

**STORMWATER MANAGEMENT PLAN (SWMP)
for
MAYBERRY, COLORADO SPRINGS – PHASE 1 PUD
(formerly known as “Ellicott Town Center”)**

Prepared for:

Mayberry Communities, LLC
3296 Divine Heights #207
Colorado Springs, CO 80922

Prepared by:



1635 West 13th Avenue
Suite 310
Denver, CO 80204

R&R Project No. MC22110
EPC Project No. PUDSP-21-009
SF-22-019

Qualified Stormwater Manager: Raw Land Detailing
Attn: Larry Lee
10475 Accipiter Dr.
Peyton, CO 80831

Contractor: Mayberry Communities, LLC
Attn: Jason Kvols
3296 Divine Heights #207
Colorado Springs, CO 80922

**MAYBERRY, COLORADO SPRINGS – PHASE 1 PUD
STORMWATER MANAGEMENT PLAN (SWMP)
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Appendix A	Standard SCM Details
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Appendix C	Mayberry Filing 3 Grading and Erosion Control Plans <i>*Note: Filing 3 GEC plans supersede previously approved plans from master development.</i>

General SWMP Notes:

1. There are no existing streams, wetlands, or other surface waters within 50 feet of the construction limits.
2. There are no dedicated asphalt / concrete batch plants proposed.
3. There are no anticipated allowable non-stormwater discharges from this site (no groundwater, springs, irrigation, discharge covered by CDPHE Low Risk Guidance, etc.).

**MAYBERRY, COLORADO SPRINGS – PHASE 1 PUD
(formerly know as “Ellicott Town Center”)
STORMWATER MANAGEMENT PLAN (SWMP)**

I. QUALIFIED STORMWATER MANAGER

A. Qualified Stormwater Manager

Contractor: Raw Land Detailing
10475 Accipiter Dr.
Peyton, CO 80831
Attn: Larry Lee (719)-495-7770
larry@rawlanddetailing.com

B. Applicant / Contact Information

Owner/Developer: Mayberry Communities, LLC
3296 Divine Heights #207
Colorado Springs, CO 80922
Attn: Jason Kvols (719)-426-7810
jasonkvols@mayberrycoloradosprings.com

Engineer: R&R Engineers – Surveyors, Inc.
1635 West 13th Avenue
Denver, CO 80204
Attn: Cliff Dayton, P.E. (303)-753-6730
cdayton@rrengineers.com

II. SPILL PREVENTION AND RESPONSE PLAN

A. Spill Prevention and Response Procedures:

- The primary objective in responding to a spill is to quickly contain the material(s) and prevent or minimize their migration into storm water runoff and conveyance systems. If the release has impacted on-site storm water, it is critical to contain the released materials on site and prevent their release into receiving waters.
- Spill Response Procedures:
 - Notify site superintendent immediately when a spill, or the threat of a spill, is observed. The superintendent shall assess the situation and determine the appropriate response.

- If spills represent an imminent threat of escaping on-site facilities and entering the receiving waters, site personnel shall respond immediately to contain the release and notify the superintendent after the situation has stabilized.
- The site superintendent, or his designee, shall be responsible for completing a spill reporting form and for reporting the spill to the appropriate agency.
- Spill response equipment shall be inspected and maintained as necessary to replace any materials used in spill response activities.
- Spill kits shall be on-hand at all fueling sites. Spill kit location(s) shall be reported to the SWMP Administrator.
- Absorbent materials shall be on-hand at all fueling areas for use in containing inadvertent spills. Containers shall be on-hand at all fueling sites for disposal of used absorbents.
- Recommended components of spill kits include the following:
 - Oil absorbent pads (one bale)
 - Oil absorbent booms (40 feet)
 - 55-gallon drums (2)
 - 9-mil plastic bags (10)
 - Personal protective equipment including gloves and goggles

B. Notification Procedures:

- In the event of an accident or spill, the SWMP Administrator shall be notified as a minimum.
- Depending on the nature of the spill material involved, the Colorado Department of Public Health and Environment (24-hour spill reporting line: 877-518-5608), downstream water users, or other agencies may also need to be notified.
- Any spill of oil which 1) violates water quality standards, 2) produces a “sheen” on a surface water, or 3) causes a sludge or emulsion, or any hazardous substance release, or hazardous waste release which exceeds the reportable quantity, must be reported immediately by telephone to the National Response Center Hotline at (800)-424-8802.

III. MATERIALS HANDLING

A. General Materials Handling Practices:

- Potential pollutants shall be stored and used in a manner consistent with the manufacturer’s instructions in a secure location. To the extent practical, material storage areas should not be located near storm drain inlets and should be equipped with covers, roofs, or secondary containment as required to prevent storm water from contacting stored materials.
- Chemicals that are not compatible shall be stored and segregated areas so that spilled materials cannot combine and react.
- Disposal of materials shall be in accordance with the manufacturer’s instructions and applicable local, state, and federal regulations.
- Materials no longer required for construction shall be removed from the site as soon as possible.

- B. Adequate garbage, construction waste, and sanitary waste handling and disposal facilities shall be provided as necessary to keep the site clear of obstruction and Stormwater Control Measures (SCMs) clear and functional.
- C. Specific Materials Handling Practices:
- All pollutants, including waste materials and demolition debris, that occur on-site during construction shall be handled in a way that does not contaminate storm water.
 - All chemicals including liquid products, petroleum products, water treatment chemicals, and wastes stored on site shall be covered and contained and protected from vandalism.
 - Maintenance and repair of all equipment and vehicles involving oil changes, hydraulic system drain down, de-greasing operations, fuel tank drain down and removal, and other activities which may result in the accidental release of contaminants, shall be conducted under cover during wet weather and on an impervious surface to prevent release of contaminants onto the ground. Materials spilled during maintenance operations shall be cleaned up immediately and properly disposed of.
 - Wheel wash water shall be settled and discharged on site by infiltration. Wheel wash water shall not be discharged to the storm water system.
 - Application of agricultural chemicals, including fertilizers and pesticides, shall be conducted in a manner and at application rates that will not result in loss of chemical to storm water runoff. Follow manufacturer's recommendations for application rates and procedures.
 - pH-modifying sources shall be managed to prevent contamination of runoff and storm water collected on site. The most common sources of pH-modifying materials are bulk cement, cement kiln dust (CKD), fly ash, new concrete washing and curing waters, waste streams generated from concrete grinding and sawing, exposed aggregate processes, and concrete pumping and mixer washout waters.
- D. Equipment maintenance and fueling: Contractor shall implement appropriate spill prevention and response procedures
- E. Concrete Wash Water: Unless confined in a pre-defined, bermed containment area, the cleaning of concrete truck delivery chutes is prohibited at the job site. The discharge of water containing waste cement to the storm drainage system is prohibited.

IV. POTENTIAL SOURCES OF POLLUTION

Potential pollutant sources will be addressed as follows:

POTENTIAL POLLUTION SOURCES

Potential Pollution Sources	Possible Site Contributions of Pollutants to Stormwater Discharges	Location
All disturbed and stored soils	Stockpiles of fill from site excavations, topsoil stockpiles.	Stockpiles
Vehicle tracking of sediments	See GEC Plans for vehicle entrance and exits. Vehicle tracking control pads will be installed and maintained at all construction access points.	VTC (per GEC Plans)
Management of contaminated soils	No contaminated soils are expected to be encountered.	N/A
Loading and unloading operations	Loading and unloading of construction materials	TBD*
Outdoor storage activities (building material, fertilizers, chemicals, etc.)	Stockpiles and equipment storage areas (no fertilizers, petroleum or chemical products will be stored on-site).	TBD*
Vehicle and equipment maintenance and fueling	Fueling will occur on-site using mobile equipment (will not be stored on-site). Equipment maintenance will occur off-site	TBD*
Significant dust or particulate-generating processes	Vehicle tracking, soil removed from excavation, stockpiles.	TBD*
Routine maintenance activities involving fertilizers, pesticides, detergents, fuels, solvents, oils, etc.	All equipment maintenance will occur off-site. No fertilizers, pesticides, detergents, and/or solvents will be used or stored on-site.	TBD*
On-site waste management practices (waste piles, liquid wastes, dumpsters, etc.)	All waste will be removed from site as soon as possible, and disposed of at a permitted off-site disposal site	TBD*
Concrete truck/equipment washing, including the concrete truck chute and associated fixtures and equipment	Properly contained concrete washout areas may be designated and maintained within the site, based on construction phasing.	CWA
Dedicated asphalt and concrete batch plants	No dedicated asphalt or concrete batch plants are planned on-site.	N/A
Non-industrial waste sources such as worker trash and portable toilets	Worker trash will be removed from the site as soon as possible. Portable toilets will be utilized and maintained as required based on construction phasing.	TBD*
Other areas or procedures where potential spills can occur	Petroleum releases from equipment are possible.	TBD*

* Contractor to add locations of any items not specified at this time*

V. IMPLEMENTATION OF CONTROL MEASURES

Narrative Description of Appropriate Stormwater Controls and Measures

Construction Phasing

Phase 1 – Mobilization, Clearing & Grubbing Operations

Clearing and grubbing will be completed prior to initial overlot grading activities for this site. Perimeter control measures will be installed prior to the start of construction operations. These perimeter controls will include silt fencing and a vehicle tracking control pad.

Phase 2 – Earthwork, Road Grading, and Utility Installation

Major earthwork activities will include overlot grading, foundation over-excavation, backfill, and compaction, utility construction, and rough and final grading for site improvements.

Phase 3 – Building Construction and Final Grading Activities

This phase will include final grading of building sites and landscape areas. Appropriate temporary SCM's will be maintained until vegetation is re-established throughout the site.

Phase 4 – Stabilization

All disturbed areas within the project will be revegetated. The specific revegetation requirements will include the following:

- Landscape plantings – per approved landscape plans
- Native seeding – all other disturbed areas

Phase 5 – Removal of Temporary Control Measures

Temporary sediment control measures shall remain in place until vegetation has been adequately established to prevent erosion from storm runoff. Once adequate vegetation has been established, the temporary erosion control measures will be removed and disposed of off-site.

SCM's for Stormwater Pollution Prevention (See GEC Plans):

Phase	SCM
Clearing and Grubbing necessary for perimeter controls	VTC's
Initiation of perimeter controls	Silt Fence
Remaining clearing and grubbing	
Site Grading	IP / SCL
Extended detention basins (sediment ponds during construction)	EDB / SB
Stabilization	SM
Removal of erosion control measures	

Proposed Sequence of Major Activities / Timing Schedule

The anticipated start and completion time period of the construction activities is from April, 2021 through August, 2022. The estimated schedule for erosion control activities is as follows:

- Install Initial SCM's: April, 2021
- Site Grading: April, 2021
- Seeding & Mulching: August, 2022
- Final Stabilization: August, 2023

Erosion and Sediment Controls:

1) Structural Practices / Control Measures (all structural Control Measures shall conform to ECM / DCM and MHFD standards and details):

- a. Silt fence at toe of slope along downstream limits of disturbed areas
- b. Sediment control logs (SCL) along drainage swales
- c. Inlet protection (IP) at storm inlets
- d. Sediment Basins (SB)
- e. Extended Detention Basins (EDB)

2) Non-Structural Practices:

- Preserve existing vegetation beyond limits of work
- Temporary seeding of areas to remain disturbed for significant periods of time
- Permanent seeding/mulching (SM) upon completion of rough grading

Other Controls:

- Contractor shall dispose of all waste materials at a permitted off-site disposal site.
- Vehicle tracking pads will be installed at all access points to limit off-site soil tracking.
- Street Sweeping: Contractor shall perform street sweeping following storm events and as required to keep adjoining public streets clean.

Control Measure / SCM Details:

- Refer to Standard SCM Details in GEC Plans.
- Refer to additional Standard Details in MHFD Volume 3 where applicable.

VI. SITE DESCRIPTION

A. Nature of Construction Activity

- The Mayberry, Colorado Springs (formerly known as "Ellicott Town Center") Phase 1 PUD is a new residential subdivision in eastern El Paso County, Colorado consisting of 240 single-family residential lots on 71.4 acres. Filing No. 1, recorded in December 2020, includes 98 residential lots, and Filing No. 4 (in process) will comprise the remaining 142 lots on the east side of the Phase 1 PUD area. The site is located along the south side of State Highway 94 (SH94) between Peyton Highway and Ellicott Highway. Site development activities will include site grading, utilities, roadways, and associated subdivision improvements.

- B. Proposed sequence of major activities:
- Mobilization / implementation of SCM's
 - Clearing and grubbing
 - Rough grading
 - Utility installation
 - Final grading
 - Roadway construction and paving
- C. Total site area = 140-acres; Projected disturbed area = 140-acres (approx.)
- D. Soil erosion potential and potential impacts upon discharge:
- On-site soils are comprised primarily of "Blakeland series" soils, which are characterized as well-drained loamy sand with rapid permeability, slow surface runoff rates, and moderate hazard of erosion (Hydrologic Soils Group A).
 - Potential impacts upon discharge would include sedimentation adversely affecting downstream waterways and habitat.
- E. Existing vegetation on site:
- Native meadow grasses and trees (approx. 70% coverage, based on site inspection)
- F. Allowable non-stormwater components of discharge: none anticipated
- G. Receiving water: Surface drainage from this site flows southeasterly into the existing downstream grass-lined drainage swales and channels which ultimately flow to Black Squirrel Creek (ultimate receiving water).
- H. Stream Crossings: There are no stream crossings located within the construction site boundary.

VII. SITE MAP

- SWMP Maps are provided on the attached GEC Plans
- Qualified Stormwater Manager shall update SWMP Maps as required based on field conditions throughout the project.
- Contractor shall update and annotate the SWMP Maps to show the location of the construction trailer, stabilized staging area, CWA, and other items as these locations are determined on site.

VIII. FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT

- A. Permanent seeding will be provided to achieve long-term stabilization of the site.
- B. Seed Mix: "Foothills Mix" or approved equal
- C. Seeding Application Rate: Drill seed 0.25" to 0.5" into the soil. In small areas not accessible to a drill, hand broadcast at double the rate and rake 0.25" to 0.5" into the soil. Apply seed at the following rates:
 - Dryland: 20-25 lbs/acre
 - Irrigated: 40 lbs/acre
- D. Soil Stabilization Practices:
 - Mulching Application: Apply 1-1/2 tons of certified weed free hay per acre mechanically crimped into the soil in combination with an organic mulch tackifier. On slopes and ditches requiring a blanket, the blanket shall be placed in lieu of much and mulch tackifier.
- E. Soil Conditioning and Fertilizer Requirements:
 - Soil conditioner, organic amendment shall be applied to all seeded areas at 3 CY / 1000 SF.
 - Fertilizer shall consist of 90% fungal biomass (mycelium) and 10% potassium-magnesia with a grade of 6-1-3 or approved equal. Fertilizer shall be applied as recommended by seed supplier.
- F. Final stabilization is reached when all soil-disturbing activities at the site have been completed, and uniform vegetative cover has been established with an individual plant density of at least 70 percent of pre-disturbance levels, or equivalent permanent, physical erosion reduction methods have been employed.
- G. Structural Control Measures:
 - Re-Seeding and Landscaping for site stabilization
 - Permanent Stormwater Detention & Water Quality Pond C1
 - Permanent Stormwater Detention & Water Quality Pond D
- H. Non-Structural Control Measures:
 - Proper Housekeeping Procedures
 - Proper Spill Containment Procedures

IX. INSPECTION REPORTS

- A. Qualified Stormwater Manager: Designated Inspector shall be a Qualified Stormwater Manager per CDPHE criteria.
- B. Inspection Frequency:
 - Contractor shall inspect SCMs bi-weekly as a minimum, and immediately (within 24 hours) after any precipitation or snowmelt event that causes surface erosion (i.e. that results in stormwater running across the ground), to ensure that SCMs are maintained in effective operating condition.
- C. Inspection Procedures:
Site Inspection / Observation Items:
 - Construction site perimeter and discharge points (including discharges into a storm sewer system)
 - All disturbed areas
 - Areas used for material / waste storage that are exposed to precipitation
 - Other areas having a significant potential for stormwater pollution, such as demolition areas or concrete washout locations, or locations where vehicles enter or leave the site
 - Erosion and sediment control measures identified in the SWMP
 - Any other structural SCMs that may require maintenance, such as secondary containment around fuel tanks, or the condition of spill response kits.
- D. Inspection Requirements:
 - Determine if there is any evidence of, or potential for, pollutants entering the drainage system.
 - Review SCMs to determine if they still meet design and operational criteria in the SWMP, and if they continue to adequately control pollutants at the site.
 - Upgrade and/or revise any SCMs not operating in accordance with the SWMP and update the SWMP to reflect any revisions.

SCM Maintenance / Replacement and Failed SCMs:

- Contractor shall remove sediment that has been collected by perimeter controls, such as silt fence and inlet protection, on a regular basis to prevent failure of SCMs, and remove potential of sediment from being discharged from the site in the event of SCM failure.
- Removed sediment must be moved to an appropriate location where it will not become an additional pollutant source, and should never be placed in ditches or streams.
- Contractor shall update Erosion Control Plans / SWMP Maps and SWMP Plan as required with any new SCMs added during the construction period.
- Contractor shall address SCMs that have failed or have the potential to fail without maintenance or modifications, as soon as possible, immediately in most cases, to prevent discharge of pollutants.

E. Inspection Reports:

- Contractor shall maintain records of all inspection reports, including signed inspection logs, at the project site. SWMP records shall be located in the project trailer.
- Inspection logs shall be signed by the Qualified Stormwater Manager.
- Permittee shall document inspection results and maintain a record of the results for a period of 3 years following expiration or inactivation of permit coverage.
- Site inspection records shall include the following:
 - Inspection date
 - Name and title of personnel making the inspection, along with Inspector's signature
 - Location of discharges of sediment or other pollutants from the site
 - Location(s) of SCMs that need to be maintained
 - Location(s) of SCMs that failed to operate as designed or proved inadequate for a particular location
 - Location(s) where additional SCMs are needed that were not in place at the time of inspection
 - Deviations from the minimum inspection schedule
 - Notations regarding updates and revisions to SWMP Maps based on field conditions

Note: This project does not rely on control measures owned or operated by another entity.

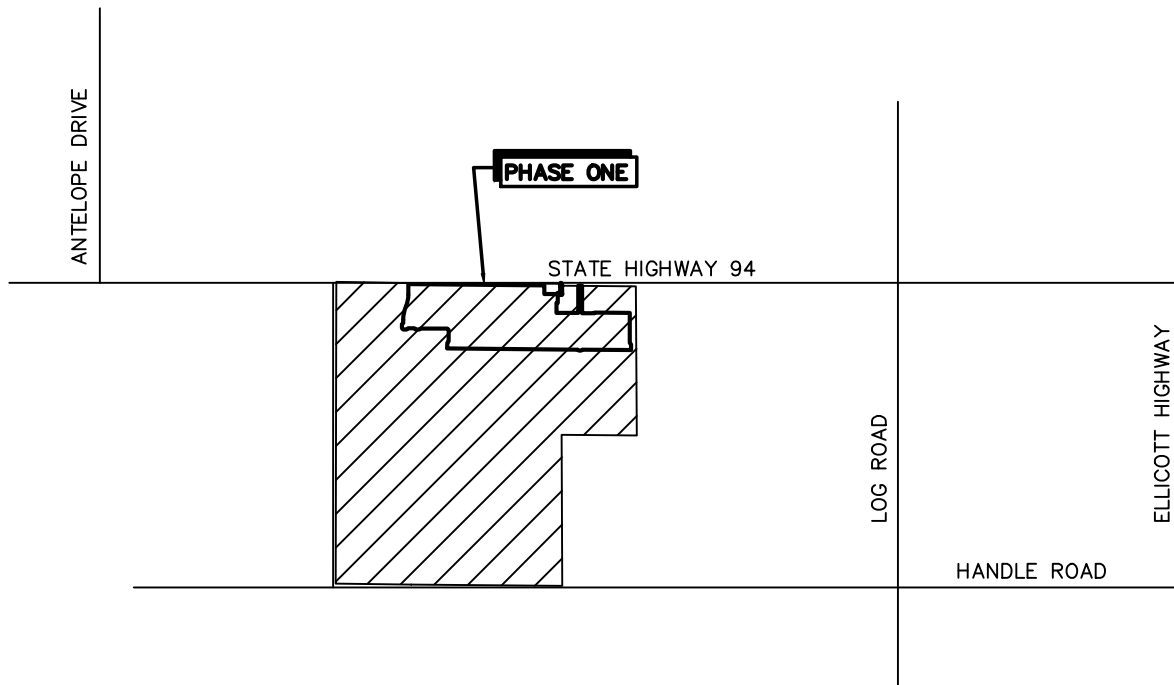
APPENDIX A

**STANDARD SCM DETAILS
(REFER TO STANDARD DETAILS
IN DRAINAGE CRITERIA MANUAL VOLUME 2)**

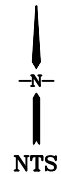
APPENDIX B

FIGURES

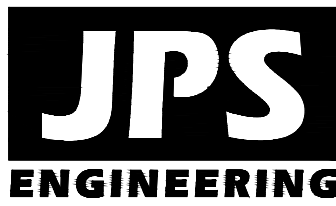
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VICINITY MAP
NTS



VICINITY
MAP

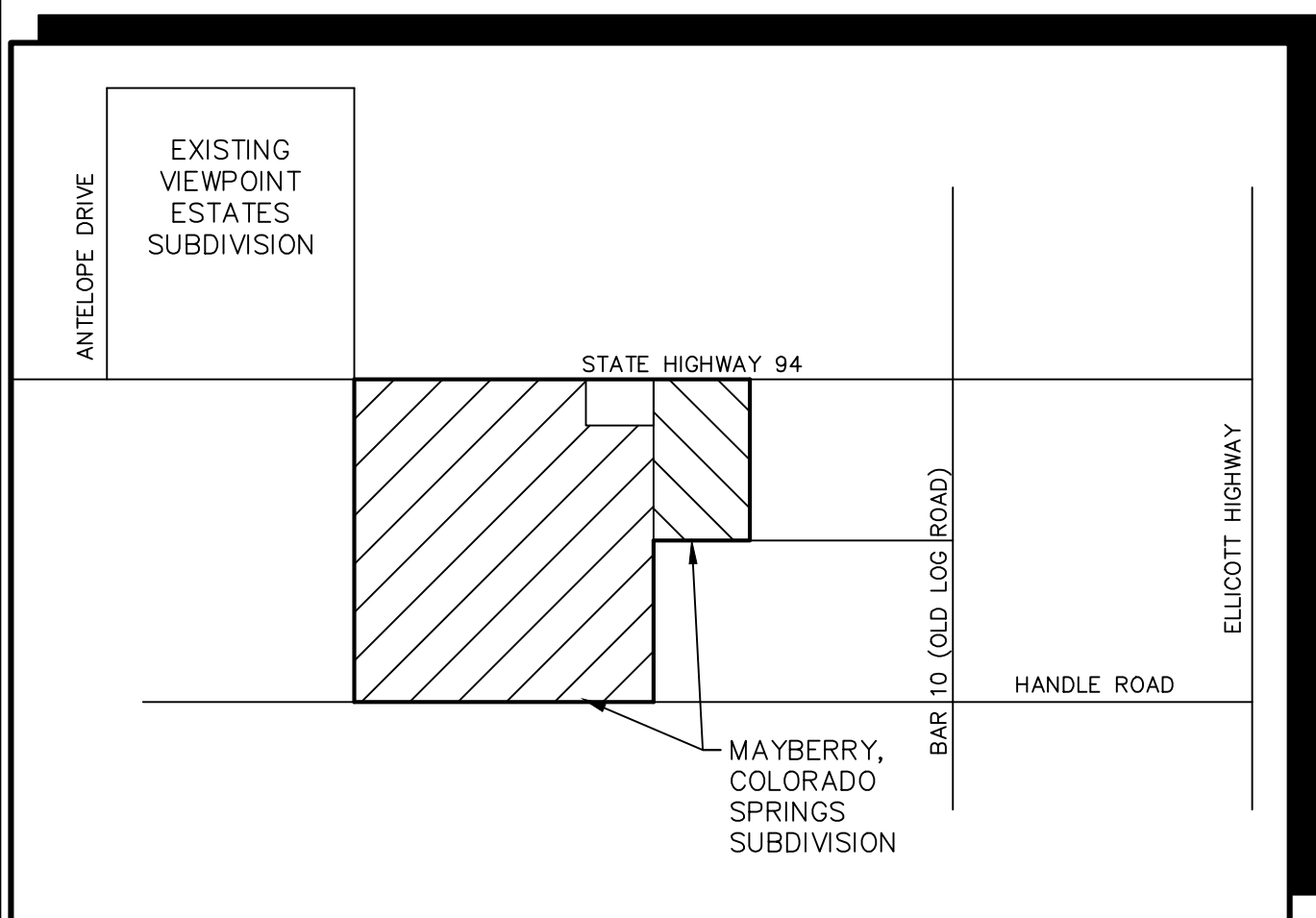


ELLICOTT
TOWN CENTER

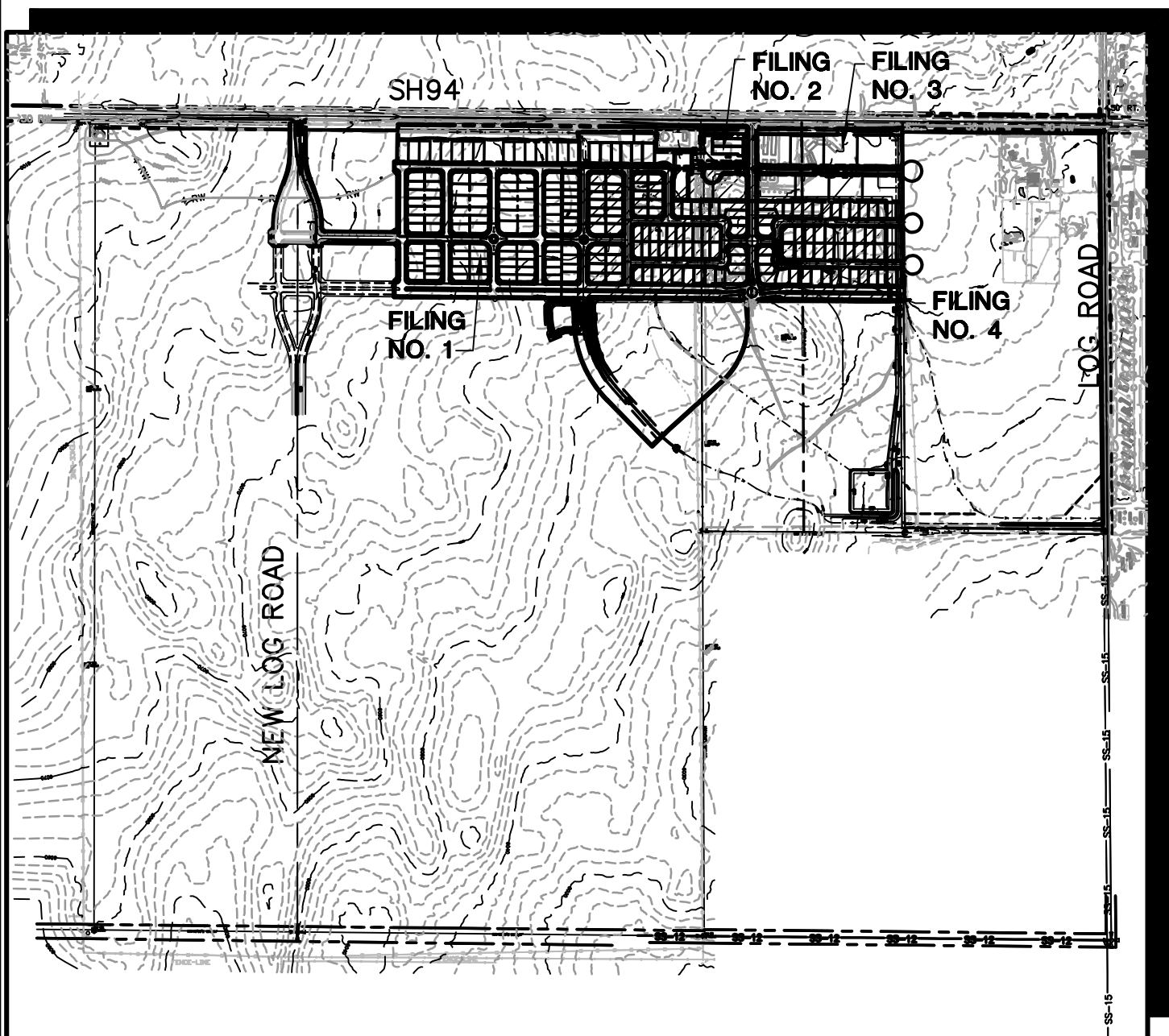
FIGURE A1
JPS PROJ NO. 090001

Mayberry, Colorado Springs

Phase 1 PUD - Pre-Development Grading & Erosion Control Plans El Paso County, Colorado



VICINITY MAP
NOT TO SCALE



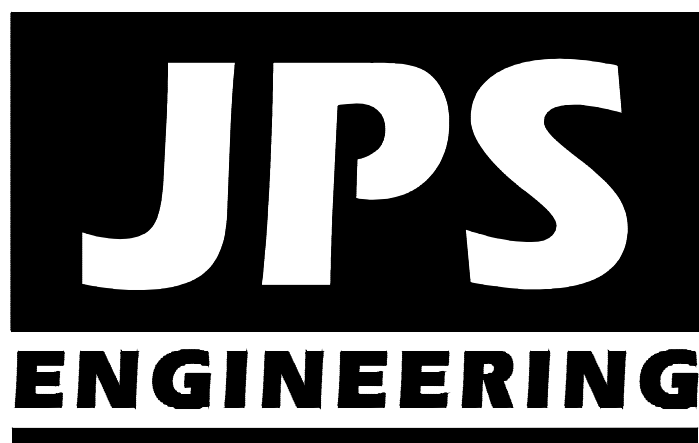
SITE MAP
NOT TO SCALE

BENCHMARK:
A # 5 REBAR LOCATED AT THE NORTH 1/4 CORNER OF SECTION 14. AIR PHOTO PANEL NEAR NORTH 1/4 CORNER, SECTION 14 NO. 5 REBAR EL=6058.55.

BASIS OF BEARINGS:
THE BASIS OF BEARING FOR THIS SURVEY IS THE NORTH LINE OF SECTION 14, T.14S., R.63W. ASSUMED AS S 89-44-49 E FROM REBAR & 3-1/2" ALUM. CAP NW CORNER SEC 14, T14S, R63W TO REBAR & 2" ALUM. CAP IN RANGE BOX, N 1/4 CORNER SEC. 14.

PREPARED FOR:
Colorado Springs Mayberry, LLC
32823 Temecula Parkway
Temecula, CA 92592

PREPARED BY:



PREPARED BY:
19 East Willamette Avenue
Colorado Springs, Colorado 80903
October, 2021

AGENCIES/CONTACTS

DEVELOPER:	COLORADO SPRINGS MAYBERRY, LLC 32823 TEMECULA PARKWAY TEMECULA, CA 92592 MR. RANDY GOODSON (858) 692-6262	WATER/WASTEWATER:	ELLCOTT UTILITIES COMPANY, LLC MR. RANDY GOODSON (858) 692-6262
CIVIL ENGINEER:	JPS ENGINEERING, INC. 19 E. WILLAMETTE AVENUE COLORADO SPRINGS, CO 80903 MR. JOHN P. SCHWAB, P.E. (719)477-9429	GAS DEPARTMENT:	BLACK HILLS ENERGY MR. SEBASTIAN SCHWENDER (719) 359-3176
SURVEYOR:	RAMPART SURVEYS P.O. BOX 5101 WOODLAND PARK, CO 80866 MR. ERIC SIMONSON, PLS (719) 687-6300	ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908 MR. DAVE WALDNER (719)495-2283
COUNTY ENGINEERING:	EL PASO COUNTY DEVELOPMENT SERVICES 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80922 (719) 520-6300	TELEPHONE COMPANY:	QWEST COMMUNICATIONS (LOCATORS) (800)922-1987 A.T. & T. (LOCATORS) (719)635-3674
STATE HIGHWAY	COLORADO DEPARTMENT OF TRANSPORTATION REGION 2 5615 WILLS BLVD. PUEBLO, CO 81008 MS. VALERIE SWORD (719)546-5407		

PCD File No. PUDSP219

SHEET INDEX

C1.0	GEC TITLE SHEET
G2	GENERAL NOTES & LEGEND
C1.1	PHASE ONE PUD MASTER GRADING PLAN
C1.2	LOT GRADING NOTES & DETAILS
C2.1	FILING 1 GRADING & EROSION CONTROL PLAN
C2.2	FILING 2-4 GRADING & EROSION CONTROL PLAN
C3.1	DETENTION POND C1 PLAN
C4.1	DETENTION POND D PLAN
C5.1	EROSION CONTROL NOTES
C5.2	EROSION CONTROL DETAILS
C5.3	EROSION CONTROL DETAILS
CH-C1	CHANNEL C1 PLAN & PROFILE
CH-C2	CHANNEL C2 PLAN & PROFILE
CH-D	CHANNEL D PLAN & PROFILE
CH-E	CHANNEL E PLAN & PROFILE

ENGINEER'S STATEMENT:

THIS GRADING AND EROSION CONTROL PLAN WAS PREPARED UNDER MY DIRECTION AND SUPERVISION AND IS CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SAID PLAN HAS BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR GRADING AND EROSION CONTROL PLANS. I ACCEPT RESPONSIBILITY FOR LIABILITY CAUSED BY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

ENGINEER OF RECORD SIGNATURE
JOHN P. SCHWAB, CO. P.E. 29891

DATE

OWNER'S STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH THE REQUIREMENTS OF THE GRADING AND EROSION CONTROL PLAN.

OWNER SIGNATURE
COLORADO SPRINGS MAYBERRY, LLC

DATE

COUNTY:

COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY FOR COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.

FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

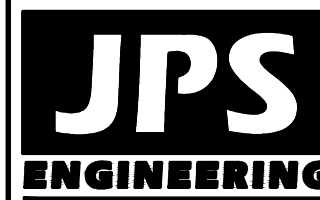
IN ACCORDANCE WITH ECM SECTION 1.12, THESE CONSTRUCTION DOCUMENTS WILL BE VALID FOR CONSTRUCTION FOR A PERIOD OF 2 YEARS FROM THE DATE SIGNED BY THE EL PASO COUNTY ENGINEER. IF CONSTRUCTION HAS NOT STARTED WITHIN THOSE 2 YEARS THE PLANS WILL NEED TO BE RESUBMITTED FOR APPROVAL, INCLUDING PAYMENT OF REVIEW FEES AT THE PLANNING AND COMMUNITY DEVELOPMENT DIRECTOR'S DISCRETION.

JENNIFER IRVINE, P.E.
COUNTY ENGINEER/ECM ADMINISTRATOR

DATE

MAYBERRY, COLORADO SPRINGS - PHASE 1 PUD

GEC TITLE SHEET



19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsegr.com



CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 3 DAYS BEFORE YOU EXCAVATE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

HORZ. SCALE:	HS	DRAWN:	BJJ
VERT. SCALE:	VS	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	11/20/20	LAST MODIFIED:	10/11/21
PROJECT NO:	090001	MODIFIED BY:	BJJ

SHEET:
C1.0

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COUNTY GENERAL NOTES:

1. ALL DRAINAGE AND ROADWAY CONSTRUCTION SHALL MEET THE STANDARDS AND SPECIFICATIONS OF THE CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND THE EL PASO COUNTY ENGINEERING CRITERIA MANUAL.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CALL 811 TO CONTACT THE UTILITY NOTIFICATION CENTER OF COLORADO (UNCC).
3. CONTRACTOR SHALL KEEP A COPY OF THESE APPROVED PLANS, THE GRADING AND EROSION CONTROL PLAN, THE STORMWATER MANAGEMENT PLAN (SWMP), THE SOILS AND GEOTECHNICAL REPORT, AND THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES, INCLUDING THE FOLLOWING:
- A. EL PASO COUNTY ENGINEERING CRITERIA MANUAL (ECM)
 - B. CITY OF COLORADO SPRINGS/EL PASO COUNTY DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2
 - C. COLORADO DEPARTMENT OF TRANSPORTATION (CDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION
 - D. CDOT M & S STANDARDS
4. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING. ANY MODIFICATIONS NECESSARY TO MEET CRITERIA AFTER-THE-FACT WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
5. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ACCURATELY SHOW EXISTING CONDITIONS, BOTH ONSITE AND OFFSITE, ON THE CONSTRUCTION PLANS. ANY MODIFICATIONS NECESSARY DUE TO CONFLICTS, OMISSIONS, OR CHANGED CONDITIONS WILL BE ENTIRELY THE DEVELOPER'S RESPONSIBILITY TO RECTIFY.
6. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY PLANNING AND COMMUNITY DEVELOPMENT (PCD) – INSPECTIONS, PRIOR TO STARTING CONSTRUCTION.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO UNDERSTAND THE REQUIREMENTS OF ALL JURISDICTIONAL AGENCIES AND TO OBTAIN ALL REQUIRED PERMITS, INCLUDING BUT NOT LIMITED TO EL PASO COUNTY EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP), REGIONAL BUILDING FLOODPLAIN DEVELOPMENT PERMIT, U.S. ARMY CORPS OF ENGINEERS-ISSUED 401 AND/OR 404 PERMITS, AND COUNTY AND STATE FUGITIVE DUST PERMITS.
8. CONTRACTOR SHALL NOT DEVIATE FROM THE PLANS WITHOUT FIRST OBTAINING WRITTEN APPROVAL FROM THE DESIGN ENGINEER AND PCD. CONTRACTOR SHALL NOTIFY THE DESIGN ENGINEER IMMEDIATELY UPON DISCOVERY OF ANY ERRORS OR INCONSISTENCIES.
9. ALL STORM DRAIN PIPE SHALL BE CLASS III RCP WITH CLASS B BEDDING UNLESS OTHERWISE NOTED AND APPROVED BY PCD.
10. CONTRACTOR SHALL COORDINATE GEOTECHNICAL TESTING PER ECM STANDARDS. PAVEMENT DESIGN SHALL BE APPROVED BY EL PASO COUNTY PCD PRIOR TO PLACEMENT OF CURB AND GUTTER AND PAVEMENT.
11. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
12. SIGHT VISIBILITY TRIANGLES AS IDENTIFIED IN THE PLANS SHALL BE PROVIDED AT ALL INTERSECTIONS. OBSTRUCTIONS GREATER THAN 18 INCHES ABOVE FLOWLINE ARE NOT ALLOWED WITHIN SIGHT TRIANGLES.
13. SIGNING AND STRIPING SHALL COMPLY WITH EL PASO COUNTY DPW (DEPT. OF PUBLIC WORKS) AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO COUNTY DPW, INCLUDING WORK WITHIN THE RIGHT-OF-WAY AND SPECIAL TRANSPORT PERMITS.
15. THE LIMITS OF CONSTRUCTION SHALL REMAIN WITHIN THE PROPERTY LINE UNLESS OTHERWISE NOTED. THE OWNER/DEVELOPER SHALL OBTAIN WRITTEN PERMISSION AND EASEMENTS, WHERE REQUIRED, FROM ADJOINING PROPERTY OWNER(S) PRIOR TO ANY OFF-SITE DISTURBANCE, GRADING, OR CONSTRUCTION.

GENERAL DRAINAGE NOTES:

1. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE IMPACTS WITHIN EACH LOT.
2. BUILDERS AND PROPERTY OWNERS SHALL IMPLEMENT & MAINTAIN EROSION CONTROL BEST MANAGEMENT PRACTICES FOR PROTECTION OF DOWNSTREAM PROPERTIES AND FACILITIES INCLUDING PROTECTION OF EXISTING GRASS BUFFER STRIPS ALONG THE DOWNSTREAM PROPERTY BOUNDARIES.
3. GRADING AND DRAINAGE WITHIN LOTS IS THE RESPONSIBILITY OF THE INDIVIDUAL BUILDERS AND PROPERTY OWNERS.

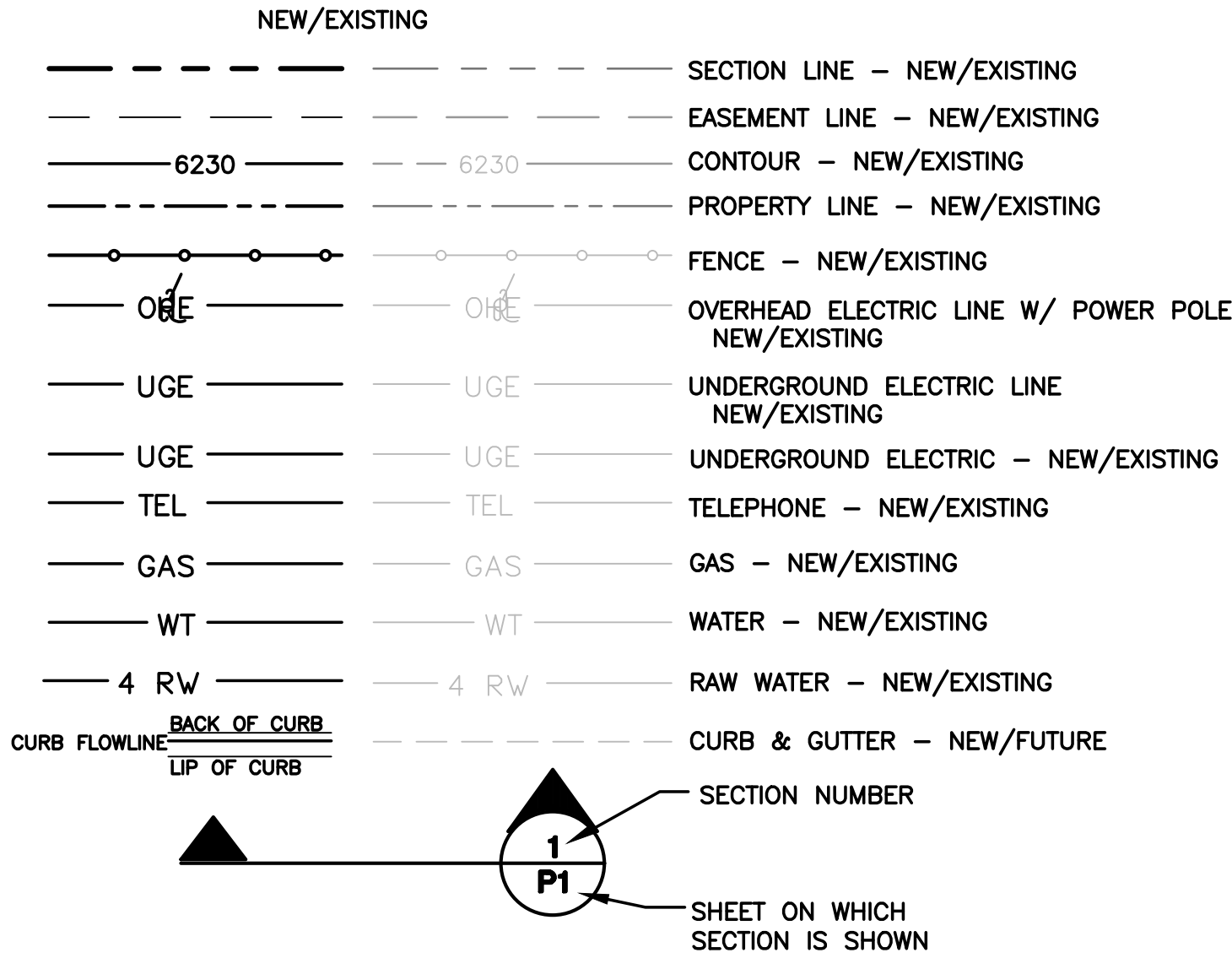
COUNTY SIGNING AND STRIPING NOTES:

1. ALL SIGNS AND PAVEMENT MARKINGS SHALL BE IN COMPLIANCE WITH THE CURRENT MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
2. REMOVAL OF EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY A METHOD THAT DOES NOT MATERIALLY DAMAGE THE PAVEMENT. THE PAVEMENT MARKINGS SHALL BE REMOVED TO THE EXTENT THAT THEY WILL NOT BE VISIBLE UNDER DAY OR NIGHT CONDITIONS. AT NO TIME WILL IT BE ACCEPTABLE TO PAINT OVER EXISTING PAVEMENT MARKINGS.
3. ANY DEVIATION FROM THE STRIPING AND SIGNING PLAN SHALL BE APPROVED BY EL PASO COUNTY.
4. ALL SIGNS SHOWN ON THE SIGNING AND STRIPING PLAN SHALL BE NEW SIGNS. EXISTING SIGNS MAY REMAIN OR BE REUSED IF THEY MEET CURRENT EL PASO COUNTY AND MUTCD STANDARDS.
5. STREET NAME AND REGULATORY STOP SIGNS SHALL BE ON THE SAME POST AT INTERSECTIONS.
6. ALL REMOVED SIGNS SHALL BE DISPOSED OF IN A PROPER MANNER BY THE CONTRACTOR.
7. ALL STREET NAME SIGNS SHALL HAVE "D" SERIES LETTERS, WITH LOCAL ROADWAY SIGNS BEING 4" UPPER-LOWER CASE LETTERING ON 8" BLANK AND NON-LOCAL ROADWAY SIGNS BEING 6" LETTERING, UPPER-LOWER CASE ON 12" BLANK, WITH WHITE BORDER THAT IS NOT RECESSED. MULTI-LANE ROADWAYS WITH SPEED LIMITS OF 40 MPH OR HIGHER SHALL HAVE 8" UPPER-LOWER CASE LETTERING ON 18" BLANK WITH A WHITE BORDER THAT IS NOT RECESSED. THE WIDTH OF THE NON-RECESSED WHITE BORDERS SHALL MATCH PAGE 255 OF THE 2012 MUTCD "STANDARD HIGHWAY SIGNS".
8. ALL TRAFFIC SIGNS SHALL HAVE A MINIMUM HIGH INTENSITY PRISMATIC GRADE SHEETING.
9. ALL LOCAL RESIDENTIAL STREET SIGNS SHALL BE MOUNTED ON A 1.75" X 1.75" SQUARE TUBE SIGN POST AND STUB POST BASE. FOR OTHER APPLICATIONS, REFER TO THE CDOT STANDARD S-614-8 REGARDING USE OF THE P2 TUBULAR STEEL POST SLIPBASE DESIGN.
10. ALL SIGNS SHALL BE SINGLE SHEET ALUMINUM WITH 0.100" MINIMUM THICKNESS.
11. ALL LIMIT LINES/STOP LINES, CROSSWALK LINES, PAVEMENT LEGENDS, AND ARROWS SHALL BE A MINIMUM 125 MIL THICKNESS PREFORMED THERMOPLASTIC PAVEMENT MARKINGS WITH TAPERED LEADING EDGES PER CDOT STANDARD S-627-1. WORD AND SYMBOL MARKINGS SHALL BE THE NARROW TYPE. STOP BARS SHALL BE 24" IN WIDTH. CROSSWALKS LINES SHALL BE 12" WIDE AND 8' LONG PER CDOT S-627-1.
12. ALL LONGITUDINAL LINES SHALL BE A MINIMUM 15MIL THICKNESS EPOXY PAINT. ALL NON-LOCAL RESIDENTIAL ROADWAYS SHALL INCLUDE BOTH RIGHT AND LEFT EDGE LINE STRIPING AND ANY ADDITIONAL STRIPING AS REQUIRED BY CDOT S-627-1.
13. THE CONTRACTOR SHALL NOTIFY EL PASO COUNTY (719) 520-6819 PRIOR TO AND UPON COMPLETION OF SIGNING AND STRIPING.
14. THE CONTRACTOR SHALL OBTAIN A WORK IN THE RIGHT OF WAY PERMIT FROM THE EL PASO COUNTY DEPARTMENT OF PUBLIC WORKS PRIOR TO ANY SIGNAGE OR STRIPING WORK WITHIN AN EXISTING EL PASO COUNTY ROADWAY.

