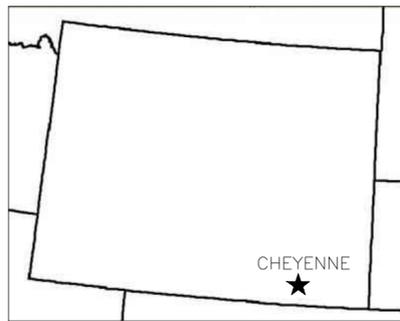


MENTAL HEALTH BUILDING ROAD REALIGNMENT

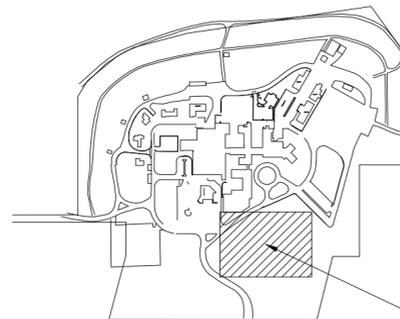
CHEYENNE VAMC
DEPARTMENT OF VETERANS AFFAIRS
2360 EAST PERSHING BOULEVARD
CHEYENNE, WYOMING 82001



VICINITY MAP
NOT TO SCALE



LOCATION MAP
NOT TO SCALE



SITE MAP
NOT TO SCALE

CHEYENNE VAMC

NEW ROAD
LOCATION

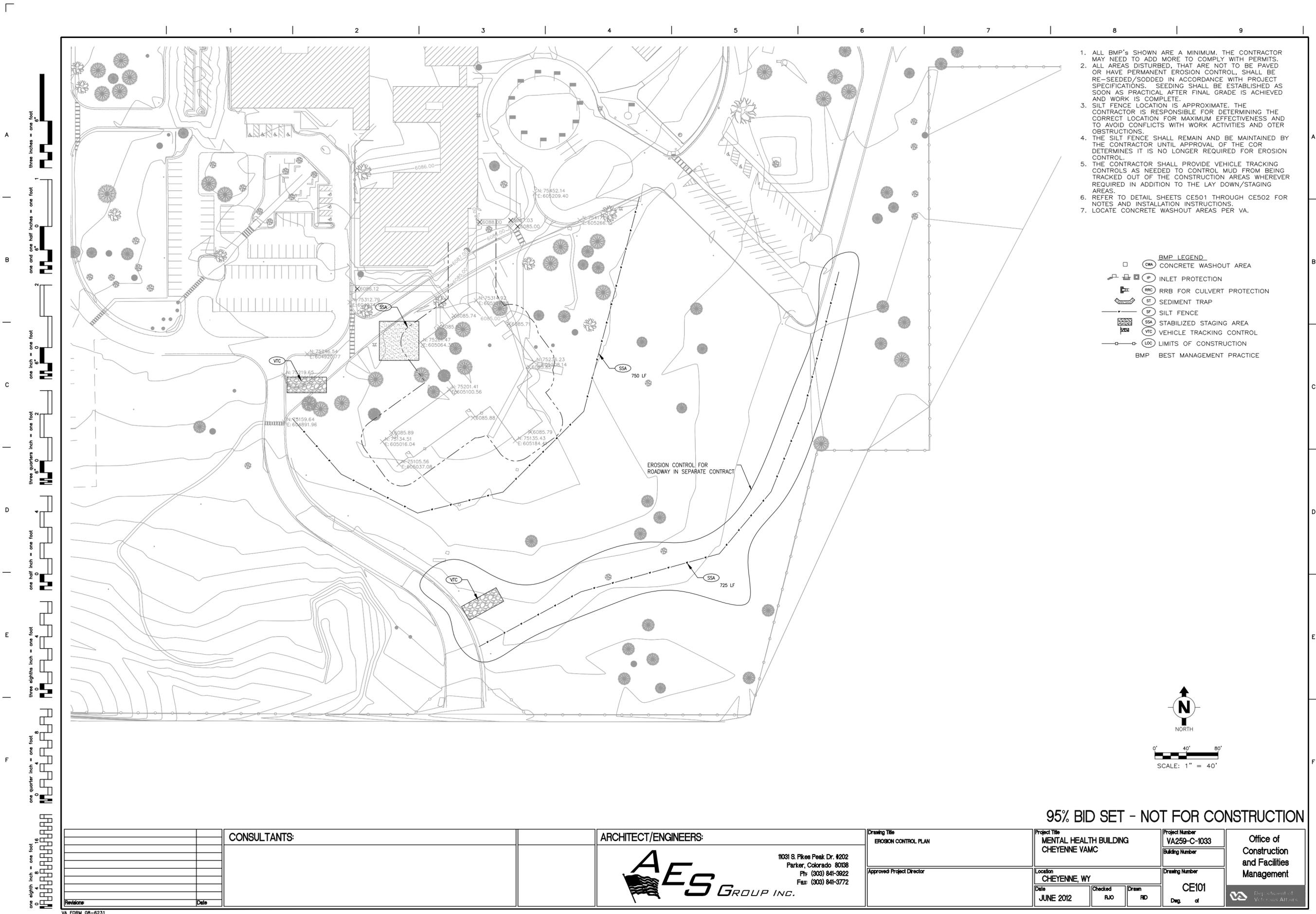
SHEET INDEX

DRAWING NUMBER	SHEET NAME
GI001	COVER SHEET
CE101	EROSION CONTROL PLAN
CD101	DEMOLITION PLAN
CU104	UTILITY PLAN - STORM SEWER
CT101	ACCESS ROAD PLAN
CT102	SIGNING AND STRIPING PLAN
CE501	CIVIL CONSTRUCTION DETAILS - EROSION CONTROL
CE502	CIVIL CONSTRUCTION DETAILS - EROSION CONTROL
CT501	CIVIL CONSTRUCTION DETAILS - ROADWAY
CT502	CIVIL CONSTRUCTION DETAILS - ROADWAY
CU502	CIVIL CONSTRUCTION DETAILS - STORM SEWER
CU503	CIVIL CONSTRUCTION DETAILS - STORM SEWER
ES200	SITE LIGHTING PLAN
ET520	ELECTRICAL SCHEDULE - FIXTURE SCHEDULE
LP100	LANDSCAPE SCHEDULE AND DETAILS
LP101	ROAD LANDSCAPING PLAN
LI100	LANDSCAPE AND IRRIGATION SYSTEM
LI101	IRRIGATION DETAILS

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
 one half inch = one foot
 three eighths inch = one foot
 one quarter inch = one foot
 one eighth inch = one foot

95% BID SET - NOT FOR CONSTRUCTION

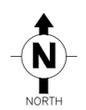
Revisions Date	CONSULTANTS:	ARCHITECT/ENGINEERS:	Drawing Title COVER SHEET	Project Title MENTAL HEALTH BUILDING CHEYENNE VAMC	Project Number VA259-C-1033	Office of Construction and Facilities Management
			Approved Project Director	Location CHEYENNE, WY	Building Number Drawing Number GI001	
		11031 S. Pike Peak Dr. #202 Parker, Colorado 80138 Ph: (303) 841-3922 Fax: (303) 841-3772	Date JUNE 2012	Checked RJO	Drawn ALK	Department of Veterans Affairs



1. ALL BMP'S SHOWN ARE A MINIMUM. THE CONTRACTOR MAY NEED TO ADD MORE TO COMPLY WITH PERMITS.
2. ALL AREAS DISTURBED, THAT ARE NOT TO BE PAVED OR HAVE PERMANENT EROSION CONTROL, SHALL BE RE-SEEDED/SODDED IN ACCORDANCE WITH PROJECT SPECIFICATIONS. SEEDING SHALL BE ESTABLISHED AS SOON AS PRACTICAL AFTER FINAL GRADE IS ACHIEVED AND WORK IS COMPLETE.
3. SILT FENCE LOCATION IS APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE CORRECT LOCATION FOR MAXIMUM EFFECTIVENESS AND TO AVOID CONFLICTS WITH WORK ACTIVITIES AND OTHER OBSTRUCTIONS.
4. THE SILT FENCE SHALL REMAIN AND BE MAINTAINED BY THE CONTRACTOR UNTIL APPROVAL OF THE COR DETERMINES IT IS NO LONGER REQUIRED FOR EROSION CONTROL.
5. THE CONTRACTOR SHALL PROVIDE VEHICLE TRACKING CONTROLS AS NEEDED TO CONTROL MUD FROM BEING TRACKED OUT OF THE CONSTRUCTION AREAS WHEREVER REQUIRED IN ADDITION TO THE LAY DOWN/STAGING AREAS.
6. REFER TO DETAIL SHEETS CE501 THROUGH CE502 FOR NOTES AND INSTALLATION INSTRUCTIONS.
7. LOCATE CONCRETE WASHOUT AREAS PER VA.

