

DEKALB COUNTY PUBLIC WORKS

PLAN AND PROFILE OF PROPOSED CS 796/ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD

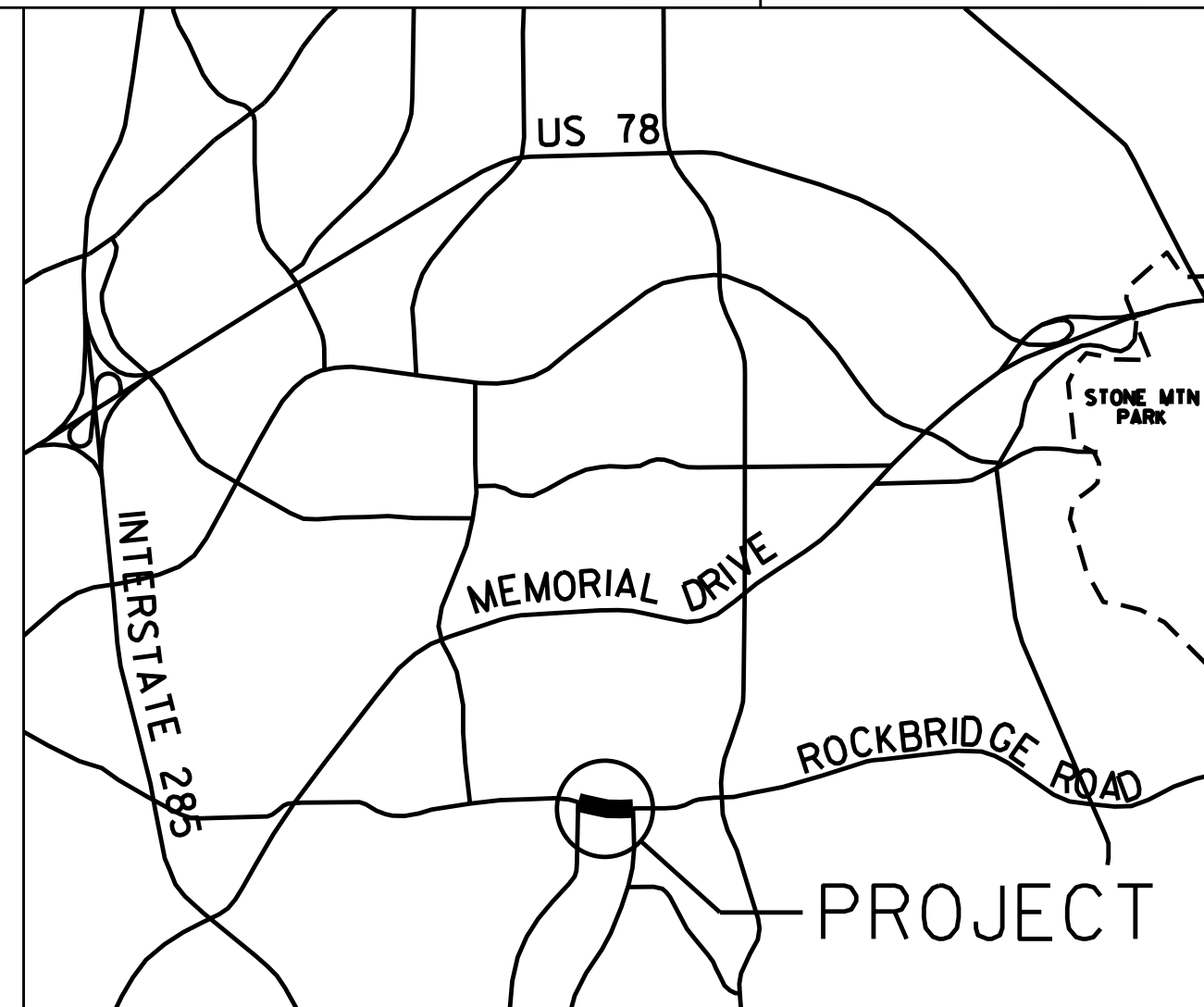
CSTEE-0008-00(121)

DEKALB COUNTY

FEDERAL ROUTE * N/A

STATE ROUTE * N/A

P.I. NO. 0008121/0012789



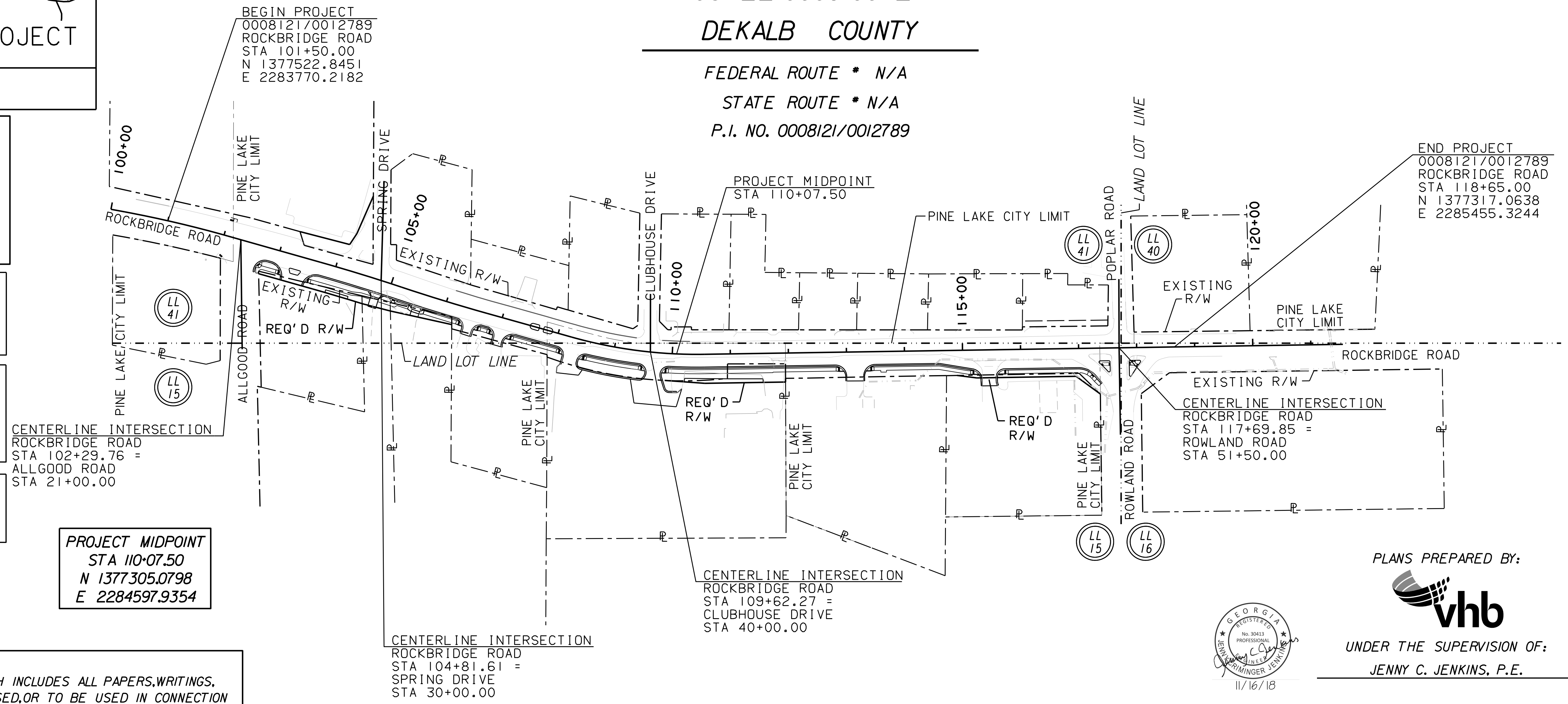
LOCATION SKETCH
N.T.S.

DESIGN DATA: ROCKBRIDGE ROAD
TRAFFIC A.D.T.: 18,920 (2018)
TRAFFIC A.D.T.: 23,000 (2038)
TRAFFIC D.H.V.: 750
DIRECTIONAL DIST: 66%
% TRUCKS: 8.6%
24 HR. TRUCKS %: 7.3%
SPEED DESIGN: 35 MPH

LOCATION & DESIGN
APPROVAL DATE: 3/29/16
FUNCTIONAL CLASS: URBAN MINOR ARTERIAL
PROJECT DESIGNATION: EXEMPT

THIS DOCUMENT HAS BEEN PREPARED
USING THE GEORGIA COORDINATE SYSTEM
OF 1985 WEST ZONE (NAD 83/94) AND
THE NORTH AMERICAN VERTICAL DATUM
OF 1988 (NAVD 88).

THIS PROJECT IS 100% IN DEKALB
COUNTY AND IS 100% IN CONGRESSIONAL
DISTRICT NO. 4.



PROJECT MIDPOINT
STA 110+07.50
N 1377305.0798
E 2284597.9354

CENTERLINE INTERSECTION
ROCKBRIDGE ROAD
STA 102+29.76 =
ALLGOOD ROAD
STA 21+00.00

CENTERLINE INTERSECTION
ROCKBRIDGE ROAD
STA 104+81.61 =
SPRING DRIVE
STA 30+00.00

CENTERLINE INTERSECTION
ROCKBRIDGE ROAD
STA 109+62.27 =
CLUBHOUSE DRIVE
STA 40+00.00



PLANS PREPARED BY:



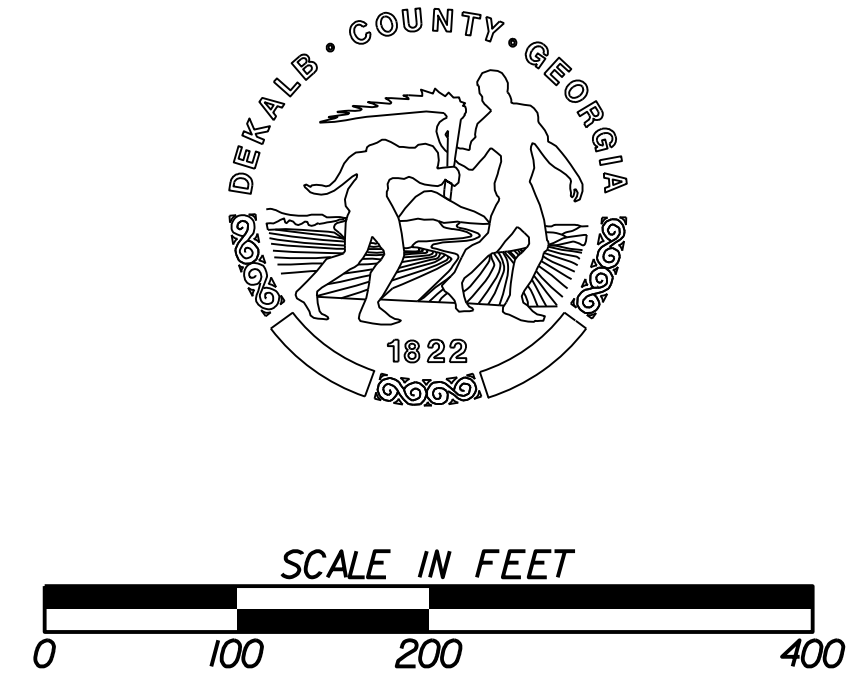
UNDER THE SUPERVISION OF:
JENNY C. JENKINS, P.E.

PLANS COMPLETED 11-16-18	REVISIONS

NOTE :
ALL REFERENCES IN THIS DOCUMENT, WHICH INCLUDES ALL PAPERS, WRITINGS,
DOCUMENTS, DRAWINGS, OR PHOTOGRAPHS USED, OR TO BE USED IN CONNECTION
WITH THIS DOCUMENT, TO "STATE HIGHWAY DEPARTMENT OF GEORGIA", "STATE
HIGHWAY DEPARTMENT", "GEORGIA STATE HIGHWAY DEPARTMENT", "HIGHWAY
DEPARTMENT", OR "DEPARTMENT" WHEN THE CONTEXT THEREOF MEANS THE
STATE HIGHWAY DEPARTMENT OF GEORGIA, AND SHALL BE DEEMED TO MEAN
THE DEPARTMENT OF TRANSPORTATION.

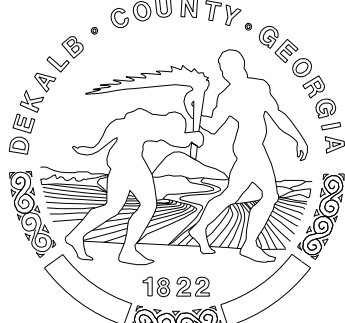

THE DATA TOGETHER WITH ALL OTHER INFORMATION SHOWN ON THESE PLANS
OR IN ANY WAY INDICATED THEREBY, WHETHER BY DRAWINGS OR NOTES, OR IN
ANY OTHER MANNER, ARE BASED UPON FIELD INVESTIGATIONS AND ARE BELIEVED
TO BE INDICATIVE OF ACTUAL CONDITIONS. HOWEVER, THE SAME ARE SHOWN AS
INFORMATION ONLY, ARE NOT GUARANTEED, AND DO NOT BIND THE DEPARTMENT
OF TRANSPORTATION IN ANY WAY. THE ATTENTION OF BIDDER IS SPECIFICALLY
DIRECTED TO SUBSECTIONS 102.04, 102.05, AND 104.03 OF THE SPECIFICATIONS.

LENGTH OF PROJECT P.I. NO. 0008121/0012789	DEKALB COUNTY No. 089 MILES
NET LENGTH OF ROADWAY	0.325
NET LENGTH OF BRIDGES	0.000
NET LENGTH OF PROJECT	0.325
NET LENGTH OF EXCEPTIONS	0.000
GROSS LENGTH OF PROJECT	0.325



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		REVISION DATES		INDEX	
		CHECKED: _____ DATE: _____ BACKCHECKED: _____ DATE: _____ CORRECTED: _____ DATE: _____ VERIFIED: _____ DATE: _____	DRAWING No. 02-0001		

GENERAL NOTES

1. ALL DRIVEWAYS THAT ARE TO BE RECONSTRUCTED SHALL BE PLACED IN KIND I.E. ASPHALT FOR ASPHALT, CONCRETE FOR CONCRETE, AND AGGREGATE SURFACE COURSE FOR DIRT DRIVES. DRIVEWAY RELOCATIONS ARE SHOWN FROM THE BEST AVAILABLE DATA. THE CONTRACTOR SHALL CONSTRUCT NEW DRIVEWAYS TO MATCH THE ACTUAL FIELD LOCATION OF EXISTING DRIVEWAYS OR AS LOCATED IN THE PLANS. RESIDENTIAL DRIVES SHALL BE 14 FEET WIDE AT THE THROAT UNLESS NOTED OTHERWISE IN THE PLANS. COMMERCIAL DRIVES SHALL BE 24 FEET WIDE UNLESS NOTED OTHERWISE IN THE PLANS. THE CONTRACTOR SHALL OBTAIN THE APPROVAL FROM THE ENGINEER PRIOR TO MAKING ANY REVISIONS TO LOCATION, WIDTH, AND/OR NUMBER OF DRIVES TO BE CONSTRUCTED. REQUIRED DRIVEWAY EASEMENTS NOT SHOWN ON THE PLANS SHALL BE ACQUIRED.

DRIVES SHALL BE CONSTRUCTED USING:

ASPHALT DRIVEWAYS COMMERCIAL: 165 LB/SY RECYCLED ASPHALTIC CONCRETE 12.5MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H. LIME
 220 LB/SY RECYCLED ASPHALTIC CONCRETE 19MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H. LIME
 6" GRADED AGGREGATE BASE

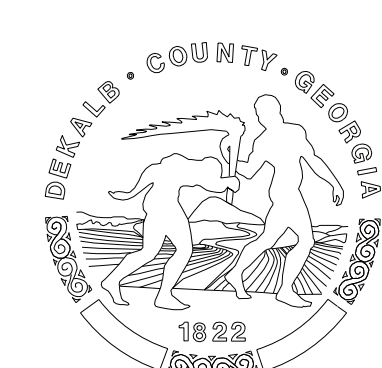
ALL DRIVEWAY ACCESS SHALL BE MAINTAINED DURING CONSTRUCTION.

2. ALL EXISTING DRAINAGE PIPES AND STRUCTURES WITHIN THE PROPOSED CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED ON PLANS. ALL COSTS ASSOCIATED WITH THE REMOVAL OF ANY PIPES AND STRUCTURES SHALL BE INCLUDED IN THE PRICE BID FOR GRADING COMPLETE.
3. THE COST FOR REMOVAL AND DISPOSAL OF EXISTING SHOULDER MATERIAL, PIPE, AND MINOR DRAINAGE STRUCTURES SHALL BE INCLUDED IN THE BID PRICE FOR GRADING COMPLETE.
4. THE CONTRACTOR SHALL REMOVE ALL SILT AND DEBRIS FROM EXISTING DRAINAGE STRUCTURES, PIPES, AND CULVERTS THAT ARE RETAINED BEFORE ANY WORK BEGINS AND AT THE COMPLETION OF THE PROJECT. THE COST OF THIS WORK SHALL BE INCLUDED IN BID PRICE FOR GRADING COMPLETE.
5. AN NOI WILL BE REQUIRED FOR THIS PROJECT. DISTURBED AREA IS 1.17 ACRES.
6. THE CONTRACTOR SHALL PROTECT ALL POST-MOUNTED STREET NAME SIGNS WITHIN THE PROJECT LIMITS. IF A STREET NAME SIGN MUST BE MOVED DURING THE COURSE OF CONSTRUCTION, IT MUST BE RESET AT THE END OF EACH WORKDAY. ALL LABOR AND MATERIALS REQUIRED TO SATISFY THIS REQUIREMENT SHALL BE INCLUDED IN THE PRICE BID FOR TRAFFIC CONTROL.
7. ALL BORROW AND WASTE SITES FOR THIS PROJECT SHALL BE ENVIRONMENTALLY APPROVED PRIOR TO CONSTRUCTION ACTIVITIES OCCURRING IN THEM. ALL COMMON FILL OR EXCESS MATERIAL DISPOSED OUTSIDE THE PROJECT RIGHT OF WAY SHALL BE PLACED IN EITHER A PERMITTED SOLID WASTE FACILITY, A PERMITTED INERT WASTE LANDFILL OR IN AN ENGINEERED FILL. SEE SECTION 201 OF THE STANDARD SPECIFICATION AND SUPPLEMENTS THERETO FOR ADDITIONAL INFORMATION.
8. THERE IS NO KNOWN SUITABLE PLACE TO BURY EXISTING CONSTRUCTION DEBRIS WITHIN THE PROJECT LIMITS. THE CONTRACTOR SHALL PROVIDE AN ENVIRONMENTALLY APPROVED SITE AS SHOWN IN GA. SPECIFICATION 201 TO DISPOSE OF EXISTING CONSTRUCTION DEBRIS AT NO ADDITIONAL COST TO THE DEPARTMENT.
9. ALL WHEEL CHAIR RAMPS AND SIDEWALK WITHIN THE INTERSECTION RADI ARE TO BE 8 INCH CONCRETE. THE COST FOR ADA RAMPS SHALL BE INCLUDED IN THE PRICE BID FOR 8 INCH CONCRETE SIDEWALK.
10. CONTRACTOR SHALL PRESSURE WASH EXISTING SIDEWALKS ALONG THE NORTH SIDE OF ROCKBRIDGE ROAD WITHIN PROJECT LIMITS. COST SHALL BE INCLUDED IN PRICE BID FOR GRADING COMPLETE.
11. ANY REFERENCE TO THE "DEPARTMENT" SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN THE DEKALB COUNTY DEPARTMENT OF ENGINEERING, AND REFERENCES TO THE "DEPARTMENT'S SPECIFICATIONS" SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN THE GEORGIA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS CURRENT EDITION.
12. METHOD OF UTILITY LOCATION:
 QL-C = EXISTING UTILITY STRUCTURES HAVE BEEN FIELD LOCATED AND SURVEYED TO ASSIST IN DEPICTING THE UTILITIES SHOWN ON RECORDS. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

 QL-B = INFORMATION WAS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROPRIATE HORIZONTAL POSITION OF THE SUBSURFACE UTILITIES. QL-B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.
13. PRIOR TO BEGINNING PAVEMENT CONSTRUCTION, CONTRACTOR SHALL PROVIDE A STAGING PLAN TO DEKALB COUNTY FOR REVIEW AND APPROVAL. THE STAGING PLAN MUST ADDRESS HOW CONSTRUCTION WILL BE STAGED IN THE AREA OF FULL DEPTH REPLACEMENT FROM STATION 106+10 TO STATION 110+30; IT MUST ENSURE THAT AT LEAST ONE LANE OF TRAFFIC ON ROCKBRIDGE ROAD WILL REMAIN OPEN AT ALL TIMES; IT MUST ADDRESS HOW ACCESS TO DRIVEWAYS WILL BE MAINTAINED; IT MUST ADDRESS HOW ACCESS TO CLUBHOUSE DRIVE WILL BE MAINTAINED. IF THE CONTRACTOR PROPOSES TO CLOSE CLUBHOUSE DRIVE, CONTRACTOR MUST SHOW A DETOUR PLAN IN ACCORDANCE WITH THE 'MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES', CURRENT EDITION. IF DEKALB COUNTY APPROVES OF THE DETOUR PLAN, IT MUST STILL BE REVIEWED AND APPROVED BY THE CITY OF PINE LAKE PRIOR TO BEGINNING PAVEMENT CONSTRUCTION.
14. THERE WILL BE NO IMPACT TO MARTA FACILITIES AS A RESULT OF THIS PROJECT. IF COORDINATION WITH MARTA IS NECESSARY, DEKALB COUNTY WILL HANDLE THE COORDINATION.
15. CONTRACTOR SHALL SALVAGE EXSTING RUBBLE WALL BETWEEN STATIONS 111+00 AND 112+00 AND DELIVER TO THE CITY OF PINE LAKE. CONTRACTOR IS RESPONSIBLE FOR DISPOSING OF THE RUBBLE OFFSITE IF THE CITY DOES NOT ACCEPT IT.

16. THE FOLLOWING UTILITY OWNERS MAY HAVE FACILITIES THAT CONFLICT WITH CONSTRUCTION ON THIS PROJECT:

NAME OF UTILITY OWNER	UTILITY
SOUTHERN COMPANY GAS	GAS
AT&T	PHONE
AT&T FIBER	FIBER OPTICS
DEKALB TRANSPORTATION	SIGNALS
DEKALB COUNTY WATERSHED MANAGEMENT	WATER & SEWER
GEORGIA POWER COMPANY	ELECTRIC
GEORGIA POWER TRANSMISSION	ELECTRIC
ZAYO GROUP	FIBER



REVISION DATES

NO.	DATE	DESCRIPTION

GENERAL NOTES

ROCKBRIDGE ROAD
 FROM ALLGOOD ROAD TO ROWLAND ROAD

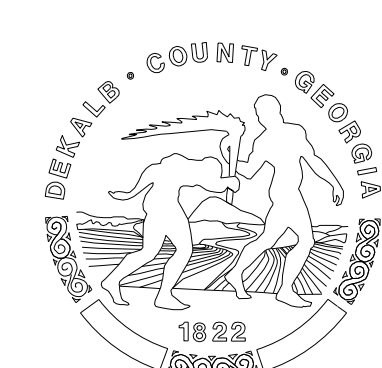
CHECKED:	DATE:	DRAWING No. 04-0001
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

SIGNING AND MARKING GENERAL NOTES

1. ALL STANDARD HIGHWAY SIGNS SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN IN THE PLANS, THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION, AND THE GEORGIA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS, AND/OR SPECIAL PROVISIONS.
2. SIGN ERECTION STATIONS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD LOCATIONS WHERE NECESSARY, BUT SHALL BE WITHIN THE LIMITATIONS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION. NO SIGN LOCATION SHALL BE CHANGED BY THE CONTRACTOR OR BY THE PROJECT ENGINEER WITHOUT PRIOR APPROVAL FROM THE DEKALB COUNTY PUBLIC WORKS TRANSPORTATION DIVISION.
3. ALL STANDARD HIGHWAY SIGNS SHALL BE ERECTED AT A HEIGHT OF 7 FEET ABOVE THE NORMAL EDGE OF PAVEMENT TO THE BOTTOM OF THE SIGN ASSEMBLY.
- 4A. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS MOUNTED BEHIND GUARDRAIL SHALL BE 6 FEET FROM THE FACE OF THE GUARDRAIL TO THE NEARER EDGE OF THE SIGN(S).
- 4B. HORIZONTAL CLEARANCE FOR STANDARD HIGHWAY SIGNS ON ALL OTHER ROADWAYS SHALL BE 6 FEET FROM THE EDGE OF THE PAVED SHOULDER OR 12 FEET FROM THE NORMAL EDGE OF PAVEMENT TO THE NEARER EDGE OF THE SIGN(S), WHICHEVER IS GREATER. THE HORIZONTAL CLEARANCE IN NON-MOUNTABLE CURB SECTIONS SHALL BE AT LEAST 2 FEET FORM THE CURB FACE TO THE NEARER EDGE OF THE SIGN(S).
5. SINGLE PLATE, HORIZONTAL RECTANGULAR SIGNS OVER 48 INCHES IN WIDTH SHALL BE MOUNTED ON TWO POSTS WITH 2 EACH 2 INCH X 1/2 INCH X (WIDTH OF SIGN) ALUMINUM OR GALVANIZED STEEL STRAPS. THE STRAPS SHALL BE FLUSH WITH THE BACK OF THE SIGN WITH ONE EACH ACROSS THE TOP AND BOTTOM OF THE SIGN. THE CENTERLINE OF EACH POST SHALL BE INSET 1/6TH OF THE SIGN WIDTH FROM THE EDGE OF THE SIGN. SIGN PLATE BOLT HOLES SHALL BE 3/8 INCH DIAMETER, DRILLED OR PUNCHED, AS SHOWN ON THE SIGN PLATE DETAILS.
6. EACH 42 OR 48 INCH WIDE X 18 OR 24 INCH HIGH SIGN REQUIRES ONE 2 INCH X 1/2 INCH X (WIDTH OF SIGN) ALUMINUM OR GALVANIZED STEEL STRAP LOCATED IN THE CENTER OF THE SIGN AND FLUSH WITH THE BACK OF THE SIGN.
7. SIGN ASSEMBLIES SHALL BE MOUNTED ON ALUMINUM OR GALVANIZED STEEL STRAP FRAMES. FOR DETAILS AND STRAP SPECIFICATIONS REFER TO SIGN ASSEMBLY-TYPICAL FRAMING DETAILS.
8. TYPE 9 (VERY HIGH INTENSITY) REFLECTIVE SHEETING SHALL BE USED FOR ALL STANDARD HIGHWAY SIGNS REQUIRING REFLECTORIZED BACKGROUNDS EXCEPT AS SPECIFIED BELOW OR SPECIFIED OTHERWISE IN THE PLANS. EITHER CLASS 1 OR CLASS 2 ADHESIVE BACKING IS PERMISSIBLE.
9. TYPE 11 (VERY HIGH INTENSITY) REFLECTIVE SHEETING SHALL BE USED FOR ALL RED SERIES SIGNS (R1-1, R1-2, R1-3P, R5-1, R5-1A, R5-1B).
10. TYPE 11 (VERY HIGH INTENSITY) FLUORESCENT YELLOW REFLECTIVE SHEETING SHALL BE USED FOR ALL WARNING SIGNS.
11. TYPE 11 (VERY HIGH INTENSITY) FLUORESCENT YELLOW GREEN REFLECTIVE SHEETING SHALL BE USED FOR SCHOOL ZONE (S1-1, S2-1, S3-1, S4-3, AND THE TOP PORTION OF THE S5-1) SIGNS. ALL REGULATORY SIGNS WITHIN THE SCHOOL ZONE SHALL HAVE TYPE 9 (VERY HIGH INTENSITY) REFLECTIVE SHEETING.
12. A 1/2 INCH MINIMUM AIR SPACE SHALL BE REQUIRED BETWEEN ALL SIGN PLATES WITHIN AN ASSEMBLY.
13. WHERE SIGNS WITHIN AN ASSEMBLY EXTEND BELOW THE STANDARD MOUNTING HOLES ON THE POST(S), ADDITIONAL 3/8 INCH DIAMETER HOLE(S), DRILLED OR PUNCHED, SHALL BE REQUIRED TO PROPERLY MOUNT THE ASSEMBLY.
14. FOR DETAILS OF SPECIAL DESIGN HIGHWAY SIGNS, SEE DETAILS OF MISCELLANEOUS SIGNS.
15. CONTRACTOR SHALL, AS REQUESTED BY THE PROJECT ENGINEER, BE REQUIRED TO REMOVE ANY EXISTING SIGNS THAT ARE DUPLICATED OR ARE CONTRARY TO THE INCLUDED SIGN PLANS.
16. BARRICADING AND TRAFFIC CONTROL DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL CONFORM TO THE "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES" AND GA DOT STANDARD SPECIFICATIONS AND DRAWINGS. TRAFFIC FLOW AND ACCESS SHALL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC SAFETY MEASURES FOR WORK ON PROJECT.
17. ALL WORK WITHIN DEKALB COUNTY RIGHT OF WAY SHALL CONFORM TO GA DOT STANDARDS AND SPECIFICATIONS FOR ROADS AND BRIDGES.
18. ALL SIDEWALKS AND HANDICAP RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH DETAILS AND GA DOT STANDARDS AND SPECIFICATIONS AND SHALL MEET ADA REQUIREMENTS.
19. ALL PAVEMENT MARKINGS, STRIPES, ARROWS, WORDS, ETC. SHALL BE HOT APPLIED THERMO-PLASTIC UNLESS INDICATED OTHERWISE.
20. ALL SIGNING, MARKING, AND TRAFFIC CONTROL SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", CURRENT EDITION.
21. ALL EXISTING STOP BARS AND CROSSWALKS THAT ARE NOT REMOVED OR RELOCATED SHALL BE RESTRIPE IN ACCORDANCE WITH CURRENT GOOT STANDARDS.

TRAFFIC SIGNAL GENERAL NOTES

1. THE COMPLETE SIGNAL INSTALLATION SHALL CONFORM TO ALL APPROPRIATE PARTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES CURRENT EDITION.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING POWER AND COMMUNICATION SERVICES TO TRAFFIC SIGNAL INSTALLATIONS AS NOTED ON PLANS. THE CONTRACTOR WILL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH POWER AND COMMUNICATIONS UNTIL THE TRAFFIC SIGNAL COMPLETES A SUCCESSFUL BURN IN TEST PERIOD. AT COMPLETION OF A SUCCESSFUL TEST PERIOD, POWER AND COMMUNICATIONS COSTS SHALL BE TRANSFERRED TO DEKALB COUNTY.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD ADJUSTMENT OF TRAFFIC SIGNAL INDICATIONS, POLES AND DETECTION AS REQUIRED DUE TO ROADWAY LANE SHIFTS. UPON MODIFICATION OR ADJUSTMENT OF ANY SIGNAL INDICATIONS, POLES, OR CABLING AT EXISTING TRAFFIC SIGNALS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESPONDING TO REPORTS OF SIGNAL MALFUNCTION OR "TROUBLE". AT NO TIME WILL THE CONTRACTOR ALLOW ANY EXISTING TRAFFIC SIGNAL INDICATIONS OR CONTROL EQUIPMENT TO BECOME INOPERABLE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESPONDING TO REPORTS OF TRAFFIC SIGNAL "TROUBLE" OR MALFUNCTION UPON ACTIVATION OF NEW SIGNAL EQUIPMENT.
4. SHIELDED CABLE WILL BE USED FOR DETECTOR RUNS AS SHOWN ON THE DETAIL SHEET. ALL LOOP LEAD-INS WILL BE ON SEPARATE CABLES FOR ALL LOOP DETECTORS.
5. SEPARATE SHIELDED CABLE SHALL BE RUN FOR PEDESTRIAN PUSHBUTTON INDICATIONS BETWEEN THE CONTROL CABINET AND THE PEDESTRIAN INDICATIONS, AND MULTIPLE DETECTION LOOPS ON THE SAME INTERSECTION APPROACH.
6. SIGNAL HEADS SHALL BE ERECTED TO PROVIDE AT LEAST 17 FEET BUT NO MORE THAN 19 FEET CLEARANCE FROM BOTTOM OF SIGNAL HEADS TO TOP OF ROAD SURFACE AND A MINIMUM OF 8 FEET MEASURED HORIZONTALLY BETWEEN CENTERS OF SIGNAL FACES.
7. THE PROJECT ENGINEER SHALL CONTACT THE DISTRICT SIGNAL ENGINEER AND/OR DEKALB COUNTY TRAFFIC ENGINEERING TO IDENTIFY SALVAGEABLE MATERIALS THAT MAY BE REMOVED FROM EXISTING SIGNALIZED INTERSECTIONS. TRAFFIC SIGNAL MATERIAL SHALL BE INSPECTED BY THE DISTRICT SEVEN SIGNAL ENGINEER FOR SALVAGEABLE MATERIALS. THOSE MATERIALS DEEMED NOT SALVAGEABLE SHALL BE DISPOSED OF BY THE CONTRACTOR AT NO COST TO THE CONTRACT.
8. THE CONTRACTOR SHALL LOCATE UNDERGROUND UTILITIES IN THE VICINITY OF NEW TRAFFIC SIGNAL POLES BEFORE INSTALLATION. MINOR SHIFTS (UP TO A MAXIMUM OF 5 FEET) IN LOCATION OF NEW SIGNAL POLES, AT THE DISCRETION OF THE ENGINEER, ARE ACCEPTABLE TO AVOID UNDERGROUND UTILITIES. MINIMUM CLEARANCES FROM EDGE OF PAVEMENT SHALL BE MAINTAINED. PLACEMENT OF THE SIGNAL HEADS SHALL BE RETAINED AS SHOWN ON THE PLANS.
9. THE CONTRACTOR SHALL MAINTAIN EXISTING TRAFFIC SIGNALS DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRAFFIC SIGNAL AND/OR CONTROL SYSTEM ADJUSTMENTS, INCLUDING TEMPORARY SUPPORT POLE LOCATION(S) REQUIRED BY THE PROJECT DURING THE INTERIM PERIOD THROUGH INSTALLATION OF NEW SIGNAL EQUIPMENT. AT NO TIME SHALL CONTRACTOR CAUSE ANY PART OF THE SIGNAL OPERATION TO BE INOPERABLE. THE EXISTING SIGNAL LOOPS SHALL BE MAINTAINED UNTIL THE NEW LOOPS ARE OPERATIONAL.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NEW GUYS ON EXISTING UTILITY TIMBER POLES WHEN ATTACHING SPAN WIRE OR INTERCONNECT CABLE TO THE POLES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
11. MATERIAL CERTIFICATION IS REQUIRED PRIOR TO BEGINNING ANY SIGNAL INSTALLATION WORK. THE CONTRACTOR SHALL FOLLOW PROCEDURES OUTLINED IN THE SPECIFICATIONS.
12. BOTH THE FACE AND BACK OF ALL TRAFFIC SIGNAL HEAD AND PEDESTRIAN SIGNAL HEAD HOUSINGS SHALL BE BLACK. ALL SIGNALS SHALL HAVE BACKPLATES.
13. PEDESTRIAN SIGNALS SHALL NOT BE MADE OPERATIONAL UNTIL CORRESPONDING CROSSWALKS ARE COMPLETED.
14. ALL NEW POLES SHALL BE PAINTED BLACK.



REVISION DATES

NO.	DATE	DESCRIPTION

GENERAL NOTES

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	04-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	

pH 6.0
 Resistivity 10000
 Project Number: CSTE-0008-00(121)

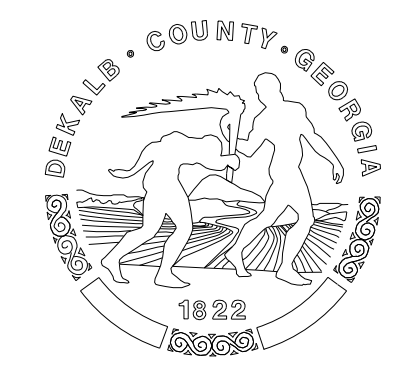

County: DEKALB P. I. Number: 0008121 0012789

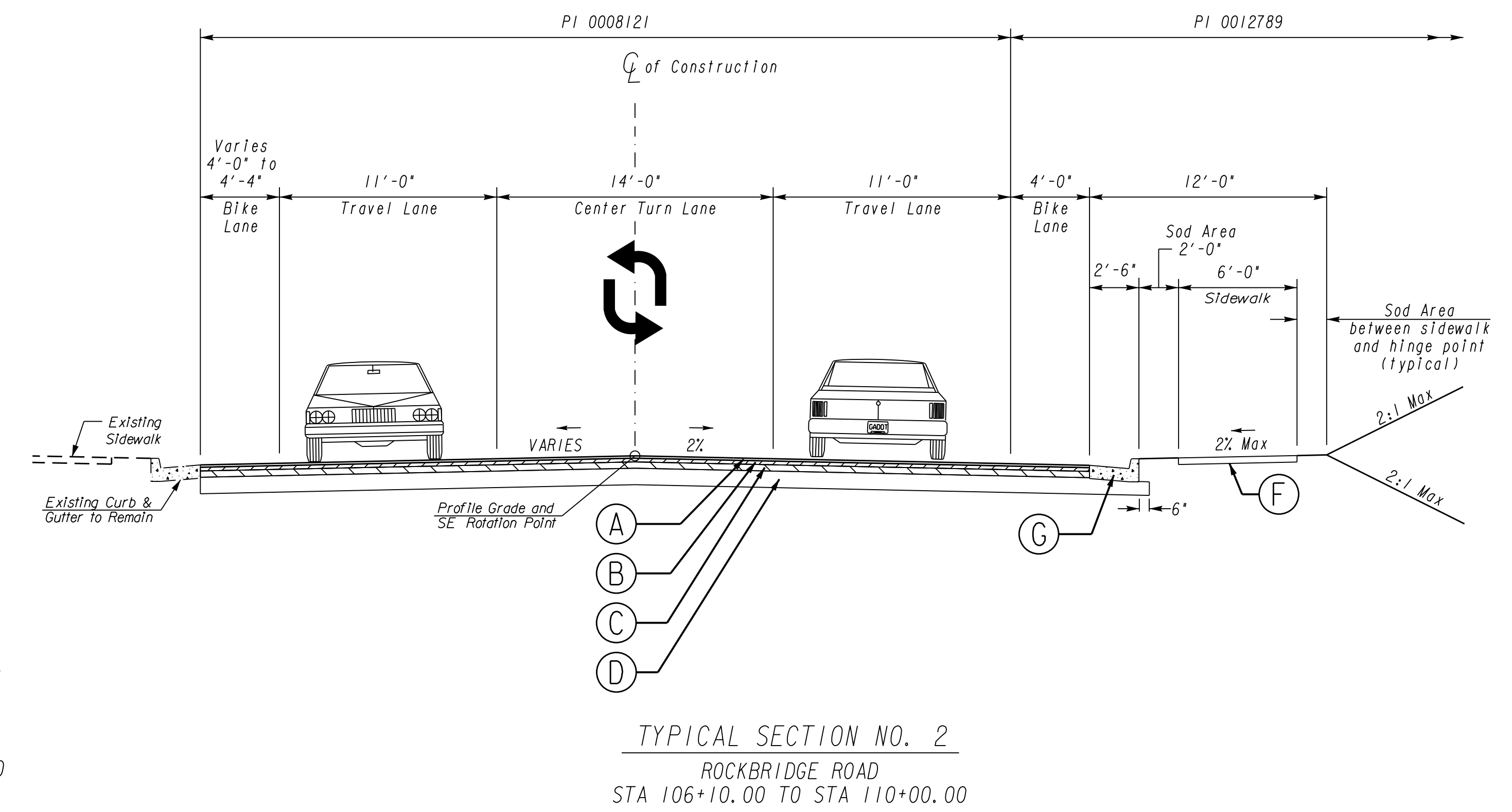
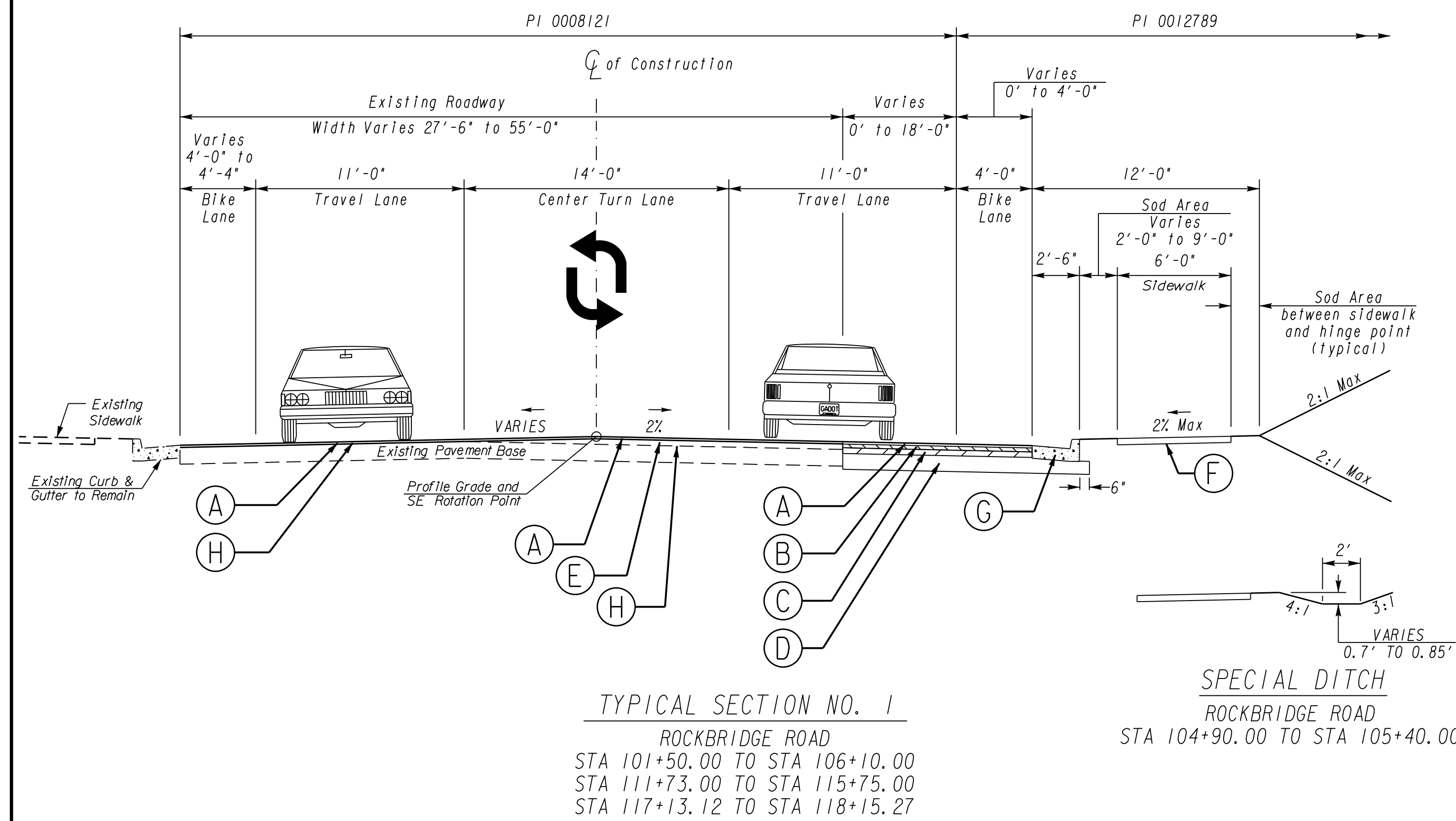
Pipe Culvert Material Alternates

TYPE OF INSTALLATION		PIPE TYPE											
		CONCRETE	STEEL			ALUMINUM	THERMOPLASTIC						
		REINFORCED CONCRETE AASHTO M-170	CORRUGATED STEEL ALUMINUM COATED (TYPE 2) AASHTO M-36	CORRUGATED STEEL PLAIN ZINC COATED AASHTO M-36	POLYMER COATED STEEL AASHTO M-245	CORRUGATED ALUMINUM AASHTO M-196	CORRUGATED HDPE AASHTO M-252	CORRUGATED SMOOTH LINED HDPE TYPE "S" AASHTO M-294	CORRUGATED SMOOTH LINED POLYPROPYLENE AASHTO M-330	PVC CORRUGATED SMOOTH INTERIOR AASHTO F-949	PVC Profile Wall Drain Pipe AASHTO M-304		
S T O R M	NON-TRAVEL BEARING (OUTSIDE ROADBED)	INTERSTATE	X										
	NON INTERSTATE	X	X		X	X		X	X	X	X		
	D R A I N	ADT < 1,500	X	X		X	X		X	X	X	X	
		1,500 < ADT < 5,000	X	X		X	X		X	X	X	X	
		5,000 < ADT < 15,000	X						X	X	X	X	
ADT > 15,000 & INTERSTATES		X											
	GRADE > 10%				X			X	X	X	X		
SIDE DRAIN		X	X		X	X		X	X	X	X		
PERMANENT SLOPE DRAIN			X	X	X	X		X	X	X	X		
PERFORATED UNDERDRAIN			X	X		X	X	X	X	X	X		

- NOTE:
- Allowable materials are indicated by an "X".
 - Structural, installation, fill height and backfill requirements of storm drain pipe will be in accordance with Georgia Standard 1030-D or 1030-P and the Standard Specifications.
 - The Contractor shall provide additional storm sewer capacity calculations if a pipe material other than concrete is selected.
 - Pipe used under mechanically stabilized earth (MSE) walls, within MSE wall backfill, or within five feet of an MSE wall face shall be Class V Concrete Pipe. Rev. 1-12-16

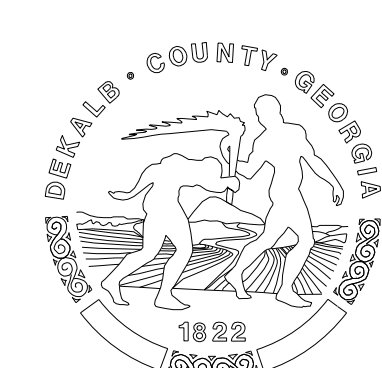
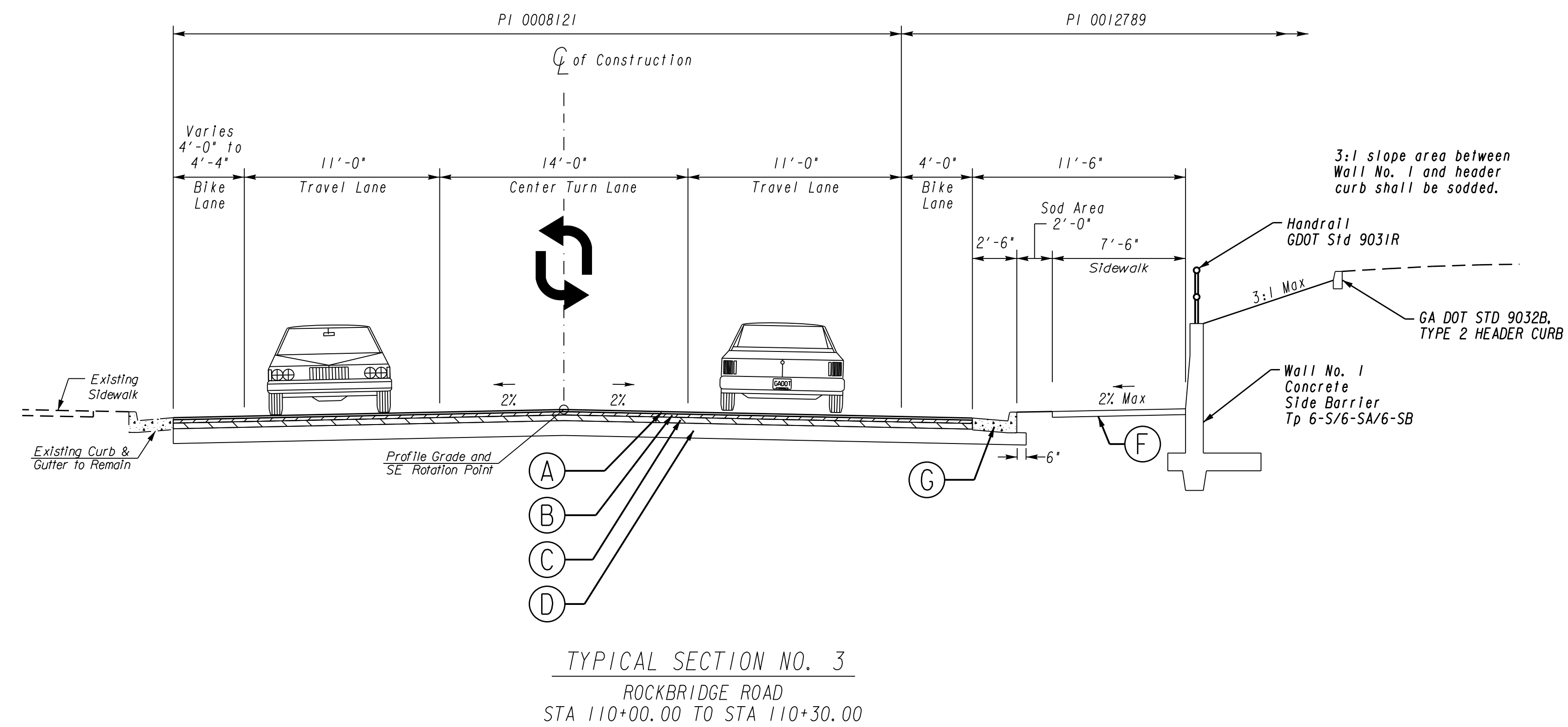
ENVIRONMENTAL RESOURCES IMPACT TABLE						
These resources and the restrictions listed are governed by state and federal law.						
Resource Name (from Section A of the ECT)	Location			Permitted Construction Activity (from Section A of the ECT)	Special Provision? (from Section B of the ECT)	Comments (from Section C of the ECT, comments only)
	Beginning STA	Ending STA	Side			
NONE						
404 Permits and Variances (from Section D of the ECT)				Expiration dates (if applicable) Contact GDOT OES 6 months prior to expiration, if work will extend beyond this date.		
Notice of Intent (NOI) for NPDES				DeKalb County and the Construction Contractor will submit an NOI to the NPDES General Permit following award of the contract but prior to construction.		

		REVISION DATES		GENERAL NOTES	
		ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD		CHECKED: _____ DATE: _____ BACKCHECKED: _____ DATE: _____ CORRECTED: _____ DATE: _____ VERIFIED: _____ DATE: _____	
				DRAWING No. 04-0003	



PAVEMENT DESIGN

- (A) 165 LB/SY RECYCLED ASPHALTIC CONCRETE
12.5MM SUPERPAVE, GP2 ONLY, INCL
BITUM MATL & H. LIME
- (B) 220 LB/SY ASPHALTIC CONCRETE
19MM SUPERPAVE, GP 1 OR 2, INCL
BITUM MATL & H. LIME
- (C) 660 LB/SY ASPHALTIC CONCRETE
25MM SUPERPAVE
- (D) 12" GRADED AGGREGATE BASE
- (E) LEVELING AS REQUIRED
- (F) 4" THICK CONCRETE SIDEWALK
- (G) GA DOT STD 9032B, TYPE 2
CONCRETE CURB & GUTTER, 8" X 30"
- (H) VARIABLE DEPTH MILLING



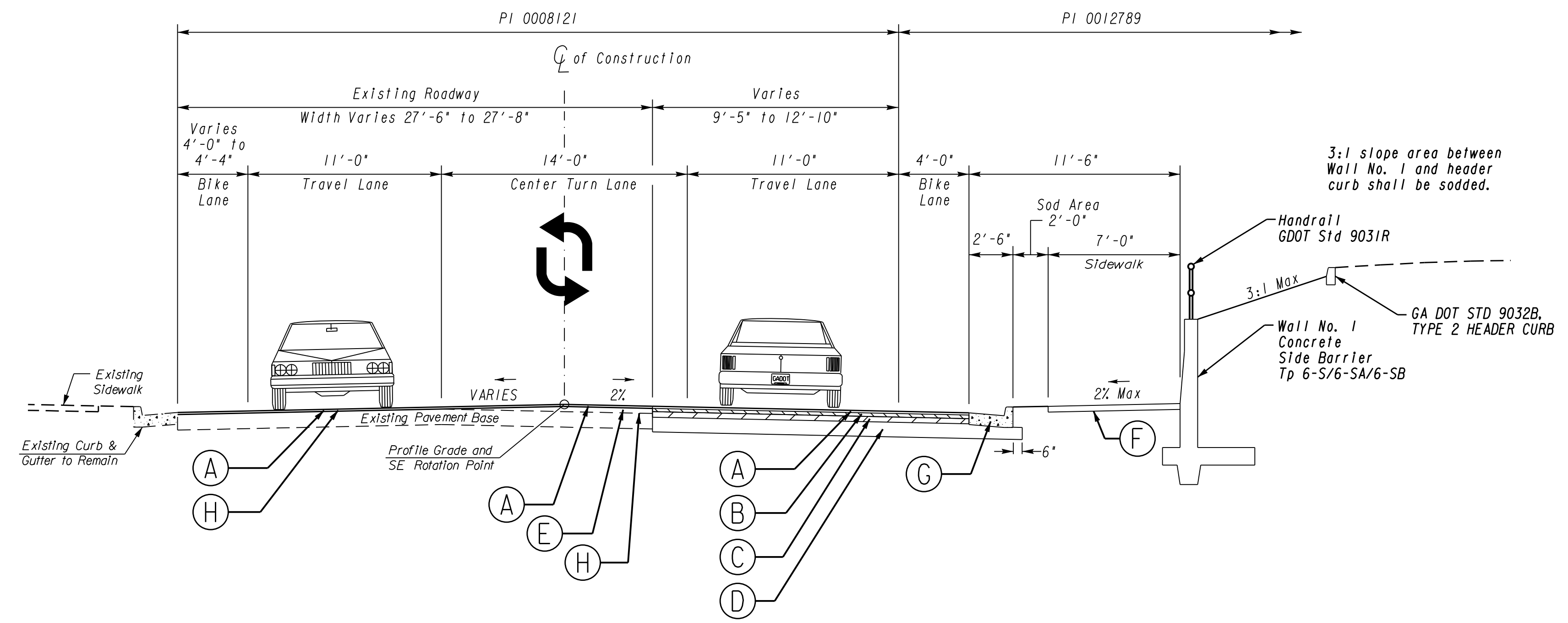
NOT TO SCALE

REVISION DATES

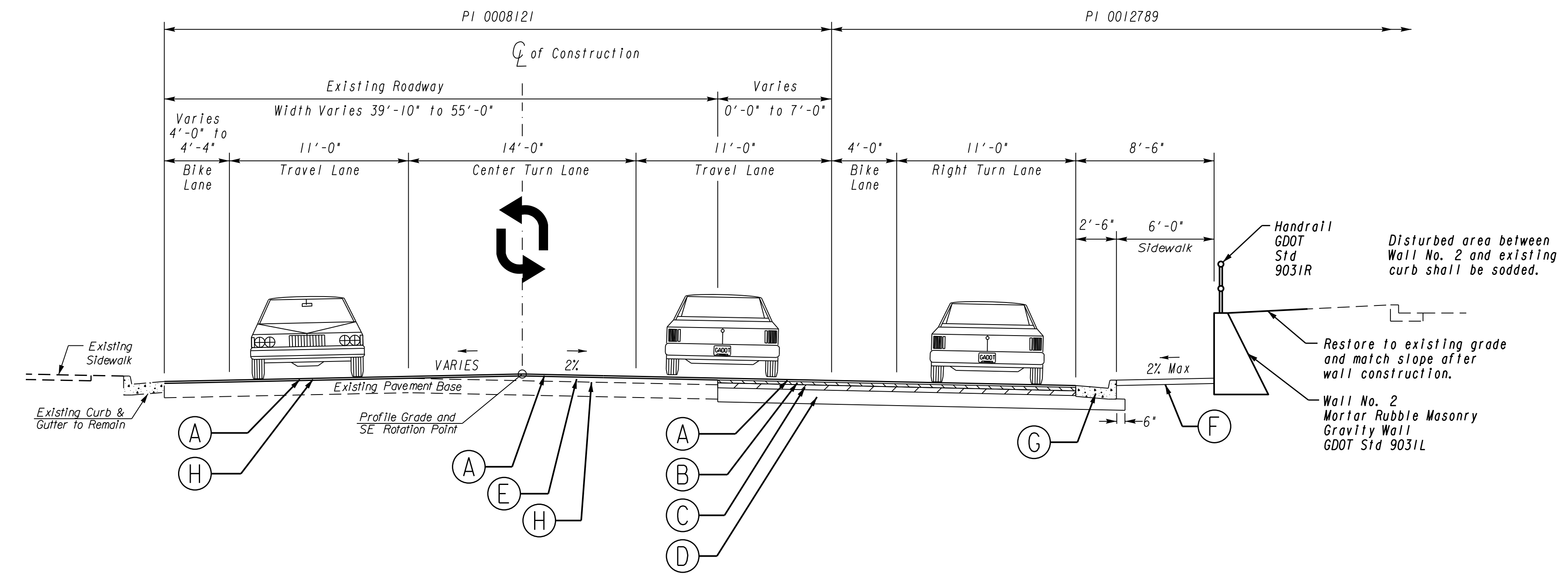
TYPICAL SECTIONS

ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	05-0001
CORRECTED:	DATE:	
VERIFIED:	DATE:	



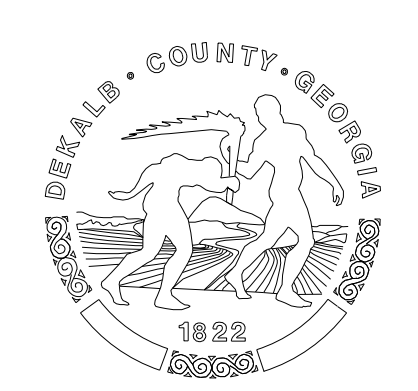
TYPICAL SECTION NO. 4
ROCKBRIDGE ROAD
STA 110+30.00 TO STA 111+73.00



TYPICAL SECTION NO. 5
ROCKBRIDGE ROAD
STA 115+75.00 TO STA 117+13.12

PAVEMENT DESIGN

- (A) 165 LB/SY RECYCLED ASPHALTIC CONCRETE
12.5MM SUPERPAVE, GP2 ONLY, INCL
BITUM MATL & H. LIME
- (B) 220 LB/SY ASPHALTIC CONCRETE
19MM SUPERPAVE, GP 1 OR 2, INCL
BITUM MATL & H. LIME
- (C) 660 LB/SY ASPHALTIC CONCRETE
25MM SUPERPAVE
- (D) 12" GRADED AGGREGATE BASE
- (E) LEVELING AS REQUIRED
- (F) 4" THICK CONCRETE SIDEWALK
- (G) GA DOT STD 9032B, TYPE 2
CONCRETE CURB & GUTTER, 8" X 30"
- (H) VARIABLE DEPTH MILLING



NOT TO SCALE

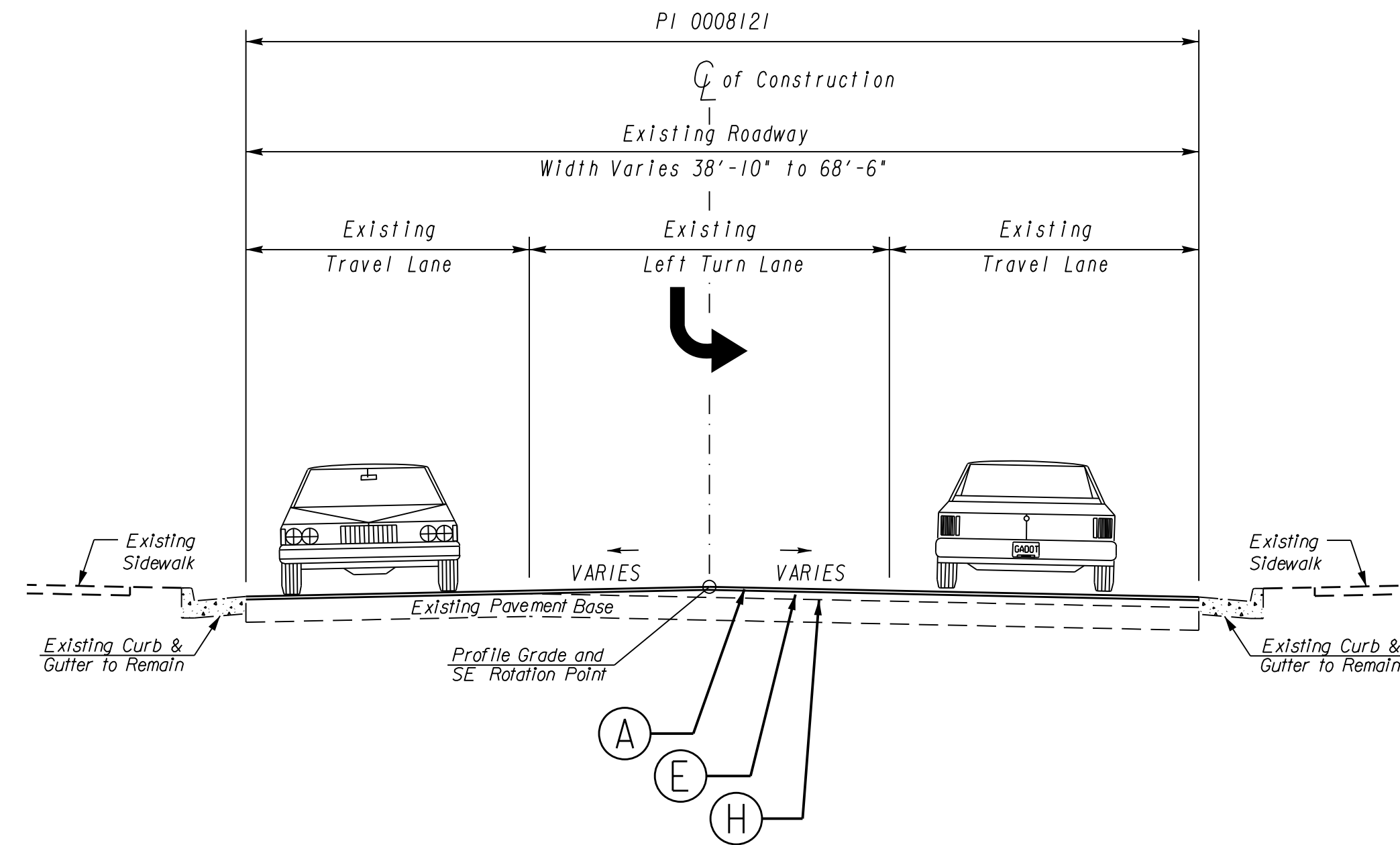
REVISION DATES

NO.	DATE	DESCRIPTION

TYPICAL SECTIONS

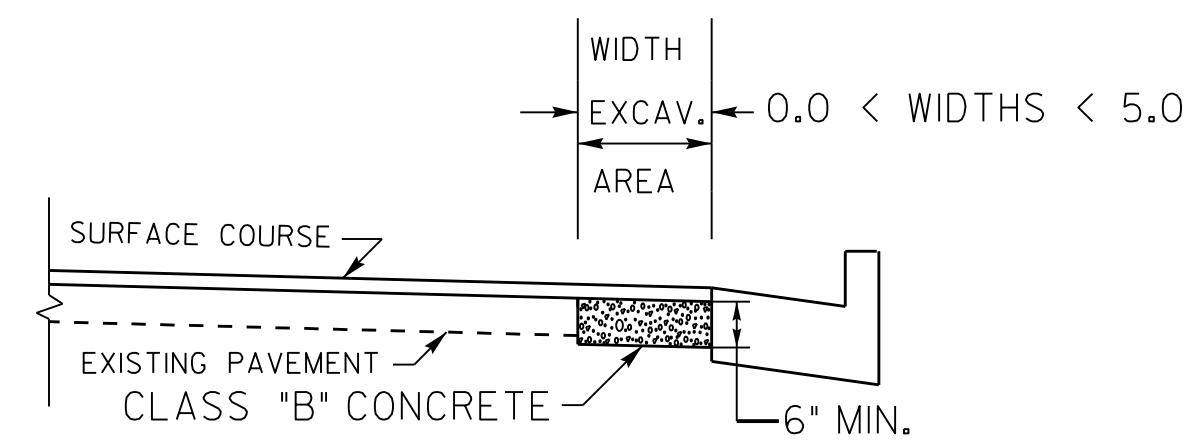
ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	05-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	



TYPICAL SECTION NO. 6
ROCKBRIDGE ROAD
STA 118+15.27 TO 118+60.00

CLASS "B" CONCRETE BASE OR PAVEMENT WIDENING DETAIL



NO SCALE
CLASS "B" CONCRETE BASE OR PAVEMENT WIDENING
Item Code 500-9999 - Cu.Yds.

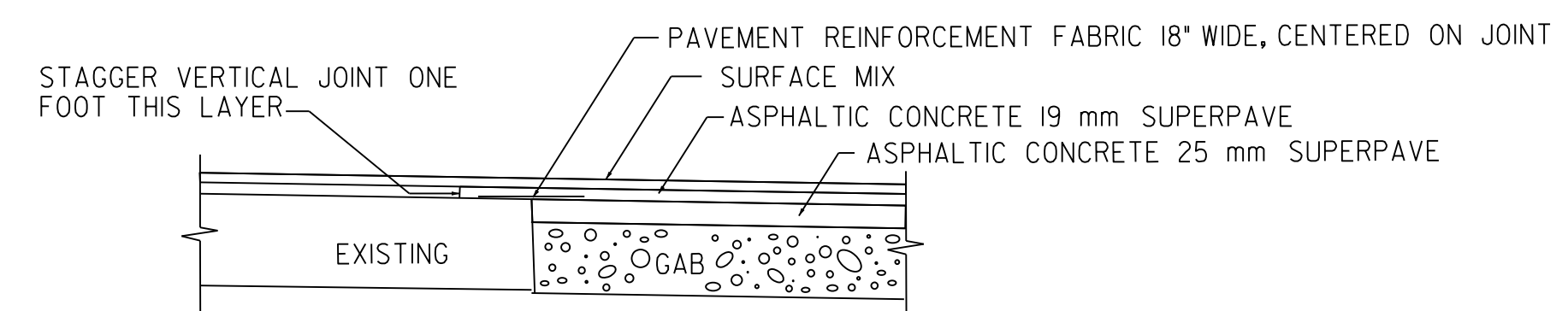
IN EXCAVATED AREAS BETWEEN THE EXISTING PAVING AND NEW CURB AND GUTTER THAT ARE 5'-0" OR LESS IN WIDTH, CLASS "B" CONCRETE SHALL BE PLACED IN LIEU OF THE ASPHALT SPECIFIED BY THE TYPICAL SECTION. PAYMENT WILL BE MADE UNDER "CLASS B CONCRETE BASE AND PAVEMENT WIDENING".

IN EXCAVATED AREAS GREATER THAN 5'-0" IN WIDTH, THE CONTRACTOR SHALL PLACE BASE AND PAVING AS SPECIFIED ON THE TYPICAL SECTION.

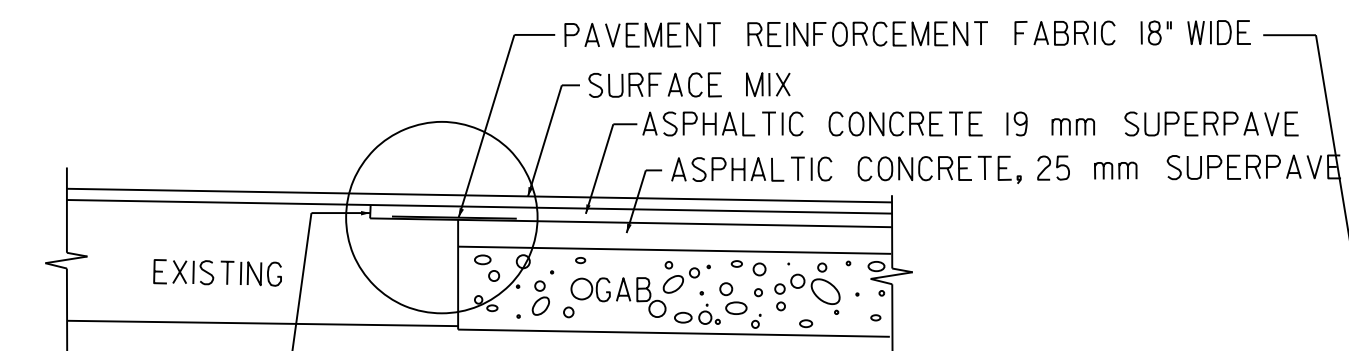
SEE PLANS FOR DETAILS OF CURB AND GUTTER CONSTRUCTION.

PAVEMENT REINFORCING FABRIC DETAIL

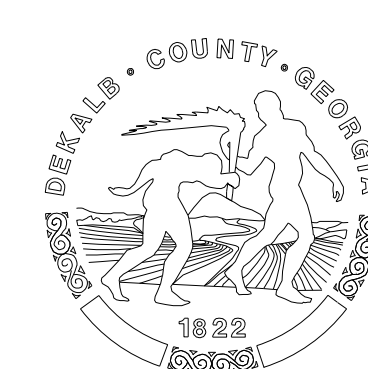
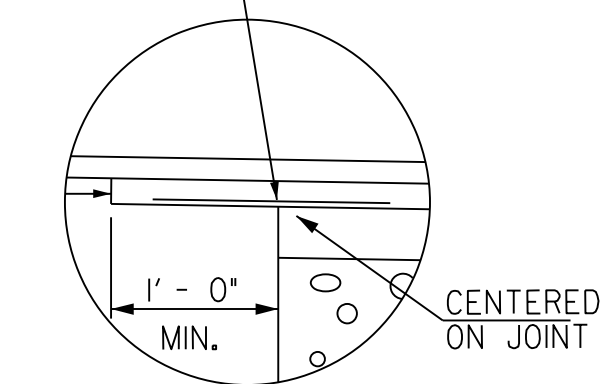
TYPICAL SECTION DETAIL TO BE USED WHEN EXISTING PAVEMENT IS TO BE RESURFACED WITH TWO INCHES OR MORE OF ASPHALTIC CONCRETE



TYPICAL SECTION DETAIL TO BE USED WHEN EXISTING PAVEMENT IS TO BE RESURFACED WITH LESS THAN TWO INCHES OF ASPHALTIC CONCRETE



MILL EXISTING LANE ONE FOOT WIDE TO DEPTH OF ADJOINING LAYER TO BE PLACED. COST OF MILLING FOR THIS WORK TO BE INCLUDED IN THE UNIT PRICE BID FOR PAVEMENT REINFORCING FABRIC.



NOT TO SCALE

REVISION DATES

NO.	DATE	DESCRIPTION

TYPICAL SECTIONS

ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	05-0003
CORRECTED:	DATE:	
VERIFIED:	DATE:	

SUMMARY OF QUANTITIES

TRAFFIC CONTROL - PROJECT 0008121
LUMP SUM

GRADING COMPLETE - PROJECT 0008121
LUMP SUM
INCLUDES CLEARING & GRUBBING AND IN PLACE EMBANKMENT

GRADING COMPLETE - PROJECT 0012789
LUMP SUM
INCLUDES CLEARING & GRUBBING AND IN PLACE EMBANKMENT

ROADWAY PAVING - PI NO 0008121									
LOCATION	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	GR AGGR BASE CRS, INCL MATL	TACK COAT	RECYCLED ASPH CONC LEVELING, INCL BITUM MATL & H LIME	MILL ASPH CONC PVMT, VARIABLE DEPTH	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH	CLASS B CONC, BASE OR PVMT WIDENING
	TN	TN	TN	TN	GL	SY	LF	CY	
STA 101+50.00 TO STA 106+00.00	235	3	9	18	145	20	2812	57	1
STA 106+00.00 TO STA 110+50.00	172	209	627	1317	295		185	21	
STA 110+50.00 TO STA 114+50.00	146	56	168	351	139	99	1257	402	
STA 114+50.00 TO STA 118+65.00	210	39	116	244	162	80	2186	219	
PROJECT TOTAL	763	307	920	1930	741	199	6440	699	1

ROADWAY PAVING - PI NO 0012789									
LOCATION	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 25 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	GR AGGR BASE CRS, INCL MATL	TACK COAT	MILL ASPH CONC PVMT, VARIABLE DEPTH	PVMT REINF FABRIC STRIPS, TP 2, 18 INCH WIDTH	CLASS B CONC, BASE OR PVMT WIDENING	
	TN	TN	TN	TN	GL	SY	LF	CY	
STA 101+50.00 TO STA 106+00.00	13	3	9	105	11	101	67	6	
STA 106+00.00 TO STA 110+50.00	17	22	66	309	30	3	11	1	
STA 110+50.00 TO STA 114+50.00	15	20	59	229	27				
STA 114+50.00 TO STA 118+65.00	31	41	122	337	56		63	1	
PROJECT TOTAL	76	86	256	980	124	104	141	8	

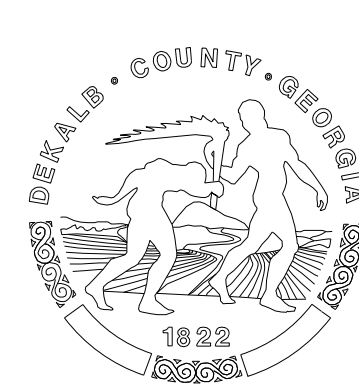
CURB & GUTTER, MEDIAN AND SIDEWALK - PI NO 0008121	
LOCATION	CONCRETE MEDIAN, 6 IN SY
STA 101+50.00 TO STA 106+00.00	
STA 106+00.00 TO STA 110+50.00	33
STA 110+50.00 TO STA 114+50.00	
STA 114+50.00 TO STA 118+65.00	61
PROJECT TOTAL	94

DRIVEWAYS - PI NO 0012789							
LOCATION	RECYCLED ASPH CONC 12.5 MM SUPERPAVE, GP 2 ONLY, INCL BITUM MATL & H LIME	RECYCLED ASPH CONC 19 MM SUPERPAVE, GP 1 OR 2, INCL BITUM MATL & H LIME	GR AGGR BASE CRS, INCL MATL	TACK COAT	CONC VALLEY GUTTER, 8 IN	AGGR SURF CRS	
	TN	TN	TN	GL	SY	TN	
DW01 STA 103+33.73 RT	3	4	51	2	101	10	
DW02 STA 104+80.00 RT	2	3	18	1	24	10	
DW03 STA 105+54.00 RT	1	2	15	1	30	10	
DW04 STA 106+48.46 RT	2	3	21	2	29	10	
DW05 STA 107+02.66 RT	3	4	25	2	32	10	
DW06 STA 108+30.76 RT	9	12	64	6	39	10	
DW07 STA 109+70.00 RT	30	40	182	19	40	10	
DW08 STA 113+15.00 RT	5	7	45	3	52	10	
DW09 STA 115+45.36 RT	5	7	39	3	35	10	
PROJECT TOTAL	60	82	460	39	382	90	

CURB & GUTTER, MEDIAN AND SIDEWALK - PI NO 0012789						
LOCATION	CONC SIDEWALK, 4 IN SY	CONC SIDEWALK, 8 IN SY	CONCRETE MEDIAN, 6 IN SY	CONCRETE HEADER CURB, 6 IN, TP 2 LF	CONC CURB & GUTTER, 8 IN X 30 IN, TP 2 LF	PRECAST BUMPER BLOCK EA
	STA 101+50.00 TO STA 106+00.00	154	20		51	336
STA 106+00.00 TO STA 110+50.00	182	61		35	658	
STA 110+50.00 TO STA 114+50.00	241	17		112	404	
STA 114+50.00 TO STA 118+65.00	142	32			313	
STA 103+23.65, 26' RT TO STA 103+43.74, 26' RT			17			
STA 111+78, 67' RT						2
PROJECT TOTAL	719	130	17	198	1711	2

RIGHT OF WAY MARKERS - PI NO 0008121	
PROJECT TOTAL	EA
	3

RIGHT OF WAY MARKERS - PI NO 0012789	
PROJECT TOTAL	EA
	11



REVISION DATES

SUMMARY QUANTITIES

ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	06-0001
CORRECTED:	DATE:	
VERIFIED:	DATE:	

SUMMARY OF QUANTITIES

DRAINAGE - PI NO 0012789												
STR NO.	LOCATION	STORM DRAIN PIPE		CATCH BASINS STD 1033 & 1034		DROP INLET STD 1019-A		DROP INLET STD 9031-S		MANHOLES STD 1011-A		REMARKS
		18 INCH H=1-10	24 INCH H=1-10	H=6' OR LESS	ADD'L. DEPTH	H=6' OR LESS	ADD'L. DEPTH	H=6' OR LESS	ADD'L. DEPTH	H=6' OR LESS	CL. 1 ADD'L. DEPTH	
		LF	LF	EA	LF	EA	LF	EA	LF	EA	LF	
A13	103+53.04, 44.88' RT	77.9				1						
A12	104+32.98, 44.88' RT	104.4				1						
A11	105+40.00, 38.00' RT	77.3				1						
A10	106+18.12, 26.17' RT	169.4										GDOT STD 1033D
A9	107+90.00, 26.17' RT	96.2				1						GDOT STD 1033D
A8.2	108+87.00, 26.17' RT	29.6				1						GDOT STD 1033D
A8.1	109+12.00, 26.67' RT	17.6				1						GDOT STD 1034D
A8	108+63.00, 26.17' RT	33.7				1						GDOT STD 1033D
A7	109+00.00, 37.00' RT	30.1								1		
A6.2	110+24.08, 43.28' RT	31.9					1	2.0				
A6.1	109+92.00, 40.00' RT	15.8							1			
A6	110+00.00, 23.00' RT	189.1					1					WITH HOOD AND INCL. BICYCLE SAFE GRATE
A5.2	111+53.81, 45.42' RT	34.7					1	4.0				
A5.1	111+90.00, 40.00' RT	11.2							1			
A5	111+90.00, 26.17' RT	77.1				1						GDOT STD 1033D
A4	112+70.00, 26.17' RT	177.4				1						GDOT STD 1033D
A3	114+50.00, 26.17' RT		19.8			1						GDOT STD 1033D
A2	114+70.00, 38.17' RT		208.9							1		
A1	116+83.50, 38.17' RT					1						GDOT STD 1033D
PROJECT TOTAL		1174	229	9		6	6	2		2		

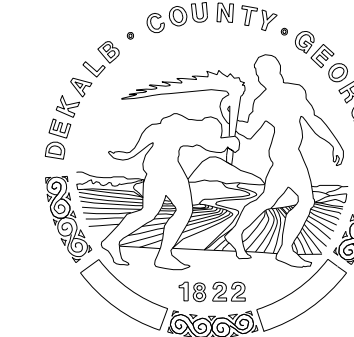
TEMPORARY EROSION CONTROL - PI NO 0012789				
	CONSTRUCTION EXIT	CONSTRUCT AND REMOVE TEMPORARY SEDIMENT BARRIER OR BALED STRAW CHECK DAM	CONSTRUCT AND REMOVE INLET SEDIMENT TRAP	TEMPORARY SILT FENCE, TYPE C
	EA	LF	EA	LF
PROJECT TOTAL				
	2	20	19	309

MAINTENANCE OF TEMPORARY EROSION CONTROL - PI NO 0012789				
	MAINTENANCE OF TEMPORARY SILT FENCE, TP C	MAINTENANCE OF SEDIMENT BARRIER BALED STRAW	MAINTENANCE OF CONSTRUCTION EXIT	MAINTENANCE OF INLET SEDIMENT TRAP
	LF	LF	EA	EA
PROJECT TOTAL				
	155	20	2	19

CONSTRUCTION WATER QUALITY - PI NO 0012789		
	WATER QUALITY MONITORING AND SAMPLING	WATER QUALITY INSPECTIONS
	EA	MO
PROJECT TOTAL		
	1	24

GRASSING FOR TEMPORARY EROSION CONTROL - PI NO 0012789		
	TEMPORARY GRASSING	MULCH
	AC	TN
PROJECT TOTAL		
	4	45

GRASSING FOR PERMANENT EROSION CONTROL - PI NO 0012789					
	PERMANENT GRASSING	AGRICULTURAL LIME	FERTILIZER MIXED GRADE	FERTILIZER NITROGEN CONTENT	SOD
	AC	TN	TN	LB	SY
PROJECT TOTAL					
	2	13	2	115	1450



REVISION DATES

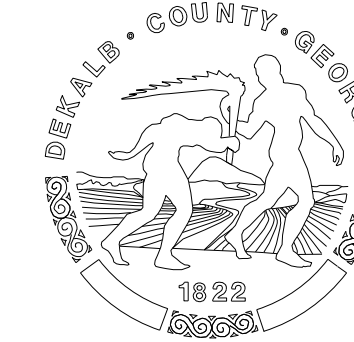
SUMMARY QUANTITIES

ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	06-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	

SUMMARY OF QUANTITIES

LOCATION	INSTL. NO.	MUTCD SIGN CODE	SIGNING - PI NO 0008121																			
			HIGHWAY SIGNS						POSTS													
			REM SIGN EA	RESET SIGN EA	TYPE 9 SHEETING			TYPE 11 SHEETING			TYPE 7		TYPE 8		TYPE 9							
					SIZE	QTY	SF	SIZE	QTY	SF	LENGTH LF	QTY	TOTAL LF	LENGTH LF	QTY	TOTAL LF	LENGTH LF	QTY	TOTAL LF			
ROCKBRIDGE ROAD																						
101+95 LT		W11-1			30X30	1	6.25									15.75	1	15.75				
		W16-1			18X24	1	3.00															
102+40 LT		R3-17			24X18	1	3.00				12.50	1	12.50									
		R3-17BP			24X8	1	1.33															
103+00 LT			1	1																		
103+90 LT		R3-17			24X18	1	3.00				13.00	1	13.00									
		R3-17BP			24X8	1	1.33															
		R3-17AP			24X8	1	1.33															
104+03 LT		R1-2						36X36X36	1	3.90	12.75	1	12.75									
104+47 LT		R9-3			18X18	1	2.25				12.50	1	12.50									
		R9-3BR			18X12	1	1.50															
104+95 LT		D3-1			30X12	1	3.50						15.00	1	15.00							
		D3-1			42X12	1	5.00															
		R5-2			24X24	1	4.00															
		R12-3SP			24X36	1	6.00															
107+55 CL		R4-7			24X30	1	5.00				12.50	1	12.50									
107+85 CL		R4-7			24X30	1	5.00				12.50	1	12.50									
109+19 LT		R3-17			24X18	1	3.00				11.50	1	11.50									
109+42 LT		D3-1			42X12	1	5.00						12.00	1	12.00							
		D3-1			42X12	1	5.00															
117+45 LT		R3-17			24X18	1	3.00				11.50	1	11.50									
117+48 LT		R9-3			18X18	1	2.25				12.50	1	12.50									
		R9-3BR			18X12	1	1.50															
117+52 LT		D3-1			30X12	1	3.50				10.00	1	10.00									
		D3-1			42X12	1	5.00															
118+50 LT		R3-17			24X18	1	3.00				12.50	1	12.50									
		R3-17AP			24X8	1	1.33															
SPRING DRIVE																						
30+77 LT		R560-5			18X24	1	3.00				12.00	1	12.00									
30+58.47 LT		R1-2	1																			
31+45 LT		W11-1			30X30	1	6.25				13.75	1	13.75									
POPLAR ROAD																						
61+15 LT		W11-1			30X30	1	6.25				13.75	1	13.75									
PROJECT TOTAL							2	1					100			4		174		27		16



REVISION DATES

SUMMARY QUANTITIES

ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

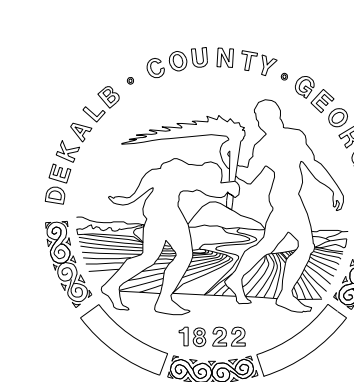
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	06-0003
CORRECTED:	DATE:	
VERIFIED:	DATE:	

SUMMARY OF QUANTITIES

LOCATION	INSTL. NO.	MUTCD SIGN CODE	SIGNING - PI NO 0012789																
			HIGHWAY SIGNS						TYPE 7			POSTS							
			REM SIGN EA	RESET SIGN EA	TYPE 9 SHEETING			TYPE 11 SHEETING			LENGTH LF	QTY	TOTAL LF	LENGTH LF	QTY	TOTAL LF	LENGTH LF	QTY	TOTAL LF
					TYPE 1 MATERIAL SIZE	QTY	SF	TYPE 1 MATERIAL SIZE	QTY	SF									
ROCKBRIDGE ROAD																			
101+86 RT		R3-17			24X18	1	3.00					12.50	1	12.50					
		R3-17AP			24X8	1	1.33												
102+78 RT		D3-1			36X12	1	4.00					10.00	1	10.00					
		D3-1			42X12	1	5.00												
102+85 RT		R3-17			24X18	1	3.00					11.50	1	11.50					
103+59 RT		R560-5			18X24	1	3.00					12.00	1	12.00					
103+70 RT		R1-2						36X36X36	1	3.90		12.75	1	12.75					
104+48 RT		R9-3			18X18	1	2.25					12.50	1	12.50					
		R9-3BL			18X12	1	1.50												
105+26 RT		R3-17			24X18	1	3.00					11.50	1	11.50					
106+62 RT		R6-2R			24X30	1	5.00					12.50	1	12.50					
		R6-2L			24X30	1	5.00												
106+89 RT		R6-2L			24X30	1	5.00					12.50	1	12.50					
		R6-2R			24X30	1	5.00												
107+18 RT		R1-1						30X30	1	6.25		13.50	1	13.50					
107+19 RT		R5-1						30X30	1	6.25		13.50	1	13.50					
109+35 RT			1	1															
110+27 RT		R3-17			24X18	1	3.00					11.50	1	11.50					
113+64 RT		R3-17			24X18	1	3.00					11.50	1	11.50					
114+60 RT		R4-4			36X30	1	7.50					12.50	1	12.50					
115+75 RT		R3-17			24X18	1	3.00					13.00	1	13.00					
		R3-17BP			24X8	1	1.33												
		R3-17AP			24X8	1	1.33												
117+10 RT		R560-5			18X24	1	3.00					12.00	1	12.00					
117+30 RT		R1-2						36X36X36	1	3.90		13.00	1	13.00					
117+47 RT		R9-3			18X18	1	2.25					12.50	1	12.50					
		R9-3BL			18X12	1	1.50												
117+52 RT		R12-3SP			24X36	1	6.00						15.00	1	15.00				
		R5-2			24X24	1	4.00												
117+88 RT		D3-1			36X12	1	4.00					10.00	1	10.00					
		D3-1			42X12	1	5.00												
118+05 RT		R3-17			24X18	1	3.00					12.50	1	12.50					
		R3-17BP			24X8	1	1.33												
118+65 RT		W11-1			30X30	1	6.25									15.75	1	15.75	
		W16-1			18X24	1	3.00												
ALLGOOD ROAD																			
19+53 RT		W11-1			30X30	1	6.25					13.75	1	13.75					
ROWLAND ROAD																			
50+27 RT		W11-1			30X30	1	6.25					13.75	1	13.75					
50+80 RT		R560-5			18X24	1	3.00					12.00	1	12.00					
51+14 RT		R1-2						36X36X36	1	3.90		13.00	1	13.00					
PROJECT TOTAL			1	1			116			25			284			15		16	

LOCATION	STRIPING - PI NO 0008121												
	THERMOPLASTIC PAVEMENT MARKINGS										RAISED PAVEMENT MARKERS		
	ARROW TYPE 2 EA	BICYCLE MARKING TYPE 1 EA	SYMBOL TYPE 4 EA	SOLID STRIPE				SKIP STRIPE		HATCHING		TYPE 1 EA	TYPE 3 EA
				5 INCH WHITE LF	24 INCH WHITE LF	8 INCH WHITE LF	5 INCH WHITE LF	WHITE GLF	YELLOW GLF	WHITE SY	YELLOW SY		
STA 101+50.00 TO STA 106+00.00	2	1	1	910	607	99	848	186	100	20	58	28	10
STA 106+00.00 TO STA 110+50.00	4	1	1	885	595		160	160	393		91	30	6
STA 110+50.00 TO STA 114+50.00	2			800	800				800			20	
STA 114+50.00 TO STA 118+65.00	5	1	1	773	594	60	386	60	272	63	37	28	12
PROJECT TOTAL	13	3	3	3368	2596	159	1394	406	1565	83	186	106	28

LOCATION	STRIPING - PI NO 0012789													
	THERMOPLASTIC PAVEMENT MARKINGS										RAISED PAVEMENT MARKERS			
	ARROW TYPE 1 EA	ARROW TYPE 2 EA	BICYCLE MARKING TYPE 1 EA	SYMBOL TYPE 4 EA	SOLID STRIPE				SKIP STRIPE		HATCHING		TYPE 1 EA	TYPE 3 EA
					5 INCH WHITE LF	24 INCH WHITE LF	8 INCH WHITE LF	5 INCH WHITE LF	WHITE GLF	YELLOW GLF	WHITE SY	YELLOW SY		
STA 101+50.00 TO STA 106+00.00			2	2	613	20	37	702	107	14	6	2		
STA 106+00.00 TO STA 110+50.00	2		1	1	510		15	606	405					
STA 110+50.00 TO STA 114+50.00			1	1	662			235	138					
STA 114+50.00 TO STA 118+65.00		3	1	1	755	93	17	776	224			4		
PROJECT TOTAL	2	3	5	5	2542	113	70	2320	875	14	6	6		



REVISION DATES

SUMMARY QUANTITIES

ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	06-0004

SUMMARY OF QUANTITIES

SIGNALS - PI NO 0008121				
LOCATION	INSTL NO	LS	STEEL WIRE STRAND CABLE, 3/8 IN LF	STRAIN POLE, TP IV EA
ROCKBRIDGE ROAD AT SPRING DRIVE	1	1	15	1
PROJECT TOTAL			15	1

RETAINING WALLS - PI NO 0012789		
LOCATION	MORTAR RUBBLE MASONRY CY	GALV STEEL PIPE HANDRAIL, 2 IN, ROUND LF
STA 115+75.00 TO STA 117+13.12	53.0	144
PROJECT TOTAL	53	144

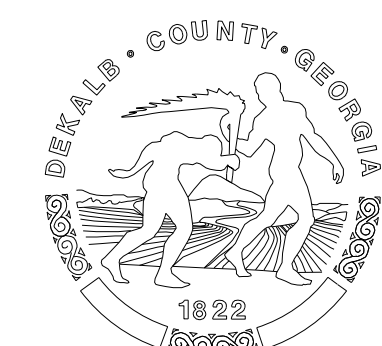
CONCRETE SIDE BARRIERS - PI NO 0012789				
LOCATION	GALV STEEL PIPE HANDRAIL, 2 IN, ROUND LF	CONCRETE SIDE BARRIER, TP 6-S LF	CONCRETE SIDE BARRIER, TP 6-SA LF	CONCRETE SIDE BARRIER, TP 6-SB LF
STA 110+00.00 TO STA 111+73.00	176	11	78	87
PROJECT TOTAL	176	11	78	87

ADJUST MANHOLE TO GRADE - PI NO 0008121	
LOCATION	EA
104+24.73, 1.43' RT	1
104+83.77, 2.10' LT	1
106+26.90, 4.44' LT	1
108+86.69, 12.00' LT	1
109+61.92, 1.28' LT	1
112+02.58, 5.81' LT	1
115+00.05, 6.22' LT	1
117+74.19, 7.25' LT	1
PROJECT TOTAL	8

