

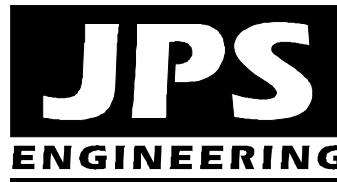
STORMWATER MANAGEMENT PLAN (SWMP) for MONUMENT ACADEMY

Prepared for:

Monument Academy Foundation
1150 Village Ridge Point
Monument, CO 80132

July 26, 2019
Revised May 15, 2020

Prepared by:



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**JPS Project No. 040201
PPR-19-009 & CDR-19-001/CDR-20-001**

Qualified Stormwater Managers:

Contractor: JHL Constructors, Inc.
7076 S. Alton Way, Building H
Centennial, CO 80112
Attn: Mario Cappella / Aimee Clode (303)-741-6116
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For File

By: Elizabeth Nijkamp

Date: 05/27/2020

El Paso County Planning & Community Development



**MONUMENT ACADEMY
STORMWATER MANAGEMENT PLAN (SWMP)
TABLE OF CONTENTS**

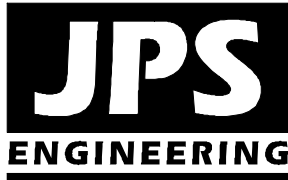
	<u>PAGE</u>
I. QUALIFIED STORMATER MANAGER.....	1
II. SPILL PREVENTION AND RESPONSE PLAN.....	2
III. MATERIALS HANDLING	3
IV. POTENTIAL SOURCES OF POLLUTION	4
V. IMPLEMENTATION OF CONTROL MEASURES	5
VI. SITE DESCRIPTION	7
VII. SITE MAP.....	7
VIII. FINAL STABILIZATION AND LONG-TERM STORMWATER MANAGEMENT	8
IX. INSPECTION REPORTS	8

FIGURES

Figure A1 Vicinity Map
 Grading & Erosion Control (GEC) Plans

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.



**MONUMENT ACADEMY HIGH SCHOOL
SEC SH83 & WALKER ROAD, MONUMENT, CO
STORMWATER MANAGEMENT PLAN (SWMP)**

Revised May, 2020

I. QUALIFIED STORMWATER MANAGER

A. Qualified Stormwater Manager

Contractor: JHL Constructors, Inc.
7076 S. Alton Way, Building H
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B. Applicant / Contact Information

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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 BMPs 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
All disturbed and stored soils	Stockpiles of fill from site excavations, topsoil 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.
Management of contaminated soils	No contaminated soils are expected to be encountered.
Loading and unloading operations	Loading and unloading of construction materials
Outdoor storage activities (building material, fertilizers, chemicals, etc.)	Stockpiles and equipment storage areas (no fertilizers, petroleum or chemical products will be stored on-site).
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.
Significant dust or particulate-generating processes	Vehicle tracking, soil removed from excavation, stockpiles.
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.
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
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.
Dedicated asphalt and concrete batch plants	No dedicated asphalt or concrete batch plants are planned on-site.

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.
Other areas or procedures where potential spills can occur	Petroleum releases from equipment are possible.

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 BMP'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.

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

<u>Phase</u>	<u>BMP</u>
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 May, 2020 through September, 2020. The estimated schedule for erosion control activities is as follows:

<u>Major Activity</u>	<u>Start Date</u>	<u>Control Measures</u>
• Install Initial BMP's:	May, 2020	Initial Control Measures
• Site Grading:	May, 2020	Interim Control Measures
• Seeding & Mulching:	August, 2020	Interim Control Measures
• Final Stabilization:	September, 2021	Final Control Measures

Anticipated final stabilization completion: September 2021

Erosion and Sediment Controls:

- 1) Structural Practices / Control Measures (all structural Control Measures shall conform to ECM / DCM standards and details):
 - a. Silt fence at toe of slope along downstream limits of disturbed areas (see detail on Sh. C4.1)
 - b. Sediment control logs (SCL) along drainage swales
 - c. Inlet protection (IP) at storm inlets (see detail on Sh. C4.1)
 - d. Sediment Basins (SB); (see details on Sh. C3.3)
 - e. Extended Detention Basins (EDB); (see details on Sh. C3.1-C3.2)
- 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.

VI. SITE DESCRIPTION

- A. Nature of Construction Activity
 - Monument Academy is planning to construct a new 67,000 square-foot, two-story Phase 1 School Building and associated school campus improvements on a 64-acre site at the southeast corner of State Highway 83 (SH83) and Walker Road in El Paso County, Colorado. Site development activities will include site grading, utilities, a new school building, internal roads, parking lots, and site landscaping.
- B. Proposed sequence of major activities:
 - Mobilization / implementation of BMP's
 - Clearing and grubbing
 - Rough grading
 - Final grading of building sites and parking areas
- C. Total site area = 64.1 acres; Projected disturbed area = 70 acres (approx.), including off-site grading of Pinehurst Circle south of MA property
- D. Soil erosion potential and potential impacts upon discharge:
 - On-site soils are comprised of a combination of Elbeth sandy loam, Pring coarse sandy loam, and Tomah-Crowfoot loams sands, all of which are classified as Hydrologic Soils Group B (moderate erosion hazard).
 - Potential impacts upon discharge would include sedimentation closing and/or 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 will ultimately flow northeasterly and northwesterly into the existing downstream drainage system which flows to West Cherry Creek (ultimate receiving water). The stormwater outfalls immediately downstream of the project site include four existing 18"-24" culverts crossing SH83 along the west boundary of the property, as well as an existing 43"x27" culvert crossing Walker Road northeast of the property.
- H. Stream Crossings: There are no stream crossings located within the construction site boundary.

VII. SITE MAP

- SWMP Maps are provided on attached GEC Plans – Sheets C2.0-C2.5
- 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 mulch 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 C14
 - Permanent Stormwater Detention & Water Quality Pond M3
- 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 BMPs 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 BMPs 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 BMPs 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 BMPs 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 BMPs not operating in accordance with the SWMP and update the SWMP to reflect any revisions.

BMP Maintenance / Replacement and Failed BMPs:

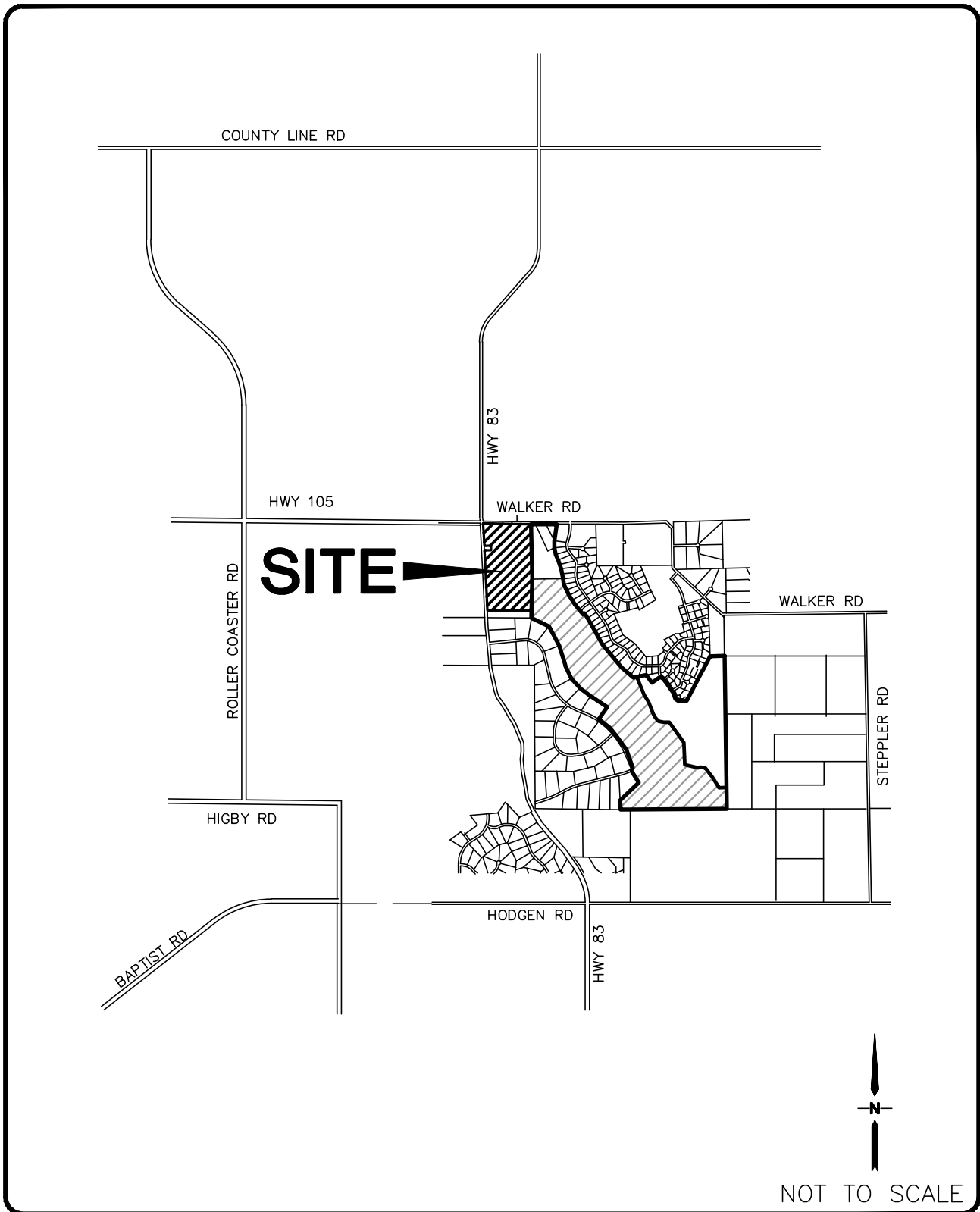
- Contractor shall remove sediment that has been collected by perimeter controls, such as silt fence and inlet protection, on a regular basis to prevent failure of BMPs, and remove potential of sediment from being discharged from the site in the event of BMP failure.
- Removed sediment must be moved 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 BMPs added during the construction period.
- Contractor shall address BMPs 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:

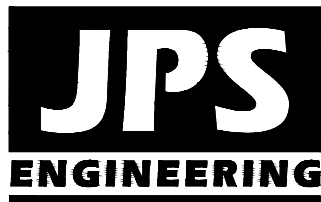
- Contractor shall maintain records of all inspection reports, including signed inspection logs, at the project site. SWMP records shall be located in the project trailer.
- Inspection logs shall be signed by the Qualified Stormwater Manager.
- Permittee shall document inspection results and maintain 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 BMPs that need to be maintained
 - Location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location
 - Location(s) where additional BMPs 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

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VICINITY MAP

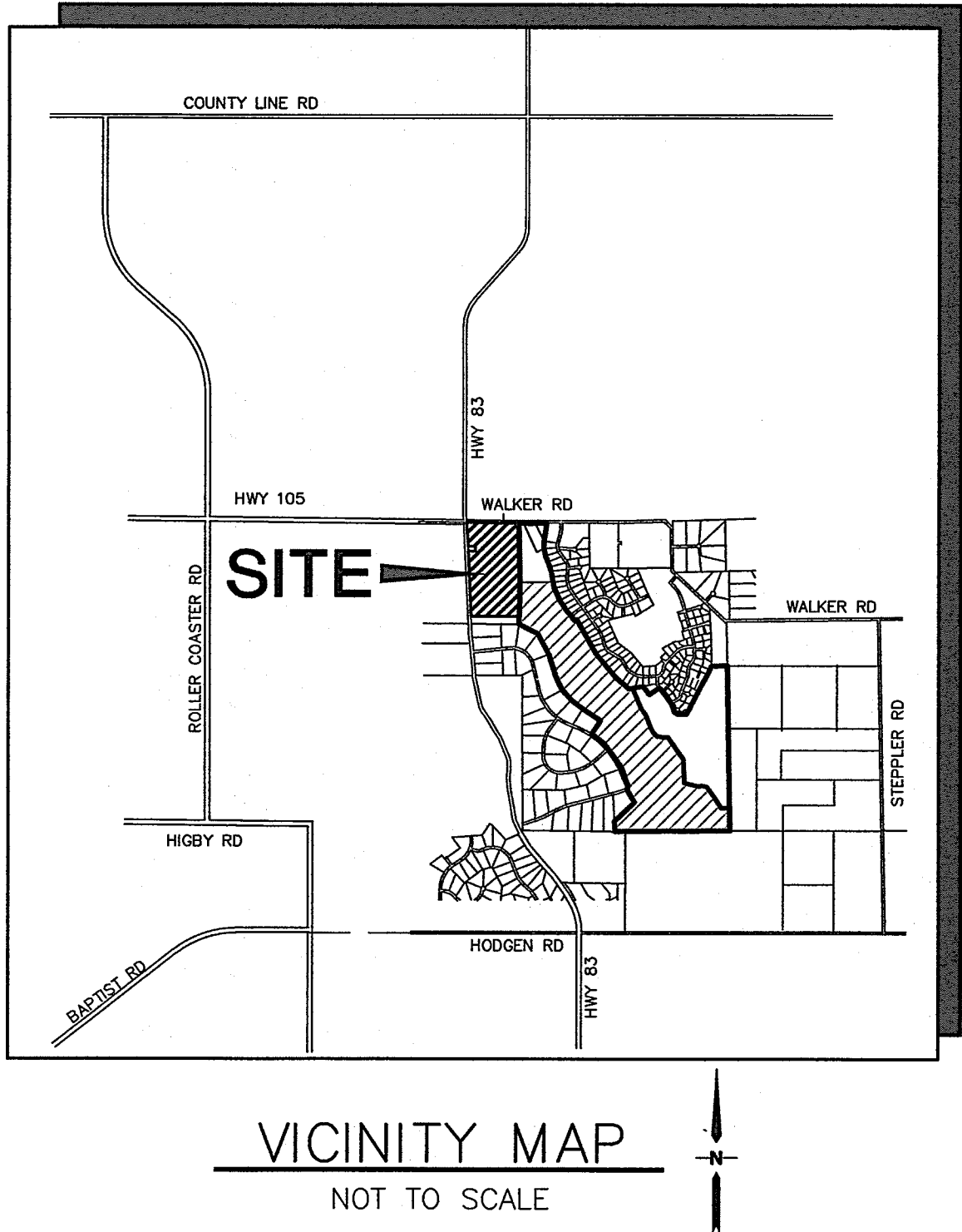


MONUMENT ACADEMY

FIGURE A1

JPS PROJ NO. 040201

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COUNTY GENERAL CONSTRUCTION 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 & 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 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 PCD 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.

PROJECT GENERAL NOTES:

1. STATIONING IS AT CENTERLINE UNLESS OTHERWISE NOTED. ALL ELEVATIONS ARE AT EDGE OF ASPHALT (EOA) UNLESS OTHERWISE NOTED. ALL DIMENSIONS ARE FROM EDGE OF ASPHALT TO EDGE OF ASPHALT UNLESS OTHERWISE NOTED.
2. PROPOSED CONTOURS SHOWN ARE TO FINISHED GRADE.
3. LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.
4. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.
5. MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.
6. REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 60 DAYS AFTER FINE GRADING IS COMPLETE.
7. EROSION CONTROL SHALL CONSIST OF SILT FENCE AND OTHER BMP'S AS SHOWN ON THE DRAWING, AND TOPSOIL WITH GRASS SEED, WHICH WILL BE WATERED UNTIL VEGETATION HAS BEEN REESTABLISHED.
8. 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.
9. 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.
10. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.
11. 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.
12. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE MATERIAL SHALL BE COMPACTED PER EL PASO COUNTY SPECIFICATIONS AND PROJECT GEOTECHNICAL REPORT.
13. ALL FINISHED GRADES SHALL HAVE A MINIMUM 1.0% SLOPE TO PROVIDE POSITIVE DRAINAGE.
14. IN CASE OF CONFLICT BETWEEN PROPOSED SLOPES AND PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN.
15. CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS PRIOR TO BEGINNING WORK.

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.

NO.	REVISION	BY	DATE
1	FOR PERMIT	JPS	4/01/19
2	COUNTY COMMENTS	JPS	4/29/19
3	COUNTY COMMENTS	JPS	6/20/19
4	COUNTY COMMENTS	JPS	7/26/19
5	EXTEND PINEHURST GRADING SOUTH TO FILING 4	JPS	9/25/19
6	ROUNDBOUT DESIGN	JPS	3/03/20
7	PH. 1B GEC PLANS	JPS	3/04/20
8	COUNTY COMMENTS	JPS	4/08/20
9	COUNTY COMMENTS	JPS	5/05/20
10	COUNTY COMMENTS	JPS	5/15/20

AGENCIES/CONTACTS

OWNER:	MONUMENT ACADEMY FOUNDATION 1150 VILLAGE RIDGE PT MONUMENT, CO 80132 MR. MARK McWILLIAMS (719) 481-1950	CIVIL ENGINEER:	JPS ENGINEERING, INC. 19 E. WILLAMETTE AVENUE COLORADO SPRINGS, CO 80903 MR. JOHN P. SCHWAB, P.E. (719) 477-9429	WATER/WASTEWATER:	WALDEN CORPORATION PO BOX 1870 MONUMENT, CO 80132 MR. MATT DUNSTON (719) 339-2410
ARCHITECT:	CRP ARCHITECTS 100 E. ST. VRAIN ST., STE. 300 COLORADO SPRINGS, CO 80903 MR. BRIAN RISLEY (719) 633-5901	LOCAL ROADS & DRAINAGE:	EL PASO COUNTY PCD 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 MR. JEFF RICE, P.E. (719) 520-6300/7877	GAS DEPARTMENT:	BLACK HILLS ENERGY MR. SEBASTIAN SCHWENDER (719) 399-3176
OWNER'S REP:	ANSER ADVISORY 1703 SAND LILY DRIVE GOLDEN, CO 80401 MR. KURT CONNOLLY (303) 526-7928	STATE HIGHWAY	COLORADO DEPARTMENT OF TRANSPORTATION REGION 2 5615 WILLS BLVD. PUEBLO, CO 81008 MR. ARTHUR GONZALES (719) 546-5732	ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908 MR. DAVE WALDNER (719) 495-2283
GENERAL CONTRACTOR:	JHL CONSTRUCTORS, INC. 7076 SOUTH ALTON WAY, BLDG. H CENTENNIAL, CO 80112 MS. AIMEE CLODE (303) 741-6116	FIRE DISTRICT	TRI-LAKES MONUMENT FIRE PROTECTION DISTRICT 16055 OLD FOREST POINT, STE. 1003 MONUMENT, CO 80332 MR. JAMEY BUMGARDNER, FIRE MARSHAL (719) 484-0911	TELEPHONE COMPANY:	CENTURY LINK COMMUNICATIONS (LOCATORS) (800) 922-1987 A.T. & T. (LOCATORS) (719) 635-3674

MONUMENT ACADEMY

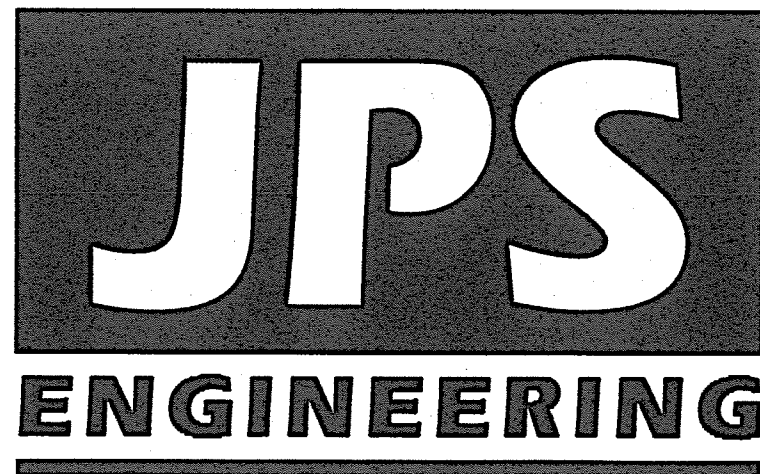
Phase 1B Grading & Erosion Control Plans

El Paso County, Colorado

PREPARED FOR:

Monument Academy
1150 Village Ridge Point
Monument, CO 80132

PREPARED BY:



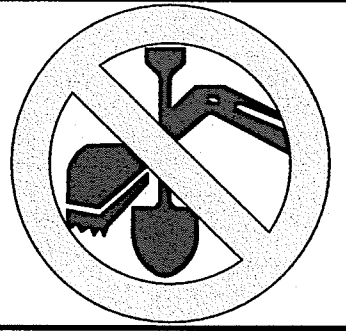
PREPARED BY:

19 East Willamette Avenue
Colorado Springs, Colorado 80903
May, 2020

GEC SHEET INDEX

C1.0	GEC PLAN TITLE SHEET
C2.0	PHASE 1B SITE GRADING & EROSION CONTROL PLAN
C2.1	NORTH SITE GRADING & EROSION CONTROL PLAN
C2.1-HW	HIGHWAY 105 GRADING & EROSION CONTROL PLAN
C2.2	SOUTH SITE GRADING & EROSION CONTROL PLAN
C2.3	SOUTH WATER LINE (PINEHURST CIRCLE) GRADING & EROSION CONTROL PLAN
C2.4	SOUTH WATER LINE (PINEHURST CIRCLE) GRADING & EROSION CONTROL PLAN
C2.5	SOUTH WATER LINE (PINEHURST CIRCLE) GRADING & EROSION CONTROL PLAN
C3.1	DETENTION POND M3 PLAN & DETAILS
C3.2	DETENTION POND C14 PLAN & DETAILS
C3.3	WATER QUALITY POND DETAILS
C3.4	RAIN GARDEN DETAILS
C4.1A	SITE GRADING & EROSION CONTROL NOTES & DETAILS
C4.1B	EROSION CONTROL DETAILS
C6.1	STORM SEWER PROFILES

CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.

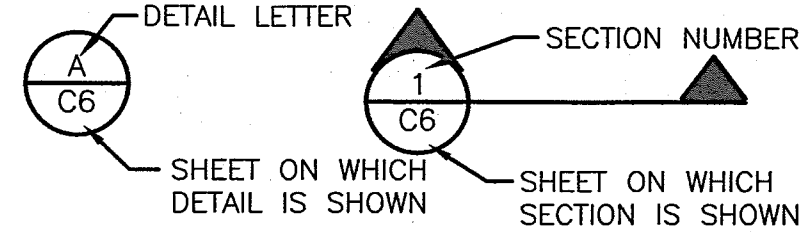


MONUMENT
ACADEMY
HIGH SCHOOL

FOR CONSTRUCTION

LEGEND:

---	NEW/EXISTING
---	SECTION LINE - NEW/EXISTING
---	EASEMENT LINE - NEW/EXISTING
---	CONTOUR - NEW/EXISTING
---	PROPERTY LINE - NEW/EXISTING
---	FENCE - NEW/EXISTING
---	OVERHEAD ELECTRIC LINE W/ POWER POLE - NEW/EXISTING
---	UNDERGROUND ELECTRIC LINE - NEW/EXISTING
---	UNDERGROUND ELECTRIC - NEW/EXISTING
---	TELEPHONE - NEW/EXISTING
---	GAS - NEW/EXISTING
---	WATER - NEW/EXISTING
X 55.5	PROPOSED SPOT ELEVATION/FLOWLINE
TW=53.0	TOP OF WALL ELEVATION
BW=50.0	BOTTOM OF WALL ELEVATION (FINISHED GRADE AT FACE OF WALL)



BENCHMARK:
BENCHMARK 4 BB RESET 1984 NAVD 88 DATUM ELEV.=7570.80
FOUND BRASS CAP IN CONCRETE INT HWY 83 & HODGEN RD.

BASIS OF BEARING:
COMMENCING AT THE SOUTHEAST CORNER OF SAID
E1/2 NW1/4, SAID POINT ALSO BEING THE SOUTHWEST CORNER
OF THE NORTHEAST ONE-QUARTER (NE1/4) OF SAID
SECTION 15, AS MONUMENTED BY A 1/2" REBAR (NO CAP), FROM
WHICH THE SOUTHWEST CORNER OF THE NORTHWEST
ONE-QUARTER (NW1/4) OF SAID SECTION 15, AS MONUMENTED
BY A REBAR AND 3-1/4" ALUMINUM CAP STAMPED
"BERGE-BREWER LS 9646" BEARS N88°08'01"W, A DISTANCE OF
2636.22 FEET AND IS THE BASIS OF BEARINGS USED HEREIN.

ENGINEER:

DESIGN 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 WAS PREPARED ACCORDING TO THE
CRITERIA ESTABLISHED BY THE COLORADO GRADING AND EROSION CONTROL
PLANS. I ACCEPT RESPONSIBILITY FOR ANY ERRORS OR OMISSIONS CAUSED BY NEGLIGENT ACTS,
ERRORS OR OMISSIONS ON MY PART IN PREPARING THIS PLAN.