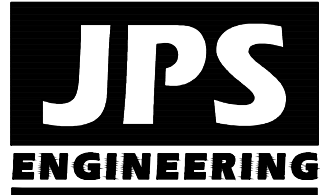
PROJECT GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE NOTIFICATION AND FIELD LOCATION OF ALL EXISTING UTILITIES, WHETHER SHOWN ON THE PLANS OR NOT, BEFORE BEGINNING CONSTRUCTION. LOCATION OF EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ACTUAL CONSTRUCTION.
2. EXISTING CONTOUR DATA PROVIDED BY OWNER GENERALLY CONSISTS OF AERIAL MAPPING FROM UNITED PLANNING & ENGINEERING. JPS ENGINEERING TAKES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING TOPOGRAPHIC MAPPING.
3. THE CONTRACTOR SHALL HAVE ONE (1) SIGNED COPY OF THESE APPROVED PLANS AND ONE (1) COPY OF THE APPROPRIATE DESIGN AND CONSTRUCTION STANDARDS AND SPECIFICATIONS AT THE JOB SITE AT ALL TIMES:
- A. EL PASO COUNTY ENGINEERING CRITERIA MANUAL
 - B. CDOT STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION
 - C. ELLICOTT UTILITIES STANDARDS SPECIFICATIONS (REFER TO CSU STANDARDS IN THE ABSENCE OF PUBLISHED SPECIFICATIONS)
4. STORM DRAIN PIPE SHALL BE RCP CLASS III WITH CLASS C BEDDING UNLESS OTHERWISE NOTED. PROVIDE WATER-TIGHT JOINTS ON STORM SEWER PIPE.
5. STATIONING IS AT CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE AT FLOWLINE UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE FROM FACE OF CURB UNLESS OTHERWISE NOTED.
6. PROPOSED CONTOURS SHOWN ARE TO FINISHED GRADE.
7. LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.
8. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.
9. MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.
10. REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 30 DAYS AFTER FINE GRADING IS COMPLETE.
11. EROSION CONTROL SHALL CONSIST OF SILT FENCE AND OTHER BMP'S AS SHOWN ON THE DRAWINGS, AND TOPSOIL WITH GRASS SEED, WHICH WILL BE WATERED UNTIL VEGETATION HAS BEEN REESTABLISHED.
12. THE EROSION CONTROL MEASURES OUTLINED ON THIS PLAN ARE THE RESPONSIBILITY OF THE DEVELOPER TO MONITOR AND REPLACE, REGRADE, AND REBUILD AS NECESSARY UNTIL VEGETATION IS REESTABLISHED.
13. EROSION CONTROL MEASURES SHALL BE IMPLEMENTED IN A MANNER THAT WILL PROTECT ADJACENT PROPERTIES AND PUBLIC FACILITIES FROM THE ADVERSE EFFECTS OF EROSION AND SEDIMENTATION AS A RESULT OF CONSTRUCTION AND EARTHWORK ACTIVITIES WITHIN THE PROJECT SITE.
14. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.
15. THE CONTRACTOR WILL TAKE THE NECESSARY PRECAUTIONS TO PROTECT EXISTING UTILITIES FROM DAMAGE DUE TO THIS OPERATION. ANY DAMAGE TO THE UTILITIES WILL BE REPAIRED AT THE CONTRACTOR'S EXPENSE, AND ANY SERVICE DISRUPTION WILL BE SETTLED BY THE CONTRACTOR
16. PEDESTRIAN RAMPS SHALL BE INSTALLED AT ALL INTERSECTIONS AND CONFORM TO COUNTY ENGINEERING STANDARDS AND SPECIFICATIONS.
17. ALL FINISHED GRADES SHALL HAVE A MINIMUM 0.5% SLOPE TO PROVIDE POSITIVE DRAINAGE.
18. WHERE PROPOSED SLOPES CONFLICT WITH PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN.
19. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.
20. ALL RESIDENTIAL STREET CURB RETURN RADII ARE 20- FEET AT FLOWLINE UNLESS OTHERWISE NOTED. ARTERIAL STREET CURB RETURN RADII ARE 35' UNLESS NOTED OTHERWISE.
21. 25-FOOT SIGHT VISIBILITY TRIANGLES SHALL BE PROVIDED AT ALL RESIDENTIAL STREET INTERSECTIONS. 50-FOOT SIGHT TRIANGLES SHALL BE PROVIDED AT ARTERIAL STREET INTERSECTIONS. NO OBSTRUCTIONS TALLER THAN 18" ARE PERMITTED WITHIN THESE TRIANGLES.
22. CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH EL PASO COUNTY AND ALL UTILITIES INVOLVED IN PROJECT PRIOR TO MOBILIZING ON SITE.
23. TYPE C STORM INLETS SHALL HAVE CLOSE-MESH GRATES.
24. PROVIDE 10' TRANSITION FROM RAMP CURB TO VERTICAL CURB ON EACH SIDE OF STORM INLETS.
25. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE MATERIAL SHALL BE COMPACTED PER EL PASO COUNTY AND CDOT STANDARDS AND SPECIFICATIONS AND PROJECT GEOTECHNICAL REPORT. CONTRACTOR SHALL STABILIZE ALL SUBGRADE AREAS PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.

LEGEND:



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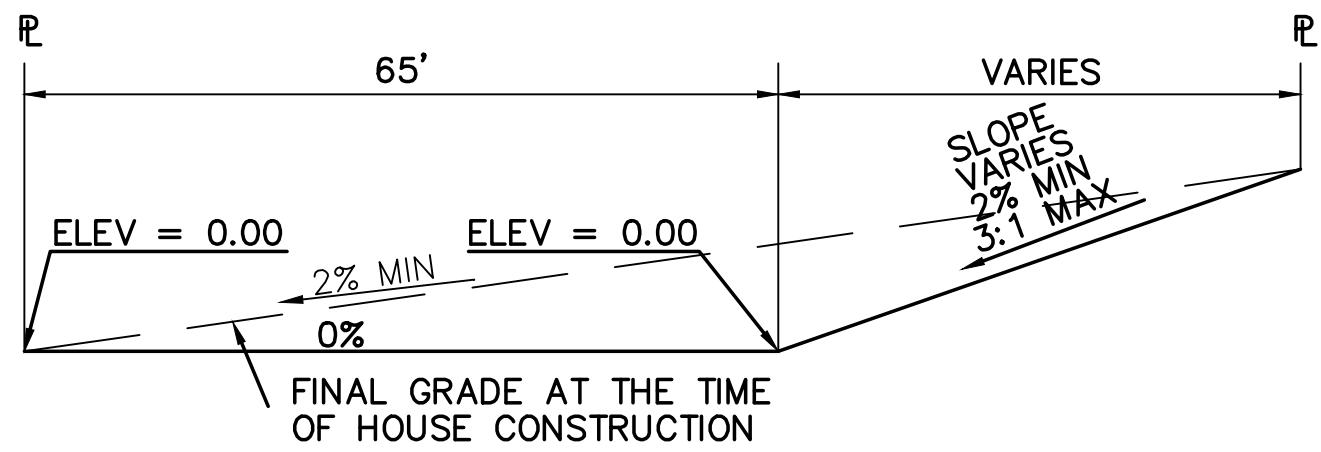
No.	REVISION	BY	DATE

GENERAL NOTES
& LEGEND

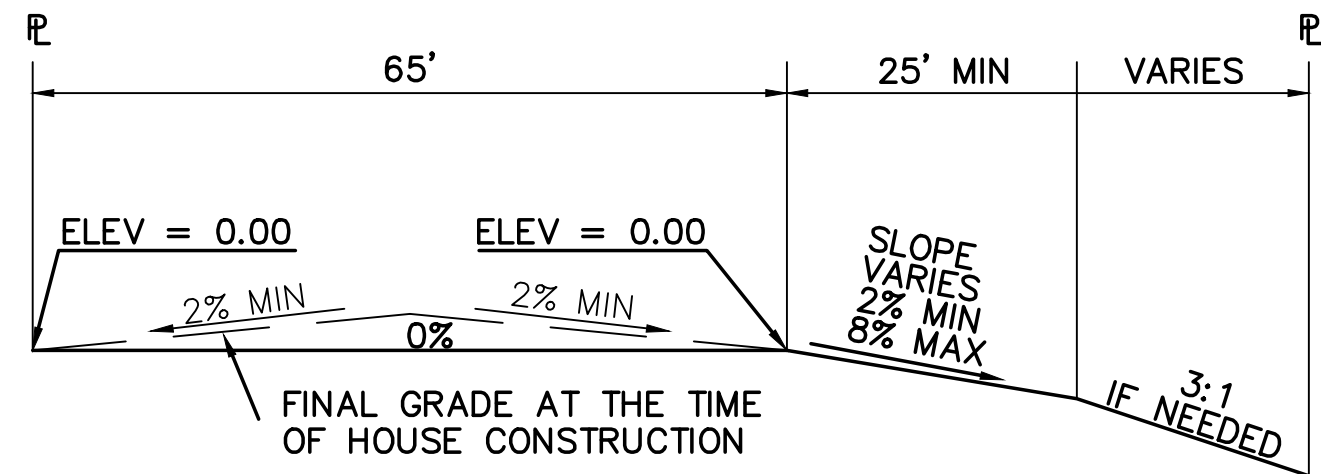
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VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 2/03/21	LAST MODIFIED: 2/24/21
PROJECT NO: 090001	MODIFIED BY: BJJ

SHEET: G2

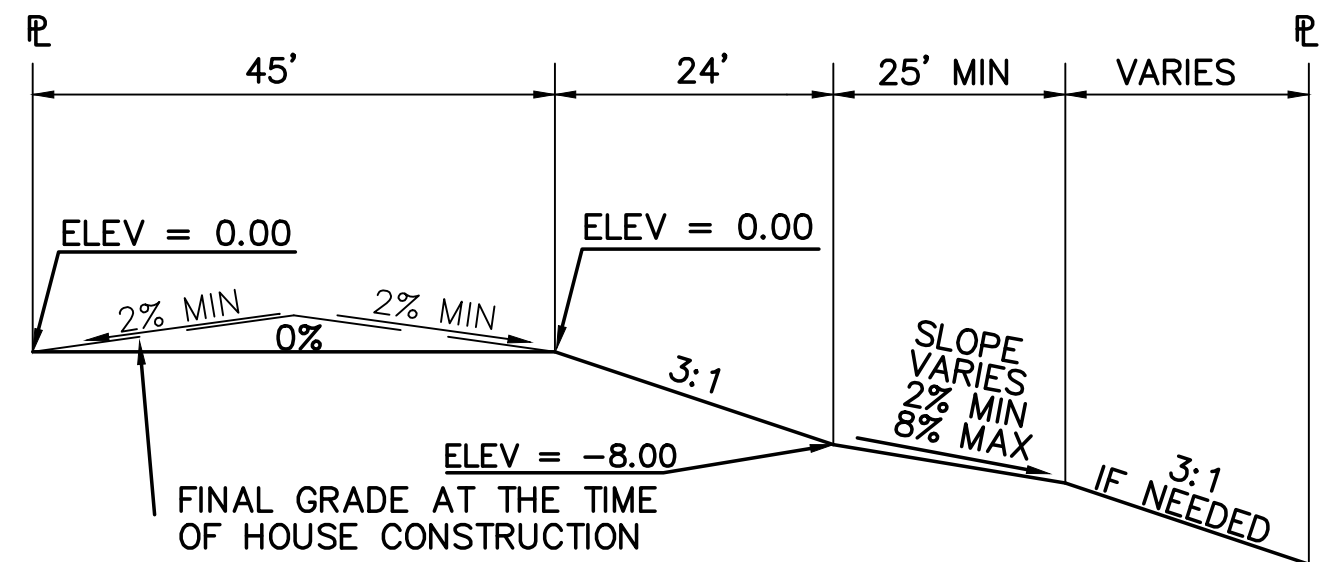
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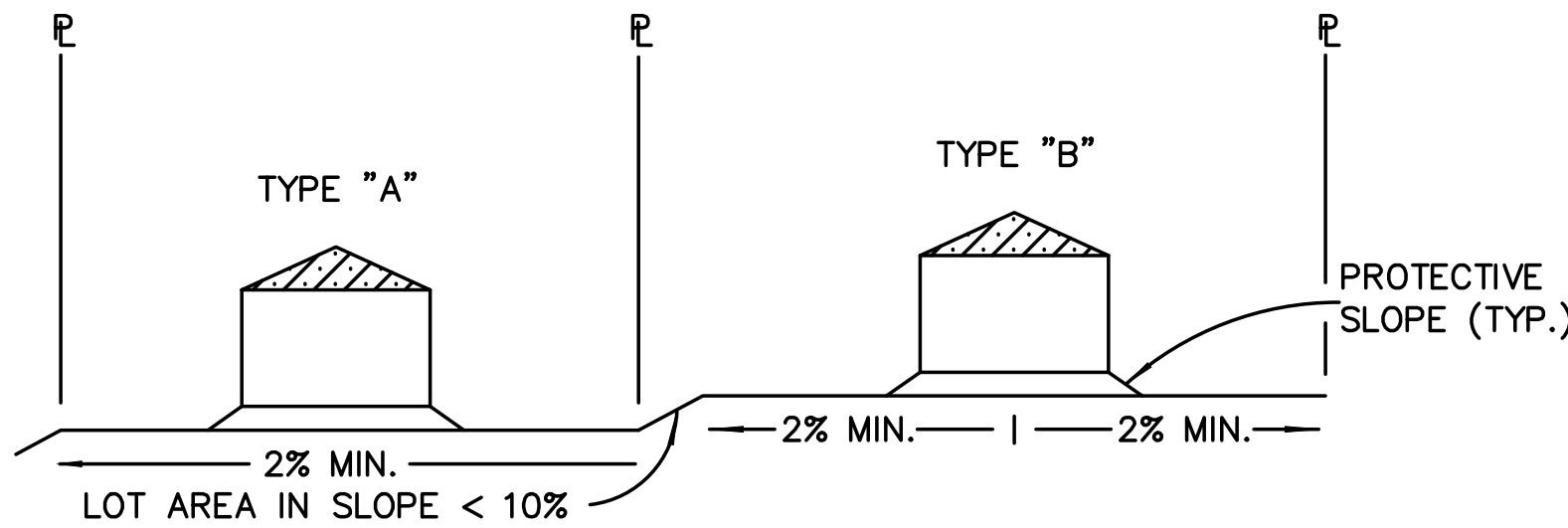
TYPICAL "A" LOT
SCALE: 1"=20'



TYPICAL "B" LOT
SCALE: 1"=20'

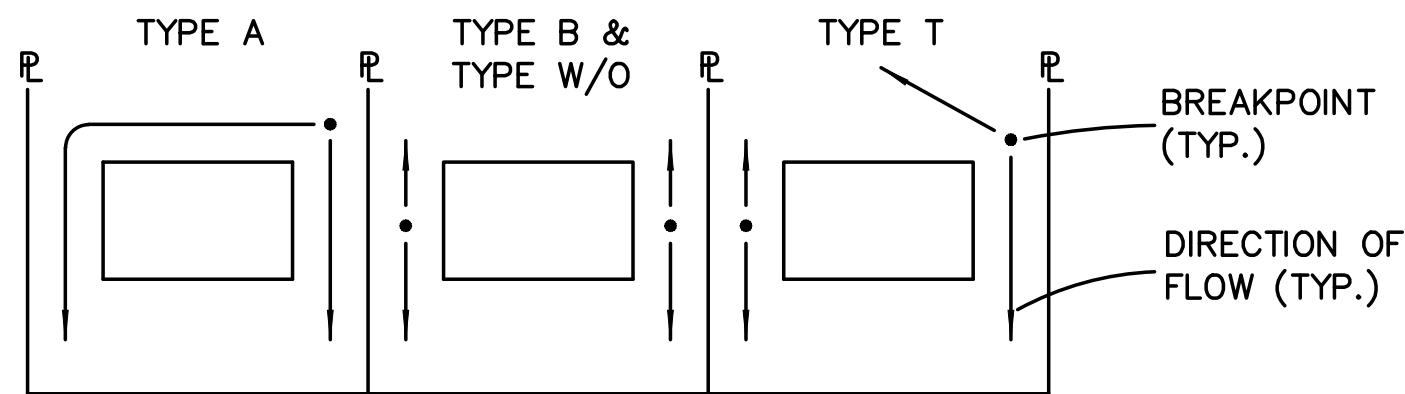


TYPICAL "WALK-OUT" LOT - "C" LOT
SCALE: 1"=20'

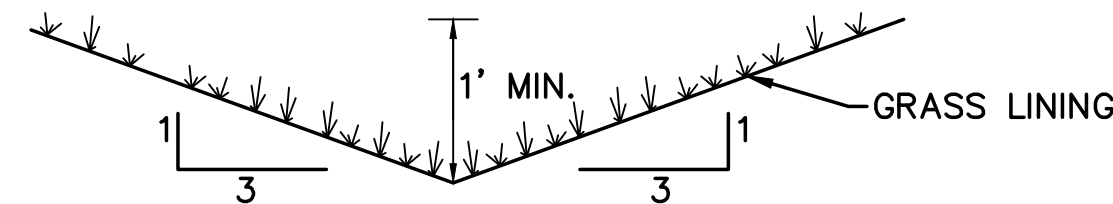


TYPICAL LOT SECTION DETAIL
N.T.S.

NOTE:
FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79g), IF APPLICABLE, AND ALL LEGAL STANDARDS.

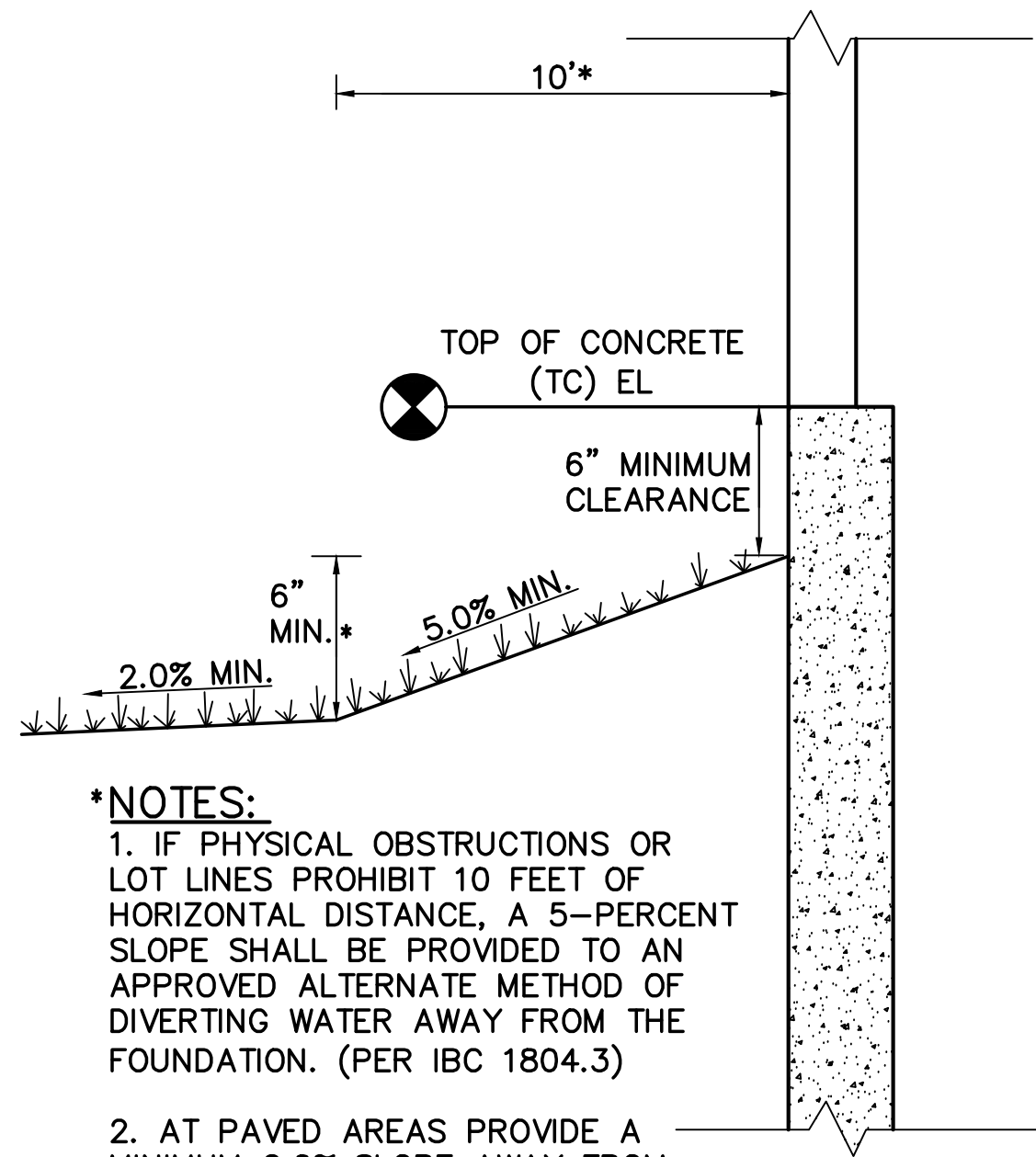


LOT DRAINAGE TYPES
N.T.S.



TYPICAL SIDE/REAR LOT SWALE (A)
N.T.S.

NOTE: BUILDERS AND OWNERS SHALL MAINTAIN PROPER PROTECTIVE SLOPES & SIDE/REAR LOT SWALES DURING AND AFTER HOME CONSTRUCTION.



*NOTES:
1. IF PHYSICAL OBSTRUCTIONS OR LOT LINES PROHIBIT 10 FEET OF HORIZONTAL DISTANCE, A 5-PERCENT SLOPE SHALL BE PROVIDED TO AN APPROVED ALTERNATE METHOD OF DIVERTING WATER AWAY FROM THE FOUNDATION. (PER IBC 1804.3)

2. AT PAVED AREAS PROVIDE A MINIMUM 2.0% SLOPE AWAY FROM THE BUILDING FOR THE FIRST 10 FEET OF HORIZONTAL DISTANCE.

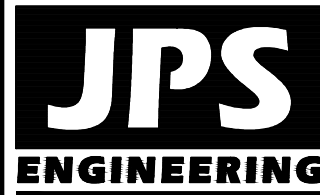
TYPICAL BUILDING DRAINAGE DETAIL (B)
N.T.S.

NOTES:

1. LOT GRADING & DRAINAGE IS THE RESPONSIBILITY OF THE INDIVIDUAL LOT BUILDERS & OWNERS.

2. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE WITHIN EACH LOT AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE ON DOWNGRADIENT LOTS.

3. FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79g), IF APPLICABLE, AND ALL LEGAL STANDARDS.



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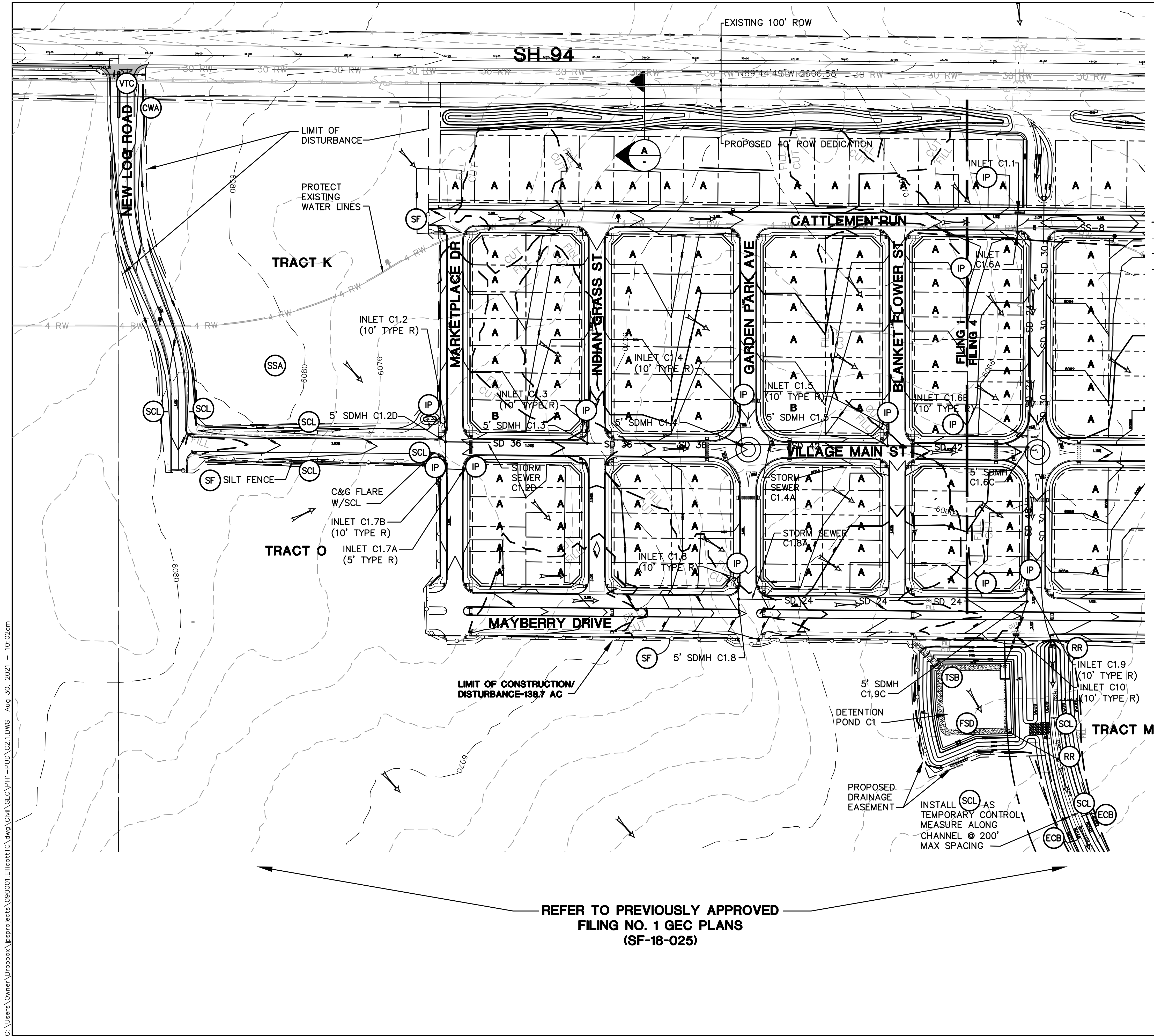
LOT GRADING NOTES
& DETAILS

HORZ. SCALE:	N/A	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	1/14/19	LAST MODIFIED:	5/12/21
PROJECT NO:	090001	MODIFIED BY:	BJJ

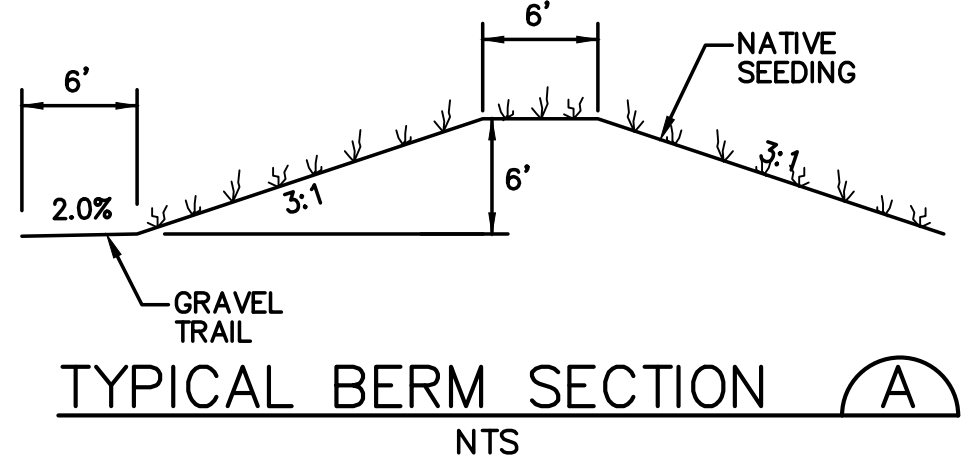
SHEET:

C1.2

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REFER TO PREVIOUSLY APPROVED
FILING NO. 1 GEC PLANS
(SF-18-025)

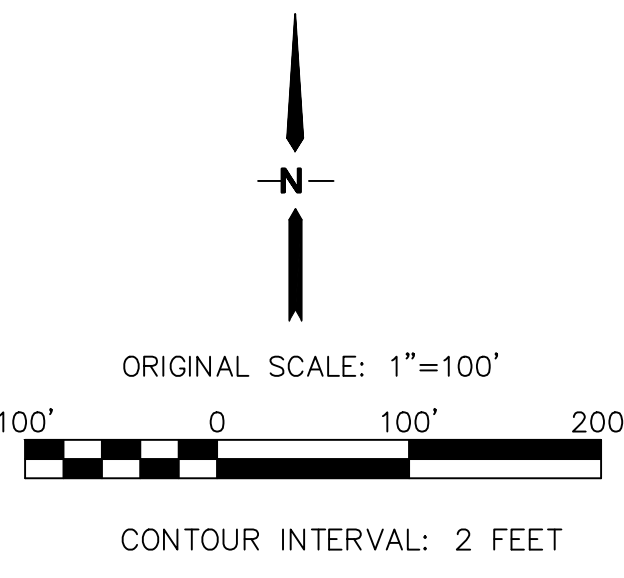


LEGEND:

- PROPERTY LINES
- EXISTING CONTOURS
- PROPOSED CONTOURS
- LIMIT OF DISTURBANCE
- PROPOSED SPOT ELEVATION (FLOWLINE)
- PROPOSED STREET PROFILE GRADE
- OVERLOT GRADING LOT TYPE (SEE SH. C2.1)

EROSION CONTROL LEGEND:

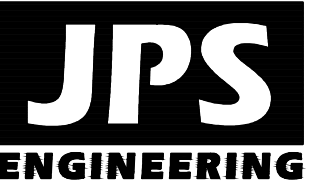
- INLET PROTECTION (GRAVEL FILTER)
- SILT FENCE
- VEHICLE TRACKING CONTROL PAD
- TEMPORARY SEED AND MULCH ON DISTURBED SLOPES
- STRAW BALE BARRIER
- TEMPORARY SEDIMENT BASIN
- RIPRAP
- FULL-SPECTRUM DETENTION BASIN
- SEDIMENT CONTROL LOG
- EROSION CONTROL BLANKETS
- CONCRETE WASHOUT AREA
- STABILIZED STAGING AREA



MAYBERRY, COLORADO SPRINGS - FILING NO. 1

FILING 1 PRE-DEVELOPMENT
GRADING & EROSION CONTROL PLAN

HORZ. SCALE: 1"=100'	DRAWN: RMD
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 12/03/00	LAST MODIFIED: 8/30/21
PROJECT NO: 090001	MODIFIED BY: BJJ
SHEET:	C2.1

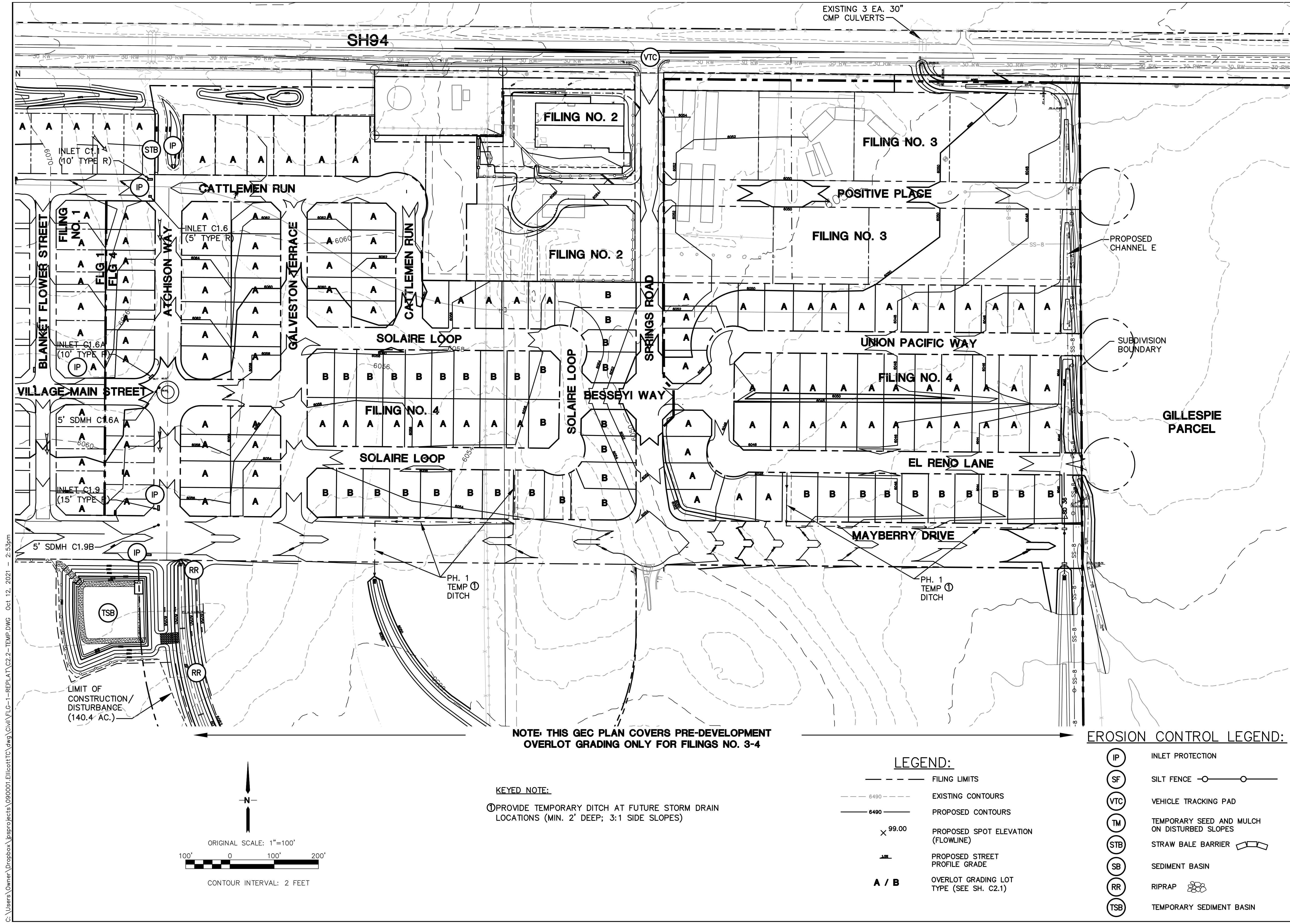


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EARTHWORK TO AVOID
DAMAGE TO UNDERGROUND
UTILITIES.

No.	REVISION	DATE	BY
1	EPC COMMENTS	1/31/20	JPS
2	EPC COMMENTS	4/17/20	JPS
3	EPC COMMENTS	9/22/20	JPS
4	EPC COMMENTS	10/21/20	JPS
5	EPC COMMENTS	8/30/21	JPS



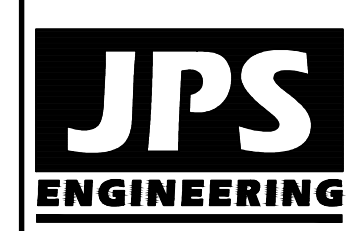
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KEYED NOTE:
① PROVIDE TEMPORARY DITCH AT FUTURE STORM DRAIN LOCATIONS (MIN. 2' DEEP; 3:1 SIDE SLOPES)

- LEGEND:**
- FILING LIMITS
 - - - 6490 - - - EXISTING CONTOURS
 - 6490 — PROPOSED CONTOURS
 - × 99.00 PROPOSED SPOT ELEVATION (FLOWLINE)
 - PROPOSED STREET PROFILE GRADE
 - A / B OVERLOT GRADING LOT TYPE (SEE SH. C2.1)

- EROSION CONTROL LEGEND:**
- IP INLET PROTECTION
 - SF SILT FENCE
 - VTC VEHICLE TRACKING PAD
 - TM TEMPORARY SEED AND MULCH ON DISTURBED SLOPES
 - STB STRAW BALE BARRIER
 - SB SEDIMENT BASIN
 - RR RIPRAP
 - TSB TEMPORARY SEDIMENT BASIN

MAYBERRY, COLORADO SPRINGS - FILING NO. 2-4



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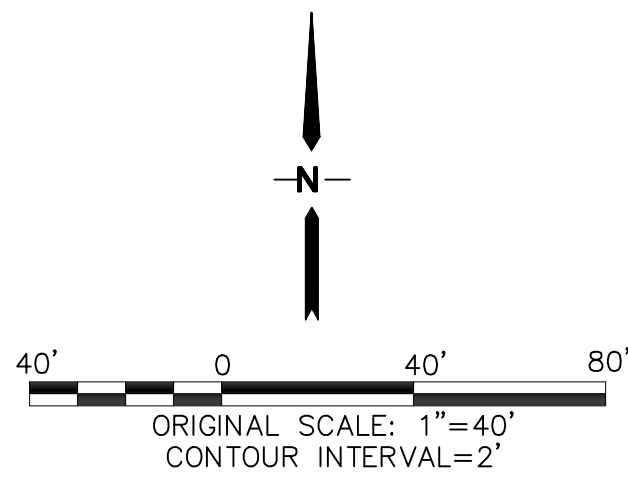
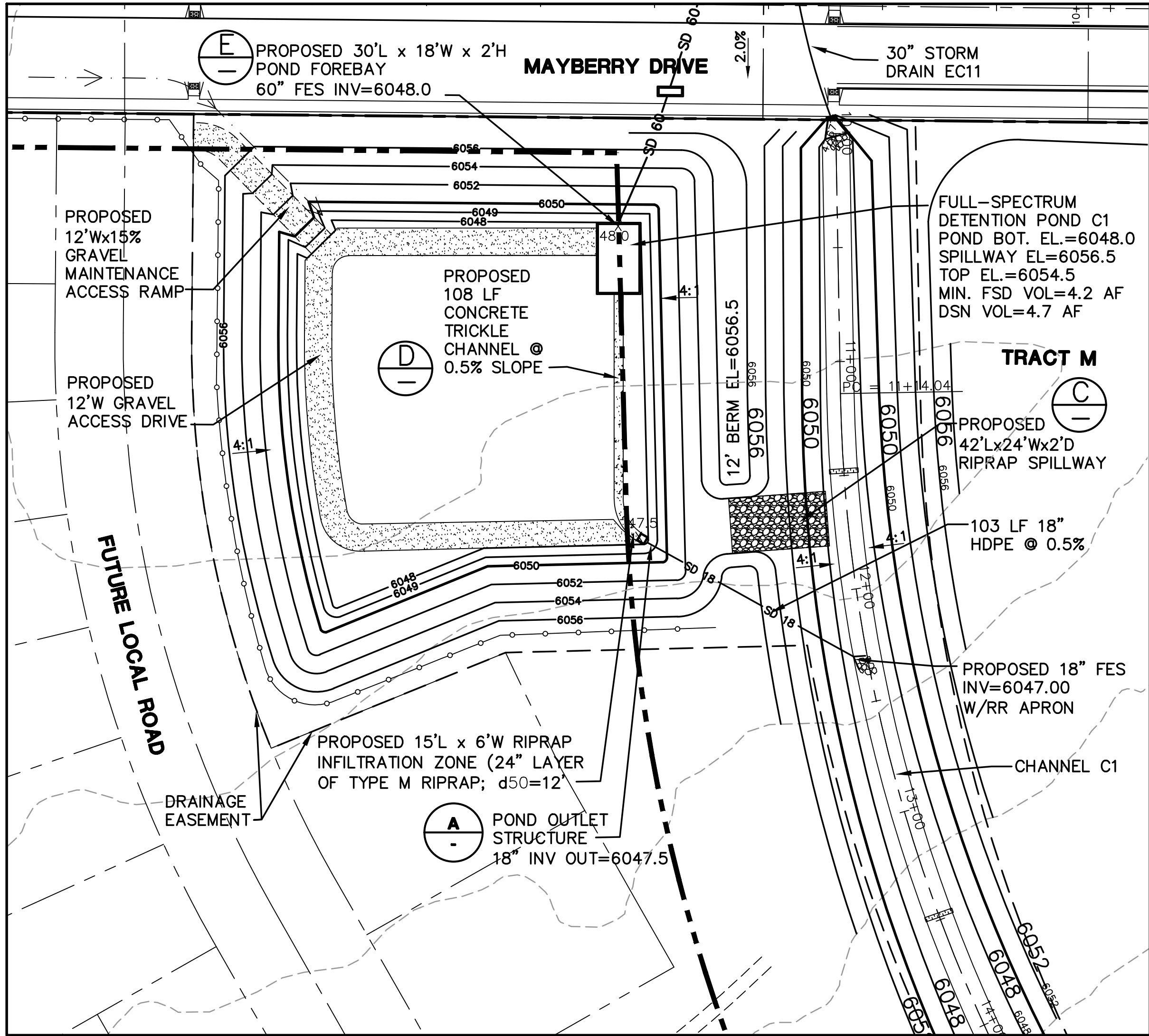
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No.	REVISION	BY	DATE

FILING 2-4 PRE-DEVELOPMENT GRADING & EROSION CONTROL PLAN

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VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 1/14/19	LAST MODIFIED: 10/12/21
PROJECT NO: 090001	MODIFIED BY: BJJ

SHEET: **C2.2**



- NOTES:**
1. THIS PLAN WAS INITIALLY APPROVED AS SH. C1.5 WITHIN THE FILING NO. 1 GEC PLANS. CURRENT PLAN REVISIONS INCORPORATE UPDATES BASED ON THE FILING NO. 1A REPLAT.
 2. POND DETAILS ARE FOR REFERENCE ONLY. FINAL POND CONSTRUCTION DETAILS ARE APPROVED WITH THE CONSTRUCTION DRAWINGS AT THE FINAL PLAT STAGE.

MAYBERRY, COLORADO SPRINGS - PHASE 1 PUD

HORZ. SCALE:	1"=50'	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	4/4/06	LAST MODIFIED:	8/30/21
PROJECT NO:	090001	MODIFIED BY:	BJJ

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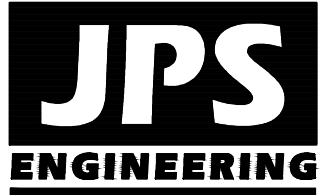
C3.1

DETENTION POND C1
PLAN

No.	REVISION	BY	DATE
1	EPC COMMENTS	JPS	9/12/19
2	EPC COMMENTS	JPS	1/31/20
3	EPC COMMENTS	JPS	4/17/20
4	PUD AMENDMENT	JPS	5/07/21
5	EPC COMMENTS	JPS	8/30/21

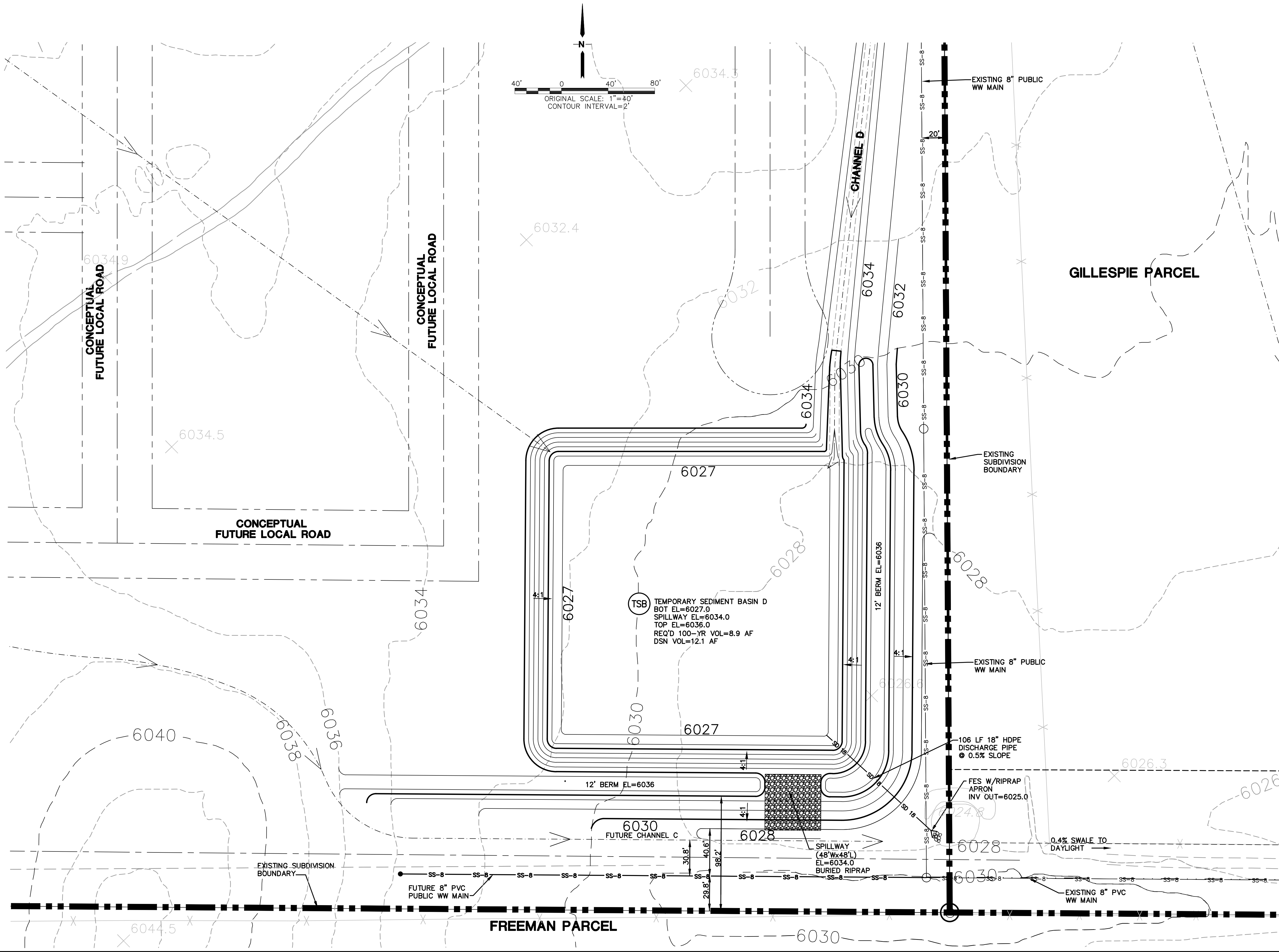


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MAYBERRY, COLORADO SPRINGS - PHASE 1 PUD

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VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	11/20/20	LAST MODIFIED:	8/26/21
PROJECT NO:	090001	MODIFIED BY:	BJJ
SHEET:			

C4.1

POND D
PLAN

No.	REVISION	BY	DATE



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80903
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STANDARD NOTES OR EL PASO COUNTY GRADING AND EROSION CONTROL PLANS:

REVISED 7/02/19

1. STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION, OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF ANY ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
2. NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS FROM REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
3. A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. MANAGEMENT OF THE SWMP DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR. THE SWMP SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4. ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
5. CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT COULD CONTRIBUTE POLLUTANTS TO STORMWATER. CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, AND DISTURBED LAND AREAS SHALL BE INSTALLED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. ALL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES ARE NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN.
7. TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS.
8. FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLANT DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9. ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DESIGNED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT AFFECT THE DESIGN OR FUNCTION OF PERMANENT STORMWATER MANAGEMENT STRUCTURES MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10. EARTH DISTURBANCES SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZE ACCELERATED SOIL EROSION AND RESULTING SEDIMENTATION. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY DISTURBED LAND SHALL BE LIMITED TO THE SHORTEST PRACTICAL PERIOD OF TIME. PRE-EXISTING VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE UNLESS SHOWN TO BE INFEASIBLE AND SPECIFICALLY REQUESTED AND APPROVED.
11. COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED. IF COMPACTION PREVENTION IS NOT FEASIBLE DUE TO SITE CONSTRAINTS, ALL AREAS DESIGNATED FOR INFILTRATION AND VEGETATION CONTROL MEASURES MUST BE LOOSENEED PRIOR TO INSTALLATION OF THE CONTROL MEASURE(S).
12. ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FROM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
13. CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO ENTER STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUTS SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY, CREEK OR STREAM.
14. DURING DEWATERING OPERATIONS OF UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT SHALL NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF UNLESS AN APPROVED STATE DEWATERING PERMIT IS IN PLACE.
15. EROSION CONTROL BLANKETING OR OTHER PROTECTIVE COVERING SHALL BE USED ON SLOPES STEEPER THAN 3:1.
16. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED AT THE SITE.
17. WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. CONTROL MEASURES MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
18. TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFF-SITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
19. THE OWNER/DEVELOPER SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, SOIL, AND SAND THAT MAY ACCUMULATE IN ROADS, STORM DRAINS AND OTHER DRAINAGE CONVEYANCE SYSTEMS AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
20. THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
21. NO CHEMICAL(S) HAVING THE POTENTIAL TO BE RELEASED IN STORMWATER ARE TO BE STORED OR USED ONSITE UNLESS PERMISSION FOR THE USE OF SUCH CHEMICAL(S) IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING APPROVAL FOR THE USE OF SUCH CHEMICAL(S), SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
22. BULK STORAGE OF ALLOWED PETROLEUM PRODUCTS OR OTHER ALLOWED LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL REQUIRE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS ONSITE AND TO PREVENT ANY SPILLED MATERIALS FROM ENTERING STATE WATERS, ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR OTHER FACILITIES.
23. NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE CURB AND GUTTER OR DITCH EXCEPT WITH APPROVED SEDIMENT CONTROL MEASURES.
24. OWNER/DEVELOPER AND THEIR AGENTS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE, DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (1041, NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND OTHER LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, LOCAL, OR COUNTY AGENCIES, THE MOST RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
25. ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE ONLY AT APPROVED CONSTRUCTION ACCESS POINTS.
26. PRIOR TO CONSTRUCTION THE PERMITTEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27. A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND SHALL BE UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28. THE SOILS REPORT FOR THIS SITE HAS BEEN PREPARED BY CTL THOMPSON, DATED JULY 13, 2006 AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29. AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB ONE (1) ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WQCD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT

EXISTING VEGETATION:

NATIVE GRASSES (APPROXIMATELY 70 PERCENT COVERAGE)

SEEDING MIX:

GRASS	VARIETY	AMOUNT IN PLS LBS. PER ACRE
CRESTED WHEAT GRASS	EPHRAIM OR HYCREST	4.0 LBS.
PERENIAL RYE	LINN	2.0 LBS.
WESTERN WHEATGRASS	SARTON	3.0 LBS.
SMOOTH BROME GRASS	LINCOLN OR MANCHAR	5.0 LBS.
SIDE OATS GRAMA	EPHRAIM	2.5 LBS.
TOTAL:		16.5 LBS.

SEEDING & FERTILIZER APPLICATION: DRILL SEED OR
HYDRO-SEED PER
CDOT SPEC. SECTION 212.

MULCHING APPLICATION: CONFORM TO CDOT
SPEC-SECTION 213.

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HYDRO-SEED PER
CDOT SPEC. SECTION 212.

MULCHING APPLICATION: CONFORM TO CDOT
SPEC-SECTION 213.