ADJUST MANHOLE TO GRADE - PI NO 0012789	
LOCATION	EA
108+03.28, 21.76' RT	1
108+76.19, 20.30' RT	1
114+99.58, 28.77' RT	1
PROJECT TOTAL	3

WATER - PI NO 0008121												
	WATER MAIN, 2 IN LF	WATER MAIN, 6 IN LF	WATER MAIN, 8 IN LF	WATER MAIN, 12 IN LF	WATER MAIN, 16 IN LF	WATER MAIN, 24 IN LF	GATE VALVE, 6 IN EA	GATE VALVE, 8 IN EA	GATE VALVE, 12 IN EA	GATE VALVE, 16 IN IN VAULT EA	GATE VALVE, 24 IN IN VAULT EA	AIR RELEASE VALVE ASSEMBLY 8 IN EA
PROJECT TOTAL	60	405	2191	25	90	1693	10	12	1	2	2	2

WATER - PI NO 0008121														
	AIR RELEASE VALVE ASSEMBLY 12 IN EA	INSERTION VALVE, 6 IN EA	INSERTION VALVE, 8 IN EA	INSERTION VALVE, 12 IN EA	INSERTION VALVE, 16 IN EA	FIRE HYDRANT EA	REMOVE EXISTING FIRE HYDRANT EA	WATER SERVICE LINE, 1 IN LF	WATER SERVICE LINE, 2 IN LF	RELOCATE EXIST WATER METER, INCL BOX EA	WATER METER EA	BACKFLOW PREVENTION ASSEMBLY EA	ABANDONMENT OF WATER VALVES EA	FLOWABLE FILL CY
PROJECT TOTAL	2	3	2	1	2	9	6	550	125	1	15	4	8	69



REVISION DATES

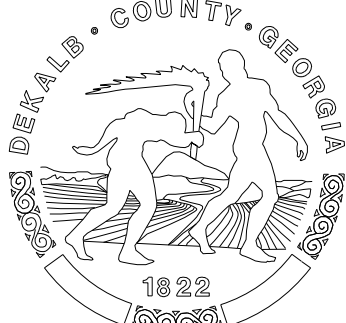

SUMMARY QUANTITIES

ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	06-0005
CORRECTED:	DATE:	
VERIFIED:	DATE:	

QUANTITIES REQUIRED ON CONSTRUCTION

DATE	ITEM NO.	DESCRIPTION	UNIT	ORIGINAL QUANTITY	PREVIOUS QUANTITY	REQUIRED ON CONSTRUCTION QUANTITY
XX-XX-XX	XXX-XXXX	XX	XX	XXX	XXX	XXX

			<small>REVISION DATES</small>	<small>QUANTITIES (CONSTRUCTION)</small> ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD								
				<table border="1" style="width: 100%; border-collapse: collapse; border-top: none;"> <tr> <td style="width: 50%;"><small>CHECKED:</small></td> <td style="width: 50%;"><small>DATE:</small></td> </tr> <tr> <td><small>BACKCHECKED:</small></td> <td><small>DATE:</small></td> </tr> <tr> <td><small>CORRECTED:</small></td> <td><small>DATE:</small></td> </tr> <tr> <td><small>VERIFIED:</small></td> <td><small>DATE:</small></td> </tr> </table>	<small>CHECKED:</small>	<small>DATE:</small>	<small>BACKCHECKED:</small>	<small>DATE:</small>	<small>CORRECTED:</small>	<small>DATE:</small>	<small>VERIFIED:</small>	<small>DATE:</small>
<small>CHECKED:</small>	<small>DATE:</small>											
<small>BACKCHECKED:</small>	<small>DATE:</small>											
<small>CORRECTED:</small>	<small>DATE:</small>											
<small>VERIFIED:</small>	<small>DATE:</small>											
				<small>DRAWING No.</small> 08-0001								

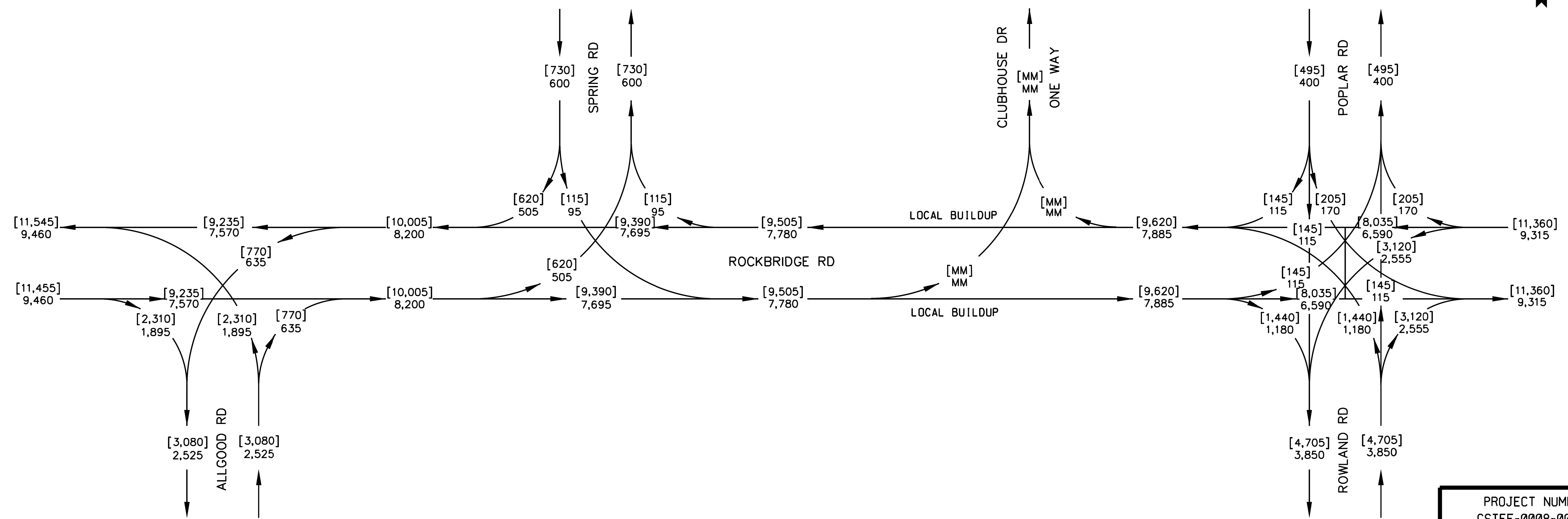
SHEET 1 OF 3

BUILD = NO BUILD

GEORGIA DEPARTMENT OF TRANSPORTATION
Office of Planning

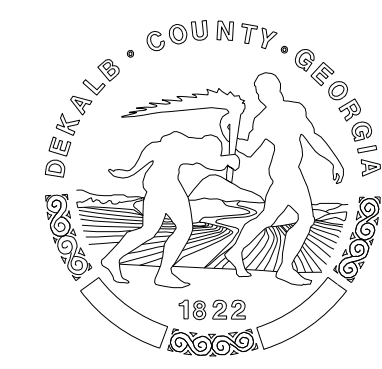
B
Bowler Engineers, Inc.
1650 Fern Circle NE
Atlanta, Georgia 30319
Tel 678-613-9909
Fax 404-417-0173
www.bowlerengineers.com

DEKALB COUNTY



PROJECT NUMBER
CSTEE-0008-00(121)
P.I.# 0008121
DEKALB COUNTY
CR 7938/ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO
ROWLAND ROAD
FUTURE 2018 [2038] ADT = 000
TRAFFIC VOLUMES

24 HOUR T = 7.3%
SU = 6.7%
COMB. = 0.6% CAB
07/2014



REVISION DATES	

TRAFFIC DIAGRAM		
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD		
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	10-0001
CORRECTED:	DATE:	
VERIFIED:	DATE:	

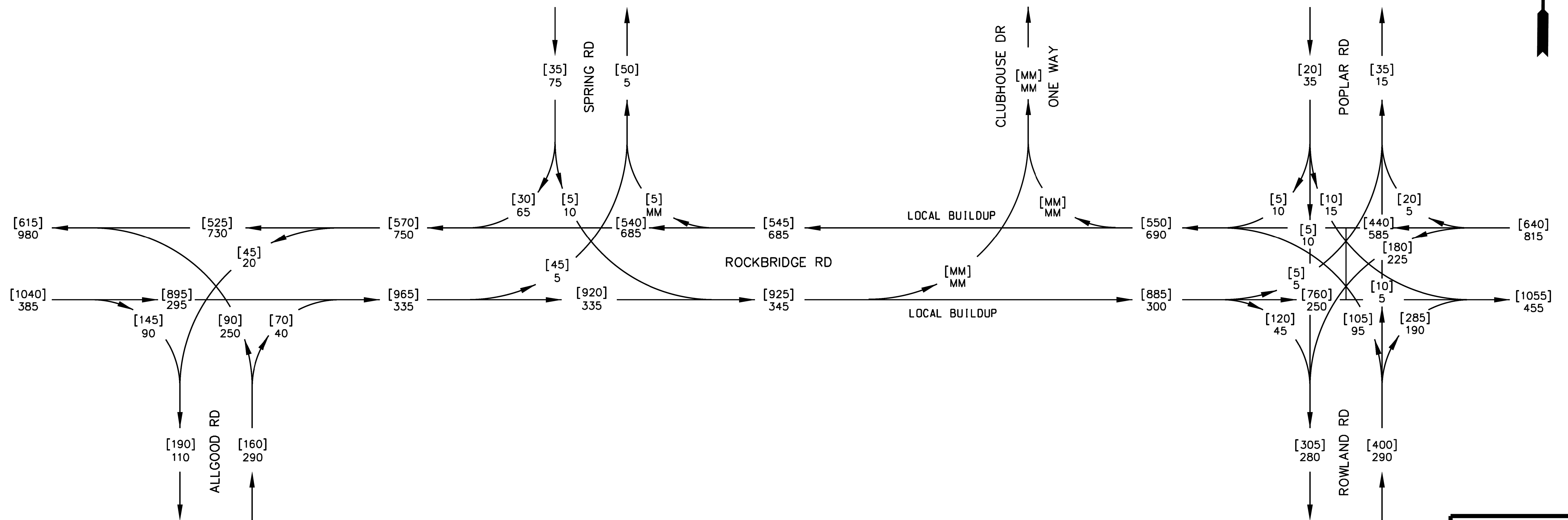
SHEET 2 OF 3

BUILD = NO BUILD

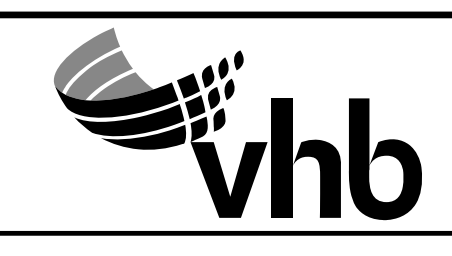
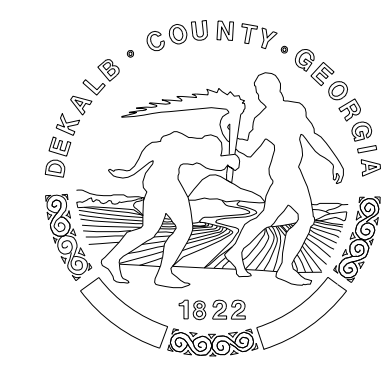
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DEKALB COUNTY
CR 7938/ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO
ROWLAND ROAD
FUTURE 2018 DHV
AM [PM] = 000 [000]
TRAFFIC VOLUMES
PEAK HOUR TRUCKS = 8.6%
SU = 7.9%
COMB. = 0.7% CAB
06/2014



REVISION DATES	

TRAFFIC DIAGRAM		
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD		
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	10-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	

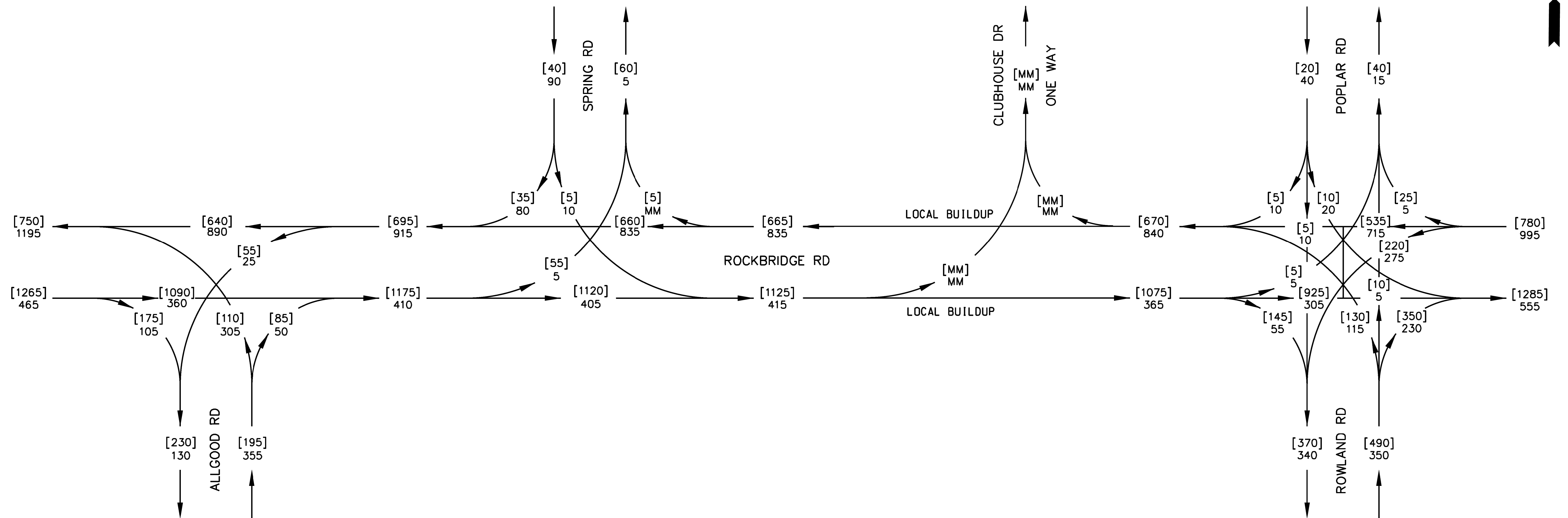
SHEET 3 OF 3

BUILD = NO BUILD

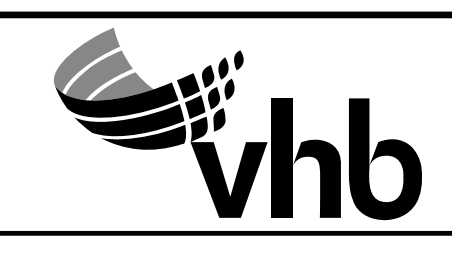
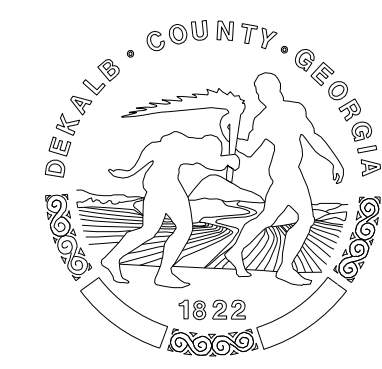
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Office of Planning

DEKALB COUNTY



PROJECT NUMBER
CSTEE-0008-00(121)
P.I.# 0008121
DEKALB COUNTY
CR 7938/ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO
ROWLAND ROAD
FUTURE 2038 DHV
AM [PM] = 000 [000]
TRAFFIC VOLUMES
PEAK HOUR TRUCKS = 8.6%
SU = 7.9%
COMB. = 0.7%
06/2014



REVISION DATES

NO.	DATE	DESCRIPTION

TRAFFIC DIAGRAM

ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

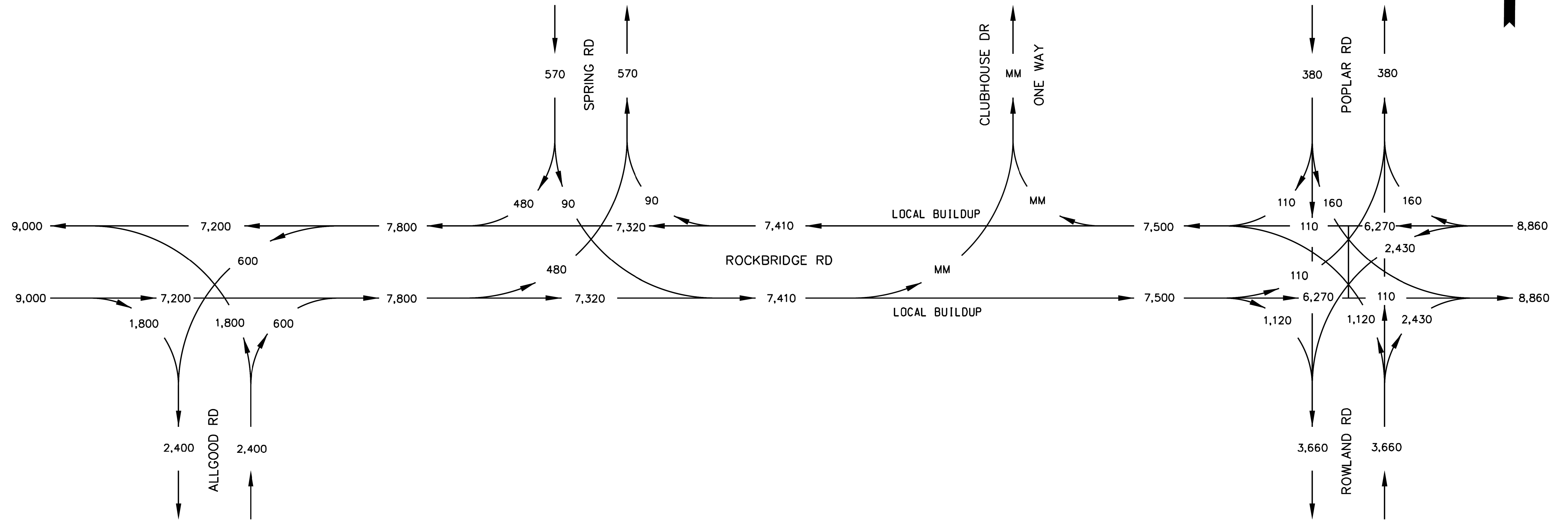
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BACKCHECKED:	DATE:	10-0003
CORRECTED:	DATE:	
VERIFIED:	DATE:	

SHEET 1 OF 2

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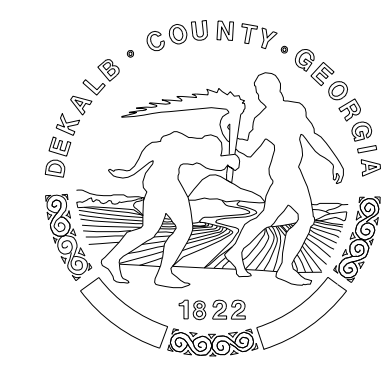
GEORGIA DEPARTMENT OF TRANSPORTATION
Office of Planning

DEKALB COUNTY



PROJECT NUMBER
CSTEE-0008-00(121)
P.I.* 0008121
DEKALB COUNTY
CR 7938/ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO
ROWLAND ROAD
EXISTING 2013 ADT = 000
TRAFFIC VOLUMES

24 HOUR T = 7.3%
SU = 6.7%
COMB. = 0.6%
CAB
06/2014



REVISION DATES	

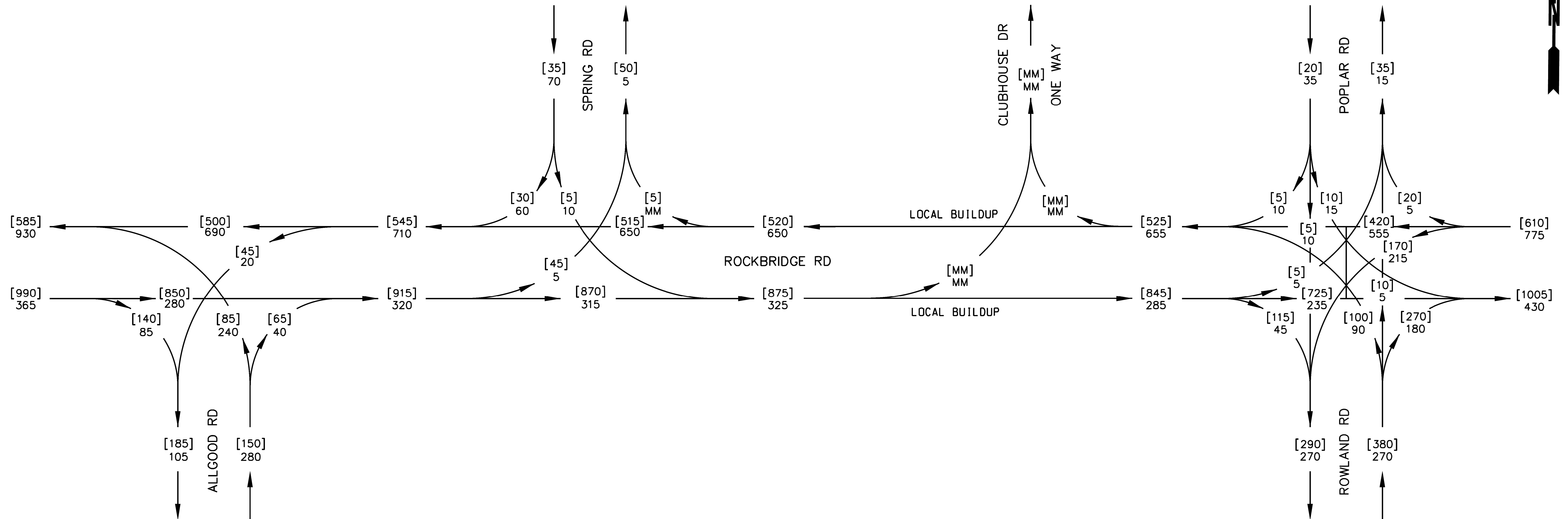
TRAFFIC DIAGRAM		
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD		
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	10-0004
CORRECTED:	DATE:	
VERIFIED:	DATE:	

SHEET 2 OF 2

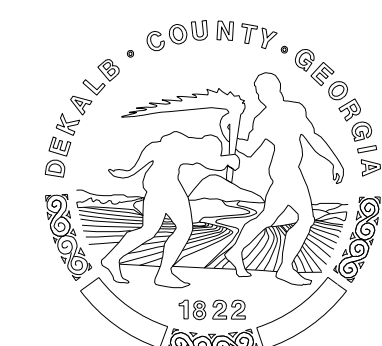
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DEKALB COUNTY



PROJECT NUMBER
 CSTE-0008-00(121)
 P.I.# 0008121
 DEKALB COUNTY
 CR 7938/ROCKBRIDGE ROAD
 FROM ALLGOOD ROAD TO
 ROWLAND ROAD
 EXISTING 2013 DHV
 AM [PM] = 000 [000]
 TRAFFIC VOLUMES
 PEAK HOUR TRUCKS = 8.6%
 SU = 7.9%
 COMB. = 0.7% CAB
 06/2014



REVISION DATES

NO.	DATE	DESCRIPTION

TRAFFIC DIAGRAM

ROCKBRIDGE ROAD
 FROM ALLGOOD ROAD TO ROWLAND ROAD

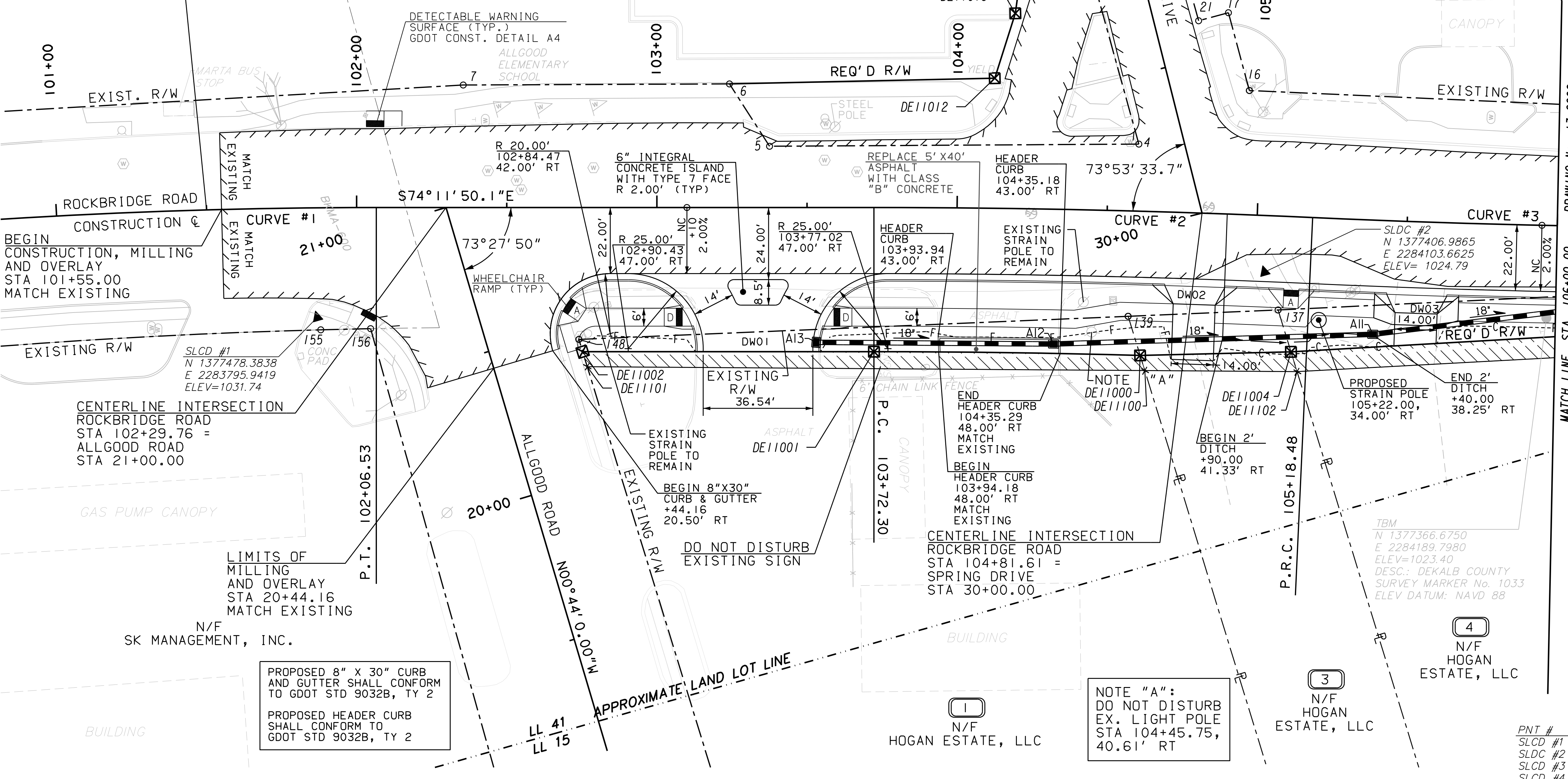
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	10-0005
CORRECTED:	DATE:	
VERIFIED:	DATE:	

CURVE #1
 PI STA= 101+15.46
 N= 1377533.0551
 E= 2283737.0772
 DELTA= 05°13'17.3" RT
 D= 02°51'53.2"
 T= 91.20'
 L= 182.26'
 R= 2000.00'
 E= 2.08'
 SE= NC

CURVE #2
 PI STA= 104+45.40
 N= 1377443.1693
 E= 2284054.6685
 DELTA= 02°37'02.6" RT
 D= 01°47'25.8"
 T= 73.10'
 L= 146.18'
 R= 3200.00'
 E= 0.83'
 SE= NC

CURVE #3
 PI STA= 105+95.52
 N= 1377395.7284
 E= 2284197.1138
 DELTA= 02°45'28.9" LT
 D= 01°47'25.8"
 T= 77.03'
 L= 154.04'
 R= 3200.00'
 E= 0.93'
 SE= NC

BEGIN PROJECT
 0008121/0012789
 ROCKBRIDGE ROAD
 STA 101+50.00
 N 1377522.8451
 E 2283770.2182

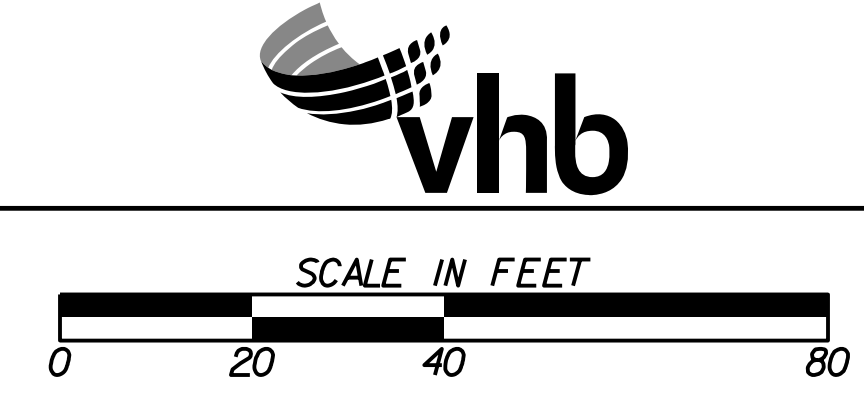
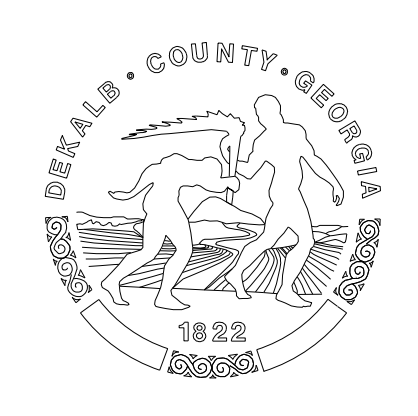


POINT	STATION	OFFSET
148	102+74.01	43.92 RT
139	104+57.91	35.09 RT
DE11000	104+62.33	48.00 RT
DE11001	103+72.30	48.00 RT
DE11002	102+75.27	48.00 RT
DE11100	104+64.05	53.00 RT
DE11101	102+76.81	53.00 RT
6	103+24.17	41.16 LT
DE11012	104+12.00	43.32 LT
DE11013	104+18.45	65.00 LT
DE11014	104+26.80	135.00 LT
4	104+59.93	22.33 LT
5	103+37.53	20.40 LT
137	105+08.28	31.26 RT
DE11004	105+13.23	45.00 RT
DE11102	105+15.58	51.50 RT

CONTROL POINT DATA TABLE			
PNT #	NORTHING	EASTING	ELEV.
SLCD #1	1377478.3838	2283795.9419	1031.74
SLDC #2	1377406.9865	2284103.6625	1024.79
SLCD #3	1377282.0988	2285431.1881	980.14
SLCD #4	1377289.3653	2285724.1920	974.51

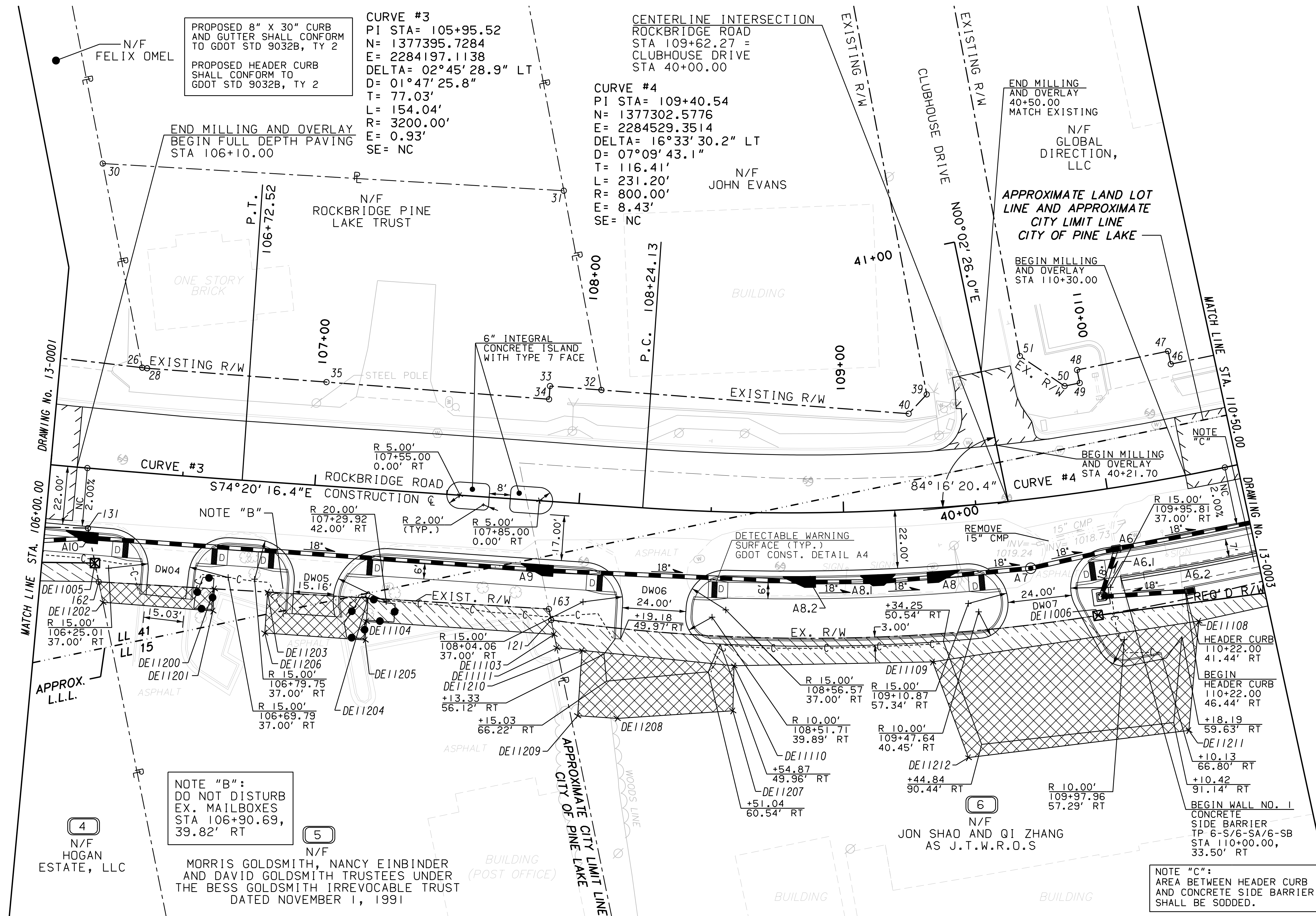
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



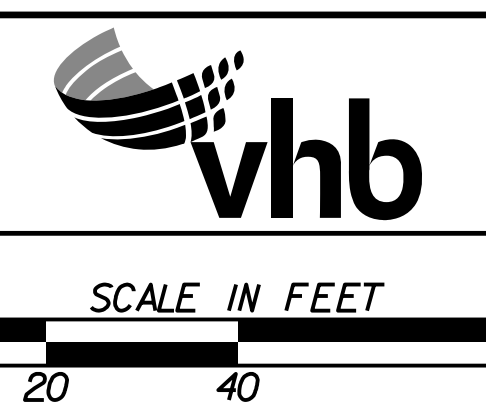
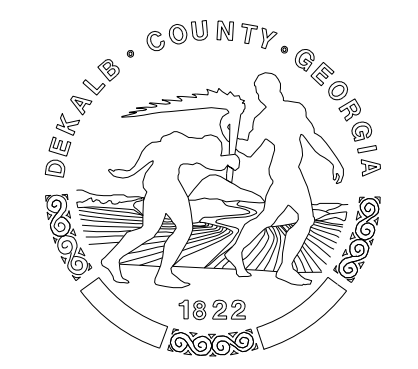
REVISION DATES	

MAINLINE PLAN			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
		13-0001	
BACHECKED:	DATE:		
CORRECTED:	DATE:		
VERIFIED:	DATE:		



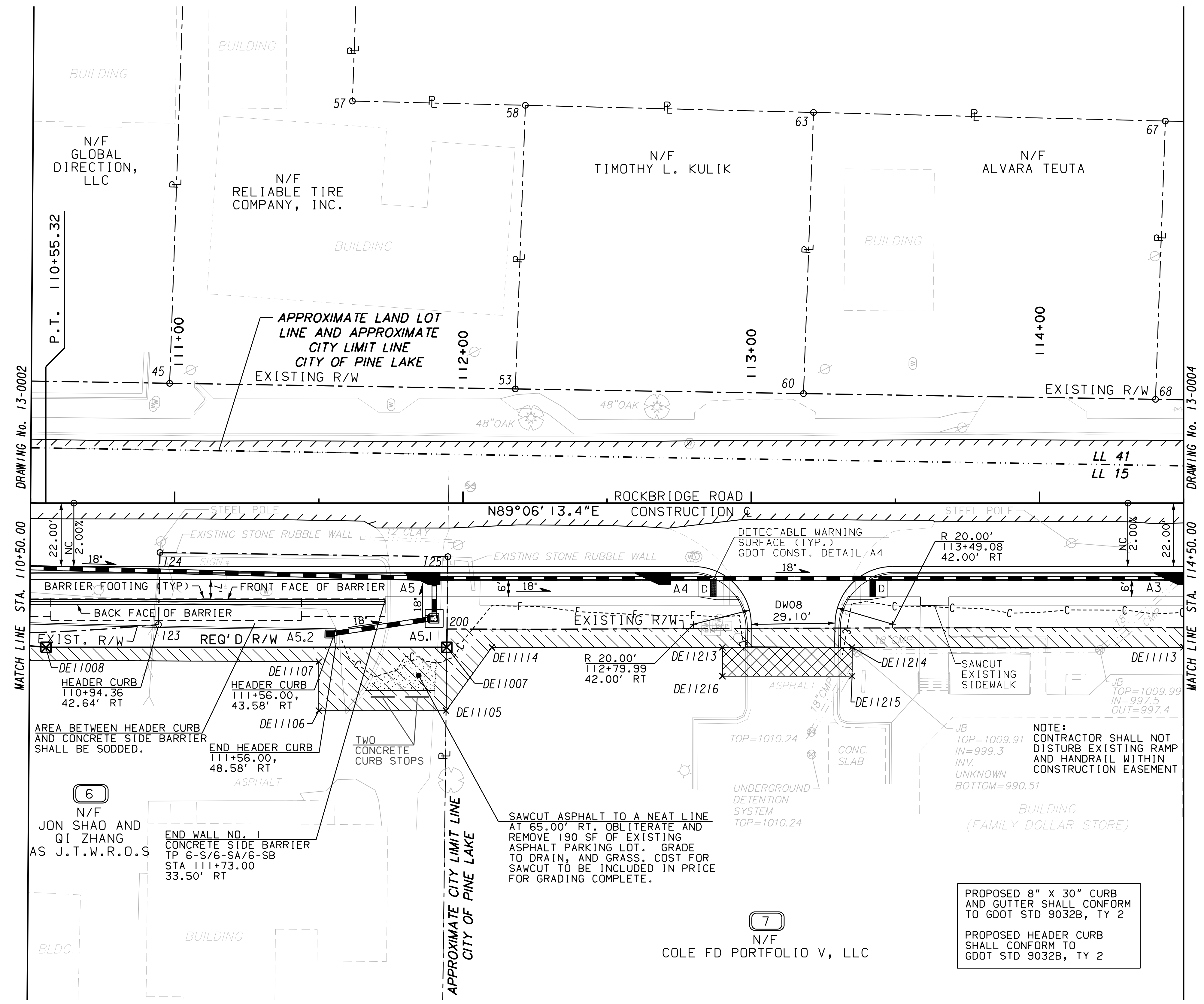
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

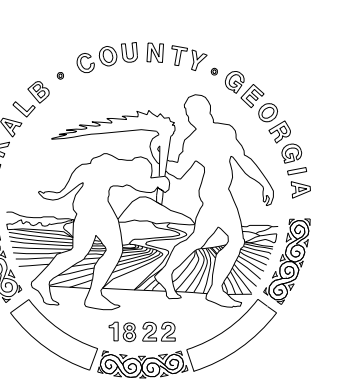
MAINLINE PLAN		
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD		
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	13-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	



POINT	STATION	OFFSET
123	110+94.38	42.14 RT
124	110+94.90	17.15 RT
125	111+94.76	18.59 RT
200	111+94.47	43.66 RT
DE11007	111+94.40	50.00 RT
DE11008	110+55.32	50.00 RT
DE11105	111+94.14	72.00 RT
DE11106	111+50.00	72.00 RT
DE11107	111+50.00	55.00 RT
DE11113	114+50.00	50.00 RT
DE11114	112+10.00	50.00 RT
DE11213	112+90.00	50.00 RT
DE11214	113+35.00	50.00 RT
DE11215	113+35.00	60.00 RT
DE11216	112+90.00	60.00 RT

PROPOSED 8" X 30" CURB AND GUTTER SHALL CONFORM TO GDOT STD 9032B, TY 2

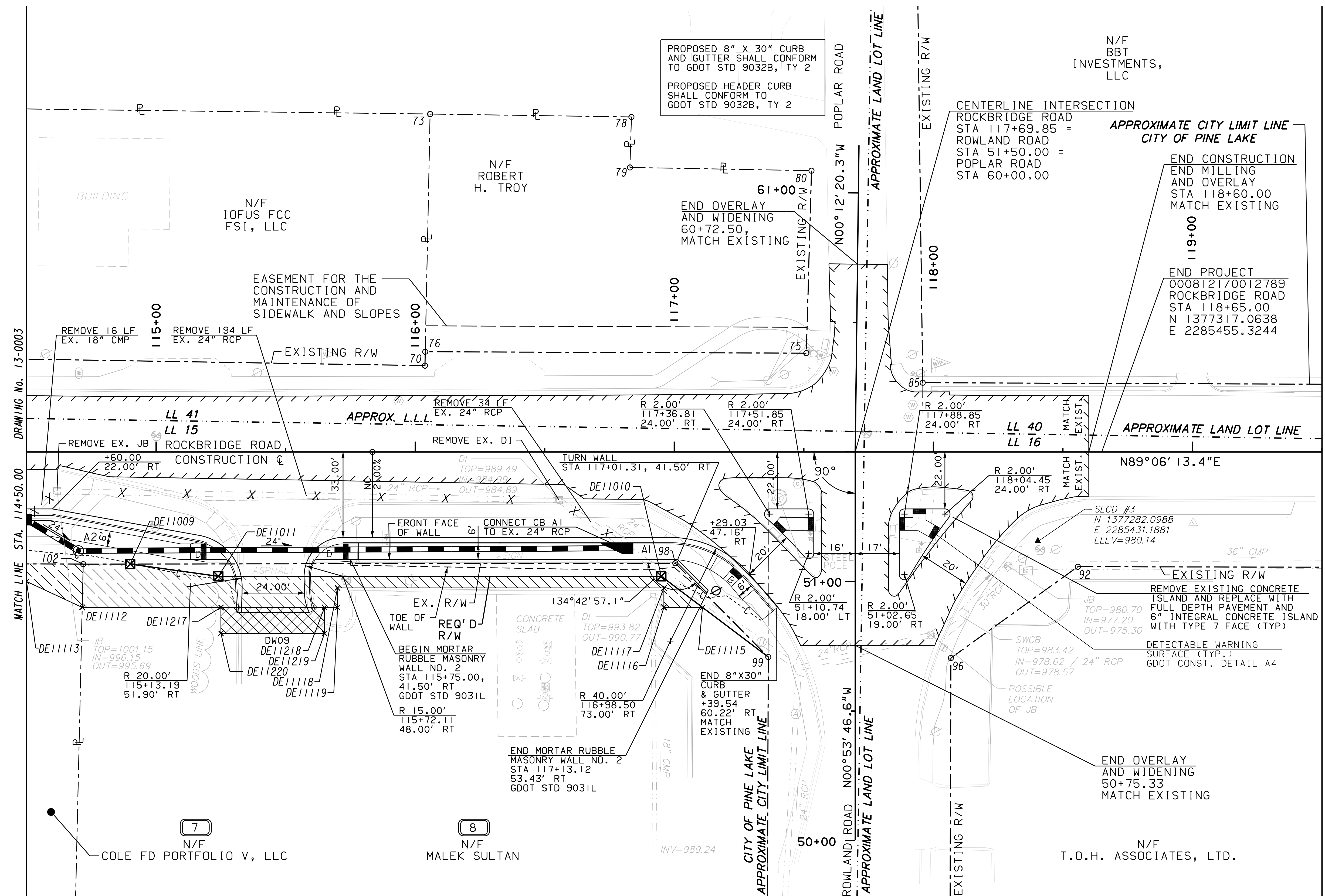
PROPOSED HEADER CURB SHALL CONFORM TO GDOT STD 9032B, TY 2



REVISION DATES	

MAINLINE PLAN			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	13-0003	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

PROPERTY AND EXISTING R/W LINE	--- P ---	BEGIN LIMIT OF ACCESS.....BLA
REQUIRED R/W LINE	--- C --- <td>END LIMIT OF ACCESS.....ELA </td>	END LIMIT OF ACCESS.....ELA
CONSTRUCTION LIMITS	--- F --- <td>LIMIT OF ACCESS </td>	LIMIT OF ACCESS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	[Hatched Box]	REQ'D R/W & LIMIT OF ACCESS
EASEMENT FOR CONSTR OF SLOPES	[Diagonal Hatched Box]	ORANGE BARRIER FENCE
EASEMENT FOR CONSTR OF DRIVES	[Cross-hatched Box]	ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

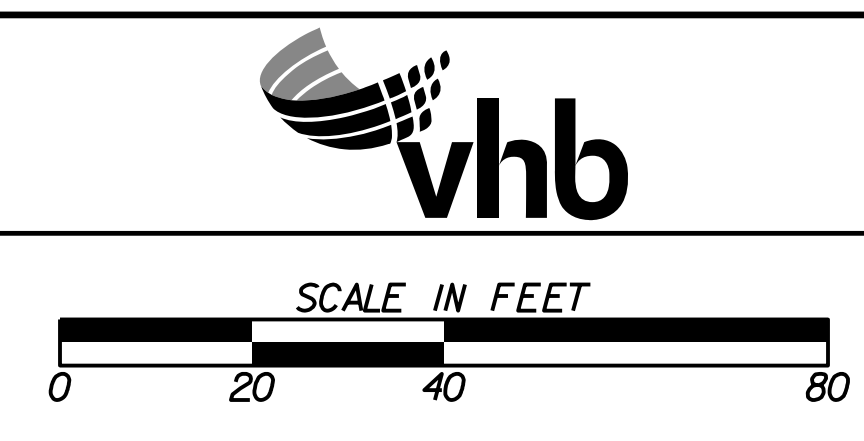
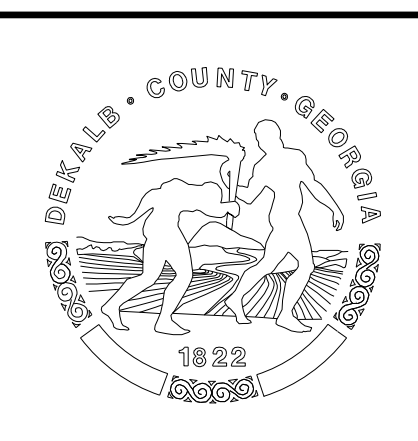


DRAWING No. 13-0003
DRAWING No. 13-0005
MATCH LINE STA. 114+50.00
MATCH LINE STA. 119+50.00

POINT	STATION	OFFSET
102	114+71.84	43.30 RT
DE1112	114+71.46	60.00 RT
DE1113	114+50.00	50.00 RT
DE11009	114+90.00	43.28 RT
98	117+00.40	42.96 RT
99	117+36.27	79.19 RT
DE11010	116+95.00	48.00 RT
DE11011	115+24.00	48.00 RT
DE11115	117+10.88	60.00 RT
DE11116	116+96.00	60.00 RT
DE11117	116+96.00	52.50 RT
DE11118	115+70.00	52.50 RT
DE11119	115+70.00	60.00 RT
DE11217	115+25.00	60.00 RT
DE11218	115+65.00	60.00 RT
DE11219	115+65.00	70.00 RT
DE11220	115+25.00	70.00 RT

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

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 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)

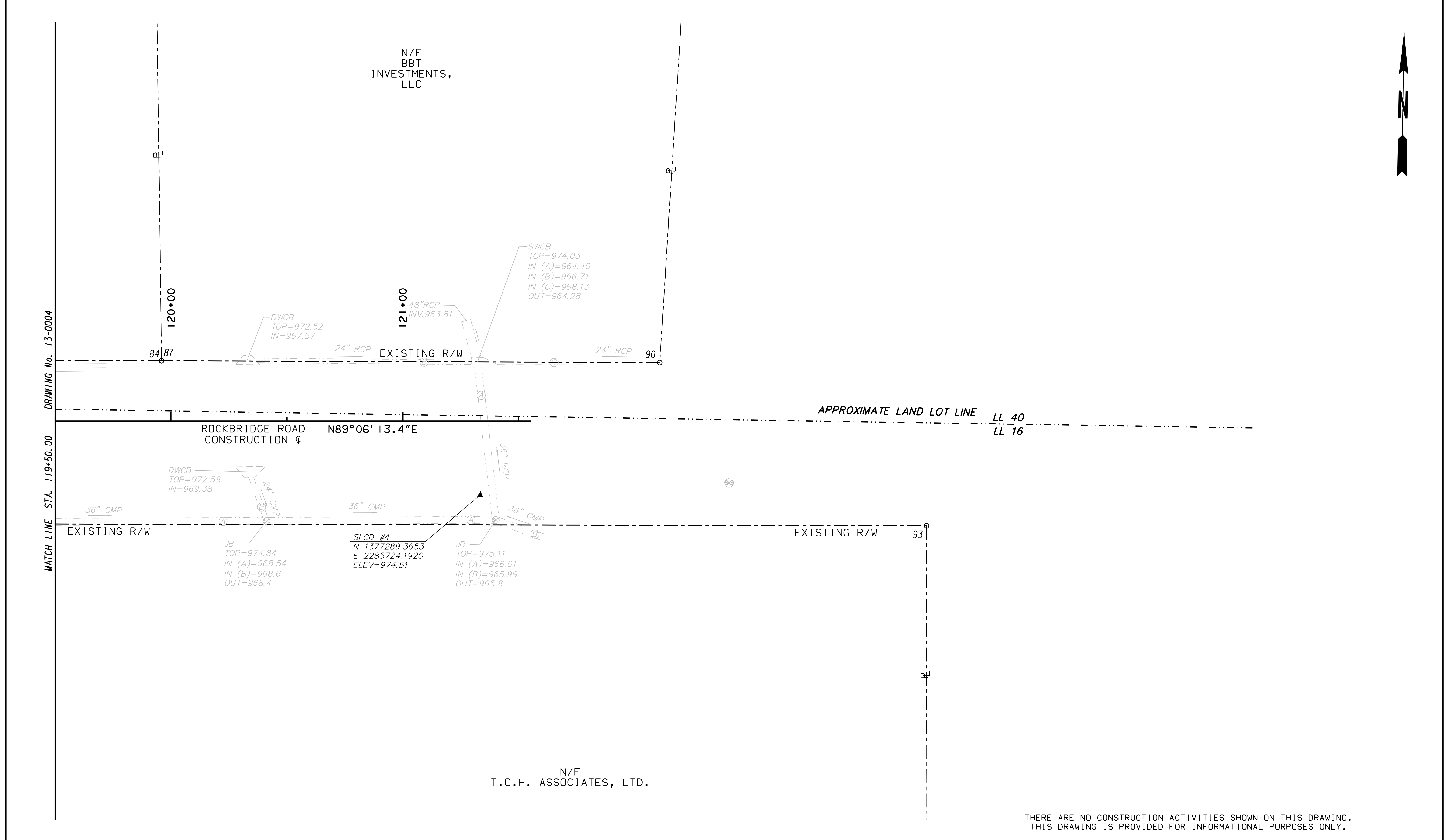


REVISION DATES	

MAINLINE PLAN
ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

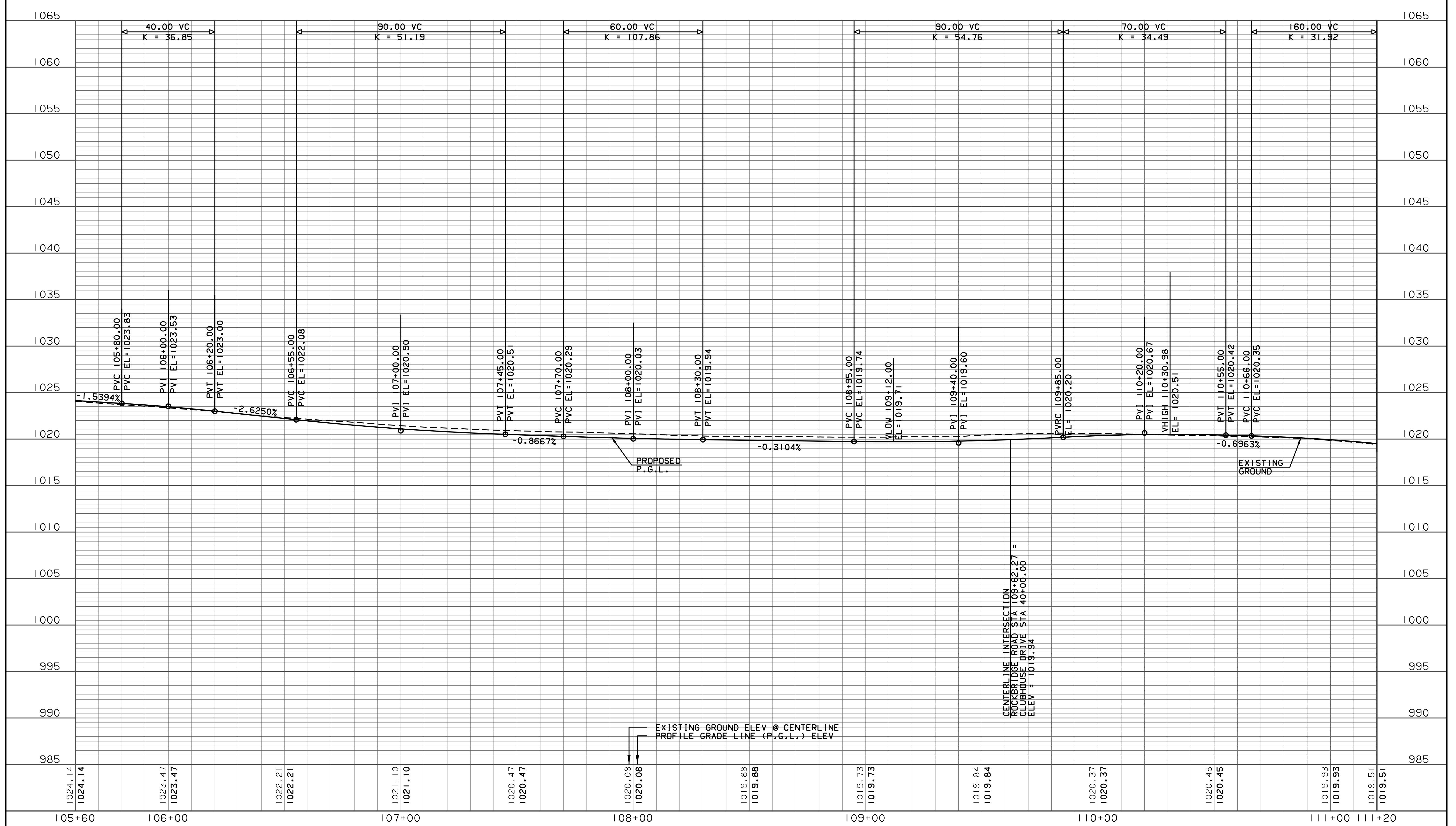
CHECKED: DATE: DRAWING No.
 BACKCHECKED: DATE:
 CORRECTED: DATE:
 VERIFIED: DATE:

13-0004



THERE ARE NO CONSTRUCTION ACTIVITIES SHOWN ON THIS DRAWING. THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

<p>PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES EASEMENT FOR CONSTR OF SLOPES EASEMENT FOR CONSTR OF DRIVES</p>	<p>--- P --- --- --- C --- F --- [Hatched Box] [Hatched Box] [Hatched Box]</p>	<p>BEGIN LIMIT OF ACCESS.....BLA END LIMIT OF ACCESS.....ELA LIMIT OF ACCESS REQ'D R/W & LIMIT OF ACCESS ORANGE BARRIER FENCE ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)</p>			<p>SCALE IN FEET</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="2">REVISION DATES</th> </tr> </thead> <tbody> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </tbody> </table>	REVISION DATES																<p>MAINLINE PLAN</p> <p>ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>CHECKED:</td> <td>DATE:</td> <td rowspan="4" style="text-align: center; vertical-align: middle;">DRAWING No. 13-0005</td> </tr> <tr> <td>BACKCHECKED:</td> <td>DATE:</td> </tr> <tr> <td>CORRECTED:</td> <td>DATE:</td> </tr> <tr> <td>VERIFIED:</td> <td>DATE:</td> </tr> </table>	CHECKED:	DATE:	DRAWING No. 13-0005	BACKCHECKED:	DATE:	CORRECTED:	DATE:	VERIFIED:	DATE:
REVISION DATES																																
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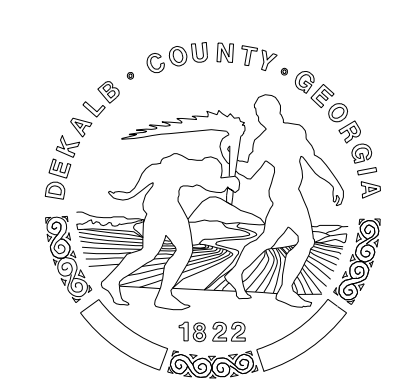


CENTERLINE INTERSECTION
 ROCKBRIDGE ROAD STA 109+62.27 =
 CLUBHOUSE DRIVE STA 40+00.00
 ELEV = 1019.94

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

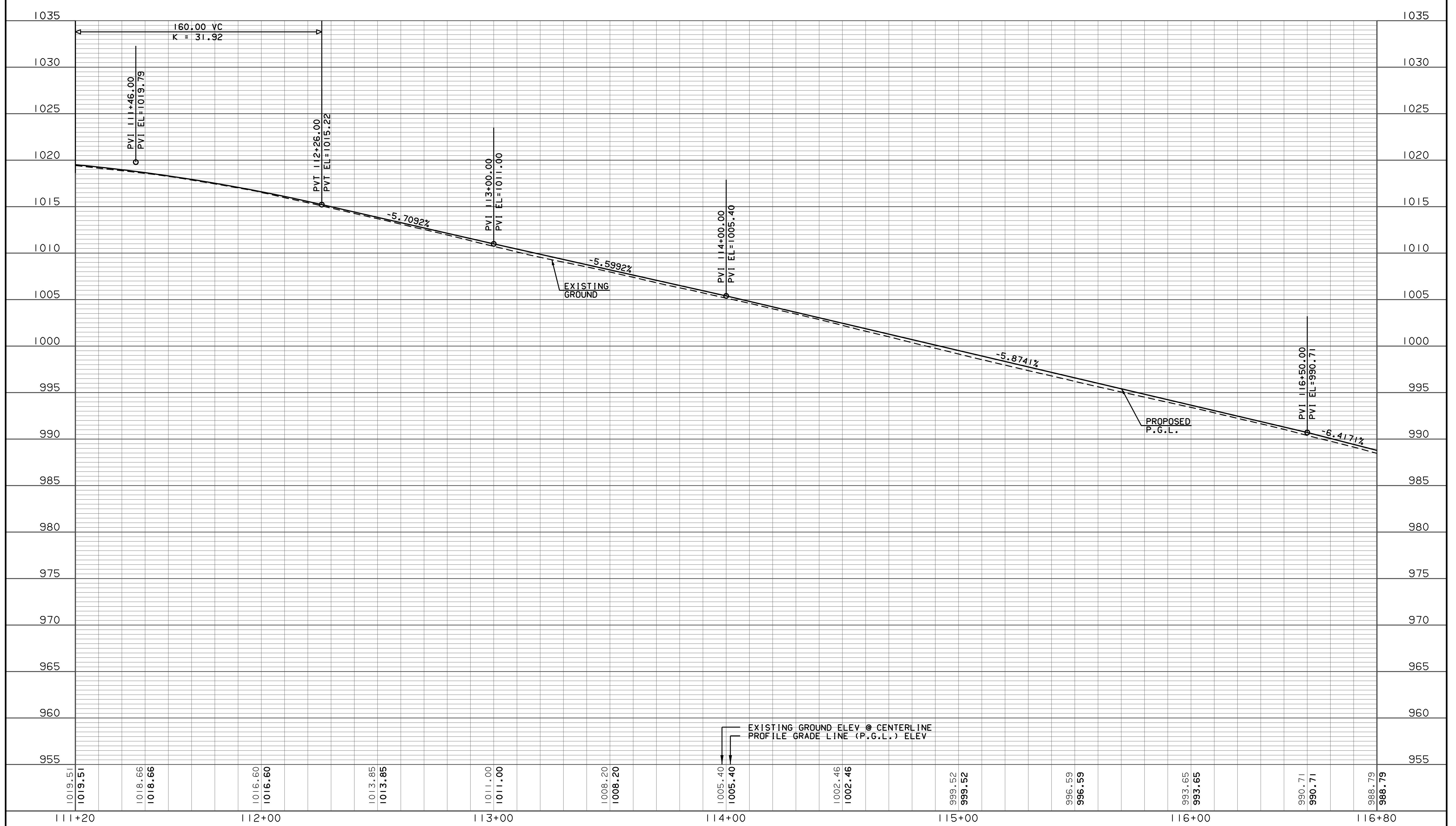
--- P ---
 --- F ---
 --- C ---
 --- O ---
 --- H ---
 --- B ---
 --- T ---

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

MAINLINE PROFILE			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	15-0002	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

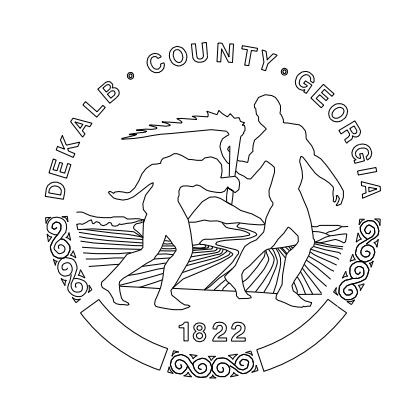


SCALE: 1"=20' HORIZONTAL, 1"=5' VERTICAL

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

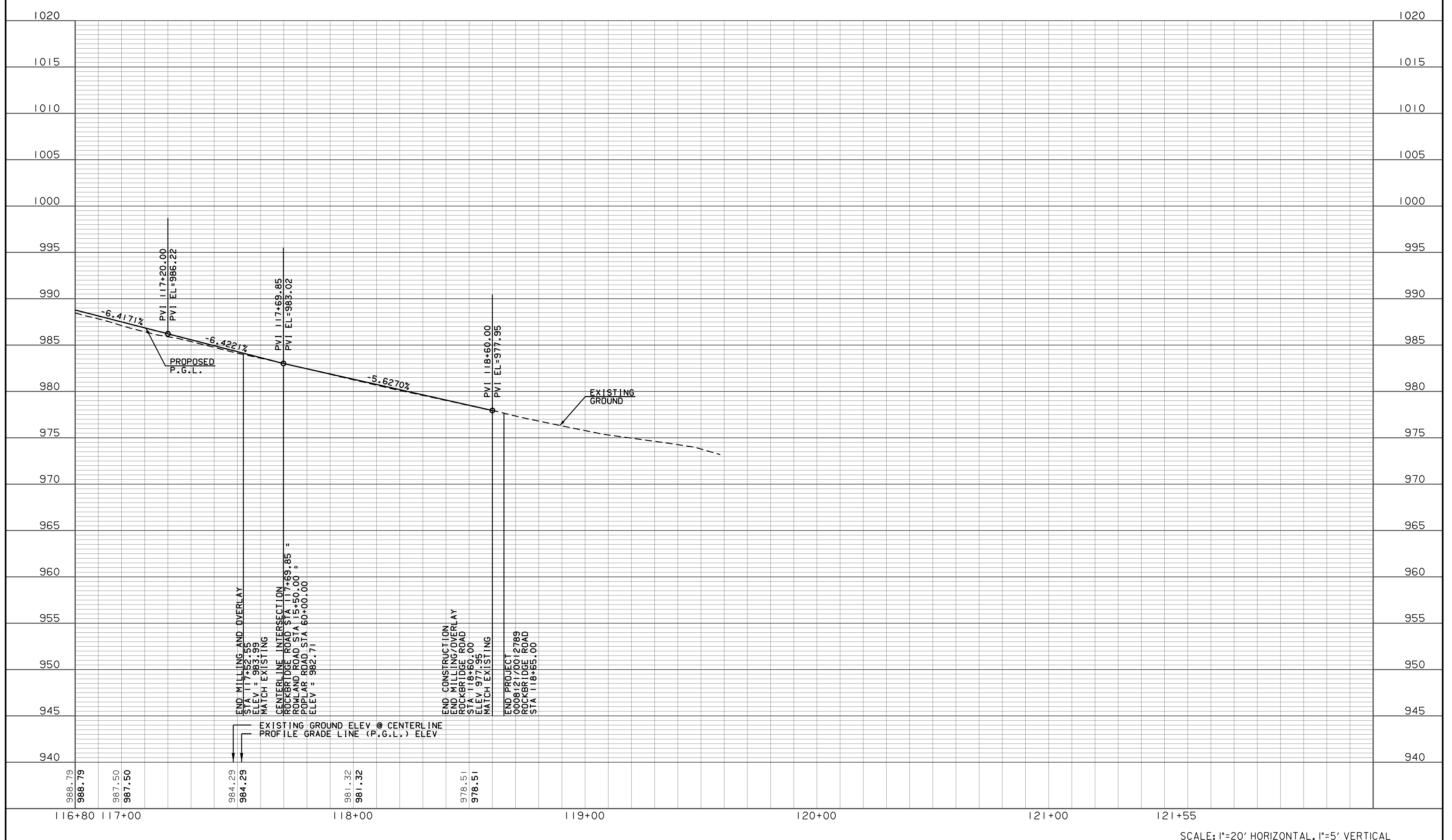
--- P ---
 --- F ---
 --- C ---
 --- H ---
 --- O ---
 --- B ---
 --- S ---

BEGIN LIMIT OF ACCESS.....BLA
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 LIMIT OF ACCESS
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REVISION DATES	

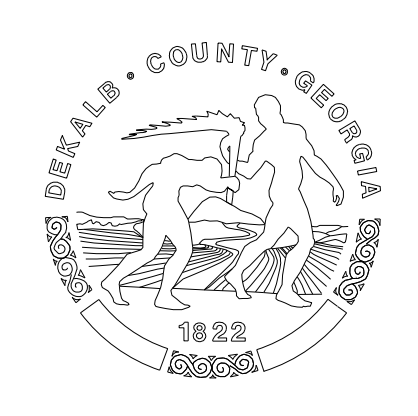
MAINLINE PROFILE			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	15-0003	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



SCALE: 1"=20' HORIZONTAL, 1"=5' VERTICAL

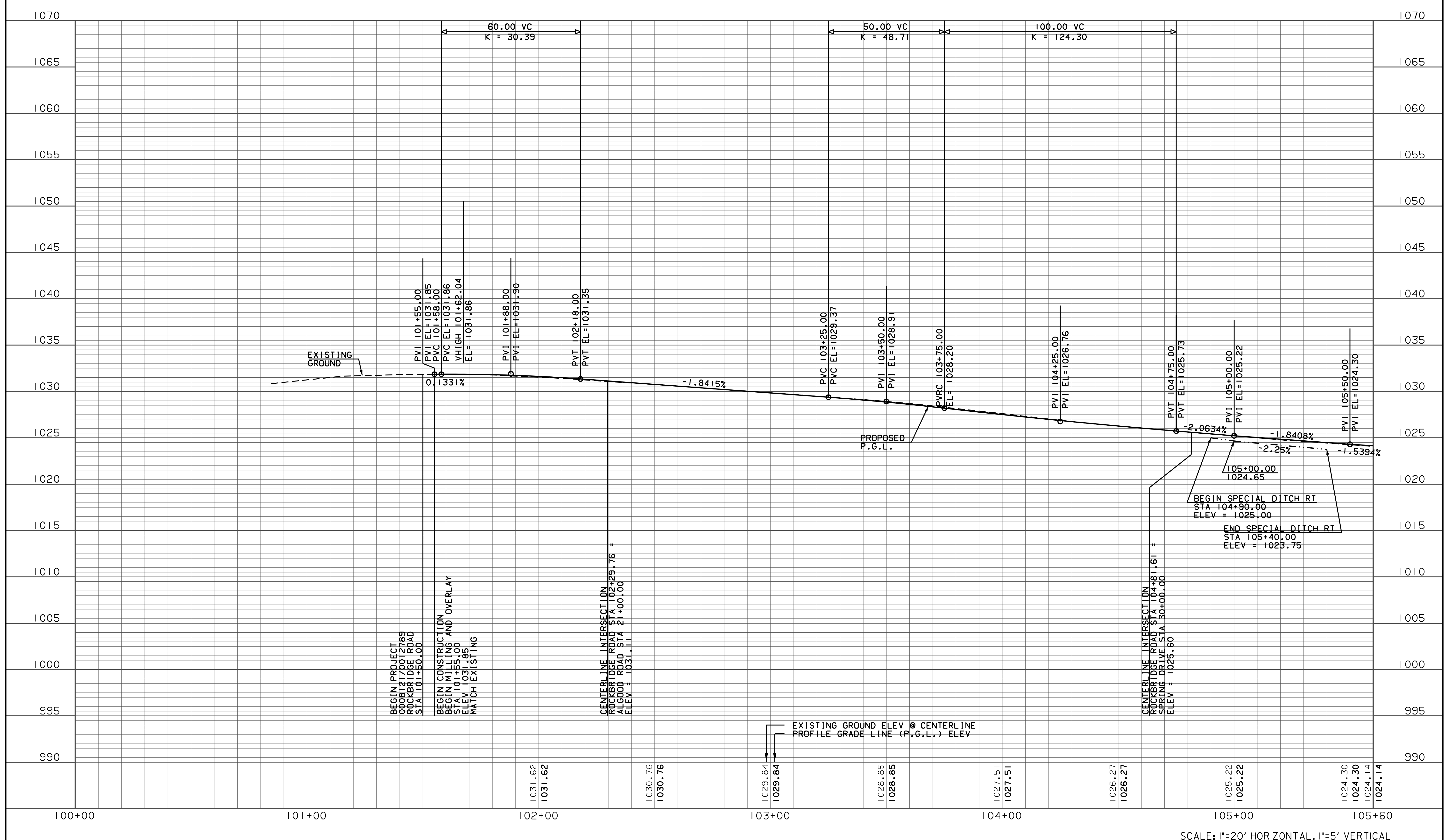
PROPERTY AND EXISTING R/W LINE
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REVISION DATES	

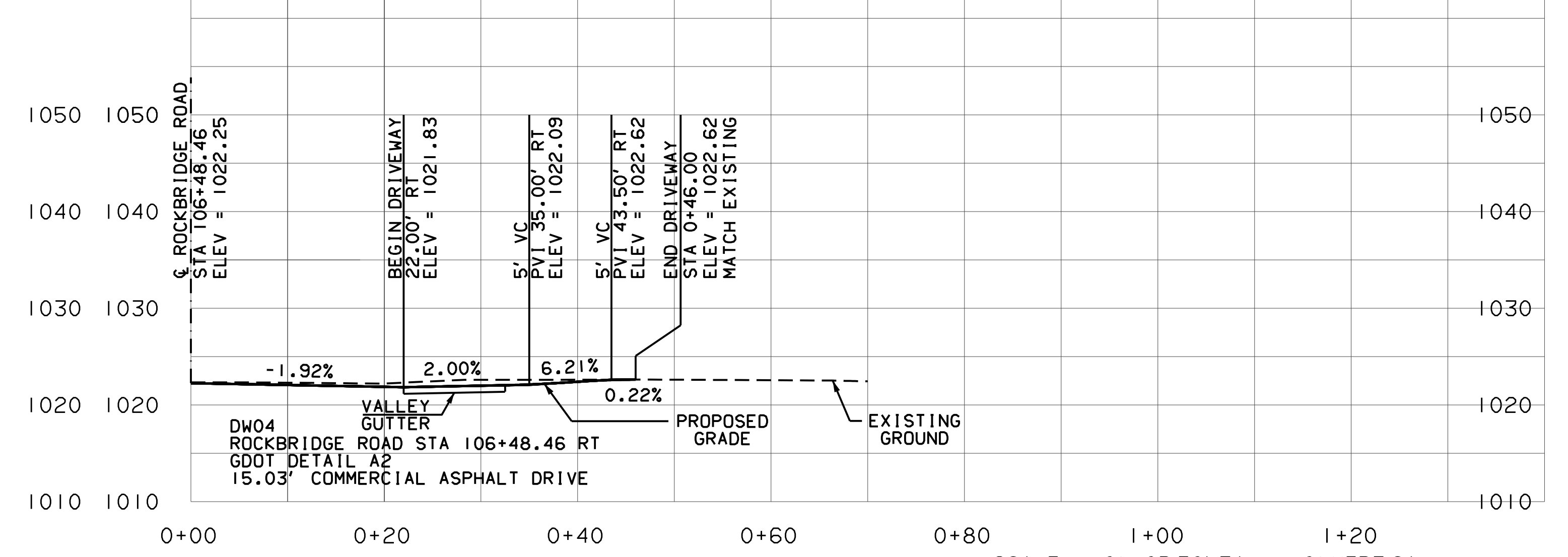
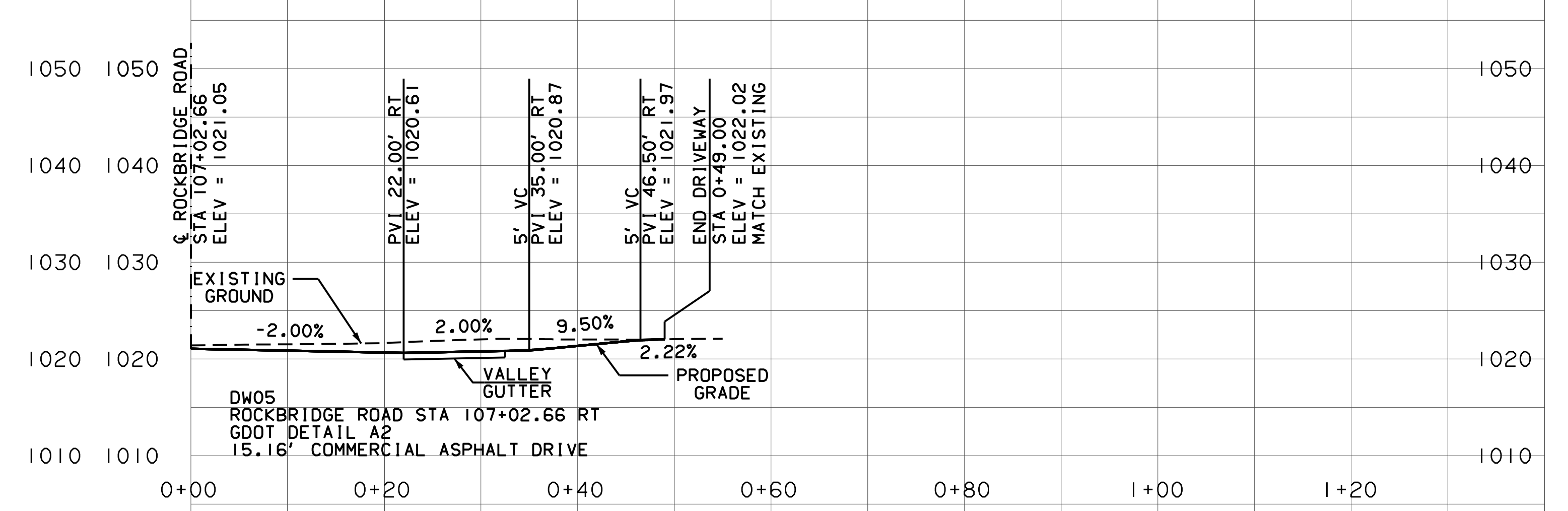
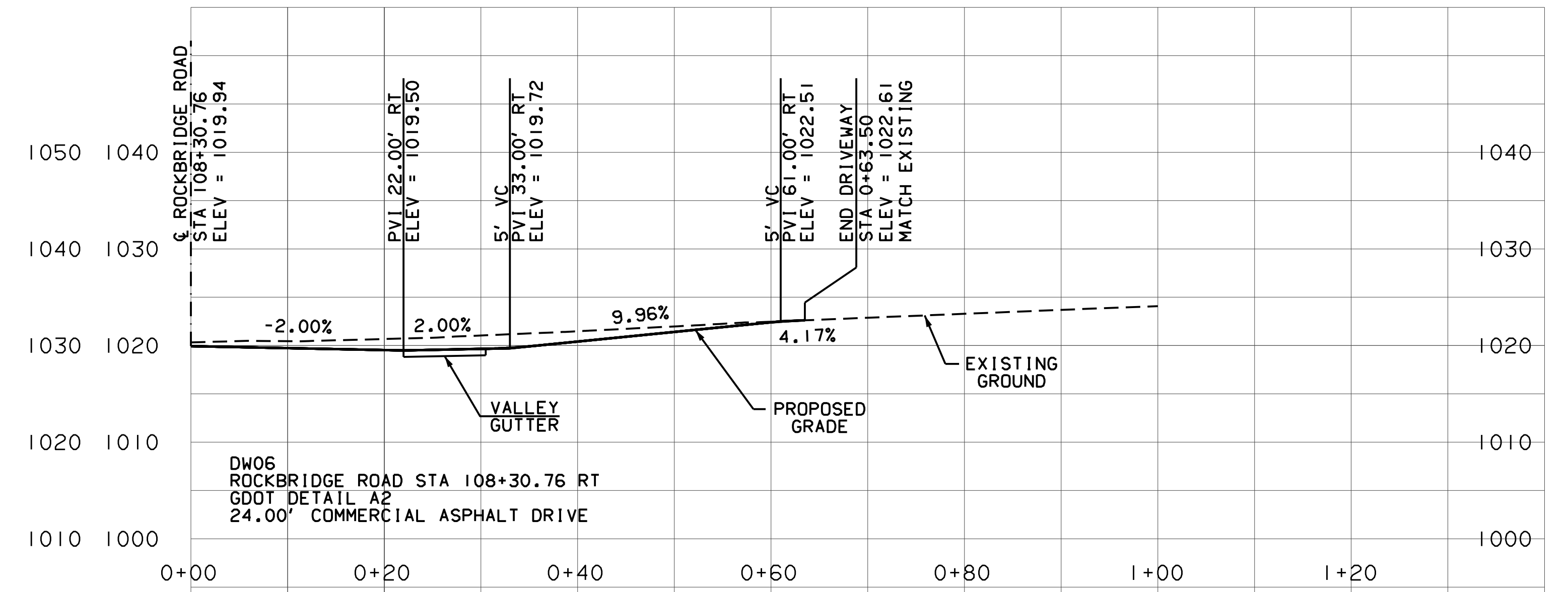
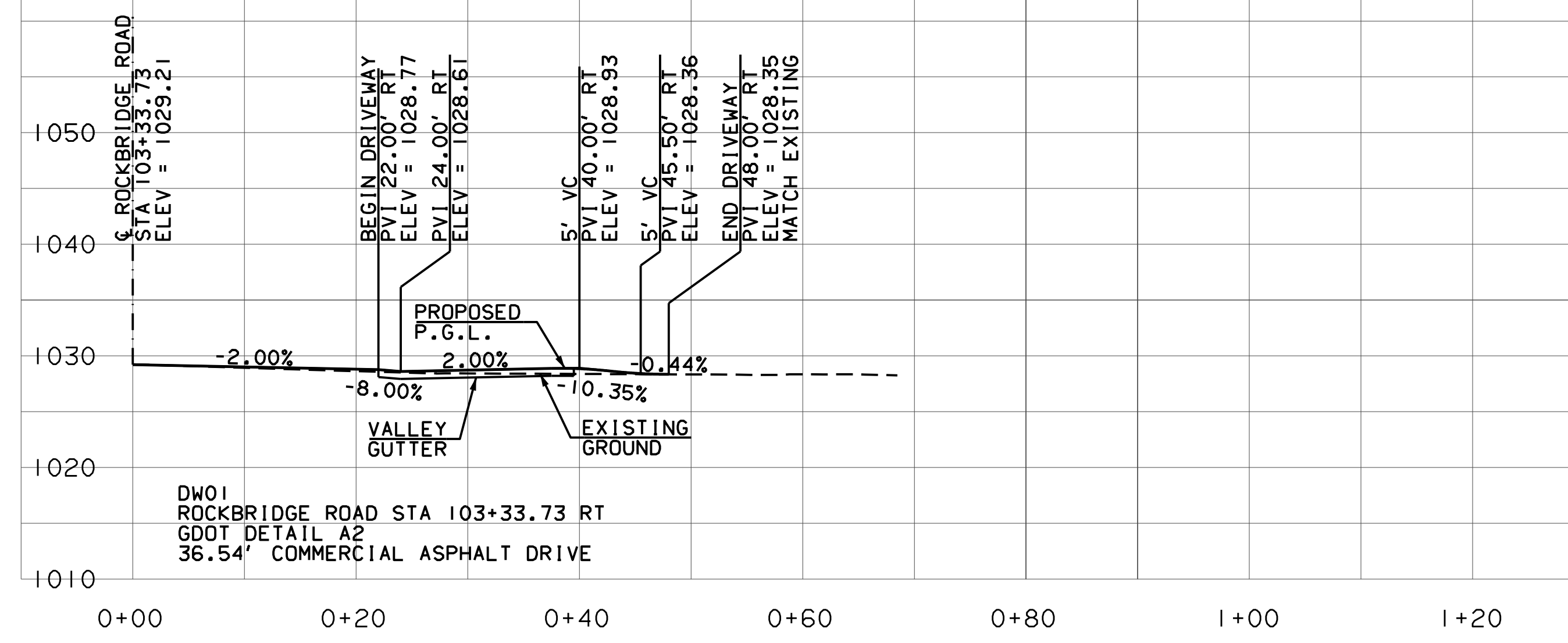
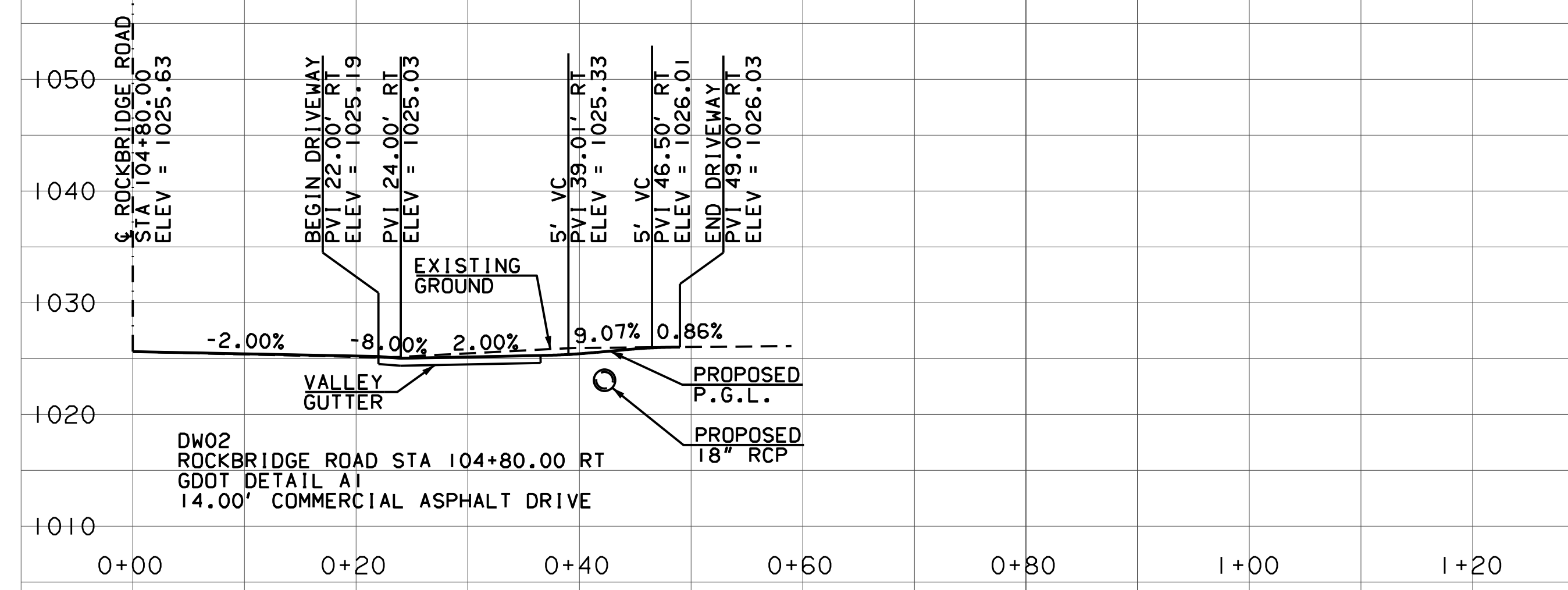
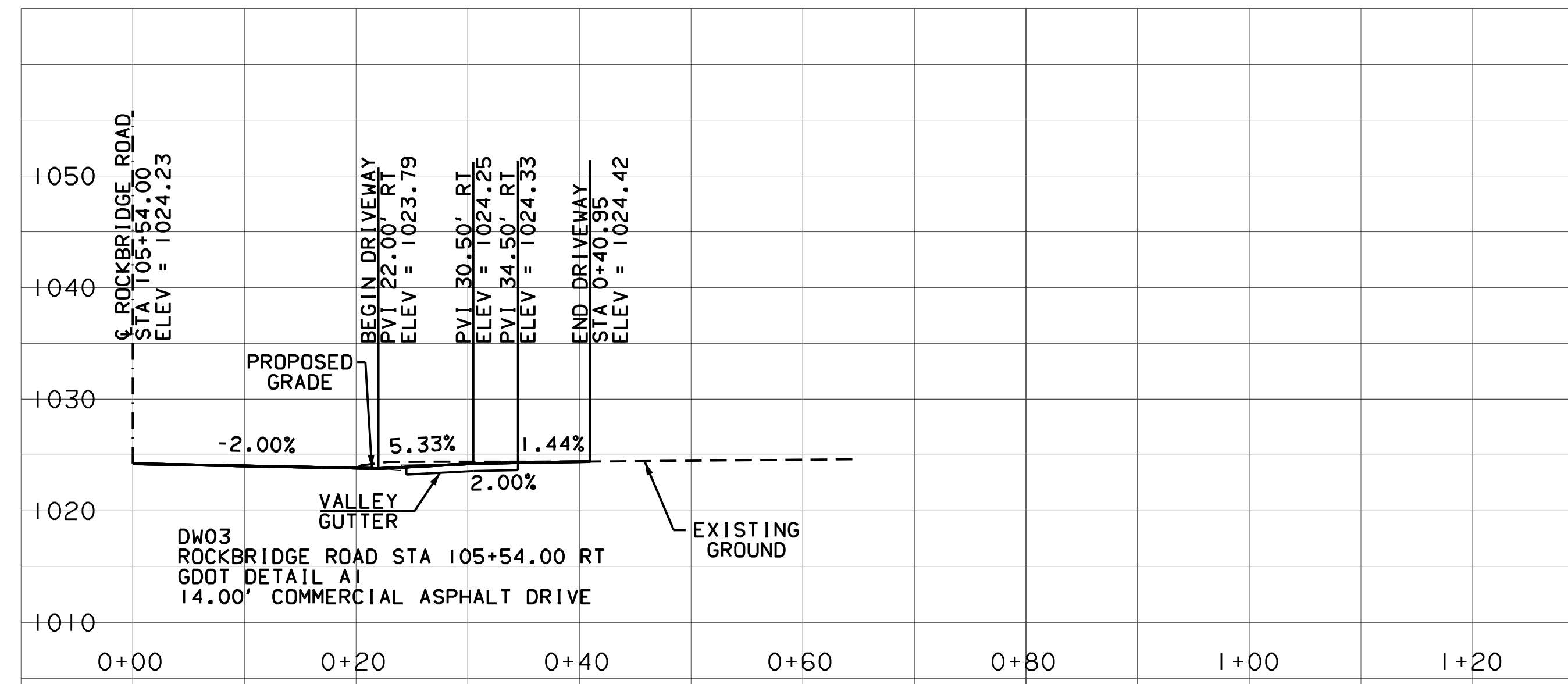
MAINLINE PROFILE			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	15-0004	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



8/28/2015 CONBDP

<p>PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES EASEMENT FOR CONSTR OF SLOPES EASEMENT FOR CONSTR OF DRIVES</p>	<p>BEGIN LIMIT OF ACCESS.....BLA END LIMIT OF ACCESS.....ELA LIMIT OF ACCESS REQ'D R/W & LIMIT OF ACCESS ORANGE BARRIER FENCE ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)</p>			REVISION DATES	<p>MAINLINE PROFILE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD</p>	
				<p>CHECKED: _____ DATE: _____ BACKCHECKED: _____ DATE: _____ CORRECTED: _____ DATE: _____ VERIFIED: _____ DATE: _____</p>	<p>DRAWING No. 15-0001</p>	

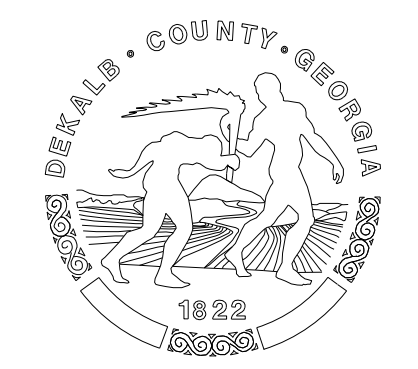
SCALE: 1"=20' HORIZONTAL, 1"=5' VERTICAL



