEN/ORIFICE PLATE SECTION (A)
NTS

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Denver, CO 80231
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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

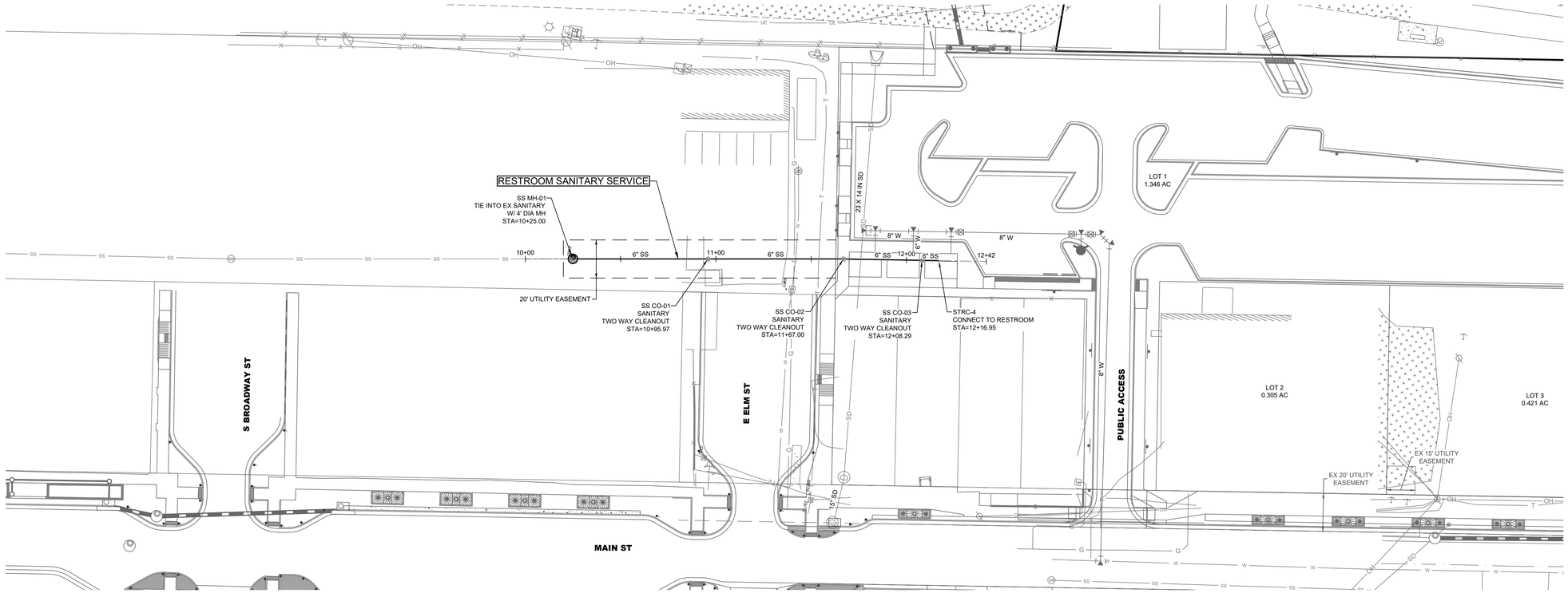
NOT FOR CONSTRUCTION

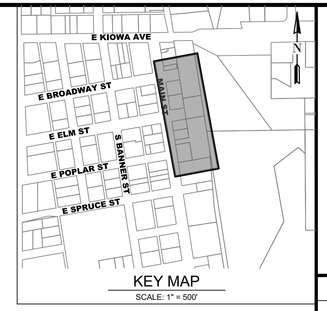
MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
STORM - OUTLET STRUCTURE - POND F

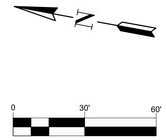
Know what's **below.** **Call** before you dig. 811

SHEET
13 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS POND SHEETS.DWG OUTLET STUCTURE





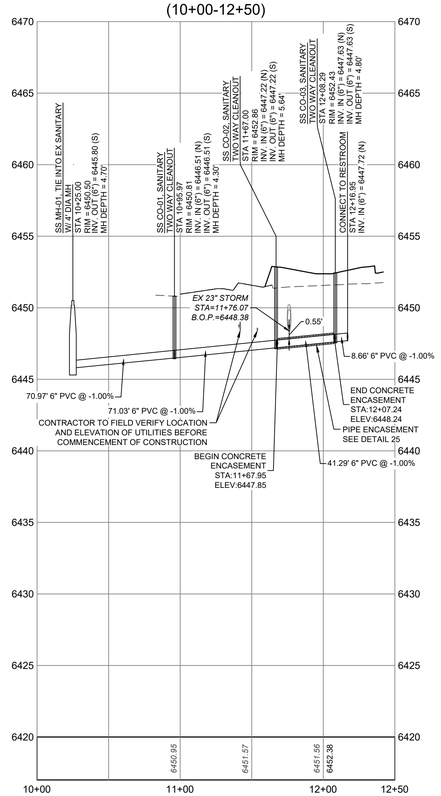


PROFILE LEGEND

EXIST GRADE	
PROP GRADE	
1"=50' (HORZ)	1"=5' (VERT)

RESTROOM SANITARY SERVICE

(10+00-12+50)



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Denver, CO 80231
ph. 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
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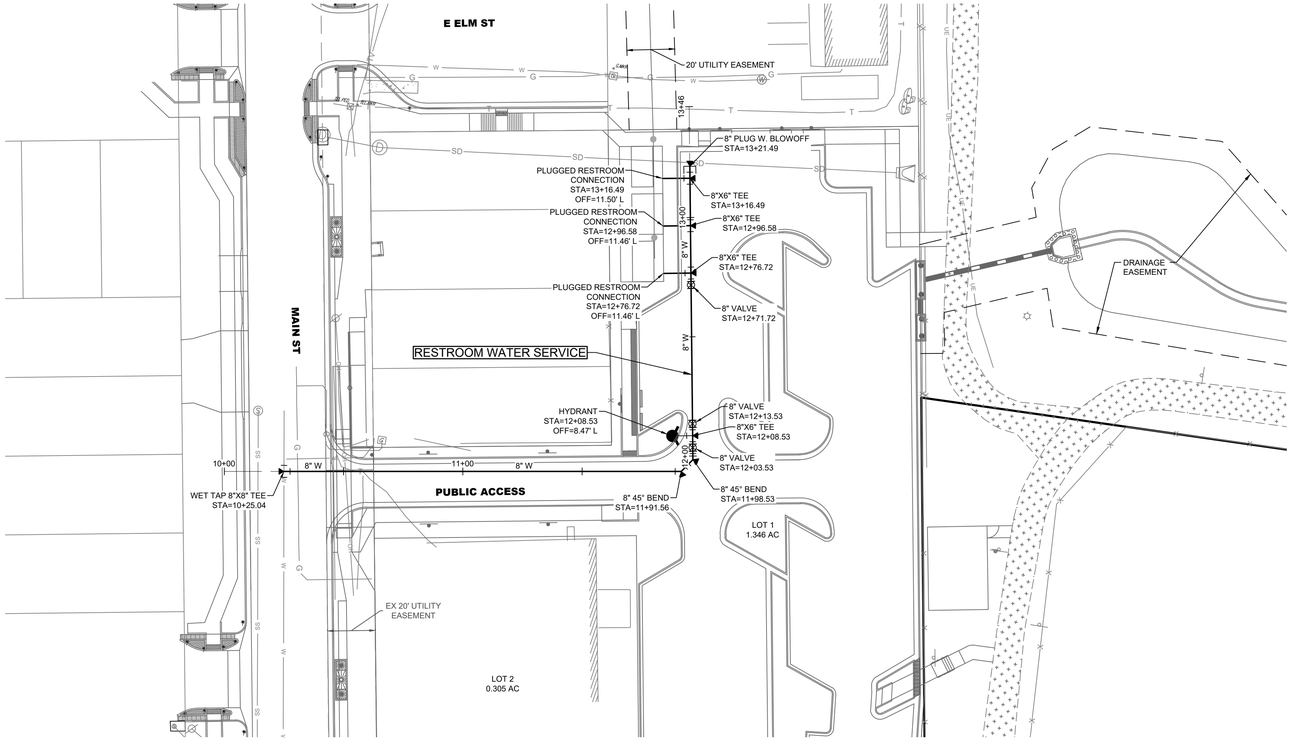
NOT FOR CONSTRUCTION

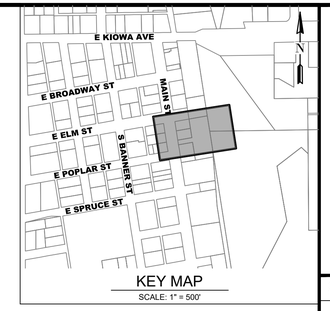
MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
SANITARY P&P - RESTROOM SANITARY SERVICE

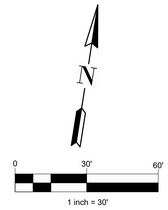
Know what's **below.** **Call** before you dig. 811

SHEET
14 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS SANITARY P&P.DWG 1





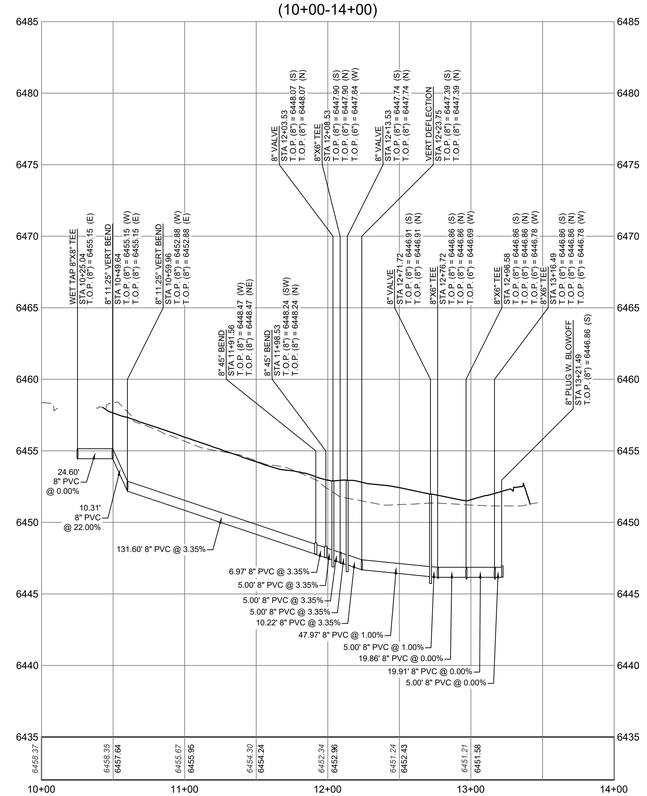


PROFILE LEGEND

EXIST GRADE	
PROP GRADE	
1"=50' (HORZ)	1"=5' (VERT)

RESTROOM WATER SERVICE

(10+00-14+00)



#	REVISION DESCRIPTION	DATE	BY
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2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS

WATER P&P - RESTROOM WATER SERVICE

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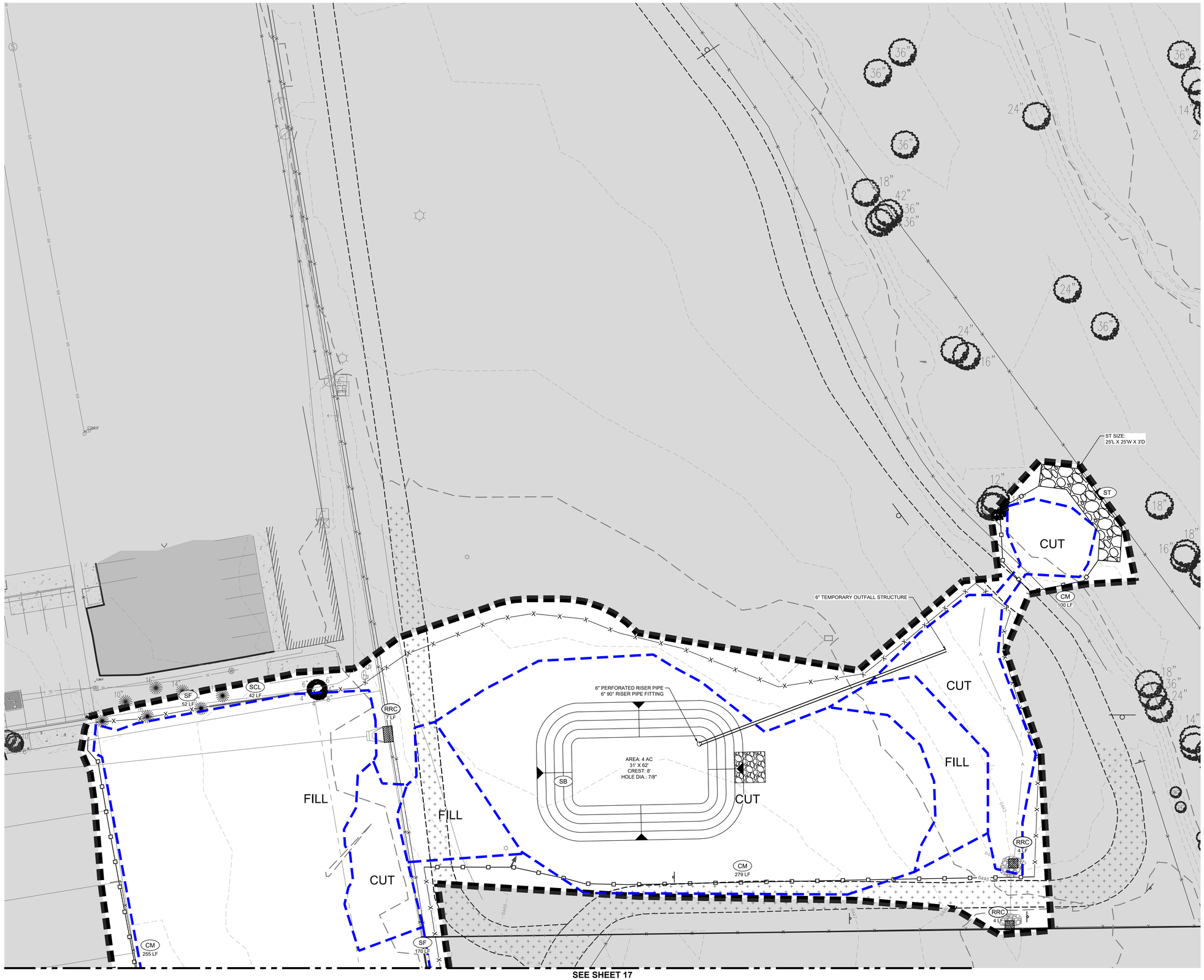
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

Know what's **below.** **Call** before you dig. 811

SHEET 15 OF 31

1/30/2025 11:24 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS WATER R&P.DWG 1



NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

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#	REVISION DESCRIPTION	DATE	BY
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2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

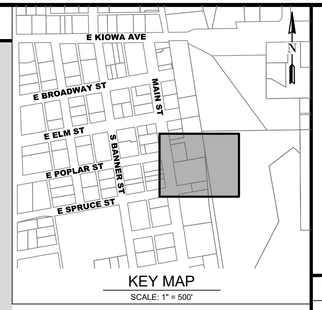
CONSTRUCTION DOCUMENTS
GESC - INITIAL PLAN

Know what's below. Call before you dig. 811

SHEET 16 OF 31

1/30/2025 11:24 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS GESC - INITIAL.DWG 1

SEE SHEET 16



KEY MAP
SCALE: 1" = 500'

N

0 20' 40'
1 inch = 20'

LEGEND

- OUTSIDE LIMITS OF CONSTRUCTION
- CD — CHECK DAM
- CWA — CONCRETE WASHOUT AREA
- CM — CONSTRUCTION MARKER
- CS — CURB SOCK / ROCK SOCK
- DD — DIVERSION DITCH
- ECB — EROSION CONTROL BLANKET
- IP — INLET PROTECTION
- RRC — REINFORCED ROCK BERM FOR CULVERT PROTECTION
- SB — TEMPORARY SEDIMENT BASIN
- SCL — SEDIMENT CONTROL LOG
- SF — SILT FENCE
- ST — SEDIMENT TRAP
- SM — SEEDING AND MULCHING
- SSA — STABILIZED STAGING AREA
- SR — SURFACE ROUGHENING
- VTC — VEHICLE TRACKING CONTROL
- LOC — LIMITS OF CONSTRUCTION

NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

terracina design
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#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
GESC - INITIAL PLAN

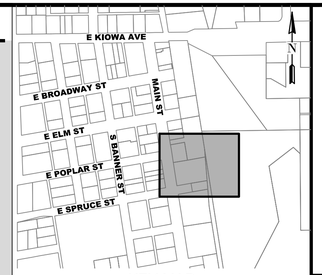
Know what's below. Call before you dig. 811

SHEET 17 OF 31

1/30/2025 11:24 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS GESC - INITIAL.DWG 2

36"
36"
36"
24"
14"
36"
18"
42"
36"
36"
24"
24"
16"
36"
ST SIZE:
25'L X 25'W X 3'D
ST
RRC
4 LF
SR
0.04 AC
CM
RRC
4 LF
RRC
4 LF
6" TEMPORARY OUTFALL STRUCTURE
6" PERFORATED RISER PIPE
6" 90° RISER PIPE FITTING
AREA: 4 AC
31' X 62'
CREST: 6'
HOLE DIA.: 7/8"
SB
6441
6442
6443
6444
6445
6446
6447
6448
6449
6450
6451
6452
6443
6444
6445
6446
6447
CM
RRB
4 LF
RRC
RRC
SF
SCL
RRC
IP
15 LF
IP
10 LF
SR
2.46 AC
CM
SF
SSMH
SSMH
SSMH

SEE SHEET 18



KEY MAP
SCALE: 1" = 500'

N

0 20' 40'

1 inch = 20'

LEGEND

	OUTSIDE LIMITS OF CONSTRUCTION
CD	CHECK DAM
CWA	CONCRETE WASHOUT AREA
CM	CONSTRUCTION MARKER
CS	CURB SOCK / ROCK SOCK
DD	DIVERSION DITCH
ECB	EROSION CONTROL BLANKET
IP	INLET PROTECTION
RRC	REINFORCED ROCK BERM FOR CULVERT PROTECTION
SB	TEMPORARY SEDIMENT BASIN
SCL	SEDIMENT CONTROL LOG
SF	SILT FENCE
ST	SEDIMENT TRAP
SM	SEEDING AND MULCHING
SSA	STABILIZED STAGING AREA
SR	SURFACE ROUGHENING
VTC	VEHICLE TRACKING CONTROL
LOC	LIMITS OF CONSTRUCTION

NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
GESC - INTERIM PLAN

Know what's **below.** **Call** before you dig. 811

1/30/2025 11:24 AM, X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS GESC - INTERIM.DWG 2

NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
   1966 CY CUT, 4779 CY FILL, 2814 CY NET FILL

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO

CONSTRUCTION DOCUMENTS
GESC - FINAL PLAN

Know what's below. Call before you dig. 811

SHEET 20 OF 31

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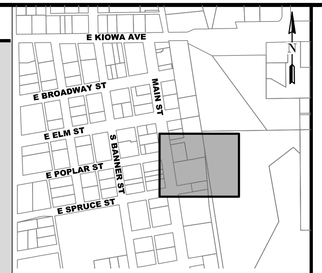
Denver, CO 80231
ph. 303.632.8867

1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS GESC - FINAL.DWG 1

SEE SHEET 20



KEY MAP
SCALE: 1" = 500'

N

0 20' 40'

1 inch = 20'

LEGEND

- OUTSIDE LIMITS OF CONSTRUCTION
- CD CHECK DAM
- CWA CONCRETE WASHOUT AREA
- CM CONSTRUCTION MARKER
- CS CURB SOCK / ROCK SOCK
- DD DIVERSION DITCH
- ECB EROSION CONTROL BLANKET
- IP INLET PROTECTION
- RRC REINFORCED ROCK BERM FOR CULVERT PROTECTION
- SB TEMPORARY SEDIMENT BASIN
- SCL SEDIMENT CONTROL LOG
- SF SILT FENCE
- ST SEDIMENT TRAP
- SM SEEDING AND MULCHING
- SSA STABILIZED STAGING AREA
- SR SURFACE ROUGHENING
- VTC VEHICLE TRACKING CONTROL
- LOC LIMITS OF CONSTRUCTION

NOTES:

1. SEE SHEETS 24-31 FOR GESC DETAILS.
2. THE SITE EARTHWORK:
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NOT FOR CONSTRUCTION

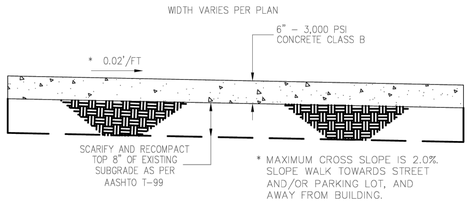
MAIN STREET OFF-STREET PARKING LOT

TOWN OF ELIZABETH, COLORADO

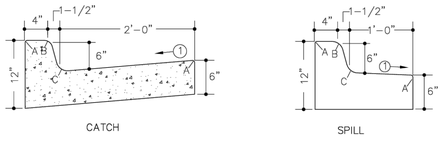
CONSTRUCTION DOCUMENTS
GESC - FINAL PLAN

Know what's **below.** **Call** before you dig. 811

1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS GESC - FINAL.DWG 2



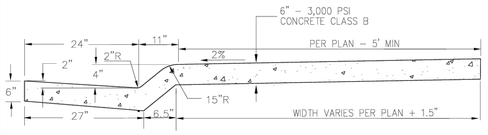
SIDEWALK DETAIL



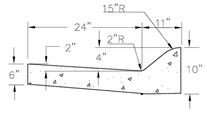
CURB DETAIL LEGEND	
A	RADIUS = 1/8"
B	RADIUS = 1-1/2"
C	RADIUS = 1-1/2" - 2"
1	CROSS SLOPE SHALL BE 1/2" PER FOOT WHEN DRAINING AWAY FROM CURB, AND 1" PER FOOT WHEN DRAINING TOWARD THE CURB

CURB DETAIL

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB, GUTTER, & SIDEWALK DETAILS	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-1A



COMBINATION CURB, GUTTER & SIDEWALK



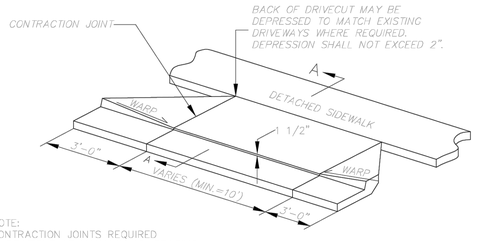
LOCAL MOUNTABLE CURB & GUTTER

NOTES:

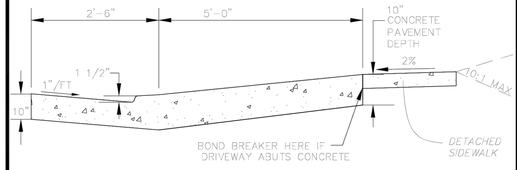
1) IF A SIDEWALK IS PLACED BEHIND THE CURB BUT IS NOT PLACED MONOLITHICALLY, EXPANSION JOINT MATERIAL AND A SILICONE BASE SEALER MUST BE APPLIED BETWEEN THE SIDEWALK AND CURB.

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB, GUTTER, & SIDEWALK DETAILS	
SCALE: NOT TO SCALE	DATE: 09/06/17
APPROVED: CORE CONSULTANTS INC. TOWN ENGINEER	RD-1B

NOTE: CURBCUTS ARE TO BE PLACED MONOLITHIC WITH CURB & GUTTER.

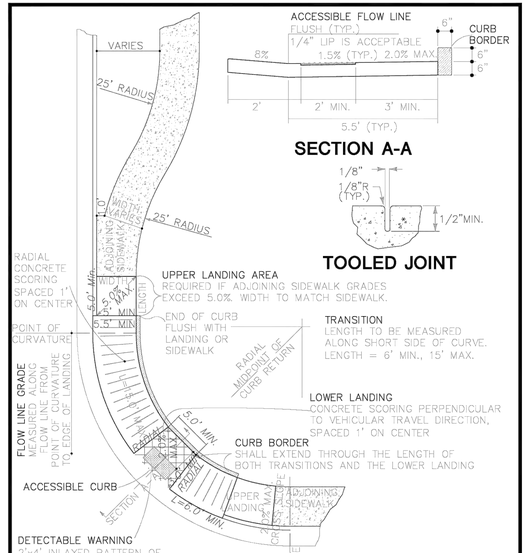


NOTE:
CONTRACTION JOINTS REQUIRED IN DRIVECUT AT MAXIMUM 10' SPACING



SECTION A-A

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
DRIVEWAY CUT DETAIL	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-2



TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
HANDICAP RAMP DETAIL	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-3A

NOTES

SLOPED TRANSITIONS SHALL COMPLY WITH ALL APPLICABLE RULES AND GUIDELINES OF THE AMERICANS WITH DISABILITIES ACT.

SLOPED TRANSITIONS SHALL BE CONSISTENT WITH THE CURRENT PUBLICATION OF FEDERAL GUIDELINES FOR ACCESSIBLE RIGHTS OF WAY.

LONGITUDINAL SLOPES WITHIN THE TRANSITION SHALL NOT EXCEED 1:12 (8.33%).

CROSS SLOPES, OR SLOPES PEPENDICULAR TO THE DIRECTION OF TRAVEL SHALL NOT EXCEED 1:50 (2.0%)

THE LOWER LANDING AREA IS A REQUIRED ELEMENT.
SLOPED TRANSITIONS ARE A REQUIRED ELEMENT AND SHALL:
A. NOT EXCEED 1:12 (8.3%) LONGITUDINAL SLOPE ALONG THE SHORTEST SIDE UNLESS TRANSITION LENGTH EXCEEDS 15.0'
B. NOT EXCEED 1:50 (2.0%) SLOPE PERPENDICULAR TO THE TRAVELED DIRECTION.
C. NOT EXCEED 15.0' IN LENGTH AS MEASURED ALONG THE SHORTEST SIDE. MAXIMUM LONGITUDINAL SLOPE SHALL BE ADJUSTED TO ACCOMODATE THE LENGTH.
D. NOT BE LESS THAN 6.0' IN LENGTH.

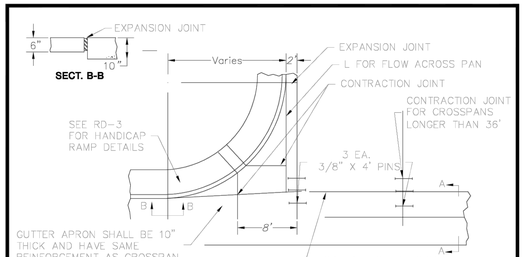
THE UPPER LANDING AREA IS REQUIRED IF:
A. THE ADJOINING SIDEWALK HAS A LONGITUDINAL GRADE (DIRECTION OF TRAVEL) IN EXCESS OF 1:20 (5.0%). SAID LANDING SHALL NOT EXCEED A 1:20 (5.0%) SLOPE IN ANY DIRECTION.
B. A CHANGE IN DIRECTION IS REQUIRED TO ENTER OF EXIT THE SLOPED TRANSITION. SAID LANDING SHALL SHALL NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION.

LANDINGS AND SLOPED TRANSITIONS SHALL MATCH THE WIDTH OF THE ADJOINING SIDEWALK, 3.0' MINIMUM.

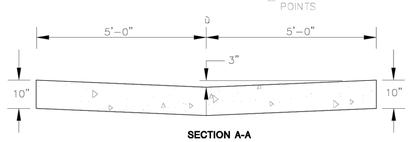
ALL TOOLED JOINTS WITHIN THE SLOPED TRANSITIONS SHALL RUN PERPENDICULAR TO THE DIRECTION OF TRAVEL.

ALL TOOLED JOINTS WITHIN THE LOWER LANDING AREA SHALL RUN PARALLEL TO AND/OR PERPENDICULAR TO THE DIRECTION OF VEHICULAR TRAVEL WITHIN THE TRAVELED WAY.

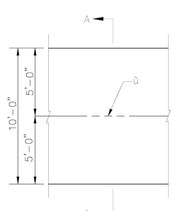
TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
HANDICAP RAMP DETAIL NOTES	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-3B



PLAN



SECTION A-A



PLAN

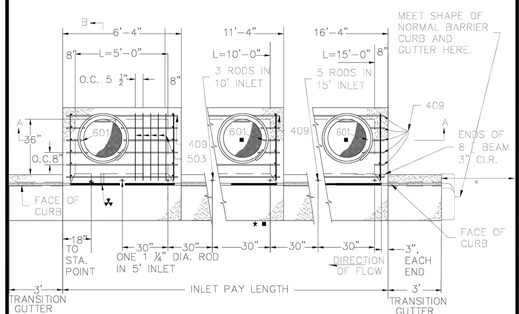
PAN LENGTH	REBAR HAVING END AREA OF
36'	.10 Sq. In. Per Ft. (#4 @ 18" E.W.)
46'	.13 Sq. In. Per Ft. (#4 @ 18" E.W.)
64'	.20 Sq. In. Per Ft. (#4 @ 18" E.W.)
84'	.26 Sq. In. Per Ft. (#4 @ 18" E.W.)

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CROSSPAN	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-4

■ADDITIONAL MANHOLE, RING AND COVER REQUIRED WHEN L=10' OR MORE. CUT REINFORCEMENT BAR ACCORDINGLY.

☘ A 2" DIAMETER TEMPORARY HOLE FOR DRAINAGE SHALL BE PLACED AT SUBGRADE ELEVATION OR A MINIMUM THREE INCHES BELOW ROAD BASE. THE HOLE SHALL BE PLUGGED WITH CONCRETE BEFORE ACCEPTANCE OF THE INLET.

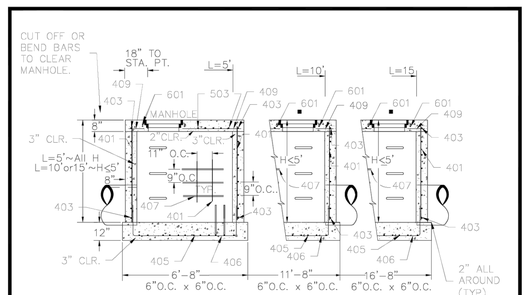
★ FOR LENGTH GREATER THEN 5 FT. PROVIDE ACCESS AT BOTH ENDS.



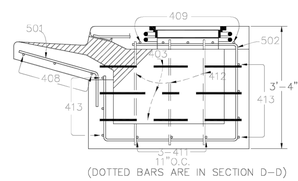
TYPICAL PLAN VIEW

NOTE:
MANHOLE RING & COVER, STATION POINT AND OUTFLOW PIPE SHALL BE LOCATED AT THE SAME END OF THE INLET.

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB INLET - TYPE R	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-5A



SECTION A-A REGULAR INLET



(DOTTED BARS ARE IN SECTION D-D)

SECTIONS C-C & D-D

■ADDITIONAL MANHOLE, RING AND COVER REQUIRED WHEN L=10' OR MORE. CUT REINFORCEMENT BAR ACCORDINGLY.

NOTE:
MANHOLE RING & COVER, STATION POINT AND OUTFLOW PIPE SHALL BE LOCATED AT THE SAME END OF THE INLET.

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB INLET - TYPE R	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-5B

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

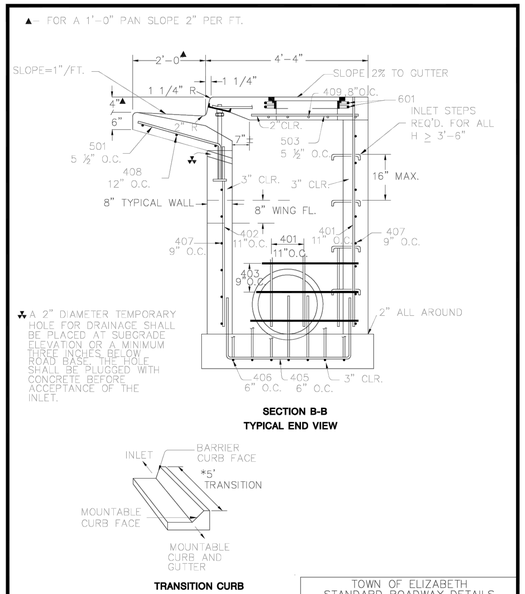
NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 22 OF 31

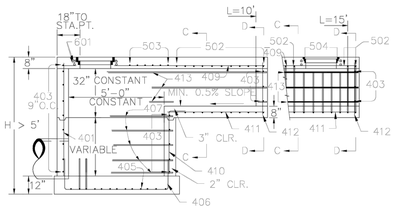
1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS DETAILS.DWG 1



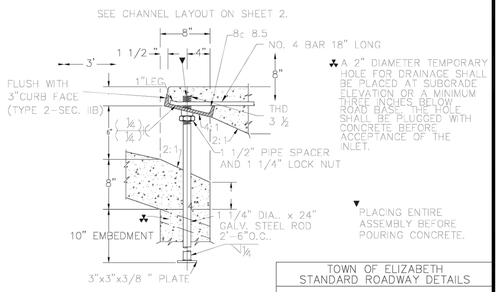
SECTION B-B
TYPICAL END VIEW

TRANSITION CURB

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB INLET – TYPE R	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-5C

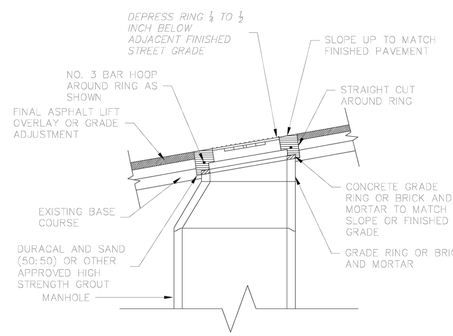


SECTION A-A
INLET WITH DROP BOX~H>5'



CURB FACE ASSEMBLY

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
CURB INLET – TYPE R	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-5D



NOTES:
1. ADEQUATE BARRICADES SHALL BE PLACED AND MAINTAINED UNTIL THE COLLAR ATTAINS A COMPRESSIVE STRENGTH OF 3000 PSI.
2. DURACAL GROUT SHALL BE A MIXTURE OF 100 LBS. DURACAL, 26 LBS. WATER (3.12 GAL.) AND 100 LBS. OF SAND CONFORMING TO ASTM C-35.
3. MANHOLES SHALL NOT BE LOCATED IN CROSSPANS OR GUTTERS

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
MANHOLE RING AND COVER	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-7

THE FOLLOWING NOTES ARE APPLICABLE TO ALL ROADWAY SECTIONS IDENTIFIED ON THE FOLLOWING PAGES (LOCAL, MINOR COLLECTOR, MAJOR COLLECTOR, MINOR ARTERIAL AND MAJOR ARTERIAL), UNLESS MODIFICATIONS ARE APPROVED IN WRITING BY THE DIRECTOR OF PUBLIC WORKS.

