

MONUMENT ACADEMY

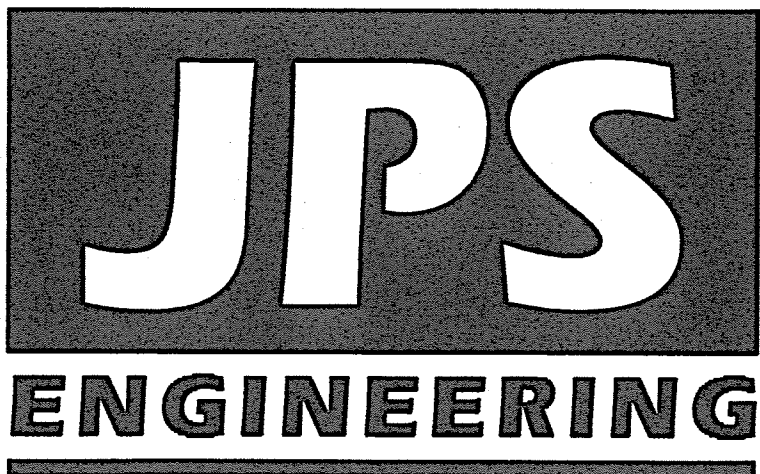
Phase 1A Grading & Erosion Control Plans

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
JULY, 2019

GEC SHEET INDEX

C1.0	GEC PLAN TITLE SHEET
C2.0a	PHASE 1A SITE GRADING & EROSION CONTROL PLAN
C2.1	NORTH SITE GRADING & EROSION CONTROL PLAN
C2.2	SOUTH SITE GRADING & EROSION CONTROL PLAN
C2.3	SOUTH WATER LINE GRADING & EROSION CONTROL PLAN
C3.1	DETENTION POND M3 PLAN & DETAILS
C3.2	DETENTION POND C14 PLAN & DETAILS
C3.3	WATER QUALITY POND DETAILS
C4.1	SITE GRADING & EROSION CONTROL NOTES & DETAILS
C4.2	CIVIL DETAILS

AGENCIES/CONTACTS

OWNER:	MONUMENT ACADEMY FOUNDATION 1150 VILLAGE RIDGE PT MONUMENT, CO 80132 DR. DON GRIFFIN (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 (719) 520-6300	GAS DEPARTMENT:	BLACK HILLS ENERGY MR. SEBASTIAN SCHWENDER (719) 399-3176
OWNER'S REP:	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 MS. VALERIE SWORD (719) 546-5407	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 MR. WILL VALKNER (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

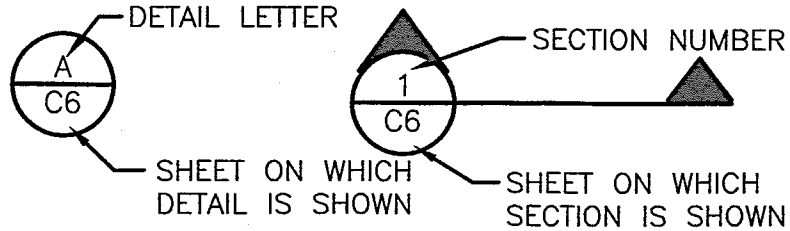
CALL UTILITY NOTIFICATION
CENTER OF COLORADO
1-800-922-1987
CALL 2-BUSINESS DAYS IN ADVANCE
BEFORE YOU DIG, GRADE, OR EXCAVATE
FOR THE MARKING OF UNDERGROUND
MEMBER UTILITIES.



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:

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 MY NEGLIGENCE OR ACTS. ERRORS OR
OMISSIONS ON MY PART IN PREPARING THESE DETAILED PLANS AND
SPECIFICATIONS.

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.

MONUMENT ACADEMY FOUNDATION
1150 VILLAGE RIDGE POINT
MONUMENT, CO 80132

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

EL PASO COUNTY:

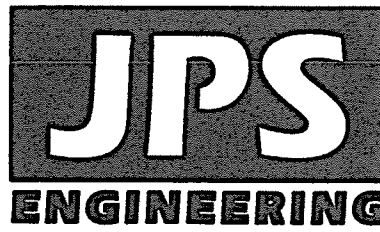
COUNTY PLAN REVIEW IS PROVIDED ONLY FOR GENERAL CONFORMANCE WITH
COUNTY DESIGN CRITERIA. THE COUNTY IS NOT RESPONSIBLE FOR THE
ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND/OR ELEVATIONS
WHICH SHALL BE CONFIRMED AT THE JOB SITE. THE COUNTY THROUGH THE
APPROVAL OF THIS DOCUMENT ASSUMES NO RESPONSIBILITY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

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

DATE

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



19 E. Willamette Ave.
Colorado Springs, CO
80903

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

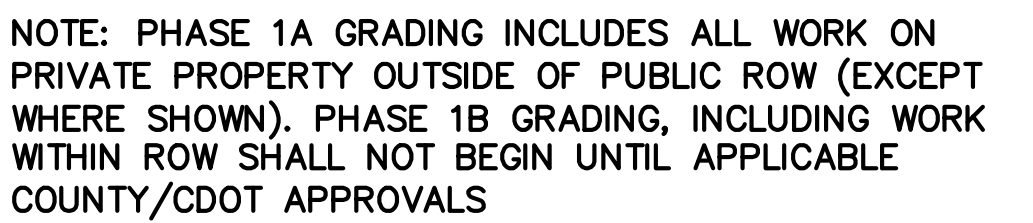
GEC PLAN TITLE SHEET



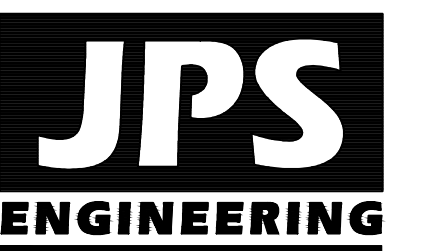
DATE: 12/21/18
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 7/09/19

C1.0a

FOR CONSTRUCTION




- PROPER HOUSEKEEPING MEASURES
- PROPER SPILL CONTAINMENT PROCEDURES

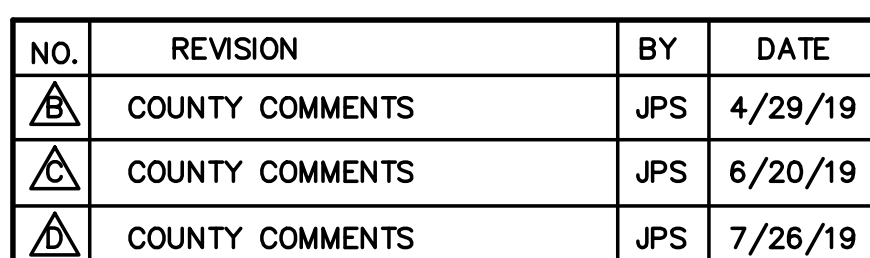


OWNERSHIP OF INSTRUMENTS OF SERVICE:

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 THERETO.

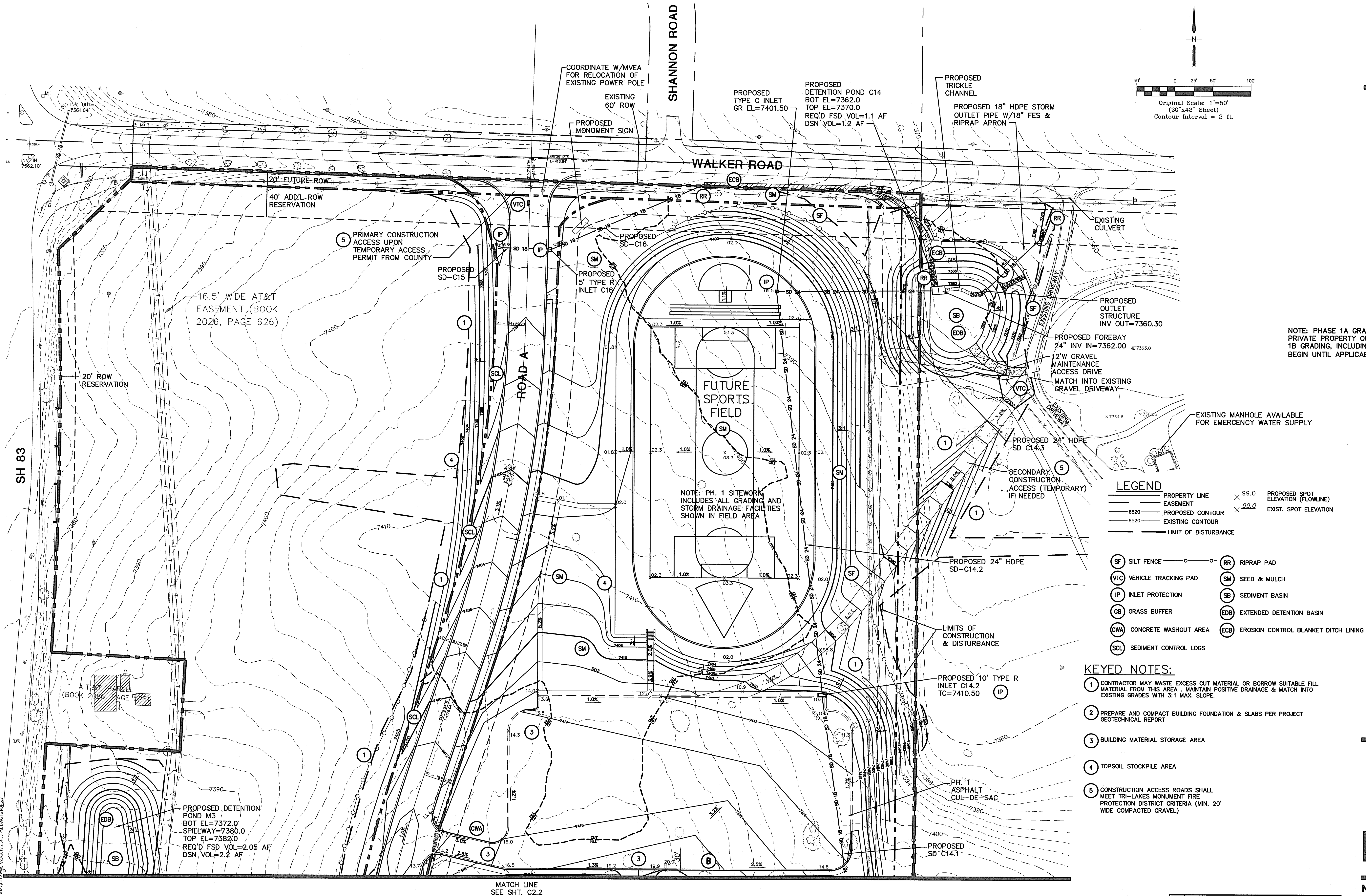
NORTH

 DATE: 12/20/18
 DRAWN BY: BJJ
 CHECKED BY: JPS
 REVISED: 7/26/19

C2.0a

**PCD PROJECT NO. PPR-19-009**

MONUMENT
ACADEMY
HIGH SCHOOL

FOR CONSTRUCTION



JPS
ENGINEERING

19 E. Willamette Ave.
Colorado Springs, CO 80903
PH: 719-477-9429
FAX: 719-471-0766
www.jpsegr.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 THEREON.