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
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EASEMENT FOR CONSTR
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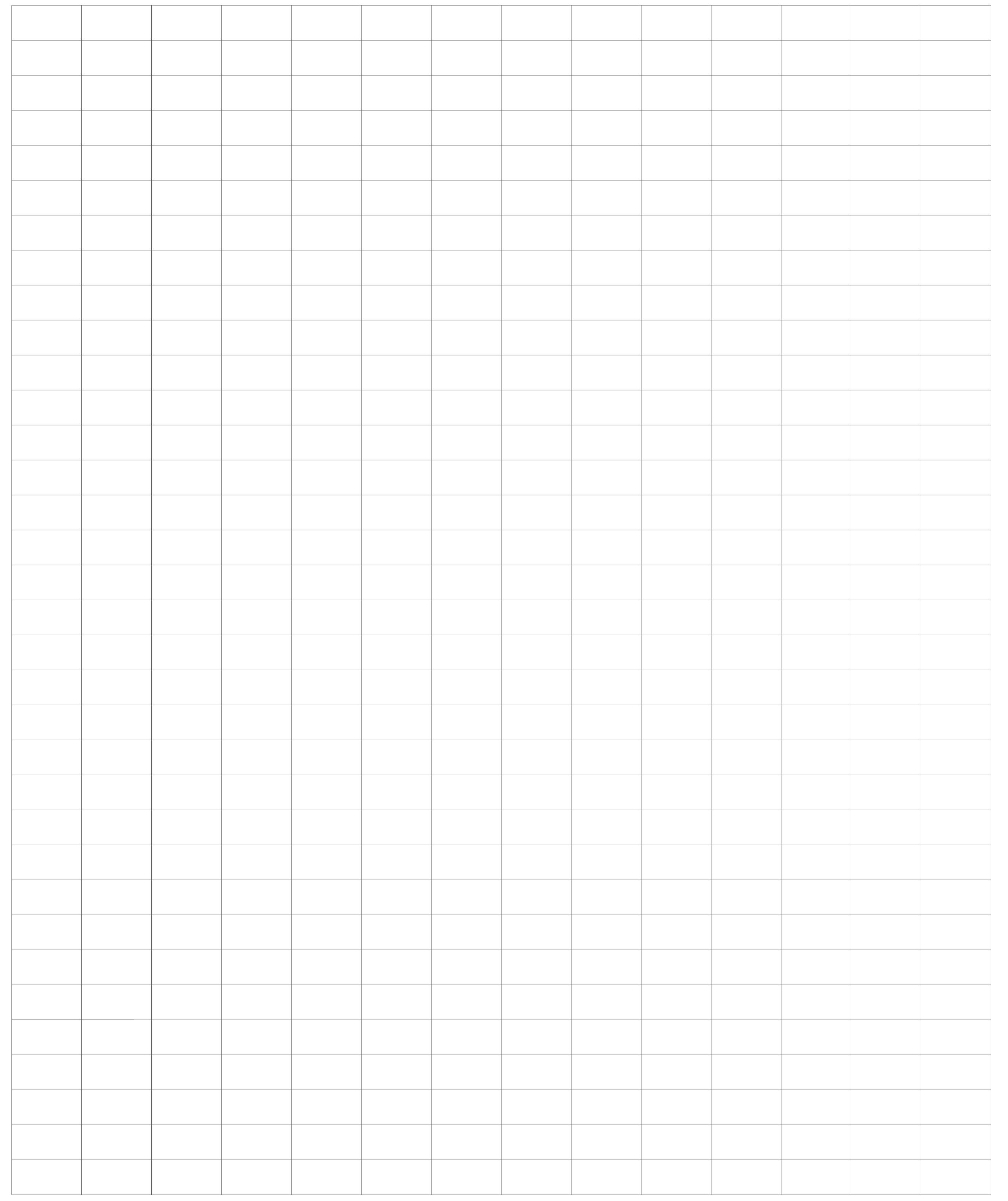
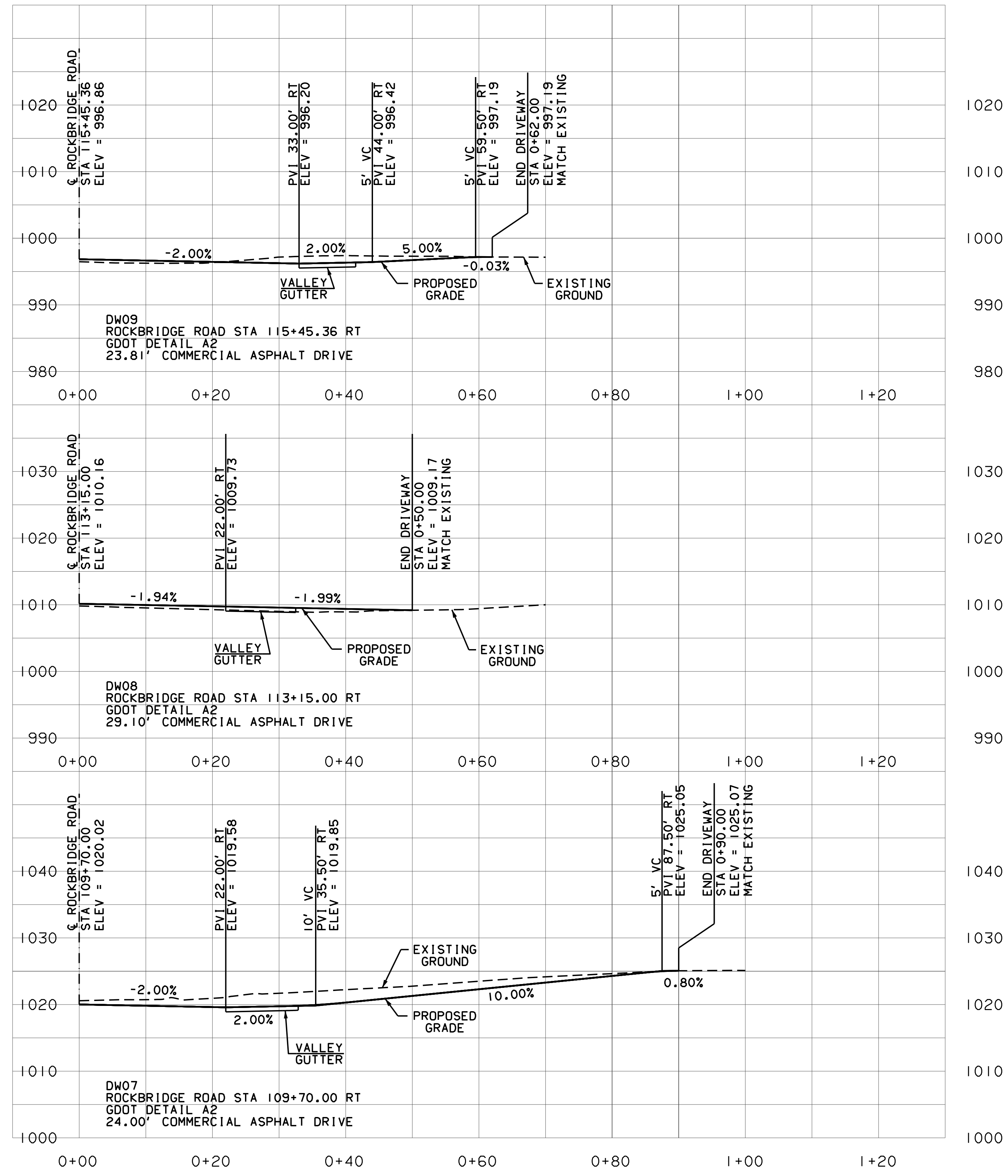
REVISION DATES

NO.	DATE	DESCRIPTION

DRIVEWAY PROFILE

ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

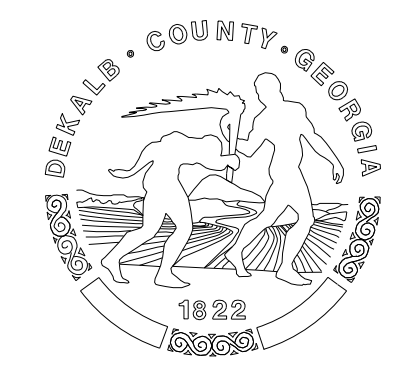
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	17-0001
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---#--- BEGIN LIMIT OF ACCESS.....BLA
---#--- END LIMIT OF ACCESS.....ELA
---#--- LIMIT OF ACCESS
---#--- REQ'D R/W & LIMIT OF ACCESS
---#--- ORANGE BARRIER FENCE
---#--- ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

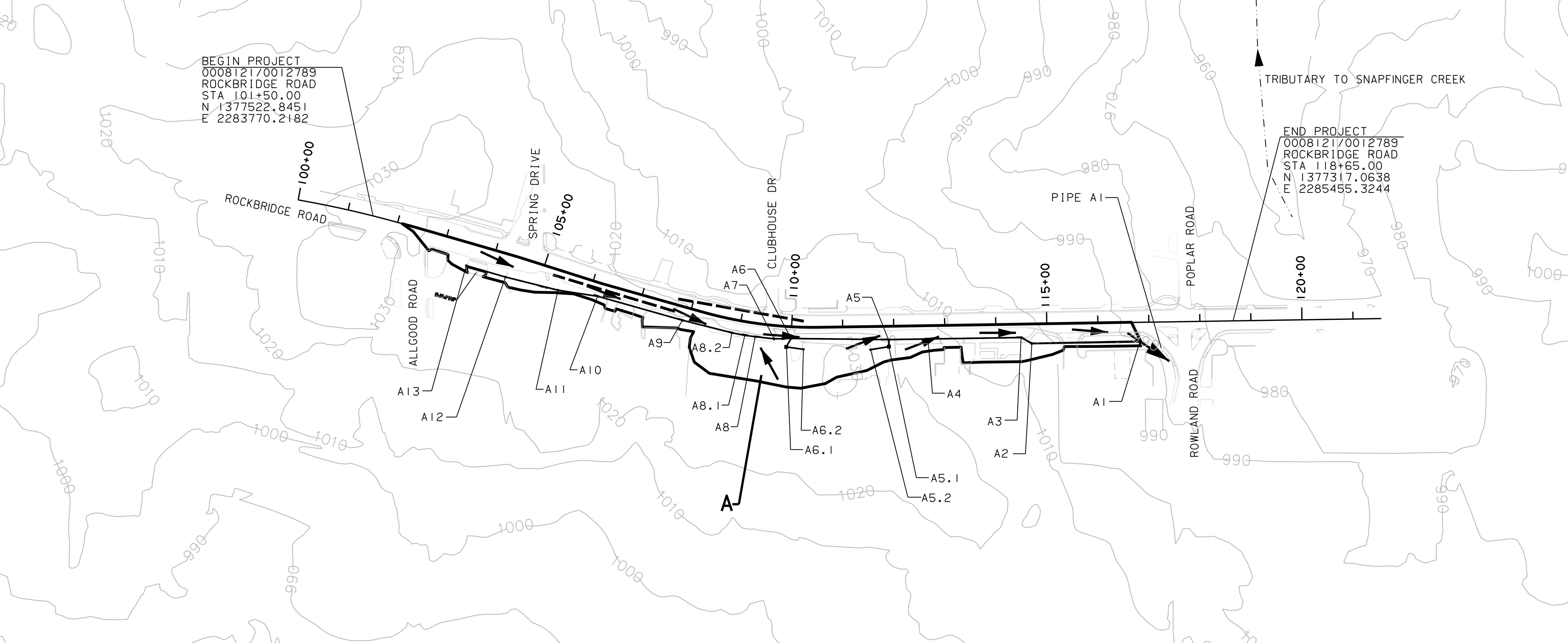


REVISION DATES	

DRIVEWAY PROFILE		
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD		
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	17-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	

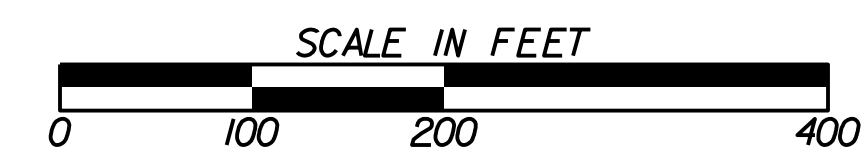
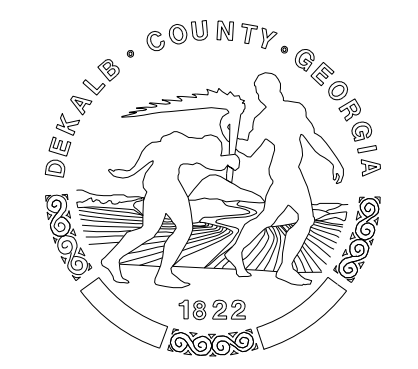
DRAINAGE AREA DESIGNATION	STATION	OFFSET	DESCRIPTION	SKEW ANGLE	PRE-CONSTRUCTION RUNOFF COEFFICIENT	POST-CONSTRUCTION RUNOFF COEFFICIENT	Q(10) (CFS)	PRE Q(50) (CFS)	PRE Q(100) (CFS)	POST Q(50) (CFS)	POST Q(100) (CFS)	PRE HW(50) (FT)	PRE HW(100) (FT)	POST HW(50) (FT)	POST HW(100) (FT)	PRE V(50) (FPS)	PRE V(100) (FPS)	POST V(50) (FPS)	POST V(100) (FPS)	DRAINAGE AREA (AC)	DISTURBED AREA (AC)	RECEIVING WATERS	
A13	103+53.04	44.88' RT	1019A	N/A	N/A	0.95	0.04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.007	0.004	TRIB TO SNAPPINGER CREEK
A12	104+32.98	44.88' RT	1019A	N/A	N/A	0.95	0.07	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.012	0.007	TRIB TO SNAPPINGER CREEK
A11	105+40.00	38.00' RT	1019A	N/A	N/A	0.41	0.12	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.047	0.072	TRIB TO SNAPPINGER CREEK
A10	106+18.12	26.17' RT	1033D	N/A	N/A	0.94	1.69	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.293	0.038	TRIB TO SNAPPINGER CREEK
A9	107+90.00	26.17' RT	1033D	N/A	N/A	0.83	0.89	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.174	0.165	TRIB TO SNAPPINGER CREEK
A8.2	108+87.00	26.17' RT	1033D	N/A	N/A	0.83	0.62	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.120	0.120	TRIB TO SNAPPINGER CREEK
A8.1	109+12.00	26.67' RT	1034D	N/A	N/A	0.75	1.26	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.273	0.055	TRIB TO SNAPPINGER CREEK
A8	109+32.00	26.17' RT	1033D	N/A	N/A	0.80	0.65	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.131	0.072	TRIB TO SNAPPINGER CREEK
A6.2	110+24.08	43.28' RT	1019A	N/A	N/A	0.90	0.71	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.128	0.000	TRIB TO SNAPPINGER CREEK
A6.1	109+92.00	40.00' RT	9031S	N/A	N/A	0.30	0.06	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.035	0.035	TRIB TO SNAPPINGER CREEK
A6	110+00.00	23.00' RT	1019A	N/A	N/A	0.95	0.09	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.016	0.016	TRIB TO SNAPPINGER CREEK
A5.2	111+53.81	45.42' RT	1019A	N/A	N/A	0.90	0.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.076	0.000	TRIB TO SNAPPINGER CREEK
A5.1	111+90.00	26.17' RT	9031S	N/A	N/A	0.64	0.40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.100	0.100	TRIB TO SNAPPINGER CREEK
A5	111+90.00	26.17' RT	1033D	N/A	N/A	0.95	0.80	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.136	0.113	TRIB TO SNAPPINGER CREEK
A4	112+70.00	26.17' RT	1033D	N/A	N/A	0.95	0.33	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.057	0.057	TRIB TO SNAPPINGER CREEK
A3	114+50.00	26.17' RT	1033D	N/A	N/A	0.66	1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.250	0.128	TRIB TO SNAPPINGER CREEK
A1	116+83.50	38.17' RT	1033D	N/A	N/A	0.87	1.42	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.266	0.184	TRIB TO SNAPPINGER CREEK
PIPE A1	116+83.50	N/A	EX 24" RCP	N/A	0.75	0.81	N/A	9.32	10.15	13.32	14.52	0.68	0.71	0.82	0.86	9.99	10.23	11.01	11.27	2.120	1.165	TRIB TO SNAPPINGER CREEK	

TOTAL PROJECT SIZE = 3.28 AC
 TOTAL DISTURBED AREA = 1.17 AC



PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

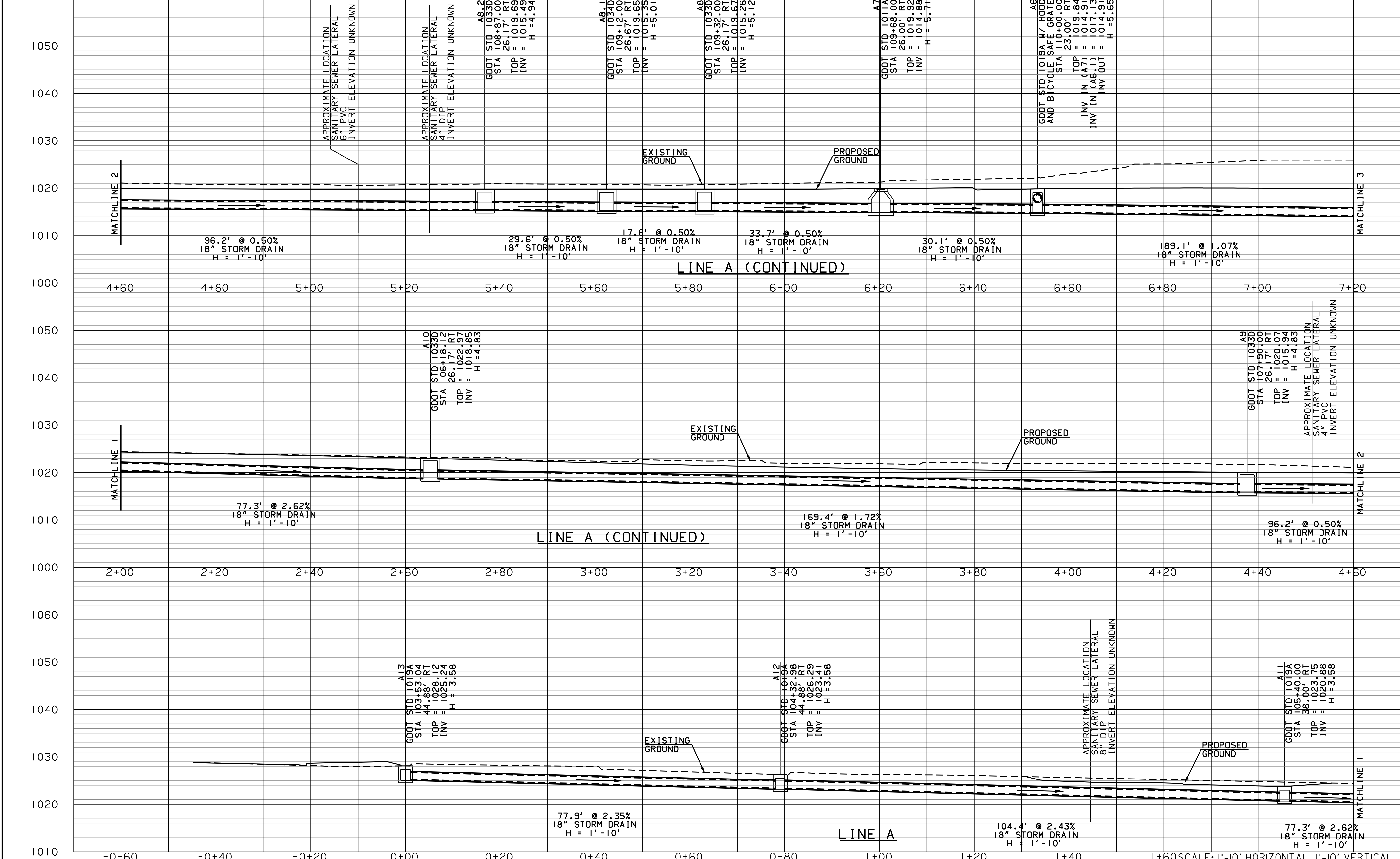
---#--- BEGIN LIMIT OF ACCESS.....BLA
 --- END LIMIT OF ACCESS.....ELA
 --- LIMIT OF ACCESS
 --- REQ'D R/W & LIMIT OF ACCESS
 --- ORANGE BARRIER FENCE
 --- ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

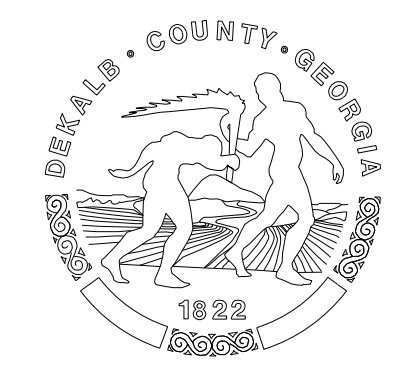
DRAINAGE AREA MAP
ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	21-0001
CORRECTED:	DATE:	
VERIFIED:	DATE:	



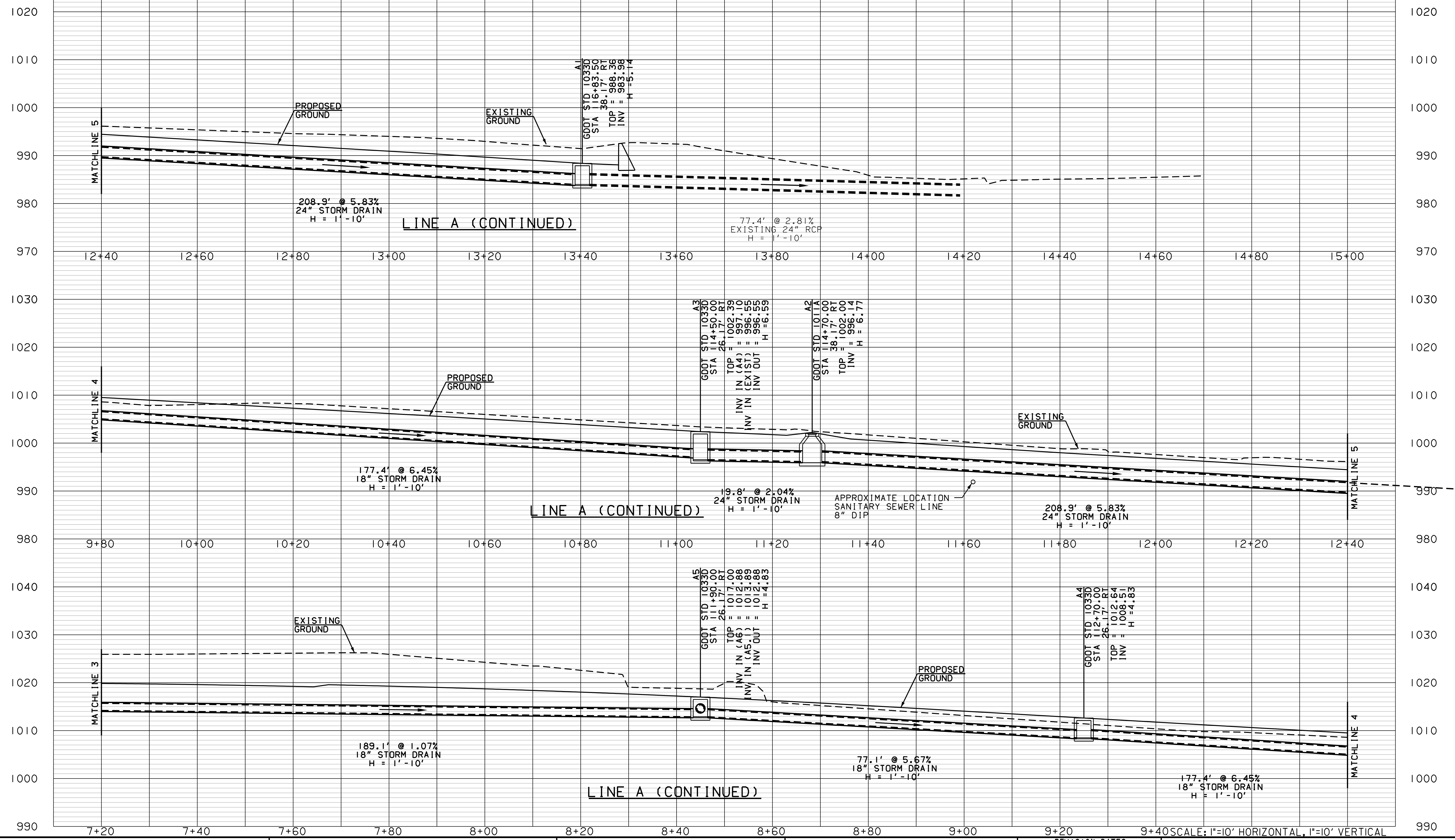
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



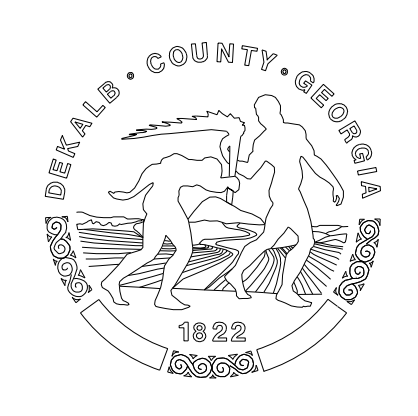
REVISION DATES	

DRAINAGE PROFILES			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	22-0001	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



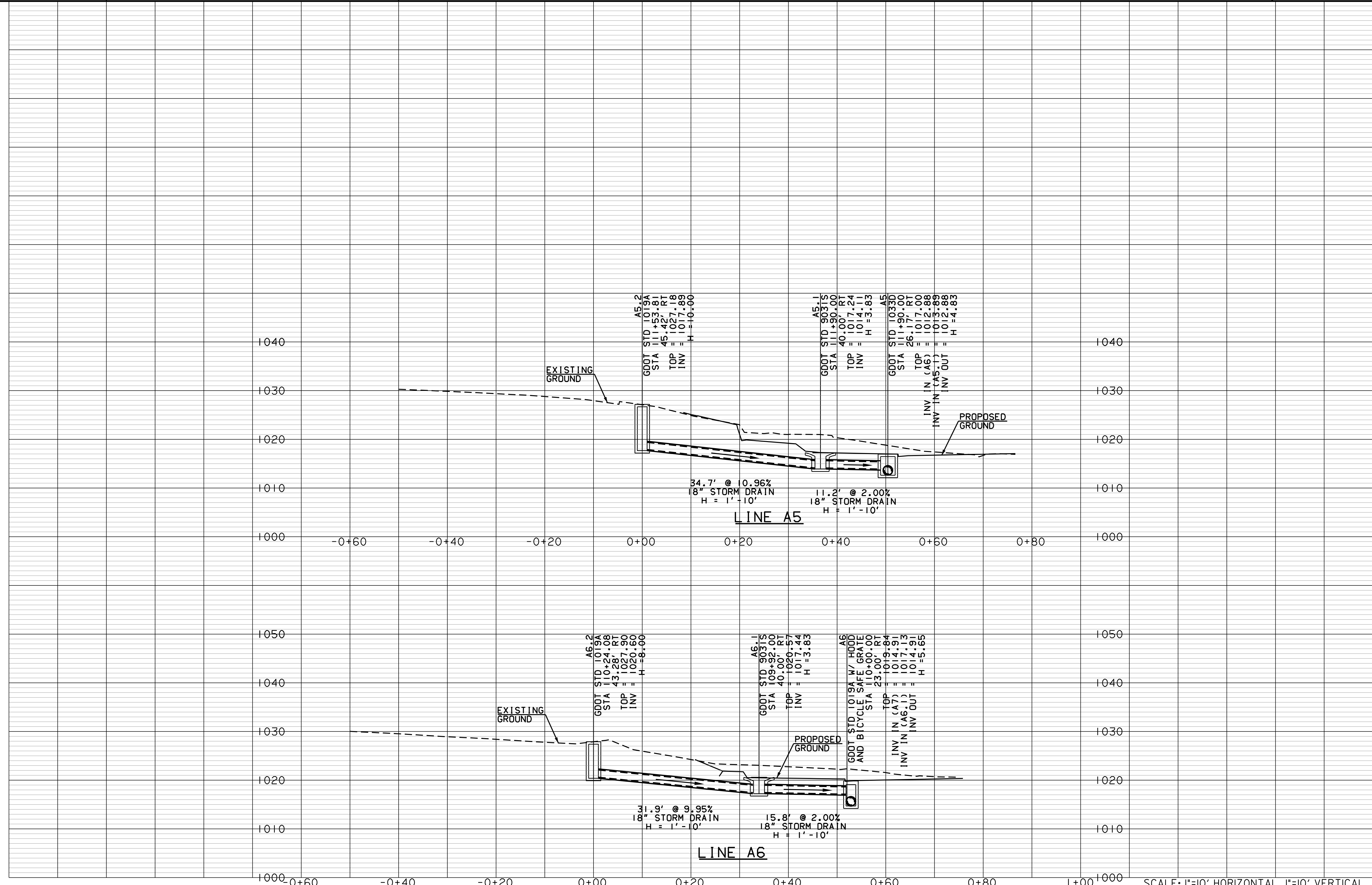
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



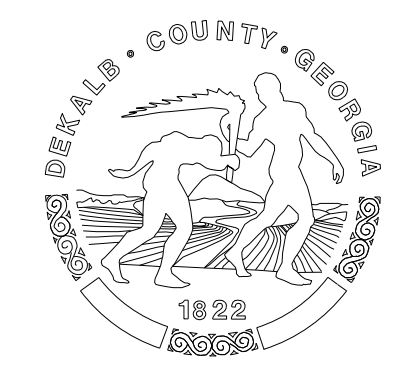
REVISION DATES	

DRAINAGE PROFILES			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	22-0002	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



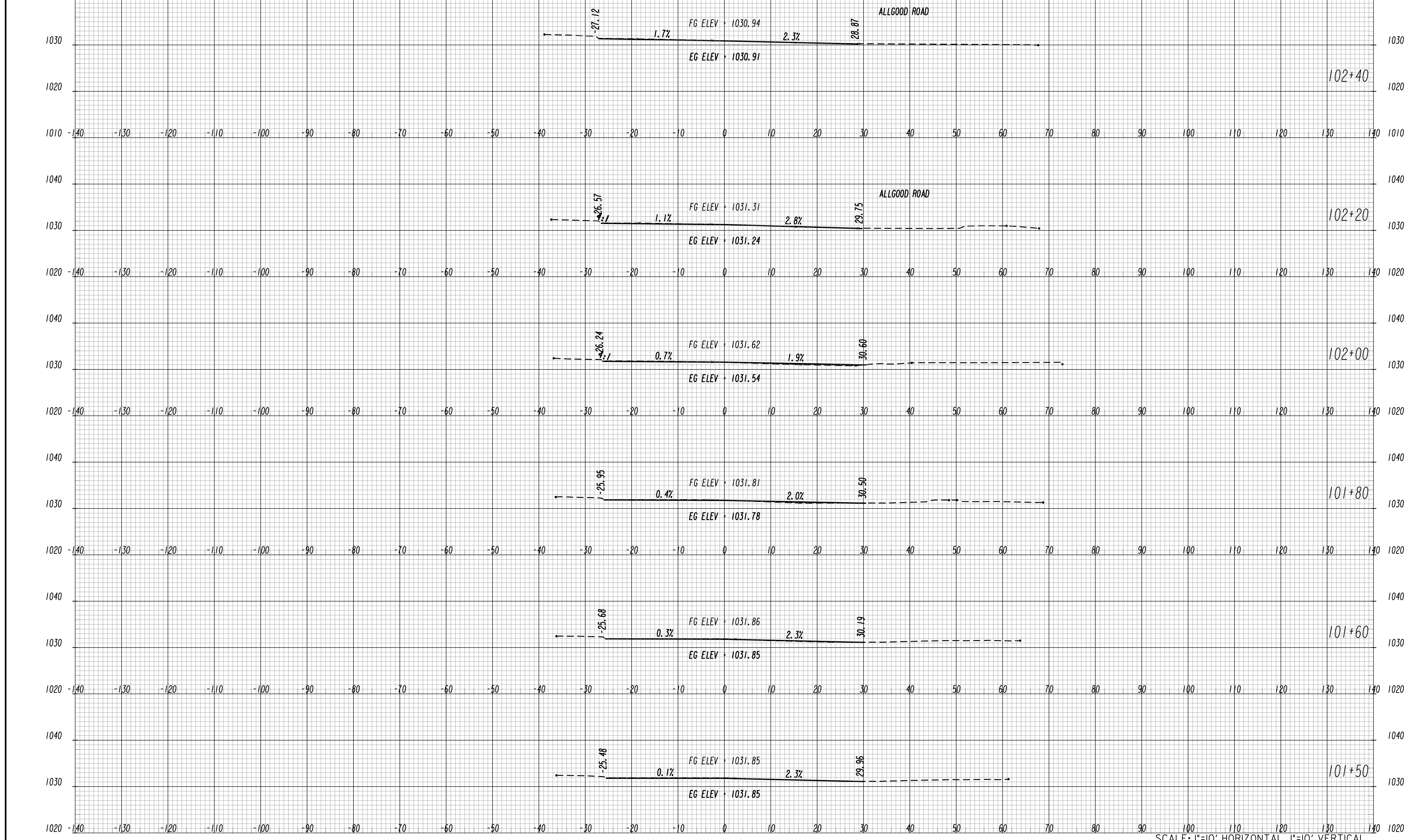
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

---#--- BEGIN LIMIT OF ACCESS.....BLA
 --- END LIMIT OF ACCESS.....ELA
 --- LIMIT OF ACCESS
 --- REQ'D R/W & LIMIT OF ACCESS
 --- ORANGE BARRIER FENCE
 --- ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)

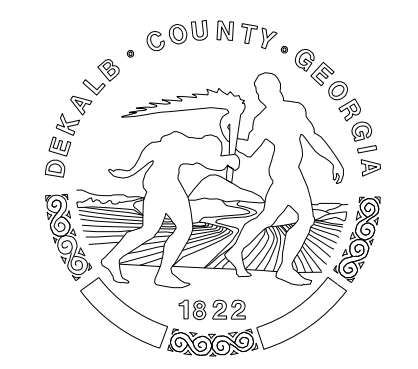


REVISION DATES	

DRAINAGE PROFILES			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	22-0003	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

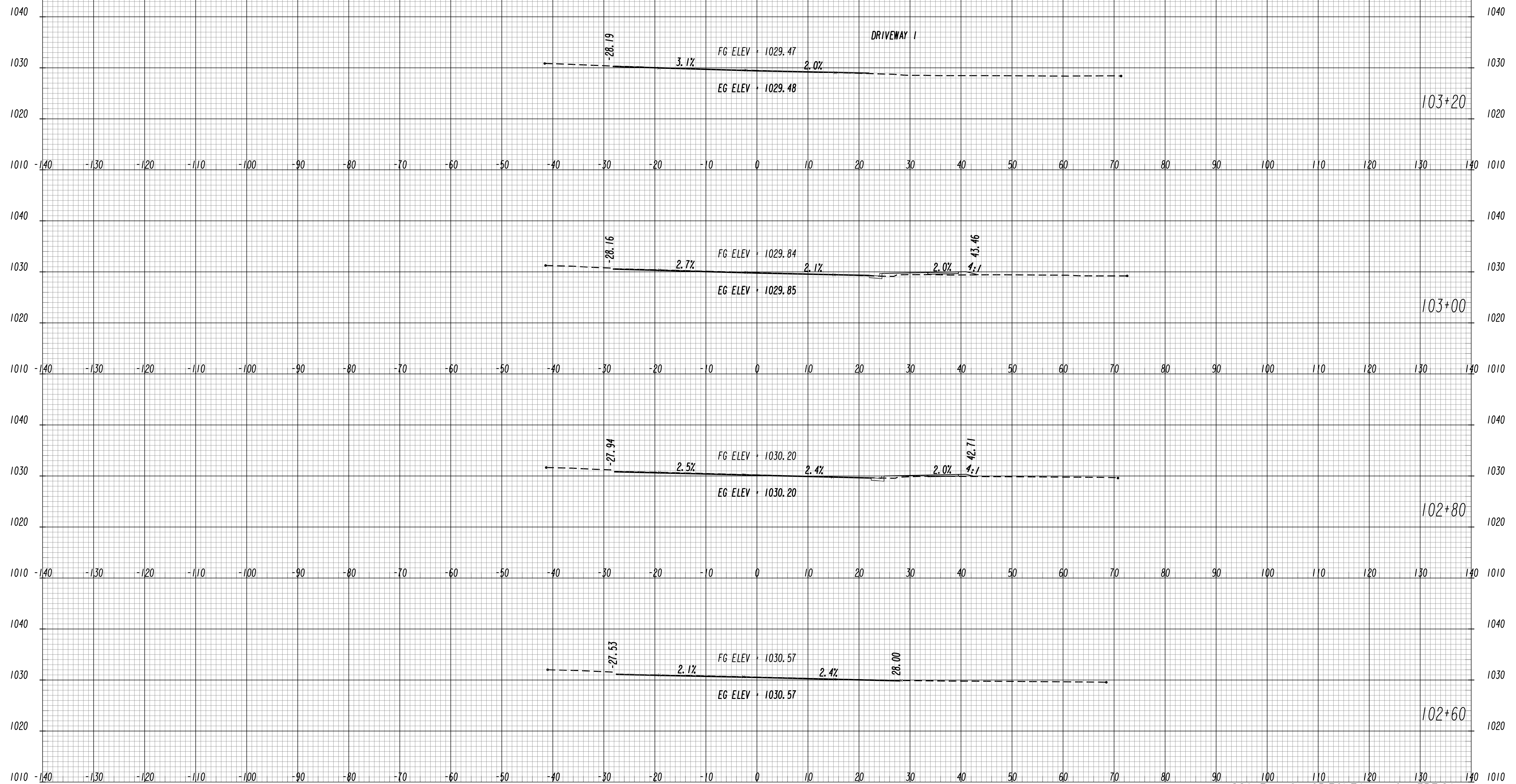


REVISION DATES

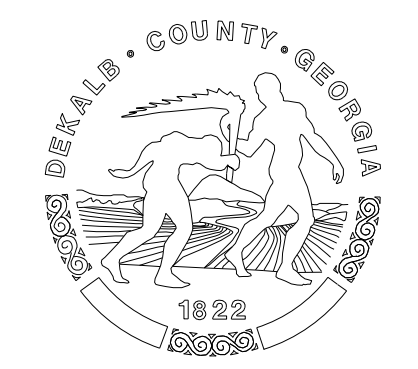
EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-001
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

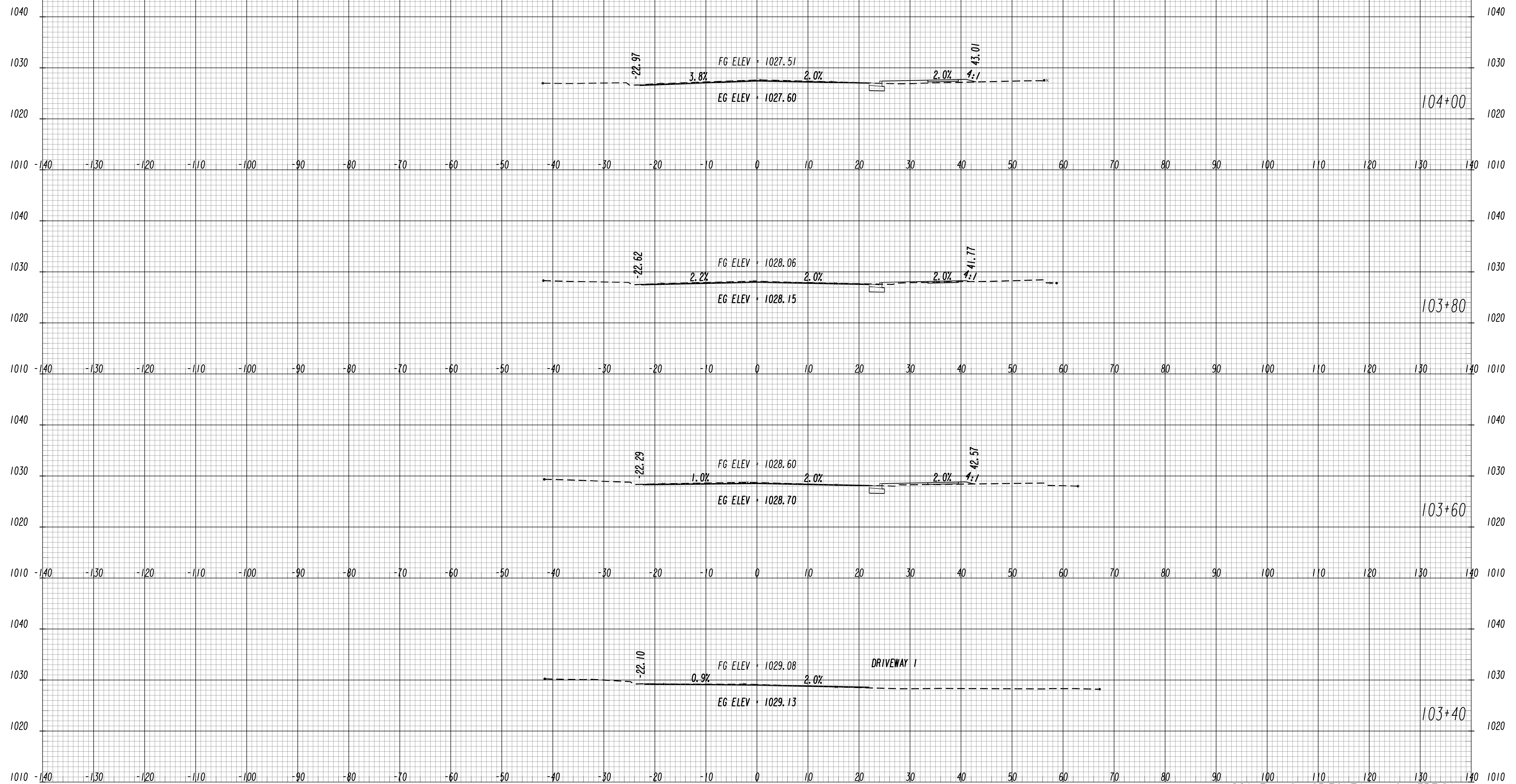


REVISION DATES	

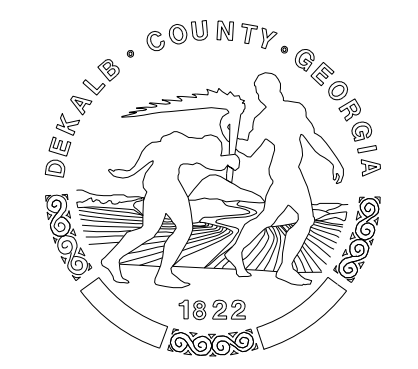
EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No. 23-0002
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

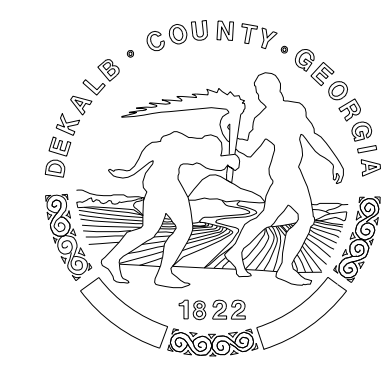
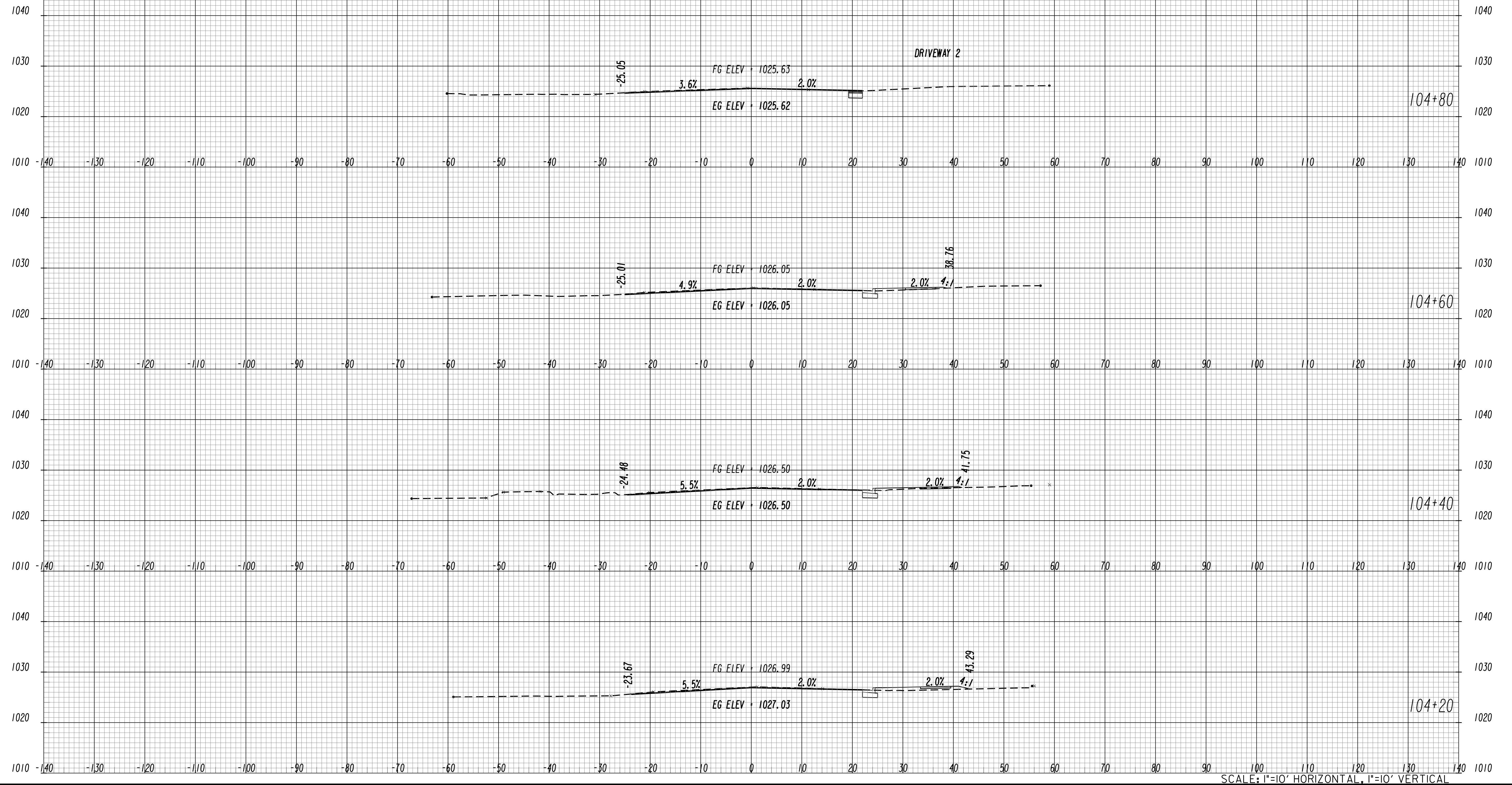


REVISION DATES

EARTHWORK CROSS SECTIONS

ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0003
CORRECTED:	DATE:	
VERIFIED:	DATE:	

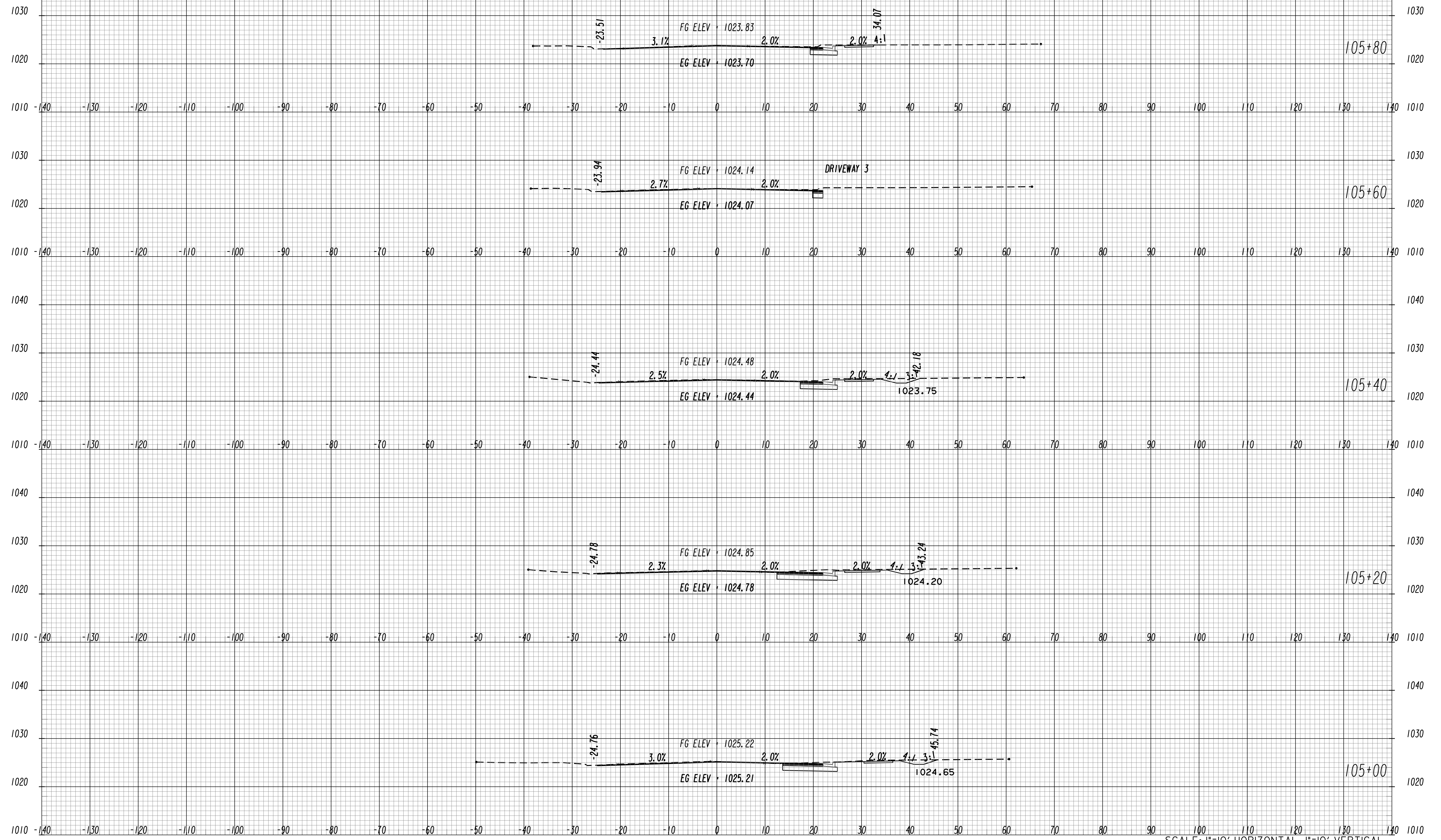


REVISION DATES

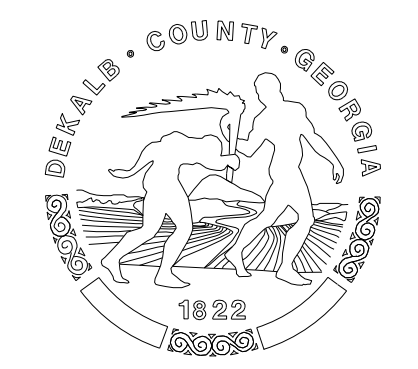
EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0004
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

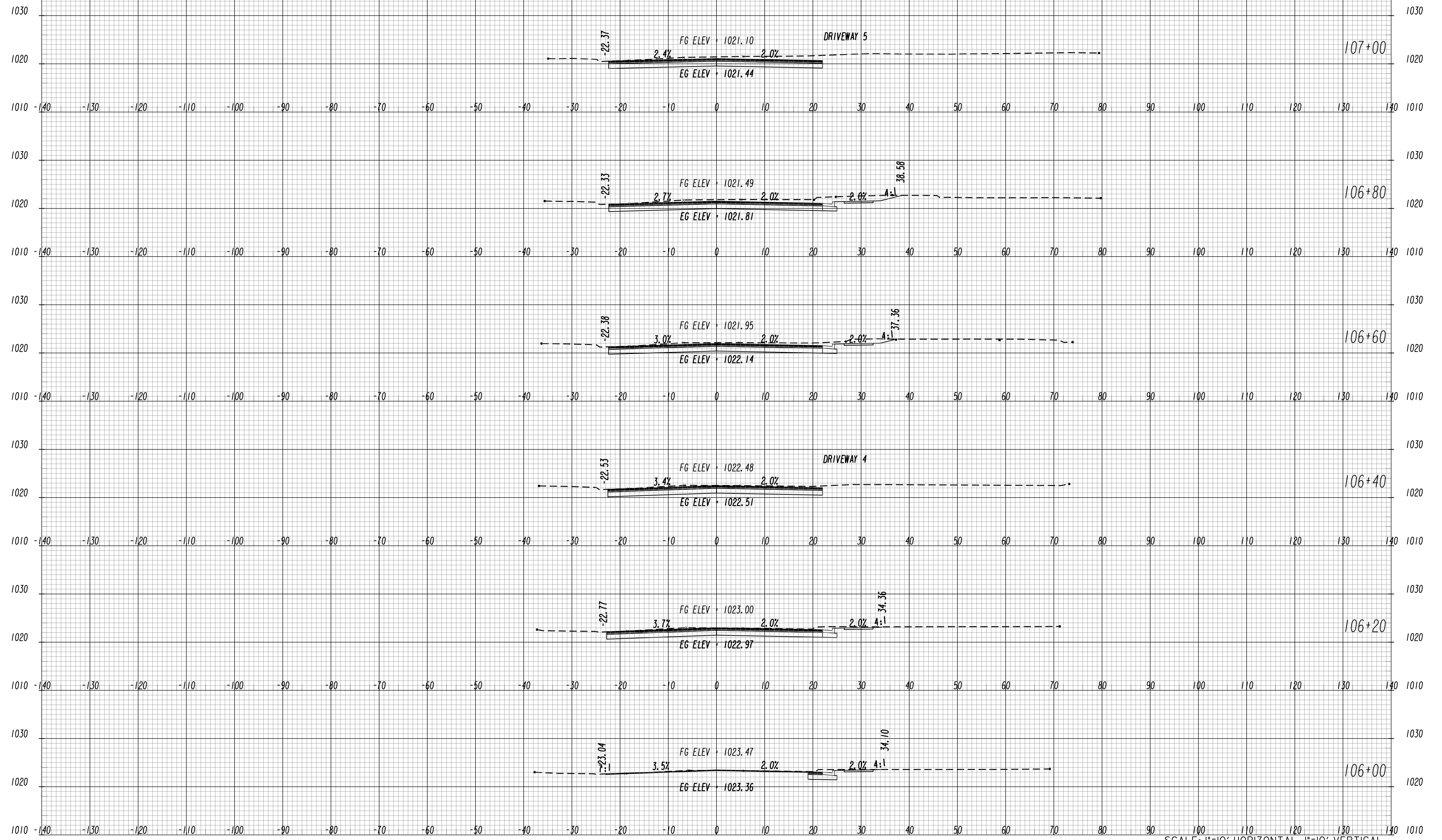


REVISION DATES

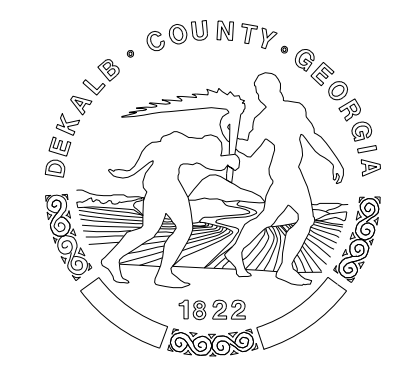
EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0005
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

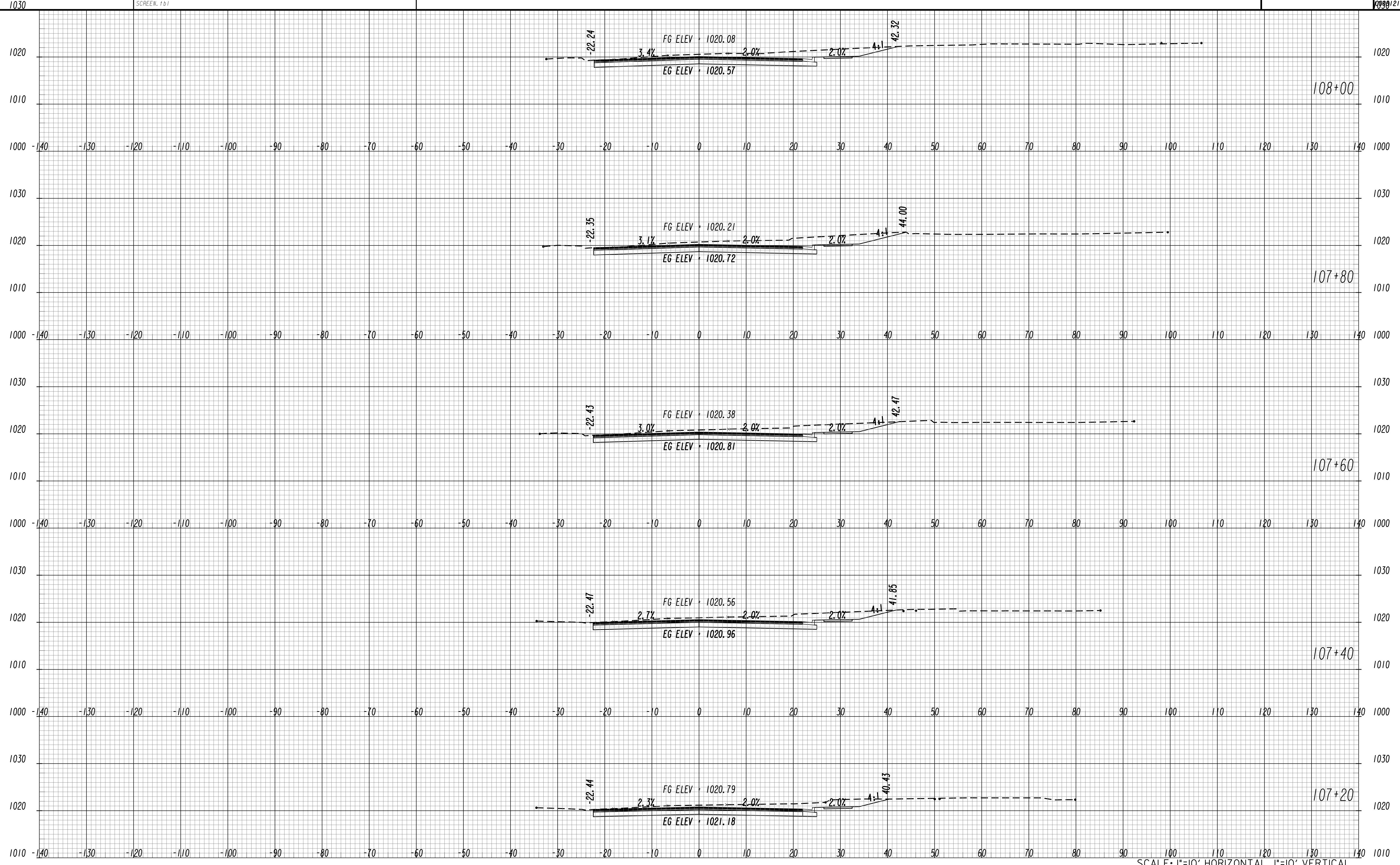


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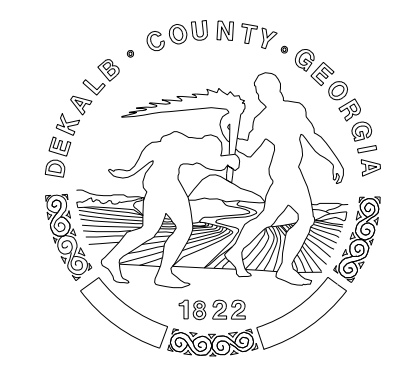
EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0006
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

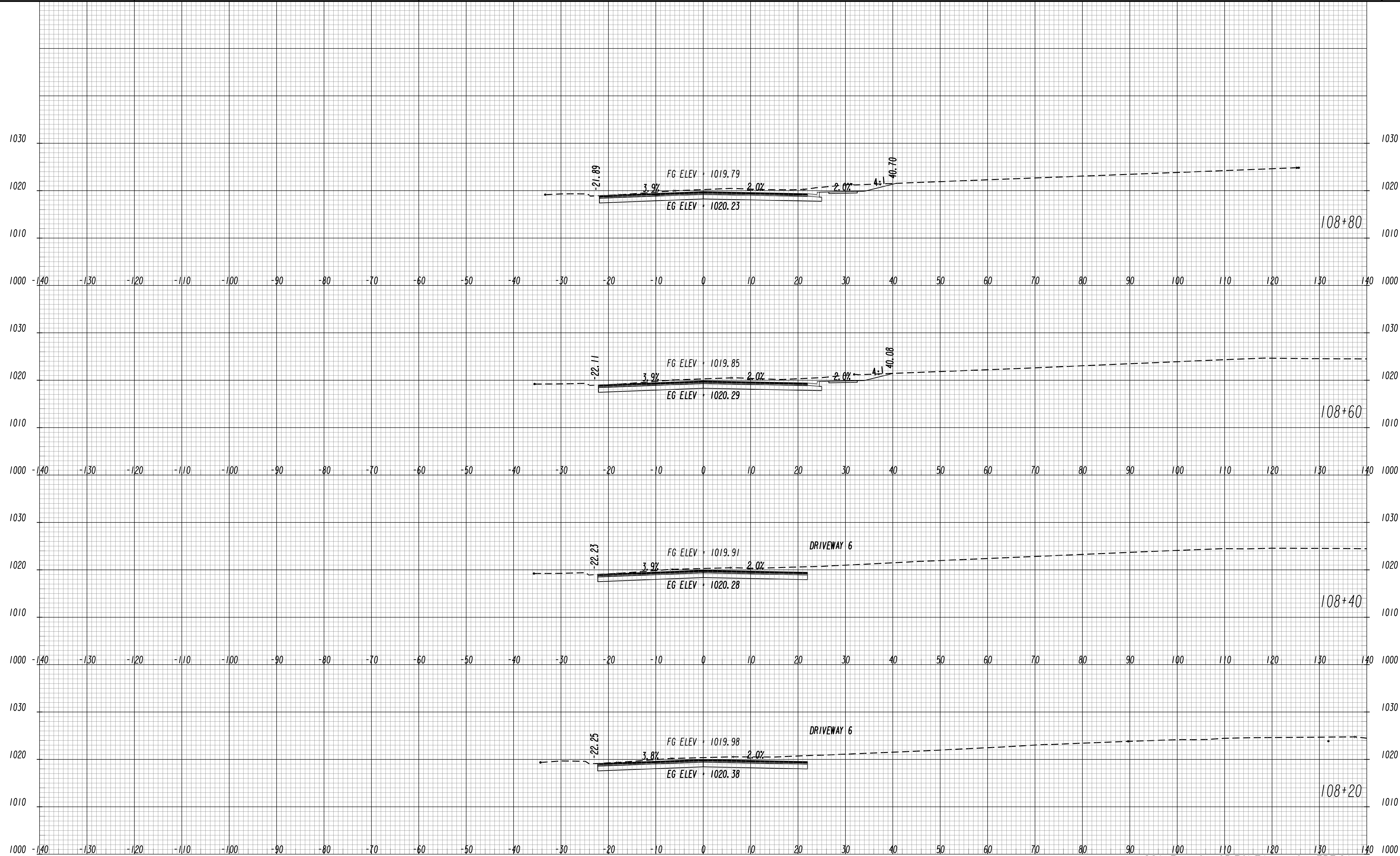


REVISION DATES

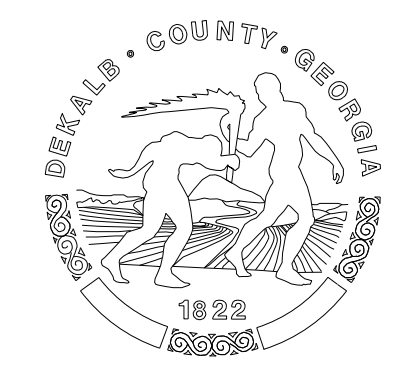
EARTHWORK CROSS SECTIONS

ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0007
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

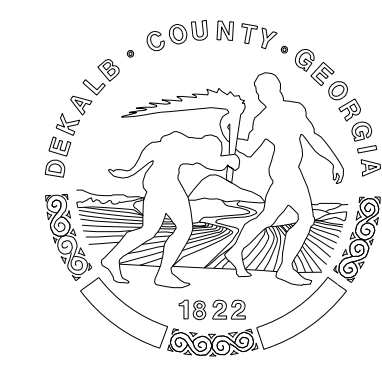
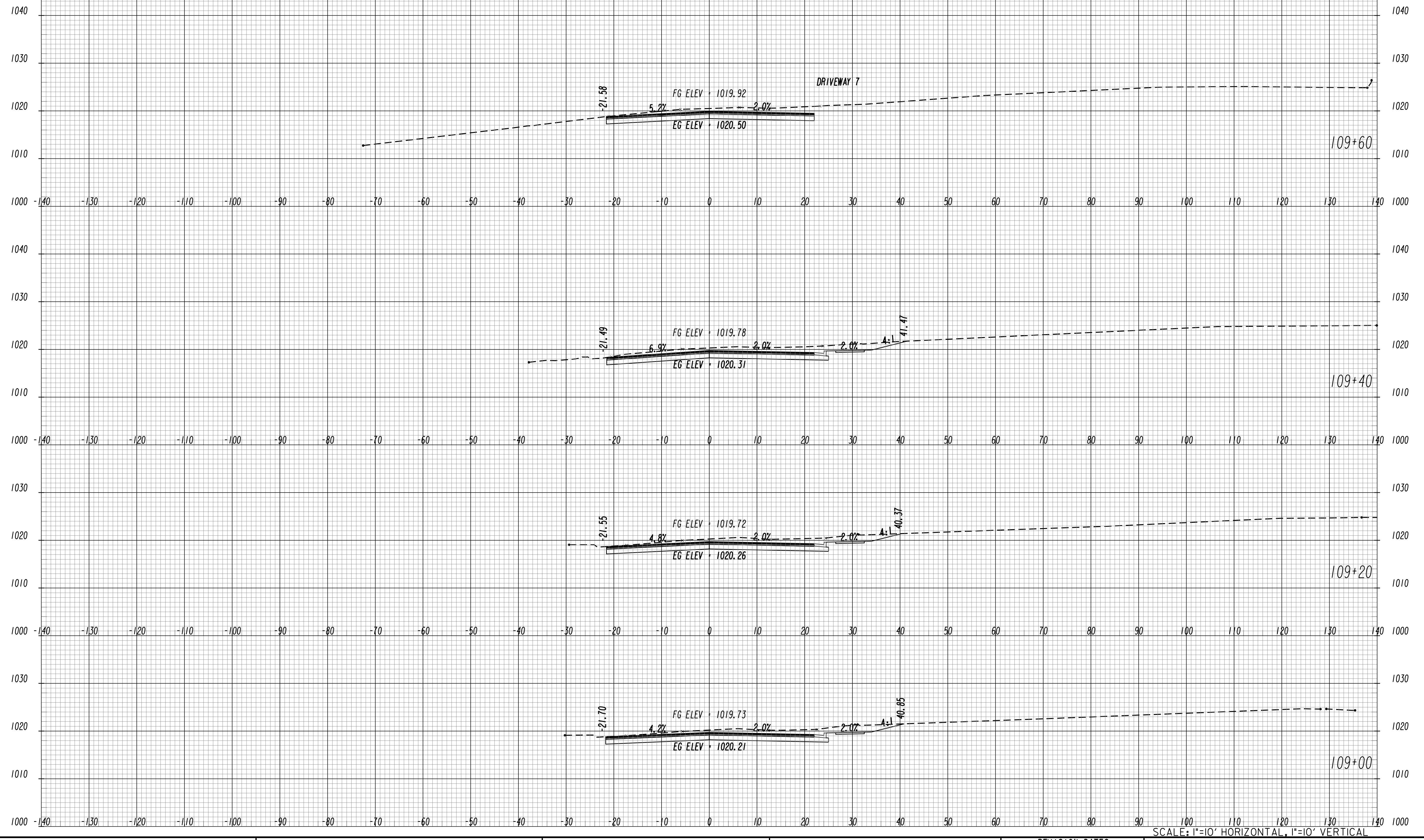


REVISION DATES	

EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0008
CORRECTED:	DATE:	
VERIFIED:	DATE:	

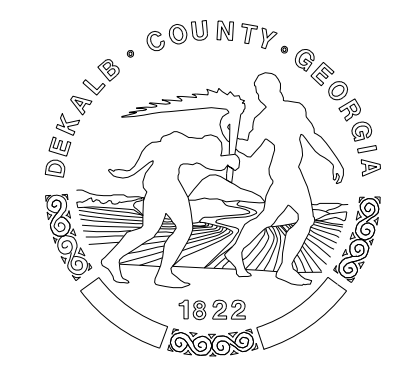
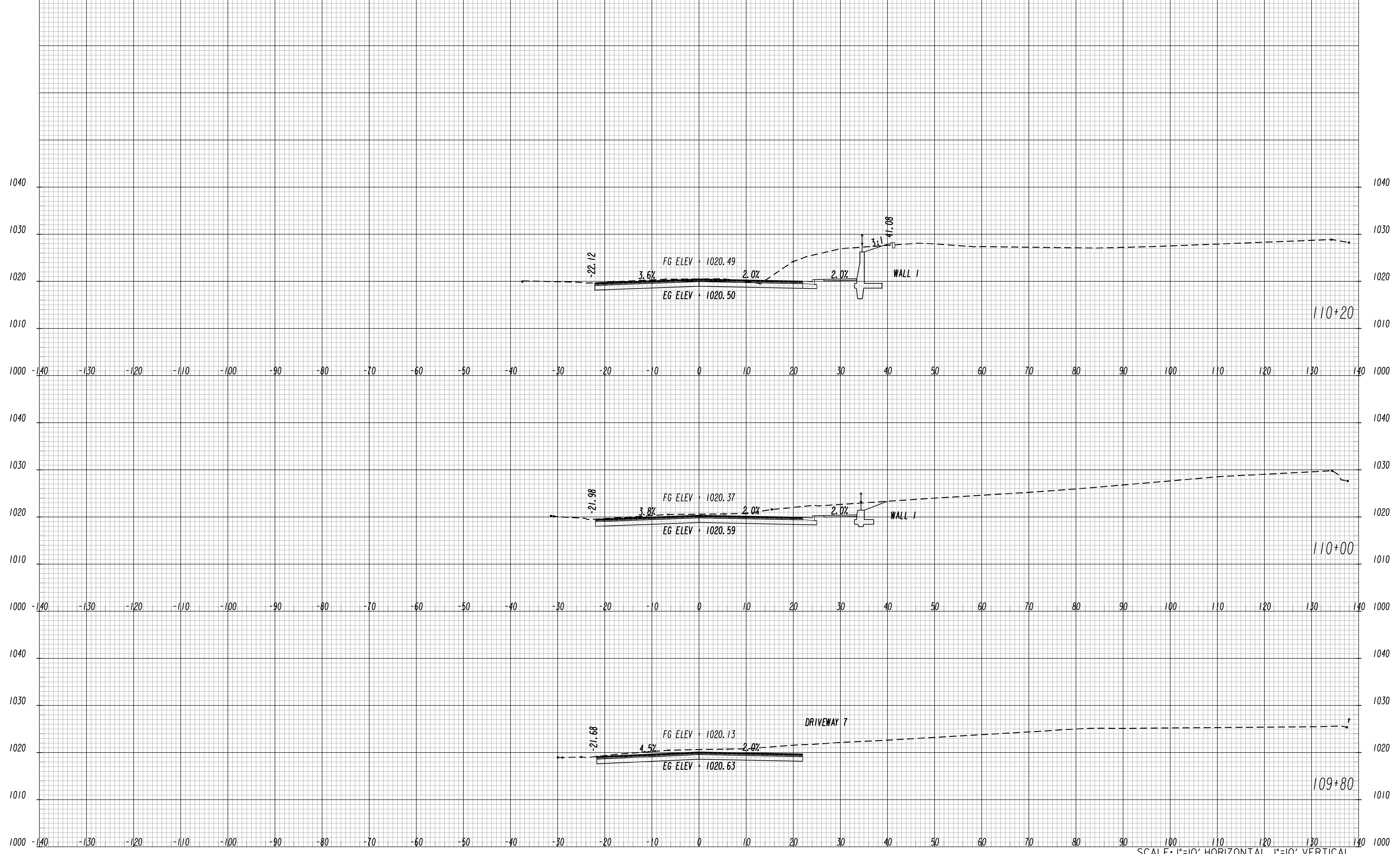


REVISION DATES

EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0009
CORRECTED:	DATE:	
VERIFIED:	DATE:	



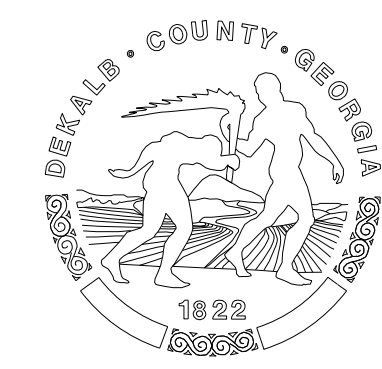
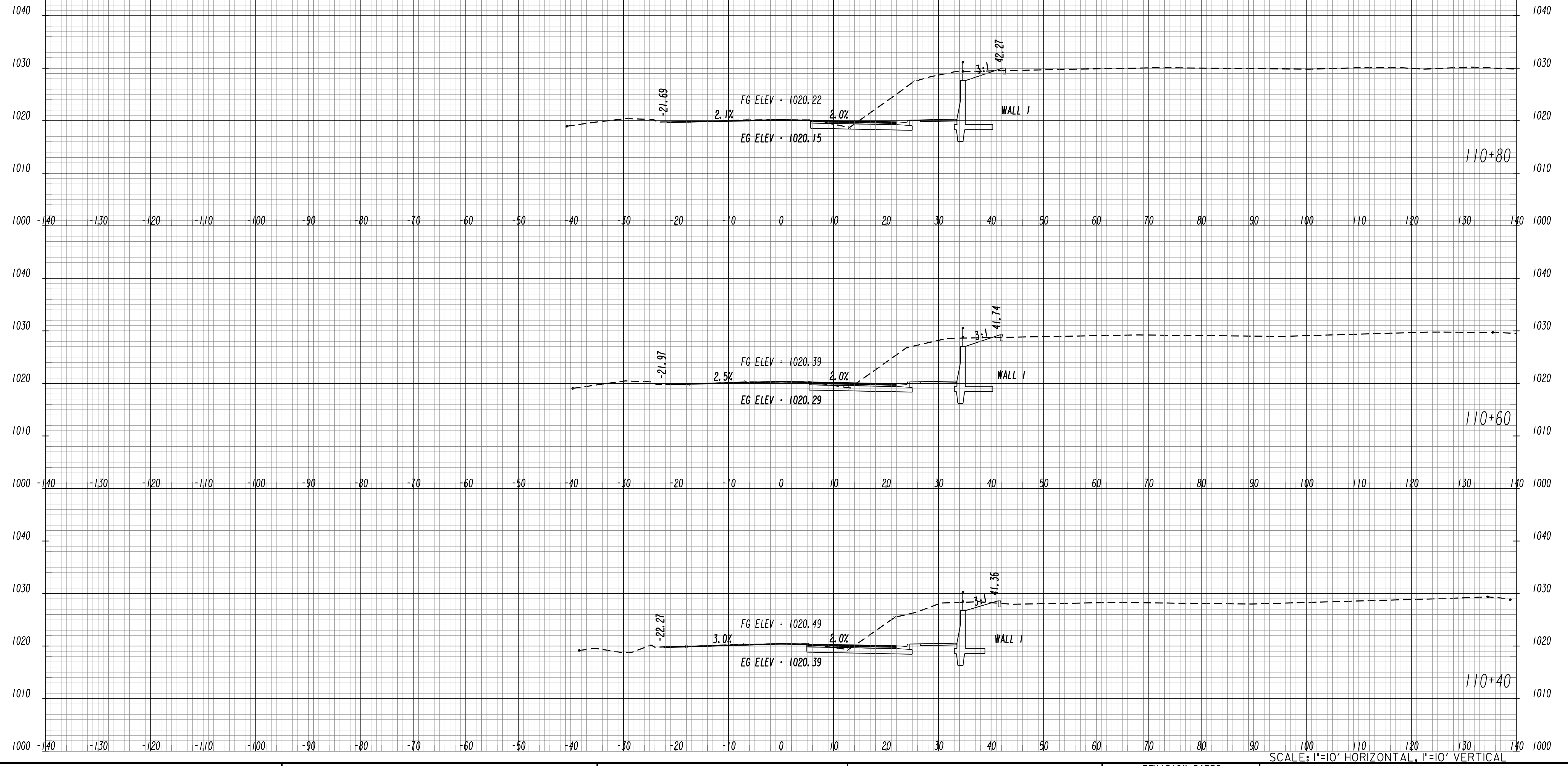
REVISION DATES

NO.	DATE	DESCRIPTION

EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0010
CORRECTED:	DATE:	
VERIFIED:	DATE:	



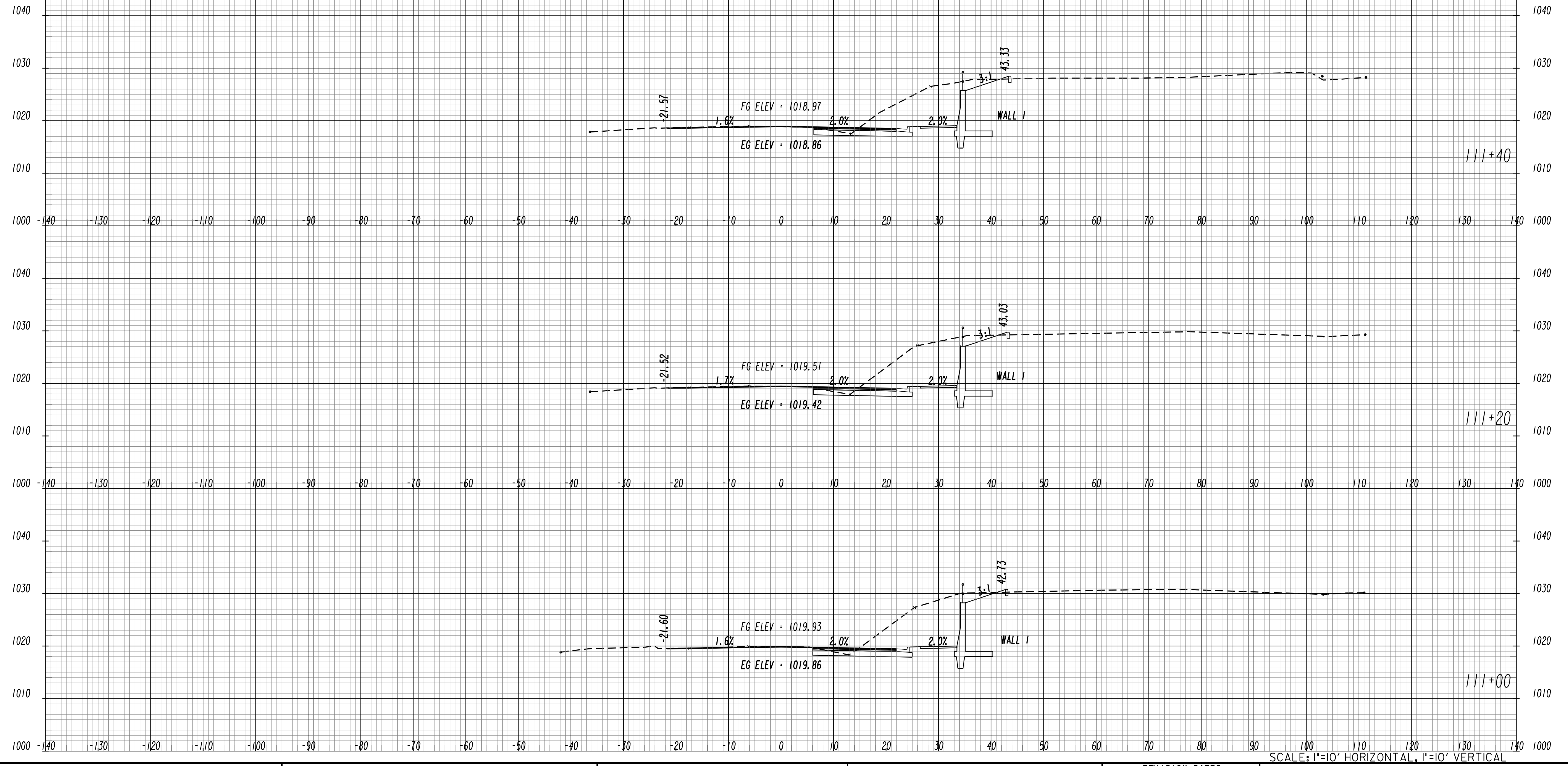
REVISION DATES

NO.	DATE	DESCRIPTION

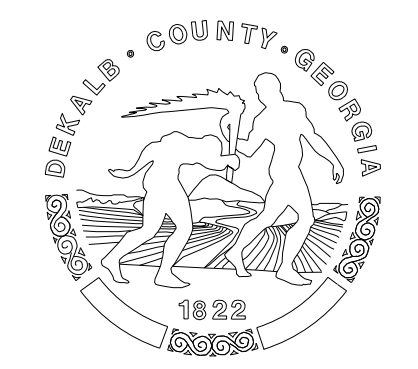
EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0011
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

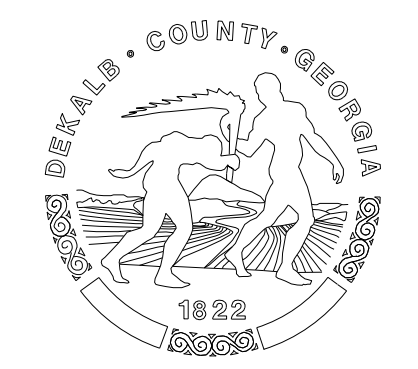
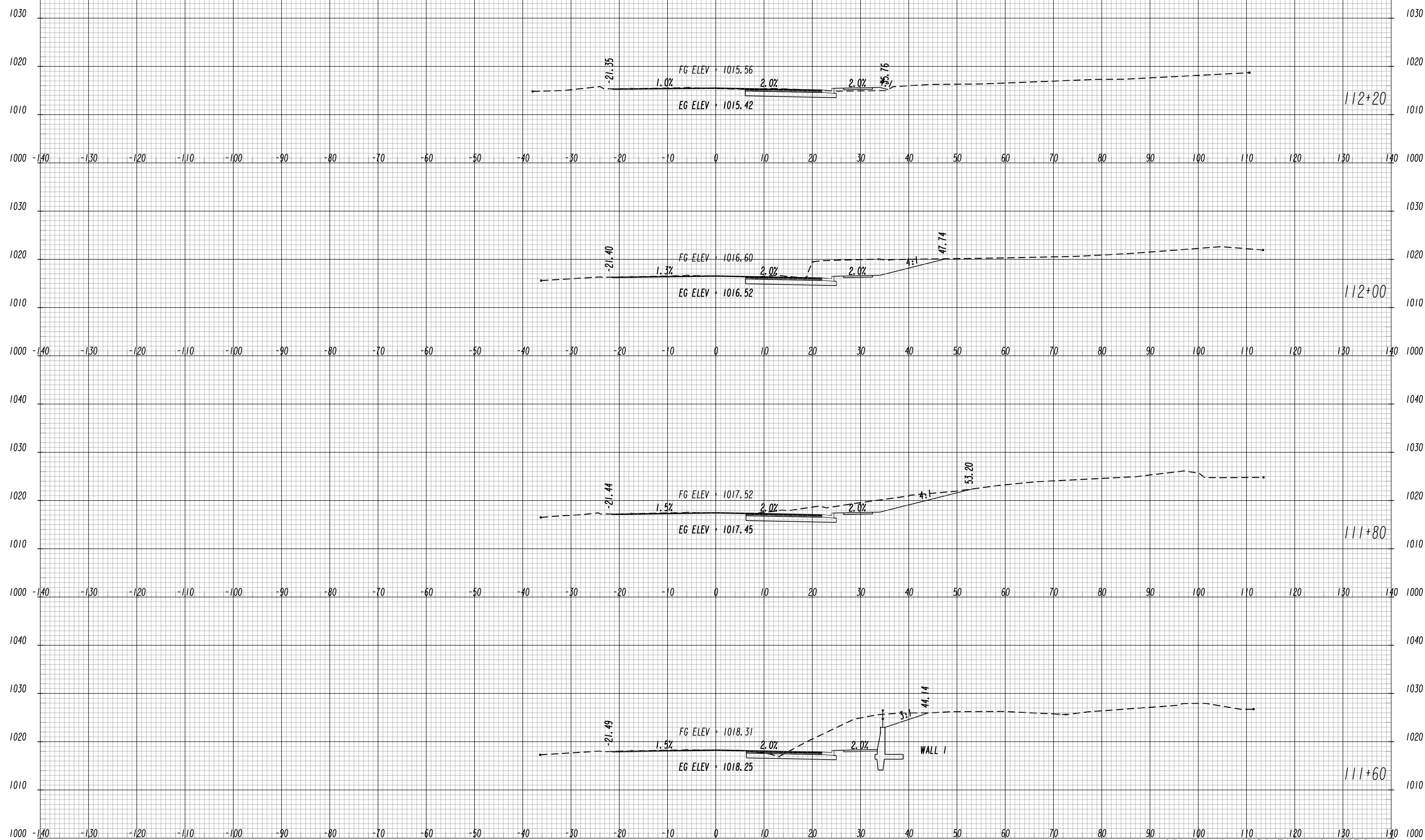


REVISION DATES

EARTHWORK CROSS SECTIONS

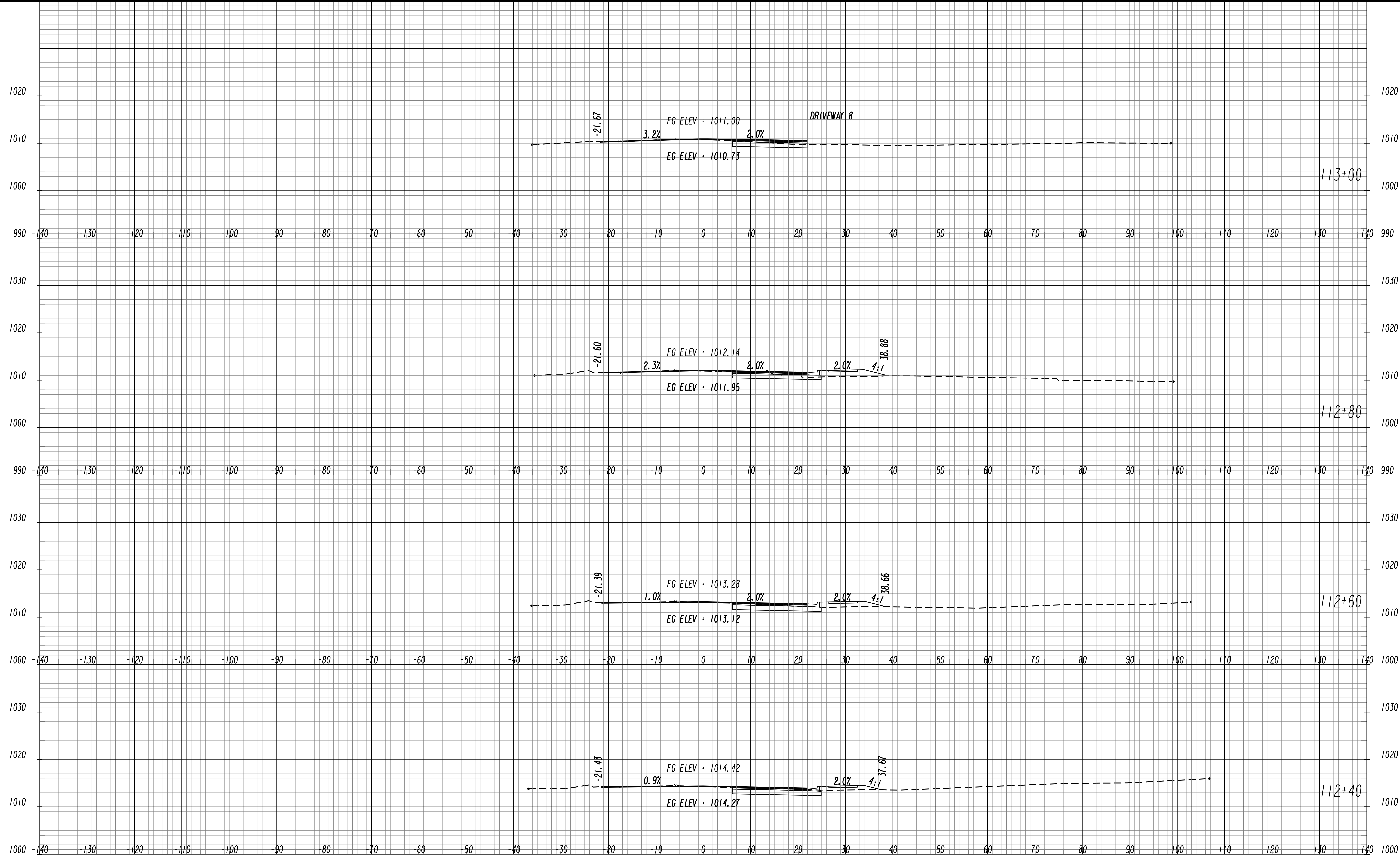
**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

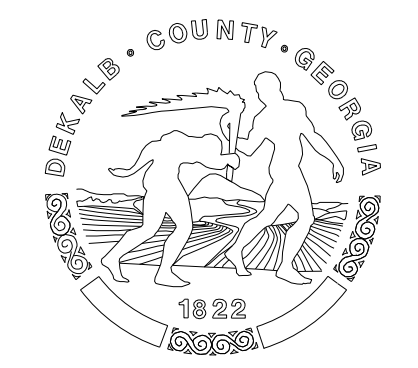

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BACKCHECKED:	DATE:	23-0012
CORRECTED:	DATE:	
VERIFIED:	DATE:	

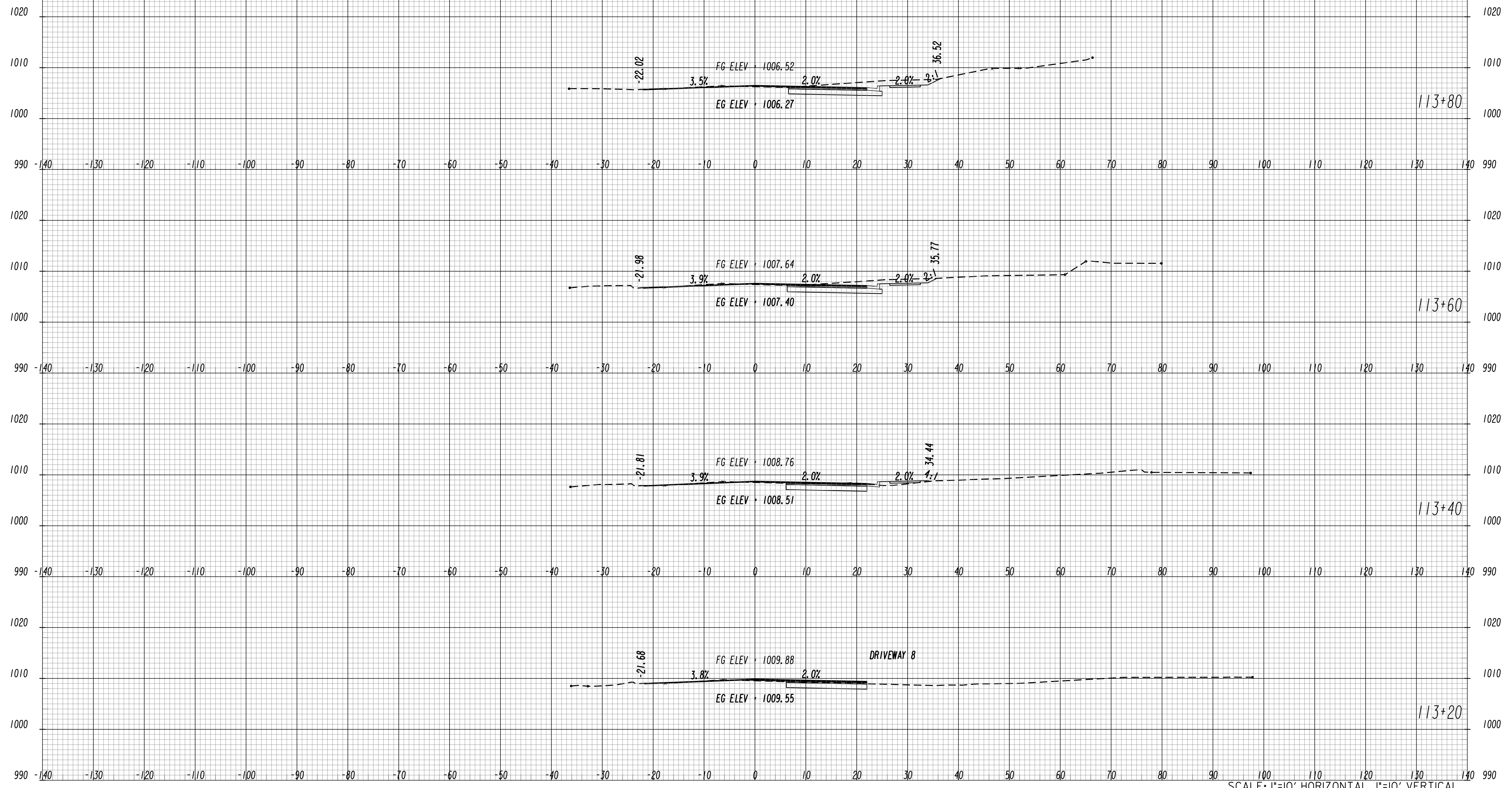


REVISION DATES	

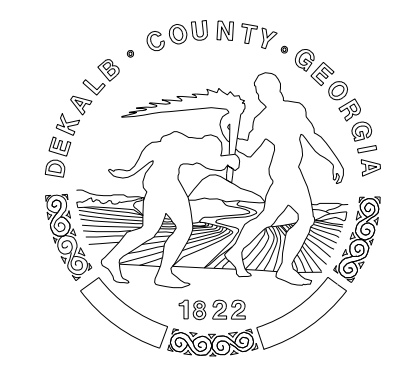
EARTHWORK CROSS SECTIONS			
ROCKBRIDGE ROAD			
FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	23-0013	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