NOTES:

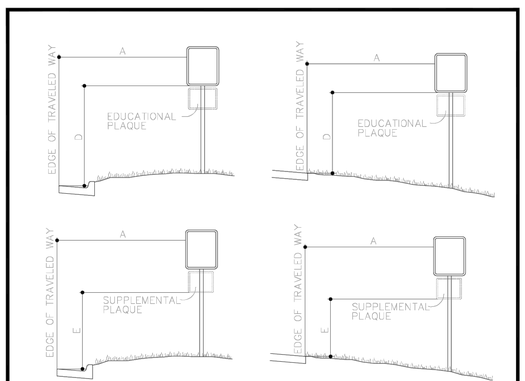
1. GUTTERS SHALL BE AT LEAST 6" THICK.
2. ALL COMBINATION CURB, GUTTER, AND SIDEWALKS TO BE 6" THICK (MIN.). SIDEWALKS WITH VERTICAL CURB AND GUTTER MAY BE 4" THICK.
3. TOTAL PAVEMENT THICKNESS TO BE DETERMINED BY PAVEMENT DESIGN PROCEDURES IN SECTION 5.4.
4. PLACEMENT, MOISTURE AND DENSITY CONTROL FOR SUBGRADE, SUBBASE AND SURFACING MATERIALS SHALL BE IN CONFORMANCE WITH THE REQUIREMENTS OF CHAPTER 8 OF THE ROADWAY DESIGN AND CONSTRUCTION STANDARDS.
5. NON-LANDSCAPED MEDIAN ISLANDS SHALL BE COVERED WITH AN ACCEPTABLE IMPERMEABLE SURFACE.
6. LEGEND

P = PARKING ALLOWED

NP = NO PARKING ALLOWED

▲ = LANEAGE

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
STREET CROSS SECTIONS NOTES	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-8

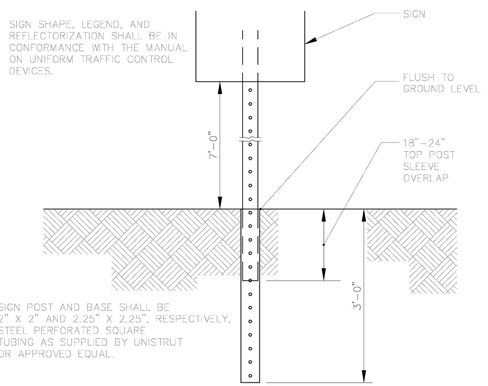


LATERAL PLACEMENT				
KEY	LOCAL STREETS		COLLECTORS & ARTERIALS	
	MINIMUM	NORMAL	MINIMUM	NORMAL
A	8'-0"	12'-0"	10'-0"	14'-0"

VERTICAL PLACEMENT			
KEY	URBAN		RURAL
	W/ SIDEWALKS	W/OUT SIDEWALKS	W/OUT SIDEWALKS
D	7'-0"	7'-0"	9'-0"
E	7'-0"	6'-0"	4'-0"

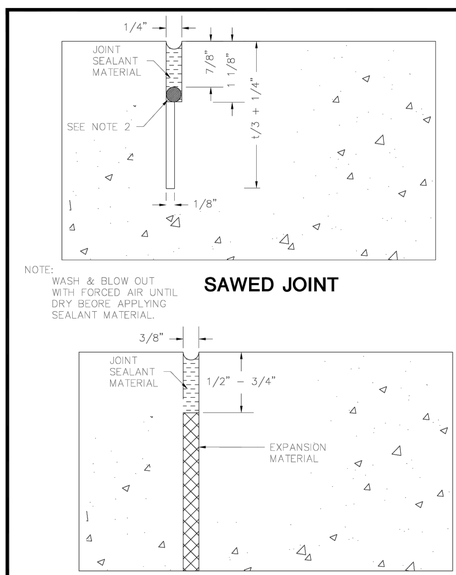
REGULATION SIGN PLACEMENT

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
REGULATION SIGN PLACEMENT	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-15



SIGN BASE DETAIL

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
SIGN BASE DETAIL	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-16



NOTE:
WASH & BLOW OUT WITH FORCED AIR UNTIL DRY BEORE APPLYING SEALANT MATERIAL.

SAWED JOINT

EXPANSION JOINT

NOTE:
JOINT SEALANT MATERIAL MUST MEET ASTM 3406, NYLON ROPE OR OPEN CEL POLYURETHANE STRAND.

TOWN OF ELIZABETH STANDARD ROADWAY DETAILS	
SAWED JOINT AND EXPANSION JOINT	
SCALE: NOT TO SCALE	DATE: 02/10/09
APPROVED: TST INC. OF DENVER TOWN ENGINEER	RD-20

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

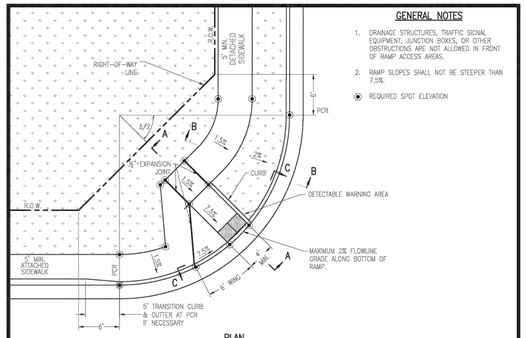
NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

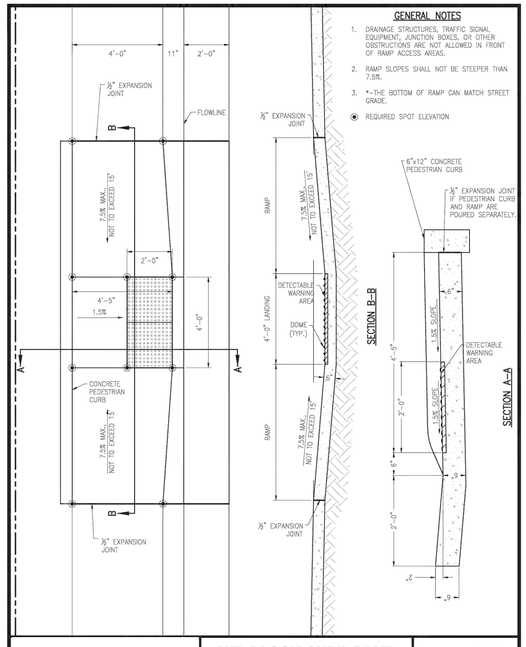
SHEET 23 OF 31

1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS DETAILS.DWG 2



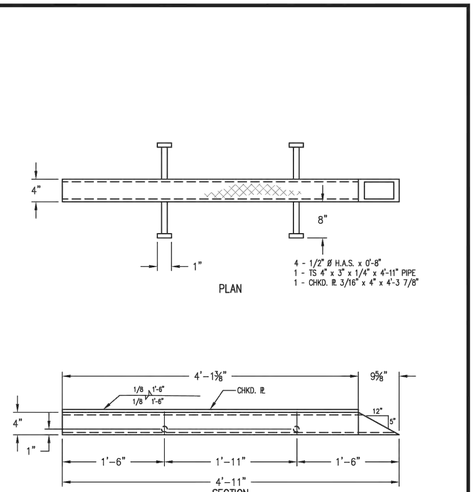
CURB RAMP FOR CURB RETURN RADIUS OF 20' TO 30'

Issued: 05/2013
Revised: 07/2021
Drawing No. **SP.19a**



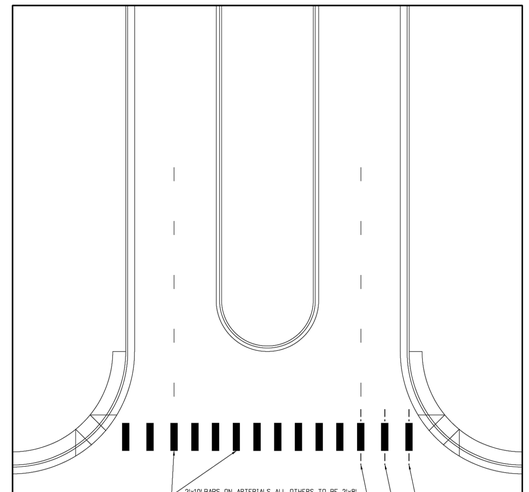
MID-BLOCK CURB RAMP

Issued: 05/2013
Revised: 07/2020
Drawing No. **SP.20**



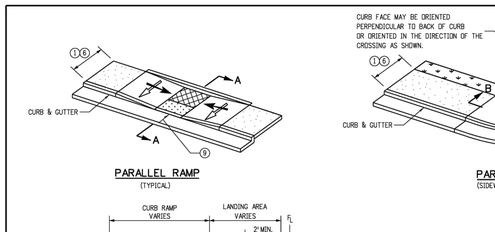
RESIDENTIAL SIDEWALK CURB CHASE DETAIL

Issued: 05/2013
Revised:
Drawing No. **SP.53b**



TYPICAL CROSSWALK MARKING

Issued: 6/15/2022
Revised:
Standard Drawing No. **SS.6**



TYPE 2 PARALLEL CURB RAMPS

Computer File Information		Sheet Revisions	
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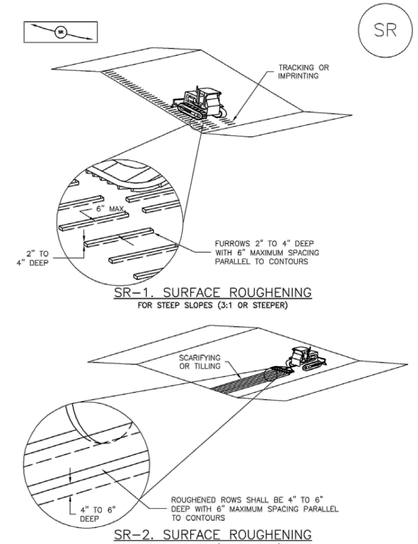
Colorado Department of Transportation
2829 West Howard Place
CDOT HQ, 3rd Floor
Denver, CO 80204
Phone: 303-757-9021 FAX: 303-757-9868
Project Development Branch JBK

CURB RAMPS

Issued by the Project Development Branch: July 31, 2019

STANDARD PLAN NO.
M-608-1
Standard Sheet No. 4 of 10
Project Sheet Number:

Surface Roughening (SR) EC-1



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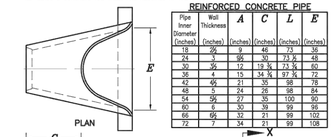
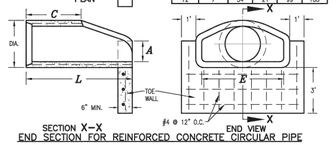
GENERAL NOTES

1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. CONCRETE END SECTIONS ARE TO BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF CULVERT OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY AND AT THE EXPENSE OF THE CONTRACTOR.
4. INSIDE CONFIGURATION AND JOINT OF CONCRETE END SECTION END PIPE SHALL MATCH.
5. END SECTIONS FOR CMP ARCH CULVERT SHALL MATCH THE DIMENSIONS OF THE CULVERT SHOWN ON THE PLANS.
6. GALVANIZED TOE PLATE AS SHOWN, WILL BE REQUIRED ON END SECTIONS FOR CORRUGATED STEEL PIPE AND SHALL BE THE SAME THICKNESS AS END SECTIONS. TOE PLATE SHALL BE FIELD-BOLTED TO END SECTION WITH ⅜" GALVANIZED BOLTS, NUTS AND WASHERS.
7. GALVANIZED STEEL SHALL BE IN CONFORMANCE WITH AASHTO M 111, M 218 OR M 232.
8. FOR TYPE SD END SECTIONS, BARS SHALL BE FABRICATED FROM NPS-3 GALVANIZED STEEL SCHEDULE 40 PIPE WHICH SHALL BE IN CONFORMANCE WITH ASTM A 53.
9. FOR A TYPE SD END SECTION, THE INSTALLATION OF ALTERNATIVE 1 OR ALTERNATIVE 2 END SECTION SHALL BE THE CONTRACTOR'S OPTION.
10. CONCRETE PIPE JOINT FASTENERS SHALL BE INSTALLED AT THE FLARED END SECTION AND LAST TWO PIPE JOINTS OF ALL RCP OUTFALLS.
11. CONNECTIONS OF METAL END SECTIONS TO PLASTIC PIPE SHALL BE APPROVED BY THE ENGINEER.
12. CLASS D CONCRETE TOE WALLS ARE REQUIRED AT THE ENDS OF ALL FLARED END SECTIONS.

REINFORCED CONCRETE PIPE

Pipe Inner Diameter (inches)	Wall Thickness (inches)	A (inches)	C (inches)	L (inches)	E (inches)
18	2½	9	46	73	38
24	3	9½	30	73 ½	48
30	3½	12	19 ½	73 ½	60
36	4	15	34 ½	97 ½	72
42	4½	21	35	98	78
48	5	24	25	98	84
54	5½	27	35	100	90
60	6	30	39	99	96
66	6½	32	21	99	102
72	7	34	21	99	108

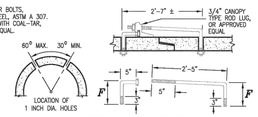




SECTION X–X
END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE

3/4 INCH GALVANIZED ANCHOR BOLTS, NUTS AND WASHERS, MILD STEEL, ASTM A 307. ROD LUG SHALL BE COATED WITH COAL-TAR, EPOXY PAINT OR APPROVED EQUAL.

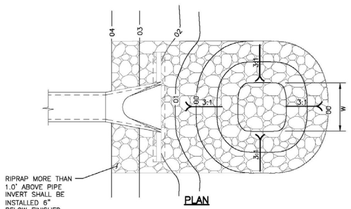
PIPE DIAMETER (inches)	F
18 – 30	5
36 – 42	6
48 – 60	7
72 – 84	9

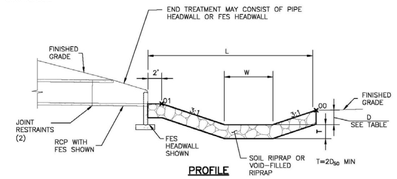


CONCRETE JOINT FASTENER
(TWO PER JOINT)

CONCRETE OR METAL END SECTIONS

Issued: 05/2013
Revised: 09/2017
Drawing No. **SP.52a**

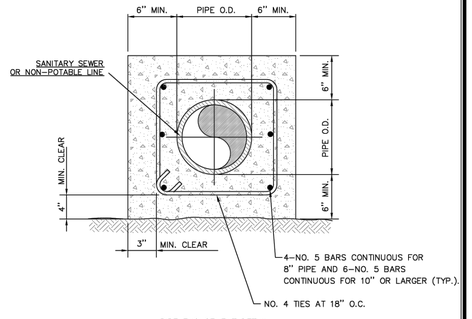




PIPE SIZE OR BOX HEIGHT	D	W*	L
18" – 24"	1'–0"	4'	15'
30" – 36"	1'–6"	6'	20'
42" – 48"	2'–0"	7'	24'
54" – 60"	2'–6"	8'	28'
66" – 72"	3'–0"	9'	32'

* IF OUTLET PIPE IS A BOX CULVERT WITH A WIDTH GREATER THAN W, THEN W = CULVERT WIDTH

Figure 9-37. Low tailwater riprap basin



PIPE ENCASEMENT DETAIL

NOTE:

1. CONCRETE SHALL NOT BE LEANER THAN 1 CEMENT; 2–1/2 SAND; 5 STONE AND SHALL NOT HAVE LESS THAN 3,000 PSI COMPRESSIVE STRENGTH AT 28 DAYS.
2. PLACE CONCRETE AGAINST EITHER SOLID FORMWORK OR UNDISTURBED SOIL.
3. USE GR. 40 REINFORCING BARS.
4. USE ONLY IF SANITARY SEWER IS BELOW THE WATER LINE. DO NOT PLACE OR SPILL CONCRETE ON WATER LINE.

Pipe Encasement Detail

THESE DETAILS ARE PROVIDED FOR STANDARDIZATION PURPOSES ONLY. THIS DETAIL REPRESENTS MINIMUM DESIGN STANDARDS WHICH MAY REQUIRE UPGRADING FOR SPECIFIC APPLICATIONS. REFER TO TOWN OF FRASER MINIMUM DESIGN CRITERIA AND CONSTRUCTION STANDARDS FOR SPECIFIC MATERIAL AND INSTALLATION REQUIREMENTS.

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Description

Temporary seeding can be used to stabilize disturbed areas that will be inactive for an extended period. Permanent seeding should be used to stabilize areas at final grade that will not be otherwise stabilized. Effective seeding includes preparing a seedbed, selecting an appropriate seed mixture, using proper planting techniques, and protecting the seeded area with mulch, geotextiles, or other appropriate measures.

Photograph TS/PS -1. Equipment used to drill seed. Photo courtesy of Douglas County.

Appropriate Uses

When the soil surface is disturbed and will remain inactive for an extended period (typically determined by local government requirements), proactive stabilization measures, including planting a temporary seed mix, should be implemented. If the inactive period is short-lived (on the order of two weeks), techniques such as surface roughening may be appropriate. For longer periods of inactivity of up to one year, temporary seeding and mulching can provide effective erosion control. Permanent seeding should be used on finished areas that have not been otherwise stabilized.

The USDCM Volume 2 *Revegetation* Chapter contains suggested annual grains and native seed mixes to use for temporary seeding. Alternatively, local governments may have their own seed mixes and timelines for seeding. Check jurisdictional requirements for seeding and temporary stabilization.

Design and Installation

Effective seeding requires proper seedbed preparation, selecting an appropriate seed mixture, using appropriate seeding equipment to ensure proper coverage and density, and protecting seeded areas with mulch or fabric until plants are established.

The USDCM Volume 2 *Revegetation* Chapter contains detailed seed mixes, soil preparation practices, and seeding and mulching recommendations that should be referenced to supplement this Fact Sheet.

Drill seeding is the preferred seeding method. Hydroseeding is not recommended except in areas where steep slopes prevent use of drill seeding equipment, and even in these instances it is preferable to hand seed and mulch. Some jurisdictions do not allow hydroseeding or hydromulching.

Temporary and Permanent Seeding	
Functions	
Erosion Control	Yes
Sediment Control	No
Site/Material Management	No

Seedbed Preparation

Prior to seeding, ensure that areas to be revegetated have soil conditions capable of supporting vegetation. Overlot grading can result in loss of topsoil and compaction, resulting in poor quality subsoils at the ground surface that

have low nutrient value, little organic matter content, few soil microorganisms, rooting restrictions, and conditions less conducive to infiltration of precipitation. As a result, it is typically necessary to provide stockpiled topsoil, compost, or other soil amendments and rototill them into the soil to a depth of 6 inches or more.

Topsoil should be salvaged during grading operations for use and spread on areas to be revegetated later. Topsoil should be viewed as an important resource to be utilized for vegetation establishment, due to its water-holding capacity, structure, texture, organic matter content, biological activity, and nutrient content. The rooting depth of most native grasses in the semi-arid Denver metropolitan area is 6 to 18 inches. If present, at a minimum of the upper 6 inches of topsoil should be stripped, stockpiled, and ultimately respread across areas that will be revegetated.

Where topsoil is not available, subsoils should be amended to provide an appropriate plant-growth medium. Organic matter, such as well digested compost, can be added to improve soil characteristics conducive to plant growth. Other treatments can be used to adjust soil pH conditions when needed. Soil testing, which is typically inexpensive, should be completed to determine and optimize the types and amounts of amendments that are required.

If the disturbed ground surface is compacted, rip or rototill the upper 12 inches of the surface prior to placing topsoil. If adding compost to the existing soil surface, rototilling is necessary. Surface roughening will assist in placing a stable topsoil layer on steeper slopes, and allow infiltration and root penetration to greater depth. Topsoil should not be placed when either the salvaged topsoil or receiving ground are frozen or snow covered.

Prior to seeding, the soil surface should be rough and the seedbed should be firm, but neither too loose nor compacted. The upper layer of soil should be in a condition suitable for seeding at the proper depth and conducive to plant growth. Seed-to-soil contact is the key to good germination.

Refer to MHFD's Topsoil Management Guidance for detailed information on topsoil assessment, design, and construction.

Temporary Vegetation

To provide temporary vegetative cover on disturbed areas which will not be paved, built upon, or fully landscaped or worked for an extended period (typically 30 days or more), plant an annual grass appropriate for the time of planting and mulch the planted areas. Temporary grain seed mixes suitable for the Denver metropolitan area are listed in Table TS/PS-1. Native temporary seed mixes are provided in USDCM Volume 2, Chapter 13, Appendix A. These are to be considered only as general recommendations when specific design guidance for a particular site is not available. Local governments typically specify seed mixes appropriate for their jurisdiction.

Permanent Revegetation

To provide vegetative cover on disturbed areas that have reached final grade, a perennial grass mix should be established. Permanent seeding should be performed promptly (typically within 14 days) after reaching final grade. Each site will have different characteristics and a landscape professional or the local jurisdiction should be contacted to determine the most suitable seed mix for a specific site. In lieu of a specific recommendation, one of the perennial grass mixes appropriate for site conditions and growth season listed in seed mix tables in the USDCM Volume 2 *Revegetation* Chapter can be used. The pure live seed (PLS) rates of application recommended in these tables are considered to be absolute minimum rates for seed applied using proper drill-seeding equipment. These are to be considered only as general

recommendations when specific design guidance for a particular site is not available. Local governments typically specify seed mixes appropriate for their jurisdiction.

If desired for wildlife habitat or landscape diversity, shrubs such as rubber rabbitbrush (*Chrysothamnus nauseosus*), fourwing saltbush (*Atriplex canescens*) and skunkbrush sumac (*Rhus trilobata*) could be added to the upland seed mixes at 0.25, 0.5 and 1 pound PLS/acre, respectively. In riparian zones, planting root stock of such species as American plum (*Prunus americana*), woods rose (*Rosa woodsii*), plains cottonwood (*Populus sargentii*), and willow (*Salix spp.*) may be considered. On non-topsoiled upland sites, a legume such as Ladak alfalfa at 1 pound PLS/acre can be included as a source of nitrogen for perennial grasses.

Timing of seeding is an important aspect of the revegetation process. For upland and riparian areas on the Colorado Front Range, the suitable timing for seeding is from October through May. The most favorable time to plant non-irrigated areas is during the fall, so that seed can take advantage of winter and spring moisture. Seed should not be planted if the soil is frozen, snow covered, or wet.

Seeding dates for the highest success probability of perennial species along the Front Range are generally in the spring from April through early May and in the fall after the first of September until the ground freezes. If the area is irrigated, seeding may occur in summer months, as well. See Table TS/PS-2 for appropriate seeding dates.

Table TS/PS-1. Minimum Drill Seeding Rates for Various Temporary Annual Grasses

Species[a] (Common name)	Growth Season[b]	Pounds of Pure Live Seed (PLS)/acre[c]	Planting Depth (inches)
1. Oats	Cool	35 - 50	1 - 2
2. Spring wheat	Cool	25 - 35	1 - 2
3. Spring barley	Cool	25 - 35	1 - 2
4. Annual ryegrass	Cool	10 - 15	½
5. Millet	Warm	3 - 15	½ - ¾
6. Winter wheat	Cool	20–35	1 - 2
7. Winter barley	Cool	20–35	1 - 2
8. Winter rye	Cool	20–35	1 - 2
9. Triticale	Cool	25–40	1 - 2

[a] Successful seeding of annual grass resulting in adequate plant growth will usually produce enough dead-plant residue to provide protection from wind and water erosion for an additional year. This assumes that the cover is not disturbed or mowed closer than 8 inches.

Hydraulic seeding may be substituted for drilling only where slopes are steeper than 3:1 or where access limitations exist. When hydraulic seeding is used, hydraulic mulching should be applied as a separate operation, when practical, to prevent the seeds from being encapsulated in the mulch.

[b] See Table TS/PS-2 for seeding dates. Irrigation, if consistently applied, may extend the use of cool season species during the summer months.

[c] Seeding rates should be doubled if seed is broadcast, or increased by 50 percent if done using a Brillion Drill or by hydraulic seeding.

Table TS/PS-2. Seeding Dates for Annual and Perennial Grasses

	Annual Grasses (Numbers in table reference species in Table TS/PS-1)		Perennial Grasses	
Seeding Dates	**Warm**	**Cool**	**Warm**	**Cool**
January 1–March 15			✓	✓
March 16–April 30		1,2,3	✓	✓
May 1–May 15			✓	
May 16–June 30	5			
July 1–July 15	5			
July 16–August 31				
September 1–September 30		6, 7, 8, 9		
October 1–December 31			✓	✓

Mulch

Cover seeded areas with mulch or an appropriate rolled erosion control product to promote establishment of vegetation. Anchor mulch by crimping, netting or use of a non-toxic tackifier. See the USDCM Volume 2 *Revegetation* Chapter and Volume 3 Mulching BMP Fact Sheet (EC-04) for additional guidance.

Maintenance and Removal

Monitor and observe seeded areas to identify areas of poor growth or areas that fail to germinate. Reseed and mulch these areas, as needed.

If a temporary annual seed was planted, the area should be reseeded with the desired perennial mix when there will be no further work in the area. To minimize competition between annual and perennial species, the annual mix needs time to mature and die before seeding the perennial mix. To increase success of the perennial mix, it should be seeded during the appropriate seeding dates the second year after the temporary annual mix was seeded. Alternatively, if this timeline is not feasible, the annual mix seed heads should be removed and then the area seeded with the perennial mix.

An area that has been permanently seeded should have a good stand of vegetation within one growing season if irrigated and within three growing seasons without irrigation in Colorado. Reseed portions of the site that fail to germinate or remain bare after the first growing season.

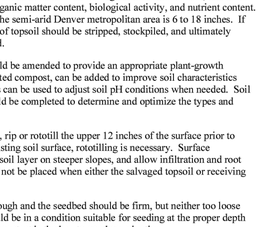
Seeded areas may require irrigation, particularly during extended dry periods. Targeted weed control may also be necessary.

Protect seeded areas from construction equipment and vehicle access.

Description

Mulching consists of evenly applying straw, hay, shredded wood mulch, rock, bark or compost to disturbed soils and securing the mulch by crimping, tackifiers, netting or other measures. Mulching helps reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff. Although often applied in conjunction with temporary or permanent seeding, it can also be used for temporary stabilization of areas that cannot be reseeded due to seasonal constraints.

Mulch can be applied either using standard mechanical dry application methods or using hydromulching equipment that hydraulically applies a slurry of water, wood fiber mulch, and often a tackifier.



Photograph MU-1. An area that was recently seeded, mulched, and crimped.

Appropriate Uses

Use mulch in conjunction with seeding to help protect the seedbed and stabilize the soil. Mulch can also be used as a temporary cover on low to mild slopes to help temporarily stabilize disturbed areas where growing season constraints prevent effective reseeding. Disturbed areas should be properly mulched and tacked, or seeded, mulched and tacked promptly after final grade is reached (typically within no longer than 14 days) on portions of the site not otherwise permanently stabilized.

Standard dry mulching is encouraged in most jurisdictions; however, hydromulching may not be allowed in certain jurisdictions or may not be allowed near waterways.

Do not apply mulch during windy conditions.

Design and Installation

Prior to mulching, surface-roughen areas by rolling with a crimping or punching type roller or by track walking. Track walking should only be used where other methods are impractical because track walking with heavy equipment typically compacts the soil.

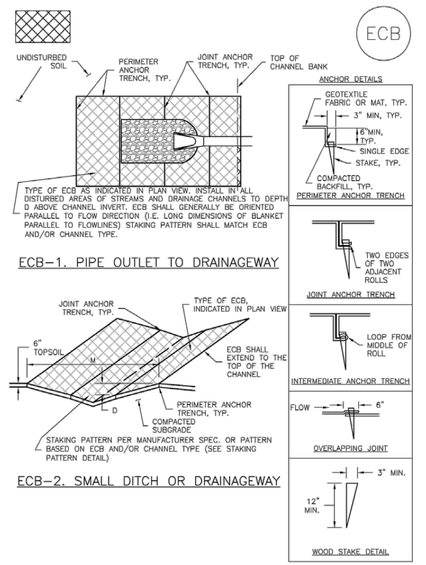
A variety of mulches can be used effectively at construction sites. Consider the following:

Mulch	
Functions	
Erosion Control	Yes
Sediment Control	Moderate
Site/Material Management	No

- Clean, weed-free and seed-free cereal grain straw should be applied evenly at a rate of 2 tons per acre and must be tacked or fastened by a method suitable for the condition of the site. Straw mulch must be anchored (and not merely placed) on the surface. This can be accomplished mechanically by crimping or with the aid of tackifiers or nets. Anchoring with a crimping implement is preferred, and is the recommended method for areas flatter than 3:1. Mechanical crimpers must be capable of tucking the long mulch fibers into the soil to a depth of 3 inches without cutting them. An agricultural disk, while not an ideal substitute, may work if the disk blades are dull or blunted and set vertically; however, the frame may have to be weighted to afford proper soil penetration.
- Grass hay may be used in place of straw; however, because hay is comprised of the entire plant including seed, mulching with hay may seed the site with non-native grass species which might in turn out-compete the native seed. Alternatively, native species of grass hay may be purchased, but can be difficult to find and are more expensive than straw. Purchasing and utilizing a certified weed-free straw is an easier and less costly mulching method. When using grass hay, follow the same guidelines as for straw (provided above).
- On small areas sheltered from the wind and heavy runoff, spraying a tackifier on the mulch is satisfactory for holding it in place. For steep slopes and special situations where greater control is needed, erosion control blankets anchored with stakes should be used instead of mulch.
- Hydraulic mulching consists of wood cellulose fibers mixed with water and a tackifying agent and should be applied at a rate of no less than 1,500 pounds per acre (1,425 lbs of fibers mixed with at least 75 lbs of tackifier) with a hydraulic mulcher. For steeper slopes, up to 2000 pounds per acre may be required for effective hydroseeding. Hydromulch typically requires up to 24 hours to dry; therefore, it should not be applied immediately prior to inclement weather. Application to roads, waterways and existing vegetation should be avoided.
- Erosion control mats, blankets, or nets are recommended to help stabilize steep slopes (generally 3:1 and steeper) and waterways. Depending on the product, these may be used alone or in conjunction with grass or straw mulch. Normally, use of these products will be restricted to relatively small areas. Biodegradable mats made of straw and jute, straw-coconut, coconut fiber, or excelsior can be used instead of mulch. (See the ECM/TRM BMP for more information.)
- Some tackifiers or binders may be used to anchor mulch. Check with the local jurisdiction for allowed tackifiers. Manufacturer's recommendations should be followed at all times. (See the Soil Binder BMP for more information on general types of tackifiers.)
- Rock can also be used as mulch. It provides protection of exposed soils to wind and water erosion and allows infiltration of precipitation. An aggregate base course can be spread on disturbed areas for temporary or permanent stabilization. The rock mulch layer should be thick enough to provide full coverage of exposed soil on the area it is applied.

Maintenance and Removal

After mulching, the bare ground surface should not be more than 10 percent exposed. Reapply mulch, as needed, to cover bare areas.



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ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

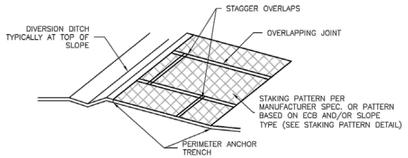
NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

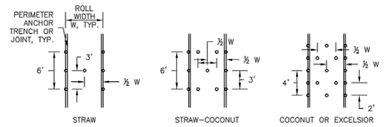
Know what's below. Call before you dig. 811

SHEET 26 OF 31

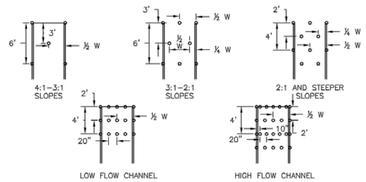
1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS DETAILS.DWG 4



ECB–3. OUTSIDE OF DRAINAGEWAY



STAKING PATTERNS BY ECB TYPE



STAKING PATTERNS BY SLOPE OR CHANNEL TYPE

EROSION CONTROL BLANKET INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF ECB.
   –TYPE OF ECB (STRAW, STRAW–COCONUT, COCONUT, OR EXCELSIOR).
   –AREA, A, IN SQUARE YARDS OF EACH TYPE OF ECB.

2. 100% NATURAL AND BIODEGRADABLE MATERIALS ARE PREFERRED FOR RECPs, ALTHOUGH SOME JURISDICTIONS MAY ALLOW OTHER MATERIALS IN SOME APPLICATIONS.

3. IN AREAS WHERE ECBs ARE SHOWN ON THE PLANS, THE PERMITTEE SHALL PLACE TOPSOIL AND PERFORM FINAL GRADING, SURFACE PREPARATION, AND SEEDING AND MULCHING. SUBGRADE SHALL BE SMOOTH AND MOIST PRIOR TO ECB INSTALLATION AND THE ECB SHALL BE IN FULL CONTACT WITH SUBGRADE. NO GAPS OR VOIDS SHALL EXIST UNDER THE BLANKET.

4. PERIMETER ANCHOR TRENCH SHALL BE USED ALONG THE OUTSIDE PERIMETER OF ALL BLANKET AREAS.

5. JOINT ANCHOR TRENCH SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER (LONGITUDINALLY AND TRANSVERSELY) FOR ALL ECBs EXCEPT STRAW WHICH MAY USE AN OVERLAPPING JOINT.

6. INTERMEDIATE ANCHOR TRENCH SHALL BE USED AT SPACING OF ONE–HALF ROLL LENGTH FOR COCONUT AND EXCELSIOR ECBs.

7. OVERLAPPING JOINT DETAIL SHALL BE USED TO JOIN ROLLS OF ECBs TOGETHER FOR ECBs ON SLOPES.

8. MATERIAL SPECIFICATIONS OF ECBs SHALL CONFORM TO TABLE ECB–1.

9. ANY AREAS OF SEEDING AND MULCHING DISTURBED IN THE PROCESS OF INSTALLING ECBS SHALL BE RESEEDED AND MULCHED.

10. DETAILS ON DESIGN PLANS FOR MAJOR DRAINAGEWAY STABILIZATION WILL GOVERN IF DIFFERENT FROM THOSE SHOWN HERE.

TABLE ECB–1. ECB MATERIAL SPECIFICATIONS

TYPE	COCONUT CONTENT	STRAW CONTENT	EXCELSIOR CONTENT	RECOMMENDED NETTING**
STRAW*	–	100%	–	DOUBLE/ NATURAL
STRAW–COCONUT	30% MIN	70% MAX	–	DOUBLE/ NATURAL
COCONUT	100%	–	–	DOUBLE/ NATURAL
EXCELSIOR	–	–	100%	DOUBLE/ NATURAL

*STRAW ECBs MAY ONLY BE USED OUTSIDE OF STREAMS AND DRAINAGE CHANNEL.
**ALTERNATE NETTING MAY BE ACCEPTABLE IN SOME JURISDICTIONS

EROSION CONTROL BLANKET MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

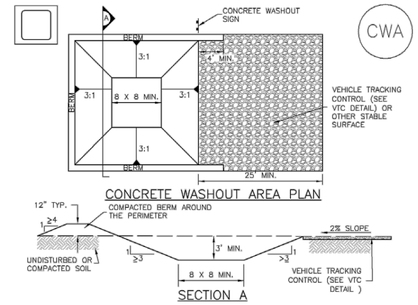
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ECBs SHALL BE LEFT IN PLACE TO EVENTUALLY BIODEGRADE, UNLESS REQUESTED TO BE REMOVED BY THE LOCAL JURISDICTION.