BMP LEGEND

	CWA	CONCRETE WASHOUT AREA
	IP	INLET PROTECTION
	RRC	RRB FOR CULVERT PROTECTION
	ST	SEDIMENT TRAP
	SF	SILT FENCE
	SSA	STABILIZED STAGING AREA
	VTC	VEHICLE TRACKING CONTROL
	LOC	LIMITS OF CONSTRUCTION
		BMP BEST MANAGEMENT PRACTICE

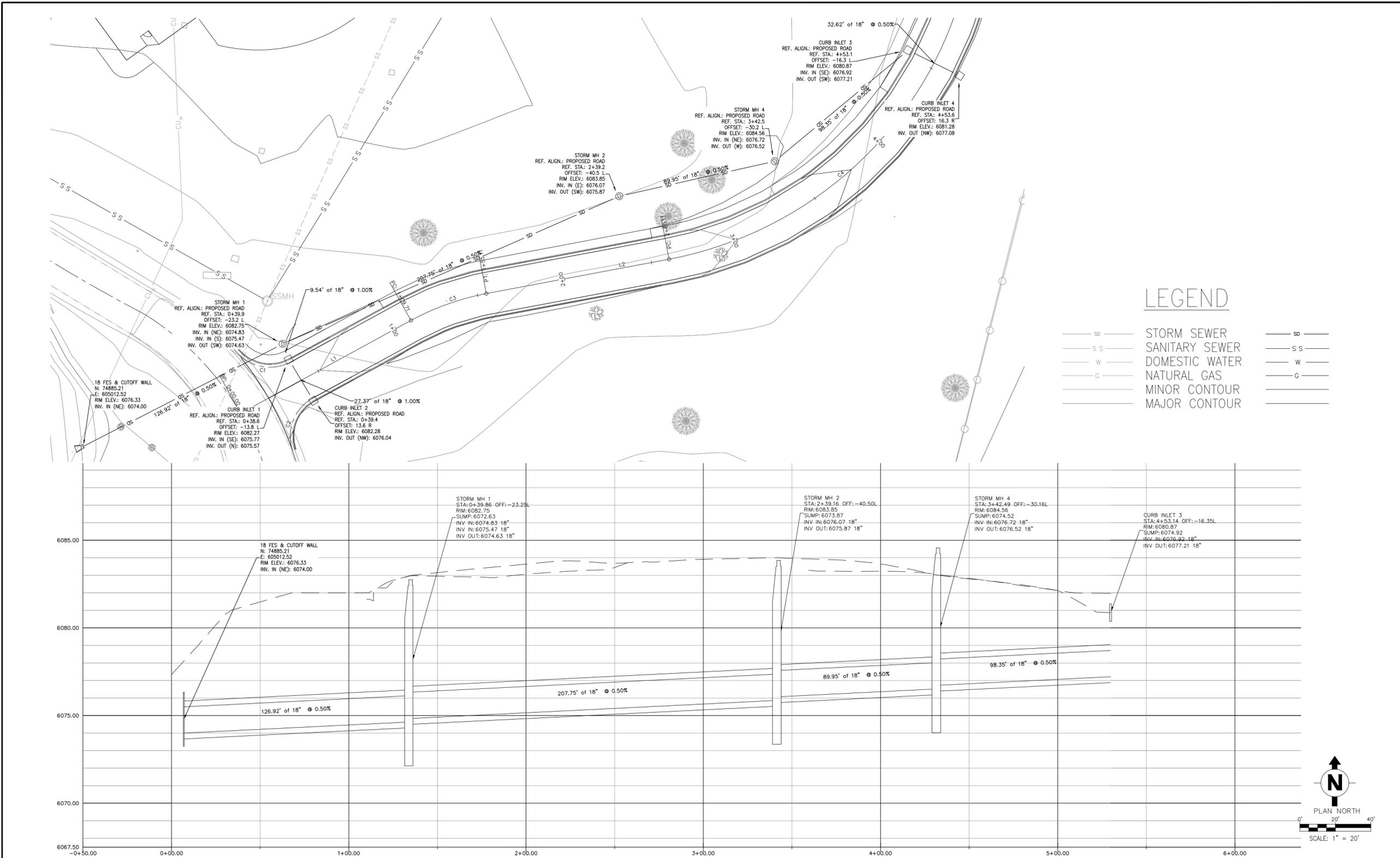


0' 40' 80'
SCALE: 1" = 40'

95% BID SET - NOT FOR CONSTRUCTION

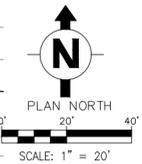
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			Approved Project Director	Location CHEYENNE, WY	Drawing Number CEI01	
Revisions	Date			Date JUNE 2012	Checked RJO	Drawn RD

three inches = one foot
 one and one half inches = one foot
 one inch = one foot
 three quarters inch = one foot
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 three eighths inch = one foot
 one quarter inch = one foot
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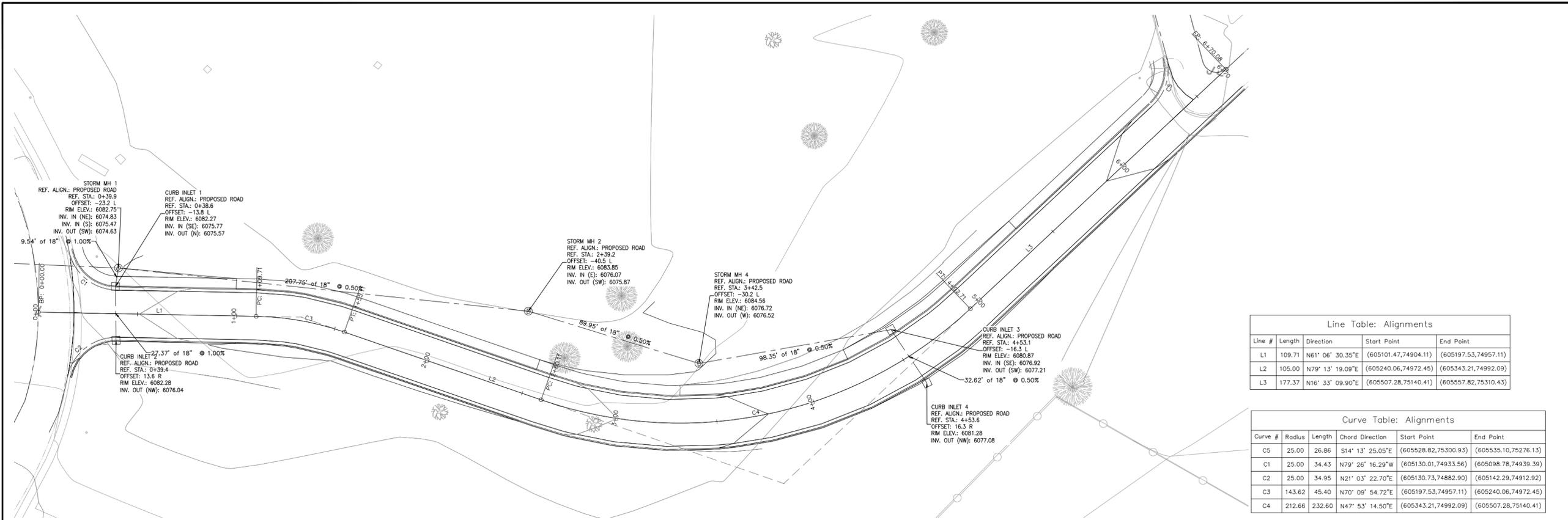
LEGEND

- SS STORM SEWER
- S-S SANITARY SEWER
- w DOMESTIC WATER
- G NATURAL GAS
- MINOR CONTOUR
- MAJOR CONTOUR



95% BID SET - NOT FOR CONSTRUCTION

	CONSULTANTS: 	ARCHITECT/ENGINEERS: 11031 S. Pike's Peak Dr. #202 Parker, Colorado 80138 Ph: (303) 841-3922 Fax: (303) 841-3772	Drawing Title ACCESS ROAD STORM SEWER Approved Project Director	Project Title MENTAL HEALTH BUILDING CHEYENNE VAMC Location CHEYENNE, WY Date JUNE 2012	Project Number VA259-C-1033 Building Number Drawing Number CU104 Checked JMS Drawn PJD	Office of Construction and Facilities Management
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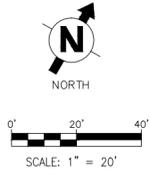
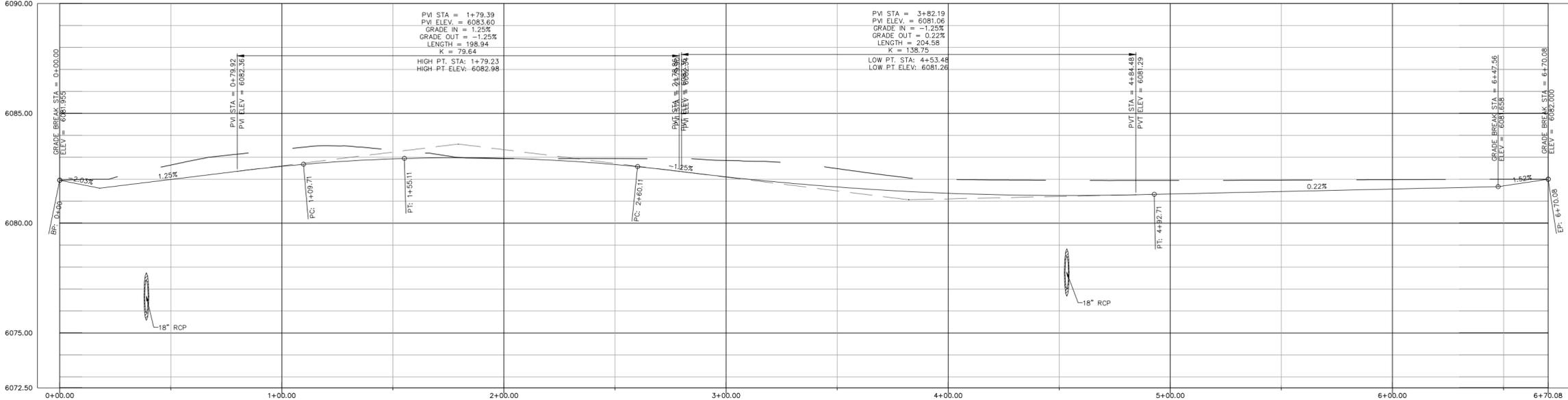
Line Table: Alignments