EROSION CONTROL NOTES:

AT LEAST TEN DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE. THE OWNER OR OPERATOR OF THE CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY CONTROL DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

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WATER QUALITY CONTROL DIVISION
WQCD-PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, COLORADO 80246-1530
ATTN.: PERMITS UNIT

ESTIMATED TIME SCHEDULE:

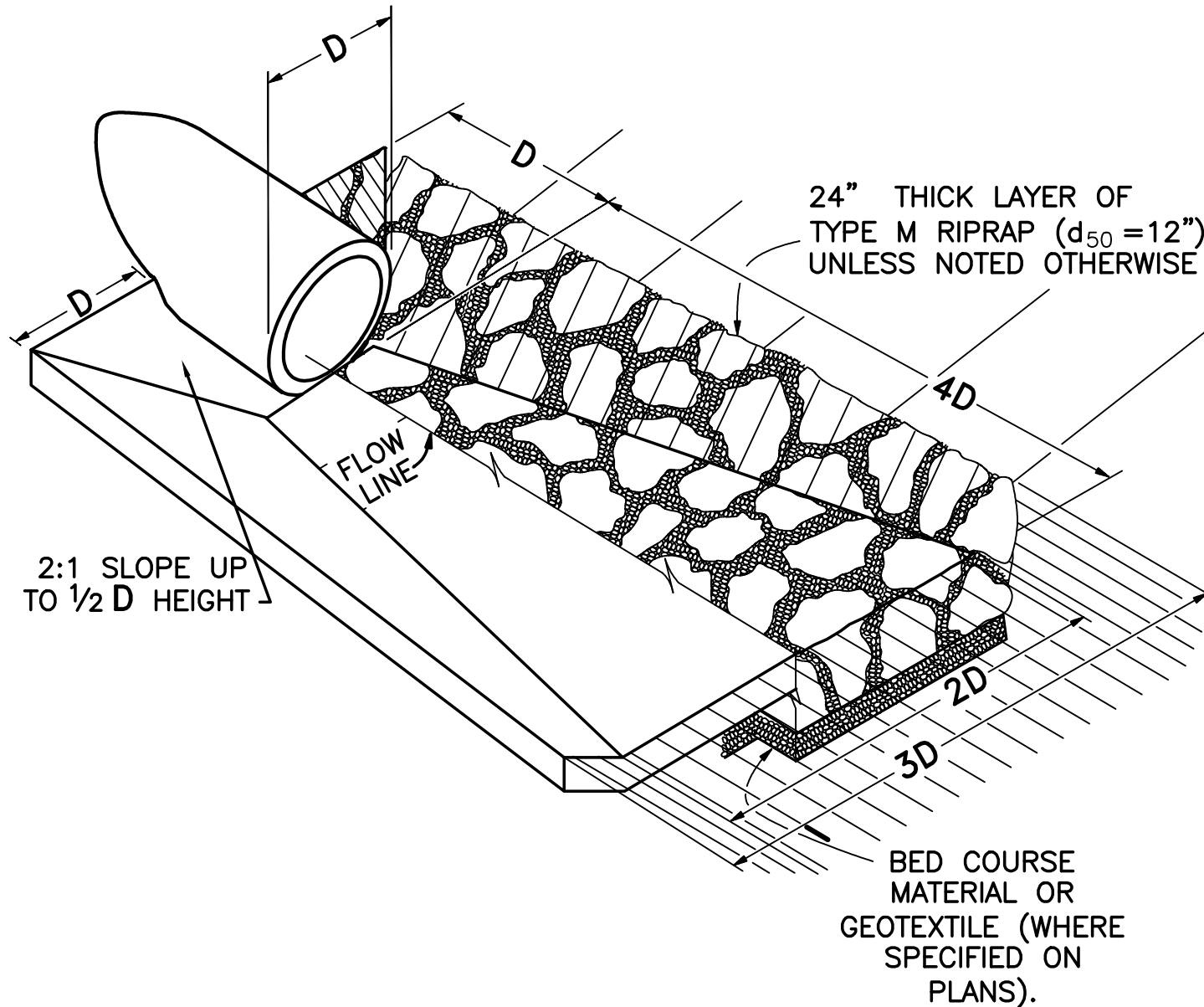
INSTALL BMP'S APRIL, 2021
GRADING START APRIL 2021
GRADING COMPLETION AUGUST, 2021
SEEDING & MULCHING AUGUST, 2021
STABILIZATION AUGUST, 2022

SEDIMENT CONTROL MAINTENANCE PROGRAM:

FREQUENCY
PERIODIC SITE INSPECTIONS BI-WEEKLY ¹
RE-VEGETATION OF EXPOSED SOILS WITHIN 21 DAYS OF GRADING
SEDIMENT REMOVAL FROM BMP'S MONTHLY ²
REMOVAL OF BMP'S AFTER STABILIZATION ACHIEVED

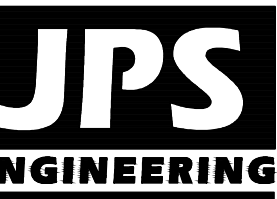
¹ AND AFTER ANY PRECIPITATION OR SNOW MELT EVENT THAT CAUSES SURFACE EROSION.

² ACCUMULATED SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THE SEDIMENT LEVEL REACHES ONE HALF THE HEIGHT OF THE BMP OR AT ANY TIME THAT SEDIMENT OR DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMP.



CULVERT OUTLET PAVING
NTS

MAYBERRY, COLORADO SPRINGS - PHASE 1 PUD



19 E. Willamette Ave.
Colorado Springs, CO
80903

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No.	REVISION	BY	DATE
1	EPC COMMENTS	JPS	1/15/07
2	2018 SUBMITTAL	JPS	8/22/18
3	EPC COMMENTS	JPS	9/12/19
4	EPC COMMENTS	JPS	1/31/20
5	EPC COMMENTS	JPS	4/17/20

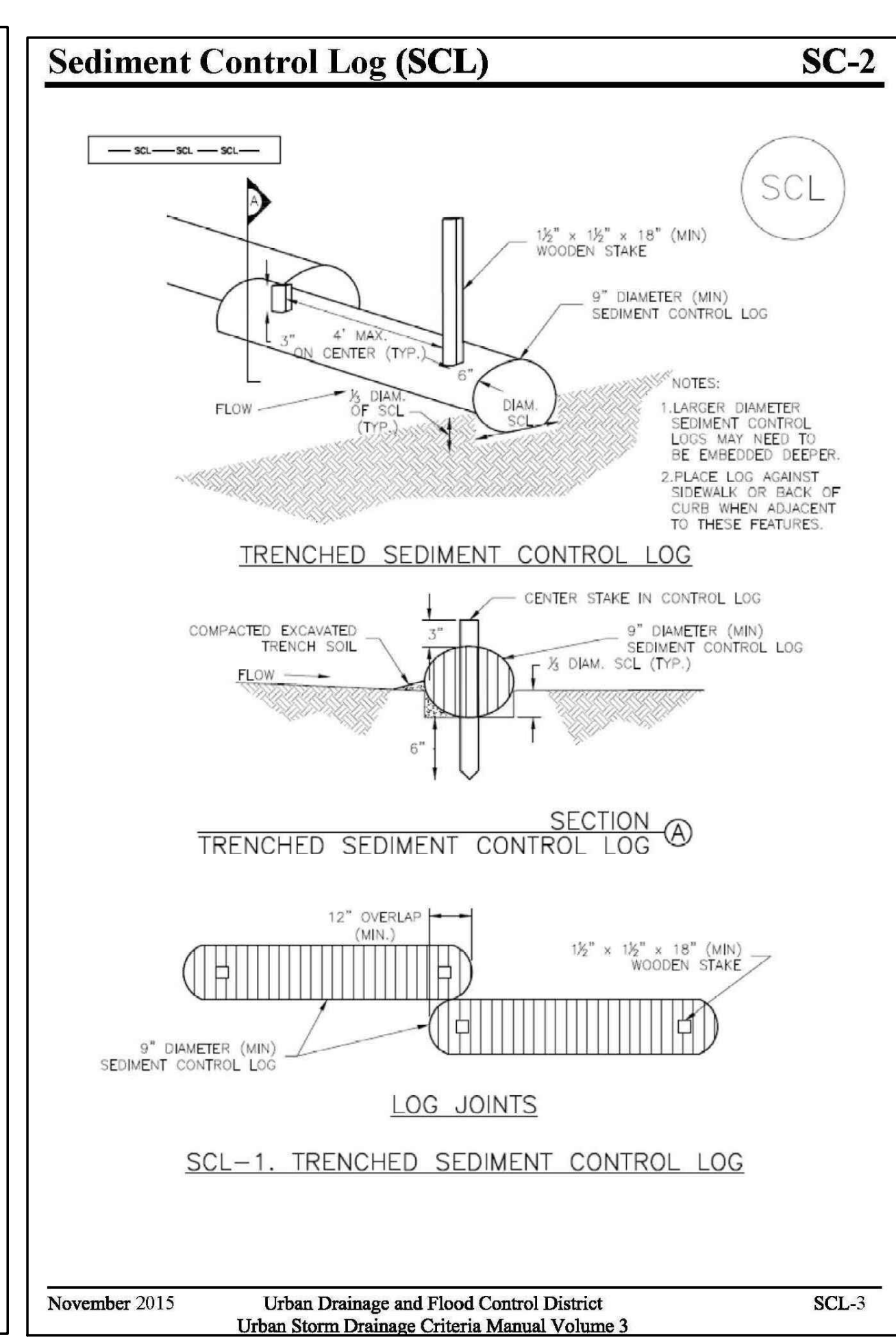
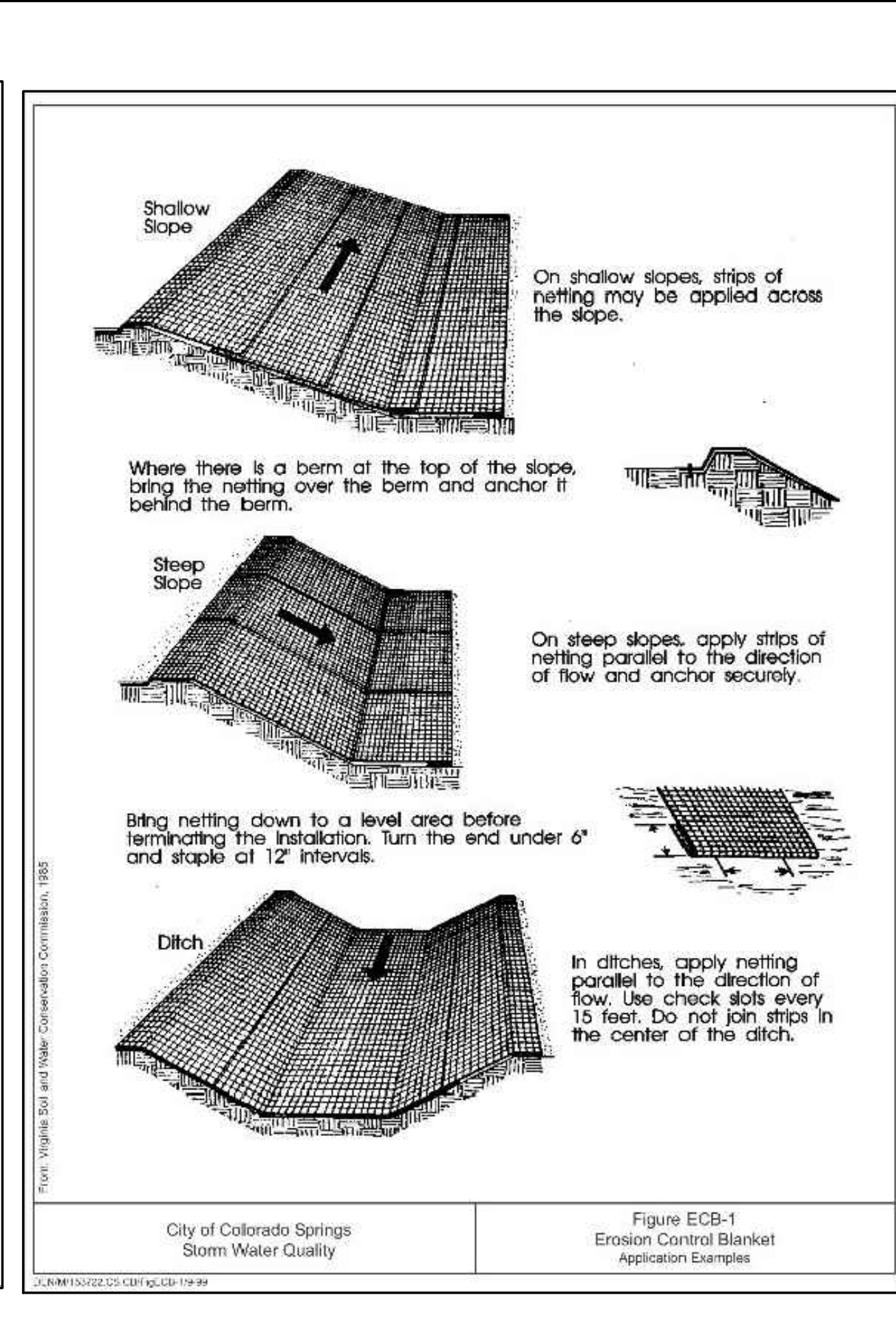
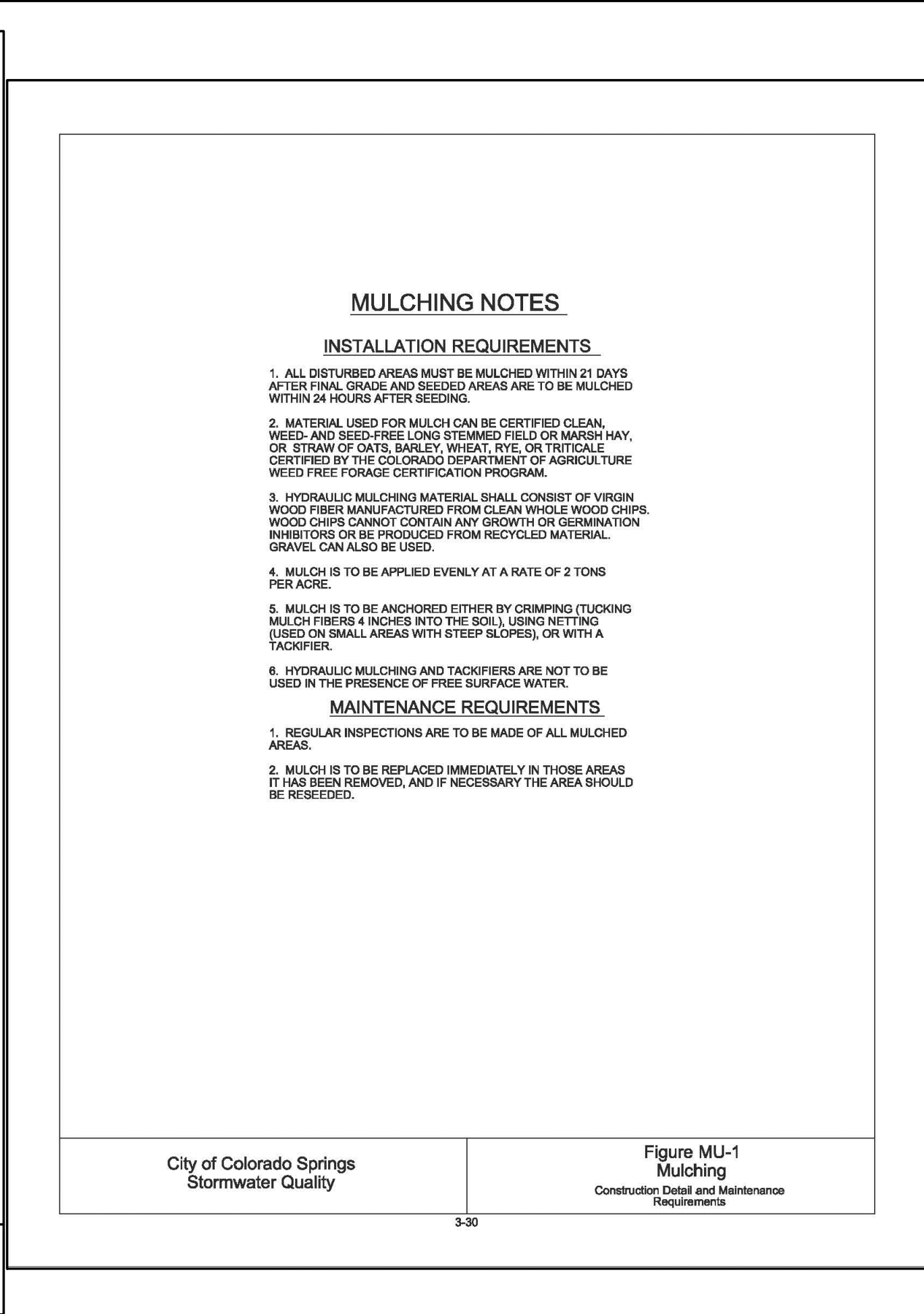
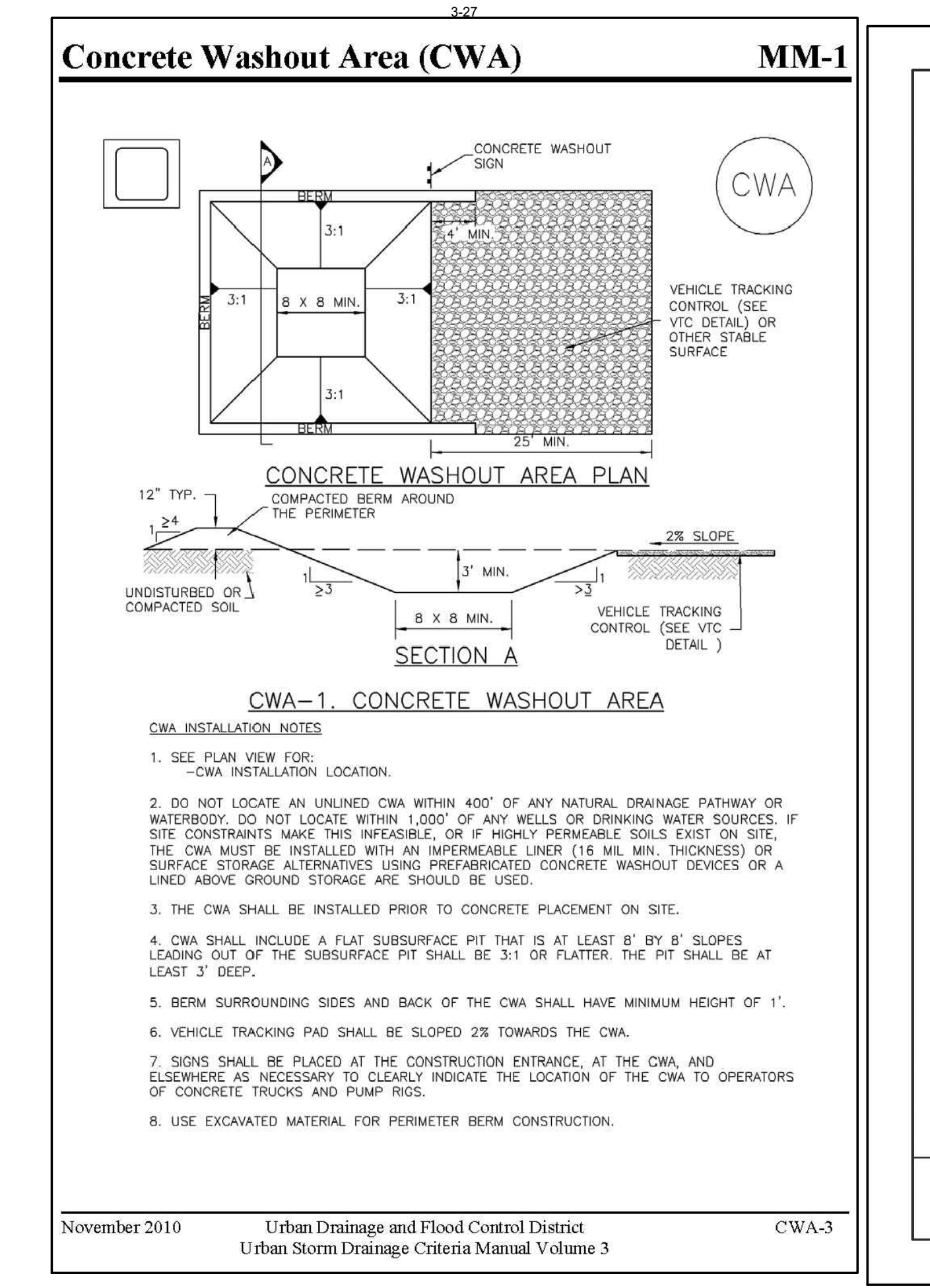
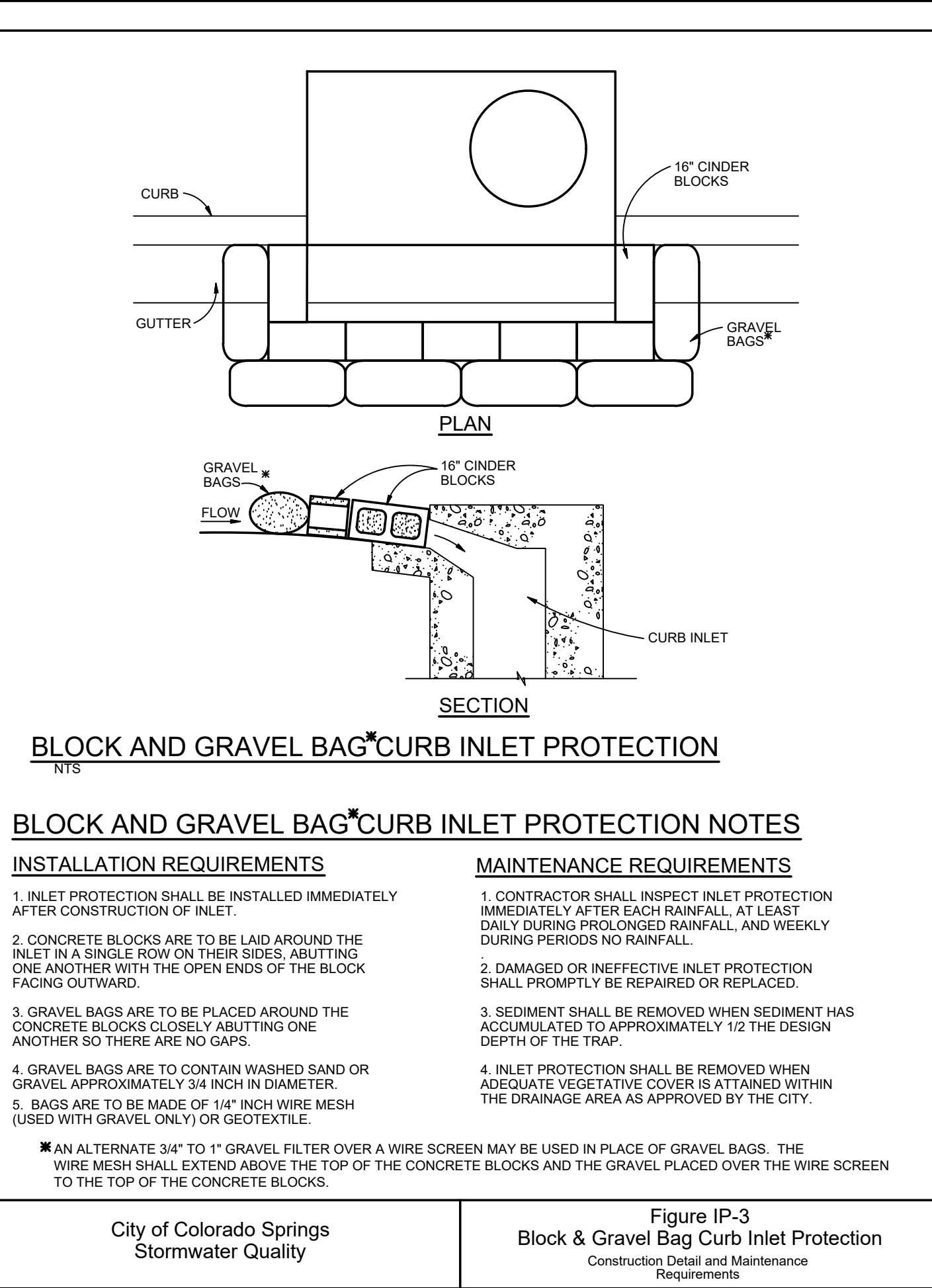
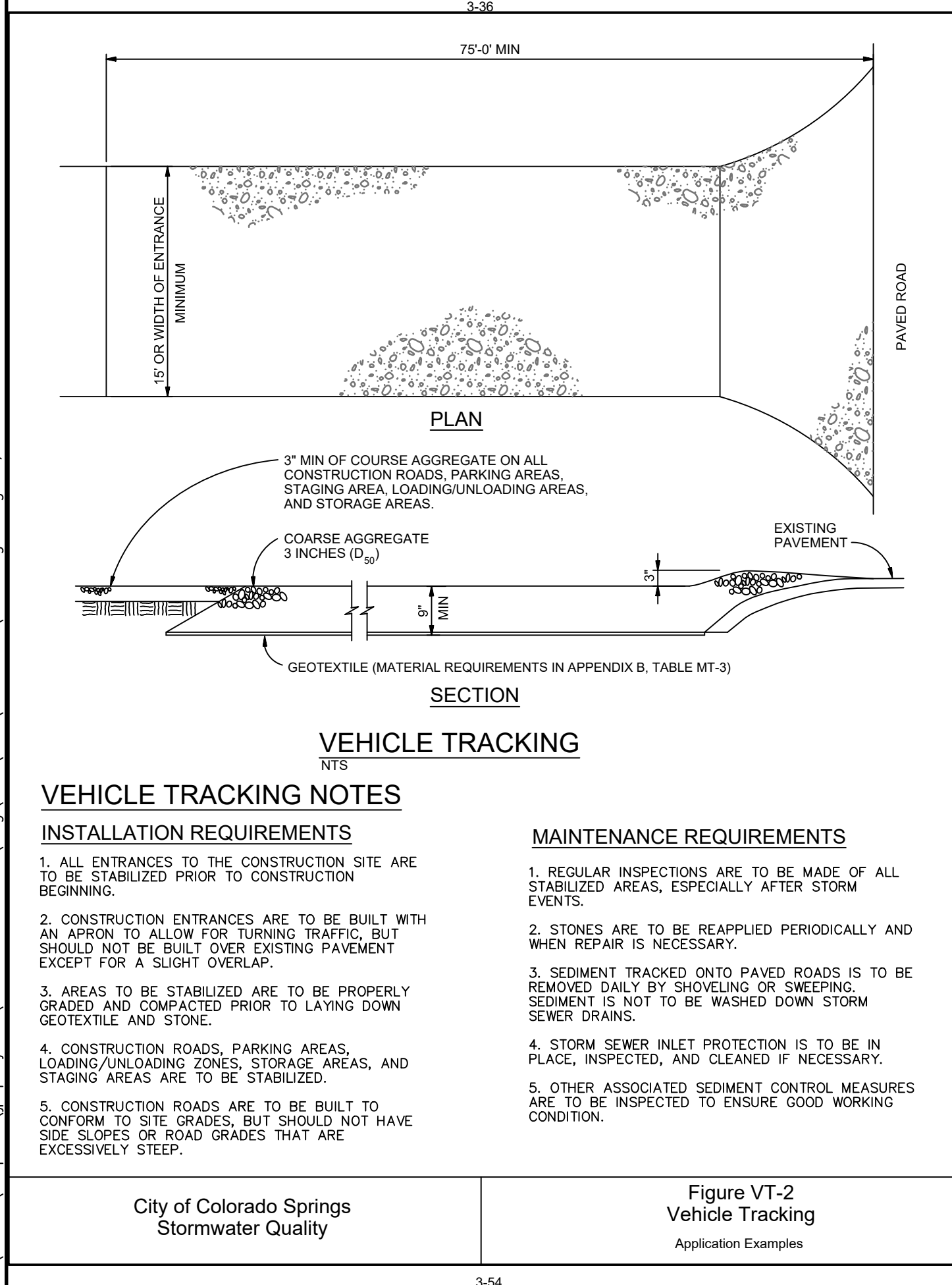
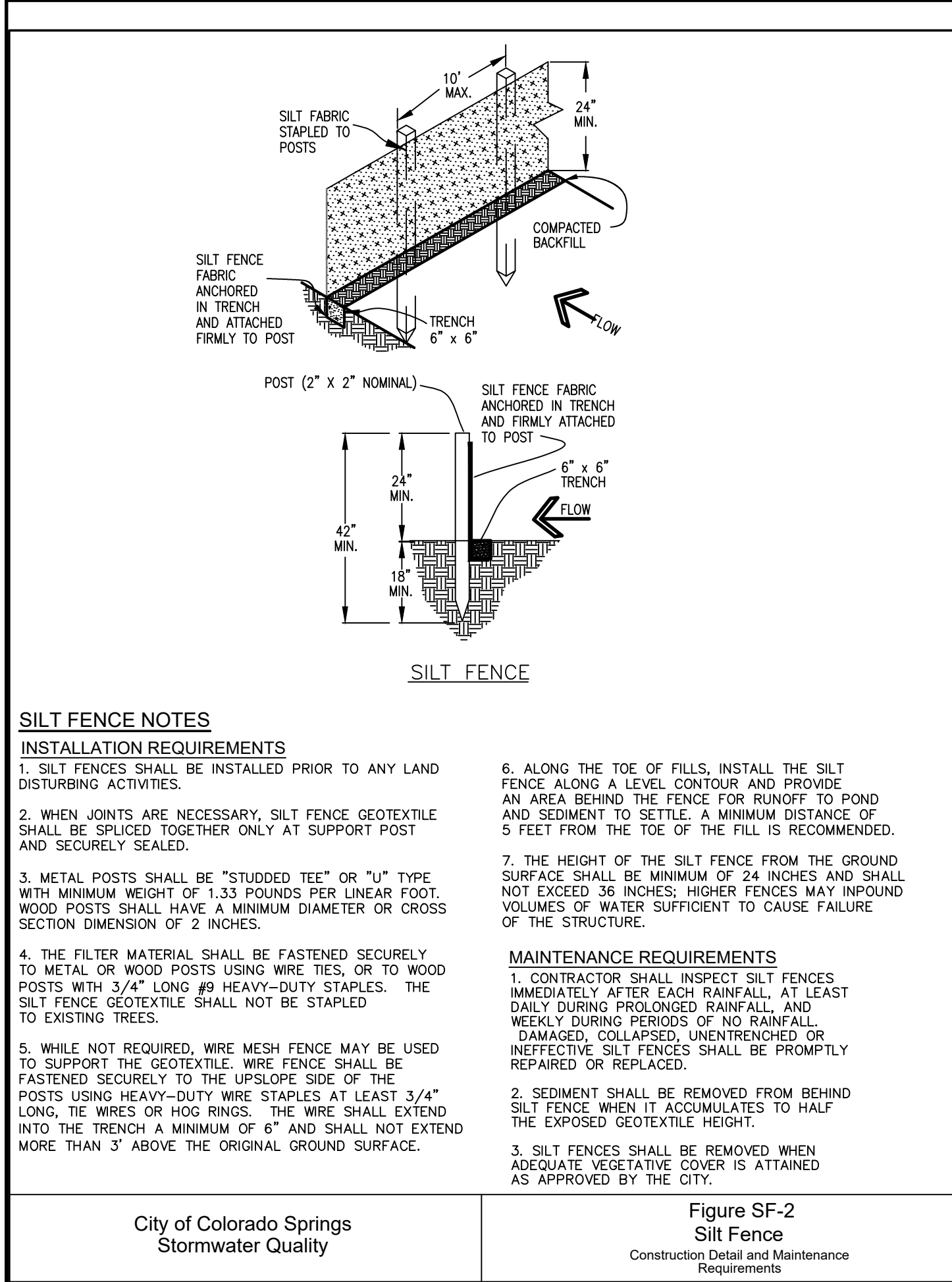
EROSION CONTROL
NOTES

HORZ. SCALE:	NTS	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	UP&E	CHECKED:	JPS
CREATED:	4/14/20	LAST MODIFIED:	8/26/21
PROJECT NO:	090001	MODIFIED BY:	BJJ

SHEET:

C5.1

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MAYBERRY, COLORADO SPRINGS - PHASE 1 PUD

EROSION CONTROL DETAILS

REVISION

NO.	REVISION	DATE
1	EPC COMMENTS	1/15/07
2	2018 SUBMITTAL	8/22/18
3	EPC COMMENTS	9/12/19
4	EPC COMMENTS	1/31/20
5	EPC COMMENTS	4/17/20

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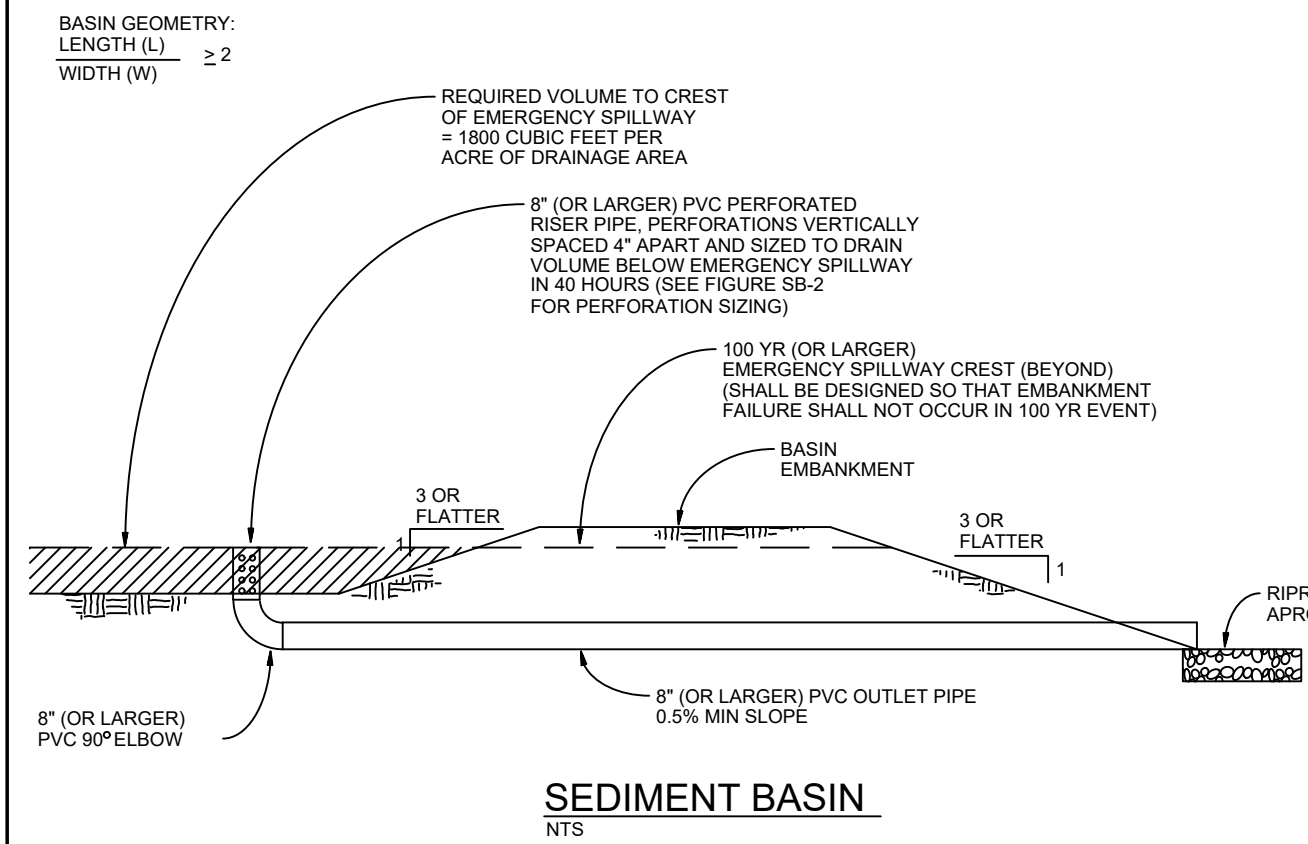
HORZ. SCALE: NTS
VERT. SCALE: N/A
SURVEYED: UP&E
CREATED: 4/14/20
PROJECT NO: 090001

DRAWN: RMD
DESIGNED: JPS
CHECKED: JPS
LAST MODIFIED: 8/26/21
MODIFIED BY: BJJ

SHEET: C5.2

TEMPORARY SEDIMENT BASIN DESIGN DATA						
BASIN	DRAINAGE AREA (AC)	REQUIRED VOLUME (AF)	D (FT)	HD* (IN)	# COLUMNS	# ROWS
C1	44.8	1.9	4.5	7/8"	3	13
D	113.2	4.7	4.5	7/8"	3	13

* PERFORATIONS AT 4" VERTICAL SPACING



SEDIMENT BASIN NOTES

INSTALLATION REQUIREMENTS

- SEDIMENT BASINS SHALL BE INSTALLED BEFORE ANY CLEARING AND/OR GRADING IS UNDERTAKEN.
- THE AREA UNDER WHICH THE EMBANKMENT IS TO BE INSTALLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ALL VEGETATION AND ROOT MAT.
- THE OUTLET OF THE BASIN SHALL BE DESIGNED TO DRAIN ITS VOLUME IN 40 HOURS.
- THE OUTLET IS TO BE LOCATED AT THE FURTHEST DISTANCE FROM THE INLET OF THE BASIN. BAYFLES MAY BE NEEDED TO INCREASE THE FLOW LENGTH AND SETTLING TIME.
- EMBANKMENT MATERIAL SHALL CONSIST OF SOIL WITH A MINIMUM OF 15% PASSING A #200 SIEVE. EXCAVATED SOIL CAN BE USED IF IT MEETS THIS REQUIREMENT.
- EMBANKMENT IS TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698.
- WHEN A BASIN IS INSTALLED NEAR A RESIDENTIAL AREA, FOR SAFETY REASONS, A SIGN SHALL BE POSTED AND THE AREA SECURED WITH A FENCE.

MAINTENANCE REQUIREMENTS

- CONTRACTOR SHALL INSPECT SEDIMENT BASINS AFTER EACH RAINFALL AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS NO RAINFALL.
- SEDIMENT BASINS SHALL BE CLEANED OUT BEFORE SEDIMENT HAS FILLED HALF THE VOLUME OF THE BASIN.
- SEDIMENT BASINS SHALL REMAIN OPERATIONAL AND PROPERLY MAINTAINED UNTIL THE SITE AREA IS PERMANENTLY STABILIZED WITH ADEQUATE VEGETATIVE COVER AND/OR OTHER PERMANENT STRUCTURE AS APPROVED BY THE CITY.

City of Colorado Springs
Stormwater Quality

Figure SB-1
Sediment Basin
Construction Detail and Maintenance
Requirements

3-32

Design Volume (Acres-ft)	Depth at Outlet (ft)											
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5
2	15.04	7.71	5.10	3.76	2.95	2.41	2.02	1.73	1.50	1.31	1.15	1.01
1	7.52	3.86	2.55	1.88	1.48	1.21	1.01	0.87	0.75	0.66	0.58	0.51
0.6	4.91	2.51	1.63	1.13	0.89	0.72	0.61	0.52	0.45	0.39	0.34	0.30
0.4	3.01	1.54	1.02	0.75	0.59	0.48	0.40	0.35	0.30	0.26	0.23	0.20
0.2	1.50	0.77	0.51	0.38	0.30	0.24	0.20	0.17	0.15	0.13	0.11	0.10
0.1	0.75	0.38	0.26	0.19	0.15	0.12	0.10	0.09	0.08	0.07	0.06	0.05
0.08	0.45	0.23	0.15	0.11	0.09	0.07	0.06	0.05	0.04	0.04	0.03	0.03
0.04	0.30	0.15	0.10	0.08	0.06	0.05	0.04	0.03	0.03	0.02	0.02	0.02
0.02	0.15	0.08	0.05	0.04	0.03	0.02	0.02	0.02	0.02	0.01	0.01	0.01
0.01	0.08	0.04	0.03	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01

TABLE SB-1

Hole Diameter (in)	Hole Diameter (in)	Area per Row (in ²)		
		n = 1	n = 2	n = 3
1/4	0.250	0.05	0.10	0.15
5/16	0.313	0.08	0.15	0.23
3/8	0.375	0.11	0.22	0.33
7/16	0.438	0.15	0.30	0.45
1/2	0.500	0.20	0.39	0.59
9/16	0.563	0.25	0.50	0.75
5/8	0.625	0.31	0.61	0.92
11/16	0.688	0.37	0.74	1.11
3/4	0.750	0.44	0.88	1.33
7/8	0.875	0.60	1.20	1.80
1	1.000	0.79	1.57	2.36
1 1/8	1.125	0.99	1.99	2.98
1 1/4	1.250	1.23	2.45	3.68
1 3/8	1.375	1.48	2.97	4.45
1 1/2	1.500	1.77	3.53	5.30
1 5/8	1.625	2.07	4.15	6.22
1 3/4	1.750	2.41	4.81	7.22
1 7/8	1.875	2.78	5.52	8.28
2	2.000	3.14	6.28	9.42
n = Number of columns of perforations		1/4"	5/16"	3/8"
Minimum steel plate thickness		1/4"	5/16"	3/8"

TABLE SB-2

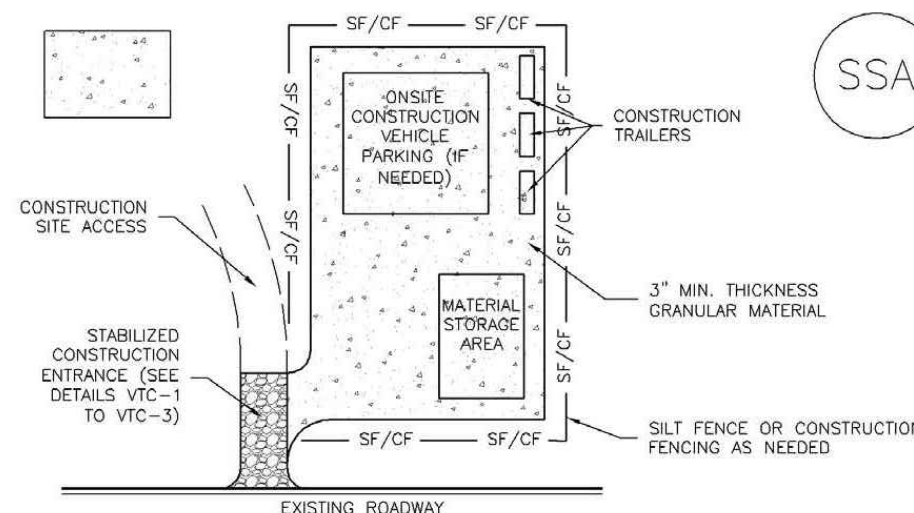
City of Colorado Springs
Stormwater Quality

Figure SB-2
Outlet Sizing
Application Techniques and Maintenance
Requirements

3-33

Stabilized Staging Area (SSA)

SM-6



STABILIZED STAGING AREA INSTALLATION NOTES

- SEE PLAN VIEW FOR:
-LOCATION OF STAGING AREA(S).
-CONTRACTOR MAY ADJUST LOCATION AND SIZE OF STAGING AREA WITH APPROVAL FROM THE LOCAL JURISDICTION.
- STABILIZED STAGING AREA SHOULD BE APPROPRIATE FOR THE NEEDS OF THE SITE. OVERSIZING RESULTS IN A LARGER AREA TO STABILIZE FOLLOWING CONSTRUCTION.
- STAGING AREA SHALL BE STABILIZED PRIOR TO OTHER OPERATIONS ON THE SITE.
- THE STABILIZED STAGING AREA SHALL CONSIST OF A MINIMUM 3" THICK GRANULAR MATERIAL.
- UNLESS OTHERWISE SPECIFIED BY LOCAL JURISDICTION, ROCK SHALL CONSIST OF DOT SECT. #703, AASHTO #3 COARSE AGGREGATE OR 6" (MINUS) ROCK.
- ADDITIONAL PERIMETER BMPs MAY BE REQUIRED INCLUDING BUT NOT LIMITED TO SILT FENCE AND CONSTRUCTION FENCING.

STABILIZED STAGING AREA MAINTENANCE NOTES

- 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.
- FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
- WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
- ROCK SHALL BE REAPPLIED OR REGRADED AS NECESSARY IF RUTTING OCCURS OR UNDERLYING SUBGRADE BECOMES EXPOSED.

November 2010

Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

SSA-3

SM-6

Stabilized Staging Area (SSA)

STABILIZED STAGING AREA MAINTENANCE NOTES

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

SSA-4

Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

November 2010

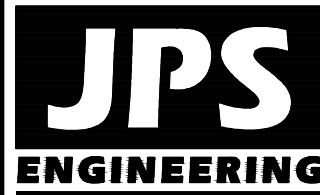
MAYBERRY, COLORADO SPRINGS - PHASE 1 PUD

EROSION CONTROL DETAILS

HORIZ. SCALE: NTS
VERT. SCALE: N/A
SURVEYED: RAMPART
CREATED: 8/26/21
PROJECT NO: 090001

DRAWN: BJJ
DESIGNED: JPS
CHECKED: JPS
LAST MODIFIED: 8/30/21
MODIFIED BY: BJJ

SHEET: C5.3



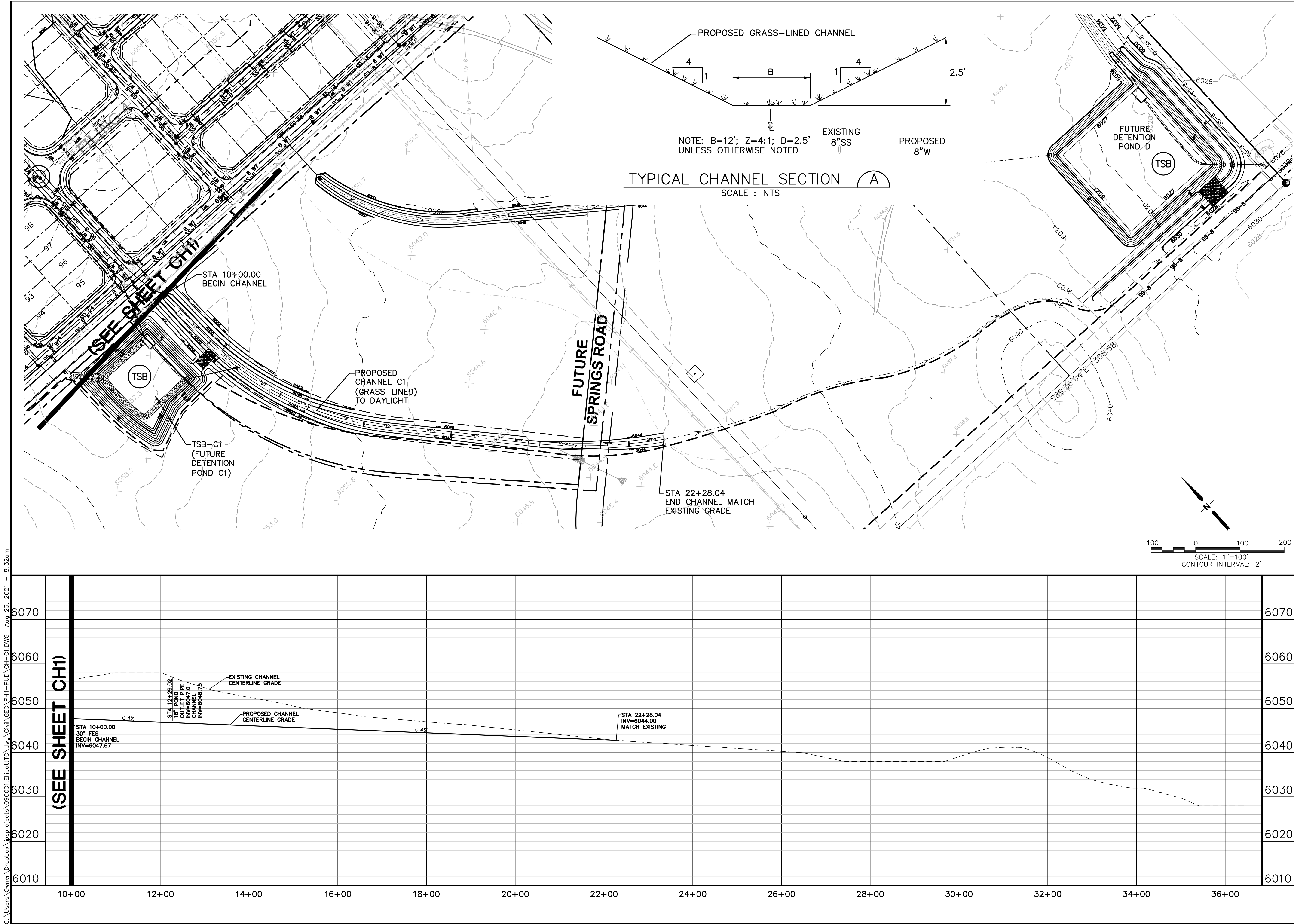
19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsengr.com

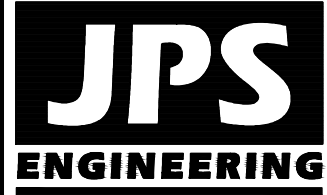


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ELLICOTT TOWN CENTER - FILING NO. 1



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80903
PH: 719-477-9429
FAX: 719-471-0766

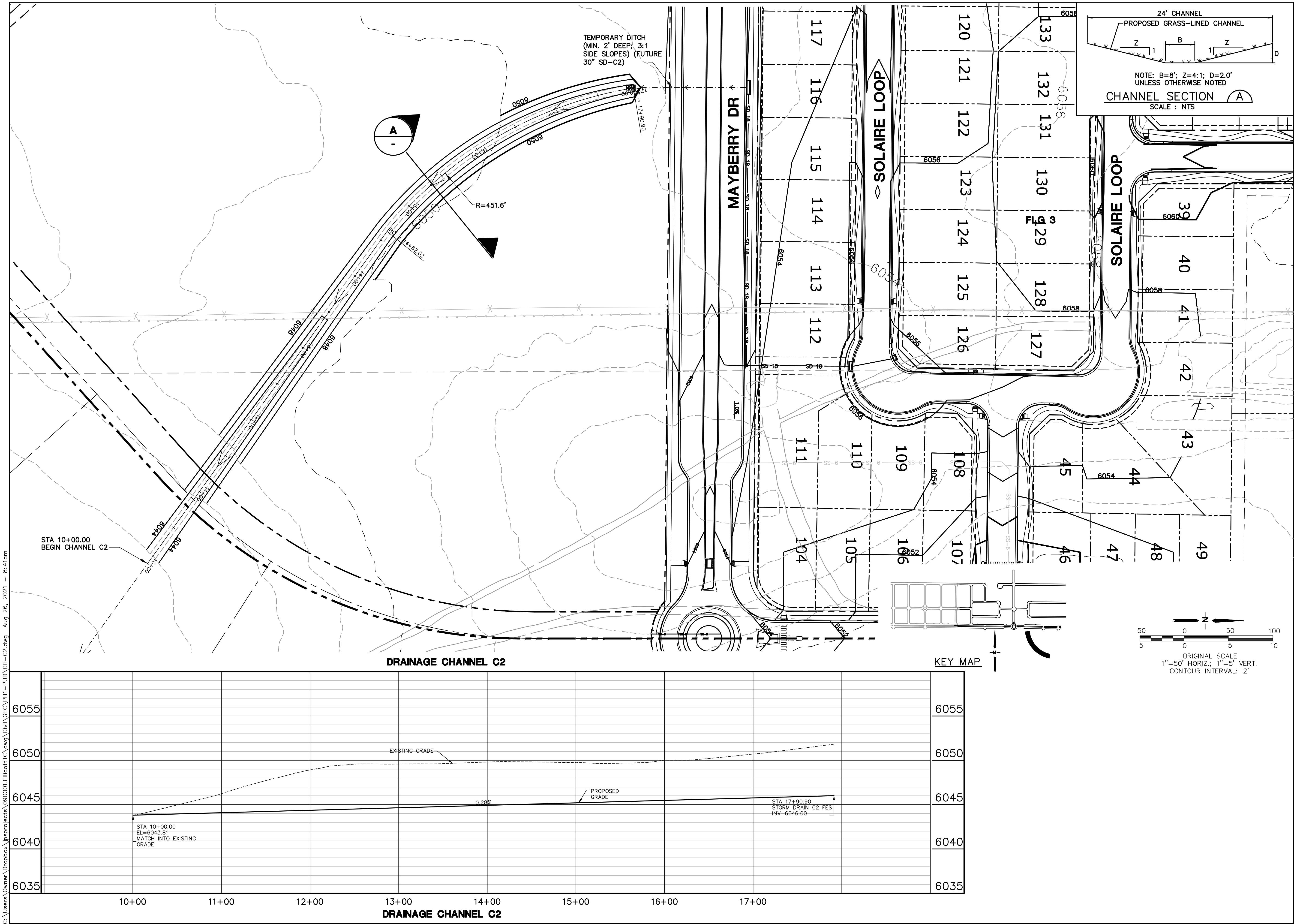
No.	REVISION	BY	DATE

CHANNEL C1 PLAN & PROFILE

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VERT. SCALE: 1"=10'	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 3/8/06	LAST MODIFIED: 8/23/21
PROJECT NO: 090001	MODIFIED BY: BJJ

SHEET: CH-C1

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MAYBERRY, COLORADO SPRINGS - FILING NO. 3 & 4

DRAINAGE CHANNEL C2

PLAN & PROFILE

CH-C2

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DATE	BY	REVISION	No.

