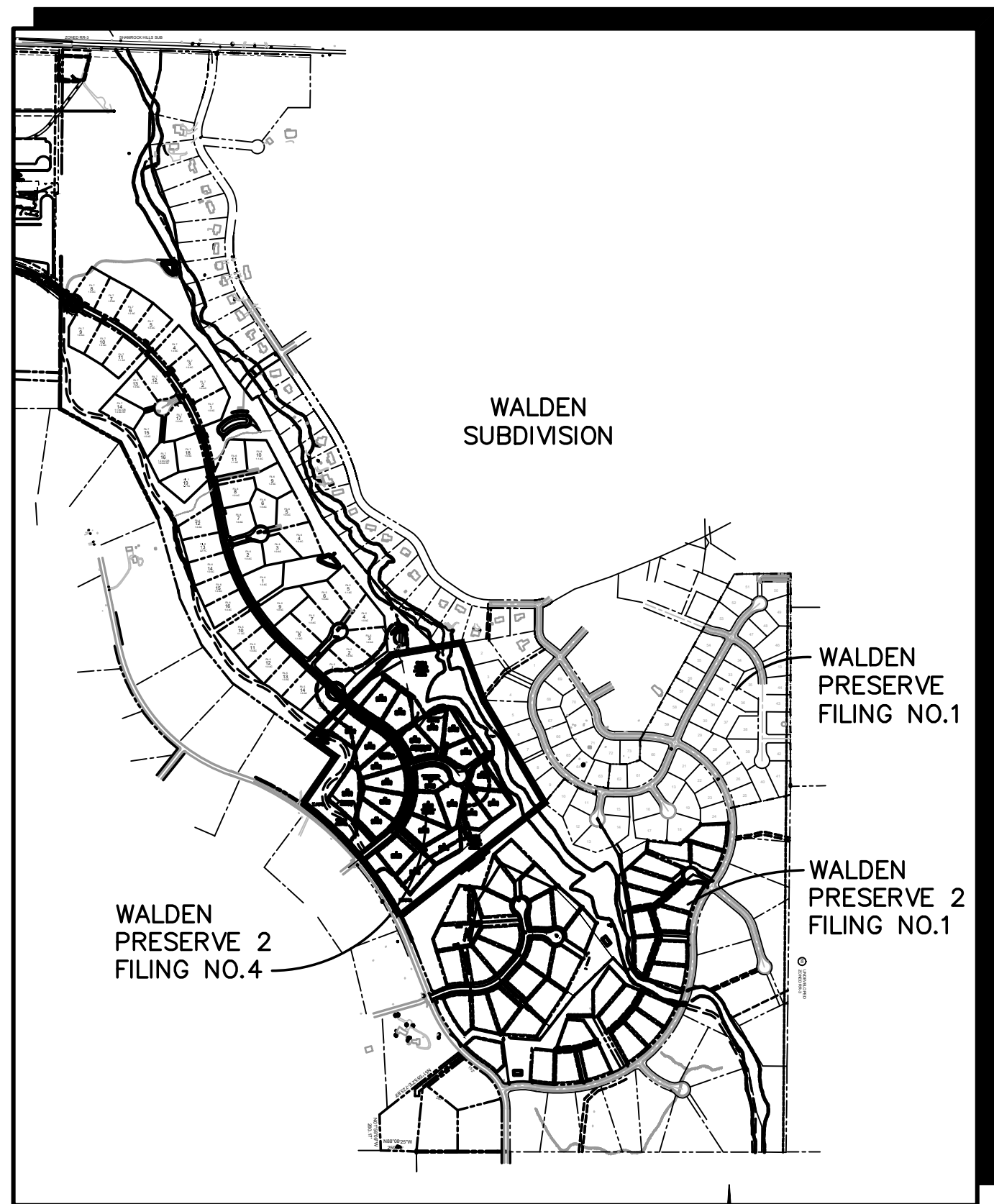


Z:\040201\walden\dwg\civil\WALDEN PRESERVE 2\PLG-4\G1 - GEC.dwg Jul 12, 2019 -- 2:38pm



VICINITY MAP
NOT TO SCALE



SITE MAP
NOT TO SCALE

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

BASIS OF BEARINGS:
THE BEARINGS FOR THIS SURVEY ARE BASED UPON THE SOUTH LINE OF LOT 7, FOREST HIGHLANDS SUBDIVISION AS RECORDED AT BOOK G-2, PAGE 6 IN THE RECORDS OF THE CLERK AND RECORDERS OFFICE, COUNTY OF EL PASO, STATE OF COLORADO, BEING ALSO A PORTION OF THE NORTH RIGHT-OF-WAY LINE OF DAWSON ROAD, BEING MONUMENTED AT THE SOUTHWEST CORNER OF SAID LOT 7 BY A FOUND REBAR & CAP MARKED "LS 9477" AND AT THE SOUTHEAST CORNER OF SAID LOT 7 BY A FOUND REBAR AND CAP MARKED "LS 9477". SAID LINE BEARS S89°05'35"E, A DISTANCE OF 601.38 FEET MEASURED (601.33 FEET PLATTED).

WALDEN PRESERVE 2

Filing No. 4

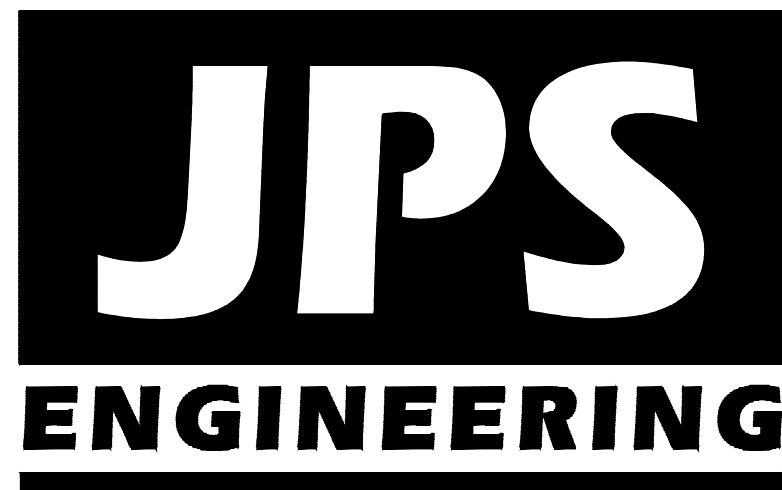
Grading & Erosion

Control Plans

El Paso County, Colorado

PREPARED FOR:
Custom Castles, Inc.
17145 Colonial Park Drive
Monument, CO 80132

PREPARED BY:



PREPARED BY:
19 East Willamette Avenue
Colorado Springs, Colorado 80903
JULY, 2019

AGENCIES/CONTACTS

DEVELOPER:	CUSTOM CASTLES, INC. 17145 COLONIAL PARK DRIVE MONUMENT, CO 80132 MR. BILL DUNSTON (719)243-1111	WATER/WASTEWATER:	WALDEN CORPORATION PO BOX 1870 MONUMENT, CO 80132 MR. MATT DUNSTON (719)339-2410
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)399-3176
LOCAL ROADS & DRAINAGE:	EL PASO COUNTY PCD 2880 INTERNATIONAL CIRCLE COLORADO SPRINGS, CO 80910 MR. GILBERT LAFORCE, P.E. (719)520-7945	ELECTRIC DEPARTMENT:	MOUNTAIN VIEW ELECTRIC ASSOCIATION 11140 E. WOODMEN ROAD COLORADO SPRINGS, CO 80908 MR. DAVE WALDNER (719)495-2283
STATE HIGHWAY	COLORADO DEPARTMENT OF TRANSPORTATION REGION 2 5615 WILLS BLVD. PUEBLO, CO 81008 MS. VALERIE SWORD (719)546-5407	TELEPHONE COMPANY:	CENTURY LINK COMMUNICATIONS (LOCATORS) (800)922-1987 A.T. & T. (LOCATORS) (719)635-3674

SHEET INDEX

G1	TITLE SHEET
G2	GENERAL NOTES & LEGEND
C1	OVERALL SITE PLAN
C1.1	SITE GRADING & EROSION CONTROL PLAN
C1.2	LOT GRADING NOTES & DETAILS
C2.1	ENLARGED SITE GRADING PLAN - SOUTH
C2.2	ENLARGED SITE GRADING PLAN - NORTH
C3	EROSION CONTROL NOTES & DETAILS
C4	RAIN GARDEN C2 PLAN & DETAILS
TY1	TYPICAL SECTIONS & DETAILS

ENGINEER:

DESIGN ENGINEER'S STATEMENT:

THESE DETAILED PLANS AND SPECIFICATIONS WERE PREPARED UNDER MY DIRECTION AND SUPERVISION. SAID PLANS AND SPECIFICATIONS HAVE BEEN PREPARED ACCORDING TO THE CRITERIA ESTABLISHED BY THE COUNTY FOR DETAILED ROADWAY, DRAINAGE, GRADING AND EROSION CONTROL PLANS AND SPECIFICATIONS, AND SAID PLANS AND SPECIFICATIONS ARE IN CONFORMITY WITH APPLICABLE MASTER DRAINAGE PLANS AND MASTER TRANSPORTATION PLANS. SAID PLANS AND SPECIFICATIONS MEET THE PURPOSES FOR WHICH THE PARTICULAR ROADWAY AND DRAINAGE FACILITIES ARE DESIGNED AND ARE CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. I ACCEPT RESPONSIBILITY FOR LIABILITY CAUSED BY NEGLIGENT ACTS, ERRORS OR OMISSIONS ON MY PART IN PREPARATION OF THESE DETAILED PLANS AND SPECIFICATIONS.

JOHN P. SCHWAB, P.E. #29891 _____ DATE _____

OWNER/DEVELOPER'S STATEMENT:

I, THE OWNER/DEVELOPER HAVE READ AND WILL COMPLY WITH ALL OF THE REQUIREMENTS SPECIFIED IN THESE DETAILED PLANS AND SPECIFICATIONS.

CUSTOM CASTLES, INC.
17145 COLONIAL PARK DRIVE
MONUMENT, COLORADO 80132

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.

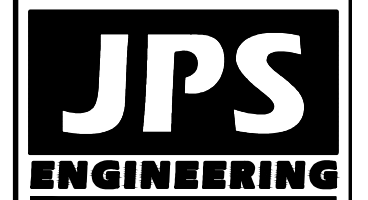
FILED IN ACCORDANCE WITH THE REQUIREMENTS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE, DRAINAGE CRITERIA MANUAL, VOLUMES 1 AND 2, AND ENGINEERING CRITERIA MANUAL AS AMENDED.