			<table border="1" style="width:100%; border-collapse: collapse;"> <tr><th colspan="2">REVISION DATES</th></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>	REVISION DATES										<p>EARTHWORK CROSS SECTIONS</p> <p>ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>CHECKED:</td> <td>DATE:</td> <td rowspan="4" style="text-align: center; vertical-align: middle;">DRAWING No. 23-0014</td> </tr> <tr> <td>BACKCHECKED:</td> <td>DATE:</td> </tr> <tr> <td>CORRECTED:</td> <td>DATE:</td> </tr> <tr> <td>VERIFIED:</td> <td>DATE:</td> </tr> </table>	CHECKED:	DATE:	DRAWING No. 23-0014	BACKCHECKED:	DATE:	CORRECTED:	DATE:	VERIFIED:	DATE:
REVISION DATES																							
CHECKED:	DATE:	DRAWING No. 23-0014																					
BACKCHECKED:	DATE:																						
CORRECTED:	DATE:																						
VERIFIED:	DATE:																						



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

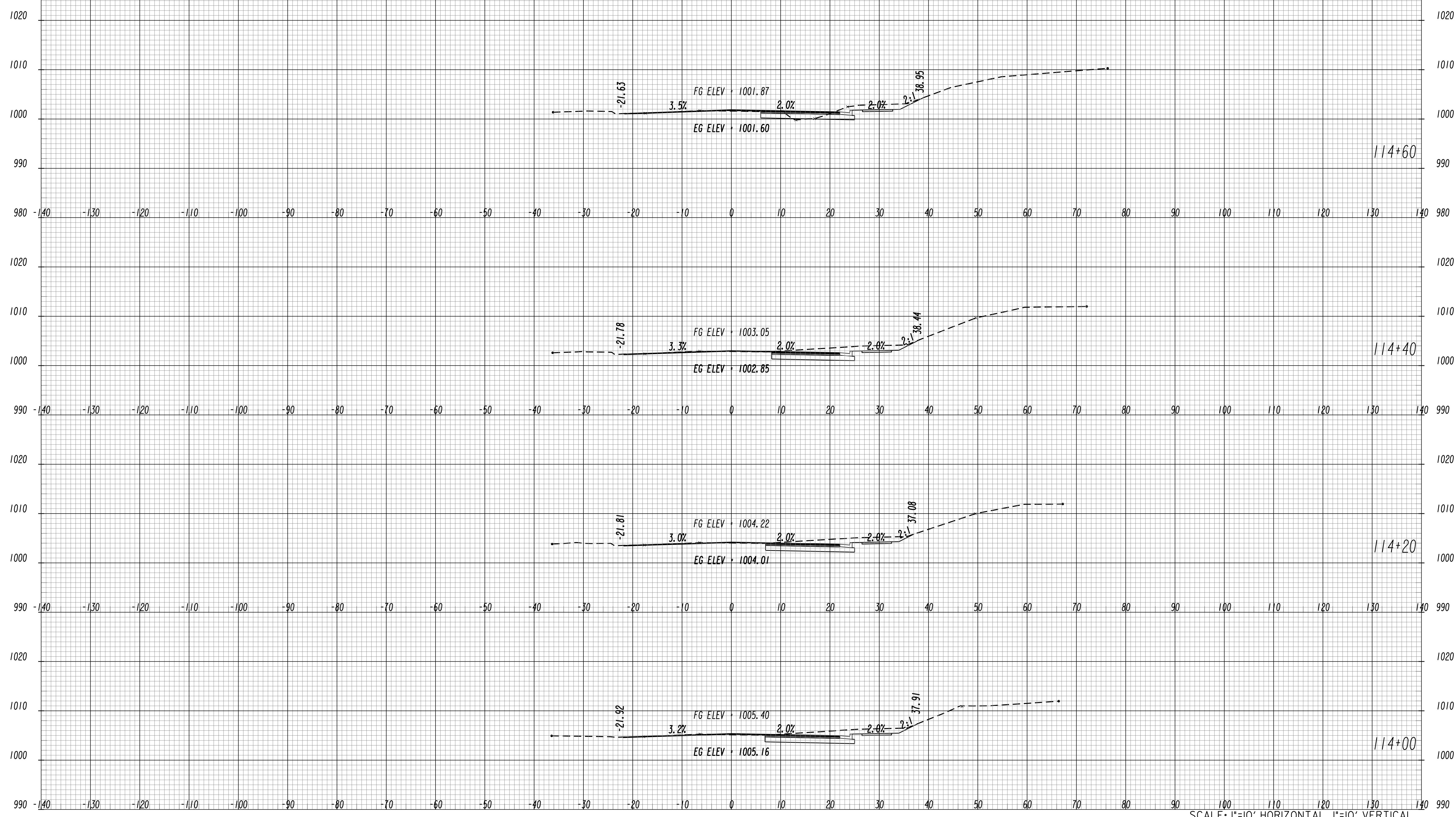


REVISION DATES

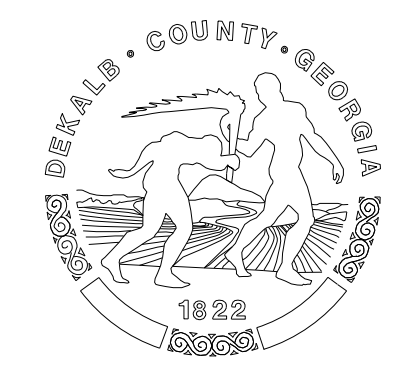
EARTHWORK CROSS SECTIONS

ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0015
CORRECTED:	DATE:	
VERIFIED:	DATE:	

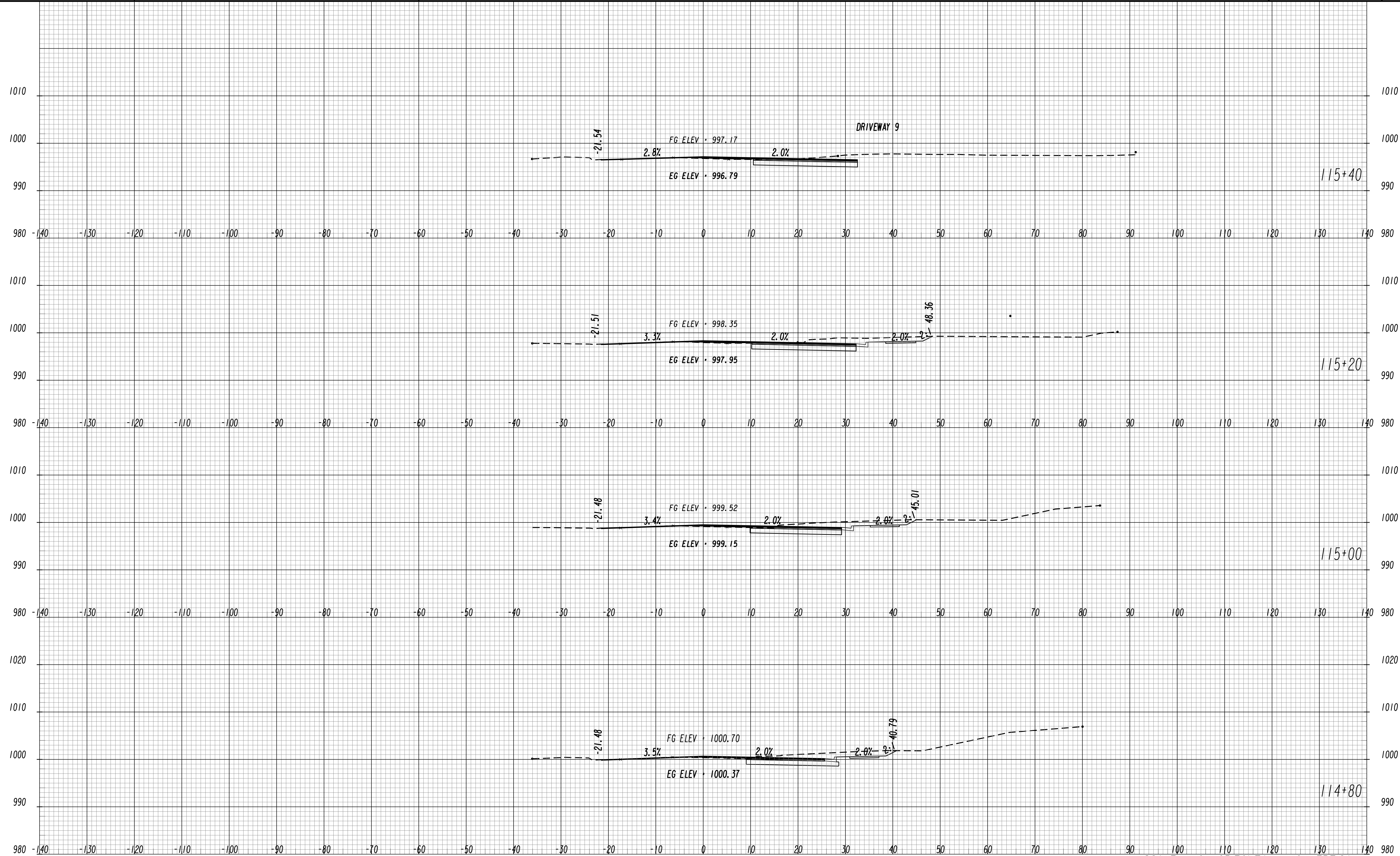


SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

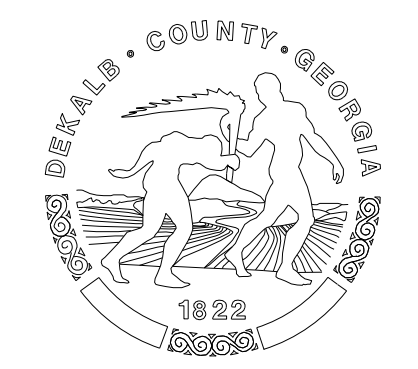


REVISION DATES

EARTHWORK CROSS SECTIONS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	23-0016	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

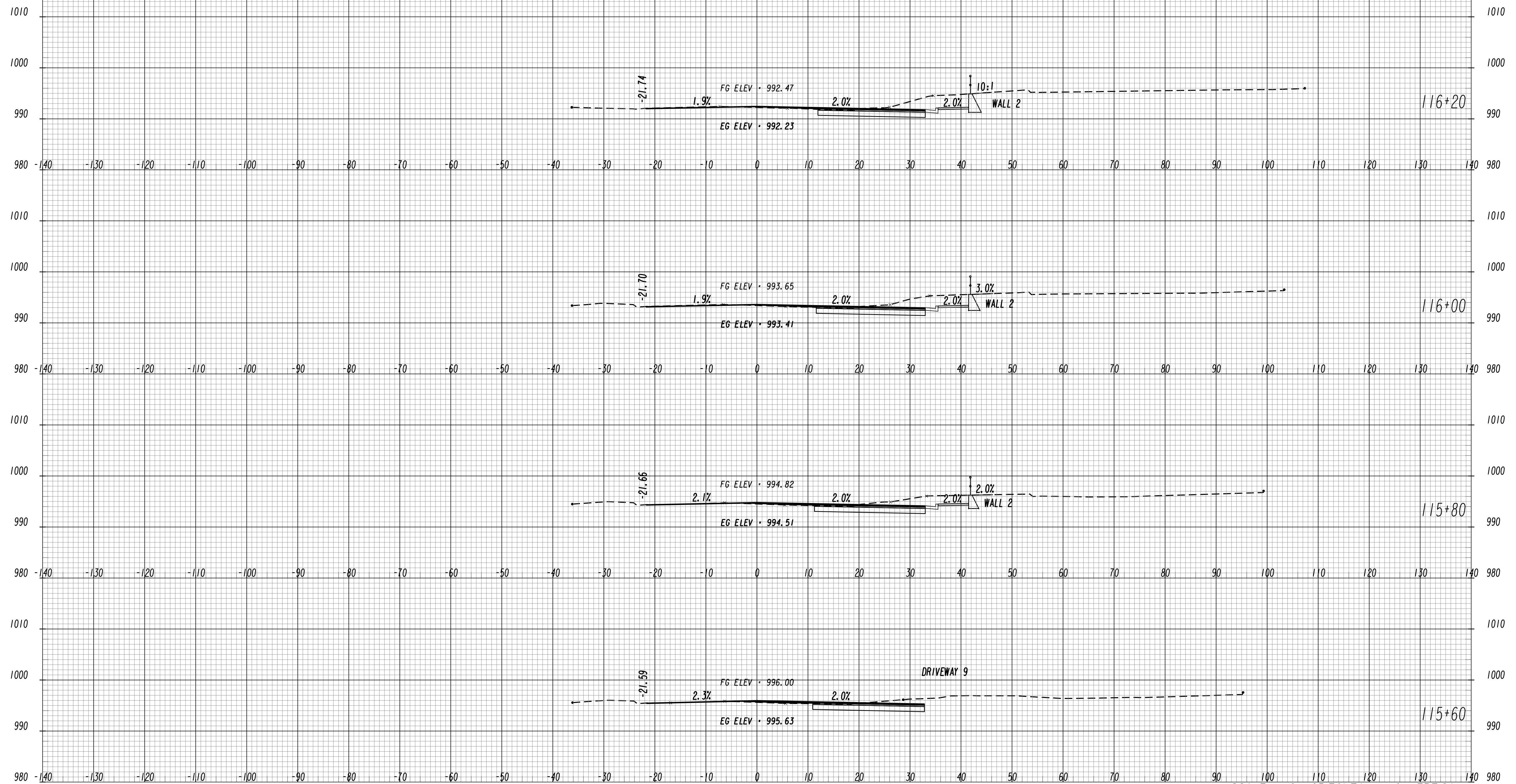


REVISION DATES	

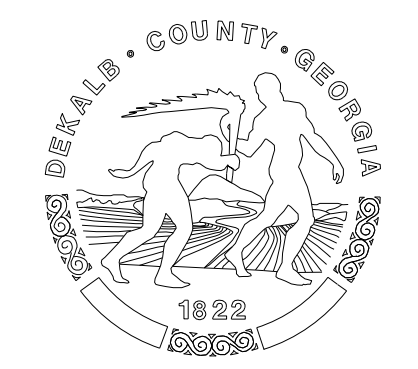
EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0017
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

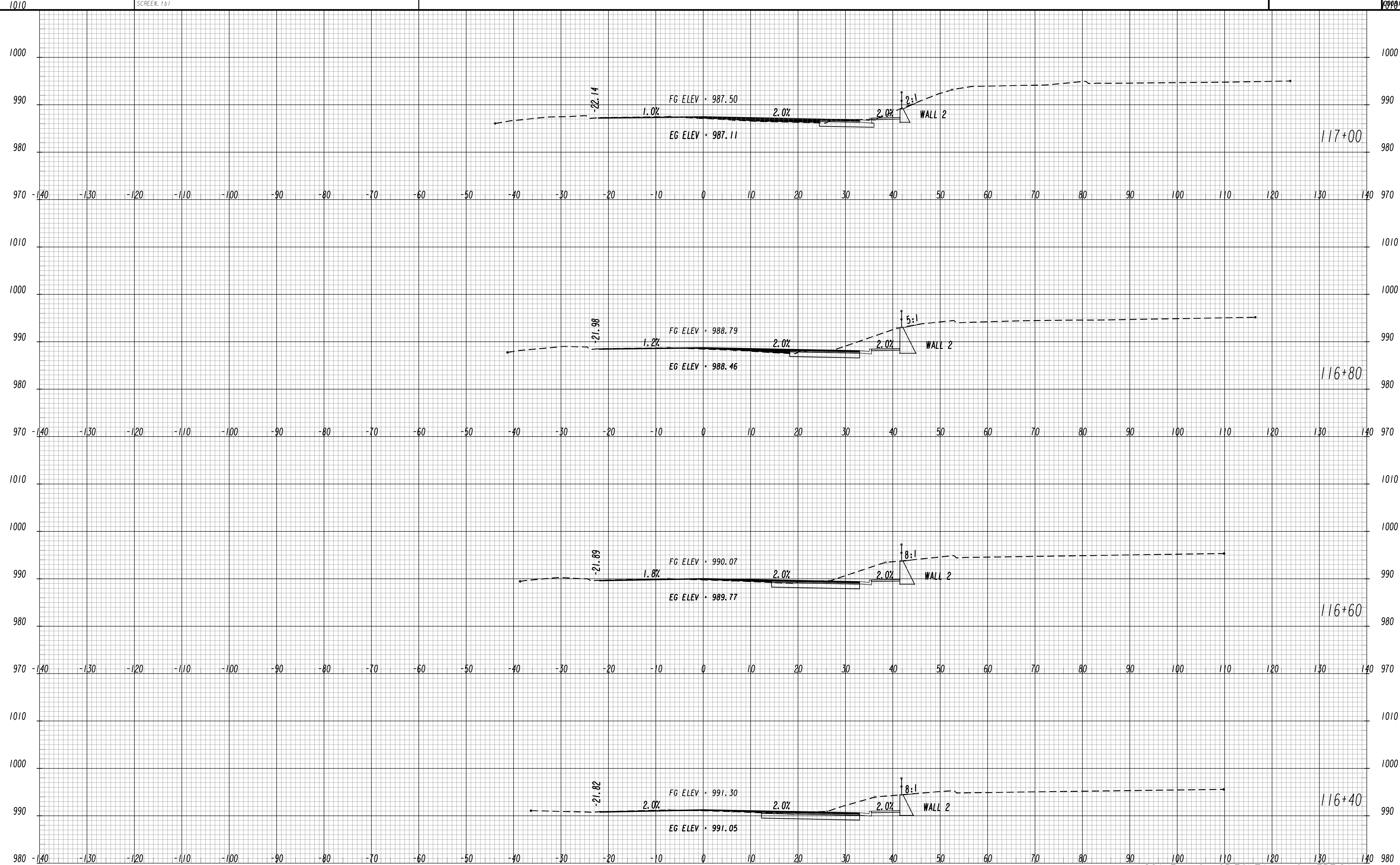


REVISION DATES

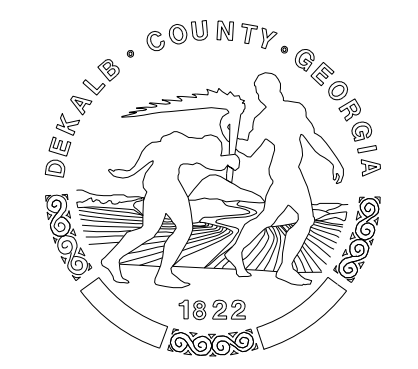
EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0018
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL

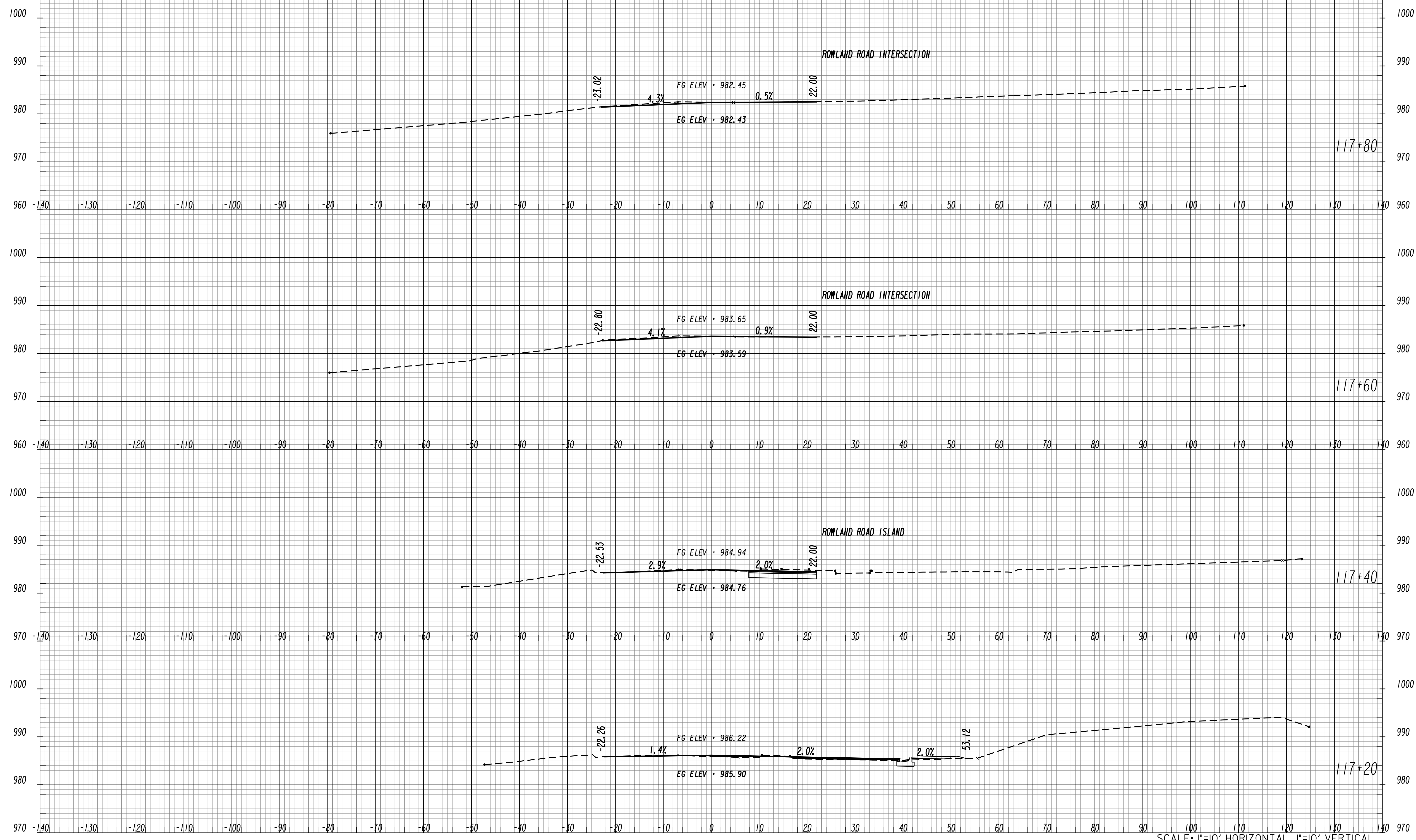


REVISION DATES

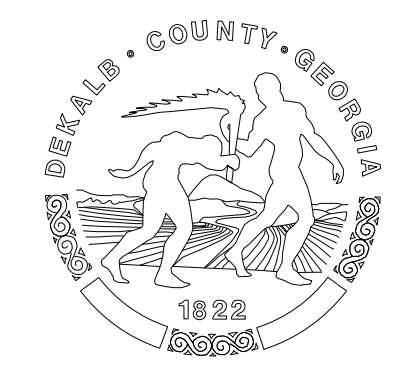
EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	23-0019
CORRECTED:	DATE:	
VERIFIED:	DATE:	



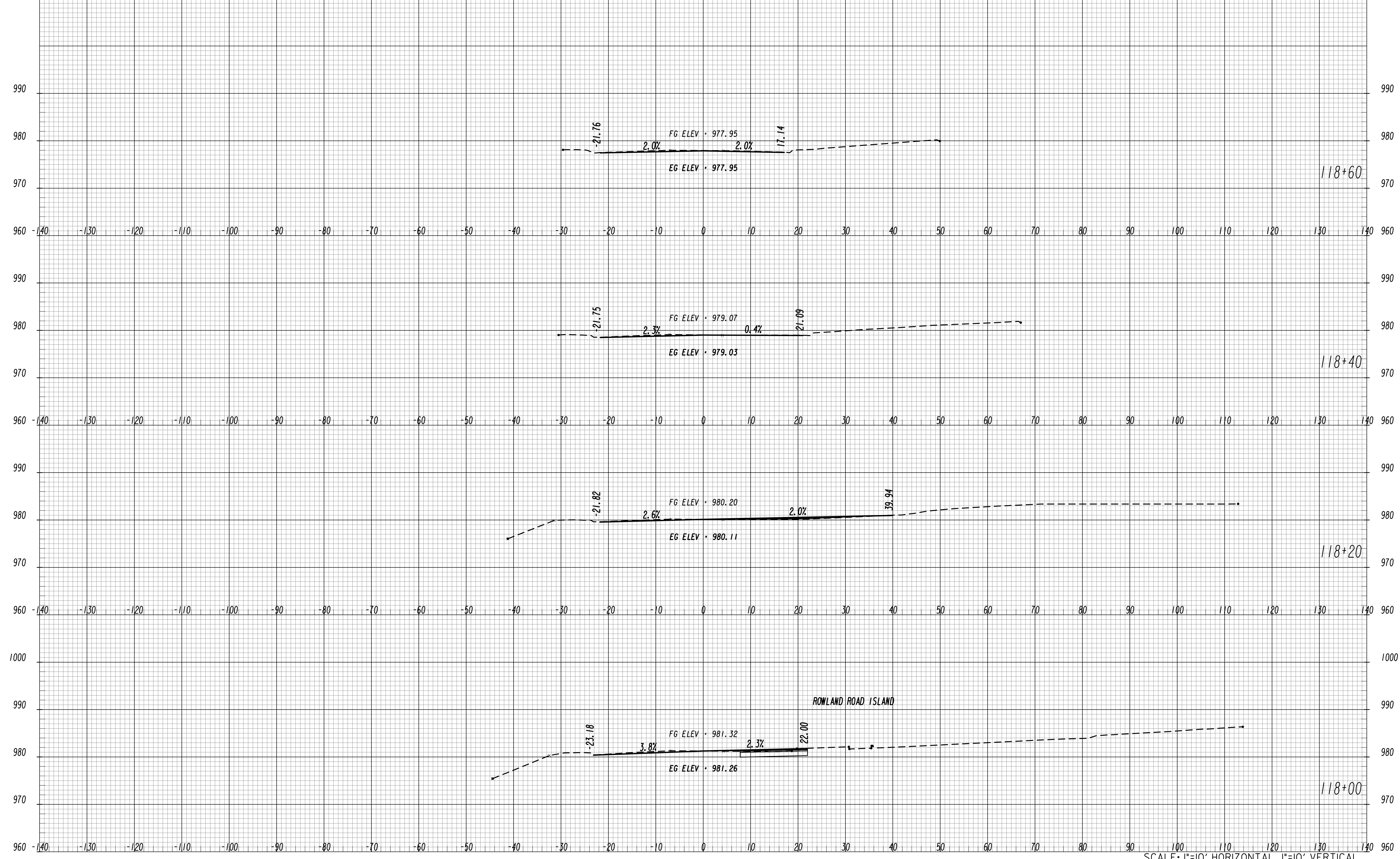
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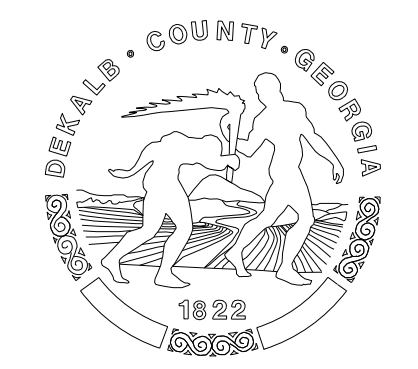
REVISION DATES	

EARTHWORK CROSS SECTIONS
ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No. 23-0020
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	



SCALE: 1"=10' HORIZONTAL, 1"=10' VERTICAL



REVISION DATES	

EARTHWORK CROSS SECTIONS

**ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No. 23-0021
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

UTILITY LINECODES			
EXISTING	TO BE REMOVED	PROPOSED	TYPE OF UTILITY
---E---	---E---	---E---	ELECTRIC
---E-T---	---E-T---	---E-T---	ELECTRIC/TELECOMMUNICATIONS
---E-TV---	---E-TV---	---E-TV---	ELECTRIC/CABLE TV
---E-TC---	---E-TC---	---E-TC---	ELECTRIC/TRAFFIC CONTROL
---E-T-TV---	---E-T-TV---	---E-T-TV---	ELECTRIC/TELECOMMUNICATIONS/CABLE TV
---E-T-TV-TC---	---E-T-TV-TC---	---E-T-TV-TC---	ELECTRIC/TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL
---E-TV-TC---	---E-TV-TC---	---E-TV-TC---	ELECTRIC/CABLE TV/TRAFFIC CONTROL
---E-T-TC---	---E-T-TC---	---E-T-TC---	ELECTRIC/TELECOMMUNICATIONS/TRAFFIC CONTROL
---GW---	---GW---	---GW---	GUY WIRE
---T---	---T---	---T---	TELECOMMUNICATIONS
---T-TC---	---T-TC---	---T-TC---	TELECOMMUNICATIONS/TRAFFIC CONTROL
---T-TV-TC---	---T-TV-TC---	---T-TV-TC---	TELECOMMUNICATIONS/CABLE TV/TRAFFIC CONTROL
---T-TV---	---T-TV---	---T-TV---	TELECOMMUNICATIONS/CABLE TV
---TV---	---TV---	---TV---	CABLE TV
---TV-TC---	---TV-TC---	---TV-TC---	CABLE TV/TRAFFIC CONTROL
---TC---	---TC---	---TC---	TRAFFIC CONTROL
---E(QL-D)---	---E(QL-D)---	---E---	ELECTRIC (QL-D)
---E(QL-C)---	---E(QL-C)---	---E(QL-C)---	ELECTRIC (QL-C)
---E(B)---	---E(B)---	---E(B)---	ELECTRIC (QL-B)
---T---	---T---	---T---	TELECOMMUNICATIONS (QL-D)
---T(C)---	---T(C)---	---T(C)---	TELECOMMUNICATIONS (QL-C)
---T(B)---	---T(B)---	---T(B)---	TELECOMMUNICATIONS (QL-B)
---TV---	---TV---	---TV---	CABLE TV (QL-D)
---TV(C)---	---TV(C)---	---TV(C)---	CABLE TV (QL-C)
---TV(B)---	---TV(B)---	---TV(B)---	CABLE TV (QL-B)
---W---	---W---	---W---	WATER (QL-D)
---W(C)---	---W(C)---	---W(C)---	WATER (QL-C)
---W(B)---	---W(B)---	---W(B)---	WATER (QL-B)
---**W---	---**W---	===**W===	WATER FOR LABELED PIPE SIZES (QL-D)
---**W(C)---	---**W(C)---	===**W(C)---	WATER FOR LABELED PIPE SIZES (QL-C)
---**W(B)---	---**W(B)---	===**W(B)---	WATER FOR LABELED PIPE SIZES (QL-B)
---NW---	---NW---	---NW---	NON-POTABLE WATER (QL-D)
---NW(C)---	---NW(C)---	---NW(C)---	NON-POTABLE WATER (QL-C)
---NW(B)---	---NW(B)---	---NW(B)---	NON-POTABLE WATER (QL-B)
---**NW---	---**NW---	===**NW===	NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-D)
---**NW(C)---	---**NW(C)---	===**NW(C)---	NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-C)
---**NW(B)---	---**NW(B)---	===**NW(B)---	NON-POTABLE WATER FOR LABELED PIPE SIZES (QL-B)
---STM---	---STM---	---STM---	STEAM (QL-D)
---STM(C)---	---STM(C)---	---STM(C)---	STEAM (QL-C)
---STM(B)---	---STM(B)---	---STM(B)---	STEAM (QL-B)
---**STM---	---**STM---	===**STM===	STEAM FOR LABELED PIPE SIZES (QL-D)
---**STM(C)---	---**STM(C)---	===**STM(C)---	STEAM FOR LABELED PIPE SIZES (QL-C)
---**STM(B)---	---**STM(B)---	===**STM(B)---	STEAM FOR LABELED PIPE SIZES (QL-B)
--->SS---	--->SS---	--->SS---	SANITARY SEWER WITH FLOW DIRECTION (QL-D)
--->SS(C)---	--->SS(C)---	--->SS(C)---	SANITARY SEWER WITH FLOW DIRECTION (QL-C)
--->SS(B)---	--->SS(B)---	--->SS(B)---	SANITARY SEWER WITH FLOW DIRECTION (QL-B)
---Σ**SS---	---Σ**SS---	===Σ**SS===	SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-D)
---Σ**SS(C)---	---Σ**SS(C)---	===Σ**SS(C)---	SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-C)
---Σ**SS(B)---	---Σ**SS(B)---	===Σ**SS(B)---	SANITARY SEWER WITH FLOW DIRECTION FOR LABELED PIPE SIZES (QL-B)
--->SFM---	--->SFM---	--->SFM---	SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-D)
--->SFM(C)---	--->SFM(C)---	--->SFM(C)---	SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-C)
--->SFM(B)---	--->SFM(B)---	--->SFM(B)---	SANITARY SEWER FORCE MAIN WITH FLOW DIRECTION (QL-B)
---G---	---G---	---G---	GAS (QL-D)
---G(C)---	---G(C)---	---G(C)---	GAS (QL-C)
---G(B)---	---G(B)---	---G(B)---	GAS (QL-B)
---**G---	---**G---	===**G===	GAS FOR LABELED PIPE SIZES (QL-D)
---**G(C)---	---**G(C)---	===**G(C)---	GAS FOR LABELED PIPE SIZES (QL-C)
---**G(B)---	---**G(B)---	===**G(B)---	GAS FOR LABELED PIPE SIZES (QL-B)
---P---	---P---	---P---	PETROLEUM (QL-D)
---P(C)---	---P(C)---	---P(C)---	PETROLEUM (QL-C)
---P(B)---	---P(B)---	---P(B)---	PETROLEUM (QL-B)
---**P---	---**P---	===**P===	PETROLEUM FOR LABELED PIPE SIZES (QL-D)
---**P(C)---	---**P(C)---	===**P(C)---	PETROLEUM FOR LABELED PIPE SIZES (QL-C)
---**P(B)---	---**P(B)---	===**P(B)---	PETROLEUM FOR LABELED PIPE SIZES (QL-B)
---TC---	---TC---	---TC---	TRAFFIC CONTROL (QL-D)
---TC(C)---	---TC(C)---	---TC(C)---	TRAFFIC CONTROL (QL-C)
---TC(B)---	---TC(B)---	---TC(B)---	TRAFFIC CONTROL (QL-B)
---UNK(B)---	---UNK(B)---	---UNK(B)---	UNKNOWN UTILITY FOUND IN SUE INVESTIGATION (QL-B)

FOR PROPOSED/TEMPORARY TRAFFIC CONTROL INFORMATION REFER TO TRAFFIC SIGNAL PLANS

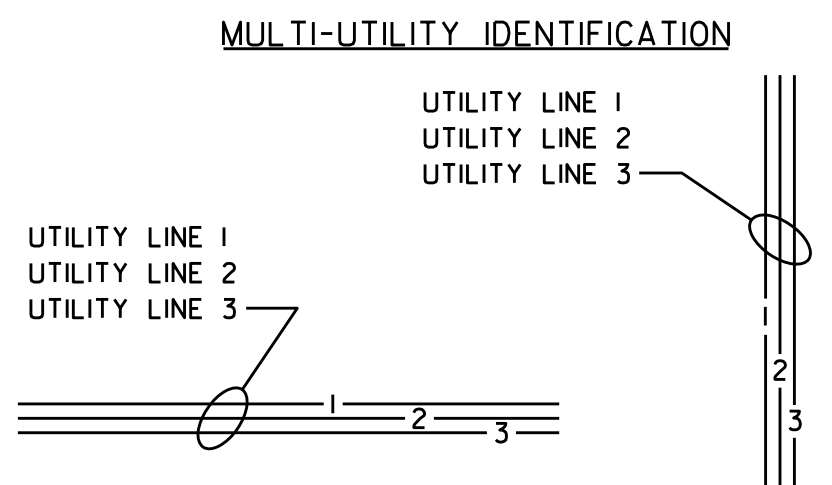
UTILITY SYMBOLS					
EXISTING	PROPOSED	TEMPORARY	EXISTING	PROPOSED	TEMPORARY

FOR PROPOSED/TEMPORARY TRAFFIC CONTROL INFORMATION REFER TO TRAFFIC SIGNAL PLANS

- MISCELLANEOUS
- LOS - LIMITS OF OVERHEAD AND SUBSURFACE UTILITY INVESTIGATION
 - TH - TEST HOLE (QL-A ONLY)
 - EOI - END OF INFORMATION
 - Q - QUALITY LEVEL (QL) DELINEATION
 - 123 - POLE ID
 - ADJ - SANITARY SEWER MANHOLE (SSMH) ID
 - C123 - CONFLICT LOCATION (UTILITY IMPACT ANALYSIS (UIA) ONLY)
 - [] - END OF UTILITY

ABBREVIATIONS

MANHOLE = LENGTH x WIDTH x DEPTH	PVC	POLY VINYL CHLORIDE
PR TELEPHONE PAIR SIZE	STR	FIBER STRAND SIZE
SVC SERVICE, UNKNOWN SIZE/TYPE	TCP	TERRA COTTA PIPE
MTD MULTIPLE TILE DUCT	ACP	ASBESTOS CONCRETE PIPE
MCD MULTIPLE CONCRETE DUCT	VCP	VITRIFIED CLAY PIPE
DIP DUCTILE IRON PIPE	STD	SINGLE TILE DUCT
TRD TRANSITE (ASBESTOS) DUCT	SCPD	SINGLE CREOSOTE PINE DUCT
FOC FIBER OPTIC CABLE	SD	SPLIT DUCT
CIP CAST IRON PIPE	3PH	3 PHASE ELECTRIC
SC SCREEN CABLE		
PE POLYETHYLENE		



QUALITY LEVELS AND DEFINITIONS

QL-D DEPICTED ACCORDING TO UTILITY RECORD INFORMATION AND IN-FIELD VISUAL INSPECTION. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

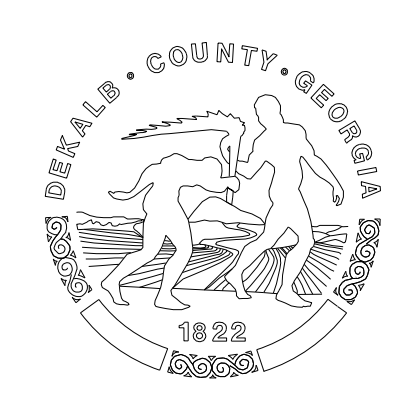
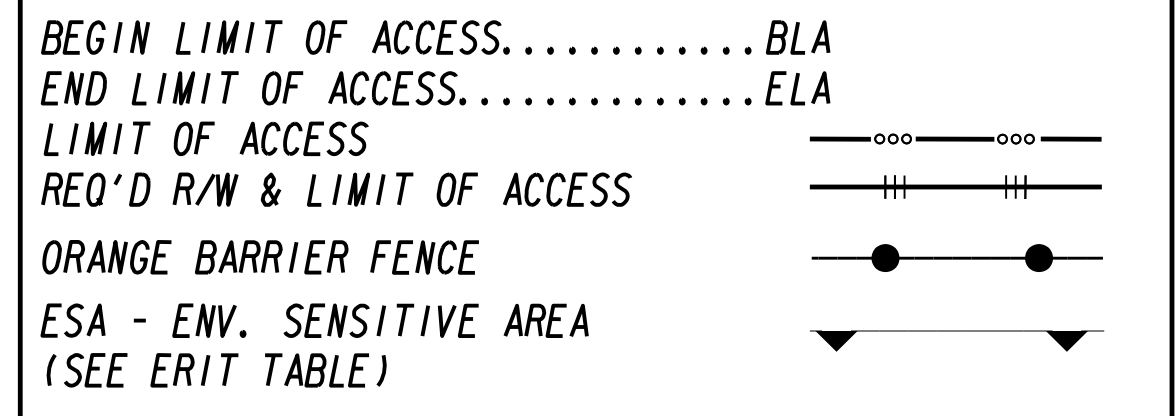
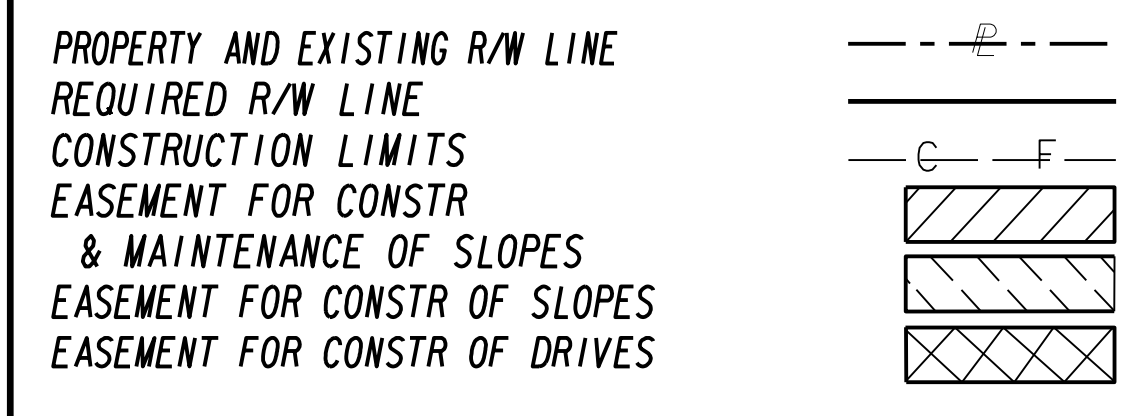
QL-C EXISTING UTILITY STRUCTURES HAVE BEEN FIELD LOCATED AND SURVEYED TO ASSIST IN DEPICTING THE UTILITIES SHOWN ON RECORDS. NO ELECTRONIC DESIGNATING INFORMATION WAS OBTAINED.

QL-B INFORMATION WAS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROPRIATE HORIZONTAL POSITION OF THE SUBSURFACE UTILITIES. QL-B DATA SHOULD BE REPRODUCIBLE BY SURFACE GEOPHYSICS AT ANY POINT OF THEIR DEPICTION. THIS INFORMATION IS SURVEYED TO APPLICABLE TOLERANCES DEFINED BY THE PROJECT AND REDUCED ONTO PLAN DOCUMENTS.

QL-A OBTAIN PRECISE HORIZONTAL AND VERTICAL POSITION OF THE UTILITY LINE BY EXCAVATING A TEST HOLE. THE TEST HOLE SHALL BE DONE USING VACUUM EXCAVATION OR COMPARABLE NONDESTRUCTIVE EQUIPMENT IN A MANNER AS TO CAUSE NO DAMAGE TO THE UTILITY LINE. AFTER EXCAVATING A TEST HOLE, A FIELD SURVEY SHALL BE PERFORMED TO DETERMINE THE EXACT LOCATION AND POSITION OF THE UTILITY LINE.

TELEPHONE PAIR SIZE TABLE

TELEPHONE PAIR SIZE	TELEPHONE CABLE DIAMETER
5 - 100	0.50 TO 2.00 IN
101 - 2400	UP TO 3.50 IN



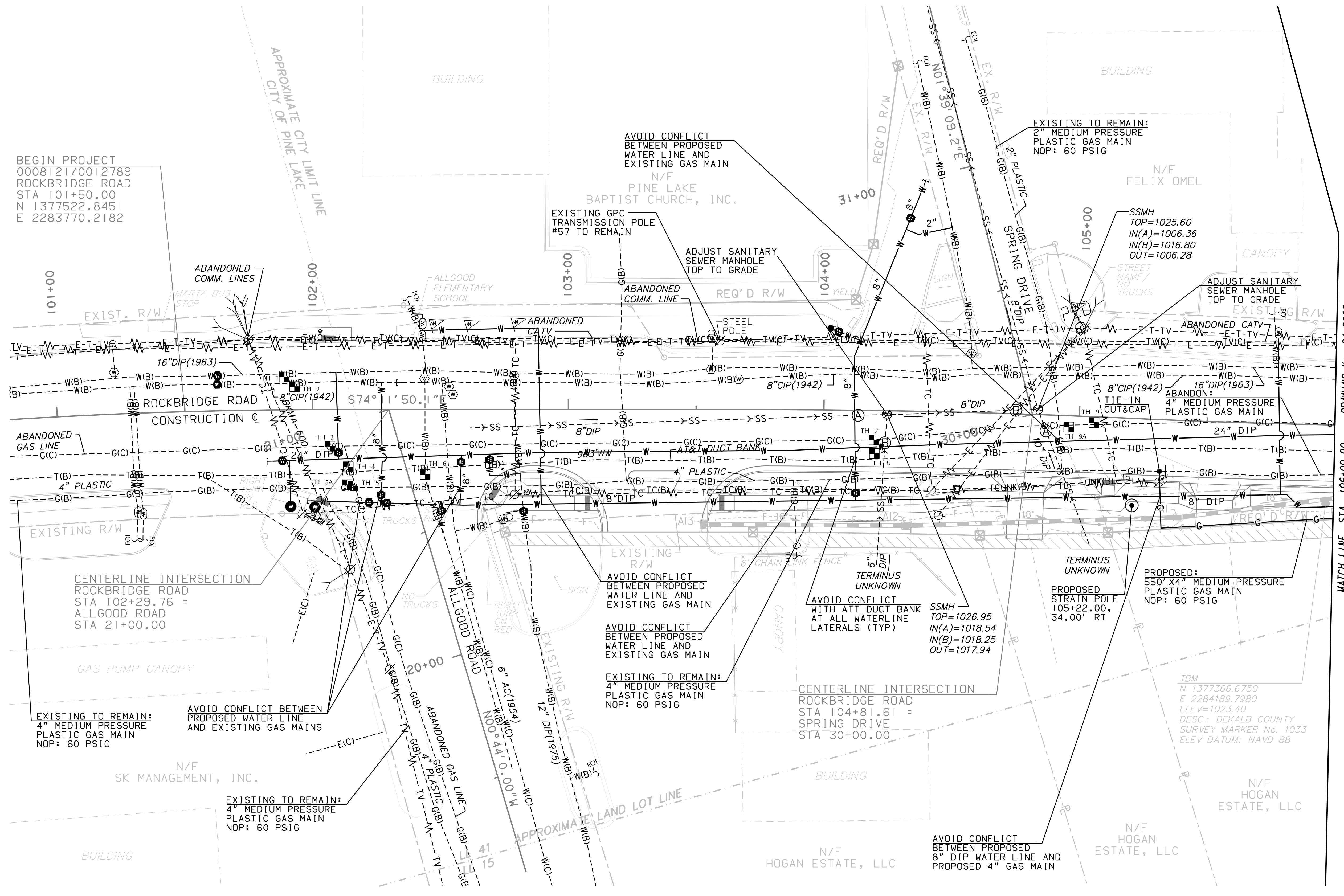
REVISION DATES

NO.	DATE	DESCRIPTION

UTILITY PLANS

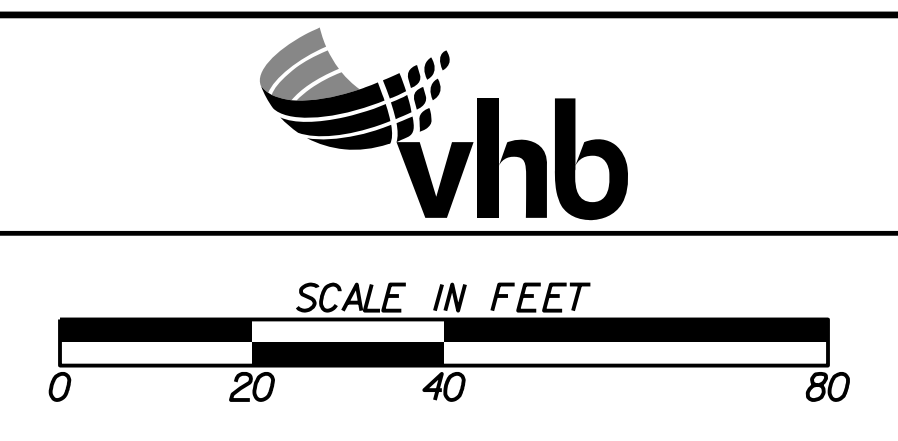
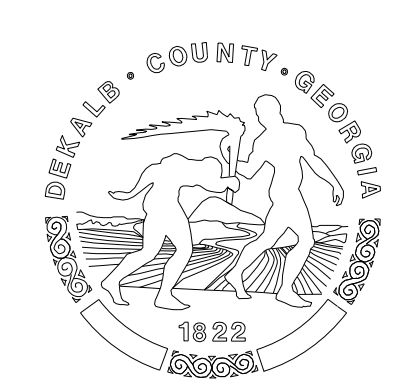
ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	24-0000
CORRECTED:	DATE:	
VERIFIED:	DATE:	



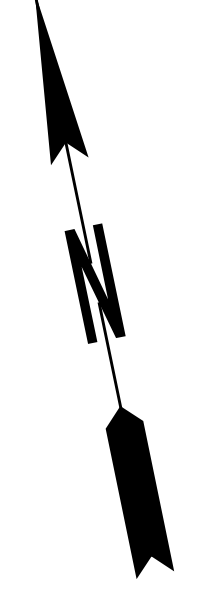
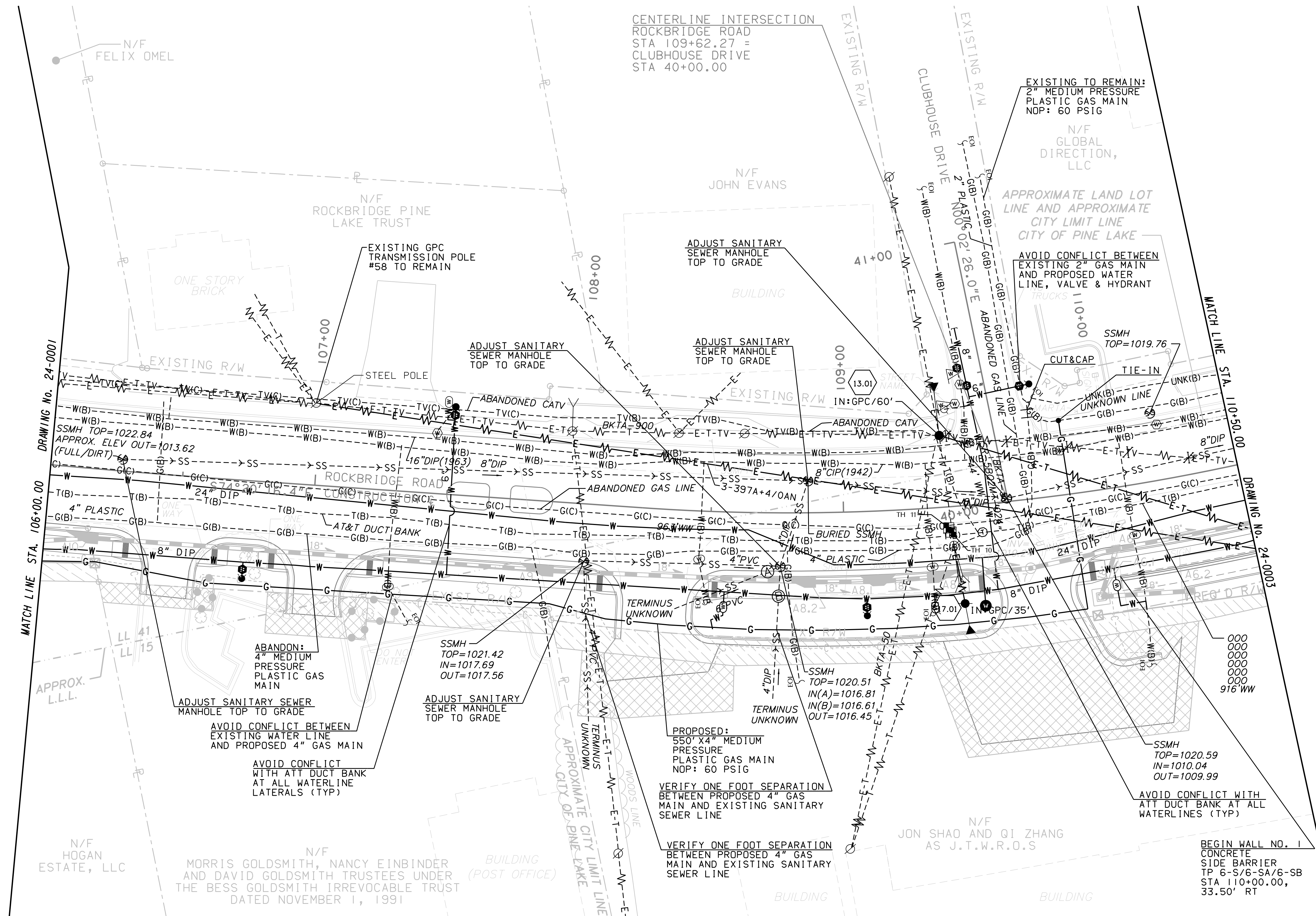
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

---#--- BEGIN LIMIT OF ACCESS.....BLA
 ---#--- END LIMIT OF ACCESS.....ELA
 ---#--- LIMIT OF ACCESS
 ---#--- REQ'D R/W & LIMIT OF ACCESS
 ---#--- ORANGE BARRIER FENCE
 ---#--- ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



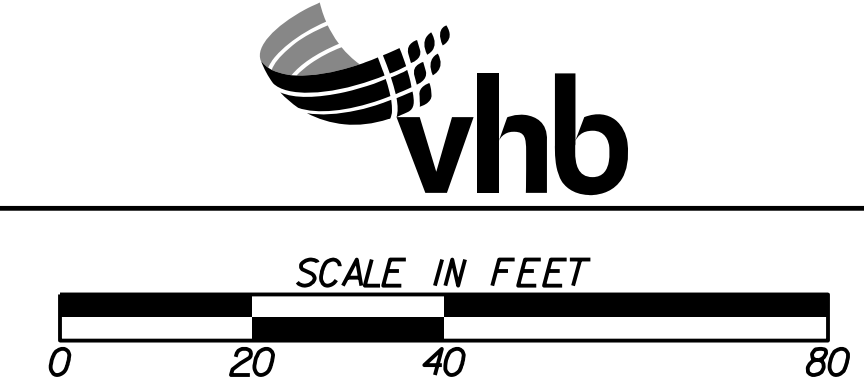
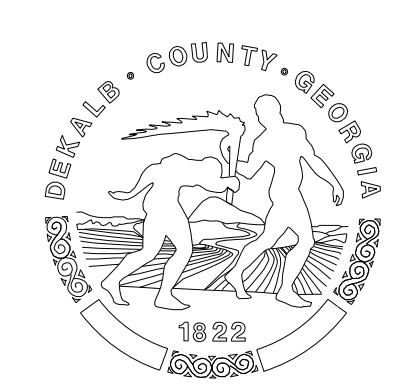
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UTILITY PLANS		
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VERIFIED:	DATE:	



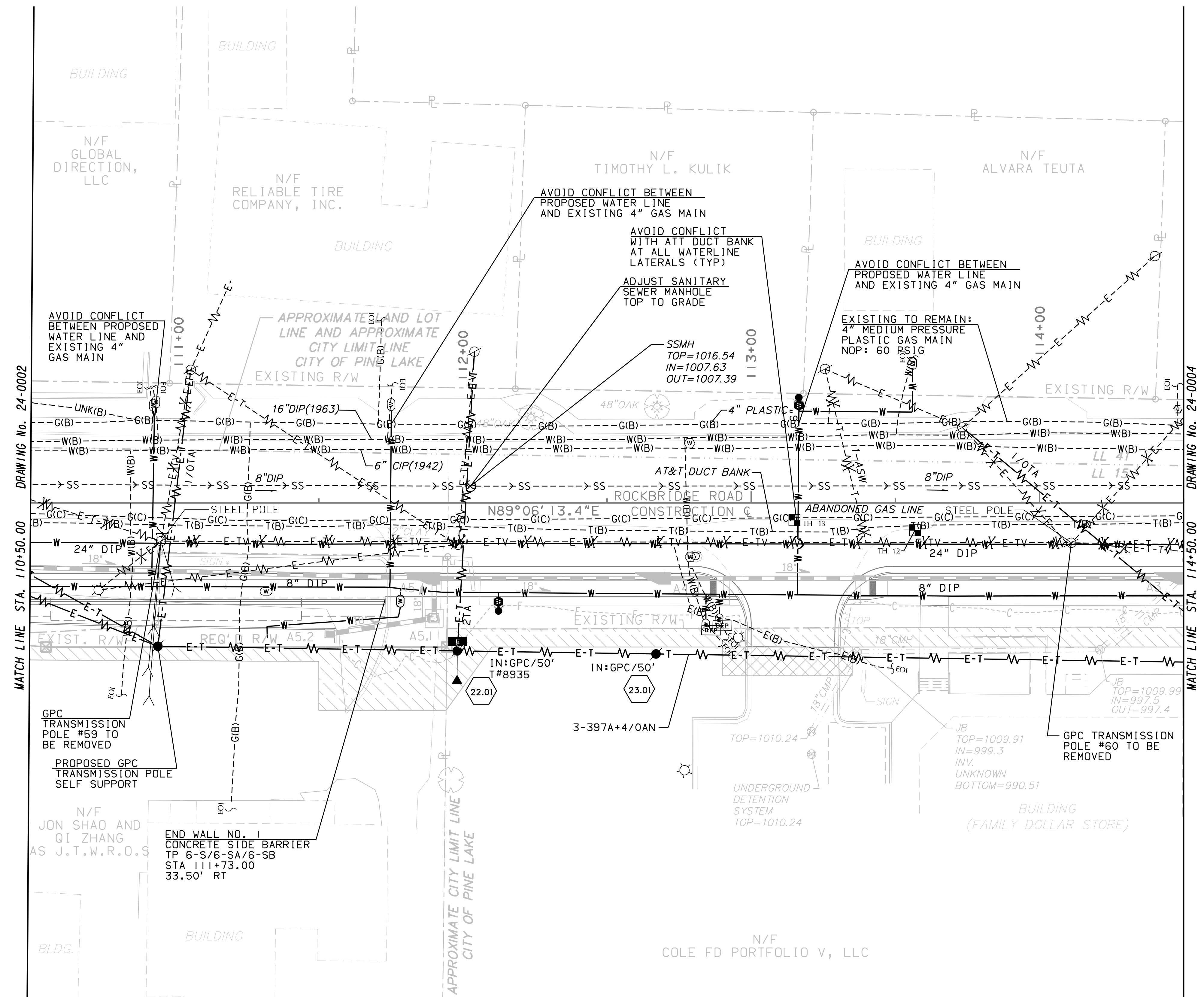
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REQUIRED R/W LINE
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EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

---#--- BEGIN LIMIT OF ACCESS.....BLA
---#--- END LIMIT OF ACCESS.....ELA
---#--- LIMIT OF ACCESS
---#--- REQ'D R/W & LIMIT OF ACCESS
---#--- ORANGE BARRIER FENCE
---#--- ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



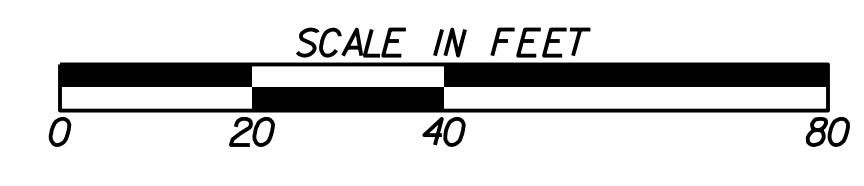
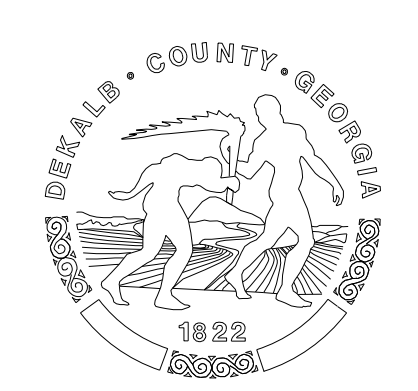
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VERIFIED:	DATE:		



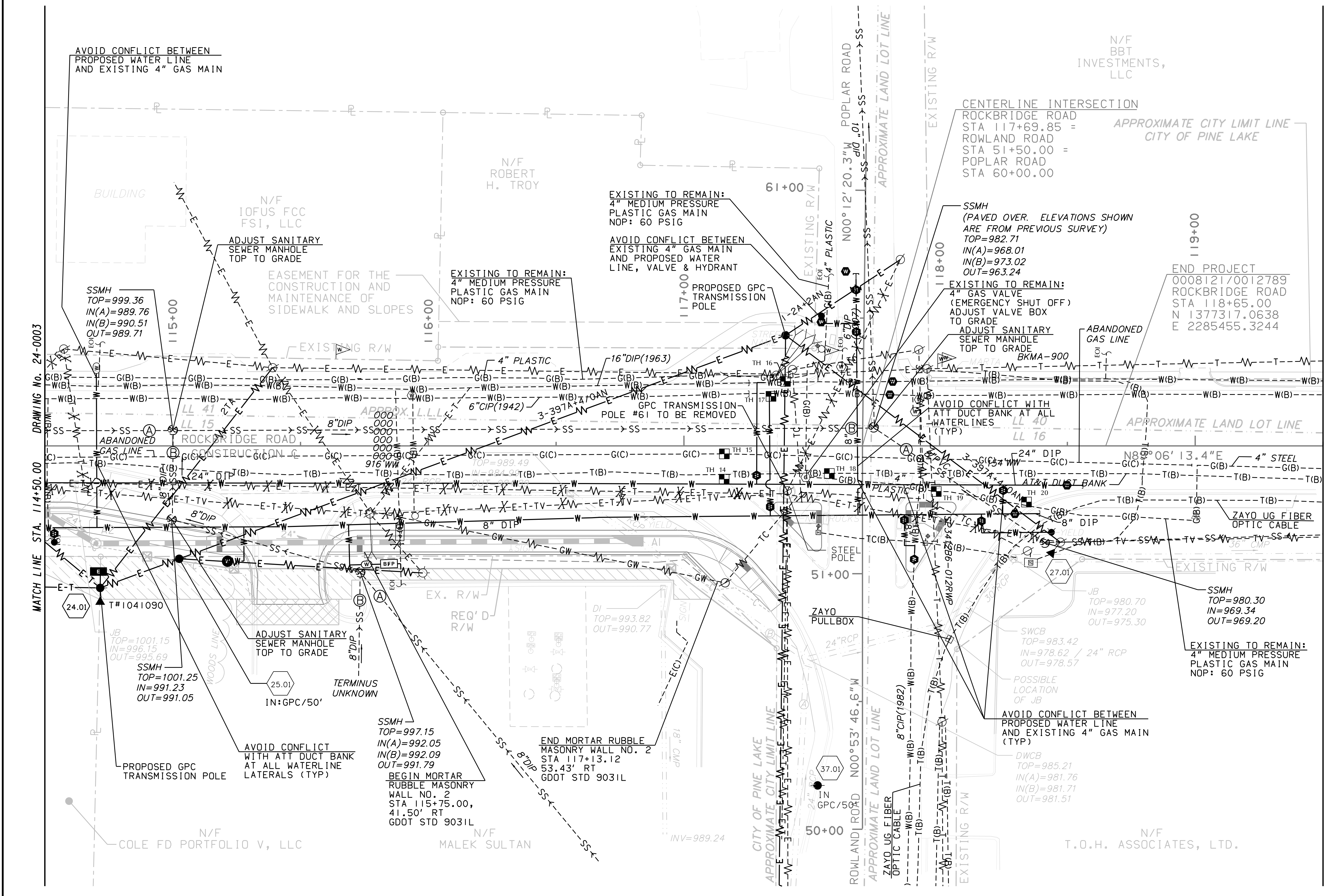
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 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

--- P --- BEGIN LIMIT OF ACCESS.....BLA
 --- END LIMIT OF ACCESS.....ELA
 --- LIMIT OF ACCESS
 --- REQ'D R/W & LIMIT OF ACCESS
 --- ORANGE BARRIER FENCE
 --- ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

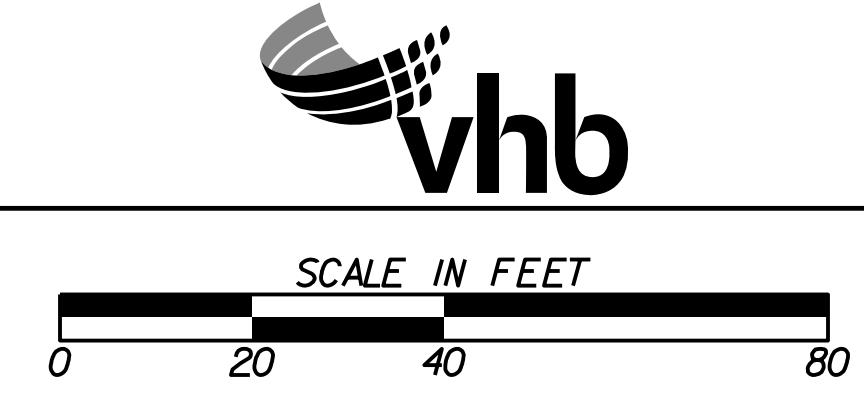
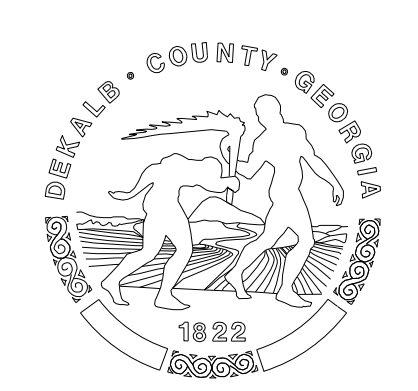
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VERIFIED:	DATE:		



PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

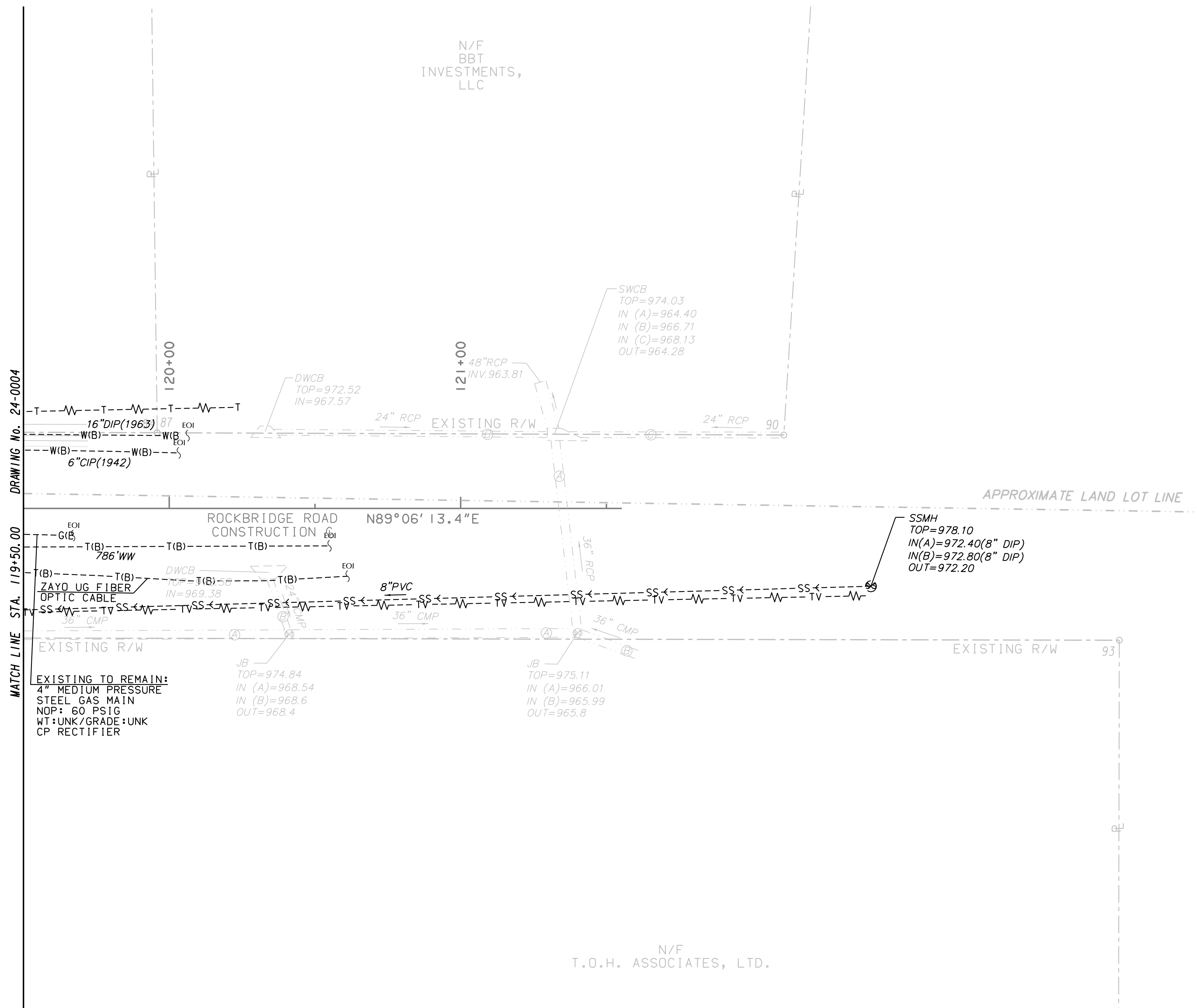
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 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

UTILITY PLANS			
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VERIFIED:	DATE:		

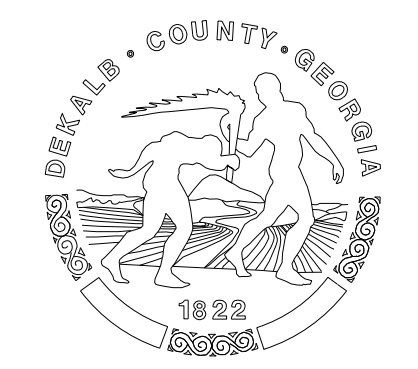


DRAWING No. 24-0004
 MATCH LINE STA. 119+50.00

THERE ARE NO CONSTRUCTION ACTIVITIES SHOWN ON THIS DRAWING.
 THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	---
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	---C---F---
EASEMENT FOR CONSTR OF SLOPES	---C---F---
EASEMENT FOR CONSTR OF DRIVES	---C---F---

BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
LIMIT OF ACCESS	---
REQ'D R/W & LIMIT OF ACCESS	---
ORANGE BARRIER FENCE	---
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	---

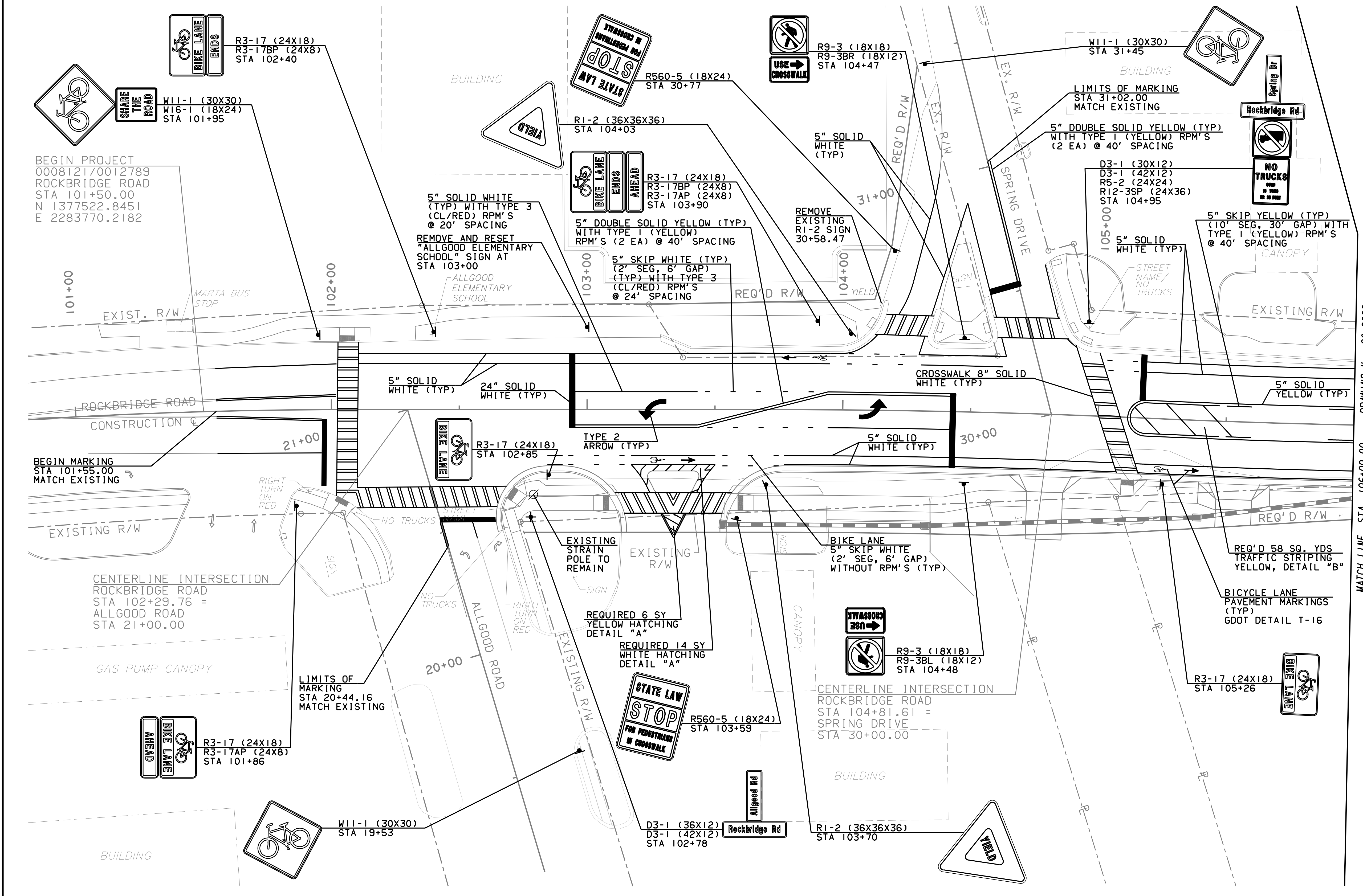


vhb

SCALE IN FEET

REVISION DATES	

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CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	24-0005	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



BEGIN PROJECT
 0008121/0012789
 ROCKBRIDGE ROAD
 STA 101+50.00
 N 1377522.8451
 E 2283770.2182

BEGIN MARKING
 STA 101+55.00
 MATCH EXISTING

CENTERLINE INTERSECTION
 ROCKBRIDGE ROAD
 STA 102+29.76 =
 ALLGOOD ROAD
 STA 21+00.00

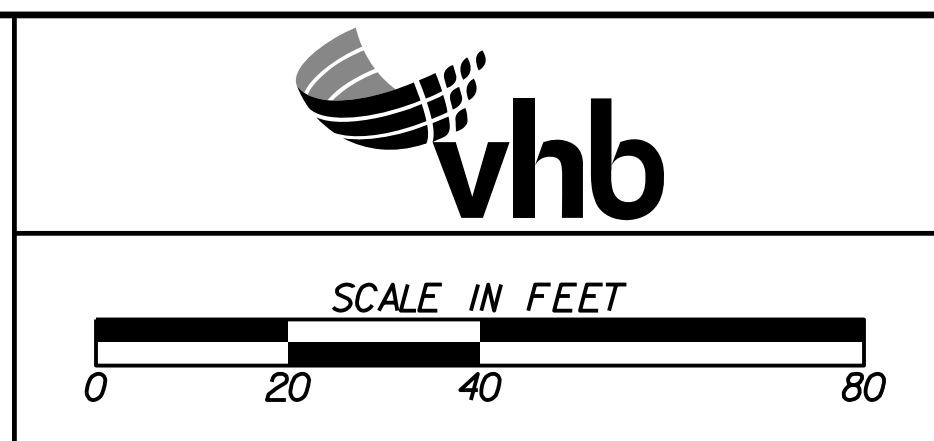
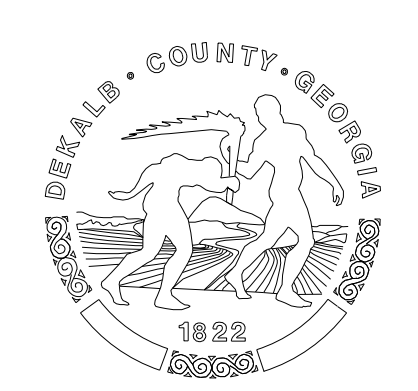
LIMITS OF MARKING
 STA 20+44.16
 MATCH EXISTING

CENTERLINE INTERSECTION
 ROCKBRIDGE ROAD
 STA 104+81.61 =
 SPRING DRIVE
 STA 30+00.00

DRAWING No. 26-0002
 MATCH LINE STA. 106+00.00

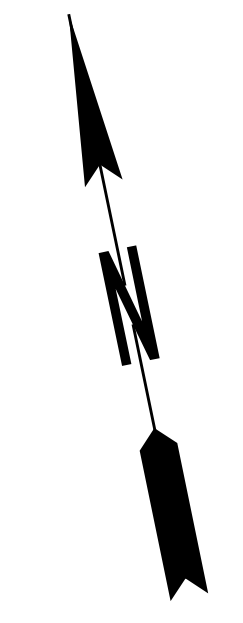
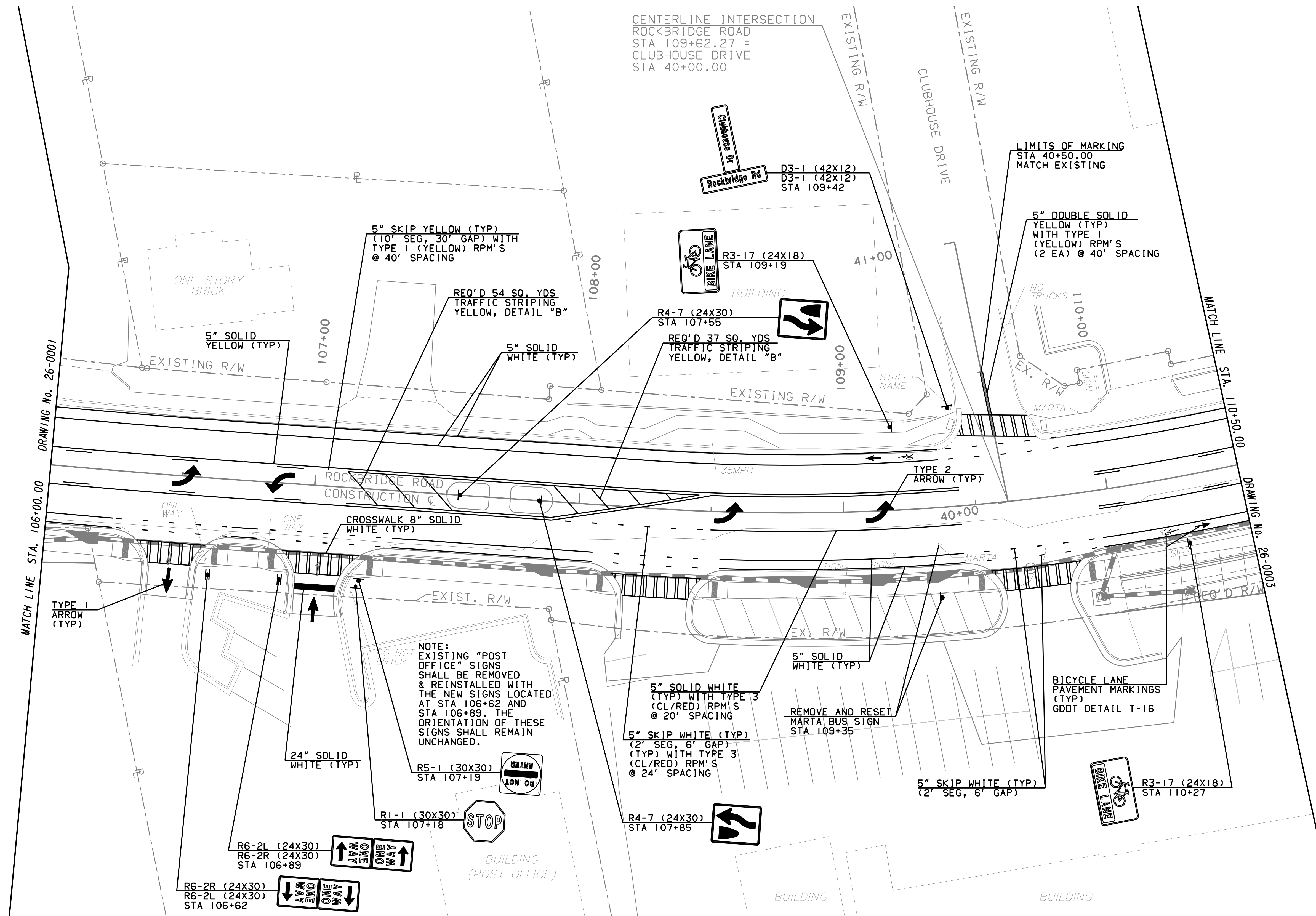
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



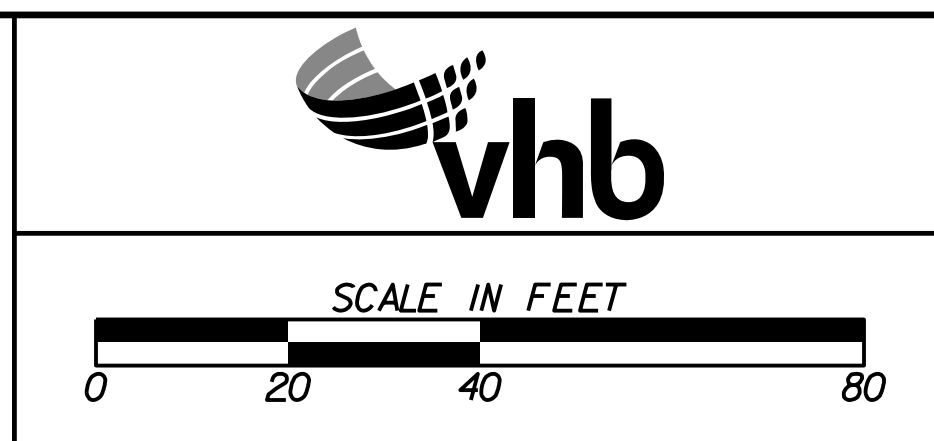
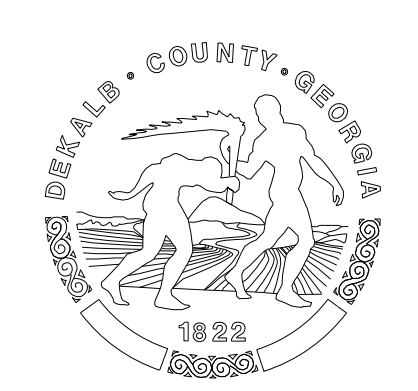
REVISION DATES	

SIGNING AND MARKING PLANS			
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CORRECTED:		DATE:	
VERIFIED:		DATE:	



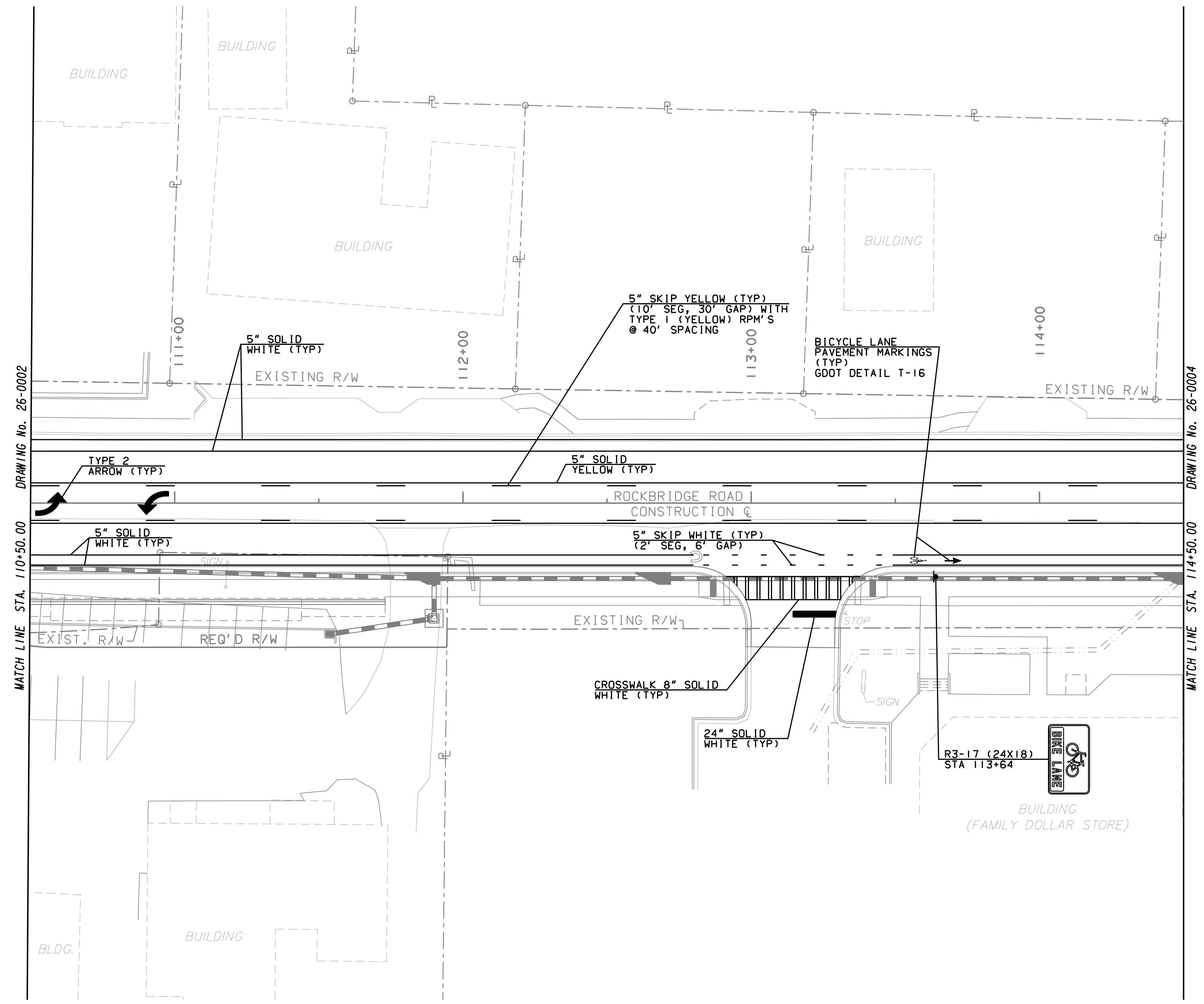
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

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 --- END LIMIT OF ACCESS.....ELA
 --- LIMIT OF ACCESS
 --- REQ'D R/W & LIMIT OF ACCESS
 --- ORANGE BARRIER FENCE
 --- ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)

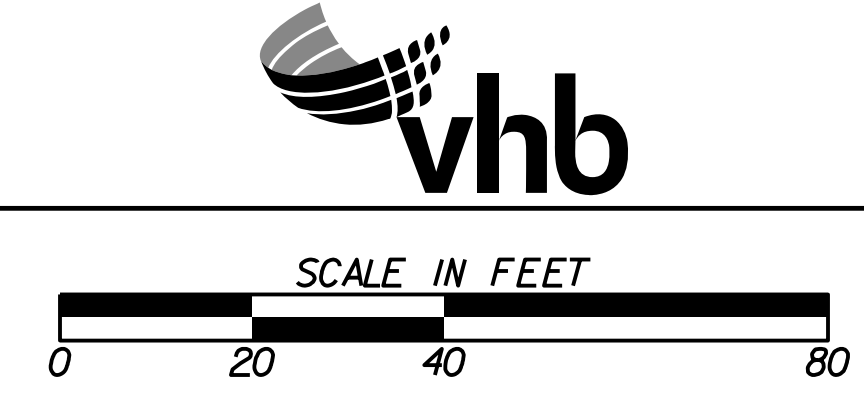
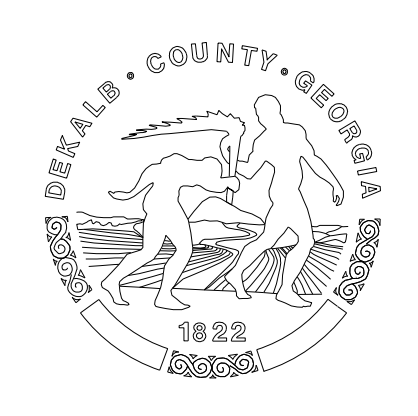
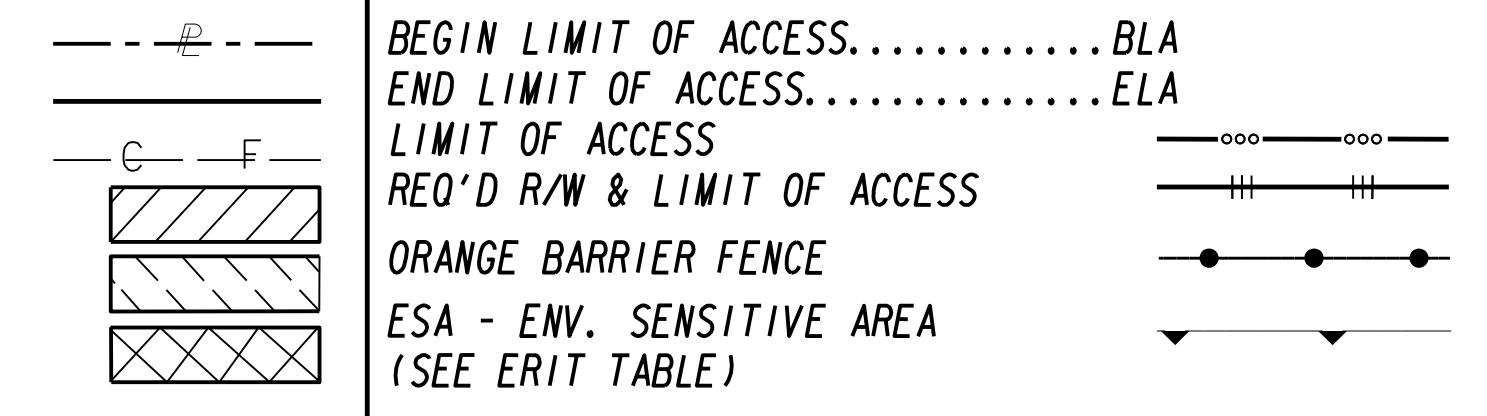