HORIZ. SCALE: 1"=50'

VERT. SCALE: 1"=5'

SURVEYED: RAMPART

CREATED: 1/29/21

PROJECT NO: 090001

DRAWN: BJJ

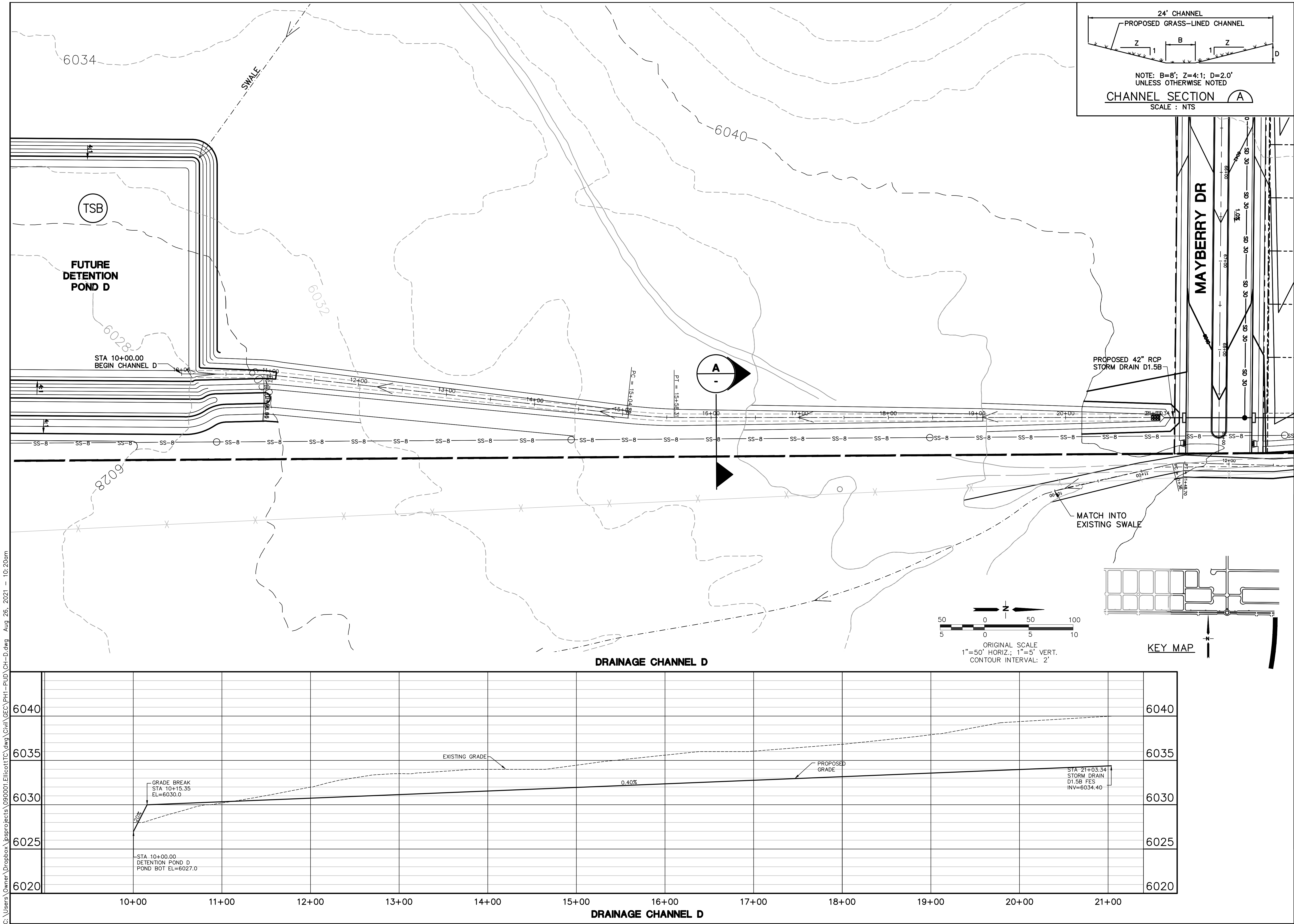
DESIGNED: JPS

CHECKED: JPS

LAST MODIFIED: 8/26/21

MODIFIED BY: BJJ

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Colorado Springs, CO 80903
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FAX: 719-471-0766
www.jpsengr.com

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No.	REVISION	BY	DATE

DRAINAGE CHANNEL D PLAN & PROFILE

HORIZ. SCALE: 1"=50'

VERT. SCALE: 1"=5'

SURVEYED: RAMPART

CREATED: 1/29/21

PROJECT NO: 090001

SHEET: CH-D

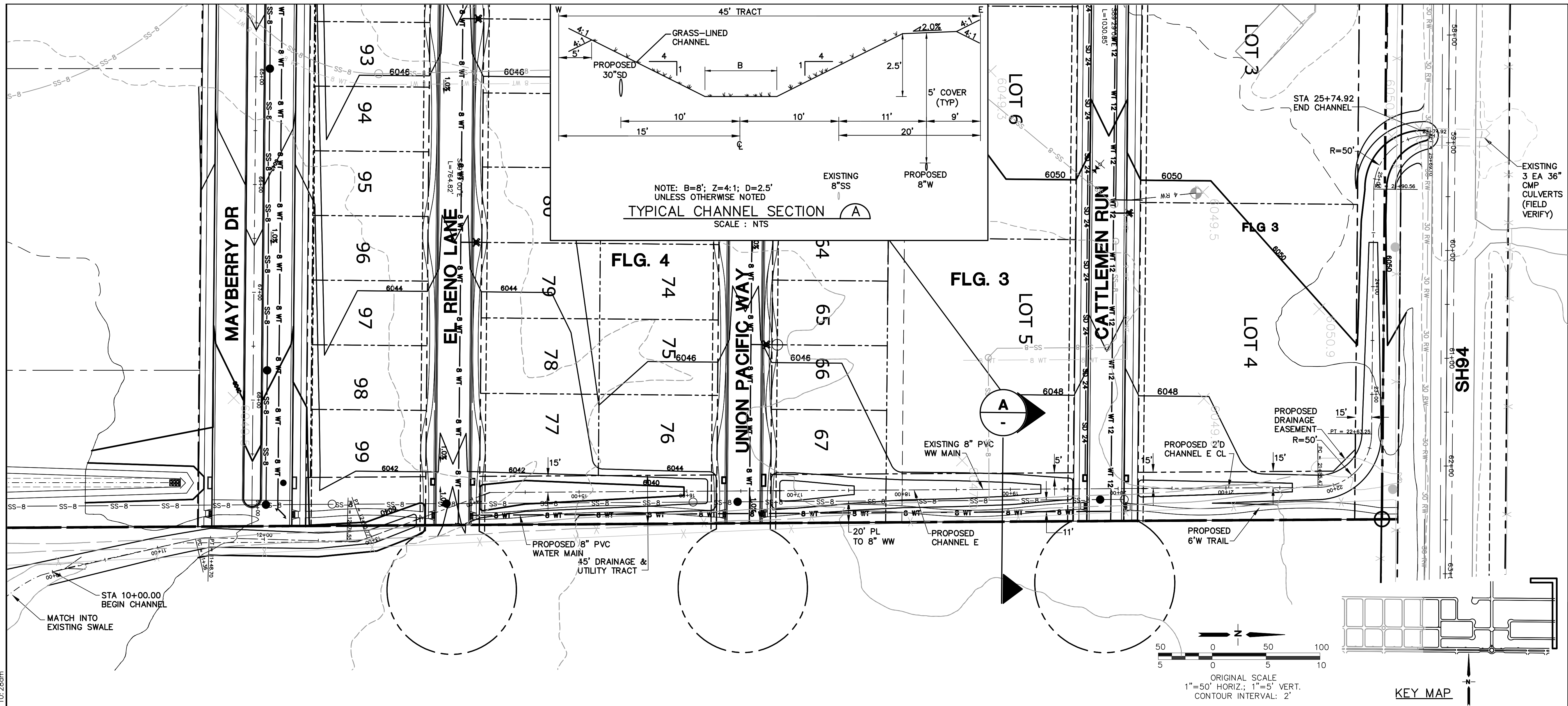
DRAWN: BJJ

DESIGNED: JPS

CHECKED: JPS

LAST MODIFIED: 8/26/21

MODIFIED BY: BJJ



MAYBERRY, COLORADO SPRINGS - FILING NO. 3 & 4



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MEMBER UTILITIES.

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**DRAINAGE CHANNEL E
PLAN & PROFILE**
(STA: 10+00.00 TO STA: 25+85.28)

HORZ. SCALE:	1"=50'	DRAWN:	BJJ
VERT. SCALE:	1"=5'	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	1/29/21	LAST MODIFIED:	8/26/21
PROJECT NO:	090001	MODIFIED BY:	BJJ

SHEET: CH-E

APPENDIX C

MAYBERRY FILING 3 GEC

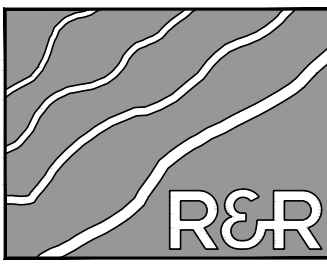
GRADING & EROSION CONTROL PLANS
MAYBERRY, COLORADO - FILING NO. 3

A REPLAT OF PART OF TRACT M AND ALL OF TRACT P, MAYBERRY, COLORADO SPRINGS FILING NO. 1, AND ALL OF TRACTS A, B, C AND D, MAYBERRY, COLORADO SPRINGS FILING NO. 2,
AND THAT PART OF SPRINGS ROAD RIGHT-OF-WAY LYING SOUTH OF SAID TRACT A AND THAT PART OF VILLAGE MAIN STREET RIGHT-OF-WAY LYING EAST OF ATCHISON WAY
ALL LOCATED IN THE NORTH HALF OF SECTION 14, TOWNSHIP 14 SOUTH, RANGE 63 WEST OF THE 6TH PRINCIPAL MERIDIAN
COUNTY OF EL PASO (UNINCORPORATED), STATE OF COLORADO



Know what's below.
Call before you dig.

NO.	REVISION	BY	DATE
	2ND SUBMISSION		9/1/2022



ENGINEERS
SURVEYORS

R&R ENGINEERS-SURVEYORS, INC.
1635 WEST 13TH AVENUE, SUITE 310
DENVER, COLORADO 80204
PHONE: 303-753-6730

WWW.RRENGINEERS.COM

MAYBERRY PUD PH 1 - FILING NO. 3

SITE ADDRESS: MAYBERRY, COLORADO SPRINGS
EL PASO COUNTY

PREPARED FOR: MAYBERRY COMMUNITIES, LLC
3296 DEVINE HEIGHTS #209
COLORADO SPRINGS, CO 80922

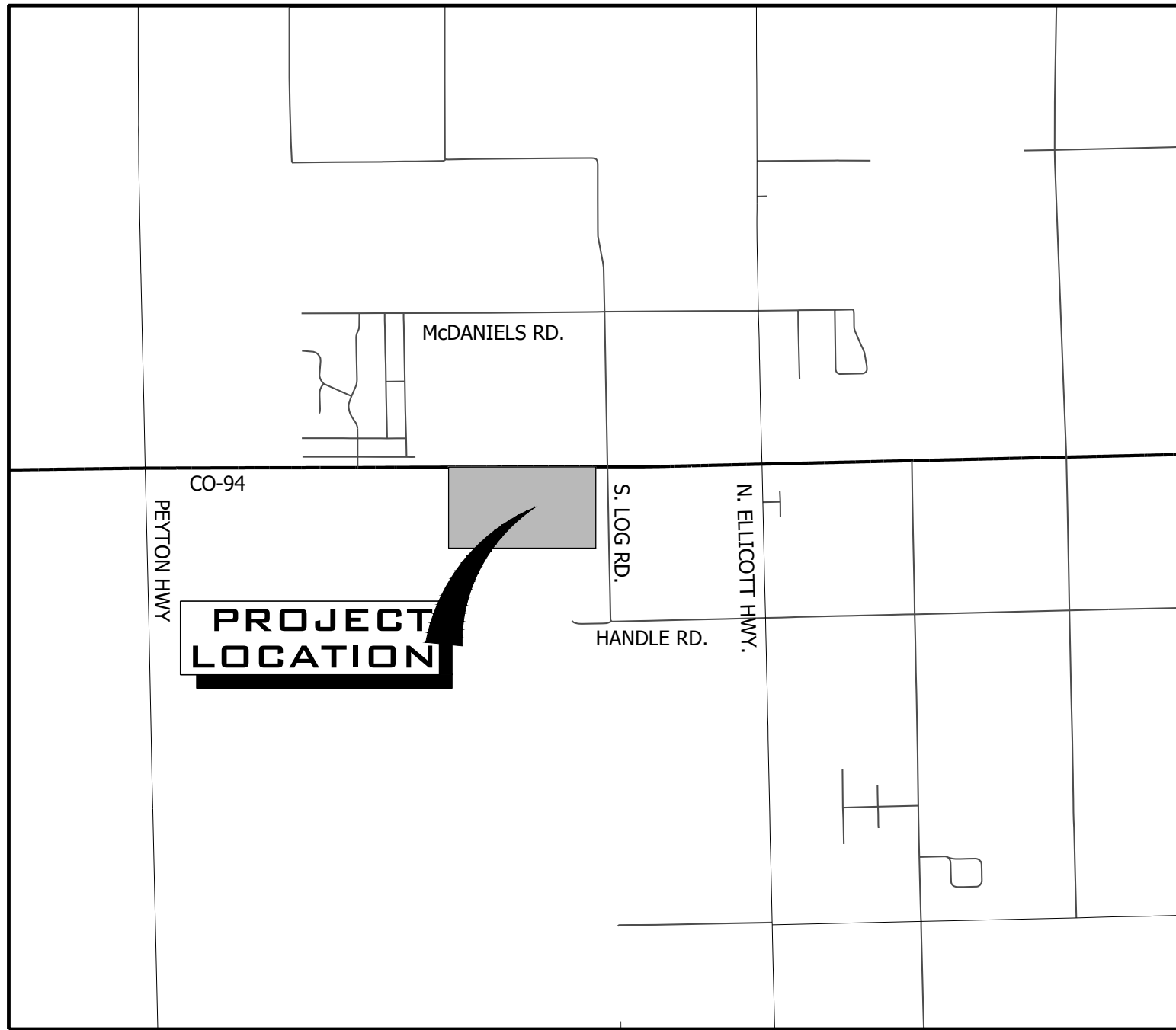
GESC PLANS

JOB NO. MC22110
ORG. SUBM. DATE 06/16/2022
DWN: LAO CHKD: CJD
NAME

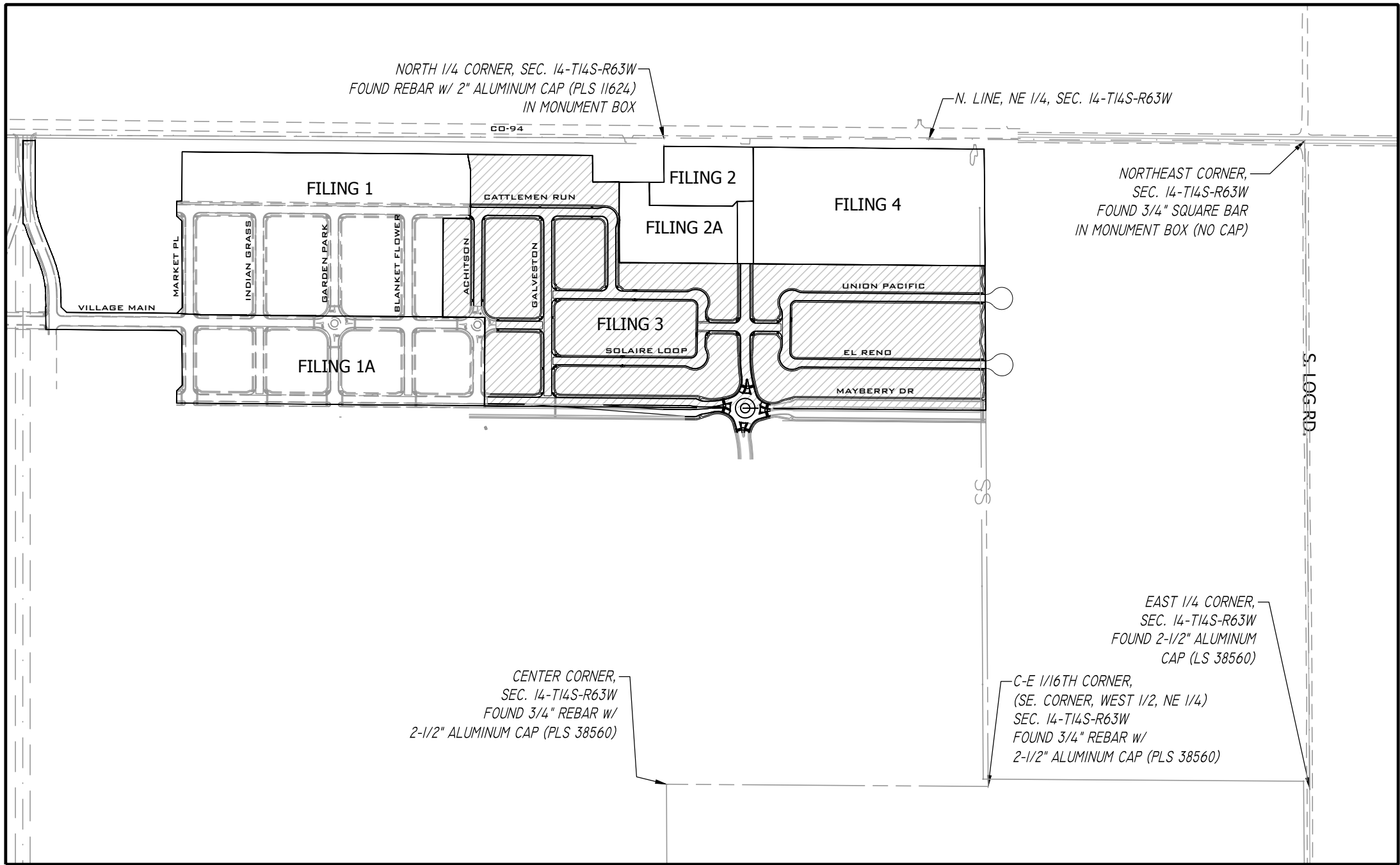
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SHEET

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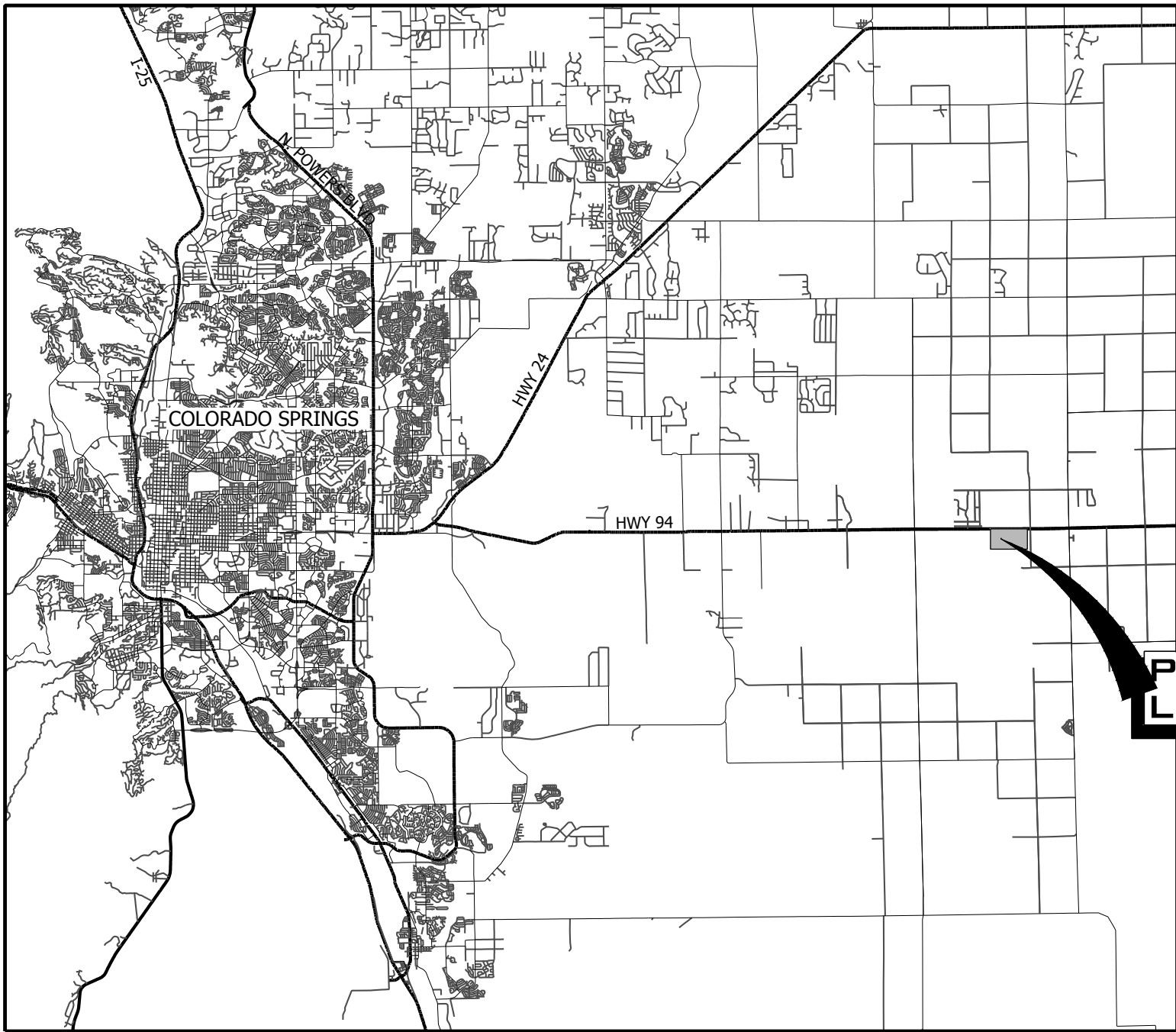
C8.0



VICINITY MAP
SCALE 1" = 5,000'



SITE MAP
SCALE 1" = 500'



VICINITY MAP
SCALE 1" = 20,000'

CONTACT LIST

DEVELOPER	CIVIL ENGINEER	SURVEYOR	COUNTY ENGINEERING
MAYBERRY COMMUNITIES, LLC	R&R ENGINEERS-SURVEYORS, LLC	R&R ENGINEERS-SURVEYORS, LLC	EL PASO COUNTY DEVELOPMENT SERVICES
3296 DEVINE HEIGHTS #208 COLORADO SPRINGS, CO 80922 719-922-2181 CONTACT: SCOTT SOUDERS	1635 WEST 13TH AVENUE, SUITE 310 DENVER, CO 80204 303-753-6730 CONTACT: CLIF DAYTON, P.E.	1635 13TH AVENUE, SUITE 310 DENVER, CO 80204 303-753-6730 CONTACT: MR. DARELL DeLAP	2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80922 719-520-6300
STATE HIGHWAY	WATER/WASTEWATER	GAS DEPARTMENT	ELECTRIC DEPARTMENT
COLORADO DEPARTMENT OF TRANSPORTATION, REGION 2	ELLCOTT UTILITIES COMPANY, LLC	BLACK HILLS ENERGY	MOUNTAIN VIEW ELECTRIC ASSOCIATION
5615 WILLS BLVD. PUEBLO, CO 81008 MR. ART GONZALES (REFERENCE CDOT ACCESS PERMITS NO. 218053 & 218054)	719-426-7810 CONTACT: JASON KVOLS	1515 WYNKOOP ST #500 DENVER, CO 80202 719-359-3176 CONTACT: SEBASTIAN SCHWENDER	11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908 719-495-2283 CONTACT: MR. DAVE WALDNER

BENCHMARK:
NGS Benchmark PID: JK003, Designation: Z 76
Disk Stamped Z 76 1935 in top of concrete monument.
Project Elevation: 6041.98 Feet
Elevation Note: Project Vertical Datum is based upon previous surveys conducted by Rampart Surveys LLC where the elevation of 6041.98 feet was established on this benchmark. This elevation has been verified by R&R Engineers and Surveyors by running closed bench level loops from Z 76 to other aerial control points that were used for the topographic survey and design on previous projects. The current NGS published elevation was Not Used. Benchmark Located in the Southeast quadrant of the intersection of State Highway 94 and Log Road. The benchmark lies 65.5 feet South and 30 feet East of the intersection.
Horizontal Values:
State Plane 1983 Central Coordinate Values in US Survey Feet:
Grid Northing: 1367803.3380' Grid Easting: 3311725.4580'
Project Coordinate Values in US Survey Feet:
Northing: 1368261.2691' Easting: 3312880.8395'

BASIS OF BEARING:
Bearings are based on the North line of the Northeast Quarter of Section 14, Township 14 South, Range 63 West of the 6th Principal Meridian having a bearing of South 89° 44' 50" East as shown on the recorded plats of Mayberry, Colorado Springs Filing No. 1 recorded as Reception No. 220714655 and as shown on Mayberry, Colorado Springs Filing No. 2 recorded as Reception No. 221714698, said North line having a ground distance of 2606.58 feet and monumented at each end as shown on sheet 2 of the Mayberry, Colorado Springs Filing No. 3 Plat.

Sheet List Table

Sheet Number	Sheet Title
C8.0	GESC COVER SHEET
C8.1	GENERAL NOTES & LEGEND
C8.2	E&S PLAN-NORTH WEST
C8.3	E&S PLAN-NORTH EAST
C8.4	E&S PLAN-SOUTH WEST
C8.5	E&S PLAN-SOUTH EAST
C8.6	E&S DETAILS
C8.7	E&S DETAILS
C8.8	E&S DETAILS
C8.9	E&S DETAILS
C8.10	OVERALL GRADING PLAN
C8.11	GRADING PLAN - WEST
C8.12	GRADING PLAN - EAST
C8.13	GRADING PLAN - DETENTION POND
C8.14	CHANNEL C2 PLAN & PROFILE 9+00 TO 20+00
C8.15	CHANNEL C2 PLAN & PROFILE 20+00 TO 29+00
C8.16	CHANNEL D PLAN & PROFILE
C8.17	CHANNEL E 9+50 TO 24+00
C8.18	CHANNEL E 24+00 to 38+50
C8.19	CHANNEL F PLAN & PROFILE
C8.20	LOT GRADING DETAILS
C8.21	DETENTION POND DETAILS
C8.22	DETENTION POND DETAILS

Engineer's Statement:

This Grading and Erosion Control Plan was prepared under my direction and supervision and is correct to the best of my knowledge and belief. Said Plan has been prepared according to the criteria established by the County for Grading and Erosion Control Plans. I accept responsibility for any liability caused by any negligent acts, errors or omissions on my part in preparing this report.

Clif Dayton, P.E. #48189

Date

Owner's Statement:

The Owner will comply with the requirements of the Grading and Erosion Control Plan.

Owner Signature

Date

El Paso County:

County plan review is provided only for general conformance with County Design Criteria. The County is not responsible for the accuracy and adequacy of the design, dimensions, and/or elevations which shall be confirmed at the job site. The County through the approval of this document assumes no responsibility for completeness and/or accuracy of this document.

Filed in accordance with the requirements of the El Paso County Land Development Code, Drainage Criteria Manual, Volumes 1 and 2, and Engineering Criteria Manual as amended.

County Project Engineer Signature

Date

PATH: P:\MC22110 MAYBERRY FILING NO. 3\ENGINEERING\4 DRAWINGS\PLANS\GIS - GESC PLANS\MC22110 - GESC - NOTES.DWG, PLOT DATE: 8/30/2022 2:57:02 PM, BY: LNN, CDRADY

EL PASO COUNTY GRADING & EROSION CONTROL STANDARD NOTES:

1.

STORMWATER DISCHARGES FROM CONSTRUCTION SITES SHALL NOT CAUSE OR THREATEN TO CAUSE POLLUTION, CONTAMINATION , OR DEGRADATION OF STATE WATERS. ALL WORK AND EARTH DISTURBANCE SHALL BE DONE IN A MANNER THAT MINIMIZES POLLUTION OF AN ON-SITE OR OFF-SITE WATERS, INCLUDING WETLANDS.
2.

NOTWITHSTANDING ANYTHING DEPICTED IN THESE PLANS IN WORDS OR GRAPHIC REPRESENTATION, ALL DESIGN AND CONSTRUCTION RELATED TO ROADS, STORM DRAINAGE AND EROSION CONTROL SHALL CONFORM TO THE STANDARDS AND REQUIREMENTS OF THE MOST RECENT VERSION OF THE RELEVANT ADOPTED EL PASO COUNTY STANDARDS, INCLUDING THE LAND DEVELOPMENT CODE, THE ENGINEERING CRITERIA MANUAL, THE DRAINAGE CRITERIA MANUAL, AND THE DRAINAGE CRITERIA MANUAL VOLUME 2. ANY DEVIATIONS TO REGULATIONS AND STANDARDS MUST BE REQUESTED, AND APPROVED, IN WRITING.
3.

A SEPARATE STORMWATER MANAGEMENT PLAN (SMWP) FOR THIS PROJECT SHALL BE COMPLETED AND AN EROSION AND STORMWATER QUALITY CONTROL PERMIT (ESQCP) ISSUED PRIOR TO COMMENCING CONSTRUCTION. DURING CONSTRUCTION THE SWMP IS THE RESPONSIBILITY OF THE DESIGNATED QUALIFIED STORMWATER MANAGER OR CERTIFIED EROSION CONTROL INSPECTOR AND SHALL BE LOCATED ON SITE AT ALL TIMES DURING CONSTRUCTION AND SHALL BE KEPT UP TO DATE WITH WORK PROGRESS AND CHANGES IN THE FIELD.
4.

ONCE THE ESQCP IS APPROVED AND A "NOTICE TO PROCEED" HAS BEEN ISSUED, THE CONTRACTOR MAY INSTALL THE INITIAL STAGE EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED ON THE APPROVED GEC. A PRECONSTRUCTION MEETING BETWEEN THE CONTRACTOR, ENGINEER, AND EL PASO COUNTY WILL BE HELD PRIOR TO ANY CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE APPLICANT TO COORDINATE THE MEETING TIME AND PLACE WITH COUNTY STAFF.
5.

CONTROL MEASURES MUST BE INSTALLED PRIOR TO COMMENCEMENT OF ACTIVITIES THAT MAY CONTRIBUTE POLLUTANTS TO STORMWATER. TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES FOR ALL SLOPES, CHANNELS, DITCHES, OR ANY DISTURBED LAND AREA SHALL BE COMPLETED IMMEDIATELY UPON COMPLETION OF THE DISTURBANCE.
6.

ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE MAINTAINED AND REMAIN IN EFFECTIVE OPERATING CONDITION UNTIL PERMANENT SOIL EROSION CONTROL MEASURES ARE IMPLEMENTED AND FINAL STABILIZATION IS ESTABLISHED. AL PERSONS ENGAGED IN LAND DISTURBANCE ACTIVITIES SHALL ASSESS THE ADEQUACY OF CONTROL MEASURES AT THE SITE AND IDENTIFY IF CHANGES TO THOSE CONTROL MEASURES IS NEEDED TO ENSURE THE CONTINUED EFFECTIVE PERFORMANCE OF THE CONTROL MEASURES. ALL CHANGES TO TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES MUST BE INCORPORATED INTO THE STORMWATER MANAGEMENT PLAN PRIOR TO IMPLEMENTATION.
7.

TEMPORARY STABILIZATION SHALL BE IMPLEMENTED ON DISTURBED AREAS AND STOCKPILES WHERE GROUND DISTURBING CONSTRUCTION ACTIVITY HAS PERMANENTLY CEASED OR TEMPORARILY CEASED FOR LONGER THAN 14 DAYS. AN AREA THAT IS GOING TO REMAIN IN AN INTERIM STATE FOR MORE THAN 60 DAYS SHALL ALSO BE STABILIZED.
8.

FINAL STABILIZATION MUST BE IMPLEMENTED AT ALL APPLICABLE CONSTRUCTION SITES. FINAL STABILIZATION IS ACHIEVED WHEN ALL GROUND DISTURBING ACTIVITIES ARE COMPLETE AND ALL DISTURBED AREAS EITHER HAVE A UNIFORM VEGETATIVE COVER WITH INDIVIDUAL PLAN DENSITY OF 70 PERCENT OF PRE-DISTURBANCE LEVELS ESTABLISHED OR EQUIVALENT PERMANENT ALTERNATIVE STABILIZATION METHOD IS IMPLEMENTED. ALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE REMOVED UPON FINAL STABILIZATION AND BEFORE PERMIT CLOSURE.
9.

ALL PERMANENT STORMWATER MANAGEMENT FACILITIES SHALL BE INSTALLED AS DEFINED IN THE APPROVED PLANS. ANY PROPOSED CHANGES THAT EFFECT THE HYDROLOGY OR HYDRAULICS OF A PERMANENT STORMWATER MANAGEMENT STRUCTURE MUST BE APPROVED BY THE ECM ADMINISTRATOR PRIOR TO IMPLEMENTATION.
10.

ANY EARTH DISTURBANCE SHALL BE CONDUCTED IN SUCH A MANNER SO AS TO EFFECTIVELY MINIMIZED ACCELERATED SOIL EROSION AND RESULTING SOIL EROSION AND RESULTING. ALL DISTURBANCES SHALL BE DESIGNED, CONSTRUCTED, AND COMPLETED SO THAT THE EXPOSED AREA OF ANY VEGETATION SHALL BE PROTECTED AND MAINTAINED WITHIN 50 HORIZONTAL FEET OF A WATERS OF THE STATE, UNLESS INFEASIBLE.
11.

COMPACTION OF SOIL MUST BE PREVENTED IN AREAS DESIGNATED FOR INFILTRATION CONTROL MEASURES OR WHERE FINAL STABILIZATION WILL BE ACHIEVED BY VEGETATIVE COVER. AREAS DESIGNATED FOR INFILTRATION CONTROL SHALL ALSO BE PROTECTED FROM SEDIMENTATION DURING CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED.
12.

ANY TEMPORARY OR PERMANENT FACILITY DESIGNED AND CONSTRUCTED FOR THE CONVEYANCE OF STORMWATER AROUND, THROUGH, OR FORM THE EARTH DISTURBANCE AREA SHALL BE A STABILIZED CONVEYANCE DESIGNED TO MINIMIZE EROSION AND THE DISCHARGE OF SEDIMENT OFF SITE.
13.

CONCRETE WASH WATER SHALL BE CONTAINED AND DISPOSED OF IN ACCORDANCE WITH THE SWMP. NO WASH WATER SHALL BE DISCHARGED TO OR ALLOWED TO RUNOFF TO STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES. CONCRETE WASHOUT SHALL NOT BE LOCATED IN AN AREA WHERE SHALLOW GROUNDWATER MAY BE PRESENT, OR WITHIN 50 FEET OF A SURFACE WATER BODY.
14.

DEWATERING OPERATIONS: UNCONTAMINATED GROUND WATER MAY BE DISCHARGED ON SITE, BUT MAY NOT LEAVE THE SITE IN THE FORM OF SURFACE RUNOFF.
15.

EROSION CONTROL BLANKETING IS TO BE USED ON SLOPES STEEPER THAN 3:1.
16.

BUILDING, CONSTRUCTION, EXCAVATION, OR OTHER WASTE MATERIALS SHALL NOT BE TEMPORARILY PLACED OR STORED IN THE STREET, ALLEY, OR OTHER PUBLIC WAY, UNLESS IN ACCORDANCE WITH AN APPROVED TRAFFIC CONTROL PLAN. BMP'S MAY BE REQUIRED BY EL PASO COUNTY ENGINEERING IF DEEMED NECESSARY, BASED ON SPECIFIC CONDITIONS AND CIRCUMSTANCES.
17.

VEHICLE TRACKING OF SOILS AND CONSTRUCTION DEBRIS OFF-SITE SHALL BE MINIMIZED. MATERIALS TRACKED OFFSITE SHALL BE CLEANED UP AND PROPERLY DISPOSED OF IMMEDIATELY.
18.

CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL WASTES FROM THE CONSTRUCTION SITE FOR DISPOSAL IN ACCORDANCE WITH LOCAL AND STATE REGULATORY REQUIREMENTS. NO CONSTRUCTION DEBRIS, TREE SLASH, BUILDING MATERIAL WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURIED, DUMPED, OR DISCHARGED A THE SITE.
19.

THE OWNER, SITE DEVELOPER, CONTRACTOR, AND/OR THEIR AUTHORIZED AGENTS SHALL BE RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION DEBRIS, DIRT, TRASH, ROCK, SEDIMENT, AND SAND THAT MAY ACCUMULATE IN THE STORM SEWER OR OTHER DRAINAGE CONVEYANCE SYSTEM AND STORMWATER APPURTENANCES AS A RESULT OF SITE DEVELOPMENT.
20.

THE QUANTITY OF MATERIALS STORED ON THE PROJECT SITE SHALL BE LIMITED, AS MUCH AS PRACTICAL, TO THAT QUANTITY REQUIRED TO PERFORM THE WORK IN AN ORDERLY SEQUENCE. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER, IN THEIR ORIGINAL CONTAINERS, WITH ORIGINAL MANUFACTURER'S LABELS.
21.

NO CHEMICALS ARE TO BE USED BY THE CONTRACTOR, WHICH HAVE THE POTENTIAL TO BE RELEASED IN STORMWATER UNLESS PERMISSION FOR THE USE OF A SPECIFIC CHEMICAL IS GRANTED IN WRITING BY THE ECM ADMINISTRATOR. IN GRANTING THE USE OF SUCH CHEMICALS, SPECIAL CONDITIONS AND MONITORING MAY BE REQUIRED.
22.

BULK STORAGE OF PETROLEUM PRODUCTS OR OTHER LIQUID CHEMICALS IN EXCESS OF 55 GALLONS SHALL HAVE ADEQUATE SECONDARY CONTAINMENT PROTECTION TO CONTAIN ALL SPILLS AND PREVENT ANY SPILLED MATERIAL FROM ENTERING STATE WATERS, INCLUDING ANY SURFACE OR SUBSURFACE STORM DRAINAGE SYSTEM OR FACILITIES.
23.

NO PERSON SHALL CAUSE THE IMPEDIMENT OF STORMWATER FLOW IN THE FLOW LINE OF THE CURB AND GUTTER OR IN THE DITCH FLOW LINE.
24.

INDIVIDUALS SHALL COMPLY WITH THE "COLORADO WATER QUALITY CONTROL ACT" (TITLE 25, ARTICLE 8, CRS), AND THE "CLEAN WATER ACT" (33 USC 1344), IN ADDITION TO THE REQUIREMENTS INCLUDED IN THE DCM VOLUME II AND THE ECM APPENDIX I. ALL APPROPRIATE PERMITS MUST BE OBTAINED BY THE CONTRACTOR PRIOR TO CONSTRUCTION (NPDES, FLOODPLAIN, 404, FUGITIVE DUST, ETC.). IN THE EVENT OF CONFLICTS BETWEEN THESE REQUIREMENTS AND LAWS, RULES, OR REGULATIONS OF OTHER FEDERAL, STATE, OR COUNTY AGENCIES, THE MORE RESTRICTIVE LAWS, RULES, OR REGULATIONS SHALL APPLY.
25.

ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE AT APPROVED CONSTRUCTION ACCESS POINTS.
26.

PRIOR TO ACTUAL CONSTRUCTION THE PERMITEE SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
27.

A WATER SOURCE SHALL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILAED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
28.

THE SOILS REPORT THIS SITE HAS BEEN PREPARED BY _____ AND SHALL BE CONSIDERED A PART OF THESE PLANS.
29.

AT LEAST TEN (10) DAYS PRIOR TO THE ANTICIPATED START OF CONSTRUCTION, FOR PROJECTS THAT WILL DISTURB 1 ACRE OR MORE, THE OWNER OR OPERATOR OF CONSTRUCTION ACTIVITY SHALL SUBMIT A PERMIT APPLICATION FOR STORMWATER DISCHARGE TO THE OCLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT, WATER QUALITY DIVISION. THE APPLICATION CONTAINS CERTIFICATION OF COMPLETION OF A STORMWATER MANAGEMENT PLAN (SWMP), OF WHICH THIS GRADING AND EROSION CONTROL PLAN MAY BE A PART. FOR INFORMATION OR APPLICATION MATERIALS CONTACT:

COLORADO DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
WATER QUALITY CONTROL DIVISION
WQCD - PERMITS
4300 CHERRY CREEK DRIVE SOUTH
DENVER, CO 80246-1530
ATTN: PERMITS UNIT

MASTER LEGEND

EXISTING	DESCRIPTION	PROPOSED
	PROPERTY LINE	
	LOT LINE	
	RIGHT OF WAY	
	CENTERLINE	
	FLOOD PLAIN	
	LIMITS OF DISTURBANCE	
	SWALE / STREAM FLOWLINE	
	OVERFLOW RELIEF PATH	
	FENCE LINE	
	EASEMENT	
	EDGE OF PAVEMENT	
	VERTICAL CURB AND GUTTER	
	MOUNTABLE CURB AND GUTTER	
	SPILL GUTTER	
	TRANSITION GUTTER	
	CONCRETE SIDEWALK	
	HANDICAP PARKING	
	SIGHT TRIANGLE	
	SIGN(S)	
	PARKING COUNT INDICATOR	
	MAJOR CONTOUR	
	MINOR CONTOUR	
	GRADE BREAK	
	SPOT ELEVATION	
	RIP RAP	
	WATER LINE	
	WATER METER	
	WATER VALVE	
	WATER REDUCER	
	WATER FITTINGS	
	FIRE HYDRANT	
	SANITARY LINE	
	SANITARY MANHOLE	
	SANITARY CLEANOUT	
	STORM SEWER PIPE	
	STORM SEWER MANHOLE	
	STORM SEWER INLET	
	STORM SEWER FLARED END SECTION	
	STORM SEWER HEADWALL	
	UNDERGROUND ELECTRIC	
	OVERHEAD ELECTRIC	
	UTILITY POLE	
	STREET LIGHT	
	CABLE TV SERVICE	
	TELECOM SERVICE	
	FIBER OPTIC SERVICE	
	NATURAL GAS SERVICE	
	TREE	
	TREE LINE	

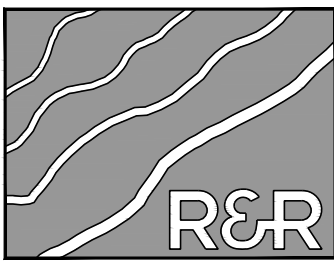
BMP LEGEND		
	CD	CHECK DAM
	CB	COMPOST BLANKET
	CFB	COMPOST FILTER BERM
	CWA	CONCRETE WASHOUT AREA
	CF	CONSTRUCTION FENCE
	CM	CONSTRUCTION MARKERS
	DW	DEWATERING
	DD	DIVERSION DITCH
		ROCK AND RIPRAP GRADATIONS
	ECB	EROSION CONTROL BLANKET
	IP	INLET PROTECTION
	RCD	REINFORCED CHECK DAM
	RRB	REINFORCED ROCK BERM
	RRC	RRB FOR CULVERT PROTECTION
	SB	SEDIMENT BASIN
	BCL	SEDIMENT CONTROL LOG
	ST	SEDIMENT TRAP
	SM	SEEDING AND MULCHING
	SF	SILT FENCE
	SSA	STABILIZED STAGING AREA
	SR	SURFACE ROUGHENING
	TRC	TEMPORARY ROAD CROSSING
	TSD	TEMPORARY SLOPE DRAIN
	TSC	TEMPORARY STREAM CROSSING
	TER	TERRACING
	VTC	VEHICLE TRACKING CONTROL
	WW	VTC WITH WHEEL WASH
	A	A LOT EROSION CONTROL
	B	B LOT EROSION CONTROL

	LOC	LIMITS OF CONSTRUCTION
	TS	TEMPORARY SEEDING



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GENERAL NOTES
& LEGEND

NO.