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

NORTH SITE GRADING & EROSION CONTROL PLAN

SCALE: 1"=50'

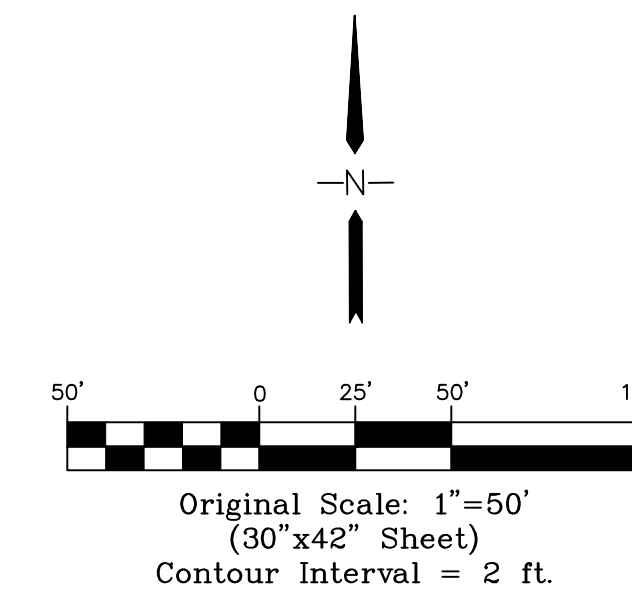
NORTH
DATE: 12/20/18
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 7/23/19

PCD PROJECT NO. PPR-19-009

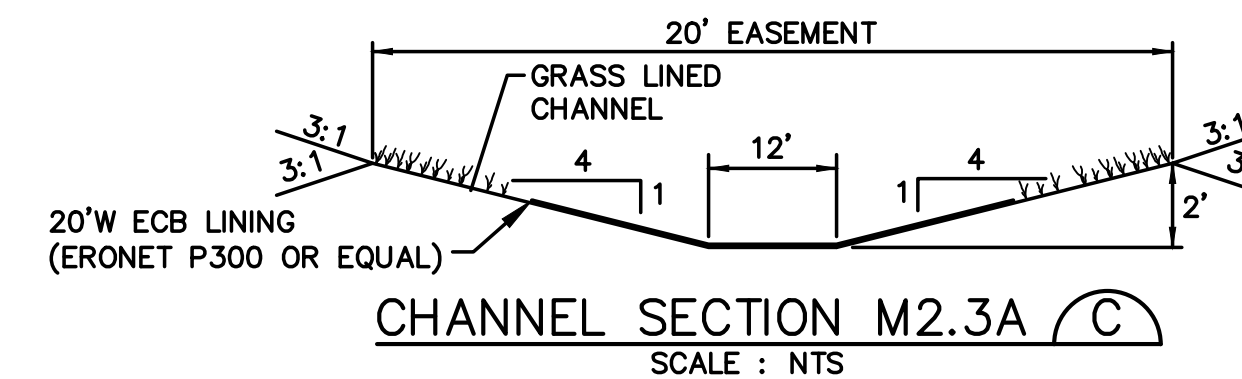
C2.1a

MONUMENT ACADEMY HIGH SCHOOL

FOR CONSTRUCTION



NOTE: PHASE 1A GRADING INCLUDES ALL WORK ON PRIVATE PROPERTY OUTSIDE OF PUBLIC ROW. PHASE 1B GRADING, INCLUDING WORK WITHIN ROW SHALL NOT BEGIN UNTIL APPLICABLE COUNTY/CDOT APPROVAL.



LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- EASEMENT
- PROPOSED CONTOUR
- EXISTING CONTOUR
- PROPOSED SPOT ELEVATION (FLOWLINE)
- EXIST. SPOT ELEVATION
- SILT FENCE
- VEHICLE TRACKING PAD
- INLET PROTECTION
- GRASS BUFFER
- CONCRETE WASHOUT AREA
- RIPRAP PAD
- SEED & MULCH
- SEDIMENT BASIN
- EXTENDED DETENTION BASIN
- EROSION CONTROL BLANKET DITCH LINING (ERONET P300 OR EQUAL)

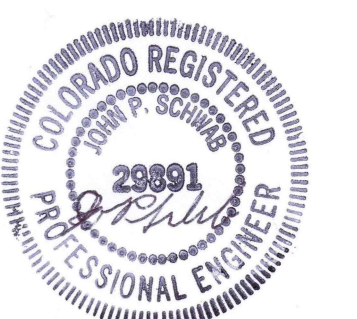
NOTE: ALL EROSION CONTROL MEASURES SHALL CONFORM TO CITY OF COLORADO SPRINGS DRAINAGE CRITERIA MANUAL, VOLUME 2 REQUIREMENTS.

KEYED NOTES:

- 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:
5" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- LIGHT DUTY PAVEMENT:
4" HBP OVER 5" ABC (REFER TO GEOTECH REPORT)
- 2' CURB CHASE
- BUILDING MATERIAL STORAGE AREA
- 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

PCD PROJECT NO. PPR-19-009



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 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 THEREON.

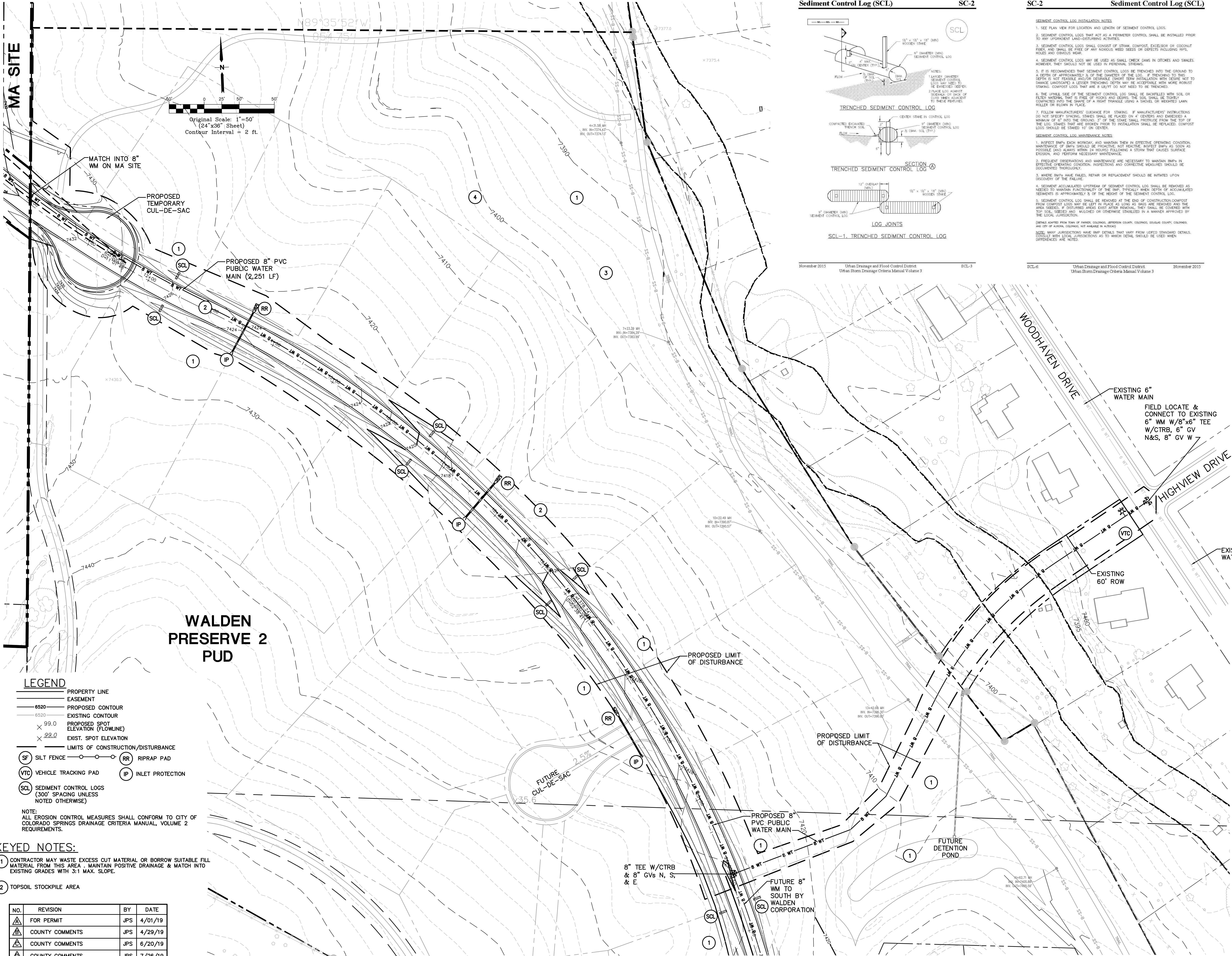
CRP ARCHITECTS AIA
100 E. St. Vrain, Suite 300
Colorado Springs, Colorado 80903

SOUTH SITE GRADING & EROSION CONTROL PLAN

SCALE: 1"=50'

NORTH
DATE: 12/20/18
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 7/26/19

C2.2a



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
- RR RIPRAP PAD
- VTC VEHICLE TRACKING PAD
- IP INLET PROTECTION
- SCL SEDIMENT CONTROL LOGS (300' SPACING UNLESS NOTED OTHERWISE)

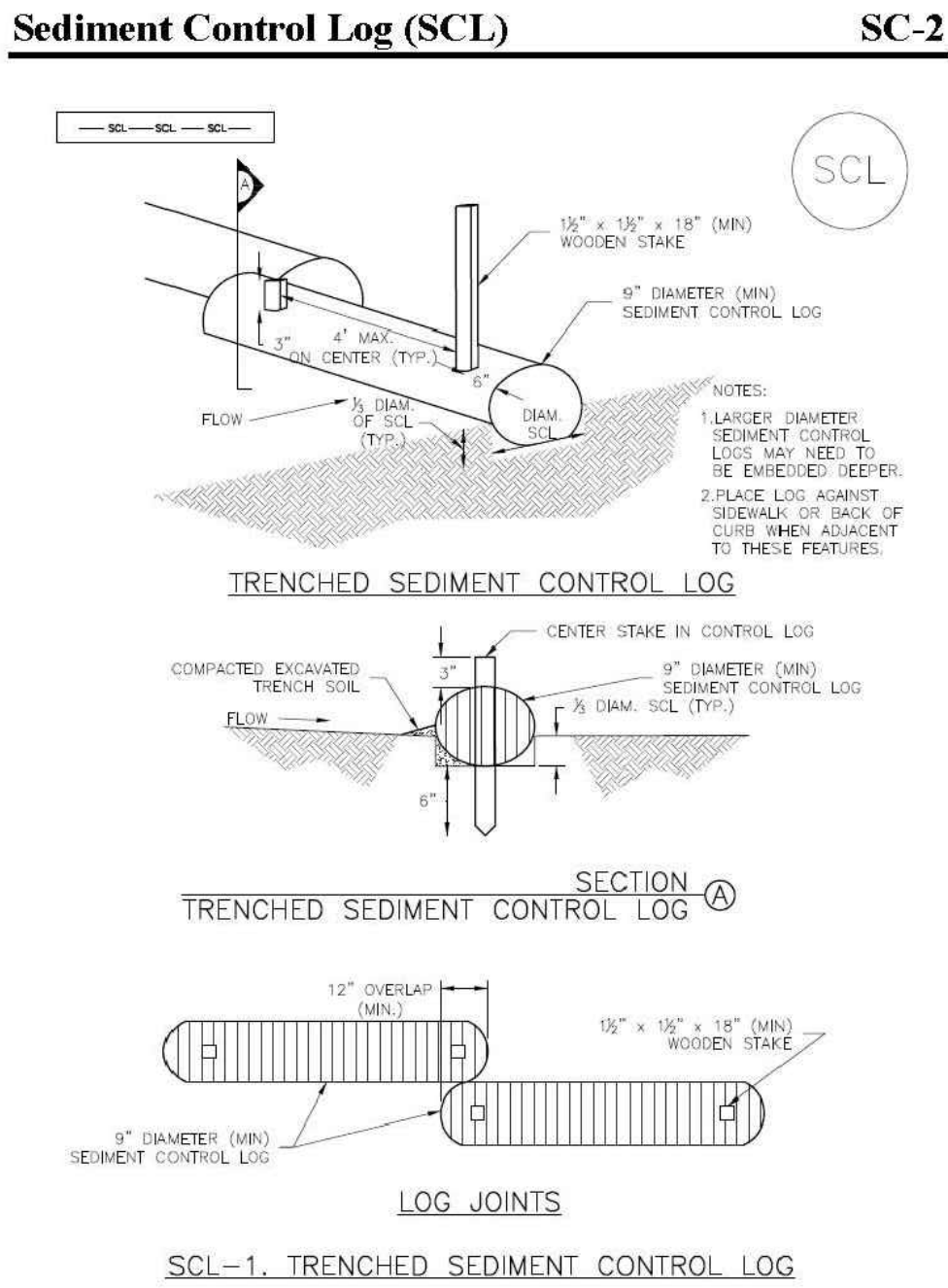
NOTE:
ALL EROSION CONTROL MEASURES SHALL CONFORM TO CITY OF COLORADO SPRINGS DRAINAGE CRITERIA MANUAL, VOLUME 2 REQUIREMENTS.

