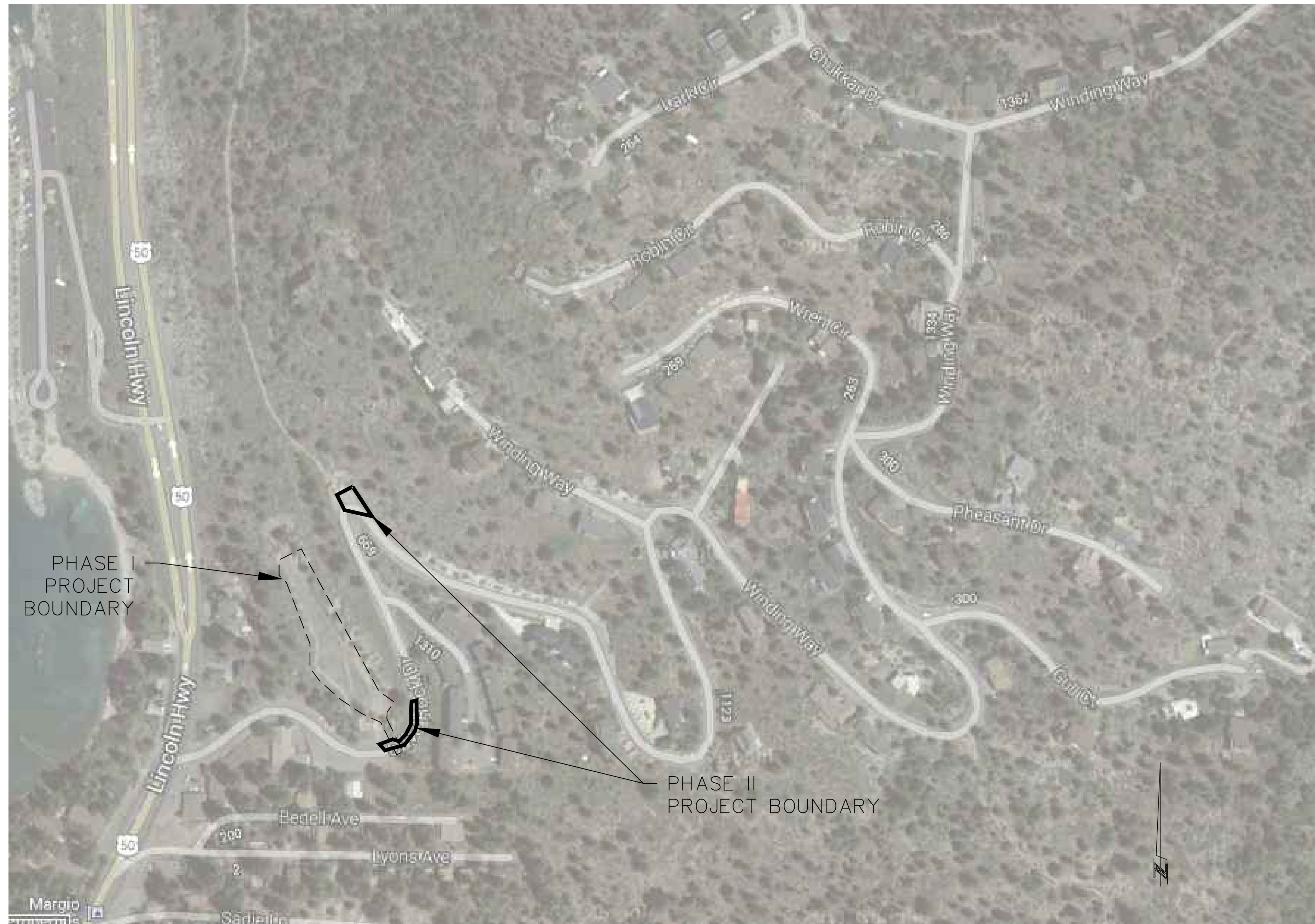


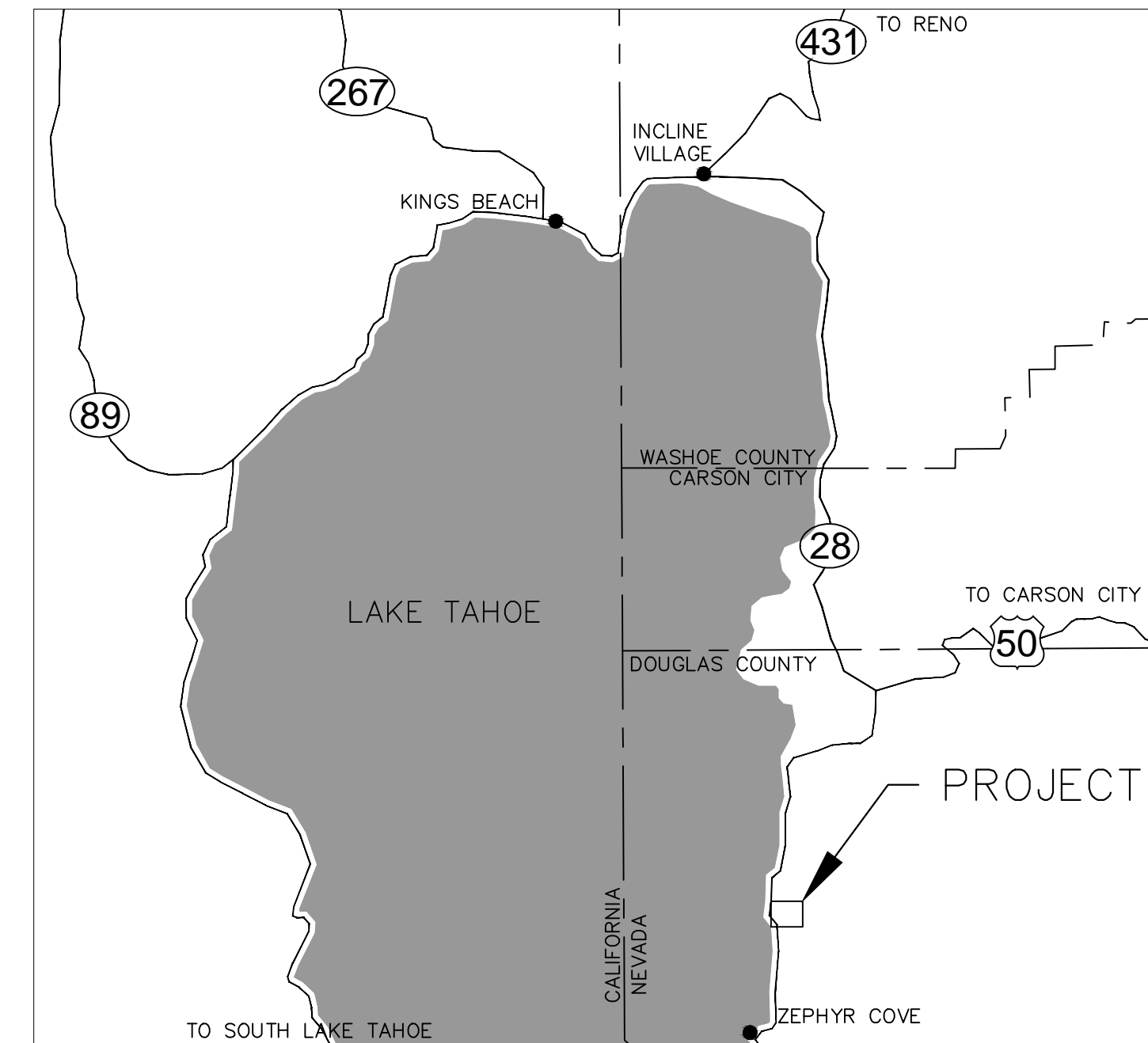
CAVE ROCK ESTATES
GENERAL IMPROVEMENT DISTRICT

NEVADA TAHOE CONSERVATION DISTRICT CAVE ROCK GID STORMWATER SYSTEM RETROFIT PROJECT, PHASE II IN THE COUNTY OF DOUGLAS



PLAN

NOT TO SCALE



VICINITY MAP

NOT TO SCALE

SHEET INDEX

SHEET TITLE	SHEET NO.
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ASSET OWNER

CAVE ROCK GENERAL IMPROVEMENT DISTRICT
P.O. BOX 10426
ZEPHYR COVE, NV 89448

ENGINEER:

MEGHAN C. KELLY, P.E.
REGISTERED CIVIL ENGINEER
STATE OF NEVADA, NO. 20851
NEVADA TAHOE CONSERVATION DISTRICT
400 DORLA CT.
ZEPHYR COVE, NV 89448
(775) 586-1610

DATE

APPROVAL:

ERIK NILSSEN, P.E.
DOUGLAS COUNTY ENGINEER

DATE

CAVE ROCK ESTATES STORMWATER SYSTEM
RETROFIT PROJECT PHASE II

BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS

0" 1"