Line #	Length	Direction	Start Point	End Point
L1	109.71	N61° 06' 30.35"E	(605101.47,74904.11)	(605197.53,74957.11)
L2	105.00	N79° 13' 19.09"E	(605240.06,74972.45)	(605343.21,74992.09)
L3	177.37	N16° 33' 09.90"E	(605507.28,75140.41)	(605557.82,75140.43)

Curve Table: Alignments

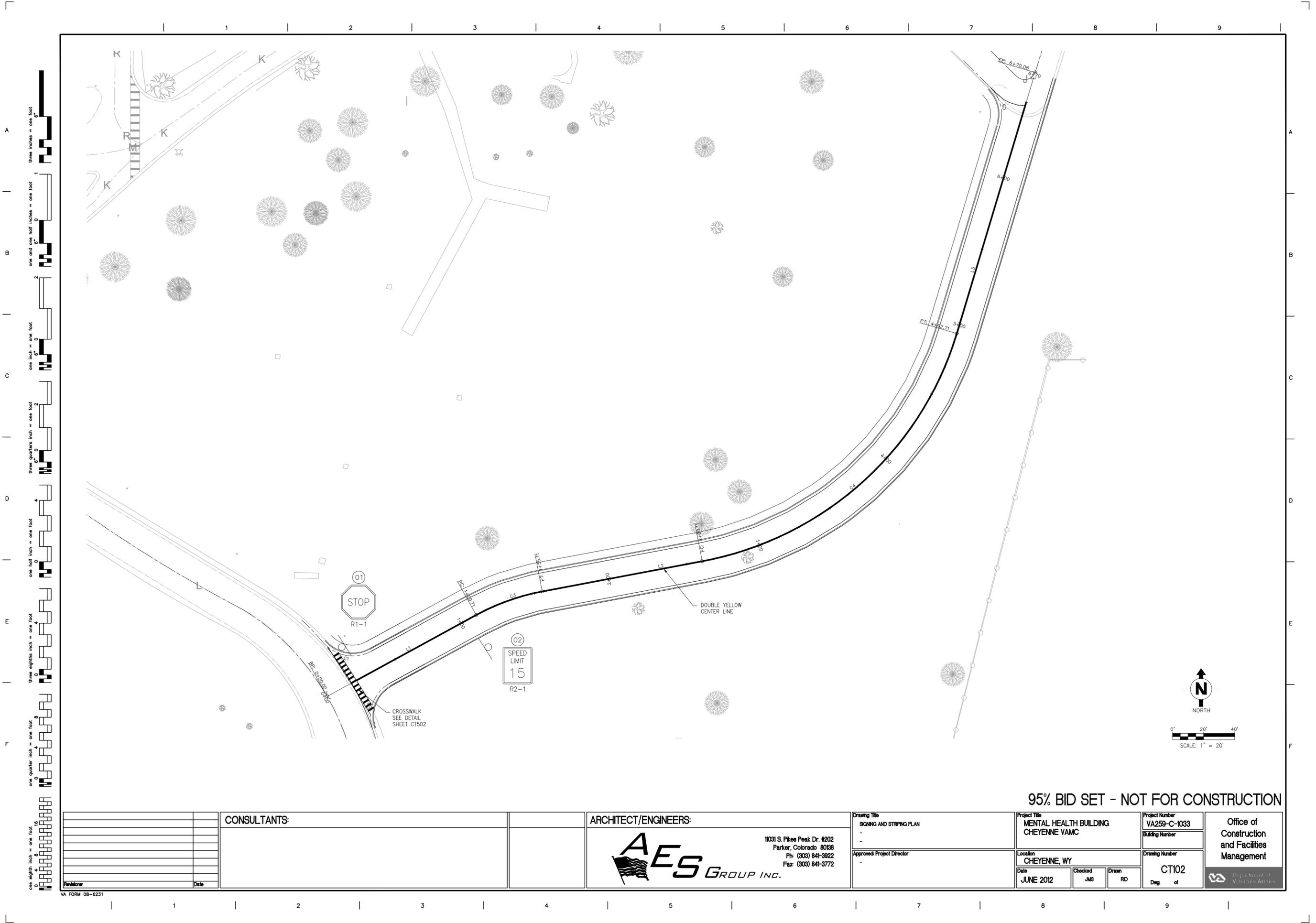
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C5	25.00	26.86	S14° 13' 25.05"E	(605528.82,75300.93)	(605535.10,75276.13)
C1	25.00	34.43	N79° 26' 16.29"W	(605130.01,74933.56)	(605098.78,74939.39)
C2	25.00	34.95	N21° 03' 22.70"E	(605130.73,74882.90)	(605142.29,74912.92)
C3	143.62	45.40	N70° 09' 54.72"E	(605197.53,74957.11)	(605240.06,74972.45)
C4	212.66	232.60	N47° 53' 14.50"E	(605343.21,74992.09)	(605507.28,75140.41)