5. ANY ECB PULLED OUT, TORN, OR OTHERWISE DAMAGED SHALL BE REPAIRED OR REINSTALLED. ANY SUBGRADE AREAS BELOW THE GEOTEXTILE THAT HAVE ERODED TO CREATED A VOID UNDER THE BLANKET, OR THAT REMAIN DEVOID OF GRASS SHALL BE REPAIRED, RESEEDED AND MULCHED AND THE ECB REINSTALLED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO AND TOWN OF PARKER COLORADO, NOT AVAILABLE IN AUTOCAD)



CONCRETE WASHOUT AREA PLAN

SECTION A

CWA–1. CONCRETE WASHOUT AREA

CWA INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –CWA INSTALLATION LOCATION.

2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (10 MIL MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.

3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.

4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.

5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.

6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.

7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.

8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

CWA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. THE CWA SHALL BE REPAIRED, CLEANED, OR ENLARGED AS NECESSARY TO MAINTAIN CAPACITY FOR CONCRETE WASTE. CONCRETE MATERIALS, ACCUMULATED IN PIT, SHALL BE REMOVED ONCE THE MATERIALS HAVE REACHED A DEPTH OF 2'.

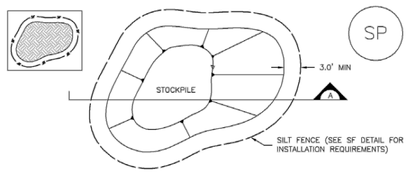
5. CONCRETE WASHOUT WATER, WASTED PIECES OF CONCRETE AND ALL OTHER DEBRIS IN THE SUBSURFACE PIT SHALL BE TRANSPORTED FROM THE JOB SITE IN A WATER–TIGHT CONTAINER AND DISPOSED OF PROPERLY.

6. THE CWA SHALL REMAIN IN PLACE UNTIL ALL CONCRETE FOR THE PROJECT IS PLACED.

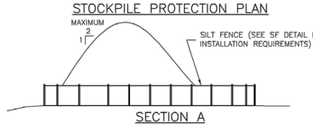
7. WHEN THE CWA IS REMOVED, COVER THE DISTURBED AREA WITH TOP SOIL, SEED AND MULCH OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM DOUGLAS COUNTY, COLORADO AND THE CITY OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD).

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



STOCKPILE PROTECTION PLAN



SECTION A

SP–1. STOCKPILE PROTECTION

STOCKPILE PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF STOCKPILES.
   –TYPE OF STOCKPILE PROTECTION.

2. INSTALL PERIMETER CONTROLS IN ACCORDANCE WITH THEIR RESPECTIVE DESIGN DETAILS. SILT FENCE IS SHOWN IN THE STOCKPILE PROTECTION DETAILS; HOWEVER, OTHER TYPES OF PERIMETER CONTROLS INCLUDING SEDIMENT CONTROL LOGS OR ROCK SOCKS MAY BE SUITABLE IN SOME CIRCUMSTANCES. CONSIDERATIONS FOR DETERMINING THE APPROPRIATE TYPE OF PERIMETER CONTROL FOR A STOCKPILE INCLUDE WHETHER THE STOCKPILE IS LOCATED ON A PERVIOUS OR IMPERVIOUS SURFACE, THE RELATIVE HEIGHTS OF THE PERIMETER CONTROL AND STOCKPILE, THE ABILITY OF THE PERIMETER CONTROL TO CONTAIN THE STOCKPILE WITHOUT FAILING IN THE EVENT THAT MATERIAL FROM THE STOCKPILE SHIFTS OR SLUMPS AGAINST THE PERIMETER, AND OTHER FACTORS.

3. STABILIZE THE STOCKPILE SURFACE WITH SURFACE ROUGHENING, TEMPORARY SEEDING AND MULCHING, EROSION CONTROL BLANKETS, OR SOIL BINDERS. SOILS STOCKPILED FOR AN EXTENDED PERIOD (TYPICALLY FOR MORE THAN 60 DAYS) SHOULD BE SEEDED AND MULCHED WITH A TEMPORARY GRASS COVER ONCE THE STOCKPILE IS PLACED (TYPICALLY WITHIN 14 DAYS). USE OF MULCH ONLY OR A SOIL BINDER IS ACCEPTABLE IF THE STOCKPILE WILL BE IN PLACE FOR A MORE LIMITED TIME PERIOD (TYPICALLY 30–60 DAYS).

4. FOR TEMPORARY STOCKPILES ON THE INTERIOR PORTION OF A CONSTRUCTION SITE, WHERE OTHER DOWNGRADIENT CONTROLS, INCLUDING PERIMETER CONTROL, ARE IN PLACE, STOCKPILE PERIMETER CONTROLS MAY NOT BE REQUIRED.

STOCKPILE PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

STOCKPILE PROTECTION MAINTENANCE NOTES

4. IF PERIMETER PROTECTION MUST BE MOVED TO ACCESS SOIL STOCKPILE, REPLACE PERIMETER CONTROLS BY THE END OF THE WORKDAY.

5. STOCKPILE PERIMETER CONTROLS CAN BE REMOVED ONCE ALL THE MATERIAL FROM THE STOCKPILE HAS BEEN USED.

(DETAILS ADAPTED FROM PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

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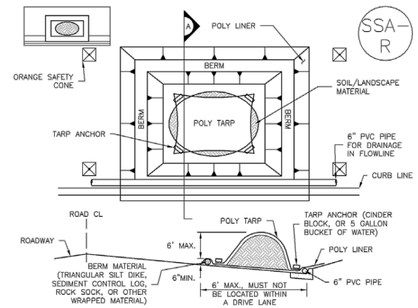

SP–2. MATERIALS STAGING IN ROADWAY

MATERIALS STAGING IN ROADWAYS INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF MATERIAL STAGING AREA(S).
   –CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. FEATURE MUST BE INSTALLED PRIOR TO EXCAVATION, EARTHWORK OR DELIVERY OF MATERIALS.

3. MATERIALS MUST BE STATIONED ON THE POLY LINER. ANY INCIDENTAL MATERIALS DEPOSITED ON PAVED SECTION OR ALONG CURB LINE MUST BE CLEANED UP PROMPTLY.

4. POLY LINER AND TARP COVER SHOULD BE OF SIGNIFICANT THICKNESS TO PREVENT DAMAGE OR LOSS OF INTEGRITY.

5. SAND BAGS MAY BE SUBSTITUTED TO ANCHOR THE COVER TARP OR PROVIDE BERMING UNDER THE BASE LINER.

6. FEATURE IS NOT INTENDED FOR USE WITH WET MATERIAL THAT WILL BE DRAINING AND/OR SPREADING OUT ON THE POLY LINER OR FOR DEMOLITION MATERIALS.

7. THIS FEATURE CAN BE USED FOR:
   –UTILITY REPAIRS.
   –WHEN OTHER STAGING LOCATIONS AND OPTIONS ARE LIMITED.
   –OTHER LIMITED APPLICATION AND SHORT DURATION STAGING.

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
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MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 27 OF 31

1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINARY CDS DETAILS.DWG 6

MATERIALS STAGING IN ROADWAY MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. INSPECT PVC PIPE ALONG CURB LINE FOR CLOGGING AND DEBRIS. REMOVE OBSTRUCTIONS PROMPTLY.

5. CLEAN MATERIAL FROM PAVED SURFACES BY SWEEPING OR VACUUMING.

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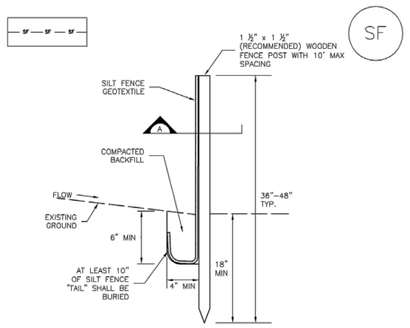
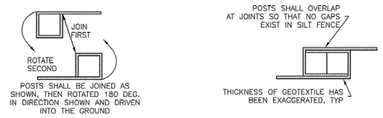
(DETAILS ADAPTED FROM AURORA, COLORADO)



SILT FENCE



SECTION A

SF-1. SILT FENCE

SILT FENCE INSTALLATION NOTES

1. SILT FENCE MUST BE PLACED AWAY FROM THE TOE OF THE SLOPE TO ALLOW FOR WATER PONDING. SILT FENCE AT THE TOE OF A SLOPE SHOULD BE INSTALLED IN A FLAT LOCATION AT LEAST SEVERAL FEET (2–5 FT) FROM THE TOE OF THE SLOPE TO ALLOW ROOM FOR PONDING AND DEPOSITION.

2. A UNIFORM 6" X 4" ANCHOR TRENCH SHALL BE EXCAVATED USING TRENCHER OR SILT FENCE INSTALLATION DEVICE. NO ROAD GRADERS, BACKHOES, OR SIMILAR EQUIPMENT SHALL BE USED.

3. COMPACT ANCHOR TRENCH BY HAND WITH A "JUMPING JACK" OR BY WHEEL ROLLING. COMPACTION SHALL BE SUCH THAT SILT FENCE RESISTS BEING PULLED OUT OF ANCHOR TRENCH BY HAND.

4. SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD BE NO NOTICEABLE SAG BETWEEN STAKES AFTER IT HAS BEEN ANCHORED TO THE STAKES.

5. SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED 3" ALONG THE FABRIC DOWN THE STAKE.

6. AT THE END OF A RUN OF SILT FENCE ALONG A CONTOUR, THE SILT FENCE SHOULD BE TURNED PERPENDICULAR TO THE CONTOUR TO CREATE A "J-HOOK." THE "J-HOOK" EXTENDING PERPENDICULAR TO THE CONTOUR SHOULD BE OF SUFFICIENT LENGTH TO KEEP RUNOFF FROM FLOWING AROUND THE END OF THE SILT FENCE (TYPICALLY 10' – 20').

7. SILT FENCE SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

SILT FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE SILT FENCE SHALL BE REMOVED AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY 6".

5. REPAIR OR REPLACE SILT FENCE WHEN THERE ARE SIGNS OF WEAR, SUCH AS SAGGING, TEARING, OR COLLAPSE.

6. SILT FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION, OR IS REPLACED BY AN EQUIVALENT PERIMETER SEDIMENT CONTROL BMP.

7. WHEN SILT FENCE IS REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, NOT AVAILABLE IN AUTOCAD)

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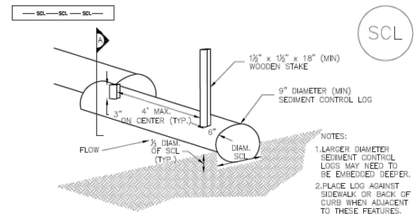
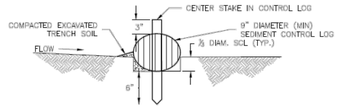
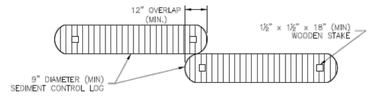


TRENCHED SEDIMENT CONTROL LOG

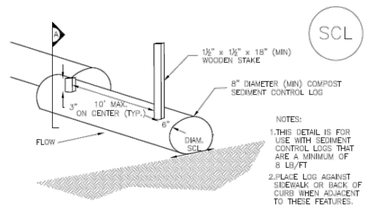


SECTION A
TRENCHED SEDIMENT CONTROL LOG

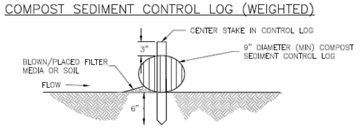


LOG JOINTS

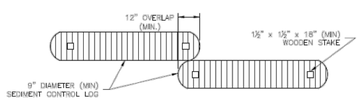
SCL-1. TRENCHED SEDIMENT CONTROL LOG



COMPOST SEDIMENT CONTROL LOG (WEIGHTED)

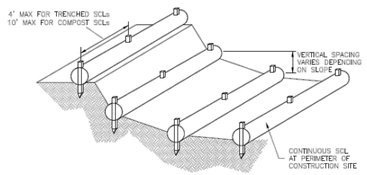


SECTION A
COMPOST SEDIMENT CONTROL LOG



LOG JOINTS

SCL-2. COMPOST SEDIMENT CONTROL LOG (WEIGHTED)



SCL-3. SEDIMENT CONTROL LOGS TO CONTROL SLOPE LENGTH

SEDIMENT CONTROL LOG INSTALLATION NOTES

1. SEE PLAN VIEW FOR LOCATION AND LENGTH OF SEDIMENT CONTROL LOGS.

2. SEDIMENT CONTROL LOGS THAT ACT AS A PERIMETER CONTROL SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND-DISTURBING ACTIVITIES.

3. SEDIMENT CONTROL LOGS SHALL CONSIST OF STRAW, COMPOST, EXCELSIOR OR COCONUT FIBER, AND SHALL BE FREE OF ANY NOXIOUS WEED SEEDS OR DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.

4. SEDIMENT CONTROL LOGS MAY BE USED AS SMALL CHECK DAMS IN DITCHES AND SWALES. HOWEVER, THEY SHOULD NOT BE USED IN PERENNIAL STREAMS.

5. IT IS RECOMMENDED THAT SEDIMENT CONTROL LOGS BE TRENCHED INTO THE GROUND TO A DEPTH OF APPROXIMATELY ⅓ OF THE DIAMETER OF THE LOG. IF TRENCHING TO THIS DEPTH IS NOT FEASIBLE AND/OR DESIRABLE (SHORT TERM INSTALLATION WITH DESIRE NOT TO DAMAGE LANDSCAPE) A LESSER TRENCHING DEPTH MAY BE ACCEPTABLE WITH MORE ROBUST STAKING. COMPOST LOGS THAT ARE 8 LB/FT DO NOT NEED TO BE TRENCHED.

6. THE UPHILL SIDE OF THE SEDIMENT CONTROL LOG SHALL BE BACKFILLED WITH SOIL OR FILTER MATERIAL THAT IS FREE OF ROCKS AND DEBRIS. THE SOIL SHALL BE TIGHTLY COMPACTED INTO THE SHAPE OF A RIGHT TRIANGLE USING A SHOVEL OR WEIGHTED LAWN ROLLER OR BLOWN IN PLACE.

7. FOLLOW MANUFACTURERS' GUIDANCE FOR STAKING. IF MANUFACTURERS' INSTRUCTIONS DO NOT SPECIFY SPACING, STAKES SHALL BE PLACED ON 4' CENTERS AND EMBEDDED A MINIMUM OF 6" INTO THE GROUND. 3" OF THE STAKE SHALL PROTRUDE FROM THE TOP OF THE LOG. STAKES THAT ARE BROKEN PRIOR TO INSTALLATION SHALL BE REPLACED. COMPOST LOGS SHOULD BE STAKED 10' ON CENTER.

SEDIMENT CONTROL LOG MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

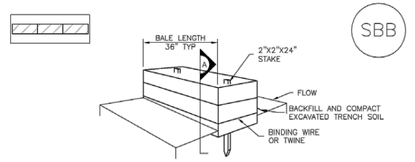
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF SEDIMENT CONTROL LOG SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ½ OF THE HEIGHT OF THE SEDIMENT CONTROL LOG.

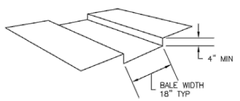
5. SEDIMENT CONTROL LOG SHALL BE REMOVED AT THE END OF CONSTRUCTION.COMPOST FROM COMPOST LOGS MAY BE LEFT IN PLACE AS LONG AS BAGS ARE REMOVED AND THE AREA SEEDED. IF DISTURBED AREAS EXIST AFTER REMOVAL, THEY SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, JEFFERSON COUNTY, COLORADO, DOUGLAS COUNTY, COLORADO, AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

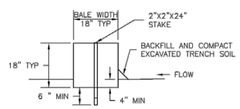
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



STRAW BALE



TRENCH FOR STRAW BALE



SECTION A

SBB-1. STRAW BALE

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 28 OF 31

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STRAW BALE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION(S) OF STRAW BALES.

2. STRAW BALES SHALL CONSIST OF CERTIFIED WEED FREE STRAW OR HAY. LOCAL JURISDICTIONS MAY REQUIRE PROOF THAT BALES ARE WEED FREE.

3. STRAW BALES SHALL CONSIST OF APPROXIMATELY 5 CUBIC FEET OF STRAW OR HAY AND WEIGH NOT LESS THAN 35 POUNDS.

4. WHEN STRAW BALES ARE USED IN SERIES AS A BARRIER, THE END OF EACH BALE SHALL BE TIGHTLY ABUTTING ONE ANOTHER.

5. STRAW BALE DIMENSIONS SHALL BE APPROXIMATELY 36"X18"X18".

6. A UNIFORM ANCHOR TRENCH SHALL BE EXCAVATED TO A DEPTH OF 4". STRAW BALES SHALL BE PLACED SO THAT BINDING TWINE IS ENCOMPASSING THE VERTICAL SIDES OF THE BALE(S). ALL EXCAVATED SOIL SHALL BE PLACED ON THE UPHILL SIDE OF THE STRAW BALE(S) AND COMPACTED.

7. TWO (2) WOODEN STAKES SHALL BE USED TO HOLD EACH BALE IN PLACE. WOODEN STAKES SHALL BE 2"X2"X24". WOODEN STAKES SHALL BE DRIVEN 6" INTO THE GROUND.

STRAW BALE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. STRAW BALES SHALL BE REPLACED IF THEY BECOME HEAVILY SOILED, ROTTEN, OR DAMAGED BEYOND REPAIR.

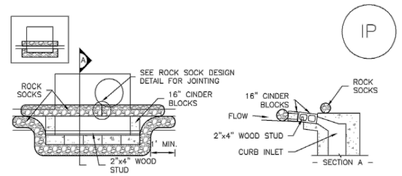
5. SEDIMENT ACCUMULATED UPSTREAM OF STRAW BALE BARRIER SHALL BE REMOVED AS NEEDED TO MAINTAIN FUNCTIONALITY OF THE BMP, TYPICALLY WHEN DEPTH OF ACCUMULATED SEDIMENTS IS APPROXIMATELY ¼ OF THE HEIGHT OF THE STRAW BALE BARRIER.

6. STRAW BALES ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

7. WHEN STRAW BALES ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



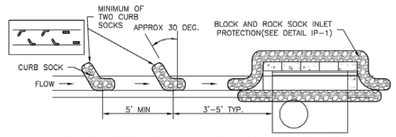
IP–1. BLOCK AND ROCK SOCK SUMP OR ON GRADE INLET PROTECTION

BLOCK AND CURB SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. CONCRETE "CINDER" BLOCKS SHALL BE LAID ON THEIR SIDES AROUND THE INLET IN A SINGLE ROW, ABUTTING ONE ANOTHER WITH THE OPEN END FACING AWAY FROM THE CURB.

3. GRAVEL BAGS SHALL BE PLACED AROUND CONCRETE BLOCKS, CLOSELY ABUTTING ONE ANOTHER AND JOINTED TOGETHER IN ACCORDANCE WITH ROCK SOCK DESIGN DETAIL.



IP–2. CURB ROCK SOCKS UPSTREAM OF INLET PROTECTION

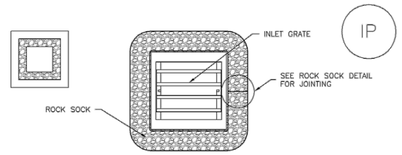
CURB ROCK SOCK INLET PROTECTION INSTALLATION NOTES

1. SEE ROCK SOCK DESIGN DETAIL INSTALLATION REQUIREMENTS.

2. PLACEMENT OF THE SOCK SHALL BE APPROXIMATELY 30 DEGREES FROM PERPENDICULAR IN THE OPPOSITE DIRECTION OF FLOW.

3. SOCKS ARE TO BE FLUSH WITH THE CURB AND SPACED A MINIMUM OF 5 FEET APART.

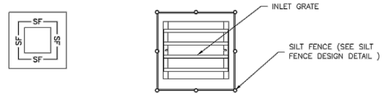
4. AT LEAST TWO CURB SOCKS IN SERIES ARE REQUIRED UPSTREAM OF ON–GRADE INLETS.



IP–3. ROCK SOCK SUMP/AREA INLET PROTECTION

ROCK SOCK SUMP/AREA INLET PROTECTION INSTALLATION NOTES
1. SEE ROCK SOCK DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF ROCK SOCKS FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



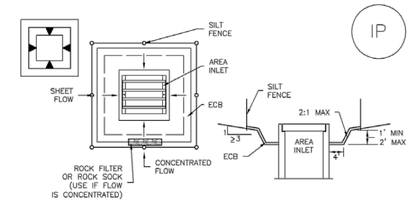
IP–4. SILT FENCE FOR SUMP INLET PROTECTION

SILT FENCE INLET PROTECTION INSTALLATION NOTES

1. SEE SILT FENCE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. POSTS SHALL BE PLACED AT EACH CORNER OF THE INLET AND AROUND THE EDGES AT A MAXIMUM SPACING OF 3 FEET.

3. STRAW WATTLES/SEDIMENT CONTROL LOGS MAY BE USED IN PLACE OF SILT FENCE FOR INLETS IN PERVIOUS AREAS. INSTALL PER SEDIMENT CONTROL LOG DETAIL.



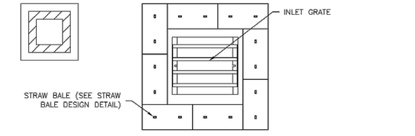
IP–5. OVEREXCAVATION INLET PROTECTION

OVEREXCAVATION INLET PROTECTION INSTALLATION NOTES

1. THIS FORM OF INLET PROTECTION IS PRIMARILY APPLICABLE FOR SITES THAT HAVE NOT YET REACHED FINAL GRADE AND SHOULD BE USED ONLY FOR INLETS WITH A RELATIVELY SMALL CONTRIBUTING DRAINAGE AREA.

2. WHEN USING FOR CONCENTRATED FLOWS, SHAPE BASIN IN 2:1 RATIO WITH LENGTH ORIENTED TOWARDS DIRECTION OF FLOW.

3. SEDIMENT MUST BE PERIODICALLY REMOVED FROM THE OVEREXCAVATED AREA.

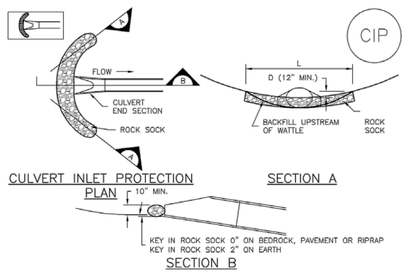


IP–6. STRAW BALE FOR SUMP INLET PROTECTION

STRAW BALE BARRIER INLET PROTECTION INSTALLATION NOTES

1. SEE STRAW BALE DESIGN DETAIL FOR INSTALLATION REQUIREMENTS.

2. BALES SHALL BE PLACED IN A SINGLE ROW AROUND THE INLET WITH ENDS OF BALES TIGHTLY ABUTTING ONE ANOTHER.



CIP–1. CULVERT INLET PROTECTION

CULVERT INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF CULVERT INLET PROTECTION.

2. SEE ROCK SOCK DESIGN DETAIL FOR ROCK GRADATION REQUIREMENTS AND JOINTING DETAIL.

CULVERT INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF THE CULVERT SHALL BE REMOVED WHEN THE SEDIMENT DEPTH IS ½ THE HEIGHT OF THE ROCK SOCK.

5. CULVERT INLET PROTECTION SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

(DETAILS ADAPTED FROM AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

GENERAL INLET PROTECTION INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF INLET PROTECTION.
   –TYPE OF INLET PROTECTION (IP.1, IP.2, IP.3, IP.4, IP.5, IP.6)

2. INLET PROTECTION SHALL BE INSTALLED PROMPTLY AFTER INLET CONSTRUCTION OR PAVING IS COMPLETE (TYPICALLY WITHIN 48 HOURS). IF A RAINFALL/RUNOFF EVENT IS FORECAST, INSTALL INLET PROTECTION PRIOR TO ONSET OF EVENT.

3. MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

INLET PROTECTION MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. SEDIMENT ACCUMULATED UPSTREAM OF INLET PROTECTION SHALL BE REMOVED AS NECESSARY TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN STORAGE VOLUME REACHES 50% OF CAPACITY, A DEPTH OF 6" WHEN SILT FENCE IS USED, OR ¼ OF THE HEIGHT FOR STRAW BALES.

5. INLET PROTECTION IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS PERMANENTLY STABILIZED, UNLESS THE LOCAL JURISDICTION APPROVES EARLIER REMOVAL OF INLET PROTECTION IN STREETS.

6. WHEN INLET PROTECTION AT AREA INLETS IS REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOP SOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO AND CITY OF AURORA, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

NOTE: THE DETAILS INCLUDED WITH THIS FACT SHEET SHOW COMMONLY USED, CONVENTIONAL METHODS OF INLET PROTECTION IN THE DENVER METROPOLITAN AREA. THERE ARE MANY PROPRIETARY INLET PROTECTION METHODS ON THE MARKET. UDFCD NEITHER ENDORSES NOR DISCOURAGES USE OF PROPRIETARY INLET PROTECTION; HOWEVER, IN THE EVENT PROPRIETARY METHODS ARE USED, THE APPROPRIATE DETAIL FROM THE MANUFACTURER MUST BE INCLUDED IN THE SWMP AND THE BMP MUST BE INSTALLED AND MAINTAINED AS SHOWN IN THE MANUFACTURER'S DETAILS.

NOTE: SOME MUNICIPALITIES DISCOURAGE OR PROHIBIT THE USE OF STRAW BALES FOR INLET PROTECTION. CHECK WITH LOCAL JURISDICTION TO DETERMINE IF STRAW BALE INLET PROTECTION IS ACCEPTABLE.

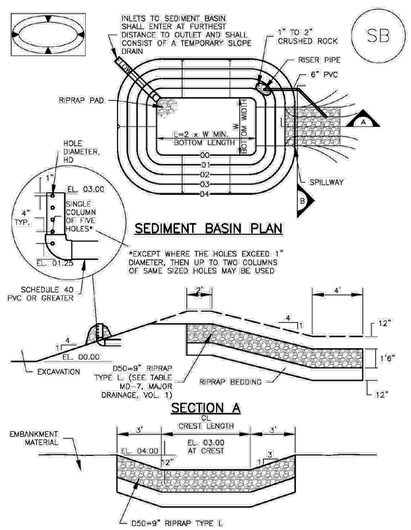


TABLE SB–1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN			
Upstream Drainage Area (rounded to nearest acre), (ac)	Basin Bottom Width (W), (ft)	Spillway Crest Length (CL), (ft)	Hole Diameter (HD), (in)
1	12 ½	2	9/32
2	21	3	13/16
3	28	5	1/2
4	33 ½	6	9/16
5	38 ½	8	27/32
6	43	9	27/32
7	47 ¾	11	27/32
8	51	12	27/32
9	55	13	7/8
10	58 ¾	15	15/16
11	61	16	31/32
12	64	18	1
13	67 ½	19	1 1/16
14	70 ½	21	1 1/8
15	73 ¼	22	1 3/16

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF SEDIMENT BASIN.
   –TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
   –FOR STANDARD BASIN, BOTTOM WIDTH W, CREST LENGTH CL, AND HOLE DIAMETER, HD.
   –FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.

2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.

3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND–DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS AS A STORMWATER CONTROL.

4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF DEBRIS, ORGANIC MATERIAL, AND ROCKS OR CONCRETE GREATER THAN 3 INCHES AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.

5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

6. PIPE SCH 40 OR GREATER SHALL BE USED.

7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 29 OF 31

1/30/2025 11:25 AM X:\TOWN OF ELIZABETH\CAD\PLANS\01 - MAIN ST PARKING\PRELIMINAY CDS DETAILS.DWG 7

SEDIMENT BASIN MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

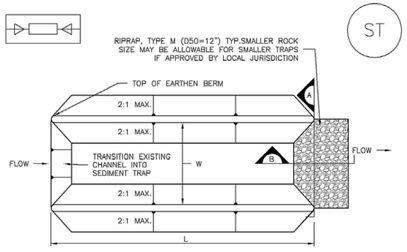
4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).

5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.

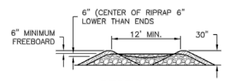
6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)

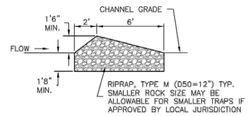
NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.



SEDIMENT TRAP PLAN



SECTION A



SECTION B

ST-1. SEDIMENT TRAP

SEDIMENT TRAP INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION, LENGTH AND WIDTH OF SEDIMENT TRAP.

2. ONLY USE FOR DRAINAGE AREAS LESS THAN 1 ACRE.

3. SEDIMENT TRAPS SHALL BE INSTALLED PRIOR TO ANY UPGRADIENT LAND–DISTURBING ACTIVITIES.

4. SEDIMENT TRAP BERM SHALL BE CONSTRUCTED FROM MATERIAL FROM EXCAVATION. THE BERM SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.

5. SEDIMENT TRAP OUTLET TO BE CONSTRUCTED OF RIPRAP, TYPE M (D50=12") TYP.SMALLER ROCK SIZE MAY BE ALLOWABLE FOR SMALLER TRAPS IF APPROVED BY LOCAL JURISDICTION.

6. THE TOP OF THE EARTHEN BERM SHALL BE A MINIMUM OF 6" HIGHER THAN THE TOP OF THE RIPRAP OUTLET STRUCTURE.

7. THE ENDS OF THE RIPRAP OUTLET STRUCTURE SHALL BE A MINIMUM OF 6" HIGHER THAN THE CENTER OF THE OUTLET STRUCTURE.

SEDIMENT TRAP MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. REMOVE SEDIMENT ACCUMULATED IN TRAP AS NEEDED TO MAINTAIN THE FUNCTIONALITY OF THE BMP, TYPICALLY WHEN THE SEDIMENT DEPTH REACHES ½ THE HEIGHT OF THE RIPRAP OUTLET.

5. SEDIMENT TRAPS SHALL REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

6. WHEN SEDIMENT TRAPS ARE REMOVED, THE DISTURBED AREA SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY THE LOCAL JURISDICTION.

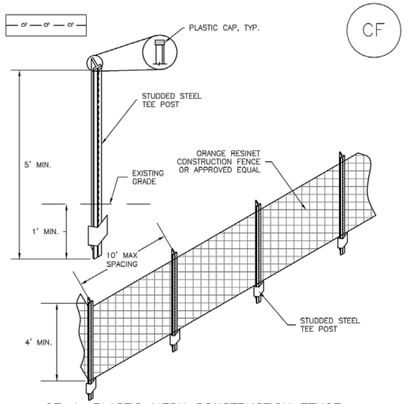
(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

Table CP-1. Typical Phased BMP Installation for Construction Projects

Project Phase	BMPs
Pre-disturbance, Site Access	▪ Install sediment controls downgradient of access point (on paved streets this may consist of inlet protection). ▪ Establish vehicle tracking control at entrances to paved streets. Fence as needed. ▪ Use construction fencing to define the boundaries of the project and limit access to areas of the site that are not to be disturbed. **Note: it may be necessary to protect inlets in the general vicinity of the site, even if not downgradient, if there is a possibility that sediment tracked from the site could contribute to the inlets.**
Site Clearing and Grubbing	▪ Install perimeter controls as needed on downgradient perimeter of site (silt fence, wattles, etc). ▪ Limit disturbance to those areas planned for disturbance and protect undisturbed areas within the site (construction fence, flagging, etc). ▪ Preserve vegetative buffer at site perimeter. ▪ Create stabilized staging area. ▪ Locate portable toilets on flat surfaces away from drainage paths. Stake in areas susceptible to high winds. ▪ Construct concrete washout area and provide signage. ▪ Establish waste disposal areas. ▪ Install sediment basins. ▪ Create dirt perimeter berms and/or brush barriers during grubbing and clearing. ▪ Separate and stockpile topsoil, leave roughened and/or cover. ▪ Protect stockpiles with perimeter control BMPs. Stockpiles should be located away from drainage paths and should be accessed from the upgradient side so that perimeter controls can remain in place on the downgradient side. Use erosion control blankets, temporary seeding, and/or mulch for stockpiles that will be inactive for an extended period. ▪ Leave disturbed area of site in a roughened condition to limit erosion. Consider temporary revegetation for areas of the site that have been disturbed but that will be inactive for an extended period. ▪ Water to minimize dust but not to the point that watering creates runoff.

Project Phase	BMPs
Utility And Infrastructure Installation	**In Addition to the Above BMPs:** ▪ Close trench as soon as possible (generally at the end of the day). ▪ Use rough-cut street control or apply road base for streets that will not be promptly paved. ▪ Provide inlet protection as streets are paved and inlets are constructed. ▪ Protect and repair BMPs, as necessary. ▪ Perform street sweeping as needed.
Building Construction	**In Addition to the Above BMPs:** ▪ Implement materials management and good housekeeping practices for home building activities. ▪ Use perimeter controls for temporary stockpiles from foundation excavations. ▪ For lots adjacent to streets, lot-line perimeter controls may be necessary at the back of curb.
Final Grading	**In Addition to the Above BMPs:** ▪ Remove excess or waste materials. ▪ Remove stored materials.
Final Stabilization	**In Addition to the Above BMPs:** ▪ Seed and mulch/tackify. ▪ Seed and install blankets on steep slopes. ▪ Remove all temporary BMPs when site has reached final stabilization.



CF–1. PLASTIC MESH CONSTRUCTION FENCE

CONSTRUCTION FENCE INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
   –LOCATION OF CONSTRUCTION FENCE.

2. CONSTRUCTION FENCE SHOWN SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

3. CONSTRUCTION FENCE SHALL BE COMPOSED OF ORANGE, CONTRACTOR–GRADE MATERIAL THAT IS AT LEAST 4' HIGH. METAL POSTS SHOULD HAVE A PLASTIC CAP FOR SAFETY.