JOHN P. SCHWAB, P.E. #29891

DATE

OWNER/DEVELOPER'S STATEMENT:

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

MONUMENT ACADEMY FOUNDATION
1150 VILLAGE RIDGE POINT
MONUMENT, CO 80132

DATE

WALDEN CORPORATION & WALDEN HOLDINGS 1, LLC
BOX 1870
MONUMENT, CO 80130

EL PASO COUNTY (STANDALONE GEC PLAN):

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
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

PCD PROJECT NO. CDR-20-001
PCD PROJECT NO. PPR-19-009

CRP ARCHITECTS AIA
100 E. St. Vrain, Suite 300
Colorado Springs, Colorado 80903

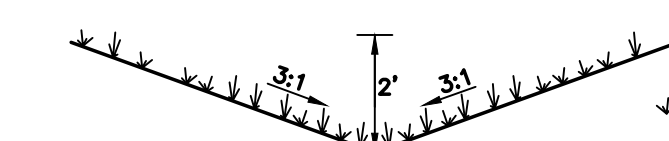
GEC PLAN TITLE SHEET

NORTH
DATE: 8/01/19
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 5/15/20

C1.0



VICINITY MAP
NOT TO SCALE



TYPICAL SWALE SECTION
NTS

KEYED NOTES:

- CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA - MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.
- PREPARE AND COMPACT BUILDING FOUNDATION & SLABS PER PROJECT GEOTECHNICAL REPORT
- HEAVY DUTY PAVEMENT: (FUTURE)
5" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- LIGHT DUTY PAVEMENT: (FUTURE)
4" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- STAGING & BUILDING MATERIAL STORAGE AREA
- TOPSOIL STOCKPILE AREA

ESTIMATED EARTHWORK QUANTITY:

UNCLASSIFIED EXCAVATION (TOTAL CUT) = 102,772 CY
* EMBANKMENT FILL = 101,244 CY
NET (CUT) = 1,528 CY
* (ASSUMES 15% COMPACTION FACTOR)

NOTE: THIS ESTIMATE IS PROVIDED FOR INFORMATION ONLY, REPRESENTING THE CALCULATED BULK EARTHWORK VOLUME TO FINISHED GRADE, EXCLUDING ANY ADJUSTMENT FOR PAVEMENT DEPTHS, ETC. CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF EARTHWORK QUANTITIES AS BASIS FOR BID PRICING AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

LEGEND

- PROPERTY LINE
- EASEMENT
- 6520 PROPOSED CONTOUR
- 6520 EXISTING CONTOUR
- 99.0 PROPOSED SPOT ELEVATION (FLOWLINE)
- 99.0 EXIST. SPOT ELEVATION
- EXISTING VEGETATION
- CUT/FILL DEMARCATION LINE
- LIMITS OF CONSTRUCTION/DISTURBANCE
- SILT FENCE (SF)
- RR RIPRAP PAD
- VTC VEHICLE TRACKING PAD
- SM SEED & MULCH
- IP INLET PROTECTION
- SB SEDIMENT BASIN
- GB GRASS BUFFER
- EDB EXTENDED DETENTION BASIN
- CWA CONCRETE WASHOUT AREA
- RG RAIN GARDEN
- SSA STABILIZED STAGING AREA

NOTES:

- ALL EROSION CONTROL MEASURES SHALL CONFORM TO CITY OF COLORADO SPRINGS DRAINAGE CRITERIA MANUAL, VOLUME 2 REQUIREMENTS.
- CONTRACTOR SHALL OBTAIN A "WORK IN THE ROW PERMIT" FOR ALL WORK IN COUNTY RIGHT-OF-WAY.

BENCHMARK:
BENCHMARK 4 BB RESET 1984 NAVD 88 DATUM
ELEV.=7570.80 FOUND BRASS CAP IN CONCRETE
INT HWY 83 & HODGEN RD.

NO.	REVISION	BY	DATE
1	COUNTY COMMENTS	JPS	6/20/19
2	COUNTY COMMENTS	JPS	8/15/19
3	ROUNDABOUT REVISION	JPS	10/09/19
4	PH. 1B GEC	JPS	3/04/20
5	COUNTY COMMENTS	JPS	4/08/20
6	COUNTY COMMENTS	JPS	5/05/20
7	COUNTY COMMENTS	JPS	5/15/20

PARCEL #61000-00-481
KANG, DONG WON
30.0 AC.

PARCEL #61000-00-192
STALEY TRUST
20.78 AC.

PARCEL #61100-01-011
THOMAS, ANNETTE
5.3 AC.

PARCEL
#61000-00-513
PAULSON, KAREN
39.85 AC.

AT&T
PARCEL

PARCEL
#61150-00-005
WALDEN
CORPORATION
20.28 AC.

NOTE: PHASE 1 SITEWORK
INCLUDES ALL SITE
GRADING AND STORM
DRAINAGE FACILITIES

ULTIMATE MA PARCEL
BOUNDARY
(LIMITS OF JHL CONTRACT
SITEWORK)

PARCEL
#61230-01-023
WALDEN
HOLDINGS I, LLC
134.05 AC.

PARCEL
#61000-00-489
RAEL, STEVE
40.2 AC.

PARCEL
#61000-00-245
WALDEN
CORPORATION
64.1 AC.

GRADING & EROSION
CONTROL BY MA
INFRASTRUCTURE, LLC

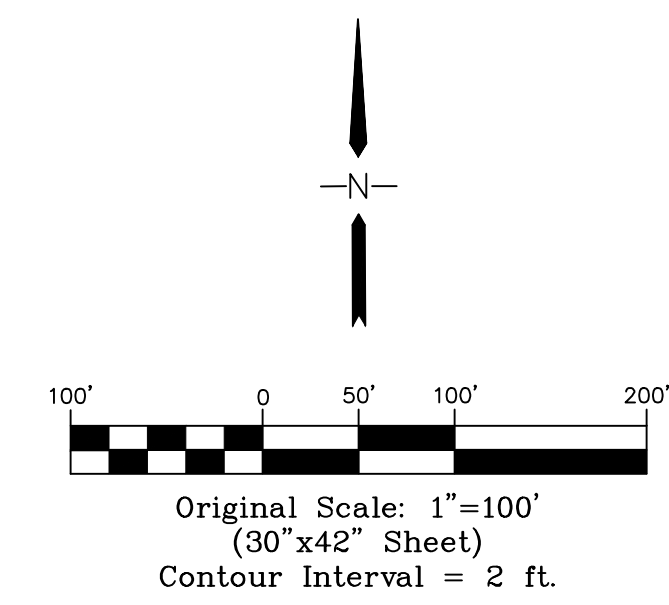
VACANT
UNPLATTED
ZONED RR-5

PARCEL
#61000-00-112
AMANN, RANDY
5.95 AC.

NOTE: CONTRACTOR SHALL IDENTIFY CONSTRUCTION TRAILER &
STAGING AREA LOCATIONS ON FIELD SET OF GEC/SWMP PLANS

MONUMENT ACADEMY HIGH SCHOOL

FOR CONSTRUCTION



NOTE: EXISTING SITE VEGETATION CONSISTS OF NATIVE MEADOW GRASSES
WITH A DENSITY OF APPROXIMATELY 70% BASED ON VISUAL
OBSERVATION.

CONTROL MEASURE/BMP PHASING PLAN:

INITIAL CONTROL MEASURES:

- VTC AT SITE ACCESS
- SILT FENCE ALONG DOWNSTREAM
GRADING LIMITS

INTERIM CONTROL MEASURES:

- STRAW BALES/SCL CHECK DAMS

FINAL CONTROL MEASURES:

- RIPRAP APRONS
- PERMANENT DETENTION AND/OR
WATER QUALITY FACILITIES
- SEEDING AND LANDSCAPING

NOTE: NO DEDICATED ASPHALT/CONCRETE
BATCH PLANTS ARE PROPOSED

NON-STRUCTURAL CONTROL MEASURES:

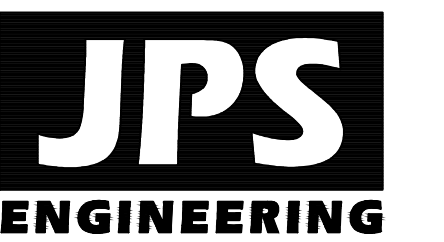
LOCATIONS:

- SCHOOL SITE
- ACCESS ROADS
- STAGING AREAS

CONTROL MEASURES:

- PROPER HOUSEKEEPING MEASURES
- PROPER SPILL CONTAINMENT PROCEDURES

NOTE: CONTRACTOR SHALL PROVIDE
APPROPRIATE METHOD OF PROTECTION OF
AREAS OUTSIDE OF THIS SITE CONSTRUCTION
BOUNDARY (SUCH AS CONSTRUCTION FENCE,
FLAGGING, BARRICADES, ETC.)



19 E. Willamette Ave.
Colorado Springs, CO
80903

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

OWNERSHIP OF INSTRUMENTS OF SERVICE:

ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD
DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS
PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF
SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN
PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL
COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS
INCLUDING THE COPYRIGHT THERE TO.



CRP ARCHITECTS AIA
100 E. St. Vrain, Suite 300
Colorado Springs, Colorado 80903

PH 1B SITE GRADING &
EROSION CONTROL PLAN

SCALE: 1"=100'

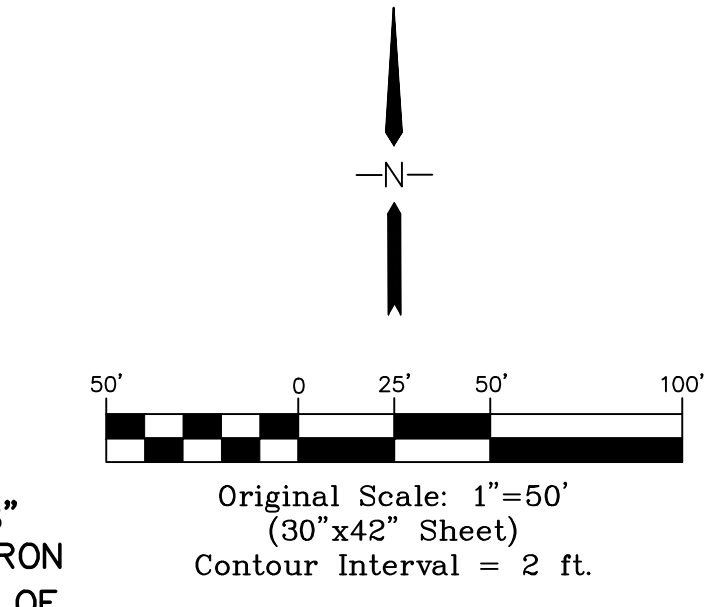
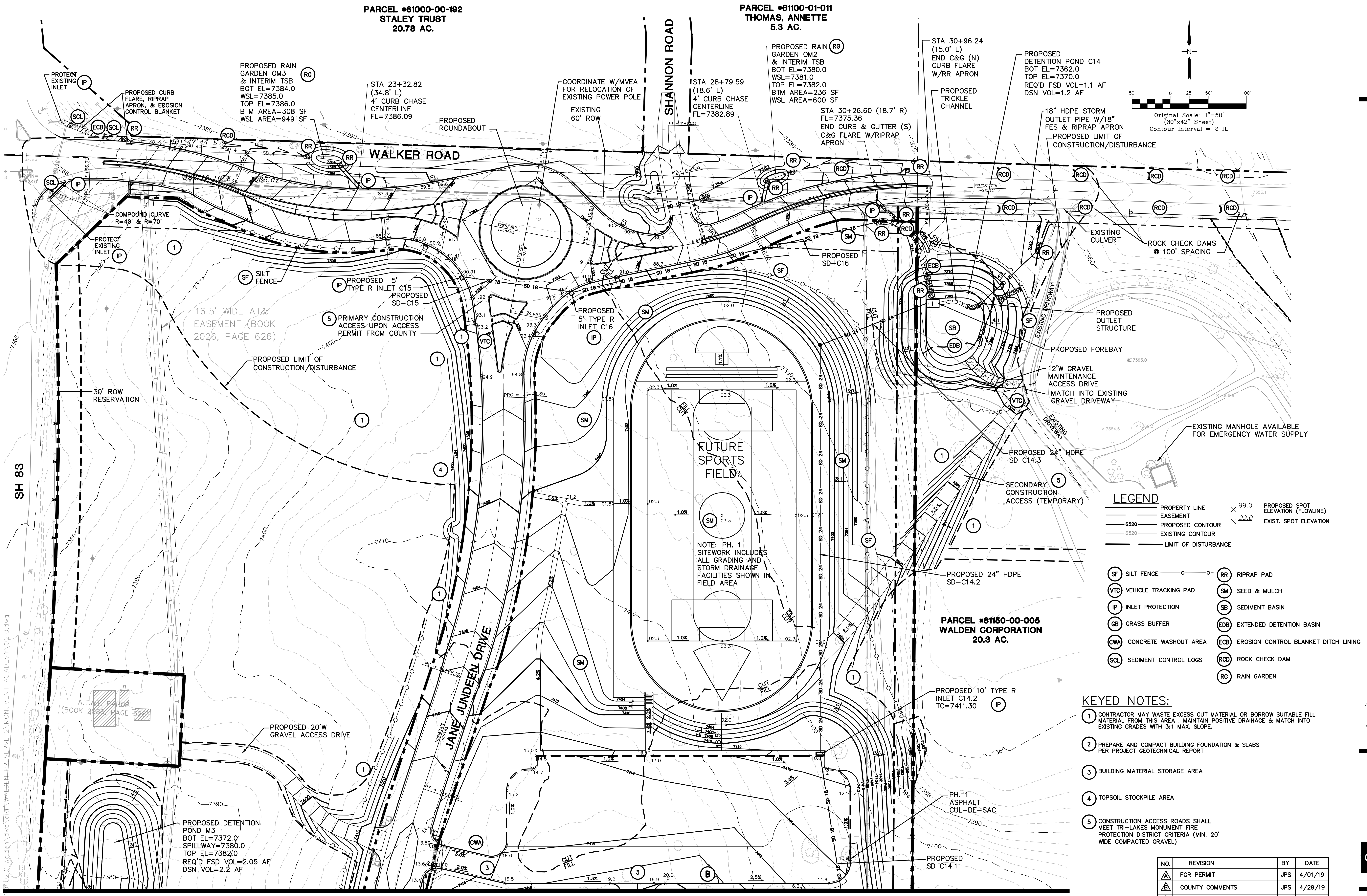
NORTH	DATE:	12/20/18
	DRAWN BY:	BJJ
	CHECKED BY:	JPS
	REVISED:	5/15/20

C2.0

PCD PROJECT NO. GDR-20-001

MONUMENT
ACADEMY
HIGH SCHOOL

FOR CONSTRUCTION



LEGEND

—	PROPERTY LINE	X 99.0	PROPOSED SPOT ELEVATION (FLOWLINE)
- - -	EASEMENT	X 99.0	EXIST. SPOT ELEVATION
- - -	PROPOSED CONTOUR		
- - -	EXISTING CONTOUR		
- - -	LIMIT OF DISTURBANCE		

(SF)	SILT FENCE	(RR)	RIPRAP PAD
(VTC)	VEHICLE TRACKING PAD	(SM)	SEED & MULCH
(IP)	INLET PROTECTION	(SB)	SEDIMENT BASIN
(GB)	GRASS BUFFER	(EDB)	EXTENDED DETENTION BASIN
(CWA)	CONCRETE WASHOUT AREA	(ECB)	EROSION CONTROL BLANKET DITCH LINING
(SCL)	SEDIMENT CONTROL LOGS	(RCD)	ROCK CHECK DAM
		(RG)	RAIN GARDEN

- KEYED NOTES:**
- CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA. MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.
 - PREPARE AND COMPACT BUILDING FOUNDATION & SLABS PER PROJECT GEOTECHNICAL REPORT
 - BUILDING MATERIAL STORAGE AREA
 - TOPSOIL STOCKPILE AREA
 - CONSTRUCTION ACCESS ROADS SHALL MEET TRI-LAKES MONUMENT FIRE PROTECTION DISTRICT CRITERIA (MIN. 20' WIDE COMPACTED GRAVEL)

NO.	REVISION	BY	DATE
1	FOR PERMIT	JPS	4/01/19
2	COUNTY COMMENTS	JPS	4/29/19
3	COUNTY COMMENTS	JPS	6/20/19
4	COUNTY COMMENTS	JPS	7/23/19
5	ROUNDABOUT REVISION	JPS	12/19/19
6	PH. 1B GEC PLANS	JPS	3/04/20
7	COUNTY COMMENTS	JPS	4/08/20
8	COUNTY COMMENTS	JPS	5/15/20

JPS ENGINEERING

19 E. Willamette Ave.
Colorado Springs, CO 80903

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

OWNERSHIP OF INSTRUMENTS OF SERVICE:
ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY DESIGN PROFESSIONAL AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF THE DESIGN PROFESSIONAL. THE DESIGN PROFESSIONAL SHALL RETAIN ALL COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THERE TO.

CRP ARCHITECTS AIA
100 E. St. Vrain, Suite 300
Colorado Springs, Colorado 80903

NORTH SITE GRADING & EROSION CONTROL PLAN

SCALE : 1"=50'

NORTH

DATE: 12/20/18
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 5/15/20

PCD PROJECT NO. CDR-20-001

C2.1

MONUMENT
ACADEMY
HIGH SCHOOL

FOR CONSTRUCTION



JPS
ENGINEERING

19 E. Willamette Ave.
Colorado Springs, CO
80903

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CRP ARCHITECTS AIA
100 E. St. Vrain, Suite 300
Colorado Springs, Colorado 80903

**HIGHWAY 105 GRADING &
EROSION CONTROL PLAN**

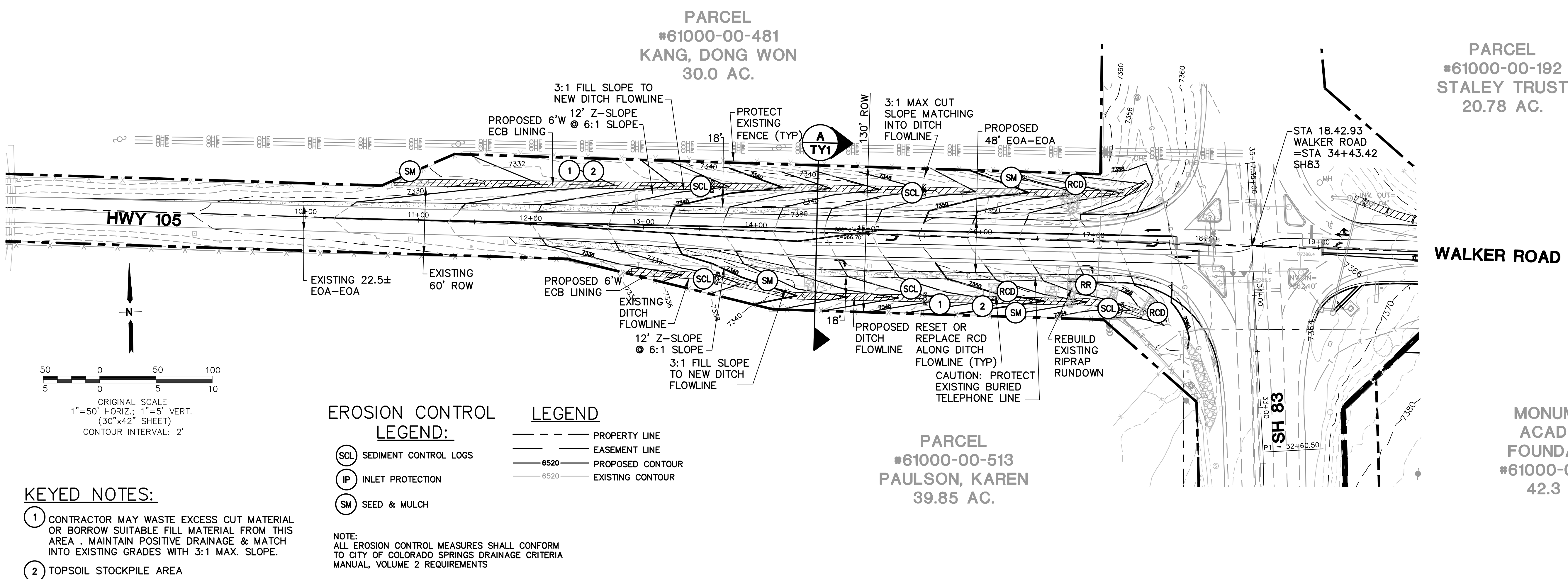
SCALE : AS SHOWN

NORTH
DATE: 4/03/20
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 5/05/20

NO.	REVISION	BY	DATE
1	FOR PERMIT	JPS	4/17/19
2	COUNTY COMMENTS	JPS	4/29/19
3	COUNTY COMMENTS	JPS	6/20/19
4	COUNTY COMMENTS	JPS	7/11/19
5	COUNTY COMMENTS	JPS	4/08/20
6	COUNTY COMMENTS	JPS	5/05/20

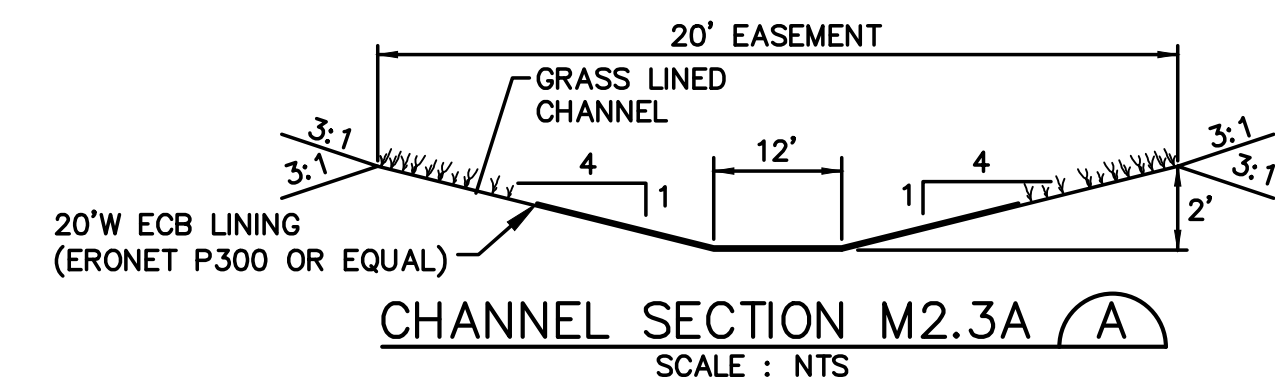
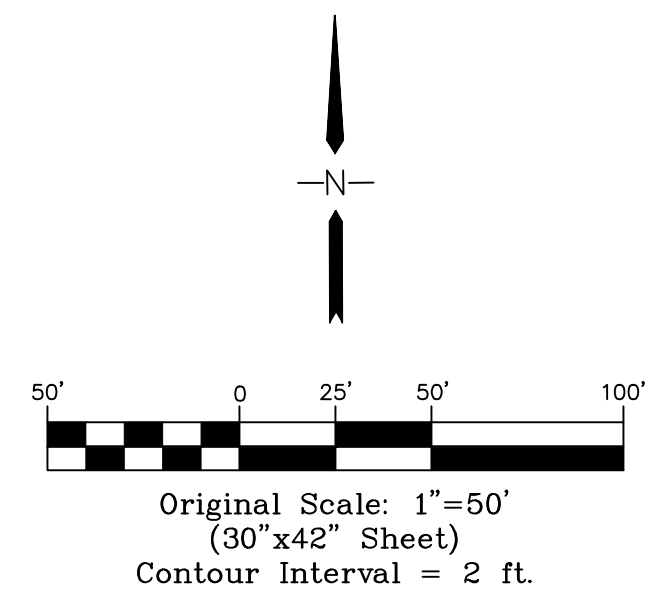
PCD PROJECT NO. CDR-20-001

C2.1-HW



MONUMENT
ACADEMY
HIGH SCHOOL

FOR CONSTRUCTION



LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- EASEMENT
- 6520 PROPOSED CONTOUR
- 6520 EXISTING CONTOUR
- 99.0 PROPOSED SPOT ELEVATION (FLOWLINE)
- 99.0 EXIST. SPOT ELEVATION
- SF SILT FENCE
- VTC VEHICLE TRACKING PAD
- IP INLET PROTECTION
- GB GRASS BUFFER
- CWA CONCRETE WASHOUT AREA
- RR RIPRAP PAD
- SM SEED & MULCH
- SB SEDIMENT BASIN
- EDB EXTENDED DETENTION BASIN
- ECB EROSION CONTROL BLANKET DITCH LINING (ERONET P300 OR EQUAL)

NOTE:
ALL EROSION CONTROL MEASURES SHALL CONFORM TO CITY OF COLORADO SPRINGS DRAINAGE CRITERIA MANUAL, VOLUME 2 REQUIREMENTS.