ACCESS ROAD



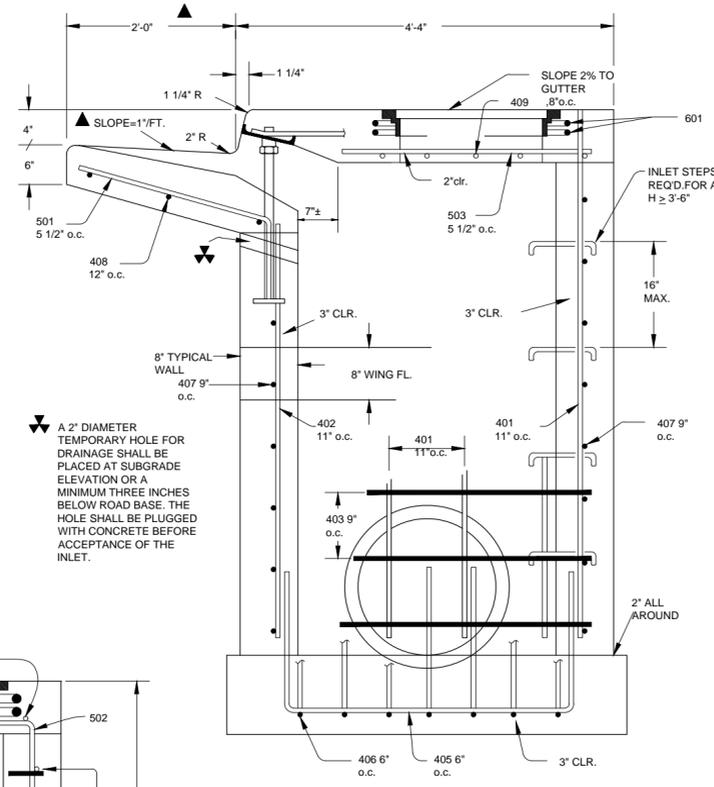
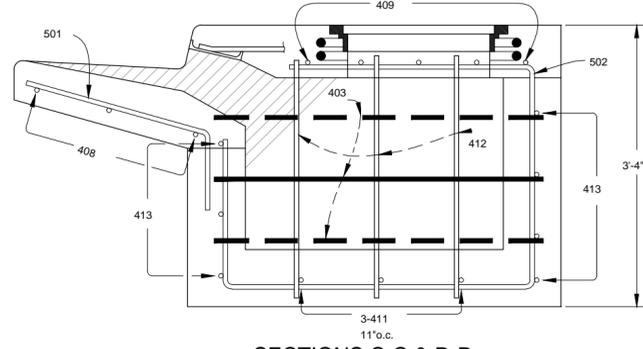
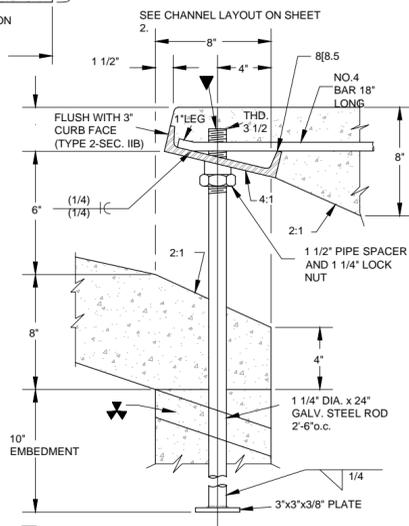
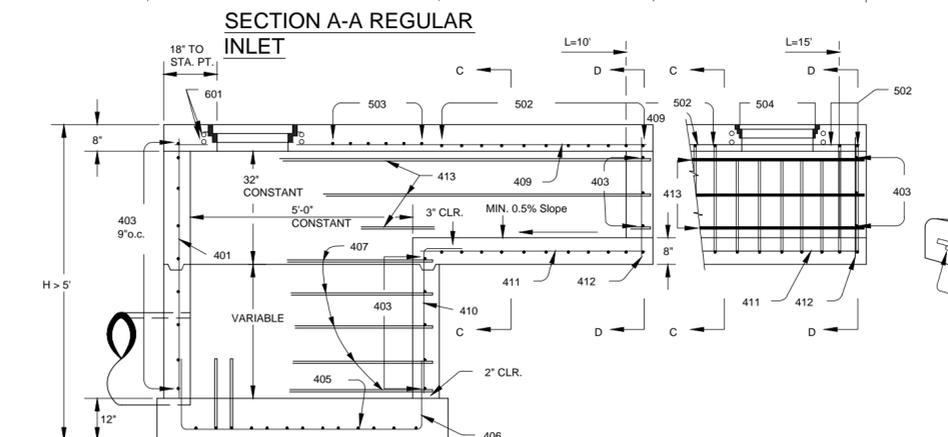
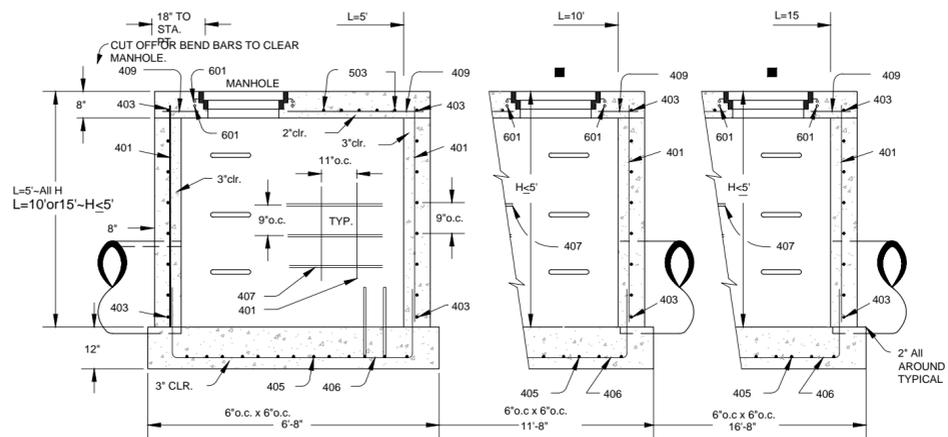
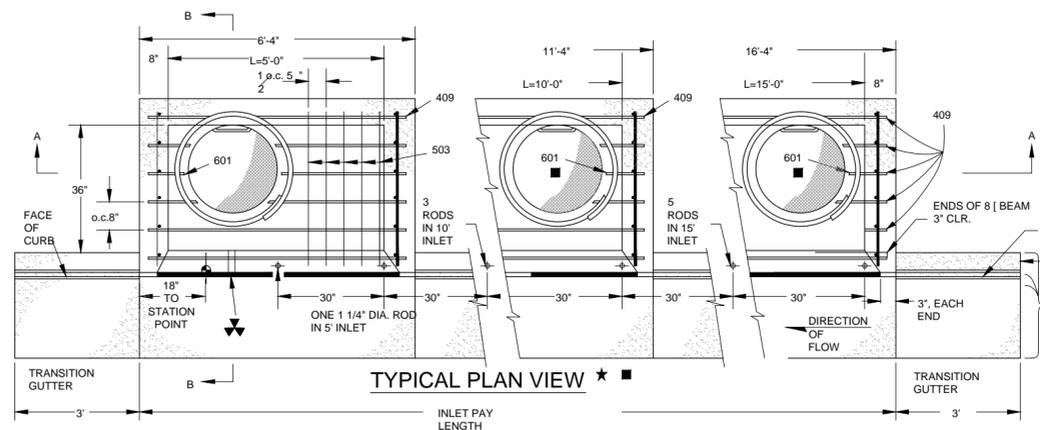
95% BID SET - NOT FOR CONSTRUCTION

<p>Revisions</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td style="width:80%;"> </td><td style="width:20%;">Date</td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>		Date							<p>CONSULTANTS:</p>	<p>ARCHITECT/ENGINEERS:</p> <div style="text-align: center;"> <p>AES GROUP INC.</p> </div> <p>11031 S. Pike Peak Dr. #202 Parker, Colorado 80138 Ph: (303) 841-3922 Fax: (303) 841-3772</p>	<p>Drawing Title ACCESS ROAD PLAN</p> <p>Approved Project Director</p>	<p>Project Title MENTAL HEALTH BUILDING CHEYENNE VAMC</p> <p>Location CHEYENNE, WY</p> <p>Date JUNE 2012</p> <p>Checked JMS</p> <p>Drawn RD</p>	<p>Project Number VA259-C-1033</p> <p>Building Number</p> <p>Drawing Number CT101</p> <p>Dwg. of</p>	<p>Office of Construction and Facilities Management</p>
	Date													



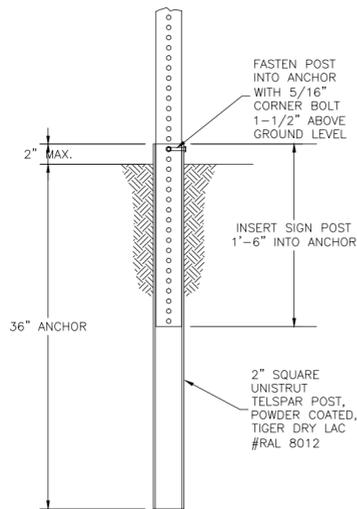
95% BID SET - NOT FOR CONSTRUCTION

Revisions Date	CONSULTANTS:	ARCHITECT/ENGINEERS:	Drawing Title	Project Title	Project Number	Office of Construction and Facilities Management <small>Department of Veterans Affairs</small>
			SIGNING AND STRIPING PLAN - Approved Project Director -	MENTAL HEALTH BUILDING CHEYENNE VAMC	VA259-C-1033 Building Number Drawing Number CT102 Dwg. of	
		AES GROUP INC. 11031 S. Pikes Peak Dr. #202 Parker, Colorado 80138 Ph: (303) 841-3922 Fax: (303) 841-3772		Location CHEYENNE, WY Date JUNE 2012	Checked JMS Drawn RID	



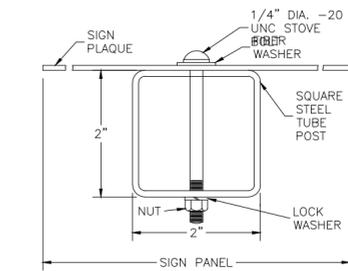
95% BID SET - NOT FOR CONSTRUCTION

Revisions Date	CONSULTANTS:	ARCHITECT/ENGINEERS:	Drawing Title CIVIL CONSTRUCTION DETAILS STORM SEWER Approved Project Director	Project Title MENTAL HEALTH BUILDING CHEYENNE VAMC Location CHEYENNE, WY Date JUNE 2012	Project Number VA259-C-1033 Building Number Drawing Number CU502 Dwg. # of	Office of Construction and Facilities Management
			 11031 S. Pike Peak Dr. #202 Parker, Colorado 80338 Ph: (303) 841-3922 Fax: (303) 841-3772	Checked Drawn RD	Dwg. # of	



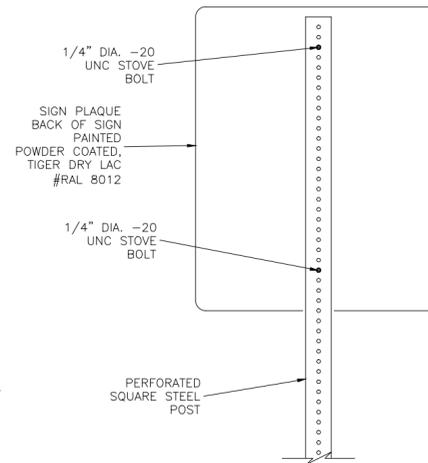
SIGN POST ANCHOR DETAILS
NO SCALE

- NOTES:
1. INSERT BOLT HEAD FROM OPPOSITE SIDE OF EXPECTED IMPACT. INSERT DRIVE RIVET INTO OPPOSITE SIDE FOR ADDITIONAL STABILITY.
 2. POSTS TO BE SET IN CONCRETE.

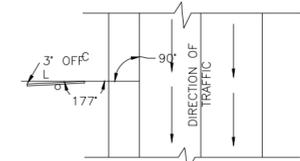


TYPICAL SQUARE TUBE POST SECTION
NO SCALE

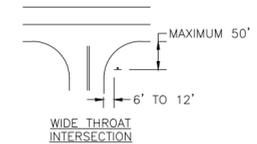
- NOTES:
1. SIGN PANELS SHALL BE SINGLE SHEET ALUMINUM, 0.080" MINIMUM THICKNESS
 2. SIGN PANELS SHALL BE FASTENED DIRECTLY TO THE POST. FASTEN TO SQUARE TUBE POSTS WITH TWO 1/4" DIA. - 20 UNC STOVE BOLTS.
 3. A FIBER WASHER SHALL BE PLACED BETWEEN THE BOLT HEAD AND THE FACE OF THE SIGN PANEL.
 4. STEEL SIGN POSTS SHALL BE 12-GAUGE PERFORATED STEEL TUBING. HOLES SHALL BE APPROXIMATELY 7/16" DIAMETER SPACED APPROXIMATELY 1" ON CENTERS.