DESIGNED/DRAWN
MBG/MBG
CHECKED
MCK
DATE
11/2016
SCALE
AS SHOWN

PROJECT
CAVE ROCK
RETROFIT PHASE II

SHEET

i

1 OF 5

RECORD DRAWINGS 11/11/16

GENERAL NOTES

- IT IS THE RESPONSIBILITY OF THE CONTRACTOR AND HIS SUBCONTRACTOR(S) TO EXAMINE THE PROJECT SITE PRIOR TO THE OPENING OF BID PROPOSALS. THE CONTRACTOR SHALL BECOME FAMILIAR WITH THE CONDITIONS UNDER WHICH THE WORK IS TO BE PERFORMED, SUCH AS THE NATURE AND LOCATION OF THE WORK AND THE GENERAL AND LOCAL CONDITIONS, PARTICULARLY THOSE AFFECTING THE AVAILABILITY OF TRANSPORTATION, THE DISPOSAL, HANDLING, AND STORAGE OF MATERIALS, AVAILABILITY OF LABOR, WATER, ELECTRICITY, ROADS, THE UNCERTAINTIES OF WEATHER, THE CONDITIONS OF THE GROUND, SURFACE AND SUBSURFACE MATERIALS, THE EQUIPMENT AND FACILITIES NEEDED PRIMARILY FOR AND DURING THE PERFORMANCE OF THE WORK, AND THE COSTS THEREOF. ANY FAILURE BY THE CONTRACTOR AND SUBCONTRACTOR(S) TO ACQUAINT HIMSELF WITH ALL THE AVAILABLE INFORMATION WILL NOT RELIEVE HIM FROM RESPONSIBILITY FOR PROPERLY ESTIMATING THE DIFFICULTY AND COST OF SUCCESSFULLY PERFORMING THE WORK.
- NTCD WILL FURNISH ONE SET OF CONSTRUCTION STAKES AS SET FORTH IN THE SPECIAL PROVISIONS.
- CONTRACTOR SHALL MAINTAIN A SET OF PLANS ON SITE SHOWING "AS CONSTRUCTED" CHANGES. UPON COMPLETION, CONTRACTOR SHALL SUPPLY DOUGLAS COUNTY, CREGID, AND NTCD A SET OF "AS BUILT" PLANS.
- MOBILIZATION AREAS ARE TO BE SECURED BY THE CONTRACTOR AND APPROVED BY TRPA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF MOBILIZATION SITES, INCLUDING PLACEMENT AND MAINTENANCE OF BMP'S.
- PRIOR TO STARTING WORK, THE CONTRACTOR SHALL INSTALL TEMPORARY BMP MEASURES AT LOCATIONS WHERE NEEDED TO CONTROL EROSION AND WATER POLLUTION DURING THE CONSTRUCTION OF THE PROJECT. THE BMP MEASURES SHALL REMAIN IN PLACE AND SHALL BE MAINTAINED IN A FUNCTIONAL CONDITION FOR THE DURATION OF THE CONSTRUCTION. SILT FENCE IS REQUIRED AT ALL CROSS DRAIN OUTLETS. SILT FENCE OR SEDIMENT LOGS WILL BE REQUIRED AT OTHER LOCATIONS AS SHOWN ON THE DRAWINGS OR STAKED IN THE FIELD BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL MEET OR EXCEED TRPA REQUIREMENTS. SEE DETAILS 2/D-2 THROUGH 5/D-2 FOR INSTALLATION DETAIL.
- ALL EXISTING VEGETATION SHALL BE PRESERVED UNLESS SPECIFICALLY IDENTIFIED BY THE ENGINEER FOR REMOVAL. BMP'S TO PROTECT VEGETATION SHALL BE INSTALLED BY THE CONTRACTOR IF REQUIRED BY TRPA.
- UTILITY LOCATIONS SHOWN ON THE DRAWINGS ARE APPROXIMATE. WHERE EXCAVATION IS NECESSARY, THE CONTRACTOR SHALL CONTACT UNDERGROUND SERVICE ALERT (USA) AND ALL AFFECTED UTILITY COMPANIES TO LOCATE ALL BURIED UTILITIES AT LEAST 48 HOURS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR RELOCATION OF UTILITIES AS REQUIRED BY THE WORK. THE UTILITY COMPANIES WILL PERFORM ALL RELOCATION WORK AT NO COST TO THE CONTRACTOR, PROVIDED THAT NO CONTRACTOR CAUSED DAMAGE TO UTILITIES HAS OCCURRED DUE TO CONTRACTOR NEGLIGENCE. EXISTING STORM DRAIN LOCATIONS, MATERIALS AND SIZE ARE BASED ON A GROUND SURVEY AND PREVIOUS PROJECT PLAN SETS. WHENEVER CONNECTIONS TO OR CLEARANCE FROM STORM DRAIN PIPE IS REQUIRED, THE CONTRACTOR SHALL POTHOLE TO VERIFY THE LOCATION, SIZE AND MATERIAL OF THE PIPE PRIOR TO CONSTRUCTION.
- NEW ROADSIDE FLOW CONVEYANCES SHALL INCORPORATE SUCH GRADE AS NECESSARY TO GUARANTEE WATER CONTINUES TO FLOW IN THE PRESENT DIRECTION, WITHOUT PONDING OR BREAKOUTS.
- ALL WORK SHALL BE DONE WITHIN THE DOUGLAS COUNTY OR CREGID PROPERTY UNLESS EASEMENT OR CONSTRUCTION PERMIT HAS BEEN ACQUIRED BY NTCD, IN WHICH CASE THE LIMITS OF WORK ARE AS SPECIFIED ON THE DRAWINGS. ANY DAMAGE DONE BY THE CONTRACTOR OR HIS SUBCONTRACTORS TO PRIVATE PROPERTY AND/OR OUTSIDE OF THE NOTED LIMITS OF WORK IS SOLELY THE RESPONSIBILITY OF THE CONTRACTOR AND/OR HIS SUBCONTRACTORS.
- NTCD WILL PROVIDE INITIAL TESTING AND INSPECTION OF WORK AND MATERIAL WHEN REQUIRED. THE COST OF TESTING AND INSPECTING THE REMOVAL AND/OR REPLACEMENT OF ANY DEFECTIVE WORK OR MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR. SUCH COSTS WILL BE DEDUCTED FROM ANY MONEYS DUE OR WHICH MAY BECOME DUE TO THE CONTRACTOR.
- STANDARD WORK DAYS SHALL BE MONDAY THROUGH FRIDAY. SATURDAY AND SUNDAY MAY BE WORKED ON OCCASION ONLY TO MAKE UP FOR WEATHER DELAYS OR OTHER SCHEDULE DELAYS. NOISE GENERATING ACTIVITIES WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 6:30 PM.
- NOISE SHALL BE REDUCED BY THE MANDATORY USE OF MUFFLERS ON ALL CONSTRUCTION VEHICLES AND EQUIPMENT. WHERE FEASIBLE, SOLENOIDAL PAVEMENT BREAKERS WILL BE USED IN LIEU OF AIR POWERED JACK HAMMERS. NOISE GENERATING ACTIVITIES WILL BE LIMITED TO THE HOURS OF 8:00 AM TO 6:30 PM.
- THE CONTRACTOR SHALL PROVIDE A WATER TRUCK TO WATER AREAS AS NECESSARY TO CONTROL DUST. THE CONTRACTOR SHALL SWEEP THE PAVEMENT AT THE END OF EACH DAY.
- ALL DISTURBED AREAS SHALL BE REVEGETATED WITH NATIVE SPECIES PER TRPA BEST MANAGEMENT PRACTICES (BMP). EXISTING VEGETATION REMOVED DURING CONSTRUCTION SHALL BE CHIPPED AND STORED FOR REVEGETATION.
- ALL TREES AND NATURAL VEGETATION TO REMAIN ON THE SITE SHALL BE PROTECTED PER TRPA.
- SOIL AND CONSTRUCTION MATERIAL SHALL NOT BE TRACKED OFF THE CONSTRUCTION SITE. GRADING OPERATIONS SHALL CEASE IN THE EVENT THAT A DANGER OF VIOLATING THIS CONDITION EXISTS.
- DURING CONSTRUCTION ENVIRONMENTAL PROTECTION DEVICES, SUCH AS EROSION CONTROL, DUST CONTROL, AND VEGETATION PROTECTION DEVICES SHALL BE MAINTAINED AT ALL TIMES.
- LOOSE SOIL MOUNDS OR SURFACES SHALL BE PROTECTED FROM WIND OR WATER EROSION BY BEING APPROPRIATELY COVERED WHEN CONSTRUCTION IS NOT IN ACTIVE PROGRESS OR WHEN REQUIRED BY TRPA.
- EXCAVATED MATERIAL SHALL BE STORED UPGRADE FROM THE EXCAVATED AREA WHENEVER POSSIBLE. NO MATERIAL SHALL BE STORED IN ANY STREAM ENVIRONMENT ZONE (SEZ) OR WET AREA.
- ONLY EQUIPMENT OF A SIZE AND TYPE THAT WILL DO THE LEAST AMOUNT OF DAMAGE, UNDER PREVAILING SITE CONDITIONS, AND CONSIDERING THE NATURE OF THE WORK TO BE PERFORMED, WILL BE USED. ALL HEAVY MACHINERY WORK SHALL BE PERFORMED FROM PAVED SURFACES TO AVOID SOIL COMPACTION.
- NO WASHING OF VEHICLES OR HEAVY EQUIPMENT, INCLUDING CEMENT MIXERS, SHALL BE PERMITTED ANYWHERE ON THE SUBJECT PROPERTY UNLESS AUTHORIZED BY TRPA IN WRITING.
- NO VEHICLE OR HEAVY EQUIPMENT SHALL BE ALLOWED IN A STREAM ENVIRONMENT ZONE OR WET AREA EXCEPT AS AUTHORIZED BY TRPA.
- ALL CONSTRUCTION SHALL BE COMPLETED OR WINTERIZED BY OCTOBER 15 TO REDUCE THE WATER QUALITY IMPACTS ASSOCIATED WITH WINTER WEATHER.
- THE CONTRACTOR AND/OR THEIR AUTHORIZED AGENTS SHALL EACH DAY REMOVE ALL SEDIMENT, MUD, CONSTRUCTION DEBRIS, OR OTHER POTENTIAL POLLUTANTS THAT MAY HAVE BEEN DISCHARGED TO, OR ACCUMULATE IN, THE DOUGLAS COUNTY RIGHT-OF-WAYS AS A RESULT OF CONSTRUCTION ACTIVITIES ASSOCIATED WITH THIS PROJECT.
- ADDITIONAL CONSTRUCTION SITE DISCHARGE BEST MANAGEMENT PRACTICES MAY BE REQUIRED OF THE OWNER AND HIS OR HER AGENTS DUE TO UNFORESEEN EROSION PROBLEMS.
- TEMPORARY OR PERMANENT STABILIZATION PRACTICES WILL BE INSTALLED ON DISTURBED AREAS AS SOON AS PRACTICABLE AND NO LONGER THEN 24 HOURS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS BEEN TEMPORARILY OR PERMANENTLY CEASED.
- AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL DISTURBED AREAS, AREAS USED FOR STORAGE OF MATERIALS AND EQUIPMENT THAT ARE EXPOSED TO PRECIPITATION, VEHICLE ENTRANCE AND EXIT LOCATIONS, AND ALL BMP'S WEEKLY, PRIOR TO A FORECASTED RAIN EVENT AND WITHIN 24 HOURS AFTER ANY ACTUAL RAIN EVENT. SOME EXCEPTIONS TO WEEKLY INSPECTIONS MAY APPLY, SUCH AS FROZEN GROUND CONDITIONS OR SUSPENSION OF LAND DISTURBANCE ACTIVITIES.

ABBREVIATIONS

NOT ALL ABBREVIATIONS LISTED ARE USED IN THESE PLANS

A.B.	AGGREGATE BASE	MJD	MAXIMUM DRY DENSITY
AC.	ACRE	MJ	MECHANICAL JOINT
A.C.	ASPHALT CONCRETE	MI.	MILE
@	AT	MIN.	MINIMUM
APPROX.	APPROXIMATE	MISC.	MISCELLANEOUS
AVG.	AVERAGE	N	NOT IN CONTRACT
AWWA	AMERICAN WATER WORKS ASSOCIATION	N.I.C.	NEVADA TAHOE CONSERVATION DISTRICT
BC	BEGIN CURVE	NTCD	NOT TO SCALE
C&G	CURB AND GUTTER	N.T.S.	NUMBER
CATV	CABLE TELEVISION	NO.	ON CENTER
C.B.	CATCH BASIN	OC	ORIGINAL GRADE
CL	CENTERLINE	OG	OVERHEAD ELECTRIC OR TELEPHONE LINES
CLR.	CLEAR	OH(E/T)	PLUS OR MINUS
CONST.	CONSTRUCT	±	POINT
CF	CUBIC FEET	PT.	PUSH ON
CMP	CORRUGATED METAL PIPE	PCC	POINT OF COMPOUND CURVE, PORTLAND CEMENT
CREGID	CAVE ROCK ESTATES GENERAL IMPROVEMENT DISTRICT	PC	POINT OF CURVATURE
CSP	CORRUGATED STEEL PIPE	PIP	PROTECT IN PLACE
CY	CUBIC YARD	PVC	POLYVINYL CHLORIDE
D.G.	DECOMPOSED GRANITE	PVMT	PAVEMENT
DEG	DEGREE(S)	POC	POINT ON CURVE
DI	DROP INLET	POS	POSITIVE
DIA.	DIAMETER	PRC	POINT OF REVERSE CURVE
DR	DIMENSION RATIO	PSI	POUNDS PER SQUARE INCH
DWG	DRAWING	PL	PROPERTY LINE
DW, DWY	DRIVEWAY	PO	PUSH ON
EA.	EACH	PUE	PUBLIC UTILITY EASEMENT
EASE.	EASEMENT	R	RADIUS
EG	EXISTING GRADE	RCP	REINFORCED CONCRETE PIPE
ELEC	ELECTRIC	REVEG	REVEGETATION
EP	EDGE OF PAVEMENT	RT,R	RIGHT
ELEV.	ELEVATION	R/W, ROW	RIGHT-OF-WAY
EC	END CURVE	SS	SANITARY SEWER, STAINLESS STEEL
EX.	EXISTING	SSCO.	SANITARY SEWER CLEAN OUT
FG	FINISH GRADE	SSMH	SANITARY SEWER MANHOLE
FH	FIRE HYDRANT	S	SLOPE
FCA	FLANGE COUPLER ADAPTER	S	SOUTH
FES	FLARED END SECTION (METAL)	SF	SQUARE FOOT/FEET
FL	FLOWLINE	SHT	SHEET
FLG	FLANGED	STD	STANDARD
FT.	FOOT, FEET	SDR	STANDARD DIMENSION RATIO
FTG	FOOTING	SSPWC	STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION
FV	FLUSH VALVE	STA	STATION
*	DEGREE	SD	STORM DRAIN
G	GAS	SDMH	STORM DRAIN MANHOLE
GV	GATE VALVE	TBC	TOP BACK OF CURB
GB	GRADE BREAK	TOC	TOP OF CURB
HDPE	HIGH DENSITY POLYETHYLENE	TRPA	TAHOE REGIONAL PLANNING AGENCY
HDPE-NP	NON-PERFORATED HIGH DENSITY POLYETHYLENE	TW	TOP OF WALL
HDPE-P	PERFORATED HIGH DENSITY POLYETHYLENE	TYP	TYPICAL
HP	HIGH POINT	UGE	UNDERGROUND ELECTRIC LINES
HOR., HORIZ.	HORIZONTAL	UGT	UNDERGROUND TELEPHONE LINES
IN.	INCH	VC	VERTICAL CURVE
IE	INVERT ELEVATION	VG	VALLEY GUTTER
IRR.	IRRIGATION	VPC	VERTICAL POINT OF CURVATURE
L	LEFT	VPI	VERTICAL POINT OF INFLECTION
LEN.	LENGTH	VPT	VERTICAL POINT OF TANGENT
LF	LINEAR FEET	W	WATER
LID	LOW IMPACT DEVELOPMENT	WL	WATERLINE
LP	LOW POINT	W	WEST
LS	LUMP SUM	W/	WITH
MH	MANHOLE	WM	WATER METER
MAX.	MAXIMUM		