KEYED NOTES:

- 1 CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA - MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.
- 2 PREPARE AND COMPACT BUILDING FOUNDATION & SLABS PER PROJECT GEOTECHNICAL REPORT
- 3 HEAVY DUTY PAVEMENT:
5" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- 4 LIGHT DUTY PAVEMENT:
4" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- 5 2' CURB CHASE
- 6 BUILDING MATERIAL STORAGE AREA
- 7 TOPSOIL STOCKPILE AREA

NO.	REVISION	BY	DATE
1	FOR PERMIT	JPS	4/01/19
2	COUNTY COMMENTS	JPS	4/29/19
3	COUNTY COMMENTS	JPS	6/20/19
4	COUNTY COMMENTS	JPS	8/23/19
5	ROUNDABOUT REVISIONS	JPS	11/29/19
6	COUNTY COMMENTS	JPS	2/27/20
7	PH. 1B GEC PLANS	JPS	3/04/20
8	COUNTY COMMENTS	JPS	4/08/20
9	COUNTY COMMENTS	JPS	5/05/20
10	COUNTY COMMENTS	JPS	5/15/20

BENCHMARK:
BENCHMARK 4 BB RESET 1984 NAVD 88 DATUM
ELEV.=7570.80 FOUND BRASS CAP IN CONCRETE
INT HWY 83 & HODGEN RD.

PCD PROJECT NO. CDR-20-001

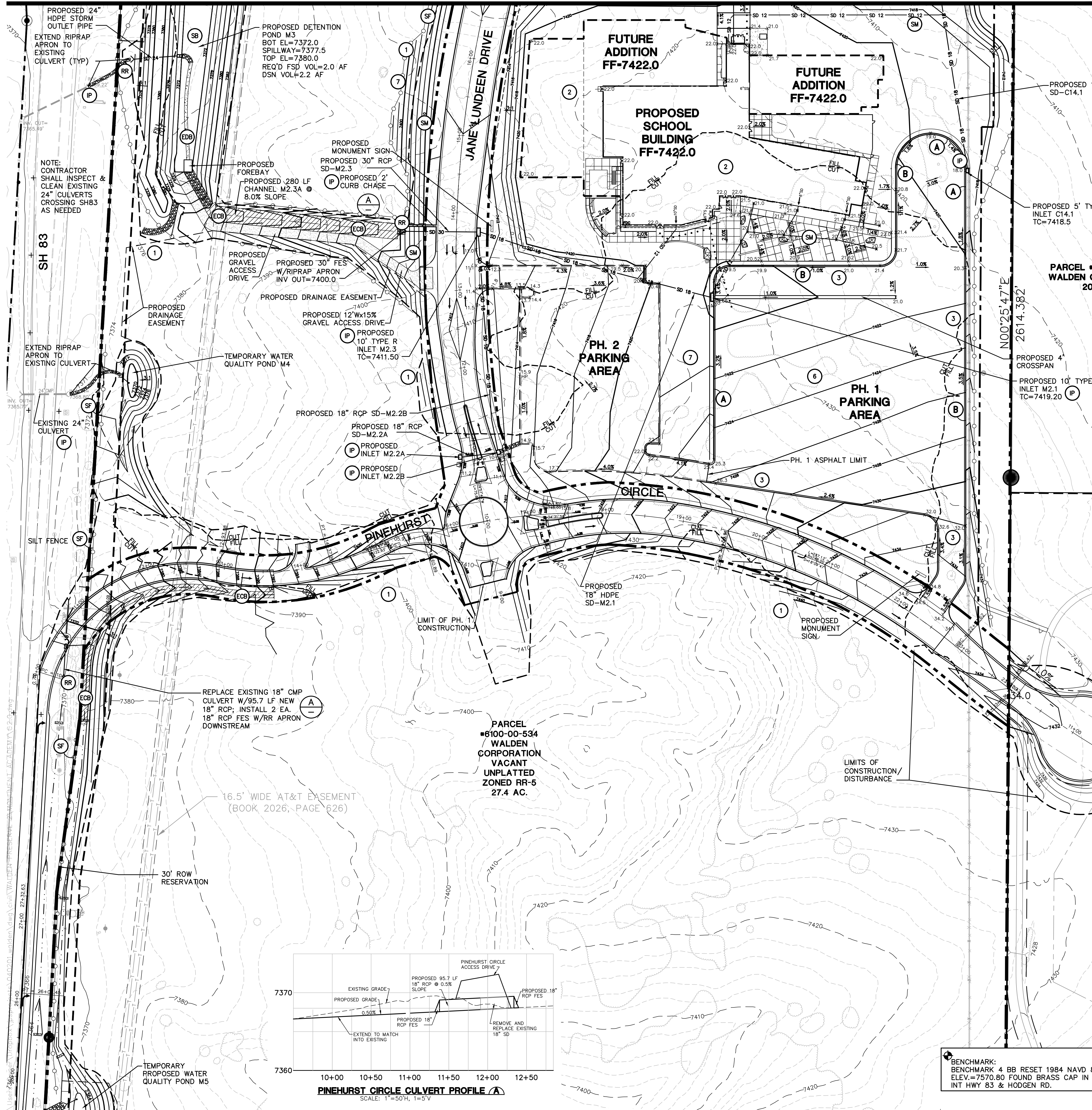
CRP ARCHITECTS AIA
100 E. St. Vrain, Suite 300
Colorado Springs, Colorado 80903

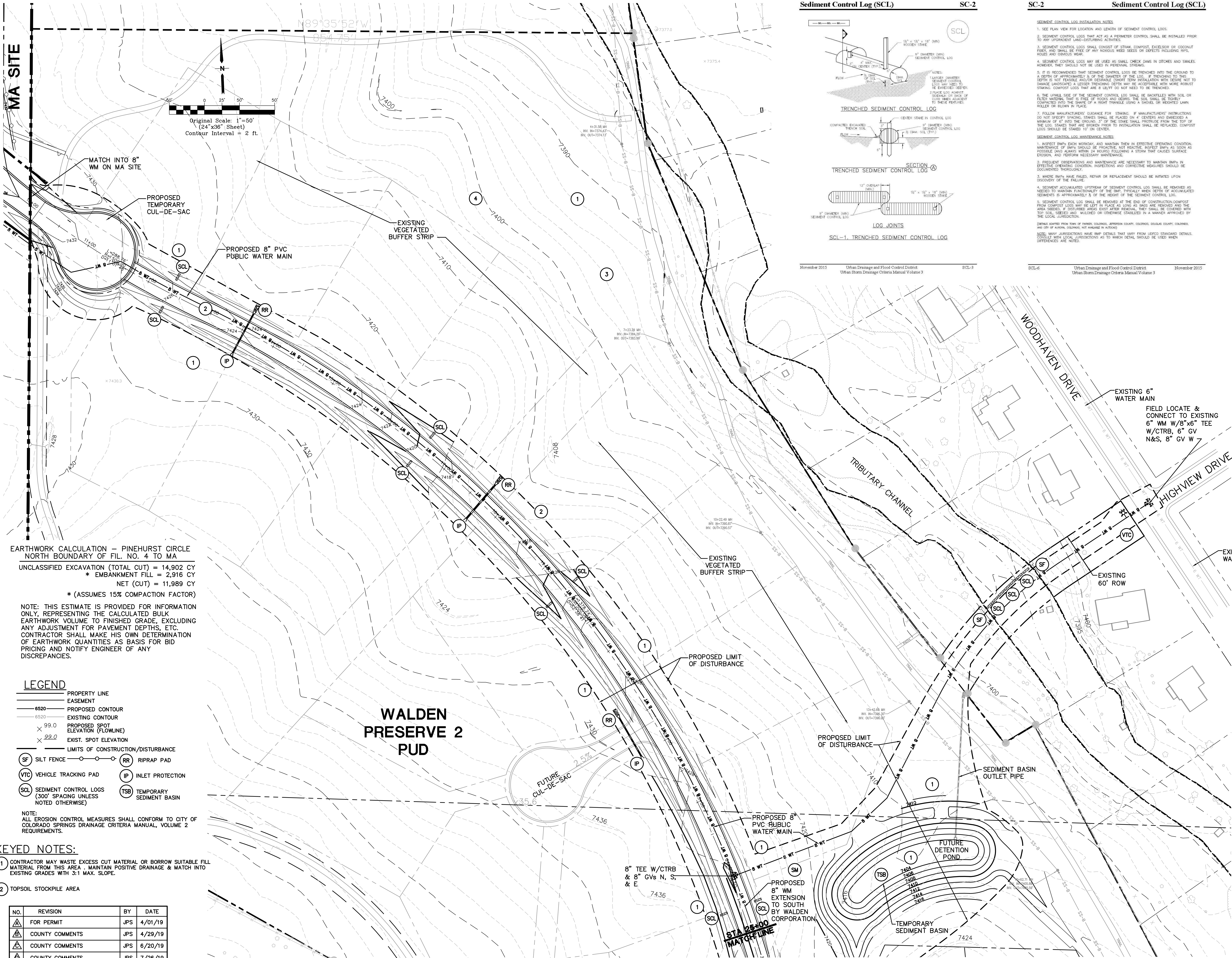
SOUTH SITE GRADING &
EROSION CONTROL PLAN

SCALE : 1"=50'

NORTH
DATE: 12/20/18
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 5/15/20

C2.2





EARTHWORK CALCULATION - PINEHURST CIRCLE
NORTH BOUNDARY OF FIL. NO. 4 TO MA

UNCLASSIFIED EXCAVATION (TOTAL CUT) = 14,902 CY
* EMBANKMENT FILL = 2,916 CY
NET (CUT) = 11,989 CY
* (ASSUMES 15% COMPACTION FACTOR)

NOTE: THIS ESTIMATE IS PROVIDED FOR INFORMATION ONLY, REPRESENTING THE CALCULATED BULK EARTHWORK VOLUME TO FINISHED GRADE, EXCLUDING ANY ADJUSTMENT FOR PAVEMENT DEPTHS, ETC. CONTRACTOR SHALL MAKE HIS OWN DETERMINATION OF EARTHWORK QUANTITIES AS BASIS FOR BID PRICING AND NOTIFY ENGINEER OF ANY DISCREPANCIES.

- LEGEND**
- PROPERTY LINE
 - EASEMENT
 - 6520 PROPOSED CONTOUR
 - 6520 EXISTING CONTOUR
 - 99.0 PROPOSED SPOT ELEVATION (FLOWLINE)
 - 99.0 EXIST. SPOT ELEVATION
 - LIMITS OF CONSTRUCTION/DISTURBANCE
 - SF SILT FENCE
 - VTC VEHICLE TRACKING PAD
 - SCL SEDIMENT CONTROL LOGS (300' SPACING UNLESS NOTED OTHERWISE)
 - RR RIPRAP PAD
 - IP INLET PROTECTION
 - TSB TEMPORARY SEDIMENT BASIN

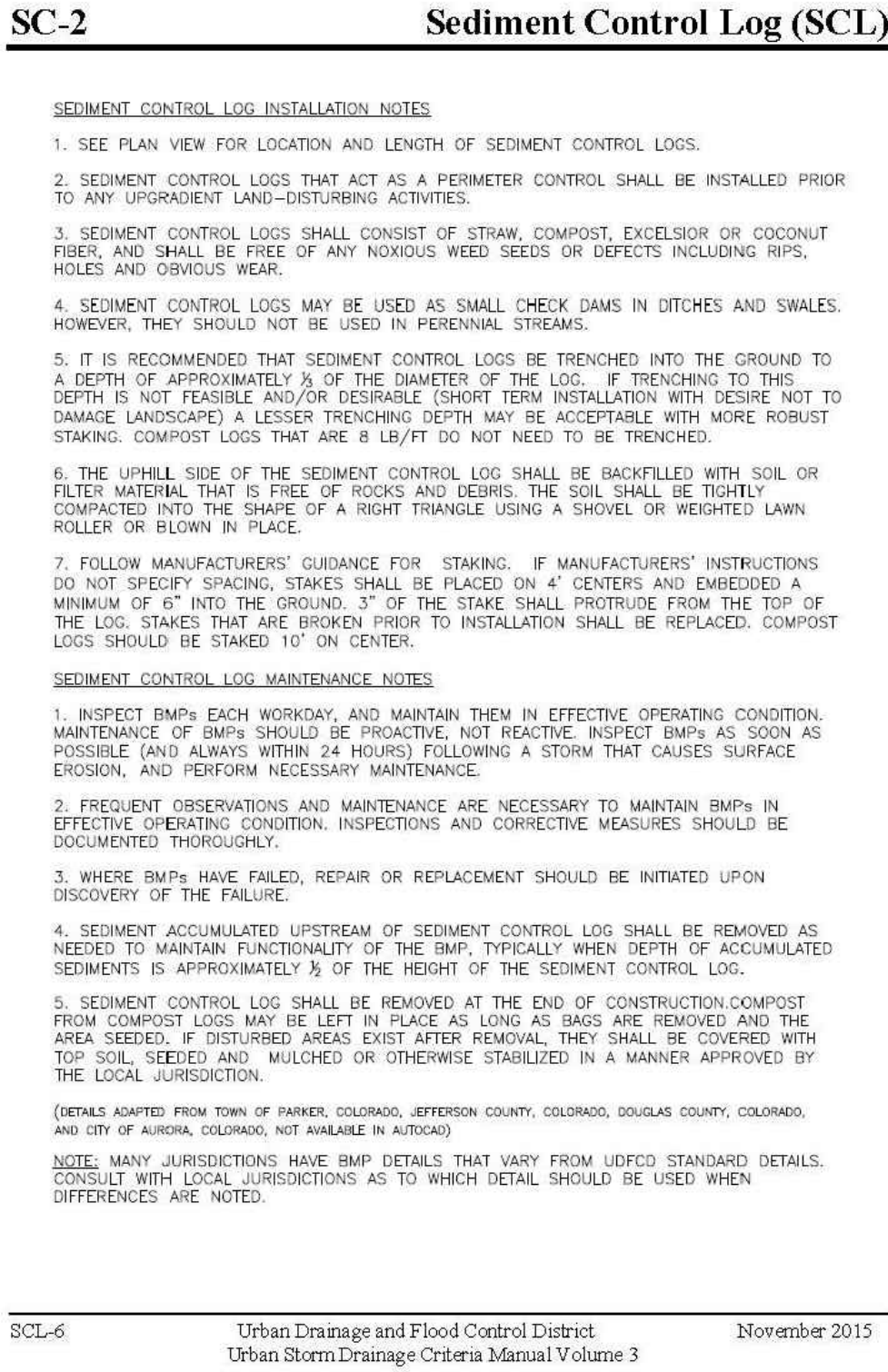
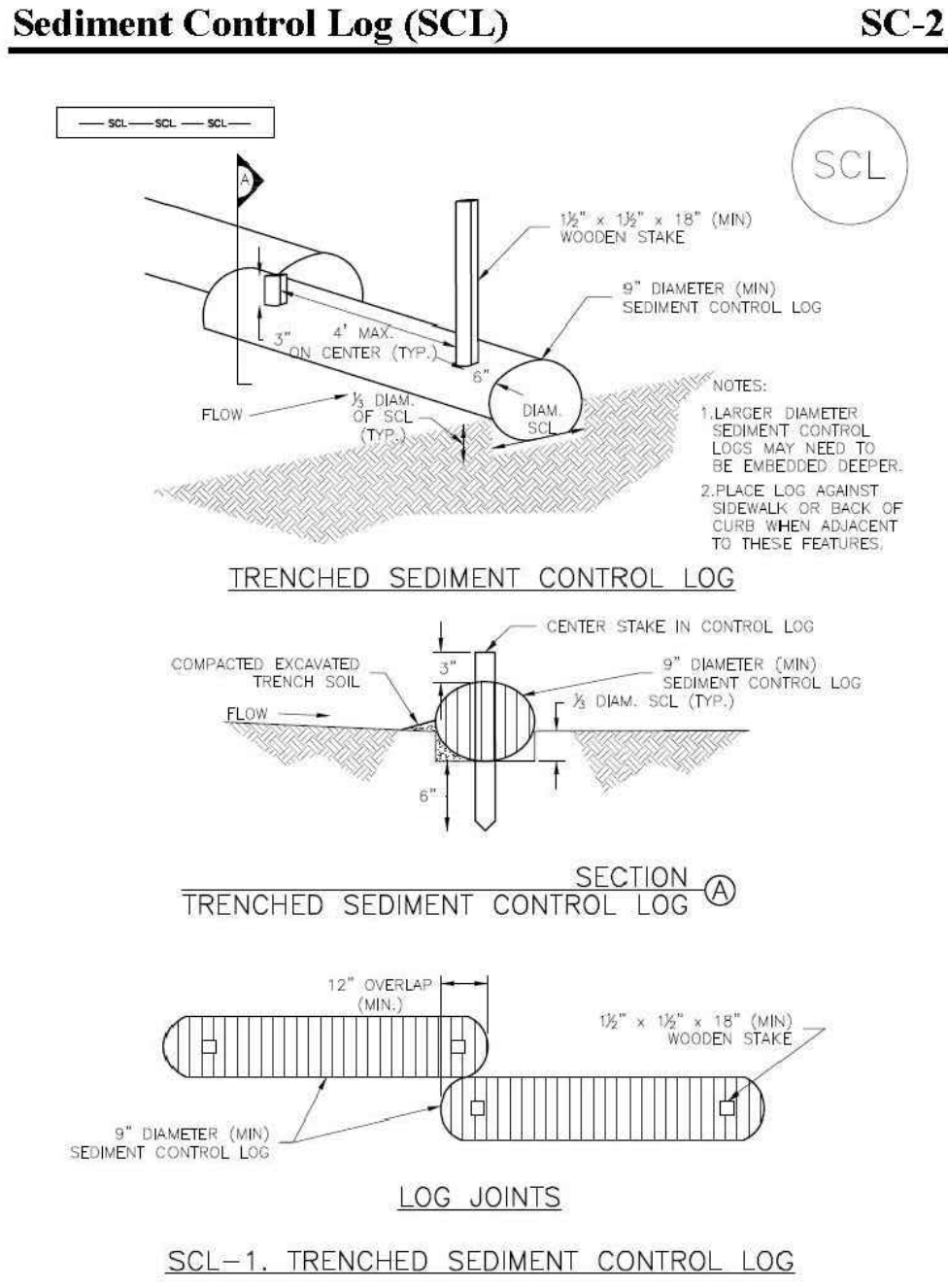
NOTE:
ALL EROSION CONTROL MEASURES SHALL CONFORM TO CITY OF COLORADO SPRINGS DRAINAGE CRITERIA MANUAL, VOLUME 2 REQUIREMENTS.

KEYED NOTES:

1 CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA. MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.

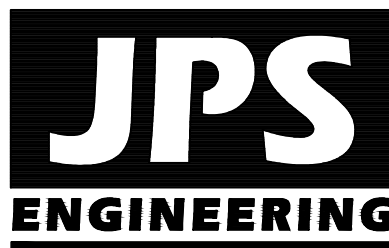
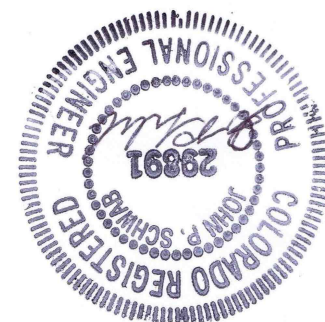
2 TOPSOIL STOCKPILE AREA

NO.	REVISION	BY	DATE
1	FOR PERMIT	JPS	4/01/19
2	COUNTY COMMENTS	JPS	4/29/19
3	COUNTY COMMENTS	JPS	6/20/19
4	COUNTY COMMENTS	JPS	7/26/19
5	REVISED LIMITS OF DISTURBANCE	JPS	1/16/20



**MONUMENT
ACADEMY
HIGH SCHOOL**

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**SOUTH WATER LINE/
PINEHURST CIRCLE GRADING
& EROSION CONTROL PLAN**

NORTH

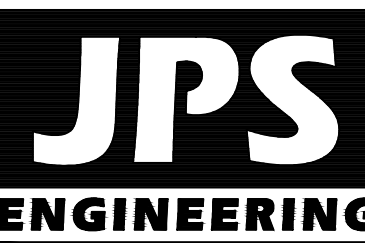
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CHECKED BY: JPS
REVISED: 1/30/20

PCD PROJECT NO. PPR-19-009

C2.3

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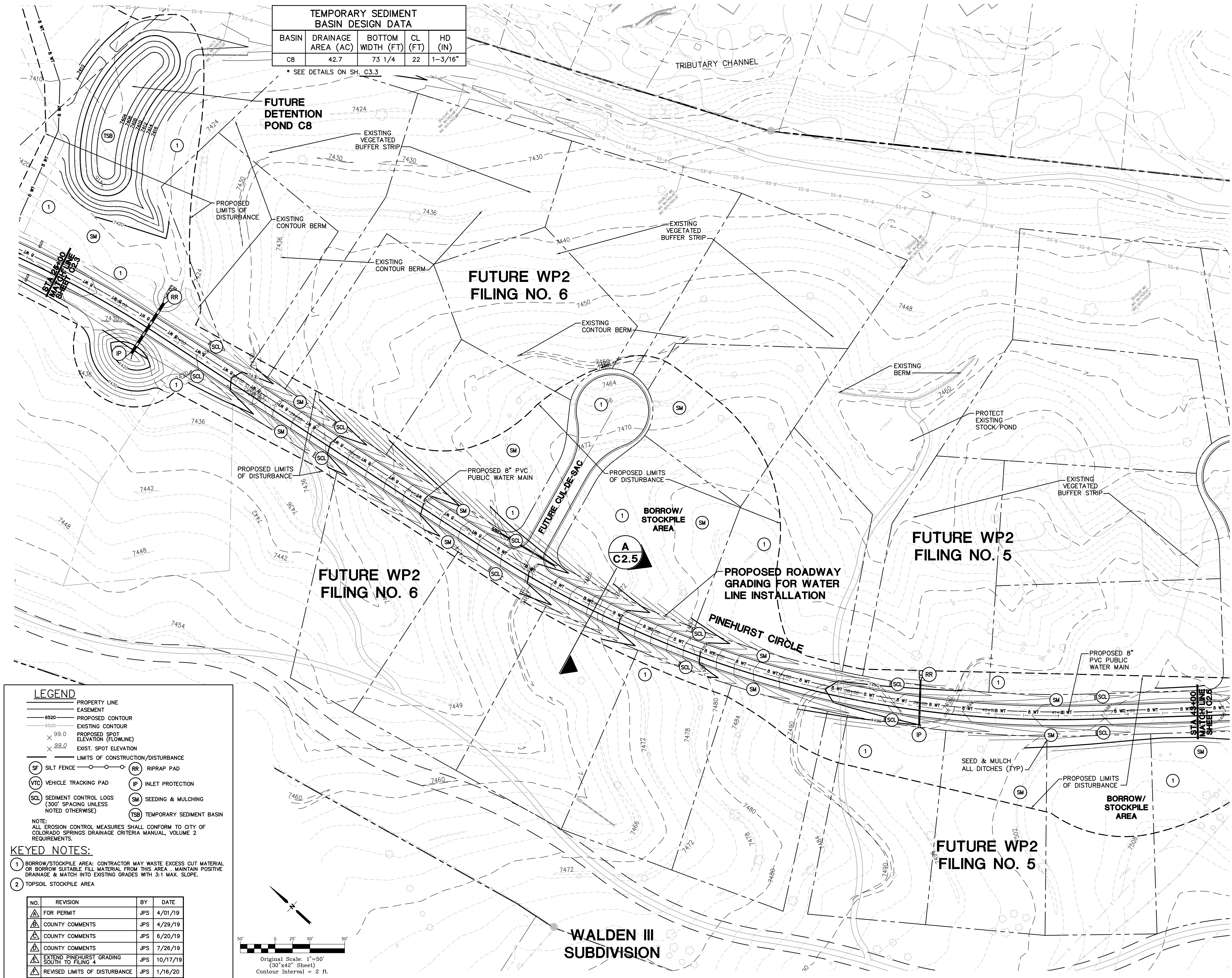
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SOUTH WATER LINE/
PINEHURST CIRCLE GRADING
& EROSION CONTROL PLAN