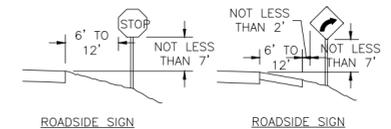
SIGN PANEL ATTACHMENT DETAILS
NO SCALE



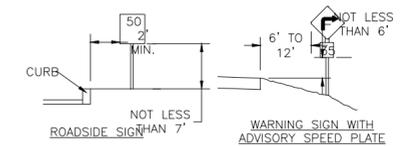
NOTE: SIGN SHALL BE POSITIONED TO ELIMINATE OR MINIMIZE SPECULAR REFLECTION DUE TO THE NUMEROUS VARIATIONS IN ROAD CURVES AND GRADES. A GENERAL RULE IS NOT ALWAYS APPLICABLE.
TYPICAL DETAIL OF SIGN POSITIONING



TYPICAL LOCATION FOR STOP SIGNS
NO SCALE

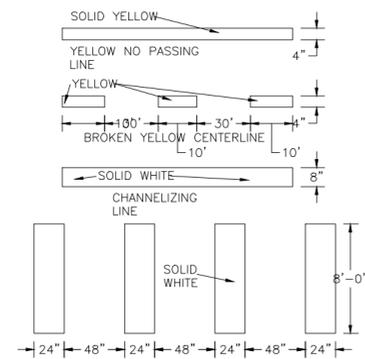


ROADSIDE SIGN



WARNING SIGN WITH ADVISORY SPEED PLATE
HEIGHT AND LATERAL LOCATION OF SIGNS-TYPICAL INSTALLATION
NO SCALE

- NOTES:
1. ALL SIGN PANELS, POSTS, FOUNDATIONS AND HARDWARE WILL BE CONTRACTOR FURNISHED, CONTRACTOR INSTALLED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL SIGNS.
 2. EXISTING SIGNS SHOWN TO BE REMOVED AND NOT REUSED SHALL BE RETURNED TO THE CONTRACTING OFFICER.
 3. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SIGNS AND BARRICADES AS REQUIRED DURING CONSTRUCTION IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.



CROSSWALK BARS
STANDARD PAVEMENT MARKINGS LINE SPECIFICATIONS
NO SCALE

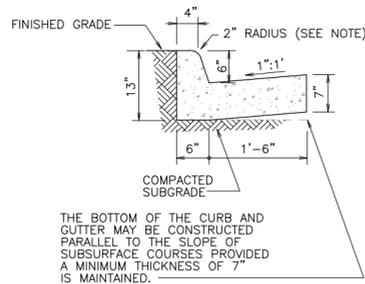
TABULATION OF SIGNS

SIGN NO.	SIGN CODE	STATION	SIGN PANEL SIZE	SIGN PANEL (S.F.)	BACKGROUND COLOR	REMOVE GROUND SIGN (EACH)	LEGEND	MISC.
01	R1-1	0+20	30"x30"	3.3	RED		STOP	
02	R2-1	4+23	24"x30"	5.0	WHITE		SPEED/LIMIT/15	
03								
04								

95% BID SET - NOT FOR CONSTRUCTION

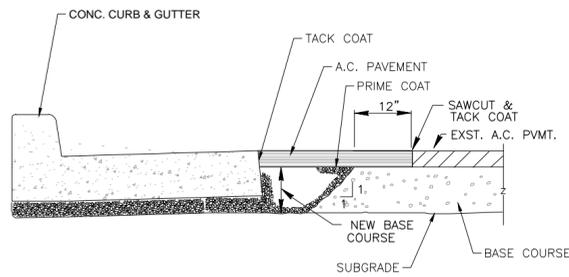
Revisions Date	CONSULTANTS:	ARCHITECT/ENGINEERS:	Drawing Title CIVIL CONSTRUCTION DETAILS SIGNAGE + STRIPPING	Project Title MENTAL HEALTH BUILDING CHEYENNE VAMC	Project Number VA259-C-1033	Office of Construction and Facilities Management	
			Approved Project Director	Location CHEYENNE, WY	Building Number Drawing Number CT502		
		 11031 S. Pike Peak Dr. #202 Parker, Colorado 80138 Ph: (303) 841-3922 Fax: (303) 841-3772		Date JUNE 2012	Checked JMS	Drawn RID	

NOTE: STANDARD CURB SHAPE OF THE STATE IN WHICH THE PROJECT IS LOCATED MAY BE SUBSTITUTED.

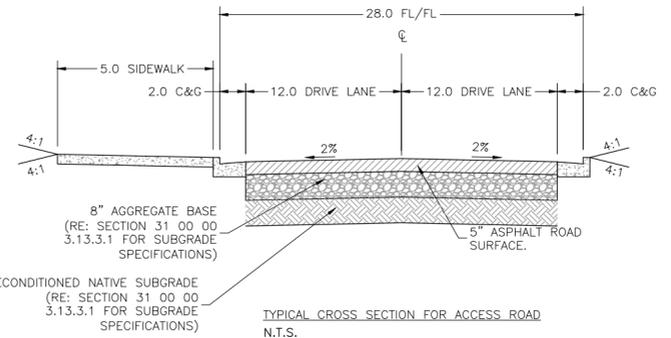


THE BOTTOM OF THE CURB AND GUTTER MAY BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBSURFACE COURSES PROVIDED A MINIMUM THICKNESS OF 7" IS MAINTAINED.

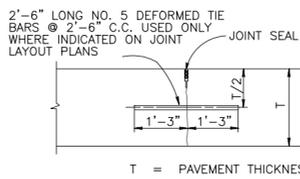
CURB AND GUTTER
N.T.S.



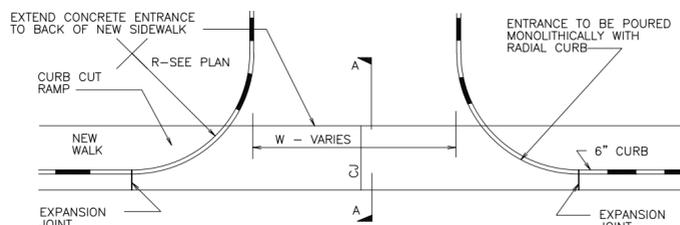
A.C. PAVEMENT AT CONCRETE CURB & GUTTER
N.T.S.



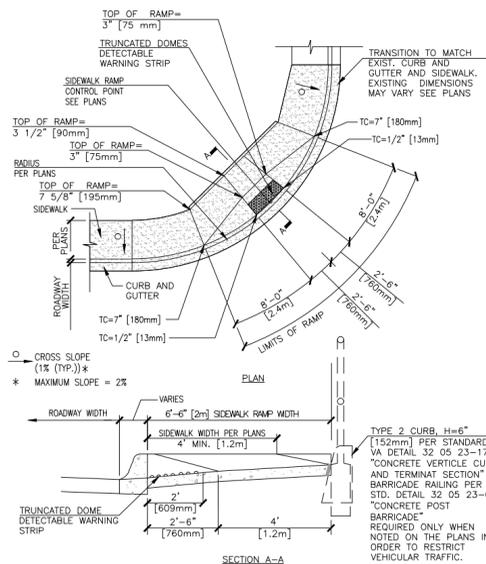
TYPICAL CROSS SECTION FOR ACCESS ROAD
N.T.S.



DUMMY GROOVE CONTRACTION JOINT
N.T.S.

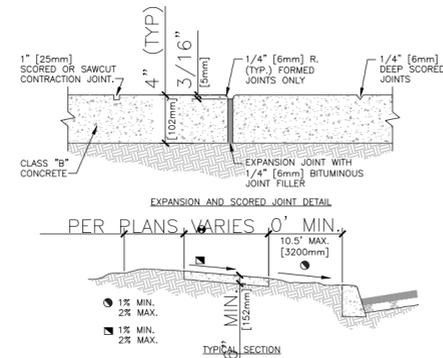


CONCRETE ENTRANCE
N.T.S.



- NOTE:
- TOP OF CURB (TC) AND TOP OF RAMP ELEVATIONS SHOWN ARE IN RELATION TO THE GUTTER AND ARE LOCATED RADIALLY. GUTTER = 0"
 - SEE STANDARD VA DETAIL 32 05 23-18 "CONCRETE SIDEWALK" FOR JOINT REQUIREMENTS.
 - WHEN CURB HEIGHTS OF GREATER THAN 7" [180mm] ARE SHOWN ON PLANS, SEE PLANS AND ADA REQUIREMENTS.
 - LANDING RAMP AREA TO BE STANDARD ON ALL PROJECTS. TYPE 2 CURB WITH 6" [152mm] REVEAL OR BARRICADE RAILING REQUIRED ONLY WHEN NOTED ON THE PLANS IN ORDER TO RESTRICT VEHICULAR TRAFFIC.

CURB ACCESS RAMP
N.T.S.