C8.1

TS TEMPORARY SEEDING



SCALE: 1" = 50'



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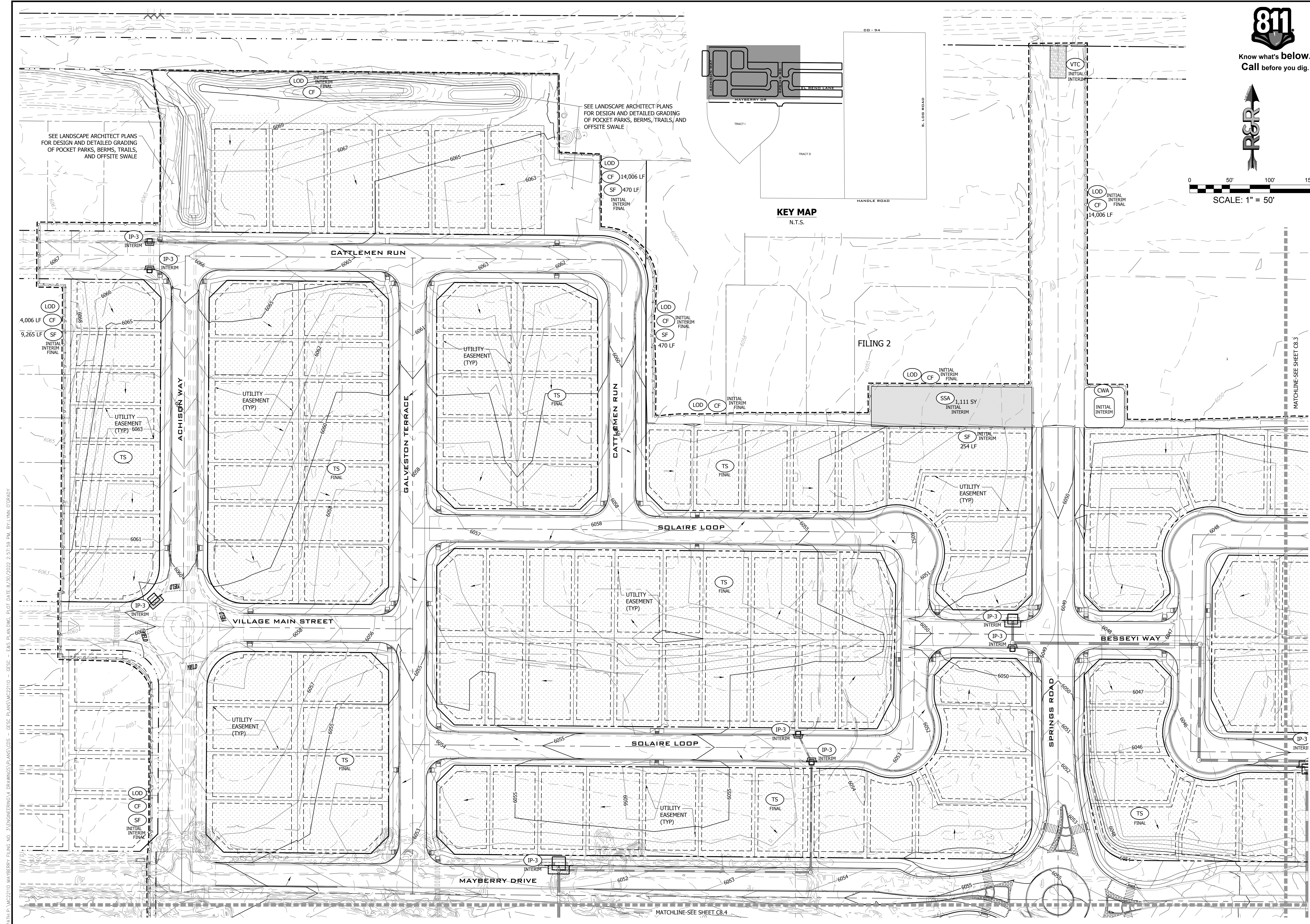
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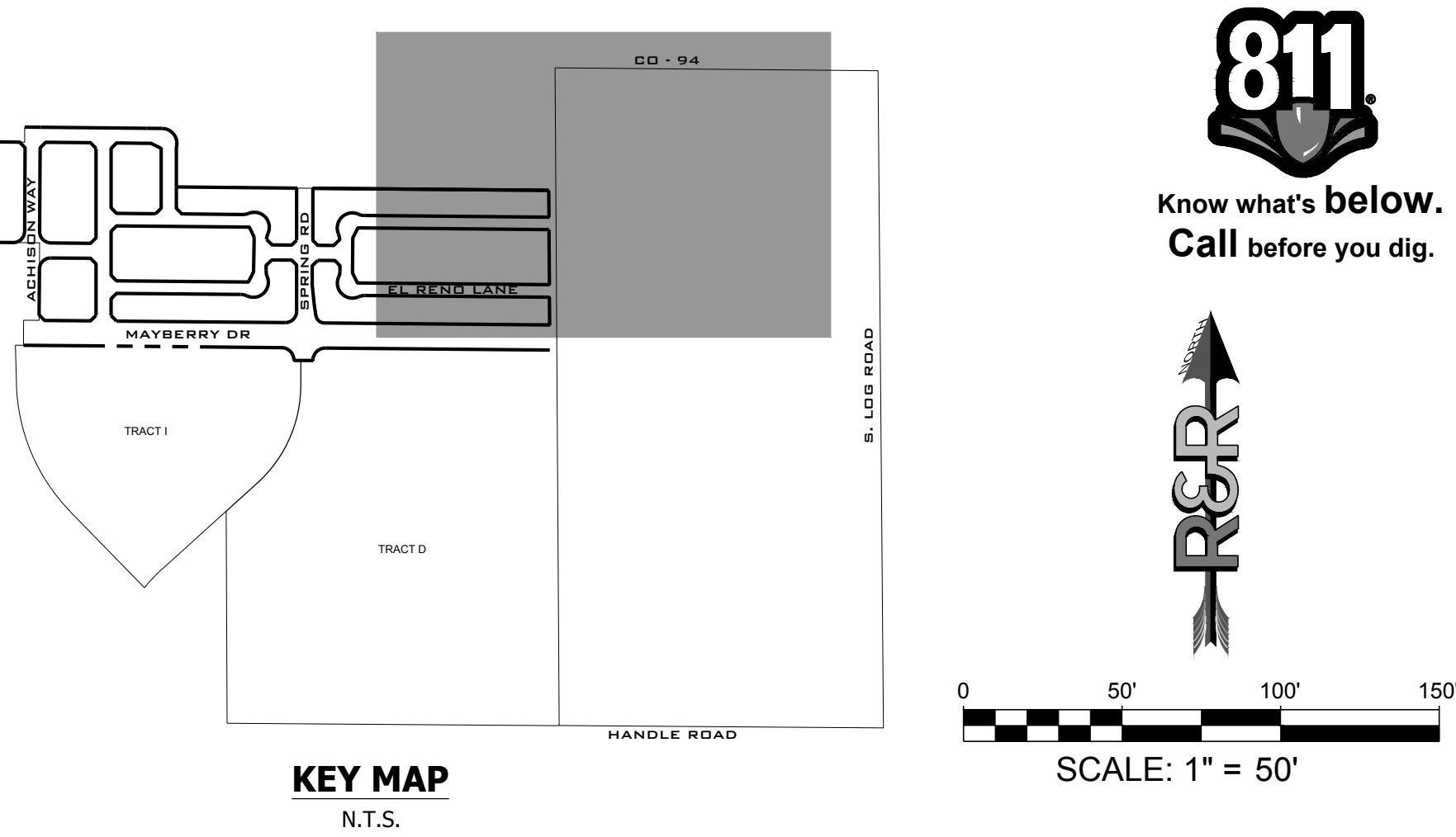
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E&S PLAN-NORTH
WEST

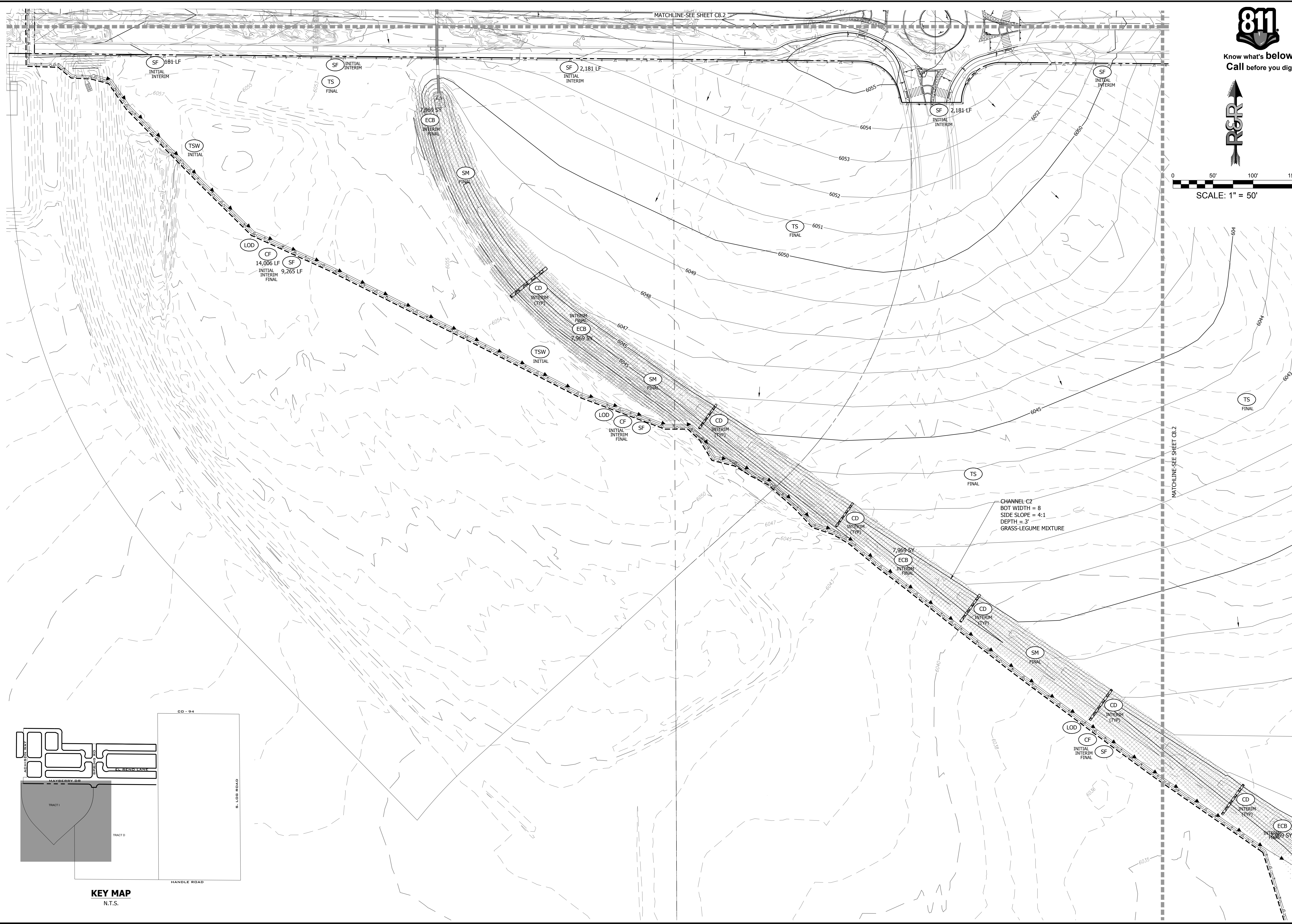
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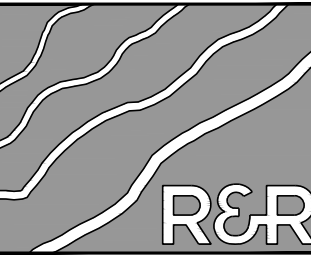


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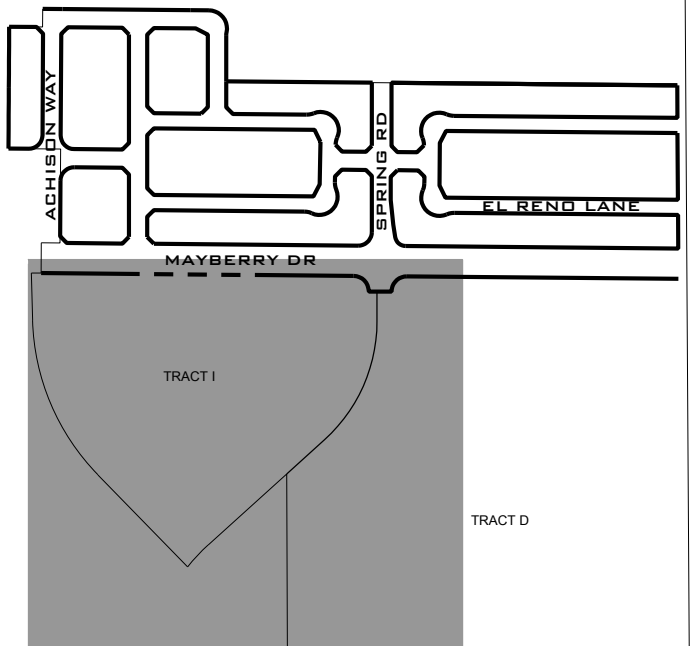
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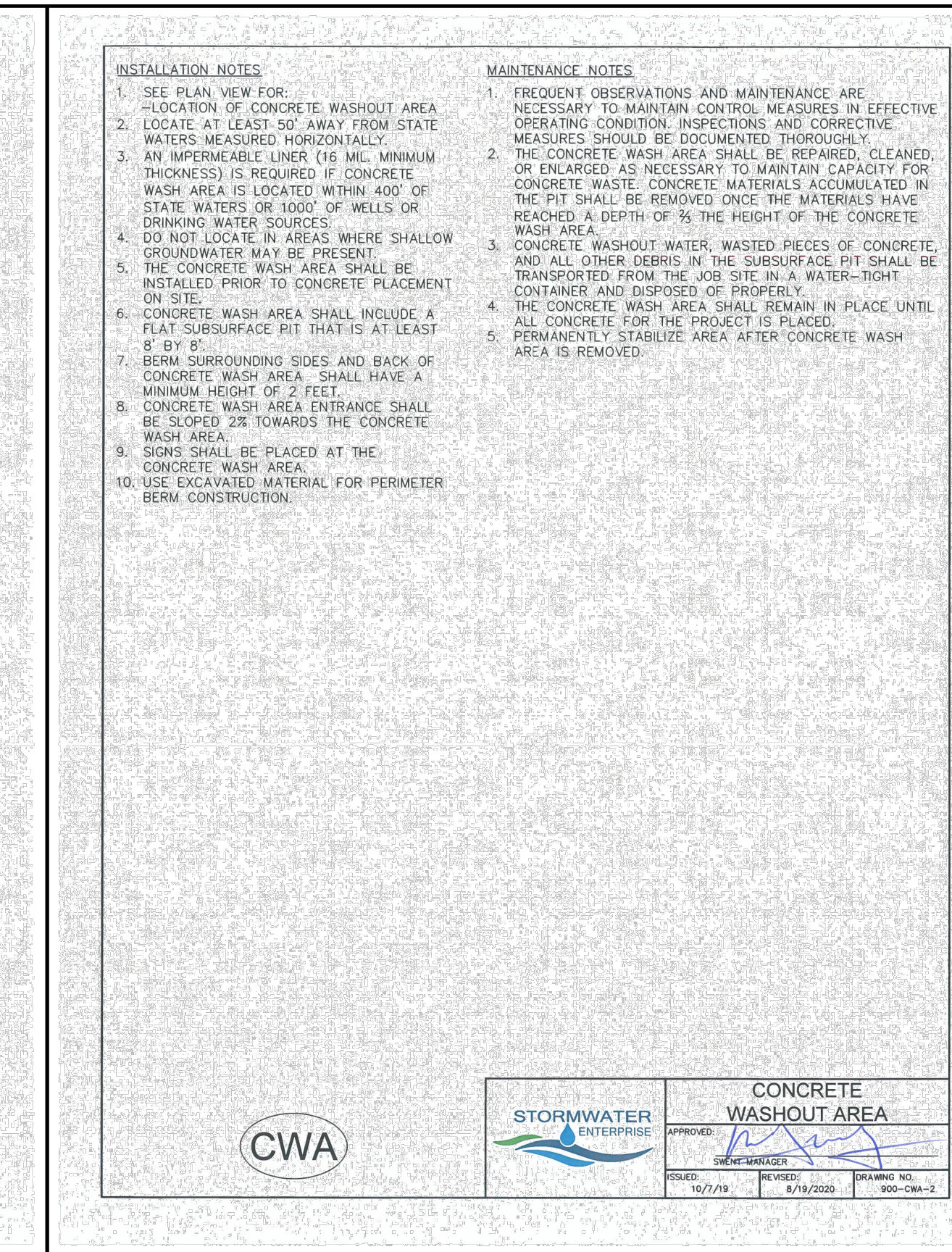
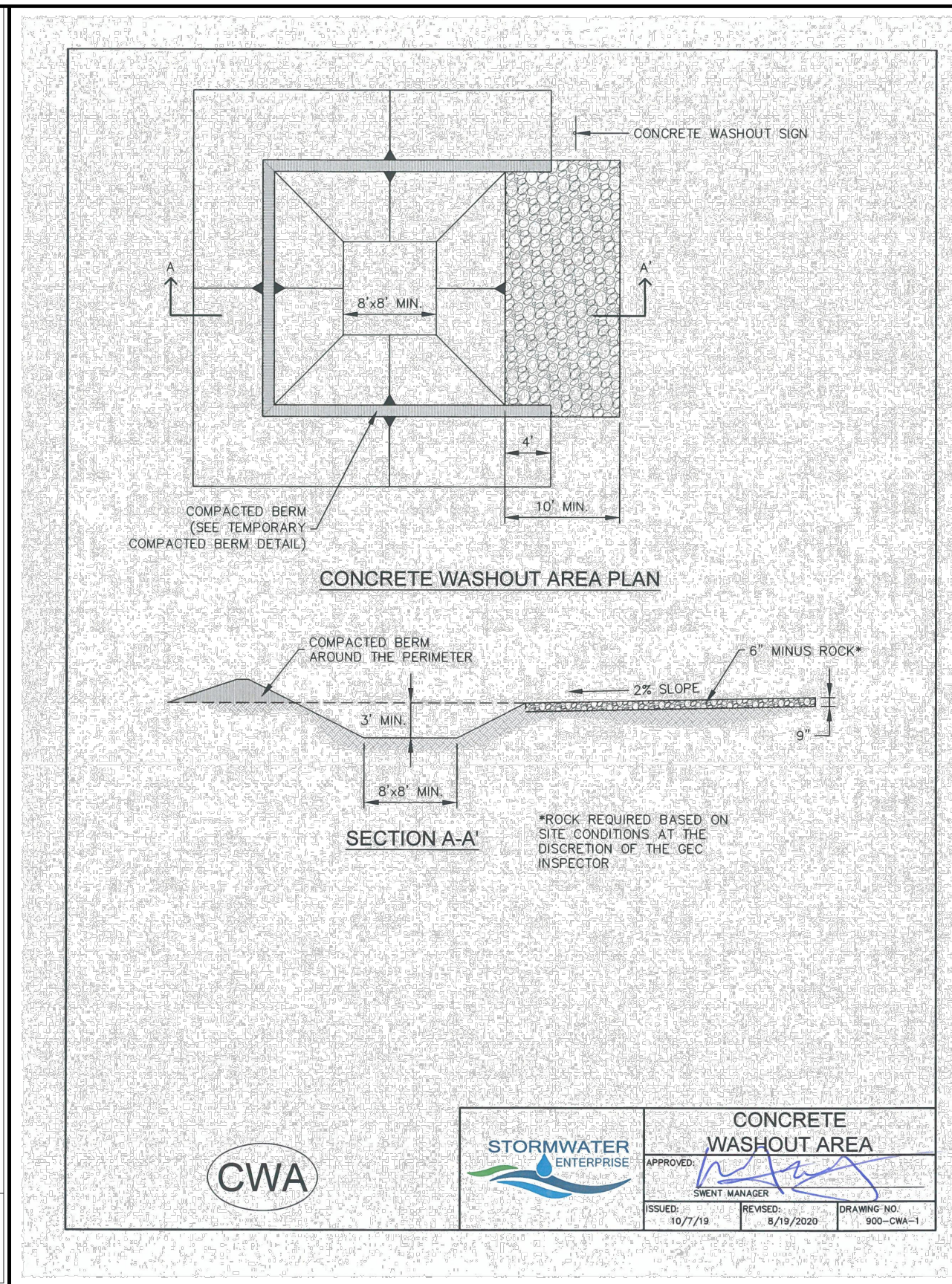
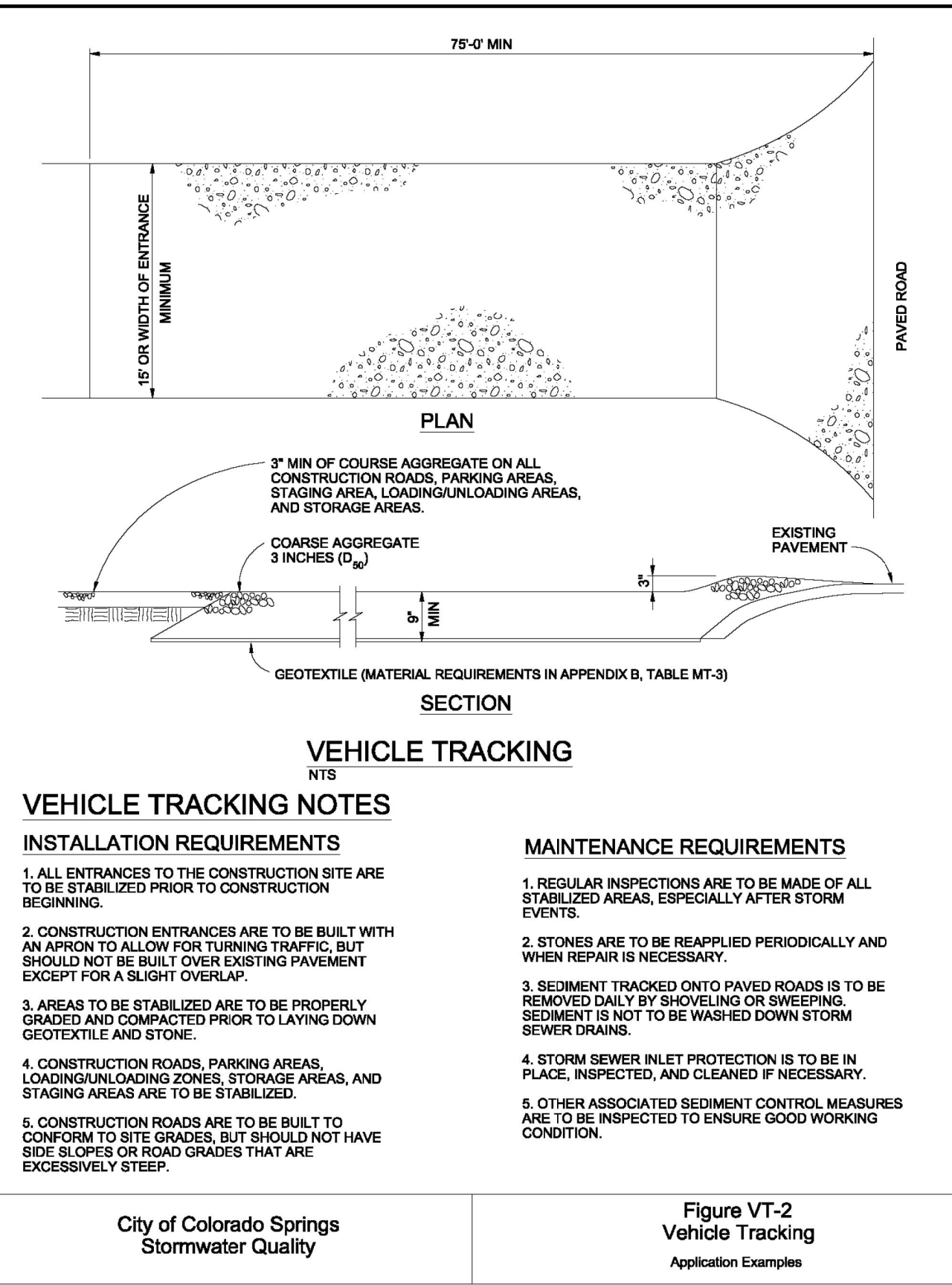
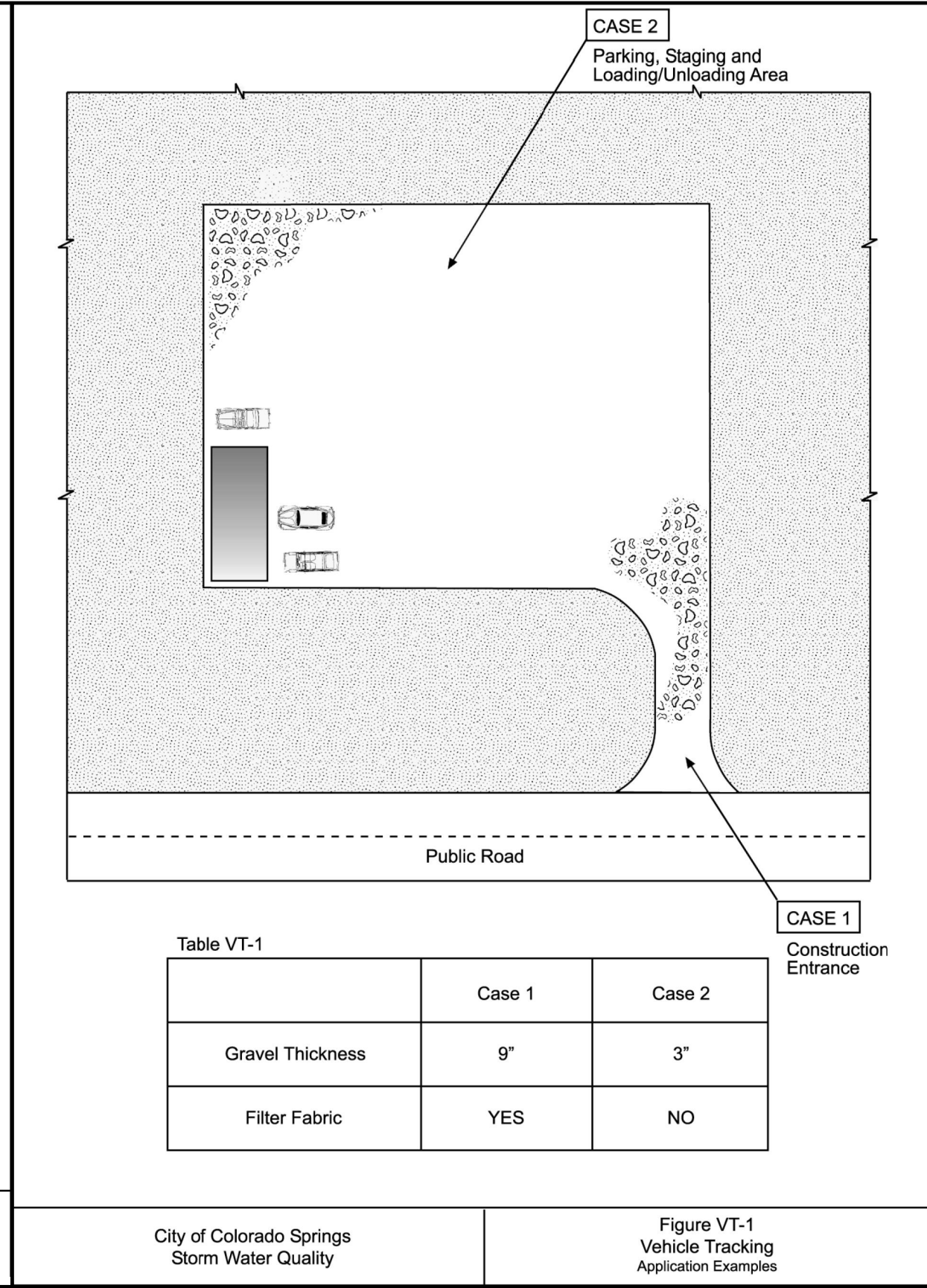
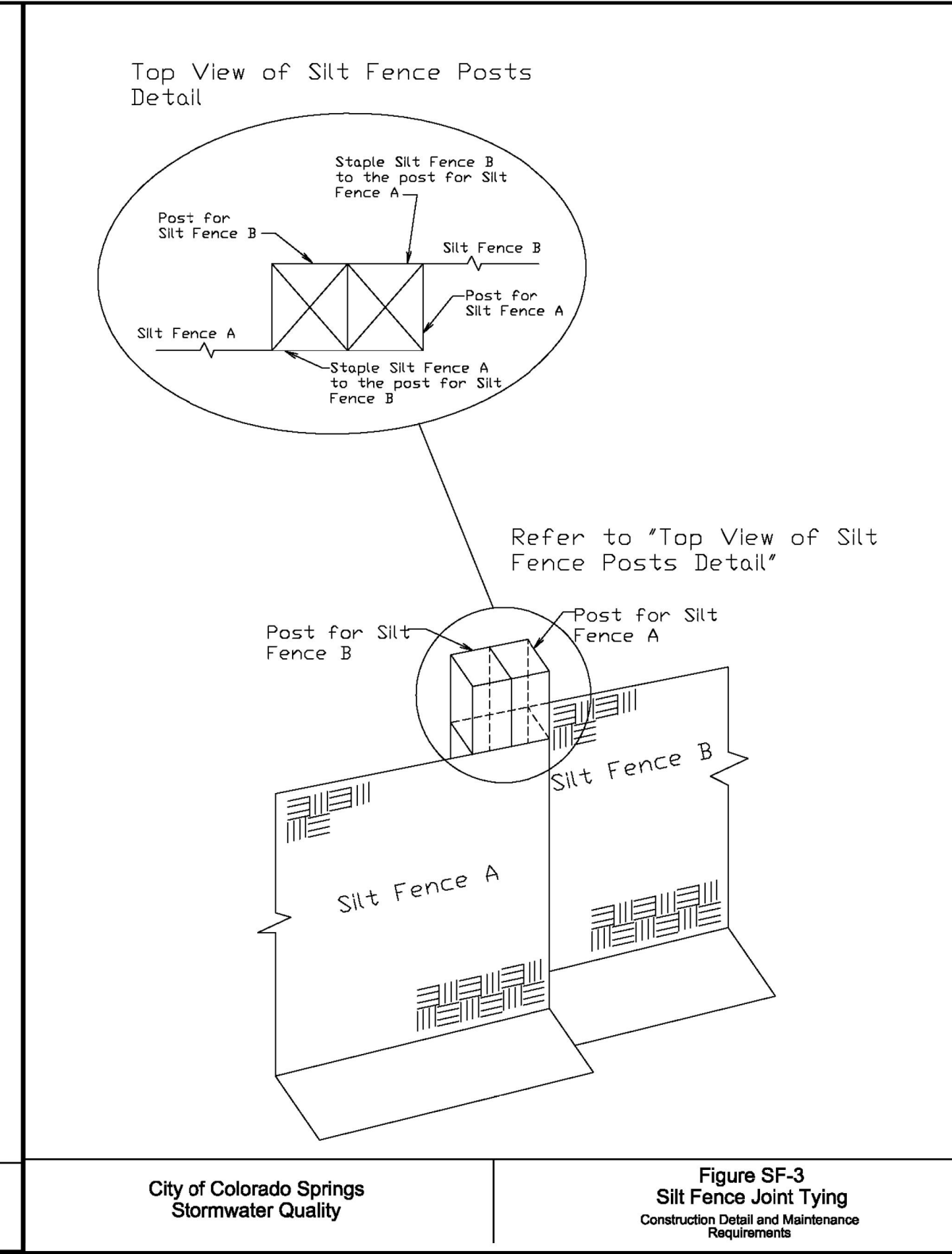
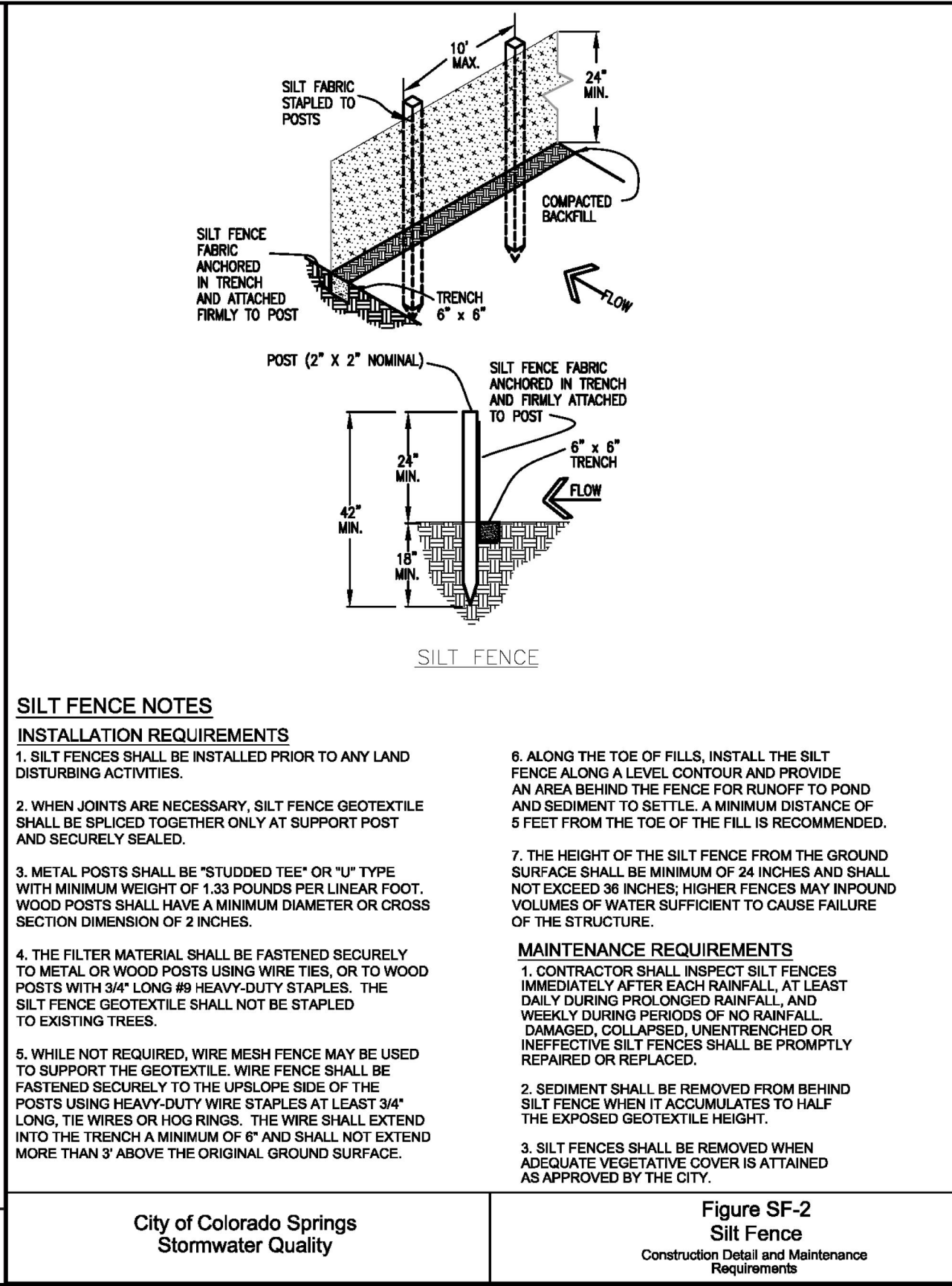
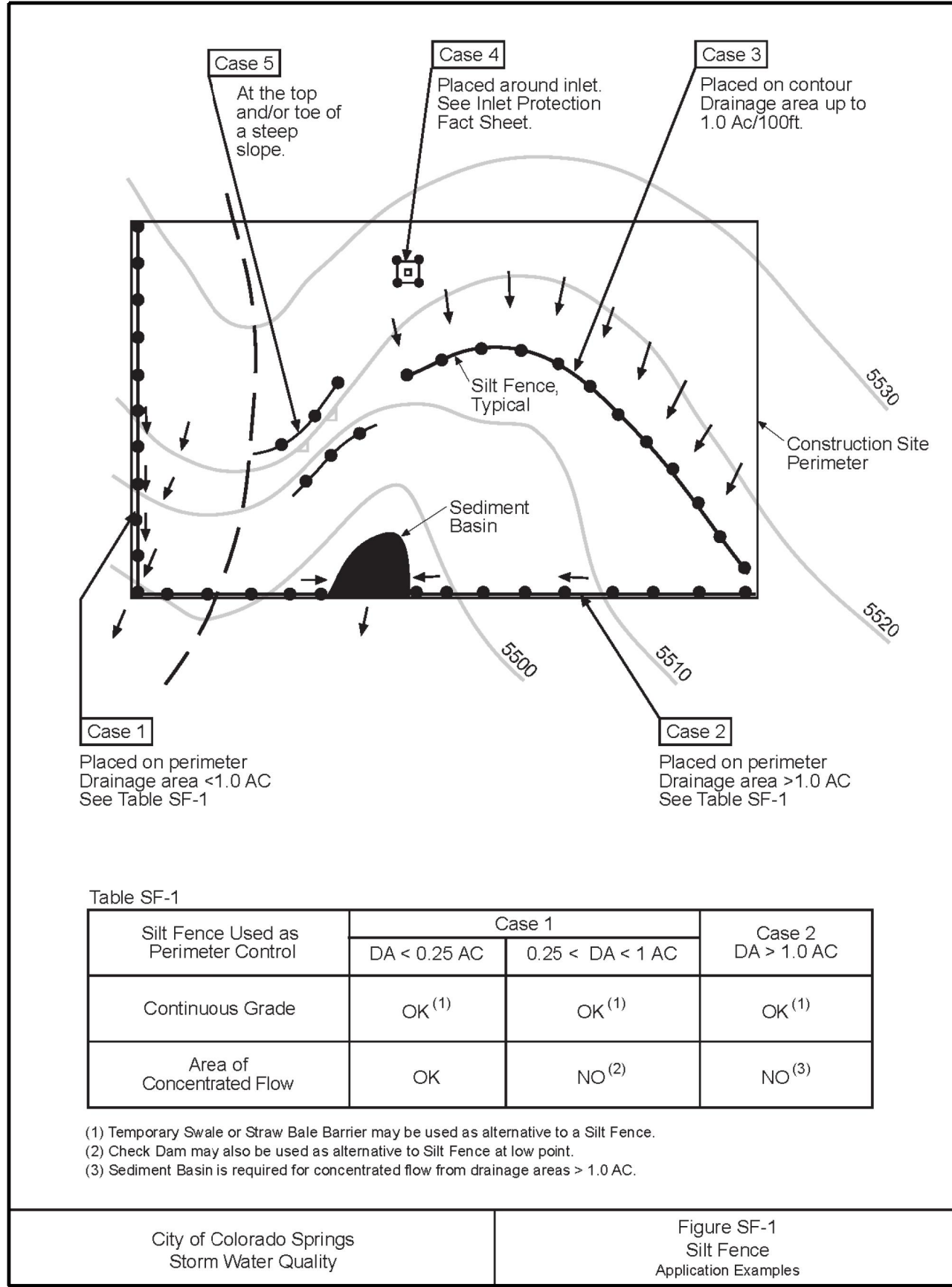
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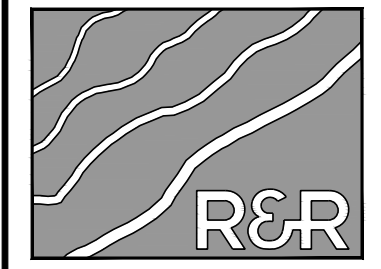
KEY MAP
N.T.S.