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, THEY 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., _____ DATE _____
COUNTY ENGINEER / ECM ADMINISTRATOR

PCD FILE NO. SF-18-034

WALDEN PRESERVE 2 - FILING NO. 4



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 BEFORE YOU DIG
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

No.	REVISION	DATE	BY
A	FINAL PLAT SUBMITTAL	9/05/18	JPS
A	COUNTY COMMENTS	2/26/19	JPS
A	COUNTY COMMENTS	5/15/19	JPS
A	COUNTY COMMENTS	7/10/19	JPS

TITLE SHEET

HORZ. SCALE:	HS	DRAWN:	BJJ
VERT. SCALE:	VS	DESIGNED:	JPS
SURVEYED:	PINNACLE	CHECKED:	JPS
CREATED:	1/05/18	LAST MODIFIED:	7/10/19
PROJECT NO:	040201	MODIFIED BY:	BJJ

SHEET:

G1

Z:\040201.walden\dwg\civil\WALDEN PRESERVE 2\PLG-4\G2.dwg May 16, 2019 -- 9:25am

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 DEPARTMENT (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 DSD. 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 DSD 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 DEPARTMENT OF PUBLIC WORKS (DPW) AND MUTCD CRITERIA.
14. CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED BY EL PASO DEPARTMENT OF PUBLIC WORKS (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. EXISTING CONTOUR DATA CONSISTS OF AERIAL TOPOGRAPHIC SURVEY DATA PROVIDED BY OWNER. JPS ENGINEERING TAKES NO RESPONSIBILITY FOR THE ACCURACY OF EXISTING TOPOGRAPHIC MAPPING.
2. 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.
3. PROPOSED CONTOURS SHOWN ARE TO FINISHED GRADE.
4. LENGTHS SHOWN FOR STORM SEWER PIPES ARE TO CENTER OF MANHOLE.
5. CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, DEBRIS, WASTE AND OTHER UNSUITABLE FILL MATERIAL FOUND WITHIN THE LIMITS OF EXCAVATION.
6. MATCH INTO EXISTING GRADES AT 3:1 MAX CUT AND FILL SLOPES.
7. REVEGETATION OF ALL DISTURBED AREAS SHALL BE DONE WITH SPECIFIED SEED MIX WITHIN 60 DAYS AFTER FINE GRADING IS COMPLETE.
8. EROSION CONTROL SHALL CONSIST OF SILT FENCE AND BMP'S AS SHOWN ON THE DRAWING, AND TOPSOIL WITH GRASS SEED, WHICH WILL BE WATERED UNTIL VEGETATION HAS BEEN REESTABLISHED.
9. 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 RE-ESTABLISHED.
10. 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.
11. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED AS DETERMINED BY SITE CONDITIONS.
12. 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.
13. ALL BACKFILL, SUB-BASE, AND/OR BASE COURSE MATERIAL SHALL BE COMPACTED PER EL PASO COUNTY AND CDOT STANDARDS AND SPECIFICATIONS.
14. ALL FINISHED GRADES SHALL HAVE A MINIMUM 1.0% SLOPE TO PROVIDE POSITIVE DRAINAGE.
15. IN CASE OF CONFLICT BETWEEN PROPOSED SLOPES AND PROPOSED SPOT ELEVATIONS, SPOT ELEVATIONS SHALL GOVERN.
16. 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.

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 PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD).
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 PLANNING AND COMMUNITY DEVELOPMENT DEPARTMENT (PCD) (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.

DESIGN DATA		REFERENCE STANDARD	
ROAD CLASSIFICATION:	RURAL LOCAL		
DESIGN SPEED:	30 MPH	ECM TABLE	2-5
POSTED SPEED:	30 MPH	ECM TABLE	2-5
ROADWAY WIDTH:	28' EOA-EOA	ECM FIGURE	2-8
MIN. HORIZONTAL RADIUS:	300'	ECM TABLE	2-5
MIN. GRADE:	1.0%	ECM TABLE	2-5
MAX. GRADE:	8.0%	ECM TABLE	2-5
MAX. CUL-DE-SAC GRADE	2.0%	ECM TABLE	2-31
MIN. K-VALUE (CREST):	19	ECM TABLE	2-12
MIN. K-VALUE (SAG):	37	ECM TABLE	2-14

LEGEND:

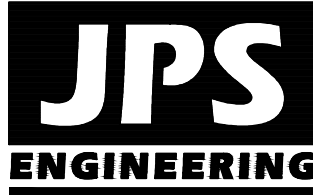
	NEW/EXISTING
	SECTION LINE -- NEW/EXISTING
	EASEMENT LINE -- NEW/EXISTING
	CONTOUR -- NEW/EXISTING
	PROPERTY LINE -- NEW/EXISTING
	FENCE -- NEW/EXISTING
	OVERHEAD ELECTRIC LINE W/ POWER POLE NEW/EXISTING
	UNDERGROUND ELECTRIC LINE NEW/EXISTING
	UNDERGROUND ELECTRIC -- NEW/EXISTING
	TELEPHONE -- NEW/EXISTING
	GAS -- NEW/EXISTING
	WATER -- NEW/EXISTING
	ECB -- DITCH LINING
	SECTION NUMBER
	SHEET ON WHICH SECTION IS SHOWN

WALDEN PRESERVE 2 - FILING NO. 4

GENERAL NOTES
& LEGEND

HORZ. SCALE:	HS	DRAWN:	BJJ
VERT. SCALE:	VS	DESIGNED:	JPS
SURVEYED:	RAMPART	CHECKED:	JPS
CREATED:	9/05/18	LAST MODIFIED:	5/15/19
PROJECT NO:	040201	MODIFIED BY:	JPS

SHEET: G2



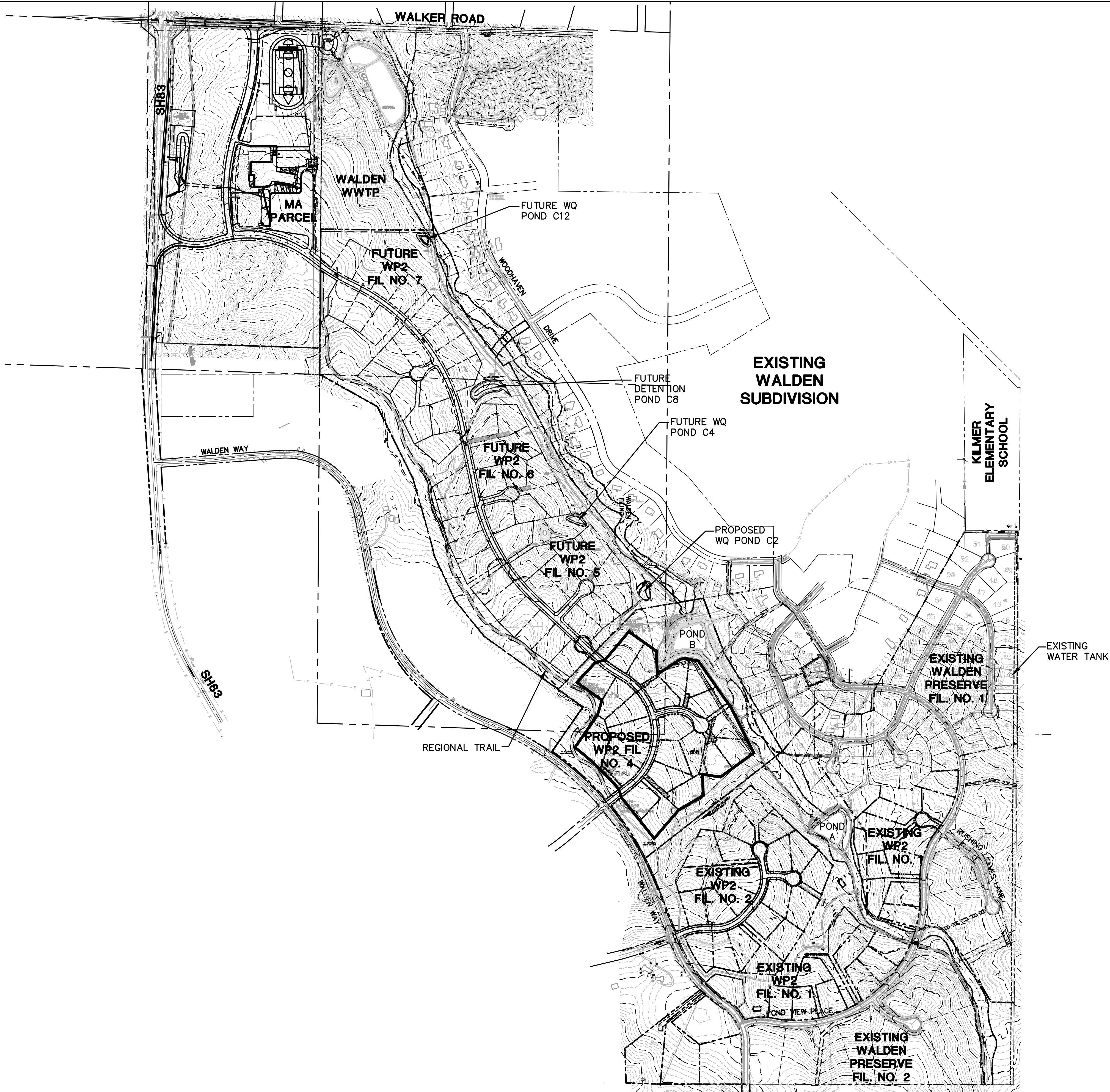
19 E. Willamette Ave.
Colorado Springs, CO
80903

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



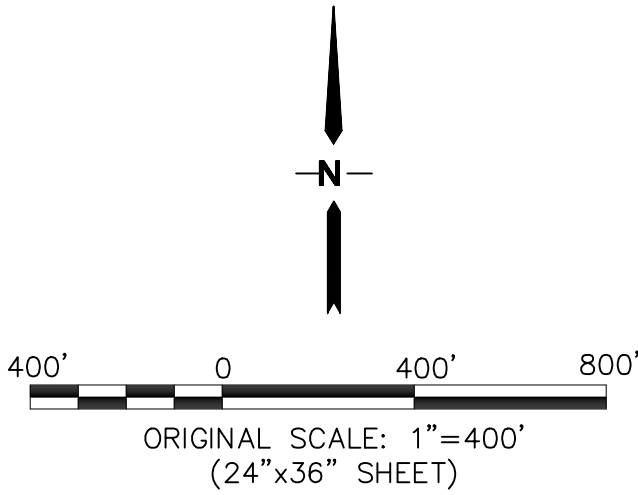
CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 811 TO LOCATE UTILITIES
BEFORE YOU DIG GRADE OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