KEYED NOTES:

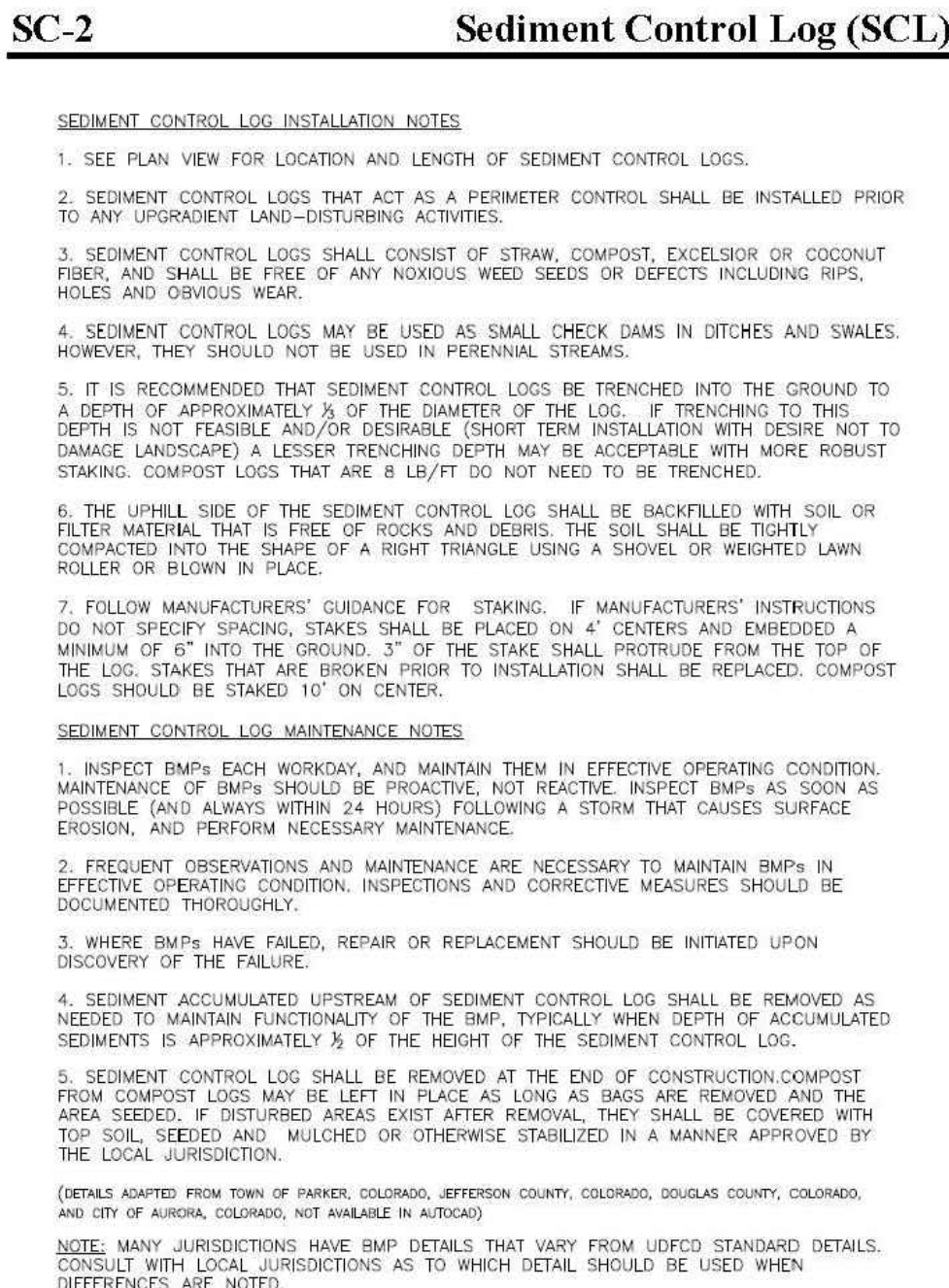
1 CONTRACTOR MAY WASTE EXCESS CUT MATERIAL OR BORROW SUITABLE FILL MATERIAL FROM THIS AREA. MAINTAIN POSITIVE DRAINAGE & MATCH INTO EXISTING GRADES WITH 3:1 MAX. SLOPE.

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



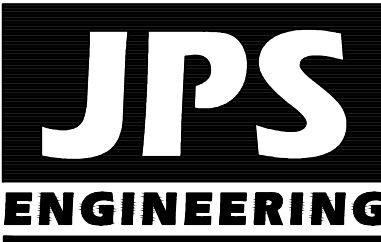
November 2015 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3



November 2015 Urban Drainage and Flood Control District Urban Storm Drainage Criteria Manual Volume 3

MONUMENT ACADEMY HIGH SCHOOL

FOR CONSTRUCTION



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 THEREON.

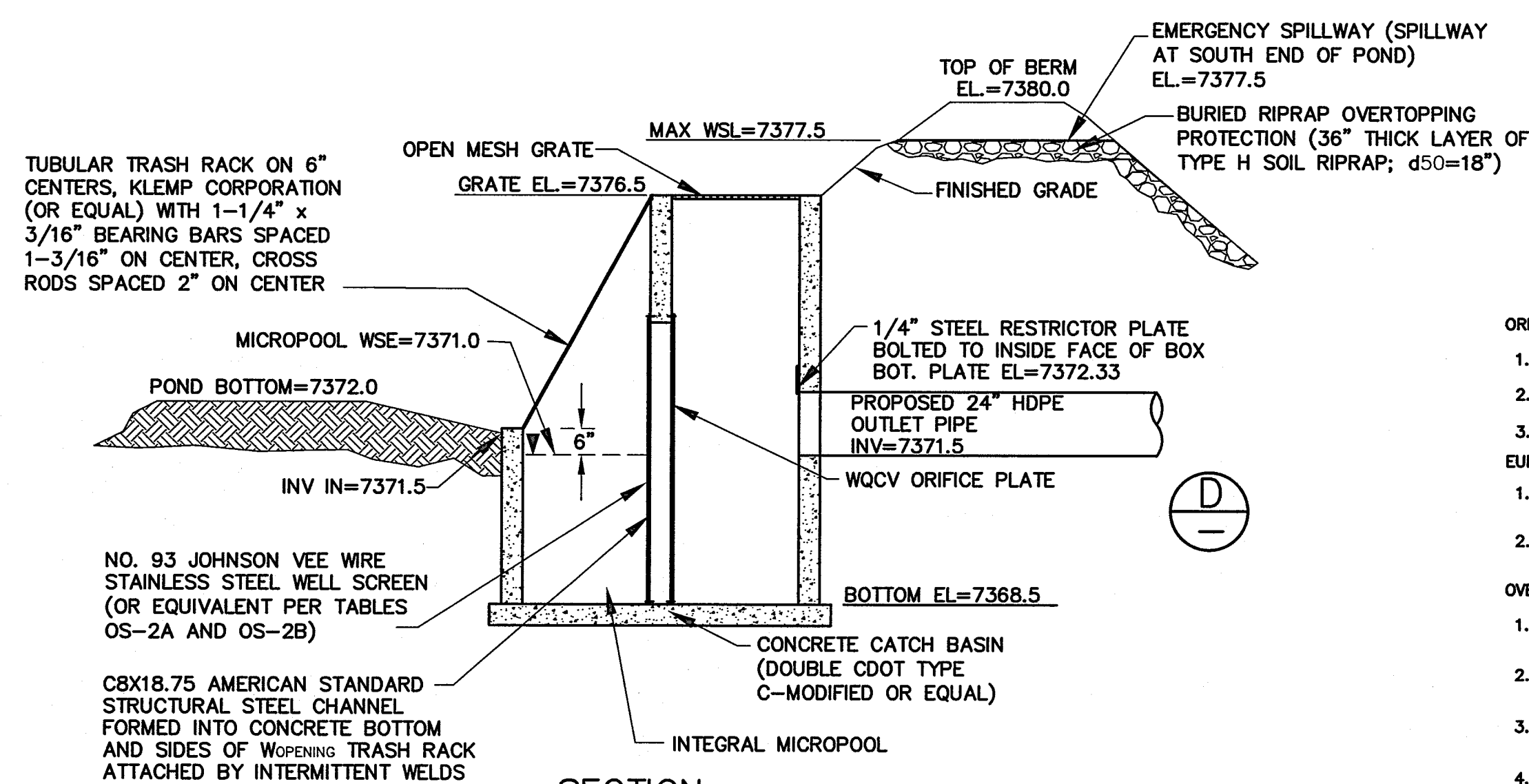
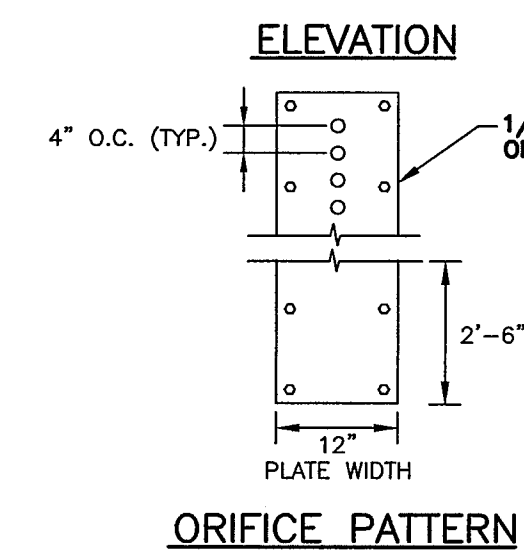
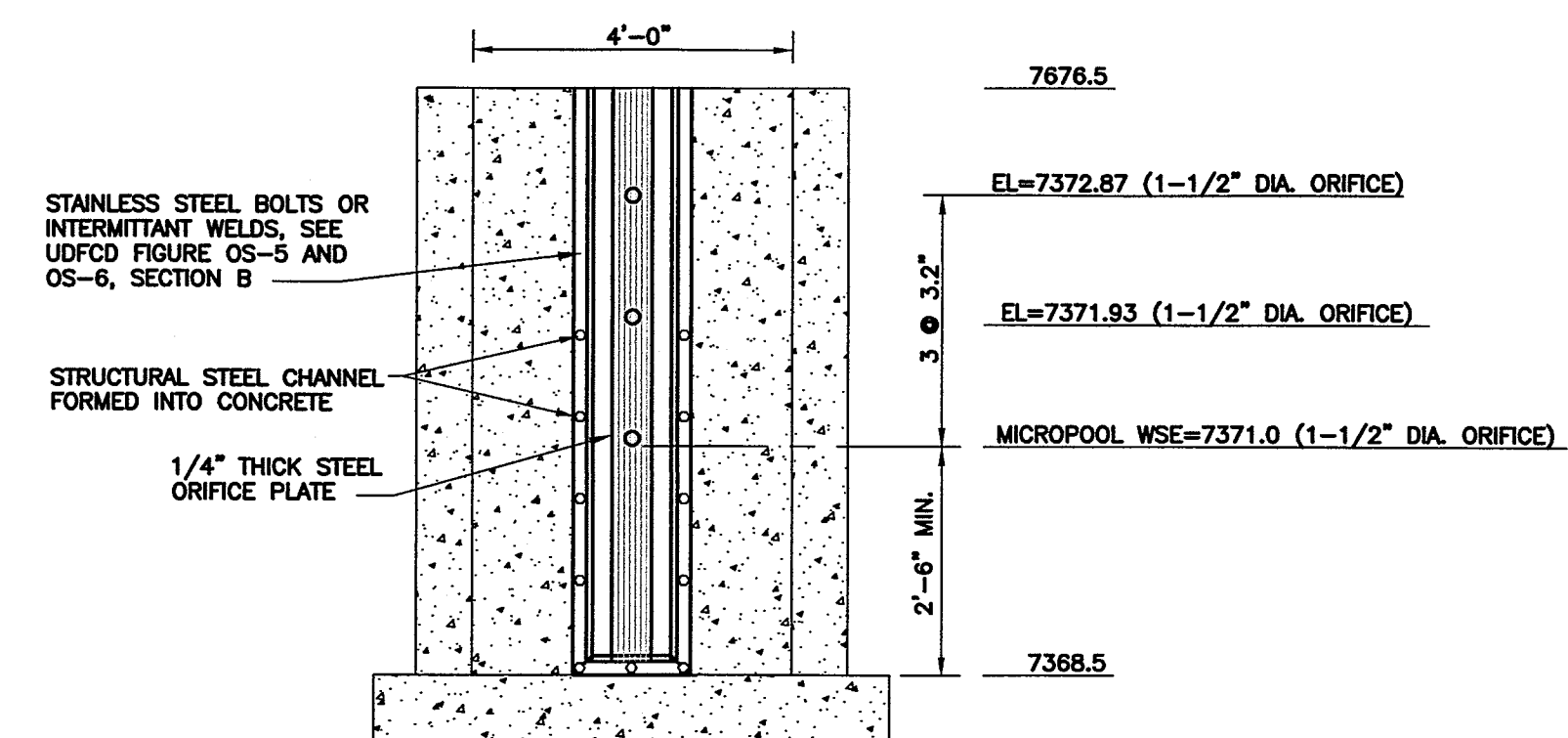
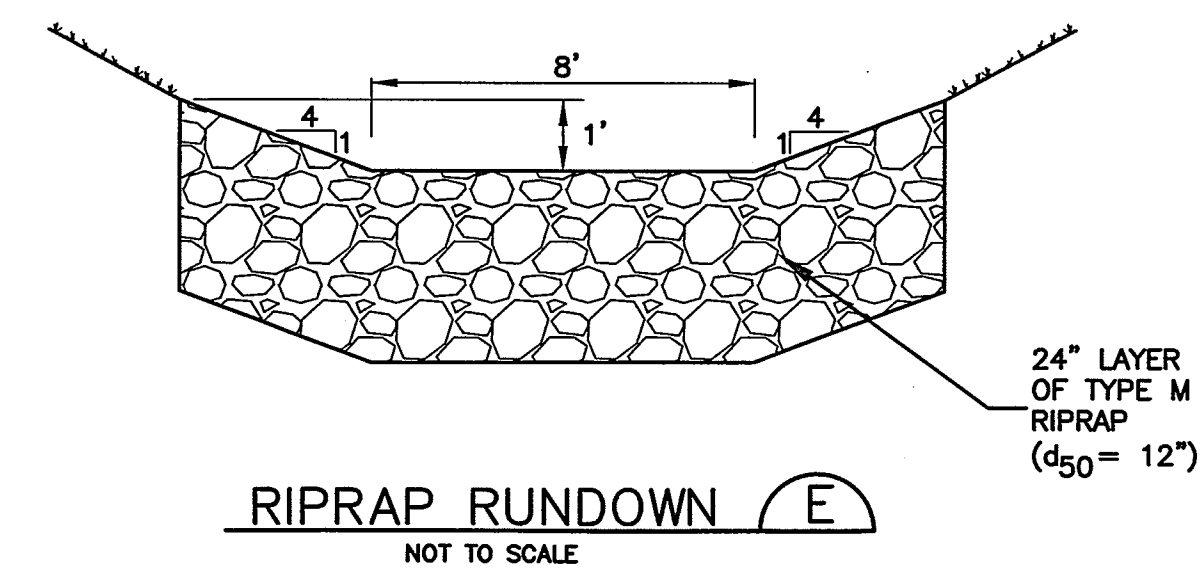
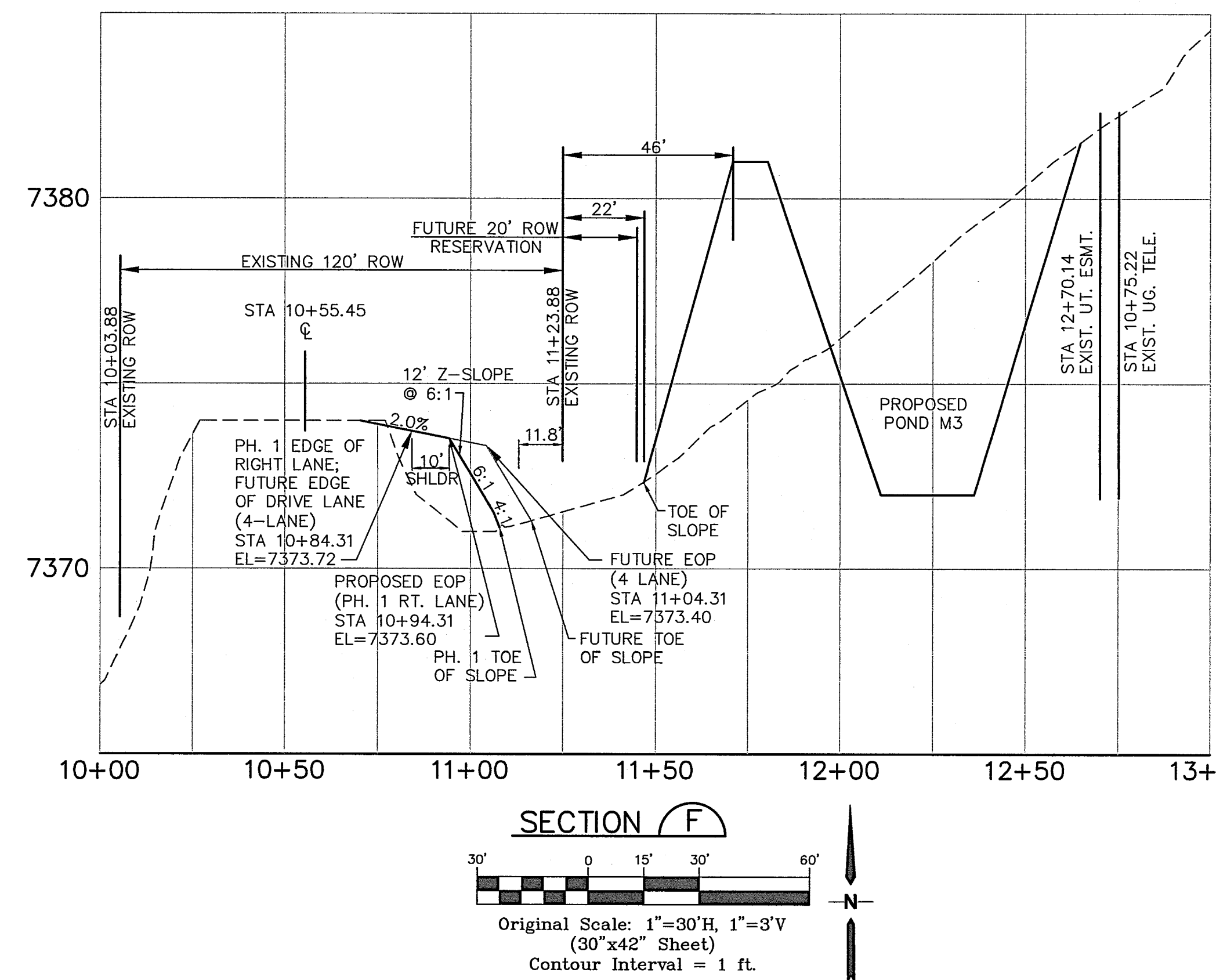
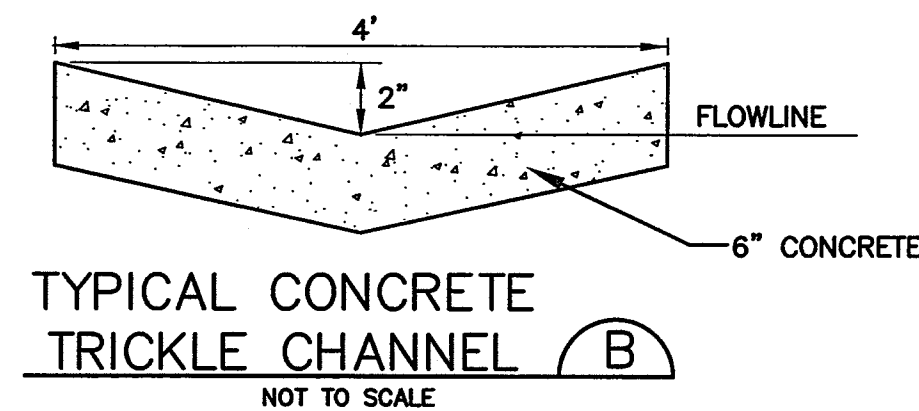
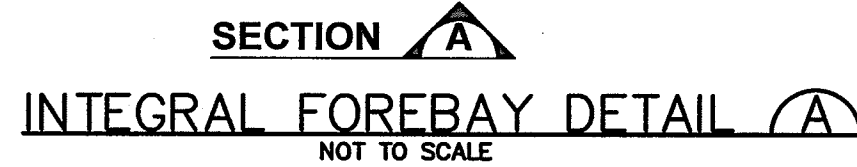
CRP ARCHITECTS AIA
100 E. St. Vrain, Suite 300
Colorado Springs, Colorado 80903