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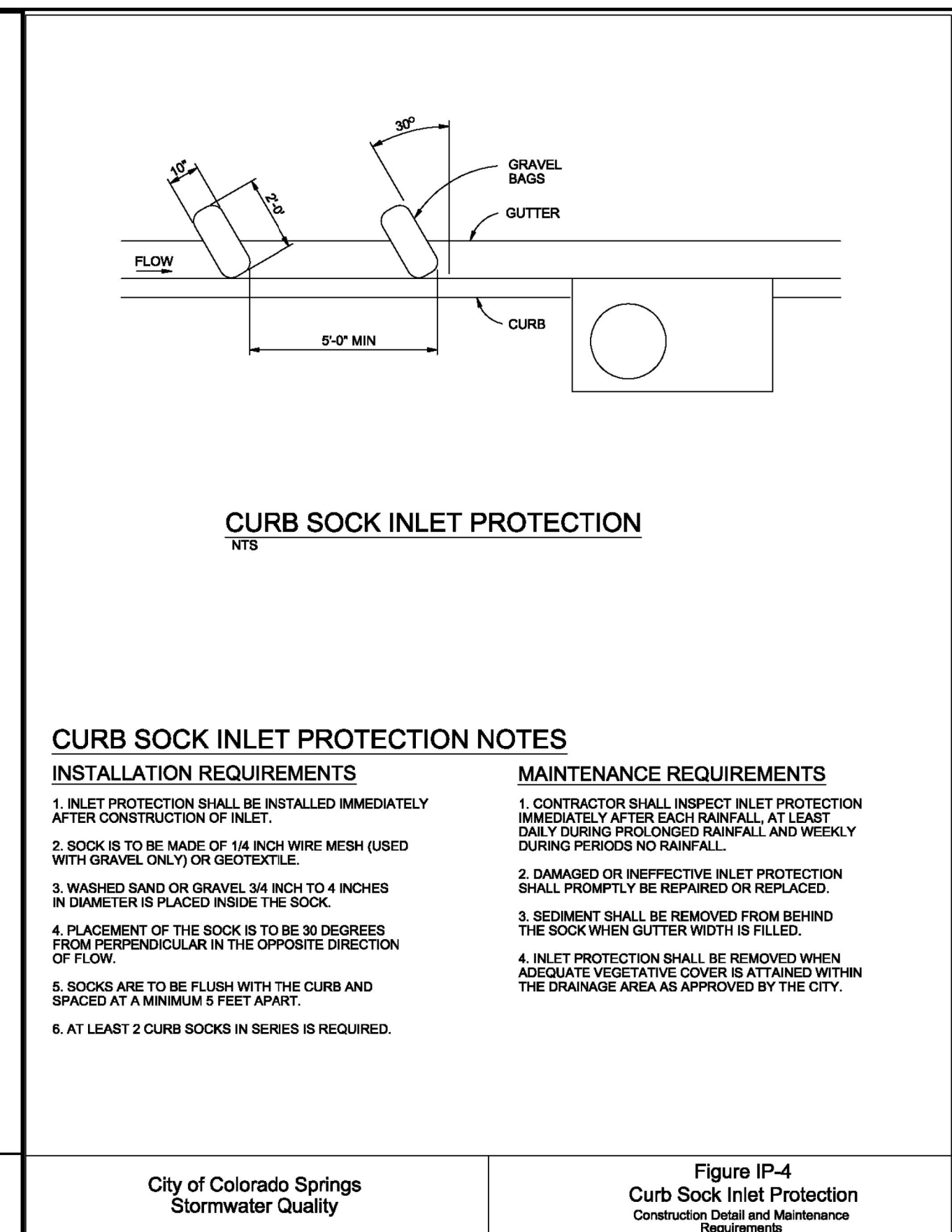
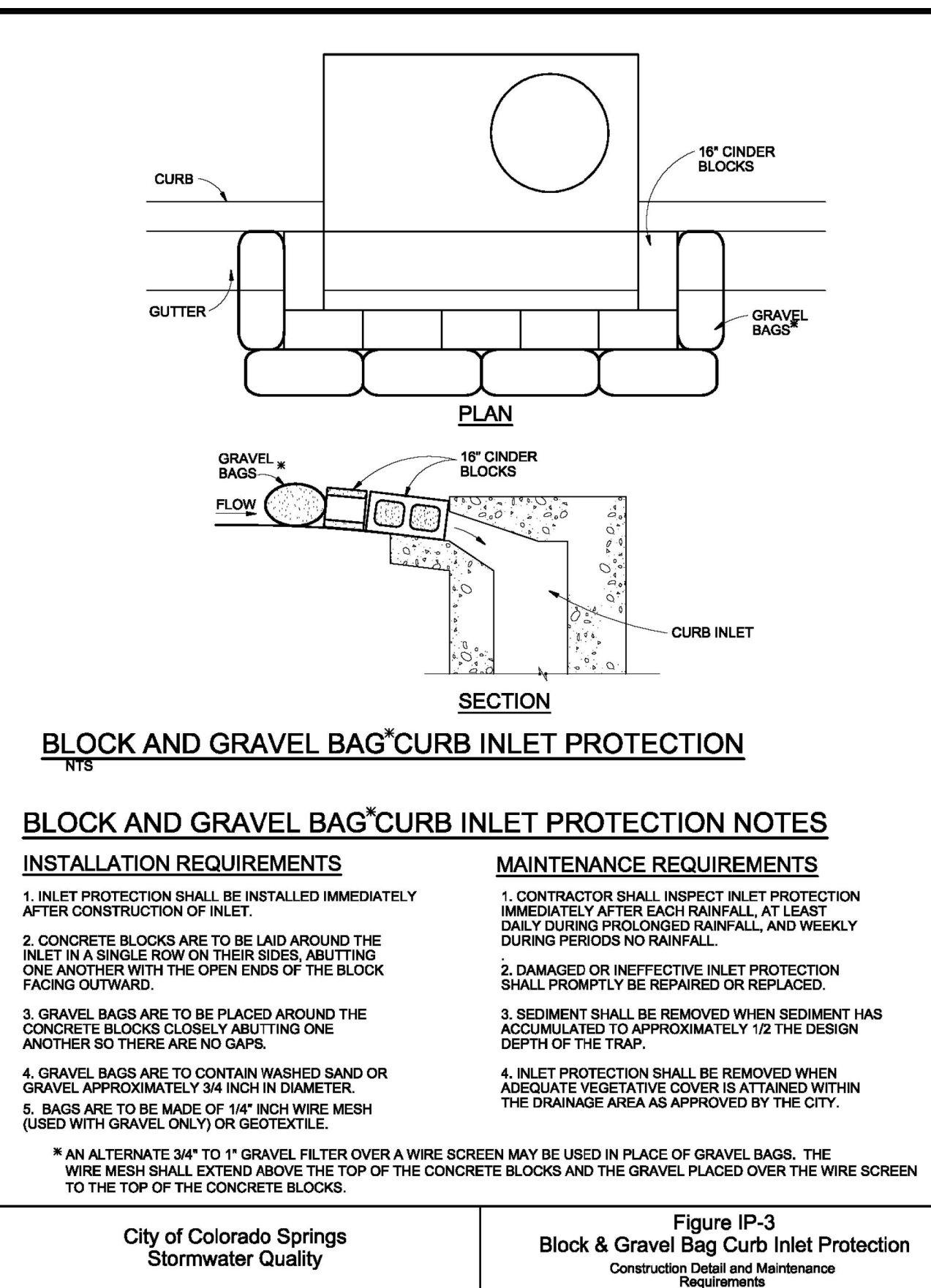
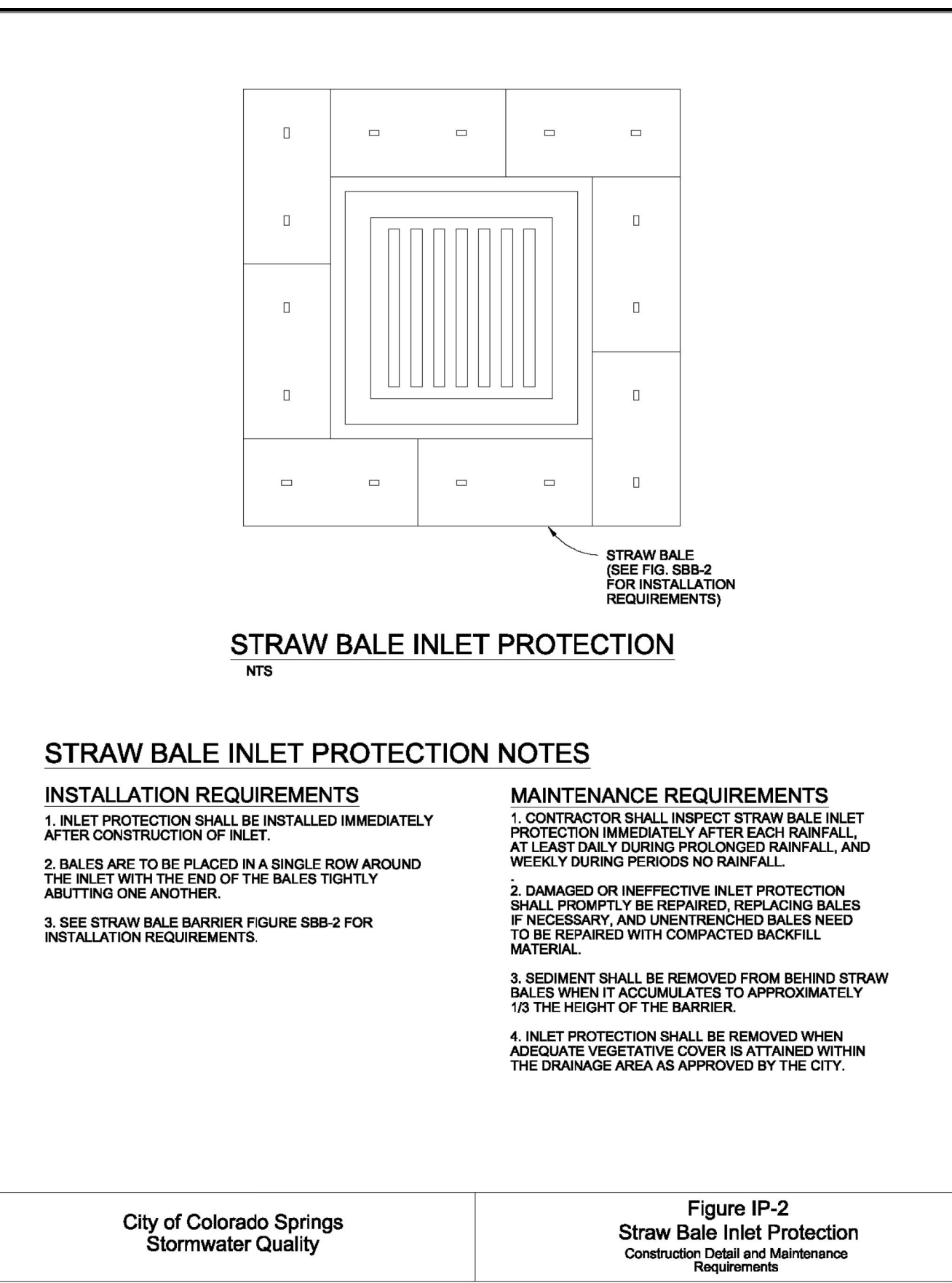
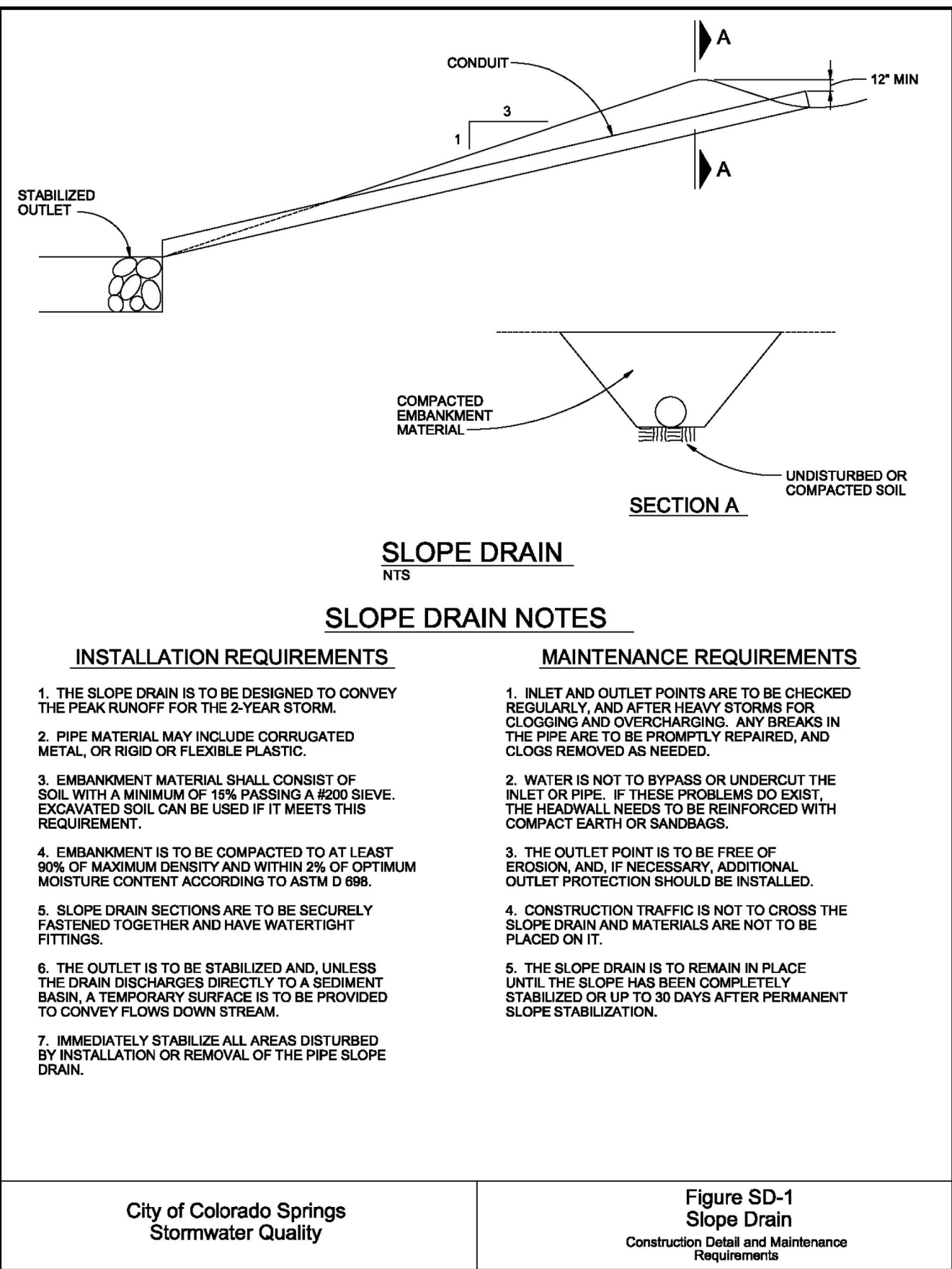
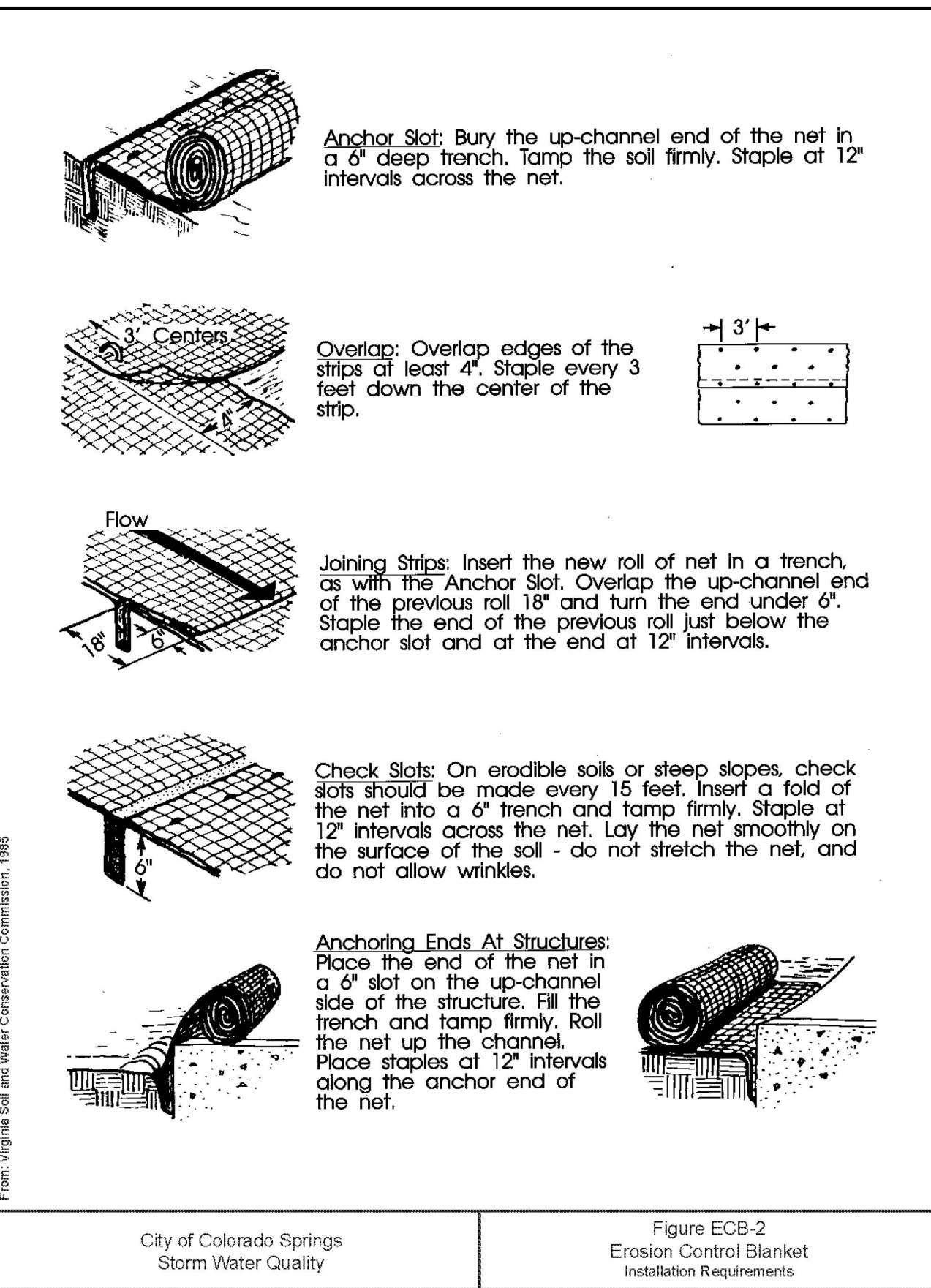
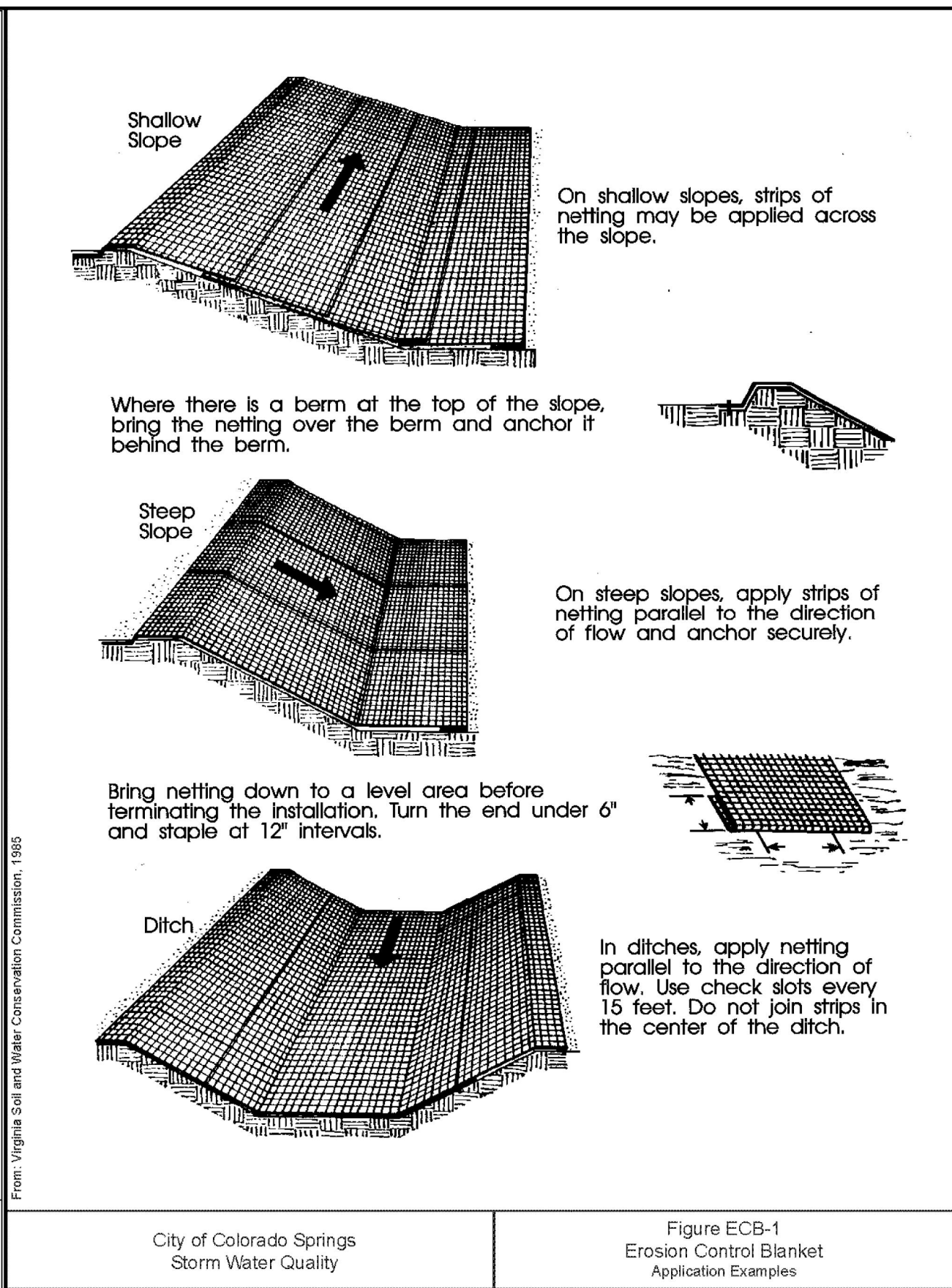
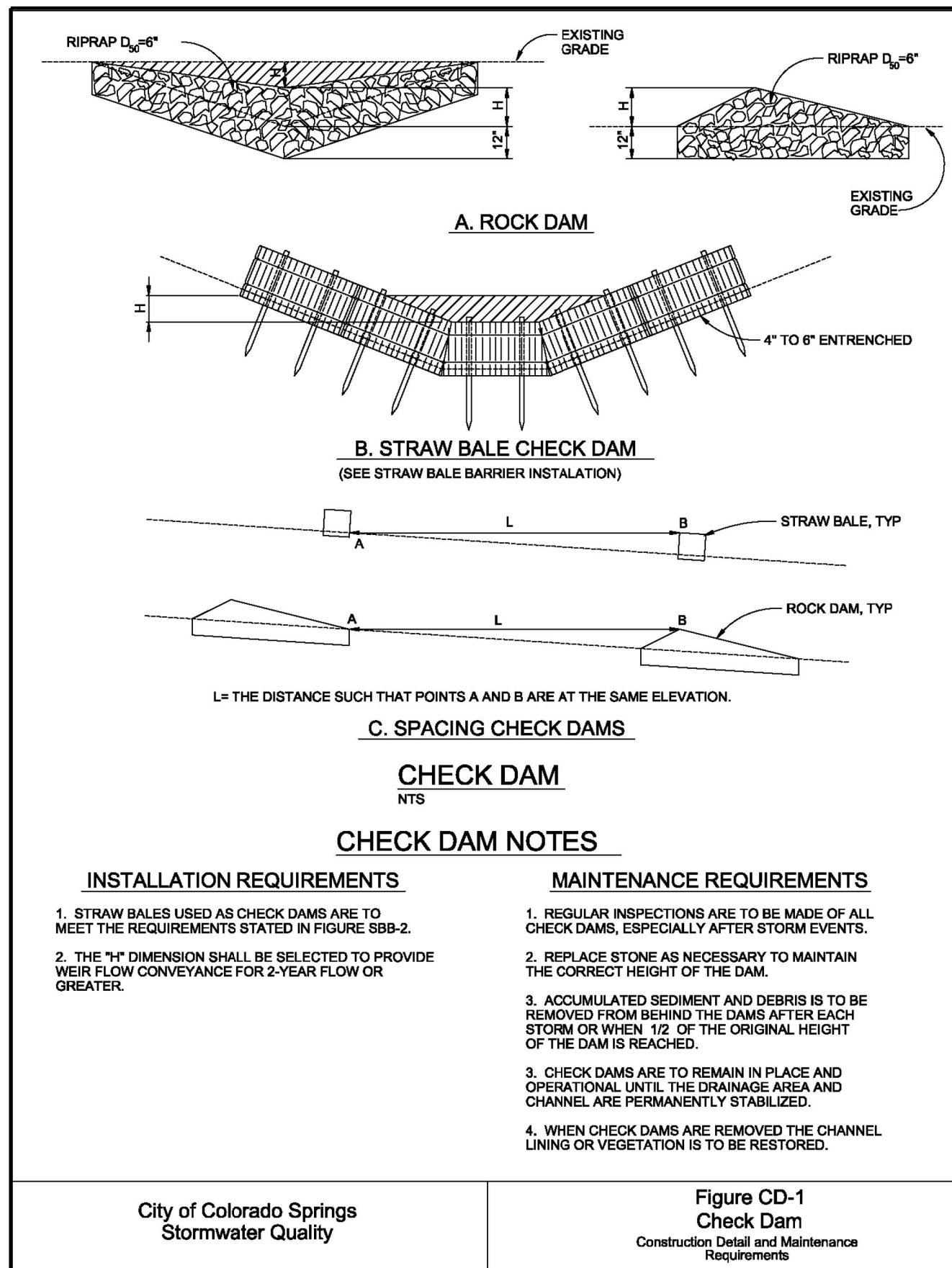
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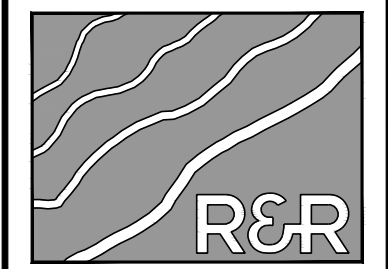
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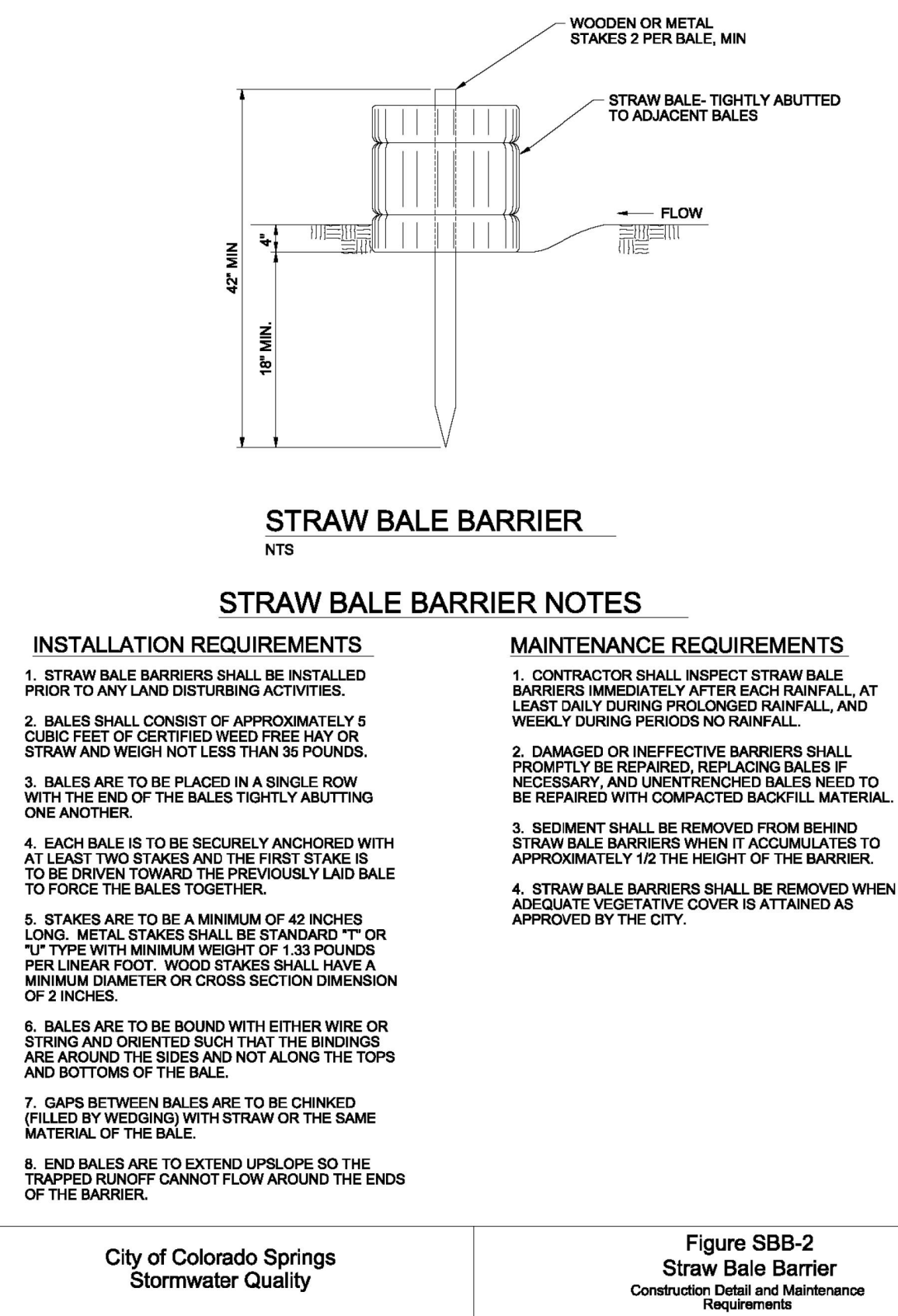
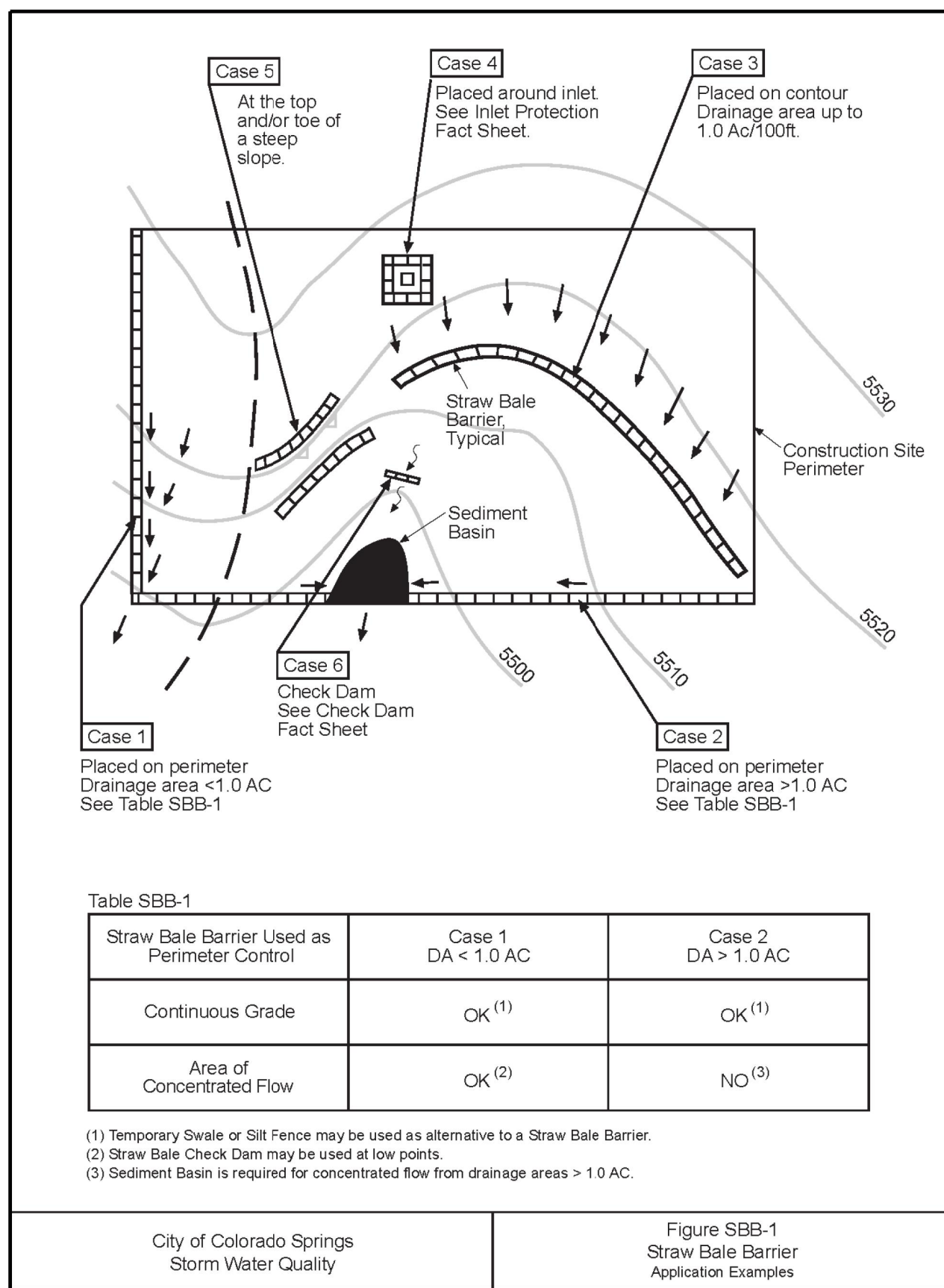
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RECOMMENDED ANNUAL GRASSES				
SPECIES (COMMON NAME)	GROWTH SEASON	SEEDING DATE	POUNDS OF PURE LIME (PLS) (PLS/AC)	PLANTING DEPTH (INCHES)
1. OATS	COOL	MARCH 16 - APRIL 30	35-50	1-2
2. SPRING WHEAT	COOL	MARCH 16 - APRIL 30	25-35	1-2
3. SPRING BARLEY	COOL	MARCH 16 - APRIL 30	25-35	1-2
4. ANNUAL RYEGRASS	COOL	MARCH 16 - JUNE 30	10-15	1-2
5. WHEAT	WARM	MAY 16 - JULY 15	10-15	12-34
6. SUDANGRASS	WARM	MAY 16 - JULY 15	5-10	12-34
7. SORGHUM	WARM	MAY 16 - JULY 15	5-10	12-34
8. WINTER WHEAT	COOL	SEPTEMBER 1 - 30	20-35	1-2
9. WINTER BARLEY	COOL	SEPTEMBER 1 - 30	20-35	1-2
10. WINTER RYE	COOL	SEPTEMBER 1 - 30	20-35	1-2
11. TREFOUR	COOL	SEPTEMBER 1 - 30	20-35	1-2

TABLE TS-1

TEMPORARY SEEDING NOTES

INSTALLATION REQUIREMENTS

- DISTURBED AREAS ARE TO BE SEEDED WITH INDIAN GRASS OR A MIXTURE OF INDIGENOUS OR GRAZING-EDGES IF SEASON ALLOWS.
- IF NECESSARY, SOIL IS TO BE CONDITIONED FOR PLANTING BY APPLYING TOPSOIL, FERTILIZER, OR LIME.
- SOIL IS TO BE LOOSED IMMEDIATELY PRIOR TO PLANTING. CONTACT SOILS ESPECIALLY NEED TO BE TILLED.
- SLOPES DEEPER THAN 18 INCHES FOR BROADCAST SEEDING AND 4 INCHES FOR STRIP SEEDING MUST NOT EXCEED 2:1.
- ANNUAL GRASSES LISTED IN TABLE 7-1 ARE TO BE USED FOR SLOPE STABILIZATION. MIXTURES ARE TO CONTAIN ANY NOXIOUS WEED SPECIES INCLUDING RUSSIAN OR CANADIAN THISTLE, SPOTTED KNOTWEED, CRABGRASS, COMMON BINDWEED, JOHNSON GRASS, AND LEAFY SPURGE.
- TABLE 7-1 ALSO PROVIDES REQUIREMENTS FOR HYDRAULIC SEEDING. THE MINIMUM SLOPE DEPTH FOR THE APPROVED TYPES OF ANNUAL GRASS SEEDING IS 6 INCHES.
- SEEDING IS TO BE APPLIED USING MECHANICAL TYPE DRILLS EXCEPT WHERE SLOPES ARE STEEP OR WHERE LIMITED TRENCH HYDRAULIC SEEDING MAY BE USED.
- ALL LIMITED AREAS ARE TO BE MULCHED (SEE ATTACHED SHEET).
- IF HYDRAULIC SEEDING IS USED THEN HYDRAULIC MULCHING SHALL BE DONE SEPARATELY TO AVOID CLOGGING OF THE SEEDING EQUIPMENT.

MAINTENANCE REQUIREMENTS

1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL SEEDED AREAS TO ENSURE GROWTH.
2. AREAS WHERE GROWTH IS NOT OCCURRING QUICKLY FOR THE SOON HAS BEEN REMOVED SHALL BE RE-SEEDED AS SOON AS POSSIBLE AND RE-MULCHED IF NEEDED.
3. SEEDED AREAS ARE NOT TO BE DRIVEN OVER WITH CONSTRUCTION EQUIPMENT OR VEHICLES.

MULCHING NOTES

INSTALLATION REQUIREMENTS

1. ALL DISTURBED AREAS MUST BE MULCHED WITHIN 21 DAYS AFTER FINAL GRADE AND SEEDBED AREAS ARE TO BE MULCHED WITH STRAW OR AT LEAST 2 INCHES OF MULCH.
 2. MATERIAL USED FOR MULCH CAN BE CERTIFIED CLEAN, WEED- AND SEED-FREE (LONG STEMMED FIBER OR MARSH HAY, WOOD CHIPS, OR STRAW) AND MUST BE CERTIFIED BY A CERTIFICATION PROGRAM CERTIFIED BY THE COLORADO DEPARTMENT OF AGRICULTURE. WEED FREE FORAGE CERTIFICATION PROGRAM.
 3. HYDRAULIC MULCHING MATERIAL SHALL CONSIST OF VIRGIN OR RECYCLED WOOD CHIPS OR PULP. WOOD CHIPS OR WOOD CHIPS MUST NOT CONTAIN ANY GROWTH OR GERMINATION OF WEEDS OR BE PREPARED FROM RECYCLED MATERIAL. GRAVEL CAN ALSO BE USED.
 4. MULCH IS TO BE APPLIED EVENLY AT A RATE OF 2 TONS PER ACRE.
 5. MULCH IS TO BE ANCHORED EITHER BY CRIMPING (FLUCKING) OR TACKLING (NAILING) INTO THE SOIL, USING NETTING (USED ON SMALL AREAS WITH STEEP SLOPES), OR WITH A TACKLER.
 6. HYDRAULIC MULCHING AND TACKLERS ARE NOT TO BE USED IN THE PRESENCE OF FREE SURFACE WATER.
- ### MAINTENANCE REQUIREMENTS
1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL MULCHED AREAS.
 2. MULCH IS TO BE REPLACED IMMEDIATELY IN THOSE AREAS IT HAS BEEN REMOVED, AND IF NECESSARY THE AREA SHOULD BE RESEED.

Diagram illustrating the placement of Temporary Swales (TSW) for sediment control. The diagram shows a construction site perimeter with a temporary swale and a sediment basin. Arrows indicate flow direction. Key features include:

- Case 1:** Placed on perimeter of site. Drainage area < 1.0 AC. See Table TSW-1.
- Case 2:** Placed on perimeter of site. Drainage area > 1.0 AC. See Table TSW-1.
- Case 3:** At the top of a steep slope.
- Case 4:** Downstream of a slope drain (see slope drain fact sheet).
- Sediment Basin:** A basin for collecting sediment.
- Temporary Swale, Typical:** A swale for collecting sediment.
- Construction Site Perimeter:** The boundary of the site.
- Flow Direction:** Indicated by arrows.

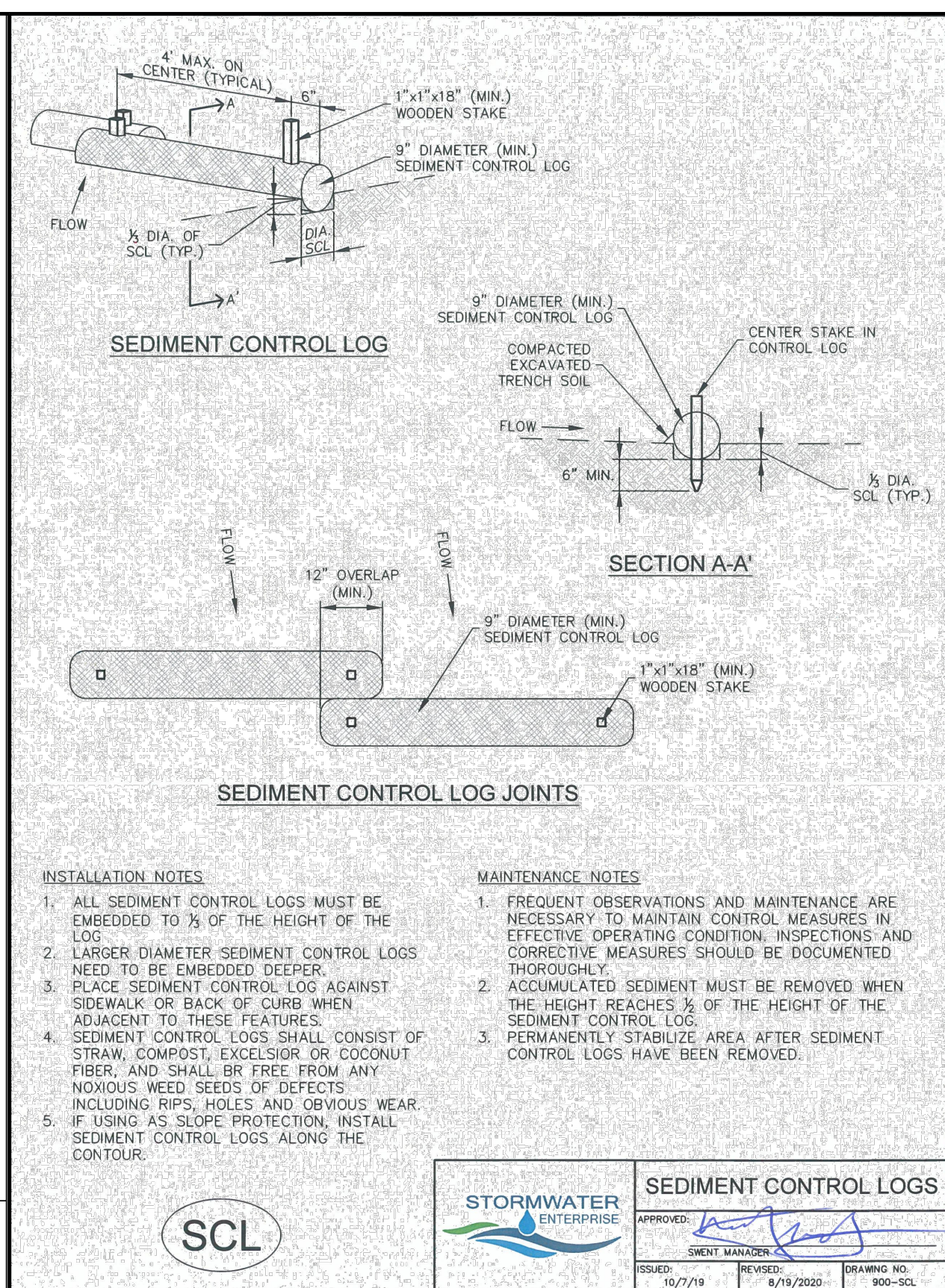
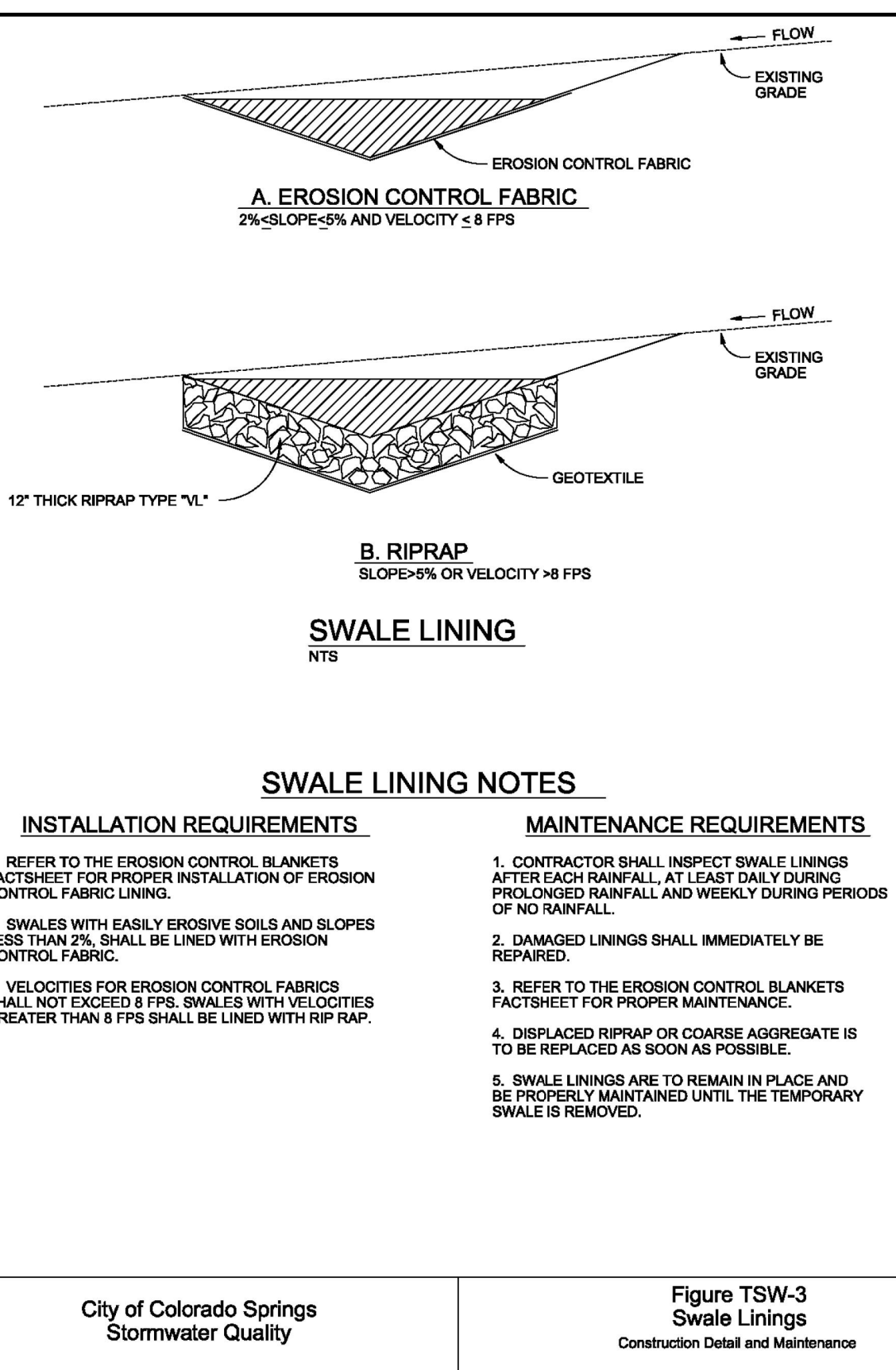
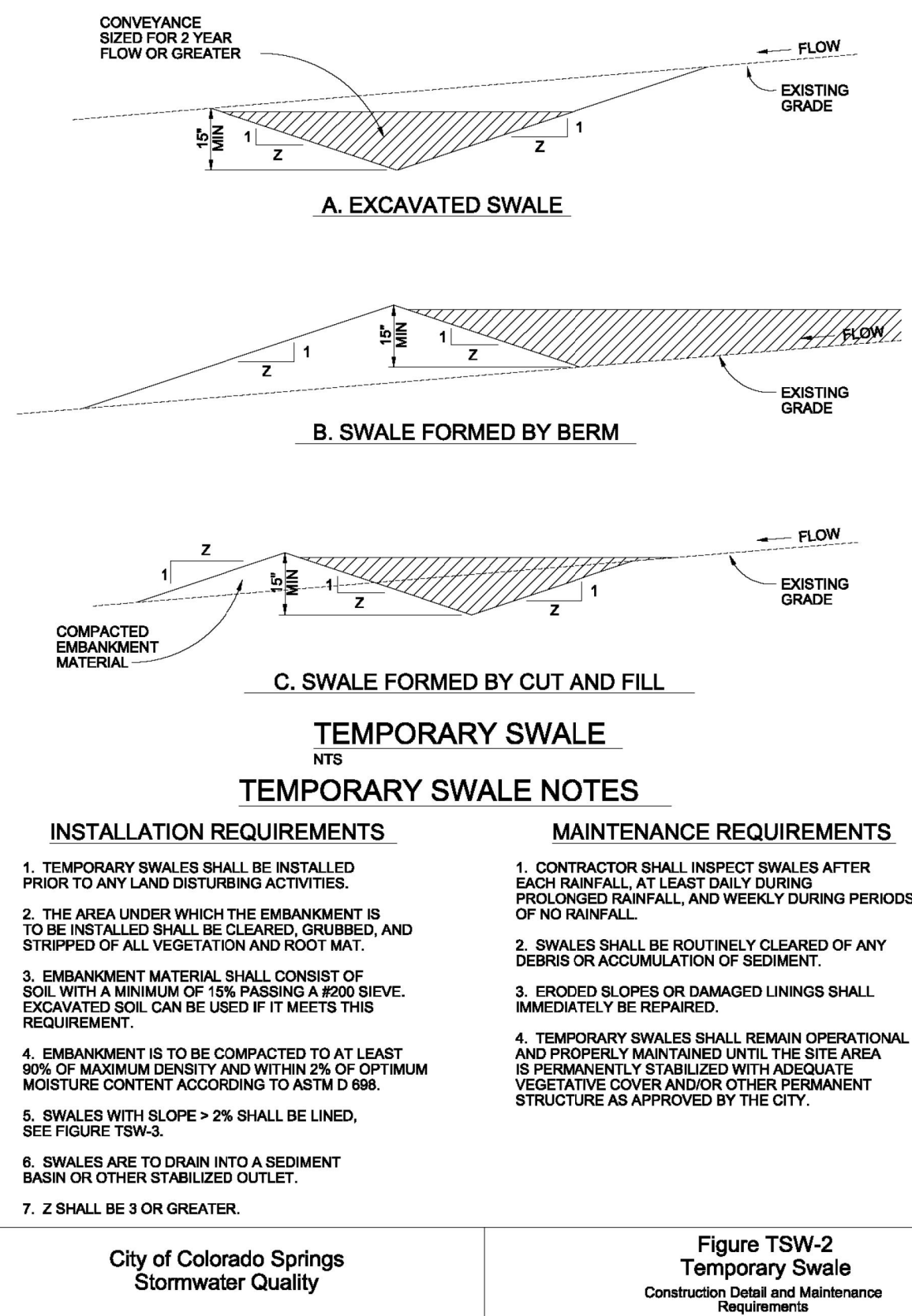
Table TSW-1

Temporary Swale Used as Perimeter Control	Case 1 DA < 1.0 AC	Case 2 DA > 1.0 AC
Continuous Grade	OK ⁽¹⁾	OK ⁽¹⁾
Area of Concentrated Flow	NO ⁽³⁾	NO ⁽²⁾

(1) Silt Fence or Straw Bale Barrier may be used as alternative to a Temporary Swale.
 (2) With Temporary Swales Sediment Basin is required for concentrated flow from drainage areas > 1.0 AC.
 (3) Check Dam is required at concentrated flow for drainage areas > 1.0 acres.

City of Colorado Springs
Storm Water Quality

Figure TSW-1
Temporary Swale
Application Examples

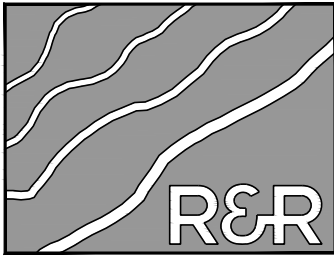


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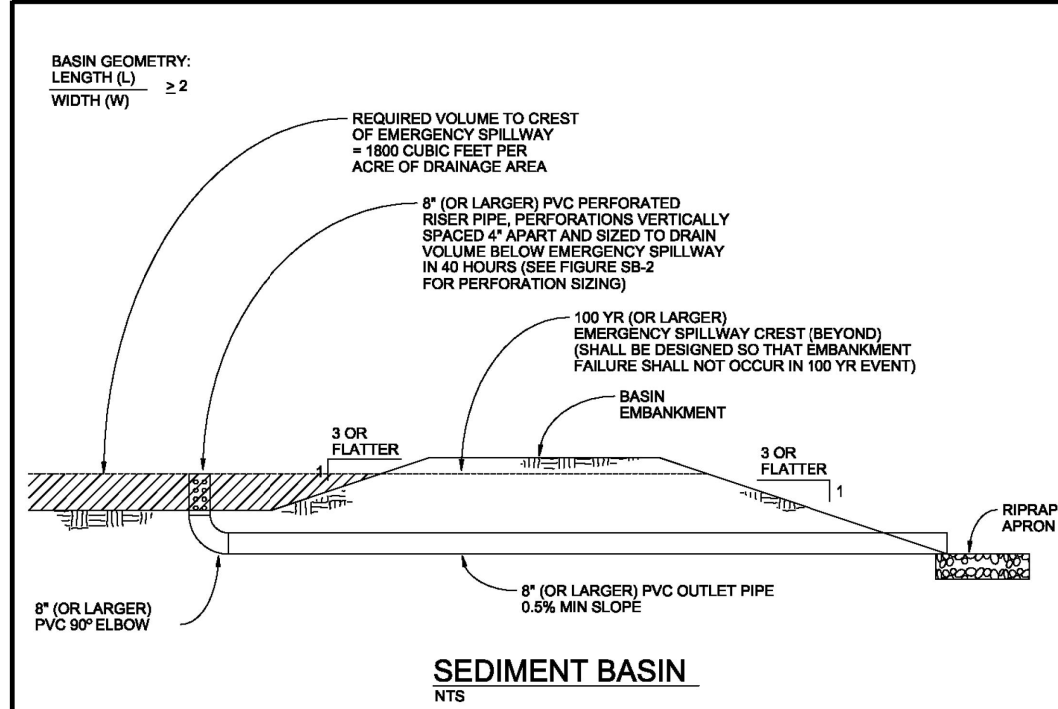
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- SEDIMENT BASIN NOTES**
- INSTALLATION REQUIREMENTS**
1. SEDIMENT BASINS SHALL BE INSTALLED BEFORE ANY CLEARING AND/OR GRADING IS UNDERTAKEN.
 2. THE AREA UNDER WHICH THE EMBANKMENT IS TO BE INSTALLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF ALL VEGETATION AND ROOT MAT.
 3. THE OUTLET OF THE BASIN SHALL BE DESIGNED TO DRAIN ITS VOLUME IN 48 HOURS.
 4. THE OUTLET IS TO BE LOCATED AT THE FURTHEST DISTANCE FROM THE INLET OF THE BASIN. BUMPERS MAY BE NEEDED TO INCREASE THE FLOW LENGTH AND SETTLING TIME.
 5. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL WITH A MINIMUM OF 5% PASSING A #200 SIEVE. EXCAVATED SOIL CAN BE USED IF IT MEETS THIS REQUIREMENT.
 6. EMBANKMENT IS TO BE COMPACTED TO AT LEAST 90% OF MAXIMUM DENSITY AND WITHIN 2% OF OPTIMUM MOISTURE CONTENT ACCORDING TO ASTM D 698.
 7. WHEN A BASIN IS INSTALLED NEAR A RESIDENTIAL AREA, FOR SAFETY REASONS, A SIGN SHALL BE POSTED AND THE AREA SECURED WITH A FENCE.
- MAINTENANCE REQUIREMENTS**
1. CONTRACTOR SHALL INSPECT SEDIMENT BASINS AFTER EACH RAINFALL AT LEAST DAILY DURING PERIODS OF UNUSUAL RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL.
 2. SEDIMENT BASINS SHALL BE CLEARED OUT BEFORE SEDIMENT HAS FILLED HALF THE VOLUME OF THE BASIN.
 3. SEDIMENT BASINS SHALL REMAIN OPERATIONAL AND PROPERLY MAINTAINED UNTIL THE SITE AREA IS PERMANENTLY STABILIZED WITH ADEQUATE VEGETATIVE COVER AND/OR OTHER PERMANENT STRUCTURE AS APPROVED BY THE CITY.

City of Colorado Springs
Stormwater Quality

Figure SB-1
Sediment Basin
Construction Detail and Maintenance
Requirements

Recirculated Area per Row (in ²)	Depth at Outlet (ft)							
	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5
2	16.04	7.71	5.10	3.78	2.86	2.41	2.02	1.73
1	7.52	3.86	2.55	1.88	1.48	1.21	1.01	0.87
0.8	4.91	2.31	1.63	1.13	0.88	0.72	0.61	0.52
0.4	3.01	1.54	1.02	0.70	0.50	0.40	0.40	0.36
0.2	1.50	0.77	0.51	0.38	0.30	0.24	0.20	0.17
0.1	0.75	0.39	0.26	0.19	0.15	0.13	0.10	0.08
0.08	0.45	0.23	0.15	0.11	0.09	0.07	0.06	0.05
0.04	0.30	0.16	0.10	0.08	0.06	0.05	0.04	0.03
0.02	0.15	0.08	0.05	0.04	0.03	0.02	0.02	0.02
0.01	0.08	0.04	0.03	0.02	0.01	0.01	0.01	0.01

TABLE SB-1

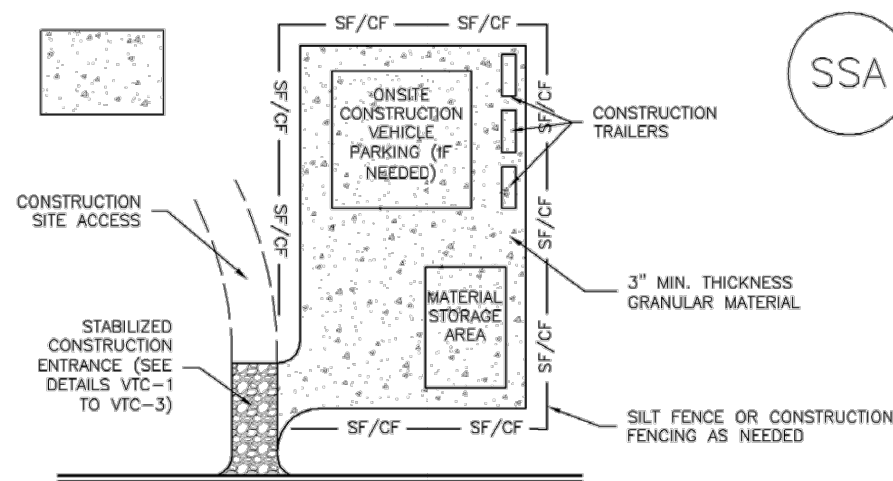
Hole Diameter (in)	Hole Diameter (in)	Area per Row (in ²)		
		n = 1	n = 2	n = 3
1/4	0.250	0.05	0.10	0.15
5/16	0.313	0.08	0.15	0.23
3/8	0.375	0.11	0.22	0.33
7/8	0.438	0.15	0.30	0.45
1/2	0.500	0.20	0.39	0.59
8/16	0.563	0.25	0.50	0.75
5/8	0.625	0.31	0.61	0.92
11/16	0.688	0.37	0.74	1.11
3/4	0.750	0.44	0.88	1.33
3/8	0.875	0.60	1.20	1.80
	1.000	0.79	1.57	2.36
1 1/8	1.125	0.98	1.96	2.89
1 1/4	1.250	1.23	2.45	3.68
1 3/8	1.375	1.48	2.97	4.45
1 1/2	1.500	1.77	3.53	5.30
1 5/8	1.625	2.07	4.15	6.22
1 3/4	1.750	2.41	4.81	7.22
1 7/8	1.875	2.76	5.52	8.28
2	2.000	3.14	6.28	9.42
n = Number of columns of perforations				
Minimum steel plate thickness		1/4"	5/16"	3/8"

TABLE SB-2

City of Colorado Springs
Stormwater Quality

Figure SB-2
Outlet Sizing
Application Techniques and Maintenance
Requirements

Stabilized Staging Area (SSA) SM-6



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, MANDOT #3 COARSE AGGREGATE OR 4" (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.