Z:\040201\walden\dwg\civil\WALDEN PRESERVE 2\FLG-4\01.dwg May 16, 2019 - 12:39pm

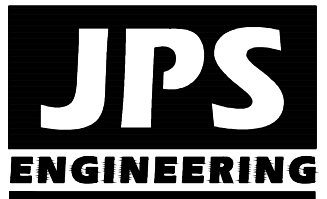


DRIVEWAY CULVERT TABLE	
FIL 4 LOT NO.	SIZE (D)
1	18"
2	18"
3	18"
4	18"
5	18"
6	18"
7	18"
8	42"
9	42"
10	42"
11	18"
12	18"
13	18"
14	18"
15	18"
16	18"
17	18"
18	18"
19	18"
20	18"
21	18"
22	18"
23	18"

NOTE: AT LOCATIONS WHERE ROADSIDE DITCHES ARE MINIMAL, DRIVEWAY CULVERTS MAY BE DELETED IN SOME CASES UPON FIELD REVIEW WITH COUNTY APPROVAL



WALDEN PRESERVE 2 - FILING NO. 4



19 E. Willamette Ave.
Colorado Springs, CO 80903
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MEMBER UTILITIES.

REVISION	DATE	BY
1	9/05/18	JPS
2	2/25/19	JPS
3	5/15/19	JPS

OVERALL SITE PLAN

HORZ. SCALE: 1"=400'	DRAWN: BJJ
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED:	CHECKED: JPS
CREATED: 10/05/17	LAST MODIFIED: 5/15/19
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET:

C1

Z:\040201\walden\dwg\civil\walden PRESERVE 2\FILG-4\C1.1.dwg Jul 12, 2019 - 11:52am

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

SEQUENCING NOTES:

1. INSTALLATION OF INITIAL BMP'S,
2. INSPECTION OF INITIAL BMP'S BY COUNTY STAFF,
3. PRECONSTRUCTION MEETING WITH COUNTY STAFF,
4. THE MAXIMUM AREA TO BE OPENED AT ANY TIME IS 30 ACRES, AND THE MAXIMUM HEIGHT OF STOCKPILES IS TO BE 10- FEET.

PROPOSED WQCV RAIN GARDEN C2
BOT EL=7440.0
MAX WSL=7441.0
TOP EL=7442.0
WQCV REQ'D=6,555 CF
DSN VOL=8,162 CF

12'W GRAVEL ACCESS ROAD;
MATCH INTO EXISTING
MAINTENANCE ACCESS TRAIL

CHANNEL C1
6.5% SLOPE

EXISTING GRAVEL TRAIL

EXISTING GRAVEL TRAIL

FUTURE
FILING
NO. 5

CHANNEL C2
(TENSAR ERONET
C125 OR EQUAL)

TRACT A
14.46 AC±
(629,994 S.F.)
UTILITIES,
DRAINAGE, OPEN
SPACE &
RECREATION

TRACT B
5.70 AC±
(263,101 S.F.)
UTILITIES,
DRAINAGE, OPEN
SPACE &
RECREATION

FILING
NO. 4

TRACT B
3.70 AC±
(161,191 S.F.)

TRACT A
14.46 AC±
(629,994 S.F.)
UTILITIES,
DRAINAGE, OPEN
SPACE &
RECREATION

LEGEND:

FLOWLINE
PROPOSED SPOT ELEVATION (FLOWLINE)
EXISTING SPOT ELEVATION

RR RIPRAP (10'L x 6'W x 2'D;
d₅₀=12" RR UNLESS
OTHERWISE NOTED)

IP INLET PROTECTION
(GRAVEL FILTER)

SF SILT FENCE

VTC VEHICLE TRACKING CONTROL PAD

TM TEMPORARY SEED AND MULCH
ON DISTURBED SLOPES

STB STRAW BALE BARRIER @ 300' SPACING
IN ALL ROADSIDE DITCHES (TYP.) OR
SEDIMENT CONTROL LOGS

TSB TEMPORARY SEDIMENT BASIN
(SEE DETAILS ON SH. C3)

ECB EROSION CONTROL BLANKET
(TENSAR ERONET SC150 OR
APPROVED EQUAL); UNLESS
NOTED OTHERWISE

RG RAIN GARDEN

SSA STABILIZED STAGING AREA

A
B
C RECOMMENDED LOT
GRADING TYPES PER
SHEET C1.2

ESTIMATED EARTHWORK QUANTITY:

UNCLASSIFIED EXCAVATION (TOTAL CUT) = 14,069 CY
* EMBANKMENT FILL = 2,759 CY
NET (CUT) = 11,310 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.

KEYED NOTES:

- ① CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA. MATCH INTO EXISTING GRADES WITH 3:1 MAX CUT AND FILL SLOPES AND MAINTAIN POSITIVE DRAINAGE IN ALL AREAS.
- ② TOPSOIL STOCKPILE AREA

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

NOTE:
REFER TO LOT GRADING NOTES & DETAILS ON SHEET C1.2

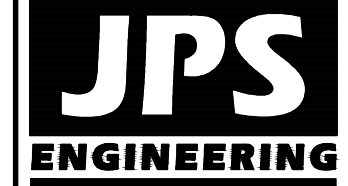
WALDEN PRESERVE 2 - FILING NO. 4

**SITE GRADING & EROSION
CONTROL PLAN**

HORZ. SCALE: 1"=100'	DRAWN: RMD
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 7/03/14	LAST MODIFIED: 7/11/19
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET:

C1.1



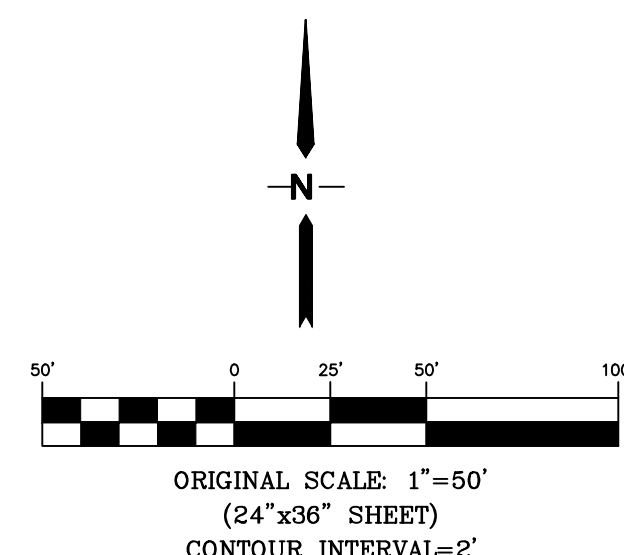
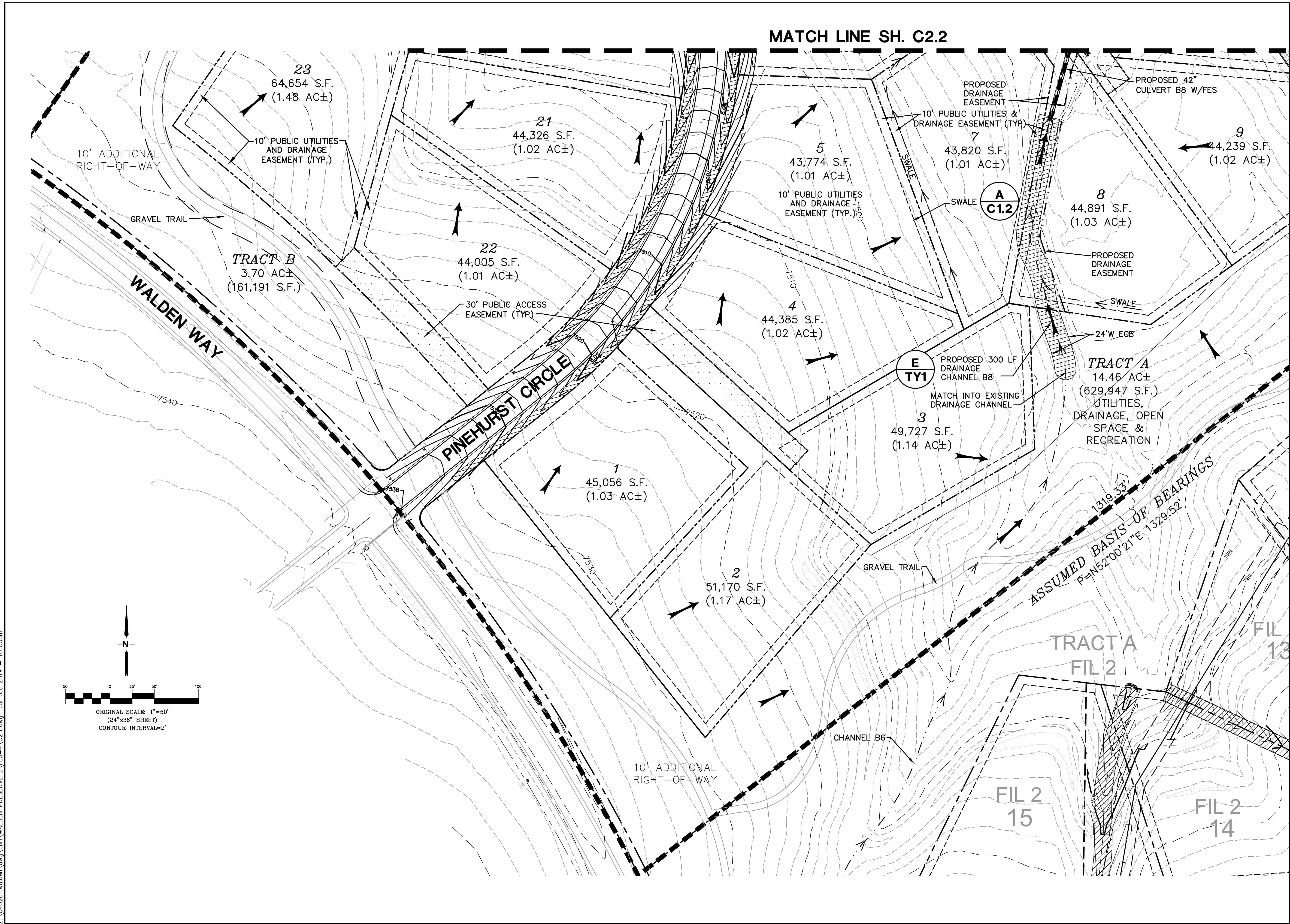
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1-800-922-1987
CALL 2-4 HOURS BEFORE
YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