REVISION DATES	

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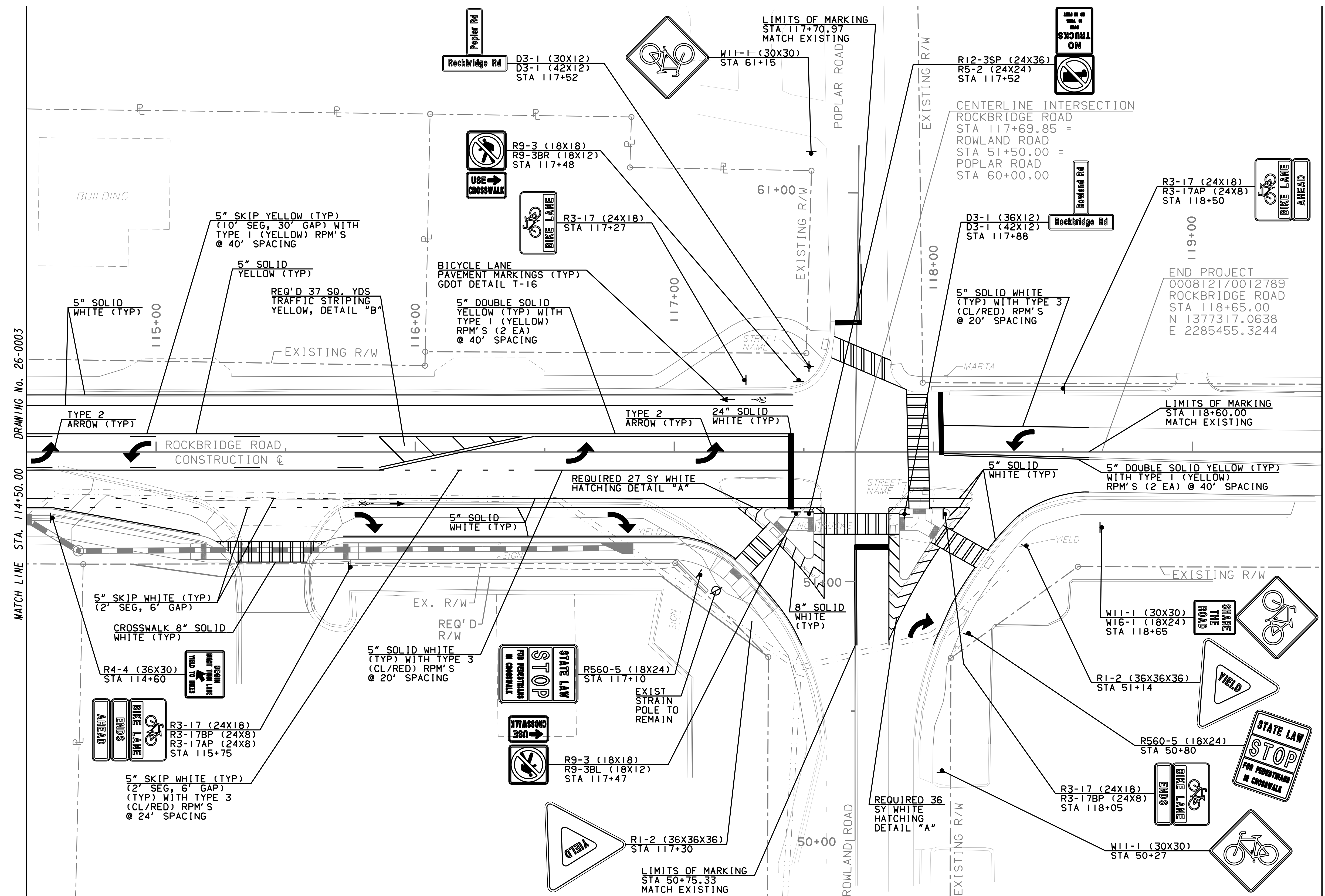


PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES



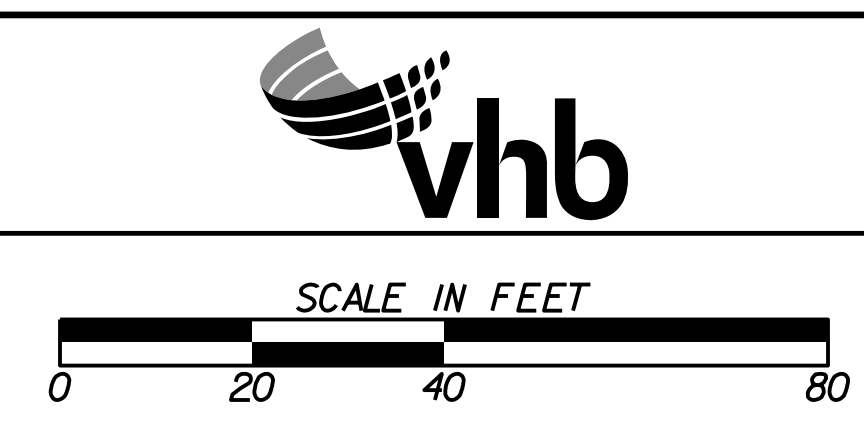
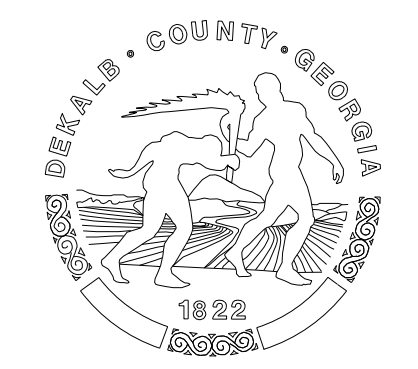
REVISION DATES	

SIGNING AND MARKING PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
DRAWING No.			26-0003



PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

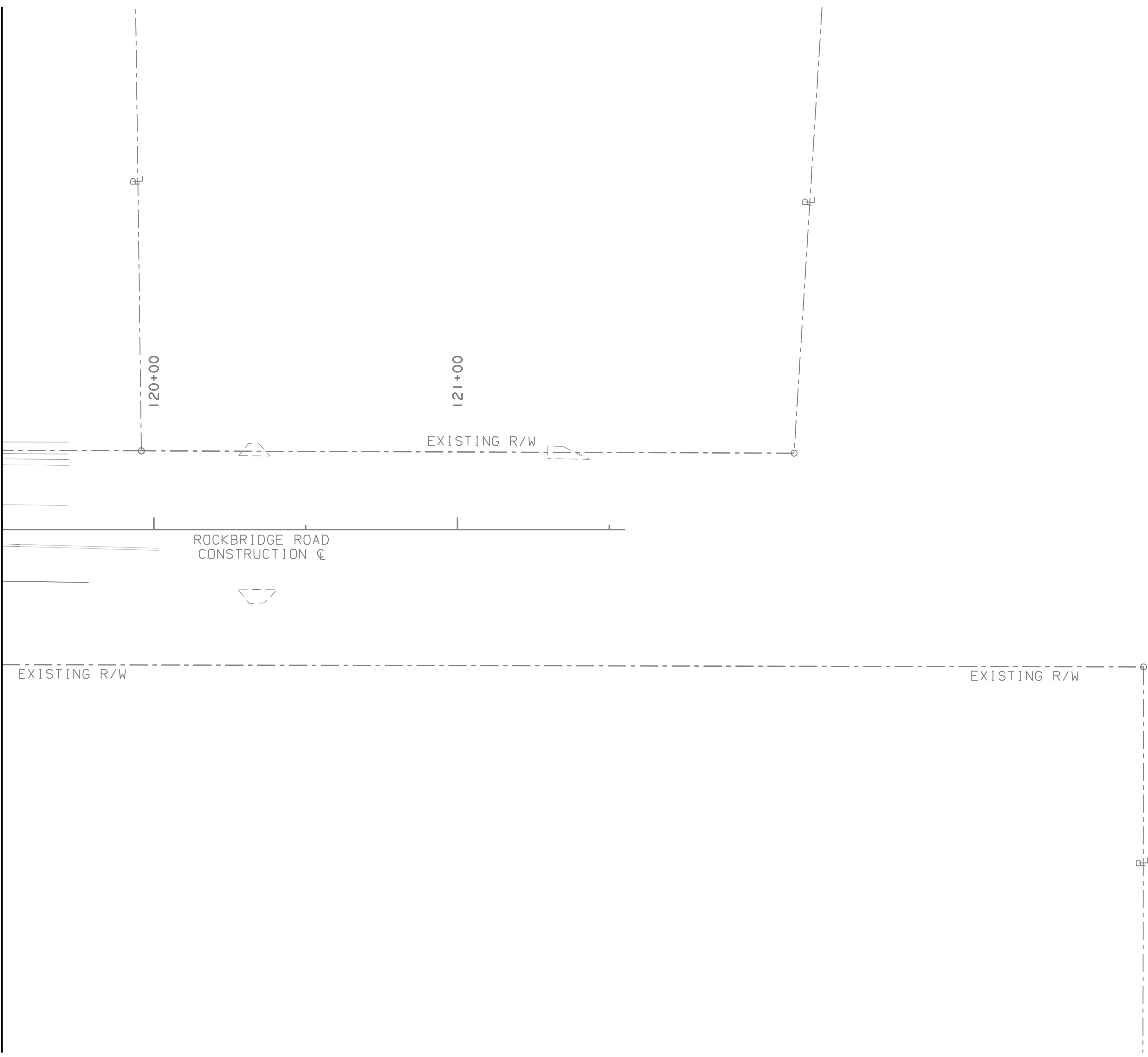
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 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

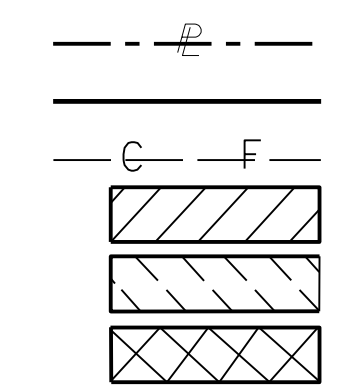
SIGNING AND MARKING PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	26-0004	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

DRAWING No. 26-0004
MATCH LINE STA. 119+50.00

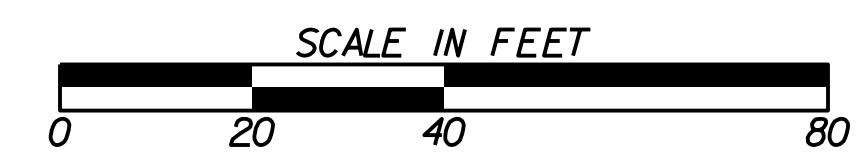
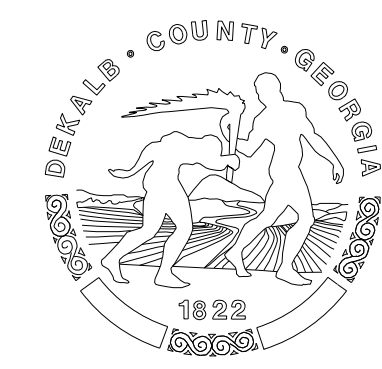
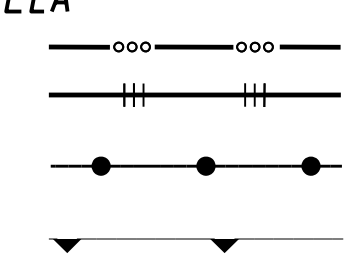


THERE ARE NO CONSTRUCTION ACTIVITIES SHOWN ON THIS DRAWING.
THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

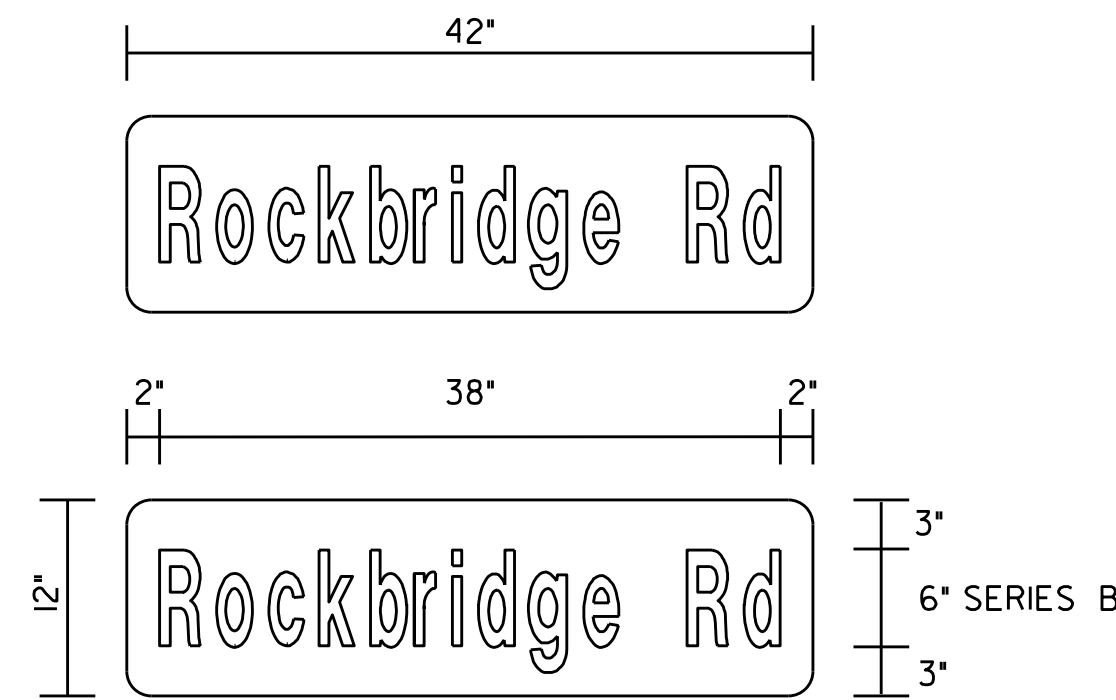


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LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

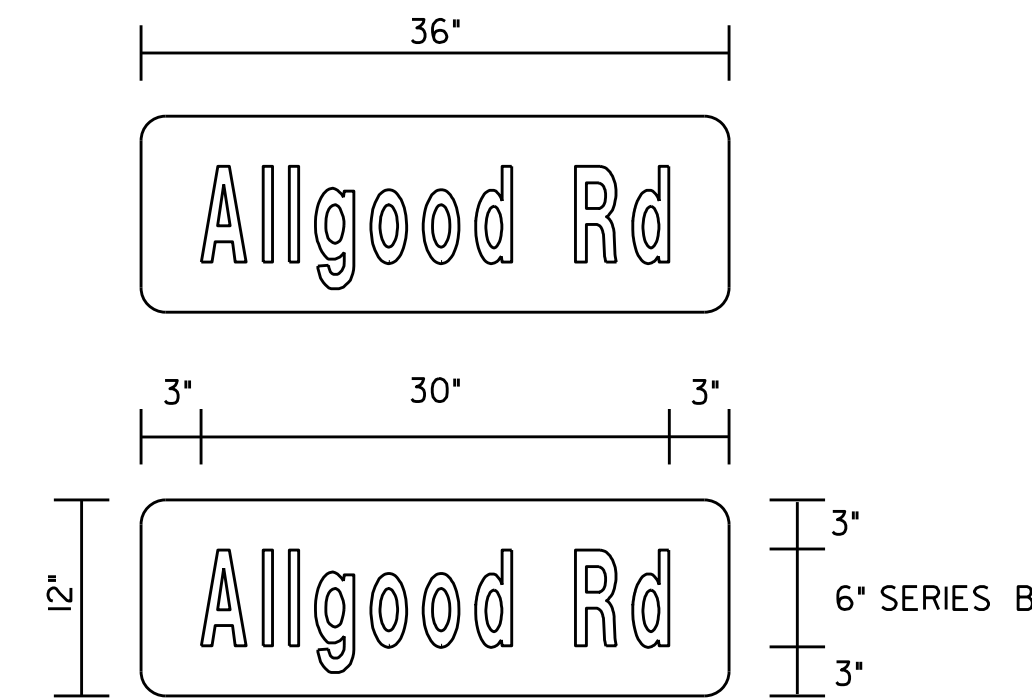


REVISION DATES	

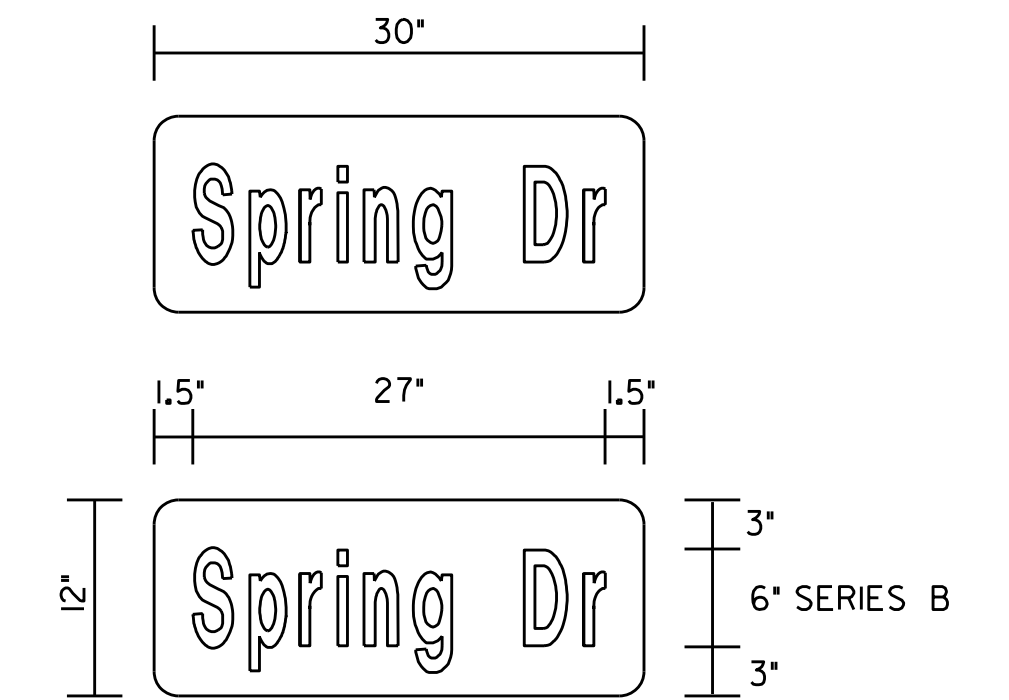
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ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
DRAWING No.			26-0005



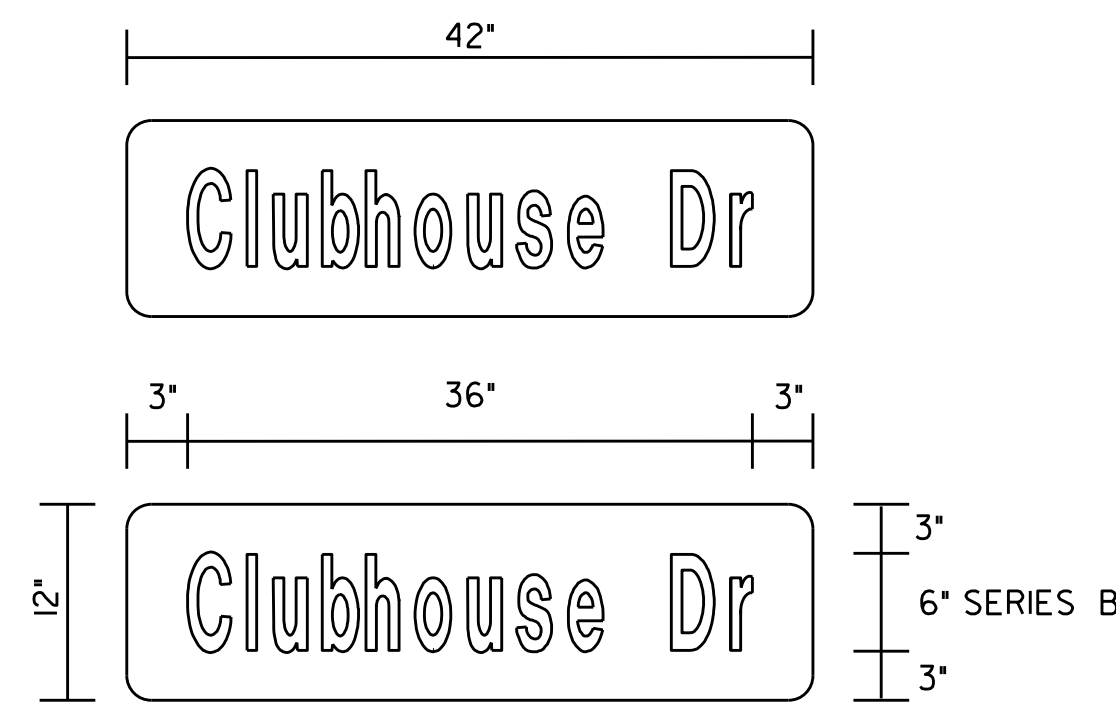
D3-1 (DOUBLE SIDED)
 STA 102+78 RT
 STA 104+95 LT
 STA 109+42 LT
 STA 117+52 LT
 STA 117+88 RT
 WHITE LEGEND
 GREEN BACKGROUND



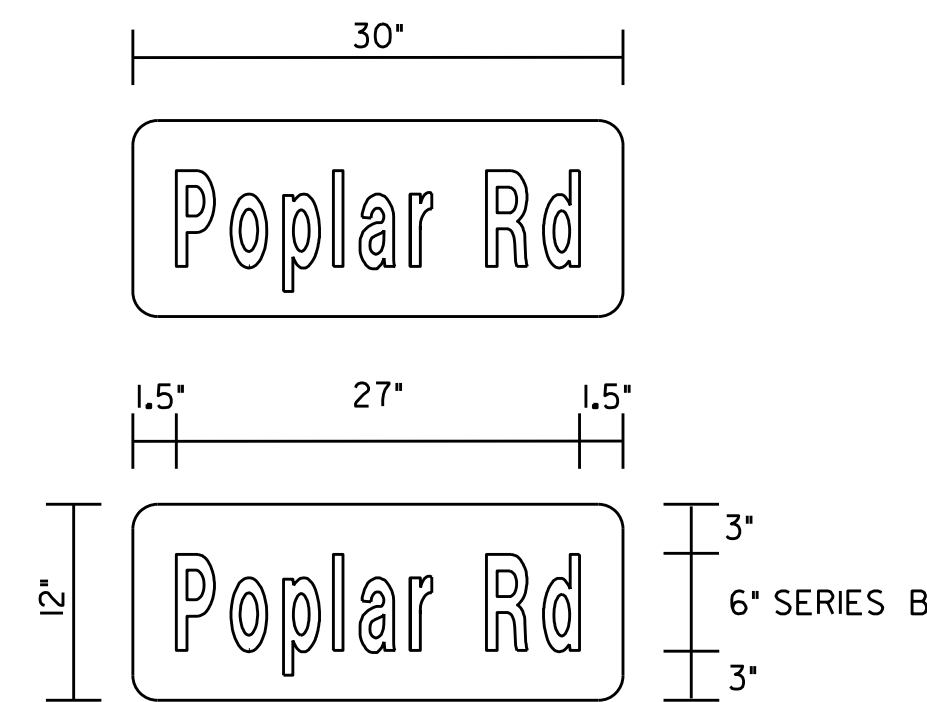
D3-1 (DOUBLE SIDED)
 STA 102+78 RT
 WHITE LEGEND
 GREEN BACKGROUND



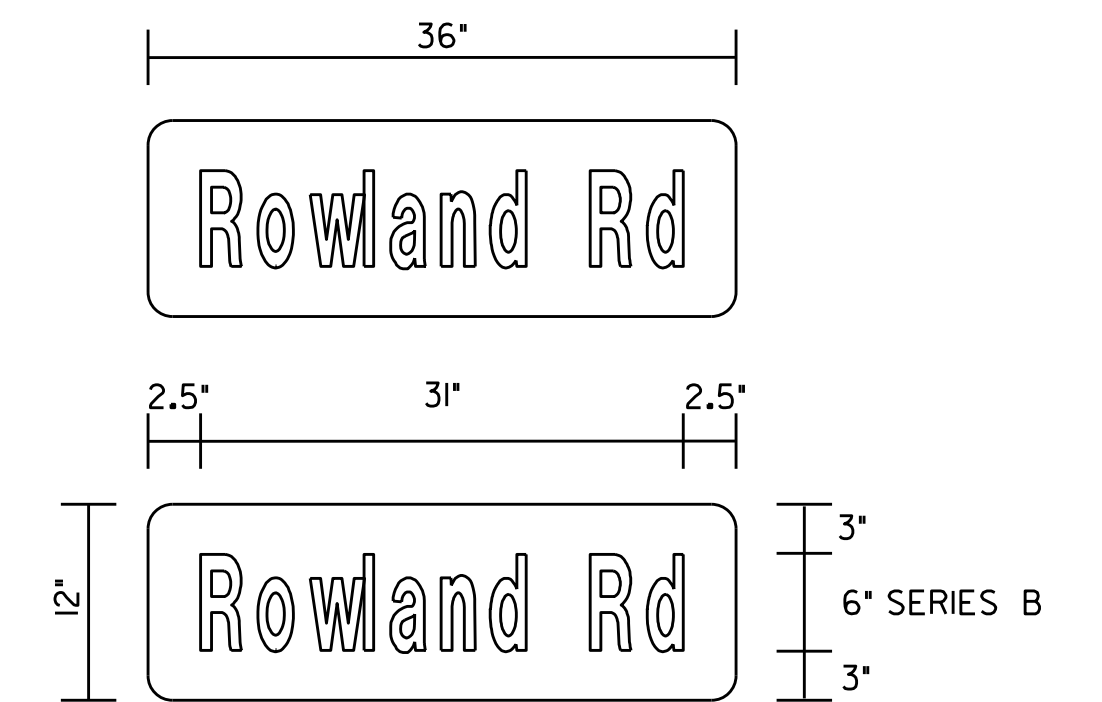
D3-1 (DOUBLE SIDED)
 STA 104+95 LT
 WHITE LEGEND
 GREEN BACKGROUND



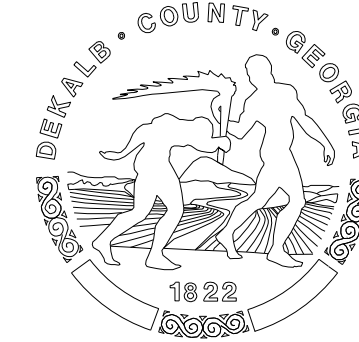
D3-1 (DOUBLE SIDED)
 STA 109+42 LT
 WHITE LEGEND
 GREEN BACKGROUND



D3-1 (DOUBLE SIDED)
 STA 117+52 LT
 WHITE LEGEND
 GREEN BACKGROUND



D3-1 (DOUBLE SIDED)
 STA 117+88 RT
 WHITE LEGEND
 GREEN BACKGROUND



REVISION DATES

NO.	DATE	DESCRIPTION

SIGNING AND MARKING PLANS

ROCKBRIDGE ROAD
 FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No. 26-0006
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

EXISTING UTILITIES

- EXISTING GUY WIRE
- EX.OH ELECTRIC
- EX POWER POLE
- EX TRANSFORMER
- EX.UG ELECTRIC
- EX GAS LINE
- EX GAS METER
- EX GAS VALVE
- EX WATER LINE
- EX FIRE HYDRANT
- EX WATER METER
- EX WATER VALVE
- EX SANITARY SEWER
- EX SS MANHOLE
- EX TELEPHONE MH
- EX OH TELEPHONE
- EX TELEPHONE POLE
- EX UG TELEPHONE
- EX OH CABLE TV
- EX UG CABLE TV

EXISTING SIGNAL

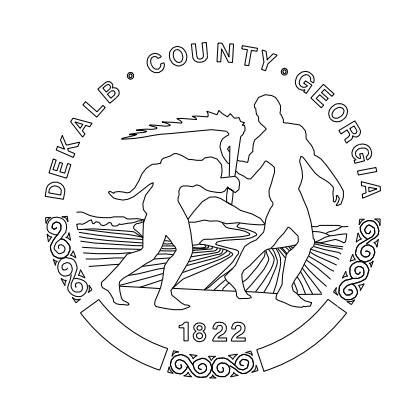
- CONTROLLER CABINET
- POLE MOUNTED CABINET
- STRAIN POLE
- TIMBER POLE
- DOWN GUY
- MAST ARM
- STREET LIGHT
- 3 SECTION HEAD
- 5 SECTION HEAD
- OVERHEAD SIGN
- PEDESTAL POLE
- PED SIGNAL HEAD
- CURB CUT RAMP
- PULLBOX, TP 1
- PULLBOX, TP 2
- PULLBOX, TP 4
- PULLBOX, TP 5
- 6x6 PULSE LOOP
- 6x18 CALL LOOP
- 6x40 PRESENCE LOOP (DIPOLE)
- 6x40 PRESENCE LOOP (QUADRUPOLE)
- CONDUIT
- RAILROAD CONTROLLER
- SIGN POST

PROPOSED SIGNAL

- CONTROLLER CABINET
- STRAIN POLE
- TIMBER POLE
- DOWN GUY
- MAST ARM
- STREET LIGHT
- 3 SECTION HEAD
- 3 SECTION HEAD W/ BACKPLATE
- 4 SECTION HEAD W/BACKPLATE
- 5 SECTION HEAD OR 4 SECTION T-SHAPE HEAD
- 5 SECTION HEAD W/ BACKPLATE OR 4 SECTION T-SHAPE HEAD W/ BACKPLATE
- OVERHEAD SIGN
- PEDESTAL POLE
- PED SIGNAL HEAD
- CURB CUT RAMP - (See ADA Detail)
- PULLBOX, TP 1
- PULLBOX, TP 2
- PULLBOX, TP 3
- 6x6 PULSE LOOP
- 6x18 CALL LOOP
- 6x40 PRESENCE LOOP (DIPOLE)
- 6x40 PRESENCE LOOP (QUADRUPOLE)
- CONDUIT
- DIRECTIONAL BORE
- RAILROAD CONTROLLER
- SIGN POST
- CCTV

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

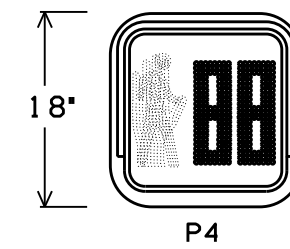
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 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

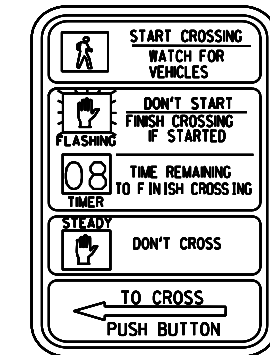
SIGNAL PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	27-0001	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

LED COUNTDOWN PED HEAD



P4

PEDESTRIAN SIGN



R10-3E(L)
9" X 15"

LIST OF MATERIALS

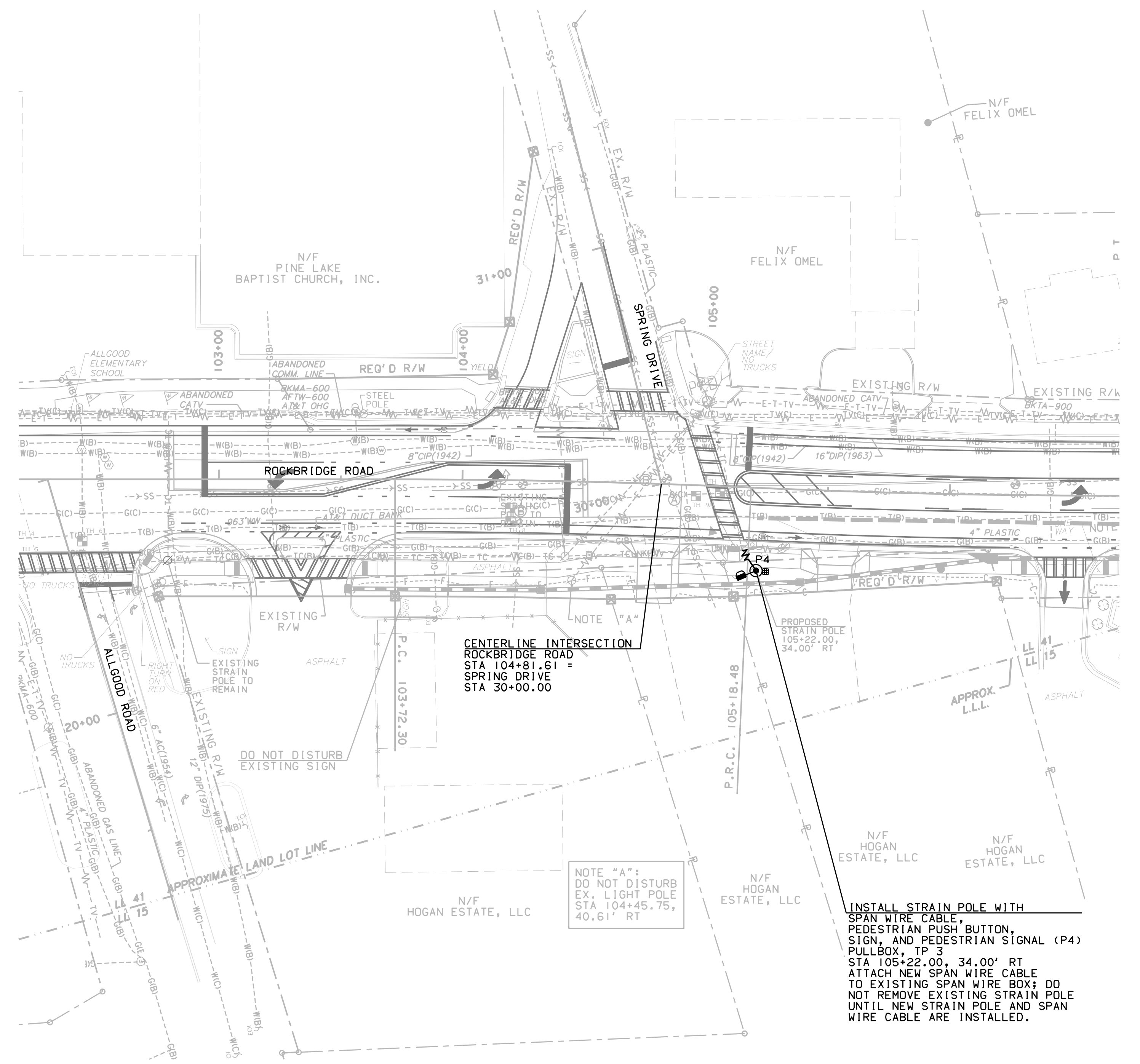
MATERIALS	UNIT	QUANTITY
LOOP/PED LEAD-IN WIRE (SHIELDED, TWISTED/1000 FT); 3 PAIR, 18 AWG	REEL	1
SIGNAL CABLE (14 AWG); 7 CONDUCTOR, PER 1000 FT.	REEL	1
1-SECTION, 16" x 18" LED - "INCANDESCENT LOOK" COUNTDOWN PEDESTRIAN SIGNAL HEAD, FULL HAND/MAN OVERLAP 9" HIGH, NUMBERS & 12" SYMBOLS	EA	1
PEDESTRIAN PUSHBUTTONS STATIONS, W/BUTTONS AND SIGNS: 9" x 15", R10-3E, (L)EFT OR (R)IGHT, COUNTDOWN	EA	1
HARDWARE FOR PEDESTAL POLE, TOP POST MOUNTING, ONE-WAY BRACKET ASSEMBLY	EA	1
PEDESTAL POLE & SQUARE BASE	EA	1
PULL BOX, PB-2	EA	1
PULL BOX, PB-3	EA	1
CONDUIT, NONMETAL, TP 2, 1"	LF	10
CONDUIT, NONMETAL, TP 2, 2"	LF	15
MISCELLANEOUS MATERIALS NEEDED TO COMPLETE INSTALLATION	LUMP	LUMP

NOTE: THE LIST OF MATERIALS IS A GUIDE, NOT AN ALL-INCLUSIVE LIST

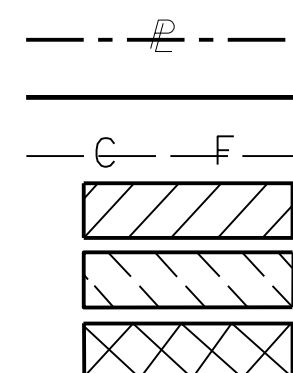
PAY ITEMS

639-2002	STEEL WIRE STRAND CABLE, 3/8 IN	LF	15
639-4004	STRAIN POLE, TP IV	EA	1
647-1000	TRAFFIC SIGNAL INSTALLATION NO. 1	LUMP	LUMP

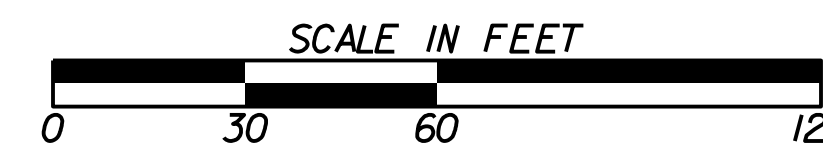
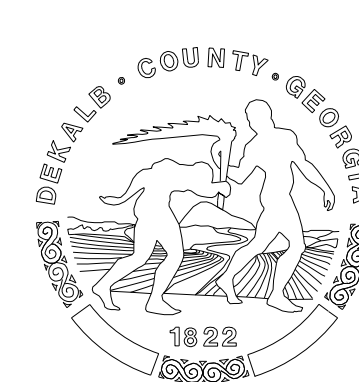
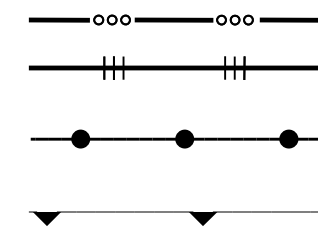
NOTE: QUANTITIES ARE FOR INFORMATIONAL PURPOSES ONLY



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
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(SEE ERIT TABLE)

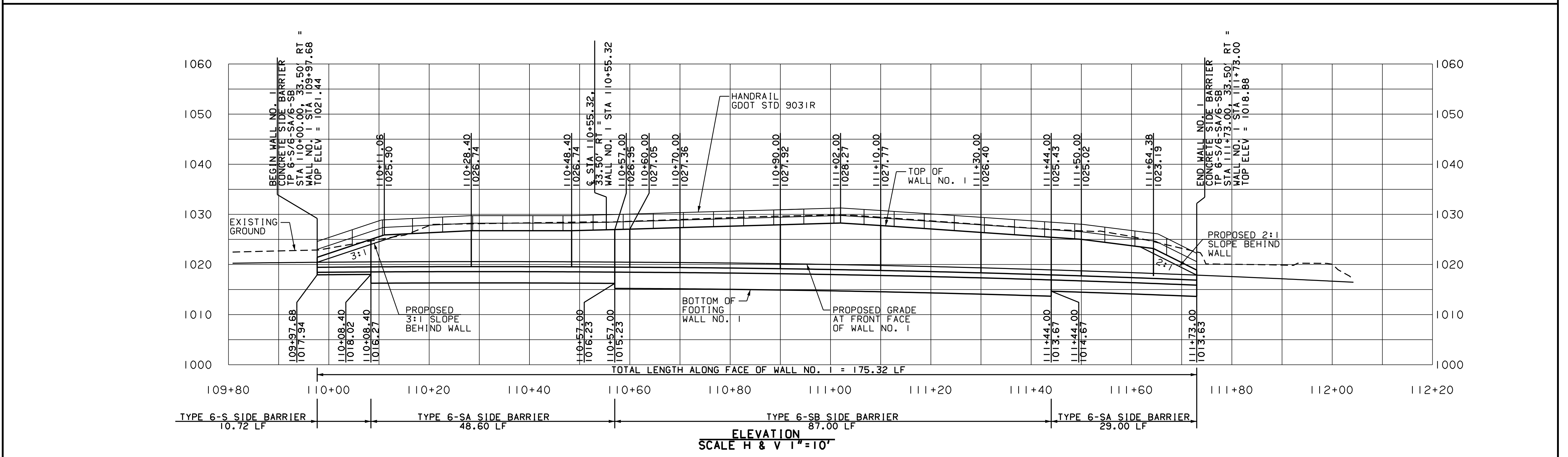
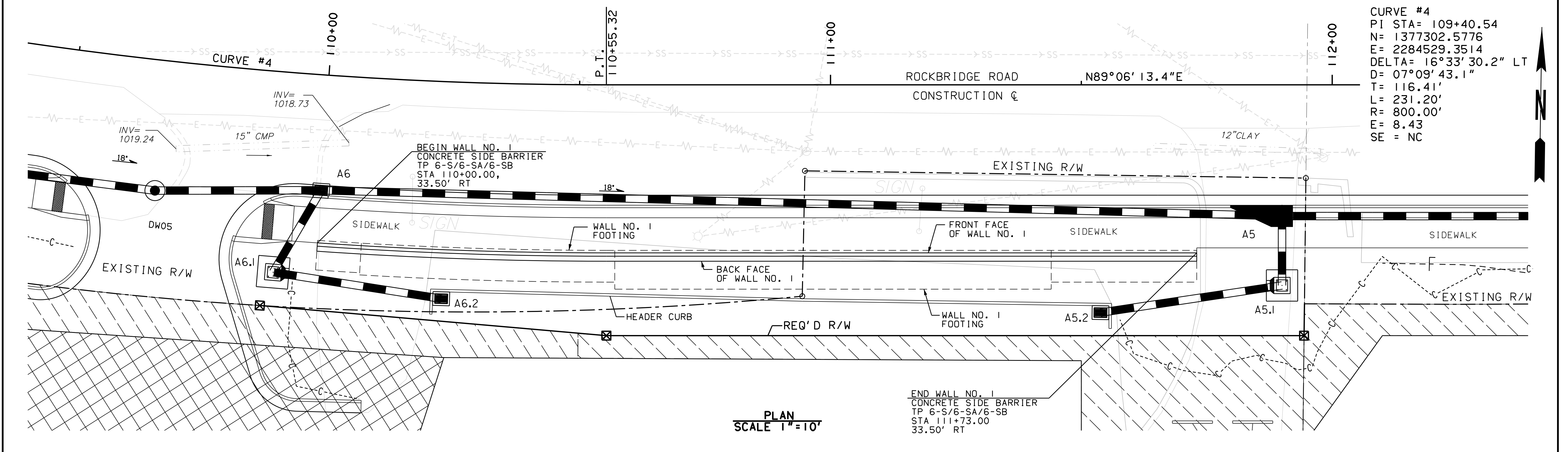


REVISION DATES

SIGNAL PLANS

ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

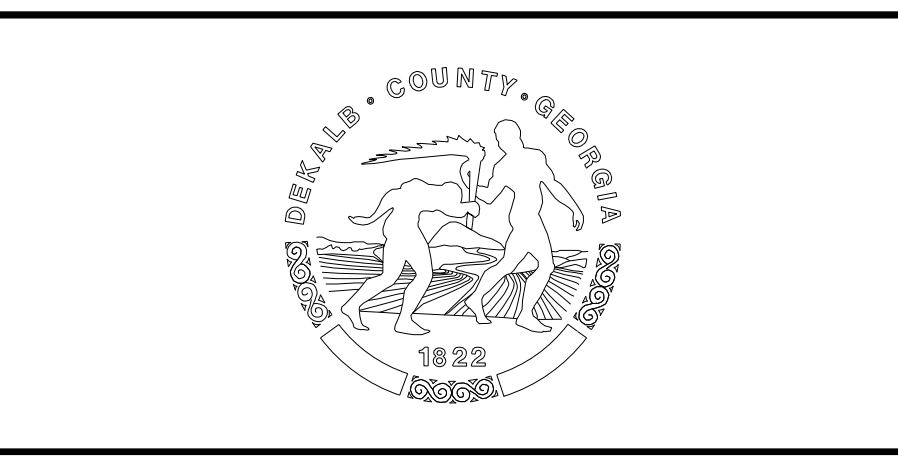
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BACKCHECKED:	DATE:	27-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	



PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

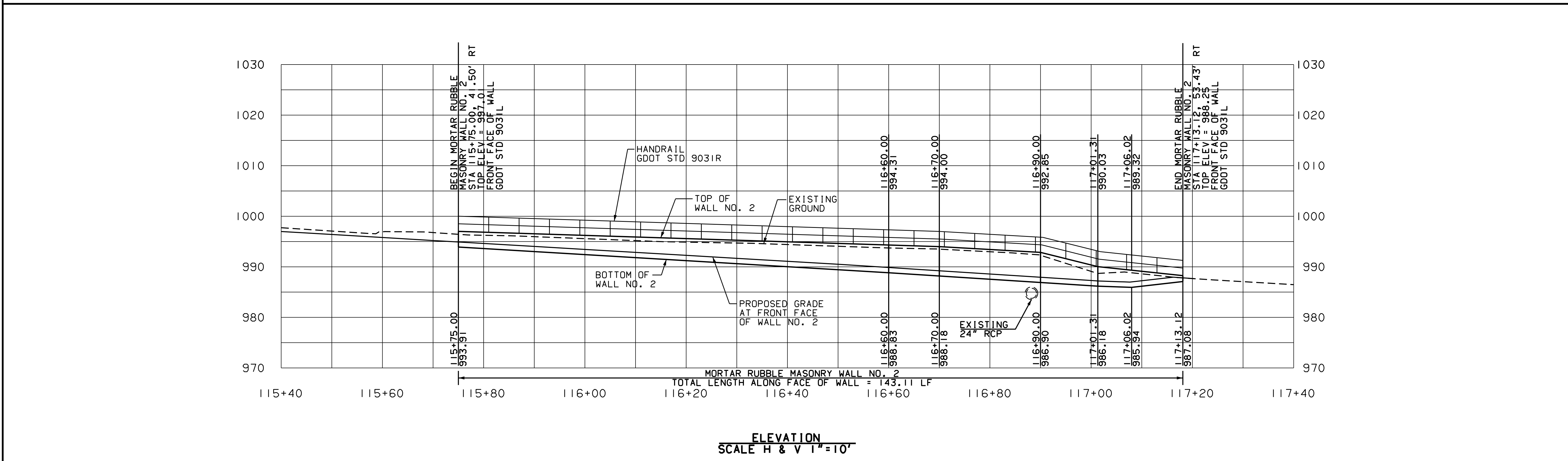
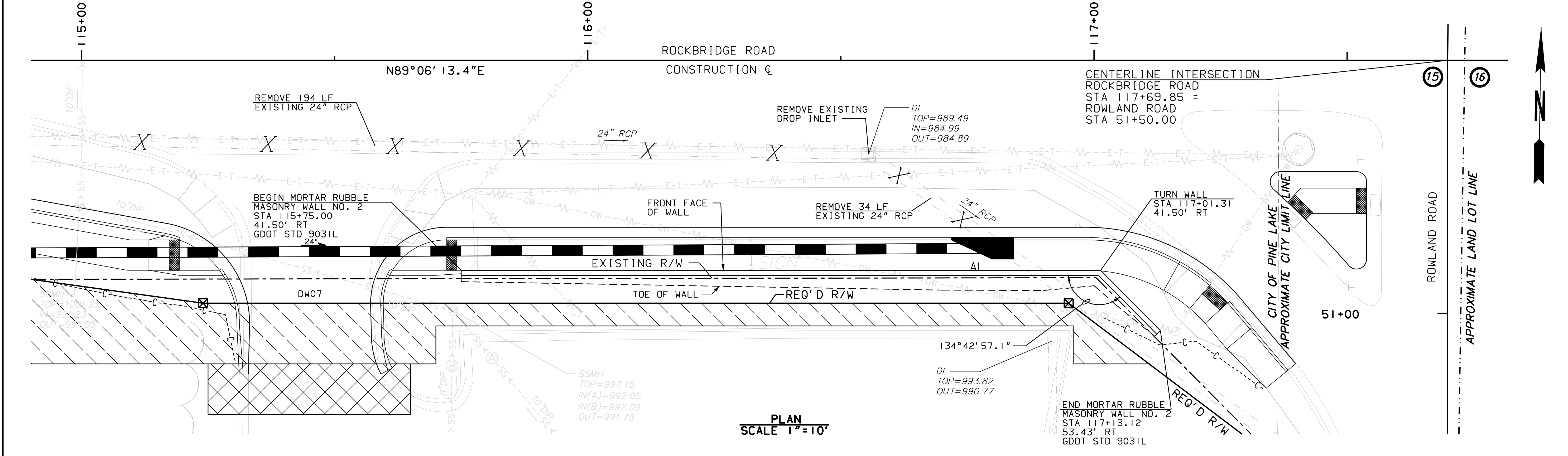
--- P ---
 --- F ---
 --- C ---
 --- H ---
 --- O ---
 --- S ---
 --- T ---

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



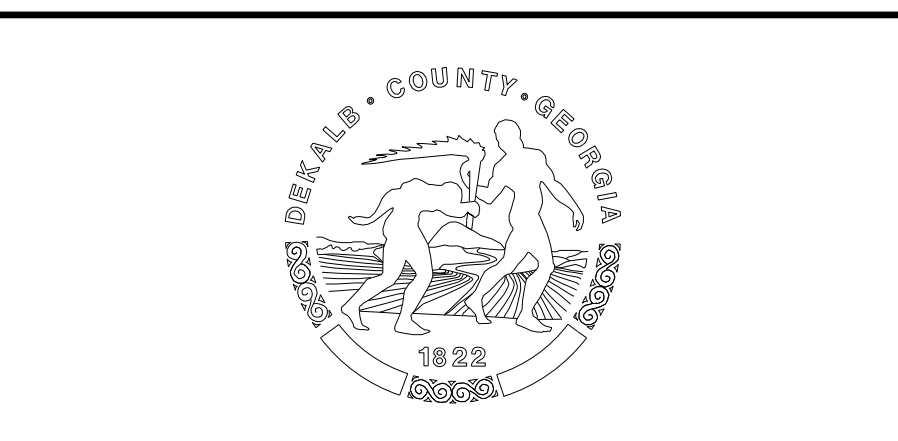
REVISION DATES	

RETAINING WALL ENVELOPES			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	31-0001	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



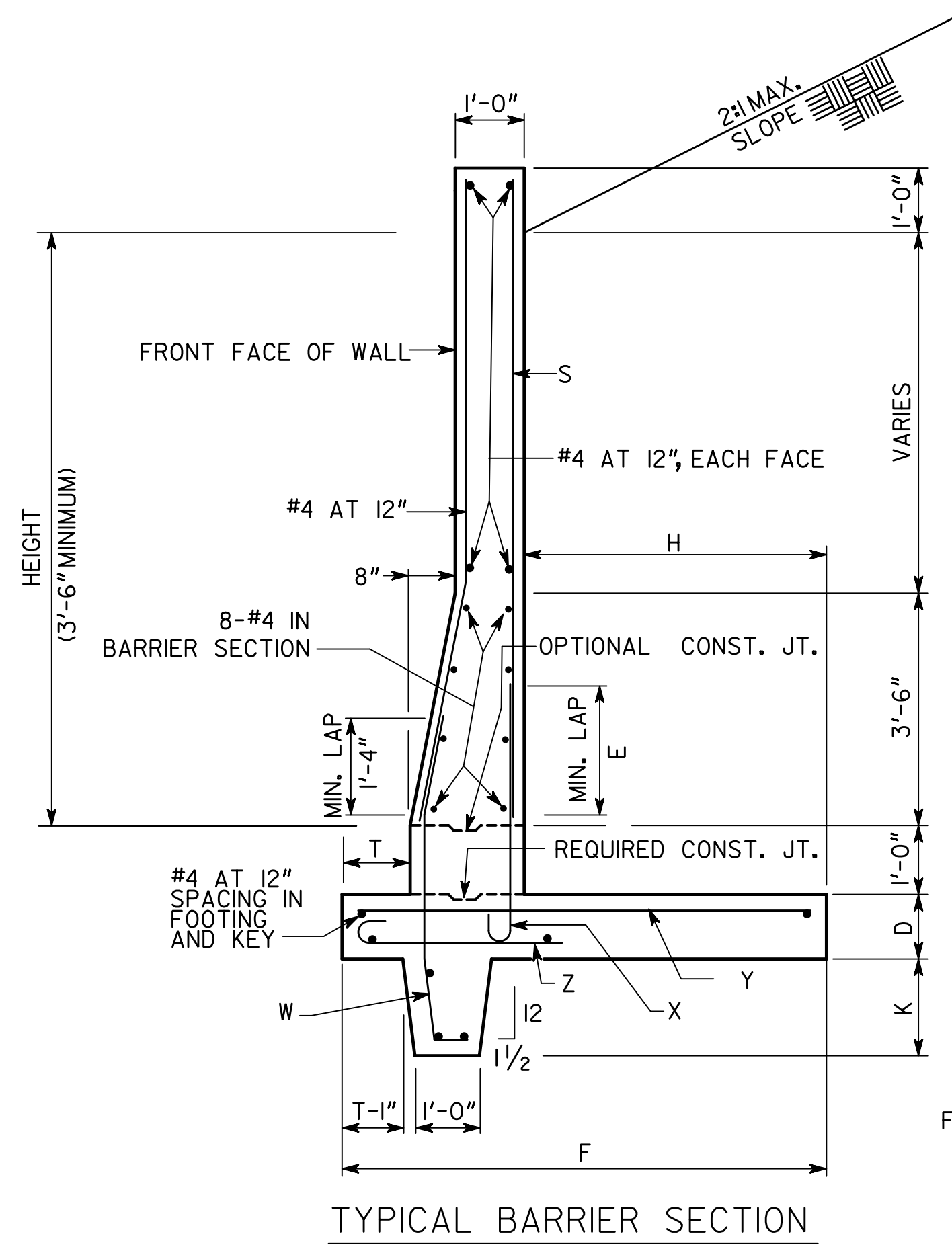
REVISION DATES	

RETAINING WALL ENVELOPES			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	31-0002	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

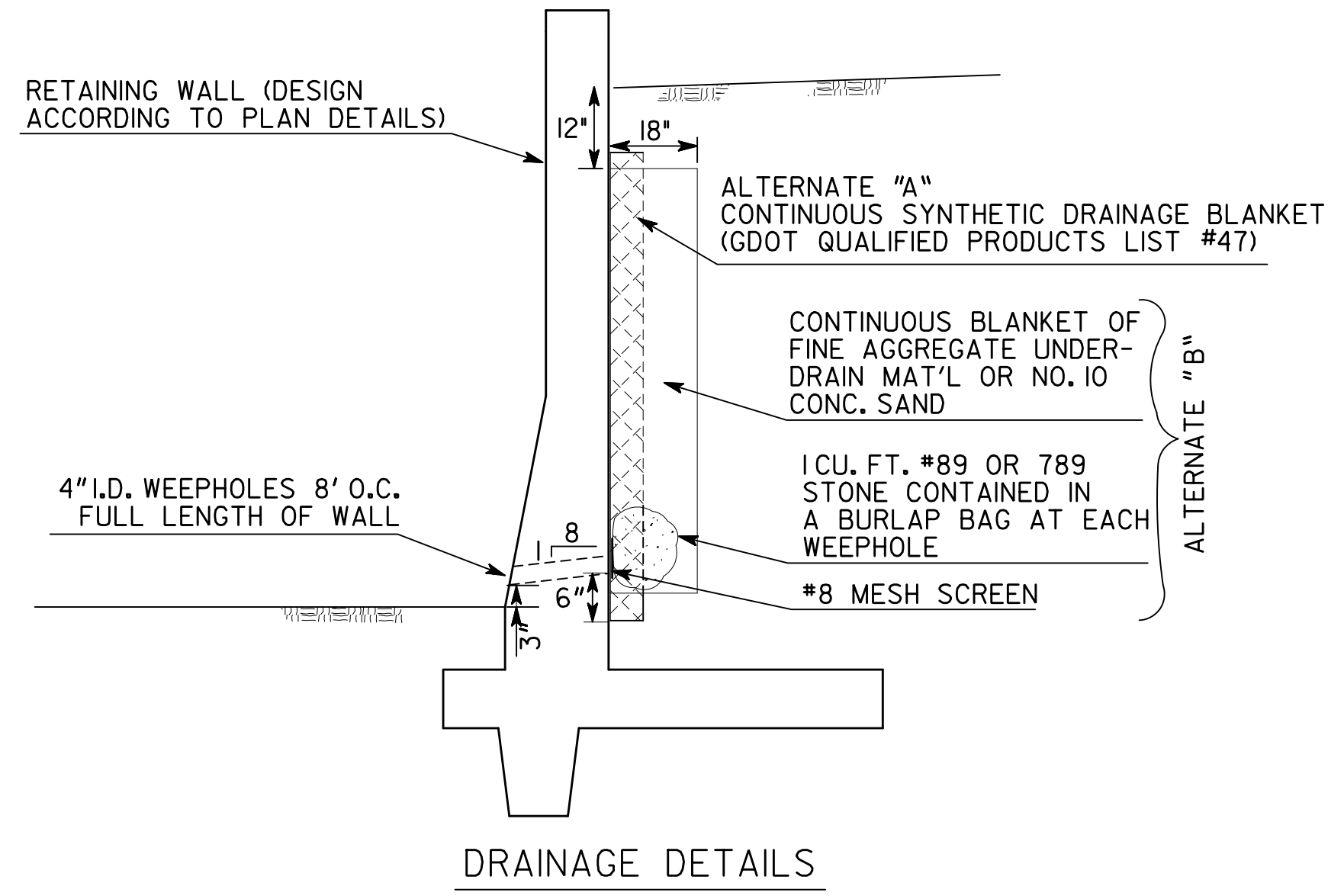
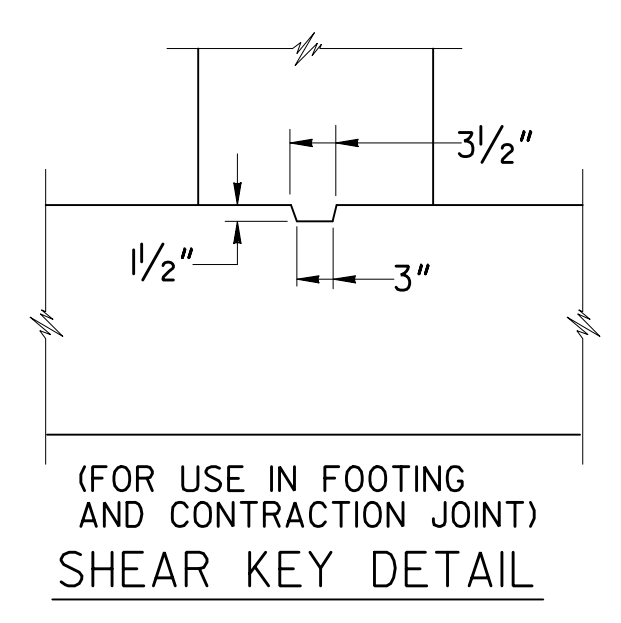
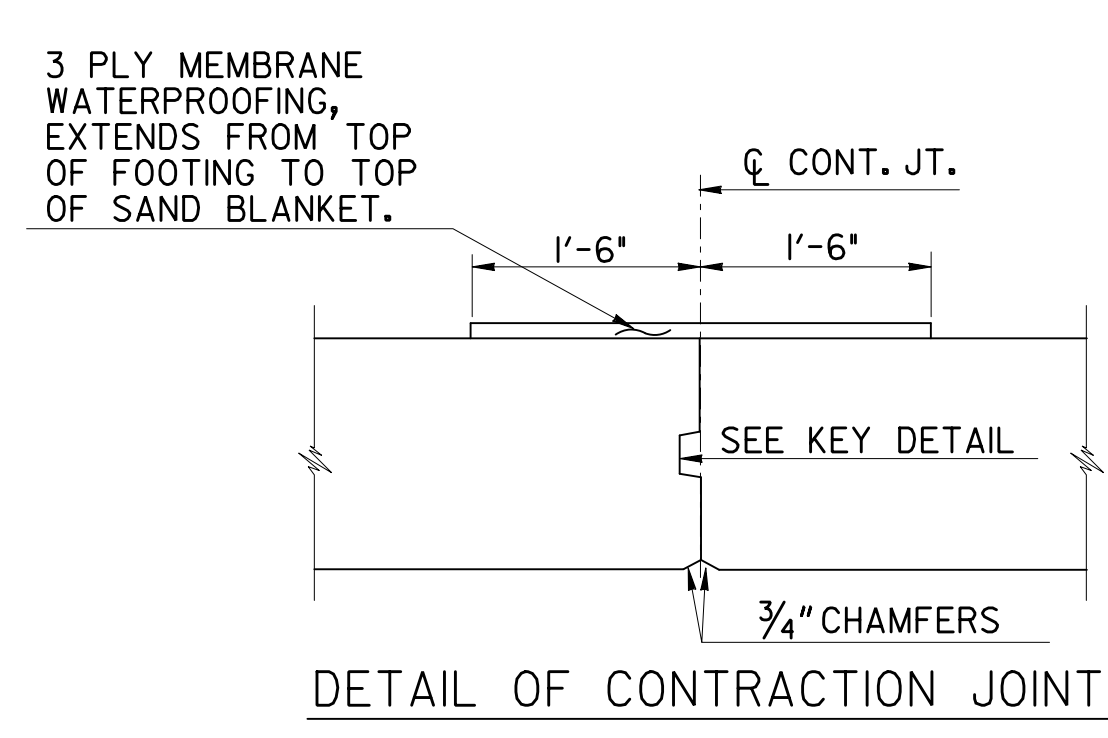
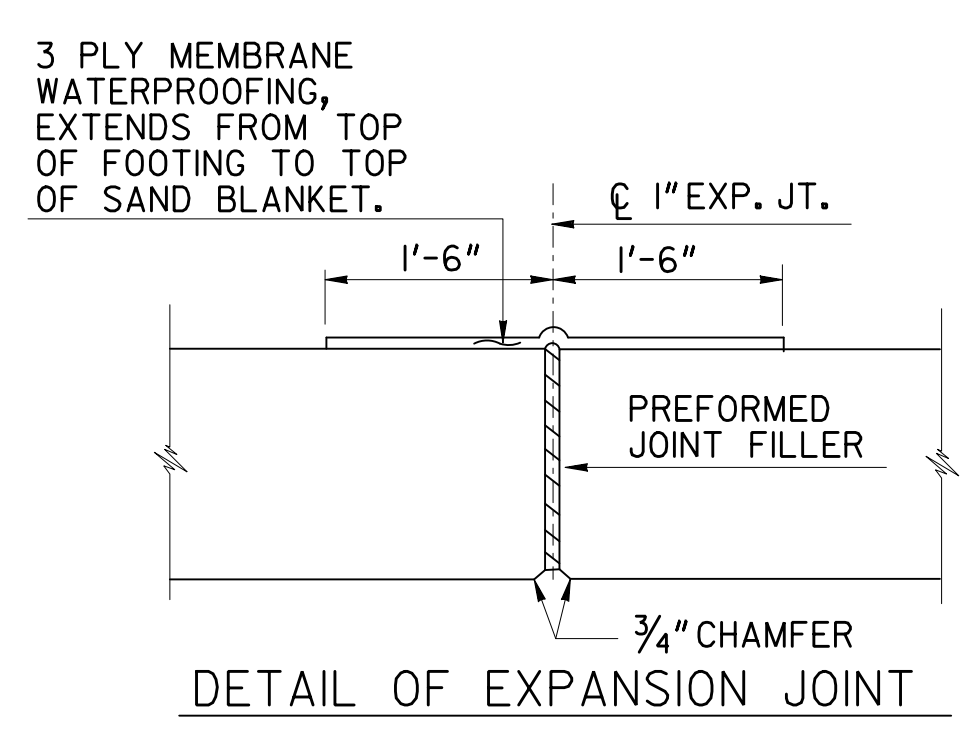
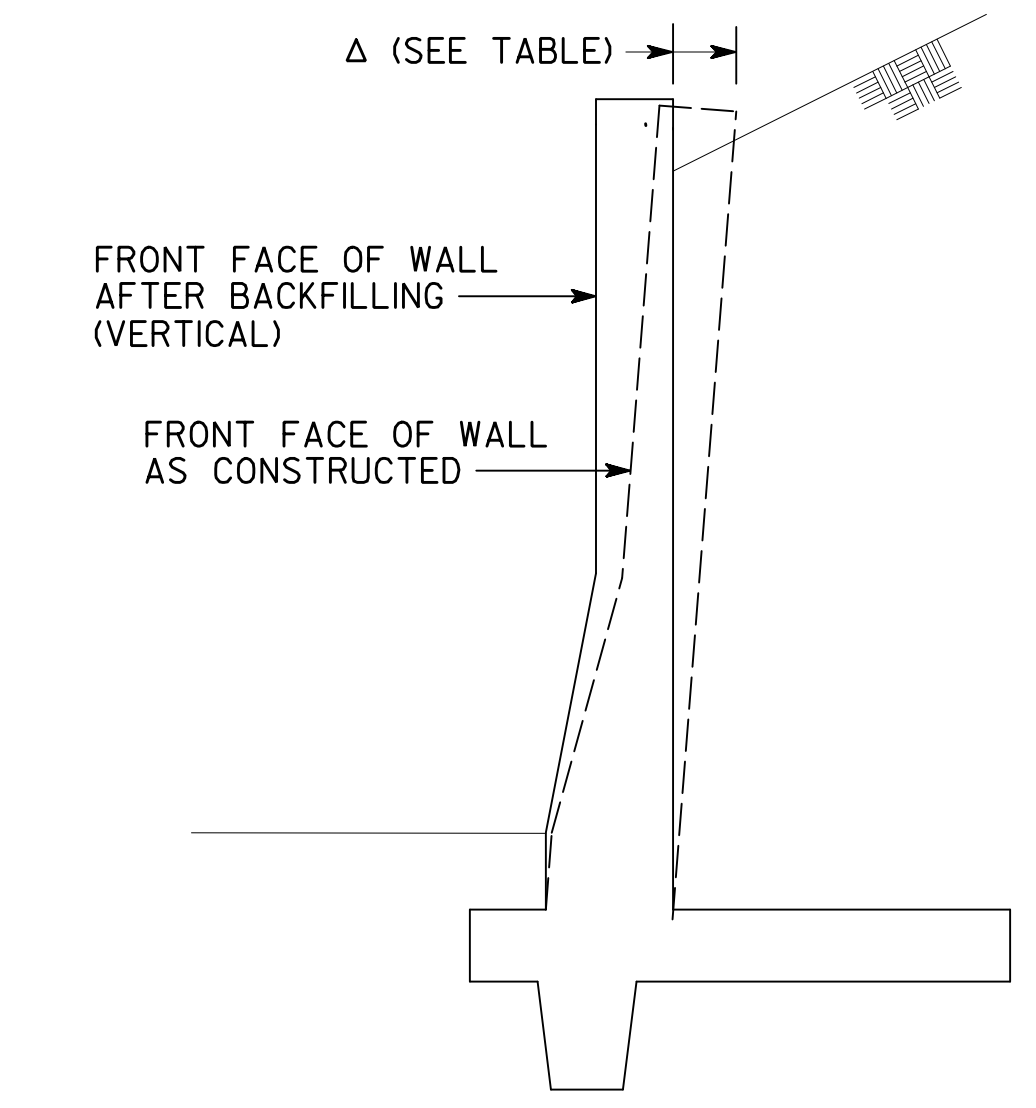
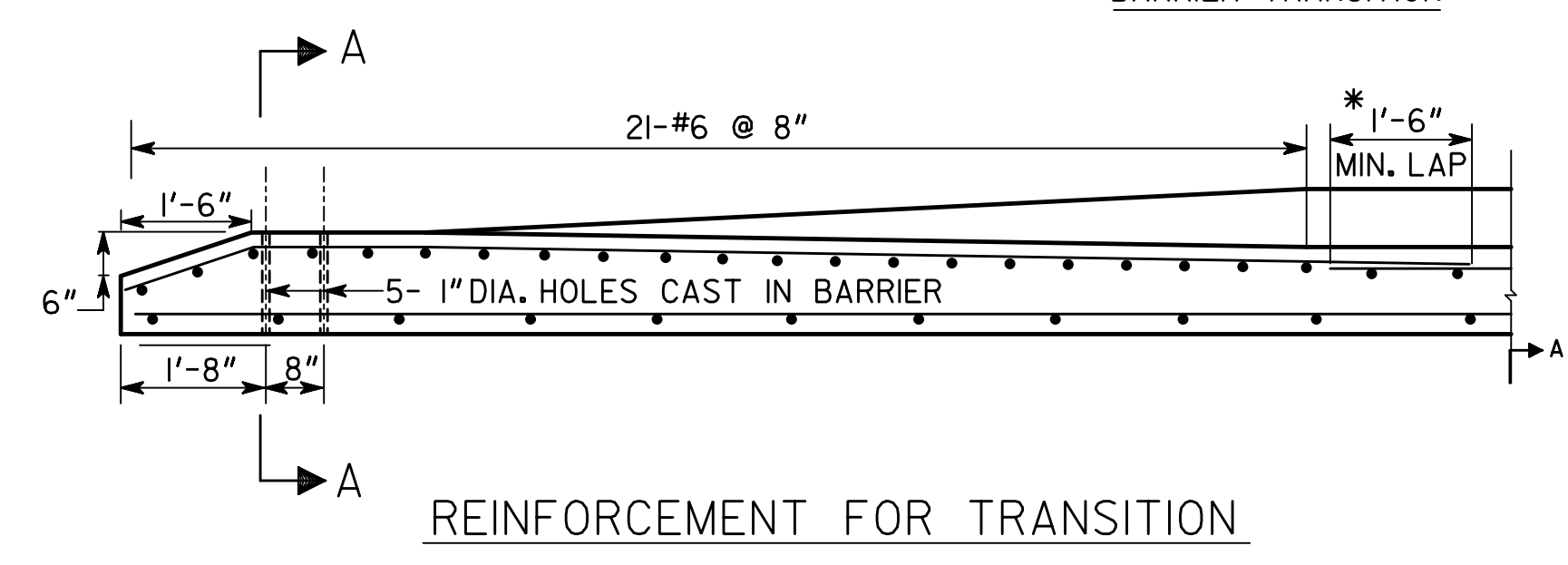
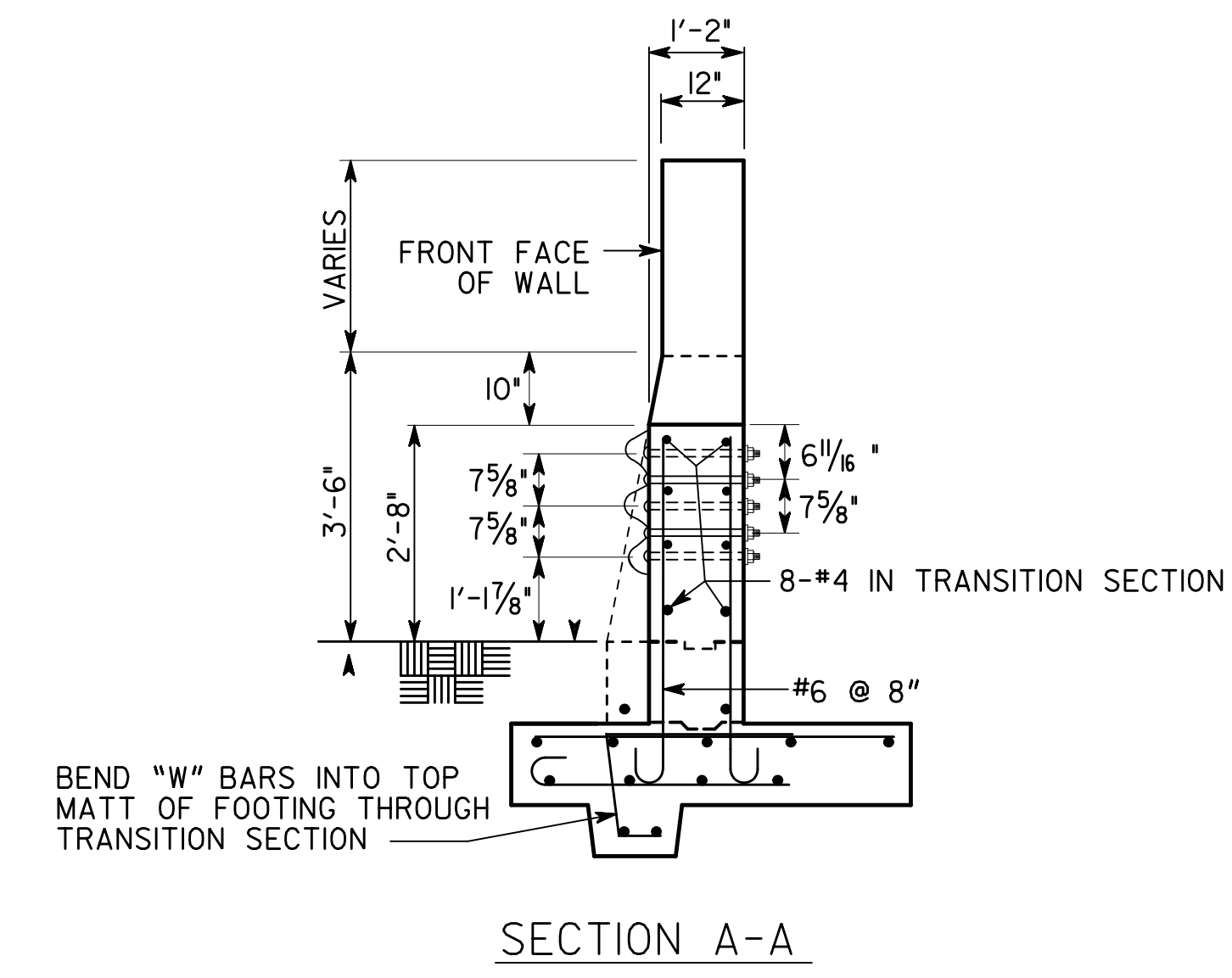
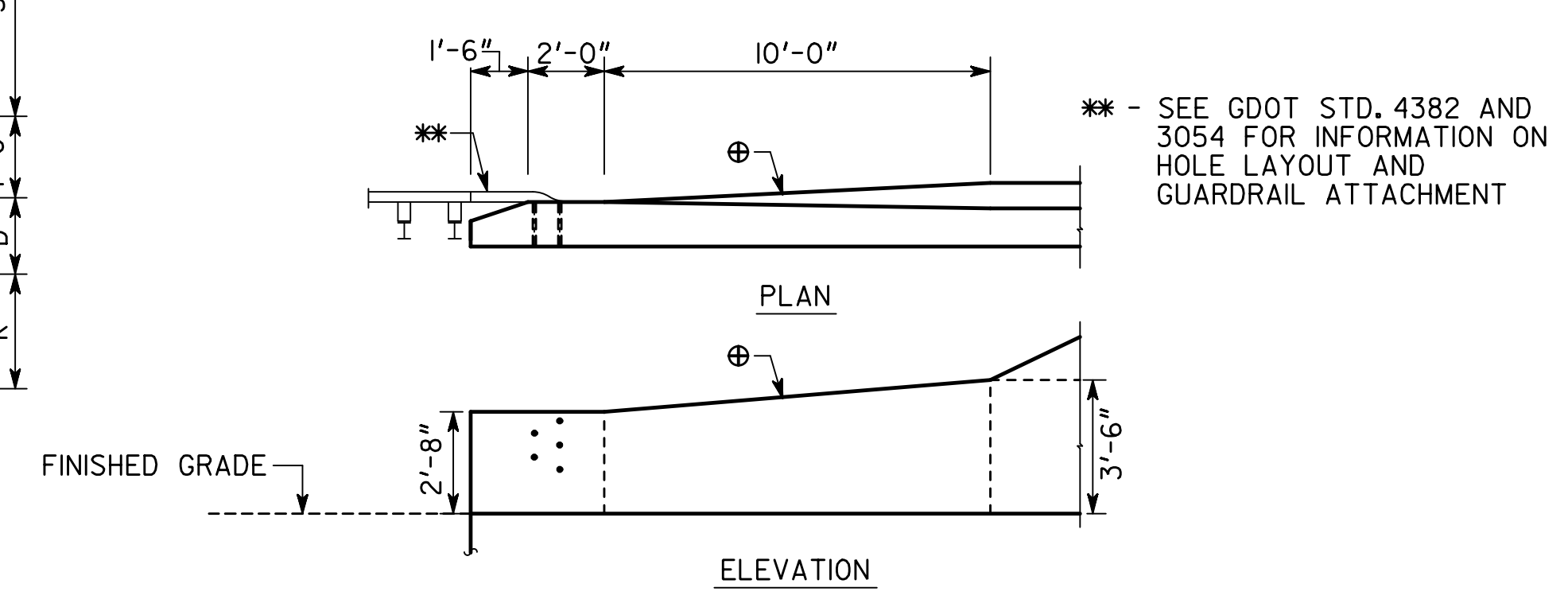
GENERAL NOTES:

- SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, AND SUPPLEMENTS THERETO.
- CONCRETE SHALL BE CLASS "AA" REINFORCING STEEL SHALL BE GRADE 60.
- DRAINAGE DETAIL ALTERNATES A OR B, PER THE DETAIL ON THIS SHEET, ARE REQUIRED FOR TYPES 6-S, 6-SA, 6-SB, AND 6-SC. INCLUDE COST OF MATERIALS AND WORK IN PRICE BID FOR BARRIER.
- MAINTAIN 2" COVER ON ALL REINFORCING IN STEM AND BARRIER AND 3" COVER IN FOOTING. USE OF FORMLINERS PER THE CONTRACT WILL REQUIRE OVERALL STEM AND BARRIER WIDTHS TO BE INCREASED TO MAINTAIN COVER.
- EXPOSED CONCRETE SURFACES SHALL RECEIVE A TYPE III FINISH UNLESS A FORMLINER IS REQUIRED PER THE CONTRACT. FORMLINERS SHALL NOT BE APPLIED TO THE BARRIER FACE.
- APPLY A GRAFFITI PROOF COATING AS PER SECTION 838 TO ALL EXPOSED CONCRETE SURFACES.
- EXPANSION JOINTS SHALL BE SPACED UNIFORMLY AT A MAXIMUM SPACING OF 90'-0" AND EXTEND THROUGH THE BARRIER, STEM AND FOOTING. CONTRACTION JOINTS SHALL BE LOCATED AT A MAXIMUM SPACING OF 20'-0" AND EXTEND THROUGH THE BARRIER AND STEM ONLY.
- EXPANSION AND CONTRACTION JOINTS IN TYPES 6-S, 6-SA, 6-SB, AND 6-SC SIDE BARRIER SHALL BE WATERPROOFED ON THE BACK SIDE, WATERPROOFING SHALL BE 3-PLY AND EXTEND FROM 1'-0" BELOW FINISH GRADE TO TOP OF FOOTING FOR 1'-6" MIN. EACH SIDE OF JOINT.
- TYPES 6-S, 6-SA, 6-SB AND 6-SC SIDE BARRIER SHALL BE PAID FOR PER LIN. FT. AS CONCRETE SIDE BARRIER, TYPE 6-S, 6-SA, 6-SB, OR 6-SC PRICE BID TO INCLUDE COST OF WATERPROOFING AND ALL INCIDENTALS AS SPECIFIED IN SECTION 621 OF THE STANDARD SPECIFICATIONS IN THE PRICE BID.
- TYPE 6-S, 6-SA, 6-SB AND 6-SC SIDE BARRIERS ARE DESIGNED IN ACCORDANCE WITH THE 2014 AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
- SIDE BARRIER DESIGN FOR THE FOLLOWING SOIL PROPERTIES:

FOUNDATION	BACKFILL
COHESION = 0 KSF	0 KSF
$\phi = 28^\circ$	28°
UNIT WT. = 0.120 KCF	0.120 KCF
- WIRE FABRIC REINFORCING OR ALTERNATE REBAR SIZE/SPACING MAY BE USED IF DETAILS ARE SUBMITTED TO & APPROVED BY THE ENGINEER PRIOR TO USE.
- AT CONTRACTOR'S OPTION, SIDES OF KEY MAY BE VERTICAL. MAINTAIN WIDTH SHOWN AT TOP OF KEY.
- PLACE BACKFILL ON FRONT FACE SIDE OF WALL BEFORE BACKFILLING BACK FACE SIDE OF WALL
- WHERE GUARDRAIL ATTACHMENT IS REQUIRED, USE BARRIER TRANSITION DETAIL. INCLUDE COSTS FOR TRANSITION AND THE FIVE 1" DIA. HOLES, PROPERLY LOCATED FOR CONNECTING THE SPECIAL END SHOE IN THE PRICE BID FOR CONCRETE SIDE BARRIER, TYPE 6-S, 6-SA, 6-SB, OR 6-SC BASED ON STEM HEIGHT REQUIRED.