November 2010 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

SSA-3

SM-6 Stabilized Staging Area (SSA)

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, SEED, AND MULCH 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 USFCD 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)

SSA-4 Urban Drainage and Flood Control District
Urban Storm Drainage Criteria Manual Volume 3

November 2010

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PREPARED FOR: MAYBERRY COMMUNITIES, LLC
3206 DEVINE HEIGHTS #208
COLORADO SPRINGS, CO 80922

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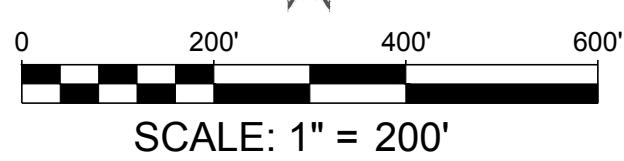
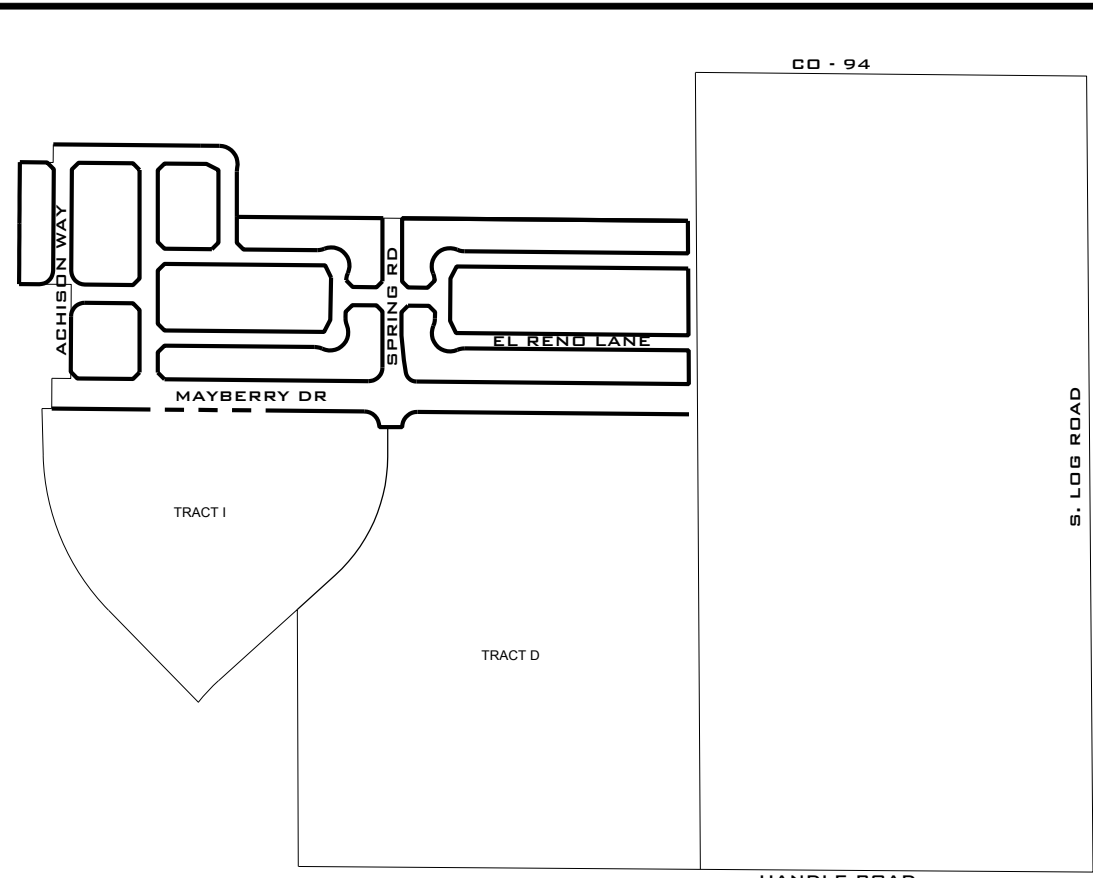
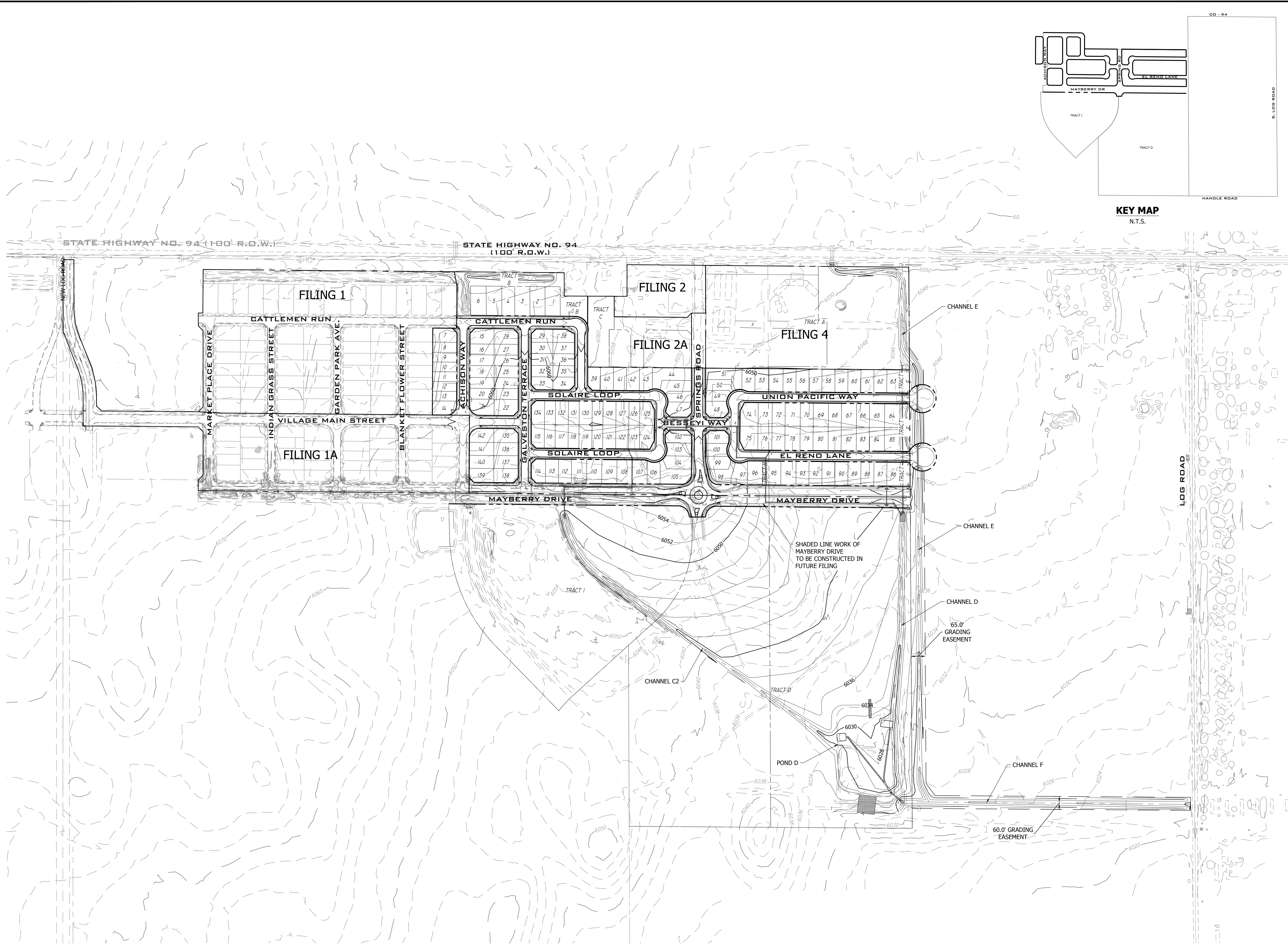
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E&S DETAILS

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C8.9

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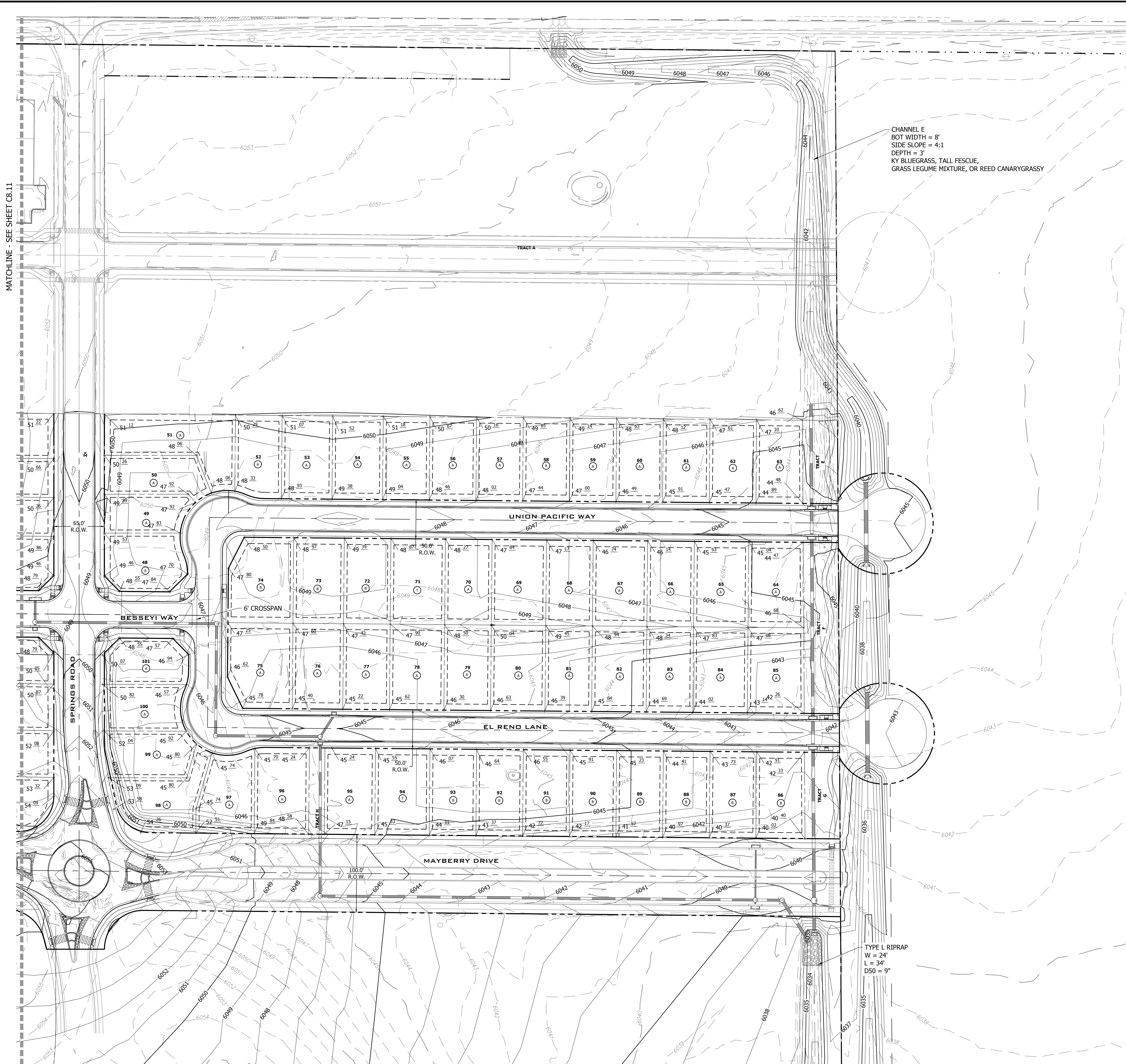
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CONSTRUCTION DOCUMENTS	
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ORG. SUBM. DATE	06/16/2022
DWN:	LAO
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OVERALL GRADING PLAN	
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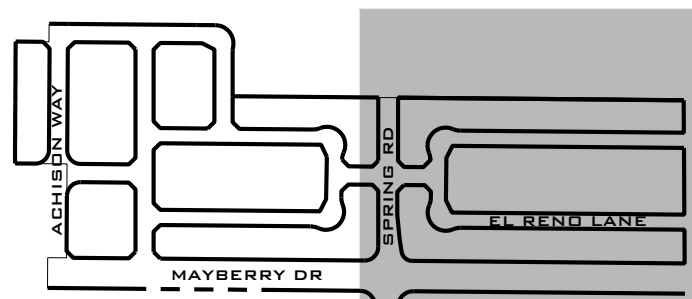
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MATCHLINE - SEE SHEET C8.11

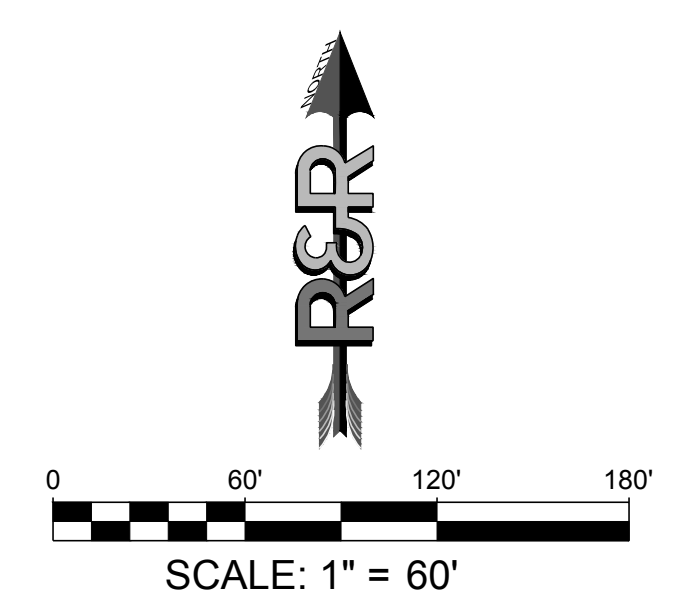




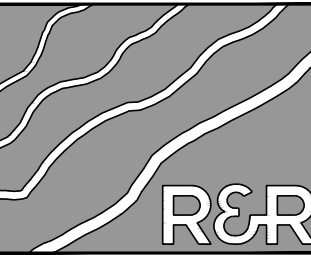
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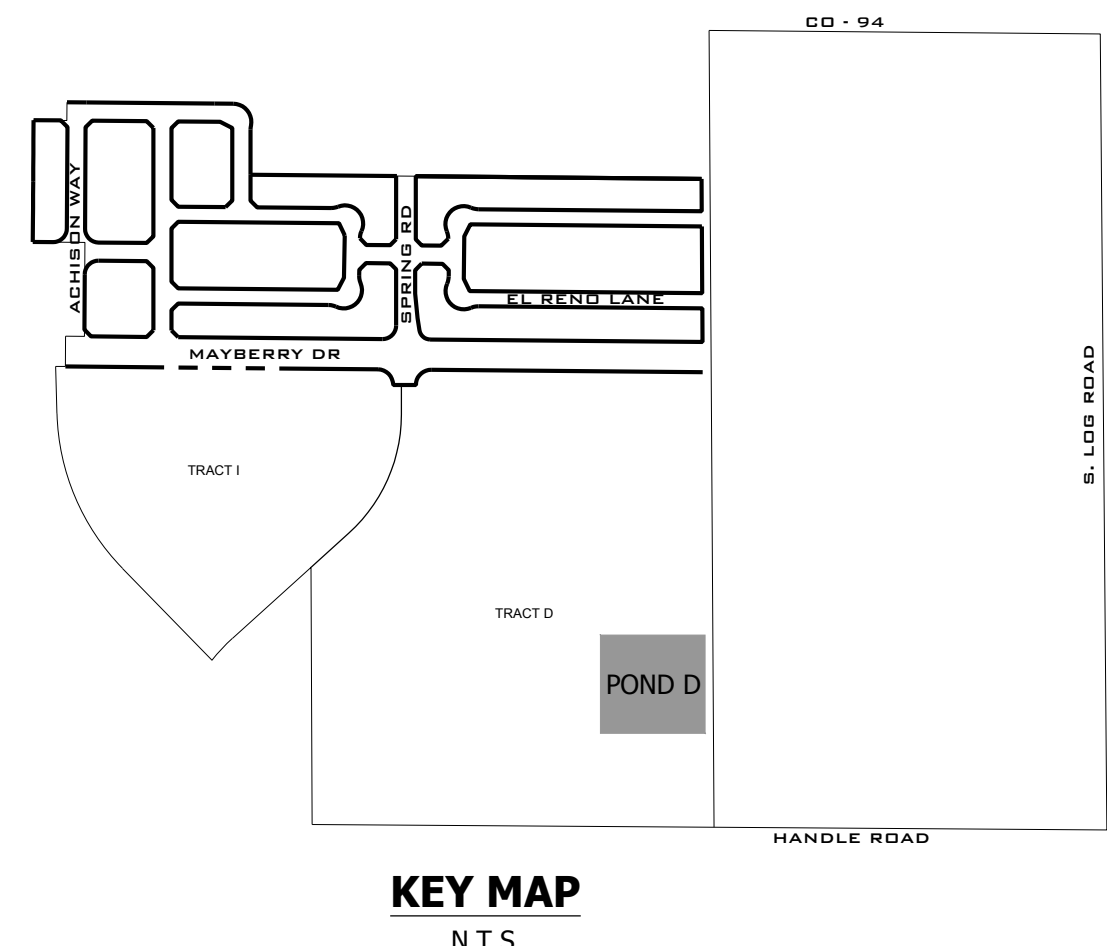
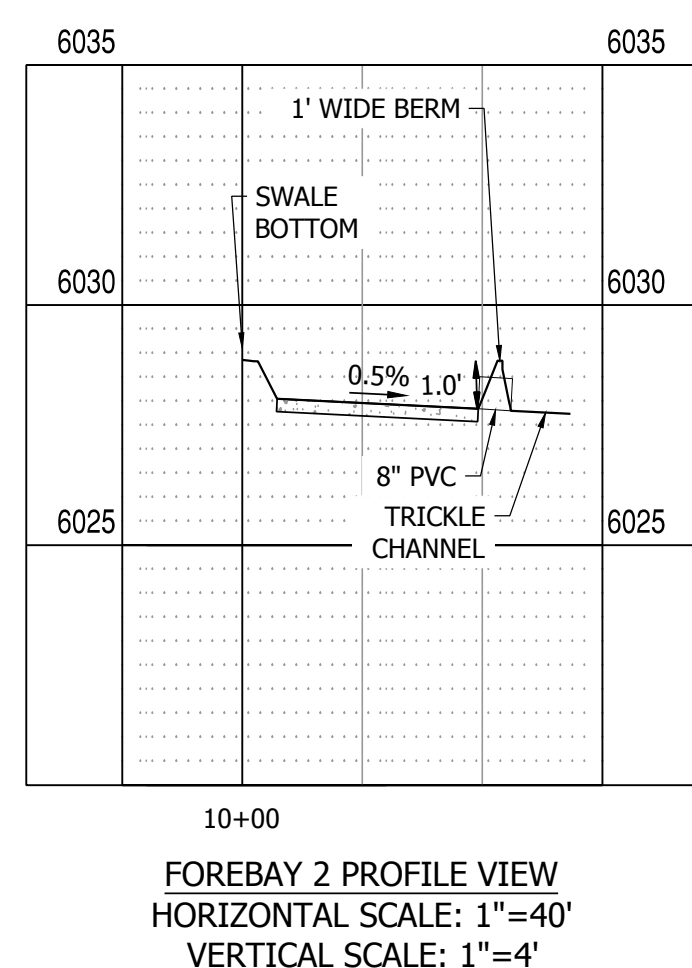
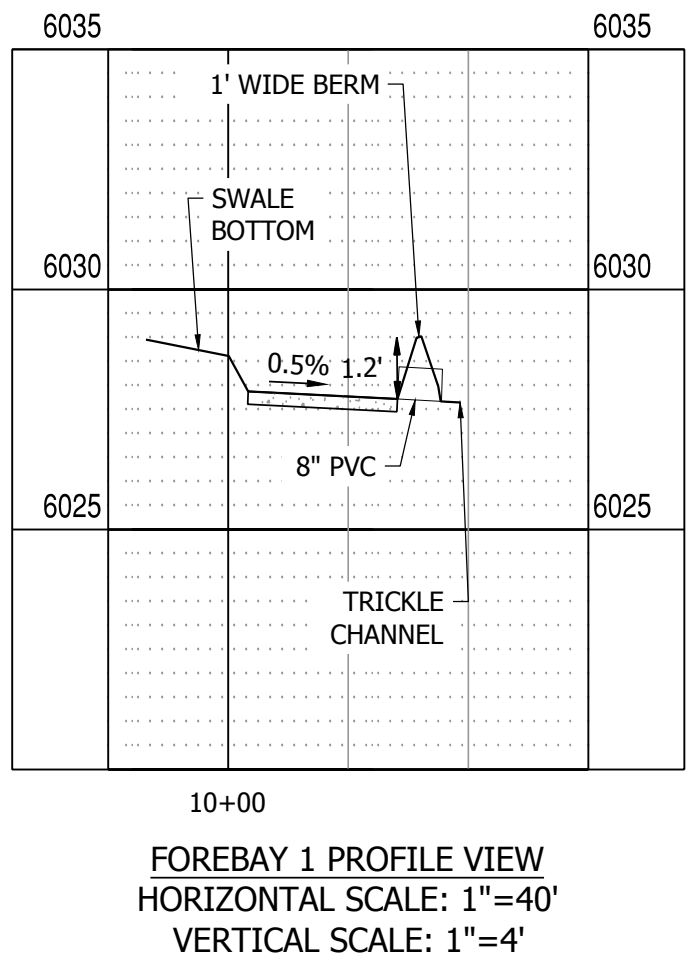
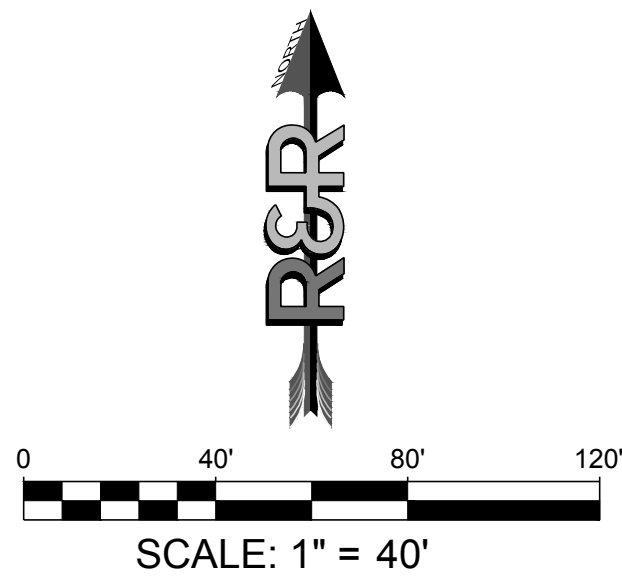
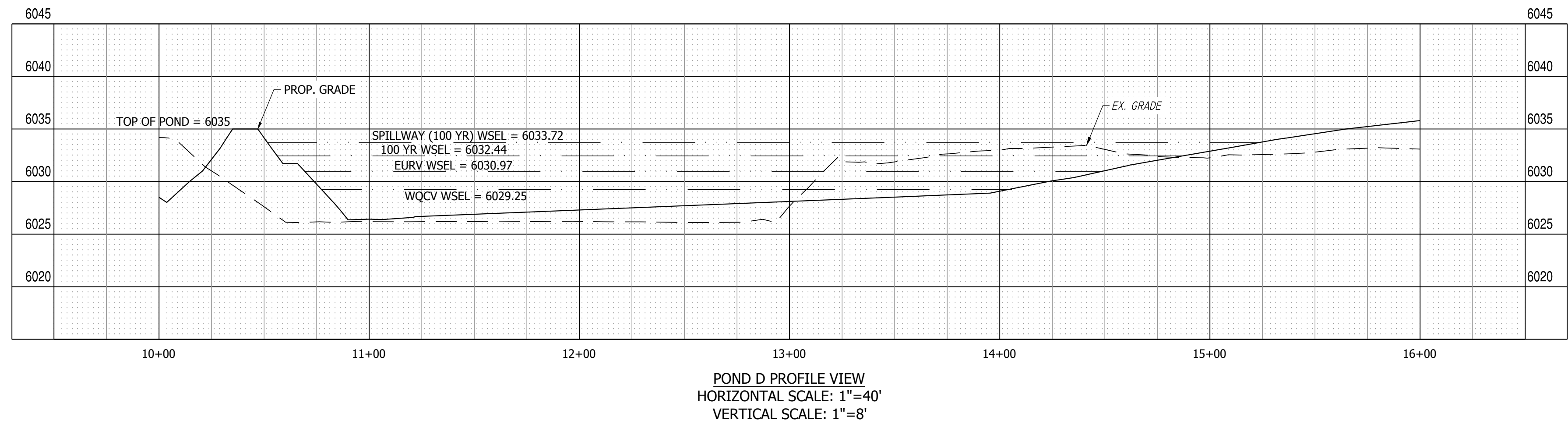
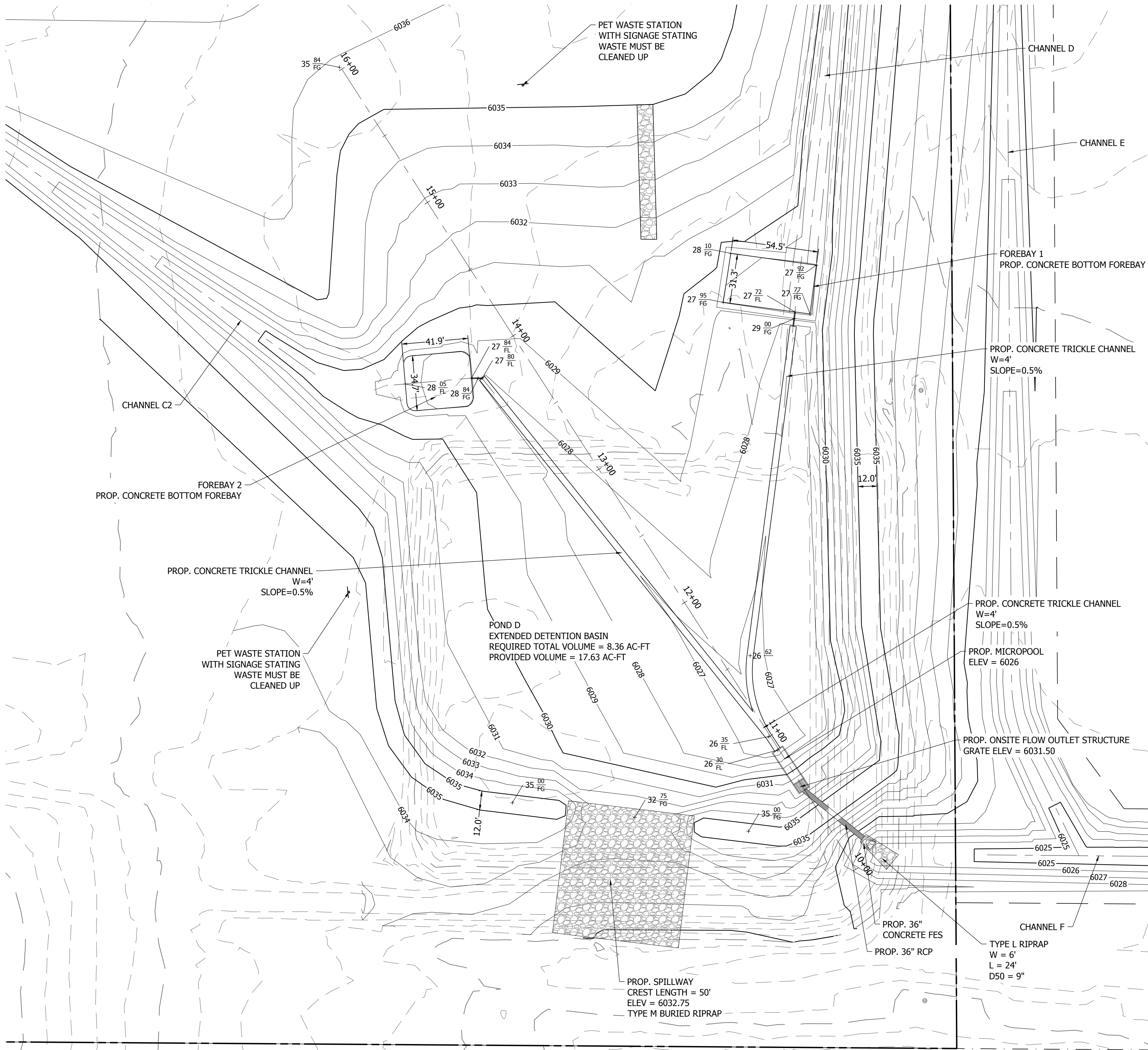
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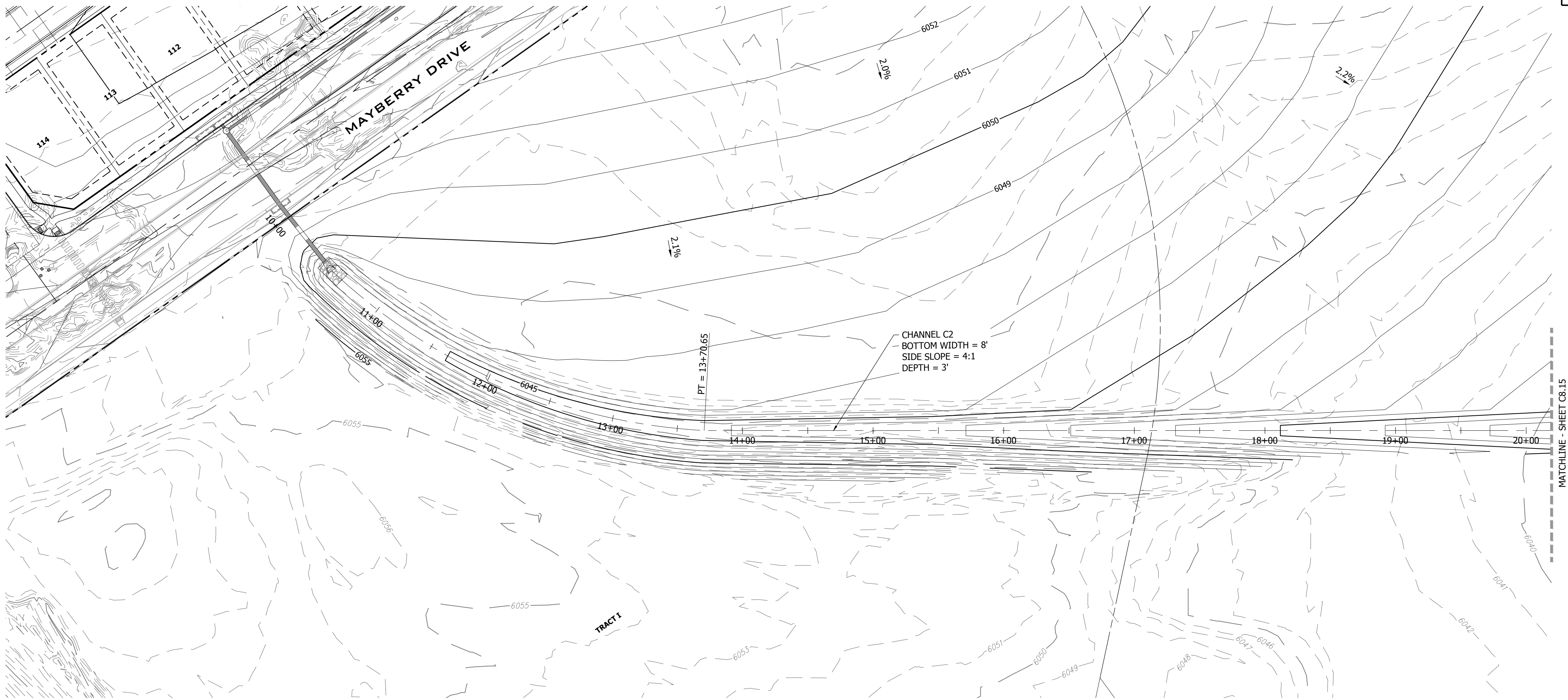
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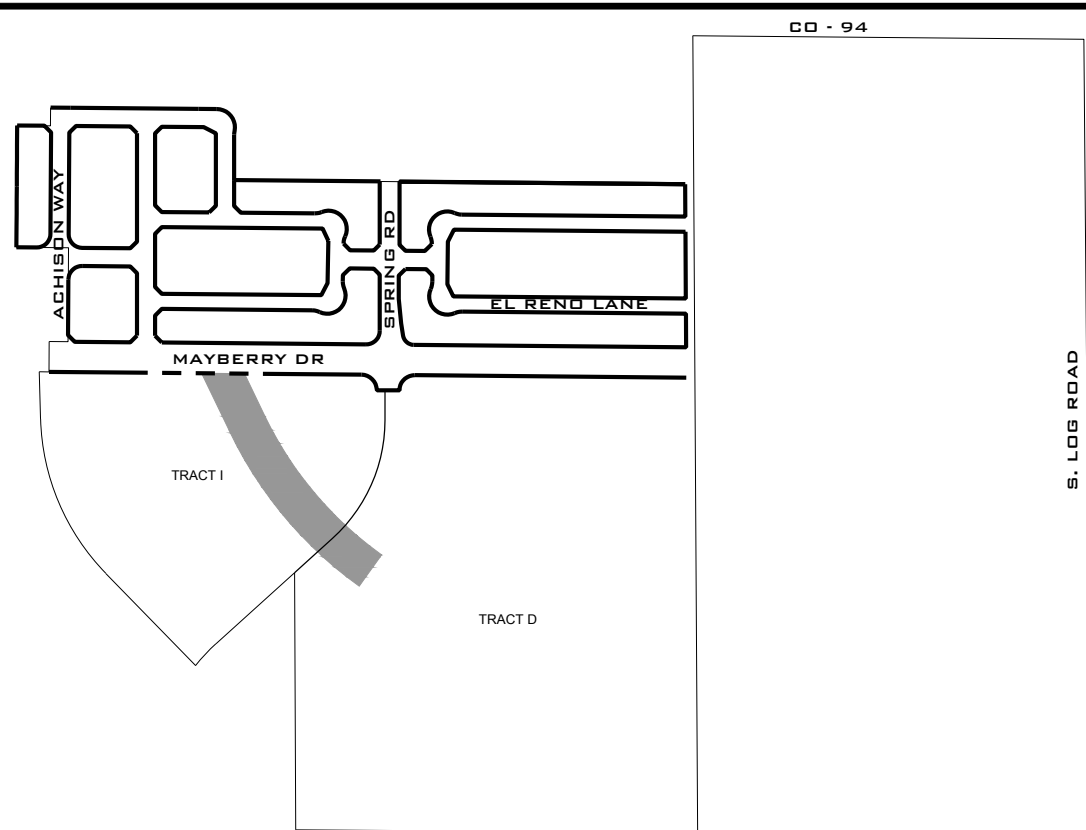
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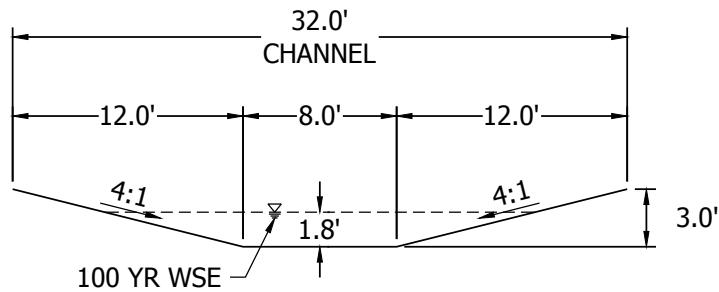
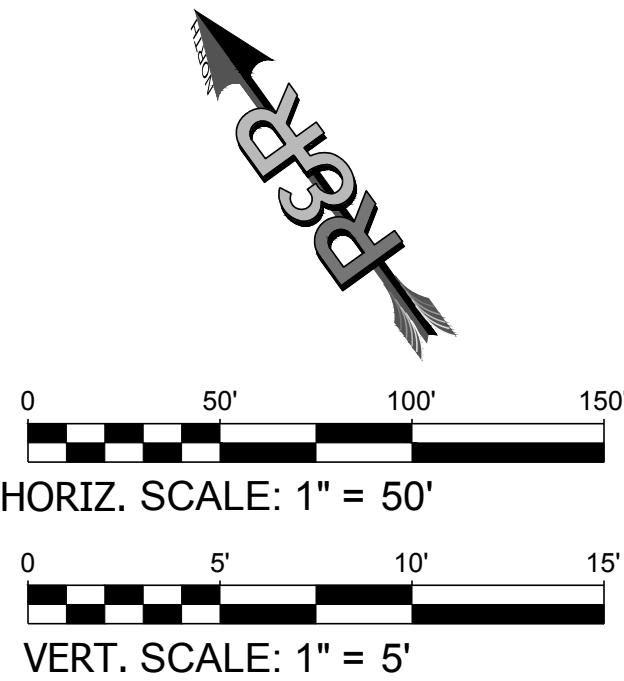
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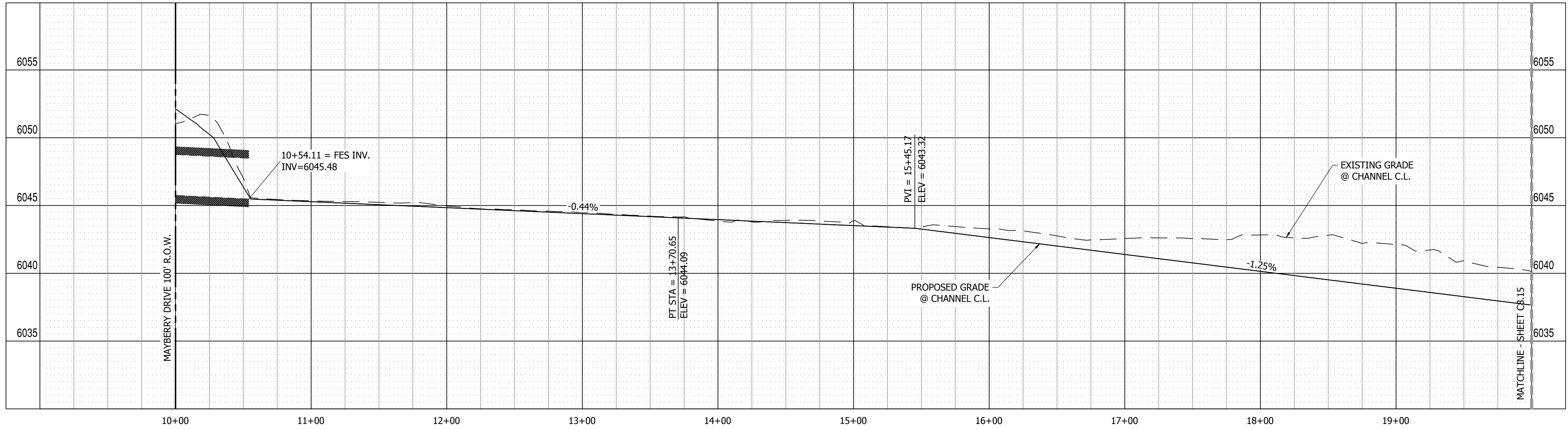
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KEY MAP
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CHANNEL C2 X-SECTION
SCALE: 1" = 10'

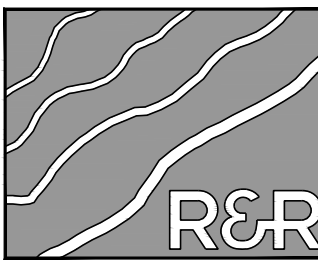


CHANNEL C2 PROFILE VIEW
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



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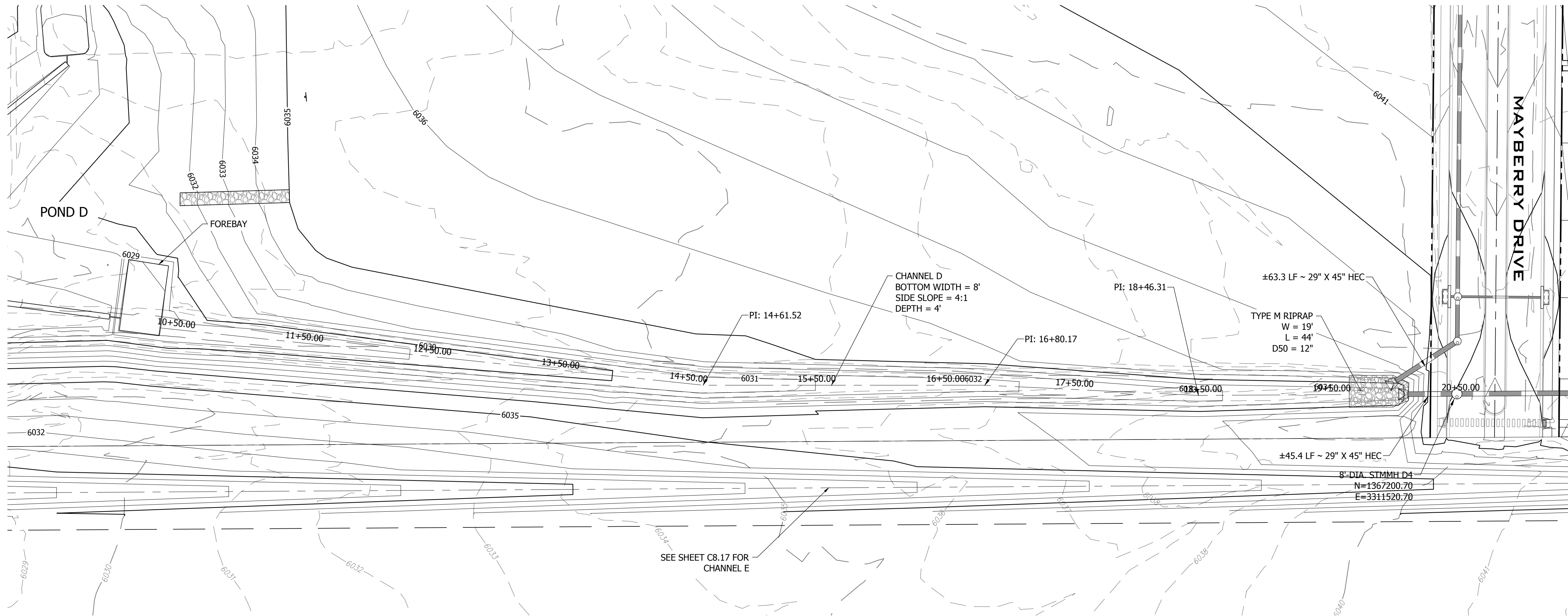
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CHANNEL C2
PLAN & PROFILE
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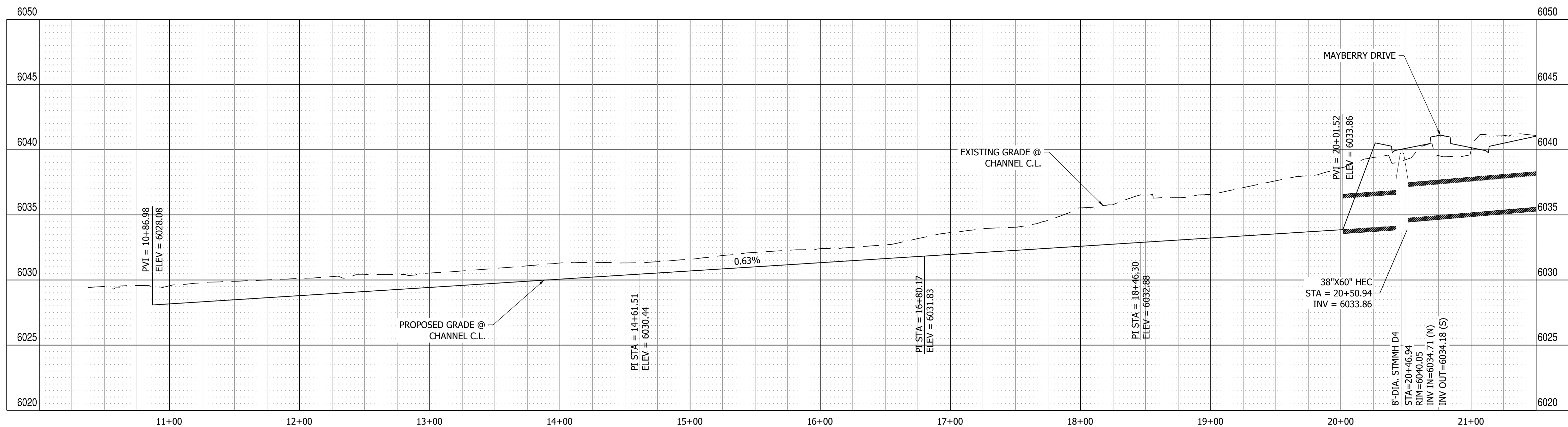
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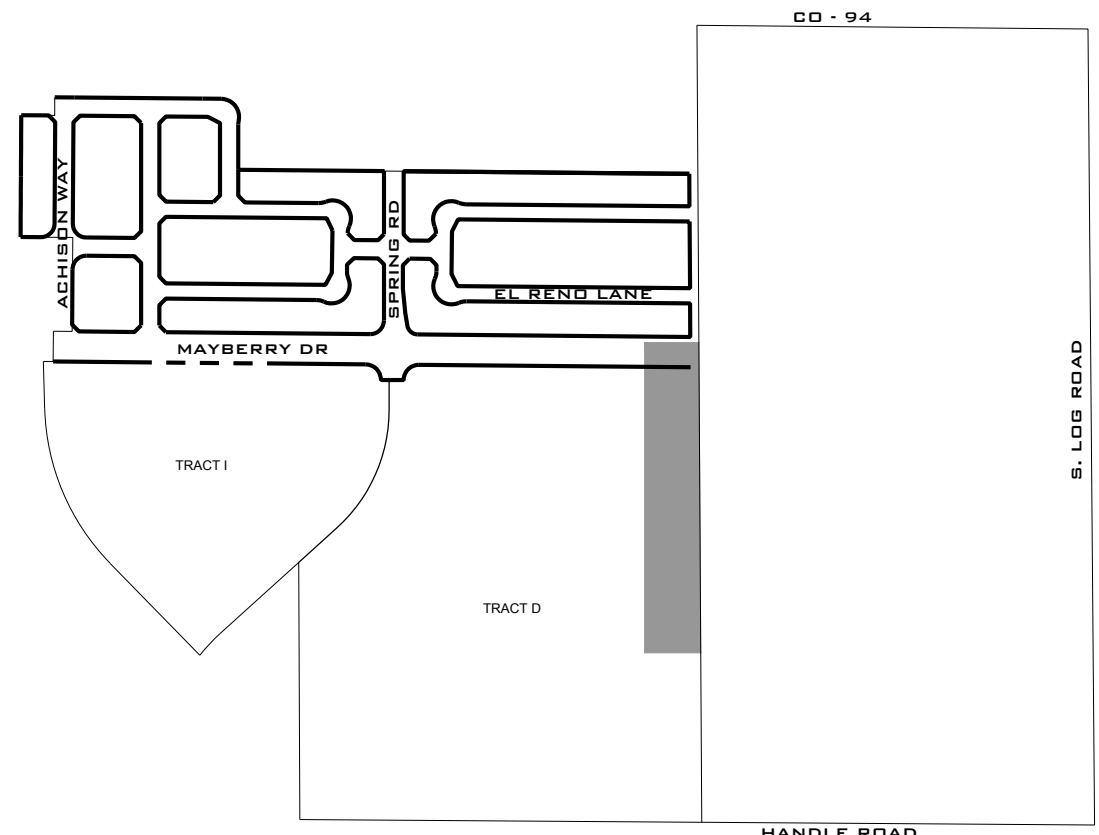
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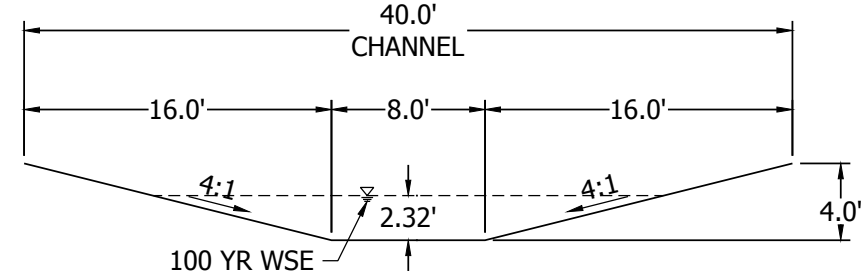
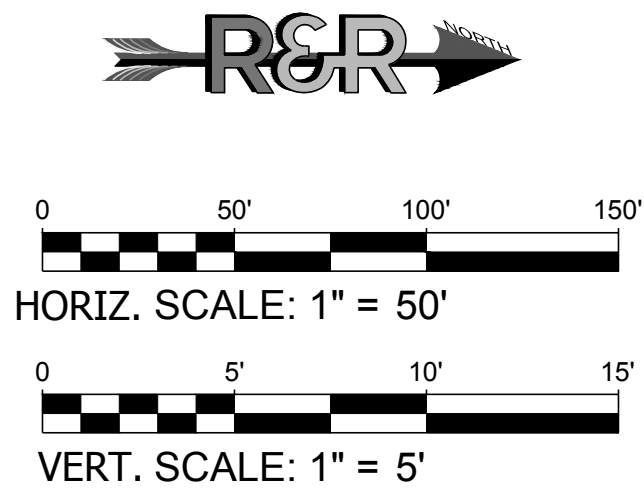
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CHANNEL D PROFILE VIEW
HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'



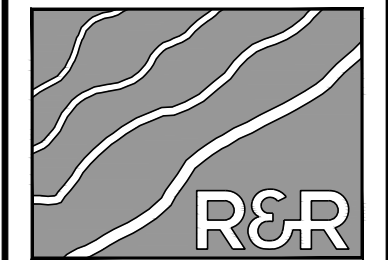
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CHANNEL D X-SECTION
SCALE: 1" = 10'