REVISION	DATE	BY
FINAL PLAT SUBMITTAL	9/05/18	JPS
COUNTY COMMENTS	2/25/19	JPS
COUNTY COMMENTS	5/15/19	JPS
COUNTY COMMENTS	7/11/19	JPS

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WALDEN PRESERVE 2 - FILING NO. 4

ENLARGED SITE GRADING PLAN - SOUTH

JPS
ENGINEERING

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Colorado Springs, CO
80903

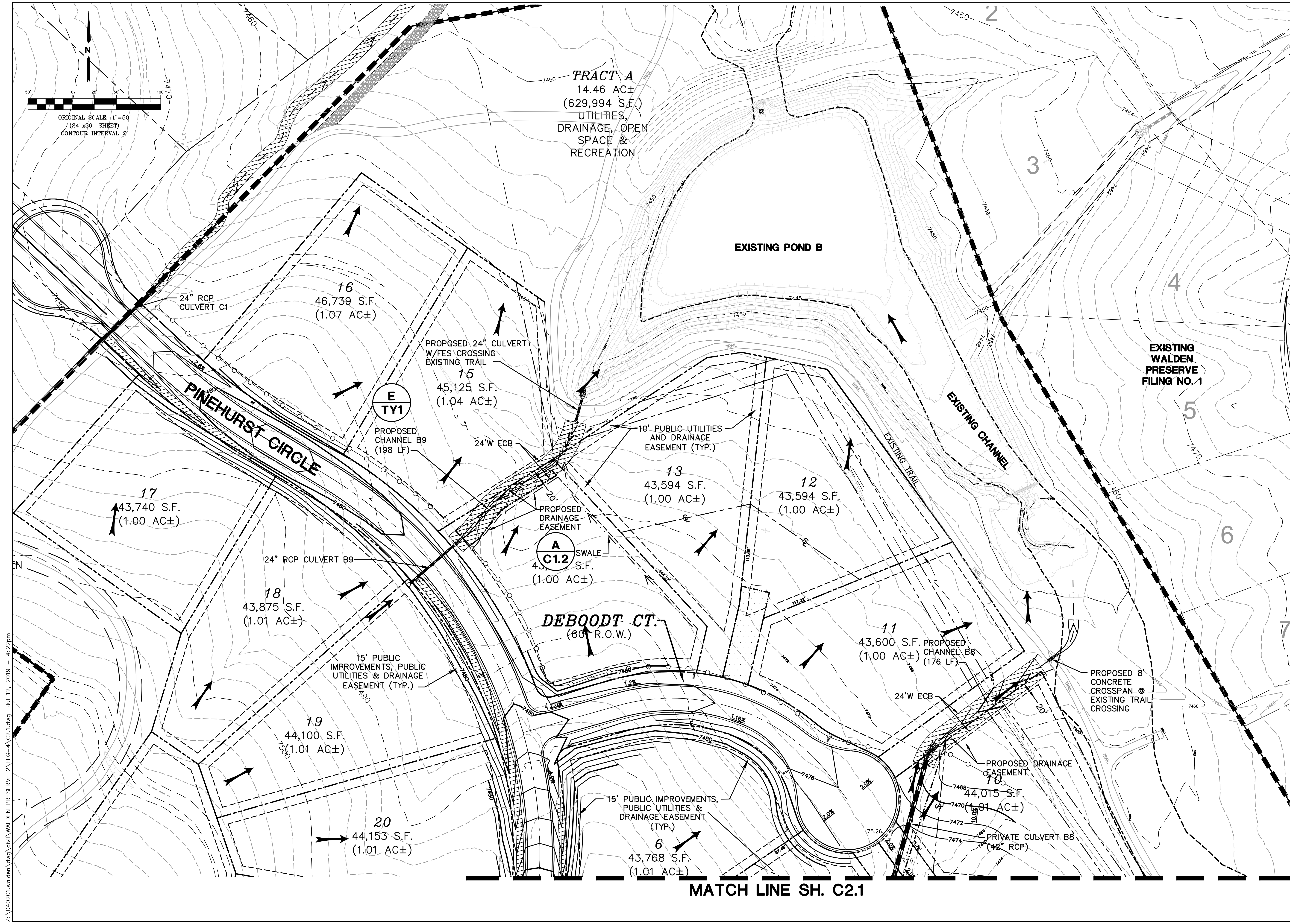
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No.	REVISION	DATE	BY
1	FINAL PLAT SUBMITTAL	9/05/18	JPS
2	COUNTY COMMENTS	2/25/19	JPS
3	COUNTY COMMENTS	5/15/19	JPS
4	COUNTY COMMENTS	7/03/19	JPS

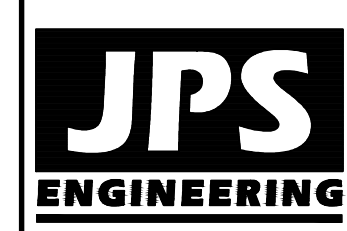
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VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 8/14/14	LAST MODIFIED: 03/19
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET: C2.1



WALDEN PRESERVE 2 - FILING NO. 4

ENLARGED SITE
GRADING PLAN - NORTH



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Colorado Springs, CO
80903
PH: 719-477-9429
FAX: 719-471-0766
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CALL 3 DAYS BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES

BY	DATE	REVISION
JPS	9/05/18	FINAL PLAT SUBMITTAL
JPS	2/25/19	COUNTY COMMENTS
JPS	5/15/19	COUNTY COMMENTS

HORZ. SCALE: 1"=50'	DRAWN: RMD
VERT. SCALE: N/A	DESIGNED: JPS
SURVEYED: RAMPART	CHECKED: JPS
CREATED: 8/14/14	LAST MODIFIED: 11/19
PROJECT NO: 040201	MODIFIED BY: BJJ
SHEET:	C2.2