UTILITIES



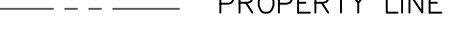
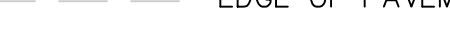
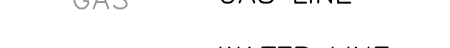
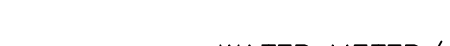






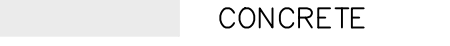

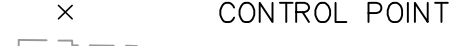
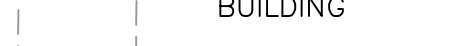



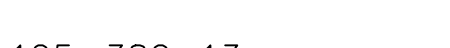
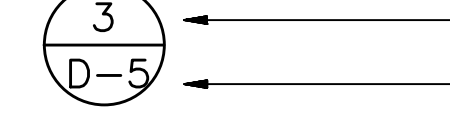
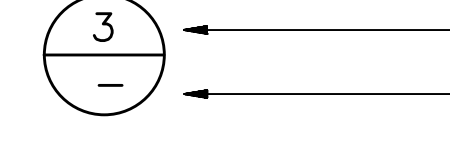
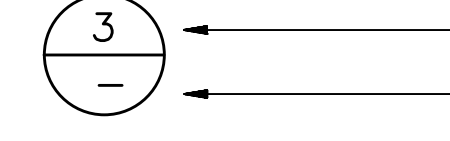
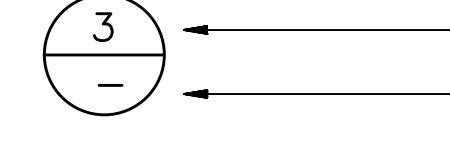
CABLE TELEVISION	CHARTER COMMUNICATIONS, (775) 588-1077
NATURAL GAS	SOUTHWEST GAS, (877) 860-6022
ELECTRIC	NV ENERGY, (775) 834-4444
WATER	CAVE ROCK/SKYLAND WATER SYSTEM, (775) 782-9989
STORM DRAIN	CAVE ROCK ESTATES GID, (775)588-2944
SEWER	TAHOE DOUGLAS DISTRICT, (775) 588-5641
PHONE	FRONTIER, (775) 782-0966
USA DIGS	(800) 642-2444 OR 811

HORIZONTAL AND VERTICAL PROJECTION

VERTICAL CONTROL IS NAVD88, Geoid09; HORIZONTAL CONTROL IS NEVADA STATE PLANE, NAD 83, WEST ZONE (U.S. FEET)

LEGEND

NOTE: LEGENDS PROVIDED ON INDIVIDUAL PLAN SHEETS OVERRIDES THIS LEGEND

EXISTING	PROPOSED
	MAJOR CONTOUR
	MINOR CONTOUR
	PROPERTY LINE
	EDGE OF PAVEMENT
	GAS LINE
	WATER LINE
	WATER METER/ VALVE
	SANITARY SEWER LINE
	SANITARY SEWER MANHOLE
	UNDERGROUND ELECTRIC LINE
	TELEPHONE OR CABLE LINE
	STORM DRAIN
	TREE
	CONCRETE
	EXISTING GRADE (SECTION VIEW)
	CONTROL POINT
	BUILDING
	ROCK
	PAVEMENT
	ARTICULATED BLOCK
125-382-13	ASSESSOR PARCEL NUMBER
958 TYNER ST.	PHYSICAL ADDRESS (PRIVATE LOT)
	SECTION OR DETAIL IDENTIFICATION
	NUMBER OF SHEET ON WHICH SECTION OR DETAIL IS DRAWN
	SECTION OR DETAIL IDENTIFICATION
	SYMBOL FOR DETAIL ON THE SAME SHEET
LETTER FOR SECTION IDENTIFICATION	FROM PAGE (PLAN VIEW)
FROM	ON PAGE (SECTION VIEW)

NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION DOUGLAS COUNTY	NO.	REVISION	DATE	STANDARD DETAIL FOR PUBLIC WORKS CONSTRUCTION	SECTION DOUGLAS COUNTY
				DOUGLAS COUNTY					DOUGLAS COUNTY
				DATE: 6/07/2007					DATE: 6/07/2007
				DWG: DC D13					DWG: DC B28

STORM DRAIN GENERAL NOTES

DOUGLAS COUNTY UTILITY DIVISION GENERAL NOTES

- ALL WORK SHALL CONFORM TO THE STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION AS ADOPTED BY DOUGLAS COUNTY. THE OWNER / CONTRACTOR SHALL OBTAIN A PERMIT FROM DOUGLAS COUNTY COMMUNITY DEVELOPMENT PRIOR TO THE START OF CONSTRUCTION.
- ALL TRAFFIC CONTROL AND BARRICADING WITHIN THE PUBLIC RIGHT-OF-WAY SHALL CONFORM TO PART VI OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION, AND THE NEVADA WORK ZONE TRAFFIC CONTROL HANDBOOK, 1986 EDITION. NO STREET CLOSURES WILL BE ALLOWED WITHOUT PRIOR WRITTEN APPROVAL OF A TRAFFIC CONTROL PLAN BY THE DOUGLAS COUNTY ENGINEERING DIVISION.
- THE OWNER / CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT "CALL BEFORE YOU DIG" 1-800-227-2600 FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION.
- THE OWNER / CONTRACTOR SHALL CALL DOUGLAS COUNTY ENGINEERING DIVISION (782-6237) FORTY-EIGHT (48) HOURS PRIOR TO START OF CONSTRUCTION. THE OWNER / CONTRACTOR SHALL CALL TWENTY-FOUR (24) HOURS PRIOR TO REQUIRED INSPECTIONS AND TESTING. THE REQUIRED INSPECTIONS AND TESTING ARE LISTED ON THE INSPECTION RECORD ISSUED WITH EACH PERMIT. THE OWNER / CONTRACTOR MUST HAVE THE PERMIT NUMBER AND THE DESCRIPTION LISTED ON THE INSPECTION RECORD TO SCHEDULE REQUIRED INSPECTIONS AND TESTING.
- THE APPROVED PLAN AND PERMIT MUST BE ON THE JOB SITE AT ALL TIMES.

BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS

0" 1"

DESIGNED/DRAWN
MBG/MBG
CHECKED
MCK
DATE
11/2016
SCALE
AS SHOWN

PROJECT
CAVE ROCK
RETROFIT PHASE II

SHEET

BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS

DESIGNED/DRAWN	MBG/MBG
CHECKED	MCK
DATE	11/2016
SCALE	AS SHOWN

PROJECT
CAVE ROCK
RETROFIT PHASE II

SHEET
C-1
3 OF 5

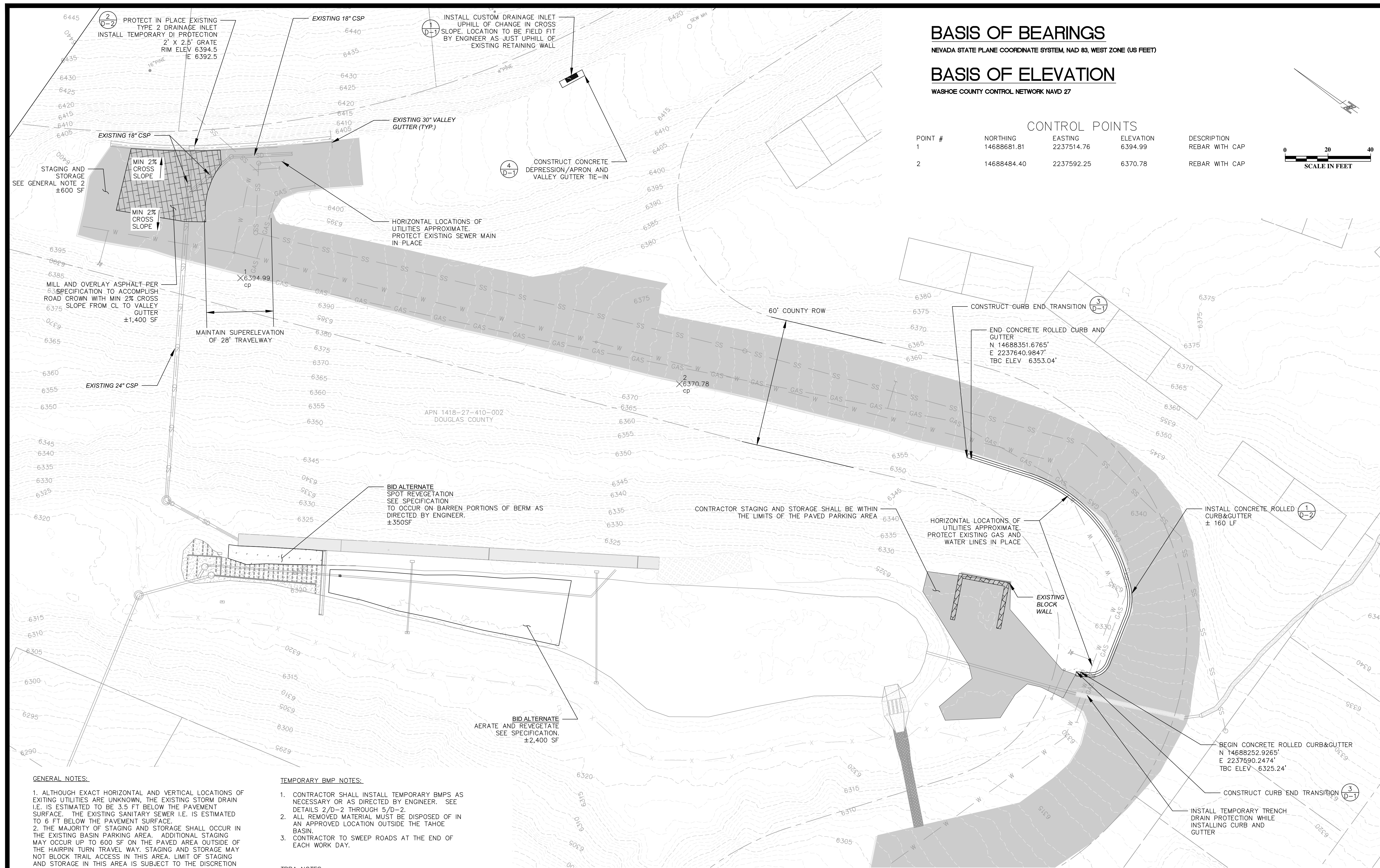
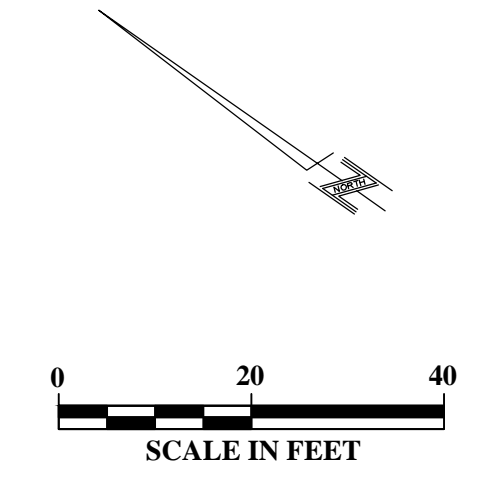
BASIS OF BEARINGS