4. STUDDED STEEL TEE POSTS SHALL BE UTILIZED TO SUPPORT THE CONSTRUCTION FENCE. MAXIMUM SPACING FOR STEEL TEE POSTS SHALL BE 10'.

5. CONSTRUCTION FENCE SHALL BE SECURELY FASTENED TO THE TOP, MIDDLE, AND BOTTOM OF EACH POST.

CONSTRUCTION FENCE MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

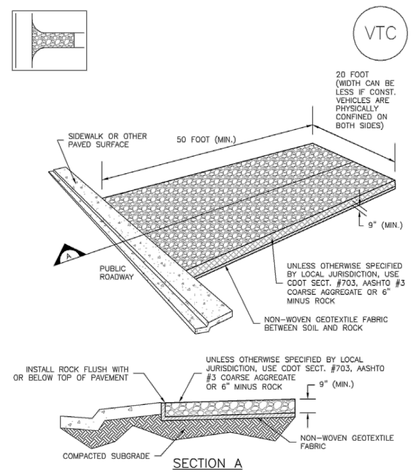
3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. CONSTRUCTION FENCE SHALL BE REPAIRED OR REPLACED WHEN THERE ARE SIGNS OF DAMAGE SUCH AS RIPS OR SAGS. CONSTRUCTION FENCE IS TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND APPROVED BY THE LOCAL JURISDICTION.

5. WHEN CONSTRUCTION FENCES ARE REMOVED, ALL DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE FENCE SHALL BE COVERED WITH TOPSOIL, SEEDED AND MULCHED, OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAIL ADAPTED FROM TOWN OF PARKER, COLORADO, NOT AVAILABLE IN AUTOCAD)



SECTION A

VTC–1. AGGREGATE VEHICLE TRACKING CONTROL

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

#	REVISION DESCRIPTION	DATE	BY
1	1ST SUBMITTAL	11/01/2024	MM
2	2ND SUBMITTAL	01/17/2025	MM

NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 30 OF 31

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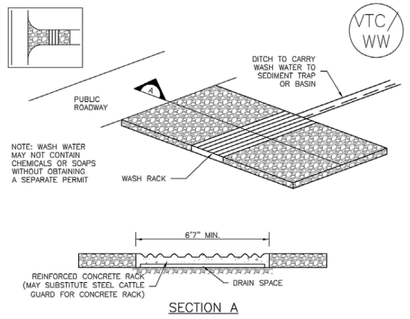
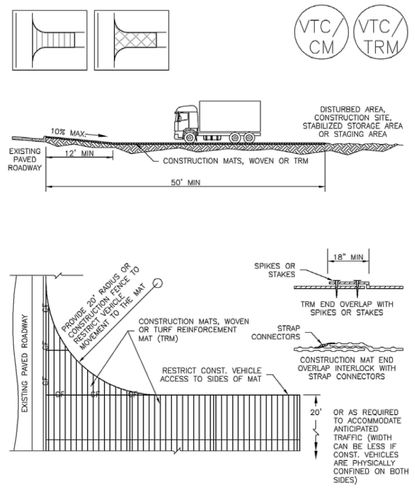


SECTION A

VTC–2. AGGREGATE VEHICLE TRACKING CONTROL WITH WASH RACK



VTC–3. VEHICLE TRACKING CONTROL W/ CONSTRUCTION MAT OR TURF REINFORCEMENT MAT (TRM)

STABILIZED CONSTRUCTION ENTRANCE/EXIT INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF CONSTRUCTION ENTRANCE(S)/EXIT(S).
   –TYPE OF CONSTRUCTION ENTRANCE(S)/EXITS(S) (WITH/WITHOUT WHEEL WASH, CONSTRUCTION MAT OR TRM).

2. CONSTRUCTION MAT OR TRM STABILIZED CONSTRUCTION ENTRANCES ARE ONLY TO BE USED ON SHORT DURATION PROJECTS (TYPICALLY RANGING FROM A WEEK TO A MONTH) WHERE THERE WILL BE LIMITED VEHICULAR ACCESS.

3. A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE LOCATED AT ALL ACCESS POINTS WHERE VEHICLES ACCESS THE CONSTRUCTION SITE FROM PAVED RIGHT–OF–WAYS.

4. STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.

5. A NON–WOVEN GEOTEXTILE FABRIC SHALL BE PLACED UNDER THE STABILIZED CONSTRUCTION ENTRANCE/EXIT PRIOR TO THE PLACEMENT OF ROCK.

6. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

STABILIZED CONSTRUCTION ENTRANCE/EXIT MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY TO THE STABILIZED ENTRANCE/EXIT TO MAINTAIN A CONSISTENT DEPTH.

5. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED THROUGHOUT THE DAY AND AT THE END OF THE DAY BY SHOVELING OR SWEEPING. SEDIMENT MAY NOT BE WASHED DOWN STORM SEWER DRAINS.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM CITY OF BROOMFIELD, COLORADO, NOT AVAILABLE IN AUTOCAD)

Description

A stabilized construction roadway is a temporary method to control sediment runoff, vehicle tracking, and dust from roads during construction activities.

Photograph SCR-1. Stabilized construction roadway.

Appropriate Uses

Use on high traffic construction roads to minimize dust and erosion.

Stabilized construction roadways are used instead of rough-cut street controls on roadways with frequent construction traffic.

Design and Installation

Stabilized construction roadways typically involve two key components: 1) stabilizing the road surface with an aggregate base course of 3-inch-diameter granular material and 2) stabilizing roadside ditches, if applicable. Early application of road base is generally suitable where a layer of coarse aggregate is specified for final road construction.

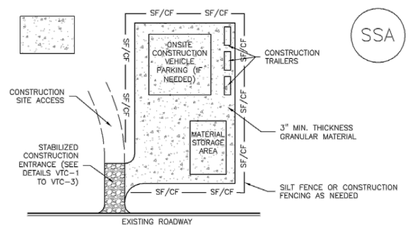
Maintenance and Removal

Apply additional gravel as necessary to ensure roadway integrity.

Inspect drainage ditches along the roadway for erosion and stabilize, as needed, through the use of check dams or rolled erosion control products.

Gravel may be removed once the road is ready to be paved. Prior to paving, the road should be inspected for grade changes and damage. Regrade and repair as necessary.

Stabilized Construction Roadway	
Functions	
Erosion Control	Yes
Sediment Control	Moderate
Site/Material Management	Yes



SSA–1. STABILIZED STAGING AREA

STABILIZED STAGING AREA INSTALLATION NOTES

1. SEE PLAN VIEW FOR
   –LOCATION OF STAGING AREA(S).
   –CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.

2. STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.

3. STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.

4. THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.

5. UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.

6. ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY, AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROACTIVE, NOT REACTIVE. INSPECT BMPs AS SOON AS POSSIBLE (AND ALWAYS WITHIN 24 HOURS) FOLLOWING A STORM THAT CAUSES SURFACE EROSION, AND PERFORM NECESSARY MAINTENANCE.

2. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.

3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.

4. ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

STABILIZED STAGING AREA MAINTENANCE NOTES

5. STABILIZED STAGING AREA SHALL BE ENLARGED IF NECESSARY TO CONTAIN PARKING, STORAGE, AND UNLOADING/LOADING OPERATIONS.

6. THE STABILIZED STAGING AREA SHALL BE REMOVED AT THE END OF CONSTRUCTION. THE GRANULAR MATERIAL SHALL BE REMOVED OR, IF APPROVED BY THE LOCAL JURISDICTION, USED ON SITE, AND THE AREA COVERED WITH TOPSOIL, SEEDED AND MULCHED OR OTHERWISE STABILIZED IN A MANNER APPROVED BY LOCAL JURISDICTION.

NOTE: MANY MUNICIPALITIES PROHIBIT THE USE OF RECYCLED CONCRETE AS GRANULAR MATERIAL FOR STABILIZED STAGING AREAS DUE TO DIFFICULTIES WITH RE–ESTABLISHMENT OF VEGETATION IN AREAS WHERE RECYCLED CONCRETE WAS PLACED.

NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM UDFCD STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

(DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO, NOT AVAILABLE IN AUTOCAD)

Description

Street sweeping and vacuuming remove sediment that has been tracked onto roadways to reduce sediment transport into storm drain systems or a surface waterway.

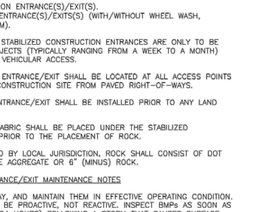
Appropriate Uses

Use this practice at construction sites where vehicles may track sediment offsite onto paved roadways.

Design and Installation

Street sweeping or vacuuming should be conducted when there is noticeable sediment accumulation on roadways adjacent to the construction site. Typically, this will be concentrated at the entrance/exit to the construction site. Well-maintained stabilized construction entrances, vehicle tracking controls and tire wash facilities can help reduce the necessary frequency of street sweeping and vacuuming.

On smaller construction sites, street sweeping can be conducted manually using a shovel and broom. Never wash accumulated sediment on roadways into storm drains.



Photograph SS-1. A street sweeper removes sediment and potential pollutants along the curb line at a construction site. Photo courtesy of Tom Gore.

Maintenance and Removal

- Inspect paved roads around the perimeter of the construction site on a daily basis and more frequently, as needed. Remove accumulated sediment, as needed.
- Following street sweeping, check inlet protection that may have been displaced during street sweeping.
- Inspect area to be swept for materials that may be hazardous prior to beginning sweeping operations.

Street Sweeping/ Vacuuming	
Functions	
Erosion Control	No
Sediment Control	Yes
Site/Material Management	Yes

Description

Manage runoff from paving and grinding operations to reduce pollutants entering storm drainage systems and natural drainageways.

Appropriate Uses

Use runoff management practices during all paving and grinding operations such as surfacing, resurfacing, and saw cutting.

Photograph PGO-1. Paving operations on a Colorado highway. Photo courtesy of CDOT.

Design and Installation

There are a variety of management strategies that can be used to manage runoff from paving and grinding operations:

- Establish inlet protection for all inlets that could potentially receive runoff.
- Schedule paving operations when dry weather is forecasted.
- Keep spill kits onsite for equipment spills and keep drip pans onsite for stored equipment.
- Install perimeter controls when asphalt material is used on embankments or shoulders near waterways, drainages, or inlets.
- Do not wash any paved surface into receiving storm drain inlets or natural drainageways. Instead, loose material should be swept or vacuumed following paving and grinding operations.
- Store materials away from drainages or waterways.
- Recycle asphalt and pavement material when feasible. Material that cannot be recycled must be disposed of in accordance with applicable regulations.

See BMP Fact Sheets for Inlet Protection, Silt Fence and other perimeter controls selected for use during paving and grinding operations.

Maintenance and Removal

Perform maintenance and removal of inlet protection and perimeter controls in accordance with their respective fact sheets.

Promptly respond to spills in accordance with the spill prevention and control plan.

Paving and Grinding Operations	
Functions	
Erosion Control	No
Sediment Control	No
Site/Material Management	Yes

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ph: 303.632.8867

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1	1ST SUBMITTAL	11/01/2024	MM
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NOT FOR CONSTRUCTION

MAIN STREET OFF-STREET PARKING LOT
TOWN OF ELIZABETH, COLORADO
CONSTRUCTION DOCUMENTS
DETAILS

Know what's below. Call before you dig. 811

SHEET 31 OF 31

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FINAL DRAINAGE REPORT

FOR

Main Street Depot Parking Lot
Town of Elizabeth, Colorado

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151 S Banner St, P.O. Box 159
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January 2025

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I. GENERAL LOCATION AND DESCRIPTION

A. Site Location

This Final Drainage Report provides remediation for changes in the drainage patterns resulting from the construction of the infrastructure components for the development of the Main Street Depot Parking Lot, from here on known as "Site". The Site includes a parking lot, sidewalks, a public restroom, existing commercial development, and an Extended Detention Basin (EDB). The restroom will have the ability to be expanded in the future.

The Site is bound to the west by Main Street, to the north by the Alpaca Center and existing apartments, to the south by the lot to the south of Spruce Street, and to the east by Elizabeth Park. It is located within Section 18, Township 8 South, Range 64 West of the 6th Principal Meridian, Elbert County, Colorado. A vicinity map for the Site can be found in Appendix A.

B. Description of Property

The Site is approximately 3 acres consisting of gravel trails, storage buildings, and open space with varying levels of vegetation. The project will include the creation of a parking lot, sidewalks, a public restroom, and an EDB. The Site is primarily Nunn clay loam and Bresser sandy loam land. These soil types are a part of the Type C and B hydrologic soil groups, respectively. A soils map has been provided and can be found in Appendix A.

The Site currently flows to Running Creek on the east side of the Site. The tributary flows south to north and eventually drains to Box Elder Creek, which eventually drains into the South Platte River. To the east of the Site, there are two existing culverts that convey the flows under the existing trail, and ultimately to Running Creek. These culverts will not be impacted by this development.

The Site falls within Zone X, as shown on the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) panel 08039C0480C. A FIRMette map can be found in Appendix A. There are no wetlands within or adjacent to the Site.

II. DRAINAGE BASINS AND SUB-BASINS

A. Major Drainage Basins

The existing drainage patterns within the major basin will generally follow the historic patterns. The development lies within the South Platte River Major Basin. Running Creek extends from the Southern boundary of Elbert County to the south through Spring Valley Golf Course to the north of the Site, where the flows will enter Box Elder Creek. Once the flows reach Box Elder Creek, it will be conveyed north and eventually flow into the South Platte River.

The redevelopment of the site will have minor impacts on the existing drainage as the runoff will be captured by an EDB and released below historic rates. This proposed EDB will be owned and maintained by the Town of Elizabeth.

B. Minor Drainage Basins

Minor Drainage Basins for the Site have been delineated using the existing and proposed site plan and grading for the development. Overall, the proposed drainage patterns for the sub-basins will generally follow the historic patterns prior to development. The developed minor basins will include overland flow and storm sewer collection systems which will direct stormwater to the proposed EDB. The EDB will release runoff below historic rates into Running Creek. Minor basins have been established for the Site, and are described below:

Sub-Basin F

Sub-basin F is 0.80 acres comprised of sidewalks, an existing gravel trail, and a proposed EDB. Runoff generated within the basin will sheet flow into the pond and drain to the east to the pond's outlet structure at Design Point F. Pond F's outlet structure will convey flows to the east into Running Creek.

The pond has been designed to store 0.371 acre-feet with a maximum depth of 4.04 feet for a 100-year storm. The 100-year storm predeveloped peak flow is 3.8 cfs and the pond outlet structure has been sized to release at 3.3 cfs. The MHFD detention basin design workbook (MHFD-Detention, Version 4.06, July 2022) was used to design EDB Pond F, and the output files for EDB Pond F have been included in Appendix D.

Sub-Basin F1

Sub-basin F1 is 1.80 acres comprised of sidewalks, a parking lot, and existing commercial development. Runoff generated within the basin will drain east to an on-grade Type R Inlet at Design Point F1. The captured runoff will be conveyed north via the proposed subsurface system to Design Point F2, and it will ultimately be discharged into proposed EDB Pond F. If the inlet were to get clogged, runoff would bypass the inlet and be received by a sump Type R Inlet at Design Point F2.

Sub-Basin F2

Sub-basin F2 is 0.68 acres comprised of sidewalks, a parking lot, and existing commercial development. Runoff generated within the basin will drain east to a sump Type R Inlet at Design Point F2. The captured runoff will be conveyed east via the proposed subsurface system to proposed EDB pond F. If the inlet were to get clogged, runoff would overtop the curb and sheet flow to proposed EDB pond F.

Sub-Basin OS1

Sub-basin OS1 is 0.21 acres comprised of open space and a portion of proposed sidewalk. Runoff generated within the basin will sheet flow east to Running Creek. To account for this direct runoff, EDB Pond F was sized to receive the runoff from this basin.

III. DRAINAGE DESIGN CRITERIA

A. Regulations

This Final Drainage Report is in accordance with the Town of Elizabeth Storm Drainage Design and Technical Criteria (Ref. D), and the Mile High Flood District (MHFD) Storm Drainage Criteria Manual (Ref. A, B, C). These manuals were used as a basis of design for the Site. All applicable figures, tables, and graphs from these manuals have been included in the Appendices. The report will analyze the minor (5-year) and major (100-year) storm events.

The design of the EDB is compliant with the Colorado Revised Statute 37-92-602 (8) pertaining to stormwater and detention facilities. In addition, per the new statute, the maximum micropool volume will be no greater than 1% of the 100-year volume including water quality.

The drainage design of The Project adheres to the requirements of Section 404 of the Clean Water Act, Section 106 of the National Historic Preservation Act of 1966 and the Endangered Species Act. Additionally, the drainage design conforms to all applicable local, state, and federal requirements for drainage design and stormwater discharge.

B. Development Criteria Reference and Constraints

There are no previous drainage studies associated with the Site. This report has been written as a standalone report.

C. Hydrologic Criteria

All the proposed minor drainage basins within The Project are less than 160 acres; therefore, the rational method can be used to determine the flow rates for the Site. The sub-basins were delineated based on the existing and proposed topography developed for the project. Impervious calculations were based on the values from the Mile High Flood District's Street Drainage Criteria Manual Volume 3 (revised March 2024). Flow rates for each basin can be found in Appendix B.

The intensity-frequency curves used in the rational method calculations were taken from the NOAA Atlas 14, which can be found in Appendix A. All drainage facilities were analyzed and designed for both the minor (5-year) and major (100-year) storm events. Time of concentration calculations were used to determine the rainfall intensity. These calculations can also be found in Appendix B.

D. Hydraulic Criteria

Street and inlet capacity design were performed and based on design spreadsheets provided by the MHFD which can be found in Appendix C.

Hydraulic grade lines and storm pipe capacities were designed and modeled using StormCAD. StormCAD uses the routed hydrograph method and the Manning's equation to compute the hydraulic grade line throughout a pipe network. See Appendix C for the StormCAD Output Tables and keymap.

Hydraulic calculations for EDB sizing and outlet structure design were based on MHFD design spreadsheets and can be found in Appendix D.

E. Stormwater Quality Criteria

Water quality measures have been included with the design of a concrete sediment pad and a proposed EDB, and these calculations can be found in Appendix D. The pond was designed as an EDB which includes a structure that releases flows for the water quality capture volume (WQCV), Excess Urban Runoff Volume (EURV), and the 100-year storm event.

IV. DRAINAGE FACILITY DESIGN

A. General Concept

Low Impact Development (LID) practices and strategies have been applied to the comprehensive land planning and engineering design approach to managing stormwater runoff. The primary objective of the Project is the preservation of the natural features of the property by arranging the development to minimize site grading, impacts to existing vegetation and wetlands, as well as providing large open space areas. The drainage design will generally maintain the historic drainage patterns and release rates for the Site. The EDB on Site has been located to minimize subsurface systems and control the developed discharge prior to entering the established waterways thus reducing the impact on Running Creek. Furthermore, the EDB was located next to an existing maintenance access, which will be used for maintenance of the pond. The EDB will discharge less than historical rates via a pipe from the outlet structure to Running Creek.

B. Specific Details

The Site will utilize a proposed EDB for water quality and detention storage. The EDB was located next to an existing maintenance access, which will be used for maintenance of the pond. The pond was designed as an EDB, which will release flows for water quality capture volume (WQCV), excess urban runoff volume (EURV), and the 100-year storm event. The pond's outlet structure will release flows below historic rates per the criteria. The EDB was calculated using the MHFD detention basin design workbook (MHFD-Detention, Version 4.06, July 2022). A copy of the output file for the ponds has been included in Appendix D.

The design of the EDB is compliant with the Colorado Revised Statute 37-92-602 (8) pertaining to stormwater and detention facilities. The applicable MHFD spreadsheet and calculations are in Appendix D. In addition, per the new statute, the maximum micropool volume will be no greater than 1% of the 100-year volume including water quality.

A concrete sediment pad was designed for the proposed EDB to help with water quality measures. A concrete sediment pad was used instead of a conventional forebay because this inflow point received less than 2 impervious acres, which is the new recommendation for forebays per MHFD's USDCM V.3 (Ref. D) section 5.2.2. A copy of the output file for the concrete sediment pad has been included in Appendix D.

There will be minimal impacts on downstream properties from the improvements within the Site because the runoff generated within the parking lot will be captured by proposed subsurface infrastructure before sheet flowing to the existing culverts. The outlet structure will release the pond's flows parallel to the existing culvert to the east of the pond, thereby not impacting the historic flow patterns of this area. The water quality of the flows released to Running Creek will improve because the runoff from the Site will be treated by the proposed EDB before being discharged into Running Creek instead of being conveyed directly to the creek via the existing culverts.

C. Variances

No variances associated with the proposed drainage design have been requested.

V. CONCLUSIONS

A. Compliance with Standards

The drainage design for the Site conforms to the Town of Elizabeth's Storm Drainage Design and Technical Criteria and the Mile High Flood Districts' Drainage Criteria Manual where applicable.

The design of the EDB is compliant with the Colorado Revised Statute 37-92-602 (8) pertaining to stormwater and detention facilities. In addition, per the new statute, the maximum micropool volume will be no greater than 1% of the 100-year volume including water quality.

The drainage design of The Project adheres to the requirements of Section 404 of the Clean Water Act, Section 106 of the National Historic Preservation Act of 1966 and the Endangered Species Act. Additionally, the drainage design conforms to all applicable local, state, and federal requirements for drainage design and stormwater discharge.

B. Discussion of Final Drainage Concept

The rational method was used to determine the developed runoff values for the minor drainage basins throughout the Site. These basins were delineated based on the natural Site topography and the developed Site plan. A proposed EDB and a concrete sediment pad will be used to improve the stormwater quality of the runoff leaving the Site. The proposed EDB was sized for a 100-year storm and will release below historic rates. The redevelopment of the site will have minor impacts on the existing drainage as the runoff will be captured by an EDB and released below historic rates. This report has been written as a standalone report.

Engineer's Statement:

This report for the final drainage design of the Main Street Depot Parking Lot, was prepared by me (or under my direct supervision) in accordance with the provisions of Town of Elizabeth Storm Drainage Design and Technical Criteria, and was designed to comply with the provisions thereof. I understand that the Town of Elizabeth does not and will not assume liability for drainage facilities designed by others.

_____

Martin Metsker, P.E.
Colorado Professional Engineer
License #41743

Owner/Developer's Statement:

The Town of Elizabeth hereby affirms that the drainage facilities for Main Street Depot Parking Lot shall be constructed according to the design presented in this report and plan. I understand that the Town of Elizabeth does not and will not assume liability for drainage facilities designed and/or certified by my engineer. I understand that the Town of Elizabeth reviews drainage reports and plans but cannot, on behalf of The Town of Elizabeth and/or their successors and/or assigns, absolve same of future liability for improper design.

_____

Town of Elizabeth Community Development Director

_____

Printed Name

VI. REFERENCES

A) MHFD (Mile High Flood District). 2018. Urban Storm Drainage Criteria Manual. Volume 1: Management, Hydrology and Hydraulics. Revised March 2024. https://mhfd.org/resources/criteria-manual.

B) MHFD. 2017. Urban Storm Drainage Criteria Manual. Volume 2: Structures, Storage and Recreation. Revised September 2017. https://mhfd.org/resources/criteria-manual.

C) MHFD. 2010. Urban Storm Drainage Criteria Manual. Volume 3: Stormwater Best Management Practices. Revised November 2010. https://mhfd.org/resources/criteria-manual.

D) Town of Elizabeth. Site Development Storm Drainage Design and Technical Criteria for the Town of Elizabeth, Colorado. Department of Public Works. https://www.townofelizabeth.org/media/4806

E) Computer Programs:

Street and Inlet Hydraulics Workbook by MHFD, V.5.03, August 2023

Detention Basin Design workbook by MHFD, V.4.06, July 2022

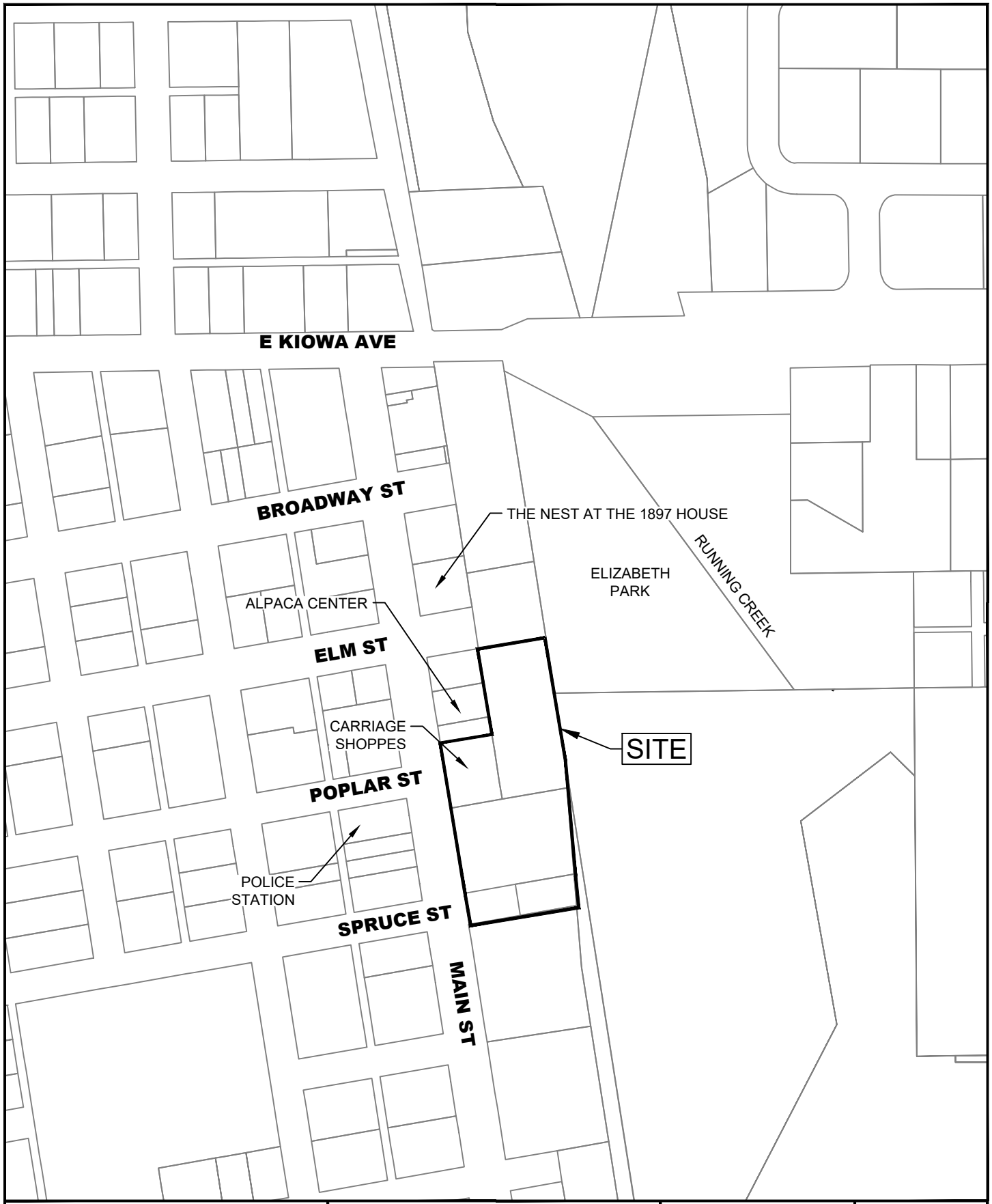
Stormwater Control Measures Design workbook by MHFD, V.400, April 2024

Open Flows StormCAD CONNECT Edition 4 by Bentley Systems. February 2023.

APPENDIX A

General Maps

Vicinity Map
Soil Map
Firm Map
NOAA Atlas 14 Results



terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

MAIN ST DEPOT PARKING VICINITY MAP

TOWN OF ELIZABETH DATE: 10/8/2024

0 250'

1" = 250'

N

10/16/2024 12:37 PM ; X:\TOWN OF ELIZABETH\DOCUMENTS\REPORTS\DRAINAGE\00 - MAIN ST PARKING LOT - RESEARCH\A1 - MAPS (VIC-FEMA-SOILS)\VICINITY MAP.DWG;

Hydrologic Soil Group—Elbert County, Colorado, Western Part
(Elizabeth Parking Lot)

Map Scale: 1:954 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 10 20 40 60

Feet: 0 45 90 180 270

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 13N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Lines

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Soil Rating Points

A
A/D
B
B/D
C
C/D
D
Not rated or not available

Water Features

Streams and Canals

Transportation

Rails
Interstate Highways
US Routes
Major Roads
Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Elbert County, Colorado, Western Part
Survey Area Data: Version 19, Aug 24, 2023

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 9, 2021—Jun 12, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
6	Bresser sandy loam, cool, 5 to 9 percent slopes	B	0.7	23.9%
32	Nunn clay loam, 0 to 4 percent slopes	C	2.2	76.1%
Totals for Area of Interest			**2.9**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

National Flood Hazard Layer FIRMette

FEMA

104°35'59"W 39°21'46"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

104°35'21"W 39°21'18"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS
- Without Base Flood Elevation (BFE) *Zone A, V, A99*
- With BFE or Depth *Zone AE, AO, AH, VE, AR*
- Regulatory Floodway

OTHER AREAS OF FLOOD HAZARD
- 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile *Zone X*
- Future Conditions 1% Annual Chance Flood Hazard *Zone X*
- Area with Reduced Flood Risk due to Levee. See Notes. *Zone X*
- Area with Flood Risk due to Levee *Zone D*

OTHER AREAS
- NO SCREEN Area of Minimal Flood Hazard *Zone X*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

GENERAL STRUCTURES
- Channel, Culvert, or Storm Sewer
- Levee, Dike, or Floodwall

OTHER FEATURES
- 20.2 Cross Sections with 1% Annual Chance
- 17.5 Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 10/16/2024 at 2:43 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

NOAA Atlas 14, Volume 8, Version 2
Location name: Elizabeth, Colorado, USA*
Latitude: 39.3606°, Longitude: -104.5965°
Elevation: 6471 ft**
* source: ESRI Maps
** source: USGS

POINT PRECIPITATION FREQUENCY ESTIMATES

Sanja Perica, Deborah Martin, Sandra Pavlovic, Ishani Roy, Michael St. Laurent, Carl Trypaluk, Dale Unruh, Michael Yekta, Geoffery Bonnin

NOAA, National Weather Service, Silver Spring, Maryland

PF_tabular | PF_graphical | Maps_&_aerials

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches)[1]

Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	**0.231** (0.188-0.286)	**0.287** (0.233-0.355)	**0.382** (0.309-0.474)	**0.465** (0.374-0.580)	**0.586** (0.458-0.758)	**0.685** (0.521-0.892)	**0.788** (0.578-1.05)	**0.896** (0.630-1.22)	**1.05** (0.707-1.45)	**1.17** (0.765-1.63)
10-min	**0.338** (0.275-0.419)	**0.420** (0.341-0.520)	**0.559** (0.452-0.694)	**0.681** (0.548-0.849)	**0.859** (0.670-1.11)	**1.00** (0.762-1.31)	**1.15** (0.846-1.53)	**1.31** (0.923-1.78)	**1.53** (1.04-2.12)	**1.71** (1.12-2.38)
15-min	**0.413** (0.335-0.511)	**0.512** (0.415-0.634)	**0.682** (0.552-0.847)	**0.831** (0.668-1.04)	**1.05** (0.817-1.35)	**1.22** (0.930-1.59)	**1.41** (1.03-1.87)	**1.60** (1.12-2.17)	**1.87** (1.26-2.59)	**2.08** (1.37-2.91)
30-min	**0.561** (0.456-0.695)	**0.696** (0.565-0.863)	**0.927** (0.750-1.15)	**1.13** (0.908-1.41)	**1.42** (1.11-1.84)	**1.66** (1.26-2.16)	**1.91** (1.40-2.53)	**2.17** (1.52-2.94)	**2.53** (1.71-3.50)	**2.82** (1.85-3.93)
60-min	**0.703** (0.571-0.871)	**0.864** (0.701-1.07)	**1.15** (0.927-1.42)	**1.40** (1.12-1.74)	**1.77** (1.38-2.29)	**2.07** (1.58-2.71)	**2.40** (1.76-3.19)	**2.74** (1.93-3.73)	**3.23** (2.18-4.48)	**3.62** (2.37-5.05)
2-hr	**0.844** (0.690-1.04)	**1.03** (0.843-1.27)	**1.36** (1.11-1.68)	**1.67** (1.35-2.06)	**2.12** (1.67-2.73)	**2.49** (1.91-3.24)	**2.89** (2.14-3.83)	**3.32** (2.36-4.49)	**3.93** (2.68-5.43)	**4.42** (2.92-6.13)
3-hr	**0.931** (0.763-1.14)	**1.13** (0.924-1.38)	**1.49** (1.21-1.82)	**1.81** (1.47-2.23)	**2.31** (1.83-2.98)	**2.73** (2.10-3.54)	**3.18** (2.37-4.20)	**3.67** (2.62-4.95)	**4.37** (2.99-6.02)	**4.93** (3.28-6.82)
6-hr	**1.11** (0.912-1.34)	**1.33** (1.09-1.62)	**1.73** (1.42-2.11)	**2.11** (1.72-2.58)	**2.68** (2.14-3.44)	**3.17** (2.46-4.08)	**3.70** (2.77-4.86)	**4.28** (3.07-5.73)	**5.10** (3.52-6.98)	**5.77** (3.86-7.93)
12-hr	**1.33** (1.10-1.60)	**1.59** (1.32-1.92)	**2.06** (1.70-2.48)	**2.48** (2.04-3.01)	**3.12** (2.51-3.96)	**3.67** (2.86-4.68)	**4.25** (3.20-5.53)	**4.88** (3.53-6.49)	**5.78** (4.02-7.85)	**6.51** (4.39-8.88)
24-hr	**1.59** (1.33-1.91)	**1.89** (1.58-2.27)	**2.42** (2.01-2.90)	**2.89** (2.39-3.48)	**3.59** (2.89-4.50)	**4.17** (3.27-5.27)	**4.79** (3.63-6.17)	**5.45** (3.96-7.18)	**6.38** (4.46-8.59)	**7.12** (4.84-9.66)
2-day	**1.88** (1.57-2.23)	**2.22** (1.86-2.63)	**2.80** (2.34-3.34)	**3.32** (2.75-3.97)	**4.07** (3.29-5.04)	**4.68** (3.69-5.86)	**5.32** (4.06-6.79)	**6.00** (4.39-7.84)	**6.95** (4.89-9.28)	**7.70** (5.27-10.4)
3-day	**2.04** (1.72-2.41)	**2.42** (2.03-2.86)	**3.05** (2.56-3.62)	**3.61** (3.01-4.30)	**4.41** (3.57-5.43)	**5.06** (3.99-6.28)	**5.73** (4.38-7.27)	**6.43** (4.72-8.35)	**7.41** (5.23-9.84)	**8.18** (5.62-11.0)
4-day	**2.17** (1.83-2.56)	**2.57** (2.17-3.03)	**3.24** (2.72-3.84)	**3.83** (3.20-4.54)	**4.66** (3.78-5.72)	**5.34** (4.23-6.61)	**6.04** (4.62-7.63)	**6.77** (4.98-8.75)	**7.77** (5.51-10.3)	**8.56** (5.90-11.5)
7-day	**2.52** (2.14-2.96)	**2.95** (2.50-3.46)	**3.67** (3.10-4.31)	**4.29** (3.60-5.06)	**5.19** (4.23-6.33)	**5.92** (4.71-7.28)	**6.66** (5.14-8.38)	**7.45** (5.52-9.59)	**8.54** (6.09-11.2)	**9.39** (6.52-12.5)
10-day	**2.84** (2.41-3.31)	**3.28** (2.78-3.83)	**4.04** (3.41-4.72)	**4.69** (3.95-5.51)	**5.63** (4.61-6.83)	**6.39** (5.11-7.84)	**7.18** (5.55-8.99)	**8.01** (5.95-10.3)	**9.15** (6.55-12.0)	**10.0** (7.00-13.3)
20-day	**3.73** (3.19-4.32)	**4.26** (3.64-4.94)	**5.15** (4.39-5.98)	**5.92** (5.01-6.89)	**7.00** (5.75-8.40)	**7.86** (6.31-9.54)	**8.74** (6.80-10.8)	**9.65** (7.22-12.3)	**10.9** (7.86-14.2)	**11.9** (8.34-15.6)
30-day	**4.50** (3.86-5.18)	**5.13** (4.40-5.92)	**6.18** (5.28-7.14)	**7.05** (5.99-8.18)	**8.26** (6.80-9.85)	**9.21** (7.42-11.1)	**10.2** (7.93-12.5)	**11.1** (8.35-14.1)	**12.4** (8.99-16.1)	**13.4** (9.48-17.6)
45-day	**5.50** (4.73-6.31)	**6.29** (5.41-7.22)	**7.56** (6.48-8.70)	**8.60** (7.33-9.93)	**10.0** (8.24-11.8)	**11.1** (8.93-13.2)	**12.1** (9.46-14.8)	**13.1** (9.88-16.5)	**14.5** (10.5-18.6)	**15.5** (11.0-20.2)
60-day	**6.37** (5.50-7.28)	**7.31** (6.30-8.37)	**8.80** (7.56-10.1)	**10.0** (8.54-11.5)	**11.6** (9.54-13.6)	**12.7** (10.3-15.1)	**13.8** (10.8-16.8)	**14.9** (11.2-18.6)	**16.3** (11.8-20.8)	**17.2** (12.3-22.5)