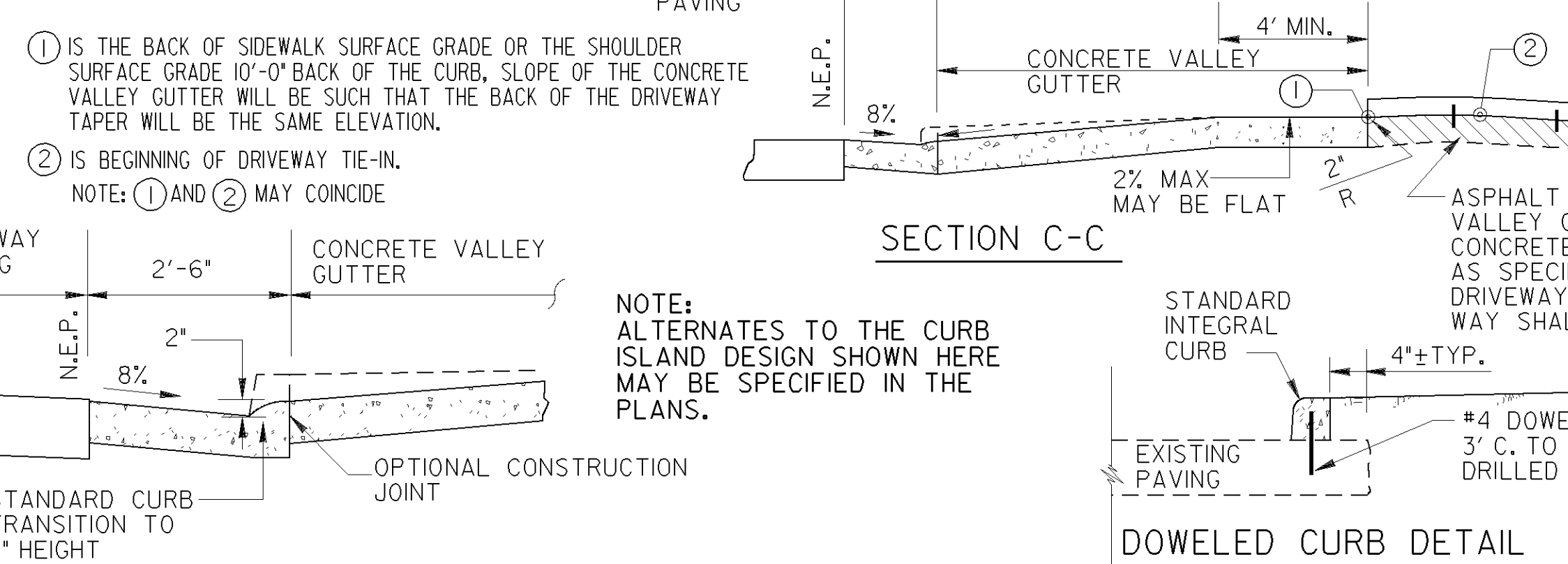
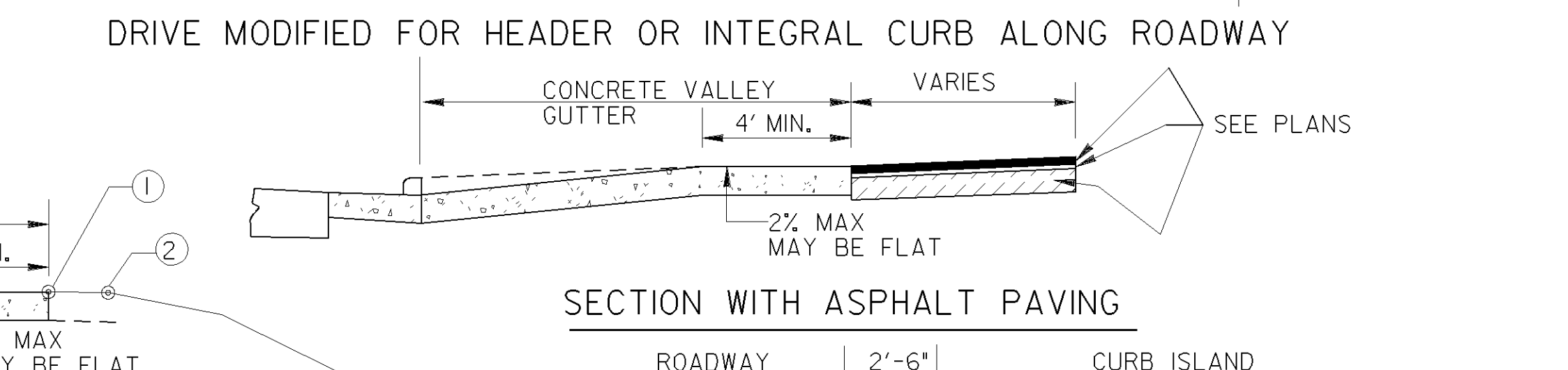
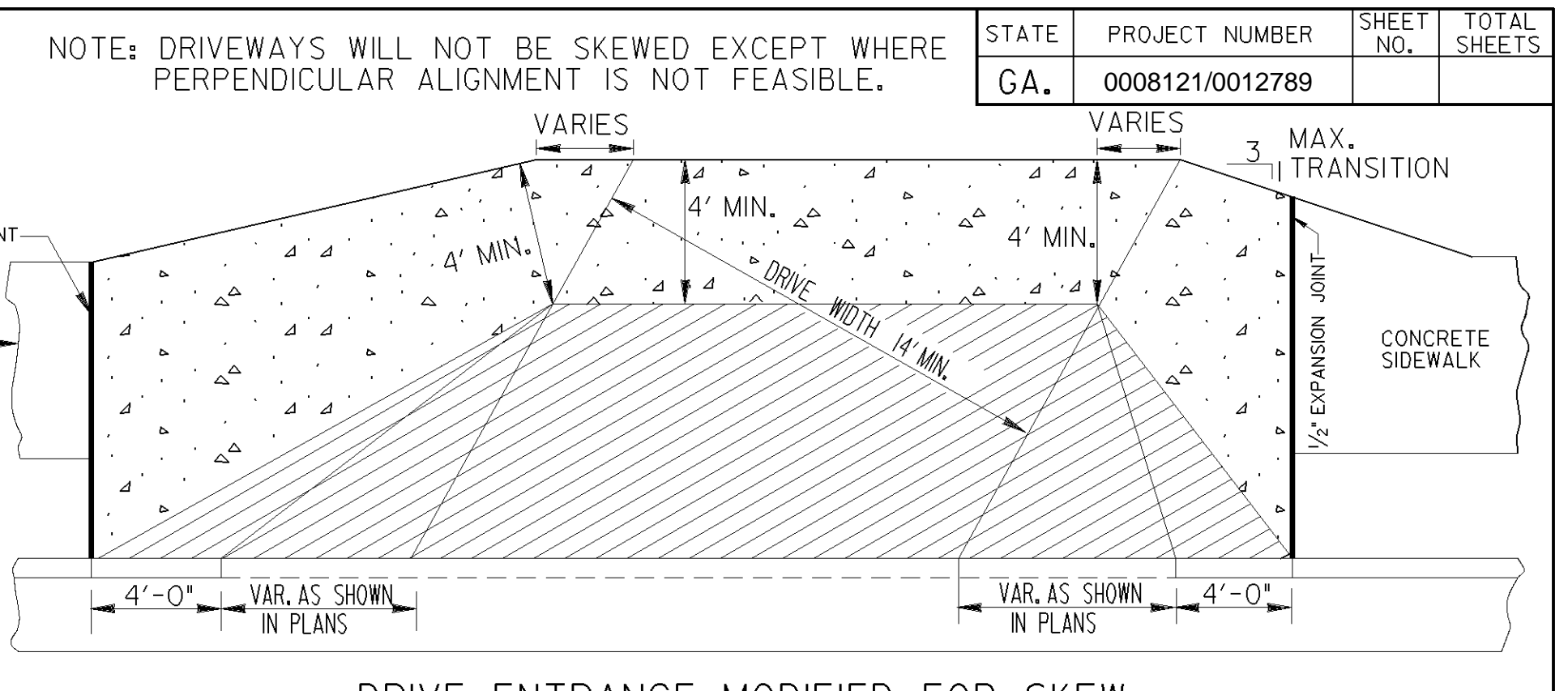
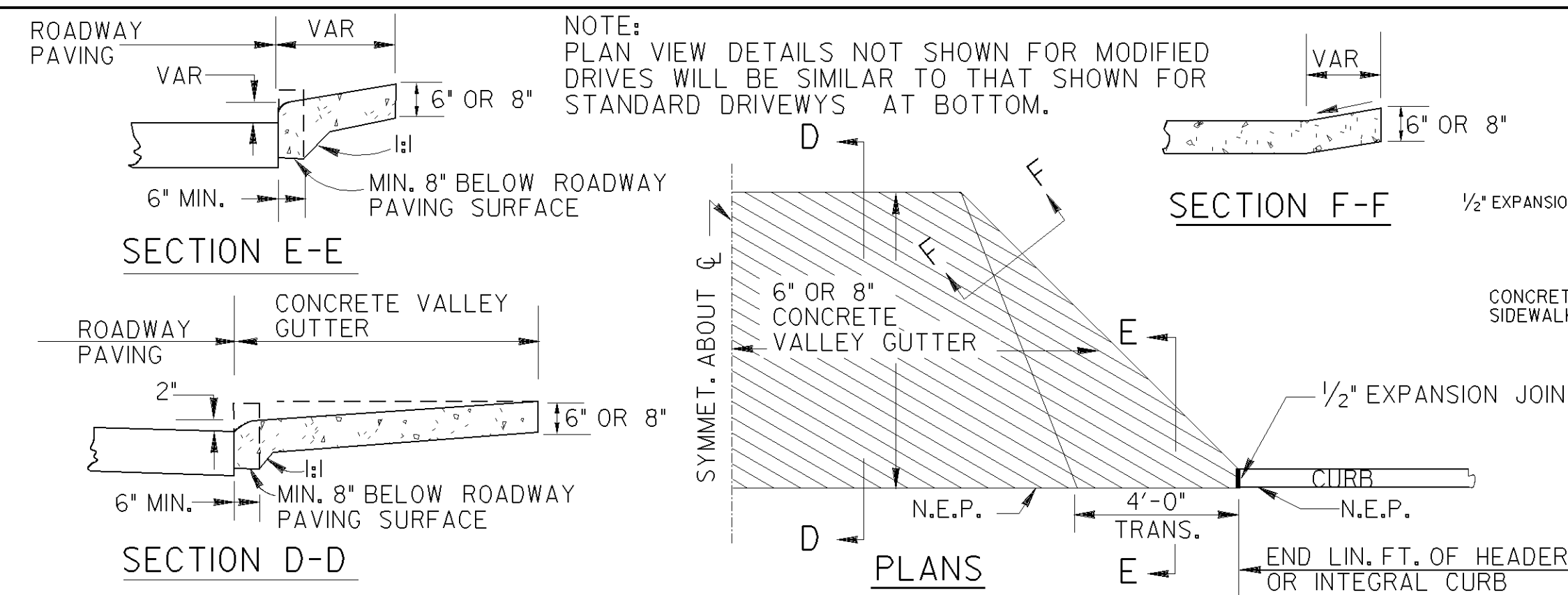
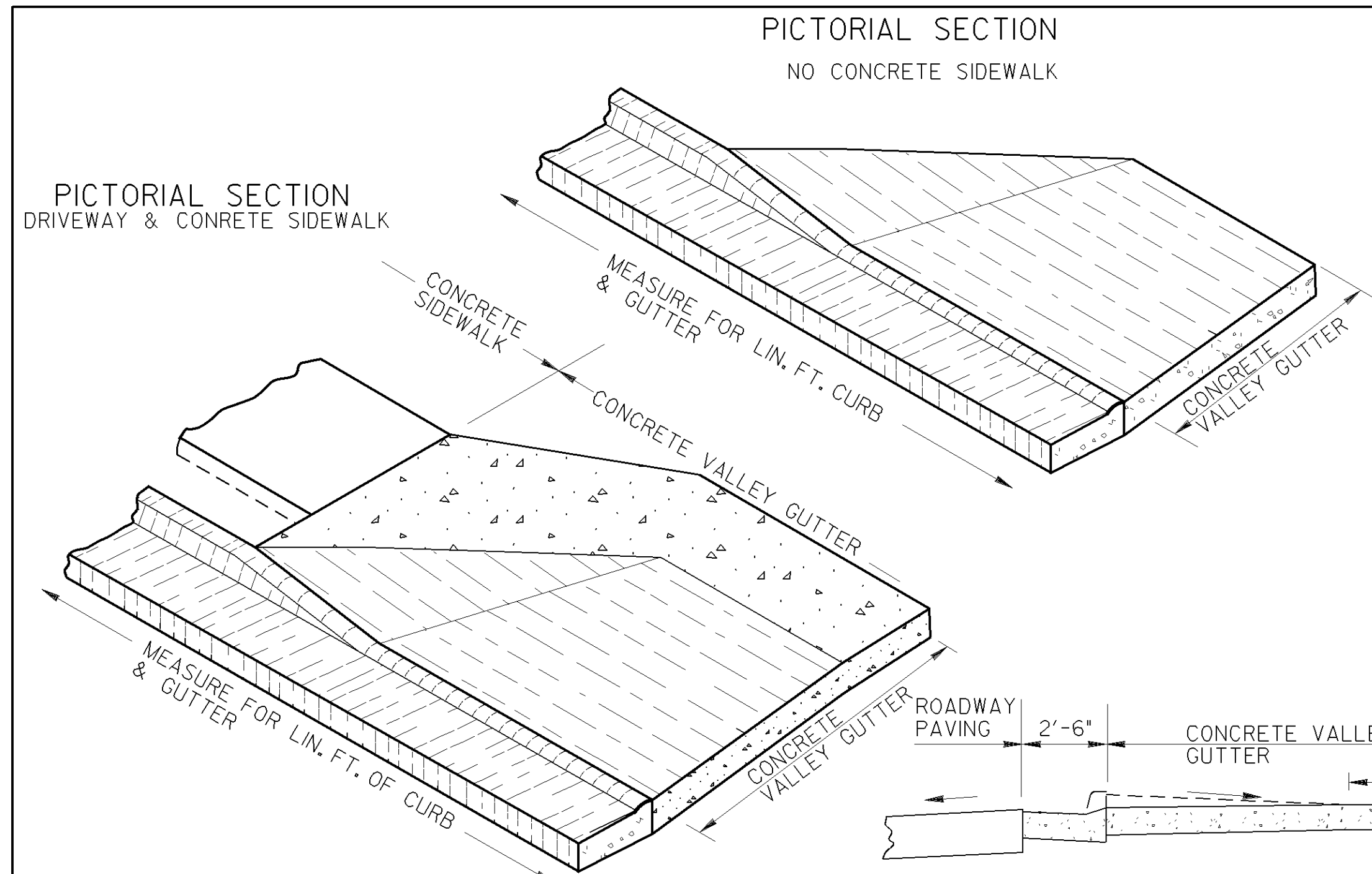
MAX. HEIGHT	WALL DIMENSIONS						REINFORCEMENT					Δ (INCHES)	REQUIRED NOMINAL RESISTANCE	TYPE
	D	E	F	H	T	K	S	W	X	Y	Z			
3'-6"	1'-0"	1'-4"	4'-4"	2'-2"	0'-6"	0'-6"	#4 AT 18"	#4 AT 12"	#4 AT 18"	#5 AT 18"	#4 AT 18"	0	2.5 KSF	
4'-6"	1'-0"	1'-4"	5'-11"	3'-9"	0'-6"	0'-6"	#4 AT 18"	#4 AT 12"	#4 AT 18"	#6 AT 12"	#4 AT 18"	1/16"	3.0 KSF	6-S
5'-6"	1'-0"	1'-4"	4'-6"	2'-4"	0'-6"	2'-3"	#4 AT 18"	#4 AT 12"	#4 AT 18"	#5 AT 12"	#4 AT 18"	1/8"	4.5 KSF	
6'-6"	1'-0"	1'-4"	6'-4"	4'-2"	0'-6"	2'-3"	#4 AT 18"	#4 AT 12"	#4 AT 18"	#8 AT 12"	#4 AT 18"	3/16"	4.5 KSF	6-SA
7'-6"	1'-0"	1'-4"	6'-0"	3'-10"	0'-6"	3'-3"	#4 AT 12"	#4 AT 12"	#4 AT 12"	#9 AT 12"	#4 AT 18"	1/4"	5.75 KSF	6-SB
8'-6"	1'-0"	1'-4"	7'-9"	5'-7"	0'-6"	3'-3"	#4 AT 8"	#4 AT 12"	#4 AT 8"	#9 AT 8"	#4 AT 18"	5/16"	5.75 KSF	
9'-6"	1'-3"	1'-8"	7'-9"	4'-9"	1'-4"	4'-3"	#5 AT 10"	#5 AT 12"	#5 AT 10"	#9 AT 10"	#4 AT 12"	7/16"	6.0 KSF	6-SC
10'-6"	1'-3"	1'-8"	9'-9"	6'-9"	1'-4"	4'-3"	#5 AT 8"	#5 AT 12"	#5 AT 8"	#9 AT 8"	#4 AT 12"	9/16"	6.0 KSF	



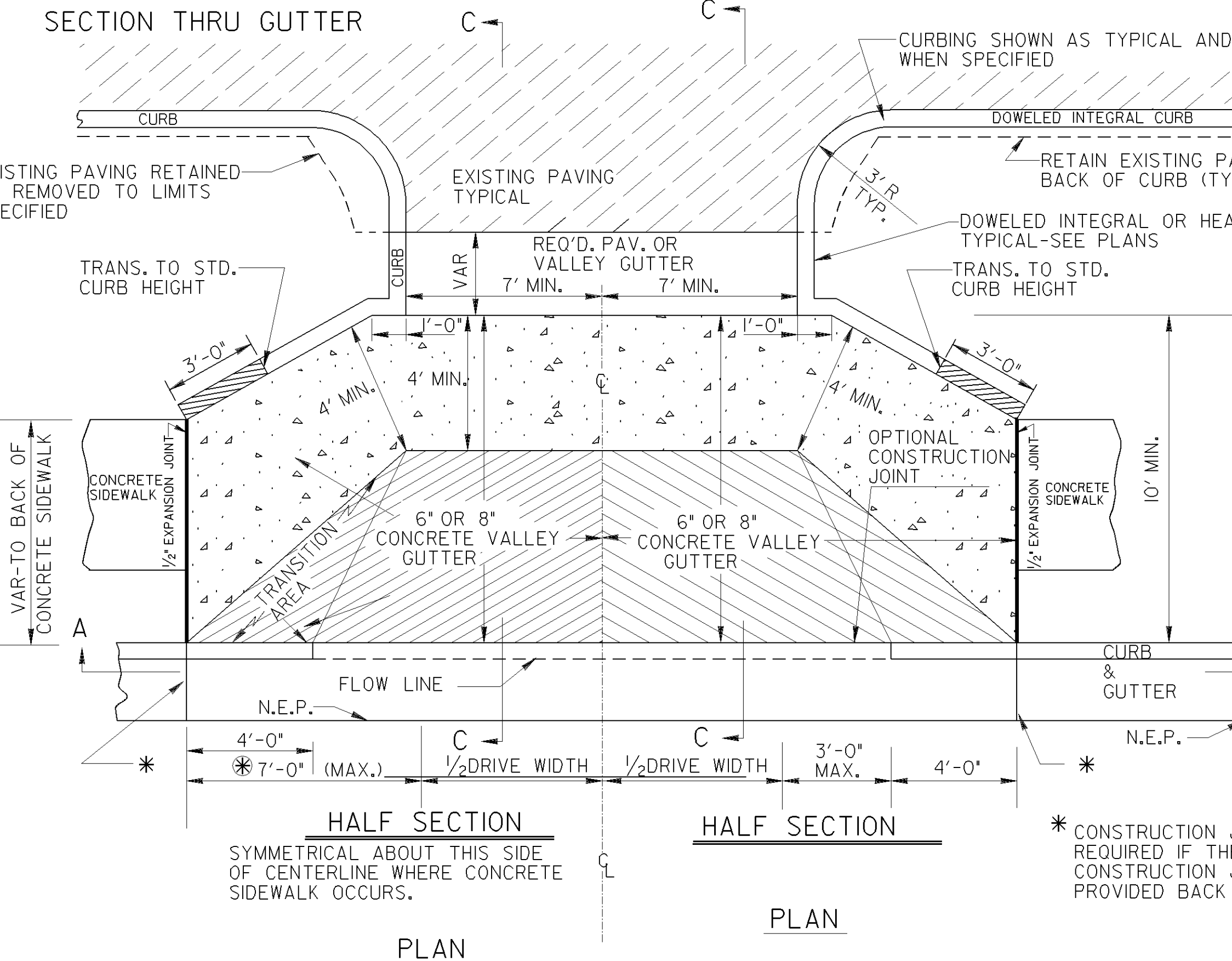
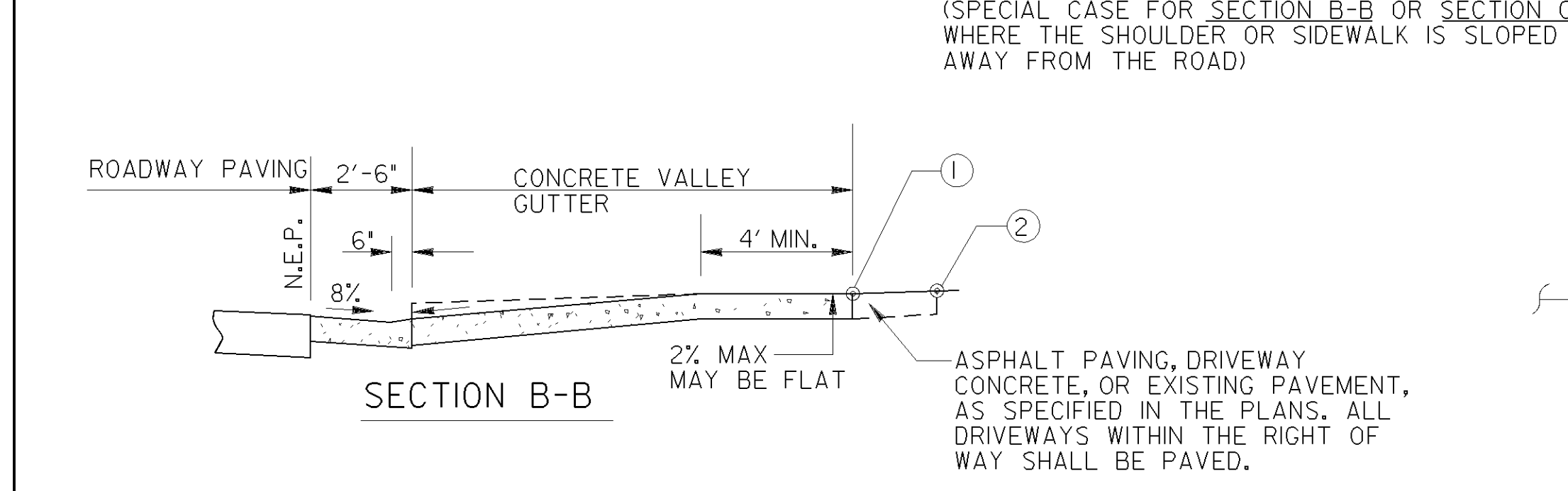
38-0001

DATE		DEPARTMENT OF TRANSPORTATION	
REVISION		STATE OF GEORGIA	
BY		SPECIAL DETAIL	
DES. CEW		CONCRETE SIDE BARRIER	
DRW. DDF		TYPES 6-S, 6-SA, 6-SB AND 6-SC	
CHK. DDF		NO SCALE	
REV. WMD/BAS		DECEMBER 2017	
		NUMBER	
		4949C	

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		



- GENERAL NOTES:**
- QUANTITIES SHALL BE MEASURED AS FOLLOWS:
 (A) CONCRETE CURB & GUTTER ALONG ROADWAY---
 LIN. FT. OF CURB & GUTTER SHALL BE MEASURED FOR PAYMENT CONTINUOUS THRU THE DRIVE ENTRANCES. PAYMENT FOR CURB & GUTTER SHALL INCLUDE DAPPING DOWN THE TOP PORTION OF THE CURB. SQ. YDS. OF CONCRETE VALLEY GUTTER SHALL BE MEASURED FOR PAYMENT TO THE BACK OF THE CURB LINE.
 (B) HEADER (OR INTEGRAL) CURB ALONG ROADWAY---
 LIN. FT. OF CURB SHALL BE MEASURED FOR PAYMENT TO THE BEGINNING OF DRIVE WAY. SQ. YDS. OF CONCRETE VALLEY GUTTER SHALL BE MEASURED FOR PAYMENT TO THE EDGE OF THE ROADWAY PAVING.
 - N.E.P. IS DEFINED AS THE POINT WHERE THE ROADWAY PAVING MEETS THE CURB & GUTTER, OR HEADER CURB, OR FACE OF THE INTEGRAL CURB.
 - DRIVES RECONSTRUCTED SHALL BE REPLACED IN KIND, I.E. ASPHALT FOR ASPHALT, CONCRETE FOR CONCRETE, AND PAVED TO THE RIGHT OF WAY LINE.
 - SEE STANDARD 9032-B FOR DETAILS OF CONCRETE CURB & GUTTER, HEADER CURBS AND DOWELED INTEGRAL CURBS.
 - WIDTHS OF COMMERCIAL DRIVEWAYS SHALL COMPLY WITH CURRENT "RULES AND REGULATIONS FOR DRIVEWAY AND ENCROACHMENT CONTROL". WIDTHS OF RESIDENTIAL NON-COMMERCIAL DRIVEWAYS SHALL BE AS SPECIFIED IN THE PLANS.
 - THE SLOPE OF THE "TRANSITION AREA" OF THE CONCRETE VALLEY GUTTER SHALL NOT BE STEEPER THAN 8% (2:1) WHERE SIDEWALKS ARE LOCATED.
 - MAXIMUM DRIVEWAY GRADES SHOWN BELOW ARE INTENDED FOR RESIDENTIAL DRIVEWAYS WHERE FLATTER GRADES ARE NOT FEASIBLE. GRADES FOR COMMERCIAL DRIVEWAYS OR FOR TRUCKS SHALL NOT BE GREATER THAN 11% UNLESS SPECIFIED OTHERWISE.

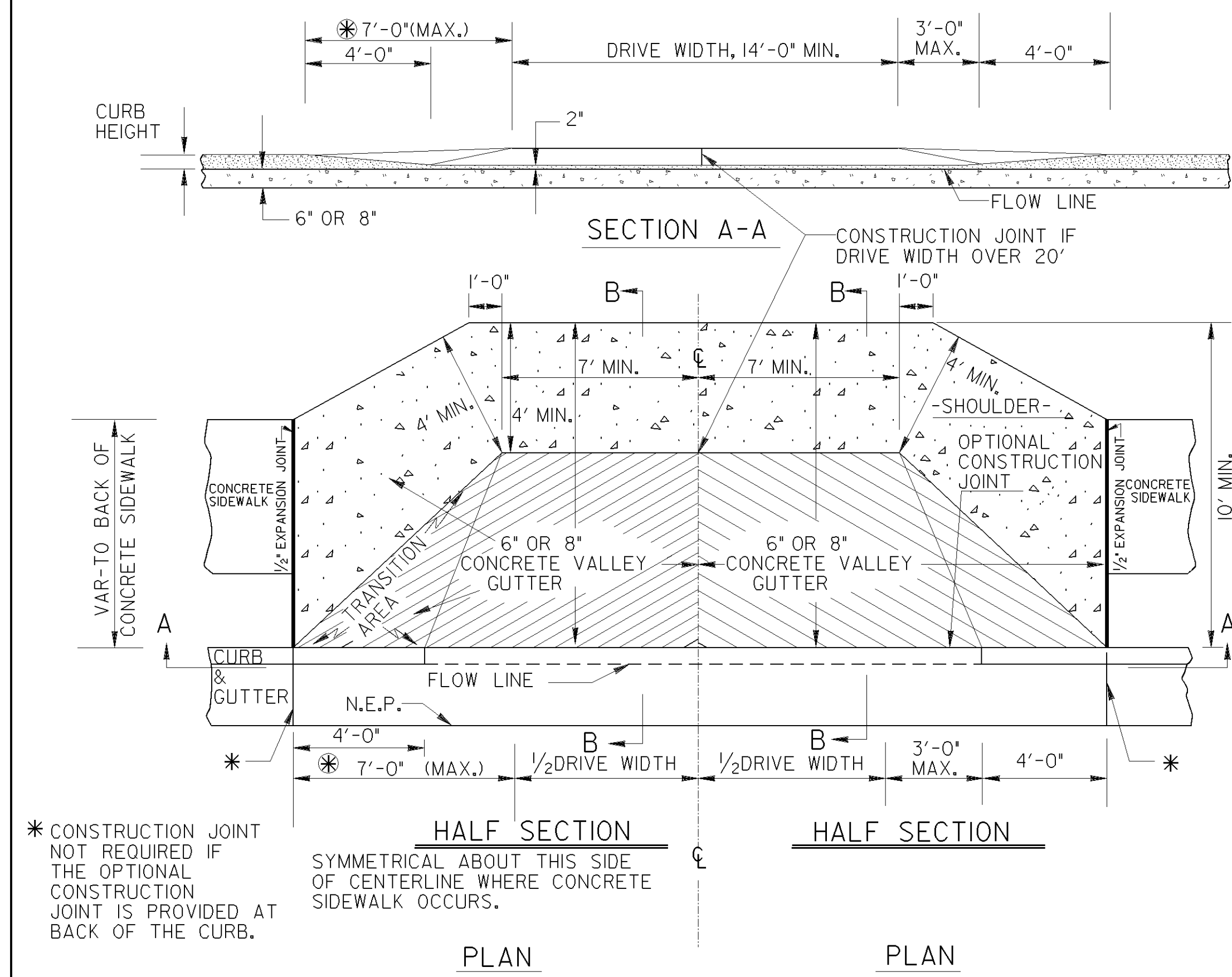
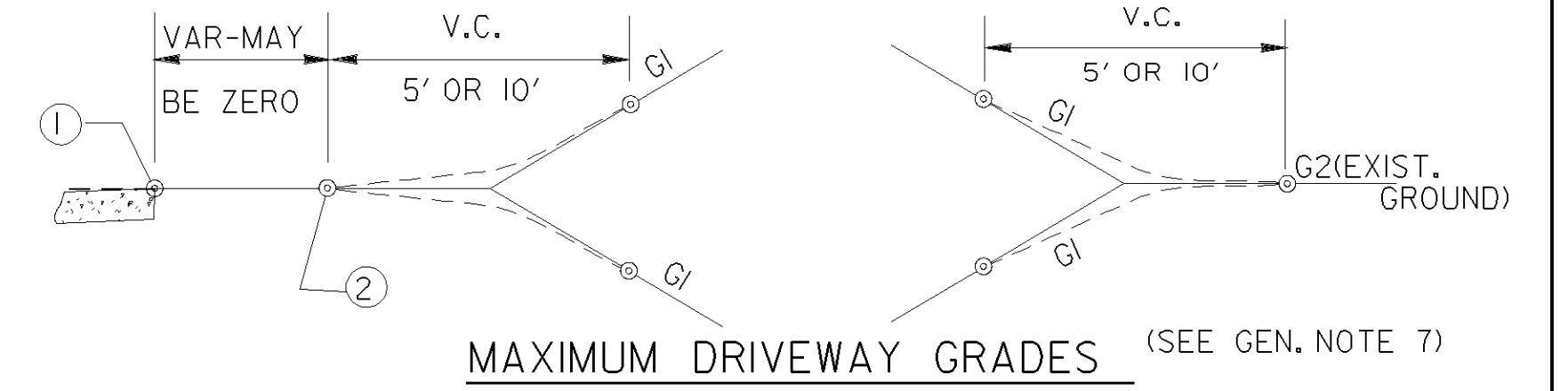


Guidelines For Usage On Metric Projects

When these details are incorporated into plans and/or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following "Rounded-Off" conversion factors: 1" = 25mm, 4" = 100mm, and 12" = 300mm. All measurement notes that refer to linear feet and square yards shall be interpreted to mean linear meters and square meters.

- IS THE BACK OF SIDEWALK SURFACE GRADE OR THE SHOULDER SURFACE GRADE 10'-0" BACK OF THE CURB. SLOPE OF THE CONCRETE VALLEY GUTTER WILL BE SUCH THAT THE BACK OF THE DRIVEWAY TAPER WILL BE THE SAME ELEVATION.
 - IS BEGINNING OF DRIVEWAY TIE-IN.
- NOTE: ① AND ② MAY COINCIDE

V.C.	MAXIMUM GI		MAX. ALGEBRAIC GRADE CHANGE	
	CUT	FILL	SAG	CREST
5'	27%	16.61%	2%	25%
10'	28%	27%	25%	36%



RESIDENTIAL, COMMERCIAL OR NON-COMMERCIAL DRIVE

* CONSTRUCTION JOINT NOT REQUIRED IF THE OPTIONAL CONSTRUCTION JOINT IS PROVIDED AT BACK OF THE CURB.

SYMMETRICAL ABOUT THIS SIDE OF CENTERLINE WHERE CONCRETE SIDEWALK OCCURS.

DRIVEWAY WITH CURB ISLAND (SHOWN ADJACENT TO EXISTING PAVED PARKING AREA)

* CONSTRUCTION JOINT NOT REQUIRED IF THE OPTIONAL CONSTRUCTION JOINT IS PROVIDED BACK OF CURB.

SYMMETRICAL ABOUT THIS SIDE OF CENTERLINE WHERE CONCRETE SIDEWALK OCCURS.

This Detail Replaces Ga Standard 6050

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

CONSTRUCTION DETAIL
DRIVEWAYS WITH TAPERED ENTRANCES
CONCRETE VALLEY GUTTERS

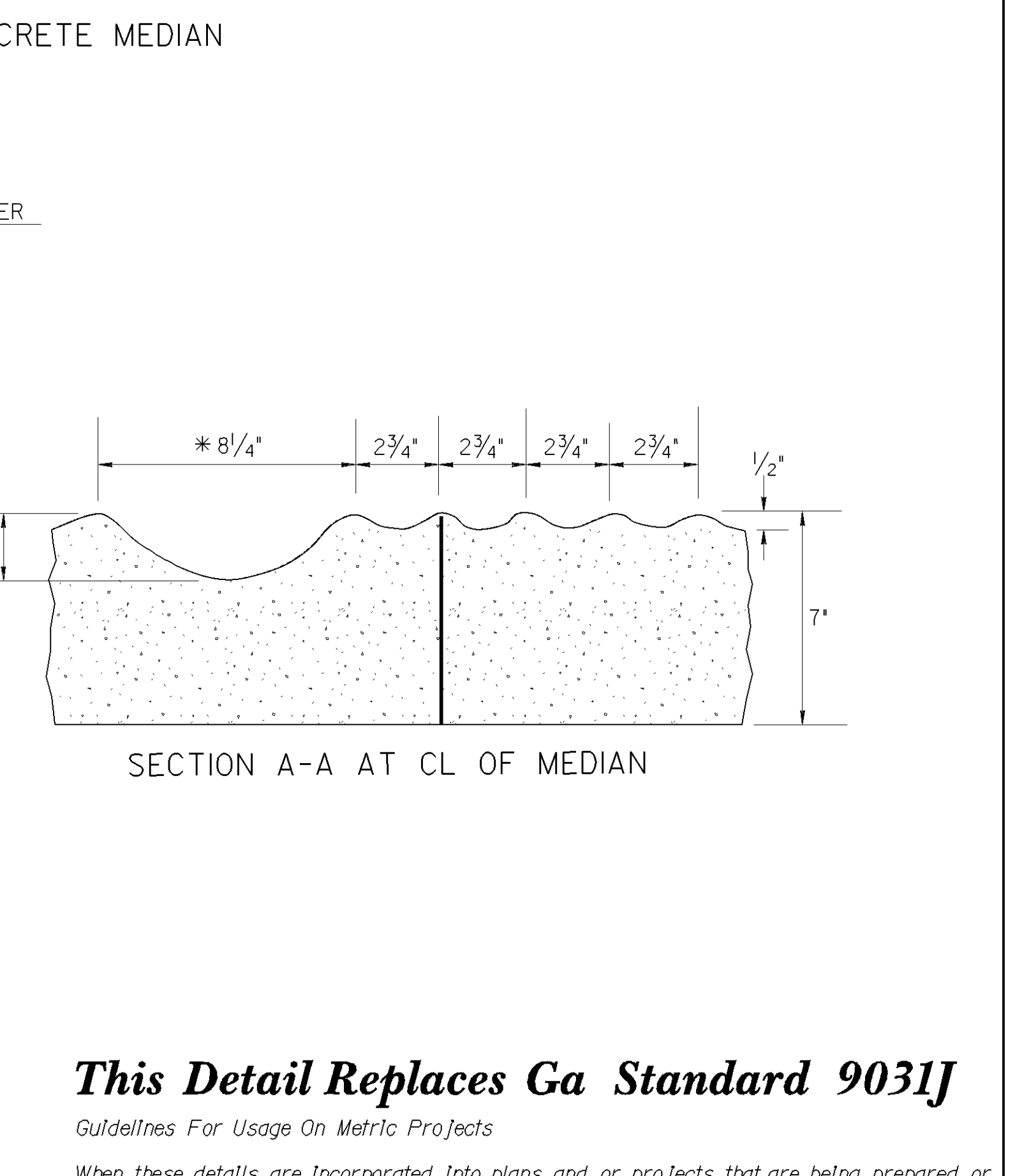
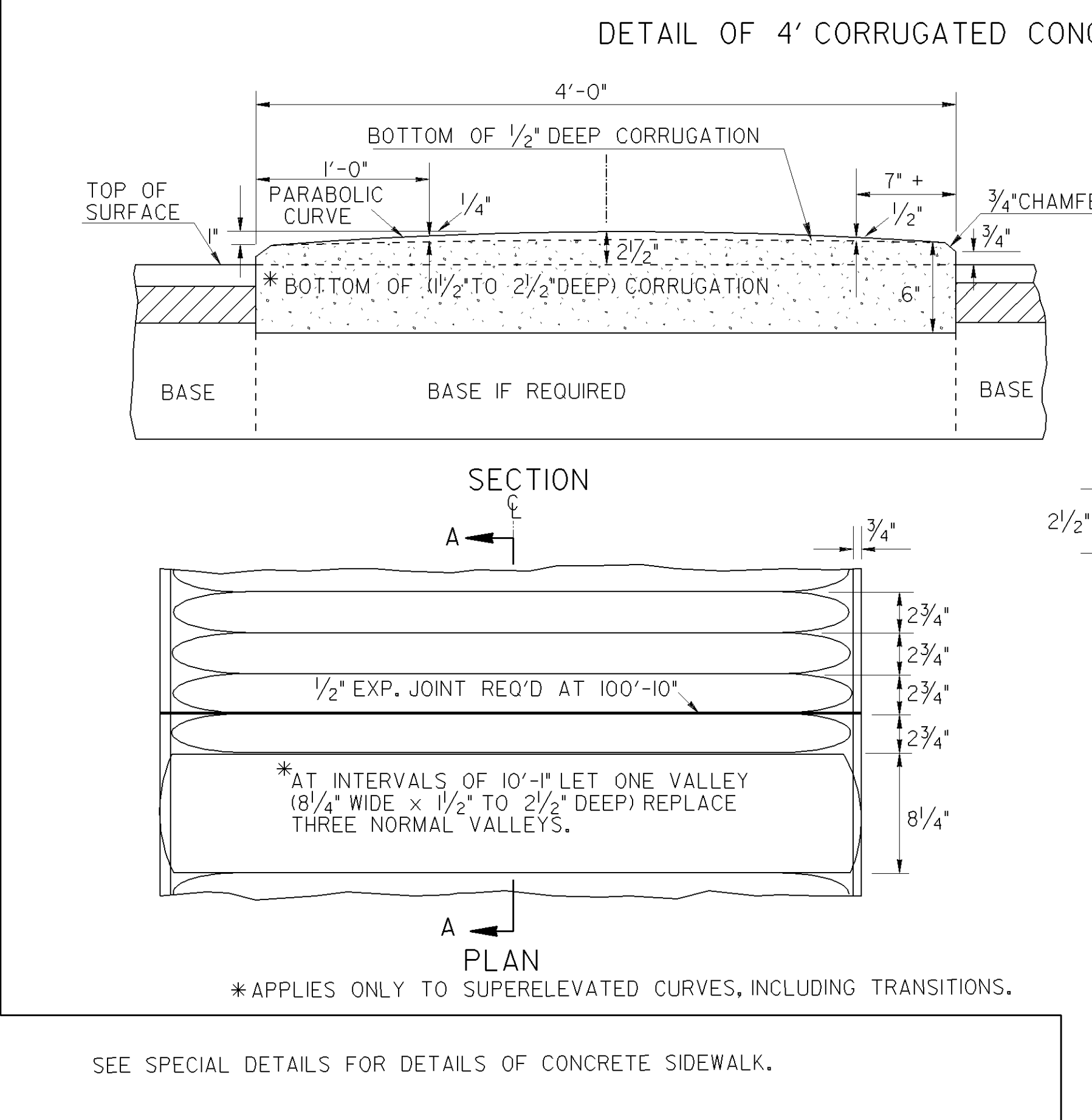
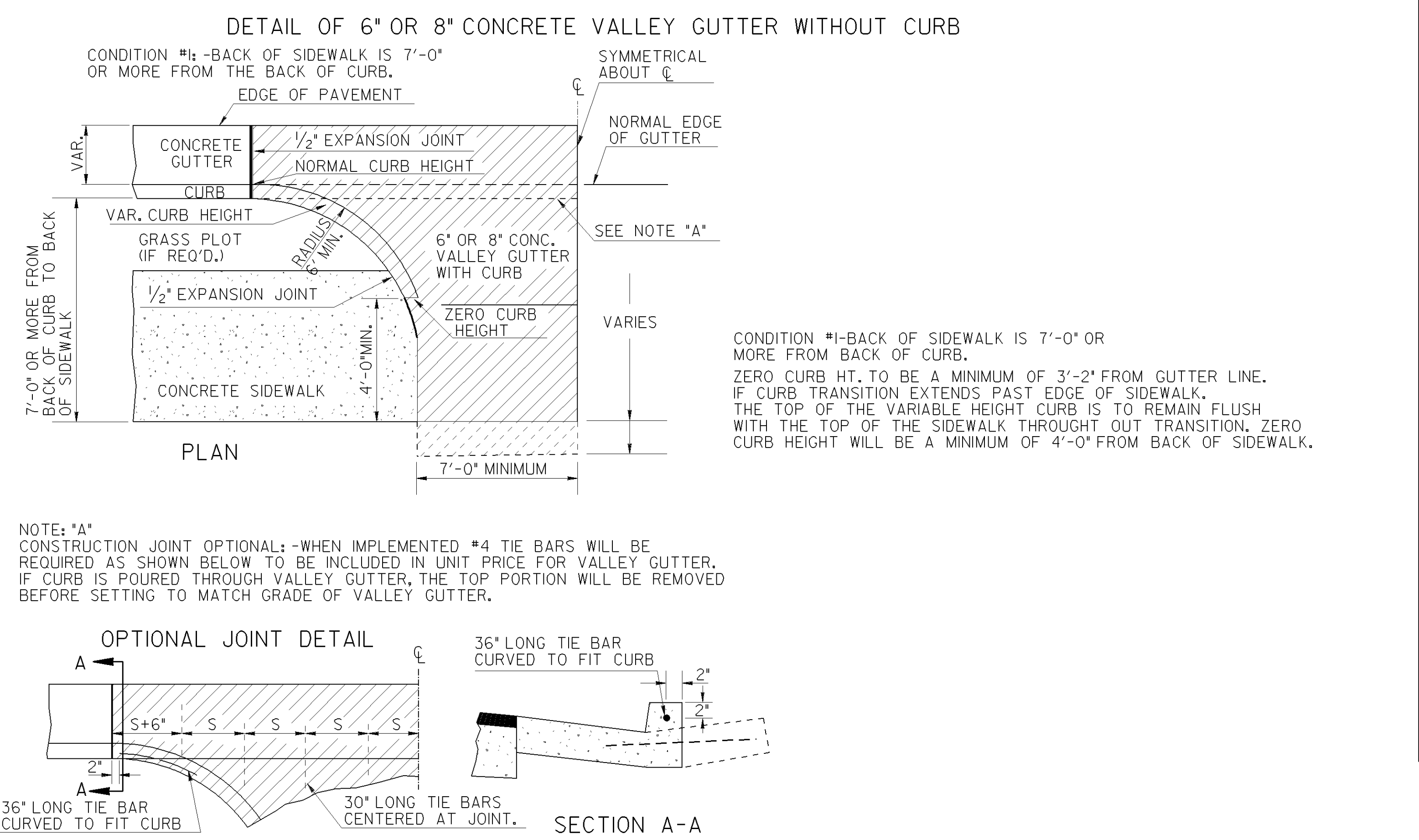
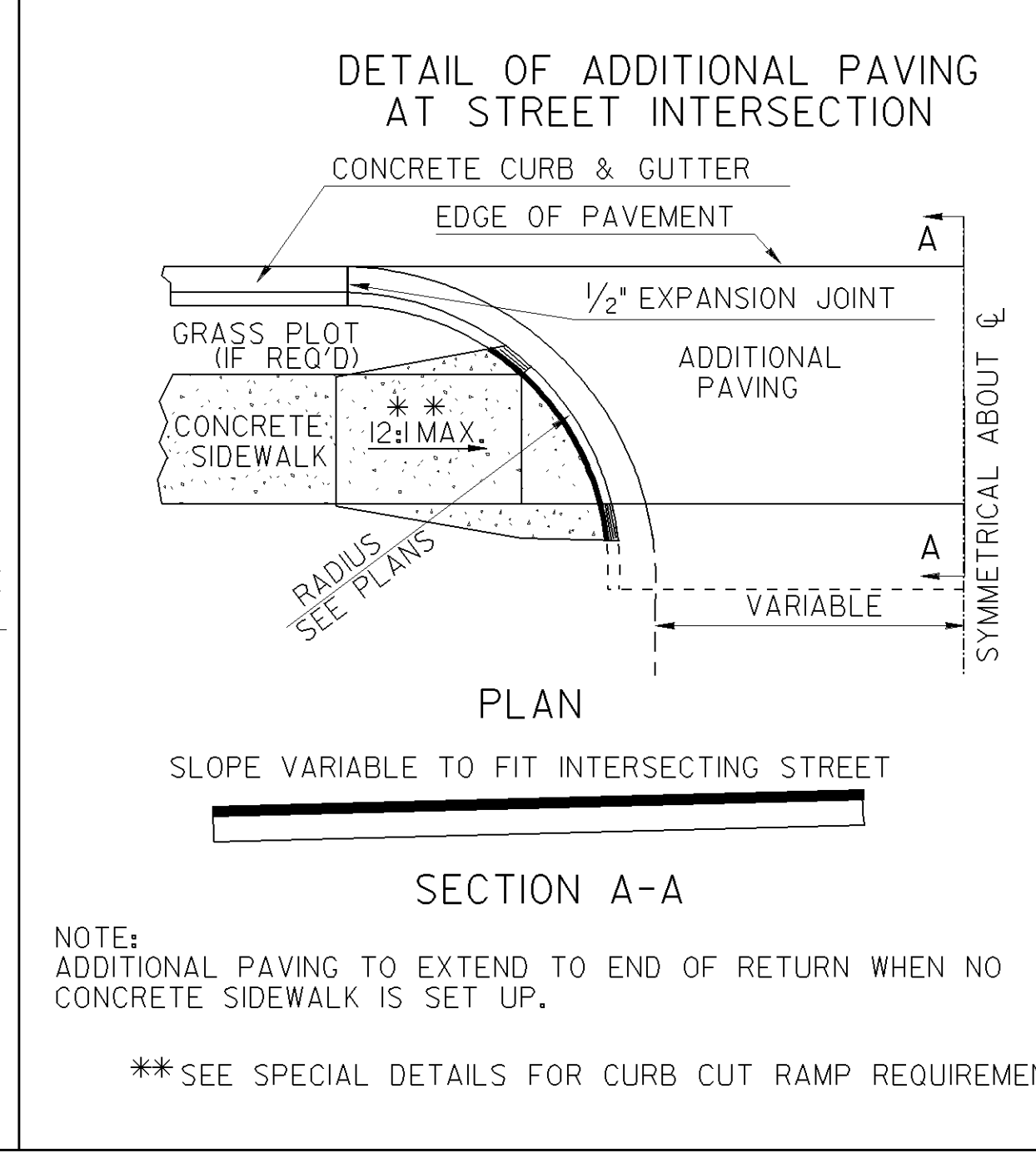
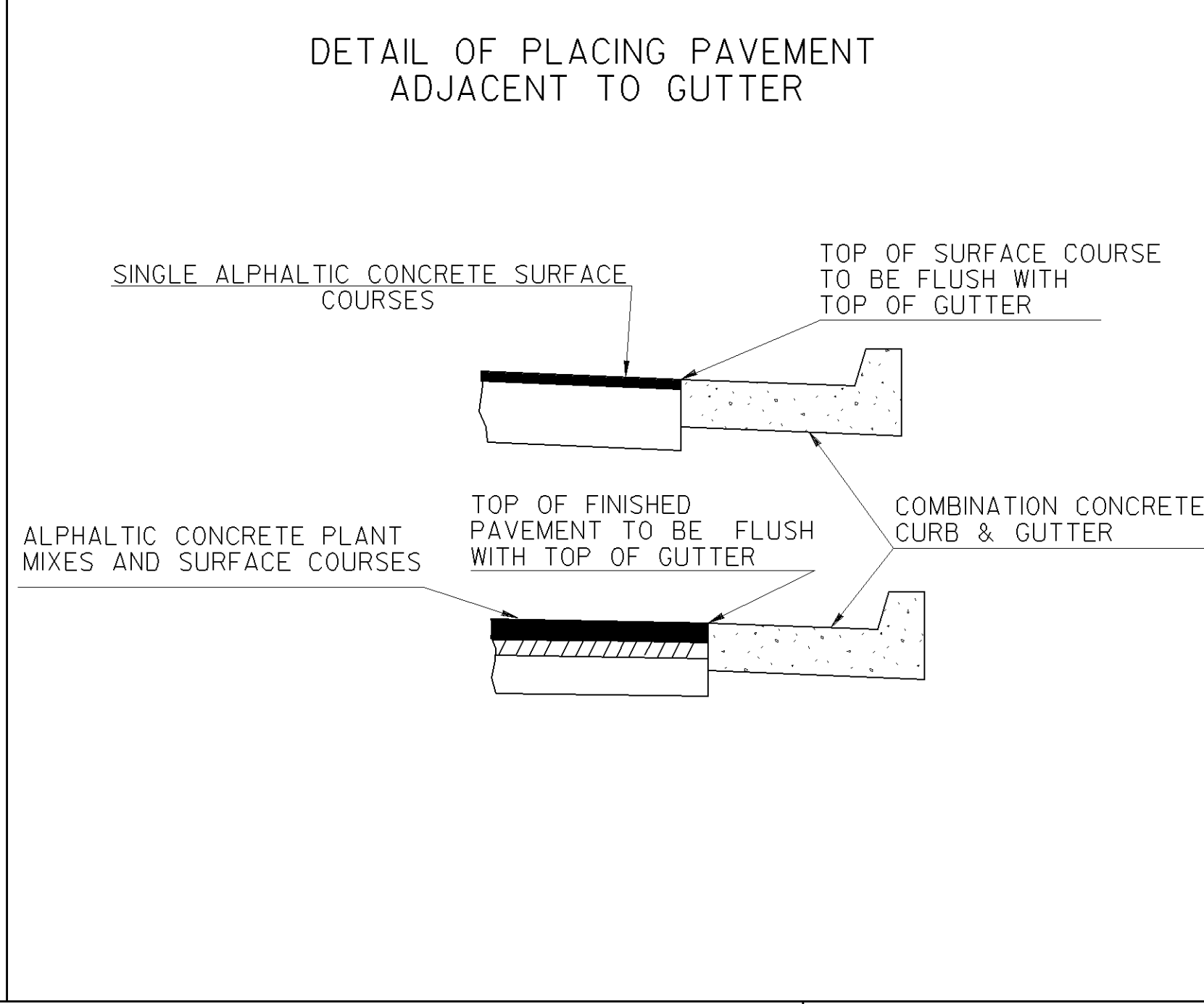
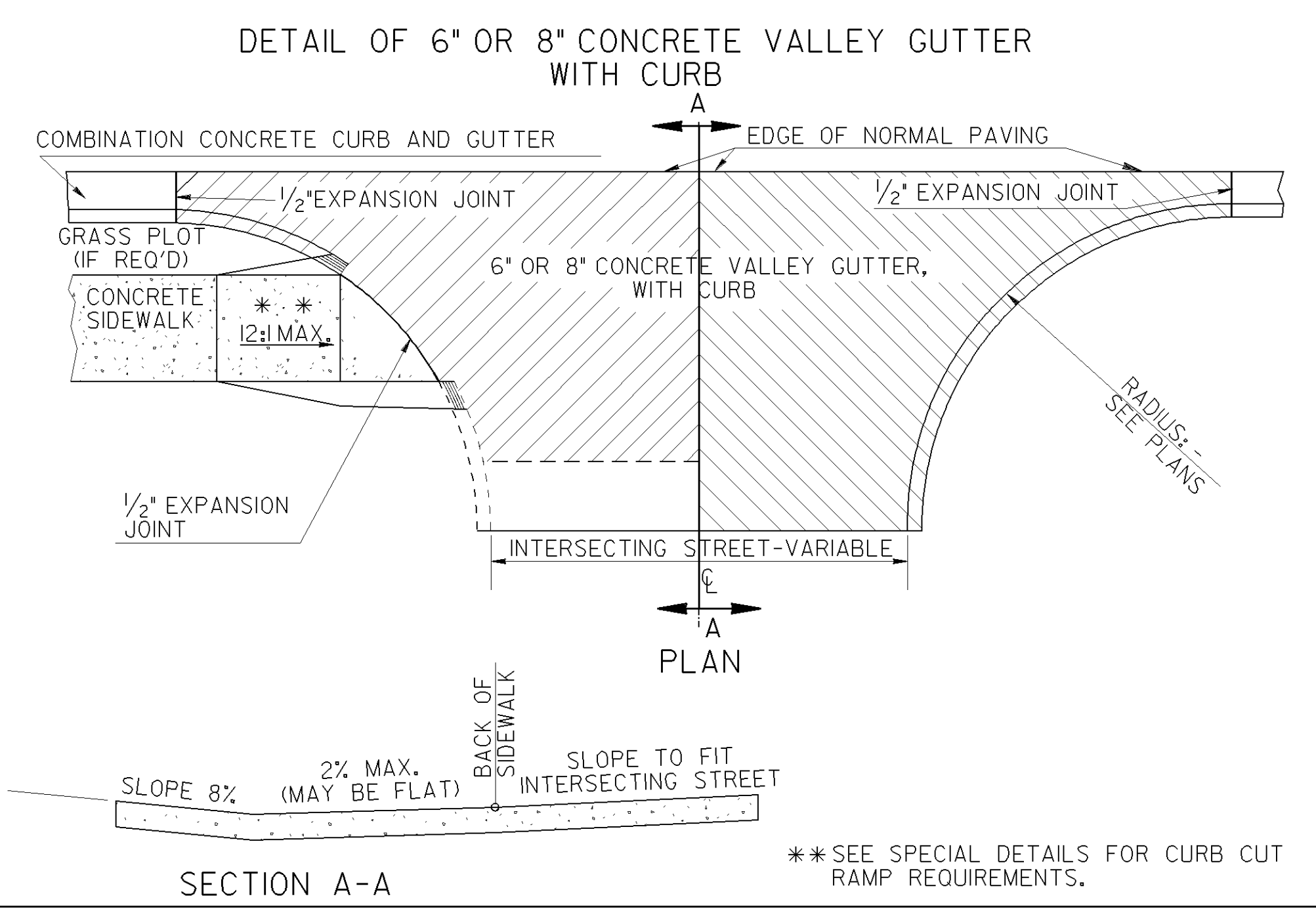
NO SCALE

MARCH 12, 2002

NUMBER
40-0001
AI

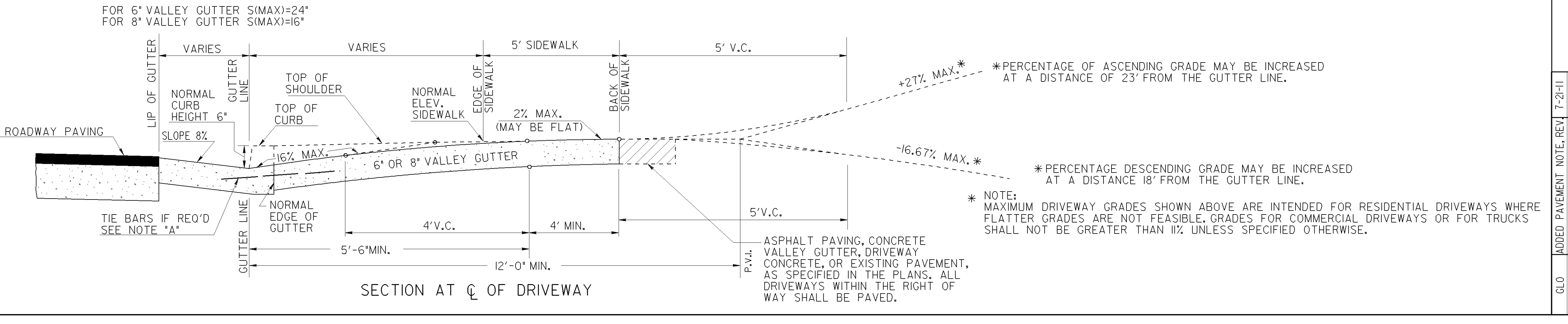
REV. PAVEMENT NOTES, REV. 7-21-11	DATE
12" TO 14" MIN. REV. SWALK REVISED 4-11-02	DATE
BY	REVISION

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		



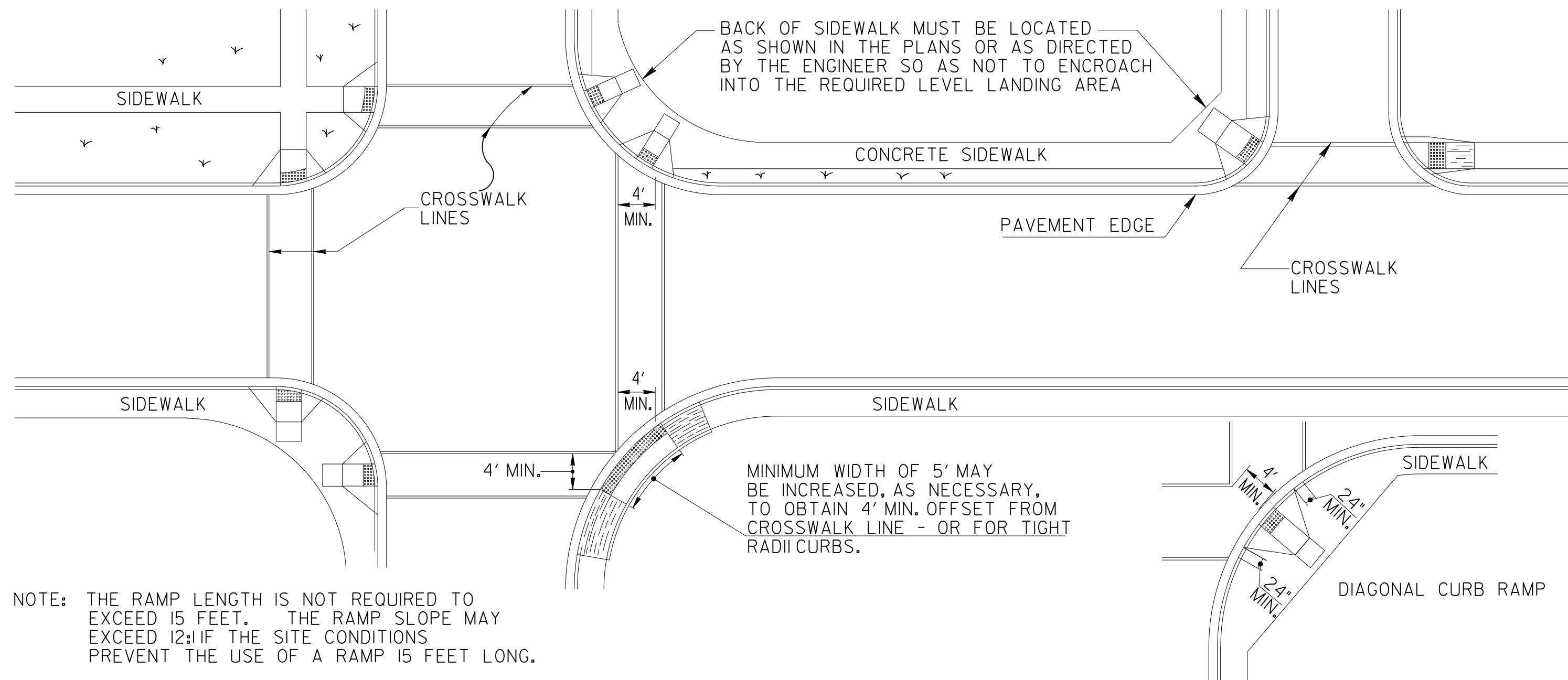
This Detail Replaces Ga Standard 9031J
Guidelines For Usage On Metric Projects

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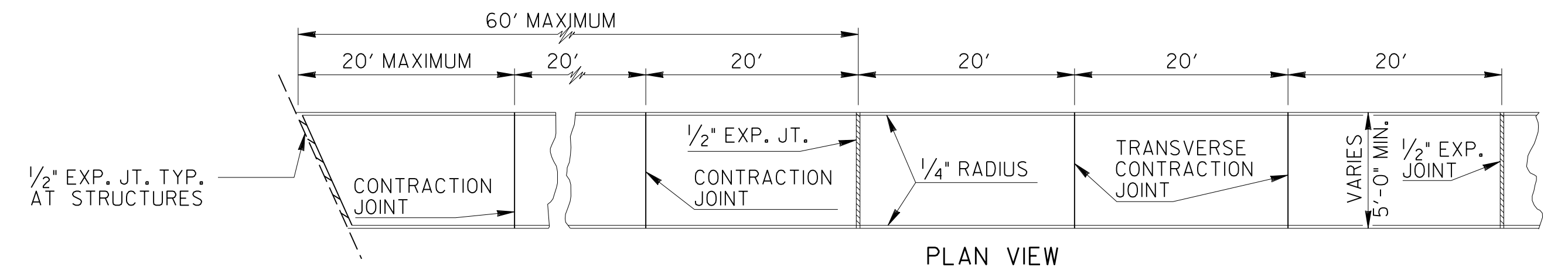
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
CONSTRUCTION DETAIL	
CONCRETE VALLEY GUTTER AT STREET INTERSECTION 6" OR 8" CONCRETE VALLEY GUTTER AT DRIVE PLACING PAVEMENT ADJACENT TO GUTTER ADDITIONAL PAVING AT STREET INTERSECTION 4' CORRUGATED CONCRETE MEDIAN	
NO SCALE	
MARCH 12, 2002	
NUMBER A2	

TYPICAL LOCATIONS FOR CURB CUT RAMPS - PLAN VIEW

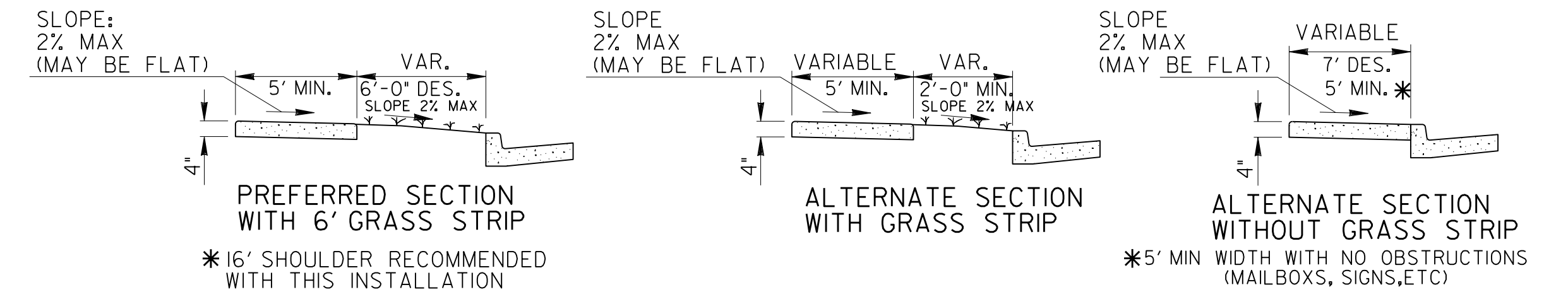
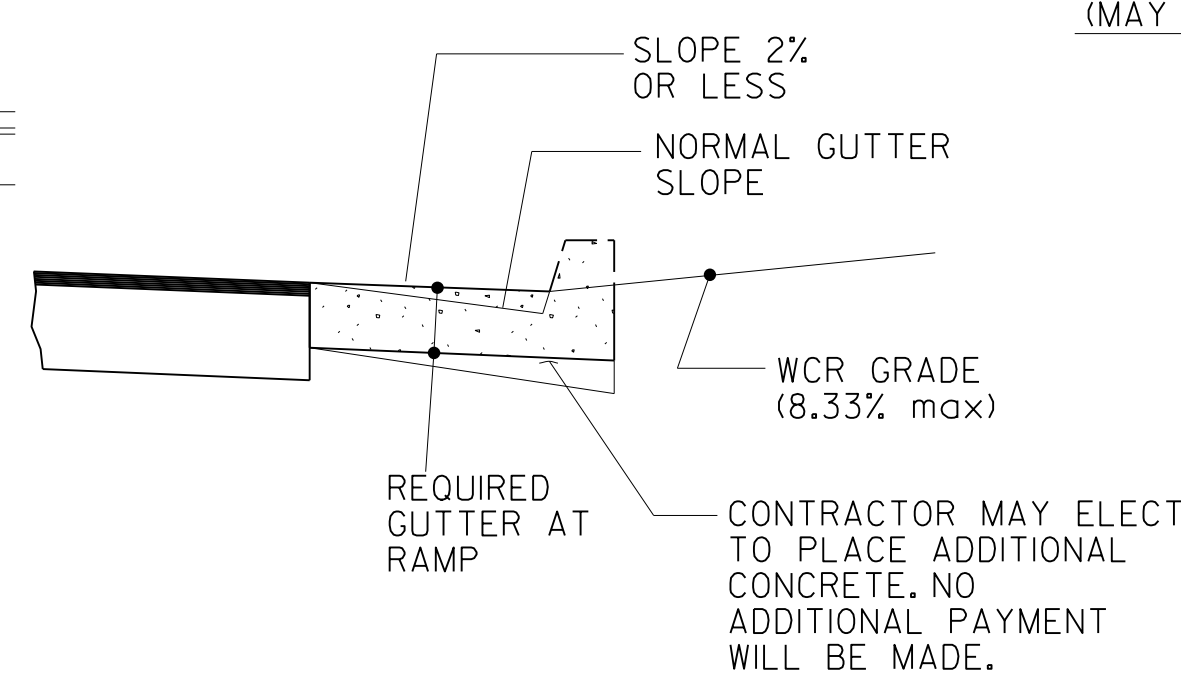


NOTE: THE RAMP LENGTH IS NOT REQUIRED TO EXCEED 15 FEET. THE RAMP SLOPE MAY EXCEED 12% IF THE SITE CONDITIONS PREVENT THE USE OF A RAMP 15 FEET LONG.

CONCRETE SIDEWALK DETAILS



GUTTER TRANSITION DETAIL



NOTES FOR CONCRETE SIDEWALK:

- CONCRETE TO BE PLACED 4" THICK AND FINISHED WITH TAMPS, WOOD FLOATS AND STIFF-BRISTLE BOOMS.
- TRANSVERSE CONTRACTION JOINTS SHALL BE PLACED AT 20 FT. INTERVALS. ALL EDGES TO BE ROUNDED TO 1/4" RADIUS.
- 1/2" EXPANSION JOINTS SHALL BE PLACED, WHERE SIDEWALK TIE INTO A STRUCTURE OR TERMINATE AT CURB, RAMPS OR DRIVEWAYS AND AT 60' INTERVALS.

NOTES FOR CURB CUT RAMPS:

- CURB CUT RAMPS WILL BE LOCATED AS FOLLOWS UNLESS PLANS OR CONTRACT SPECIFY OTHERWISE.
 - AT ALL PEDESTRIAN CROSSWALKS WHERE CURB IS CONSTRUCTED OR REPLACED.
 - WHERE THE SIDEWALK, CONCRETE OR UNPAVED, IS INTERRUPTED BY THE CURB AT TURNOUTS OR AT INTERSECTIONS.
 - AT OTHER LOCATIONS SUCH AS HOSPITALS, NURSING HOMES, REST AREAS, ETC., WHERE THE CURB WOULD OTHERWISE BE AN OBSTRUCTION TO THE PHYSICALLY DISABLED.
- RAMPS WILL BE CONSTRUCTED FROM CONCRETE. SPECIFICATIONS FOR RAMPS WILL BE THE SAME AS FOR CONCRETE SIDEWALK. RAMPS SHALL HAVE EITHER A ROUGH OR A TEXTURED FINISH.
- DROP INLETS ARE NOT TO BE LOCATED DIRECTLY IN FRONT OF RAMPS. CATCH BASINS SHOULD BE LOCATED AT LEAST 10 FT. FROM RAMPS WHEN FEASIBLE.
- WHERE RAMPS ARE LOCATED IN RADII, THE DIMENSIONS SHOWN FOR RAMP WIDTHS AND TAPERS ARE MEASURED PERPENDICULAR TO THE RAMP AND NOT ALONG THE CURVE.
- WHERE UTILITY STRUCTURES CONFLICT, WHERE SIDEWALK GEOMETRY VARIES, AT SKEWED INTERSECTIONS, OR IN OTHER SPECIAL CASES, THE RAMP DESIGNS MAY BE MODIFIED BY THE DESIGNER OR ENGINEER, PROVIDED THAT THE WIDTH REMAINS A MINIMUM OF 48 INCHES, AND NO SLOPE ON THE ACCESSIBLE PART OF THE RAMP IS STEEPER THAN 12%.
- 1 IN. FT. OF CURB AND GUTTER WILL INCLUDE THE TRANSITIONED CURB IN FRONT OF RAMPS. SO, YDS. OF CONCRETE SIDEWALK AND CONCRETE MEDIAN PAVING WILL INCLUDE RAMPS. NO ADDITIONAL PAYMENT WILL BE MADE FOR CURB RAMPS. NO ADDITIONAL PAYMENT WILL BE MADE FOR SAWING AND REMOVING EXISTING SIDEWALK OR CURB WHERE NECESSARY FOR RAMP CONSTRUCTION.
- WHEN A CURB RAMP IS PLACED ON EXISTING PAVEMENT, THE PAVEMENT SHALL BE REMOVED TO PROVIDE A MINIMUM THICKNESS OF 3 INCHES OF CONCRETE AT ALL LOCATIONS. NO SEPARATE PAYMENT WILL BE MADE FOR REMOVAL OF THE PAVEMENT.
- DETECTABLE WARNING SURFACES ARE REQUIRED ON ALL INTERSECTIONS WITH PUBLIC STREETS, SIGNALIZED COMMERCIAL DRIVEWAYS, AND COMMERCIAL DRIVEWAYS WITH AN AADT OF 25 VPD.

This Detail Replaces Ga Standard 9031W

Guidelines For Usage On Metric Projects

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Type A

(Perpendicular)
(The Preferred Ramp)

Back of sidewalk shall be located as shown in the plans or as directed by the Engineer so as not to encroach into the required landing area.

DIFFERENCE IN HEIGHT	LENGTH REQUIRED
1 inch	10 inches
2 inches	1'-8"
3 inches	2'-6"
4 inches	3'-4"
5 inches	4'-2"
6 inches	5 feet

Type C

(Parallel)

Type B

(Parallel)

(Normally used when space is not available for a landing at the top of a Type A Ramp)

Skewed Ramp Details

(Applies to Type A Type D Ramps Only)

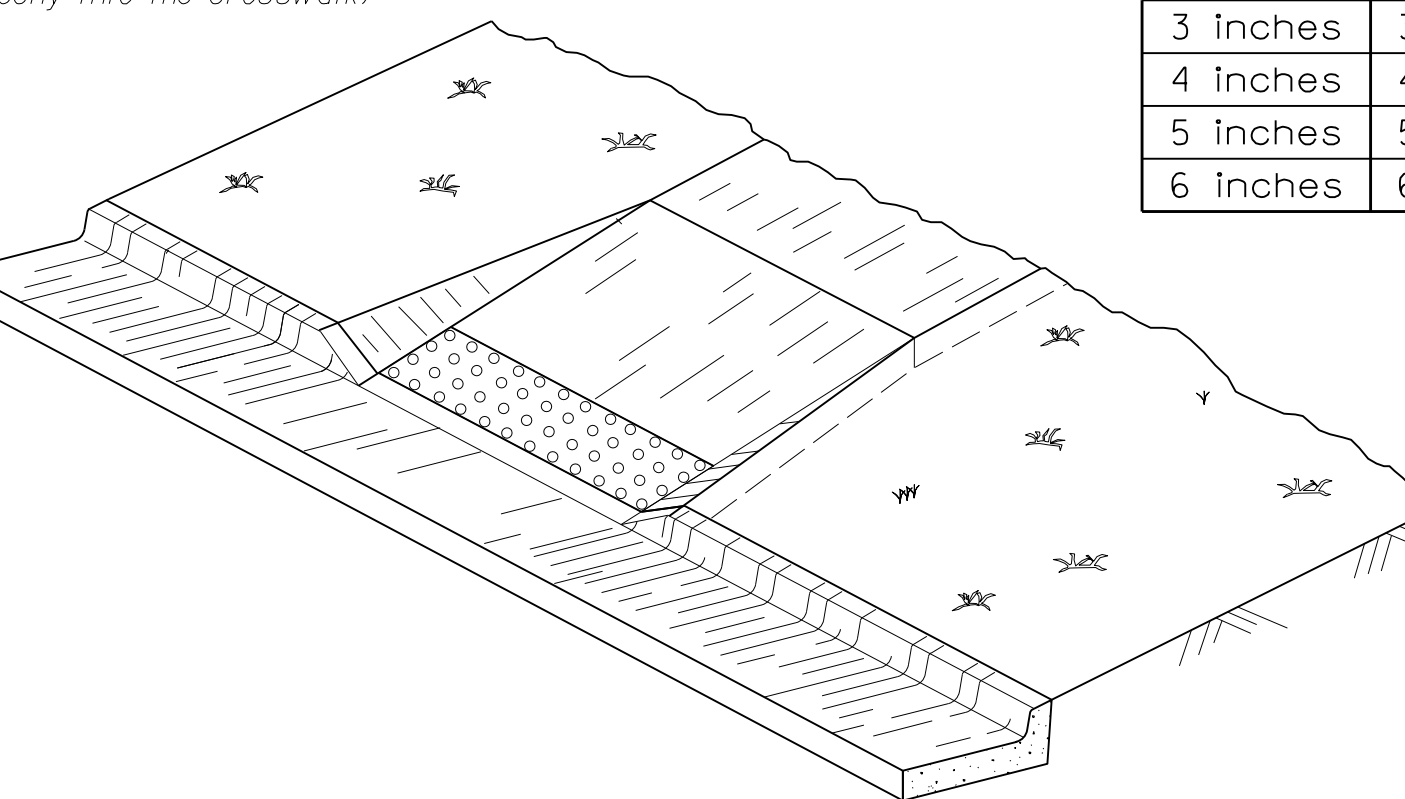
WHEN THE RAMP CENTERLINE IS NOT PERPENDICULAR TO THE CURB A LEVEL LANDING AREA WITH SLOPES LESS THAN 2% MUST BE PROVIDED AT THE BOTTOM OF THE RAMP.

Type D

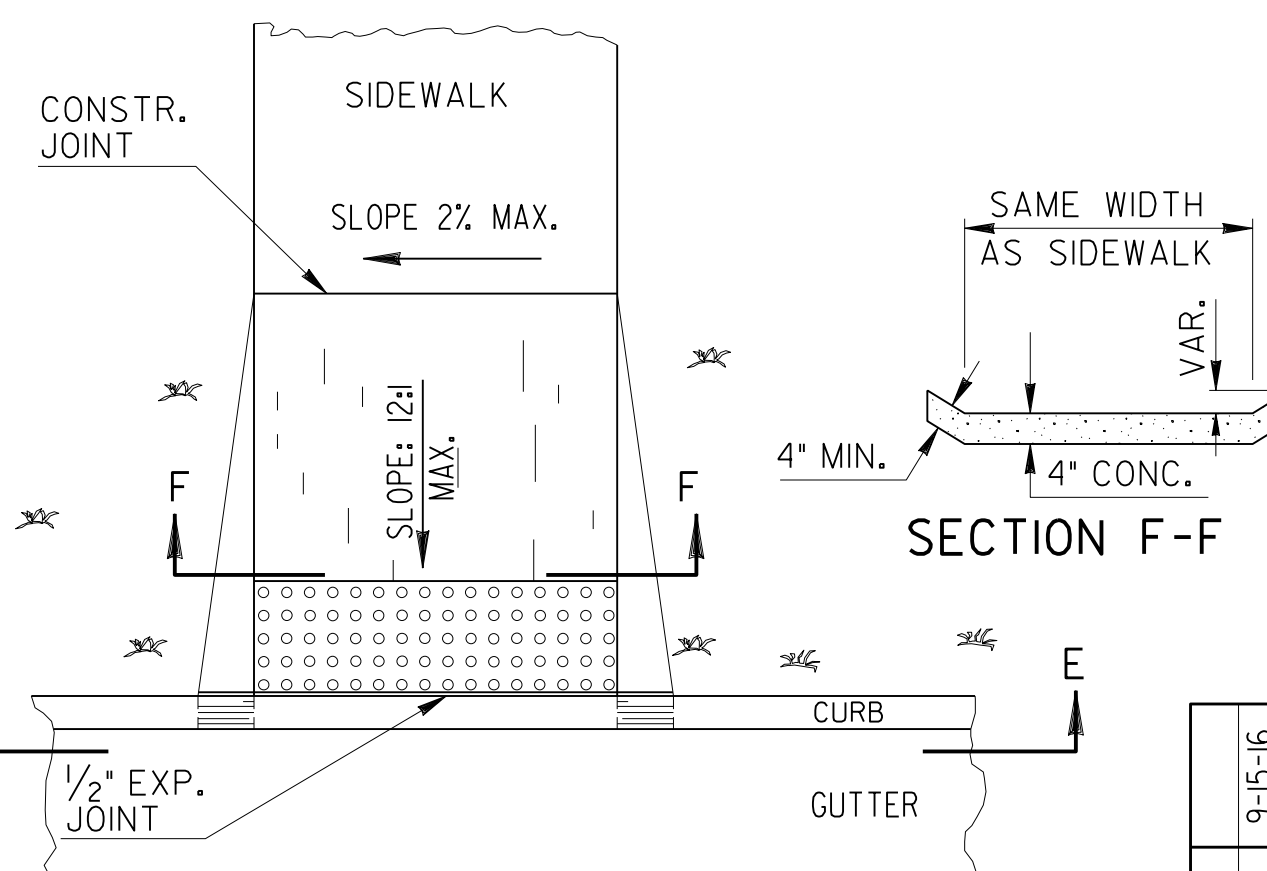
(Perpendicular)

(Normally used when the sidewalk ties directly into the crosswalk)

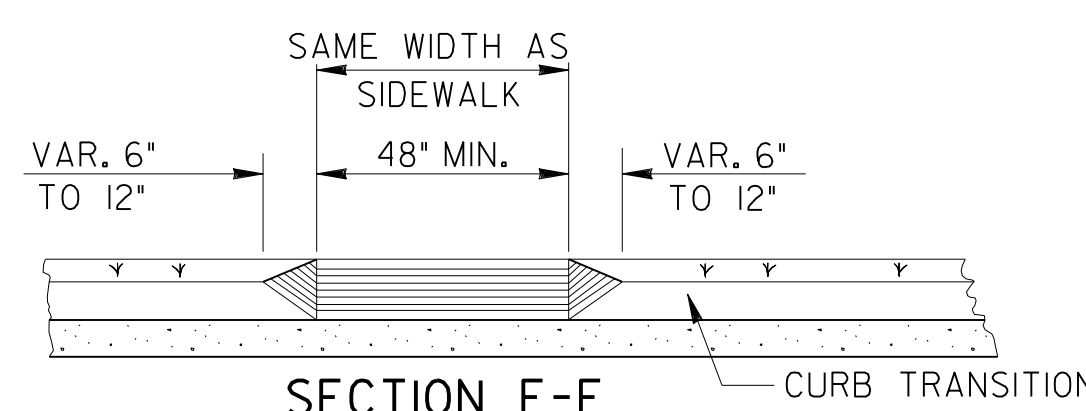
DIFFERENCE IN HEIGHT	LENGTH REQUIRED
1 inch	1 foot
2 inches	2 feet
3 inches	3 feet
4 inches	4 feet
5 inches	5 feet
6 inches	6 feet



IN AREAS WHERE THE GUTTER HAS A SLOPE 1" IN 1' END NORMAL GUTTER SLOPE AT A DISTANCE OF 6 TO 10 FEET FROM THE RAMP AND BEGIN TRANSITION TO A FLAT GUTTER SLOPE. NORMAL GUTTER SLOPE SHALL BE RESUMED AT A SIMILAR DISTANCE BEYOND THE RAMP.

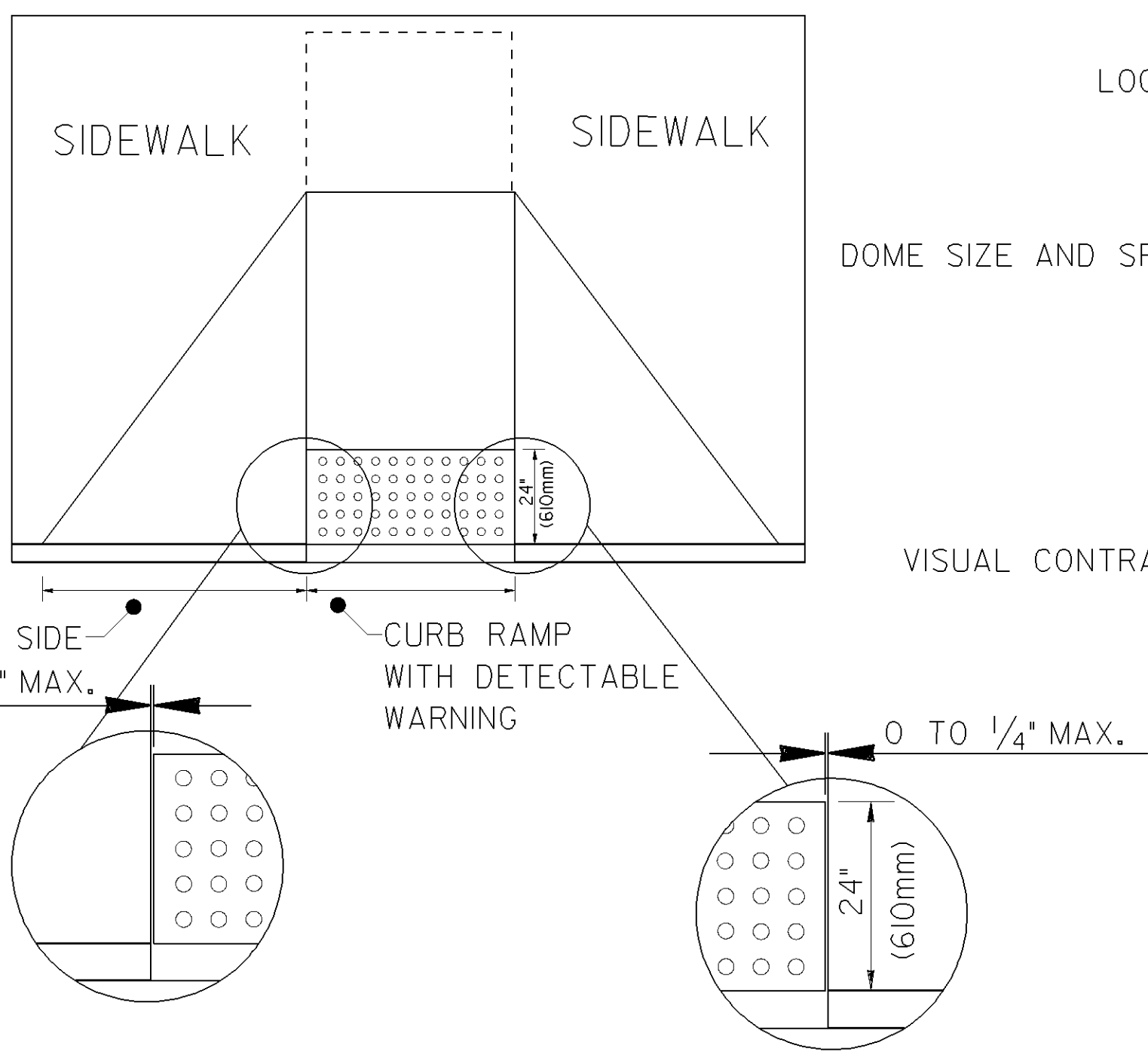
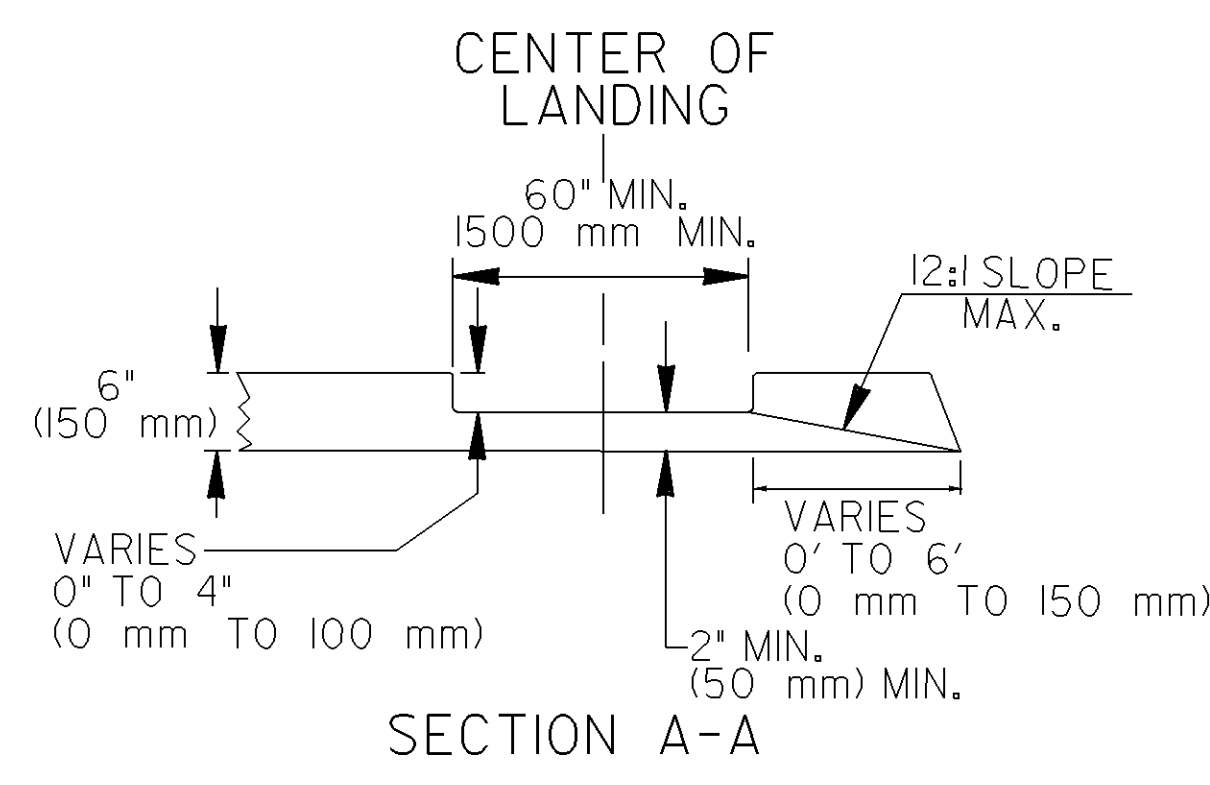


PLAN VIEW



DEPARTMENT OF TRANSPORTATION										STATE OF GEORGIA		
SPECIAL DETAIL										CONCRETE SIDEWALK DETAILS		
CURB CUT (WHEELCHAIR) RAMPS										NO SCALE		
REVISION										DATE		
9-15-16	6-18-09	5-10-06	2-21-03	7-10-03	7-29-02	5-29-02	5-23-02	5-13-02	4-29-02	4-11-02	4-3-02	3-28-02
ADDED PERP. OR PARALLEL	REV. SLOPES TO PERCENT AND ADDED I24 & I04 CHART.	REV. TRUNCATED DOMES	REVISED	REVISED	REVISED	REVISED	REVISED	REVISED	REVISED	REVISED	REVISED	REVISED
CJB	GLO	GLO										
										MARCH 12, 2002		
										NUMBER		
										A3		
										40-0003		

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		



SIZE: DETECTABLE WARNINGS SHALL BE 24 INCHES (610 mm) IN THE DIRECTION OF PEDESTRAIN TRAVEL AND EXTEND THE FULL WIDTH OF THE CURB RAMP OR FLUSH SURFACE.

LOCATION: THE DETECTABLE WARNING SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE OR OTHER POTENTIAL HAZARD IS 6 TO 8 INCHES (150 mm TO 180mm) FROM THE CURB LINE OR OTHER POTENTIAL HAZARD, SUCH AS A REFLECTIVE POOL EDGE OR THE DYNAMIC ENVELOPE OF RAIL OPERATIONS.

DOMES SIZE AND SPACING: TRUNCATED DOMES SHALL HAVE A BASE DIAMETER OF 0.9 INCH TO 1.4 INCH (23mm-36mm) AT THE BOTTOM, A DIAMETER OF 0.45 INCH TO 0.91 INCH (11mm-23mm) AT THE TOP, THE TOP DIAMETER SHALL BE A MINIMUM OF 50% AND A MAXIMUM OF 65% OF THE BASE DIAMETER, A HEIGHT OF 0.2 INCH (5.1mm) AND A CENTER-TO-CENTER SPACING OF 2.40 INCHES (61mm) DESIRABLE 1.60 INCHES (41mm) MINIMUM MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT. DOMES SHALL HAVE A SQUARE ARRANGEMENT. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES.

VISUAL CONTRAST: DETECTABLE WARNING SURFACES SHALL CONTRAST VISUALLY WITH THE ADJACENT WALKING SURFACE EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE VISUAL CONTRAST SHALL BE AN INTEGRAL PART OF THE DETECTABLE WARNING SURFACE.

MATERIALS:

NEW CONSTRUCTION

THE DETECTABLE WARNINGS SHALL BE MADE OF MATERIALS SPECIFIED ON QPL 87.

RETROFIT OF EXISTING RAMPS

SURFACED APPLIED MATERIALS WILL ONLY BE APPROVED TO BE USED ON EXISTING WHEELCHAIR RAMPS.

INSTALLATION:

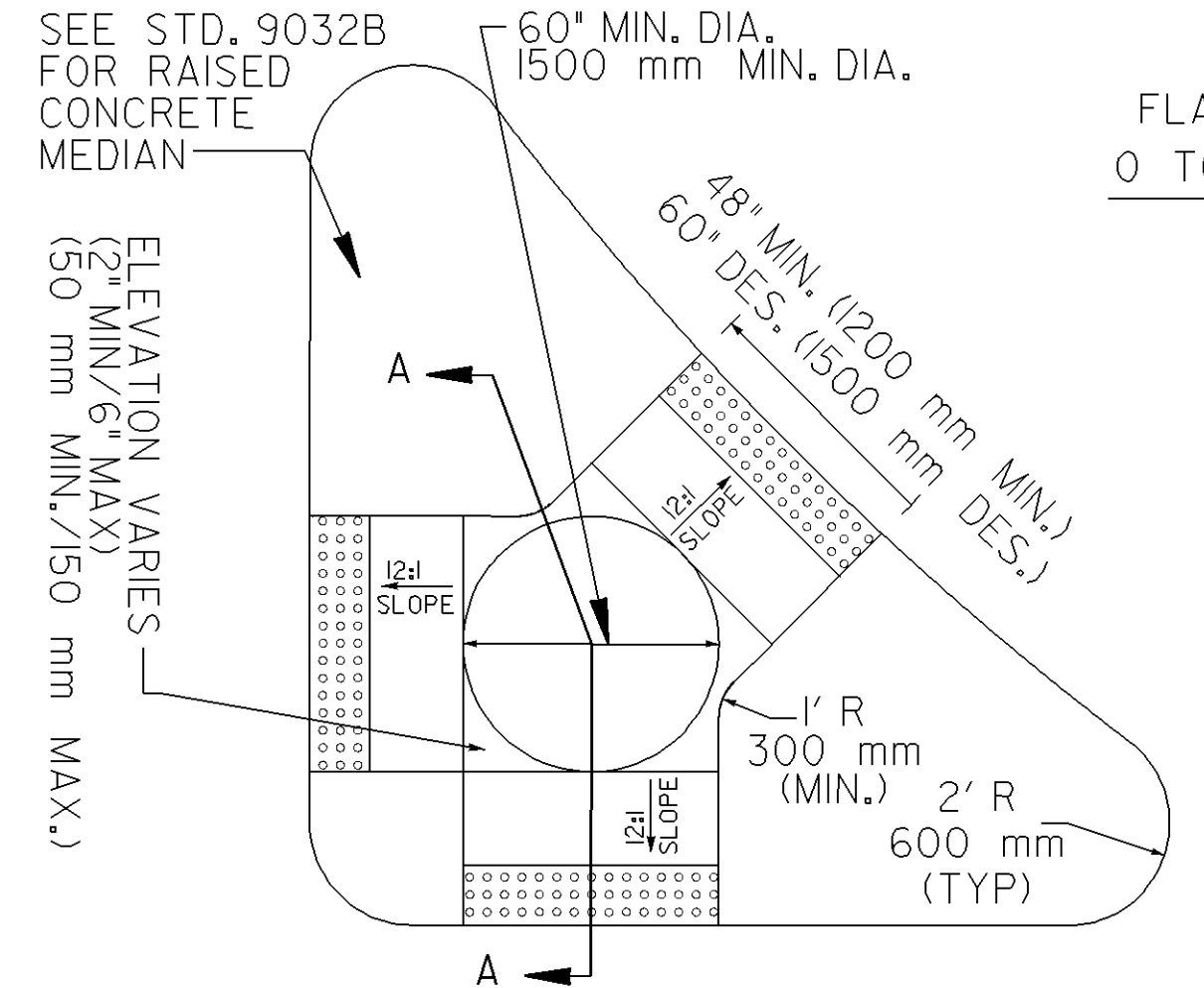
BRICK PAVERS SHALL BE SET IN A WET MORTAR BED. THE BED SHALL BE PLACED ON CONCRETE. THE CONCRETE SHALL BE A MINIMUM OF 4" THICK.

CERAMIC TILE SHALL BE EPOXY IN PLACE OR SET IN A WET MORTAR BED. MANUFACTURER RECOMMEND ADHESIVE OR FASTENER SHALL BE USED IN THE INSTALLATION.

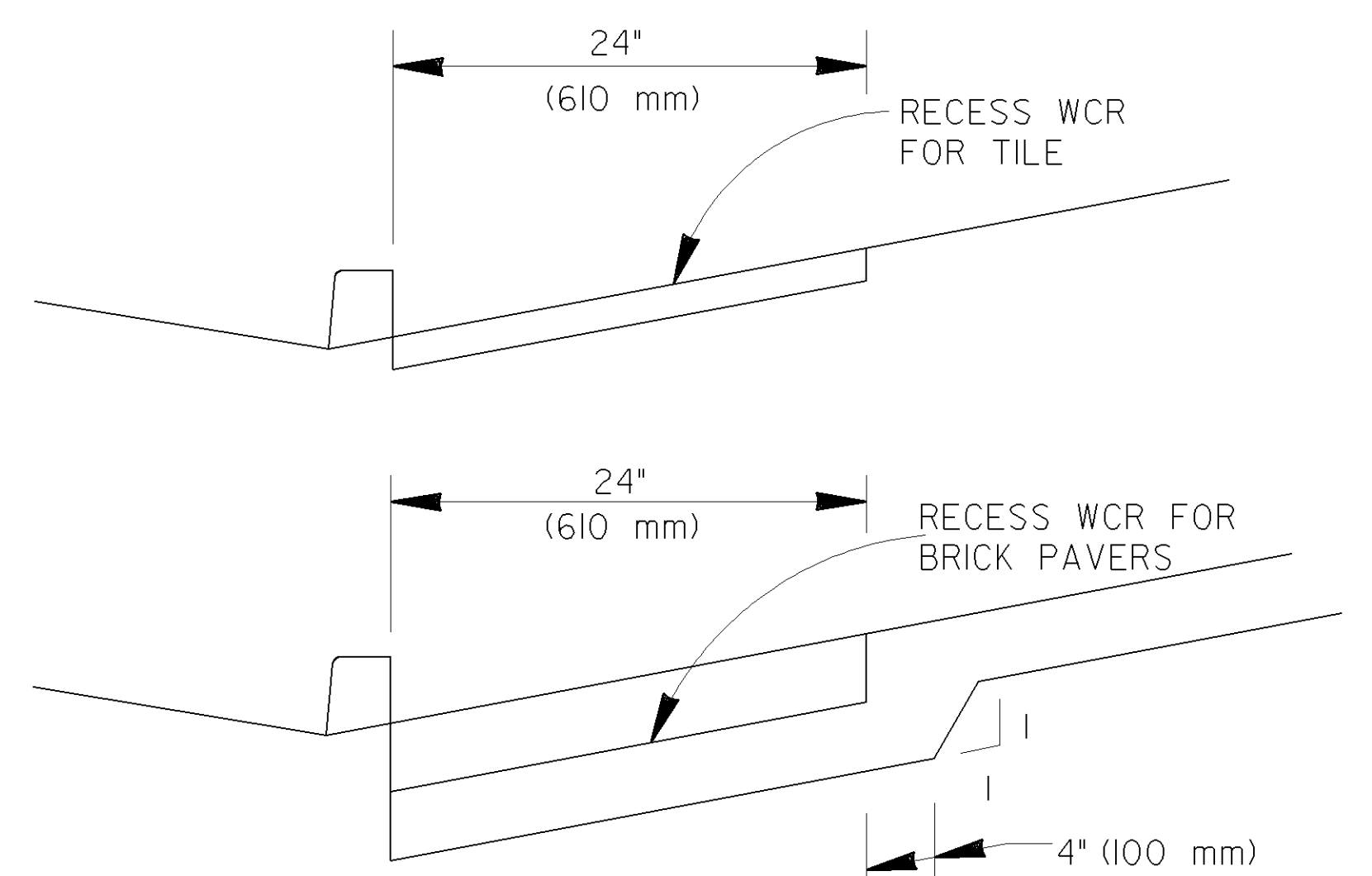
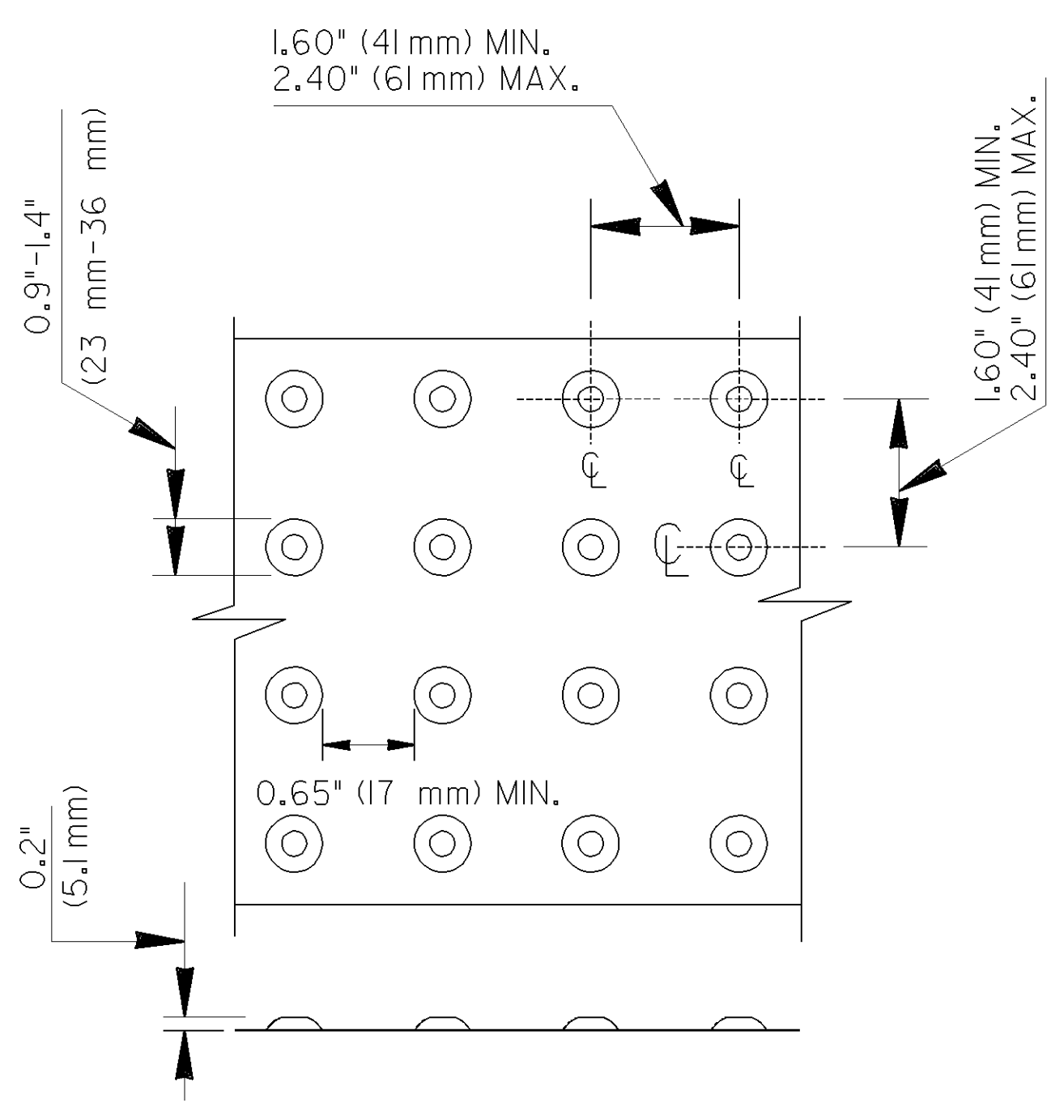
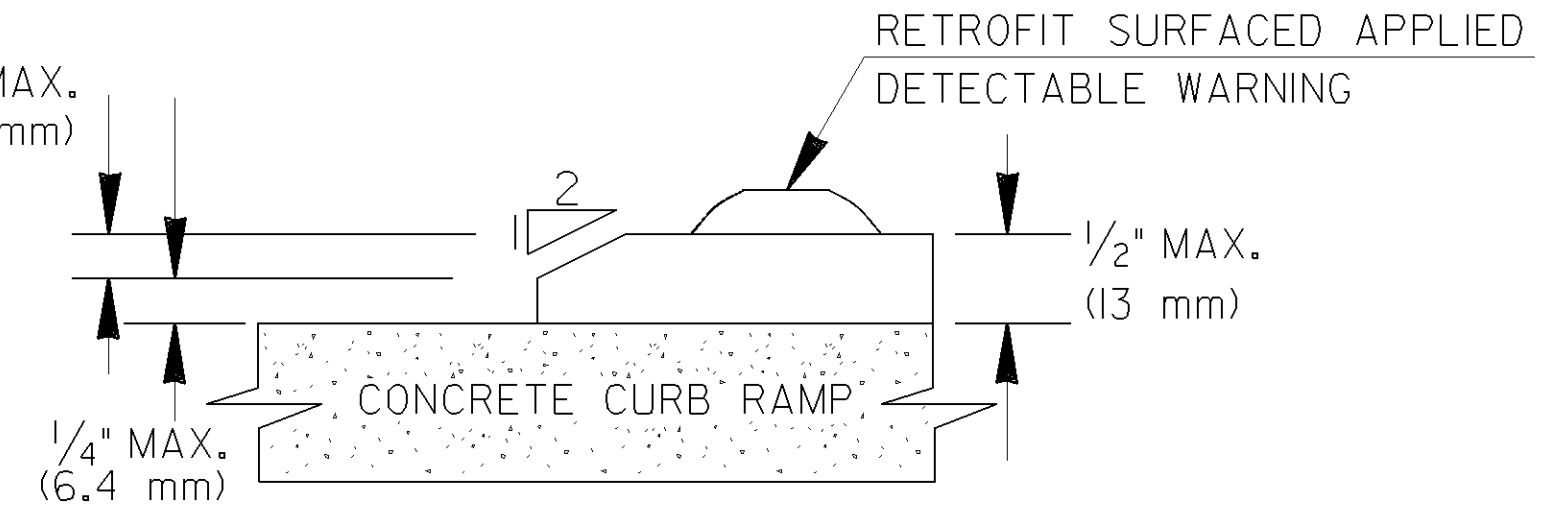
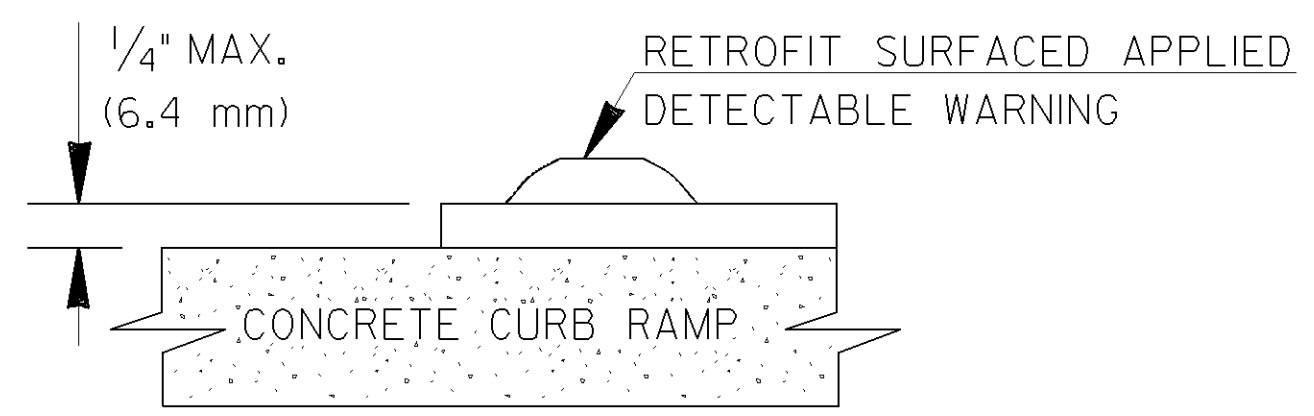
ALL OTHER MATERIALS SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S DETAILS OR INSTRUCTION.