NEVADA STATE PLANE COORDINATE SYSTEM, NAD 83, WEST ZONE (US FEET)

BASIS OF ELEVATION

WASHOE COUNTY CONTROL NETWORK NAVD 27

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	14688681.81	2237514.76	6394.99	REBAR WITH CAP
2	14688484.40	2237592.25	6370.78	REBAR WITH CAP



GENERAL NOTES:

- ALTHOUGH EXACT HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING UTILITIES ARE UNKNOWN, THE EXISTING STORM DRAIN I.E. IS ESTIMATED TO BE 3.5 FT BELOW THE PAVEMENT SURFACE. THE EXISTING SANITARY SEWER I.E. IS ESTIMATED TO BE 6 FT BELOW THE PAVEMENT SURFACE.
- THE MAJORITY OF STAGING AND STORAGE SHALL OCCUR IN THE EXISTING BASIN PARKING AREA. ADDITIONAL STAGING MAY OCCUR UP TO 600 SF ON THE PAVED AREA OUTSIDE OF THE HAIRPIN TURN TRAVEL WAY. STAGING AND STORAGE MAY NOT BLOCK TRAIL ACCESS IN THIS AREA. LIMIT OF STAGING AND STORAGE IN THIS AREA IS SUBJECT TO THE DISCRETION OF THE ENGINEER.

TEMPORARY BMP NOTES:

- CONTRACTOR SHALL INSTALL TEMPORARY BMPS AS NECESSARY OR AS DIRECTED BY ENGINEER. SEE DETAILS 2/D-2 THROUGH 5/D-2.
- ALL REMOVED MATERIAL MUST BE DISPOSED OF IN AN APPROVED LOCATION OUTSIDE THE TAHOE BASIN.
- CONTRACTOR TO SWEEP ROADS AT THE END OF EACH WORK DAY.

TRPA NOTES:

- LAND CAPABILITY FOR ENTIRE PROJECT AREA IS CLASS 1A
- NO TREES WILL BE REMOVED AS A PART OF THIS PROJECT

PROPOSED PLAN
SCALE: 1"=20'

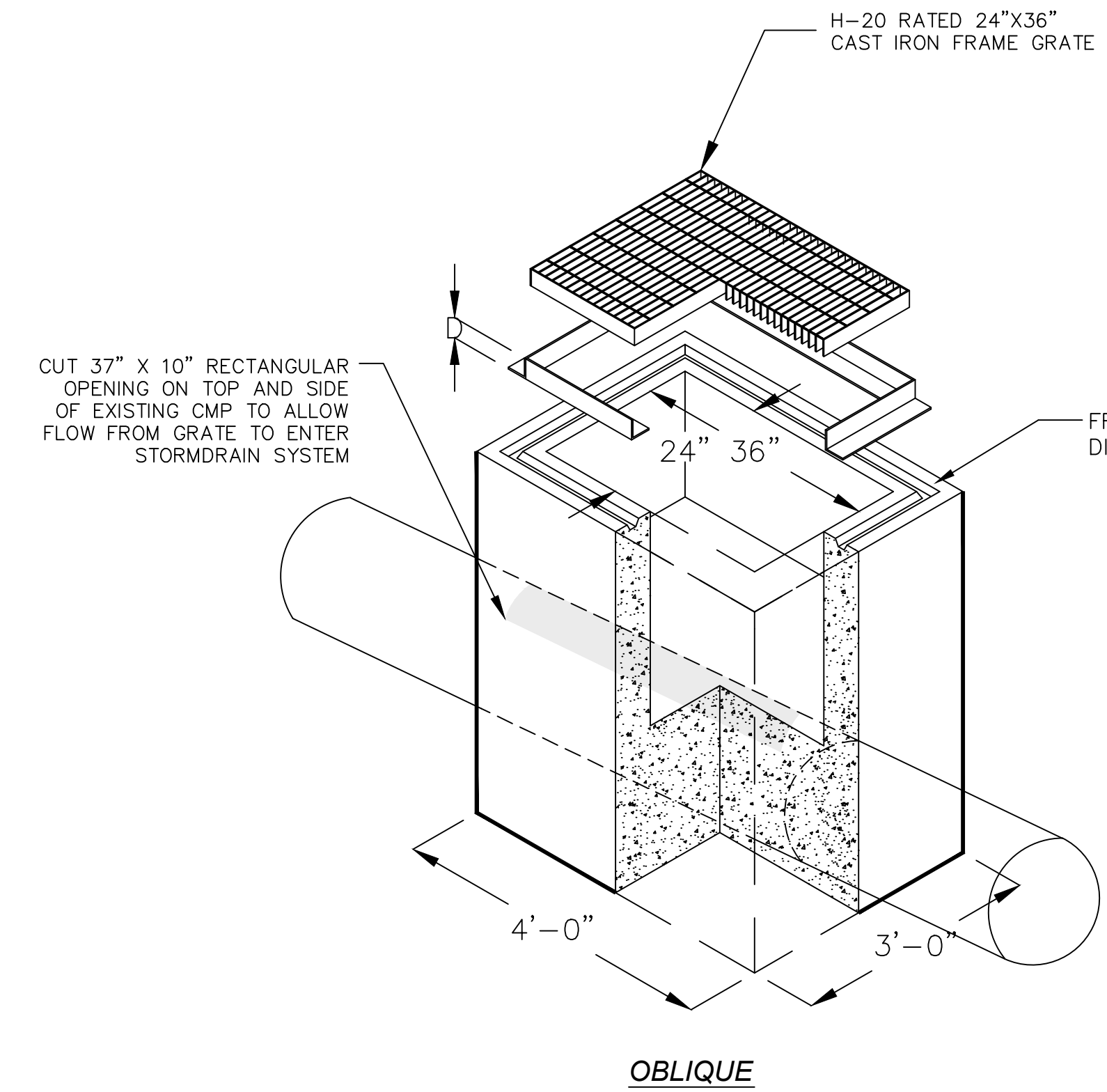
RECORD DRAWINGS 11/11/16

BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS

DESIGNED/DRAWN MBG/MBG
CHECKED MCK
DATE 11/2016
SCALE AS SHOWN

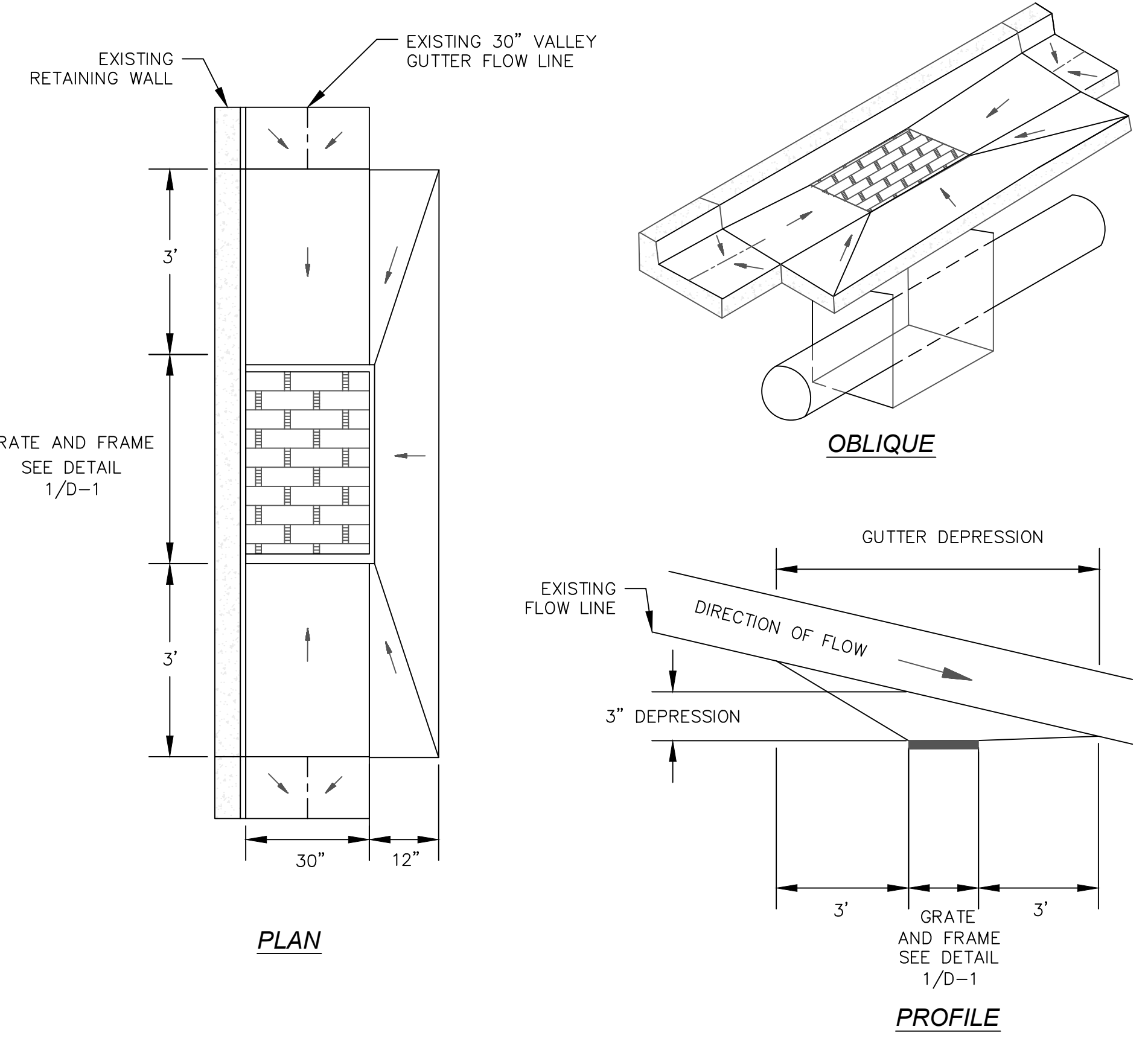
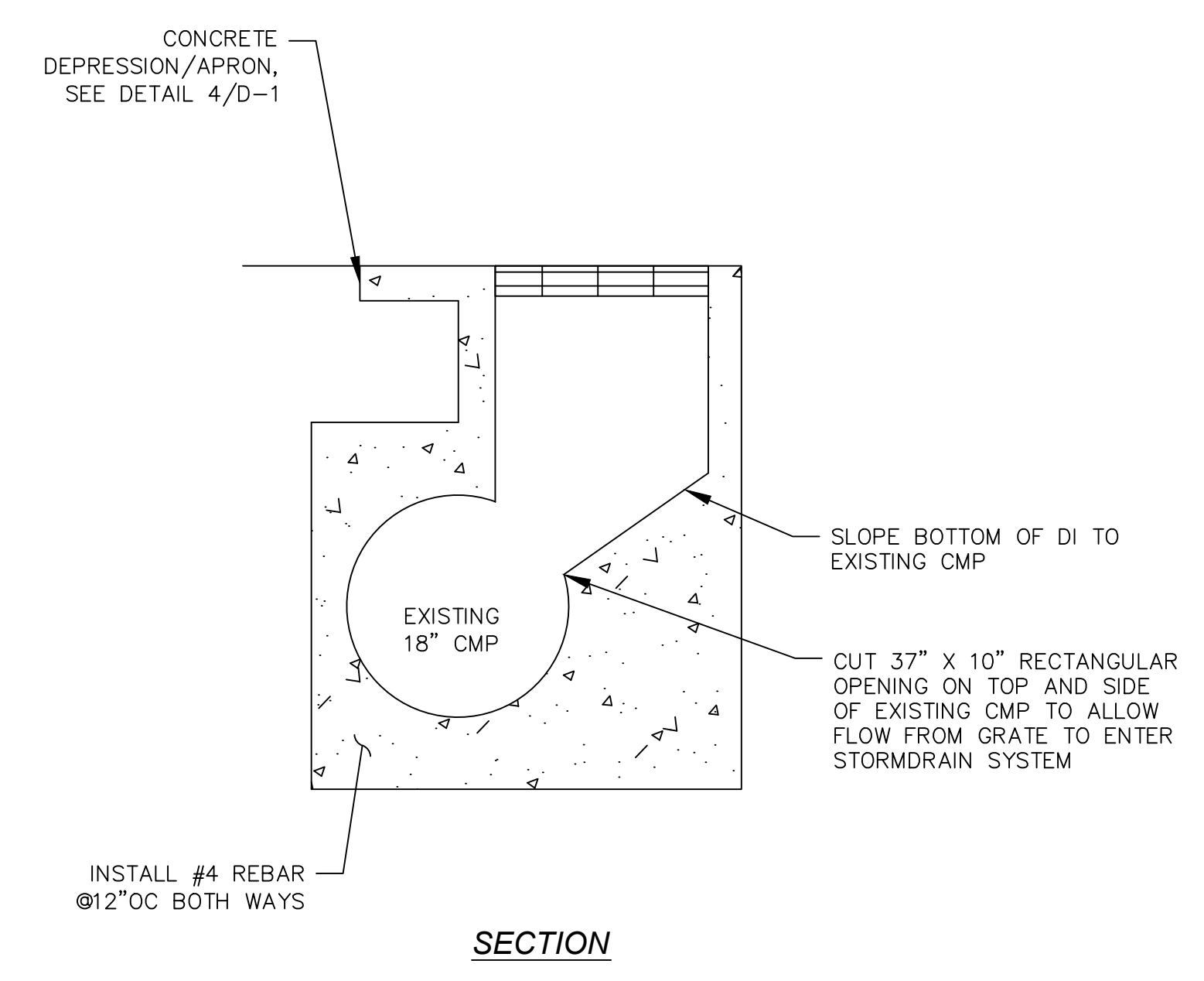
PROJECT CAVE ROCK RETROFIT PHASE II