- NOTES:
- EXPANSION JOINTS SHALL BE LOCATED WHERE SIDEWALK ABUTS CONCRETE DRIVEWAYS, CURB OR OTHER ADJACENT STRUCTURES.
 - ONE-HALF INCH BITUMINOUS JOINT FILLER SHALL BE INSTALLED AT EXPANSION JOINT LOCATIONS AND SHALL EXTEND THE FULL DEPTH OF THE CONCRETE.
 - 1" DEEP CONTRACTION JOINTS SHALL BE PLACED AT INTERVALS OF APPROXIMATELY 15' [4572mm] OR AT A SPACING THAT MATCHES THE ADJACENT CURB.
 - FORMED CONTRACTION JOINTS SHALL BE FINISHED WITH A TOOL HAVING A 1/4" [6mm] RADIUS.
 - SCORED JOINTS SHALL BE 1/4" [6mm] DEEP AND PLACED AT THE SPACING INDICATED FOR THE WIDTH OF SIDEWALK OR MATCH SCORED JOINTS OF ADJACENT CURB.
 - CONCRETE SHALL BE FINISHED BY MEANS OF A FLOAT, STEEL TROWELLED AND BROOMED WITH A FINE BRUSH IN A TRANSVERSE DIRECTION.
 - 1/4" DEEP SCORED JOINTS (TYP) SPACED AT 6' [1829mm] OR EQUAL TO SIDEWALK WIDTH.

CONCRETE SIDEWALK
N.T.S.

95% BID SET - NOT FOR CONSTRUCTION

CONSULTANTS: 		ARCHITECT/ENGINEERS: 		Drawing Title: CIVIL CONSTRUCTION DETAILS ROADWAY		Project Title: MENTAL HEALTH BUILDING CHEYENNE VAMC		Project Number: VA259-C-1033		Office of Construction and Facilities Management	
Revisions: _____ Date: _____		11031 S. Pike Peak Dr. #202 Parker, Colorado 80138 Ph: (303) 841-3922 Fax: (303) 841-3772		Approved Project Director:		Location: CHEYENNE, WY		Drawing Number: CT501		Date: JUNE 2012 Checked: JMS Drawn: RID	

EROSION CONTROL NOTES:

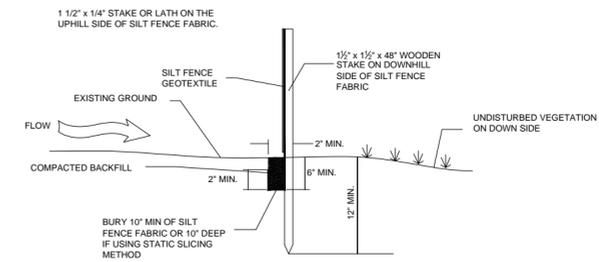
- ALL MATERIALS AND WORKMANSHIP SHALL BE SUBJECT TO INSPECTION BY THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE. CONTRACTING OFFICER OR THEIR REPRESENTATIVE RESERVES THE RIGHT TO ACCEPT OR REJECT ANY SUCH MATERIALS AND WORKMANSHIP THAT DOES NOT CONFORM TO BUCKLEY AFB STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL INSTALL EROSION/SEDIMENTATION CONTROLS PRIOR TO ANY SITE PREPARATION WORK (E.G., CLEARING, GRUBBING OR EXCAVATION).
- THE PLACEMENT OF EROSION/SEDIMENTATION CONTROLS SHALL BE IN ACCORDANCE THE APPROVED PROJECT EROSION AND SEDIMENT CONTROL PLAN.
- ANY VARIATION IN MATERIAL OR LOCATION OF EROSION/SEDIMENTATION CONTROLS FROM THE APPROVED PLANS WILL REQUIRE WRITTEN APPROVAL FROM AN ACCOUNTABLE REPRESENTATIVE OF THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE.
- AFTER THE INSTALLATION OF THE EROSION/SEDIMENTATION CONTROLS, THE CONTRACTOR SHALL SET UP AN ON-SITE "PRE-CONSTRUCTION" MEETING WITH THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE. THE MEETING SHALL BE SCHEDULED A MINIMUM OF FORTY EIGHT (48) HOURS AND A MAXIMUM OF NINETY SIX (96) HOURS PRIOR TO THE ANTICIPATED START OF ANY LAND DISTURBANCE.
- CONSTRUCTION SHALL NOT BEGIN UNTIL: (1) ALL EROSION/SEDIMENTATION CONTROLS ARE INSTALLED PER APPROVED PLANS; (2) A "PRE-CONSTRUCTION" MEETING HAS BEEN HELD ON SITE WITH THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE.
- ALL AREAS (EXCEPT THOSE THAT WILL BE PAVED) ARE TO BE CONTOUR-FURROWED IMMEDIATELY FOLLOWING GRADE CERTIFICATION, BUT NO LATER THAN THREE DAYS AFTER COMPLETION OF GRADING.
- ALL DISTURBED AREAS ARE TO BE SEEDDED IN ACCORDANCE WITH SPECIFICATION SECTION 32 92 19.
- THE CONTRACTOR(S) MUST STAY INSIDE APPROVED LIMITS OF CONSTRUCTION AT ALL TIMES. THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE MUST APPROVE ANY WORK NECESSARY OUTSIDE THE LIMITS OF CONSTRUCTION AND, AT THE DISCRETION OF THE CO, ADDITIONAL EROSION/SEDIMENTATION CONTROLS MAY BE REQUIRED.
- ALL CONSTRUCTION TRAFFIC MUST ENTER/EXIT THE SITE THROUGH THE APPROVED VEHICLE-TRACKING PAD. ADDITIONAL STABILIZED CONSTRUCTION ENTRANCES MAY BE ADDED WITH THE AUTHORIZATION FROM THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE.
- THE CONTRACTOR IS RESPONSIBLE FOR CLEANUP OF SEDIMENT OR CONSTRUCTION DEBRIS TRACKED ON TO AREA STREETS. STREETS ARE TO BE KEPT CLEAN THROUGHOUT BUILD-OUT AND WILL BE CLEANED, WITH A STREET CLEANER (NOT A STREET SWEEPER), AT FIRST NOTICE OF ACCIDENTAL TRACKING OR AT THE DISCRETION OF THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE. THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE RESERVES THE RIGHT TO REQUIRE ADDITIONAL MEASURES TO ENSURE AREA STREETS ARE KEPT FREE OF SEDIMENT AND/OR CONSTRUCTION DEBRIS.
- APPROVED EROSION AND SEDIMENT CONTROL "BEST MANAGEMENT PRACTICES" (BMPs) SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THIS PROJECT. AT A MINIMUM, THE CONTRACTOR OR HIS AGENT SHALL INSPECT ALL BMPs WEEKLY, AFTER ALL SIGNIFICANT PRECIPITATION EVENTS OR AT THE DISCRETION OF THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE. ALL NECESSARY MAINTENANCE AND REPAIR ACTIVITIES SHALL BE COMPLETED WITHIN TWENTY-FOUR (24) HOURS AFTER DIRECTED BY THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE. ACCUMULATED SEDIMENT OR CONSTRUCTION DEBRIS SHALL BE REMOVED WEEKLY FROM ALL BMPs, OR AT ANY TIME THAT SEDIMENT OR CONSTRUCTION DEBRIS ADVERSELY IMPACTS THE FUNCTION OF THE BMPs.
- TOPSOIL SHALL BE STOCKPILED TO THE GREATEST EXTENT PRACTICABLE ON SITE (WITHIN "LIMITS OF CONSTRUCTION") FOR USE ON AREAS TO BE RE-VEGETATED. ANY AND ALL STOCKPILES SHALL BE PLACED IN AN APPROVED LOCATION AND PROTECTED FROM EROSION ELEMENTS USING MEASURES SPECIFIED IN THE EROSION CONTROL PLAN.
- PERMANENT SOIL EROSION CONTROL MEASURES WILL INCLUDE PAVEMENT SURFACING AND PERMANENT LANDSCAPING. THE CONTRACTOR AND/OR OWNER SHALL ACCEPT FULL RESPONSIBILITY FOR ANY AND ALL DAMAGE TO OTHER PROPERTIES RELATED TO FAILURE TO CONTROL EROSION FROM THIS PROJECT.
- THE APPROVED EROSION CONTROL PLAN MAY REQUIRE CHANGES OR ALTERATIONS AFTER APPROVAL TO MEET CHANGING SITE OR PROJECT CONDITIONS OR TO ADDRESS INEFFICIENCIES IN DESIGN OR INSTALLATION. THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE MUST APPROVE CHANGES PROPOSED BY THE CONTRACTOR.
- ALL SWALES AND ROADSIDE DITCHES SHALL NOT EXCEED THREE (3) PERCENT. SLOPES GREATER THAN THREE (3) PERCENT WILL REQUIRE APPROVAL OF THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE AND WILL REQUIRE ADEQUATE EROSION PROTECTION.
- ALL SLOPES GREATER THAN 3:1 WILL REQUIRE PRIOR APPROVAL OF THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE, AS WELL AS ADEQUATE EROSION PROTECTION.
- NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHEREVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS AND FOR THE SHORTEST PRACTICAL PERIOD OF TIME.
- ANY SETTLEMENT OR SOIL ACCUMULATIONS BEYOND THE LIMITS OF CONSTRUCTION DUE TO GRADING OR EROSION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR REMEDIATION OF ANY ADVERSE IMPACTS TO ADJACENT WATERWAYS, WETLANDS, PROPERTIES, ETC., RESULTING FROM WORK DONE AS PART OF THIS PROJECT.
- A WATER SOURCE WILL BE AVAILABLE ON SITE DURING EARTHWORK OPERATIONS AND UTILIZED AS REQUIRED TO MINIMIZE DUST FROM EARTHWORK EQUIPMENT AND WIND.
- SOILS THAT WILL BE STOCKPILED FOR MORE THAN THIRTY (30) DAYS SHALL BE MULCHED AND SEEDDED WITH A TEMPORARY OR PERMANENT GRASS COVER WITHIN FOURTEEN (14) DAYS OF STOCKPILE CONSTRUCTION. NO STOCKPILES SHOULD BE WITHIN ONE HUNDRED (100) FEET OF DRAINAGE WAY UNLESS APPROVED BY THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE.
- THE CONTRACTOR MUST KEEP ALL POLLUTANTS, INCLUDING SEDIMENT, CONSTRUCTION DEBRIS, AND TRENCH BACKFILL MATERIALS FROM ENTERING THE STORM SEWER SYSTEM. IN ADDITION, ALL SPILLS INCLUDING, BUT NOT LIMITED TO, PETROLEUM PRODUCTS, SOLVENTS, AND CEMENT SHALL BE CLEANED UP IMMEDIATELY. THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE SHALL BE NOTIFIED IMMEDIATELY IF POSSIBLE, BUT NO LATER THAN WITHIN TWENTY-FOUR (24) HOURS OF ANY SPILL OF TWENTY-FIVE GALLONS OR LARGER.
- ALL WORK ON SITE SHALL STAY A MINIMUM OF ONE HUNDRED (100) FEET AWAY FROM ANY DRAINAGE WAY, WETLAND, ETC., UNLESS OTHERWISE NOTED ON AN APPROVED PLAN SHEET.
- THE GENERAL CONTRACTOR SHALL ENSURE THAT ALL LOADS OF CUT AND FILL MATERIAL IMPORTED TO OR EXPORTED FROM THE SITE SHALL BE PROPERLY COVERED TO PREVENT LOSS OF THE MATERIAL DURING TRANSPORT ON PUBLIC RIGHT-OF-WAY.
- THE GENERAL CONTRACTOR SHALL ENSURE THAT ALL MATERIAL EXPORTED FROM THE SITE, IF IN THE LIMITS OF BUCKLEY AIR FORCE BASE, IS DISPOSED OF AT A SITE PERMITTED TO ACCEPT SUCH MATERIAL. THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE MUST BE NOTIFIED, A MINIMUM OF TWENTY-FOUR (24) HOURS PRIOR TO THE MATERIAL BEING EXPORTED FROM THE SITE, OF THE LOCATION AND PERMIT NUMBERS OF BOTH THE EXPORTING AND IMPORTING SITE.
- THE USE OF REBAR, STEEL STAKES, OR STEEL FENCE FOR STAKING DOWN STRAW OR HAY BALES OR TO SUPPORT SILT FENCING USED AS AN EROSION CONTROL MEASURE, IS PROHIBITED.
- MODIFICATION OR TERMINATION OF AN ACTIVE EROSION AND SEDIMENT CONTROL PERMIT UPON COMPLETION OF THE PROJECT REQUIRES NOTIFICATION AND APPROVAL BY THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE.
- THE CLEANING OF CONCRETE DELIVERY TRUCK CHUTES IS RESTRICTED TO APPROVED LOCATIONS ON THE JOB SITE. THE DISCHARGE OF WATER CONTAINING WASTE CEMENT TO THE STORM SEWER SYSTEM IS PROHIBITED. ALL CONCRETE WASTE SHALL BE PROPERLY CLEANED UP AND DISPOSED OF AT AN APPROPRIATE LOCATION. PRIOR TO ACTUAL CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES.
- ALL DE-WATERING ON SITE SHALL BE COORDINATED WITH THE CONTRACTING OFFICER OR THEIR REPRESENTATIVE, BE FREE OF SEDIMENT, AND HAVE ADEQUATE EROSION PROTECTION AT THE POINT OF DISCHARGE.
- USE BEST MANAGEMENT PRACTICES (BMP) TO MINIMIZE FUGITIVE DUST. OPACITY SHALL NOT EXCEED 20 PERCENT.
- REQUIREMENTS IN THE PROJECT STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL TAKE PRECEDENCE WHEN CONFLICTS WITH THIS PLAN OCCUR.