[1] Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

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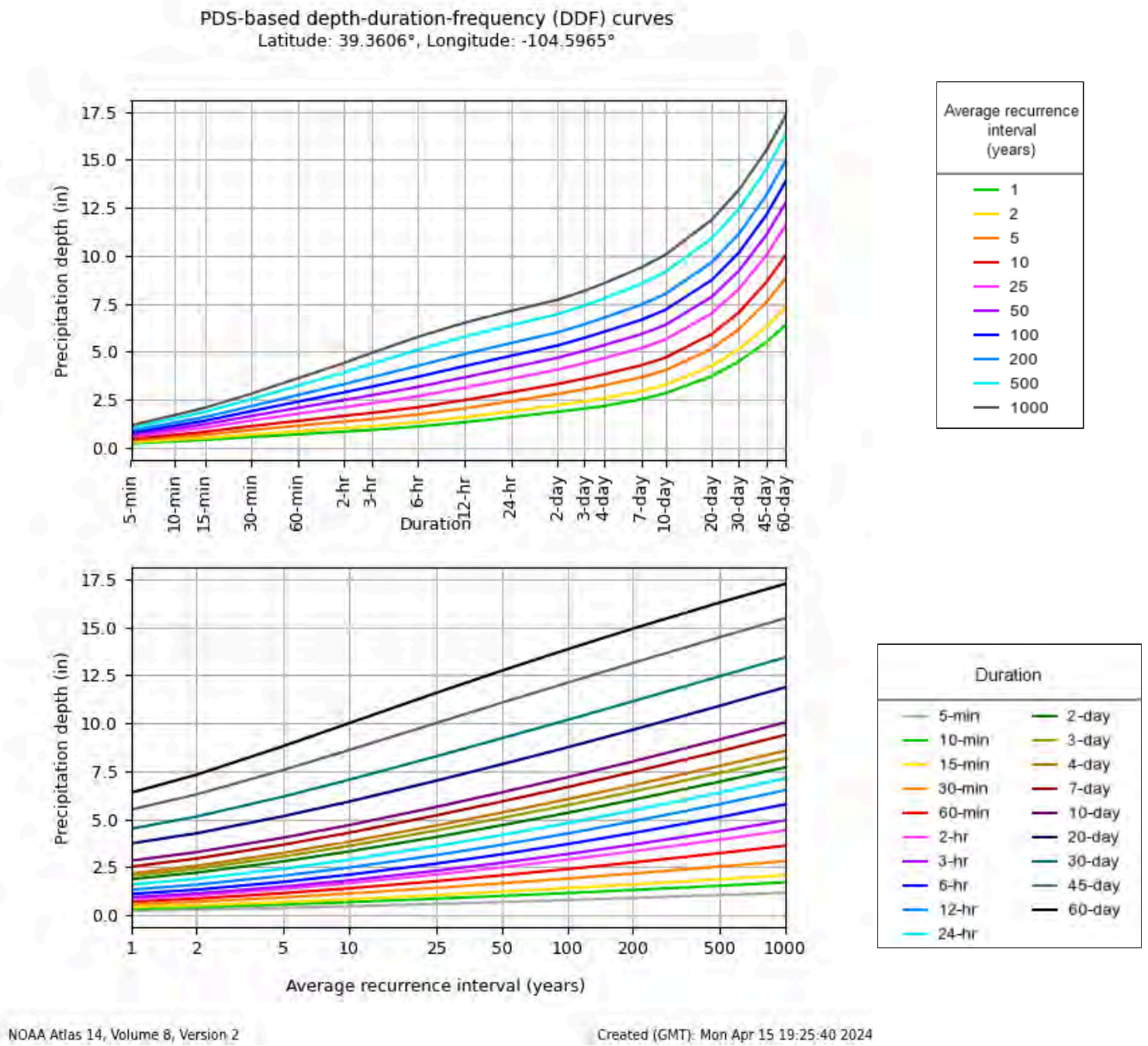
PF graphical



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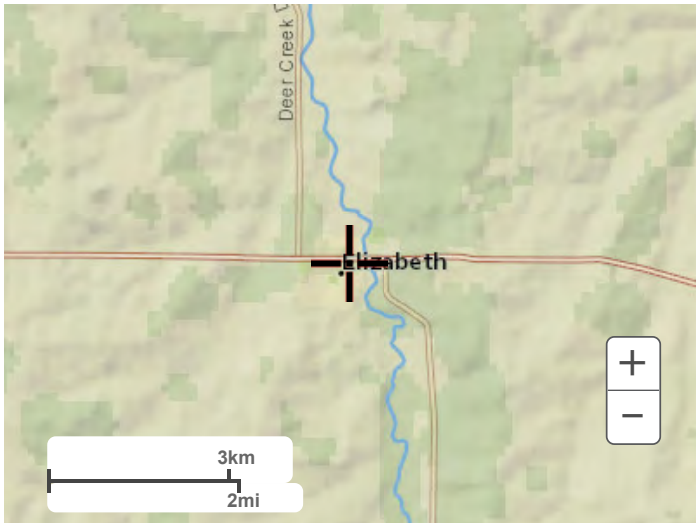
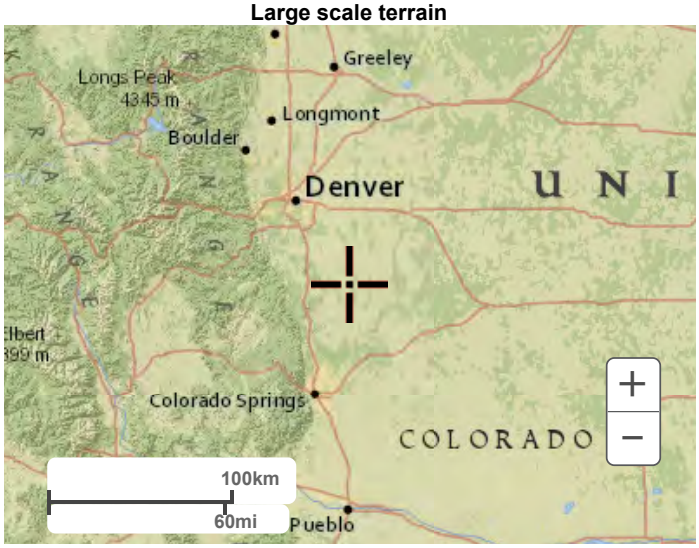
Maps & aerials

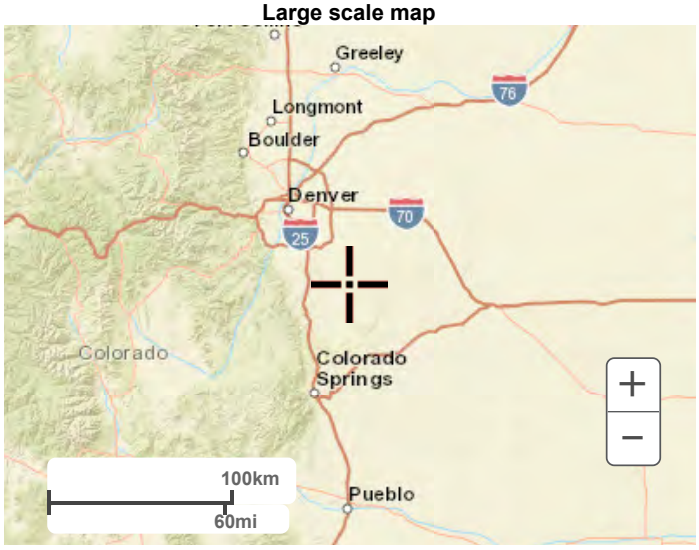
Small scale terrain



Large scale terrain



Large scale map



Large scale aerial

APPENDIX B
HYDROLOGIC COMPUTATIONS

Percent Imperviousness
Runoff Coefficient
Time of Concentration
Minor Storm Rational Method
Major Storm Rational Method

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph. 303.632.8867

Project Name: Elizabeth Main St Parking Lot
Prepared By: JNS

Percent Impervious Calculations

Basin Id	Design Point	Basin Area (Ac)	Historic Area	Paved Street, Roof, Drives,	Commercial Area	Gravel Area	EDB Area						Weighted % Impervious
			5%	95%	65%	40%	25%						
F1	F1	1.80	0.15	0.91	0.74								75.3%
F2	F2	0.68	0.04	0.33	0.31								76.4%
F	F	0.80	0.47	0.02		0.10	0.21						16.7%
OS1	OS1	0.21	0.20	0.01									8.9%
Pond F	Pond F	3.48	0.85	1.27	1.05	0.10	0.21						58.2%

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Project Name: Elizabeth Main St Parking Lot
Prepared By: JNS

Runoff Coefficent (C)

Runoff Coefficient calculations based on MHFD Volume 1: Chapter 6, Table 6-4 equations

Basin Id	Weighted % Impervious	i	Soil Type	Soil Type Area	Basin Area (Ac)	Runoff Coefficients, C							Weighted Coefficients, C						
						5-Year	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year	5-Year	2-Year	5-Year	10-Year	25-Year	50-Year	100-Year
F1	75.3%	0.75	A	0.00	1.80	0.60	0.58	0.60	0.62	0.64	0.67	0.70	0.65	0.61	0.65	0.68	0.74	0.76	0.79
			B	0.07		0.63	0.60	0.63	0.66	0.72	0.75	0.78							
			C/D	1.73		0.65	0.61	0.65	0.69	0.74	0.77	0.79							
F2	76.4%	0.76	A	0.00	0.68	0.61	0.59	0.61	0.63	0.65	0.68	0.70	0.65	0.61	0.65	0.68	0.74	0.76	0.79
			B	0.35		0.64	0.61	0.64	0.67	0.73	0.75	0.78							
			C/D	0.32		0.66	0.62	0.66	0.69	0.75	0.77	0.80							
F	16.7%	0.17	A	0.00	0.80	0.09	0.08	0.09	0.10	0.12	0.17	0.24	0.15	0.11	0.15	0.23	0.39	0.46	0.54
			B	0.27		0.12	0.10	0.12	0.19	0.35	0.42	0.50							
			C/D	0.53		0.17	0.11	0.17	0.25	0.41	0.48	0.55							
OS1	8.9%	0.09	A	0.00	0.21	0.04	0.04	0.04	0.04	0.06	0.10	0.18	0.06	0.05	0.06	0.13	0.30	0.38	0.47
			B	0.21		0.06	0.05	0.06	0.13	0.30	0.38	0.47							
			C/D	0.00		0.11	0.06	0.11	0.20	0.37	0.44	0.52							

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Time of Concentration Calculations (T_C)

Sub-Basin Data			Initial or Overland Flow Time				Channelized Flow Time				T_c Check (Urbanized Basins)					
Basin Id	Basin Area (Ac)	C(5)	Length (ft)	Elev Change	Slope (%)	T_i (min)	Length (ft)	Elev Change	Slope (%)	NRCS Coeff. K	Velocity (FPS)	T_t (min)	Comp. T_c	Percent Imperv.	MHFD Eq. 6.5	$Final\ T_c$ (min)
F1	1.80	0.65	152	5	3.3	6.78	474	5	1.1	20.0	2.07	3.8	10.6	75.3%	17.1	10.6
F2	0.68	0.65	42	2	3.9	3.36	283	8	2.7	20.0	3.32	1.4	4.8	76.4%	14.5	5.0
F	0.80	0.15	223	10	4.5	15.47	103	1	1.3	20.0	2.25	0.8	16.2	16.7%	24.5	16.2
OS1	0.21	0.06	33	2	6.1	5.94	34	4	10.2	20.0	6.39	0.1	6.0	8.9%	24.7	6.0

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Peak Runoff Rational Method (5-Year)

			Rainfall Depth-Duration-Frequency (1-hr) =				1.15
Design Point	**Basin ID**	**Basin Area (Ac)**	**Runoff Coeff (5-Year)**	**T_c (min)**	**C X A**	**I (in/hr)**	**Q (cfs)**
F1	F1	1.80	0.65	10.6	1.16	3.04	3.54
F2	F2	0.68	0.65	5.0	0.44	3.90	1.71
F	F	0.80	0.15	16.2	0.12	2.51	0.31
OS1	OS1	0.21	0.06	6.0	0.01	3.70	0.05

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Project Name: Elizabeth Main St Parking Lot

Prepared By: JNS

Peak Runoff Rational Method (100-Year)

			Rainfall Depth-Duration-Frequency (1-hr) =				2.40
Design Point	**Basin ID**	**Basin Area (Ac)**	**Runoff Coeff (100-Year)**	**T_c (min)**	**C X A**	**I (in/hr)**	**Q (cfs)**
F1	F1	1.80	0.79	10.6	1.42	6.34	9.02
F2	F2	0.68	0.79	5.0	0.53	8.14	4.34
F	F	0.80	0.54	16.2	0.43	5.25	2.24
OS1	OS1	0.21	0.47	6.0	0.10	7.73	0.74

APPENDIX C
HYDRAULIC CALCULATIONS

Inlet Management
Inlet Calculations

StormCAD Key Map
StormCAD Output Tables

MHFD-Inlet, Version 5.03 (August 2023)

INLET MANAGEMENT

Worksheet Protected

INLET NAME	Inlet F1	Inlet F2
Site Type (Urban or Rural)	URBAN	URBAN
Inlet Application (Street or Area)	STREET	STREET
Hydraulic Condition	On Grade	In Sump
Inlet Type	CDOT Type R Curb Opening	CDOT Type R Curb Opening

USER-DEFINED INPUT

User-Defined Design Flows

Minor Q_{Known} (cfs)	3.5	1.7
Major Q_{Known} (cfs)	9.0	4.3

Bypass (Carry-Over) Flow from Upstream — Inlets must be organized from upstream (left) to downstream (right) in order for byp

Receive Bypass Flow from:	No Bypass Flow Received	Inlet F1
Minor Bypass Flow Received, Q_b (cfs)	0.0	0.0
Major Bypass Flow Received, Q_b (cfs)	0.0	2.4

Watershed Characteristics

Subcatchment Area (acres)		
Percent Impervious		
NRCS Soil Type		

Watershed Profile

Overland Slope (ft/ft)		
Overland Length (ft)		
Channel Slope (ft/ft)		
Channel Length (ft)		

Minor Storm Rainfall Input

Design Storm Return Period, T_r (years)		
One-Hour Precipitation, P_1 (inches)		

Major Storm Rainfall Input

Design Storm Return Period, T_r (years)		
One-Hour Precipitation, P_1 (inches)		

CALCULATED OUTPUT

Minor Total Design Peak Flow, Q (cfs)	3.5	1.7
Major Total Design Peak Flow, Q (cfs)	9.0	6.7
Minor Flow Bypassed Downstream, Q_b (cfs)	0.0	N/A
Major Flow Bypassed Downstream, Q_b (cfs)	2.4	N/A

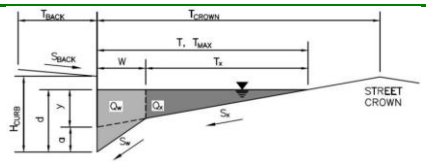
MHFD-Inlet, Version 5.03 (August 2023)

ALLOWABLE CAPACITY FOR ONE-HALF OF STREET (Minor & Major Storm)

(Based on Regulated Criteria for Maximum Allowable Flow Depth and Spread)

Project: Main Street Parking Lot

Inlet ID: Inlet F1



Gutter Geometry:

Maximum Allowable Width for Spread Behind Curb	T_{BACK} =	0.0	ft
Side Slope Behind Curb (leave blank for no conveyance credit behind curb)	S_{BACK} =	0.050	ft/ft
Manning's Roughness Behind Curb (typically between 0.012 and 0.020)	n_{BACK} =	0.013	
Height of Curb at Gutter Flow Line	H_{CURB} =	6.00	inches
Distance from Curb Face to Street Crown	T_{CROWN} =	27.0	ft
Gutter Width	W =	2.00	ft
Street Transverse Slope	S_X =	0.030	ft/ft
Gutter Cross Slope (typically 2 inches over 24 inches or 0.083 ft/ft)	S_W =	0.083	ft/ft
Street Longitudinal Slope - Enter 0 for sump condition	S_O =	0.010	ft/ft
Manning's Roughness for Street Section (typically between 0.012 and 0.020)	n_{STREET} =	0.013	

		Minor Storm	Major Storm	
Max. Allowable Spread for Minor & Major Storm	T_{MAX} =	27.0	27.0	ft
Max. Allowable Depth at Gutter Flowline for Minor & Major Storm	d_{MAX} =	6.0	6.0	inches
Allow Flow Depth at Street Crown (check box for yes, leave blank for no)		☐	☐	

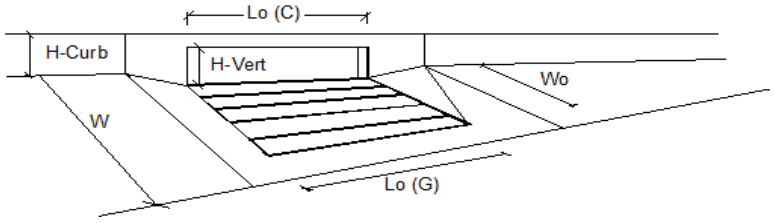
		Minor Storm	Major Storm	
MINOR STORM Allowable Capacity is based on Depth Criterion				
MAJOR STORM Allowable Capacity is based on Depth Criterion	Q_{allow} =	13.1	13.1	cfs

Minor storm max. allowable capacity GOOD - greater than the design peak flow of 3.54 cfs on sheet 'Inlet Management'

Major storm max. allowable capacity GOOD - greater than the design peak flow of 9.02 cfs on sheet 'Inlet Management'

INLET ON A CONTINUOUS GRADE

MHFD-Inlet, Version 5.03 (August 2023)



Design Information (Input)		MINOR	MAJOR	
Type of Inlet	Type =	CDOT Type R Curb Opening		
Local Depression (additional to continuous gutter depression 'a')	a_{LOCAL} =	3.0	3.0	inches
Total Number of Units in the Inlet (Grate or Curb Opening)	No =	2	2	
Length of a Single Unit Inlet (Grate or Curb Opening)	L_o =	5.00	5.00	ft
Width of a Unit Grate (cannot be greater than W, Gutter Width)	W_o =	N/A	N/A	ft
Clogging Factor for a Single Unit Grate (typical min. value = 0.5)	C_f (G) =	N/A	N/A	
Clogging Factor for a Single Unit Curb Opening (typical min. value = 0.1)	C_f (C) =	0.10	0.10	

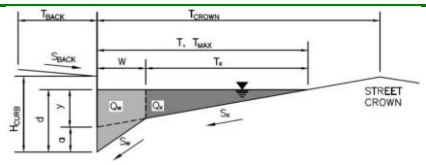
Street Hydraulics: OK - Q < Allowable Street Capacity'		MINOR	MAJOR	
Total Inlet Interception Capacity	Q =	3.5	6.6	cfs
Total Inlet Carry-Over Flow (flow bypassing inlet)	Q_b =	0.0	2.4	cfs
Capture Percentage = Q_a/Q_o	C% =	100	74	%

MHFD-Inlet, Version 5.03 (August 2023)

ALLOWABLE CAPACITY FOR ONE-HALF OF STREET (Minor & Major Storm)

(Based on Regulated Criteria for Maximum Allowable Flow Depth and Spread)

Project: Main Street Parking Lot
Inlet ID: Inlet F2



Gutter Geometry:

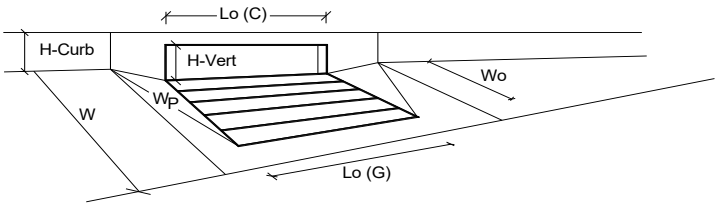
Maximum Allowable Width for Spread Behind Curb	T_{BACK} =	0.0	ft
Side Slope Behind Curb (leave blank for no conveyance credit behind curb)	S_{BACK} =	0.050	ft/ft
Manning's Roughness Behind Curb (typically between 0.012 and 0.020)	n_{BACK} =	0.013	
Height of Curb at Gutter Flow Line	H_{CURB} =	6.00	inches
Distance from Curb Face to Street Crown	T_{CROWN} =	27.0	ft
Gutter Width	W =	2.00	ft
Street Transverse Slope	S_X =	0.030	ft/ft
Gutter Cross Slope (typically 2 inches over 24 inches or 0.083 ft/ft)	S_W =	0.083	ft/ft
Street Longitudinal Slope - Enter 0 for sump condition	S_O =	0.000	ft/ft
Manning's Roughness for Street Section (typically between 0.012 and 0.020)	n_{STREET} =	0.013	

		Minor Storm	Major Storm	
Max. Allowable Spread for Minor & Major Storm	T_{MAX} =	27.0	27.0	ft
Max. Allowable Depth at Gutter Flowline for Minor & Major Storm	d_{MAX} =	6.0	6.0	inches
Check boxes are not applicable in SUMP conditions		☐	☐	

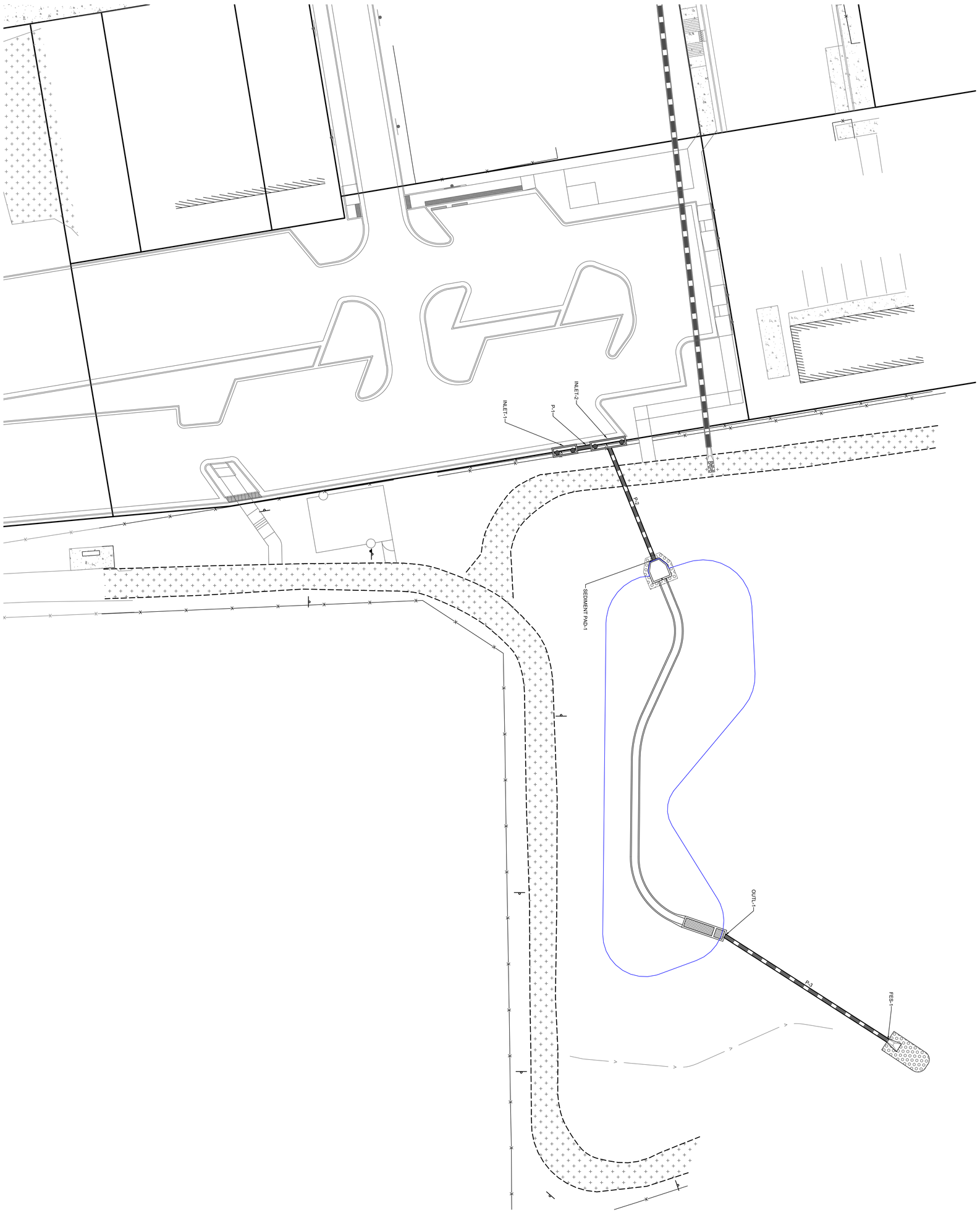
		Minor Storm	Major Storm	
MINOR STORM Allowable Capacity is not applicable to Sump Condition				
MAJOR STORM Allowable Capacity is not applicable to Sump Condition	Q_{allow} =	SUMP	SUMP	cfs

INLET IN A SUMP OR SAG LOCATION

MHFD-Inlet, Version 5.03 (August 2023)



Design Information (Input)		MINOR	MAJOR	
Type of Inlet	Type =	CDOT Type R Curb Opening		
Local Depression (additional to continuous gutter depression 'a' from above)	a_{local} =	3.00	3.00	inches
Number of Unit Inlets (Grate or Curb Opening)	No =	3	3	
Water Depth at Flowline (outside of local depression)	Ponding Depth =	6.0	6.0	inches
Grate Information		MINOR	MAJOR	☐ Override Depths
Length of a Unit Grate	L_o (G) =	N/A	N/A	feet
Width of a Unit Grate	W_o =	N/A	N/A	feet
Open Area Ratio for a Grate (typical values 0.15-0.90)	A_{ratio} =	N/A	N/A	
Clogging Factor for a Single Grate (typical value 0.50 - 0.70)	C_f (G) =	N/A	N/A	
Grate Weir Coefficient (typical value 2.15 - 3.60)	C_w (G) =	N/A	N/A	
Grate Orifice Coefficient (typical value 0.60 - 0.80)	C_o (G) =	N/A	N/A	
Curb Opening Information		MINOR	MAJOR	
Length of a Unit Curb Opening	L_o (C) =	5.00	5.00	feet
Height of Vertical Curb Opening in Inches	H_{vert} =	6.00	6.00	inches
Height of Curb Orifice Throat in Inches	H_{throat} =	6.00	6.00	inches
Angle of Throat	Theta =	63.40	63.40	degrees
Side Width for Depression Pan (typically the gutter width of 2 feet)	W_p =	2.00	2.00	feet
Clogging Factor for a Single Curb Opening (typical value 0.10)	C_f (C) =	0.10	0.10	
Curb Opening Weir Coefficient (typical value 2.3-3.7)	C_w (C) =	3.60	3.60	
Curb Opening Orifice Coefficient (typical value 0.60 - 0.70)	C_o (C) =	0.67	0.67	
Low Head Performance Reduction (Calculated)		MINOR	MAJOR	
Depth for Grate Midwidth	d_{Grate} =	N/A	N/A	ft
Depth for Curb Opening Weir Equation	d_{Curb} =	0.33	0.33	ft
Grated Inlet Performance Reduction Factor for Long Inlets	RF_{Grate} =	N/A	N/A	
Curb Opening Performance Reduction Factor for Long Inlets	RF_{Curb} =	0.79	0.79	
Combination Inlet Performance Reduction Factor for Long Inlets	$RF_{Combination}$ =	N/A	N/A	
		MINOR	MAJOR	
Total Inlet Interception Capacity (assumes clogged condition)	Q_a =	9.7	9.7	cfs
Inlet Capacity IS GOOD for Minor and Major Storms (>Q Peak)	$Q_{PEAK\ REQUIRED}$ =	1.7	6.7	cfs



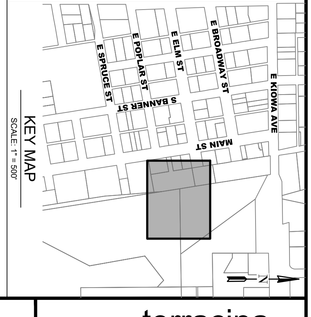
LEGEND

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROJECT BOUNDARY
- RIGHT OF WAY (ROW)
- EASEMENT
- LOT BOUNDARY
- CONCRETE
- MAINTENANCE ACCESS (GRAVEL) ROAD
- RIPRAP
- SOIL RIPRAP
- STORM (FES, MH, & INLET)
- SANITARY
- WATER (HYDRANT, VALVE, BEND, MH)
- FOREBAY
- STORM INLETS (TYPE C, D, 13, & R)
- STORM 100 YEAR HGL
- EX STORM (FES, MH, & INLET)
- EXISTING UTILITY
- EXISTING SWALE
- EXISTING SIGN
- EXISTING WATER
- EXISTING FENCE
- EXISTING POWER POLE & GUY WIRE
- EX WATER MH, METER, & VENT PIPE
- EX WATER VALVE & HYDRANT

0 20' 40'
1 inch = 20'

N

KEY MAP
SCALE: 1" = 500'



1 OF 1	11/4/2024	0 1" = 20' 20' N	TOWN OF ELIZABETH MAIN ST. DEPOT PARKING LOT	STORMCAD KEYMAP

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STORMCAD OUTPUT TABLES

Main Street Depot - 5-Year

Catchment Table - Time: 0.00 hours

Label	Outflow Element	Area (acres)	Runoff Coeff.	Time of C (min)	Catchment CA (acres)	Intensity (in/h)	Flow (cfs)
F1	INLET-1	1.770	0.650	10.600	1.151	2.960	3.43
F2	INLET-2	0.680	0.650	5.000	0.442	3.799	1.69

Catch Basin Table - Time: 0.00 hours

Label	Rim (ft)	Invert (ft)	Flow (cfs)	HGL (In) (ft)	HGL (Out) (ft)	Inlet Location	Notes
OUTL-2	6,441.57	6,439.76	0.20	6,439.93	6,439.93	In Sag	Outlet Structure
INLET-1	6,449.40	6,444.15	3.43	6,444.86	6,444.86	In Sag	10' TYPE R INLET
INLET-2	6,449.74	6,443.65	4.74	6,444.49	6,444.49	In Sag	15' TYPE R INLET

Conduit Table - Time: 0.00 hours

Label	Start Node	Stop Node	Invert (Start) (ft)	Invert (Stop) (ft)	Length (ft)	Slope (%)	Dia. (in)	Mann.	Flow (cfs)	Velocity (ft/s)	Depth (ft)	Capacity (cfs)	Froude Number	HGL (In) (ft)	HGL (Out) (ft)
P-1	INLET-1	INLET-2	6,444.15	6,443.85	20.0	1.50	18.0	0.013	3.43	6.17	0.71	12.88	1.745	6,444.86	6,444.40
P-2	INLET-2	SEDIMENT PAD-1	6,443.65	6,442.82	55.0	1.51	18.0	0.013	4.74	6.74	0.84	12.90	1.725	6,444.49	6,443.45
P-3	OUTL-2	FES-1	6,439.76	6,439.32	87.6	0.50	18.0	0.013	0.20	1.82	0.16	7.43	0.942	6,439.93	6,439.49

Outfall Table - Time: 0.00 hours

ID	Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Boundary Condition Type	Flow (Total Out) (cfs)	Notes
1907	FES-1	6,441.12	6,439.32	Free Outfall	0.20	18" FES
1911	SEDIMENT PAD-1	6,445.14	6,442.82	Free Outfall	4.72	SEDIMENT PAD

STORMCAD OUTPUT TABLES

Main Street Depot - 100-Year

Catchment Table - Time: 0.00 hours

Label	Outflow Element	Area (acres)	Runoff Coeff.	Time of C (min)	Catchment CA (acres)	Intensity (in/h)	Flow (cfs)
F1	INLET-1	1.770	0.790	10.600	1.398	6.423	9.05
F2	INLET-2	0.680	0.790	5.000	0.537	8.242	4.46

Catch Basin Table - Time: 0.00 hours

Label	Rim (ft)	Invert (ft)	Flow (cfs)	HGL (In) (ft)	HGL (Out) (ft)	Inlet Location	Notes
OUTL-2	6,441.57	6,439.76	3.10	6,440.44	6,440.44	In Sag	Outlet Structure
INLET-1	6,449.40	6,444.15	9.05	6,445.31	6,445.31	In Sag	10' TYPE R INLET
INLET-2	6,449.74	6,443.65	12.51	6,444.98	6,444.98	In Sag	15' TYPE R INLET

Conduit Table - Time: 0.00 hours

Label	Start Node	Stop Node	Invert (Start) (ft)	Invert (Stop) (ft)	Length (ft)	Slope (%)	Dia. (in)	Mann.	Flow (cfs)	Velocity (ft/s)	Depth (ft)	Capacity (cfs)	Froude Number	HGL (In) (ft)	HGL (Out) (ft)
P-1	INLET-1	INLET-2	6,444.15	6,443.85	20.0	1.50	18.0	0.013	9.05	7.89	1.16	12.88	1.568	6,445.31	6,444.83
P-2	INLET-2	SEDIMENT PAD-1	6,443.65	6,442.82	55.0	1.51	18.0	0.013	12.51	8.32	1.33	12.90	1.317	6,444.98	6,444.02
P-3	OUTL-2	FES-1	6,439.76	6,439.32	87.6	0.50	18.0	0.013	3.10	4.01	0.67	7.43	0.983	6,440.44	6,439.99

Outfall Table - Time: 0.00 hours

ID	Label	Elevation (Ground) (ft)	Elevation (Invert) (ft)	Boundary Condition Type	Flow (Total Out) (cfs)	Notes
1907	FES-1	6,441.12	6,439.32	Free Outfall	3.10	18" FES
1911	SEDIMENT PAD-1	6,445.14	6,442.82	Free Outfall	12.46	SEDIMENT PAD

APPENDIX D

EXTENDED DETENTION BASIN/ WATER QUALITY ENHANCEMENT BMP'S

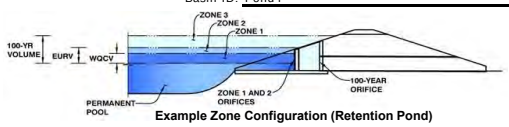
Outlet Structure Design Spreadsheet
Concrete Sediment Pad Design Spreadsheet

DETENTION BASIN STAGE-STORAGE TABLE BUILDER

MHFD-Detention, Version 4.06 (July 2022)

Project: Town of Elizabeth - Main St Depot Parking Lot

Basin ID: Pond F



Example Zone Configuration (Retention Pond)

Watershed Information

Selected BMP Type =	EDB	
Watershed Area =	3.48	acres
Watershed Length =	705	ft
Watershed Length to Centroid =	354	ft
Watershed Slope =	0.021	ft/ft
Watershed Imperviousness =	58.17%	percent
Percentage Hydrologic Soil Group A =	0.0%	percent
Percentage Hydrologic Soil Group B =	34.2%	percent
Percentage Hydrologic Soil Groups C/D =	65.8%	percent
Target WQCV Drain Time =	40.0	hours
Location for 1-hr Rainfall Depths =	User Input	

After providing required inputs above including 1-hour rainfall depths, click 'Run CUHP' to generate runoff hydrographs using the embedded Colorado Urban Hydrograph Procedure.