SOUTH WATER LINE GRADING & EROSION CONTROL PLAN

NORTH

DATE: 4/23/19
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 7/26/19

FOR CONSTRUCTION



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

- EURV AND WQCV TRASH RACKS:

1. WELL-SCREEN TRASH RACKS (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
<u>A</u>	FOR PERMIT	JPS	4/17/19
<u>B</u>	COUNTY COMMENTS	JPS	4/29/19
<u>C</u>	COUNTY/CDOT COMMENTS	JPS	7/23/19

PCD PROJECT NO. PPR-19-009


C3.1

\\040201.walden\dwt\civil\WALDEN PRESERVE 2\MONUMENT ACADEMY\C3.1.dwg, 7/23/2019 2:38:35 PM, DWG To PDF.pc3

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)

VERTICAL CONTROL POINT

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

19 E. Willamette Ave.
Colorado Springs, CO
80903

PH: 719-477-9429
FAX: 719-471-0766
www.jpsenqr.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 THEREON.

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

DETENTION POND M3 PLAN & DETAILS

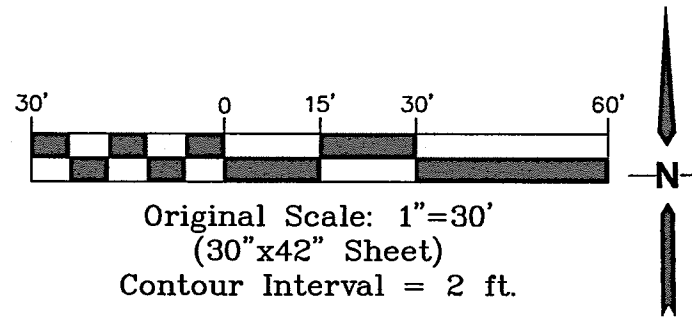
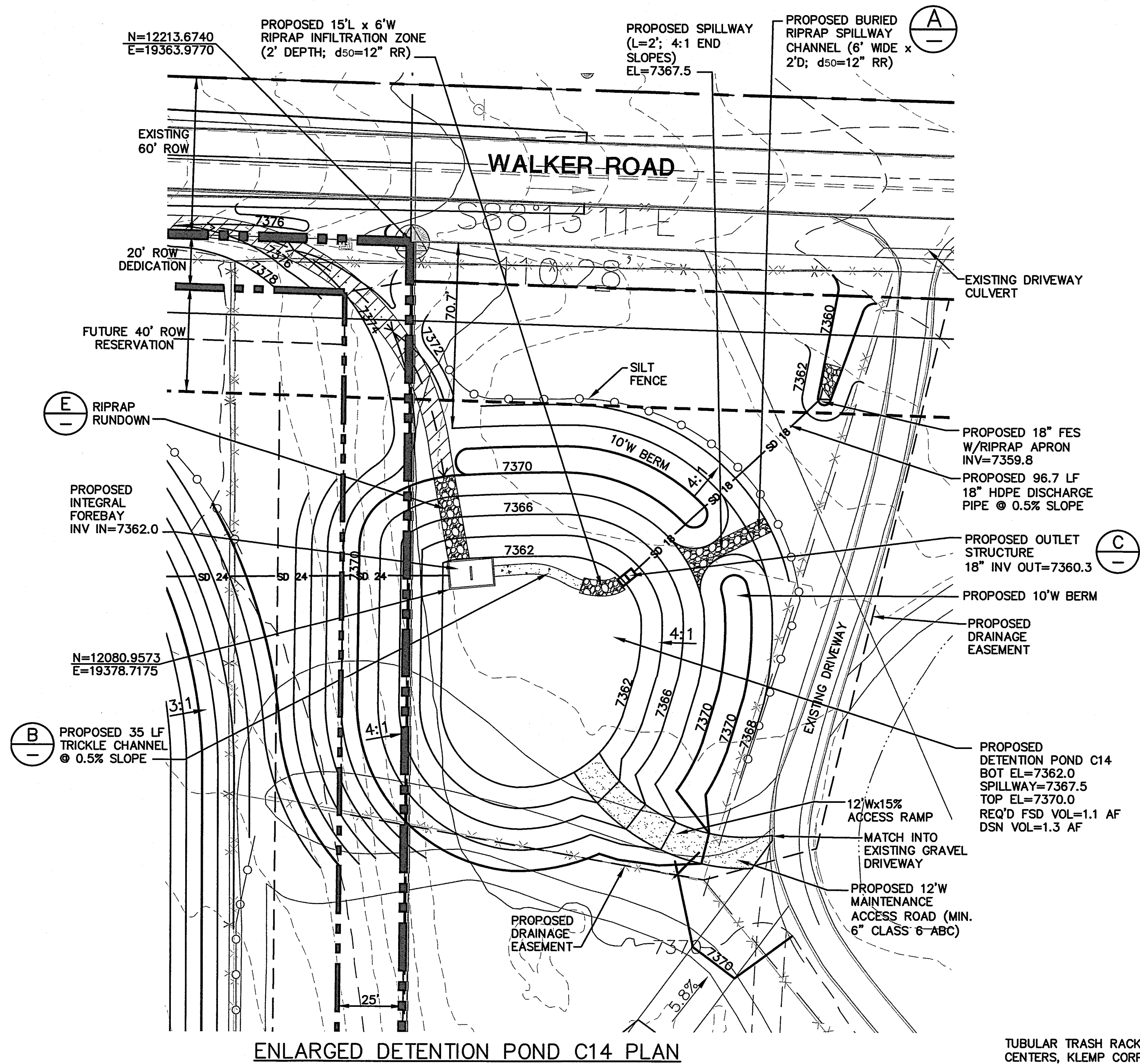
SCALE : AS SHOWN