SHEET D-1
4 OF 5

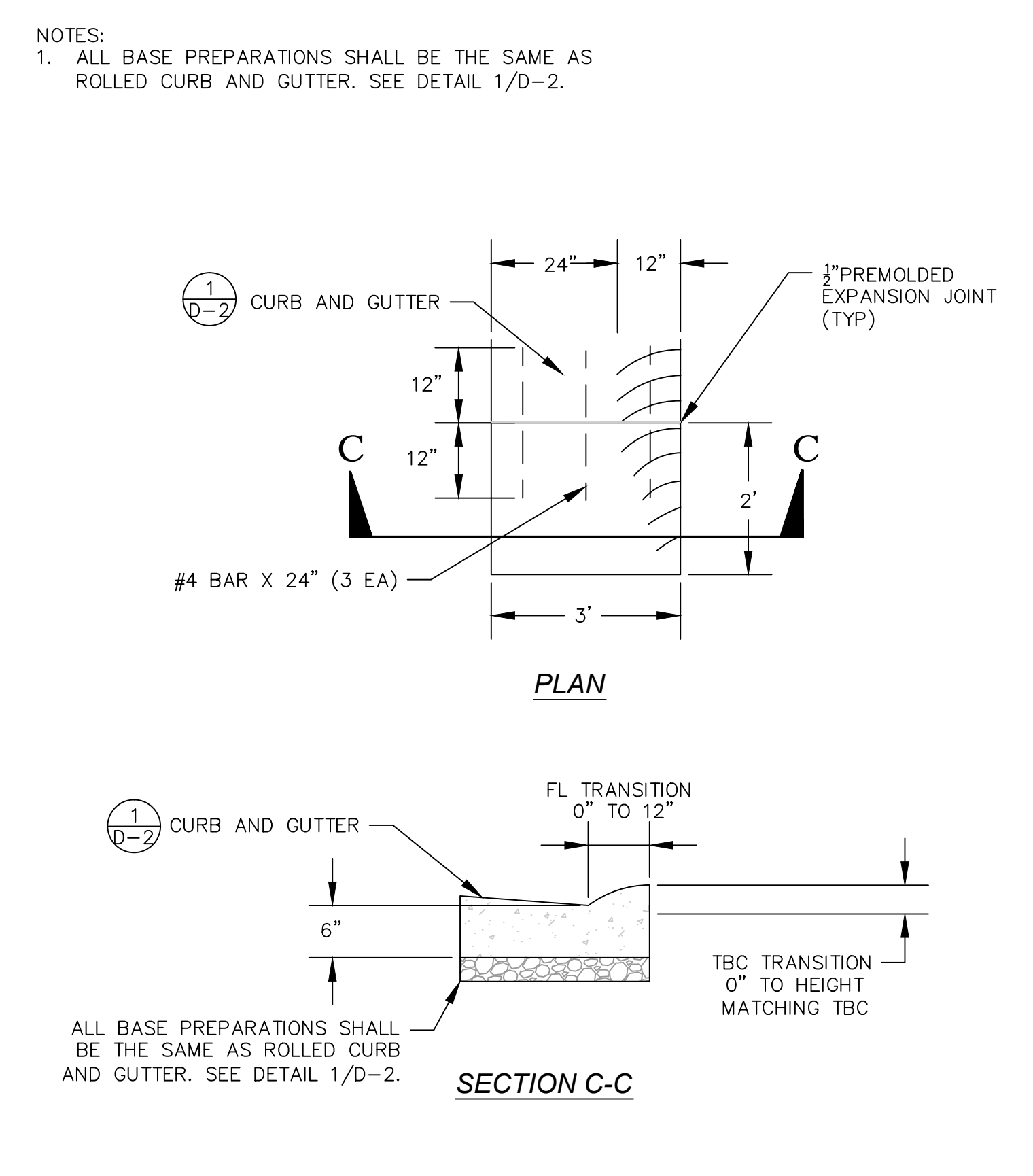


- NOTES:
- DI SHALL BE CUSTOM TO SURROUND EXISTING STORMDRAIN PIPE. PIPE SHALL BE CUT TO ALLOW INFLOW FROM GRATE.
 - DESIGN LOAD FOR CONCRETE BOX, GRATE, AND FRAME: H20 FULL TRAFFIC
 - FRAME AND GRATE SHALL BE BICYCLE SAFE.
 - A MINIMUM OF 6" OF GRADED DRAIN ROCK MATERIAL SHALL BE CONSTRUCTED BENEATH THE DI.