			Optional User Overrides	
Water Quality Capture Volume (WQCV) =	0.067	acre-feet		acre-feet
Excess Urban Runoff Volume (EURV) =	0.202	acre-feet		acre-feet
2-yr Runoff Volume (P1 = 0.86 in.) =	0.130	acre-feet	0.86	inches
5-yr Runoff Volume (P1 = 1.15 in.) =	0.193	acre-feet	1.15	inches
10-yr Runoff Volume (P1 = 1.4 in.) =	0.257	acre-feet	1.40	inches
25-yr Runoff Volume (P1 = 1.77 in.) =	0.374	acre-feet	1.77	inches
50-yr Runoff Volume (P1 = 2.07 in.) =	0.460	acre-feet	2.07	inches
100-yr Runoff Volume (P1 = 2.4 in.) =	0.565	acre-feet	2.40	inches
500-yr Runoff Volume (P1 = 3.23 in.) =	0.814	acre-feet	3.23	inches
Approximate 2-yr Detention Volume =	0.124	acre-feet		
Approximate 5-yr Detention Volume =	0.185	acre-feet		
Approximate 10-yr Detention Volume =	0.230	acre-feet		
Approximate 25-yr Detention Volume =	0.274	acre-feet		
Approximate 50-yr Detention Volume =	0.295	acre-feet		
Approximate 100-yr Detention Volume =	0.338	acre-feet		

Define Zones and Basin Geometry

Zone 1 Volume (WQCV) =	0.067	acre-feet
Zone 2 Volume (EURV - Zone 1) =	0.136	acre-feet
Zone 3 (100yr + 1 / 2 WQCV - Zones 1 & 2) =	0.169	acre-feet
Total Detention Basin Volume =	0.371	acre-feet
Initial Surcharge Volume (ISV) =	user	ft^3
Initial Surcharge Depth (ISD) =	user	ft
Total Available Detention Depth (H_{total}) =	user	ft
Depth of Trickle Channel (H_{TC}) =	user	ft
Slope of Trickle Channel (S_{TC}) =	user	ft/ft
Slopes of Main Basin Sides (S_{main}) =	user	H:V
Basin Length-to-Width Ratio ($R_{L/W}$) =	user	

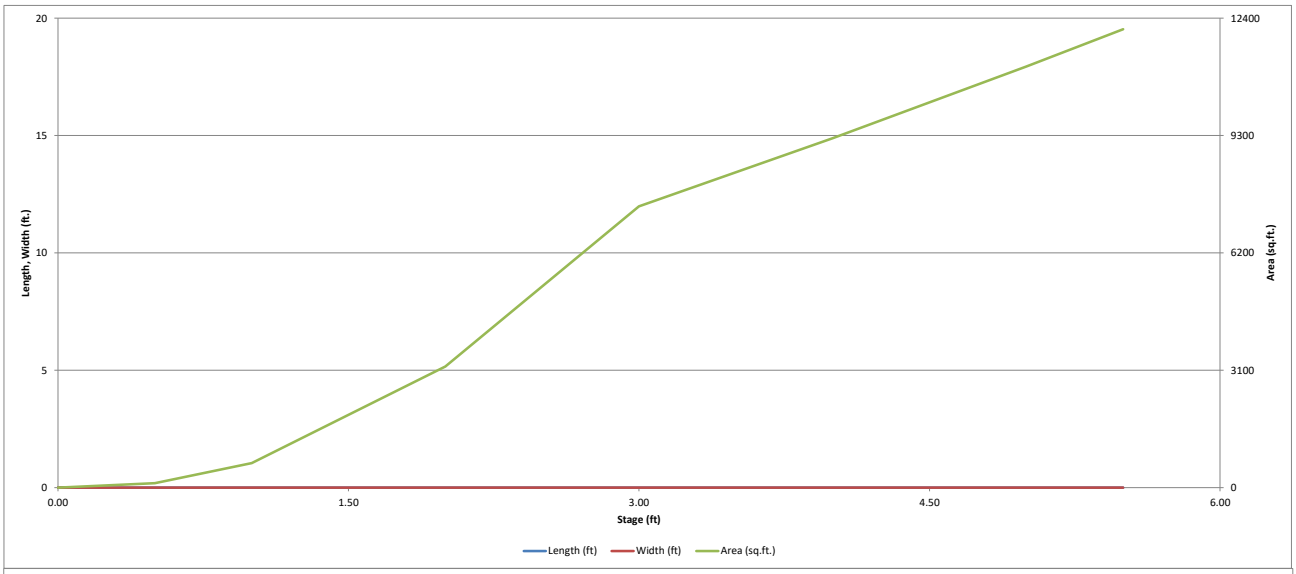
Initial Surcharge Area (A_{ISV}) =	user	ft^2
Surcharge Volume Length (L_{ISV}) =	user	ft
Surcharge Volume Width (W_{ISV}) =	user	ft
Depth of Basin Floor (H_{FLOOR}) =	user	ft
Length of Basin Floor (L_{FLOOR}) =	user	ft
Width of Basin Floor (W_{FLOOR}) =	user	ft
Area of Basin Floor (A_{FLOOR}) =	user	ft^2
Volume of Basin Floor (V_{FLOOR}) =	user	ft^3
Depth of Main Basin (H_{MAIN}) =	user	ft
Length of Main Basin (L_{MAIN}) =	user	ft
Width of Main Basin (W_{MAIN}) =	user	ft
Area of Main Basin (A_{MAIN}) =	user	ft^2
Volume of Main Basin (V_{MAIN}) =	user	ft^3
Calculated Total Basin Volume (V_{total}) =	user	acre-feet

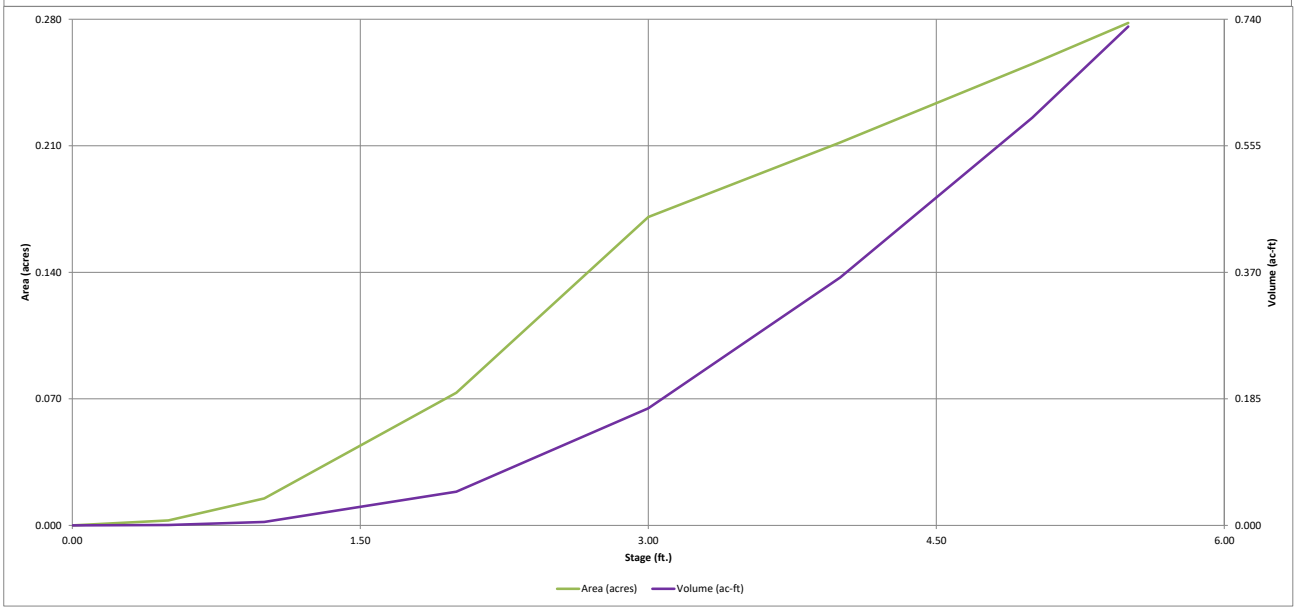
Depth Increment = 1.00 ft

Stage - Storage Description	Stage (ft)	Optional Override Stage (ft)	Length (ft)	Width (ft)	Area (ft^2)	Optional Override Area (ft^2)	Area (acre)	Volume (ft^3)	Volume (ac-ft)
Top of Micropool	--	0.00	--	--	--	0	0.000		
6440.5	--	0.50	--	--	--	118	0.003	29	0.001
6441	--	1.00	--	--	--	649	0.015	221	0.005
6442	--	2.00	--	--	--	3,198	0.073	2,145	0.049
6443	--	3.00	--	--	--	7,429	0.171	7,459	0.171
6444	--	4.00	--	--	--	9,228	0.212	15,787	0.362
6445	--	5.00	--	--	--	11,122	0.255	25,963	0.596
6445.5	--	5.50	--	--	--	12,107	0.278	31,770	0.729

DETENTION BASIN STAGE-STORAGE TABLE BUILDER

MHFD-Detention, Version 4.06 (July 2022)



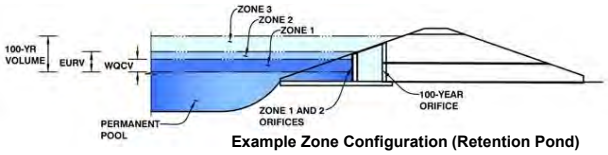


DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-Detention, Version 4.06 (July 2022)

Project: Town of Elizabeth - Main St Depot Parking Lot

Basin ID: Pond F



Example Zone Configuration (Retention Pond)

	Estimated Stage (ft)	Estimated Volume (ac-ft)	Outlet Type
Zone 1 (WQCV)	2.21	0.067	Orifice Plate
Zone 2 (EURV)	3.18	0.136	Rectangular Orifice
3 (100+1/2WQCV)	4.05	0.169	Weir&Pipe (Restrict)
Total (all zones)		0.371	

User Input: Orifice at Underdrain Outlet (typically used to drain WQCV in a Filtration BMP)

Underdrain Orifice Invert Depth =		ft (distance below the filtration media surface)	Underdrain Orifice Area =		ft^2
Underdrain Orifice Diameter =		inches	Underdrain Orifice Centroid =		feet

Calculated Parameters for Underdrain

User Input: Orifice Plate with one or more orifices or Elliptical Slot Weir (typically used to drain WQCV and/or EURV in a sedimentation BMP)

Centroid of Lowest Orifice =	0.00	ft (relative to basin bottom at Stage = 0 ft)	WQ Orifice Area per Row =	2.083E-03	ft^2
Depth at top of Zone using Orifice Plate =	2.20	ft (relative to basin bottom at Stage = 0 ft)	Elliptical Half-Width =	N/A	feet
Orifice Plate: Orifice Vertical Spacing =	12.00	inches	Elliptical Slot Centroid =	N/A	feet
Orifice Plate: Orifice Area per Row =	0.30	sq. inches (diameter = 5/8 inch)	Elliptical Slot Area =	N/A	ft^2

Calculated Parameters for Plate

User Input: Stage and Total Area of Each Orifice Row (numbered from lowest to highest)

	Row 1 (required)	Row 2 (optional)	Row 3 (optional)	Row 4 (optional)	Row 5 (optional)	Row 6 (optional)	Row 7 (optional)	Row 8 (optional)
Stage of Orifice Centroid (ft)	0.00	1.00	2.00					
Orifice Area (sq. inches)	0.30	0.30	0.30					

	Row 9 (optional)	Row 10 (optional)	Row 11 (optional)	Row 12 (optional)	Row 13 (optional)	Row 14 (optional)	Row 15 (optional)	Row 16 (optional)
Stage of Orifice Centroid (ft)								
Orifice Area (sq. inches)								

User Input: Vertical Orifice (Circular or Rectangular)

	Zone 2 Rectangular	Not Selected			Zone 2 Rectangular	Not Selected	
Invert of Vertical Orifice =	2.21	N/A	ft (relative to basin bottom at Stage = 0 ft)	Vertical Orifice Area =	0.03	N/A	ft^2
Depth at top of Zone using Vertical Orifice =	3.16	N/A	ft (relative to basin bottom at Stage = 0 ft)	Vertical Orifice Centroid =	0.04	N/A	feet
Vertical Orifice Height =	1.00	N/A	inches				
Vertical Orifice Width =	4.00		inches				

Calculated Parameters for Vertical Orifice

User Input: Overflow Weir (Dropbox with Flat or Sloped Grate and Outlet Pipe OR Rectangular/Trapezoidal Weir and No Outlet Pipe)

	Zone 3 Weir	Not Selected			Zone 3 Weir	Not Selected	
Overflow Weir Front Edge Height, Ho =	3.35	N/A	ft (relative to basin bottom at Stage = 0 ft)	Height of Grate Upper Edge, H_t =	4.35	N/A	feet
Overflow Weir Front Edge Length =	4.00	N/A	feet	Overflow Weir Slope Length =	4.12	N/A	feet
Overflow Weir Grate Slope =	4.00	N/A	H:V	Grate Open Area / 100-yr Orifice Area =	6.50	N/A	
Horiz. Length of Weir Sides =	4.00	N/A	feet	Overflow Grate Open Area w/o Debris =	11.48	N/A	ft^2
Overflow Grate Type =	Type C Grate	N/A		Overflow Grate Open Area w/ Debris =	5.74	N/A	ft^2
Debris Clogging % =	50%	N/A	%				

Calculated Parameters for Overflow Weir

User Input: Outlet Pipe w/ Flow Restriction Plate (Circular Orifice, Restrictor Plate, or Rectangular Orifice)

	Zone 3 Restrictor	Not Selected			Zone 3 Restrictor	Not Selected	
Depth to Invert of Outlet Pipe =	0.25	N/A	ft (distance below basin bottom at Stage = 0 ft)	Outlet Orifice Area =	1.77	N/A	ft^2
Outlet Pipe Diameter =	18.00	N/A	inches	Outlet Orifice Centroid =	0.75	N/A	feet
Restrictor Plate Height Above Pipe Invert =	18.00		inches	Half-Central Angle of Restrictor Plate on Pipe =	3.14	N/A	radians

Calculated Parameters for Outlet Pipe w/ Flow Restriction Plate

User Input: Emergency Spillway (Rectangular or Trapezoidal)

Spillway Invert Stage=	4.10	ft (relative to basin bottom at Stage = 0 ft)	Spillway Design Flow Depth=	0.39	feet
Spillway Crest Length =	10.00	feet	Stage at Top of Freeboard =	5.49	feet
Spillway End Slopes =	4.00	H:V	Basin Area at Top of Freeboard =	0.28	acres
Freeboard above Max Water Surface =	1.00	feet	Basin Volume at Top of Freeboard =	0.72	acre-ft

Calculated Parameters for Spillway

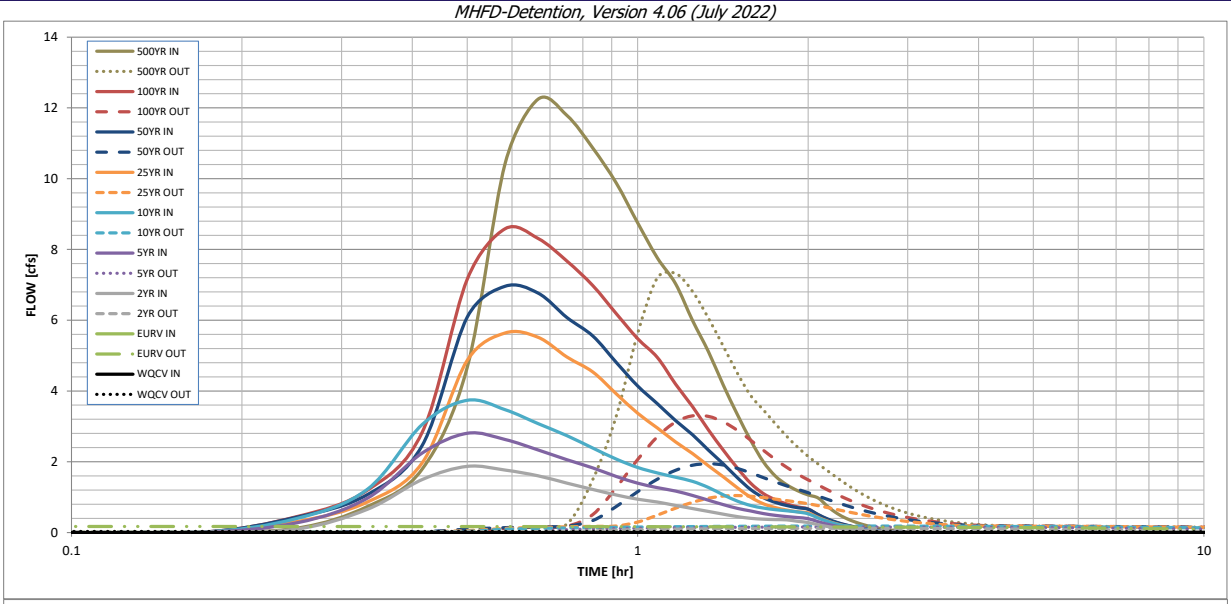
Routed Hydrograph Results

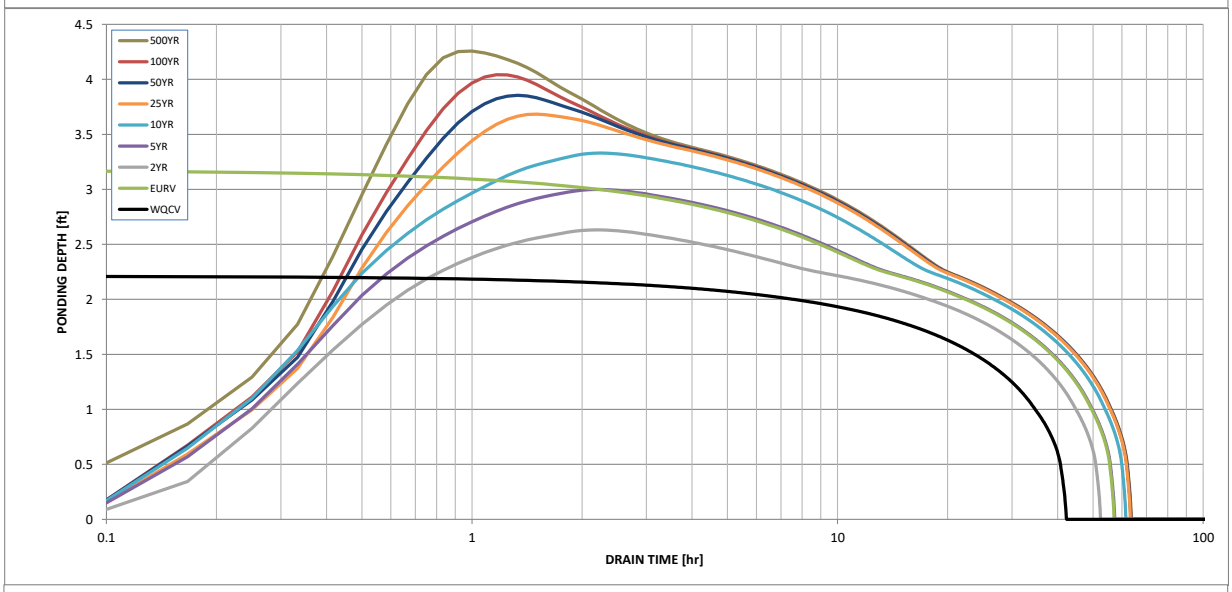
The user can override the default CUHP hydrographs and runoff volumes by entering new values in the Inflow Hydrographs table (Columns W through AF).

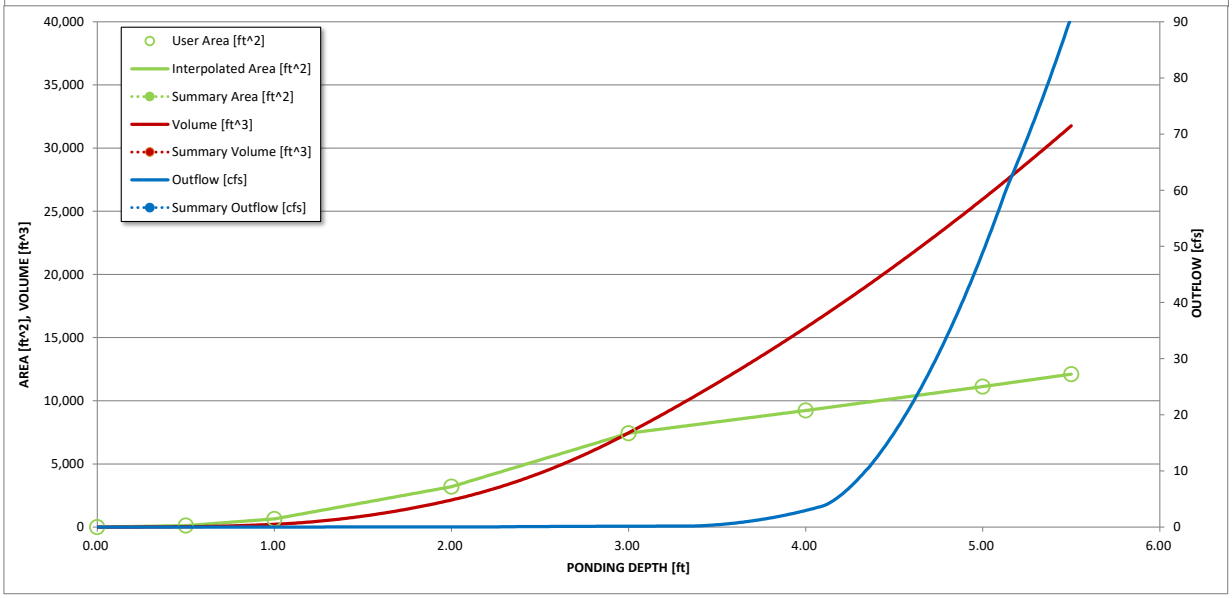
Design Storm Return Period =	WQCV	EURV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	500 Year
One-Hour Rainfall Depth (in) =	N/A	N/A	0.86	1.15	1.40	1.77	2.07	2.40	3.23
CUHP Runoff Volume (acre-ft) =	0.067	0.202	0.130	0.193	0.257	0.374	0.460	0.565	0.814
Inflow Hydrograph Volume (acre-ft) =	N/A	N/A	0.130	0.193	0.257	0.374	0.460	0.565	0.814
CUHP Predevelopment Peak Q (cfs) =	N/A	N/A	0.0	0.3	0.8	2.1	2.8	3.8	6.0
OPTIONAL Override Predevelopment Peak Q (cfs) =	N/A	N/A							
Predevelopment Unit Peak Flow, q (cfs/acre) =	N/A	N/A	0.01	0.09	0.23	0.59	0.81	1.10	1.72
Peak Inflow Q (cfs) =	N/A	N/A	1.9	2.8	3.7	5.6	7.0	8.6	12.2
Peak Outflow Q (cfs) =	0.0	0.2	0.1	0.2	0.2	1.0	1.9	3.3	7.3
Ratio Peak Outflow to Predevelopment Q =	N/A	N/A	N/A	0.5	0.2	0.5	0.7	0.9	1.2
Structure Controlling Flow =	Vertical Orifice 1	Vertical Orifice 1	Vertical Orifice 1	Vertical Orifice 1	Vertical Orifice 1	Overflow Weir 1	Overflow Weir 1	Overflow Weir 1	Spillway
Max Velocity through Grate 1 (fps) =	N/A	N/A	N/A	N/A	N/A	0.1	0.2	0.3	0.4
Max Velocity through Grate 2 (fps) =	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Time to Drain 97% of Inflow Volume (hours) =	39	49	46	49	52	51	49	47	42
Time to Drain 99% of Inflow Volume (hours) =	41	54	50	54	57	57	57	55	53
Maximum Ponding Depth (ft) =	2.22	3.18	2.63	3.00	3.33	3.68	3.86	4.04	4.26
Area at Maximum Ponding Depth (acres) =	0.09	0.18	0.13	0.17	0.18	0.20	0.21	0.21	0.22
Maximum Volume Stored (acre-ft) =	0.068	0.203	0.115	0.170	0.230	0.297	0.331	0.371	0.417

DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-Detention, Version 4.06 (July 2022)







S-A-V-D Chart Axis Override	X-axis	Left Y-Axis	Right Y-Axis
minimum bound			
maximum bound			

DETENTION BASIN OUTLET STRUCTURE DESIGN

Outflow Hydrograph Workbook Filename:

Inflow Hydrographs

The user can override the calculated inflow hydrographs from this workbook with inflow hydrographs developed in a separate program.

	SOURCE	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP	CUHP
Time Interval	TIME	WQCV [cfs]	EURV [cfs]	2 Year [cfs]	5 Year [cfs]	10 Year [cfs]	25 Year [cfs]	50 Year [cfs]	100 Year [cfs]	500 Year [cfs]
5.00 min	0:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.12
	0:15:00	0.00	0.00	0.10	0.27	0.40	0.31	0.43	0.45	0.74
	0:20:00	0.00	0.00	0.66	0.97	1.22	0.86	1.07	1.20	1.80
	0:25:00	0.00	0.00	1.50	2.25	3.06	1.98	2.47	2.84	4.67
	0:30:00	0.00	0.00	1.87	2.81	3.74	4.86	6.09	7.16	10.43
	0:35:00	0.00	0.00	1.76	2.63	3.47	5.64	6.96	8.59	12.24
	0:40:00	0.00	0.00	1.60	2.33	3.08	5.52	6.77	8.31	11.79
	0:45:00	0.00	0.00	1.40	2.06	2.74	4.96	6.08	7.67	10.86
	0:50:00	0.00	0.00	1.22	1.83	2.39	4.54	5.55	6.98	9.88
	0:55:00	0.00	0.00	1.06	1.58	2.08	3.92	4.81	6.19	8.75
	1:00:00	0.00	0.00	0.94	1.40	1.84	3.37	4.14	5.48	7.76
	1:05:00	0.00	0.00	0.86	1.27	1.68	2.96	3.64	4.95	7.03
	1:10:00	0.00	0.00	0.77	1.17	1.56	2.56	3.16	4.19	5.99
	1:15:00	0.00	0.00	0.68	1.05	1.45	2.23	2.76	3.56	5.11
	1:20:00	0.00	0.00	0.60	0.91	1.27	1.89	2.33	2.90	4.17
	1:25:00	0.00	0.00	0.52	0.79	1.07	1.57	1.94	2.33	3.34
	1:30:00	0.00	0.00	0.45	0.68	0.89	1.26	1.55	1.82	2.61
	1:35:00	0.00	0.00	0.40	0.61	0.76	1.00	1.21	1.39	2.00
	1:40:00	0.00	0.00	0.38	0.54	0.69	0.81	0.99	1.10	1.60
	1:45:00	0.00	0.00	0.37	0.49	0.65	0.71	0.85	0.93	1.35
	1:50:00	0.00	0.00	0.36	0.45	0.61	0.63	0.76	0.81	1.18
	1:55:00	0.00	0.00	0.32	0.42	0.58	0.59	0.70	0.73	1.06
	2:00:00	0.00	0.00	0.28	0.39	0.53	0.55	0.66	0.67	0.98
	2:05:00	0.00	0.00	0.22	0.31	0.41	0.43	0.51	0.50	0.74
	2:10:00	0.00	0.00	0.17	0.23	0.31	0.32	0.38	0.37	0.54
	2:15:00	0.00	0.00	0.13	0.18	0.24	0.24	0.29	0.27	0.40
	2:20:00	0.00	0.00	0.10	0.13	0.18	0.18	0.21	0.21	0.30
	2:25:00	0.00	0.00	0.07	0.10	0.13	0.14	0.16	0.15	0.23
	2:30:00	0.00	0.00	0.05	0.07	0.10	0.10	0.12	0.11	0.17
	2:35:00	0.00	0.00	0.04	0.05	0.07	0.07	0.09	0.08	0.12
	2:40:00	0.00	0.00	0.03	0.04	0.05	0.05	0.06	0.06	0.09
	2:45:00	0.00	0.00	0.02	0.02	0.03	0.04	0.04	0.04	0.06
	2:50:00	0.00	0.00	0.01	0.02	0.02	0.02	0.03	0.03	0.04
	2:55:00	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.02
	3:00:00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.01
	3:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:45:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	3:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:45:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:05:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:10:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:15:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:20:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:25:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:30:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:35:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:40:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:45:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:50:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5:55:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	6:00:00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

DETENTION BASIN OUTLET STRUCTURE DESIGN

MHFD-Detention, Version 4.06 (July 2022)

Summary Stage-Area-Volume-Discharge Relationships

The user can create a summary S-A-V-D by entering the desired stage increments and the remainder of the table will populate automatically.
The user should graphically compare the summary S-A-V-D table to the full S-A-V-D table in the chart to confirm it captures all key transition points.

Stage - Storage Description	Stage [ft]	Area [ft^2]	Area [acres]	Volume [ft^3]	Volume [ac-ft]	Total Outflow [cfs]

Extended Detention Basin (EDB)

SCM Design, Version 4.00 (April 2024)

Designer:
Company:
Date: November 19, 2024
Project:
Location:
Outfall ID: F

1. Inlet and Forebay

A) Is RPA (GB/GS) used for Runoff Reduction upstream of SCM? NO

Define inflow points for all areas tributary to the SCM below.

B) Inflow Points contributing to SCM (max 8)

Inflow Design Point ID	F1							
Tributary Area to Inflow Point (ft^2)	107,767							
Imperviousness above Inflow Point (%)	75.6%							
Default WQCV for Inflow Point (ft^3)	2,719							
WQCV Reduction above Inflow Point (ft^3)	0							
Remaining WQCV at Inflow Point (ft^3)	2,719							
Will pretreatment be provided with a Sedimentation MTD (HDS)	NO							
Paired Pretreatment HDS Worksheet Name	--							
Sheet or Concentrated Flow	Conc							

C) Sheet Flow

Select sheet flow inflow feature	--							
Is Concrete Edger used?	--							
Spacing between slots, recommend ≤ 2 ft on center (ft)	--							
Slot Opening Length, recommend 1.5 (in)	--							
Select type of blind swale used to distribute flow	--							
Select energy dissipation method for level spreader	--							
Height of drop, recommend 2 to 3 (in)	--							
Is concrete mowing strip provided to facilitate maintenance?	--							

D) Concentrated Flow

Select concentrated flow inflow feature	Pipe							
Is downspout extension needed to bridge backfill zone?	--							
Depth of gutter flow line depression for curb opening, recommend 3 (in)	--							
Curb opening inlet width (ft)	--							
Height of drop to sediment pad/forebay, recommend ≥ 1 (in)	--							
Select energy dissipation method for downspouts and/or curb openings.	--							
Select energy dissipation method for swales, channels, and piped outfalls	Riprap							

v) Forebay

Impervious area tributary to concentrated inflow location (ft^2)	81,472							
Forebay Type (Concrete Sediment Pad sufficient for Imp Area ≤ 2 acre)	Pad							
Minimum Forebay Volume (ft^3)	--							
Design Forebay Volume (ft^3)	--							
Maximum Forebay Depth (in)	--							
Design Forebay Depth (in)	--							
Rectangular Weir Notch Width to Empty Forebay in 5-minutes (in)	--							
Design Notch Width (in)	--							
Forebay Drain Time (minutes)	--							

Extended Detention Basin (EDB)

SCM Design, Version 4.00 (April 2024)

Designer:
Company:
Date: November 19, 2024
Project:
Location:
Outfall ID: F

2. Design Storage Volume

Inflow Points above should be fully defined before proceeding below

A) Contributing Watershed Area (including EDB area)

Area = 151,420 ft²
Area = 3.48 ac

For area < 20 impervious acres, consider filtration/infiltration SCMs to avoid small orifices prone to clogging.