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REVISED: 1/30/20

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C2.4



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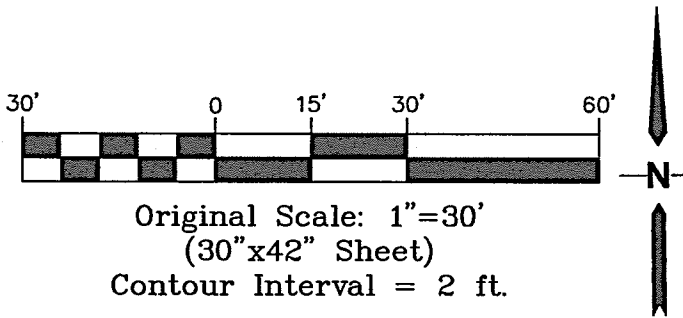
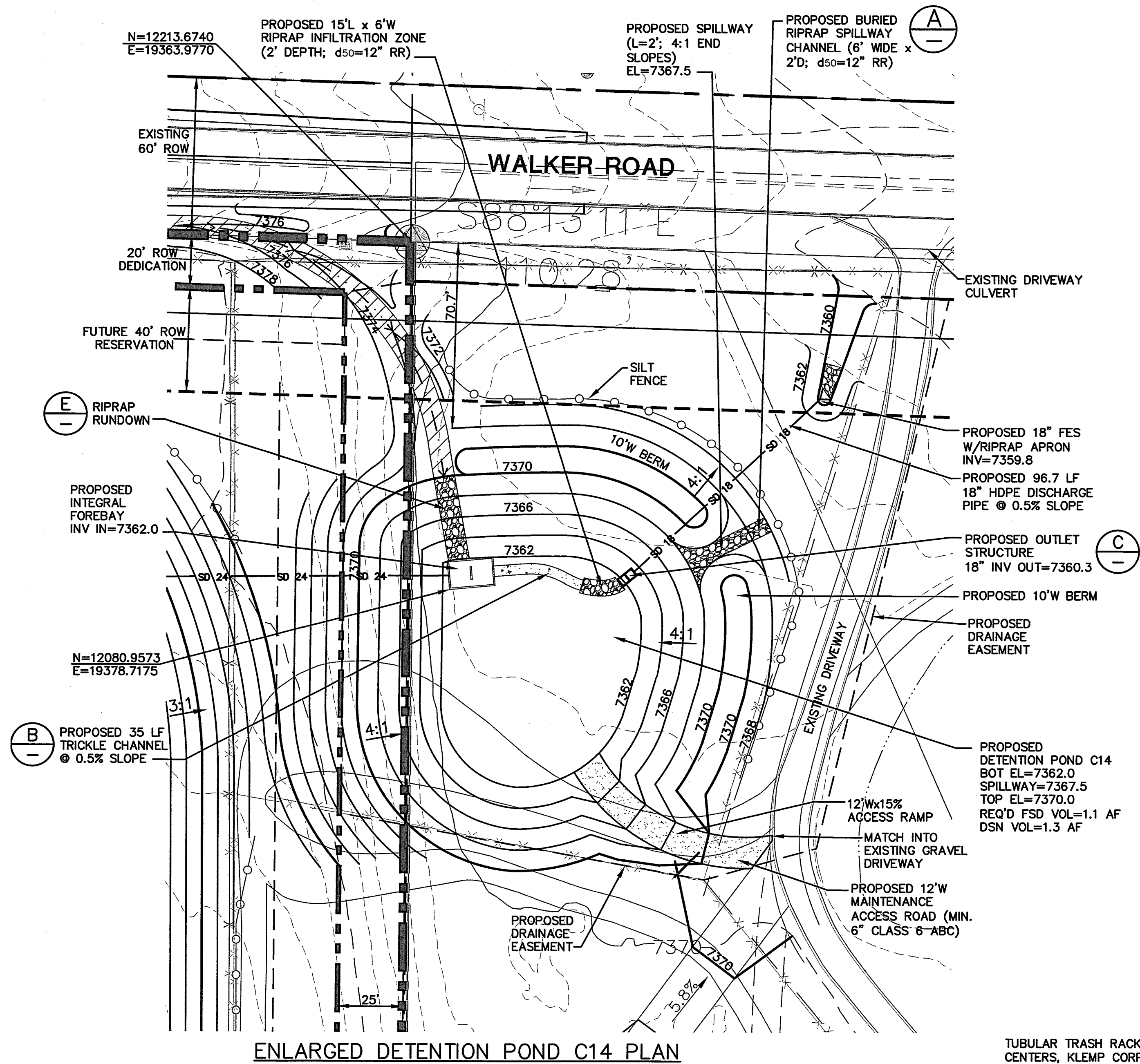


NOTE:
ALL EROSION CONTROL MEASURES SHALL CONFORM TO CITY OF
COLORADO SPRINGS DRAINAGE CRITERIA MANUAL, VOLUME 2
REQUIREMENTS.

FOR CONSTRUCTION

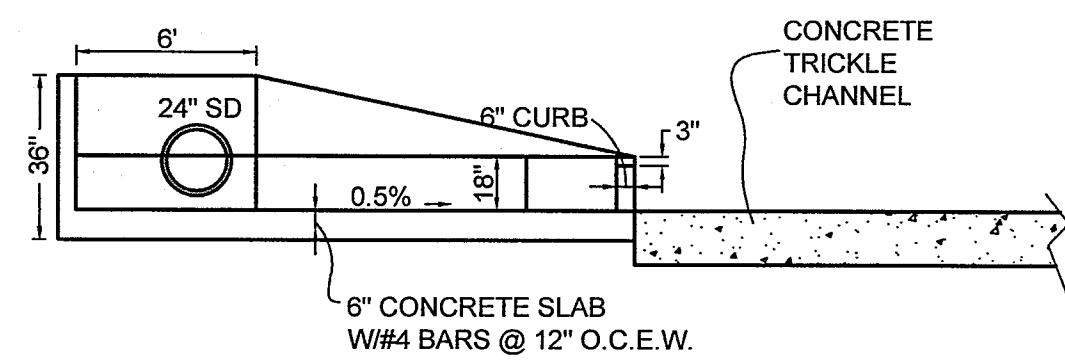
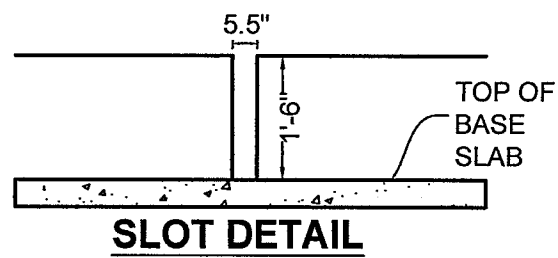
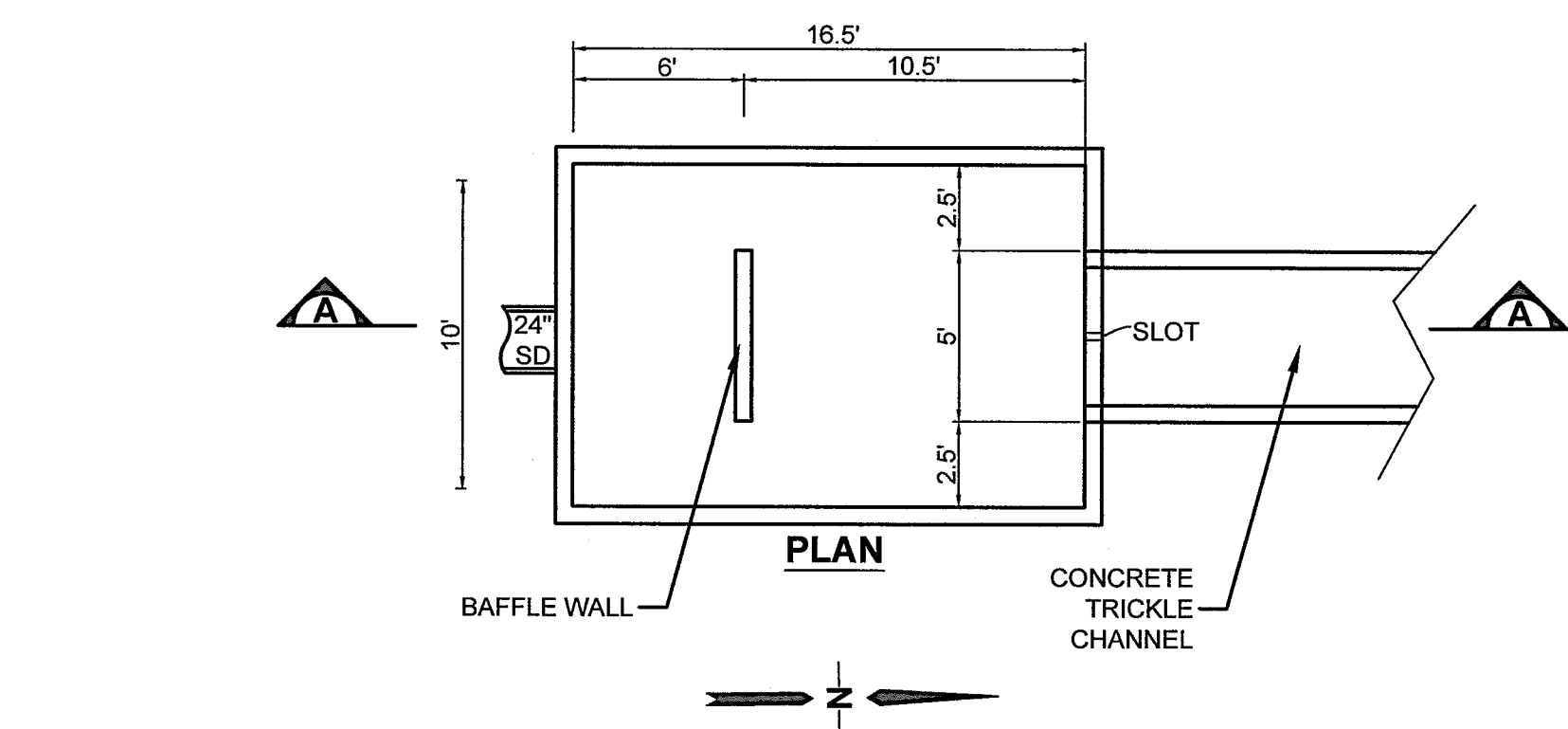
MONUMENT
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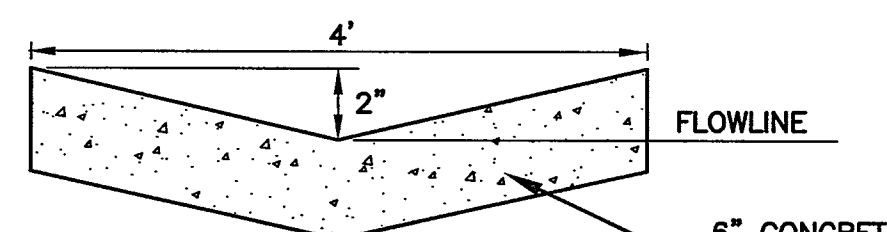


EMBANKMENT CONSTRUCTION NOTES:

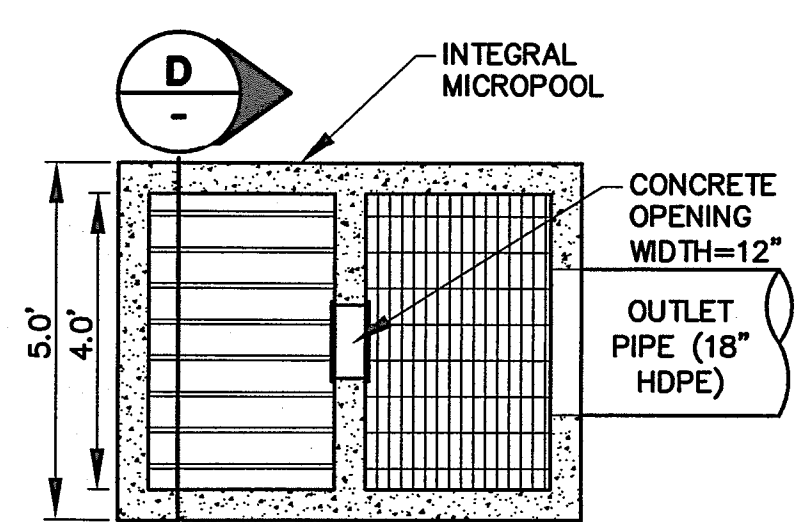
1. COMPLY WITH RECOMMENDATIONS IN PROJECT GEOTECHNICAL REPORT BY KUMAR.
2. PROVIDE EMBANKMENT KEY-IN BY OVER-EXCAVATING & RE-COMPACTING MIN. 2' DEPTH & 12' WIDTH AT BASE OF EMBANKMENT.
3. COMPACT FILL MATERIAL TO 100% MAX. STANDARD PROCTOR DENSITY.
4. PROVIDE CONCRETE COLLAR ON POND DISCHARGE PIPE AT CENTER OF EMBANKMENT (MIN. 8" BEYOND PIPE O.D.; MIN. 12" THICK)



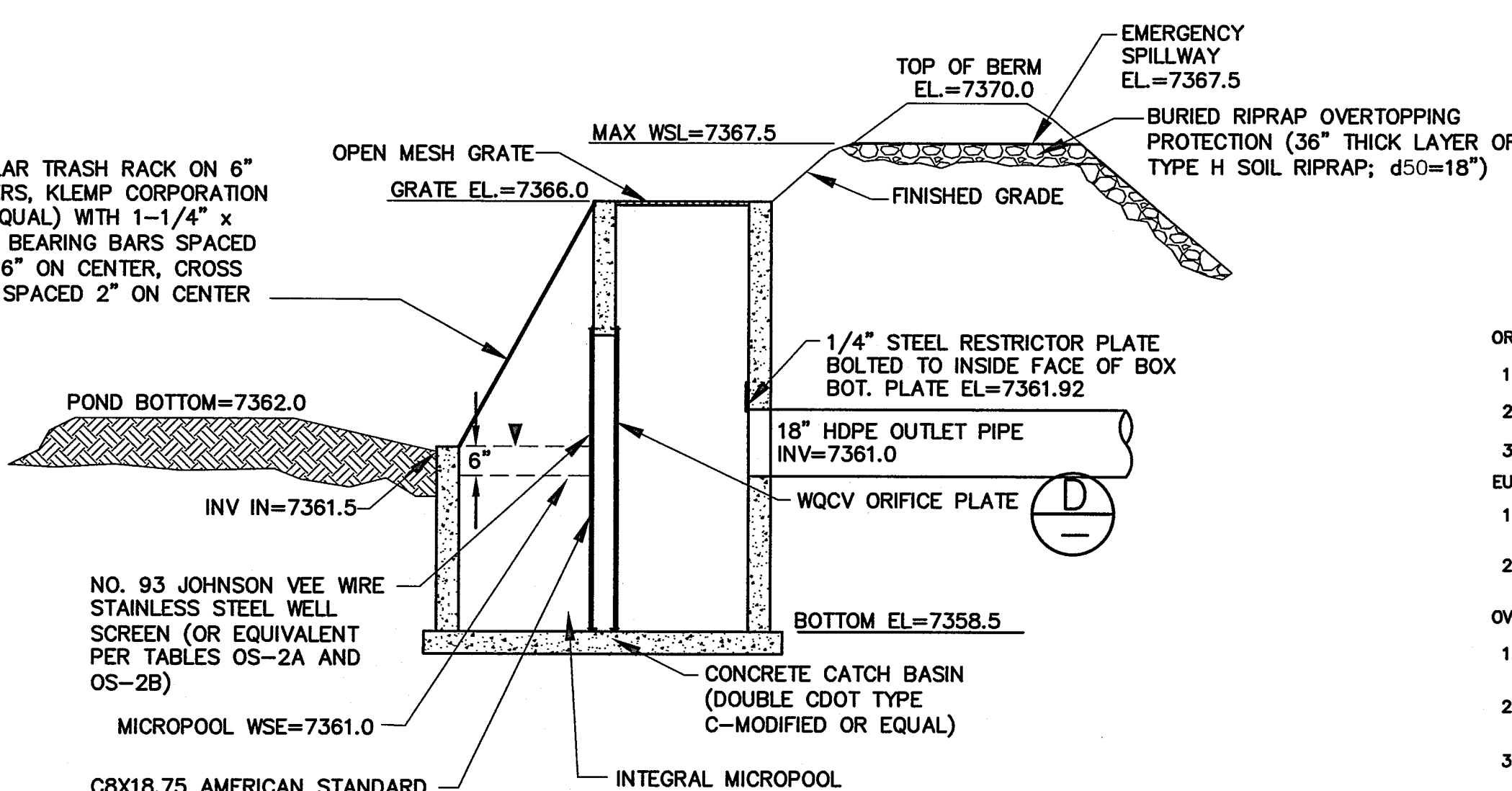
INTEGRAL FOREBAY DETAIL A
NOT TO SCALE



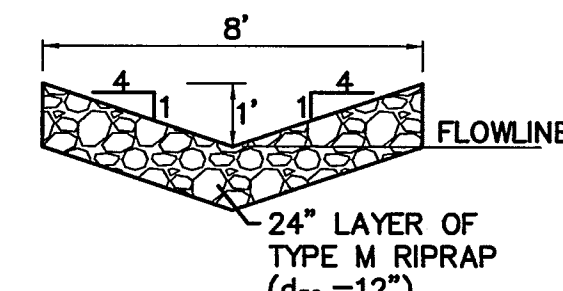
TYPICAL CONCRETE TRICKLE CHANNEL B
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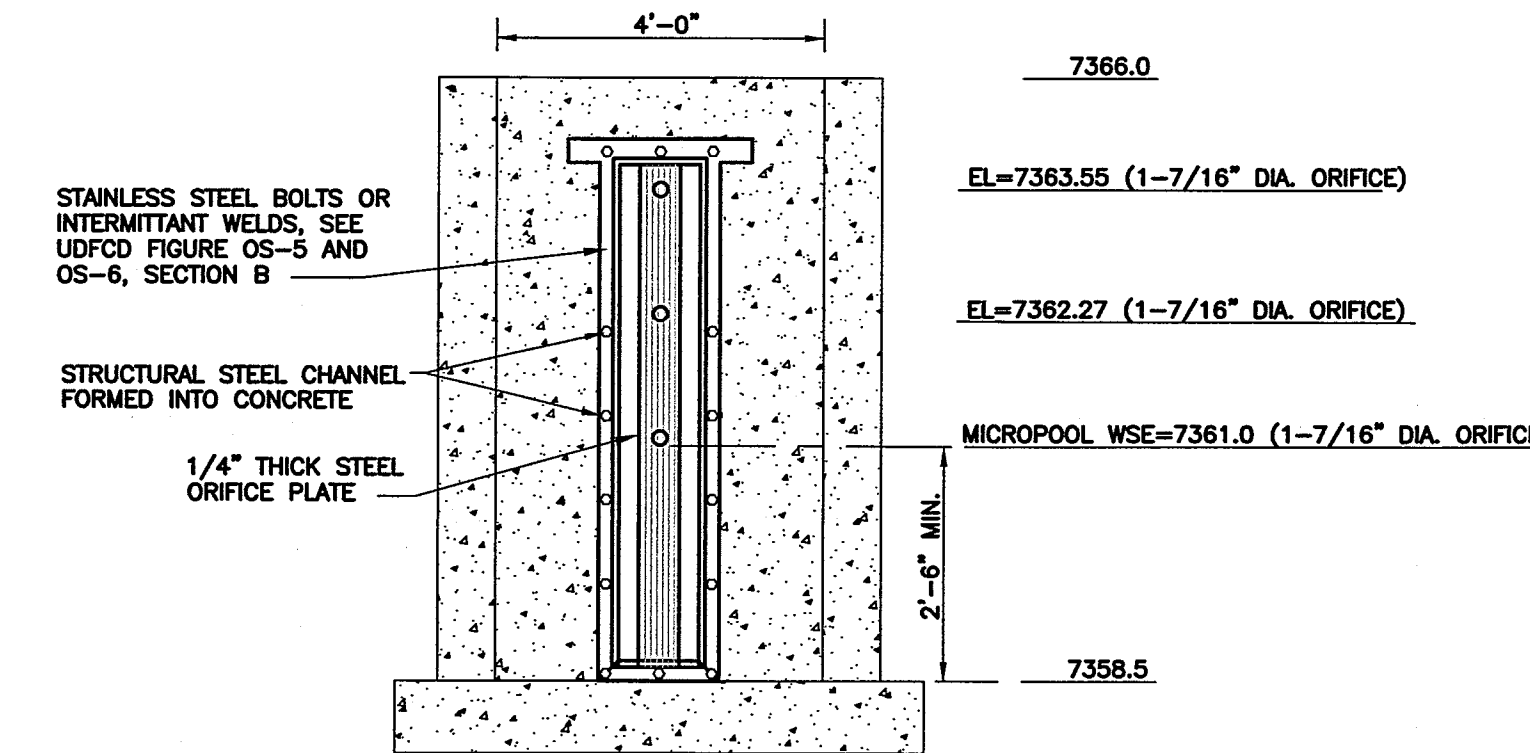
PLAN VIEW
NTS



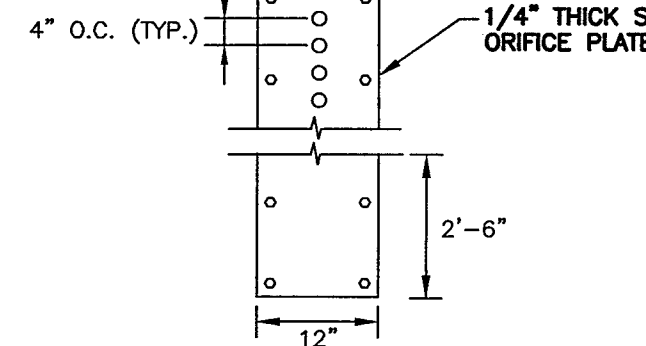
SECTION
DETENTION POND OUTLET STRUCTURE C
SCALE: NTS



RIPRAP RUNDOWN E
NOT TO SCALE



ELEVATION

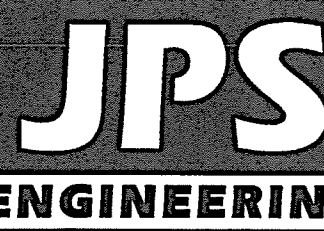


ORIFICE PATTERN

- 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.
- EMRY AND WQCV TRASH RACKS:
1. WELL-SCREEN TRASH RACKS (FOR CIRCULAR ORIFICES) SHALL BE STAINLESS STEEL AND 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 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.