NORTH

DATE: 12/20/18
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 7/23/19

PCD PROJECT NO. PPR-19-009

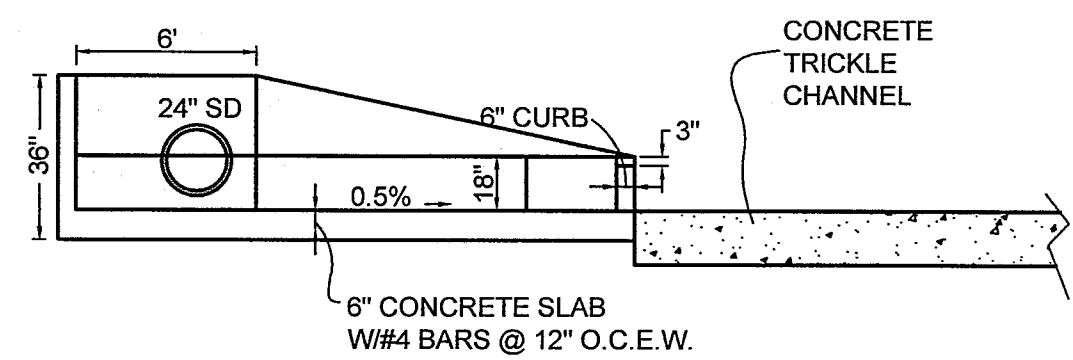
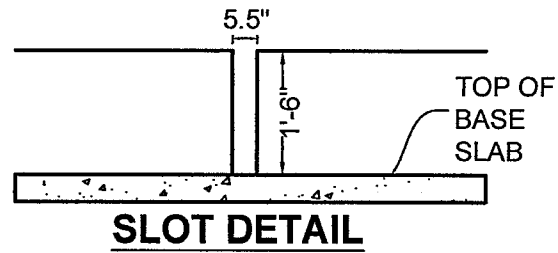
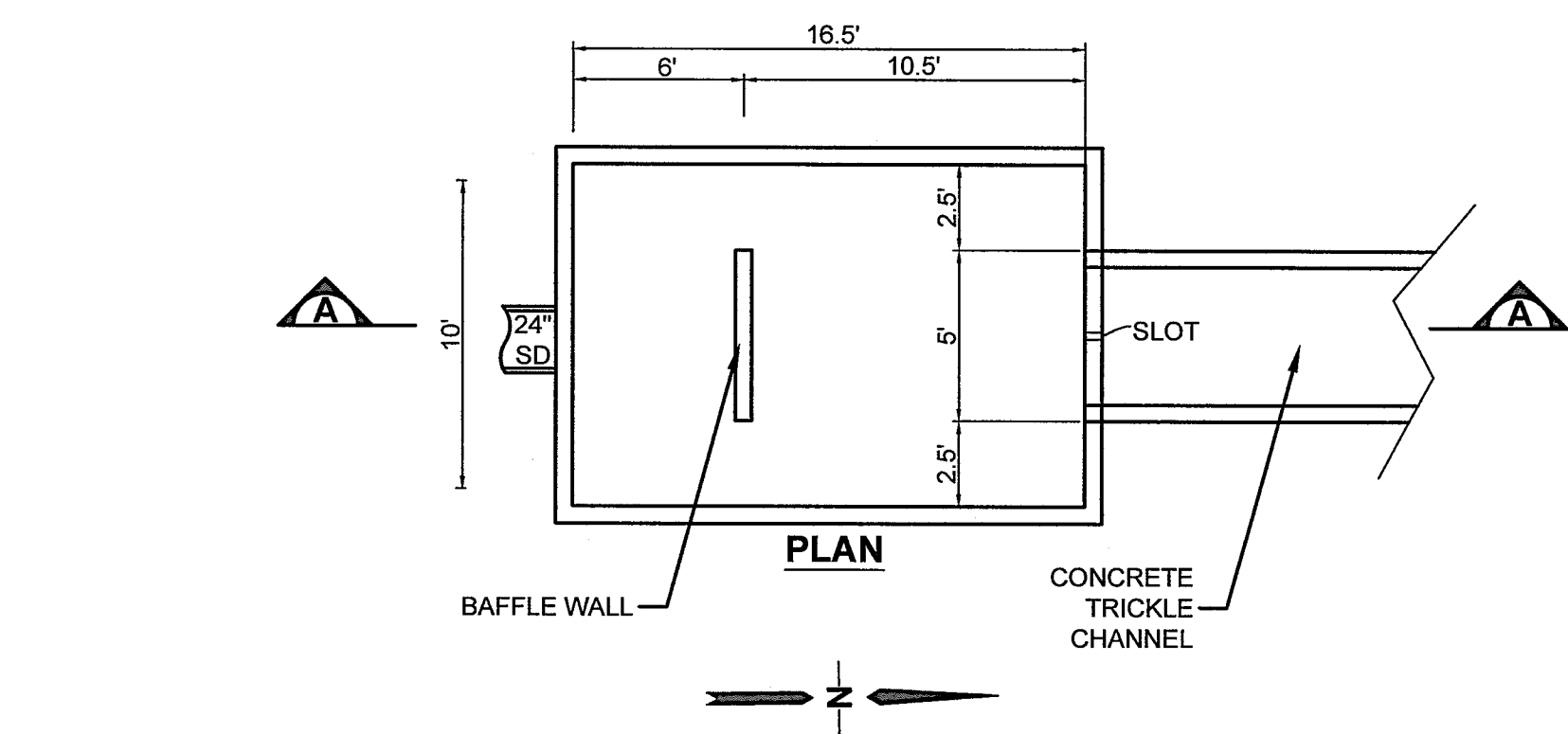
MONUMENT
ACADEMY
HIGH SCHOOL

FOR CONSTRUCTION

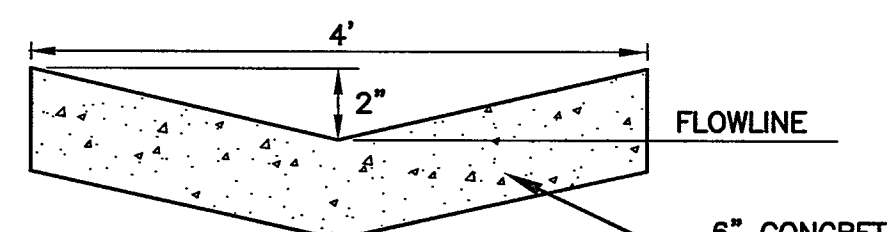


EMBANKMENT CONSTRUCTION NOTES:

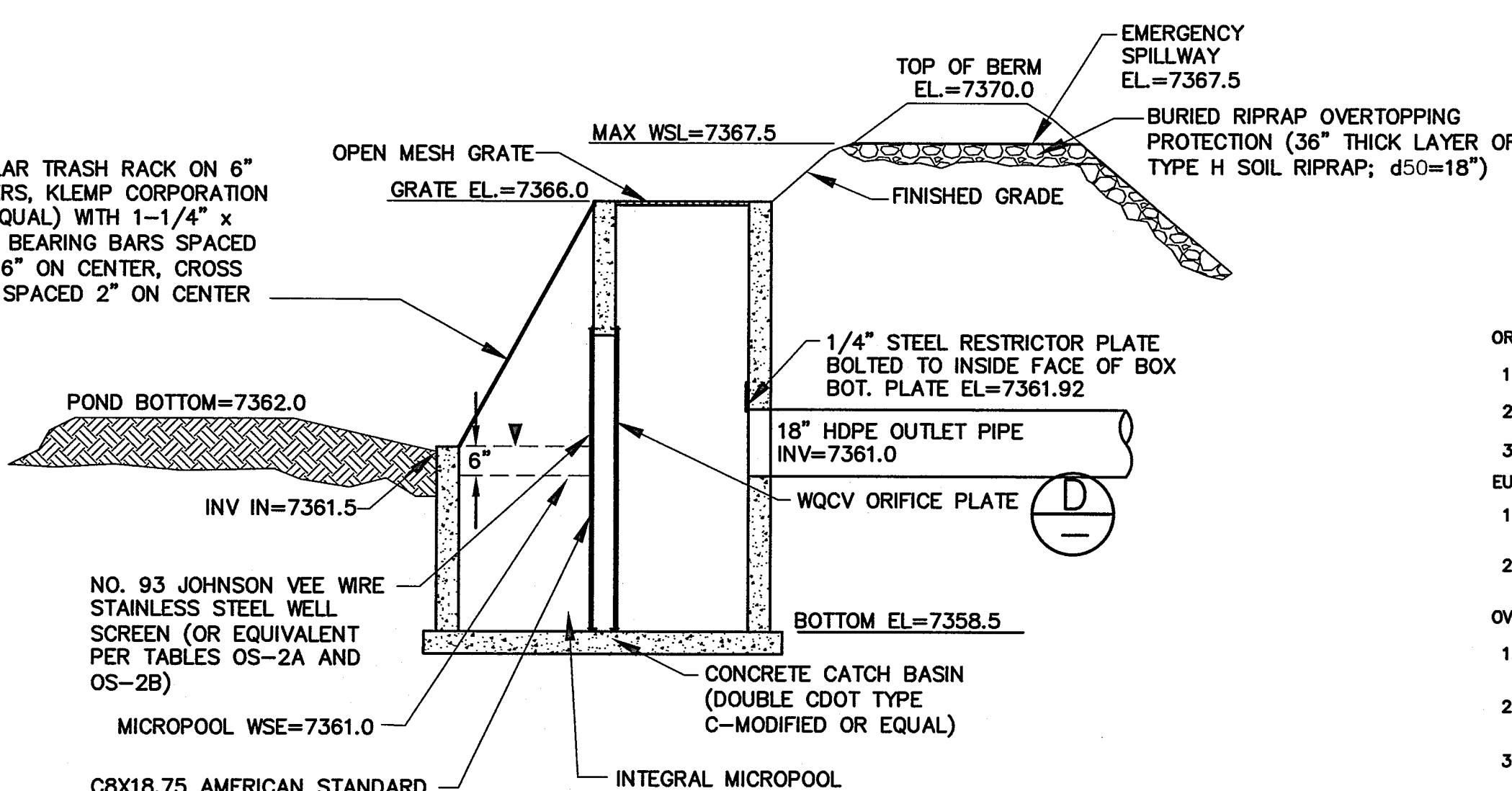
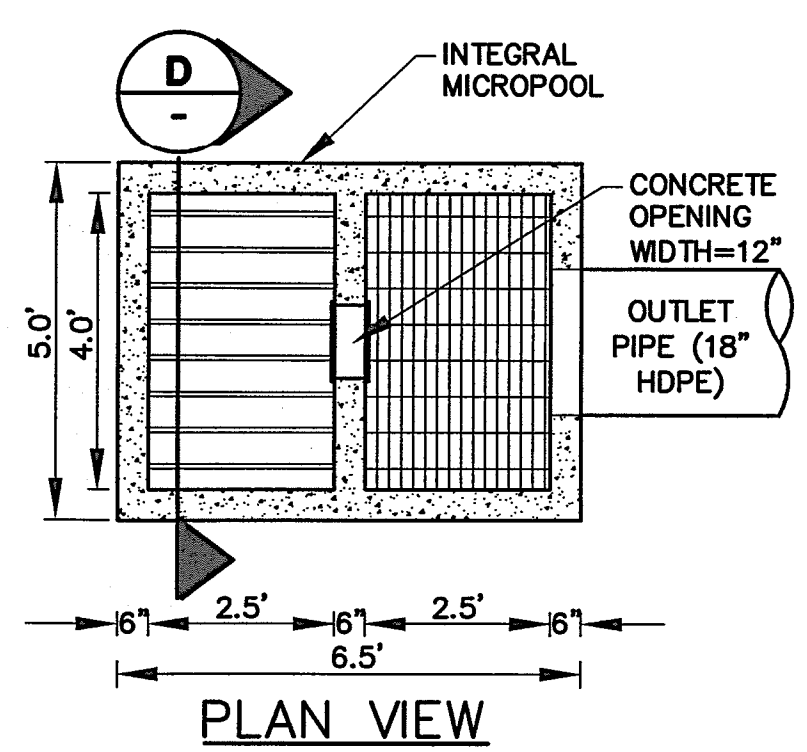
1. COMPLY WITH RECOMMENDATIONS IN PROJECT GEOTECHNICAL REPORT BY KUMAR.
2. PROVIDE EMBANKMENT KEY-IN BY OVER-EXCAVATING & RE-COMPACTING MIN. 2' DEPTH & 12' WIDTH AT BASE OF EMBANKMENT.
3. COMPACT FILL MATERIAL TO 100% MAX. STANDARD PROCTOR DENSITY.
4. PROVIDE CONCRETE COLLAR ON POND DISCHARGE PIPE AT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



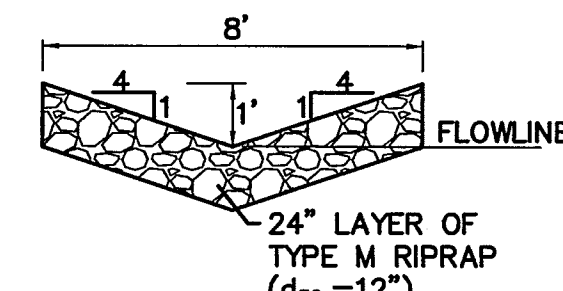
INTEGRAL FOREBAY DETAIL (A)
NOT TO SCALE