B) Imperviousness of Tributary Area

i = 58.2% %

C) Default WQCV

$V_{WQCV\ Default}$ = 2,906 ft³

D) WQCV Reduction resulting from Upstream RPA (GB/GS)

WQCV Reduction = 0 ft³

E) Remaining WQCV

$V_{WQCV\ Remaining}$ = 2,906 ft³

F) Design WQCV (based on actual design geometry)

$V_{WQCV\ Design}$ = ft³

G) Describe additional storage volume provided (e.g. EURV/100yr)
Describe why EDB was selected over other SCMs based on Table EDB-3 considerations related to contributing impervious area.

3. EDB Shape

A) Basin Length-to-Width Ratio
(measured along the low flow channel from inlet to outlet)

$R_{L/W}$ =

B) Discuss how the design considered community values

4. Side Slopes

When designing basin slopes, consider requirements for access and vegetation management.

A) Max. Side Slope (Z = 4:1 or flatter, horiz. dist per unit vertical)
(Use "0" if EDB has vertical walls)

Z = ft / ft

5. Low Flow Channels and Basin Bottom Grading

A) Type of low flow channel

B) Depth of low flow channel (recommend 18")

D_{LFC} = in

C) Depth of concrete curb (recommend 6")

D_{Curb} = in

D) Side Slopes of low flow channel (Z = 2 min.)

Z_{LFC} = ft / ft

E) Bottom width of low flow channel

Bottom Width $_{LFC}$ = ft

F) Longitudinal Slope of Low Flow Channel

Slope $_{LFC}$ = ft / ft

G) Typical Bottom Slope toward low flow channel (min. 0.02 ft/ft)

Slope $_{Basin\ Bottom}$ = ft / ft

H) Describe any non-typical low flow channel features (if applicable)

Extended Detention Basin (EDB)

SCM Design, Version 4.00 (April 2024)

Designer:
Company:
Date: November 19, 2024
Project:
Location:
Outfall ID: F

6. Initial Surcharge Volume

A) Initial Surcharge Depth — ISD = [ ] in

7. Outlet Structure

A) Micropool Type — [ ]

B) Depth of Micropool (recommend 2.5 feet minimum) — D_{MP} = [ ] ft

C) Surface Area of Micropool (recommend 15 square feet minimum) — A_{MP} = [ ] ft^2

D) Describe Micropool configuration

E) Minimum dimension of opening in water quality orifice plate based on 40-hour drain time and hydrograph routing in MHFD-Detention. — Orifice D_{Min} = [ ] in

F) Describe orifice plate configuration

G) Trash Rack Type — [ ]

H) Trash Rack Configuration — [ ]

I) Describe Outlet Structure(s) for events larger than WQCV. (EURV, full-spectrum detention, safety grating, etc.)

8. Emergency Spillway and Overflow Embankment

A) Describe spillway configuration, spillway capacity, and embankment protection.

9. Vegetation

A) Has a vegetation management plan been developed? [ ]

B) Has a landscape management plan been developed? [ ]

C) Describe vegetation/landscaping considerations:
- Specify plants that support the water quality function of the EDB? (e.g. wetland, wetland fringe, riparian, upland, trees)
- Include drought tolerant native plants?
- Consider soil assessment, preparation, and erosion mitigation?
- Include plants that enhance within context of the site?
- Address alternative hydraulic regimes?
- Consider required maintenance activities and intervals?
- Consider short and long-term irrigation needs?
- Consider irrigation head placement?

Extended Detention Basin (EDB)

SCM Design, Version 4.00 (April 2024)

Designer:
Company:
Date: November 19, 2024
Project:
Location:
Outfall ID: F

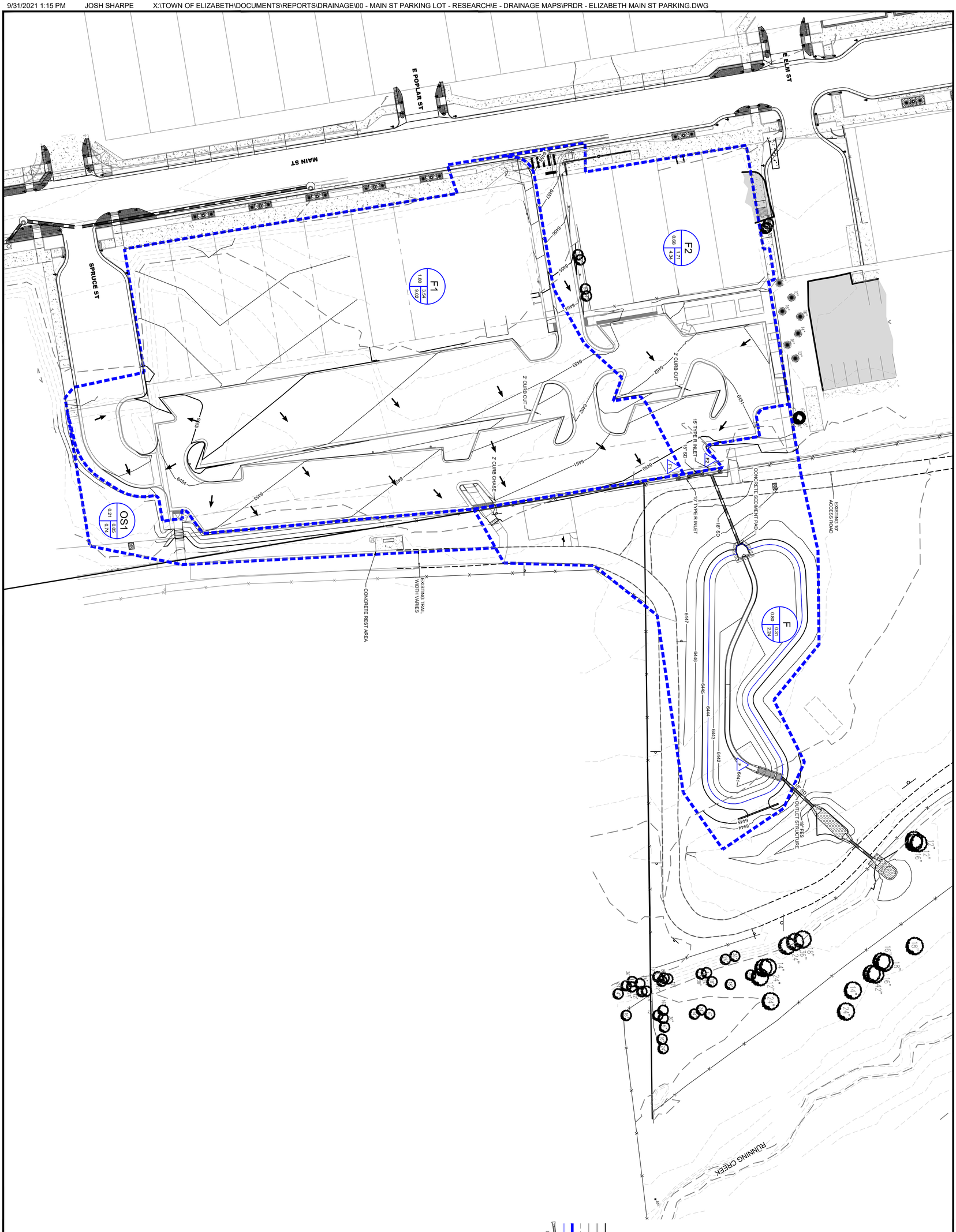
10. Maintenance Access

A) Describe maintenance access into forebay(s) and area adjacent to and within outlet structure:
- minimum access path width of 10 feet
- maximum 10% grade for haul road surface
- maximum 20% grade for skid-loader and backhoe access
- cross-slope of 2% for access path
- stabilized access materials (concrete, block, grid, reinforced turf)
- access stairs inside outlet structure

Notes:

APPENDIX E
DRAINAGE MAPS

Proposed Drainage Map



LEGEND

- PROPOSED MAJOR CONTOUR
- PROPOSED MINOR CONTOUR
- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- PROPOSED MAJOR DRAINAGE BASIN
- 100-YR WSEL
- STORM (FES, MH, & INLET)
- EXISTING / PROPOSED
- BASIN DESIGNATION (AREA, XXA; CA/CO, 0.XX; 0.XX)
- MINOR RUNOFF (CFS)
- MAJOR RUNOFF (CFS)
- DIRECTIONAL FLOW ARROW
- DESIGN POINT

1 OF 1	1/29/2025	0 1" = 30' 60 N	TOWN OF ELIZABETH MAIN ST. DEPOT PARKING LOT	PROPOSED DRAINAGE MAP

terracina design
10200 E. Girard Ave, A-314
Denver, CO 80231
ph: 303.632.8867

Town of Elizabeth GESC Permit V24-00XX

Cost Opinion Spreadsheet

Project Name: Main Street Depot Date: 1/29/2025

No.	BMP	ID	Unit	Installation Unit Cost	Quantity	Cost
1	Check Dam	CD	LF	$ 24.00	0	$ -
2	Compost Blanket	CB	SF	$ 0.36	0	$ -
3	Compost Filler Berm	CFB	LF	$ 2.00	0	$ -
4	Concrete Washout Area	CWA	EA	$ 1,000.00	1	$ 1,000.00
5	Construction Fence	CF	LF	$ 2.00	0	$ -
6	Construction Markers	CM	LF	$ 0.20	1,177	$ 235.43
7	Dewatering	DW	EA	$ 600.00	0	$ -
8	Diversion Ditch	DD	LF	$ 1.60	0	$ -
9	Erosion Control Blanket	ECB	SY	$ 5.00	284	$ 1,420.97
10	Inlet Protection	IP	LF	$ 11.00	25	$ 275.00
11	Reinforced Check Dam	RCD	LF	$ 36.00	0	$ -
12	Reinforced Rock Berm	RRB	LF	$ 9.00	4	$ 36.00
13	RRB for Culvert Protection	RRC	LF	$ 9.00	34	$ 306.00
14	Sediment Basin	SB	AC	$ 1,100.00	4	$ 4,400.00
15	Sediment Control Log	SCL	LF	$ 2.00	298	$ 595.52
16	Sediment Trap	ST	EA	$ 600.00	1	$ 600.00
17	Seeding and Mulching	SM	AC	$ 3,500.00	1	$ 4,497.07
18	Silt Fence	SF	LF	$ 3.00	1,139	$ 3,415.77
19	Stabilized Staging Area	SSA	SY	$ 60.00	553	$ 33,180.00
20	Surface Roughening	SR	AC	$ 600.00	2.5	$ 1,497.67
21	Temporary Slope Drain	TSD	LF	$ 30.00	0	$ -
22	Temporary Stream Crossing	TSC	EA	$ 1,000.00	0	$ -
23	Terracing	TER			0	$ -
24	Vehicle Tracking Control	VTC	EA	$ 1,000.00	1	$ 1,000.00
25	VTC with Wheel Wash	WW	EA		0	$ -
26	Termporary Batch Plant Restoration		AC	$ 5,000.00	0	$ -
27	Other: Curb Sock		LF	$ 20.00	0	$ -
	SUB-TOTAL					$ 52,459.42

Engineer's Opinion of Estimated Costs for
Main Street Depot, Elizabeth, Colorado

Date: 1/29/2025

Note: All Costs Must Include Labor and Materials.

Description	Quantity	Unit	Unit Cost	Total Cost
Earthwork				
Mobilizaton	1	EA	$25,000.00	$25,000.00
Clearing and Grubbing	2	AC	$2,000.00	$3,597.62
Imported Fill Material	2,562	CY	$75.00	$192,125.10
Transportation				
Mobilizaton	1	EA	$25,000.00	$25,000.00
Adjust Manholes/Clean Outs	2	EA	$700.00	$1,400.00
Adjust Valves	3	EA	$1,000.00	$3,000.00
Remove Ashpalt Pavement	14	SY	$40.00	$570.68
Remove Curb & Gutter	50	LF	$20.00	$1,000.00
Remove Sidewalk	30	SY	$47.00	$1,409.66
Saw Cut Existing Asphalt	56	LF	$3.00	$168.00
Curb & Gutter - Mountable 1' pan (Spill)	920	LF	$27.00	$24,840.00
Curb & Gutter - Mountable 2' pan (Catch)	1,807	LF	$27.00	$48,789.00
Crosspan 10' Wide	1	EA	$3,000.00	$3,000.00
Concrete Sidewalk 6'	679	LF	$75.00	$50,891.64
Ramps (Corner)	2	EA	$3,000.00	$6,000.00
Ramps (Mid-Block)	6	EA	$2,900.00	$17,400.00
Curb Chase	32	LF	$136.00	$4,352.00
Asphalt - Local Pavement, Base, & Subgrade (1 beyond back of curb) - Local	6,029	SY	$40.00	$241,160.00
Public Signage	11	EA	$200.00	$2,200.00
Striping - White Line - 6" Solid	2,823	LF	$1.60	$4,516.80
Striping - Crosswalk (2' x 8' Bar)	5	EA	$75.00	$375.00
Striping - Stop Bar	1	LF	$250.00	$250.00
Striping - Road Markings	12	EA	$1,000.00	$12,000.00
Fence (Relocated Smoking Area)	140	LF	$50.00	$7,000.00
Storm Drain				
RCP Pipe 18"	152	LF	$130.00	$19,813.30
Inlet Type R - 10'	1	EA	$11,000.00	$11,000.00
Inlet Type R - 15'	1	EA	$13,000.00	$13,000.00
FES 18"	3	EA	$6,000.00	$18,000.00
Concrete Sediment Pad (10 SY)	1	EA	$12,000.00	$12,000.00
Outlet Structure	1	EA	$55,000.00	$55,000.00
Spillway Cutoff Wall	32	LF	$175.00	$5,600.00
Concrete Trickle Channel (3' Wide) (6" Thick)	170	LF	$60.00	$10,191.91
Riprap (Type M)	53	SY	$97.00	$5,163.81
Sanitary Sewer				
Connect to Existing Sanitary Main	1	EA	$3,000.00	$3,000.00
Manhole 4'	1	EA	$10,000.00	$10,000.00
4" Sanitary Clean Out	3	EA	$1,185.00	$3,555.00
PVC Pipe 6"	192	LF	$74.00	$14,203.95
Water				
Connect to Existing Water Infrastructure	1	EA	$2,500.00	$2,500.00
Water Service 3/4"	3	EA	$2,300.00	$6,900.00
PVC Pipe (C900) 8"	296	LF	$63.00	$18,676.15
Bend 8"	2	EA	$700.00	$1,400.00
Valve 8"	3	EA	$2,400.00	$7,200.00
Tee 8"x8"	1	EA	$1,110.00	$1,110.00
Tee 8"x6"	3	EA	$1,390.00	$4,170.00
Plug with 2" Blow-Off 8"	1	EA	$3,330.00	$3,330.00
Hydrant Assembly (Includes Tee, Valve, & DIP)	1	EA	$7,200.00	$7,200.00
	Subtotal			$909,059.63
Total Improvements				**$909,059.63**

TOWN OF ELIZABETH

COMMUNITY DEVELOPMENT DEPARTMENT

LAND USE APPLICATION

DATE: November 21, 2024

NAME OF PROJECT: Main Street Depot - Minor Development and Site Plan

NAME OF APPLICANT: Town of Elizabeth

ADDRESS AND LEGAL DESCRIPTION OF PROJECT: NE corner of Main Street and Spruce Street

A replat of Lots 5 and 6, Block 3 and Lots 1-6, Inclusive, Block 13, and a part of the NE 1/4 Section 18, Township 8 South, Range 64 West of the 6 P.M.

Please check the appropriate item(s):

____REZONE	____PLAT	____USE BY SPECIAL REVIEW
____PUD (planned unit development)	X MINOR PLAT/REPLAT	____ANNEXATION
____VARIANCE	____SUBDIVISON	____MINOR SUBDIVISION
X SITE PLAN	____OTHER	

PRESENT ZONING: DT District

AREA IN ACRES: Approx. 3 acres

PROPOSED ZONING: N/A

PRESENT USE: Vacant

PROPOSED # OF LOTS (if applicable): 3

PROPOSED GROSS FLOOR AREA (if applicable): N/A

***PROPERTY OWNER**

NAME: Linda & Don Bulmer & Town of Elizabeth

ADDRESS: 7814 LOST LAKE DRIVE FRANKTOWN, CO 80116
151 S Banner St., Elizabeth, CO 80107

TELEPHONE #:

EMAIL:

11/25/2024
SIGNATURE OF OWNER

11/23/2024
SIGNATURE OF OWNER

APPLICANT REPRESENTATIVE

NAME: Town of Elizabeth - Patrick Davidson

ADDRESS: 151 S Banner Street, Elizabeth, CO 80107

TELEPHONE #: 303-646-4166

EMAIL:

11/21/2024
SIGNATURE OF APPLICANT

SIGNATURE OF APPLICANT

***(OWNERS SIGNATURE NEEDS TO BE NOTARIZED)**

Subscribed and sworn to be before me this 25th day of November, 20 24

My commission expires

July 18, 2026

Notary

HARMONY MALAKOWSKI
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20184029120
MY COMMISSION EXPIRES JULY 18, 2026

Main Street Depot Project Narrative

The Town of Elizabeth proposes a replat and site improvement plan for the Main Street Depot area, encompassing approximately 3 acres bounded by Main Street to the west, the Alpaca Center and apartments to the north, Spruce Street to the south, and Elizabeth Running Creek Park to the east (Section 18, Township 8 South, Range 64 West, Elbert County, Colorado). The proposed development includes a replat of existing parcels into three distinct lots, along with construction of the Main Street Depot parking lot which will provide 111 standard parking spaces and 5 handicap-accessible spaces. The site will feature two access points: one entrance from Spruce Street to the south and another from Main Street to the west. Site improvements will include new pedestrian sidewalks, a public restroom facility, and an extended detention basin, while integrating with existing gravel trails and open space. This development will enhance downtown accessibility and public infrastructure while optimizing land use in Elizabeth's downtown area.

This strategic development addresses projected parking needs while supporting future growth in downtown Elizabeth. The Old Town Circulation Study revealed that while most visitors currently find parking near their Main Street destinations, several existing businesses rely on public parking due to grandfathered status predating current requirements. The study also showed strong public willingness to walk short distances from parking to downtown destinations, making this location ideal. The parking facility will serve both daily downtown visitors and seasonal events at Running Creek Park and along Main Street. With the completion of the Main Street Streetscape project next summer, increased pedestrian traffic is anticipated to benefit downtown businesses. The lot's location at Main Street's southern end promotes walkability throughout the downtown corridor while preserving prime Main Street frontage for future commercial development through the strategic reconfiguration of existing parcels.

November 13, 2024

Town of Elezabeth Public Works

RE: Main Street Parking Lot CDs

This letter has been prepared in support of the Construction Documents for the Main Street Parking Lot known as "Site" from here on.

The Site is bound to the west by Main Street, to the north by the Alpaca Center and existing apartments, to the south by the lot to the south of Spruce Street, and to the east by Elizabeth Park. It is located within Section 18, Township 8 South, Range 64 West of the 6th Principal Meridian, Elbert County, Colorado.

The Site is approximately 3 acres consisting of gravel trails, storage buildings, and open space with varying levels of vegetation. The project will include the construction of a parking lot, sidewalks, a public restroom, and an extended detention basin.

If you have any questions, please do not hesitate to call me at 303.632.8867.
Sincerely,

Terracina Designs

Martin Metsker, PE
Senior Project Manager

629010 B: 838 P: 585 WD
08/28/2023 11:21:07 AM Page 1 of 2 R: $18.00 D: $40.00
Rhonda Braun, Elbert County, CO

WARRANTY DEED

THIS DEED, Made this 25th day of August, 2023, between

ELIZABETH PROPERTY INVESTORS LLC, A COLORADO LIMITED LIABILITY COMPANY

of the County of ELBERT, in the State of COLORADO, grantor, and

TOWN OF ELIZABETH, A COLORADO MUNICIPAL CORPORATION

whose legal address is 151 S BANNER STREET, ELIZABETH, CO 80107, of the County of ELBERT in the State of COLORADO, grantee:

WITNESSETH, that the grantor, for and in consideration of the sum of exactly Four Hundred Thousand and 00/100 ($400,000.00) DOLLARS, the receipt and sufficiency of which is hereby acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, convey and confirm unto the grantee, heirs and assigns forever, all the real property, together with improvements, if any, situate, lying and being in the County of ELBERT, and State of COLORADO, described as follows:

SEE EXHIBIT "A" ATTACHED HERETO

also known by street and number as 444 S. MAIN STREET, ELIZABETH, CO, COLORADO 80107

Assessor's Schedule or Parcel No.: 8418117009 AND 8418117010

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, and all of the estate, right, title, interest, claim and demand whatsoever of the said grantor, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the said grantee, heirs and assigns forever. And the said grantor, for himself, heirs and personal representatives, does covenant, grant, bargain and agree to and with the grantee, heirs and assigns, that at the time of the ensealing and delivery of these presents, is well seized of the premises above conveyed, has good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and has good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments, encumbrances and restrictions of whatever kind or nature soever. EXCEPT FOR TAXES FOR THE CURRENT YEAR AND SUBSEQUENT YEARS, EASEMENTS, RESTRICTIONS, RESERVATIONS, COVENANTS AND RIGHTS-OF-WAY OF RECORD, IF ANY.

The grantor shall and will WARRANT and FOREVER DEFEND the above-bargained premises in the quiet and peaceable possession of the grantee, heirs and assigns, against all and every person or persons lawfully claiming the whole or any part thereof. The singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

IN WITNESS WHEREOF the grantor has executed this deed on the date set forth above.

_____

_____

ELIZABETH PROPERTY INVESTORS LLC, A COLORADO LIMITED LIABILITY COMPANY

BY: _____
BRANDON JEFFRESS, MEMBER

STATE OF COLORADO)
) ss.
COUNTY OF ELBERT)

The foregoing instrument was acknowledged before me on this 25th day of August, 2023 by ELIZABETH PROPERTY INVESTORS LLC, A COLORADO LIMITED LIABILITY COMPANY, by BRANDON JEFFRESS, MEMBER.

My commission expires: 11-27-2023

VALERIE J PEARSON
Notary Public
State of Colorado
Notary ID #20194044697
My Commission Expires 11-27-2023

Witness my hand and Official seal.

_____
Notary Public

(115628.PFD/115628/3)

EXHIBIT "A"

DESCRIPTION NO. 1

LOTS 2,3,4,5 AND 6,
BLOCK 13,
PHILLIPS ADDITION TO ELIZABETH,
COUNTY OF ELBERT,
STATE OF COLORADO

AND

DESCRIPTION NO. 2

A TRACT OF LAND SITUATED IN SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE 6TH P.M., TOWN OF ELIZABETH, ELBERT COUNTY COLORADO MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHEAST CORNER OF LOT 6, BLOCK 13, PHILLIPS ADDITION TO THE TOWN OF ELIZABETH;
THENCE N 09°03'56" W ALONG THE EAST BOUNDARY OF PHILLIPS ADDITION A DISTANCE OF 166.70 FEET TO THE SOUTHEAST CORNER OF LOT 1, BLOCK 13;
THENCE N 80°55'54" E A DISTANCE OF 125.97 FEET TO THE EAST LINE OF THE FORMER COLORADO AND SOUTHERN RAILROAD RIGHT OF WAY;
THENCE S 04°45'51" E ALONG SAID EAST LINE A DISTANCE OF 167.17 FEET TO THE NORTH LINE OF SPRUCE STREET;
THENCE S 80°56'04" W ALONG SAID NORTH LINE A DISTANCE OF 113.43 FEET TO THE POINT OF BEGINNING;
EXCEPTING THAT PORTION OF DEEDED TO THE TOWN OF ELIZABETH BY DEED RECORDED APRIL 22, 1998 AT RECEPTION NO. 364740;

COUNTY OF ELBERT,
STATE OF COLORADO

637366 B: 846 P: 574 WD
09/16/2024 12:53:40 PM Page 1 of 2 R: $18.00 D: $63.00
Rhonda Braun, Elbert County, CO

Land Title
GUARANTEE COMPANY
Since 1967

General Warranty Deed

(Pursuant to C.R.S. 38-30-113(1)(a))

State Documentary Fee
Date: September 09, 2024
$63.00

This Deed, effective as of **September 9th, 2024**, signed on the date(s) acknowledged below, by Grantor(s), **EJAY HOLDINGS, LLC, A COLORADO LIMITED LIABILITY COMPANY**, whose street address is **392 MAIN STREET, ELIZABETH, CO 80107**, City or Town of **ELIZABETH**, County of **Elbert** and State of **Colorado** , for the consideration of (**$630,000.00**) ***Six Hundred Thirty Thousand and 00/100*** dollars, in hand paid, hereby sell(s) and convey(s) to **DON S. BULMER AND LINDA M. BULMER** , as Joint Tenants whose street address is **7814 Lost Lake Dr, Franktown, CO 80116**, City or Town of **Franktown**, County of **Douglas** and State of **Colorado**, the following real property in the County of **Elbert** and State of Colorado, to wit:

See attached "Exhibit A"

also known by street and number as: **392 MAIN STREET, ELIZABETH, CO 80107**

with all its appurtenances and warrant(s) the title to the same, subject to Statutory Exceptions.

EJAY HOLDINGS, LLC, A COLORADO LIMITED LIABILITY COMPANY

By: _____
JANET MCCRACKEN, PRINCIPAL

By: _____
EDMUND J. BEARD, PRINCIPAL

State of **Colorado**)
)ss.
County of **Douglas**)

The foregoing instrument was acknowledged before me on this day of **September 9th, 2024** by **JANET MCCRACKEN AND EDMUND J. BEARD AS PRINCIPALS FOR EJAY HOLDINGS, LLC, A COLORADO LIMITED LIABILITY COMPANY**

Witness my hand and official seal

My Commission expires: 8.27.27 _____
Notary Public

LAURA WENDT
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20154033830
MY COMMISSION EXPIRES 08/27/2027

When recorded return to: **DON S. BULMER AND LINDA M. BULMER**
7814 Lost Lake Dr, Franktown, CO 80116

Exhibit A

PARCEL I:

A TRACT OF LAND LOCATED IN THE NE 1/4 OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE 6TH P.M., AND BEING A PORTION OF THE AMENDED PLAT OF ELIZABETH AND PHILLIPS' ADDITION TO THE TOWN OF ELIZABETH, COUNTY OF ELBERT, STATE OF COLORADO, BEING FURTHER DESCRIBED AS FOLLOWS:

FOR THE PURPOSES OF THIS DESCRIPTION, BEARINGS ARE BASED ON THE WEST LINE OF THE COLORADO AND SOUTHERN RAILROAD RIGHT-OF-WAY AND ASSUMED TO BEAR SOUTH 09°03'56" EAST;

BEGINNING AT THE SW CORNER OF LOT 6, BLOCK 3 IN THE AMENDED PLAT OF ELIZABETH;
THENCE N09°03'56" W FOR 33.18 FEET TO THE NW CORNER OF SAID LOT 6;
THENCE N80°56'04" E FOR 100.06 FEET TO THE NE CORNER OF SAID LOT 6, BEING A POINT ON THE WEST LINE OF THE COLORADO AND SOUTHERN RAILROAD RIGHT-OF-WAY;
THENCE S09°03'56" E, AND ALONG SAID WEST RIGHT-OF-WAY LINE FOR 125.58 FEET TO THE SE CORNER OF LOT 1, BLOCK 13 IN PHILLIPS' ADDITION TO THE TOWN OF ELIZABETH;
THENCE S80°55'37" W FOR 100.00 FEET TO THE SW CORNER OF SAID LOT 1;
THENCE N09°05'13" W FOR 92.41 FEET TO THE POINT OF BEGINNING.

Remit Payment To:
Elbert County Abstract & Title Company
305 Comanche Street/ P. O. Box 38
Kiowa, CO 80117

INVOICE

Billed To:

Invoice No.:
Invoice Date: March 6, 2024
Please Pay Before: March 6, 2024
Our File Number: 115722
Your Reference Number:

Property:
444 S. MAIN STREET
ELIZABETH, CO, CO 80107
ELBERT County

Brief Legal:

DESCRIPTION	AMOUNT
INFORMATION ONLY COMMITMENT	150.00
Invoice Total Amount Due	**$ 150.00**

LENDERS -- PLEASE SUBMIT ENDORSEMENT REQUIREMENTS TO TITLE PRIOR TO CLOSING .

REALTORS -- PLEASE SUBMIT DISBURSEMENT STATEMENTS TO TITLE AT LEAST 5 DAYS PRIOR TO CLOSING TO FACILITATE ACCURATE CLOSING DISCLOSURES AND DISBURSEMENT CHECKS.

ALLIANT NATIONAL TITLE INSURANCE COMPANY

ALTA COMMITMENT FOR TITLE INSURANCE

Issued by: *Alliant National Title Insurance Company*

NOTICE

IMPORTANT—READ CAREFULLY: THIS COMMITMENT IS AN OFFER TO ISSUE ONE OR MORE TITLE INSURANCE POLICIES. ALL CLAIMS OR REMEDIES SOUGHT AGAINST THE COMPANY INVOLVING THE CONTENT OF THIS COMMITMENT OR THE POLICY MUST BE BASED SOLELY IN CONTRACT.

THIS COMMITMENT IS NOT AN ABSTRACT OF TITLE, REPORT OF THE CONDITION OF TITLE, LEGAL OPINION, OPINION OF TITLE, OR OTHER REPRESENTATION OF THE STATUS OF TITLE. THE PROCEDURES USED BY THE COMPANY TO DETERMINE INSURABILITY OF THE TITLE, INCLUDING ANY SEARCH AND EXAMINATION, ARE PROPRIETARY TO THE COMPANY, WERE PERFORMED SOLELY FOR THE BENEFIT OF THE COMPANY, AND CREATE NO EXTRACONTRACTUAL LIABILITY TO ANY PERSON, INCLUDING A PROPOSED INSURED.

THE COMPANY'S OBLIGATION UNDER THIS COMMITMENT IS TO ISSUE A POLICY TO A PROPOSED INSURED IDENTIFIED IN SCHEDULE A IN ACCORDANCE WITH THE TERMS AND PROVISIONS OF THIS COMMITMENT. THE COMPANY HAS NO LIABILITY OR OBLIGATION INVOLVING THE CONTENT OF THIS COMMITMENT TO ANY OTHER PERSON.

COMMITMENT TO ISSUE POLICY

Subject to the Notice; Schedule B, Part I—Requirements; Schedule B, Part II—Exceptions; and the Commitment Conditions, **Alliant National Title Insurance Company**, a **Colorado** corporation (the "Company"), commits to issue the Policy according to the terms and provisions of this Commitment. This Commitment is effective as of the Commitment Date shown in Schedule A for each Policy described in Schedule A, only when the Company has entered in Schedule A both the specified dollar amount as the Proposed Amount of Insurance and the name of the Proposed Insured.

If all of the Schedule B, Part I—Requirements have not been met within 120 days after the Commitment Date, this Commitment terminates and the Company's liability and obligation end.

COMMITMENT CONDITIONS

1. DEFINITIONS
   a. "Discriminatory Covenant": Any covenant, condition, restriction, or limitation that is unenforceable under applicable law because it illegally discriminates against a class of individuals based on personal characteristics such as race, color, religion, sex, sexual orientation, gender identity, familial status, disability, national origin, or other legally protected class.
   b. "Knowledge" or "Known": Actual knowledge or actual notice, but not constructive notice imparted by the Public Records.

   c. "Land": The land described in Item 5 of Schedule A and improvements located on that land that by State law constitute real property. The term "Land" does not include any property beyond that described in Schedule A, nor any right, title, interest, estate, or easement in any abutting street, road, avenue, alley, lane, right-of-way, body of water, or waterway, but does not modify or limit the extent that a right of access to and from the Land is to be insured by the Policy.

   d. "Mortgage": A mortgage, deed of trust, trust deed, security deed, or other real property security instrument, including one evidenced by electronic means authorized by law.
   e. "Policy": Each contract of title insurance, in a form adopted by the American Land Title Association, issued or to be issued by the Company pursuant to this Commitment.
   f. "Proposed Amount of Insurance": Each dollar amount specified in Schedule A as the Proposed Amount of Insurance of each Policy to be issued pursuant to this Commitment.
   g. "Proposed Insured": Each person identified in Schedule A as the Proposed Insured of each Policy to be issued pursuant to this Commitment.
   h. "Public Records": The recording or filing system established under State statutes in effect at the Commitment Date under which a document must be recorded or filed to impart constructive notice of matters relating to the Title to a purchaser for value without Knowledge. The term "Public Records" does not include any other recording or filing system, including any pertaining to environmental remediation or protection, planning, permitting, zoning, licensing, building, health, public safety, or national security matters.
   i. "State": The state or commonwealth of the United States within whose exterior boundaries the Land is located. The term "State" also includes the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, and Guam.
   j. "Title": The estate or interest in the Land identified in Item 3 of Schedule A.

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AMERICAN LAND TITLE ASSOCIATION

ALLIANT NATIONAL TITLE INSURANCE COMPANY

Commitment Number: 115722

SCHEDULE A

1. Commitment Date: February 29, 2024 at 07:00 AM

2. Policy (or Policies) to be issued: Amount

   (a) Owner's Policy (ALTA Own. Policy (10/17/92))
   Proposed Insured:

   (b) Loan Policy (ALTA Loan Policy (10/17/92))
   Proposed Insured:

3. Fee Simple interest in the land described in this Commitment is owned, at the Commitment Date, by TOWN OF ELIZABETH, A COLORADO MUNICIPAL CORPORATION.