TYPICAL WQCV ORIFICE PLATE DETAIL D
SCALE: NTS

NO.	REVISION	BY	DATE
1	FOR PERMIT	JPS	4/17/19
2	COUNTY COMMENTS	JPS	4/29/19
3	COUNTY COMMENTS	JPS	6/20/19
4	COUNTY COMMENTS	JPS	7/11/19



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DETENTION POND C14
PLAN & DETAILS

SCALE : AS SHOWN

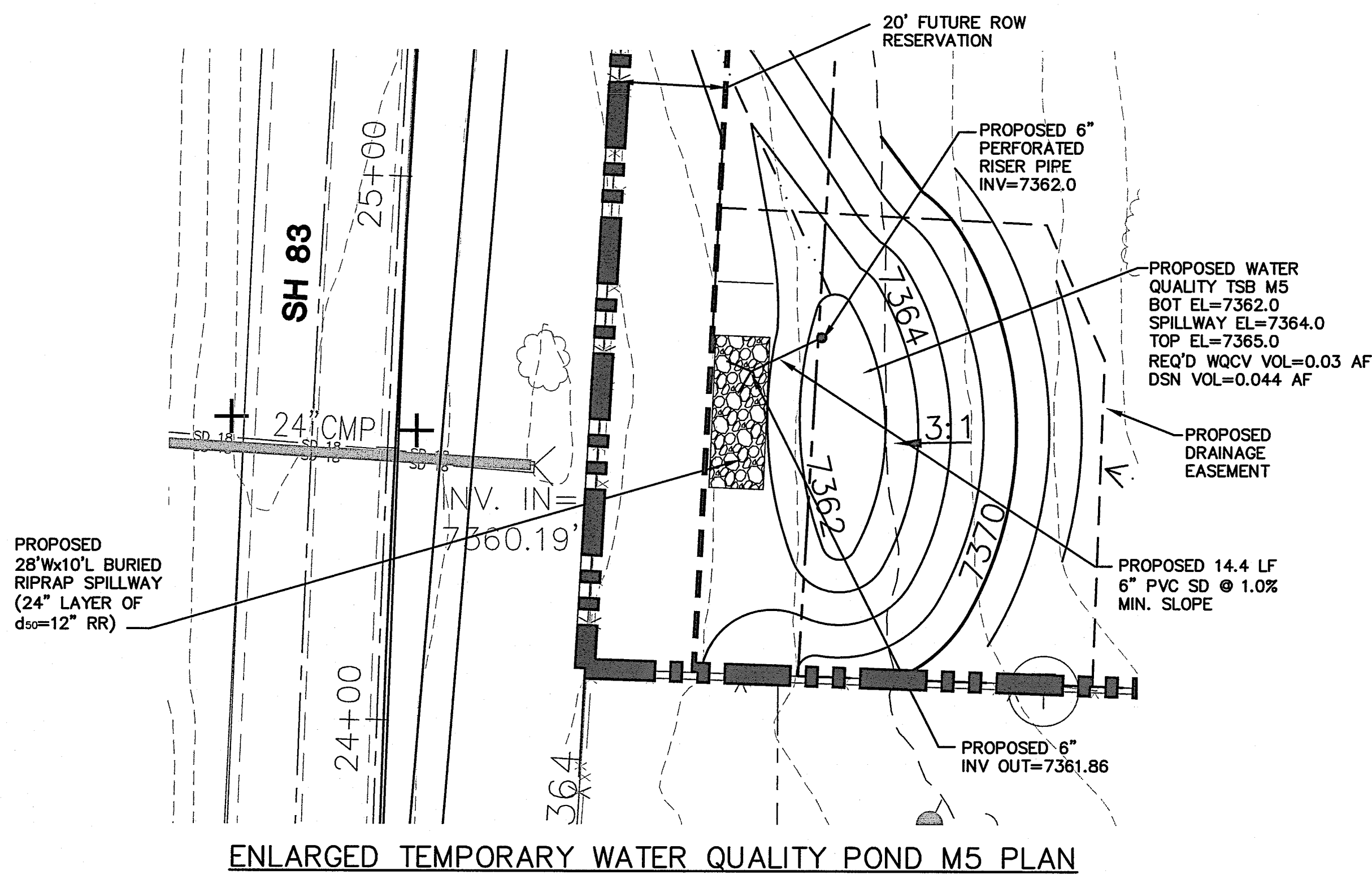
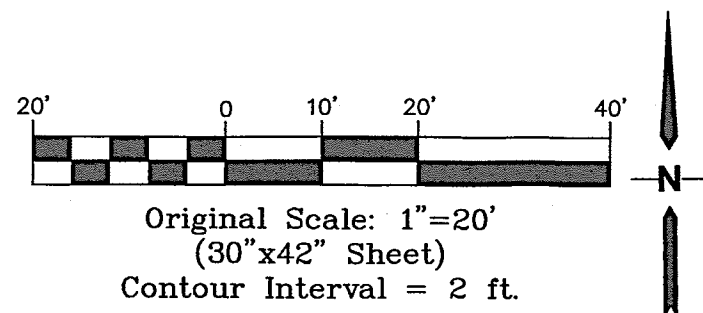
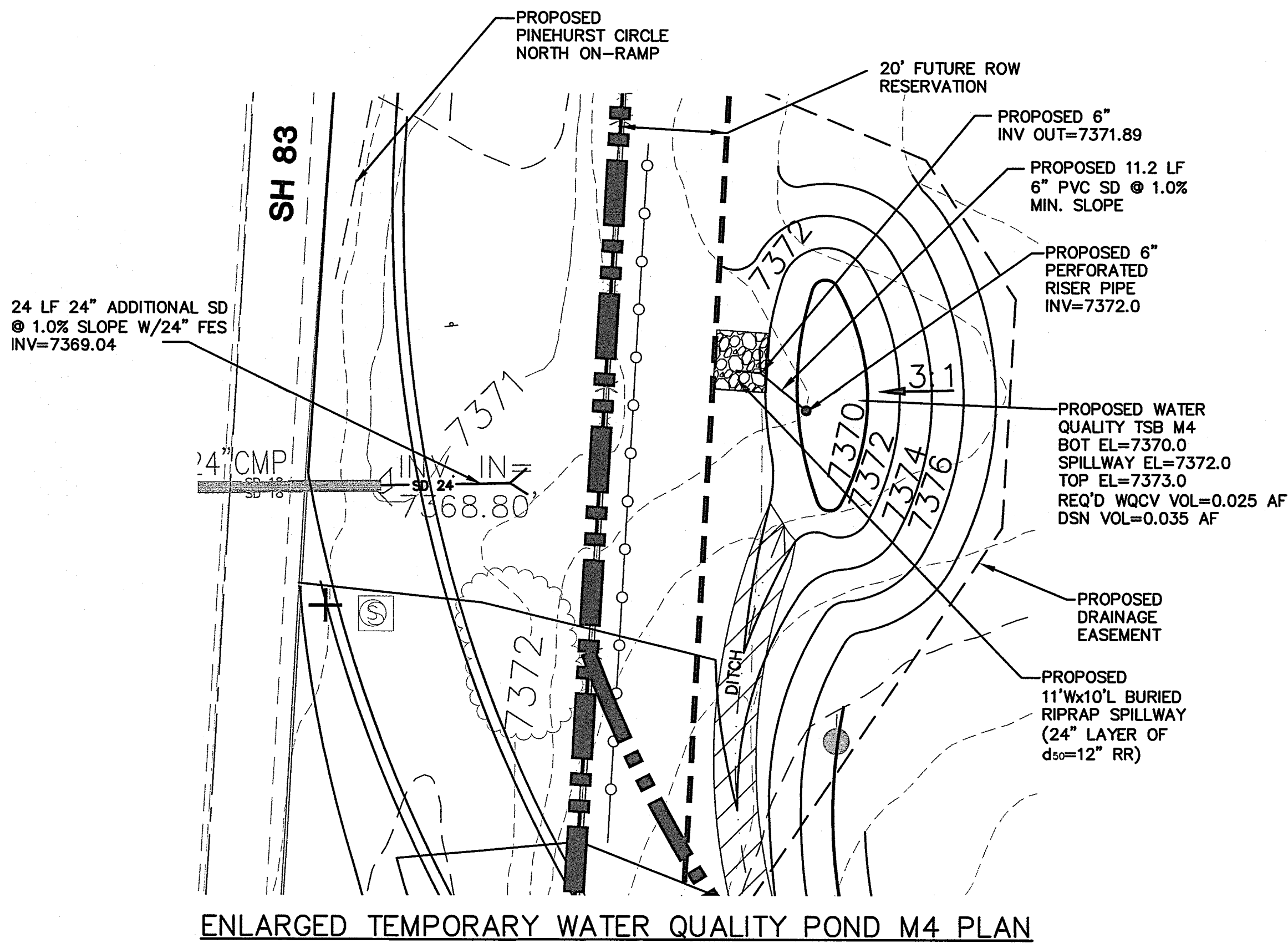
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DRAWN BY: BJJ	
CHECKED BY: JPS	
REVISED: 7/11/19	

EPC 7/30/19 C3.2

PCD PROJECT NO. PPR-19-009

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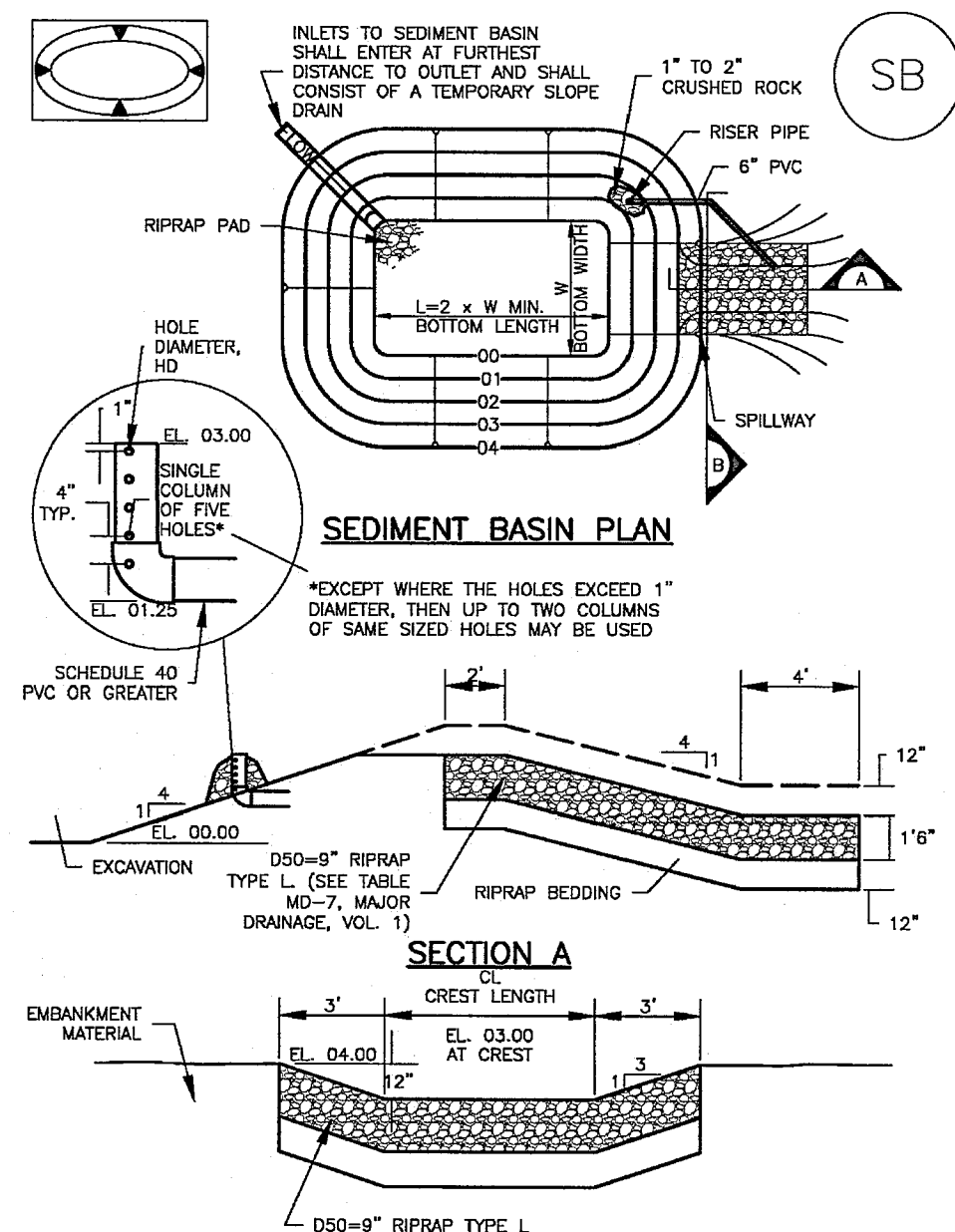
FOR CONSTRUCTION



TEMPORARY SEDIMENT BASIN DESIGN DATA			
BASIN	DRAINAGE AREA (AC)	CL (FT)	HD (IN)
M4	3.2	5	1-1/2"
M5	23.2	22	1-3/16"

Sediment Basin (SB)

SC-7



August 2013

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

SB-5

SC-7

Sediment Basin (SB)

TABLE SB-1. SIZING INFORMATION FOR STANDARD SEDIMENT BASIN			
Upstream Drainage Area (rounded to nearest acre), (Ac)	Basin Bottom Width (W), (ft)	Basin Length (L), (ft)	Flow Diameter (D), (in)
1	12 1/2	2	1 1/4
2	21	3	1 1/2
3	28	4	1 3/4
4	33 1/2	5	1 3/4
5	39 1/2	6	1 3/4
6	47 1/2	7	1 3/4
7	51	8	1 3/4
8	51	9	1 3/4
9	51	10	1 3/4
10	51	11	1 3/4
11	51	12	1 3/4
12	51	13	1 3/4
13	51	14	1 3/4
14	51	15	1 3/4
15	51	16	1 3/4

SEDIMENT BASIN INSTALLATION NOTES

1. SEE PLAN VIEW FOR:
- LOCATION OF SEDIMENT BASIN.
- TYPE OF BASIN (STANDARD BASIN OR NONSTANDARD BASIN).
- FOR STANDARD BASIN, BOTTOM WIDTH, N. CREST LENGTH, CL, AND HOLE DIAMETER, HD.
- FOR NONSTANDARD BASIN, SEE CONSTRUCTION DRAWINGS FOR DESIGN OF BASIN INCLUDING RISE HEIGHT, H, NUMBER OF COLLARS, N, HOLE DIAMETER, HD, AND PIPE DIAMETER, D.
2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS A STORMWATER CONTROL.
4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF ORGANIC MATERIAL, AND ROCKS OF CONCRETE GREATER THAN 3 ROCKS AND SHALL HAVE A MINIMUM OF 15 PERCENT BY WEIGHT PASSING THE NO. 200 SIEVE.
5. EMBANKMENT MATERIAL SHALL BE COMPACTED TO AT LEAST 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D698.
6. PIPE SCH 40 OR GREATER SHALL BE USED.
7. THE DETAILS SHOWN ON THESE SHEETS PERTAIN TO STANDARD SEDIMENT BASIN(S) FOR DRAINAGE AREAS LESS THAN 15 ACRES. SEE CONSTRUCTION DRAWINGS FOR EMBANKMENT, STORAGE VOLUME, SPILLWAY, OUTLET, AND OUTLET PROTECTION DETAILS FOR ANY SEDIMENT BASIN(S) THAT HAVE BEEN INDIVIDUALLY DESIGNED FOR DRAINAGE AREAS LARGER THAN 15 ACRES.

SB-6

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

August 2013

Sediment Basin (SB)

SC-7

SEDIMENT BASIN MAINTENANCE NOTES

1. INSPECT BMPs EACH WORKDAY AND MAINTAIN THEM IN EFFECTIVE OPERATING CONDITION. MAINTENANCE OF BMPs SHOULD BE PROMPTIVE, 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. PRELUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E. TWO FEET BELOW THE SPILLWAY CREST).
 5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.
 6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, SEEDING AND MULCHED OR OTHERWISE STABILIZED AS APPROVED BY LOCAL JURISDICTION.
- (DETAILS ADAPTED FROM DOUGLAS COUNTY, COLORADO)
- NOTE: MANY JURISDICTIONS HAVE BMP DETAILS THAT VARY FROM LISTED STANDARD DETAILS. CONSULT WITH LOCAL JURISDICTIONS AS TO WHICH DETAIL SHOULD BE USED WHEN DIFFERENCES ARE NOTED.

August 2013

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

SB-7



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TEMPORARY WATER
QUALITY POND DETAILS

SCALE : AS SHOWN

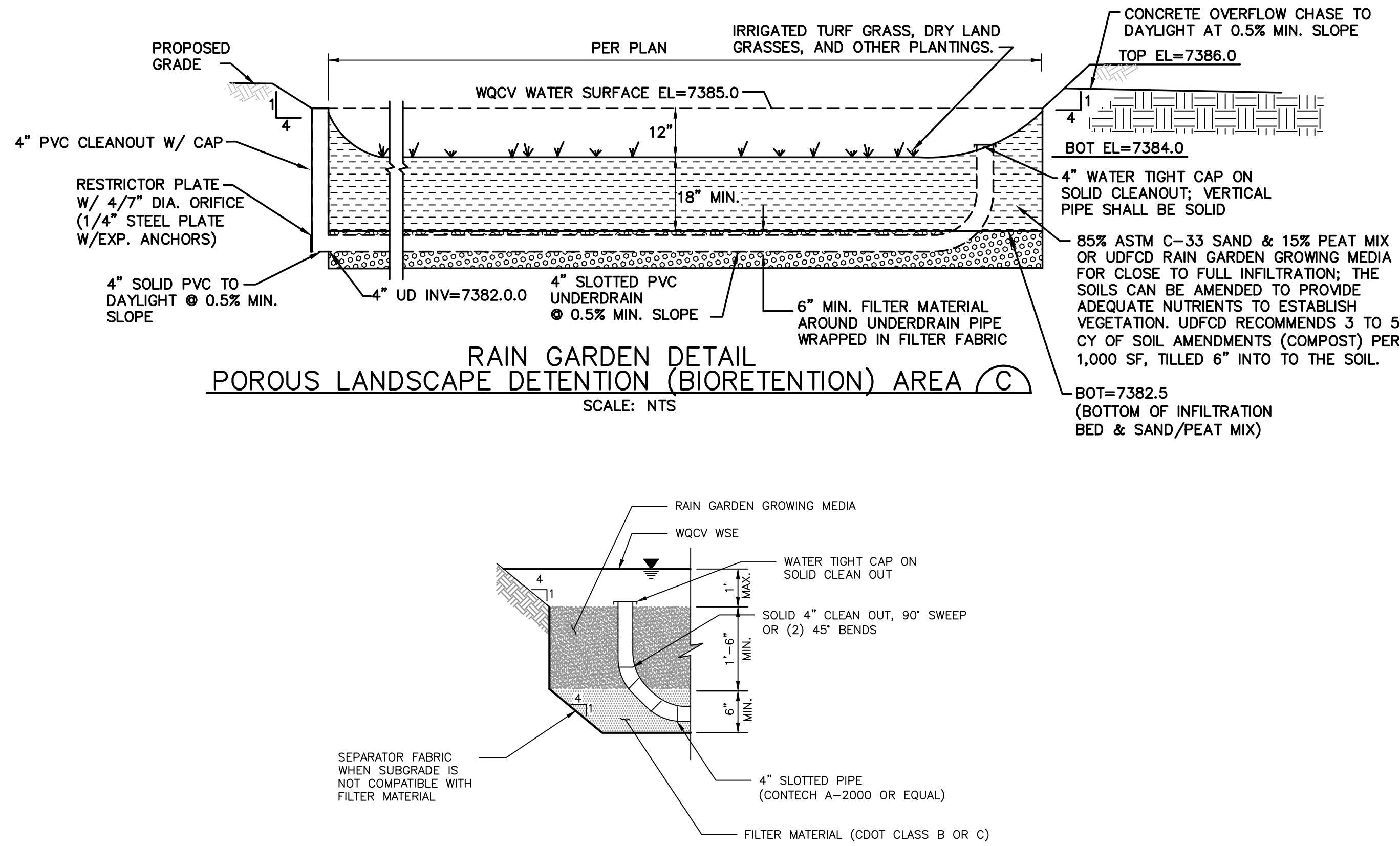
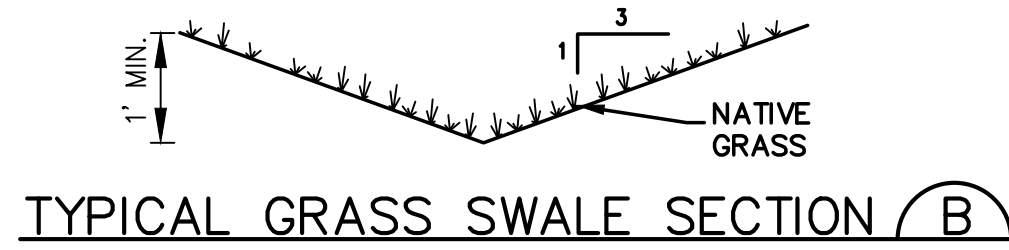
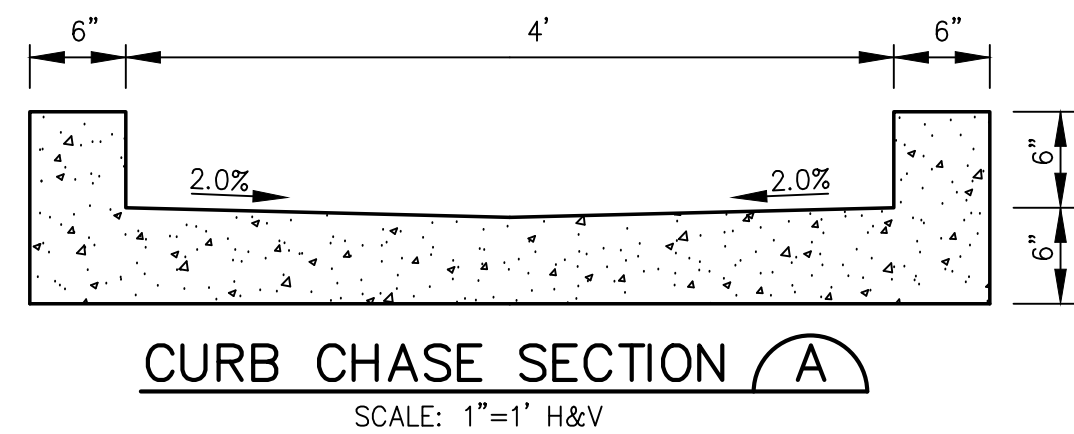
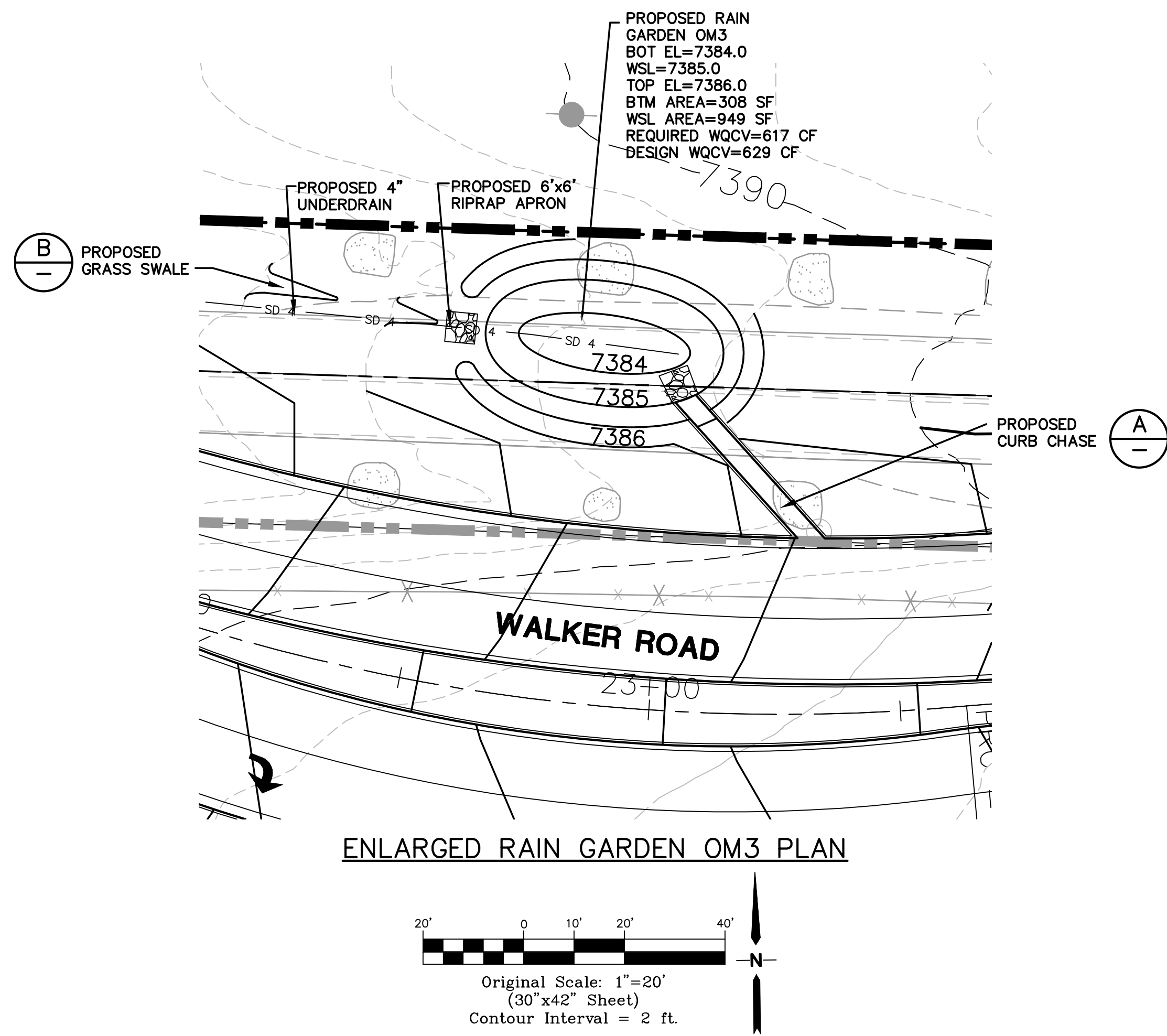