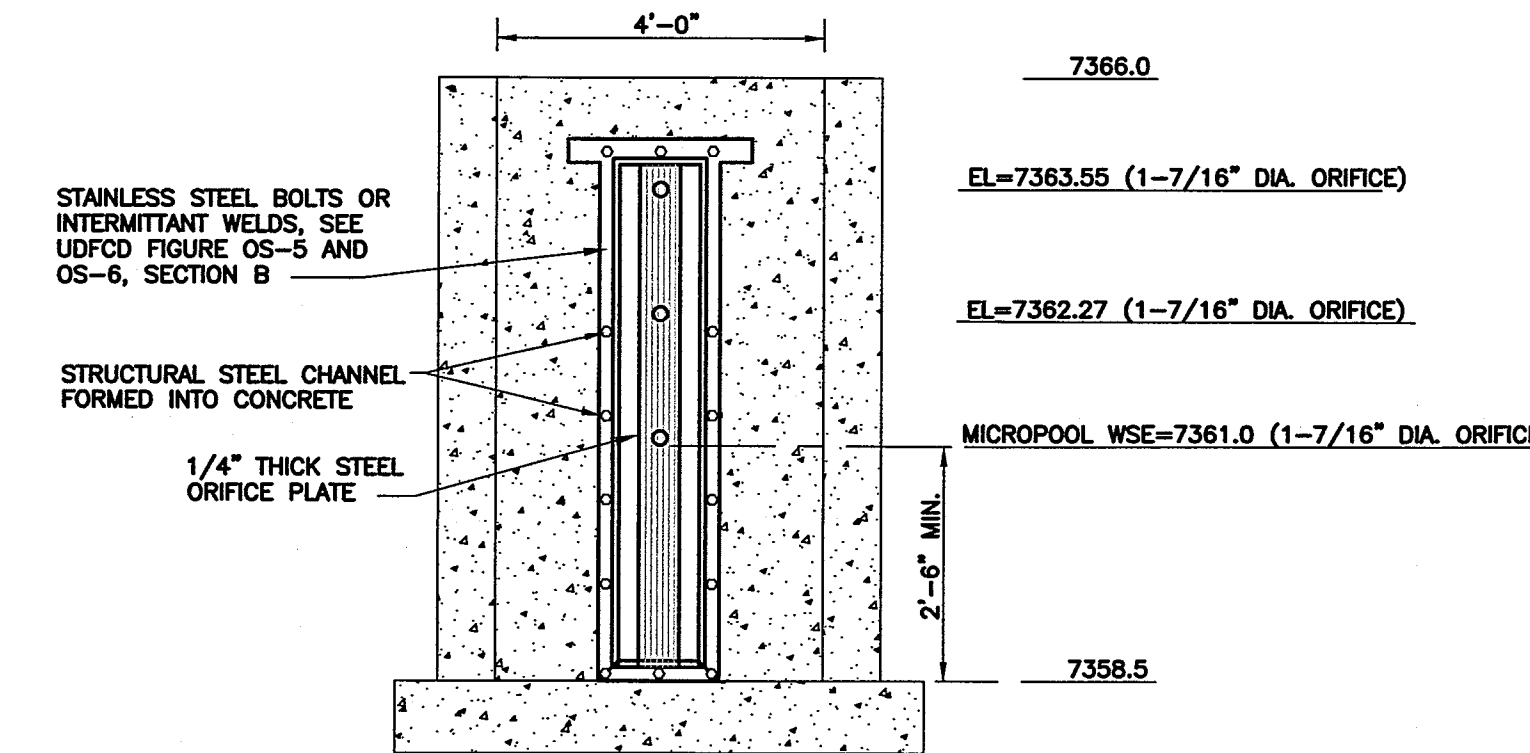
TYPICAL CONCRETE TRICKLE CHANNEL (B)
NOT TO SCALE



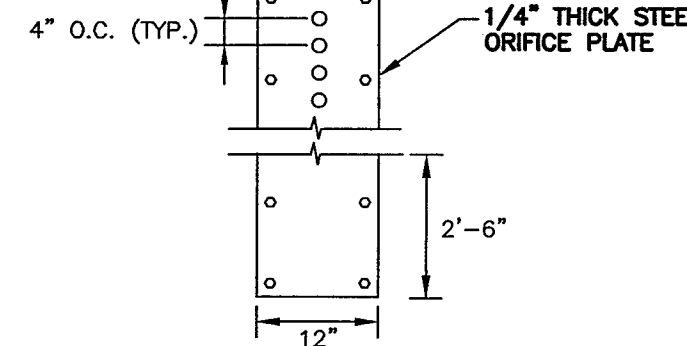
SECTION
DETENTION POND OUTLET STRUCTURE (C)
SCALE: NTS



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\"/>

- 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



JPS
ENGINEERING

19 E. Wilamette 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

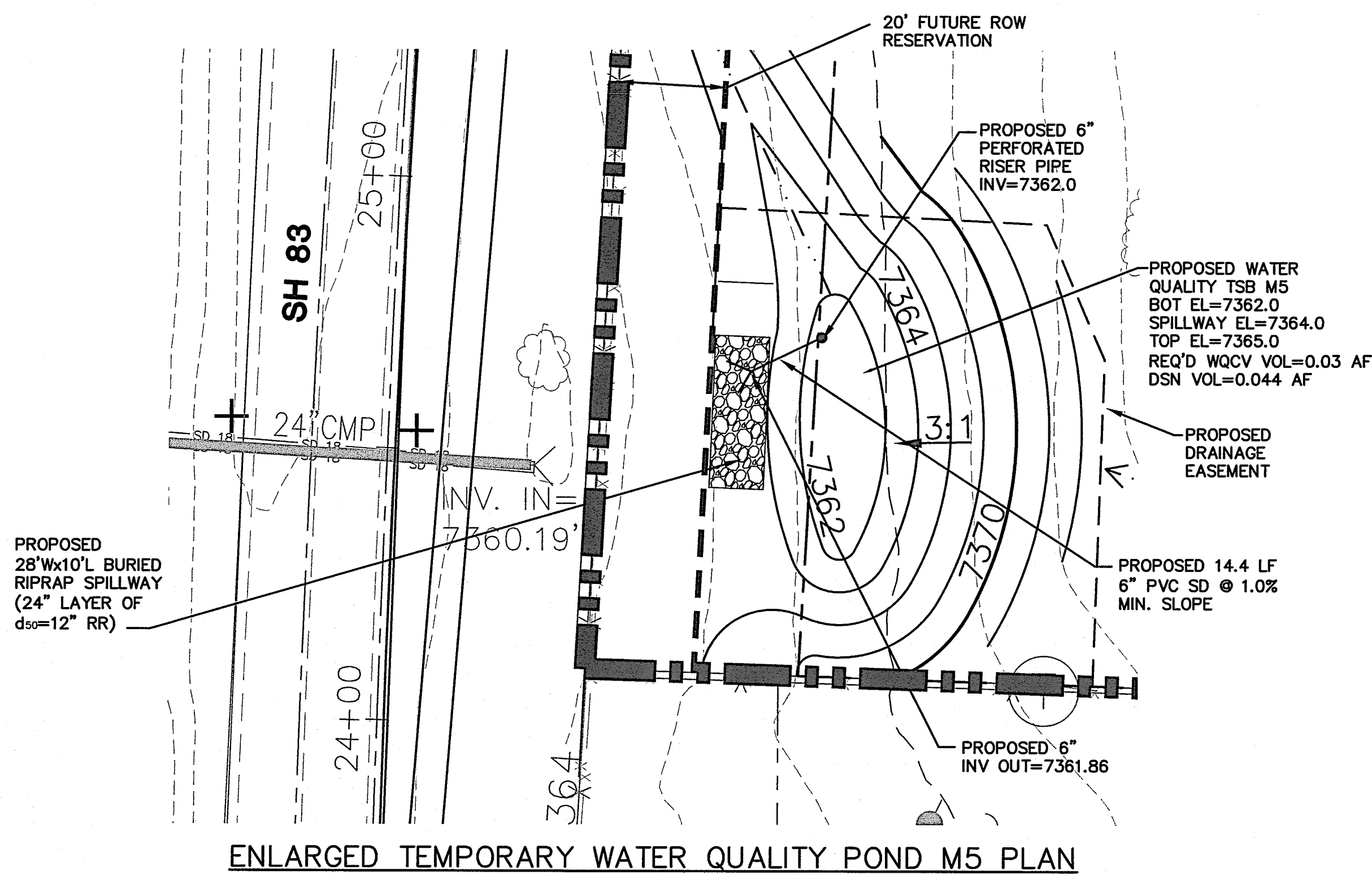
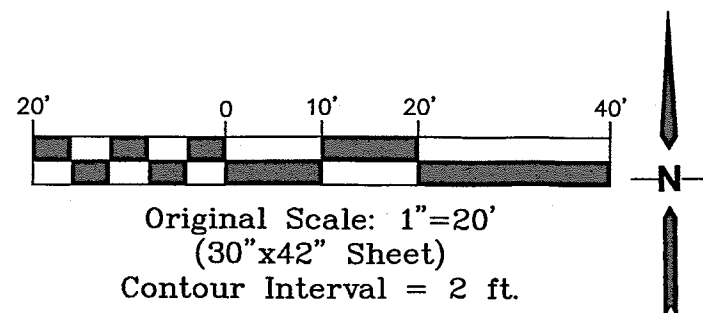
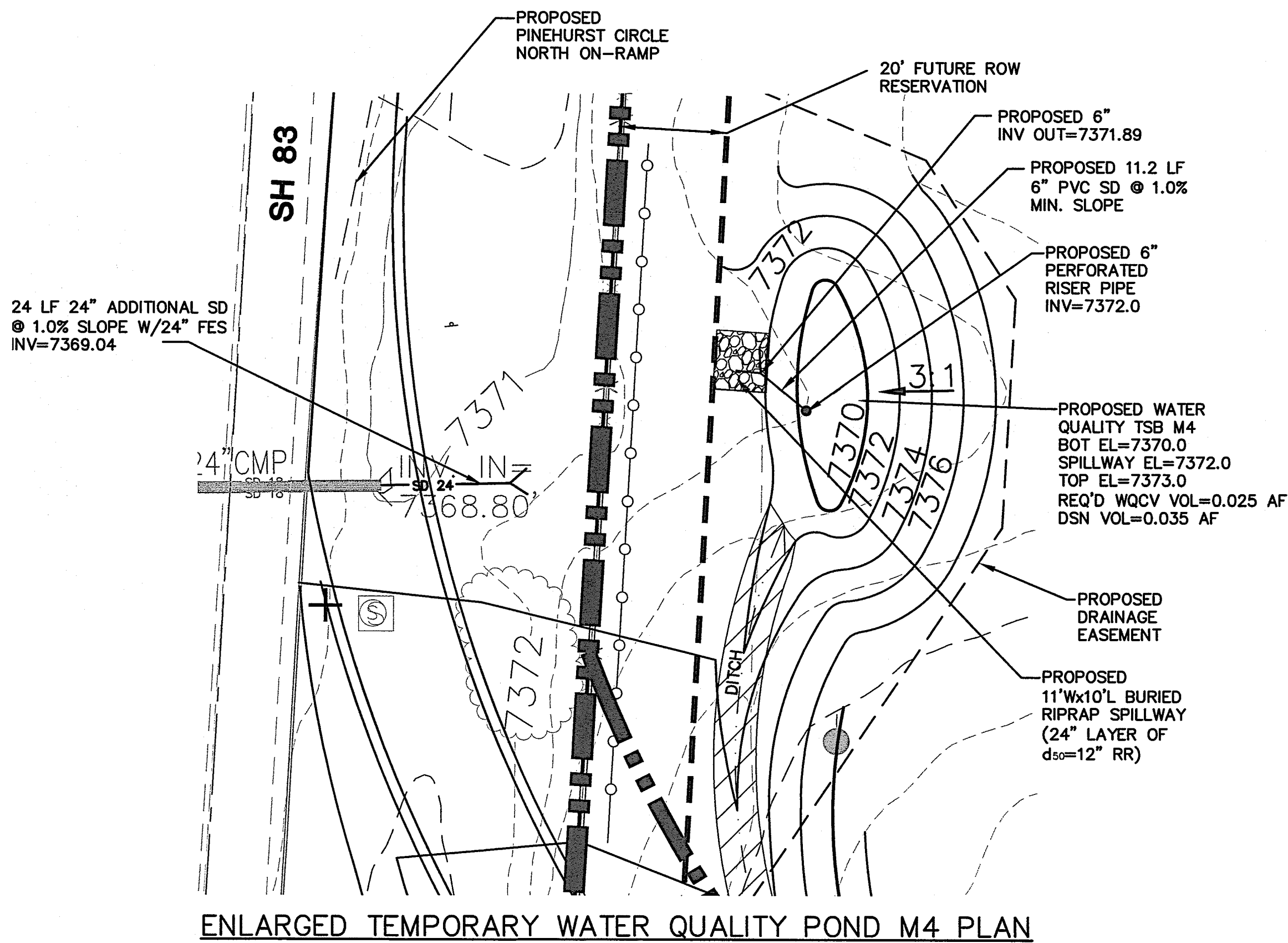
DETENTION POND C14
PLAN & DETAILS