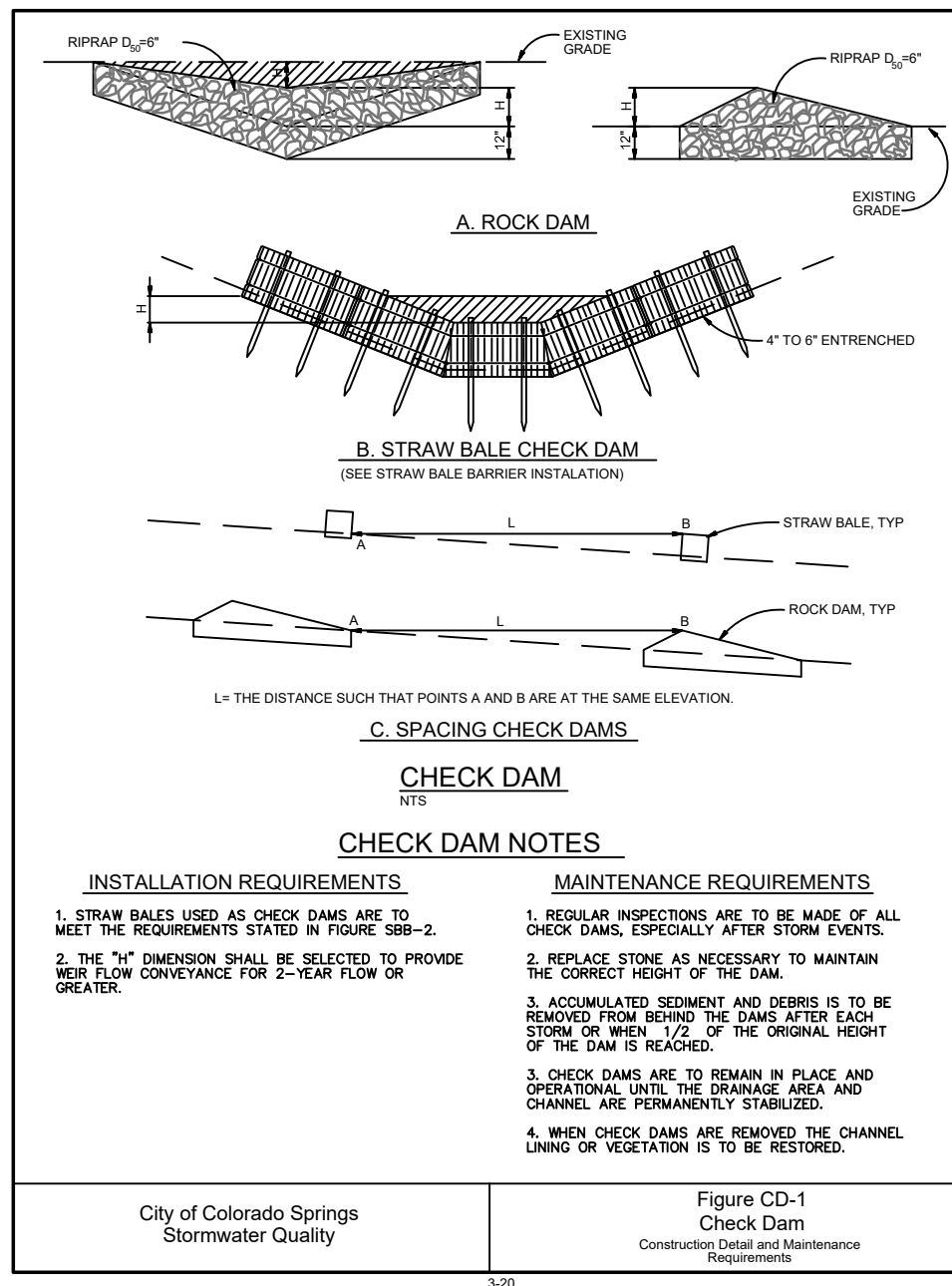
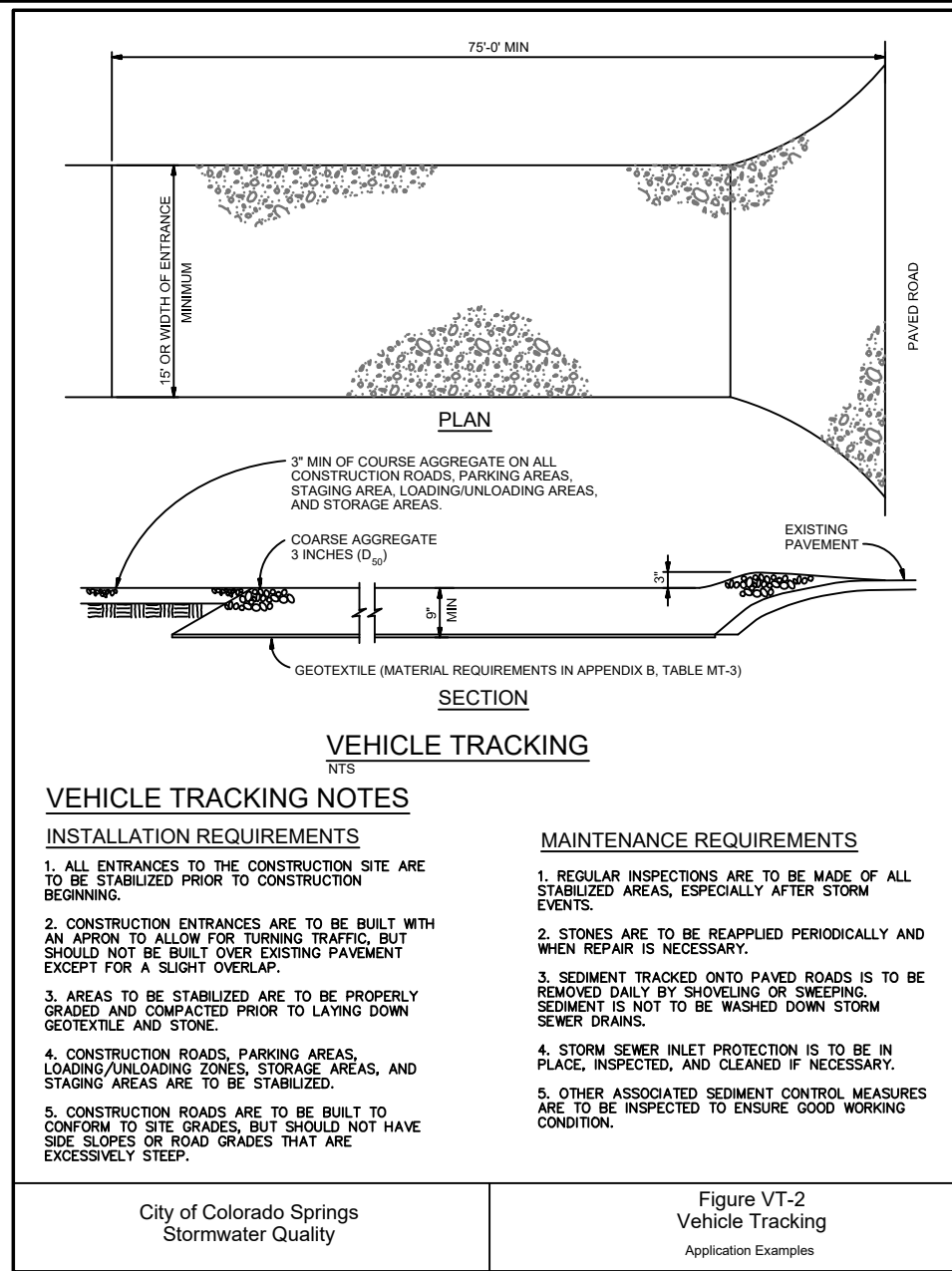
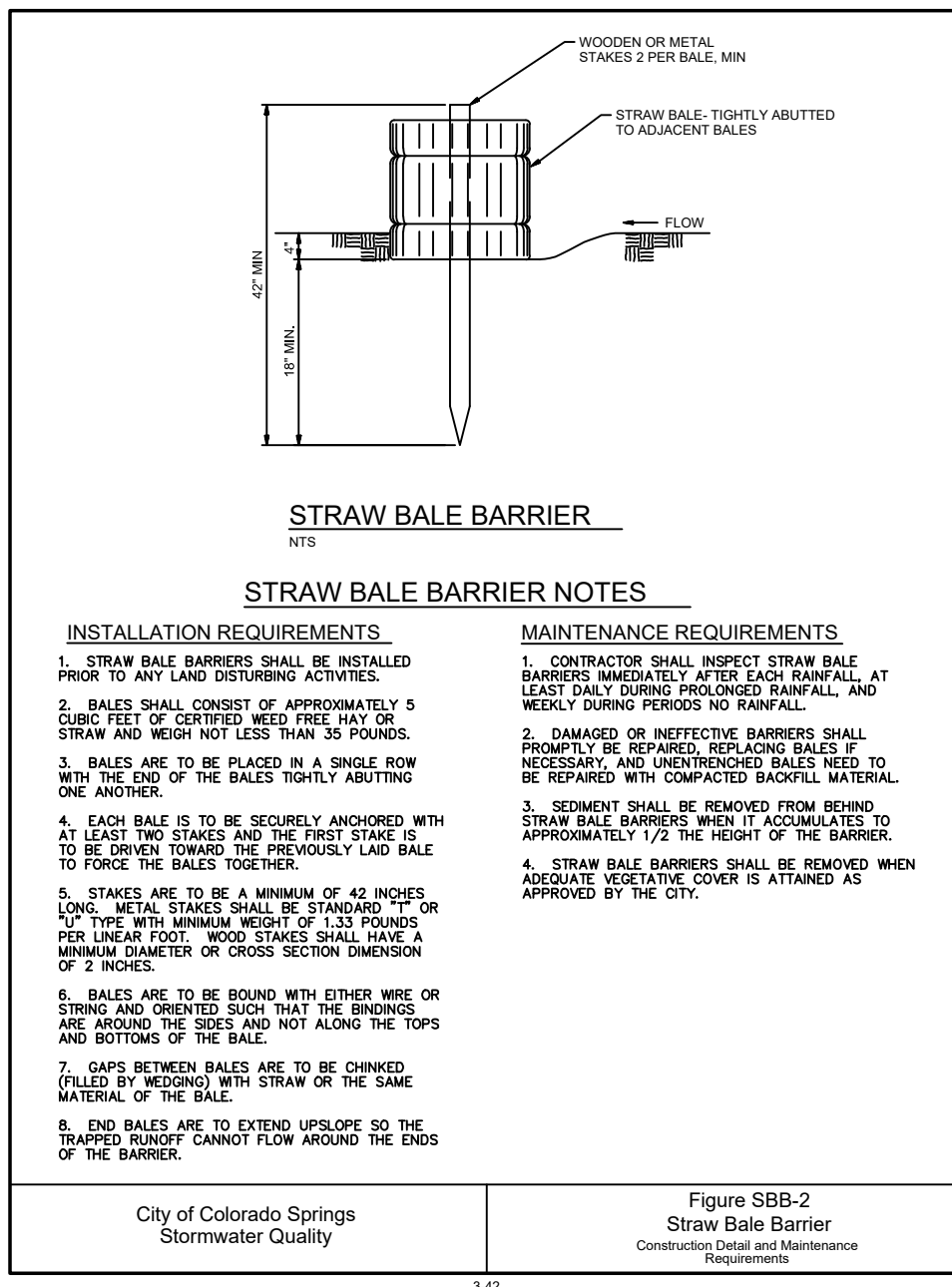
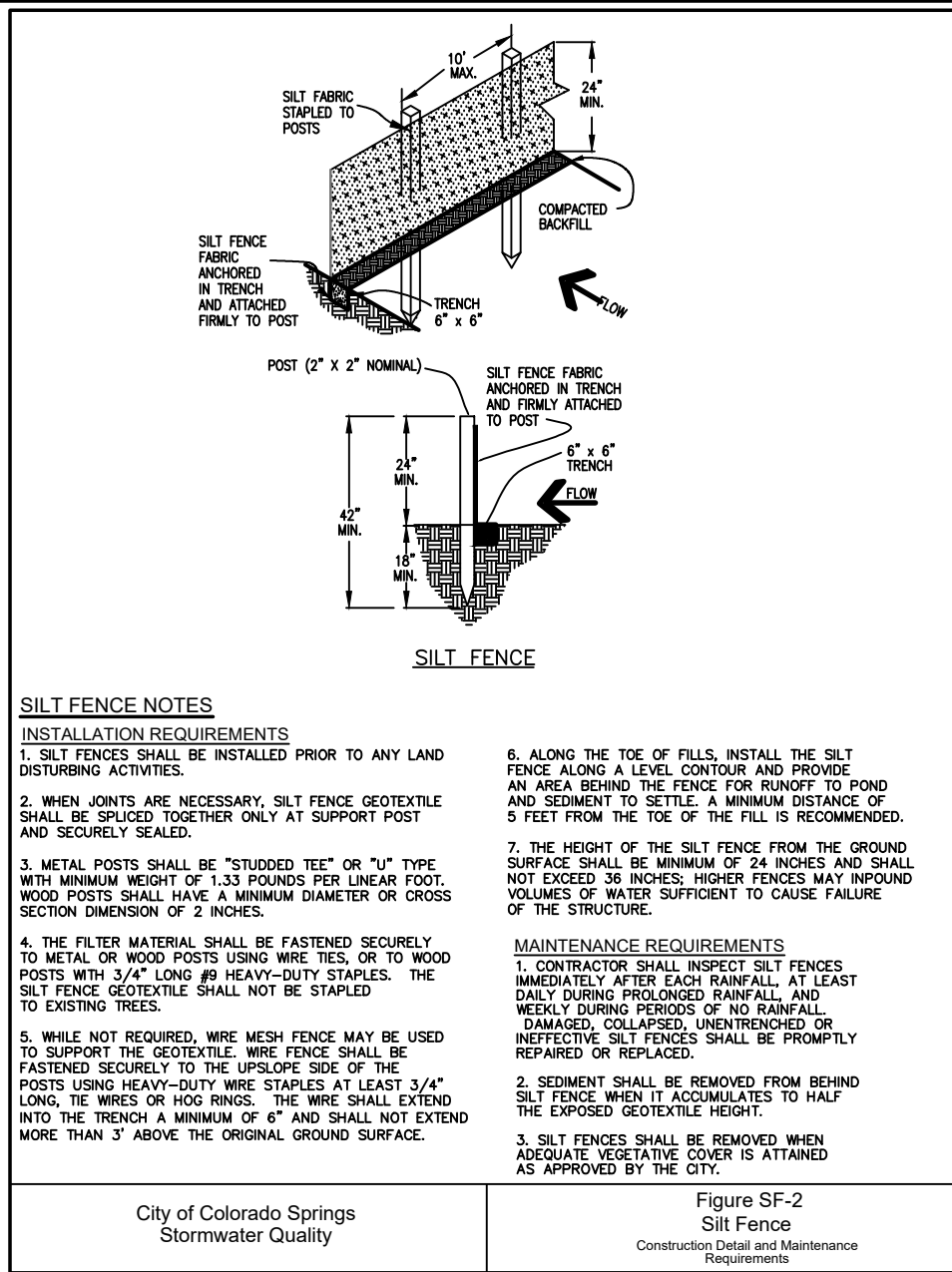
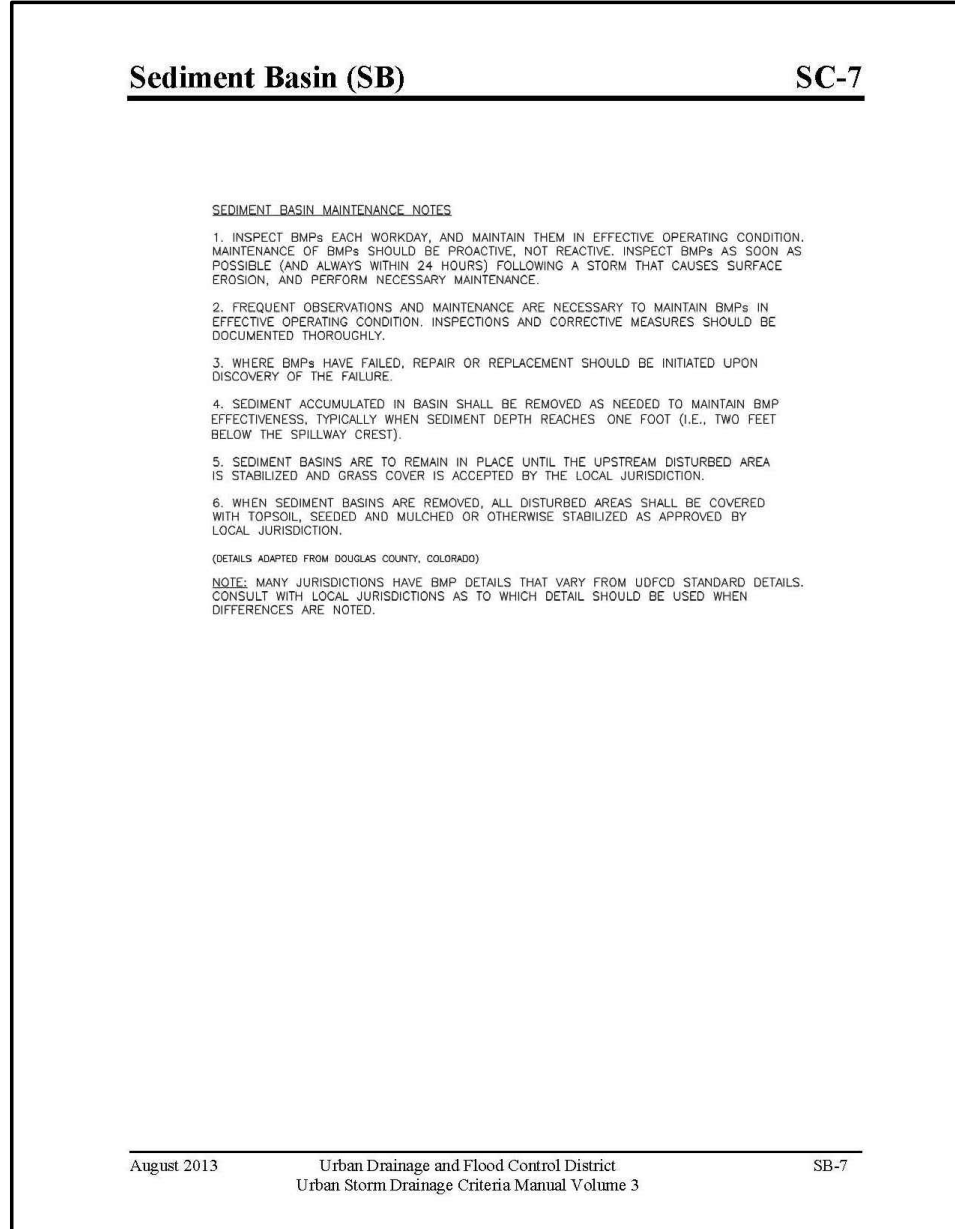
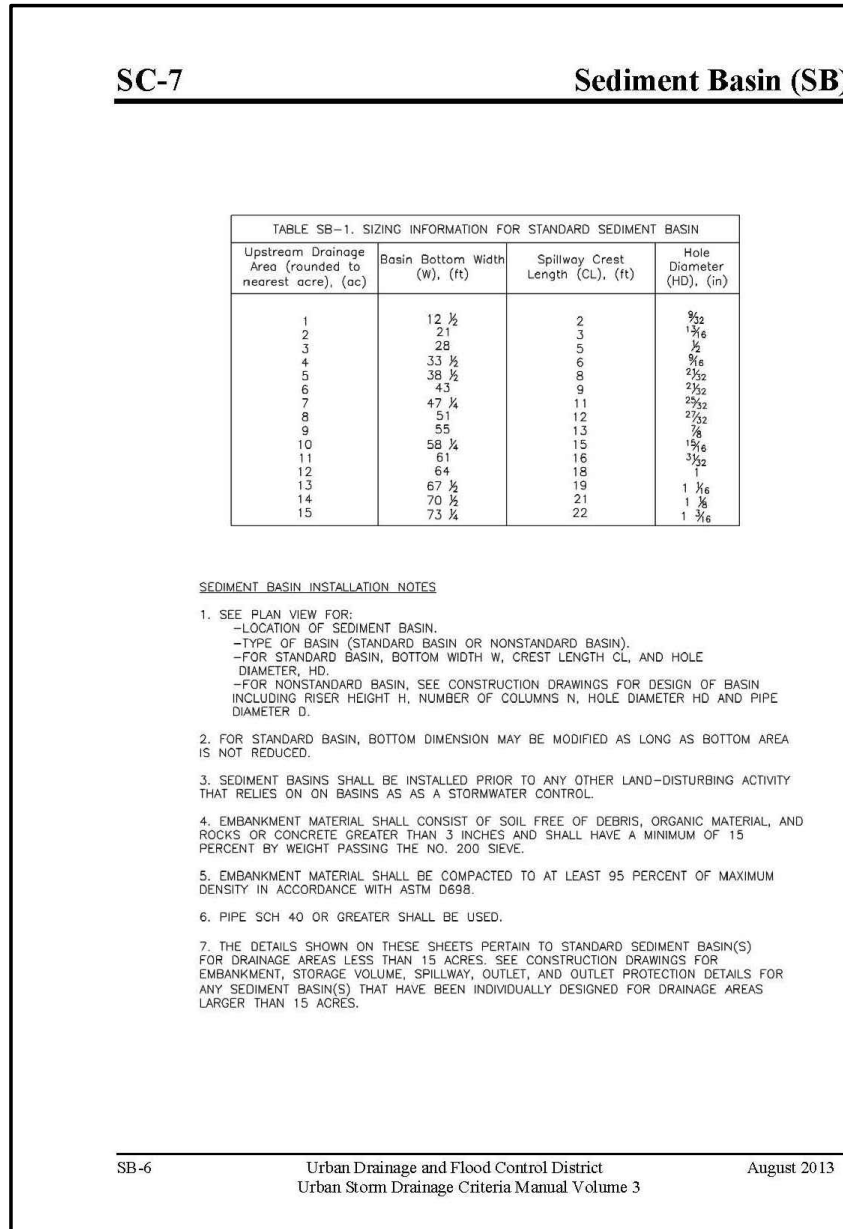
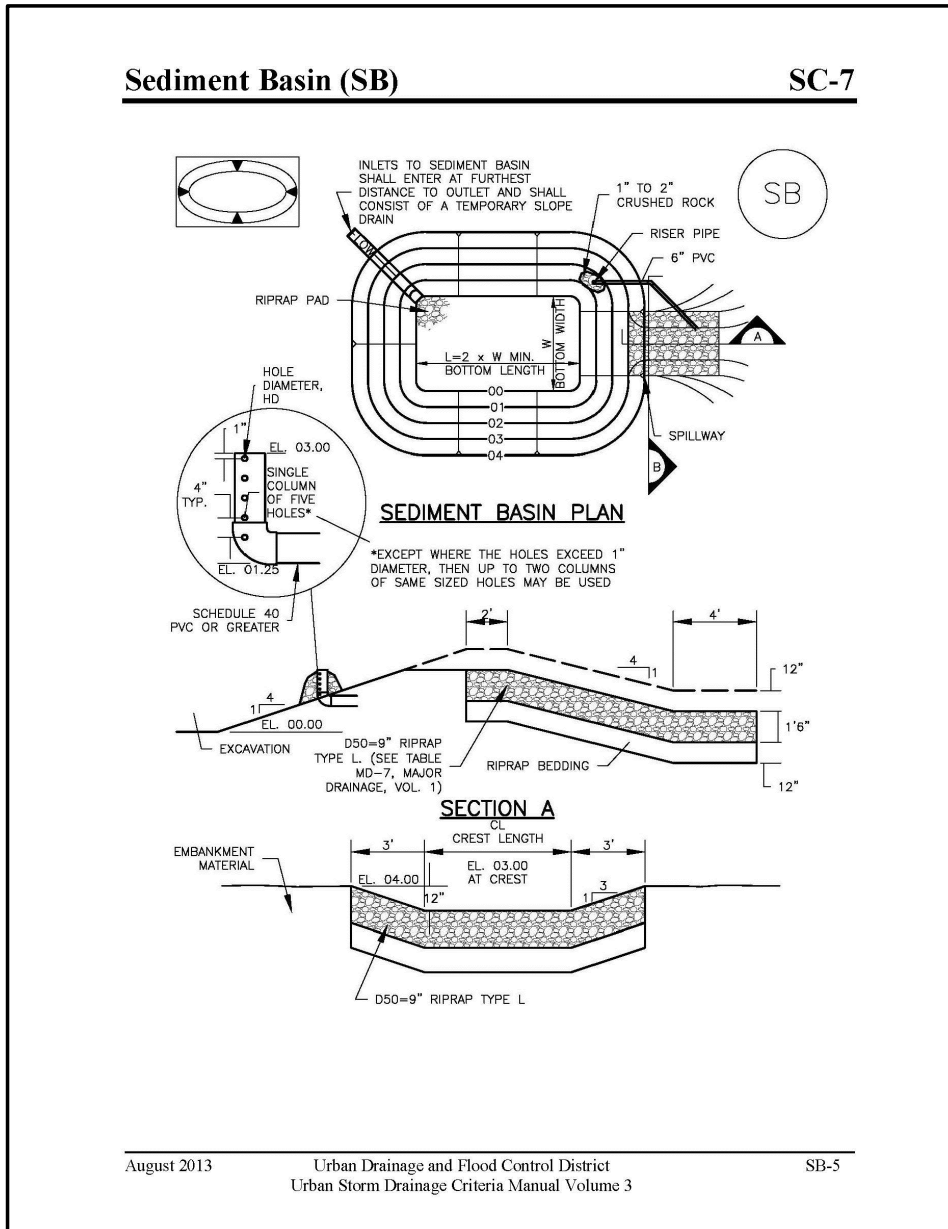
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Revised 7/07/10