DATE: 4/17/19
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 7/09/19

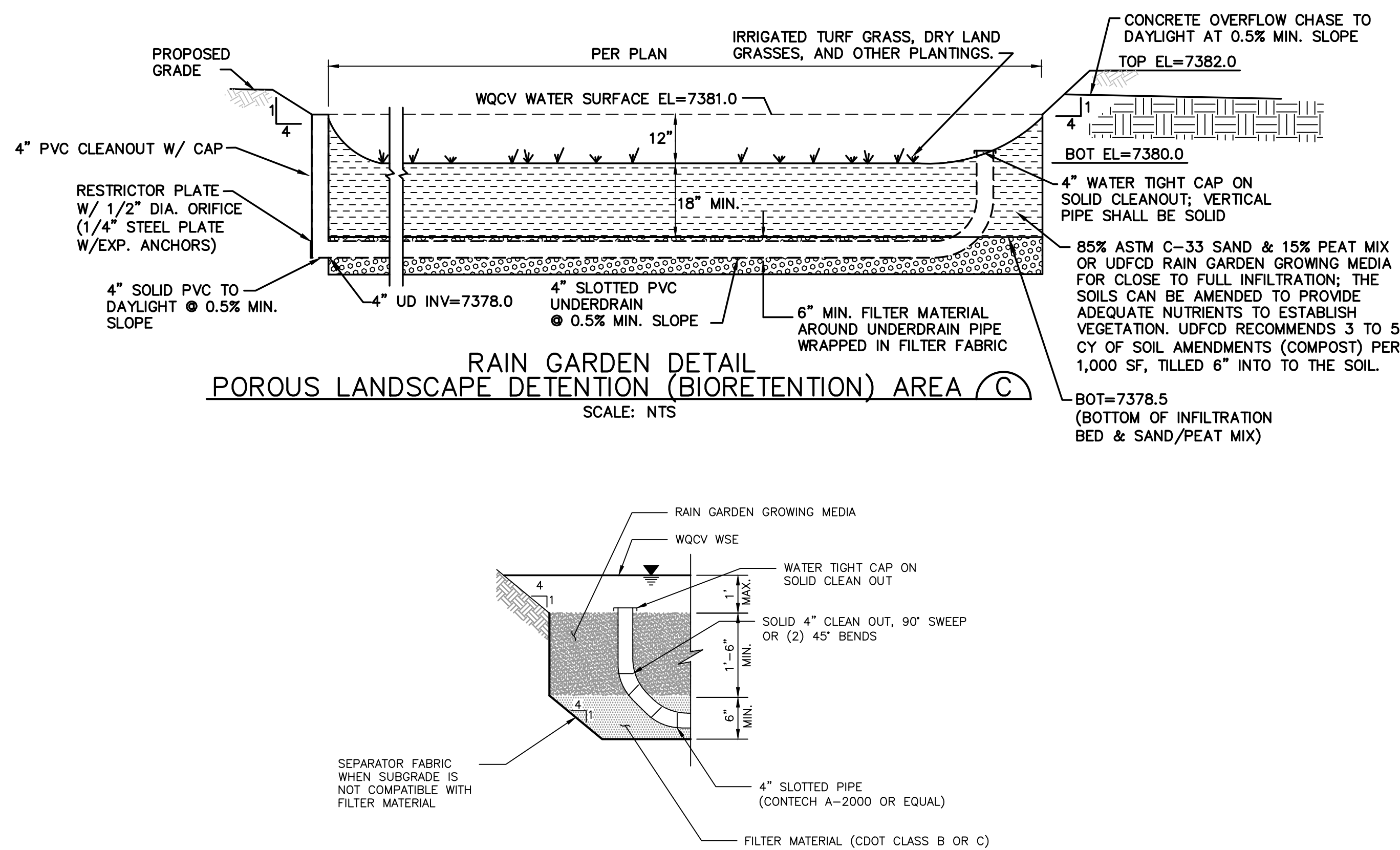
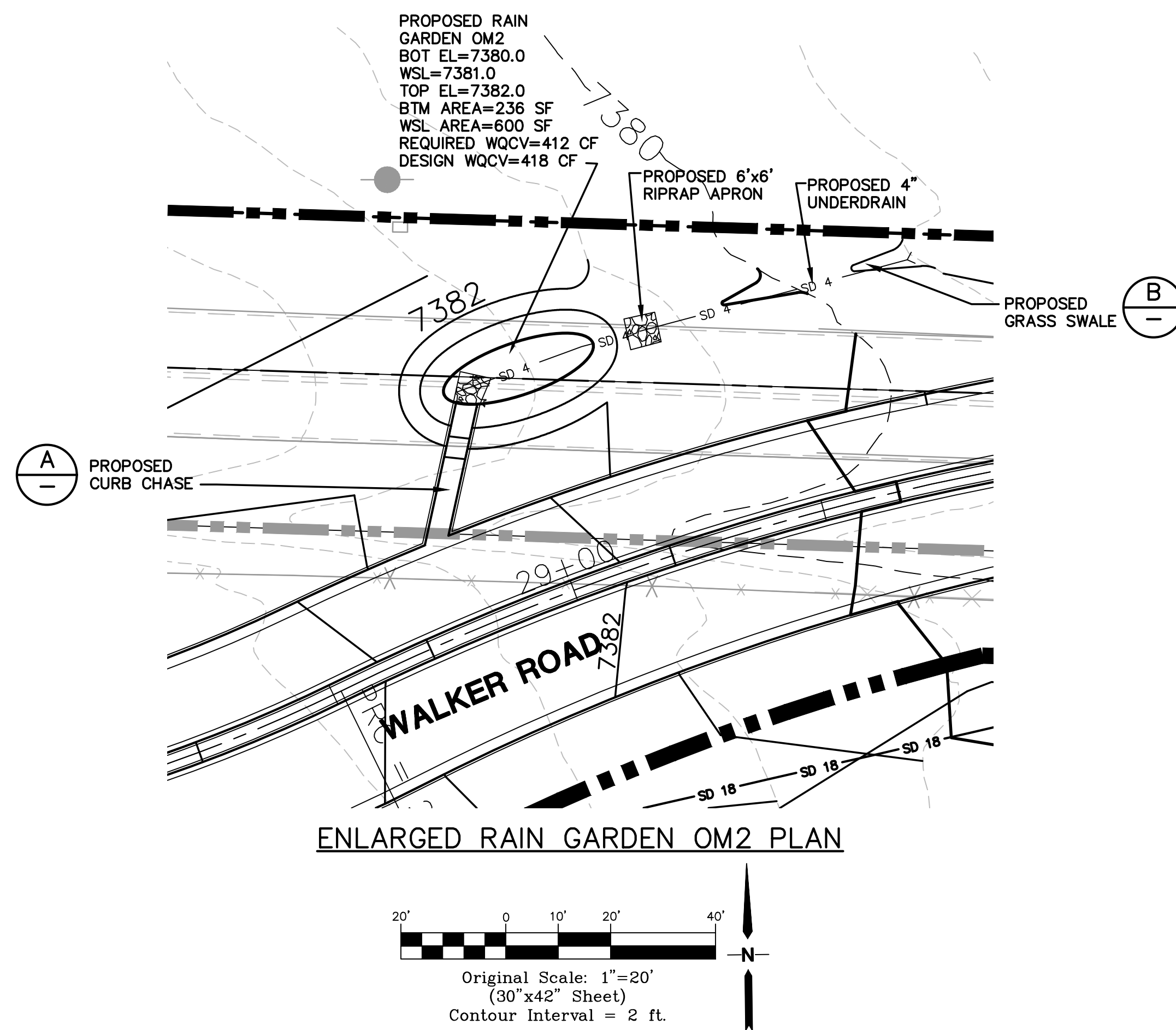
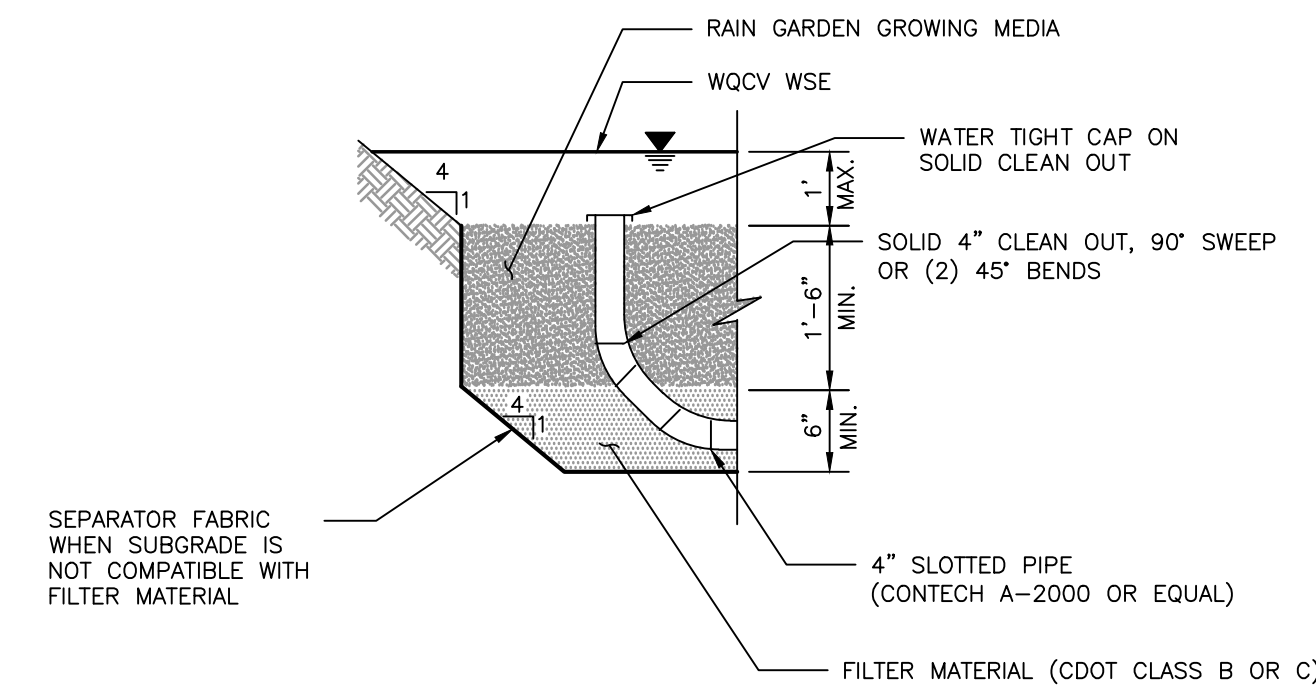
EPC 7/30/19

C3.3

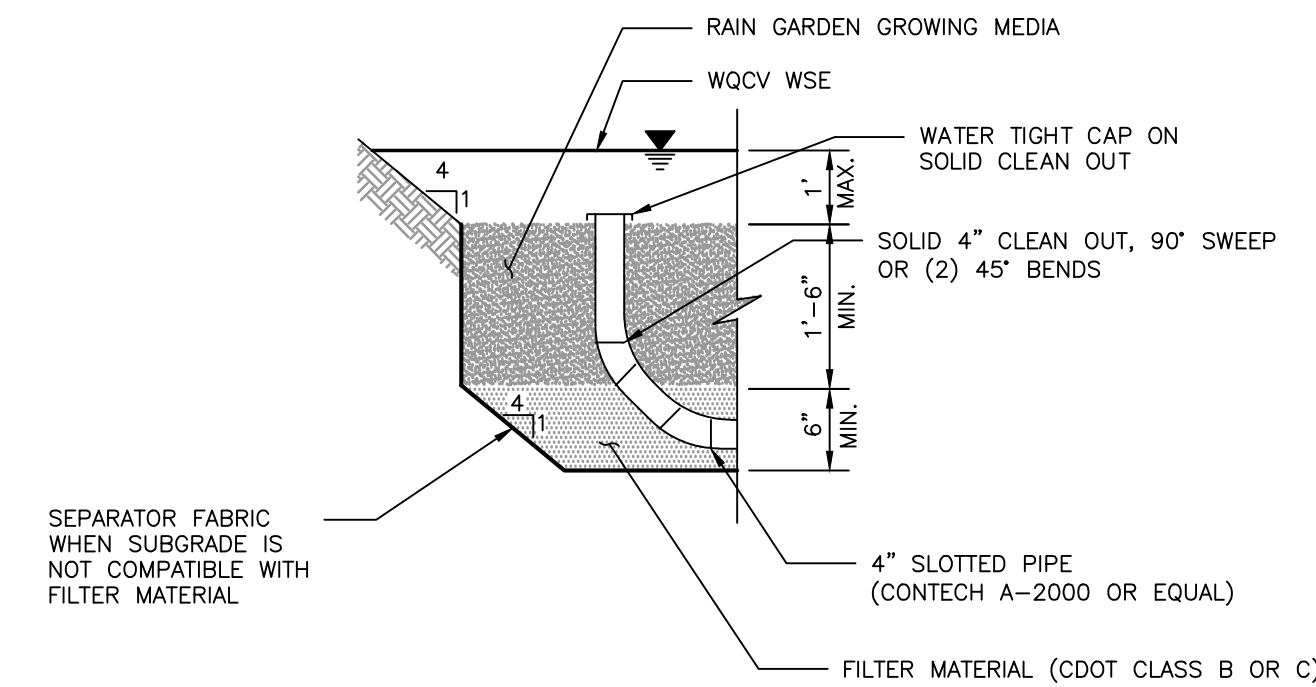
PCD PROJECT NO. PPR-19-009



PARTIAL INFILTRATION SECTION (D)
NTS
RAIN GARDEN OM3 DETAILS



PARTIAL INFILTRATION SECTION (D)
NTS
RAIN GARDEN OM2 DETAILS

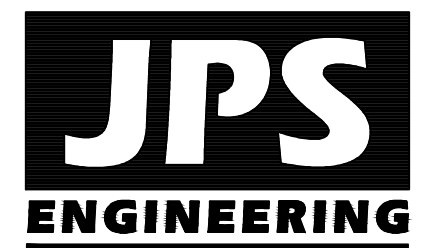


NO.	REVISION	BY	DATE
1	FOR PERMIT	JPS	4/17/19
2	COUNTY COMMENTS	JPS	4/29/19
3	COUNTY COMMENTS	JPS	6/20/19
4	COUNTY COMMENTS	JPS	7/09/19
5	COUNTY COMMENTS	JPS	4/08/20

PCD PROJECT NO. CDR-20-001

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RAIN GARDEN DETAILS

SCALE : AS SHOWN

NORTH
DATE: 4/17/19
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 5/05/20

C3.4

STANDARD NOTES FOR 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 KUMAR & ASSOC., DATED 2/25/19 AND SHALL BE CONSIDERED A PART OF THESE PLANS. ROAD CONSTRUCTION SHALL FOLLOW COUNTY ECM STANDARDS & DEVELOPER SHALL PROVIDE A SUPPLEMENTAL GEOTECHNICAL REPORT FOR PAVEMENT DESIGN PRIOR TO PAVING.
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 (SMWP), 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

SEDIMENT CONTROL MAINTENANCE PROGRAM:

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.
PERENNIAL RYE	LINN	2.0 LBS.
WESTERN WHEATGRASS	SARTON	3.0 LBS.
SMOOTH BROME GRASS	LINCOLN OR MANCHAR	3.0 LBS.
SIDEOLATS 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.

PERIODIC SITE INSPECTIONS	FREQUENCY
RE-VEGETATION OF EXPOSED SOILS	BI-WEEKLY
SEDIMENT REMOVAL FROM BMP'S	MONTHLY
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.

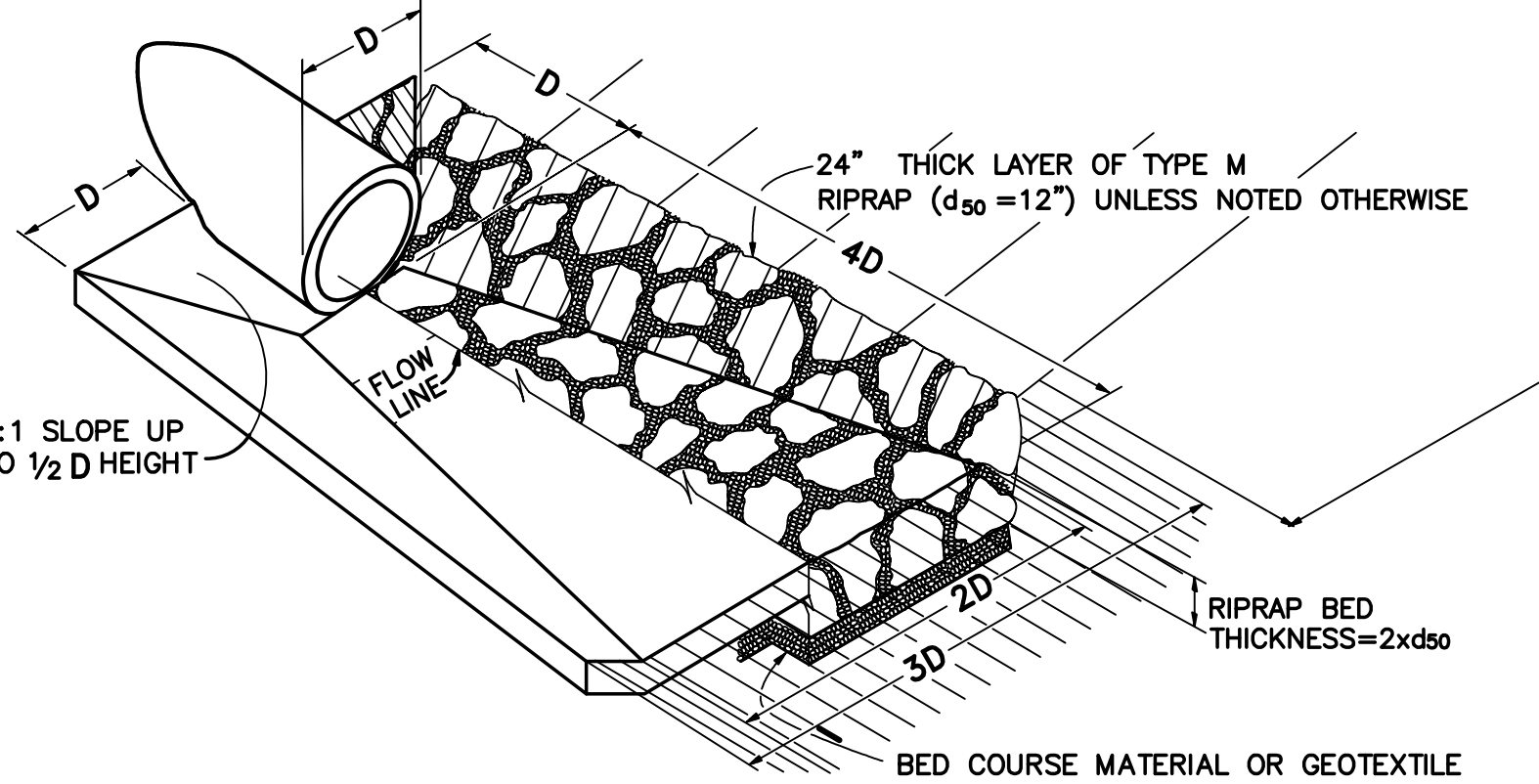
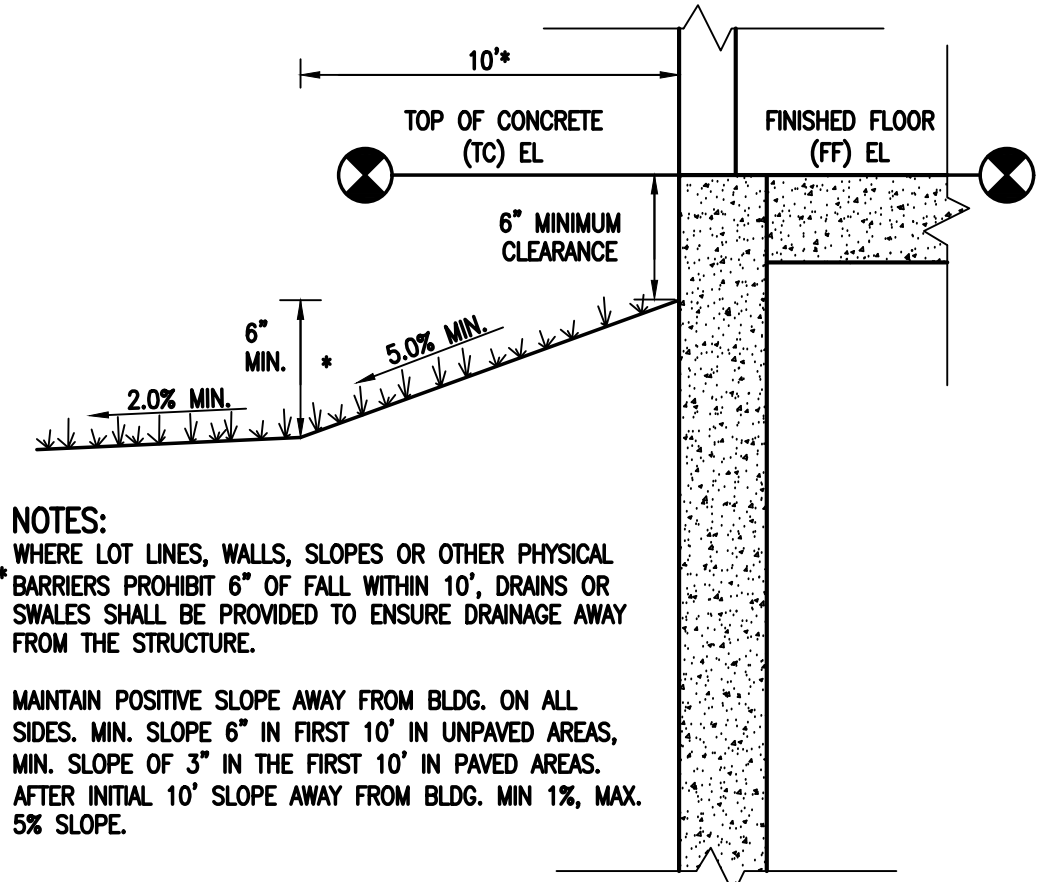
ESTIMATED TIME SCHEDULE:

INSTALL BMP'S	MAY, 2020
SITE GRADING	MAY, 2020
SEEDING & MULCHING	AUGUST, 2020
STABILIZATION	SEPTEMBER, 2021

RECEIVING WATERS: WEST CHERRY CREEK

GENERAL NOTES

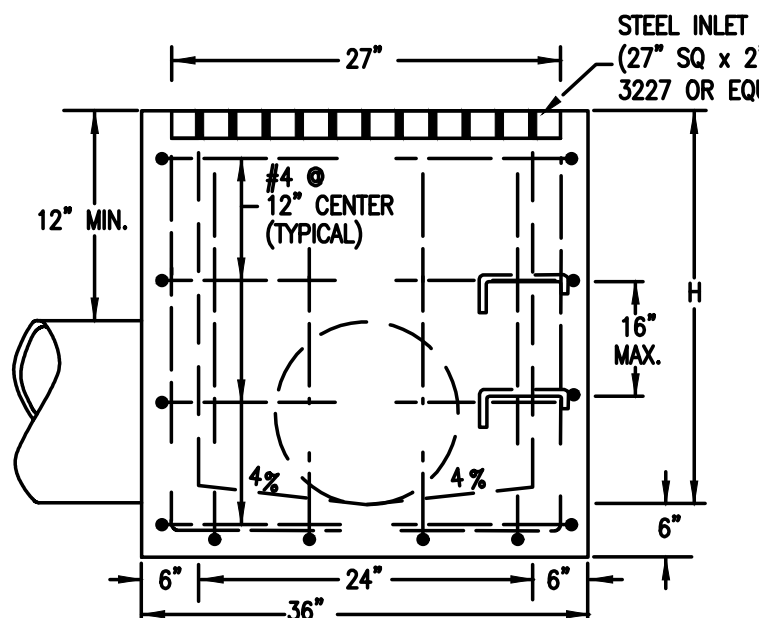
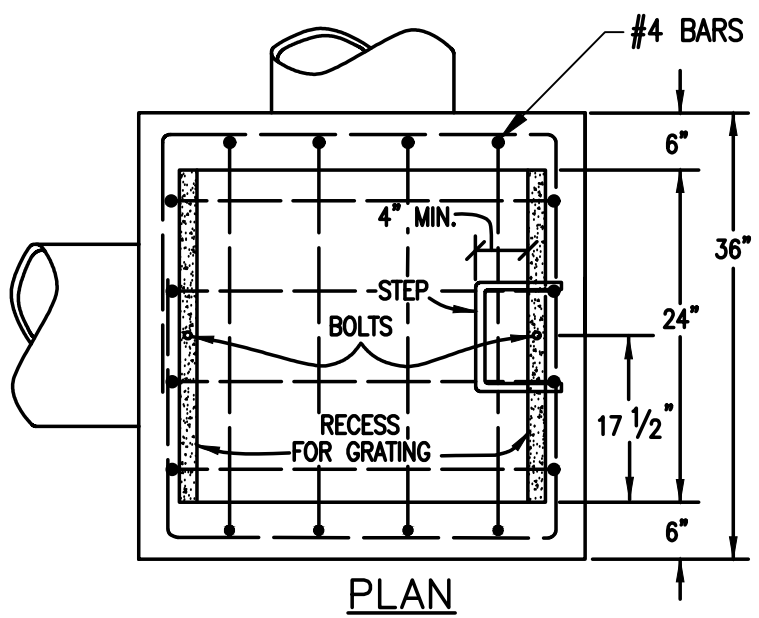
- CONCRETE SHALL BE CDOT CLASS B. INLET MAY BE CAST-IN-PLACE OR PRECAST.
- REINFORCING BARS SHALL BE EPOXY COATED AND DEFORMED, AND SHALL HAVE A MINIMUM 2 IN. CLEARANCE.
- STRUCTURAL STEEL FOR GRATES AND GRATE INSTALLATION HARDWARE SHALL BE GALVANIZED AND SHALL BE IN ACCORDANCE WITH CDOT 712.06.
- STEPS SHALL BE PROVIDED WHEN INLET DIMENSION "H" EXCEEDS 3 FT.-6 IN. AND SHALL BE IN ACCORDANCE WITH AASHTO M 199.
- SEE CDOT SHEET M-604-11, INLET, TYPE D, FOR REINFORCEMENT AROUND THE PIPE OPENING.