4. The land referred to in the Commitment is described as follows:
   SEE EXHIBIT A ATTACHED HERETO

Elbert County Abstract & Title Company

By: Rosalie Sisneros
Elbert County Abstract & Title Company

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AMERICAN LAND TITLE ASSOCIATION

ALLIANT NATIONAL TITLE INSURANCE COMPANY

Commitment Number: 115722

EXHIBIT A
PROPERTY DESCRIPTION

The land referred to in this Commitment is described as follows:

DESCRIPTION NO. 1

LOTS 2,3,4,5 AND 6,
BLOCK 13,
PHILLIPS ADDITION TO ELIZABETH,
COUNTY OF ELBERT,
STATE OF COLORADO

AND

DESCRIPTION NO. 2

A TRACT OF LAND SITUATED IN SECTION 18, TOWNSHIP 8 SOUTH, RANGE 64 WEST OF THE 6TH P.M., TOWN OF ELIZABETH, ELBERT COUNTY COLORADO MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHEAST CORNER OF LOT 6, BLOCK 13, PHILLIPS ADDITION TO THE TOWN OF ELIZABETH;
THENCE N 09°03'56" W ALONG THE EAST BOUNDARY OF PHILLIPS ADDITION A DISTANCE OF 166.70 FEET TO THE SOUTHEAST CORNER OF LOT 1, BLOCK 13;
THENCE N 80°55'54" E A DISTANCE OF 125.97 FEET TO THE EAST LINE OF THE FORMER COLORADO AND SOUTHERN RAILROAD RIGHT OF WAY;
THENCE S 04°45'51" E ALONG SAID EAST LINE A DISTANCE OF 167.17 FEET TO THE NORTH LINE OF SPRUCE STREET;
THENCE S 80°56'04" W ALONG SAID NORTH LINE A DISTANCE OF 113.43 FEET TO THE POINT OF BEGINNING;
EXCEPTING THAT PORTION DEEDED TO THE TOWN OF ELIZABETH BY DEED RECORDED APRIL 22, 1998 AT RECEPTION NO. 364740;

COUNTY OF ELBERT,
STATE OF COLORADO

ALLIANT NATIONAL TITLE INSURANCE COMPANY

Commitment Number: 115722

SCHEDULE B - SECTION I
REQUIREMENTS

The following requirements must be met:

a. Pay the agreed amounts for the interest in the land and/or the mortgage to be insured.

b. Pay us the premiums, fees and charges for the policy.

c. Documents satisfactory to us creating the interest in the land and/or the mortgage to be insured must be signed, delivered and recorded.

d. You must tell us in writing the name of anyone not referred to in this Commitment who will get an interest in the land or who will make a loan on the land. We may then make additional requirements or exceptions.

1. NONE:

NOTE: THIS COMMITMENT IS FOR INFORMATIONAL PURPOSES ONLY AND LIABILITY IS LIMITED TO THE AMOUNT OF THE PREMIUM.

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AMERICAN LAND TITLE ASSOCIATION

ALLIANT NATIONAL TITLE INSURANCE COMPANY

Commitment Number: 115722

SCHEDULE B - SECTION II
EXCEPTIONS

Any policy we issue will have the following exceptions unless they are taken care of to our satisfaction.

1. RIGHT OR CLAIMS OF PARTIES IN POSSESSION NOT SHOWN BY THE RECORDS.

2. EASEMENTS, OR CLAIMS OF EASEMENTS, NOT SHOWN BY THE PUBLIC RECORDS.

3. DISCREPANCIES, CONFLICTS IN BOUNDARY LINES, SHORTAGE IN AREA, ENCROACHMENTS, AND ANY FACTS WHICH A CORRECT SURVEY AND INSPECTION OF THE LAND WOULD DISCLOSE, AND WHICH ARE NOT SHOWN BY THE PUBLIC RECORDS.

4. ANY LIEN, OR RIGHT TO A LIEN, FOR SERVICES, LABOR OR MATERIAL HERETOFORE OR HEREAFTER FURNISHED, IMPOSED BY LAW AND NOT SHOWN BY THE PUBLIC RECORDS.

5. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE HEREOF BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES OF RECORD FOR VALUE THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS COMMITMENT.

6. UNPATENTED MINING CLAIMS; RESERVATIONS OR EXCEPTION IN PATENTS OR IN ACTS AUTHORIZING ISSUANCE THEREOF.

   NOTICE: PURSUANT TO SECTION 10-11-122 OF THE COLORADO REVISED STATUTES, 1987, THE COMPANY IS REQUIRED TO DISCLOSE THE FOLLOWING INFORMATION:

   (A) THE SUBJECT PROPERTY MAY BE LOCATED IN A SPECIAL TAXING DISTRICT.

   (B) A CERTIFICATE OF TAXES DUE LISTING EACH TAXING JURISDICTION MAY BE OBTAINED FROM THE COUNTY TREASURER OR THE COUNTY TREASURERS'S AUTHORIZED AGENT.

   (C) INFORMATION REGARDING SPECIAL DISTRICTS AND THE BOUNDARIES OF SUCH DISTRICTS MAY BE OBTAINED FROM THE BOARD OF COUNTY COMMISSIONERS, THE COUNTY CLERK AND RECORDER OR THE COUNTY ASSESSOR.

7. ANY AND ALL WATER RIGHTS, CLAIMS, OR TITLE TO WATER.

8. TAXES FOR THE YEAR 2023, A LIEN NOW DUE AND PAYABLE.

9. ANY QUESTION AS TO THE EXACT SIZE AND LOCATION OF SUBJECT PROPERTY.
   NOTE: THIS EXCEPTION IS NECESSARY BECAUSE THE PLAT DOES NOT GIVE THE EXACT DIMENSIONS OF ALL LOTS.

10. FENCES AND FENCE LOCATIONS BEING CONSIDERED THE PROPERTY BOUNDARY LINES OF SUBJECT PROPERTY OR OF THE ADJOINING PROPERTIES, AND ANY QUESTION, DISPUTE OR LITIGATION AS TO THE EXACT LOCATION OF SUBJECT PROPERTY BOUNDARY LINES.

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AMERICAN LAND TITLE ASSOCIATION

Commitment Number: 115722

SCHEDULE B - SECTION II
Continued)

11. FENCE LINES, POWER LINE, WATER TANK AND CATV AS SHOWN ON LAND SURVEY PLAT BY DAVID E. ARCHER & ASSOCIATES, DEPOSITED SEPTEMBER 26, 2022 AT RECEPTION NO. 220614.

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AMERICAN LAND TITLE ASSOCIATION

2. If all of the Schedule B, Part I—Requirements have not been met within the time period specified in the Commitment to Issue Policy, this Commitment terminates and the Company's liability and obligation end.

3. The Company's liability and obligation is limited by and this Commitment is not valid without:
   a. the Notice;
   b. the Commitment to Issue Policy;
   c. the Commitment Conditions;
   d. Schedule A;
   e. Schedule B, Part I—Requirements; and
   f. Schedule B, Part II—Exceptions; and
   g. a counter-signature by the Company or its issuing agent that may be in electronic form.

4. COMPANY'S RIGHT TO AMEND
   The Company may amend this Commitment at any time. If the Company amends this Commitment to add a defect, lien, encumbrance, adverse claim, or other matter recorded in the Public Records prior to the Commitment Date, any liability of the Company is limited by Commitment Condition 5. The Company is not liable for any other amendment to this Commitment.

5. LIMITATIONS OF LIABILITY
   a. The Company's liability under Commitment Condition 4 is limited to the Proposed Insured's actual expense incurred in the interval between the Company's delivery to the Proposed Insured of the Commitment and the delivery of the amended Commitment, resulting from the Proposed Insured's good faith reliance to:
      i. comply with the Schedule B, Part I—Requirements;
      ii. eliminate, with the Company's written consent, any Schedule B, Part II—Exceptions; or
      iii. acquire the Title or create the Mortgage covered by this Commitment.
   b. The Company is not liable under Commitment Condition 5.a. if the Proposed Insured requested the amendment or had Knowledge of the matter and did not notify the Company about it in writing.
   c. The Company is only liable under Commitment Condition 4 if the Proposed Insured would not have incurred the expense had the Commitment included the added matter when the Commitment was first delivered to the Proposed Insured.
   d. The Company's liability does not exceed the lesser of the Proposed Insured's actual expense incurred in good faith and described in Commitment Condition 5.a. or the Proposed Amount of Insurance.
   e. The Company is not liable for the content of the Transaction Identification Data, if any.
   f. The Company is not obligated to issue the Policy referred to in this Commitment unless all of the Schedule B, Part I—Requirements have been met to the satisfaction of the Company.
   g. The Company's liability is further limited by the terms and provisions of the Policy to be issued to the Proposed Insured.

6. LIABILITY OF THE COMPANY MUST BE BASED ON THIS COMMITMENT; CHOICE OF LAW AND CHOICE OF FORUM
   a. Only a Proposed Insured identified in Schedule A, and no other person, may make a claim under this Commitment.
   b. Any claim must be based in contract under the State law of the State where the Land is located and is restricted to the terms and provisions of this Commitment. Any litigation or other proceeding brought by the Proposed Insured against the Company must be filed only in a State or federal court having jurisdiction.
   c. This Commitment, as last revised, is the exclusive and entire agreement between the parties with respect to the subject matter of this Commitment and supersedes all prior commitment negotiations, representations, and proposals of any kind, whether written or oral, express or implied, relating to the subject matter of this Commitment.
   d. The deletion or modification of any Schedule B, Part II—Exception does not constitute an agreement or obligation to provide coverage beyond the terms and provisions of this Commitment or the Policy.
   e. Any amendment or endorsement to this Commitment must be in writing and authenticated by a person authorized by the Company].
   f. When the Policy is issued, all liability and obligation under this Commitment will end and the Company's only liability will be under the Policy.

7. IF THIS COMMITMENT IS ISSUED BY AN ISSUING AGENT
   The issuing agent is the Company's agent only for the limited purpose of issuing title insurance commitments and policies. The issuing agent is not the Company's agent for closing, settlement, escrow, or any other purpose.

8. PRO-FORMA POLICY
   The Company may provide, at the request of a Proposed Insured, a pro-forma policy illustrating the coverage that the Company may provide. A pro-forma policy neither reflects the status of Title at the time that the pro-forma policy is delivered to a Proposed Insured, nor is it a commitment to insure.

9. CLAIMS PROCEDURES
   This Commitment incorporates by reference all Conditions for making a claim in the Policy to be issued to the Proposed Insured. Commitment Condition 9 does not modify the limitations of liability in Commitment Conditions 5 and 6.

This page is only a part of a 2021 ALTA Commitment for Title Insurance issued by Alliant Nation Title Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a counter-signature by the Company or its issuing agent that may be in electronic form.

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10. CLASS ACTION
ALL CLAIMS AND DISPUTES ARISING OUT OF OR RELATING TO THIS COMMITMENT, INCLUDING ANY SERVICE OR OTHER MATTER IN CONNECTION WITH ISSUING THIS COMMITMENT, ANY BREACH OF A COMMITMENT PROVISION, OR ANY OTHER CLAIM OR DISPUTE ARISING OUT OF OR RELATING TO THE TRANSACTION GIVING RISE TO THIS COMMITMENT, MUST BE BROUGHT IN AN INDIVIDUAL CAPACITY. NO PARTY MAY SERVE AS PLAINTIFF, CLASS MEMBER, OR PARTICIPANT IN ANY CLASS OR REPRESENTATIVE PROCEEDING. ANY POLICY ISSUED PURSUANT TO THIS COMMITMENT WILL CONTAIN A CLASS ACTION CONDITION.

11. ARBITRATION
The Policy contains an arbitration clause. All arbitrable matters when the Proposed Amount of Insurance is $2,000,000 or less may be arbitrated at the election of either the Company or the Proposed Insured as the exclusive remedy of the parties. A Proposed Insured may review a copy of the arbitration rules at http://www.alta.org/arbitration.

Countersigned:
The Elbert County Abstract & Title Company
305 Comanche Street
P.O. Box 38
Kiowa, CO 80117

BY: _____
Authorized Agent or Officer

ALLIANT NATIONAL TITLE INSURANCE COMPANY

By: _____ President

Attest: _____ Secretary

This page is only a part of a 2021 ALTA Commitment for Title Insurance issued by Alliant Nation Title Company. This Commitment is not valid without the Notice; the Commitment to Issue Policy; the Commitment Conditions; Schedule A; Schedule B, Part I—Requirements; and Schedule B, Part II—Exceptions; and a countersignature by the Company or its issuing agent that may be in electronic form.

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ALLIANT NATIONAL
TITLE INSURANCE COMPANY

DISCLOSURES

NOTE: Pursuant to C.R.S. §10-11-122, for each Commitment for an Owner's Policy of Title Insurance pertaining to the sale of residential real property, notice is hereby given that:
A) The subject real property may be located in a special taxing district.
B) A Certificate of Taxes Due listing each taxing jurisdiction will be obtained from the County Treasurer or the County Treasurer's authorized agent unless the proposed insured provides written instructions to the contrary.
C) Information regarding special districts and the boundaries of such districts may be obtained from the Board of County Commissioners, the County Clerk and Recorder, or the County Assessor.
D) The company will not issue its policy of policies of title insurance contemplated by the commitment until it has been provided a Certificate of Taxes due from the County Treasurer or the County Treasurer's authorized agent; or until the Proposed Insured has notified or instructed the company in writing to the contrary.

NOTE: Pursuant to C.R.S. §10-11-123, for each Commitment for an Owner's Policy of Title Insurance containing a mineral severance instrument exception or exceptions in Schedule B, Section 2, notice is hereby given that:
A) There is recorded evidence that a mineral estate has been severed, leased, or otherwise conveyed from the surface estate and that there is a substantial likelihood that a third party holds some or all interest in oil, gas, other minerals, or geothermal energy in the property; and
B) Such mineral estate may include the right to enter and use the property without the surface owner's permission.

NOTE: Pursuant to Colorado Division of Insurance Regulation 8-1-2, notice is hereby given that affirmative mechanic's lien protection for the prospective insured owner may be available upon compliance with the following conditions:
A. The land described in Schedule A of this Commitment must be a single family residence, which includes a condominium or townhouse unit.
B. No labor or materials may have been furnished by mechanics or materialmen for purposes of construction on the land described in Schedule A of this Commitment within the past 6 months.
C. The Company must receive appropriate affidavits indemnifying the Company against all unfiled mechanic's and materialmen's liens.
D. Any deviation from conditions A through C above is subject to such additional requirements or information as the Company may deem necessary; or, at its option, the Company may refuse to delete the exception.

No coverage will be given under any circumstances for labor or material for which the insured has contracted for or agreed to pay.

NOTE: Pursuant to Colorado Division of Insurance Regulation 8-1-2, notice is hereby given that every title insurance company shall be responsible to the proposed insured(s) subject to the terms and conditions of the title insurance commitment, other than the effective date of the title insurance commitment, for all matters which appear of record prior to the time of recording whenever the title insurance company, or its agent, conducts the closing and settlement service that is in conjunction with its issuance of an owner's policy of title insurance and is responsible for the recording and filing of legal documents resulting from the transaction which was closed.

NOTE: Pursuant to Colorado Division of Insurance Regulation 8-1-3, notice is hereby given of the availability of a Closing Protection Letter which may, upon request, be provided to certain parties to the transaction

NOTE: C.R.S. §30-10-406 requires that all documents received for recording or filing in the clerk and recorder's office shall contain a top margin of at least one inch and a left, right, and bottom margin of at least one half of an inch. The clerk and recorder may refuse to record or file any document that does not conform, except that, the requirement for the top margin shall not apply to documents using forms on which space is provided for recording or filing information at the top margin of the document.

NOTE: Pursuant to C.R.S. §38-35-125(2), no person or entity that provides closing and settlement services for a real estate transaction shall disburse funds as a part of such services until those funds have been received and are available for immediate withdrawal as a matter of right.

NOTE: If the transaction includes a sale of the property and the price exceeds $100,000.00, the seller must comply with the disclosure/withholding provisions of C.R.S. §39-22-604.5 (Nonresident withholding).

NOTE: C.R.S. §39-14-102 requires that a real property transfer declaration accompany any conveyance document presented for recordation in the State of Colorado. Said declaration shall be completed and signed by either the grantor or grantee.

Nothing herein contained will be deemed to obligate the company to provide any of the coverages referred to herein unless the above conditions are fully satisfied.

ALLIANT NATIONAL
TITLE INSURANCE COMPANY

PRIVACY POLICY

PURPOSE OF NOTICE

Alliant National Title Insurance Company respects the privacy of our customers' personal information, so we want you to know the ways in which we may collect and use non-public personal information, also known as personally identifiable information (NPI/PII). The "transactions" which we refer to below are those transactions which are related to our business of title insurance, including the issuance of title insurance policies and the handling of claims. Our practices and policies are set out in this notice.

Types of Information We May Collect

In the course of our business, the types of personal information that we may collect about you include:

- Information we receive from you or your authorized representative on applications and forms, and in other communications to us
- Information about your transactions with us, our affiliated companies, or others
- Information from consumer or other reporting agencies
- Information that we receive from others involved in your transaction, such as from a real estate agent or lender.

Use and Disclosure Information

We use your information to provide the product or service you or your authorized agent have requested of us. We may disclose information to our affiliated companies and nonaffiliated third parties as necessary to service your transaction, to protect against fraudulent or criminal activities, when required to do so by law, and as otherwise permitted by law.

We do not share any personal information we collect from you with nonaffiliated third parties for their own use.

Protection of Your Personal Information

We restrict access to personal information about you to those employees who need to know that information in order to provide products and services to you or for other legitimate business purposes. We maintain physical, electronic and procedural safeguards to protect your personal information from unauthorized access or intrusion.

Changes

This notice may be revised in accordance with applicable privacy laws.

How to Contact Us

If you have any question or concerns regarding this Privacy Policy, please contact our National Operations Center (NOC) at noc@alliantnational.com, or (303) 682-9800 ext. 100.

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ATTACHMENT B

▪ PO Box 159, 151 S. Banner Street ▪ Elizabeth, Colorado 80107 ▪ (303) 646-4166 ▪ Fax: (303) 646-9434 ▪
www.townofelizabeth.org

TOWN OF ELIZABETH

MICHAEL DEVOL/PUBLIC WORKS DIRECTOR

TO: Mayor, Mayor Pro-Tem, Town board of Trustees
FROM: Mike DeVol, Public Works Director
DATE: February 4, 2025
SUBJECT: Depot Parking Lot

Public Works has been involved since the early stages of the Depot Parking Lot when it was the conceptual 444 Parking Lot and to what is now the exchange of property frontage for more property for the Depot Parking Lot. Public Works has worked with Terracina in all aspects of design, drainage, lighting, accessibility, water sewer design, landscaping, and possible snow storage when needed. During the streetscape project Public Works installed domestic water, fire line tap stub, and sewer service stub and a CDPHE water sampling station. Public Works has also installed a water service line and meter pit into the Depot Lot and when that portion of the street scaping is underway Public Works will tie that water service into Main Street while concrete is being replaced. Public Works Approves the land exchange and Depot Parking Lot for the Town of Elizabeth.

Mike DeVol
Town of Elizabeth
Public Works Director
GCWWTP Operations
303-913-6453
mdevol@townofelizabeth.org

Elizabeth Fire Protection District

P.O. Box 441
155 W Kiowa Ave.
Elizabeth, Colorado
80107

Phone: 303-646-3800
Fax: 303-688-6994
Email: kara@elizabethfire.com
Website: https://www.elizabethfire.com

Division Chief of Administration
and Prevention

Date 1/31/2025

Applicant	Town of Elizabeth
Applicant Address	PO Box 159 Elizabeth, CO 80107
Project	Main Street Depot
Project Address	Spruce Street
Plans Dated	1/17/2025
Review Number	2
Plan Review Fee	0.00

Approved ☑ **Needs Changes** ☐ **Rejected** ☐

A review was conducted on the submitted plans for the above location based on the adopted codes and standards below.

☑ 2018 International Codes and Adopted Standards
☐ 2021 International Codes and Adopted Standards

Reviewed By: Kara Gerczynski Signature: _____
Title: Division Chief/Fire Marshal

RESPONSE TO PLAN REVIEW COMMENTS AND INSPECTION REQUESTS

Please read this document in its entirety. The contractor and/or applicant is responsible for compliance with all requests, comments, applicable codes, ordinance or policy of the fire department. All comments shall be addressed in writing. If plans are rejected, additional review fees may be charged. If changes are needed, additional submittals may be required.

Conditions found, or other data collected or submitted, shall not prevent the fire code official from requiring correction of errors found.

Inspections are required to be requested on our website at www.elizabethfire.com or phoned in by 4:00 p.m. at 303-646-3800 the day before the day you wish the inspection.

NOTE: ALL INSPECTION TIMES ARE SUBJECT TO INSPECTOR AVAILABILITY

After hour inspections can be scheduled for additional fees. All review and inspection fees are due at the time of review pick-up. Fees schedules are located on our website at www.elizabethfire.com

Section 1

BUILDING INFORMATION

Building Square Footage: 130 Sq. Ft
Type of Construction: _____

Section 2

Fire Service Features

FIRE SERVICE WATER SUPPLY

Required Fire Flow:

Fire flow: N/A
Duration: _____
Total Capacity: _____
Sprinklered Building reduction: _____

Fire Hydrant Location and Distribution:

Number of Fire Hydrants: 1
Average Spacing: _____

FIRE SERVICE ACCESS

Width and Surface:

	Approved	Rejected	N/A
Width:	☑	☐	☐
Length:	☑	☐	☐
Turn-around:	☑	☐	☐
Surface:	☑	☐	☐
Premises Identification:	☑	☐	☐
Key Boxes:	☐	☐	☑
Radio coverage:	☐	☐	☑

Additional Comments:

The town shall have signage at the entrance to the parking lot to identify Main Street Station for immediate emergency response.

Commercial building plans need to be submitted to this office for review. An Impact Fee Agreement needs to be signed before recordation of site plan. The required fire department access and fire hydrants shall be installed and approved prior to construction beginning above foundation level or the moving of combustible materials onto the construction site.

TOWN OF ELIZABETH

PO Box 159, 151 S. Banner Street ▪ Elizabeth CO 80107 ▪ 303-646-4166 x4

REFERRAL AGENCY REVIEW FORM

Project Title:	**Main Street Depot – Minor Development & Site Plan**
Description:	Replat consisting of 3 lots; site plan for a parking lot and restroom facility
Review Sent Date:	1/22/2025 **Review Due by:** 1/24/2025

REFERRAL AGENCY	**Stolfus and Associates**
Contact Name	**Max Rusch**
Contact Email and Phone Number	**max@stolfusandassociates.com 303-221-2330**

COMMENTS:

The last round of comments were adequately addressed. As such, there are no further comments.

TOWN OF ELIZABETH

PO Box 159, 151 S. Banner Street ▪ Elizabeth CO 80107 ▪ 303-646-4166 x4

REFERRAL AGENCY REVIEW FORM

Project Title:	**Main Street Depot – Minor Development & Site Plan**
Description:	Replat consisting of 3 lots; site plan for a parking lot and restroom facility
Review Sent Date:	12/2/2024 **Review Due by:** 12/23/2024

REFERRAL AGENCY	**Elbert County Planning Department**
Contact Name	**Danny Klibaner**
Contact Email and Phone Number	**Danny.klibaner@ElbertCounty-co.gov**

COMMENTS:

No objections.

From: Brooks Kaufman
To: Alexandra Cramer
Subject: RE: Review Needed - Main Street Depot Minor Development & Site Plan
Date: Tuesday, February 4, 2025 11:01:25 AM
Attachments: image002.png
image003.png
image004.png
image005.png
image006.png
image007.png
image009.png
image010.png

Alexandra

CORE approves the revisions. Thank you

Brooks Kaufman
Lands and Rights of Way Manager

800.332.9540 **MAIN**
720.733.5493 **DIRECT**
303.912.0765 **MOBILE**

www.core.coop.

Book time to meet with me

From: Alexandra Cramer <acramer@townofelizabeth.org>
Sent: Tuesday, February 4, 2025 10:48 AM
To: Brooks Kaufman <BKaufman@core.coop>
Subject: RE: Review Needed - Main Street Depot Minor Development & Site Plan

[CAUTION:] This email is from an external source. Avoid clicking links or opening attachments unless you trust the sender and verify the content's safety.

Hi Brooks,

Could you let me know if this meets your requirements? The Town engineer has added all of the easements you gave us as existing, and the new easement is shown. We are still finalizing the new easement by separate document but will add that info to the plat

ATTACHMENT C

▪ PO Box 159, 151 S. Banner Street ▪ Elizabeth, Colorado 80107 ▪ (303) 646-4166 ▪ Fax: (303) 646-9434 ▪
www.townofelizabeth.org

PUBLISHER'S AFFIDAVIT

STATE OF COLORADO)
) ss.
COUNTY OF ELBERT)

I, Nikki Lister, do solemnly affirm that I am the Publisher of RANCHLAND NEWS; that the same is a weekly newspaper published at Simla, County of Elbert, State of Colorado, and has a general circulation therein; that said newspaper has been continuously and uninterruptedly published in said County of Elbert for a period of at least 52 consecutive weeks next prior to the first publication of the annexed notice, that said newspaper is entered in the post office at Calhan, Colorado as second class mail matter and that said newspaper is a newspaper within the meaning of the Act of the General Assembly of the State of Colorado, approved March 30, 1923, and entitled "Legal Notices and Advertisements," with other Acts relating to the printing and publishing of legal notices and advertisements. That the annexed notice was published in the regular and entire issue of said newspaper, once each week for one successive weeks; that the first publication of said notice was in the Issue of said newspaper dated;

January 16, 2025

and the last publication of said notice was in the issue of said newspaper dated;

January 16, 2025

and that copies of each number of said paper in which said notice and/or list was published were delivered by carriers or transmitted by mail to each of the subscribers of said newspaper, Ranchland News, according to the accustomed mode of business in this office.

Nikki Lister

Publisher

The above certificate of publication was subscribed and affirmed to before me, a Notary Public, to be the identical person described in the above certificate, on the

16 day of January, 2025

Jennifer Lister

Notary Public

February 20, 2028

(My Notary Public Commission Expiration Date)

JENNIFER LISTER
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20244007249
MY COMMISSION EXPIRES FEBRUARY 20, 2028

NOTICE OF PUBLIC HEARINGS

Notice is hereby given that the Planning Commission and Board of Trustees shall hold public hearings concerning a replat application for the project known as Bulmer Filing No. 1 located on property described in Exhibit A and a site plan application for the project known as The Depot on Main Street located on property described in Exhibit B and generally located at the northeast corner of S Main Street and Spruce Street pursuant to the Town of Elizabeth Land Development Ordinance.

The public hearings are to be held before the Planning Commission on February 4, 2025 at 6:30 p.m. and Board of Trustees on February 11, 2025 at 7:00 p.m., or as soon as possible thereafter. The public hearings shall be held in the Town Hall, 151 South Banner Street, Elizabeth, Colorado, or at such other time or place in the event this hearing is adjourned. Further information is available through the Town Community Development Department at 303-646-4166 x4.

ALL INTERESTED PERSONS MAY ATTEND

EXHIBIT A (legal description)

A replat of Lots 5 and 6, Block 3 and Lots 1-6, Inclusive, Block 13, and a part of the northeast quarter of Section 18, Township 8 South, Range 64 West of the 6th P.M., Town of Elizabeth, County of Elbert, State of Colorado

EXHIBIT B (legal description)

Lots 2-6 of Block 13, situated in the northeast quarter of Section 18, Township 8 South, Range 64 West of 6th P.M., Town of Elizabeth, County of Elbert, State of Colorado

Published January 16, 2025
In Ranchland News
Legal No. 20

NOTICE OF PUBLIC HEARINGS

Notice is hereby given that the property upon which this sign is posted shall be considered at public hearings for a replat and a site plan application pursuant to the Town of Elizabeth Land Development Ordinance. The public hearings are to be held before the Planning Commission on February 4, 2025 at 6:30 pm and Board of Trustees on February 11, 2025 at 7:00 pm, or as soon as possible thereafter.

The public hearings shall be held in Chambers for the Town of Elizabeth.

Further information is available through the Town Community Development Department at (303) 646-4166.

ALL INTERESTED PERSONS MAY ATTEND.

R108549
R108544
R108548
R108547
R118191
R114913
R114912
R114911
R108541
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R123673
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R108606
R108609
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R114196
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R108604
R108605
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R108618
R123673
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R108645
R124982
R124981

Dear Neighbor,

The Town of Elizabeth is submitting a replat and site plan application for the Main Street Depot project, located at the northeast corner of South Main Street and Spruce Street in Elizabeth. The replat application involves dividing approximately 3 acres of downtown property into three lots: one for the existing Carriage Shoppes, one for future commercial development with Main Street frontage, and one for a public parking facility adjacent to Running Creek Park. The Town of Elizabeth is partnering as a co-applicant for this project.

The proposed site plan includes the development of a 116-space public parking facility, which will feature public restrooms and enhanced pedestrian connections to both Running Creek Park and downtown. The parking facility will have two access points from Main Street and Spruce Street to ensure efficient circulation.

Public hearings for the replat and site plan applications will be held as follows:

- **Planning Commission**: February 4, 2025, at 6:30 p.m.
- **Board of Trustees**: February 11, 2025, at 7:00 p.m. or soon thereafter.

Both hearings will take place at the Town Hall, 151 South Banner Street, Elizabeth, Colorado. For more information, please contact the Town of Elizabeth Community Development Department at 303-646-4166.

We invite you to attend the public hearings and share your thoughts.

Sincerely,

The Town of Elizabeth

ELIZABETH PRESBYTERIAN CHURCH
PO BOX 117
ELIZABETH CO 80107-0117

FUGETT DEAN A
1258 N HUNT CLUB DR
HERNANDO FL 34442

FUGETT C JANE
1258 N HUNT CLUB DR
HERNANDO FL 34442

TOWN OF ELIZABETH
151 BANNER ST
ELIZABETH CO 80107

HALBROOK ALICE F
1752 PRIVATE RD 130
ELIZABETH CO 80107

SCHRODER MICHAEL LEE
18473 W MARCONI AVE
SURPRISE AZ 85388

MICHAEL AND KATHLEEN BLACKBURN FAMILY TRUST
2242 ANTELOPE CIR
ELIZABETH CO 80107

MICHAEL AND KATHLEEN BLACKBURN FAMILY TRUST
2242 ANTELOPE CIR
ELIZABETH CO 80107

232 MAIN STREET LLC
232 MAIN S MAIN ST
ELIZABETH CO 80107

JOHN AND JANET TAYLOR LIVING TRUST (THE)
245 ROCKY CLIFF ROAD
ELIZABETH CO 80107

EVELETH STEVEN GEORGE
324 E ELM ST
ELIZABETH CO 80107

STRUTHERS JEFF PHOTOGRAPHY LLC
33252 COUNTY RD 73
KIOWA CO 80117

HUBBS JAMES E
349 E ELM STREET
ELIZABETH CO 80107

HUBBS MARC E
349 E ELM STREET
ELIZABETH CO 80107

BLODIG DENISE
367 SANDY HOLLOW TRAIL
FRANKTOWN CO 80116

SAAVEDRA LINDSAY LEIGH
375 SOUTH MAIN ST
ELIZABETH CO 80107

COWLEY ROBERT R
40900 WIND SPIRIT LN
PARKER CO 801384758

TOWN OF ELIZABETH COLORADO
425 MAIN ST
ELIZABETH CO 80107

SCHAUER CHRISTINA
459 S BANNER ST
ELIZABETH CO 80107

SILVERMAN SYRINA HALEN
459 S BANNER ST
ELIZABETH CO 80107

MANZANARES EDWINA T
481 SOUTH BANNER ST
ELIZABETH CO 80107

BULMER DONALD S
5120 SILVER HARE LN
CASTLE ROCK CO 80104

BULMER LINDA M
5120 SILVER HARE LN
CASTLE ROCK CO 80104

FLEMING ERIC W
5120 SILVER HARE LN
CASTLE ROCK CO 80104

FLEMING JENNIFER R
5120 SILVER HARE LN
CASTLE ROCK CO 80104

SIMMONS JULIE ANNE
523 S MAIN ST
ELIZABETH CO 80107

STRAND SAMUEL
5367 S BOSTON ST
GREENWOOD VILLAGE CO 801113440

STRAND ANNE
5367 S BOSTON ST
GREENWOOD VILLAGE CO 801113440

MAIN STREET STATION ELIZABETH LLC
5369 GRAND FIR WAY
PARKER CO 80134

FORSYTH BONNIE
577 S MAIN ST
ELIZABETH CO 80107

CORDOVA STEVEN A SR
624 S BANNER ST
ELIZABETH CO 80107

CORDOVA CHERYL L
624 S BANNER ST
ELIZABETH CO 80107

BULMER DONALD
7814 LOST LAKE DR
FRANKTOWN CO 80116

BULMER LINDA M
7814 LOST LAKE DRIVE
FRANKTOWN CO 80116

PRICKLY PEAR INVESTMENTS LLC
8034 HOMESTEAD RD
PARKER CO 80138

MKN LLC, C/O MIKE NAUGHTON
8521 E ILIFF DR
DENVER CO 80246

BONNIE RAY WILKINSON FAMILY TRUST
8983 APACHE PLUME DR. UNIT D
PARKER CO 801345569

EVANGEL PARTNERS LLC
PO BOX 1011
ELIZABETH CO 80107

ELIZABETH PRESBYTERIAN CHURCH
PO BOX 117
ELIZABETH CO 80107-0117

HUNTER PAUL W
PO BOX 1268
ELIZABETH CO 80107

WENDLER JOEL
PO BOX 1357
ELIZABETH CO 80107

WENDLER LAURA
PO BOX 1357
ELIZABETH CO 80107

TOWN OF ELIZABETH
PO BOX 159
ELIZABETH CO 80107

CARLSON ANDREW JOHN
PO BOX 1734
PARKER CO 801341405

KENNETH AND JULIE UHERNIK TRUST
PO BOX 1802
ELIZABETH CO 80107

GERONDALE GARRY
PO BOX 1835
ELIZABETH CO 801071835

GERONDALE TONYA
PO BOX 1835
ELIZABETH CO 801071835

MUZEK BUCK MAUREEN
PO BOX 1838
ELIZABETH CO 80107

ELIZABETHS OLDE HOTEL SQUARE LLC
PO BOX 1947
ELIZABETH CO 80107-1947

WAGNER GENEVIEVE M.A.
PO BOX 1981
ELIZABETH CO 80107

WAGNER GEOFFREY A
PO BOX 1981
ELIZABETH CO 80107

WHITE RACHEL LEE
PO BOX 2614
ELIZABETH CO 80107

CONNIE DEAN LEHMAN TRUST
PO BOX 281
ELIZABETH CO 80107

JEFFREY W LEHMAN TRUST
PO BOX 281
ELIZABETH CO 80107

KRUEGER LINDA A
PO BOX 477
ELIZABETH CO 80107-0477

ELIZABETH SCHOOL DISTRICT
PO BOX 520
ELIZABETH CO 801070520

WAGNER MATTHEW G
PO BOX 863
ELIZABETH CO 80107

AMERICAN LEGION POST 82
PO BOX 865
ELIZABETH CO 80107

DYER STEPHEN E
PO BOX 937
PARKER CO 801340937