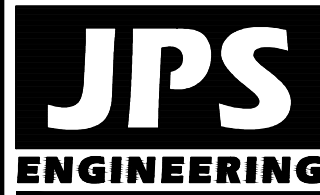
3. Construction will not commence until a Construction Permit is obtained from Development Services and a Preconstruction Conference is held with Development Services Inspectors.
2. Stormwater discharges from construction sites shall not cause or threaten to cause pollution, contamination, or degradation 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.
3. 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.
4. A separate Stormwater Management Plan (SWMP) 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 Stormwater Manager, shall be located on site at all times and shall be kept up to date with work progress and changes in the field.
5. Once the ESQCP has been issued, the contractor may install the initial stage erosion and sediment control BMPs as indicated on the 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 DSD inspections staff.
6. Soil erosion control measures for all slopes, channels, ditches, or any disturbed land area shall be completed within 21 calendar days after final grading, or final earth disturbance, has been completed. Disturbed areas and stockpiles which are not at final grade but will remain dormant for longer than 30 days shall also be mulched within 21 days after interim grading. An area that is going to remain in an interim state for more than 60 days shall also be seeded. All temporary soil erosion control measures and BMPs shall be maintained until permanent soil erosion control measures are implemented and established.
7. Temporary soil erosion control facilities shall be removed and earth disturbance areas graded and stabilized with permanent soil erosion control measures pursuant to standards and specification prescribed in the DCM Volume II and the Engineering Criteria Manual (ECM) appendix I.
8. All persons engaged in earth disturbance shall implement and maintain acceptable soil erosion and sediment control measures including BMPs in conformance with the erosion control technical standards of the Drainage Criteria Manual (DCM) Volume II and in accordance with the Stormwater Management Plan (SWMP).
9. All temporary erosion control facilities including BMPs and all permanent facilities intended to control erosion of any earth disturbance operations, shall be installed as defined in the approved plans, the SWMP and the DCM Volume II and maintained throughout the duration of the earth disturbance operation.
10. Any earth disturbance shall be conducted in such a manner so as to effectively reduce 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.
11. Any temporary or permanent facility designed and constructed for the conveyance of stormwater around, through, or from the earth disturbance area shall be designed to limit the discharge to a non-erosive velocity.
12. 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.
13. Erosion control blanketing is to be used on slopes steeper than 3:1.
14. 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.
15. Vehicle tracking of soils and construction debris off-site shall be minimized. Materials tracked offsite shall be cleaned up and properly disposed of immediately.
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. 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.
18. 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.
19. 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.
20. Bulk storage structures for petroleum products and other chemicals shall have adequate protection so as to contain all spills and prevent any spilled material from entering State Waters, including any surface or subsurface storm drainage system or facilities.
21. No person shall cause the impediment of stormwater flow in the flow line of the curb and gutter or in the ditchline.
22. 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.
23. All construction traffic must enter/exit the site at approved construction access points.
24. Prior to actual construction the permittee shall verify the location of existing utilities.
25. A water source shall be available on site during earthwork operations and utilized as required to minimize dust from earthwork equipment and wind.
26. The preliminary soils report for this site prepared by Himmelreich & Assoc., dated 1/24/05 shall be considered a part of these plans.
27. 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 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