NOTE: TYPICAL RIPRAP APRON DIMENSIONS SHALL BE 12'Lx9'Wx2.0'D UNLESS NOTED OTHERWISE

TYPICAL RIPRAP APRON/
CULVERT OUTLET PAVING

NOT TO SCALE



TYPICAL GRATED STORM INLET DETAIL

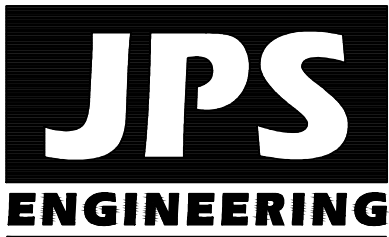
SCALE: NTS

TYPICAL BUILDING DRAINAGE DETAIL

SCALE: NTS

MONUMENT
ACADEMY
HIGH SCHOOL

FOR CONSTRUCTION



19 E. Willamette Ave.
Colorado Springs, CO
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CRP ARCHITECTS AIA
100 E. St. Vrain, Suite 300
Colorado Springs, Colorado 80903

SITE GRADING & EROSION
CONTROL NOTES &
DETAILS

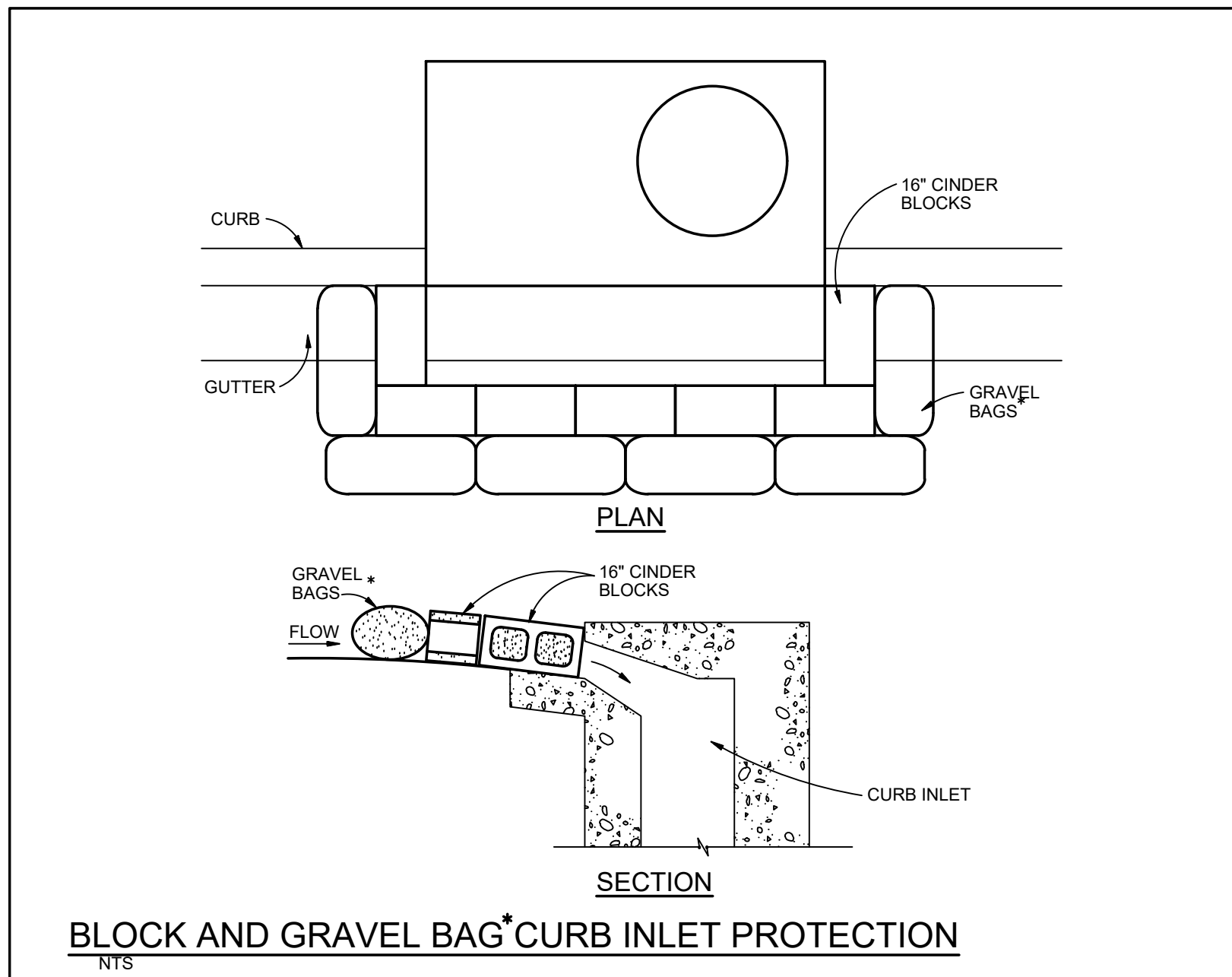
NORTH
DATE: 12/20/18
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 5/05/20

PCD PROJECT NO. CDR-20-001

C4.1A

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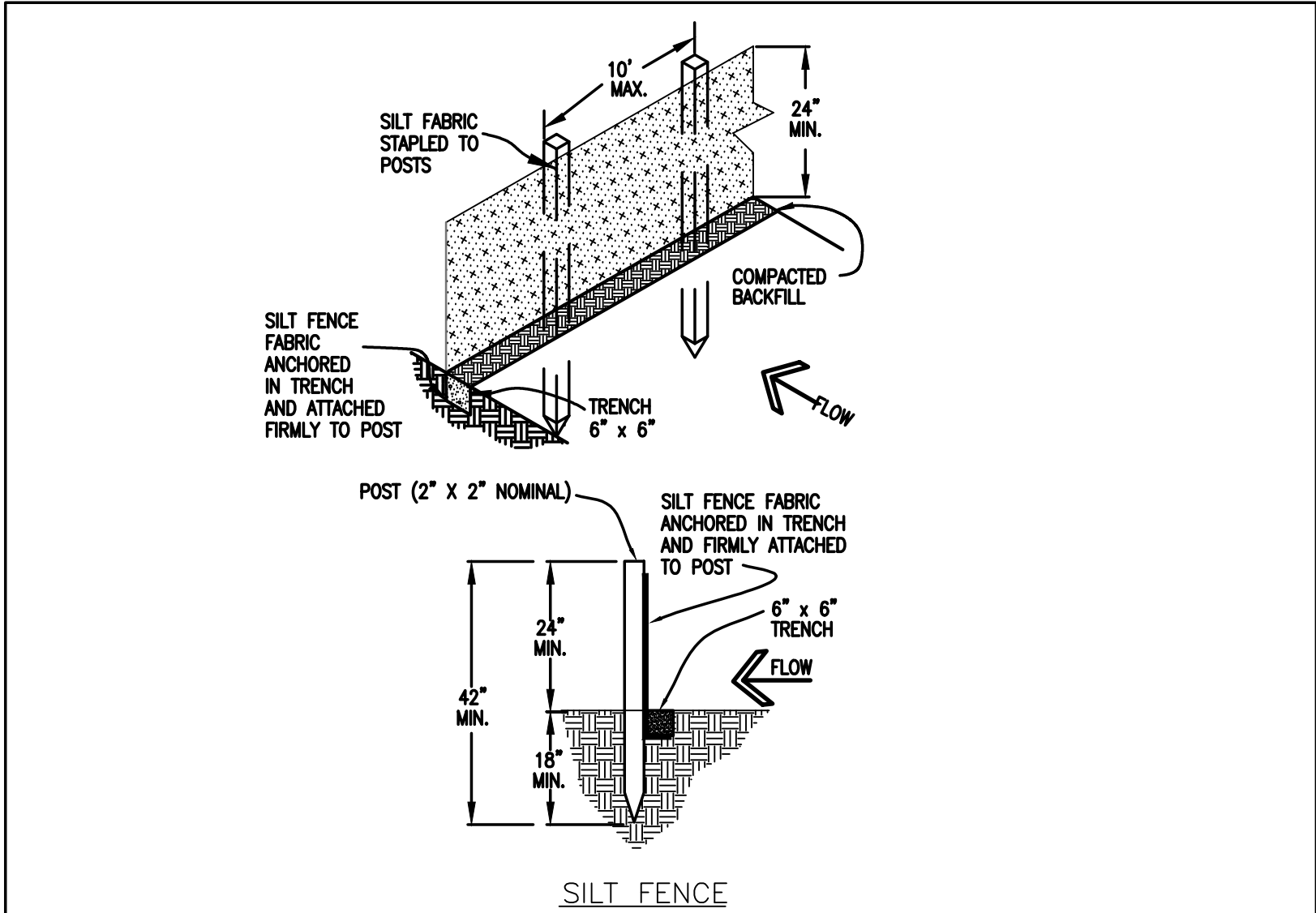
- BLOCK AND GRAVEL BAG*CURB INLET PROTECTION NOTES**
- INSTALLATION REQUIREMENTS**
1. INLET PROTECTION SHALL BE INSTALLED IMMEDIATELY AFTER CONSTRUCTION OF INLET.
 2. CONCRETE BLOCKS ARE TO BE LAID AROUND THE INLET IN A SINGLE ROW ON THEIR SIDES, ABUTTING ONE ANOTHER WITH THE OPEN ENDS OF THE BLOCK FACING OUTWARD.
 3. GRAVEL BAGS ARE TO BE PLACED AROUND THE CONCRETE BLOCKS CLOSELY ABUTTING ONE ANOTHER SO THERE ARE NO GAPS.
 4. GRAVEL BAGS ARE TO CONTAIN WASHED SAND OR GRAVEL APPROXIMATELY 3/4 INCH IN DIAMETER.
 5. BAGS ARE TO BE MADE OF 1/4" INCH WIRE MESH (USED WITH GRAVEL ONLY) OR GEOTEXTILE.
- MAINTENANCE REQUIREMENTS**
1. CONTRACTOR SHALL INSPECT INLET PROTECTION IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL.
 2. DAMAGED OR INEFFECTIVE INLET PROTECTION SHALL PROMPTLY BE REPAIRED OR REPLACED.
 3. SEDIMENT SHALL BE REMOVED WHEN SEDIMENT HAS ACCUMULATED TO APPROXIMATELY 1/2 THE DESIGN DEPTH OF THE TRAP.
 4. INLET PROTECTION SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED WITHIN THE DRAINAGE AREA AS APPROVED BY THE CITY.
- * AN ALTERNATE 3/4" TO 1" GRAVEL FILTER OVER A WIRE SCREEN MAY BE USED IN PLACE OF GRAVEL BAGS. THE WIRE MESH SHALL EXTEND ABOVE THE TOP OF THE CONCRETE BLOCKS AND THE GRAVEL PLACED OVER THE WIRE SCREEN TO THE TOP OF THE CONCRETE BLOCKS.

City of Colorado Springs Stormwater Quality	Figure IP-3 Block & Gravel Bag Curb Inlet Protection Construction Detail and Maintenance Requirements
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Table MD-7—Classification and Gradation of Ordinary Riprap			
Riprap Designation	% Smaller Than Given Size by Weight	Intermediate Rock Dimensions (inches)	d ₅₀ (inches)*
Type VL	70-100	12	6**
	50-70	9	
	35-50	6	
	2-10	2	
Type L	70-100	15	9**
	50-70	12	
	35-50	9	
	2-10	3	
Type M	70-100	21	12**
	50-70	18	
	35-50	12	
	2-10	4	
Type H	70-100	30	18
	50-70	24	
	35-50	18	
	2-10	6	
Type VH	70-100	42	24
	50-70	33	
	35-50	24	
	2-10	9	

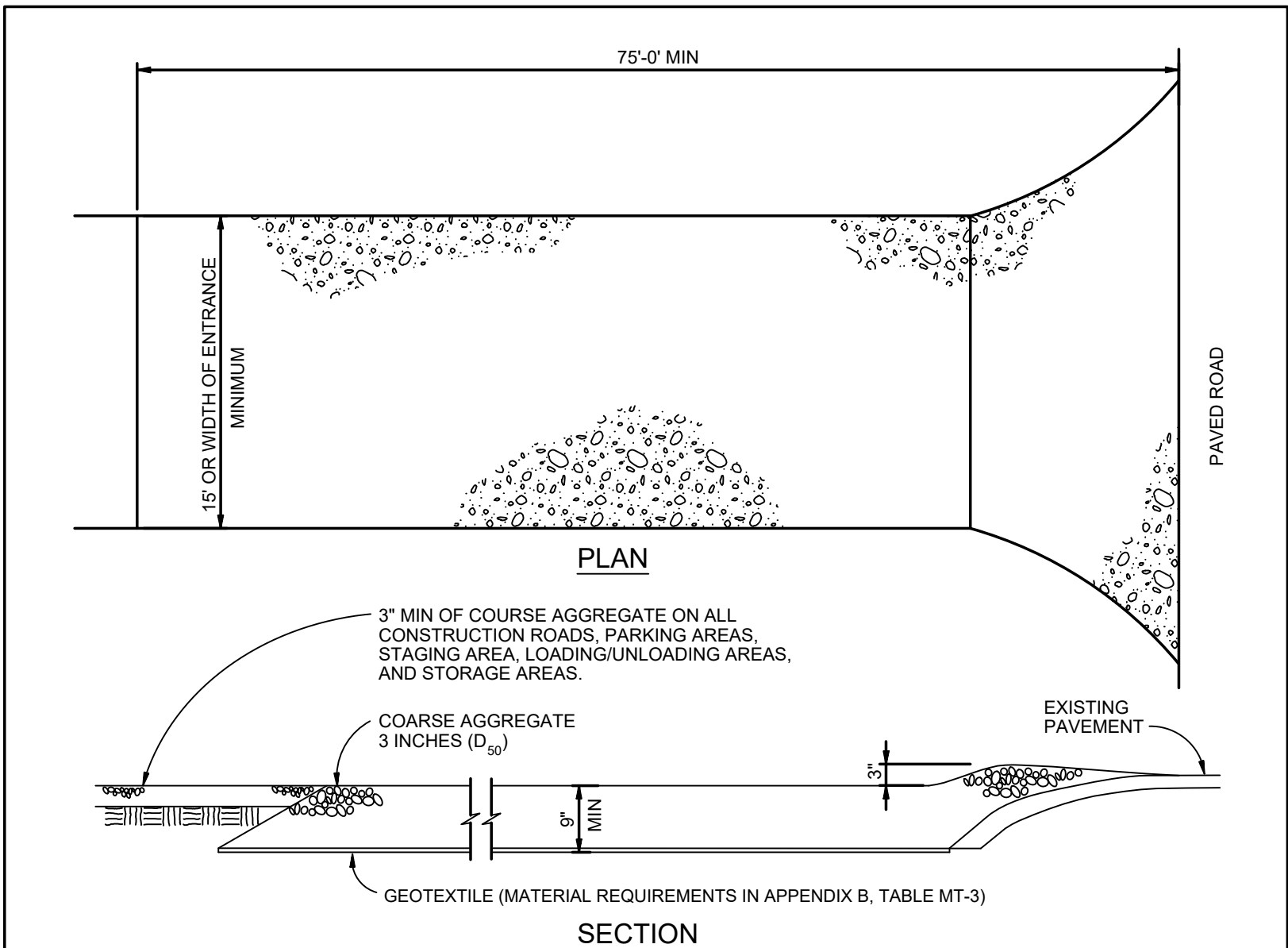
- * d₅₀ = mean particle size (intermediate dimension) by weight.
- ** Mix VL, L and M riprap with 35% topsoil (by volume) and bury it with 4 to 6 inches of topsoil, all vibration compacted, and revegetate.

- Basic requirements for riprap stone are as follows:
- Rock shall be hard, durable, angular in shape, and free from cracks, overburden, shale, and organic matter.
 - Neither breadth nor thickness of a single stone should be less than one-third its length, and rounded stone should be avoided.
 - The rock should sustain a loss of not more than 40% after 500 revolutions in an abrasion test (Los Angeles machine—ASTM C-535-69) and should sustain a loss of not more than 10% after 12 cycles of freezing and thawing (AASHTO test 103 for ledge rock procedure A).
 - Rock having a minimum specific gravity of 2.65 is preferred; however, in no case should rock have a specific gravity less than 2.50.



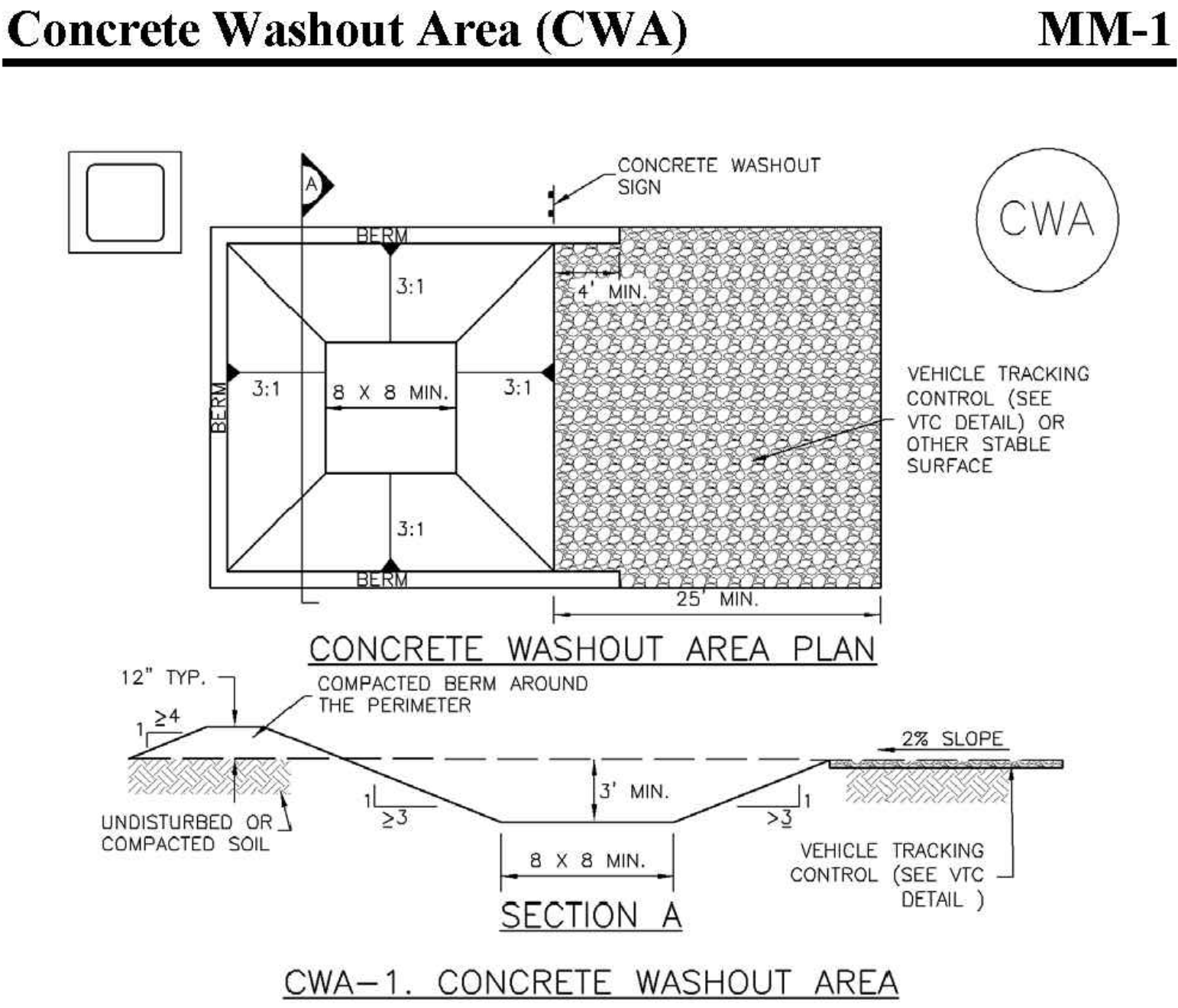
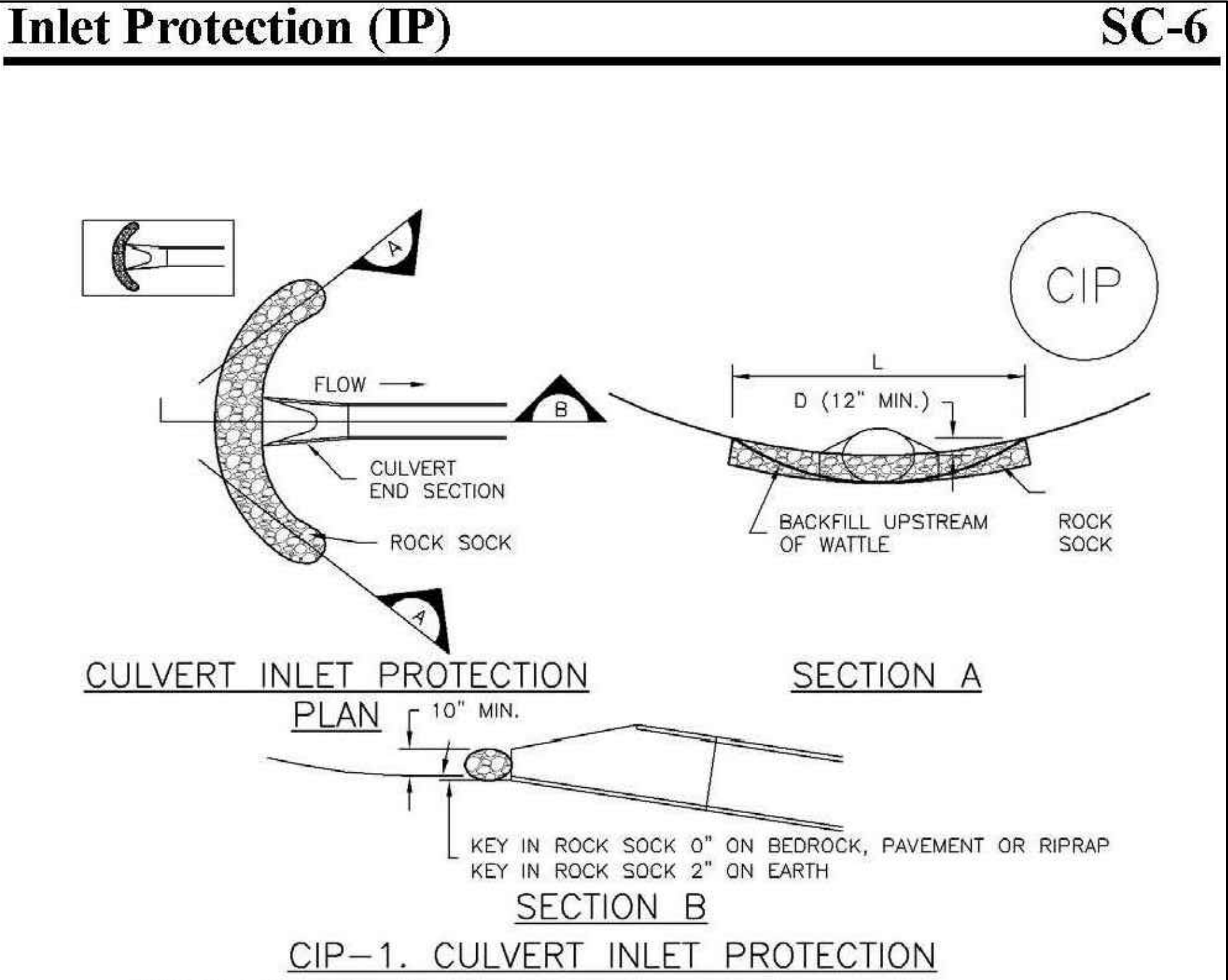
- SILT FENCE NOTES**
- INSTALLATION REQUIREMENTS**
1. SILT FENCES SHALL BE INSTALLED PRIOR TO ANY LAND DISTURBING ACTIVITIES.
 2. WHEN JOINTS ARE NECESSARY, SILT FENCE GEOTEXTILE SHALL BE SPLICED TOGETHER ONLY AT SUPPORT POST AND SECURELY SEALED.
 3. METAL POSTS SHALL BE "STUDDER TEE" OR "I" TYPE WITH MINIMUM WEIGHT OF 1.33 POUNDS PER LINEAR FOOT. WOOD POSTS SHALL HAVE A MINIMUM DIAMETER OR CROSS SECTION DIMENSION OF 2 INCHES.
 4. THE FILTER MATERIAL SHALL BE FASTENED SECURELY TO METAL OR WOOD POSTS USING WIRE TIES, OR TO WOOD POSTS WITH 3/4" LONG #8 HEAVY-DUTY STAPLES. THE SILT FENCE GEOTEXTILE SHALL NOT BE STAPLED TO EXISTING TREES.
 5. WHILE NOT REQUIRED, WIRE MESH FENCE MAY BE USED TO SUPPORT THE GEOTEXTILE. WIRE FENCE SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY-DUTY WIRE STAPLES AT LEAST 3/4" LONG. TIE WIRES OR HOG RINGS. THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF 6" AND SHALL NOT EXTEND MORE THAN 3" ABOVE THE ORIGINAL GROUND SURFACE.
 6. ALONG THE TOE OF FILLS, INSTALL THE SILT FENCE ALONG A LEVEL CONTOUR AND PROVIDE AN AREA BEHIND THE FENCE FOR RUNOFF TO POND AND SEDIMENT TO SETTLE. A MINIMUM DISTANCE OF 5 FEET FROM THE TOE OF THE FILL IS RECOMMENDED.
 7. THE HEIGHT OF THE SILT FENCE FROM THE GROUND SURFACE SHALL BE MINIMUM OF 24 INCHES AND SHALL NOT EXCEED 36 INCHES. HIGHER FENCES MAY INPOUND VOLUMES OF WATER SUFFICIENT TO CAUSE FAILURE OF THE STRUCTURE.
- MAINTENANCE REQUIREMENTS**
1. CONTRACTOR SHALL INSPECT SILT FENCES IMMEDIATELY AFTER EACH RAINFALL, AT LEAST DAILY DURING PROLONGED RAINFALL, AND WEEKLY DURING PERIODS OF NO RAINFALL. DAMAGED, COLLAPSED, UNENTRENCHED OR INEFFECTIVE SILT FENCES SHALL BE PROMPTLY REPAIRED OR REPLACED.
 2. SEDIMENT SHALL BE REMOVED FROM BEHIND SILT FENCE WHEN IT ACCUMULATES TO HALF THE EXPOSED GEOTEXTILE HEIGHT.
 3. SILT FENCES SHALL BE REMOVED WHEN ADEQUATE VEGETATIVE COVER IS ATTAINED AS APPROVED BY THE CITY.