GENERAL NOTES:

- RETROFIT SURFACED APPLIED MATERIALS ONLY:
- CHANGES IN LEVEL OF 1/4" (6.4 mm) HIGH MAXIMUM SHALL BE PERMITTED VERTICALLY ON SURFACED APPLIED MATERIALS.
 - CHANGES IN LEVEL BETWEEN 1/4" (6.4 mm) HIGH MINIMUM AND 1/2" (13mm) HIGH MAXIMUM SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 2:1.



CONCRETE ISLAND WITH ELEVATED CUT THROUGH

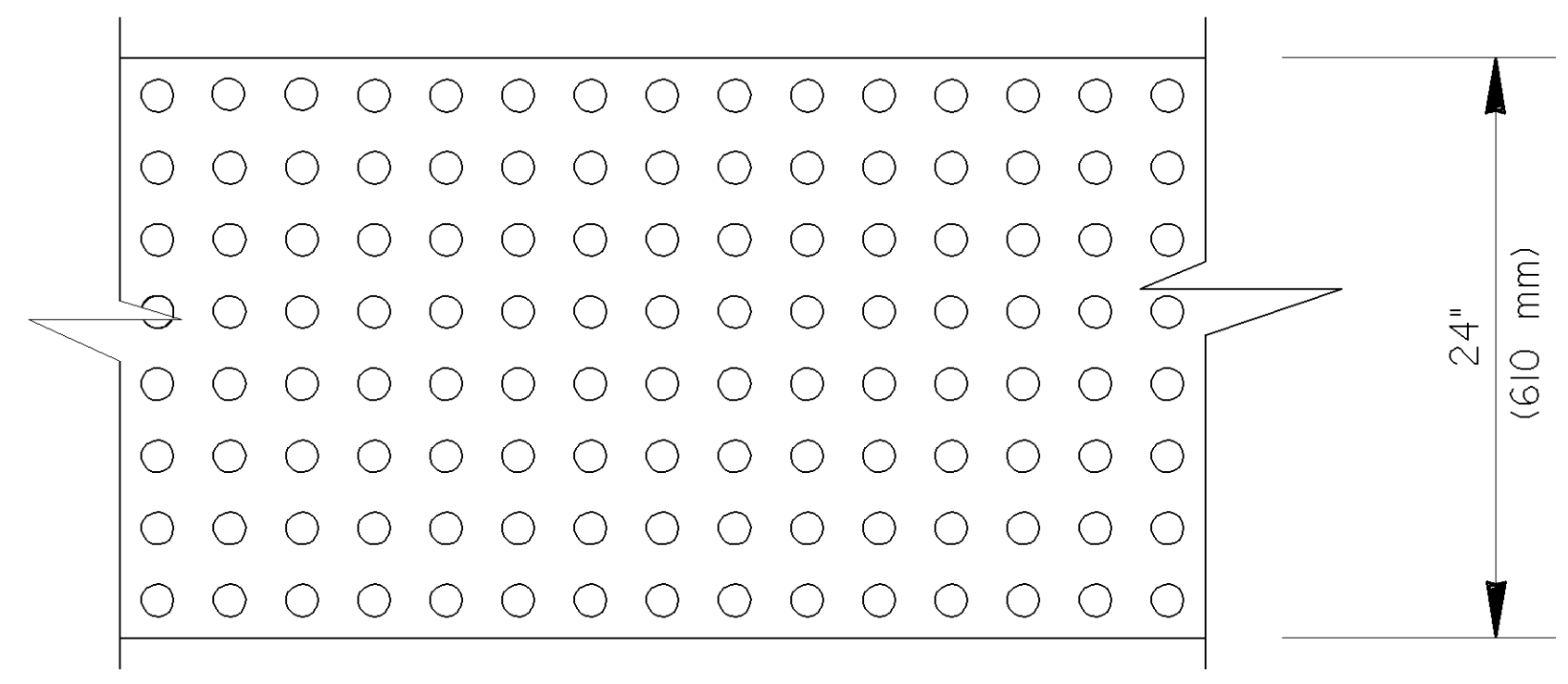


FOR TILE OR BRICK PAVERS NO VERTICAL LIP OVER 1/8" (3 mm) IS ALLOWED

NO SEPARATE PAYMENT WILL BE MADE FOR THE DETECTABLE WARNINGS. THE COST SHALL BE INCLUDED IN THE PRICE BID FOR SIDEWALK (OR CURB CUT RAMP IF THE ITEM IS INCLUDED IN THE PROPOSAL).

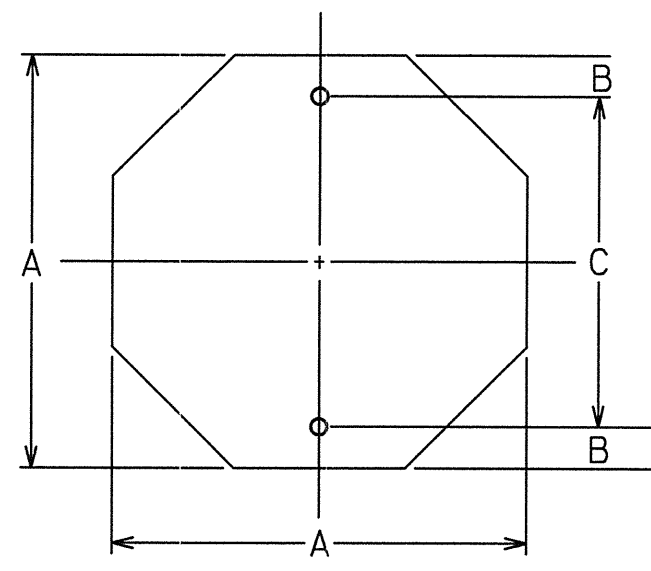
FOR CUT-THRU ISLANDS AND EXISTING RAMPS, WHERE NO SIDEWALK OR CURB CUT RAMPS ARE IN THE PROPOSAL, THE COST OF THE DETECTABLE WARNINGS SHALL BE INCLUDED IN THE OVERALL BID PRICE SUBMITTED.

DETAIL FOR DETECTABLE WARNING AT CUT-THRU CONCRETE ISLAND



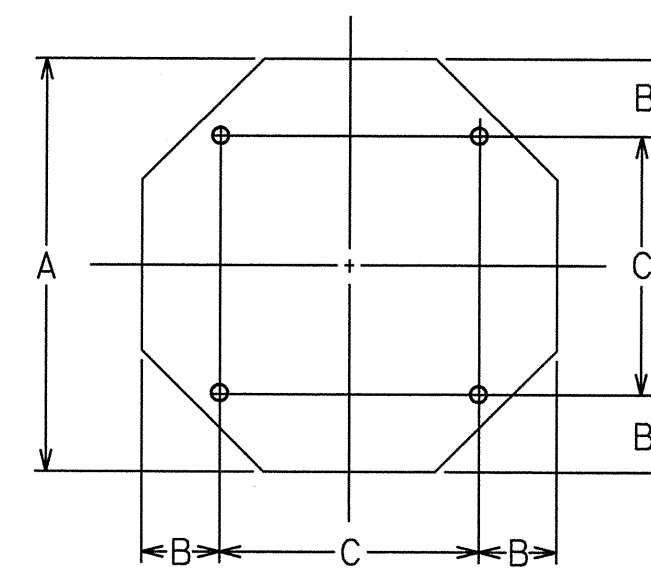
6-18-09		DATE		DEPARTMENT OF TRANSPORTATION	
ADDED RETROFIT DETAIL		REVISION		STATE OF GEORGIA	
AND ADDED ALT. RAMP		REVISION		SPECIAL DETAIL	
DETAIL AND GEN. NOTES		REVISION		DETECTABLE WARNING SURFACE	
ADDED TOLERANCE TO DTL.		REVISION		TRUNCATED DOME SIZE, SPACING	
REVISED TOLERANCE TO DTL.		REVISION		AND ALIGNMENT REQUIREMENTS	
REVISED TOLERANCE TO DTL.		REVISION		NO SCALE	
REVISED TOLERANCE TO DTL.		REVISION		MARCH 12, 2002	
REVISED TOLERANCE TO DTL.		REVISION		40-0004	
REVISED TOLERANCE TO DTL.		REVISION		NUMBER	
REVISED TOLERANCE TO DTL.		REVISION		A4	

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

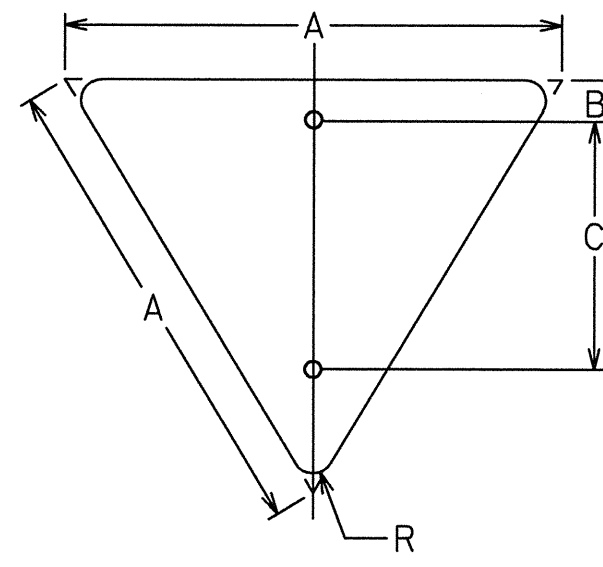


OCTAGON

A	B	C
24	3	18
30	3	24
36	3	30

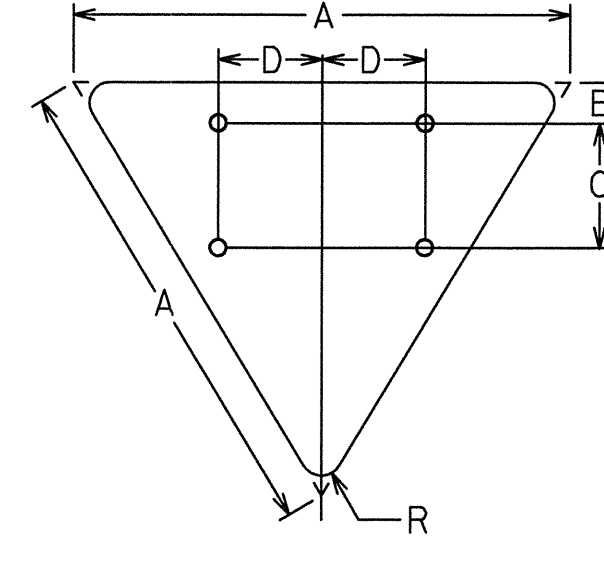


A	B	C
48	9	30

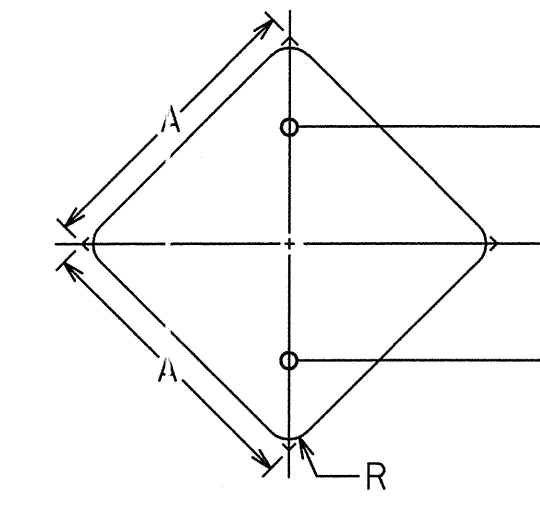


EQUILATERAL TRIANGLE

A	B	C	R
30	3	18	1 1/2
36	3	21	2
48	3	27	3

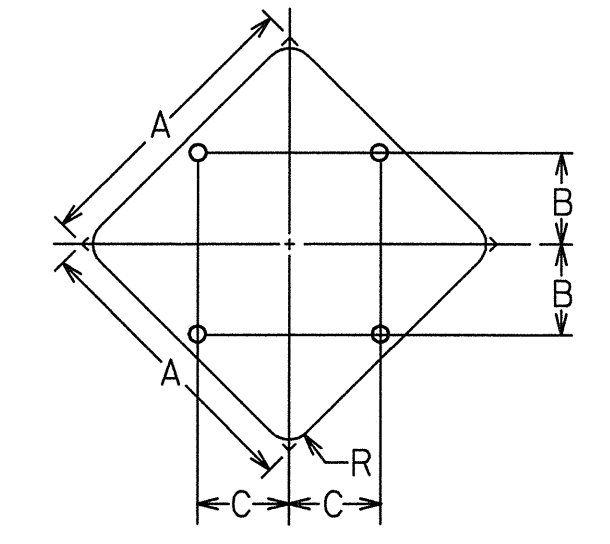


A	B	C	D	R
60	3	18	15	3



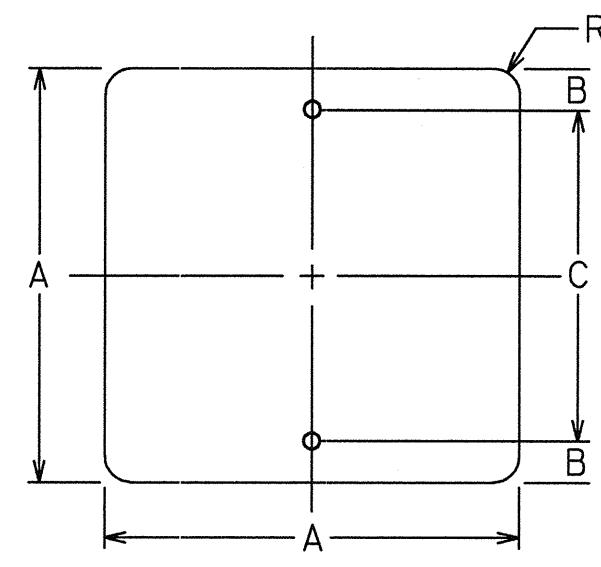
DIAMOND

A	B	R
24	12	1 1/2
30	15	1 7/8
36	18	2 1/4



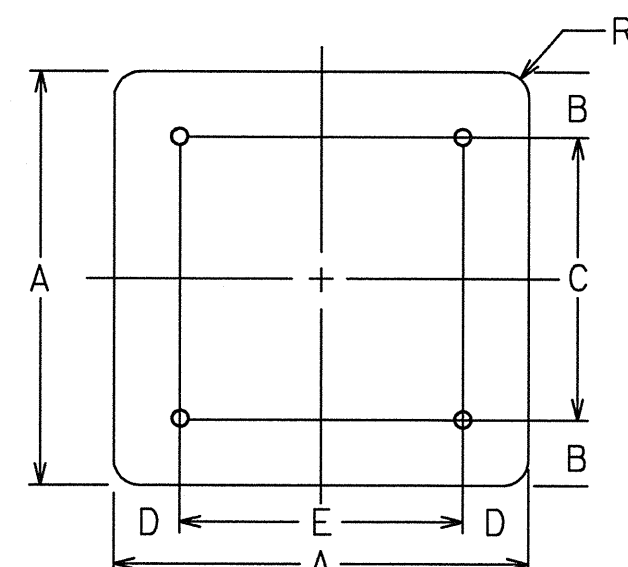
A	B	C	R
36	10	10	2 1/4
48	15	15	3
60	18	18	3 3/4

* FOR TWO POST ERECTION

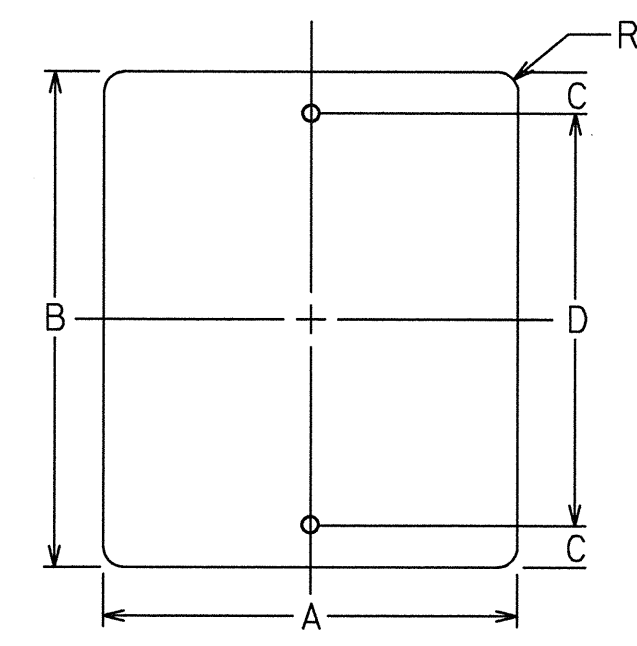


SQUARE

A	B	C	R
18	3	12	1 1/2
24	3	18	1 1/2
30	3	24	1 7/8

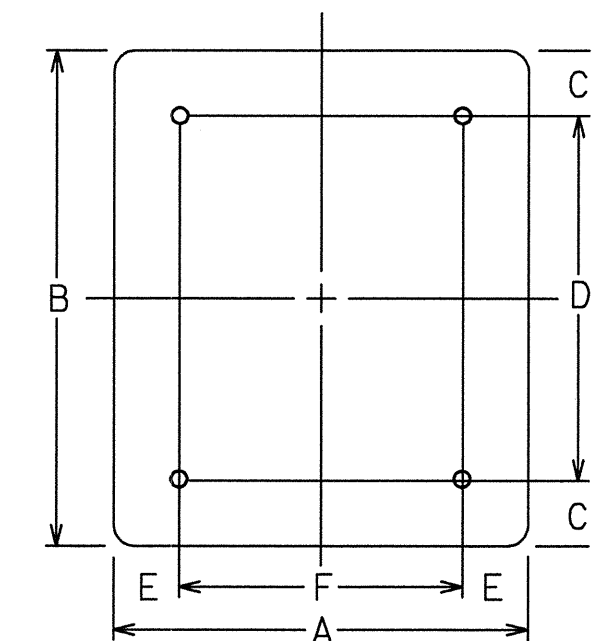


A	B	C	D	E	R
36	6	24	6	24	2 1/4
48	6	36	6	36	3

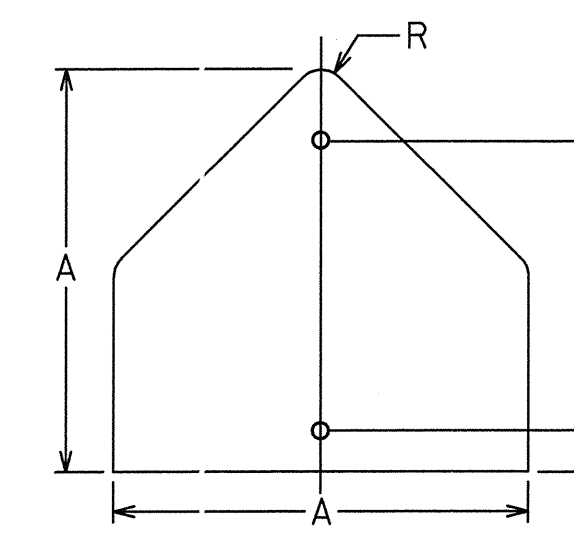


VERTICAL RECTANGLE

A	B	C	D	R
12	18	1 1/2	15	1 1/2
18	24	3	18	1 1/2
24	30	3	24	1 1/2
30	36	3	30	1 7/8

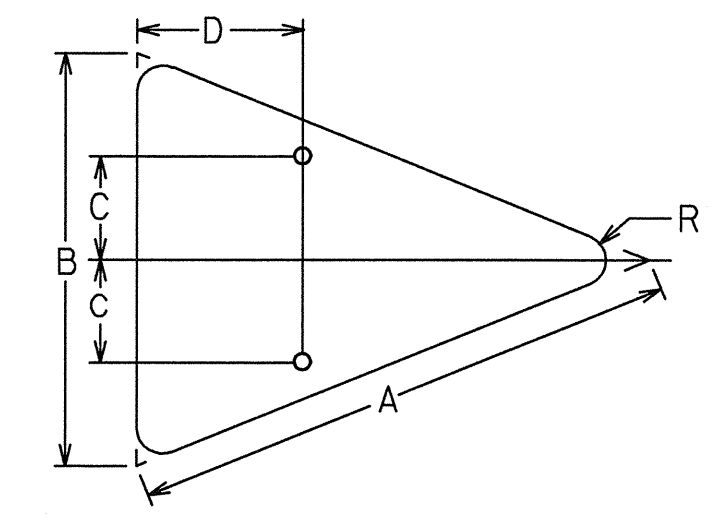


A	B	C	D	E	F	R
36	48	6	36	6	24	2 1/4
48	60	6	48	9	30	3



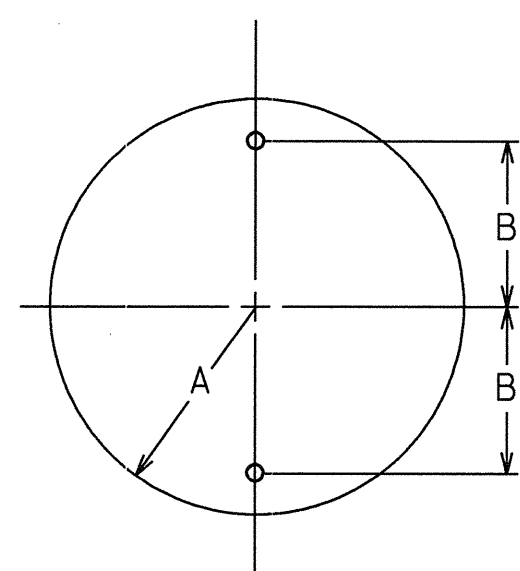
PENTAGON

A	B	C	R
30	21	3	1 7/8
36	24	3	2 1/4



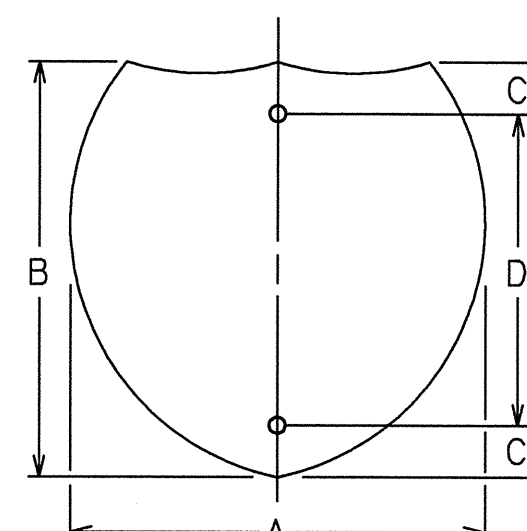
ISOSCELES TRIANGLE

A	B	C	D	R
40	30	7 1/2	12	1 7/8
48	36	9	15	2 1/4



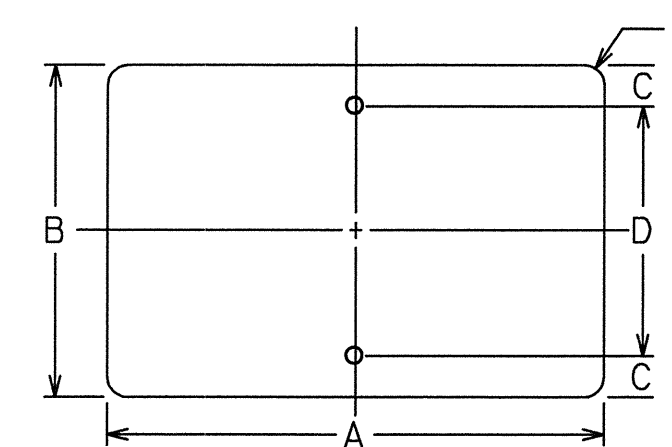
CIRCLE

A	B
15	12
18	15



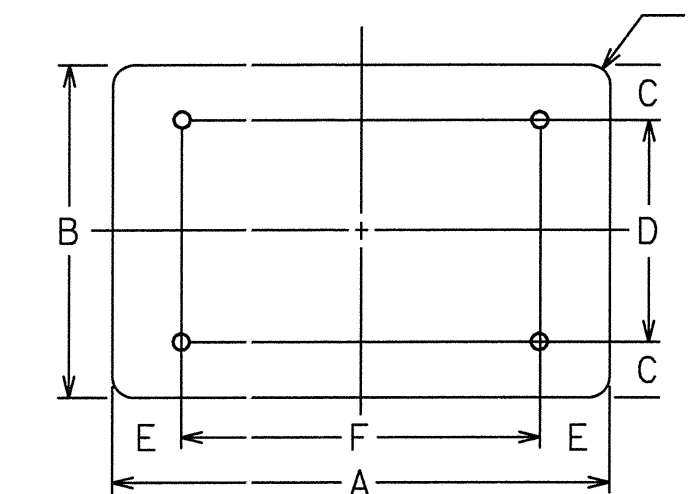
INTERSTATE SHIELD

A	B	C	D
24	24	3	18
30	24	3	18
36	36	6	24
45	36	6	24



HORIZONTAL RECTANGLE

A	B	C	D	R
21	15	1 1/2	12	1 1/2
24	12	1 1/2	9	1 1/2
24	18	3	12	1 1/2
30	15	1 1/2	12	1 1/2
30	24	3	18	1 1/2
36	12	1 1/2	9	1 1/2
36	24	3	18	1 1/2
48	12	1 1/2	9	1 1/2
48	24	3	18	1 7/8

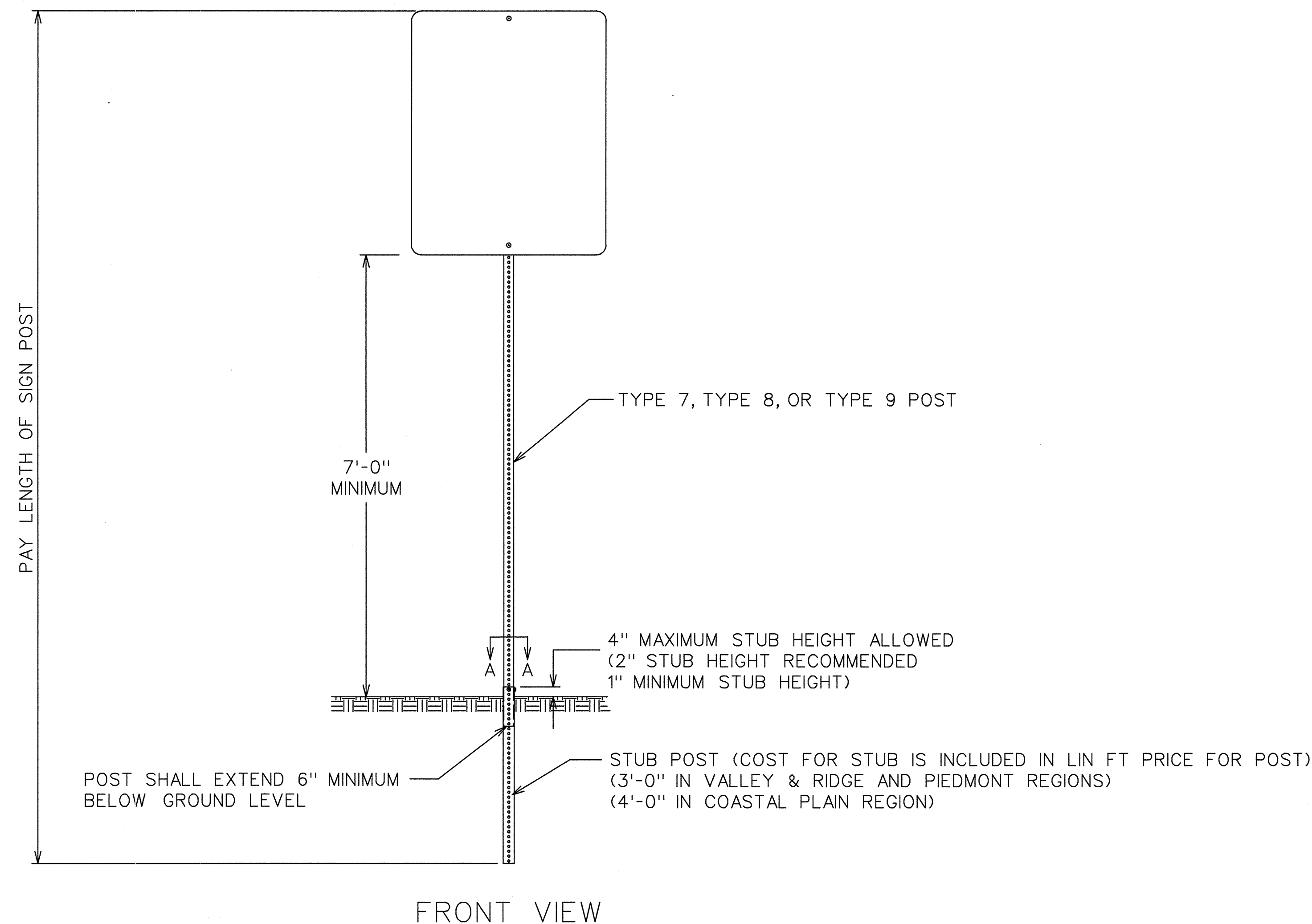


A	B	C	D	E	F	R
48	36	6	24	9	30	2 1/4
60	24	3	18	12	36	1 1/2
60	36	6	24	12	36	2 1/4

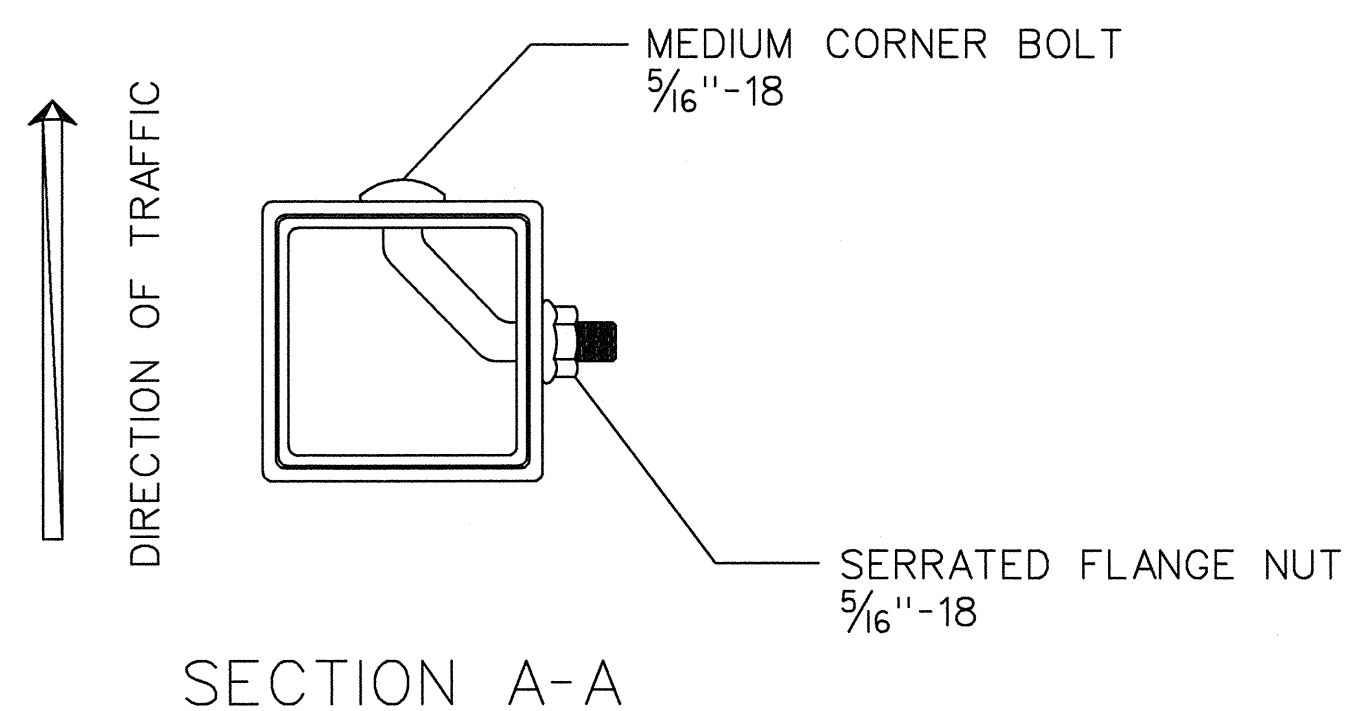
40-0005

DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN
		DETAILS OF SIGN PLATES
		NO SCALE
		JANUARY 2000

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		



POST	STUB SIZE
TYPE 7	2 1/4" x 2 1/4"
TYPE 8	2 3/4" x 2 3/4"
TYPE 9	2 1/2" x 2 1/2"



SIGN POST SELECTION CHART

70 MPH Wind Load Chart + 15% Gust Factor

Sign Centroid	SLIP BASE NOT REQUIRED				GROUND MOUNTED BREAKAWAY SIGN SUPPORT REQUIRED				
	TYPE 7 2" 1/4 ga.		TYPE 9 2-1/4" 14 ga	TYPE 8 2-1/2" 12 ga.	TYPE 8 2-1/2" 12 ga.		TYPE 8 w / TYPE 9 Insert* 2-1/2" 12 ga. W / 2-1/4" 14 ga.		
	1 Post	2 Post	1 Post	1 Post	2 Post	3 Post	1 Post	2 Post	3 Post
	SQUARE FOOTAGE				SQUARE FOOTAGE				
6'	13.50	27.00	19.25	30.00	60.00	90.00	49.25	98.50	147.75
7'	11.60	23.20	16.50	25.75	51.50	77.25	42.25	84.50	126.75
8'	10.15	20.30	14.45	22.55	45.10	67.65	37.00	74.00	111.00
9'	9.00	18.00	12.85	20.00	40.00	60.00	32.85	65.70	98.55
10'	8.10	16.20	11.55	18.00	36.00	54.00	29.55	59.10	88.65
11'	7.40	14.80	10.50	16.40	32.80	49.20	26.90	53.80	80.70
12'	6.80	13.60	9.65	15.00	30.00	45.00	24.65	49.30	73.95
13'	6.25	12.50	8.90	13.85	27.70	41.55	22.75	45.50	68.25
14'	5.80	11.60	8.25	12.90	25.80	38.70	21.15	42.30	63.45
15'	5.00	10.00	6.45	10.10	20.20	30.30	16.55	33.10	49.65
16'	4.70	9.40	6.05	9.45	18.90	28.35	15.50	31.00	46.50
17'	4.40	8.80	5.70	8.90	17.80	26.70	14.60	29.20	43.80
18'	4.15	8.30	5.40	8.40	16.80	25.20	13.80	27.60	41.40
19'	3.95	7.90	5.10	7.95	15.90	23.85	13.05	26.10	39.15
20'	3.75	7.50	4.85	7.55	15.10	22.65	12.40	24.80	37.20

SIGN CENTROID IS DISTANCE FROM GROUND LEVEL TO BOTTOM OF SIGN PLUS HALF THE HEIGHT OF SIGN.
 EXAMPLE: 24" X 48" SIGN THAT IS 7 FEET FROM GROUND TO BOTTOM OF SIGN. ADD HALF OF 48" (24" OR 2 FT) PLUS 7 FT. = 9' CENTROID.

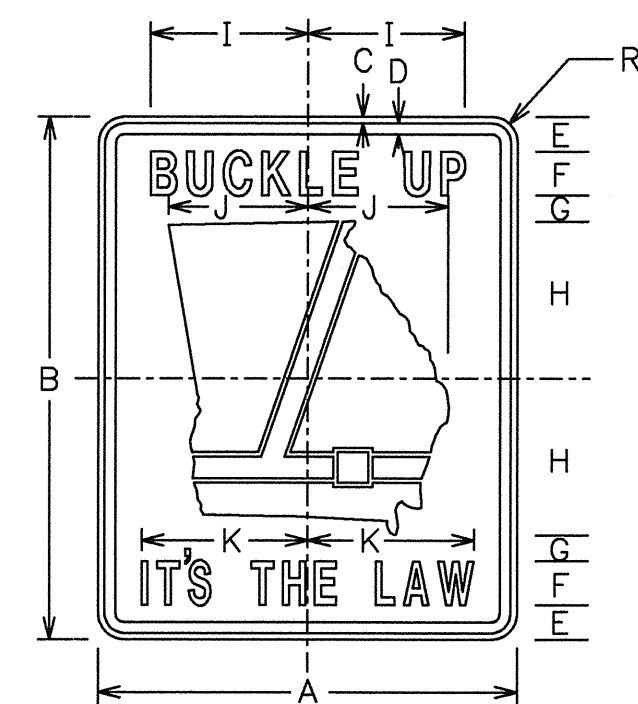
SIGN PLATE SHALL NOT EXCEED 48" IN WIDTH ON A SINGLE POST.

* TYPE 9 INSERT SHALL BE A CONTINUOUS POST INSERTED INTO THE TYPE 8 POST WHERE REQUIRED. THE INSERT POST SHALL EXTEND FROM THE BOTTOM OF THE SLIP BASE UPPER ASSEMBLY TO 4" BELOW THE BOTTOM OF THE SIGN. THE INSERT POST SHALL NOT EXTEND ABOVE THE BOTTOM OF THE SIGN. PAYMENT FOR THE INSERT POST SHALL BE PER LINEAR FOOT OF TYPE 9 POST.

GROUND MOUNTED BREAKAWAY SIGN SUPPORT WILL BE MEASURED AND PAID FOR SEPARATELY. THE COST FOR THIS WORK SHALL INCLUDE THE UPPER AND LOWER ASSEMBLY, STUB POST, CLASS "A" CONCRETE, ALL HARDWARE NECESSARY TO COMPLETE THE INSTALLATION, AND BE INCLUDED IN THE BID PRICE SUBMITTED FOR ITEM 636-3010.

40-0006

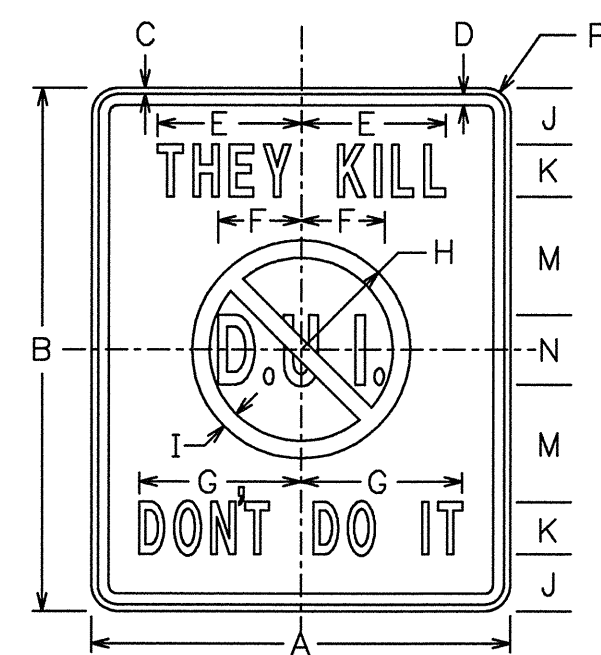
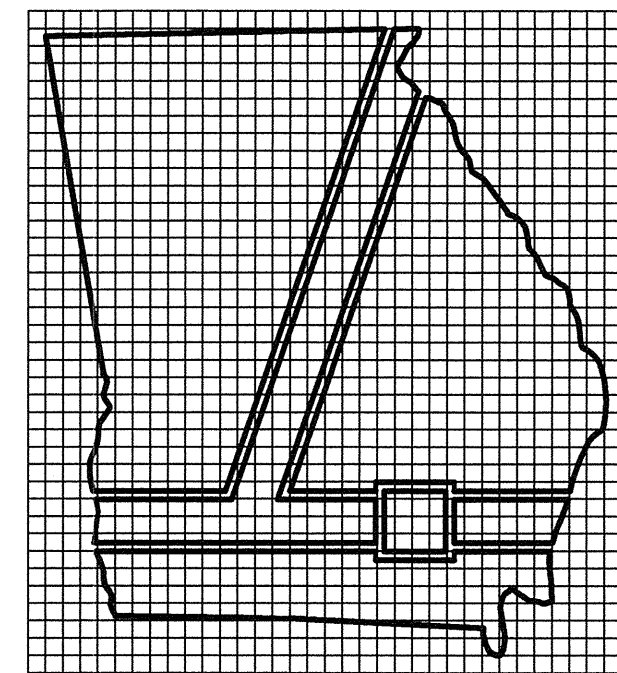
DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN
		TYPE 7, 8, AND 9 SQUARE TUBE POST INSTALLATION DETAIL
		NO SCALE JULY 2002



R560-1

SIGN	DIMENSIONS (INCHES)											
	A	B	C	D	E	F	G	H	I	J	K	R
MIN & STD	30	36	1/2	3/4	2 1/2	3C	1 1/2	11	8 1/2	10	11	1 7/8
FWY	48	60	3/4	1 1/4	4	5C	3	18	15 1/2	16	18	3

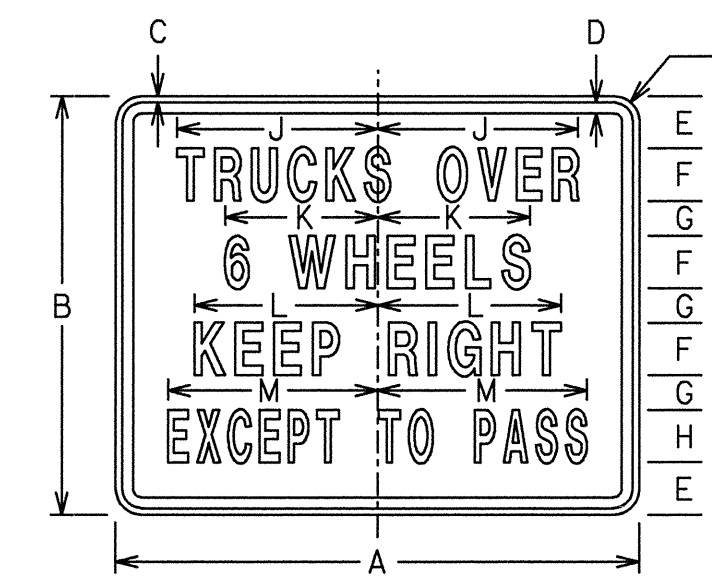
COLORS
STATE SHIELD & BORDER - RED (REFL)
LEGEND & BELT - BLACK (NON-REFL)
BACKGROUND - WHITE (REFL)



R560-2

SIGN	DIMENSIONS (INCHES)														
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P
MIN & STD	30	36	1/2	3/4	11	5	12 1/2	7 1/2	1 1/4	4	4C	3	4 1/2	5C	1 7/8
FWY	48	60	3/4	1 1/4	16 1/2	9 1/2	18 1/2	12 1/2	2	6 1/2	6C	5	8 1/2	8C	3

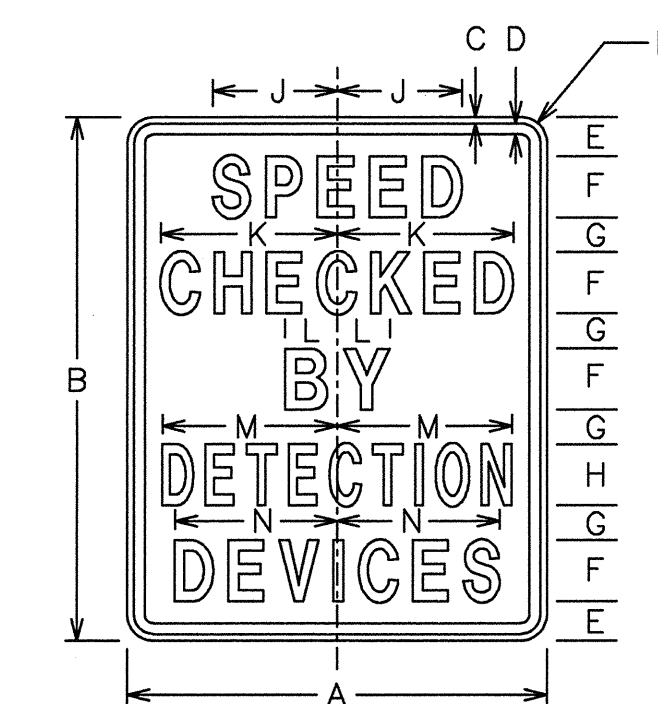
COLORS
CIRCLE & DIAGONAL - RED (REFL)
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - WHITE (REFL)



R560-3

SIGN	DIMENSIONS (INCHES)														
	A	B	C	D	E	F	G	H	J	K	L	M	R		
MIN & STD	36	30	1/2	3/4	3 1/2	3 1/2	C	3	3 1/2	8	14	10	11 1/2	14 1/2	1 7/8
FWY	60	48	3/4	1 1/4	6	6C	4	6B	23	17 1/2	21	24	3		

COLORS
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - WHITE (REFL)



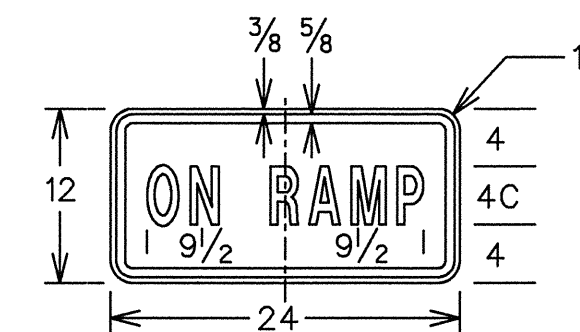
I550-1

SIGN	DIMENSIONS (INCHES)														
	A	B	C	D	E	F	G	H	J	K	L	M	N	R	
MIN & STD	30	36	1/2	3/4	4	4D	2	4C	8 3/16	11 3/16	3 7/16	11 7/16	10 5/8	1 7/8	
FWY	48	60	3/4	1 1/4	4 1/2	7D	4	7C	14 5/16	20 3/16	6	20	18 5/8	3	

COLORS
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - WHITE (REFL)

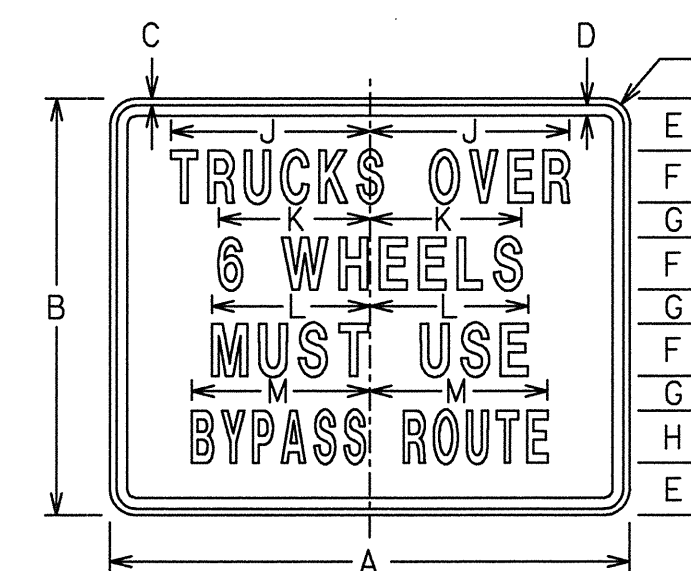
THE I550-1 SIGN SHALL BE ERECTED:

- ON EVERY HIGHWAY THAT COMPRISES A PART OF THE STATE HIGHWAY SYSTEM AT THAT POINT ON THE HIGHWAY WHICH INTERSECTS THE STATE LINE.
- AT THE TERMINI OF EVERY HIGHWAY THAT COMPRISES A PART OF THE STATE HIGHWAY SYSTEM WHICH BEGINS OR ENDS WITHIN THE STATE BOUNDARIES.
- ON EVERY HIGHWAY THAT COMPRISES A PART OF THE STATE HIGHWAY SYSTEM AT THAT POINT ON THE HIGHWAY WHERE TRAFFIC FROM OUTSIDE THE COUNTY FIRST ENTERS A COUNTY THAT HAS A PERMIT TO OPERATE SPEED DETECTION DEVICES, AND
- ON EVERY HIGHWAY THAT COMPRISES A PART OF THE STATE HIGHWAY SYSTEM AT THAT POINT ON THE HIGHWAY WHERE TRAFFIC FIRST ENTERS THE CORPORATE LIMITS OF ANY MUNICIPALITY THAT HAS A PERMIT TO OPERATE SPEED DETECTION DEVICES.



R8-3aP

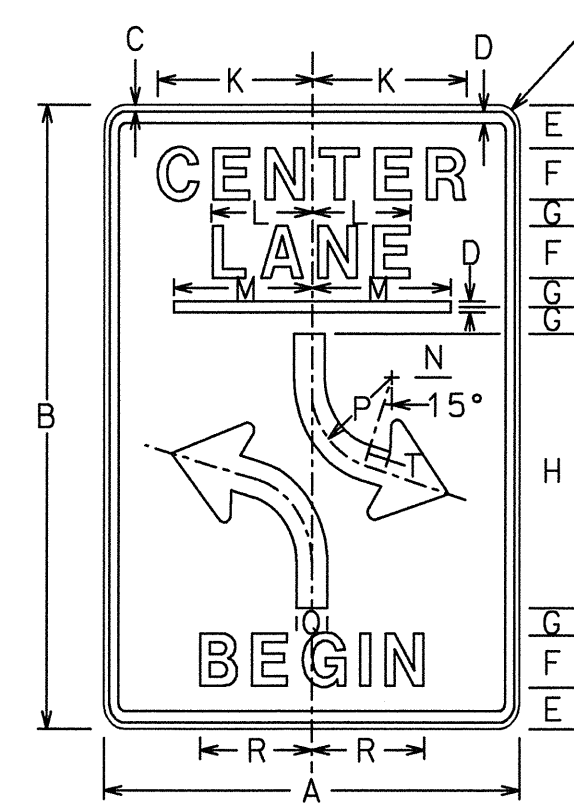
COLORS
LEGEND & BORDER - RED (REFL)
BACKGROUND - WHITE (REFL)



R560-4

SIGN	DIMENSIONS (INCHES)														
	A	B	C	D	E	F	G	H	J	K	L	M	R		
MIN & STD	36	30	1/2	3/4	3 1/2	3 1/2	C	3	3 1/2	8	14	10	10	12 1/2	1 7/8
FWY	60	48	3/4	1 1/4	6	6C	4	6C	23	17 1/2	17 1/2	25 1/2	3		

COLORS
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - WHITE (REFL)

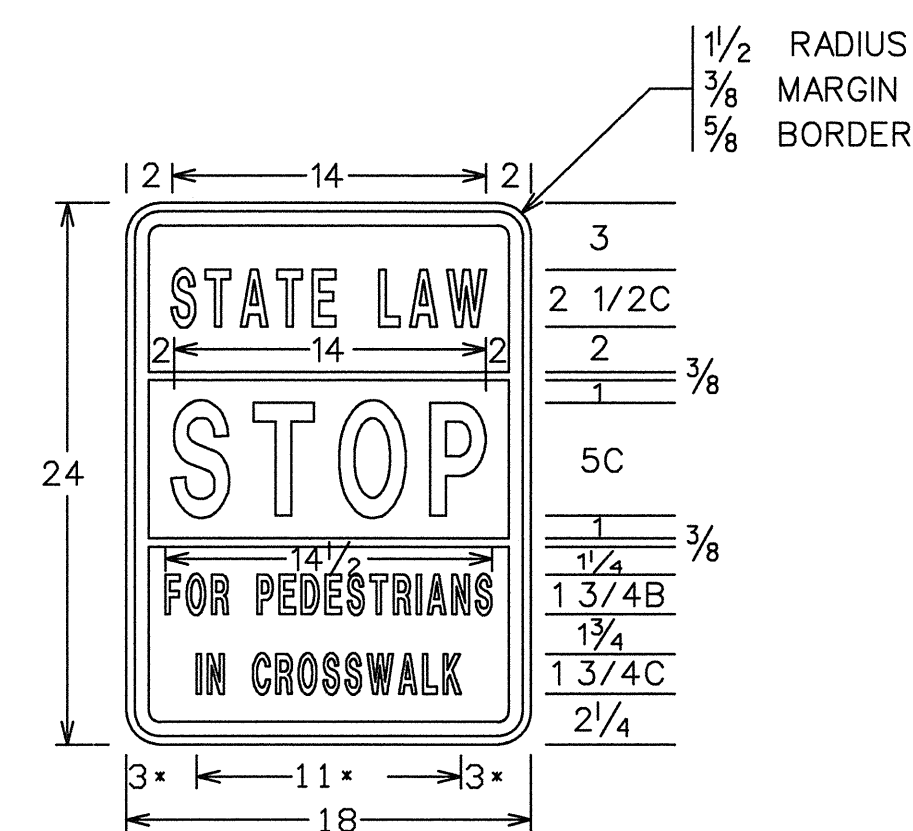


R3-9B(BEGIN)

END
I S I S I
R3-9B(END)

SIGN	DIMENSIONS (INCHES)																		
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S	T	
STD & MIN	24	36	3/8	5/8	2 1/2	3E	1 1/2	16	1 1/2	8 1/16	5 3/4	8	2 1/2	6	2	6 3/16	4 3/16	1 1/2	
SPECIAL	36	48	5/8	7/8	3 1/2	5E	1 1/2	20	2 1/4	14 1/16	9 1/2	12	3	8	3	7 1/16	4 5/16	2	

COLORS
LEGEND & BORDER - BLACK (NON-REFL)
BACKGROUND - WHITE (REFL)

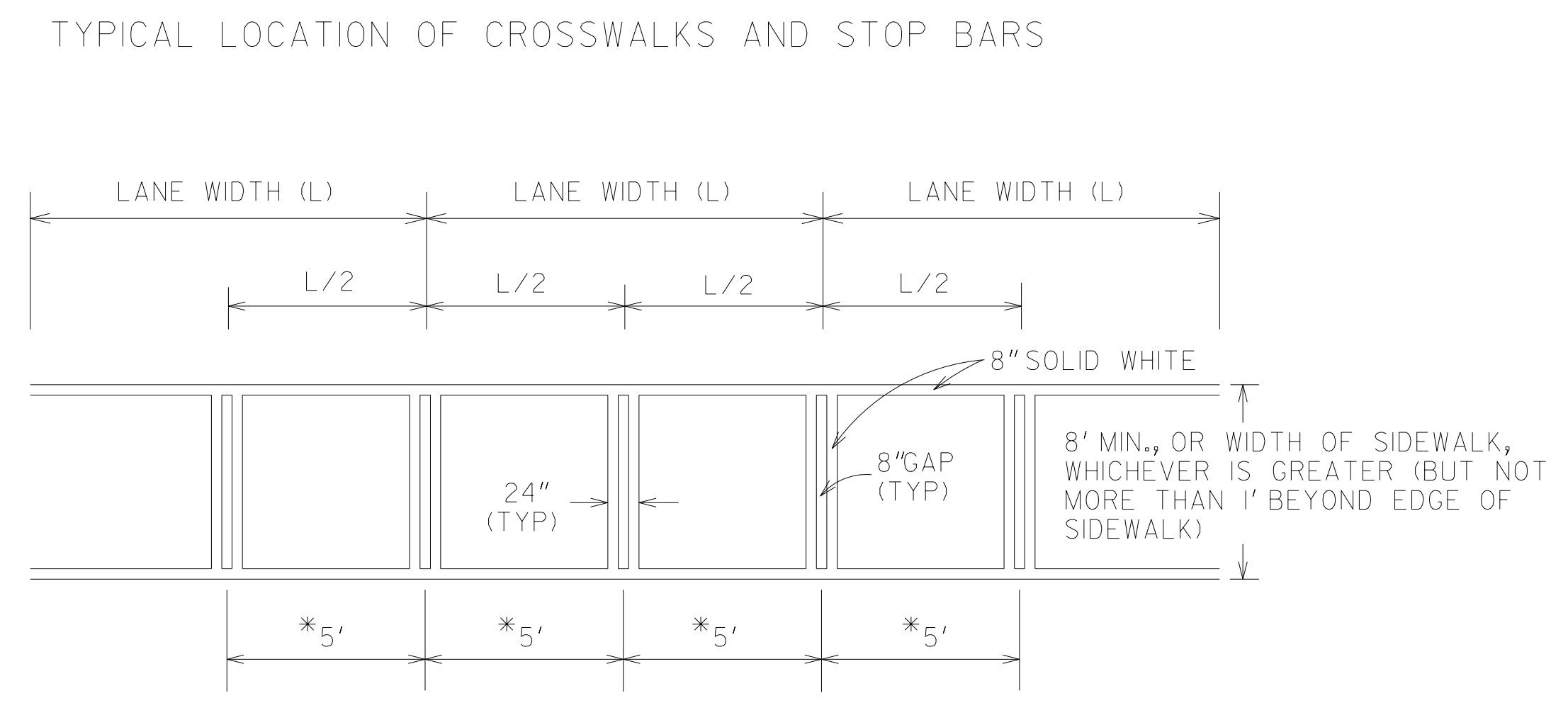
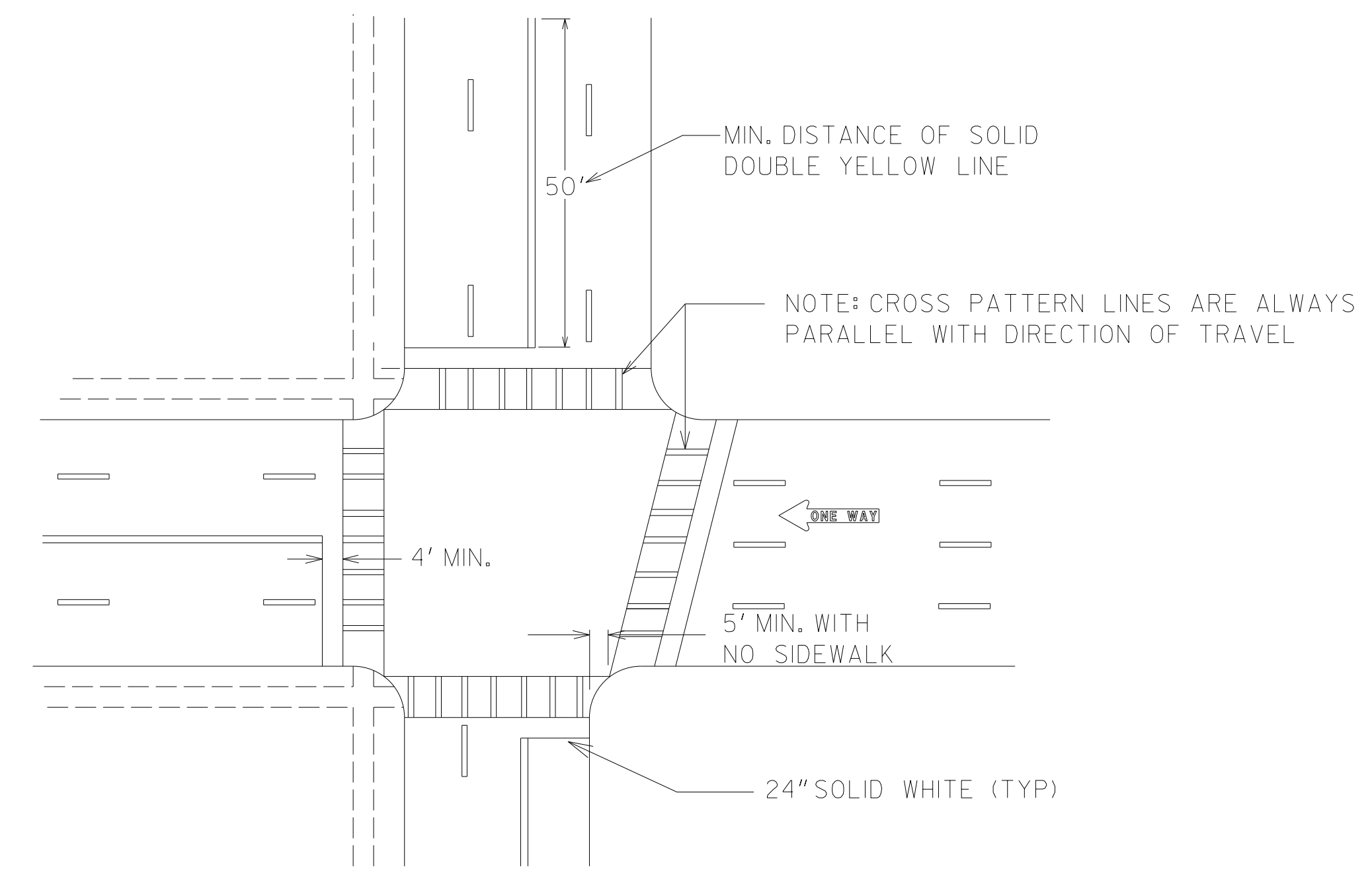
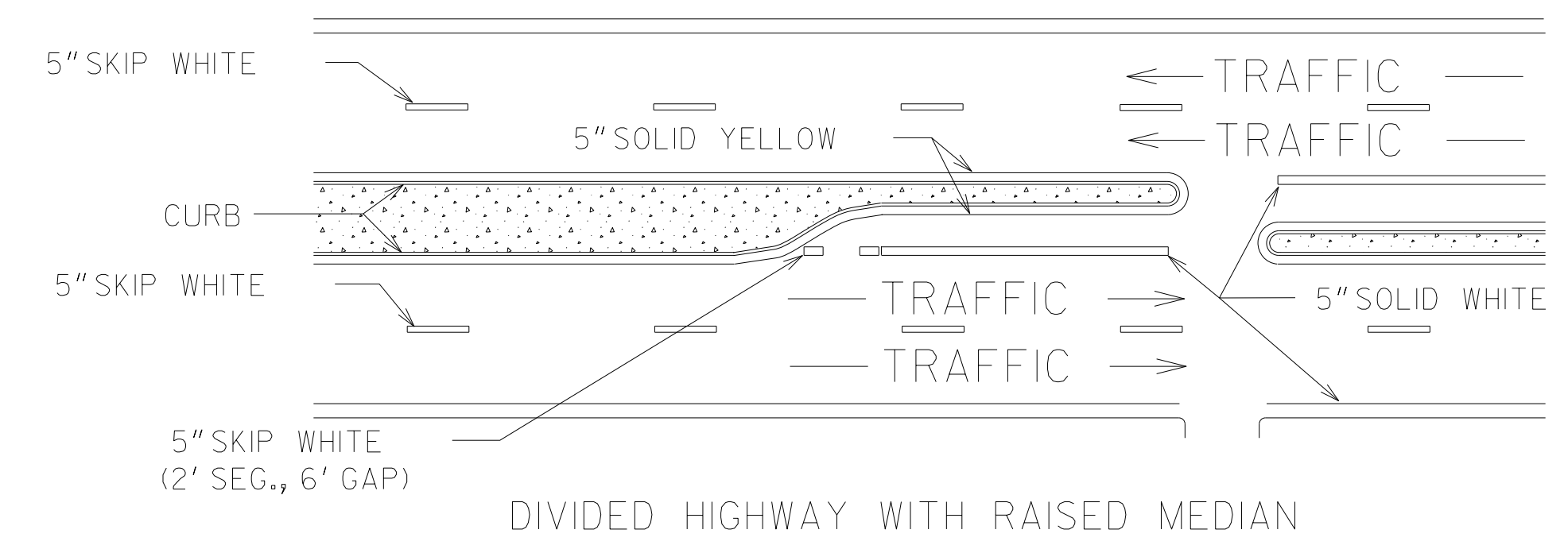
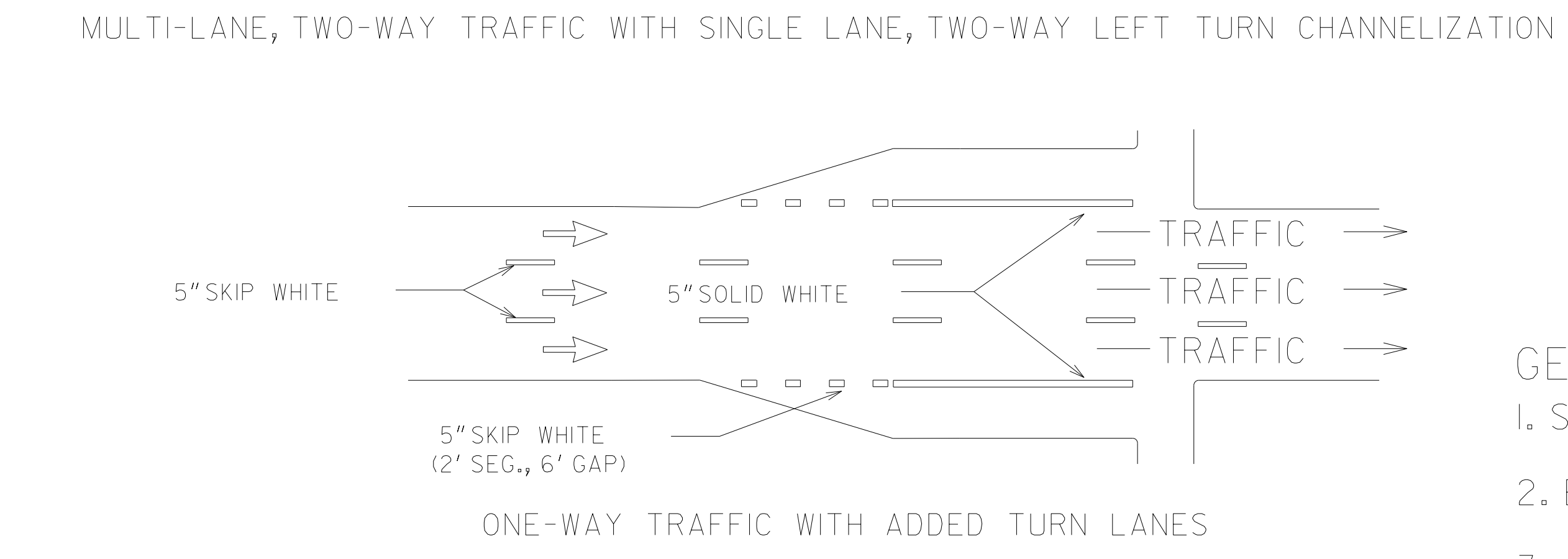
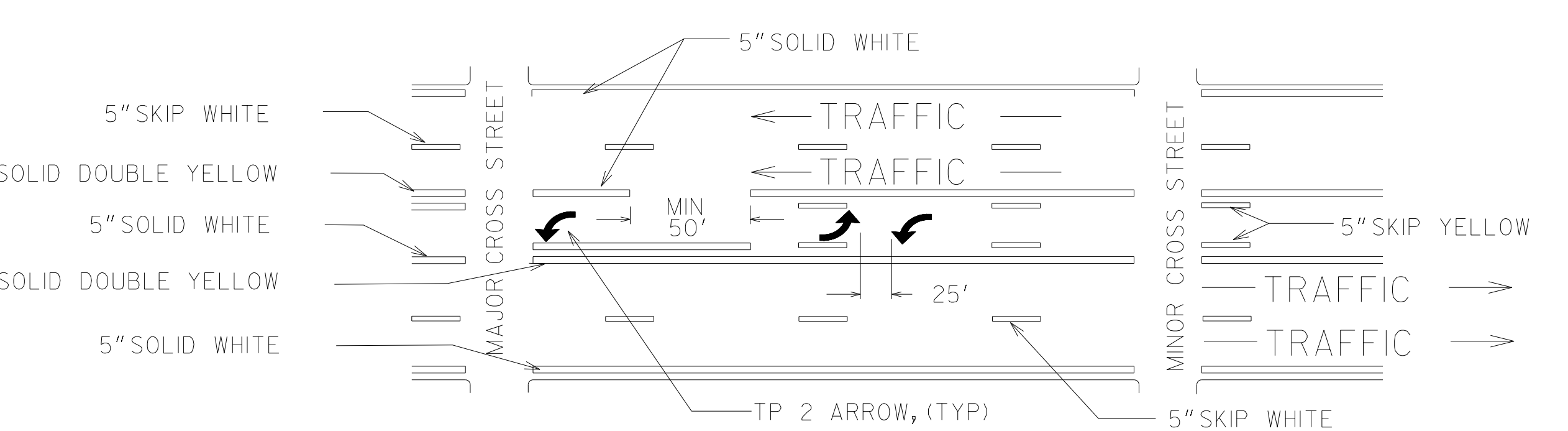
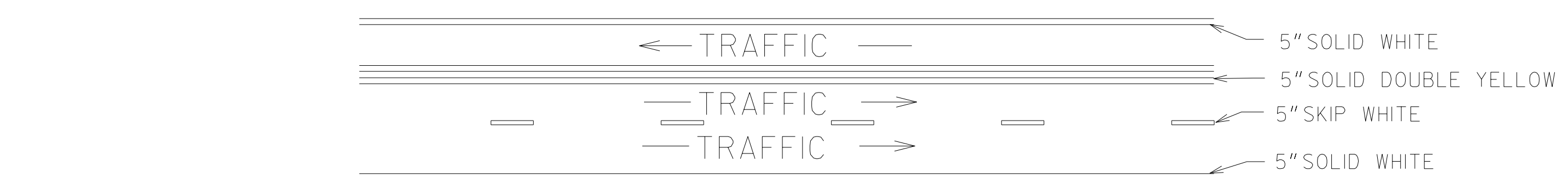
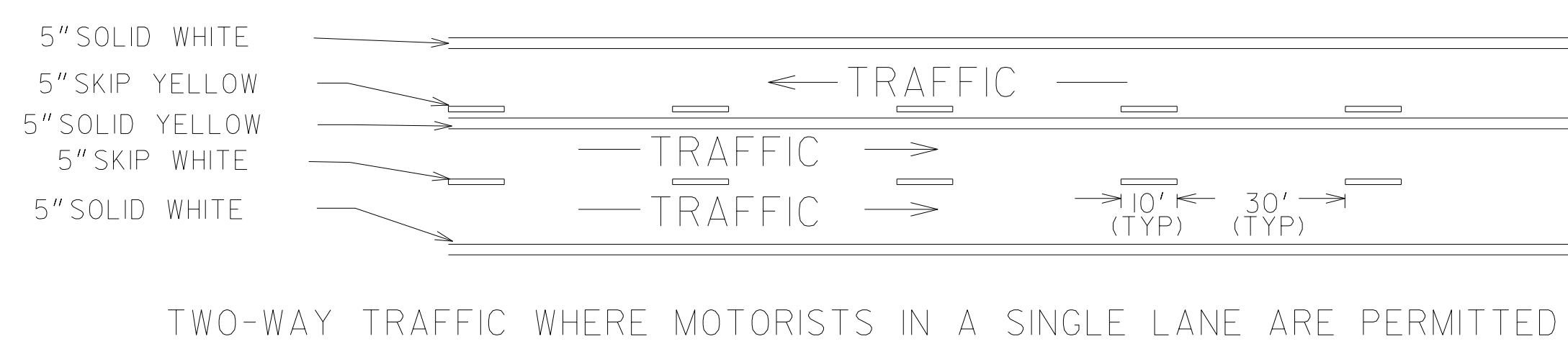
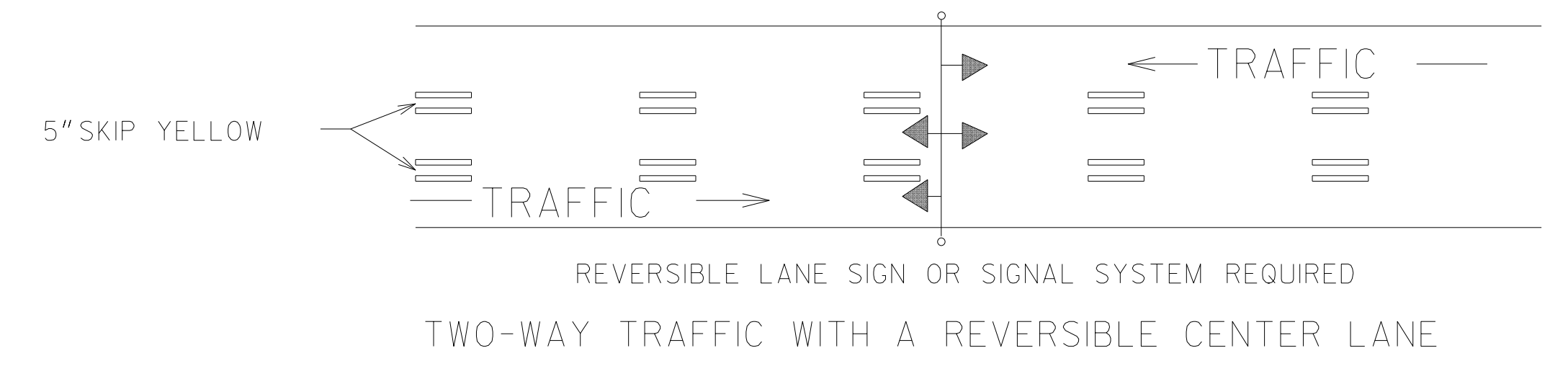


R560-5

COLORS
LEGEND & BORDER - BLACK (NON-REFL)
WORD "STOP" - RED (REFL)
BACKGROUND - WHITE (REFL)

40-0007

DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN
5-24-00	ADDED R9-8 DETAIL	DETAILS OF REGULATORY SIGNS SHEET 1 OF 2
1-21-03	DELETED R1-4 SIGNS	
1-21-03	REV SIGN CODES FOR R3-9 SIGNS	
		NO SCALE
		JANUARY 2000



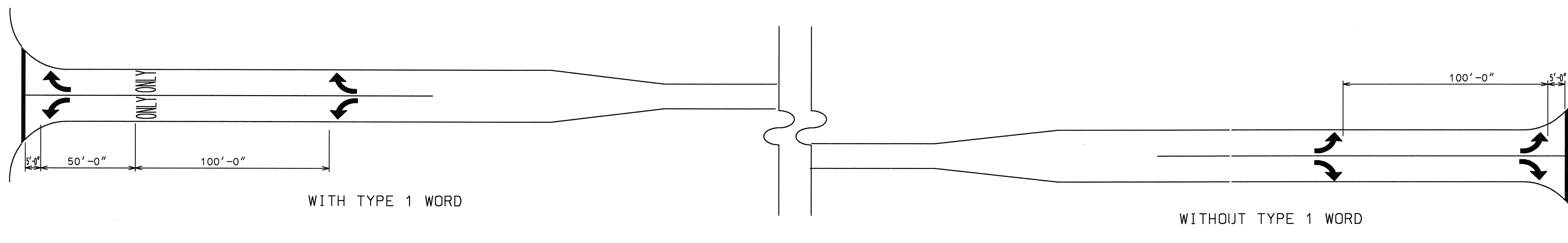
*USE WHERE THE LANE WIDTH EXCEEDS 12' OR WHERE LANE LINES HAVE BEEN OMITTED

- GENERAL NOTES:
1. SPACING BETWEEN DOUBLE LINES SHALL BE EQUAL TO THE LINE WIDTH.
 2. EDGE LINES SHALL BE PLACED A MINIMUM OF 4 INCHES FROM THE NORMAL EDGE OF PAVEMENT.
 3. CONTRAST MARKINGS FOR SKIP STRIPING SHALL BE AS SHOWN IN DETAIL T-IIB.

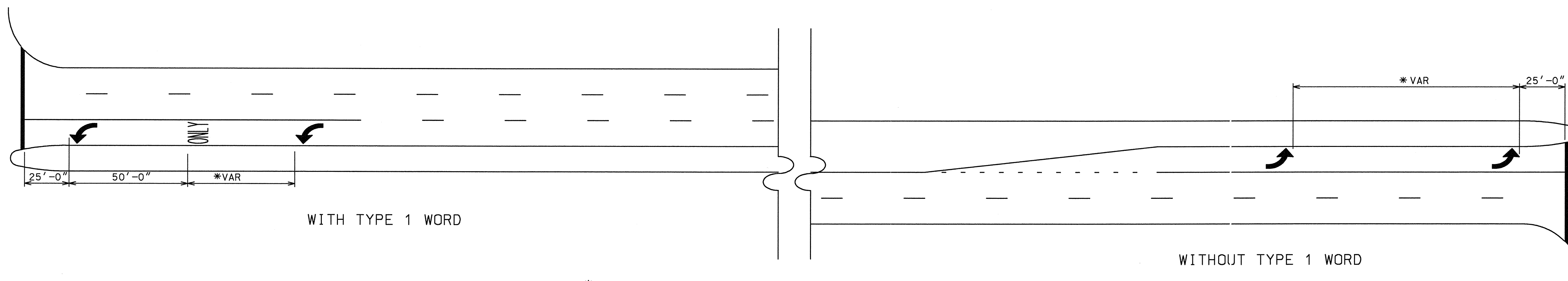
9-15-16		DATE		DEPARTMENT OF TRANSPORTATION	
9-15-16		DATE		STATE OF GEORGIA	
ADDED GENERAL NOTE 3		REVISION		CONSTRUCTION DETAILS	
ADDED GENERAL NOTE 3		REVISION		PAVEMENT MARKING PLACEMENT	
ADDED GENERAL NOTE 3		REVISION		NON-LIMITED ACCESS ROADWAY	
NO SCALE		JANUARY 2000			
CDR	BY	DESIGNED	_____	40-0008	NUMBER T-IIA
		DRAWN	_____		
		TRACED	_____		
		CHECKED	_____		

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

EXIT RAMP

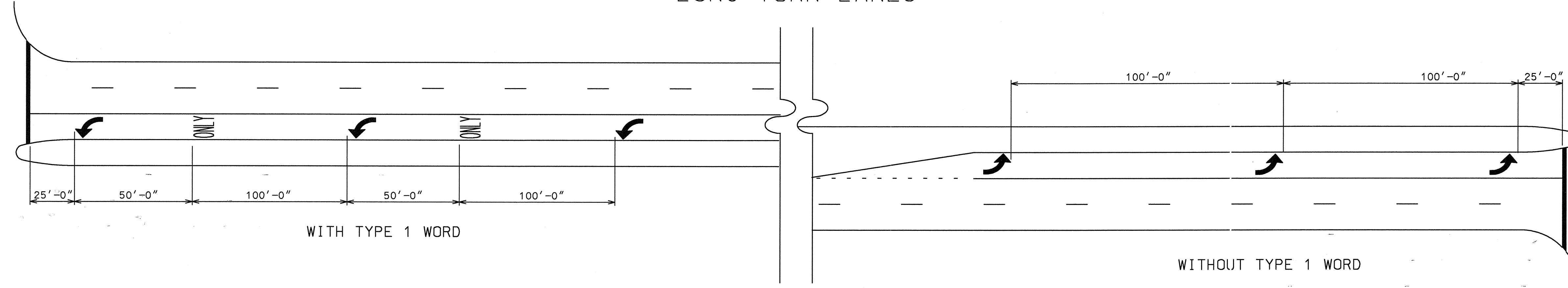


SHORT TURN LANES



* ADJUST TO MEET LOCAL CONDITIONS (NOT LESS THAN 50' NOR MORE THAN 100')

LONG TURN LANES



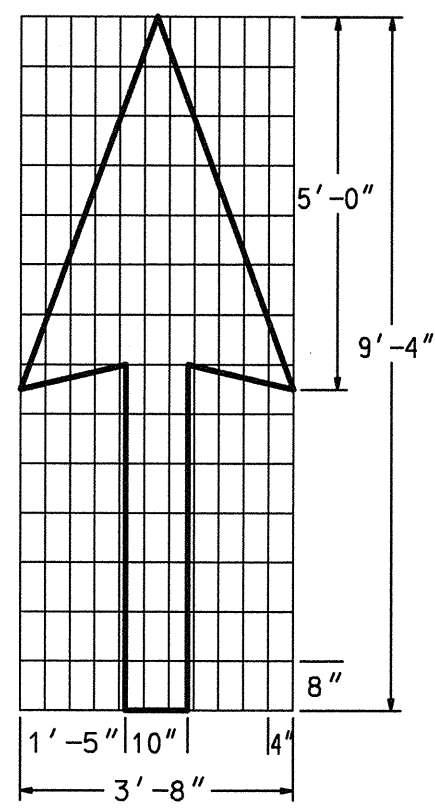
GENERAL NOTES:

1. SPACING OF TYPE 2 ARROW IS REPRESENTATIVE OF SPACING FOR TYPE 1, TYPE 3, TYPE 4, & TYPE 5 ARROWS.
2. ALL TURNING LANES SHALL HAVE A MINIMUM OF 2 ARROWS.
3. GROUND MOUNTED OR OVERHEAD SIGNING SHALL BE SUPPLEMENTED BY TYPE 1 WORD.

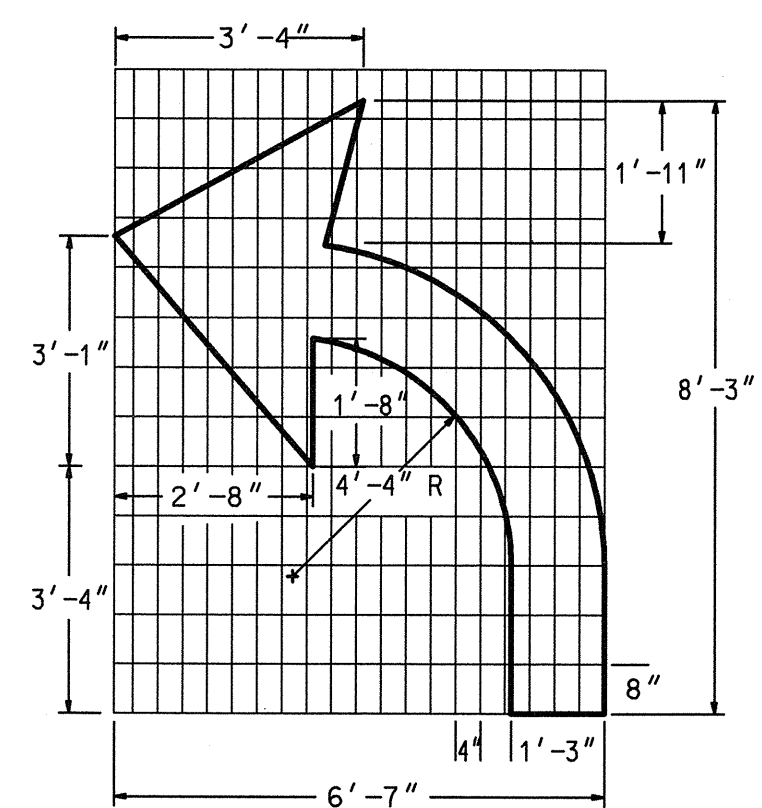
DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN

40-0009
 DETAILS OF PAVEMENT MARKING ARROW LOCATION
 NO SCALE JANUARY 2000

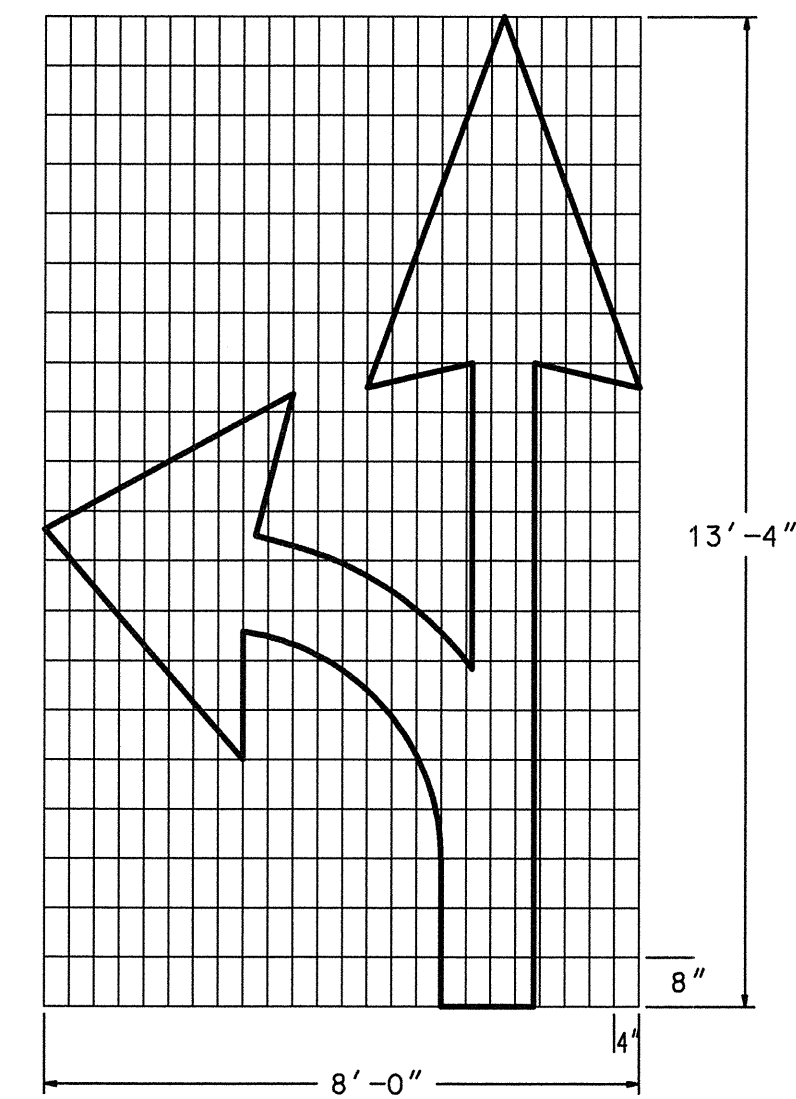
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		



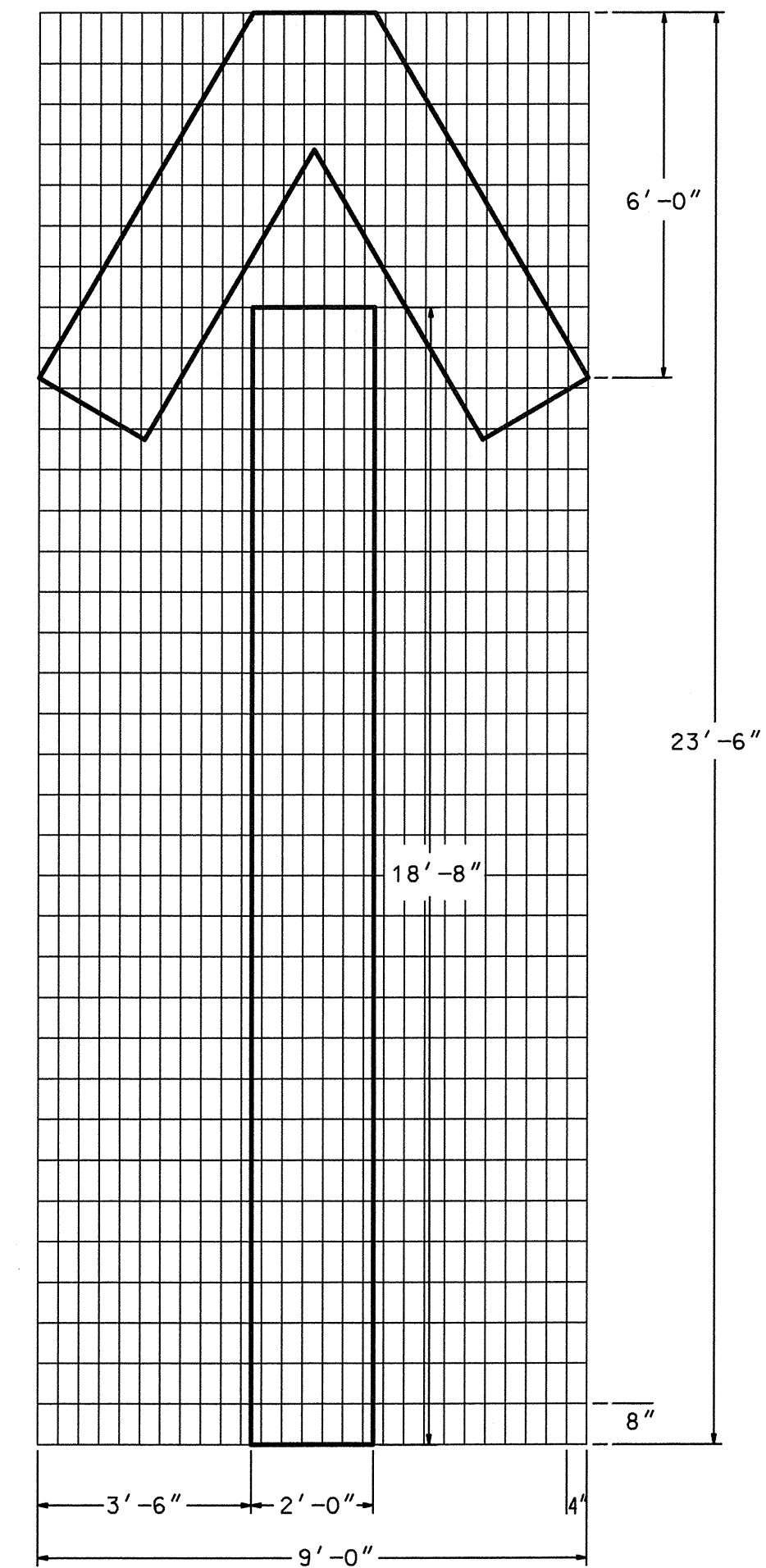
PAVEMENT MARKING, ARROW, TYPE 1
WHITE
(12.0 SQ. FT.)