SILT FENCE INSTALLATION NOTES

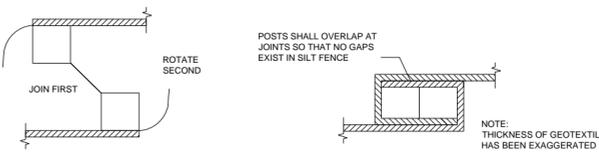
- SEE EROSION CONTROL PLAN FOR LOCATION(S) OF SILT FENCE.
- ALL SILT FENCE SHALL BE IN GOOD CONDITION AND FREE OF ANY DEFECTS INCLUDING RIPS, HOLES AND OBVIOUS WEAR.
- A 6" x 2" ANCHOR TRENCH SHALL BE EXCAVATED WITH TRENCHER, OR WITH SILT FENCE INSTALLATION MACHINE. ROAD GRADERS, BACKHOES, AND OTHER SIMILAR MACHINERY SHALL NOT BE USED.
- A 10" DEEP ANCHOR SLIT SHALL BE FORMED IF USING A STATIC SLICING METHOD.
- EXCAVATED MATERIAL SHALL BE PLACED ON UPHILL SIDE OF ANCHOR TRENCH.
- THE ANCHOR TRENCH SHALL BE FREE OF ROCKS OR OTHER DEBRIS PRIOR TO THE PLACEMENT OF THE SILT FENCE.
- THE ANCHOR TRENCH SHALL BE BACKFILLED WITH SOIL THAT IS FREE OF ROCKS AND DEBRIS. BOTH SIDE OF THE TRENCH SHALL BE COMPACTED BY HAND, USING A VIBRATORY PLATE COMPACTOR, JUMPING JACK TAMPER OR BY WHEEL ROLLING WITH A SKID STEER OR TRACTOR.
- SILT FENCE STAKES SHALL BE MADE OF WOOD AND HAVE THE FOLLOWING DIMENSIONS: 1 1/2" x 1 1/2" x 48"
- STAKES SHALL BE PLACED ON THE DOWNHILL SIDE OF THE SILT FENCE FABRIC AND PLACED ON 10.0' CENTERS OR LESS. STAKES SHALL BE EMBEDDED A MINIMUM OF 12" INTO THE GROUND. A WOODEN LATH SHALL BE ATTACHED TO THE OPPOSING (UPHILL) SIDE OF THE STAKE FOR ADDED STRENGTH AND SUPPORT. THE LATH SHALL HAVE THE FOLLOWING DIMENSIONS 1 1/2" x 1/4" x 24"
- SILT FENCE SHALL BE PULLED TIGHT AS IT IS ANCHORED TO THE STAKES. THERE SHOULD NOT BE NOTICEABLE SAG ALONG ANY PORTION OF THE SILT FENCE AFTER IT HAS BEEN ANCHORED TO THE STAKES.
- SILT FENCE FABRIC SHALL BE ANCHORED TO THE STAKES AND LATHS USING 1" HEAVY DUTY STAPLES OR NAILS WITH 1" HEADS. STAPLES AND NAILS SHOULD BE PLACED EVERY THREE INCHES ALONG THE SILT FENCE FABRIC.
- SILT FENCE FABRIC SHALL MEET THE FOLLOWING MANDATORY REQUIREMENTS:
 - GRAB TENSILE STRENGTH ASTM D 4632 >= 124 LBS
 - MULLEN BURST STRENGTH ASTM D 3786 >= 300PSI
 - PUNCTURE STRENGTH ASTM D 4833 >= 60 LBS
 - TRAPEZOID TEAR STRENGTH ASTM D 4533 >= 65 LBS
 - UV RESISTANCE ASTM D 4355 >= 80% @ 500 HR
 - FLOW RATE ASTM D 4491 >= 10 GAL/MIN/FT2
- AN ORIGINAL PRODUCT SPECIFICATION SHEET FROM THE SILT FENCE MANUFACTURER SHALL BE MADE AVAILABLE AT THE REQUEST OF THE TOWN'S INSPECTOR. THE PRODUCT SPECIFICATION SHEET SHALL PROVIDE THE RESULTS FOR THE TEST METHODS ABOVE.
- SILT FENCE JOINTS SHALL BE CONNECTED ACCORDING THE TO ATTACHED DRAWING.

SILT FENCE INSPECTION AND MAINTENANCE NOTES

- THE EROSION CONTROL SUPERVISOR SHALL INSPECT SILT FENCE AT THE FOLLOWING INTERVALS:
 - IMMEDIATELY FOLLOWING INITIAL INSTALLATION
 - EVERY 14 DAYS WHILE THE SITE IS UNDER ACTIVE CONSTRUCTION
 - AFTER ANY STORM EVENT THAT CAUSES SOIL EROSION
 - ONCE A MONTH FOLLOWING THE END OF CONSTRUCTION, UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER.
 - IMMEDIATELY FOLLOWING STRONG WINDS.
- ACCUMULATED SEDIMENT SHALL BE REMOVED ONCE THE UPSTREAM SEDIMENT HAS REACHED A DEPTH OF 6-INCHES.
- SILT FENCE SHALL REMAIN IN PLACE AND PROPERLY MAINTAINED UNTIL VEGETATIVE COVER HAS REACHED A CONSISTENT DENSITY OF AT LEAST 70% OF FULL VEGETATIVE COVER AND EROSION AND SEDIMENTATION IS NO LONGER A POSSIBILITY AS DETERMINED BY THE TOWN'S INSPECTOR.
- SILT FENCE SHALL BE REPLACED WHEN THERE IS ANY SIGNS OF WEAR.
- WHEN THE SILT FENCE IS REMOVED ANY DISTURBED AREAS ASSOCIATED WITH THE INSTALLATION, MAINTENANCE, AND/OR REMOVAL OF THE SILT FENCE SHALL BE RESEEDDED PER VA SPECIFICATIONS.