SCALE : AS SHOWN

NORTH
DATE: 12/20/18
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 7/11/19

MONUMENT
ACADEMY
HIGH SCHOOL

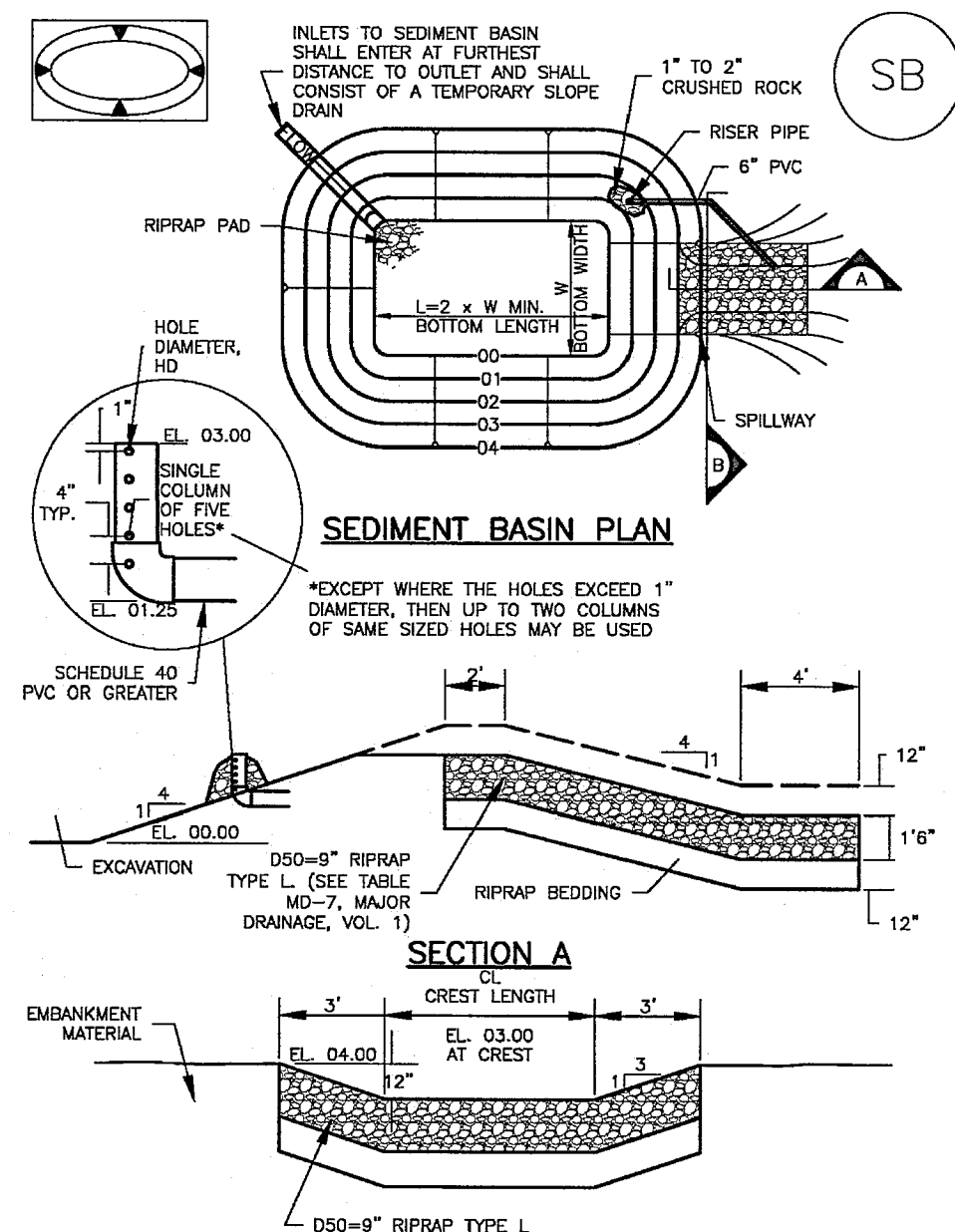
FOR CONSTRUCTION



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	55 1/2	8	1 3/4
8	63 1/2	9	1 3/4
9	71 1/2	10	1 3/4
10	79 1/2	11	1 3/4
11	87 1/2	12	1 3/4
12	95 1/2	13	1 3/4
13	103 1/2	14	1 3/4
14	111 1/2	15	1 3/4
15	119 1/2	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 RISER HEIGHT H, NUMBER OF COLUMNS N, HOLE DIAMETER HD AND PIPE DIAMETER D.
2. FOR STANDARD BASIN, BOTTOM DIMENSION MAY BE MODIFIED AS LONG AS BOTTOM AREA IS NOT REDUCED.
3. SEDIMENT BASINS SHALL BE INSTALLED PRIOR TO ANY OTHER LAND-DISTURBING ACTIVITY THAT RELIES ON ON BASINS AS A STORMWATER CONTROL.
4. EMBANKMENT MATERIAL SHALL CONSIST OF SOIL FREE OF ODORS, ORGANIC MATERIAL, AND ROCKS OR 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. FREQUENT OBSERVATIONS AND MAINTENANCE ARE NECESSARY TO MAINTAIN BMPs IN EFFECTIVE OPERATING CONDITION. INSPECTIONS AND CORRECTIVE MEASURES SHOULD BE DOCUMENTED THOROUGHLY.
 3. WHERE BMPs HAVE FAILED, REPAIR OR REPLACEMENT SHOULD BE INITIATED UPON DISCOVERY OF THE FAILURE.
 4. SEDIMENT ACCUMULATED IN BASIN SHALL BE REMOVED AS NEEDED TO MAINTAIN BMP EFFECTIVENESS, TYPICALLY WHEN SEDIMENT DEPTH REACHES ONE FOOT (I.E., TWO FEET BELOW THE SPILLWAY CREST).
 5. SEDIMENT BASINS ARE TO REMAIN IN PLACE UNTIL THE UPSTREAM DISTURBED AREA IS STABILIZED AND GRASS COVER IS ACCEPTED BY THE LOCAL JURISDICTION.
 6. WHEN SEDIMENT BASINS ARE REMOVED, ALL DISTURBED AREAS SHALL BE COVERED WITH TOPSOIL, 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



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 THEREON.