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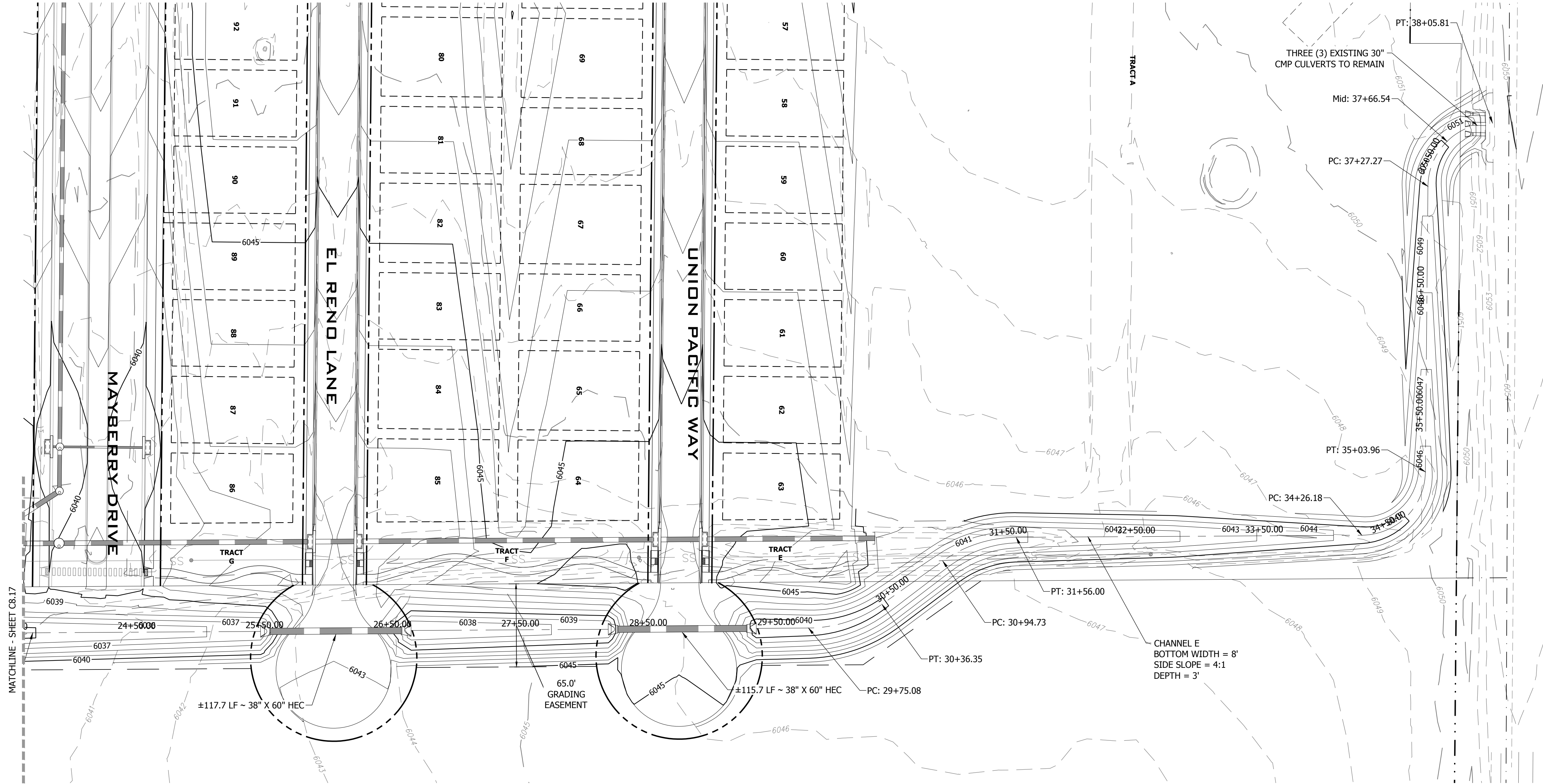
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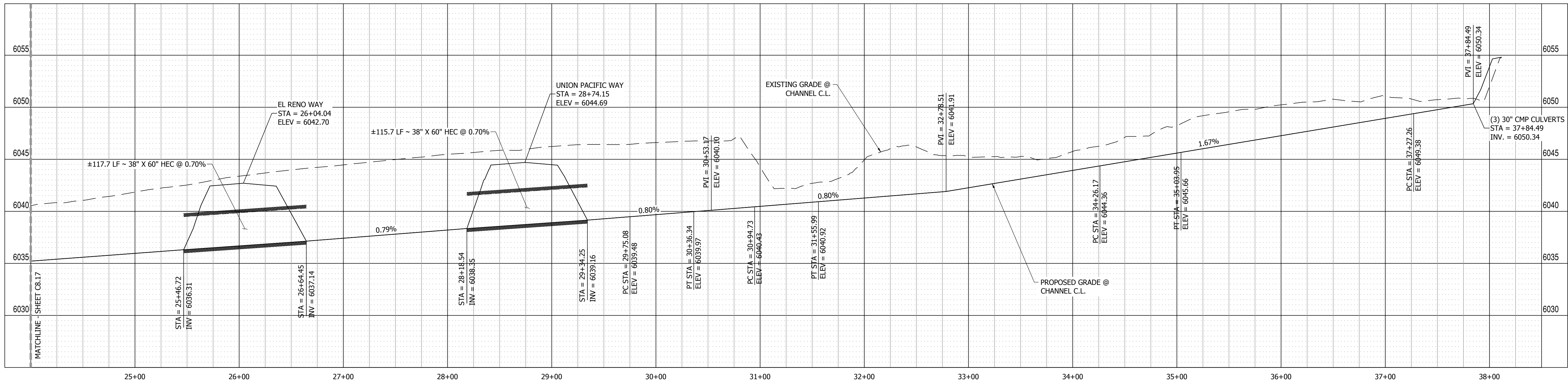
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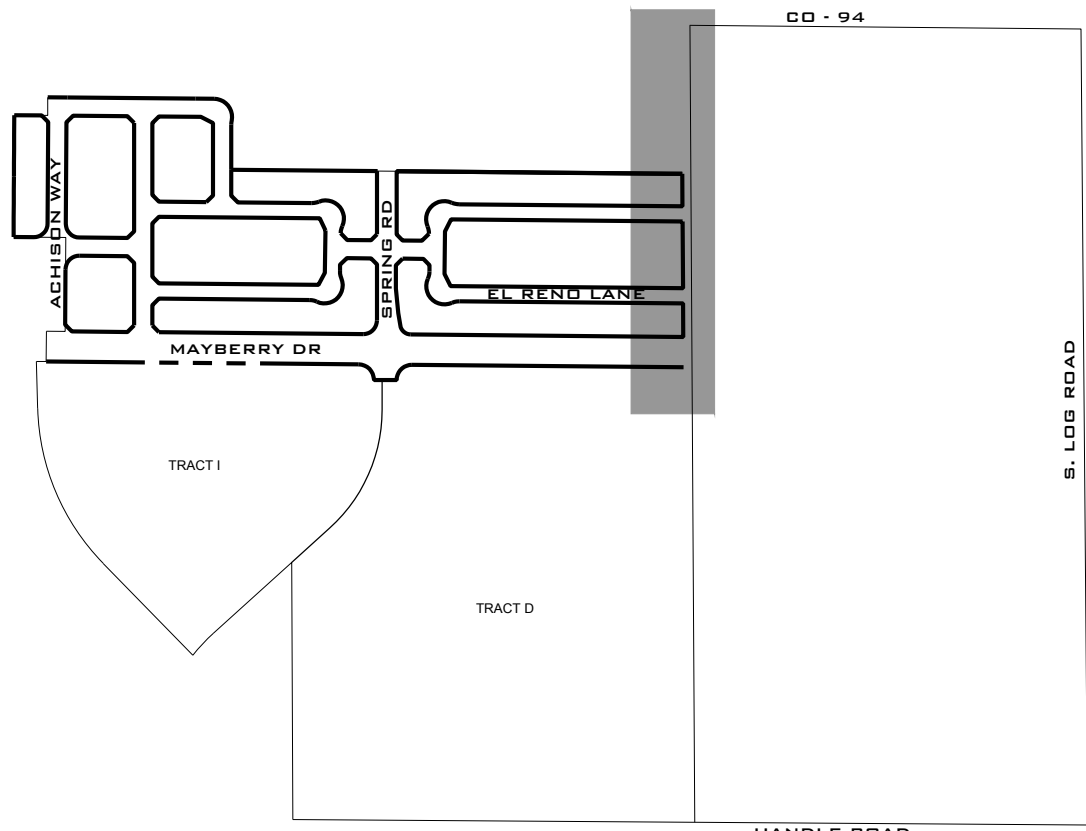
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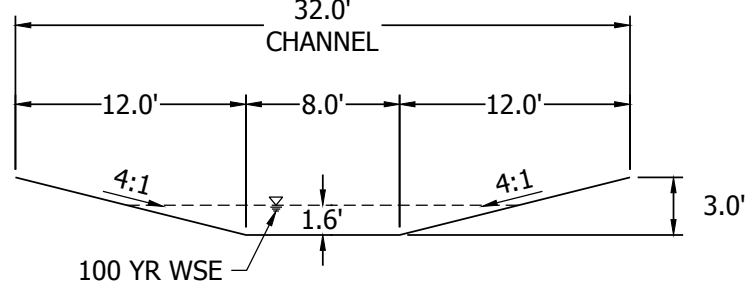
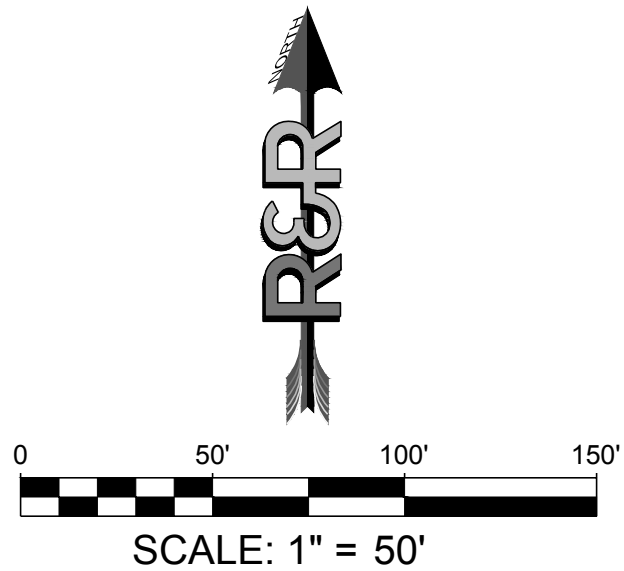
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CHANNEL E PROFILE VIEW
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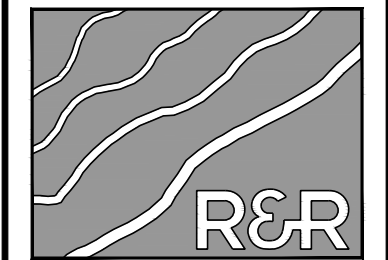


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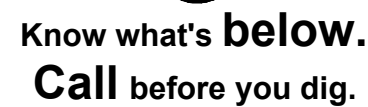
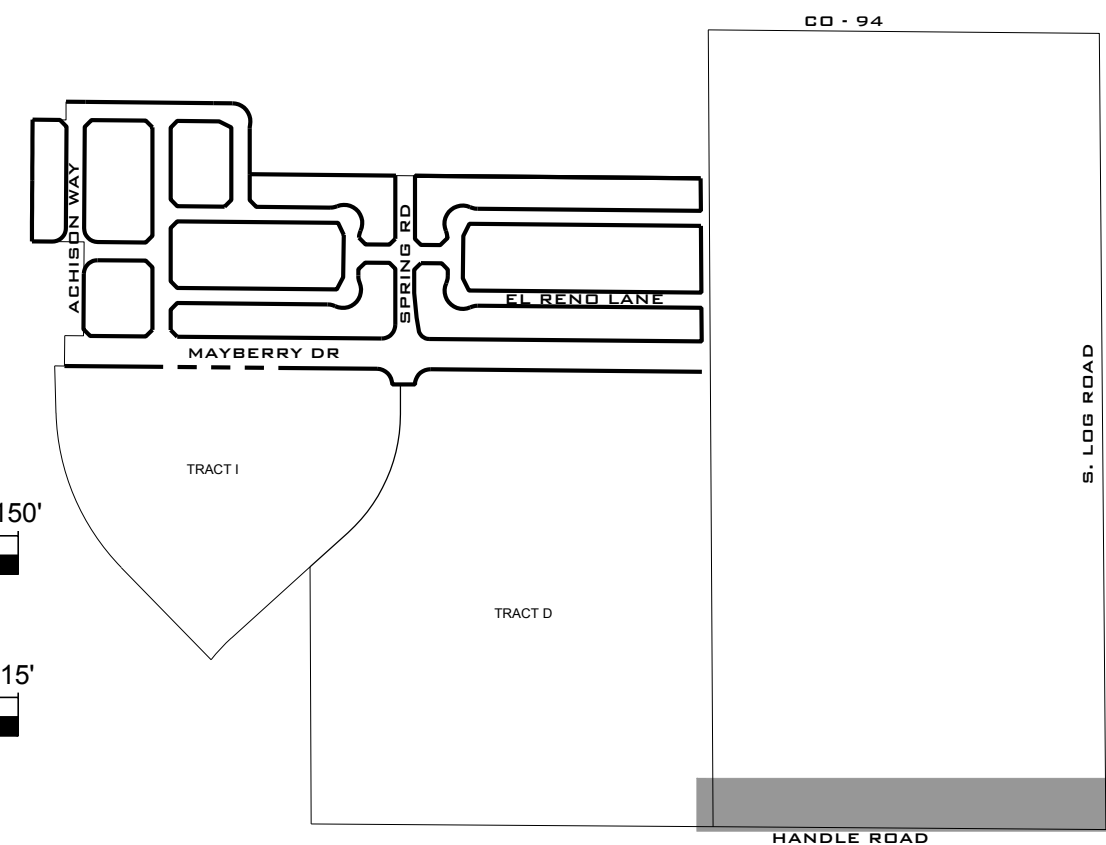
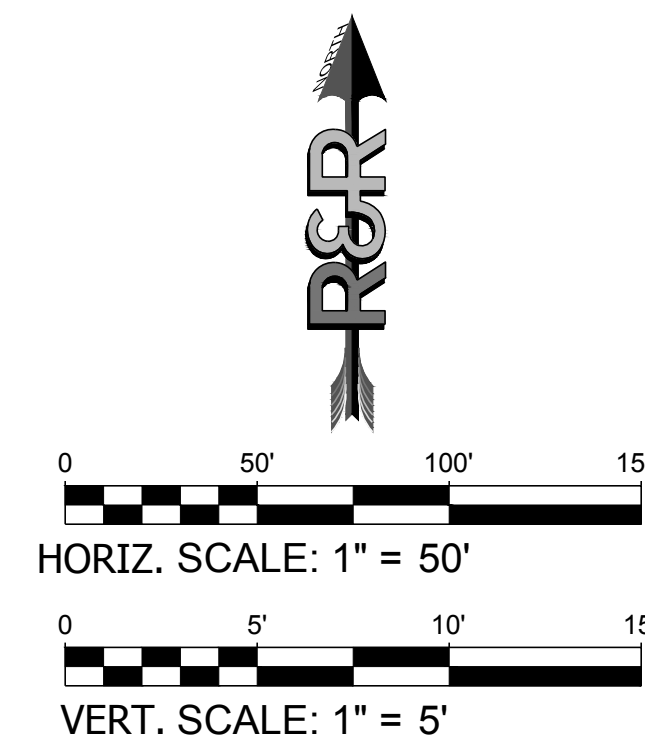
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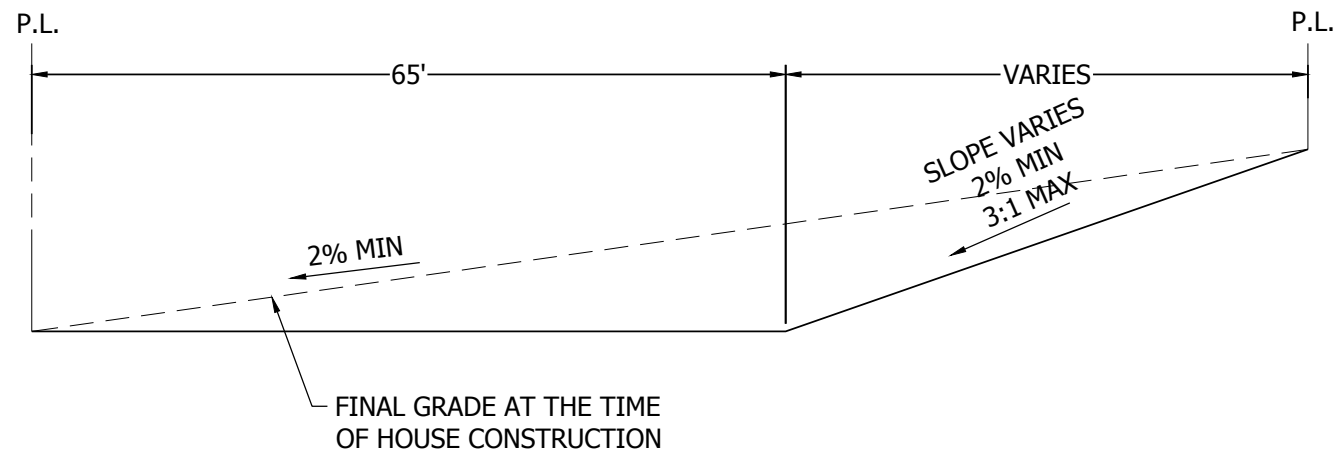
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CHANNEL E 24+00
TO 38+50

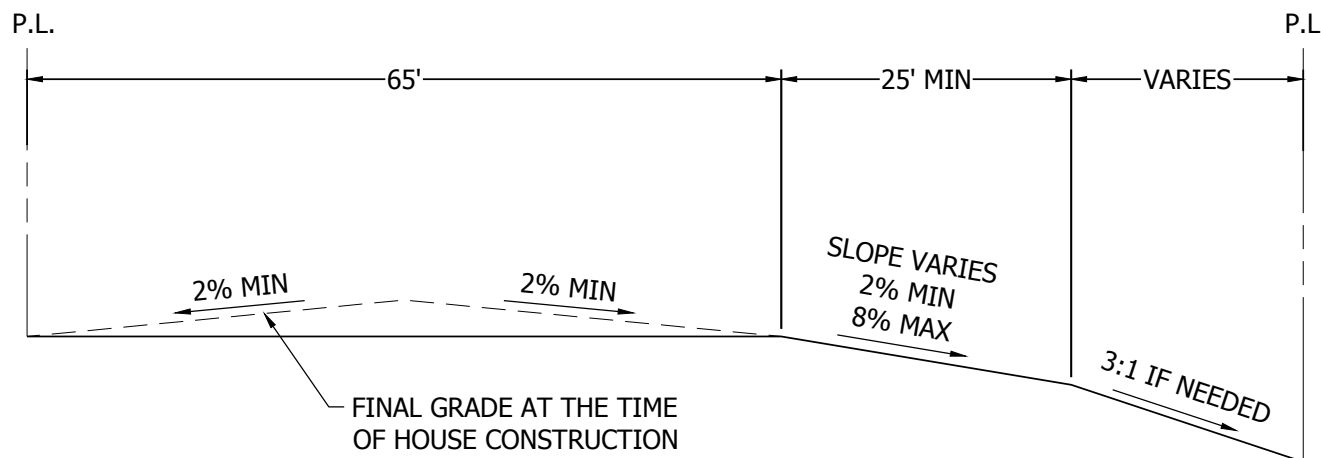
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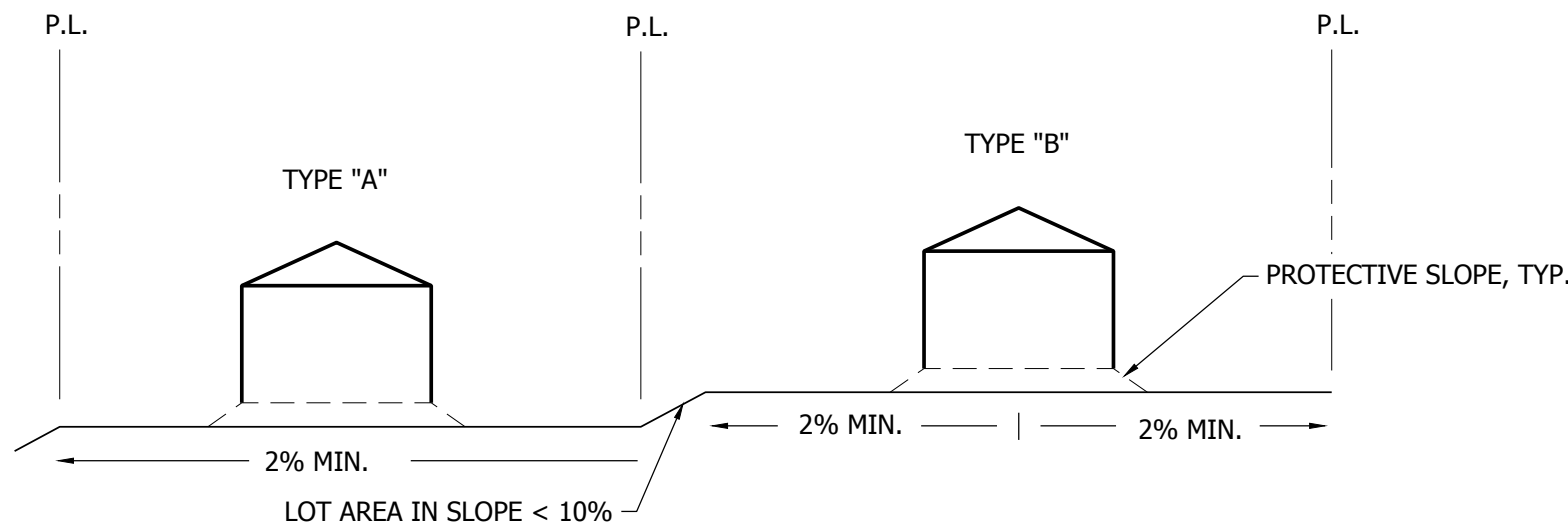
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TYPICAL "A" LOT
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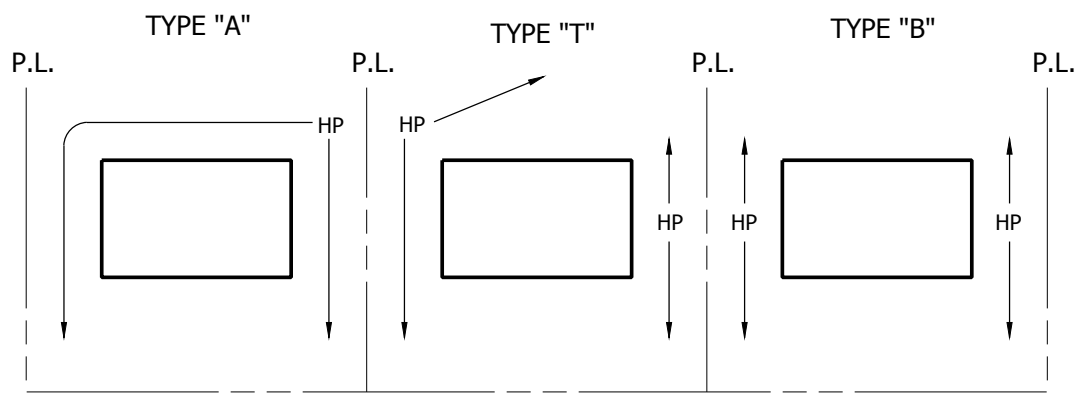


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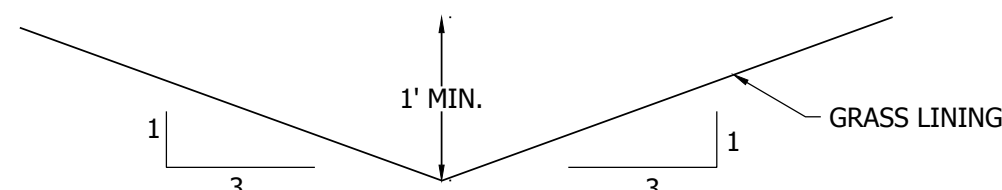
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NOTE:
FINAL GRADING TO COMPLY WITH H.U.D.
STANDARDS CONTAINED IN SECTION 310 AND
602 OF THE MINIMUM PROPERTY STANDARDS
(MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA
SHEET 79G), IF APPLICABLE, AND ALL LEGAL
STANDARDS.



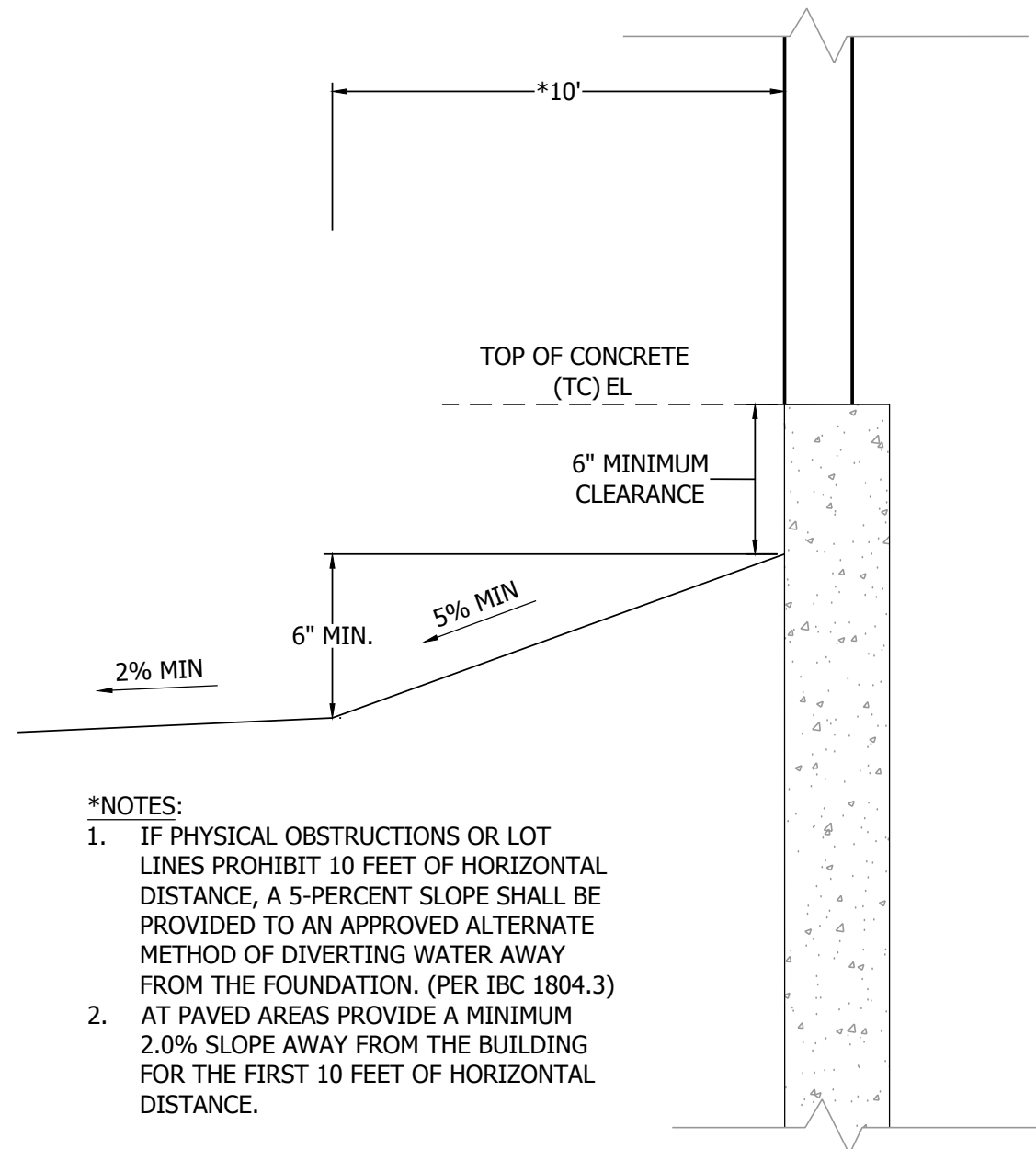
LOT DRAINAGE TYPES
N.T.S.

- NOTES:
1. LOT GRADING & DRAINAGE IS THE RESPONSIBILITY OF THE INDIVIDUAL LOT BUILDERS AND OWNERS
 2. INDIVIDUAL BUILDERS SHALL PROVIDE POSITIVE DRAINAGE WITHIN EACH LOT AND ACCOUNT FOR POTENTIAL CROSS-LOT DRAINAGE ON DOWN GRADIENT LOTS.
 3. FINAL GRADING TO COMPLY WITH H.U.D. STANDARDS CONTAINED IN SECTION 310 AND 602 OF THE MINIMUM PROPERTY STANDARDS (MPS) 4900.1, HANDBOOK 4140.3 CHG (DATA SHEET 79G), IF APPLICABLE AND ALL LEGAL STANDARDS.



TYPICAL SIDE/REAR LOT SWALE
N.T.S.

NOTE:
BUILDERS AND OWNERS SHALL MAINTAIN
PROPER PROTECTIVE SLOPES AND SIDE/REAR
LOT SWALES DURING AND AFTER HOME
CONSTRUCTION.

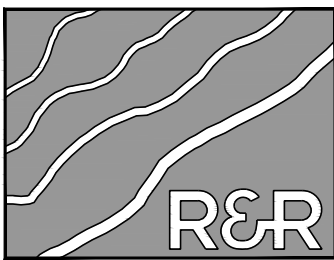


TYPICAL BUILDING DRAINAGE DETAIL
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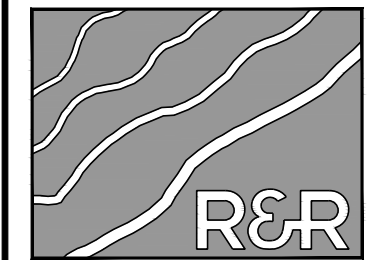
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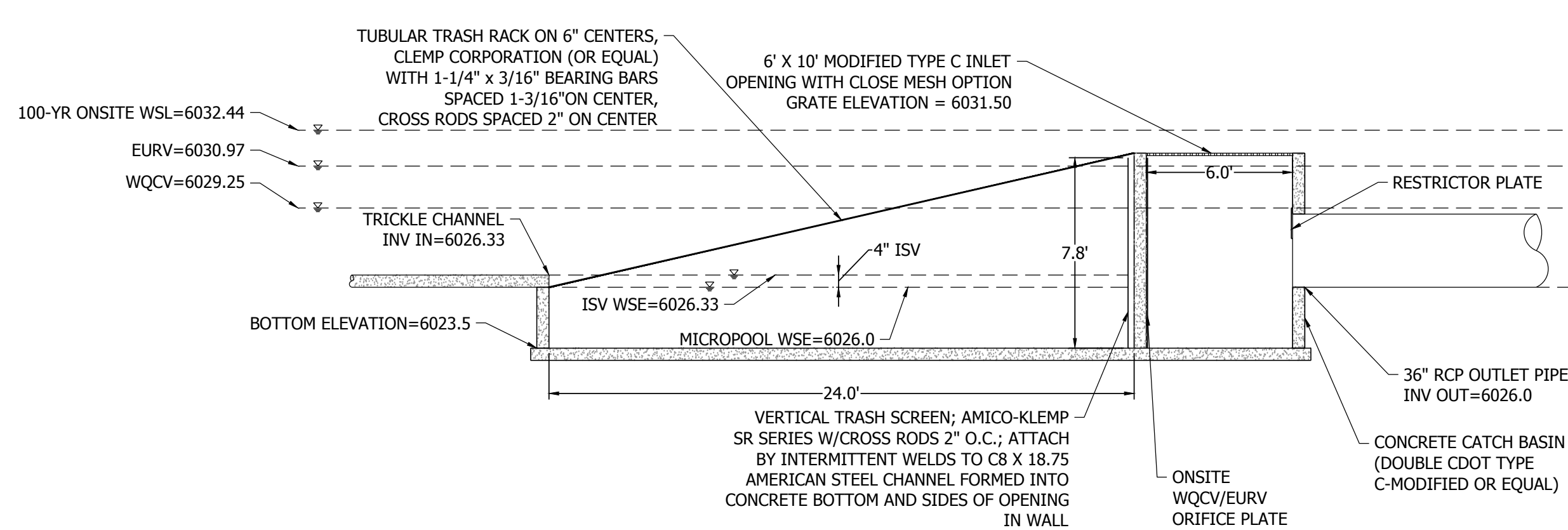
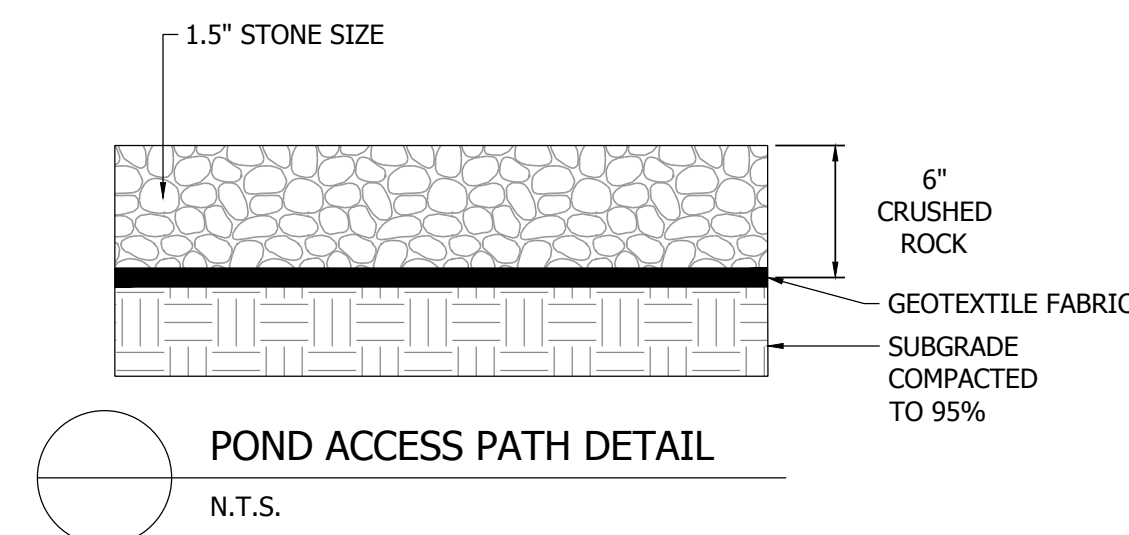
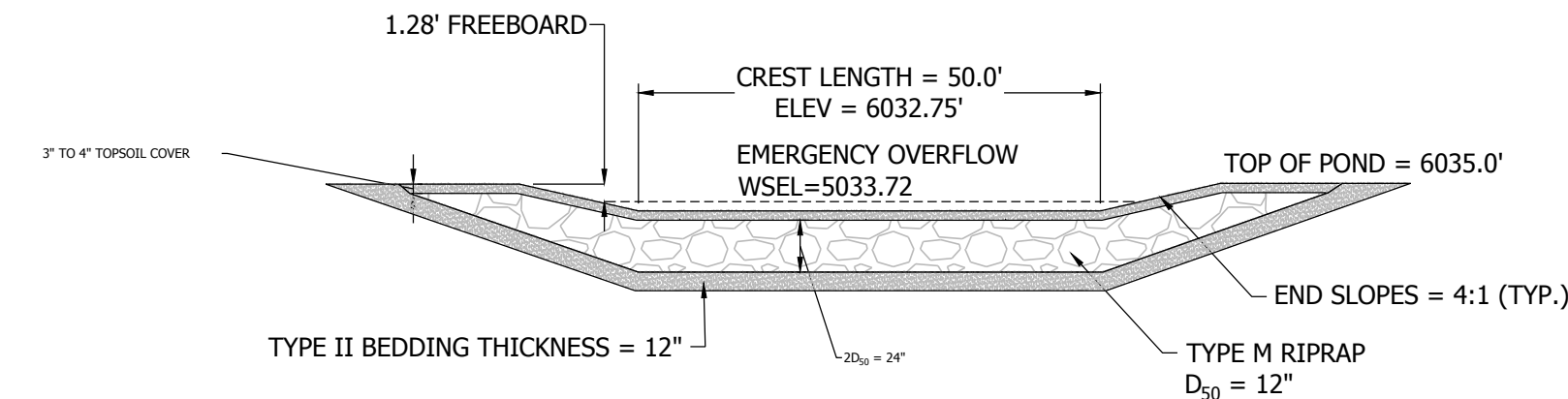
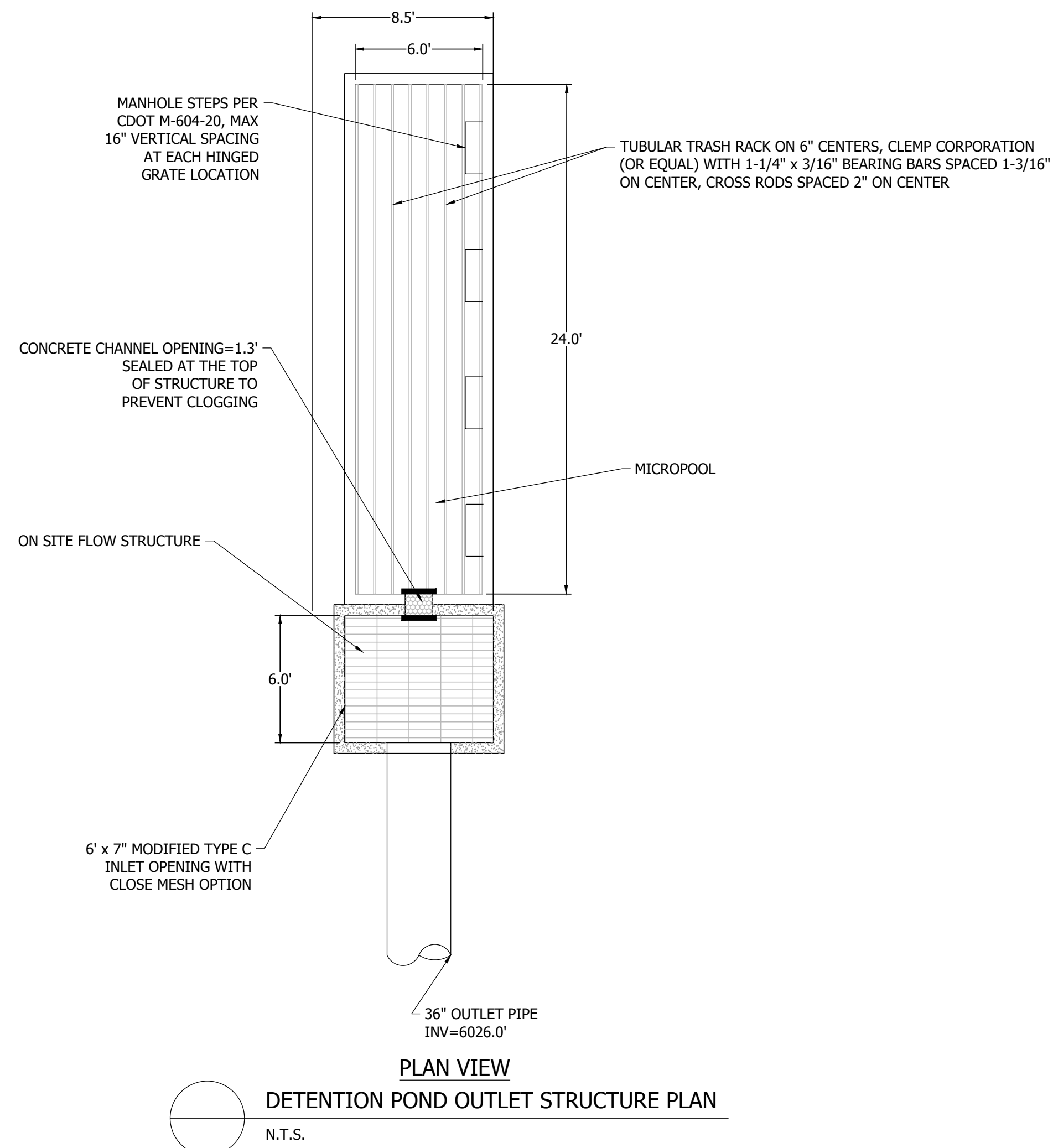
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MAYBERRY PUD PH1 - FILING NO. 1
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EL PASO COUNTY
MAYBERRY COMMUNITIES, LLC
3296 DEVINE HEIGHTS #208
COLORADO SPRINGS, CO 80922

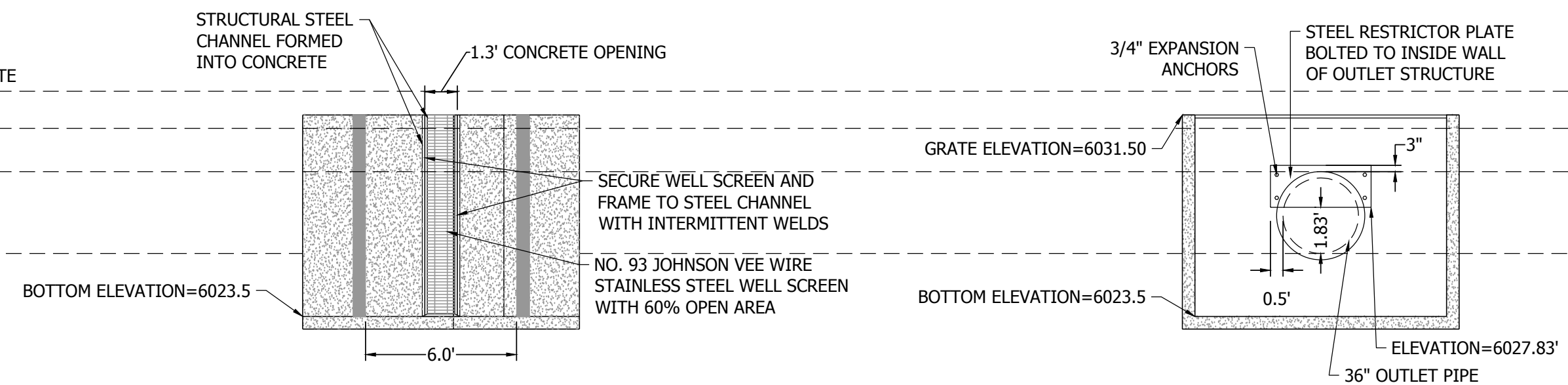
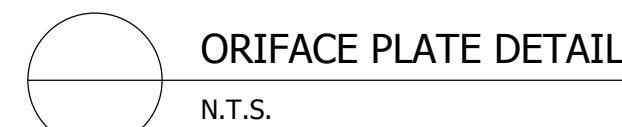
GESC PLANS			
JOB NO.	MC22110	ORG. SUBM. DATE	06/16/2022
DWN:	LAO	CHKD:	CJD
NAME			

DETENTION POND
DETAILS

NO.
C8.21



- ORIFICE PLATE NOTES:
1. MINIMIZE THE NUMBER OF COLUMNS.
 2. PROVIDE GASKET MATERIAL BETWEEN THE ORIFICE PLATE AND CONCRETE.
 3. BOLT PLATE TO CONCRETE 12" MAX. ON CENTER.



EURV AND WQCV TRASH RACKS:

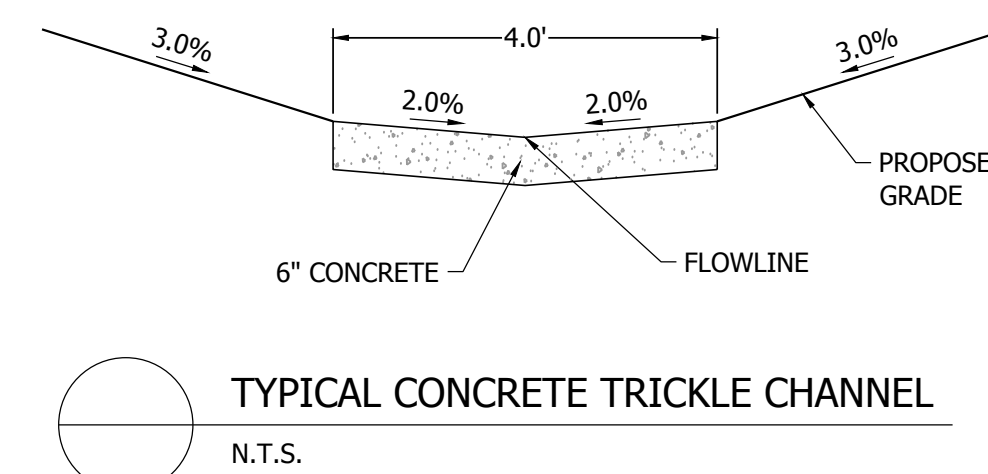
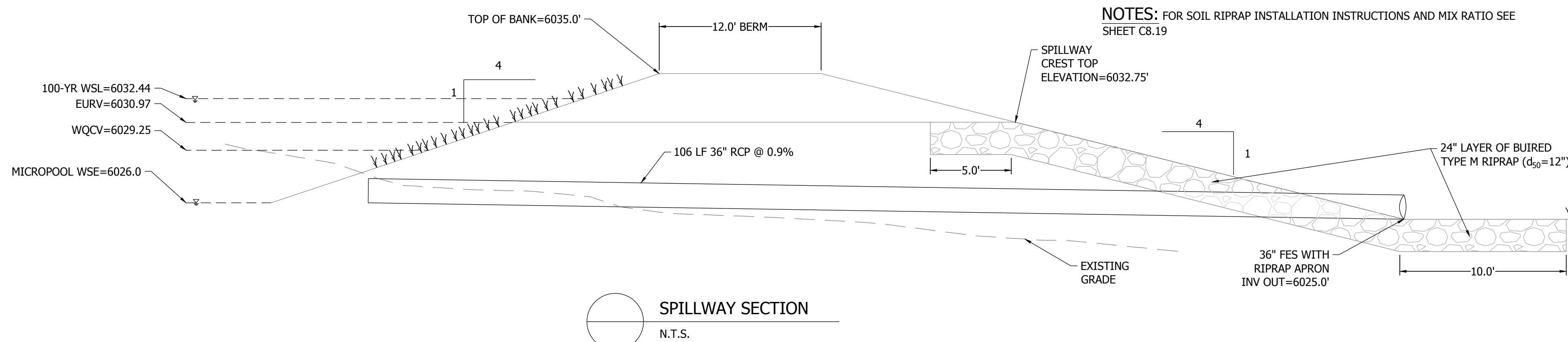
1. WELL-SCREEN TRASH RACKS SHALL BE ATTACHED BY INTERMITTENT WELDS ALONG THE EDGE OF THE MOUNTING FRAME.
2. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.

OVERFLOW TRASH RACKS:

1. ALL TRASH RACKS SHALL BE MOUNTED USING STAINLESS STEEL HARDWARE AND PROVIDED WITH HINGED AND LOCKABLE OR BOLTABLE ACCESS PANELS.
2. TRASH RACKS SHALL BE STAINLESS STEEL, ALUMINUM, OR STEEL. STEEL TRASH RACKS SHALL BE HOT DIP GALVANIZED AND MAY BE HOT POWDER COATED AFTER GALVANIZING.
3. TRASH RACKS SHALL BE DESIGNED SUCH THAT THE DIAGONAL DIMENSION OF THE EACH OPENING IS SMALLER THAN THE DIAMETER OF THE OUTLET PIPE.
4. STRUCTURAL DESIGN OF TRASH RACKS SHALL BE BASED ON FULL HYDROSTATIC HEAD WITH ZERO HEAD DOWNSTREAM OF THE RACK.



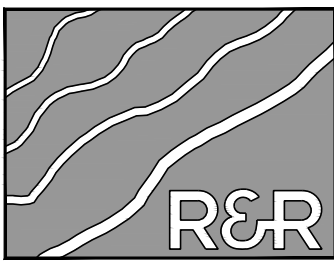
NOTES: FOR SOIL RIPRAP INSTALLATION INSTRUCTIONS AND MIX RATIO SEE SHEET C8.19





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NO.	REVISION	BY	DATE
	2ND SUBMISSION		9/1/2022



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1635 WEST 13TH AVENUE, SUITE 310
DENVER, COLORADO 80204
PHONE: 303-753-6730

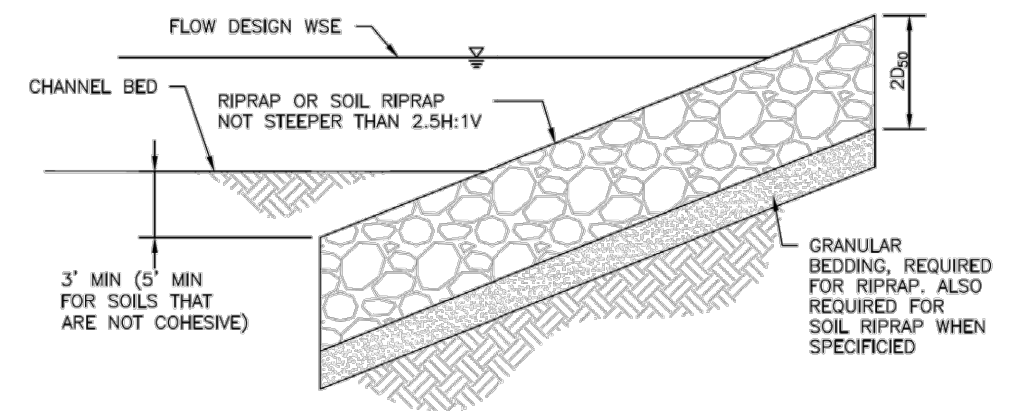
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MAYBERRY PUD PH 1 - FILING NO. 1
SITE ADDRESS: MAYBERRY, COLORADO SPRINGS
EL PASO COUNTY
PREPARED FOR: MAYBERRY COMMUNITIES, LLC
3296 DEVINE HEIGHTS #208
COLORADO SPRINGS, CO 80922

GESC PLANS
JOB NO. MC22110
ORG. SUBM. DATE 06/16/2022
DWN: LAO CHKD: CJD
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RIPRAP DESIGNATION	% SMALLER THAN GIVEN SIZE BY WEIGHT	INTERMEDIATE ROCK DIMENSION (INCHES)	D ₅₀ * (INCHES)
TYPE VL	70 - 100 50 - 70 35 - 50 2 - 10	12 9 6 2	6
TYPE L	70 - 100 50 - 70 35 - 50 2 - 10	15 12 9 3	9
TYPE M	70 - 100 50 - 70 35 - 50 2 - 10	21 18 12 4	12
TYPE H	70 - 100 50 - 70 35 - 50 2 - 10	30 24 18 6	18

*D₅₀ = MEAN ROCK SIZE.

Figure 8-34. Riprap and soil riprap placement and gradation (part 1 of 3)

SOIL RIPRAP NOTES:

- ELEVATION TOLERANCES FOR THE SOIL RIPRAP SHALL BE 0.10 FEET. THICKNESS OF SOIL RIPRAP SHALL BE NO LESS THAN THICKNESS SHOWN AND NO MORE THAN 2-INCHES GREATER THAN THE THICKNESS SHOWN.
- WHERE "SOIL RIPRAP" IS DESIGNATED ON THE CONTRACT DRAWINGS, RIPRAP VOIDS ARE TO BE FILLED WITH NATIVE SOIL. THE RIPRAP SHALL BE PRE-MIXED WITH THE NATIVE SOIL AT THE FOLLOWING PROPORTIONS BY VOLUME: 65PERCENT RIPRAP AND 35 PERCENT SOIL. THE SOIL USED FOR MIXING SHALL BE NATIVE TOPSOIL AND SHALL HAVE A MINIMUM FINES CONTENT OF 15 PERCENT. THE SOIL RIPRAP SHALL BE INSTALLED IN A MANNER THAT RESULTS IN A DENSE, INTERLOCKED LAYER OF RIPRAP WITH RIPRAP VOIDS FILLED COMPLETELY WITH SOIL. SEGREGATION OF MATERIALS SHALL BE AVOIDED AND IN NO CASE SHALL THE COMBINED MATERIAL CONSIST PRIMARILY OF SOIL. THE DENSITY AND INTERLOCKING NATURE OF RIPRAP IN THE MIXED MATERIAL SHALL ESSENTIALLY BE THE SAME AS IF THE RIPRAP WAS PLACED WITHOUT SOIL.
- WHERE SPECIFIED (TYPICALLY AS "BURIED SOIL RIPRAP"), A SURFACE LAYER OF TOPSOIL SHALL BE PLACED OVER THE SOIL RIPRAP ACCORDING TO THE THICKNESS SPECIFIED ON THE CONTRACT DRAWINGS. THE TOPSOIL SURFACE LAYER SHALL BE COMPACTED TO APPROXIMATELY 85% OF MAXIMUM DENSITY AND WITHIN TWO PERCENTAGE POINTS OF OPTIMUM MOISTURE IN ACCORDANCE WITH ASTM D698. TOPSOIL SHALL BE ADDED TO ANY AREAS THAT SETTLE.
- ALL SOIL RIPRAP THAT IS BURIED WITH TOPSOIL SHALL BE REVIEWED AND APPROVED BY THE ENGINEER PRIOR TO ANY TOPSOIL PLACEMENT.

GRADATION FOR GRANULAR BEDDING		
PERCENT PASSING BY WEIGHT		
U.S. STANDARD SIEVE SIZE	TYPE I CDOT SECT. 703.01	TYPE II CDOT SECT. 703.09 CLASS A
3 INCHES	-	90 - 100
1½ INCHES	-	-
¾ INCHES	-	20 - 90
⅜ INCHES	100	-
#4	95 - 100	0 - 20
#16	45 - 80	-
#50	10 - 30	-
#100	2 - 10	-
#200	0 - 2	0 - 3

RIPRAP BEDDING

Figure 8-34. Riprap and soil riprap placement and gradation (part 2 of 3)

THICKNESS REQUIREMENTS FOR GRANULAR BEDDING			
RIPRAP DESIGNATION	MINIMUM BEDDING THICKNESS (INCHES)		
	FINE-GRAINED SOILS ¹		COARSE-GRAINED SOILS ²
	TYPE I (LOWER LAYER)	TYPE II (UPPER LAYER)	TYPE II
VL (D ₅₀ = 6 IN)	4	4	6
L (D ₅₀ = 9 IN)	4	4	6
M (D ₅₀ = 12 IN)	4	4	6
H (D ₅₀ = 18 IN)	4	6	8
VH (D ₅₀ = 24 IN)	4	6	8

- NOTES:
- MAY SUBSTITUTE ONE 12-INCH LAYER OF TYPE II BEDDING. THE SUBSTITUTION OF ONE LAYER OF TYPE II BEDDING SHALL NOT BE PERMITTED AT DROP STRUCTURES. THE USE OF A COMBINATION OF FILTER FABRIC AND TYPE II BEDDING AT DROP STRUCTURES IS ACCEPTABLE.
 - FIFTY PERCENT OR MORE BY WEIGHT RETAINED ON THE #40 SIEVE.

Figure 8-34. Riprap and soil riprap placement and gradation (part 3 of 3)