CUSTOM DRAINAGE INLET
SCALE = NTS
1 D-1

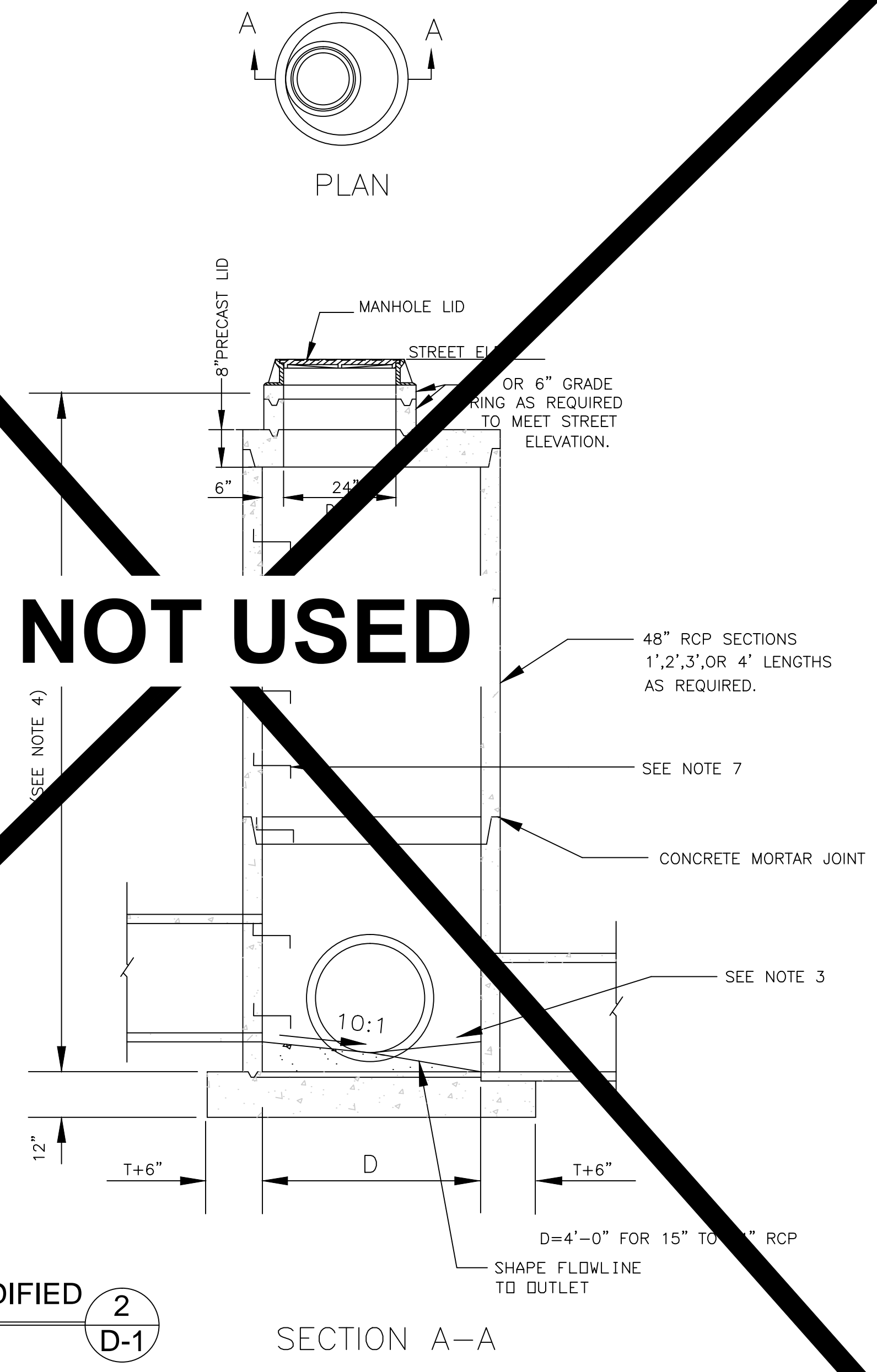


CONCRETE DEPRESSION/APRON
SCALE = NTS
4 D-1

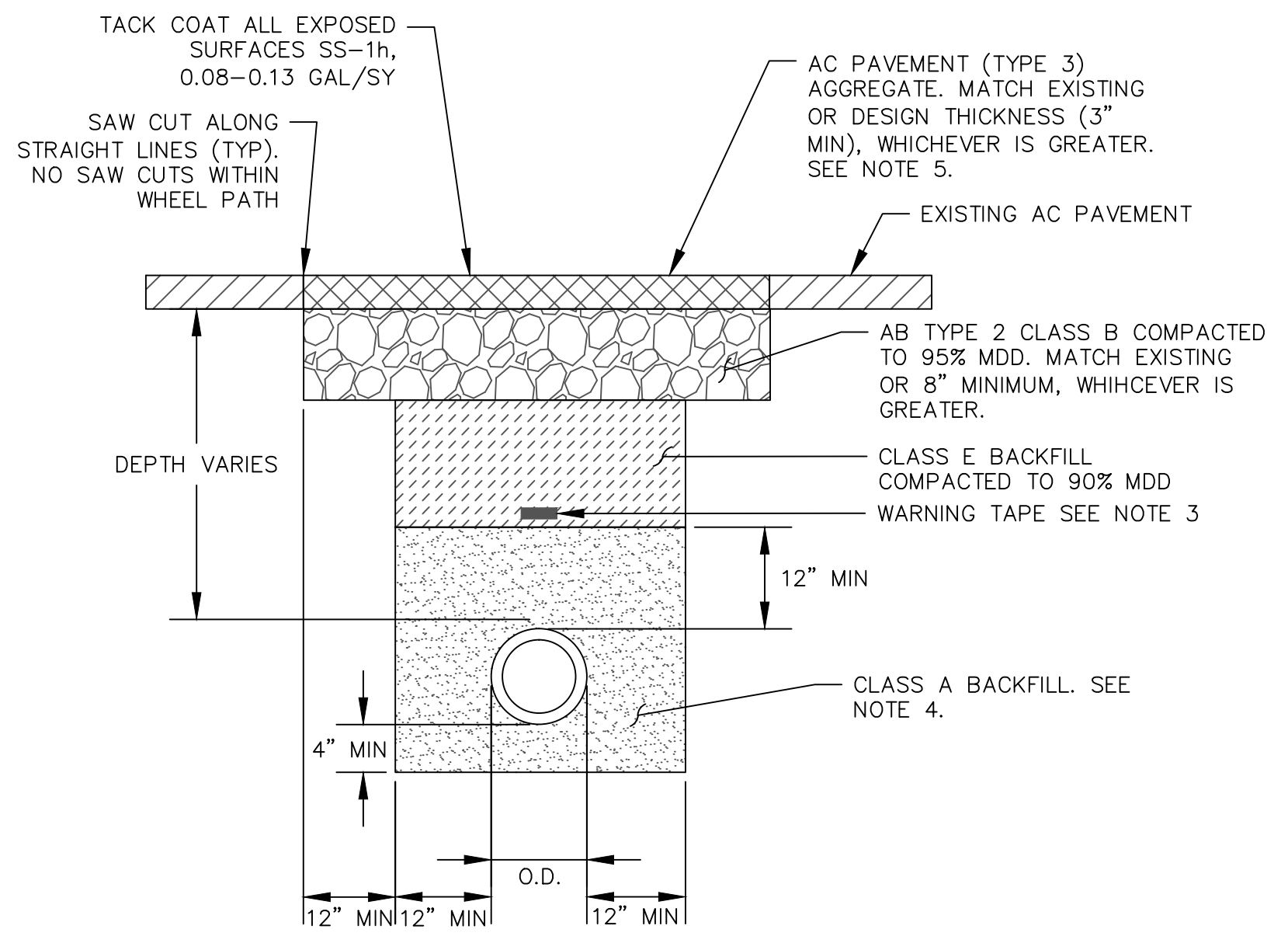


CURB END TRANSITION
SCALE = NTS
3 D-1

STORMDRAIN MANHOLE DOUGLAS COUNTY TYPE 1 MODIFIED
SCALE = NTS
2 D-1

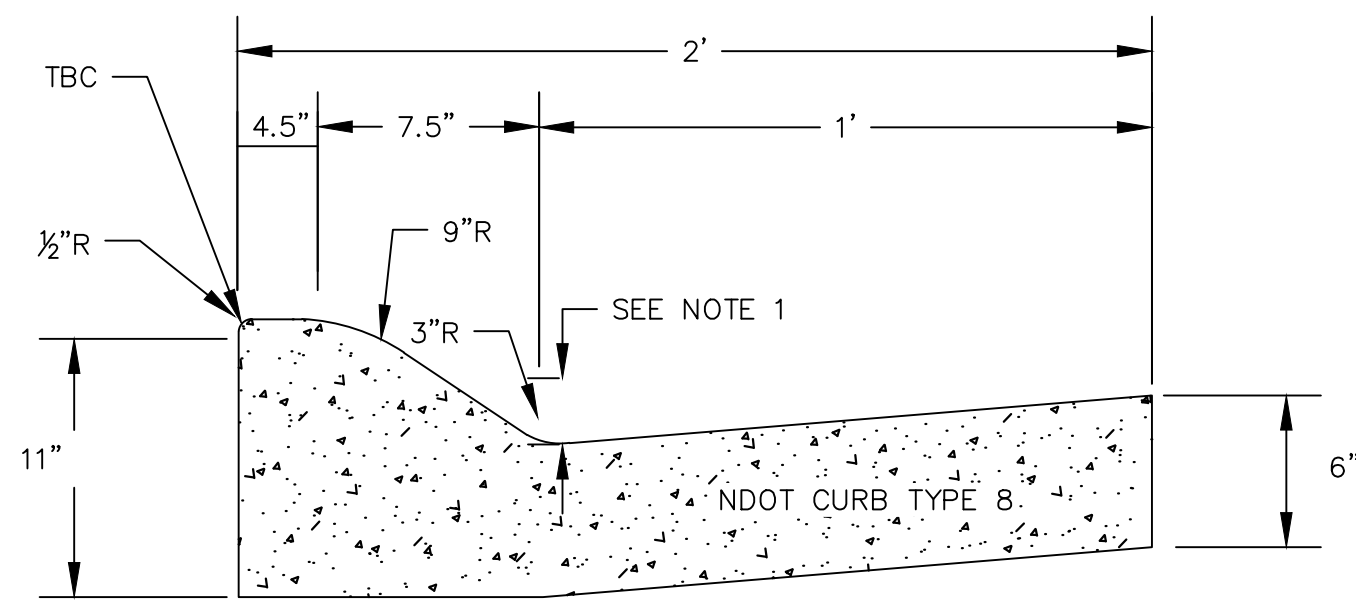


- NOTES:
- ALL REQUIREMENTS FOR THE DOUGLAS COUNTY STORM DRAIN UTILITY ORDINANCE MUST BE MET. CLASS A AND CLASS E BACKFILL SHALL CONFORM TO SECTION 200 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. BEDDING AND BACKFILL SHALL BE MECHANICALLY COMPACTED IN CONFORMANCE WITH SECTION 305.10.
 - PLACE WARNING TAPE 1 FOOT ABOVE STORM DRAIN PIPE. WARNING TAPE SHALL READ "CAUTION STORM DRAIN MAIN".
 - CLASS A BACKFILL AS BEDDING MATERIAL PER ORANGE BOOK 200.03.03 COMPACT OR CONSOLIDATE TO PROVIDE PROPER SUPPORT OF PIPE
 - PATCH WIDTH: A) PATCHES WILL BE 4 FOOT MINIMUM, ANY DIRECTION. B) IF EDGE OF PATCHING IS WITHIN 3 FEET OF EDGE OF PAVEMENT OR LIP OF GUTTER, REMOVE AND REPLACE AC PAVEMENT FROM PATCH TO THAT EDGE C) PLACE SLURRY SEAL OR CHIP SEAL ON STREETS WITH EXISTING SLURRY OR CHIP SEAL SURFACE TOLERANCES, ASPHALT CONCRETE CONSTRUCTION MATERIALS, AND CONSTRUCTION TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS (ORANGE BOOK).
 - ASPHALT CEMENT SHALL BE PG 64-28 NV UNLESS OTHERWISE APPROVED BY DOUGLAS COUNTY ENGINEERING. WHEN PG 64-28 NV ASPHALT CEMENT IS NOT USED, NEW ASPHALT CONCRETE SURFACE SHALL BE FOG SEALED.