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

TEMPORARY WATER
QUALITY POND DETAILS

SCALE : AS SHOWN




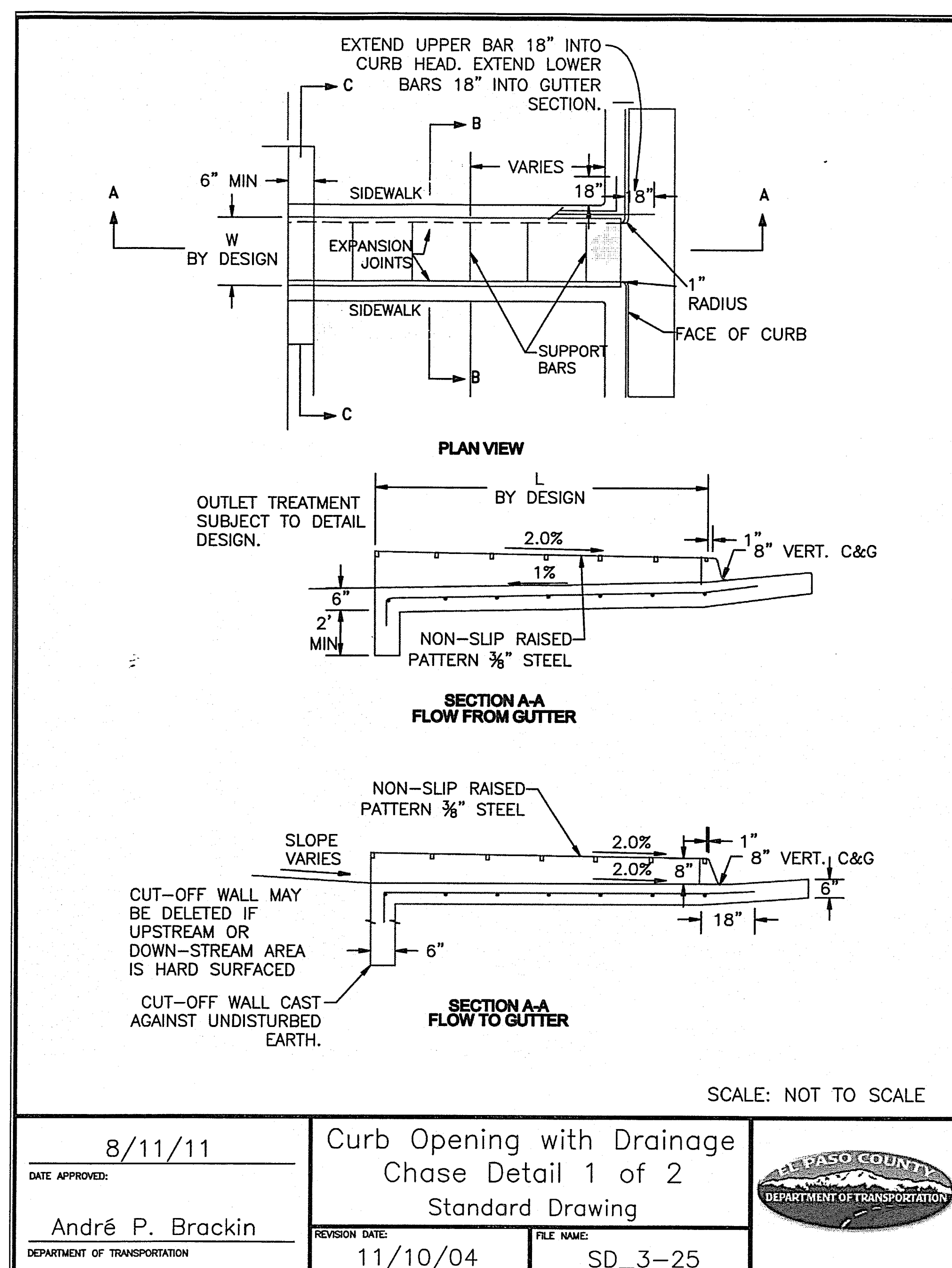
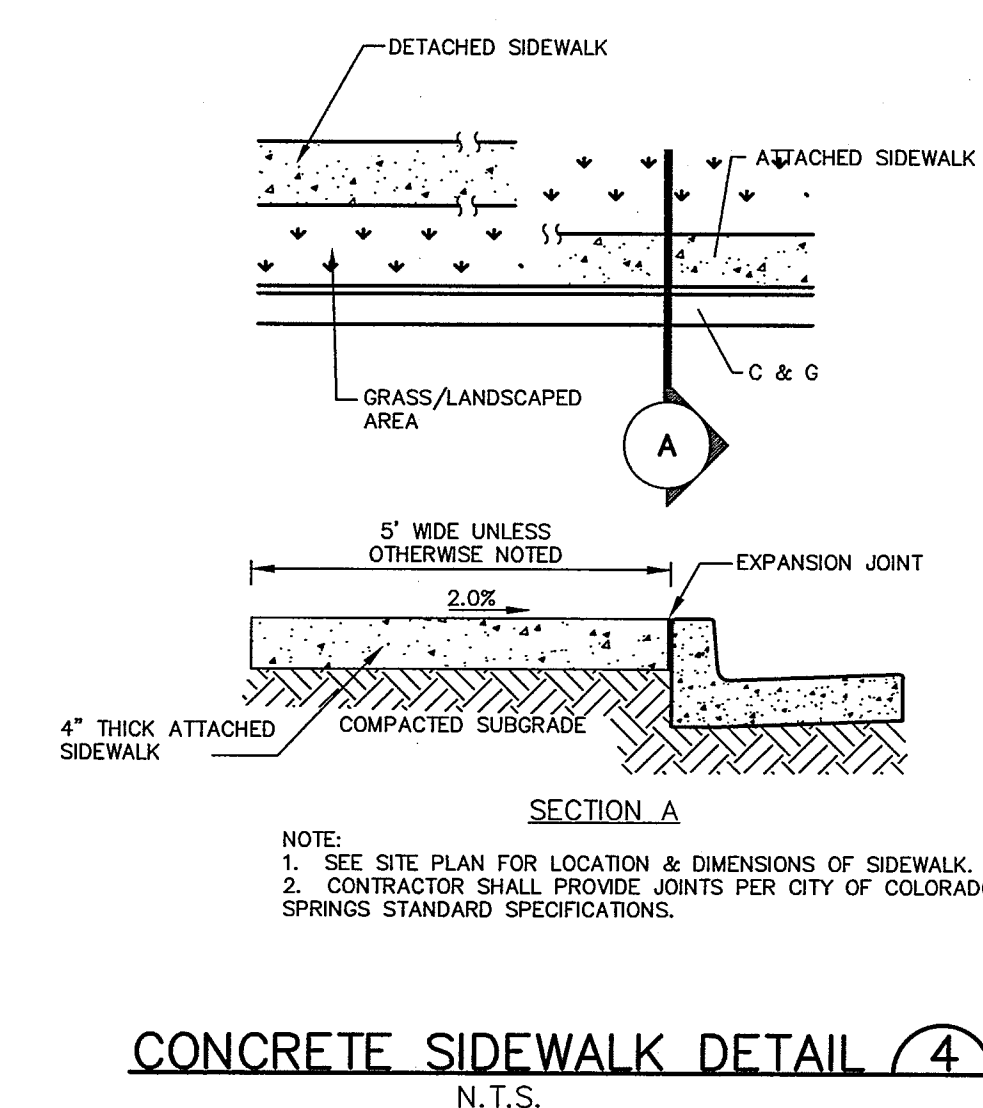
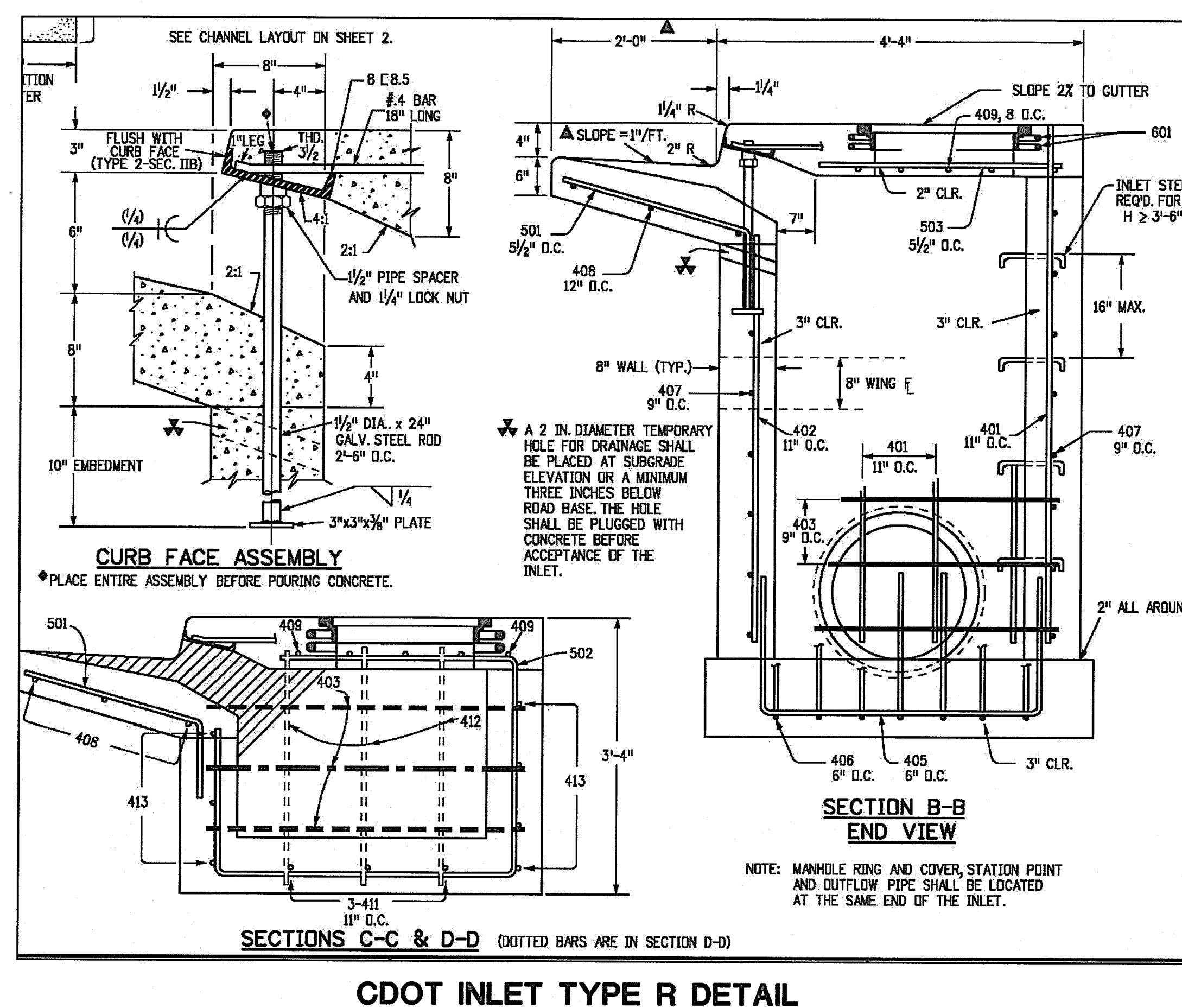
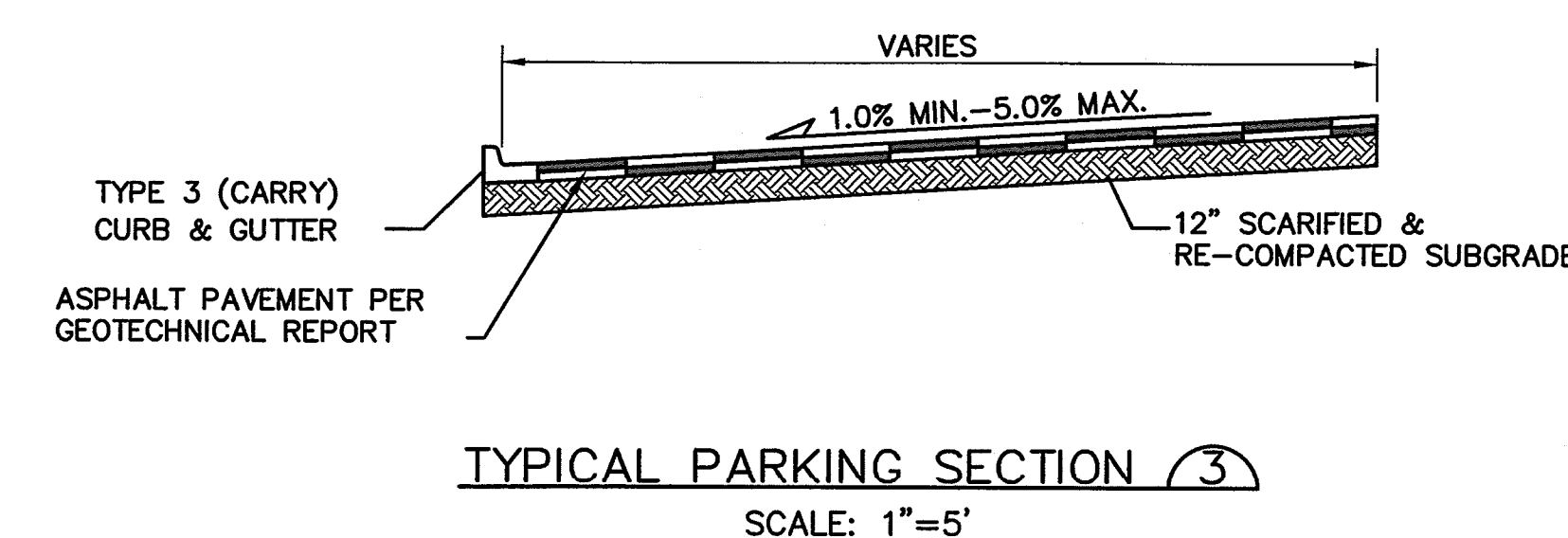
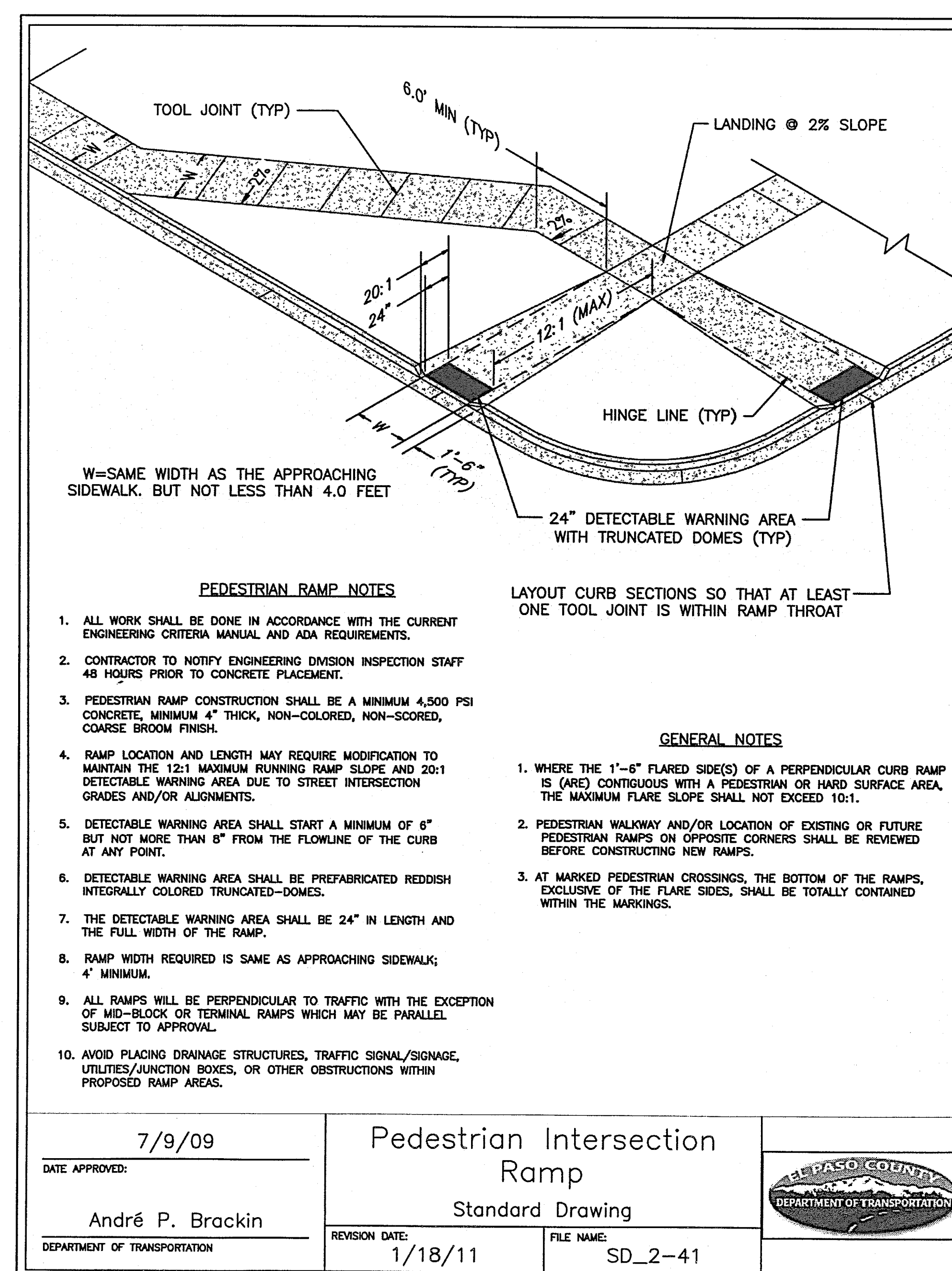
DATE: 4/17/19
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 7/09/19

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

PCD PROJECT NO. PPR-19-009

C3.3

FOR CONSTRUCTION



JPS
ENGINEERING

19 E. Willamette Ave.
Colorado Springs, CO
80903

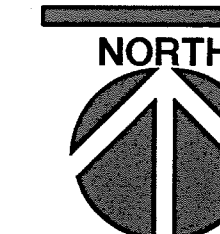
PH: 719-477-9429
FAX: 719-471-0766
www.ipsenqr.com

REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, 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 RESERVE COMMON LAW STATUTORY AND OTHER RESERVED RIGHTS INCLUDING THE COPYRIGHT THEREON.

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

CIVIL DETAILS - PHASE 1b

NO.	REVISION	BY	DATE
A	FOR PERMIT	JPS	4/01/1
A	COUNTY COMMENTS	JPS	4/29/1
A	COUNTY COMMENTS	JPS	6/20/1
A	COUNTY COMMENTS	JPS	7/09/1



DATE: 12/21/18
DRAWN BY: BJJ
CHECKED BY: JPS
REVISED: 7/09/19

PCD PROJECT NO. PPR-19-009

C4.2