SILT FENCE INSTALLATION



JOINT SECTIONS

95% BID SET - NOT FOR CONSTRUCTION

Revisions	Date

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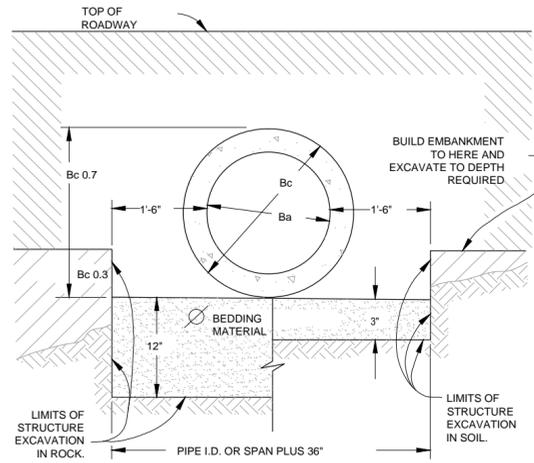
Drawing Title CIVIL CONSTRUCTION DETAILS EROSION CONTROL	Project Title MENTAL HEALTH BUILDING CHEYENNE VAMC	Project Number VA259-C-1033
Approved Project Director	Location CHEYENNE, WY	Drawing Number CE501
Date JUNE 2012	Checked JMS	Drawn RID
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Office of Construction and Facilities Management

Division of Veterans Affairs

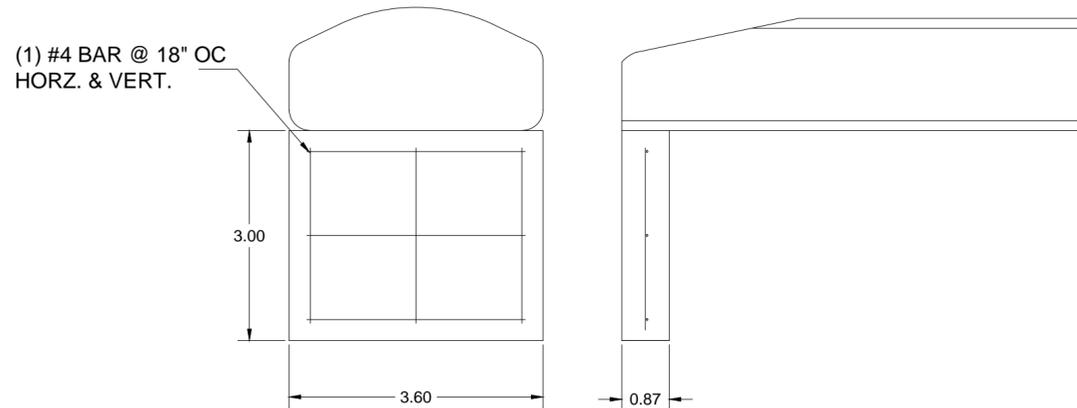
**GENERAL NOTES
REINFORCED CONCRETE PIPE**

1. MINIMUM COVER FOR REINFORCED CONCRETE PIPE IS THE PAVEMENT THICKNESS PLUS ONE FOOT.
2. FILL HEIGHTS GREATER THAN MAXIMUM ALLOWED IN THE HEIGHTS OF FILL TABLE ON THIS SHEET WILL REQUIRE SPECIAL DESIGN OF STRUCTURE.
3. PIPE DESIGN IS BASED ON SAFETY FACTOR OF 1.33 ON ULTIMATE STRENGTH.
4. THE HEIGHTS OF FILL OVER TOP OF PIPE ARE BASED ON UNIT WEIGHT OF SOIL AT 120 LBS. PER CUBIC FOOT.
5. PIPE CLASS IS DETERMINED FROM 0.01 INCH CRACK D-LOAD.
6. BEDDING IS 3000 PSI(MODIFIED) (FROM CONCRETE PIPE DESIGN MANUAL-AMERICAN CONCRETE PIPE ASSOCIATION) WITH SETTLEMENT RATIO R = 0.0 (YIELDING BED).
7. CHANGES IN DESIGN FACTORS WILL REQUIRE COMPENSATING CHANGE IN PIPE DESIGN.
8. MINIMUM WALL THICKNESS DIMENSIONS ARE BASED ON AASHTO M 170 (WALL B) FOR CIRCULAR PIPE, AND AASHTO M 207 FOR ELLIPTICAL PIPE.
9. SPACING FOR MULTIPLE PIPE INSTALLATIONS SHALL CONFORM TO THE DETAILS SHOWN ON M STANDARD FOR EXCAVATION AND BACKFILL FOR STRUCTURES.
10. WHEN A CULVERT IS TO BE EXTENDED WITH PIPE OF DIFFERENT MATERIAL, THE CONNECTION SHALL CONFORM TO THE DETAIL ON PLANS OR BE APPROVED.

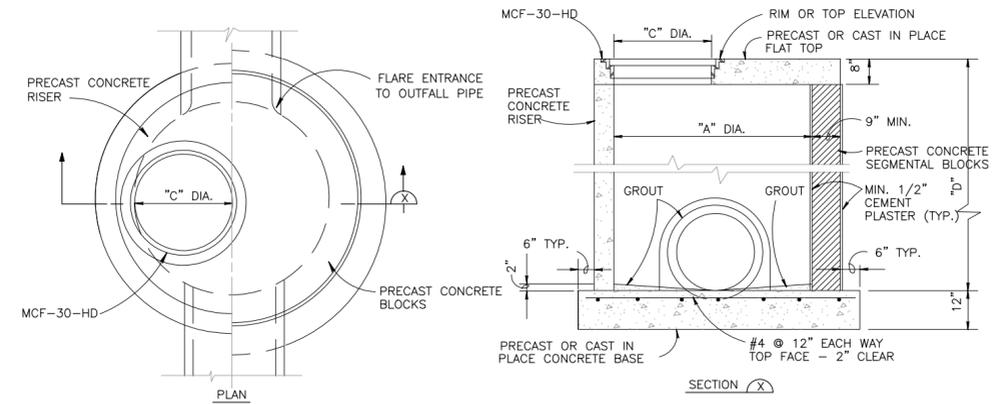


Ø BEDDING MATERIAL FOR SOIL SHALL BE 3 IN. LOOSE THICKNESS STRUCTURE BACKFILL CLASS 2.
 BEDDING MATERIAL FOR ROCK SHALL BE 12 IN. LOOSE THICKNESS STRUCTURE BACKFILL CLASS 1
 NOTE: Bc IS THE OUTSIDE DIMENSION FOR DIAMETER, SPAN OR RISE.

**PIPE INSTALLATION
(WITH 0.7 PROJECTION RATIO)
SCALE: NTS**



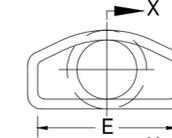
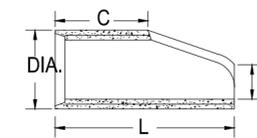
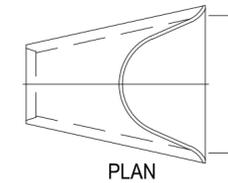
**TOE WALL
SCALE: NTS**



**TYPICAL PRECAST SHALLOW MANHOLE DETAIL
N.T.S.**

REINFORCED CONCRETE PIPE

PIPE I.D.	DIMENSIONS			
	A	C	L	E
	(inches)			
18	10	48	78	36
24	10	48	78	48
30	14	36	96	60
36	18	36	96	72
42	24	36	96	78
48	28	24	96	84
54	30	36	96	90
60	36	36	96	96
72	34	20	96	108



**SECTION-X
END SECTION FOR REINFORCED CONCRETE CIRCULAR PIPE**

1. DIMENSIONS OF END SECTIONS MAY VARY SLIGHTLY FROM THOSE SHOWN ON THE TABLES DUE TO DIFFERENT MANUFACTURER'S VARIATIONS.
2. CONCRETE END SECTIONS ARE TO BE FURNISHED WITH TONGUE OR GROOVE AS REQUIRED.
3. DESIGN LENGTH OF CULVERT OR SIDE DRAIN IS BASED ON LENGTH OF END SECTION SHOWN IN TABLE. ANY ADDITIONAL PIPE REQUIRED TO PROVIDE THE DESIGN LENGTH SHALL BE FURNISHED BY AND AT THE EXPENSE OF THE CONTRACTOR.
4. INSIDE CONFIGURATION AND JOINT OF CONCRETE END SECTION END PIPE SHALL MATCH.

95% BID SET - NOT FOR CONSTRUCTION

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Revisions 				Approved Project Director		Location CHEYENNE, WY		Building Number		Drawing Number CU503	
Date				Date JUNE 2012		Checked JMS		Drawn RID		Dwg. of	