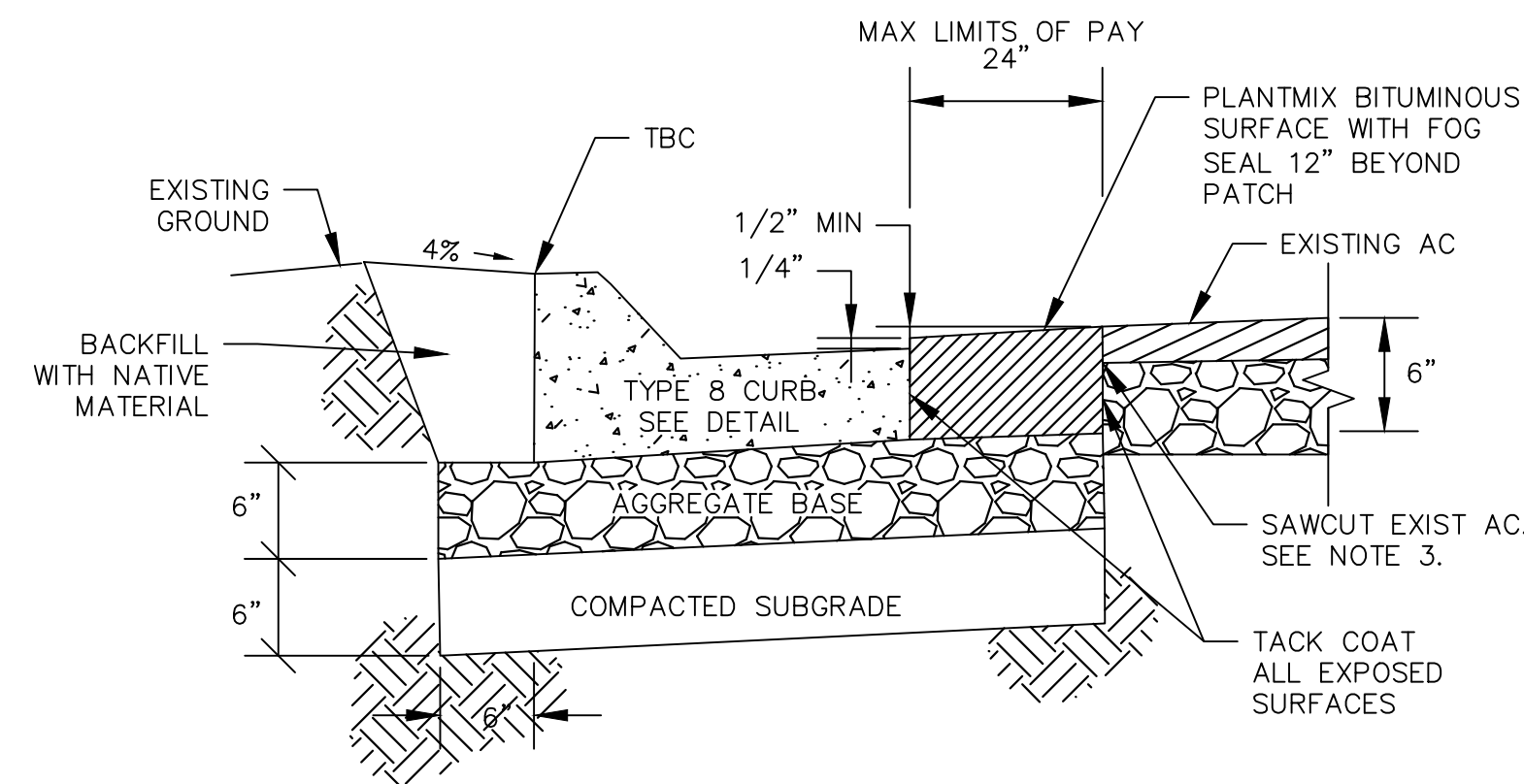
STORM DRAIN TRENCH
SCALE = NTS
5 D-1

RECORD DRAWINGS 11/11/16



TYPE 8 CURB SECTION

- NOTES:
- 2" WHEN POSITIONED ON LOW SIDE OF ROADBED, OTHERWISE GUTTER CROSS SLOPE TO MATCH THAT ON ADJACENT ROADBED
 - CURB AND GUTTER TO BE STAKED IN THE FIELD BY NTC D STAFF
 - SAW CUT ALONG STRAIGHT LINES. NO SAW CUTS WITHIN WHEEL PATH SURFACE TOLERANCES FOR AC PAVEMENT REPAIR SHALL CONFORM TO THE CURRENT EDITION OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (ORANGE BOOK)
 - ASPHALT CONCRETE MATERIALS AND TESTING SHALL CONFORM TO THE CURRENT EDITION OF THE ORANGE BOOK.
 - AGGREGATE BASE SHALL BE TYPE 2 CLASS B COMPACTED TO 95% MDD. COMPACTED SUBGRADE SHALL BE CLASS A OR CLASS E (NATIVE) BACKFILL COMPACTED TO 90% MDD
 - TACKCOAT ALL EXPOSED SURFACES SS-1h, 0.07-0.13 GAL/SY
 - PORTLAND CEMENT SHALL CONFORM TO SECTION 337.10.01.01 OF THE STANDARD SPECIFICATIONS (ORANGE BOOK) FOR CONCRETE EXPOSED TO FREEZE-THAW ENVIRONMENTS.