TEMPORARY SEDIMENT BASIN DESIGN DATA			
BASIN	DRAINAGE AREA (AC)	CL (FT)	HD (IN)
C2	22.8	22	1-3/16"



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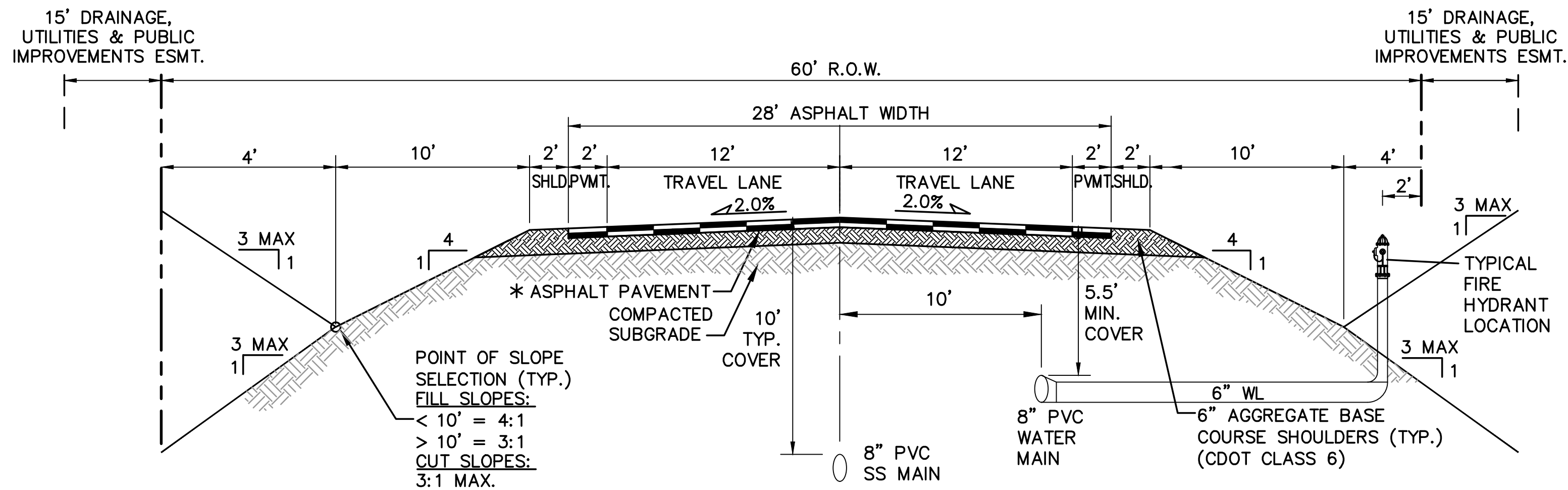
No.	REVISION	BY	DATE
	FINAL PLAT SUBMITTAL	JPS	9/05/18
	COUNTY COMMENTS	JPS	2/15/19
	COUNTY COMMENTS	JPS	5/15/19
	COUNTY COMMENTS	JPS	7/09/19

EROSION CONTROL NOTES & DETAILS

HORZ. SCALE:	NTS	DRAWN:	BJJ
VERT. SCALE:	N/A	DESIGNED:	JPS
SURVEYED:	PINNACLE	CHECKED:	JPS
CREATED:	6/30/14	LAST MODIFIED:	7/09/19
PROJECT NO:	040201	MODIFIED BY:	BJJ