City of Colorado Springs Stormwater Quality	Figure SF-2 Silt Fence Construction Detail and Maintenance Requirements
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- VEHICLE TRACKING NOTES**
- INSTALLATION REQUIREMENTS**
1. ALL ENTRANCES TO THE CONSTRUCTION SITE ARE TO BE STABILIZED PRIOR TO CONSTRUCTION BEGINNING.
 2. CONSTRUCTION ENTRANCES ARE TO BE BUILT WITH AN APRON TO ALLOW FOR TURNING TRAFFIC, BUT SHOULD NOT BE BUILT OVER EXISTING PAVEMENT EXCEPT FOR A SLIGHT OVERLAP.
 3. AREAS TO BE STABILIZED ARE TO BE PROPERLY GRADED AND COMPACTED PRIOR TO LAYING DOWN GEOTEXTILE AND STONE.
 4. CONSTRUCTION ROADS, PARKING AREAS, LOADING/UNLOADING ZONES, STORAGE AREAS, AND STAGING AREAS ARE TO BE STABILIZED.
 5. CONSTRUCTION ROADS ARE TO BE BUILT TO CONFORM TO SITE GRADES, BUT SHOULD NOT HAVE SIDE SLOPES OR ROAD GRADES THAT ARE EXCESSIVELY STEEP.
- MAINTENANCE REQUIREMENTS**
1. REGULAR INSPECTIONS ARE TO BE MADE OF ALL STABILIZED AREAS, ESPECIALLY AFTER STORM EVENTS.
 2. STONES ARE TO BE REAPPLIED PERIODICALLY AND WHEN REPAIR IS NECESSARY.
 3. SEDIMENT TRACKED ONTO PAVED ROADS IS TO BE REMOVED DAILY BY SHOVELING OR SWEEPING. SEDIMENT IS NOT TO BE WASHED DOWN STORM SEWER DRAINS.
 4. STORM SEWER INLET PROTECTION IS TO BE IN PLACE, INSPECTED, AND CLEANED IF NECESSARY.
 5. OTHER ASSOCIATED SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED TO ENSURE GOOD WORKING CONDITION.

City of Colorado Springs Stormwater Quality	Figure VT-2 Vehicle Tracking Application Examples
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- CWA-1. CONCRETE WASHOUT AREA**
- CWA INSTALLATION NOTES**
1. SEE PLAN VIEW FOR:
- CWA INSTALLATION LOCATION.
 2. DO NOT LOCATE AN UNLINED CWA WITHIN 400' OF ANY NATURAL DRAINAGE PATHWAY OR WATERBODY. DO NOT LOCATE WITHIN 1,000' OF ANY WELLS OR DRINKING WATER SOURCES. IF SITE CONSTRAINTS MAKE THIS INFEASIBLE, OR IF HIGHLY PERMEABLE SOILS EXIST ON SITE, THE CWA MUST BE INSTALLED WITH AN IMPERMEABLE LINER (18 MIL. MIN. THICKNESS) OR SURFACE STORAGE ALTERNATIVES USING PREFABRICATED CONCRETE WASHOUT DEVICES OR A LINED ABOVE GROUND STORAGE ARE SHOULD BE USED.
 3. THE CWA SHALL BE INSTALLED PRIOR TO CONCRETE PLACEMENT ON SITE.
 4. CWA SHALL INCLUDE A FLAT SUBSURFACE PIT THAT IS AT LEAST 8' BY 8' SLOPES LEADING OUT OF THE SUBSURFACE PIT SHALL BE 3:1 OR FLATTER. THE PIT SHALL BE AT LEAST 3' DEEP.
 5. BERM SURROUNDING SIDES AND BACK OF THE CWA SHALL HAVE MINIMUM HEIGHT OF 1'.
 6. VEHICLE TRACKING PAD SHALL BE SLOPED 2% TOWARDS THE CWA.
 7. SIGNS SHALL BE PLACED AT THE CONSTRUCTION ENTRANCE, AT THE CWA, AND ELSEWHERE AS NECESSARY TO CLEARLY INDICATE THE LOCATION OF THE CWA TO OPERATORS OF CONCRETE TRUCKS AND PUMP RIGS.
 8. USE EXCAVATED MATERIAL FOR PERIMETER BERM CONSTRUCTION.

November 2010	Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3	CWA-3
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NO.	REVISION	BY	DATE
1	COUNTY COMMENTS	JPS	4/29/19
2	COUNTY COMMENTS	JPS	6/20/19
3	COUNTY COMMENTS	JPS	7/23/19
4	COUNTY COMMENTS	JPS	4/08/20

PCD PROJECT NO. CDR-20-001

C4.1B



JPS
ENGINEERING

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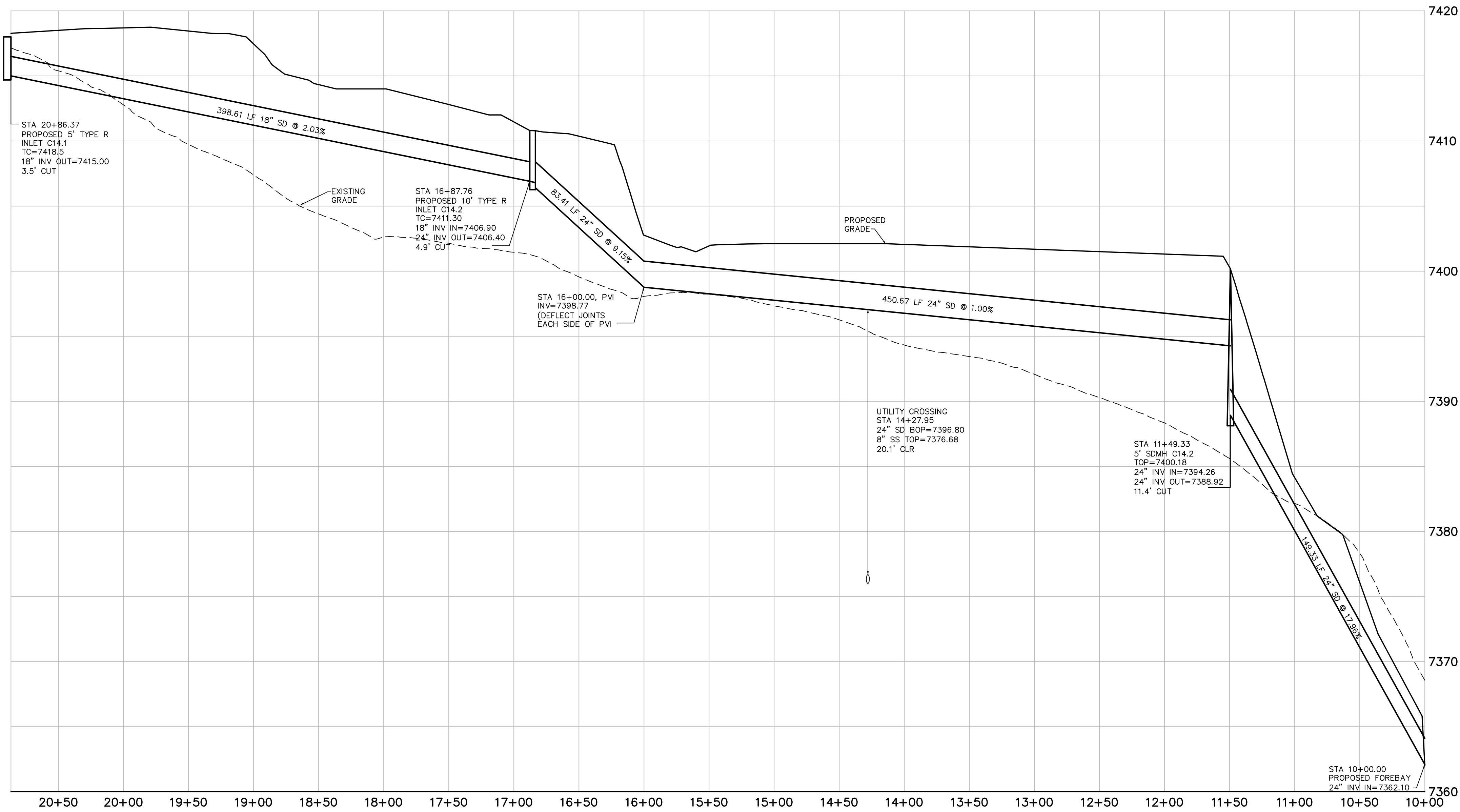
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Colorado Springs, Colorado 80903

**EROSION CONTROL
DETAILS**

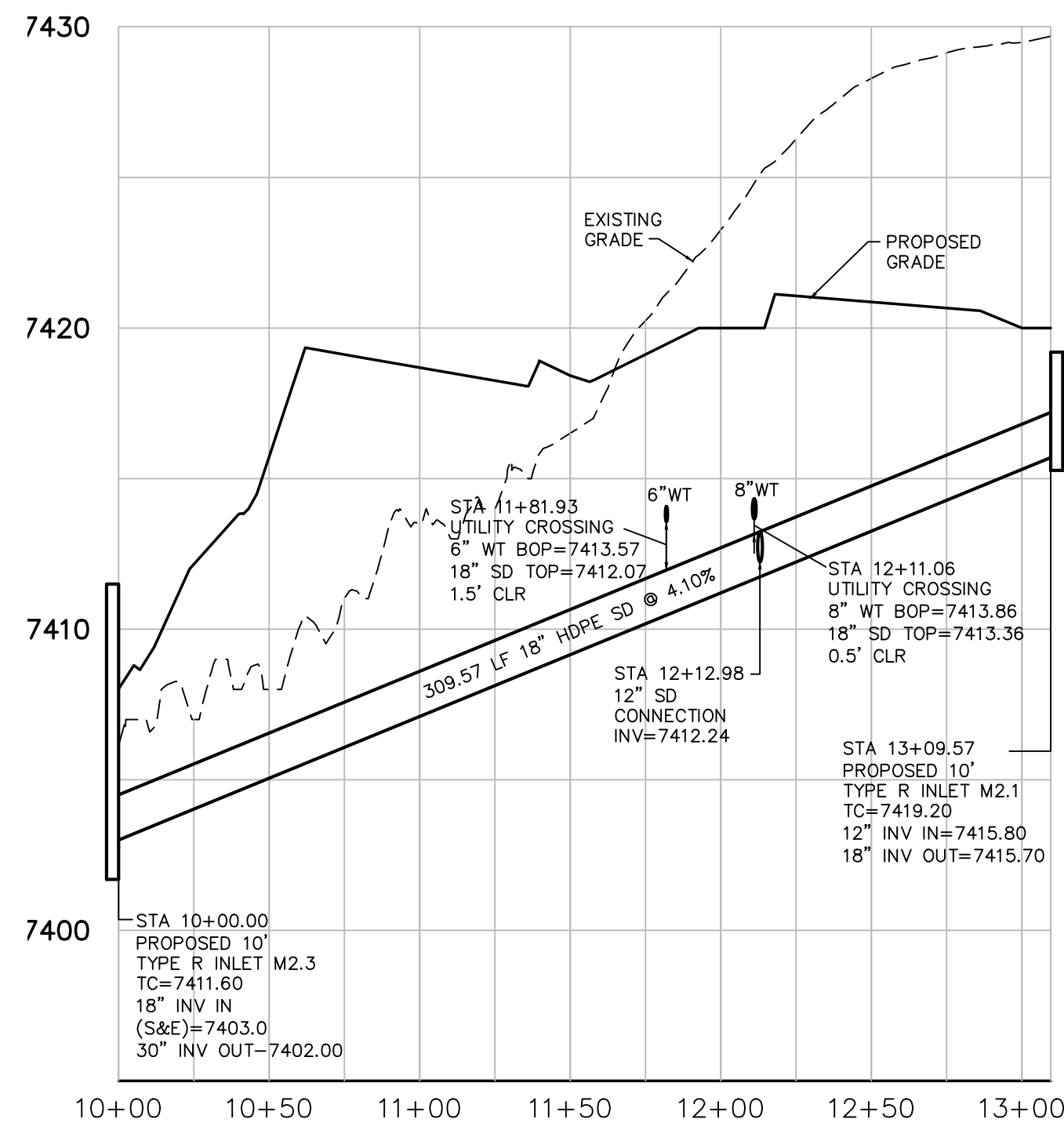
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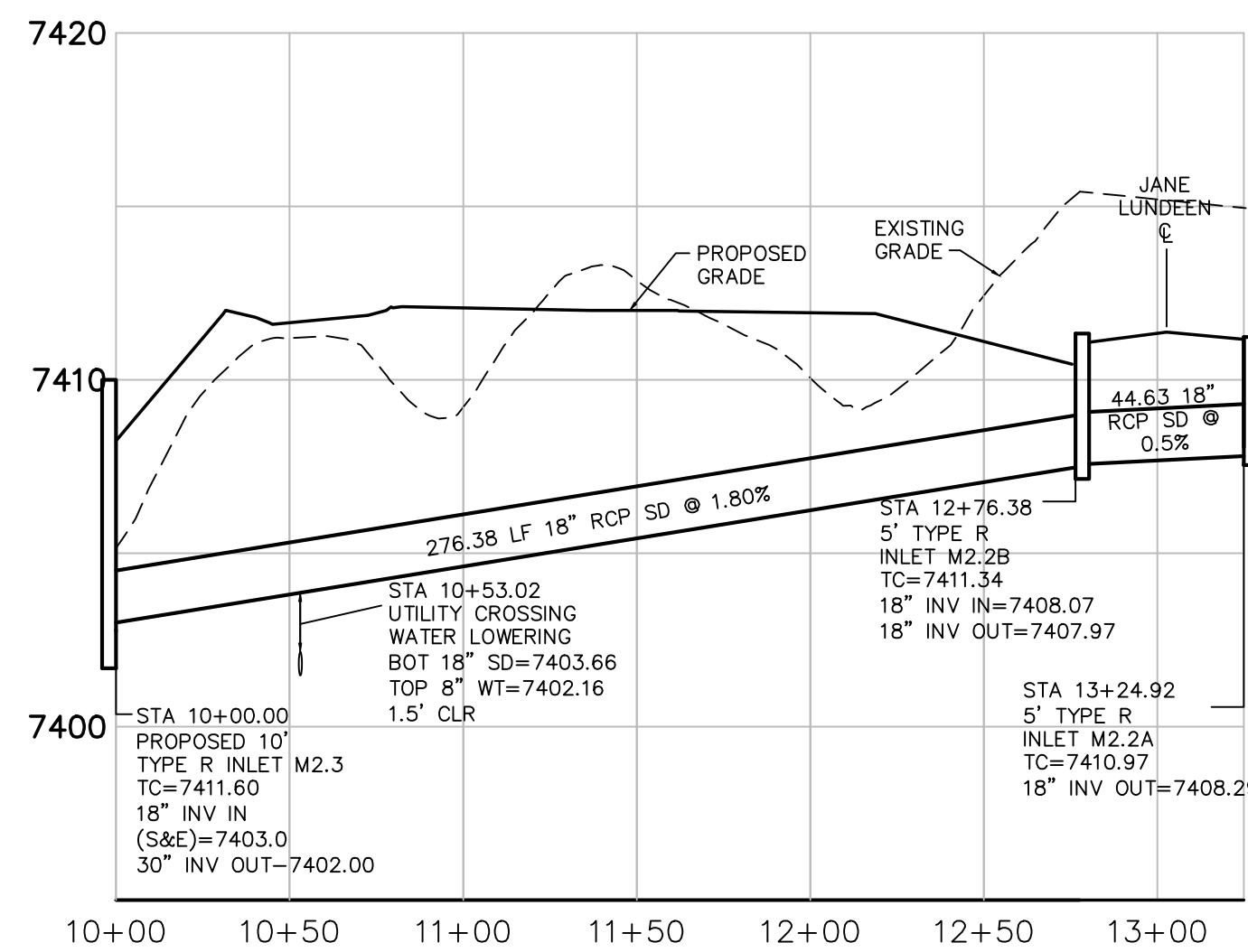
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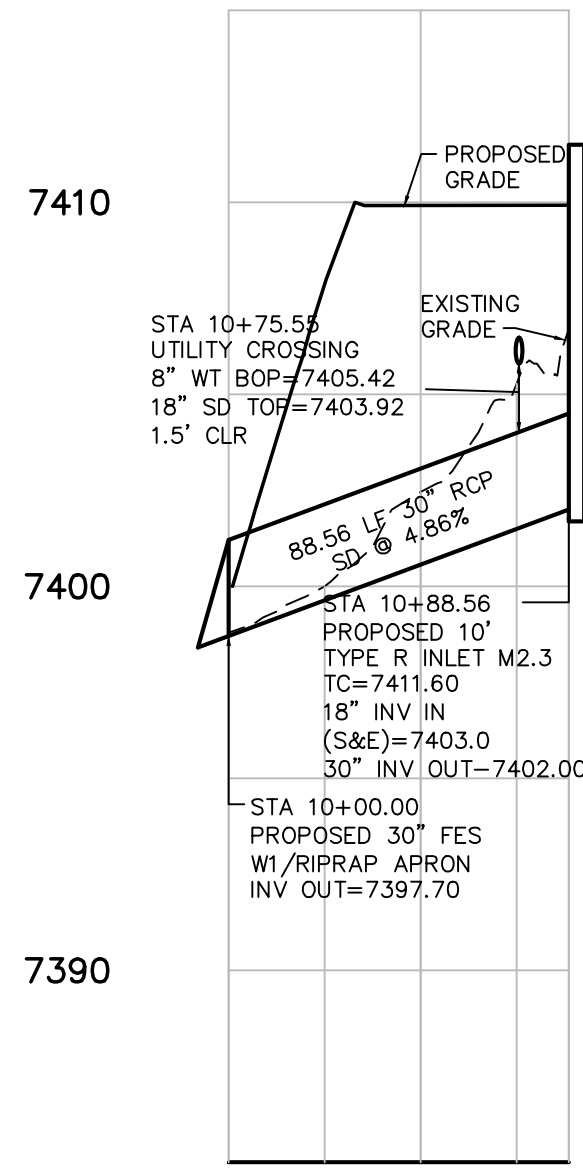
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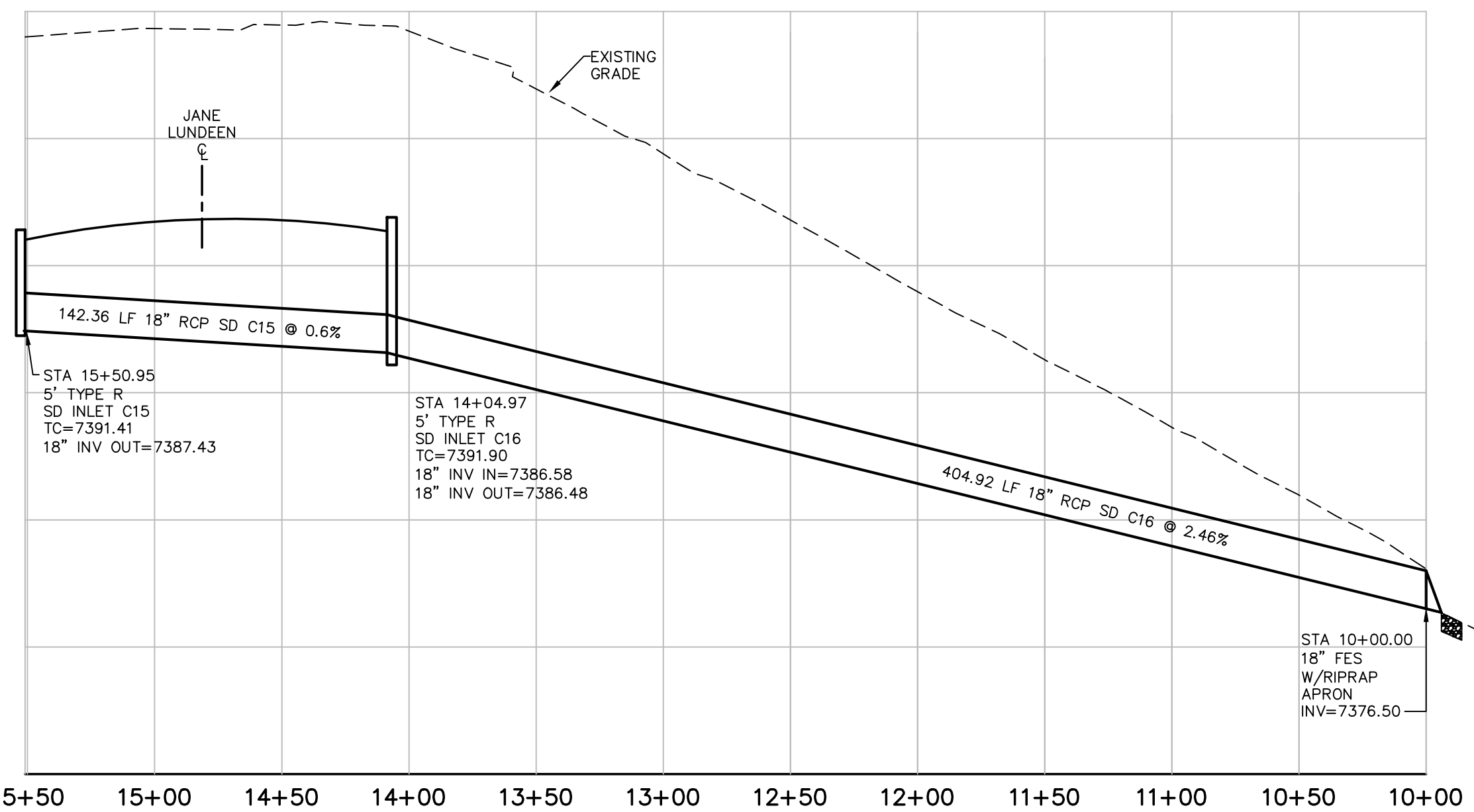
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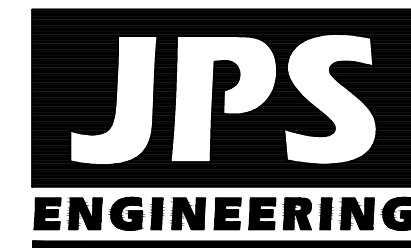
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SD-M2.3 PROFILE
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(PRIVATE UNTIL COMPLETED
WITH DOWNSTREAM
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ADDRESSED)
SCALE: 1"=50'H, 1"=5'V



SD C15-C16 PROFILE
(PUBLIC)
SCALE: 1"=50'H, 1"=5'V



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NO.	REVISION	BY	DATE
△	FOR PERMIT	JPS	4/01/19
△	COUNTY COMMENTS	JPS	4/29/19
△	COUNTY COMMENTS	JPS	6/20/19
△	COUNTY COMMENTS	JPS	8/09/19
△	SD-C14.2 REVISION	JPS	9/20/19
△	SD-C14.2 & SD-M2.1 REVISION	JPS	10/22/19
△	COUNTY COMMENTS	JPS	4/08/20
△	COUNTY COMMENTS	JPS	5/15/20

PCD PROJECT NO. CDR-20-001

CRP ARCHITECTS AIA
100 E. St. Vrain, Suite 300
Colorado Springs, Colorado 80903

STORM SEWER PROFILES

SCALE: 1"=50'H, 1"=5'V



DATE: 3/29/19
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 5/15/20

C6.1