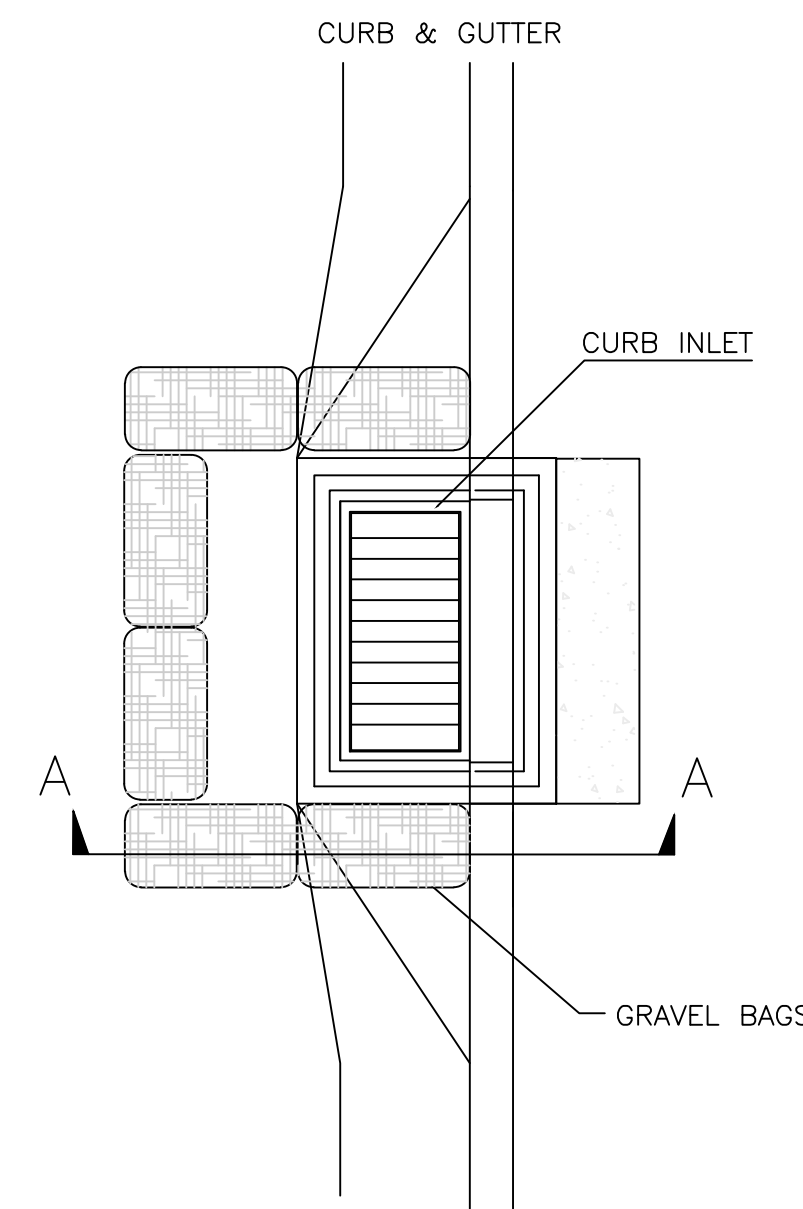


CURB INSTALLATION

CONCRETE ROLLED CURB AND GUTTER

SCALE: NTS

1
D-2

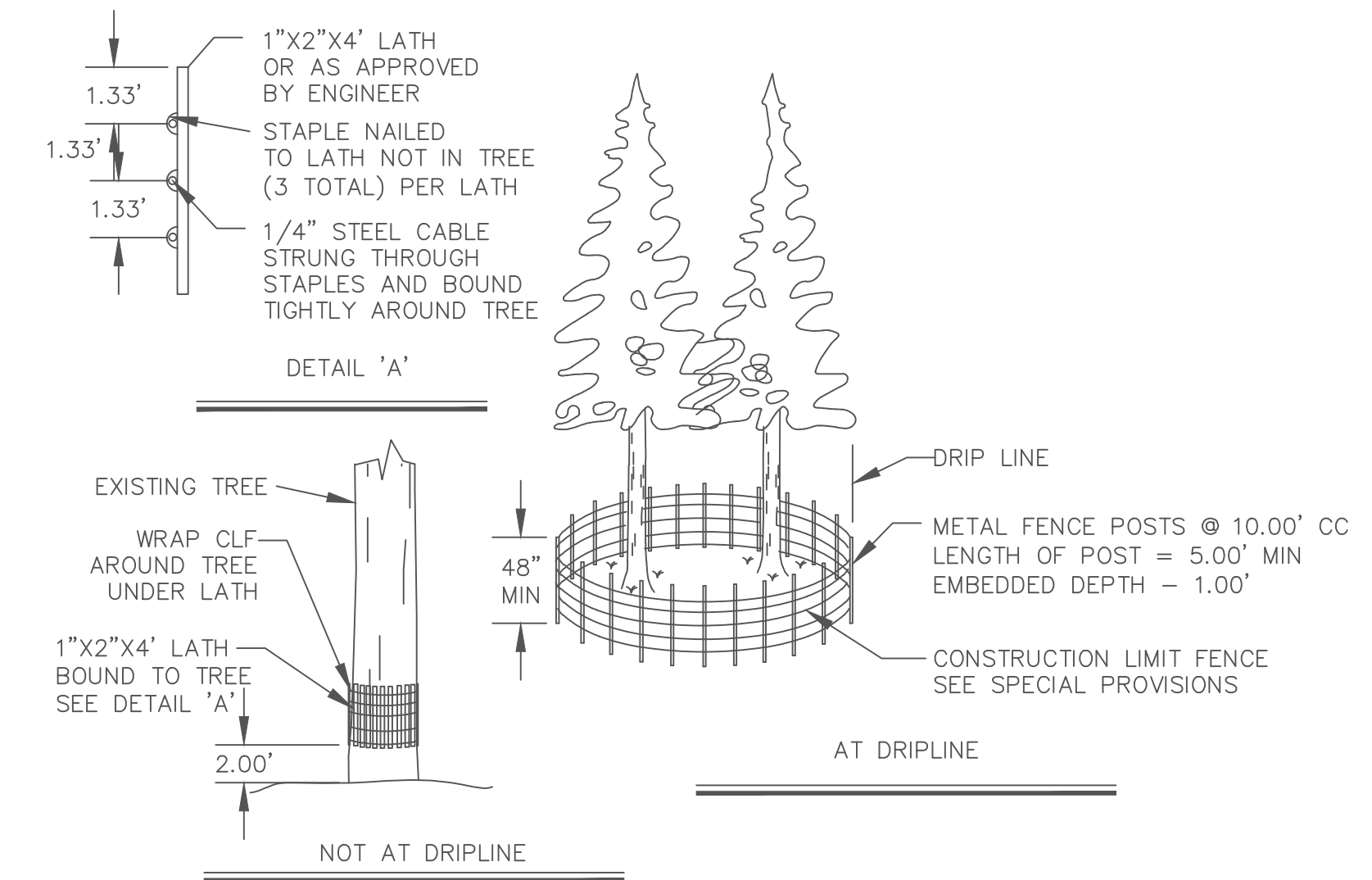


SECTION A-A

DRAINAGE INLET PROTECTION

NOT TO SCALE

2
D-2

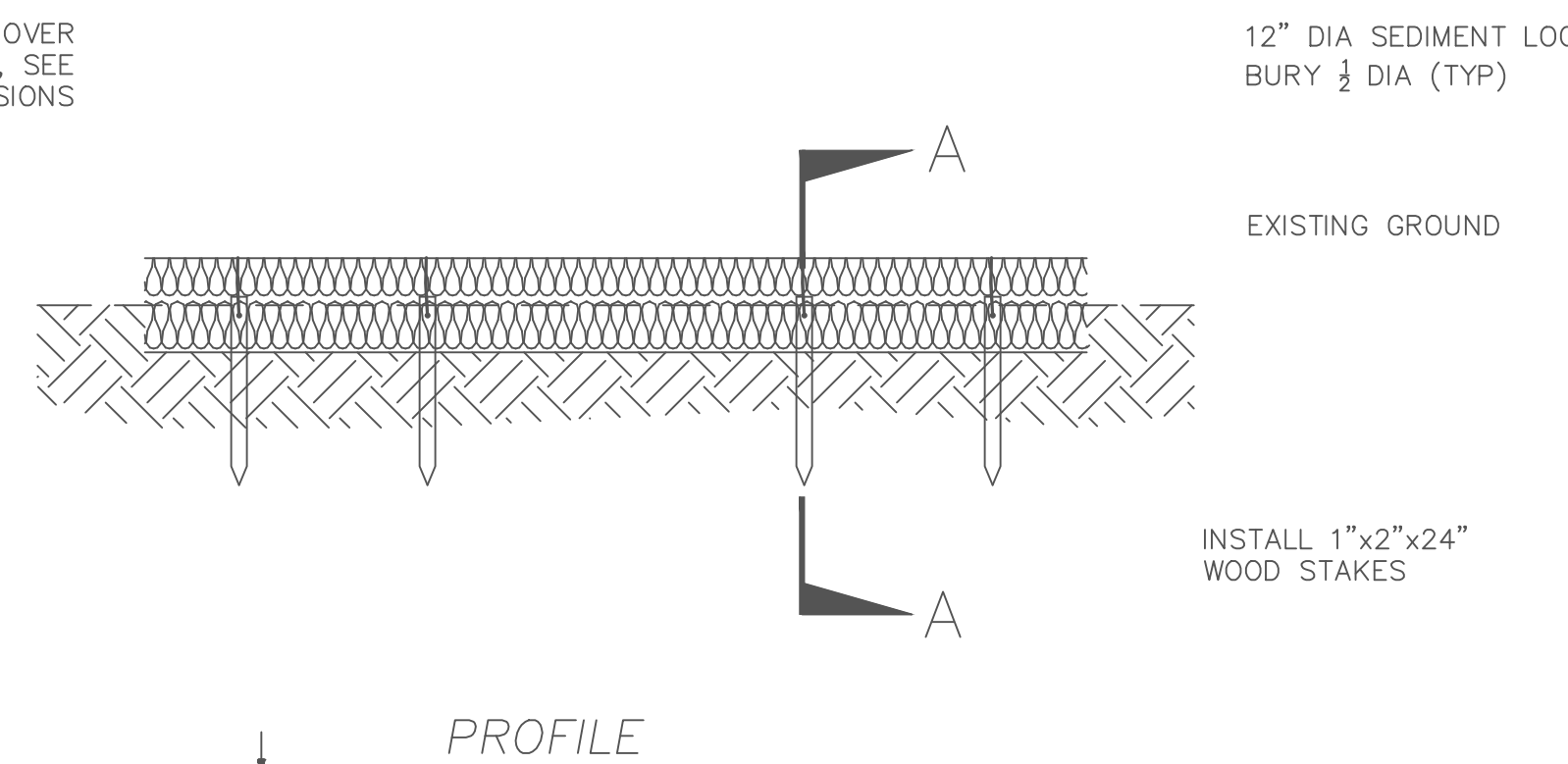


- NOTE:
- CLF AND TREE PROTECTION FENCE SHALL BE A MINIMUM OF 48" HIGH. FOR TREES WITH DRIPLINES THAT OVERHANG THE CONSTRUCTION AREAS, THE LOCATION OF THE TREE PROTECTION FENCE SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER AND/OR THE TRPA AT THE PREGRADE MEETING.
 - THE DETAIL SHOWN IS FOR TREE PROTECTION. MATERIAL AND SPACING SHOWN ALSO APPLIES TO CLF.
 - QUANTITY OF FILTER FENCE AND CONSTRUCTION LIMIT FENCE DOES NOT INCLUDE MINIMUM LIMITS FOR TREE PROTECTION. TREE PROTECTION FENCING TO BE PER DETAIL THIS SHEET AND/OR AS DETERMINED IN THE FIELD.

CONSTRUCTION LIMIT AND TREE PROTECTION FENCING

3
D-2

SISAL TWINE OVER SEDIMENT LOG, SEE SPECIAL PROVISIONS



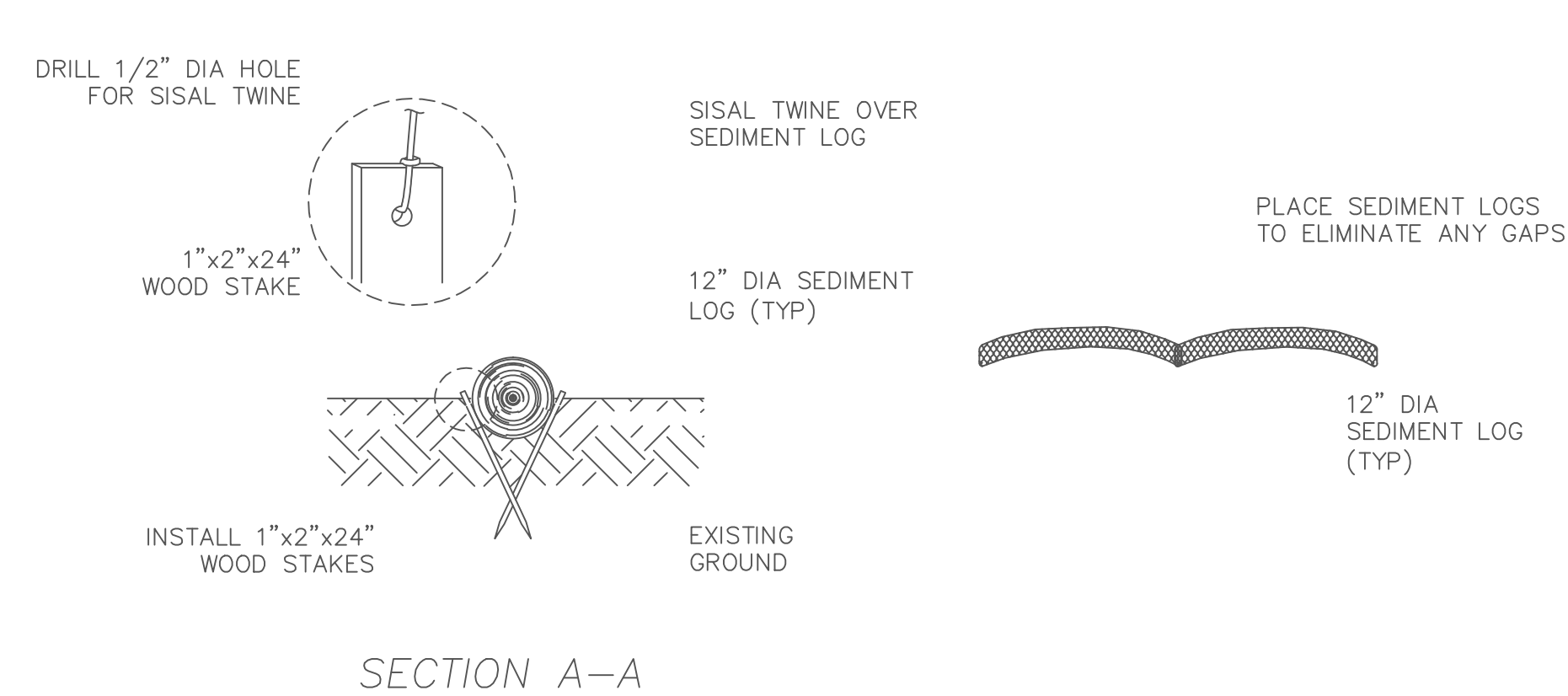
PROFILE

- NOTES:
- PLACEMENT OF SEDIMENT LOGS IS SUBJECT TO EXISTING CONDITIONS. FINAL LOCATIONS TO BE DETERMINED BY THE ENGINEER IN THE FIELD.
 - SEE SPECIAL PROVISIONS FOR SPECIFICATIONS REGARDING SEDIMENT LOG MATERIAL REQUIREMENTS.
 - WEIGHTED SEDIMENT LOGS MAY BE NECESSARY ON PAVED AREAS.

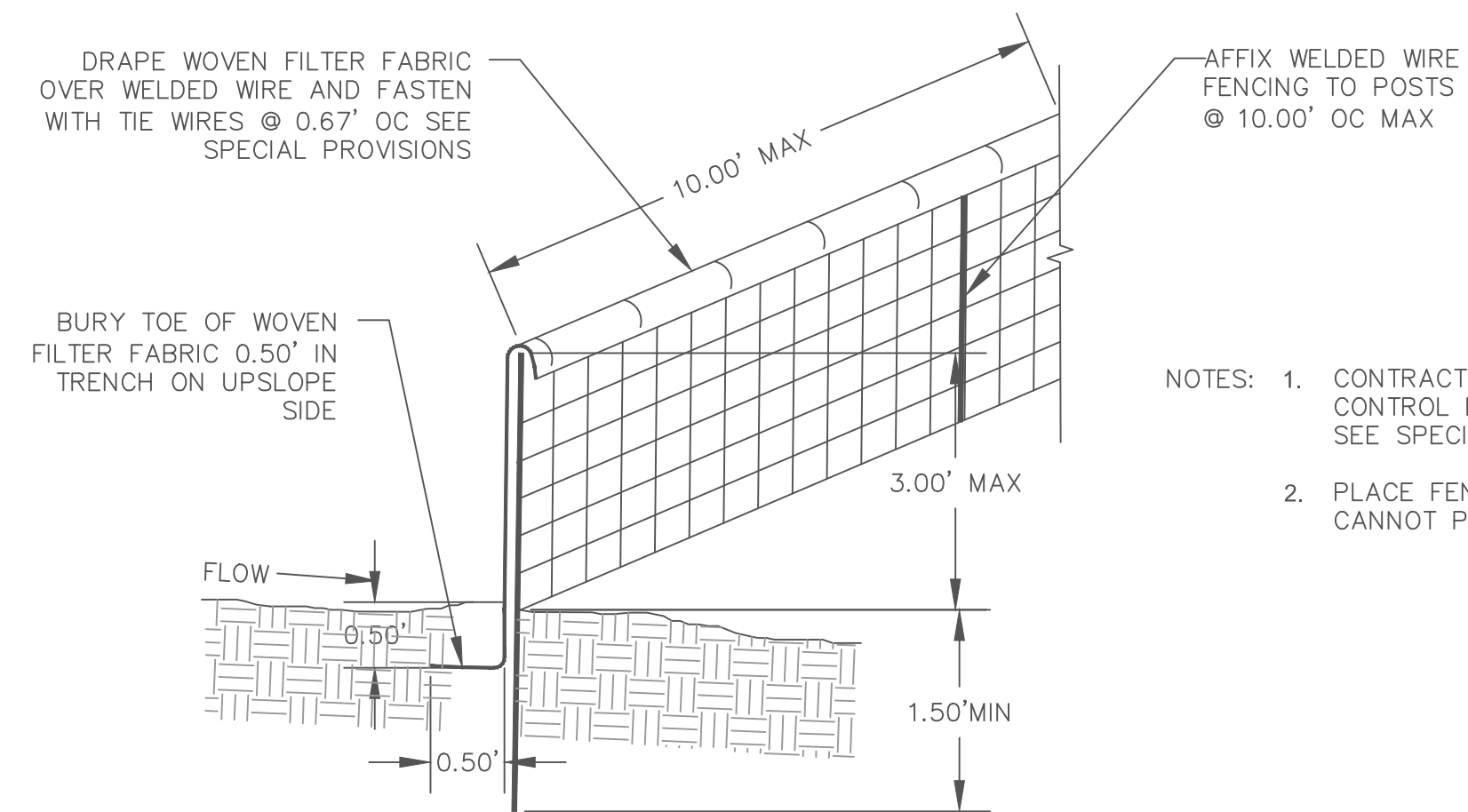
SEDIMENT ROLL (COIR LOG)

NOT TO SCALE

4
D-2



SECTION A-A



FILTER FENCE

NOT TO SCALE

5
D-2

CAVE ROCK ESTATES STORMWATER SYSTEM RETROFIT PROJECT PHASE II DETAILS

BAR IS ONE INCH ON ORIGINAL DRAWING, ADJUST SCALES FOR REDUCED PLOTS

0" 1"

DESIGNED/DRAWN
MBG/MBG
CHECKED
MCK
DATE
11/2016
SCALE
AS SHOWN

PROJECT
CAVE ROCK RETROFIT PHASE II

SHEET

D-2

5 OF 5