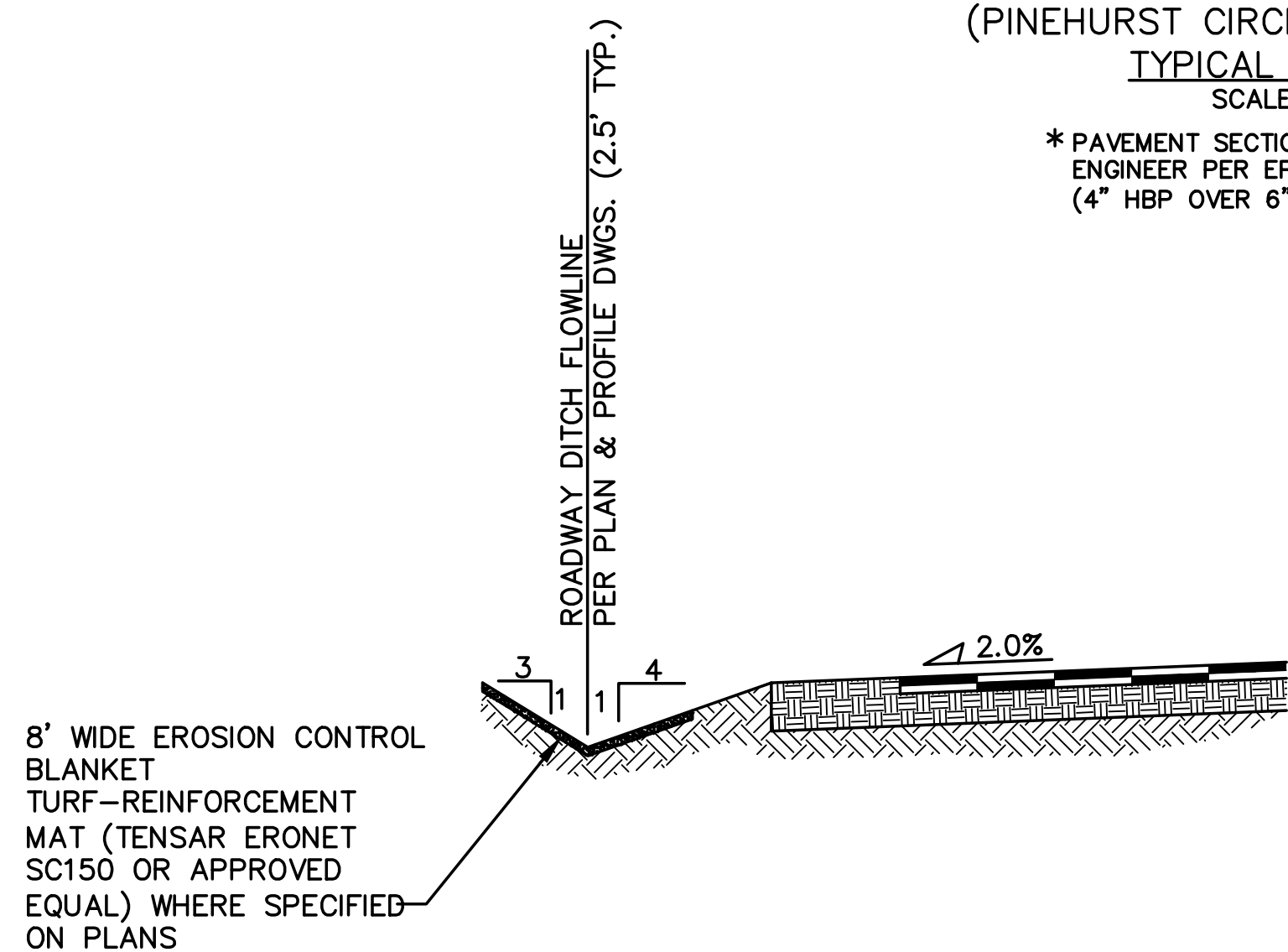
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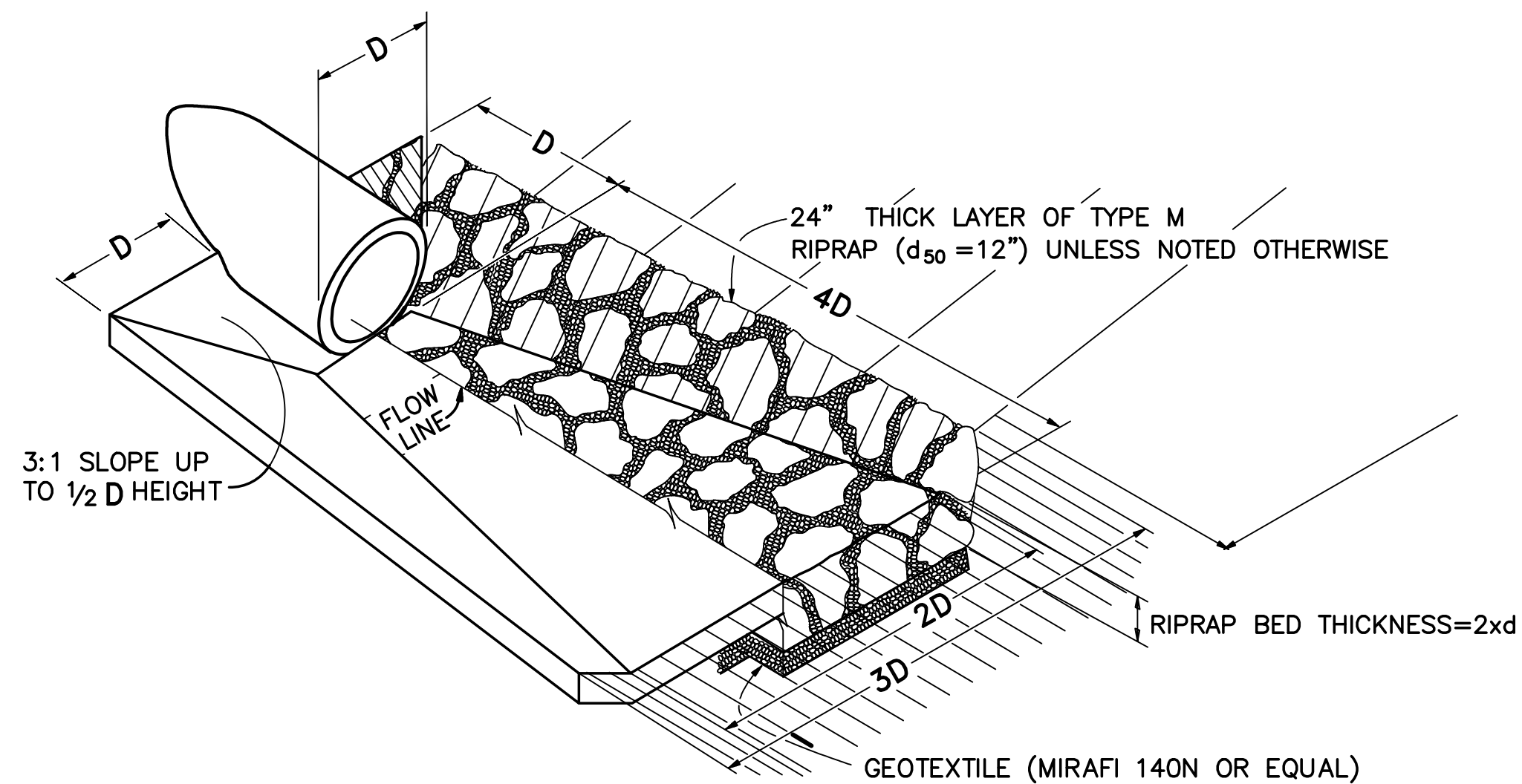


RURAL LOCAL-PAVED ROAD (PUBLIC)
(PINEHURST CIRCLE &, DEBOODT CT)
TYPICAL SECTION (A)
SCALE: 1"=5'

* PAVEMENT SECTION TO BE DESIGNED BY GEOTECHNICAL
ENGINEER PER EPC SPECIFICATIONS.
(4" HBP OVER 6" ABC FOR BIDDING PURPOSES)



TYPICAL DITCH SECTION WITH
EROSION CONTROL BLANKET LINING (B)
SCALE : NTS



TYPICAL RIPRAP APRON/
CULVERT OUTLET PAVING (C)
NOT TO SCALE

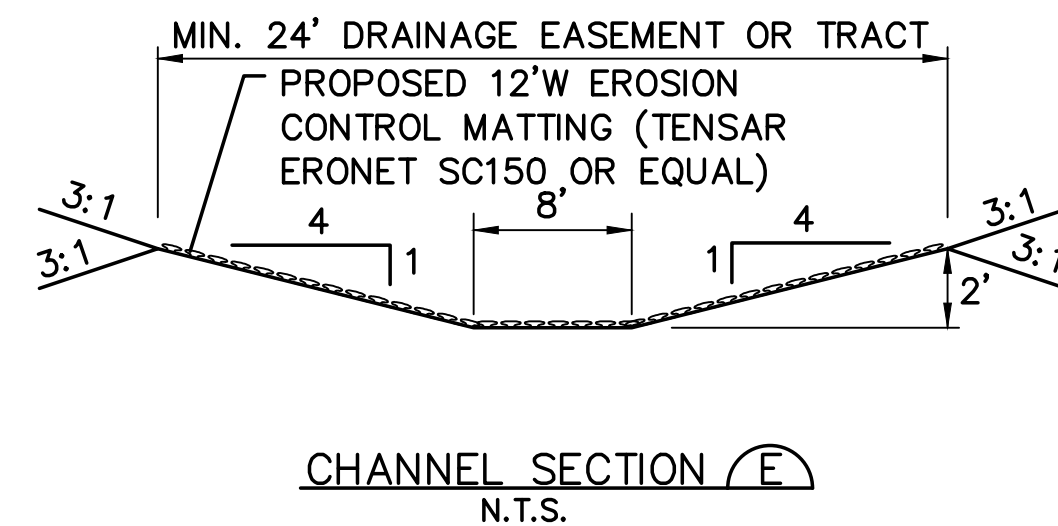
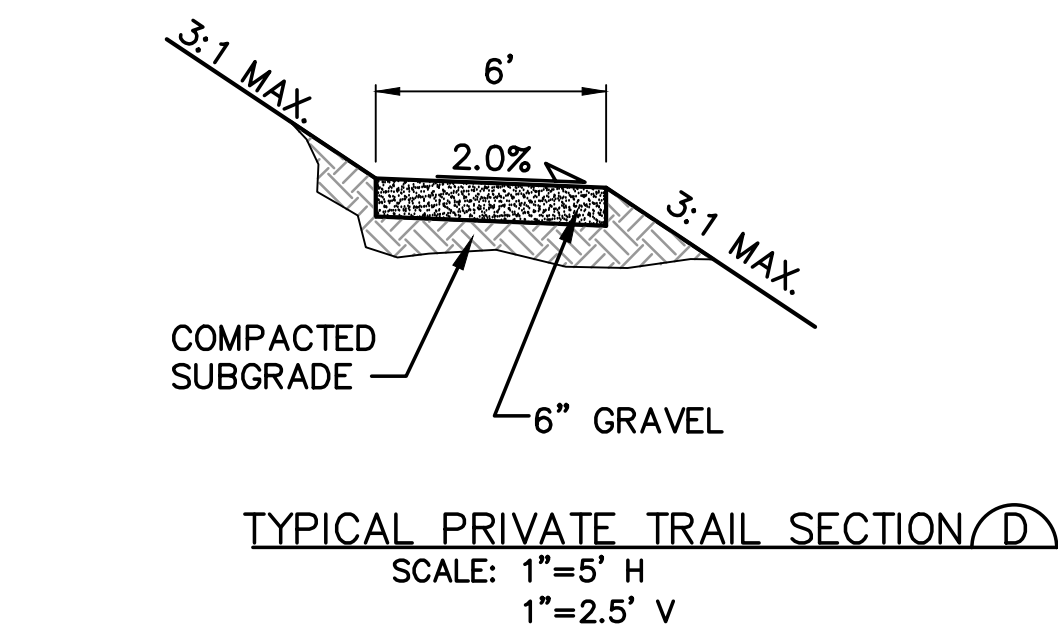


Table MD-7—Classification and Gradation of Ordinary Riprap

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	

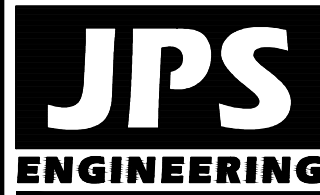
* d₅₀ = mean particle size (intermediate dimension) by weight.

** 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.

RIPRAP DETAILS (F)



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TYPICAL SECTIONS AND DETAILS

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VERT. SCALE: AS SHOWN	DESIGNED: JPS
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CREATED: 9/05/18	LAST MODIFIED: 11/19
PROJECT NO: 040201	MODIFIED BY: BJJ

SHEET:

TY1