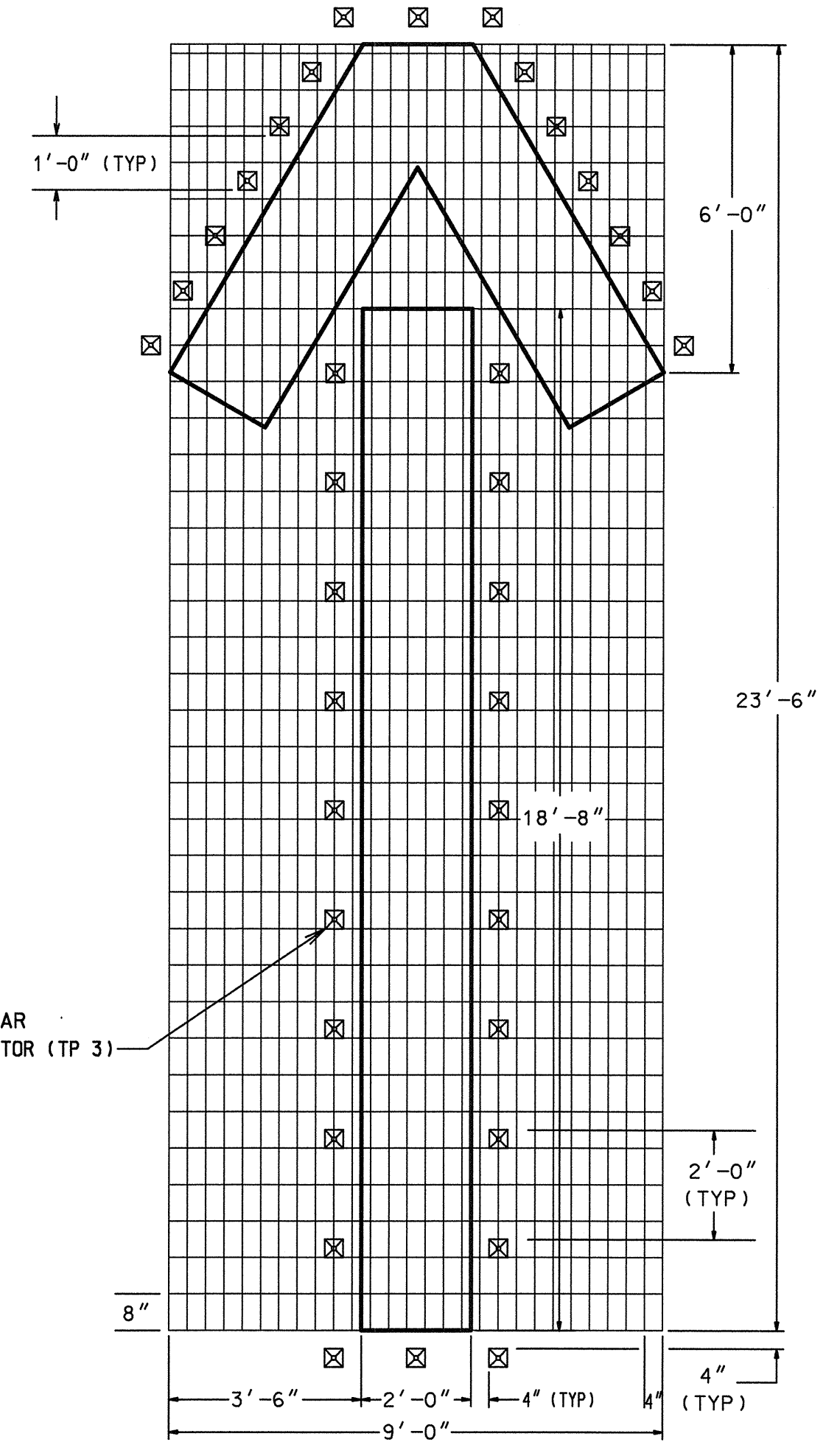
PAVEMENT MARKING, ARROW, TYPE 2
WHITE
(16.0 SQ. FT.)



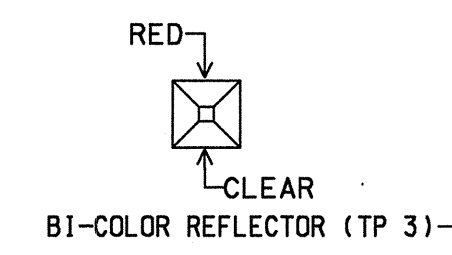
PAVEMENT MARKING, ARROW, TYPE 3
WHITE
(28.5 SQ. FT.)



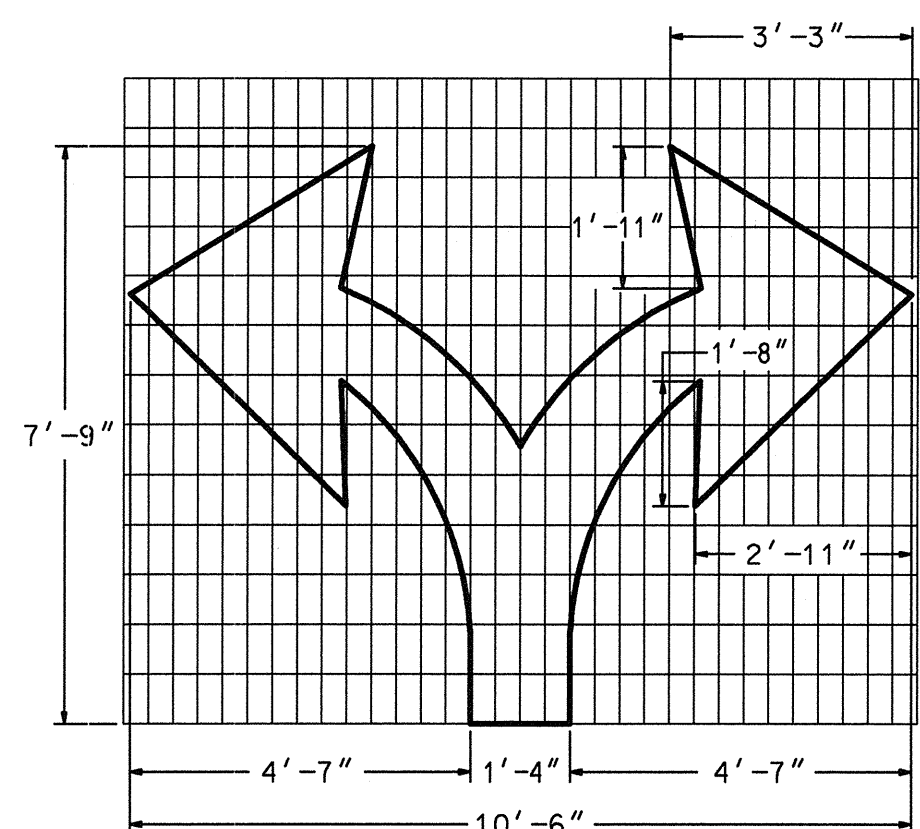
PAVEMENT MARKING, ARROW, TYPE 4
WHITE
(64.5 SQ. FT.)



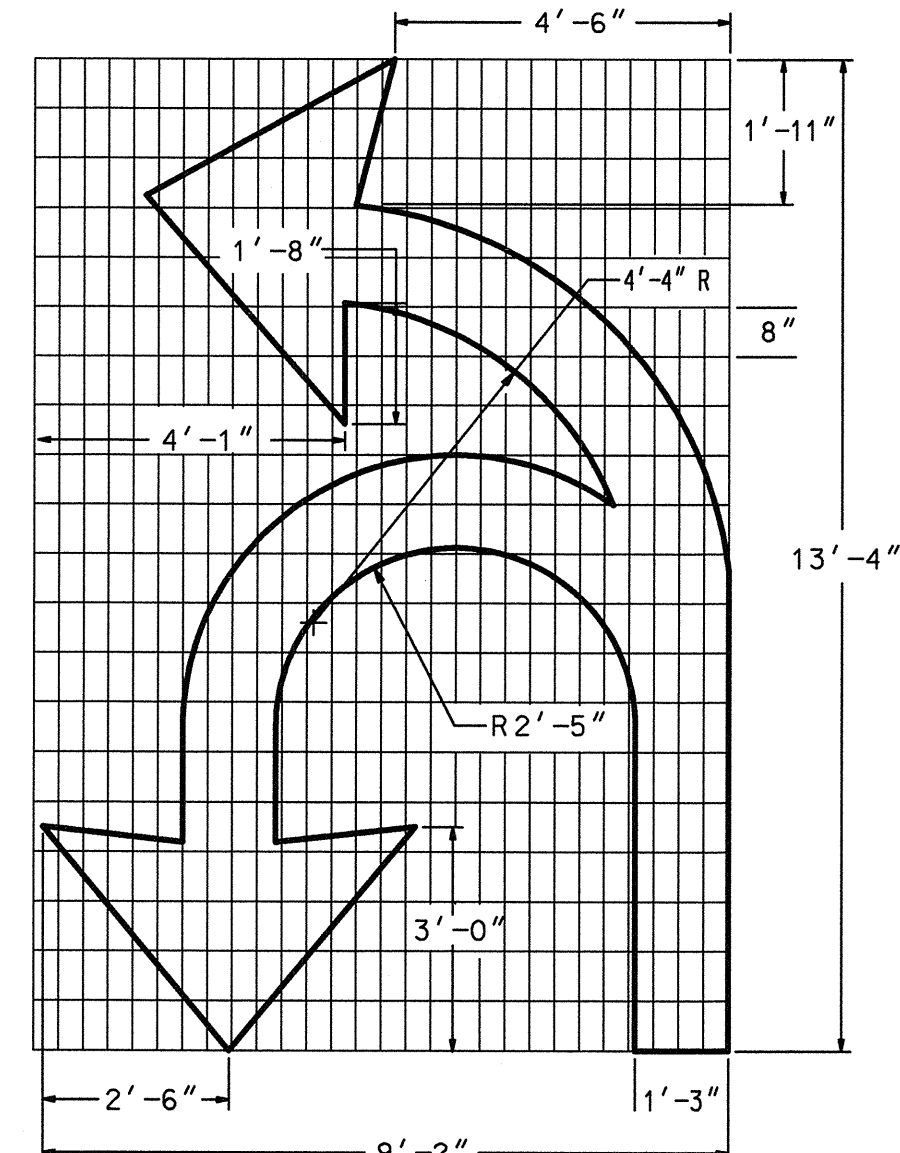
PAVEMENT MARKING, ARROW, WRONG WAY
WHITE
(64.5 SQ. FT.)



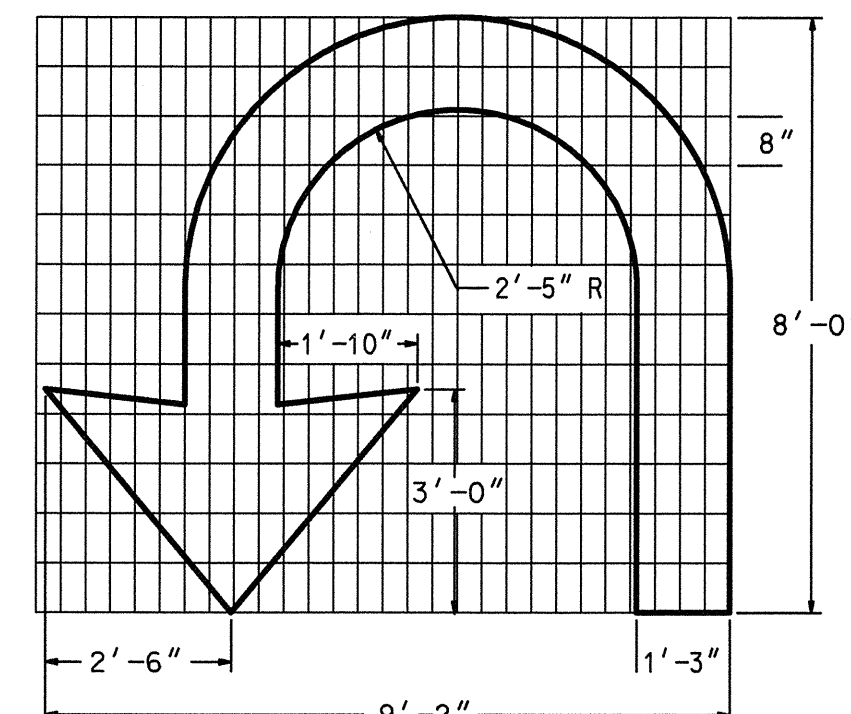
ARROW- WHITE REFLECTORIZED PAINT THERMOPLASTIC, AS SPECIFIED BY GEORGIA STANDARD SPECIFICATIONS, SECTION 655.



PAVEMENT MARKING, ARROW, TYPE 5
WHITE
(25.5 SQ. FT.)



PAVEMENT MARKING, ARROW, TYPE 6
WHITE
(42.0 SQ. FT.)



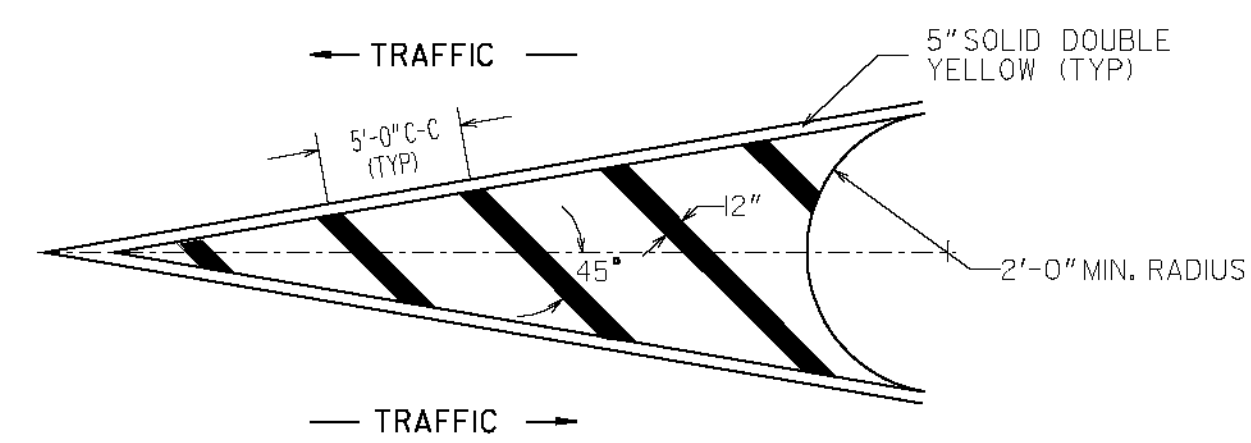
PAVEMENT MARKING, ARROW, TYPE 7
WHITE
(26.0 SQ. FT.)

40-0010

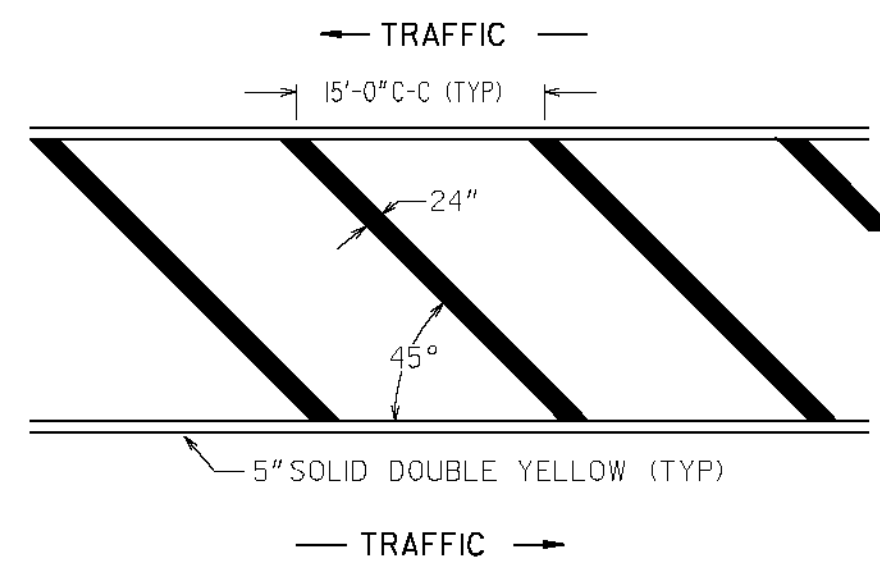
DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN
4-11-00	CHANGED LOCATION OF RPMs ON WRONG WAY ARROW	

DETAILS OF
PAVEMENT MARKINGS-ARROWS
NO SCALE JANUARY 2000

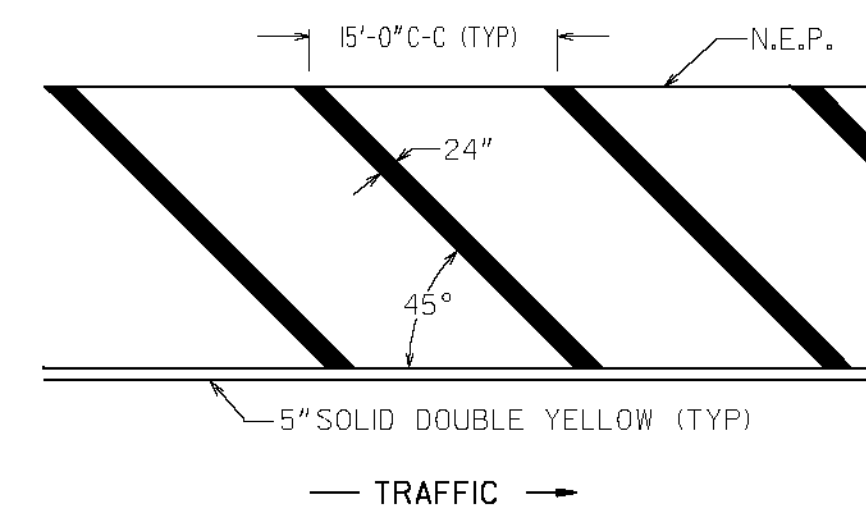
DETAIL "A" (YELLOW)



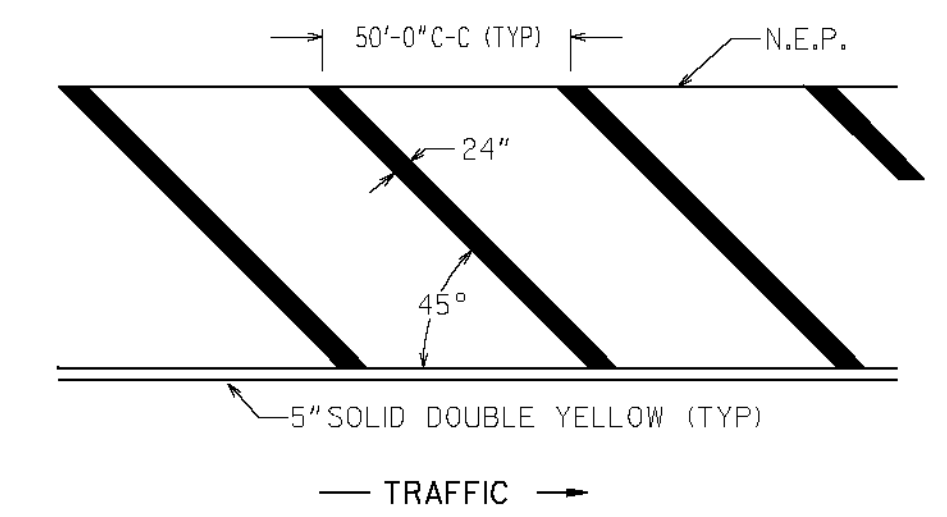
DETAIL "B" (YELLOW)



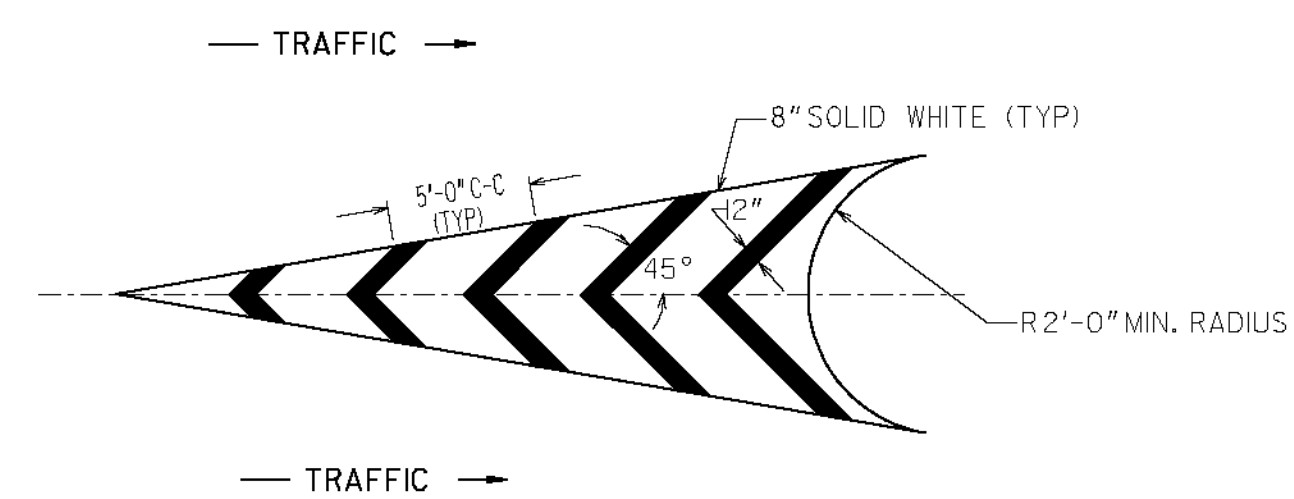
DETAIL "C" (YELLOW)



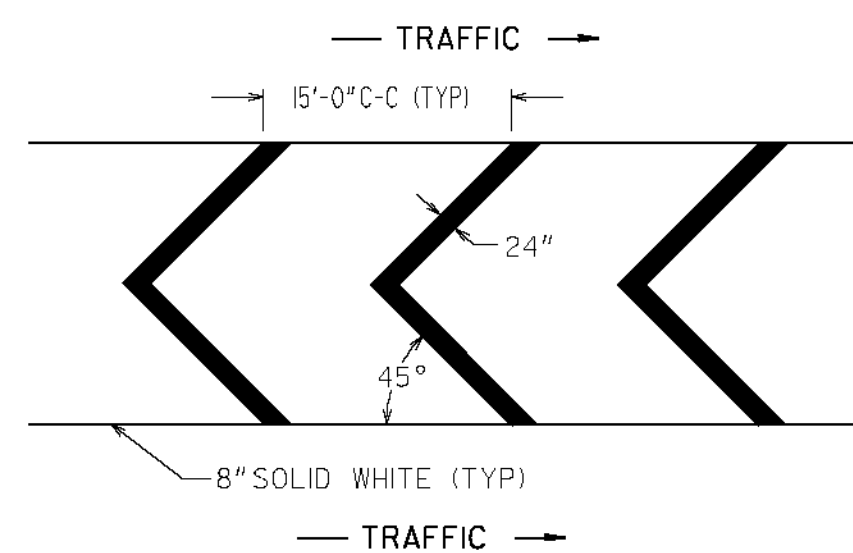
DETAIL "D" (YELLOW)



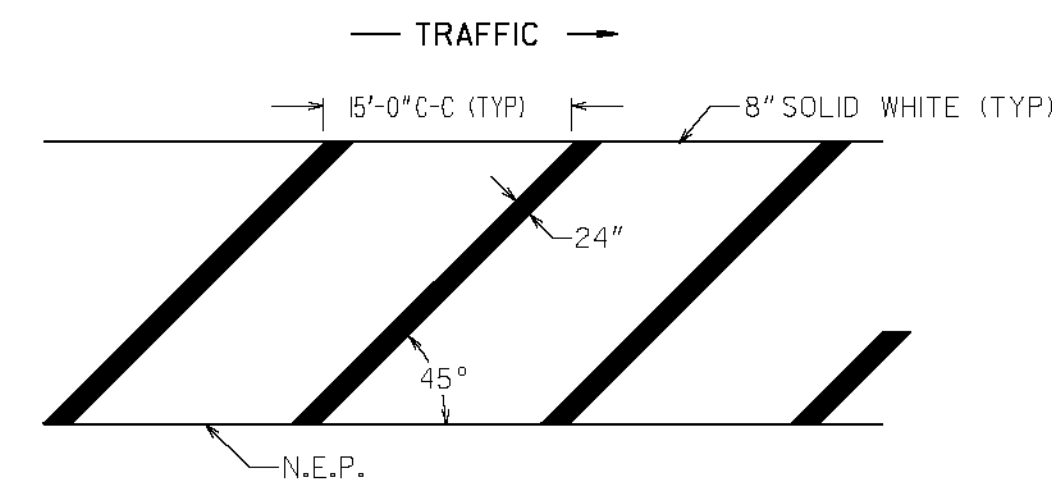
DETAIL "A" (WHITE)



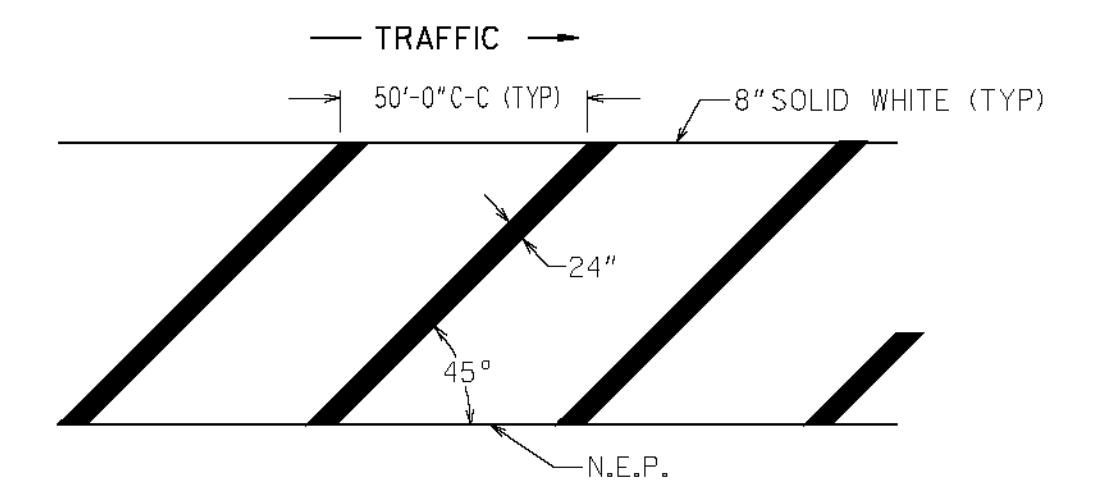
DETAIL "B" (WHITE)



DETAIL "C" (WHITE)



DETAIL "D" (WHITE)



GENERAL NOTES:

1. FOR YELLOW STRIPING, THE SQUARE YARDS SHOWN ON PLAN, SUMMARY AND DETAILED ESTIMATE SHEETS INCLUDE THE AREA WITHIN THE BORDERS AND THE 5" SOLID DOUBLE YELLOW BORDER.
2. FOR WHITE STRIPING, THE SQUARE YARDS SHOWN ON PLAN, SUMMARY AND DETAILED ESTIMATE SHEETS INCLUDES THE AREA WITHIN THE BORDERS AS WELL AS THE 8" SOLID WHITE BORDER.

40-0011

GEORGIA
DEPARTMENT
OF
TRANSPORTATION

- NO SCALE -

DATE	REVISIONS
6/25/04	Modified general note 1
1/18/05	CHANGED BORDER
11/21/08	Modified general note 1

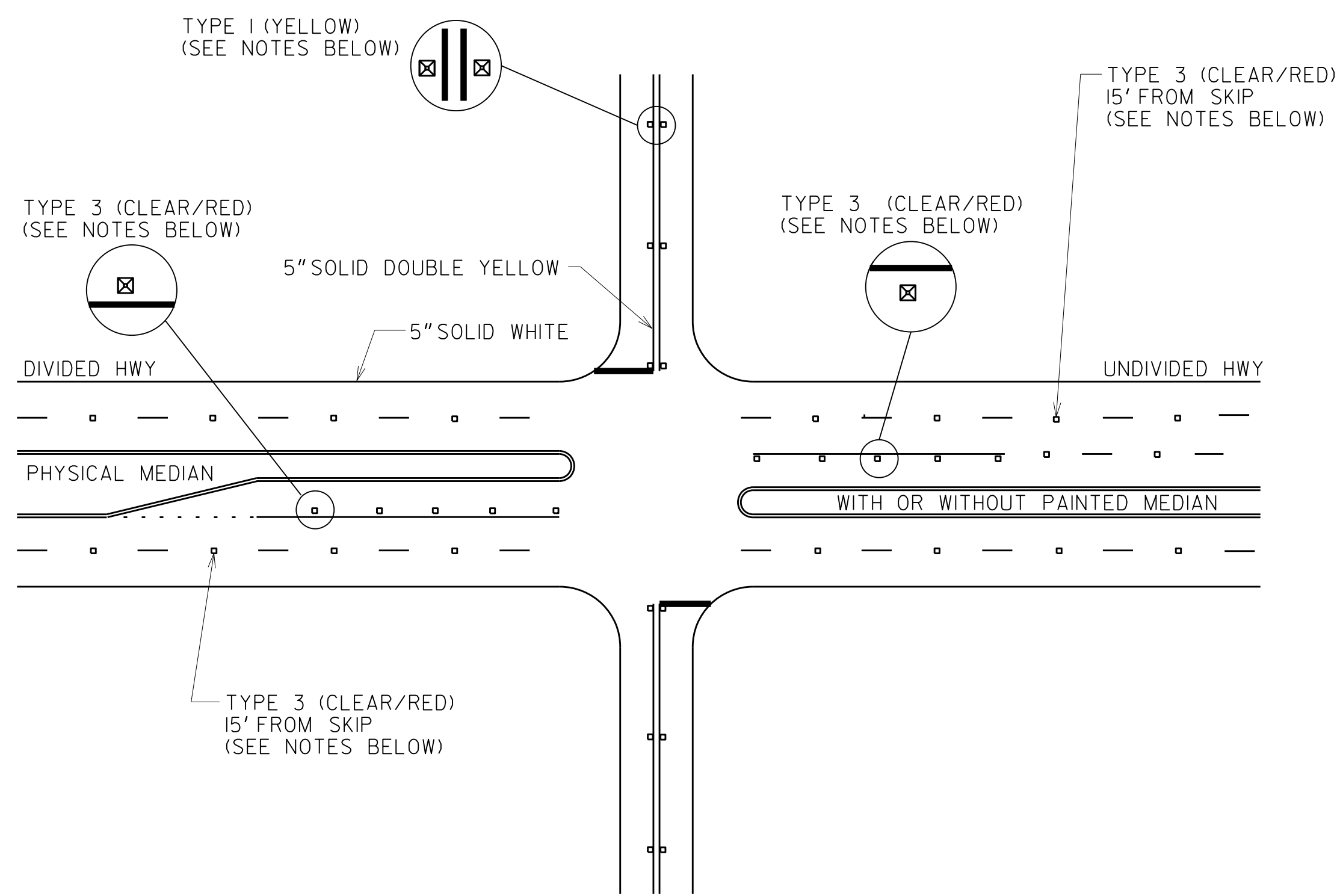
STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: TRAFFIC OPERATIONS
SIGNING AND MARKING PLANS

DETAIL OF PAVEMENT MARKING
HATCHING
JANUARY 2000

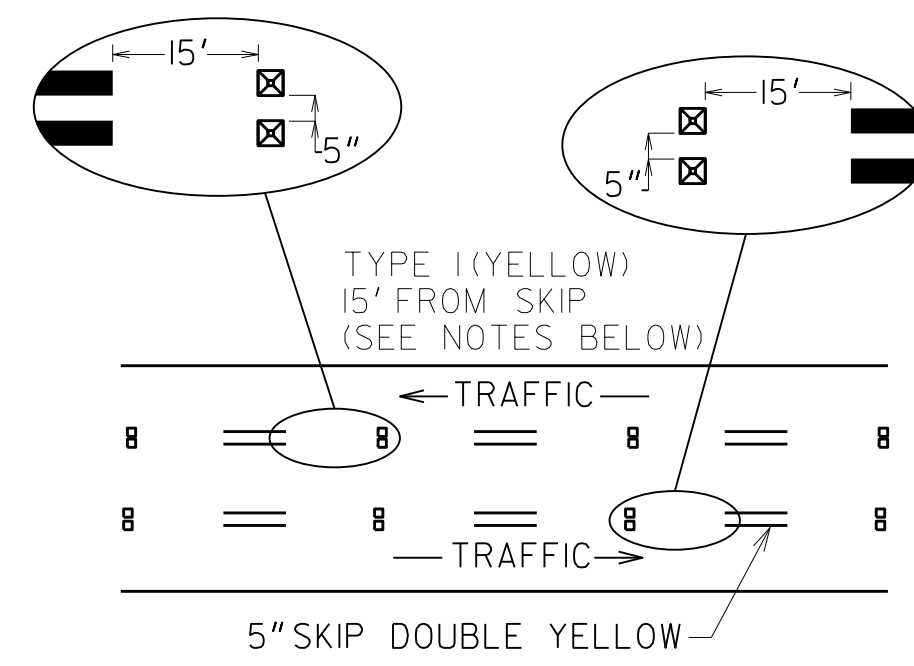
T-14
NUMBER
T -14

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

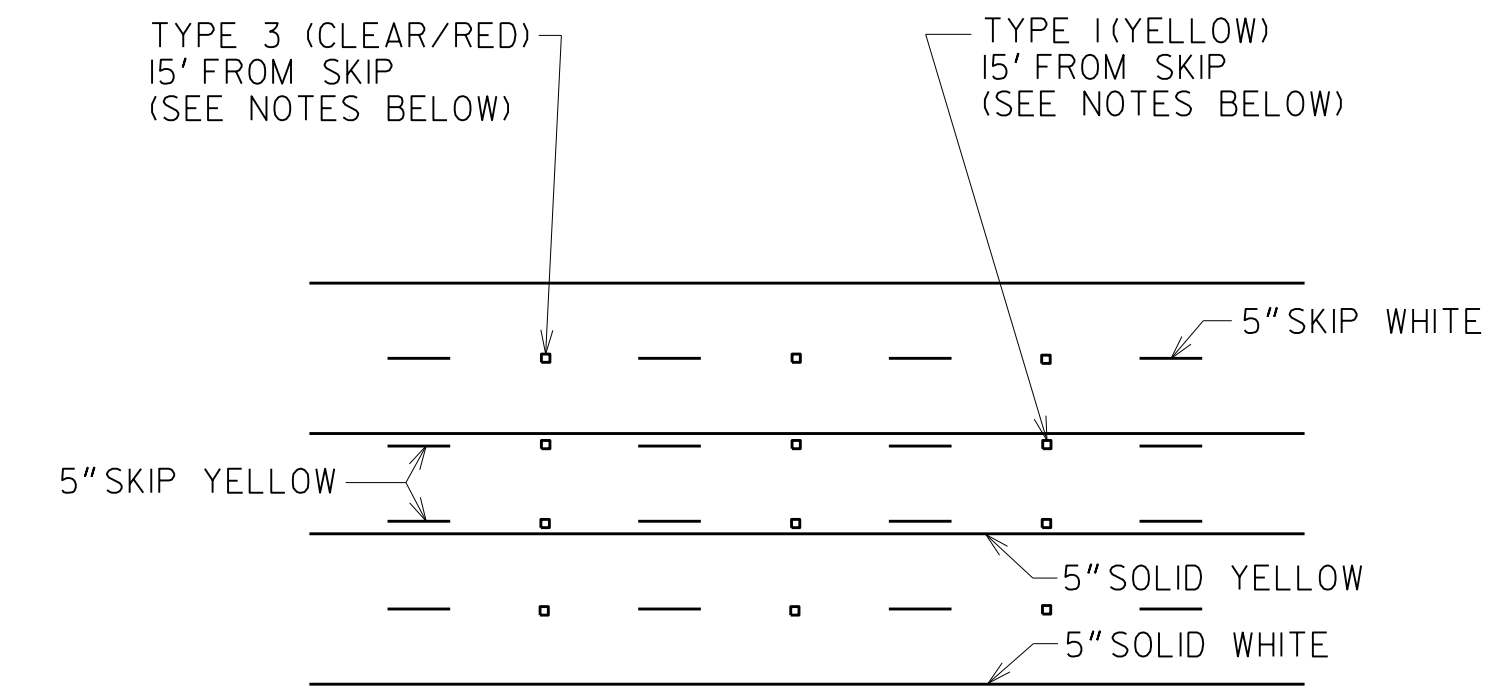
DIVIDED / UNDIVIDED HIGHWAY



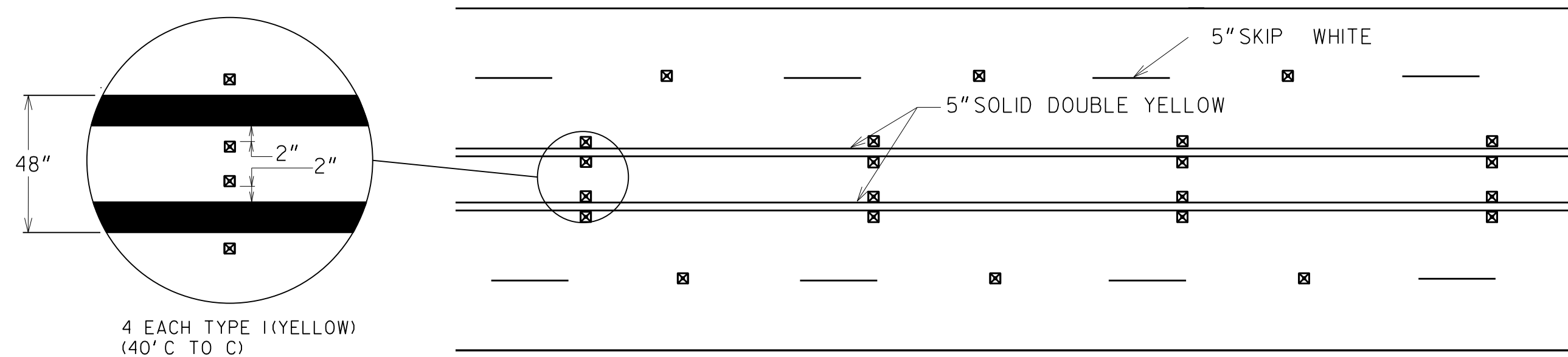
REVERSIBLE LANE



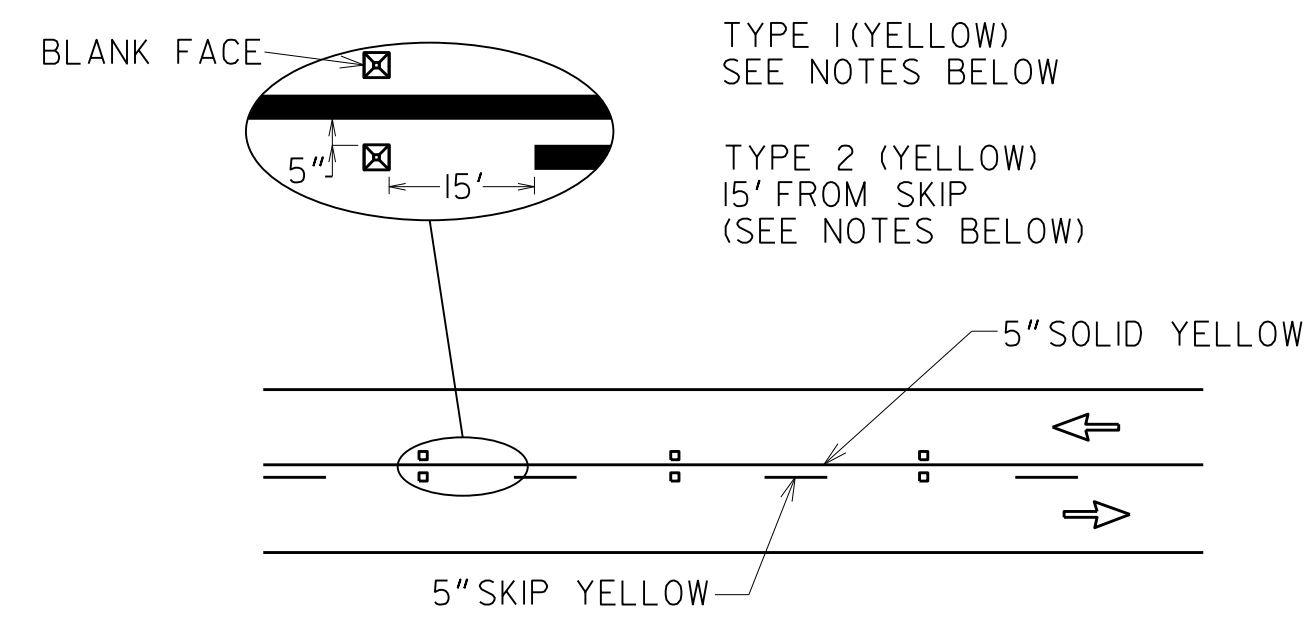
TWO WAY LEFT TURN LANE



4'-0" STRIPED FLUSH MEDIAN



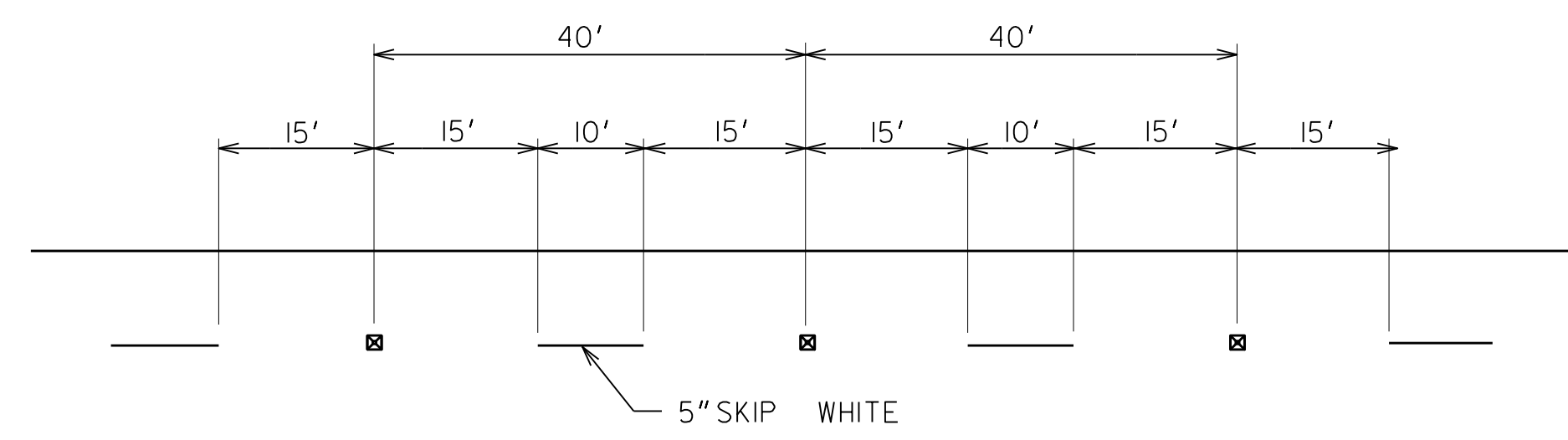
NO PASSING ZONE



GENERAL NOTES:

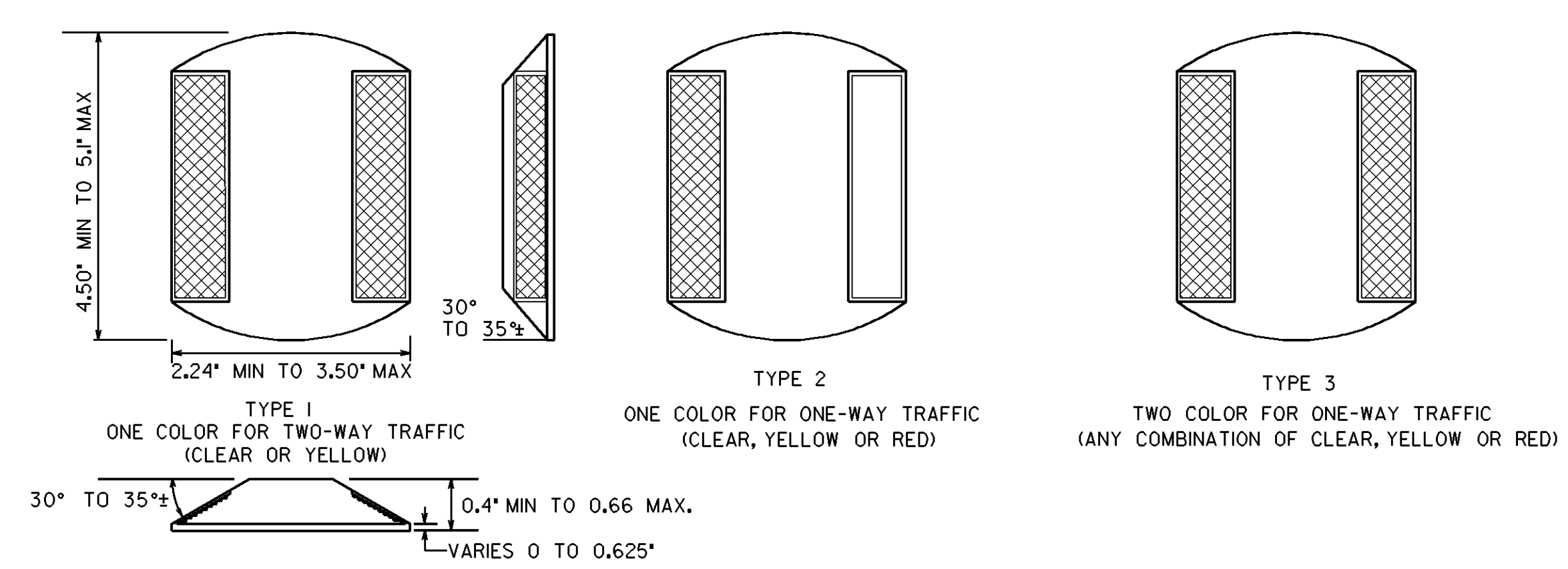
1. RAISED PAVEMENT MARKERS SHALL BE SPACED EVERY 40 FT UNLESS OTHERWISE SPECIFIED.
2. ON SOLID WHITE TURN BAY LINES, SPACING SHALL BE 20 FT.
3. RAISED PAVEMENT MARKERS SHALL BE OFFSET 5 INCHES FROM SOLID LANE LINES.
4. CLEAR FACE OF TYPE 3 RAISED PAVEMENT MARKERS SHALL BE ORIENTED TOWARD ONCOMING TRAFFIC.

TYPICAL RPM/STRIPE SPACING

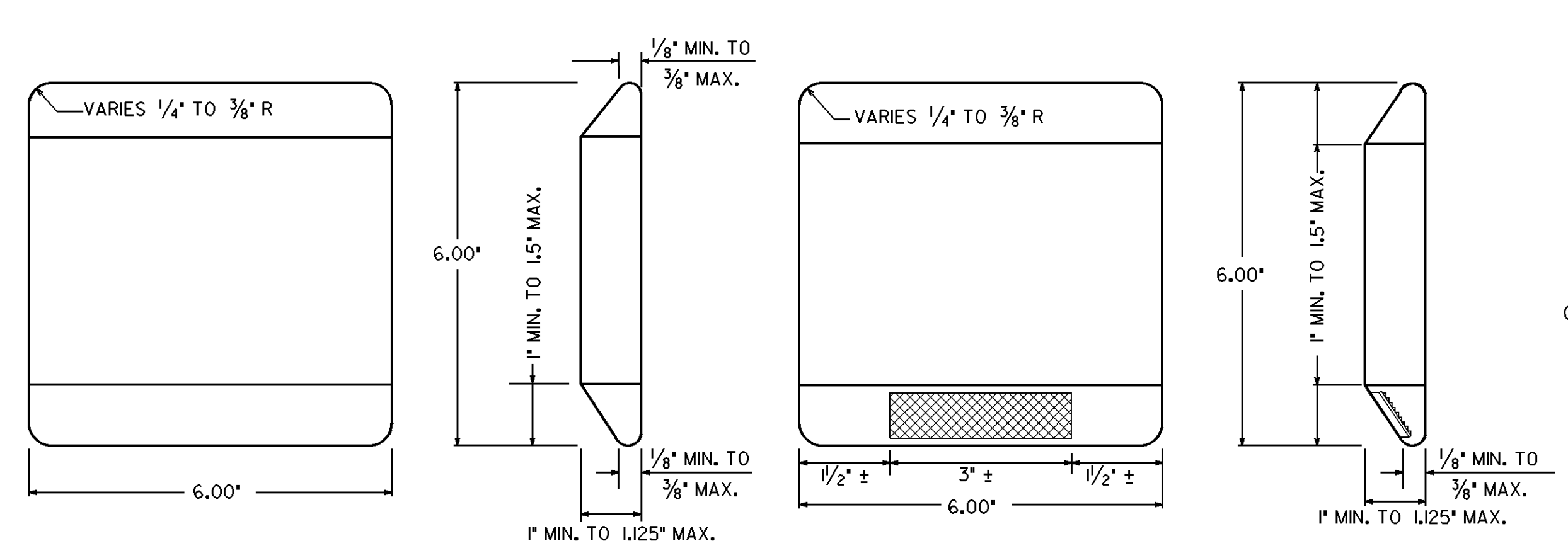
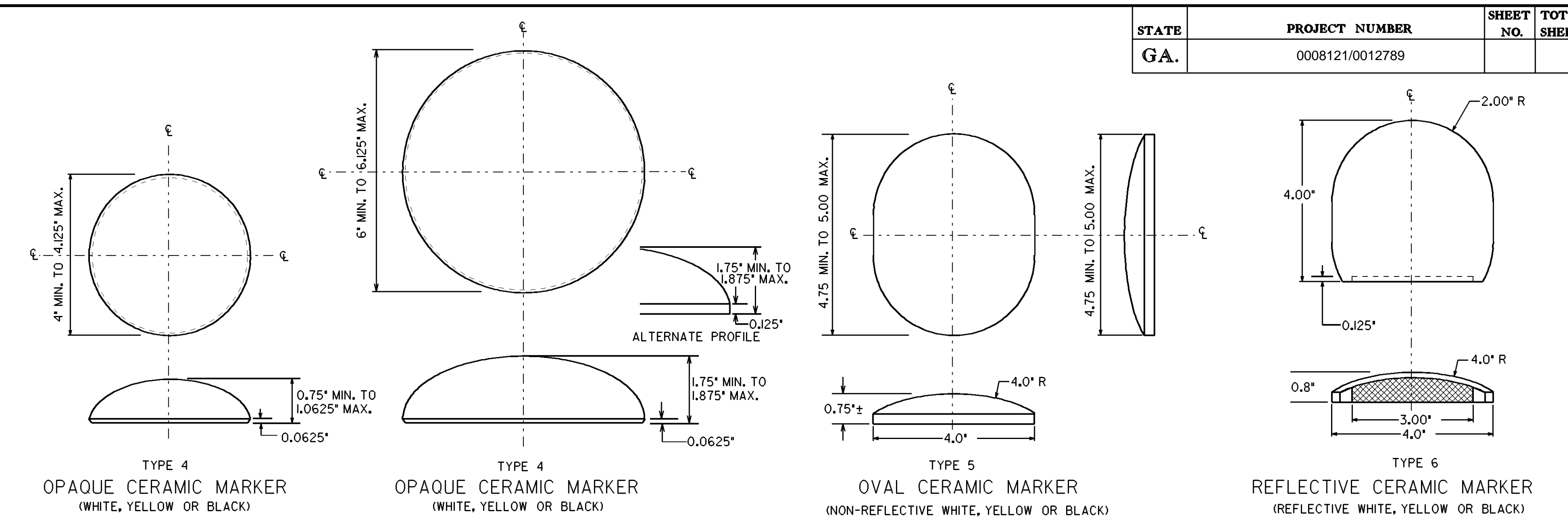


9-15-2016 DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REV. RPM SPACING TO 40' REVISION		CONSTRUCTION DETAILS RAISED PAVEMENT MARKER LOCATION NON-LIMITED ACCESS ROADWAY	
NO SCALE		REV. AND REDRAWN, JUNE 2015	
CDR BY	DESIGNED _____ DRAWN _____ TRACED _____ CHECKED _____	40-0012	NUMBER T-15A

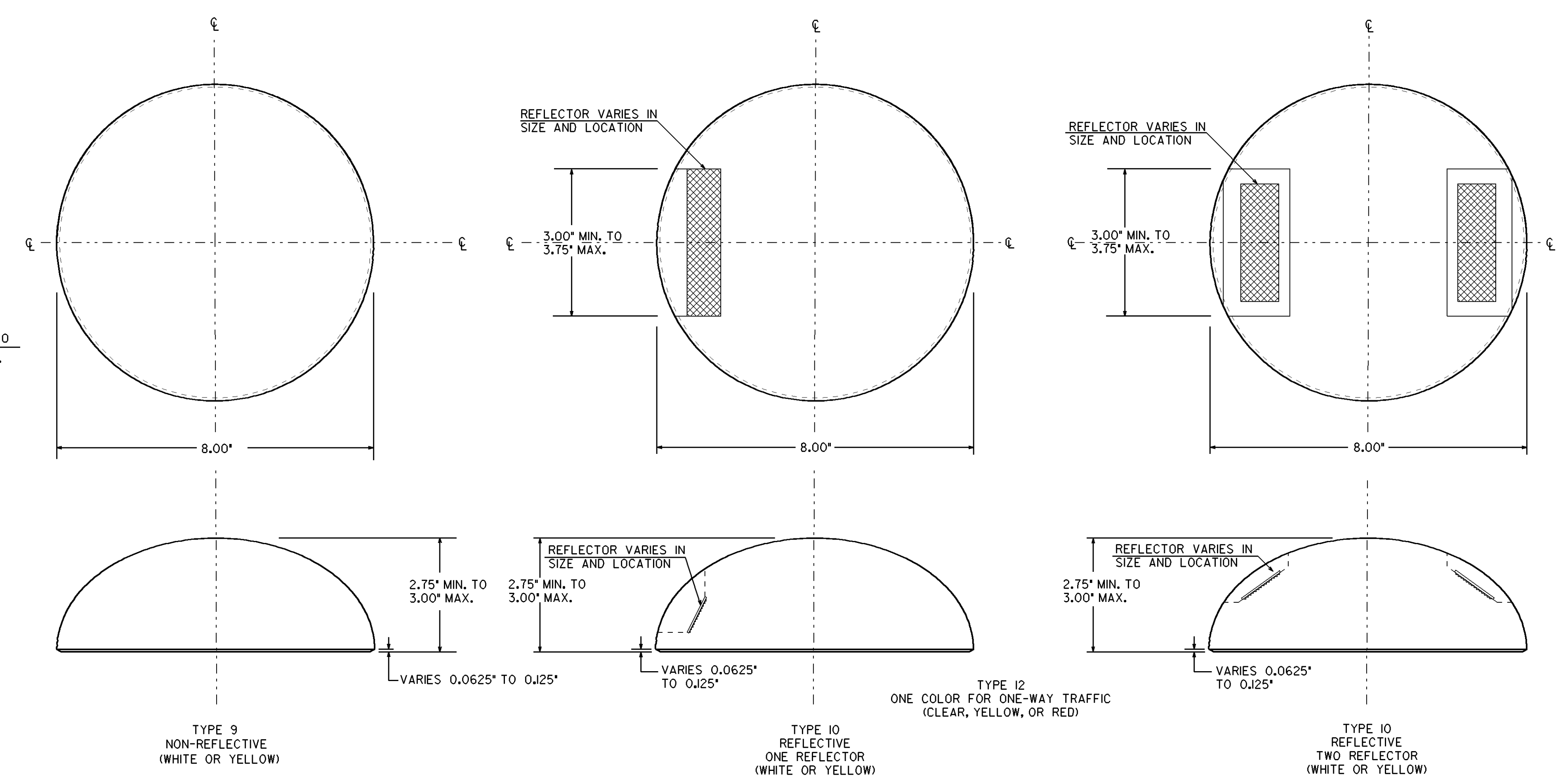
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		



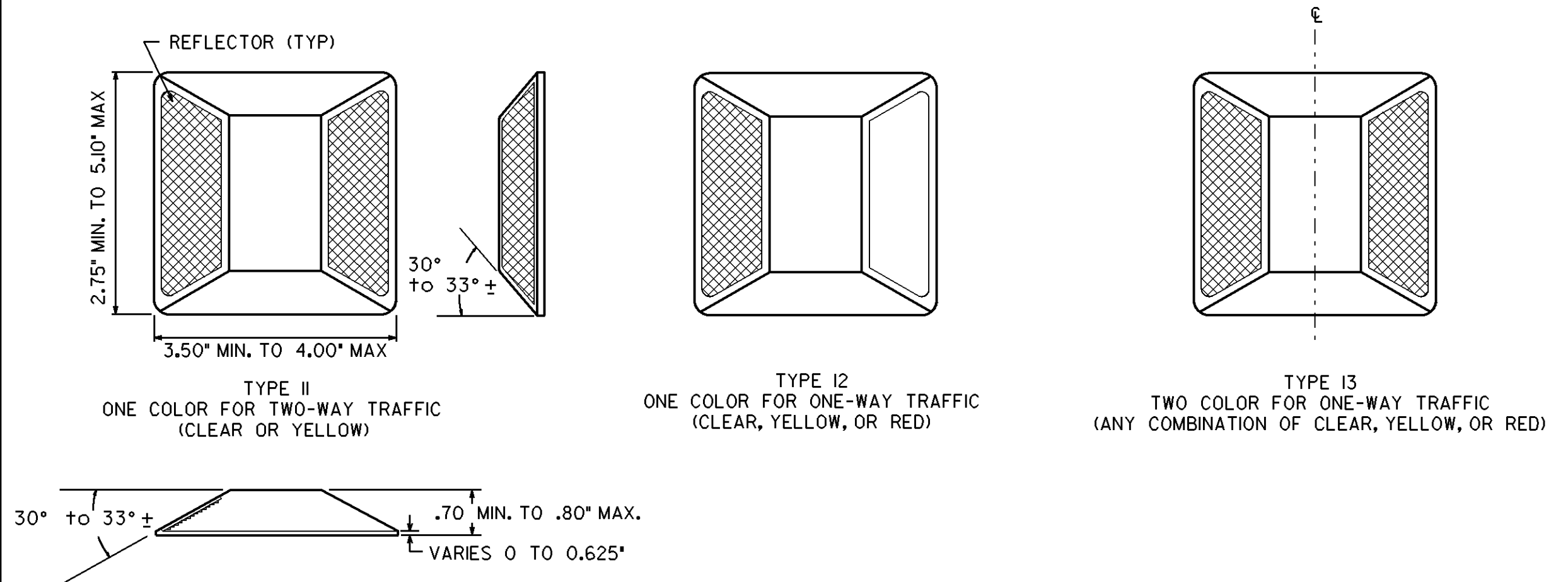
RAISED REFLECTIVE MARKERS



CERAMIC JIGGLE BAR MARKER



CERAMIC CHANNEL MARKER



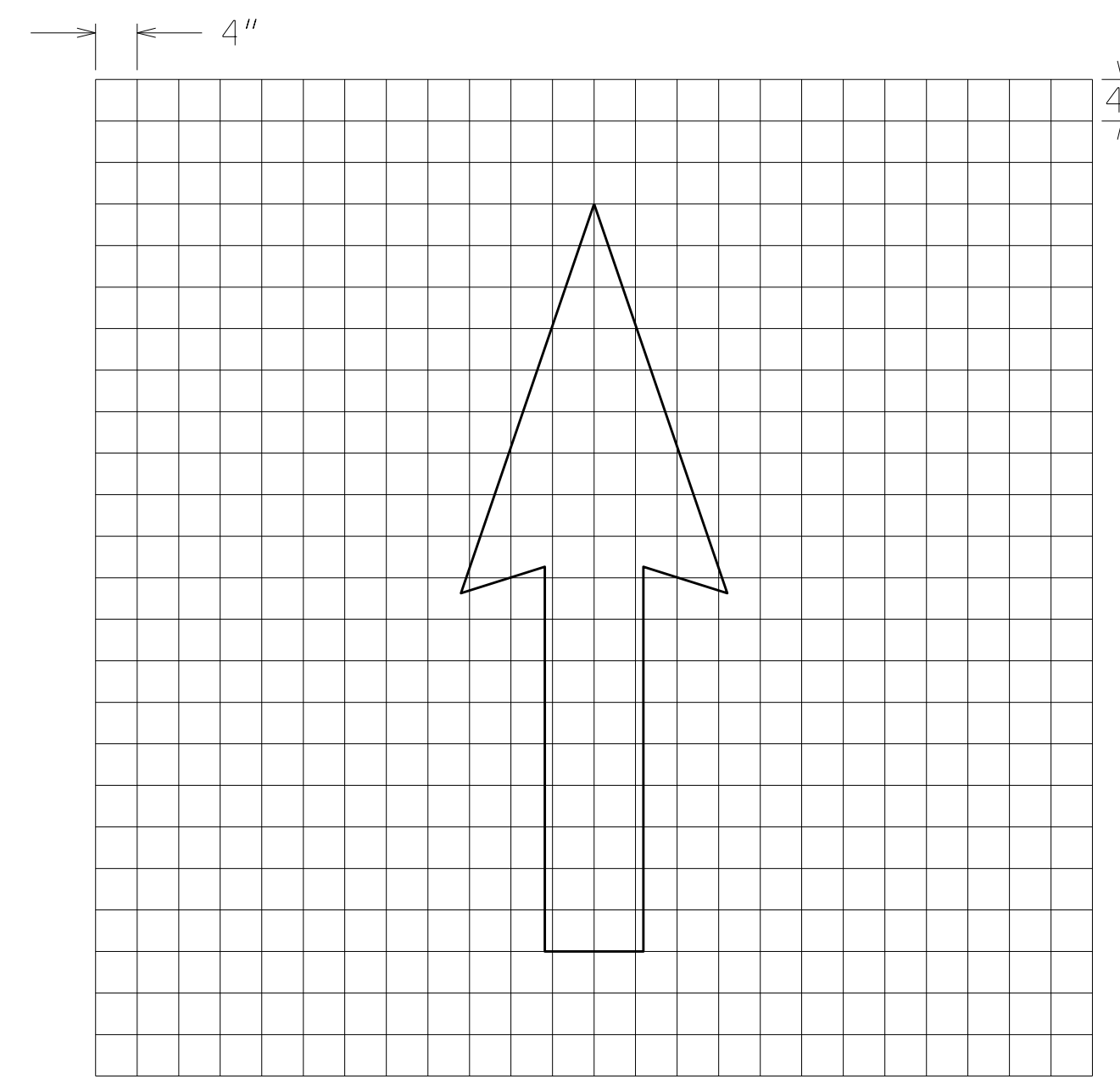
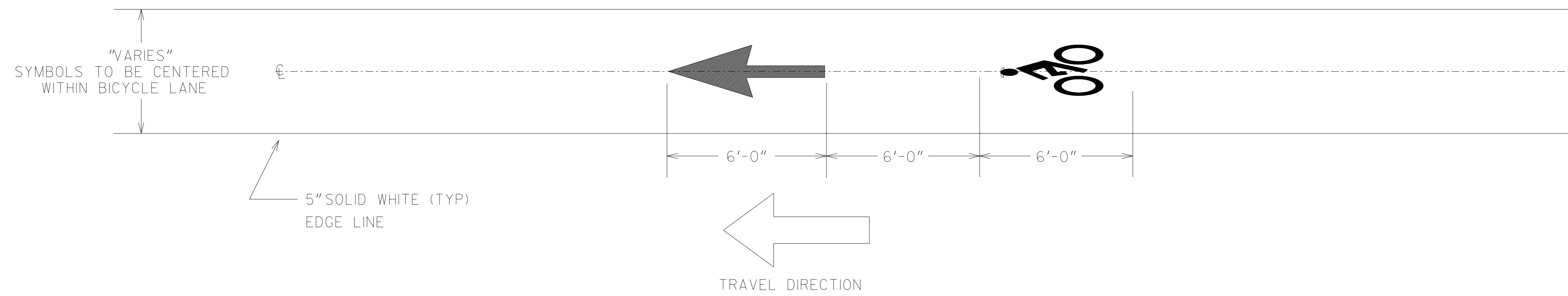
ALTERNATE RAISED REFLECTIVE MARKERS

GENERAL NOTES:

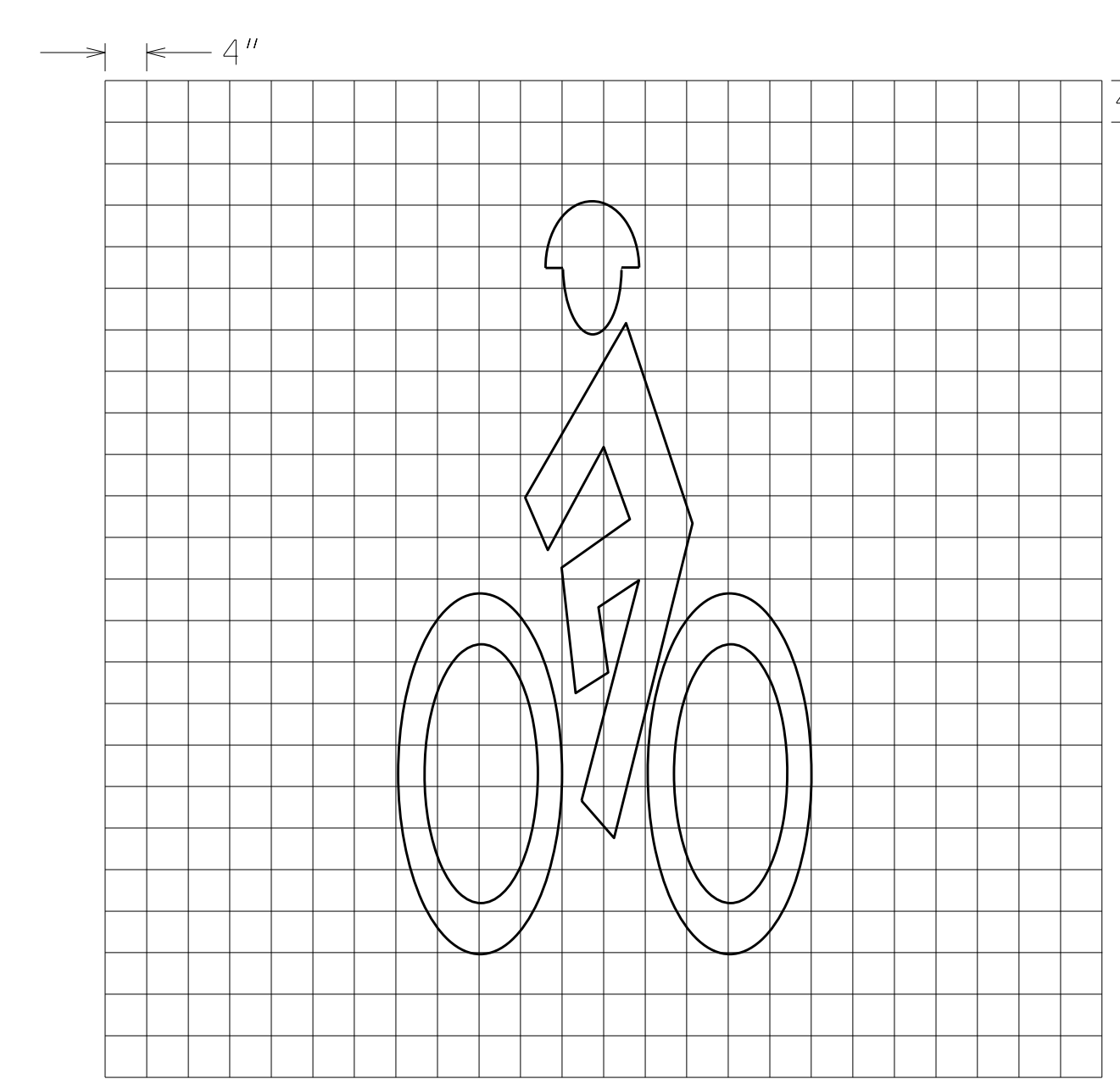
- SPECIFICATIONS: GEORGIA STANDARD, CURRENT EDITION, AND SUPPLEMENTS THERE TO.
- THE CONTRACTOR SHALL USE RAISED PAVEMENT MAKER SOURCES AS LISTED IN OPL 76.
- COLORS FOR REFLECTIVE ELEMENTS SHALL BE EITHER CLEAR, YELLOW, OR RED AS SPECIFIED.
- THE SHELL OF THE REFLECTIVE MARKERS SHALL BE OF ONE COLOR OR OF A COMBINATION OF TWO COLORS, WHICH SHALL BE THE SAME AS THE REFLECTIVE ELEMENT.
- THE SURFACE OF OPAQUE CERAMIC MARKERS SHALL BE GLAZED AND OF THE COLOR SPECIFIED IN THE PLANS WITH A WHITE, VITREOUS, CERAMIC BASE.
- COLORS FOR ALL RAISED PAVEMENT MARKERS SHALL BE AS SPECIFIED IN THE PLANS.

40-0013

DATE	REVISIONS	GEORGIA DEPARTMENT OF TRANSPORTATION OFFICE OF TRAFFIC SAFETY & DESIGN
9-22-11	REV. DIMENSIONS, ADDED NOTES TO MARKERS AND REV. GEN. NOTES.	
		DETAILS OF RAISED PAVEMENT MARKERS
		NO SCALE
		JANUARY 2000



TYPE 1 ARROW - BICYCLE LANE



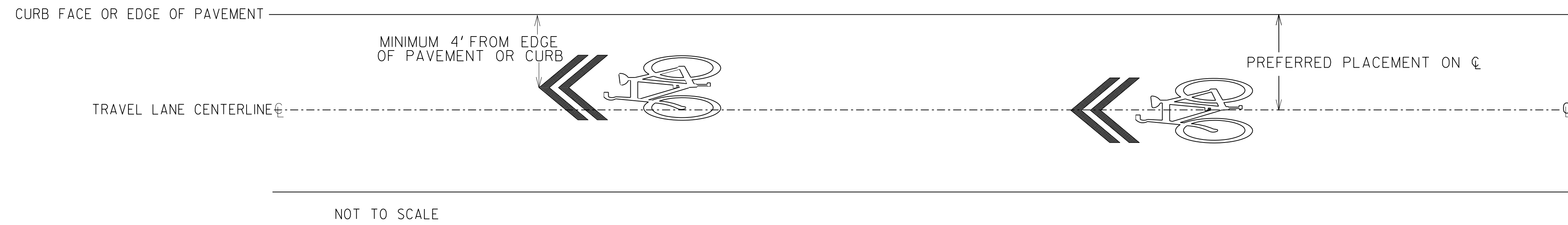
TYPE 4 SYMBOL - BICYCLE LANE

GENERAL NOTES:

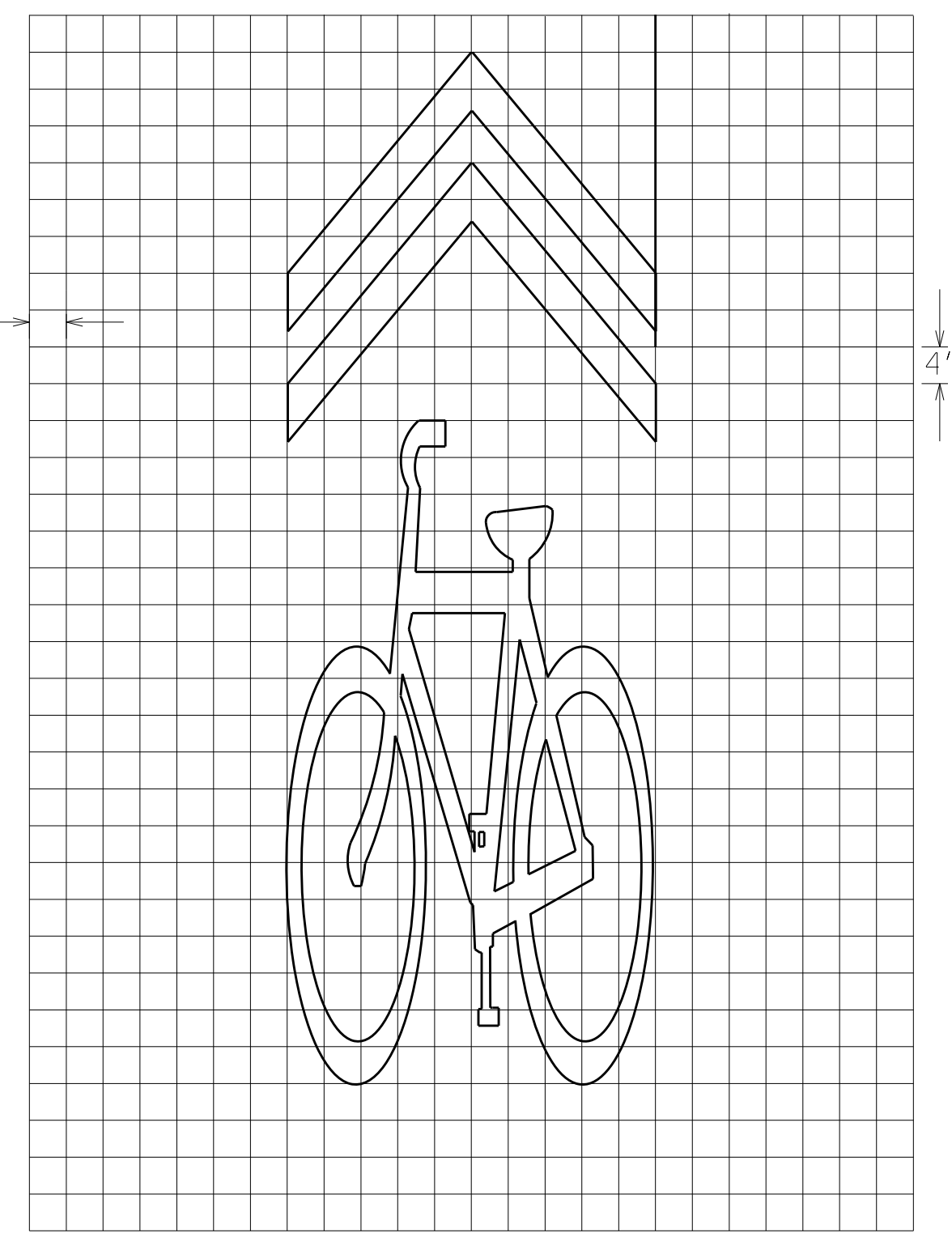
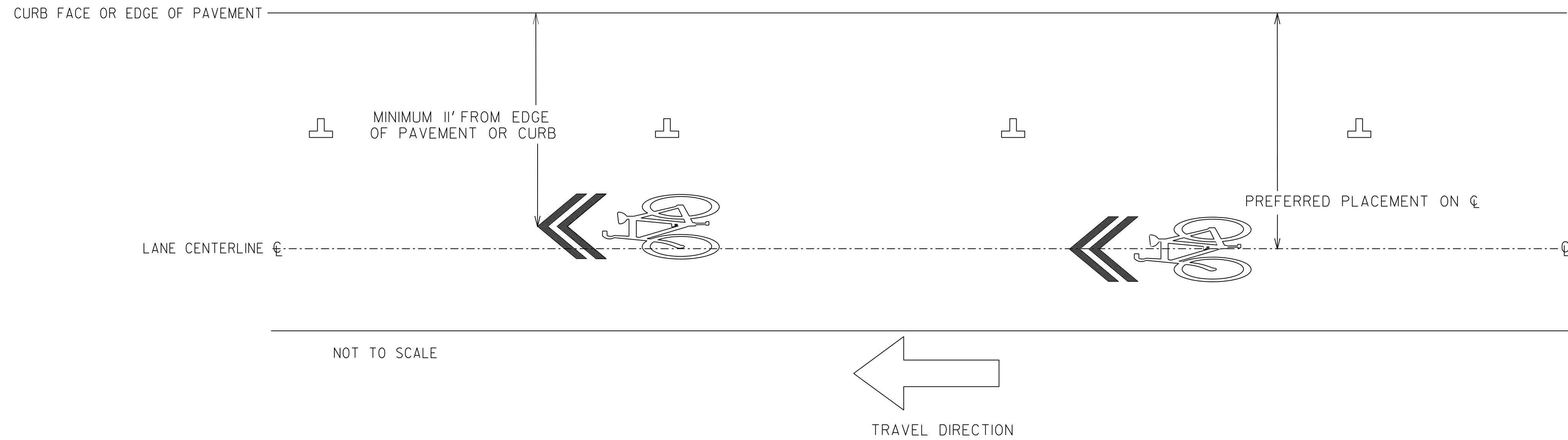
- BICYCLE LANE SYMBOLS SHALL BE PLACED ON THE FAR SIDE OF EACH INTERSECTION 6 FEET BEYOND THE CROSS WALK OR END OF INTERSECTING ROAD RADII. ADDITIONAL SYMBOLS MAY BE PLACED ON LONG, UNINTERRUPTED SECTIONS OF ROADWAY BASED ON ENGINEERING JUDGEMENT.
- ALL BICYCLE LANE PAVEMENT SYMBOLS SHALL BE HOT APPLIED PREFORMED PLASTIC (THERMOPLASTIC - 659) FOR BOTH ASPHALT AND CONCRETE PAVEMENTS.
- BICYCLE LANE EDGE LINE SHALL MATCH THE PAVEMENT MARKING TYPE SPECIFIED BY THE PAVEMENT MARKING SELECTION CHART IN SECTION 12 OF THE SIGNING AND MARKING DESIGN GUIDELINES.
- FOR ADDITIONAL INFORMATION REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES, CURRENT EDITION.

3-30-16 DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
Rev. 2009 MUTCD Manual REVISION	CONSTRUCTION DETAILS DETAILS OF BICYCLE LANE PAVEMENT MARKINGS	
HAC BY	DESIGNED _____ DRAWN _____ TRACED _____ CHECKED _____	NO SCALE JANUARY 2000 NUMBER T-16
	40-0014	

SHARED LANE ARROW PLACEMENT WITH NO STREET PARKING



SHARED LANE ARROW PLACEMENT WITH ON STREET PARKING



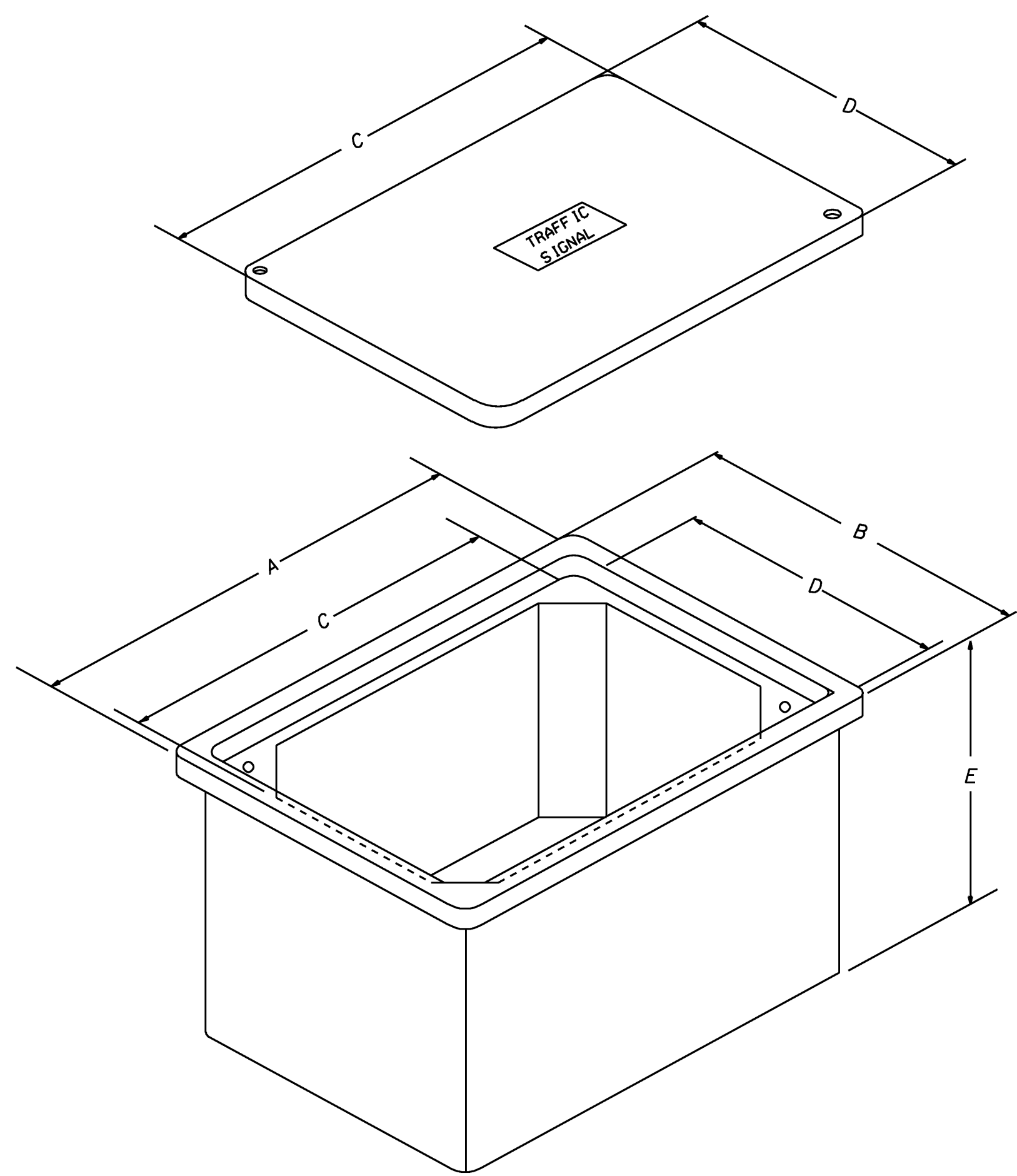
BIKE SHARED LANE SYMBOL

GENERAL NOTES:

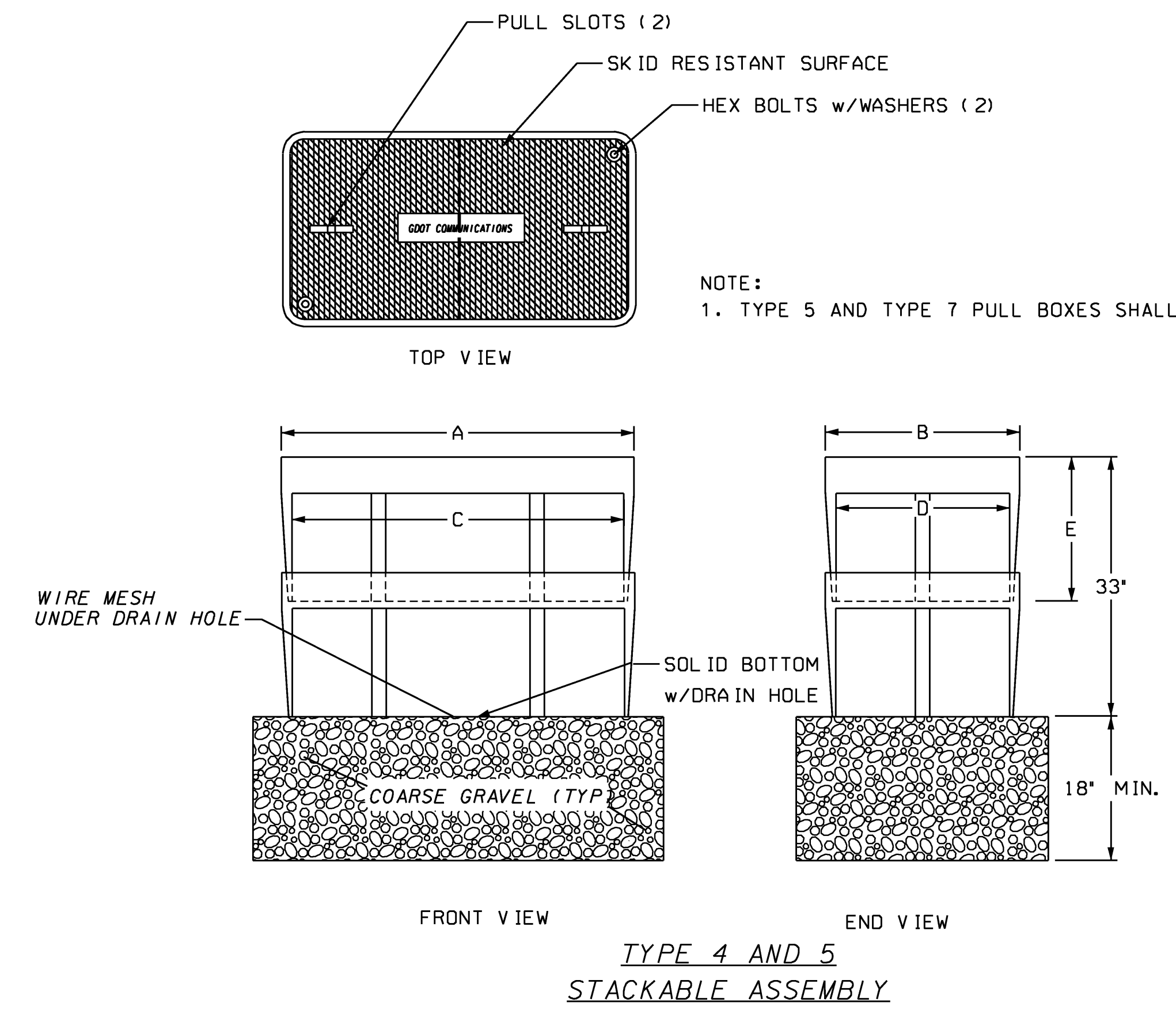
1. SHARED LANE MARKINGS SHALL BE PLACED ON THE FAR SIDE OF EACH INTERSECTION 6 FEET BEYOND THE CROSS WALK OR END OF INTERSECTING ROAD RADII. ADDITIONAL SYMBOLS SHOULD BE PLACED NOT GREATER THAN EVERY 250 FEET THEREAFTER.
2. SHARED LANE MARKINGS SHALL NOT BE PLACED ON SHOULDERS OR IN DESIGNATED BIKE LANES.
3. ALL SHARED BICYCLE LANE PAVEMENT SYMBOLS SHALL BE HOT APPLIED PREFORMED PLASTIC (THERMOPLASTIC - 659) FOR BOTH ASPHALT AND CONCRETE PAVEMENTS.
4. FOR ADDITIONAL INFORMATION REFER TO MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, CURRENT EDITION, AND AASHTO GUIDE FOR THE DEVELOPMENT OF BICYCLE FACILITIES, CURRENT EDITION.

		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
		CONSTRUCTION DETAILS DETAILS OF SHARED BICYCLE LANE	
		NO SCALE	3-30-16
BY	DESIGNED _____ DRAWN _____ TRACED _____ CHECKED _____	40-0015	NUMBER T-16A

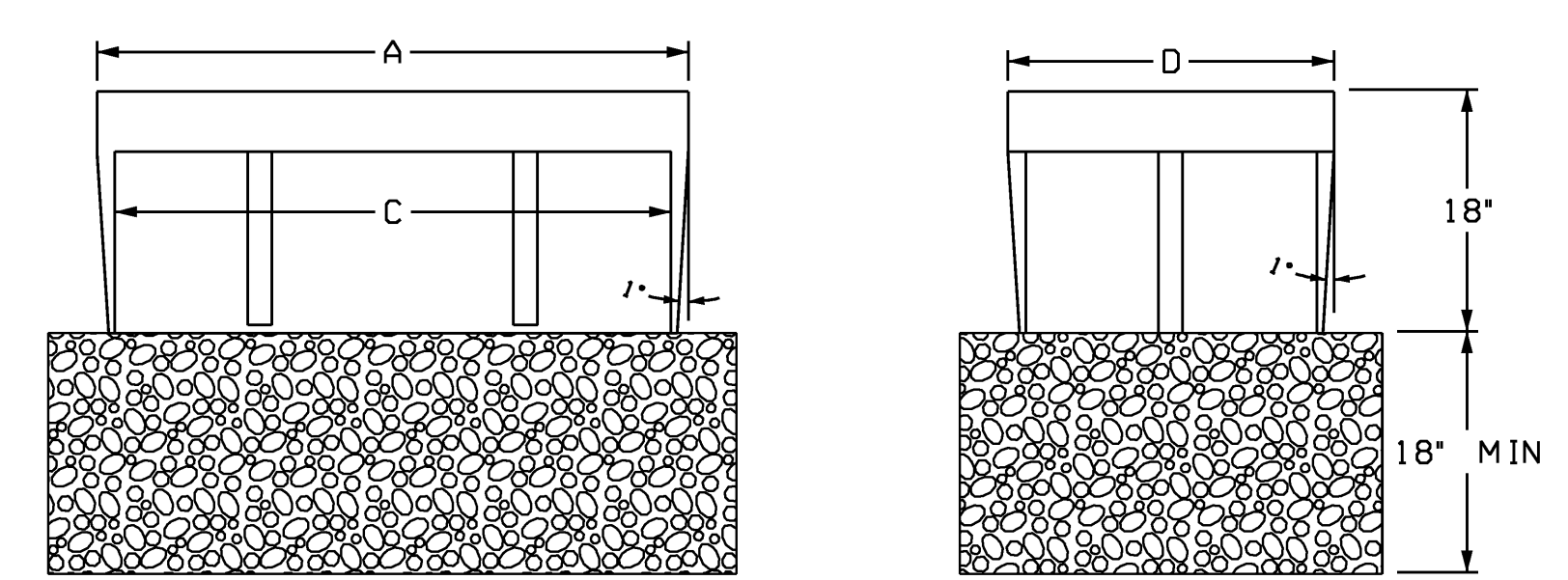
PULLBOX TYPES
1, 2 AND 3



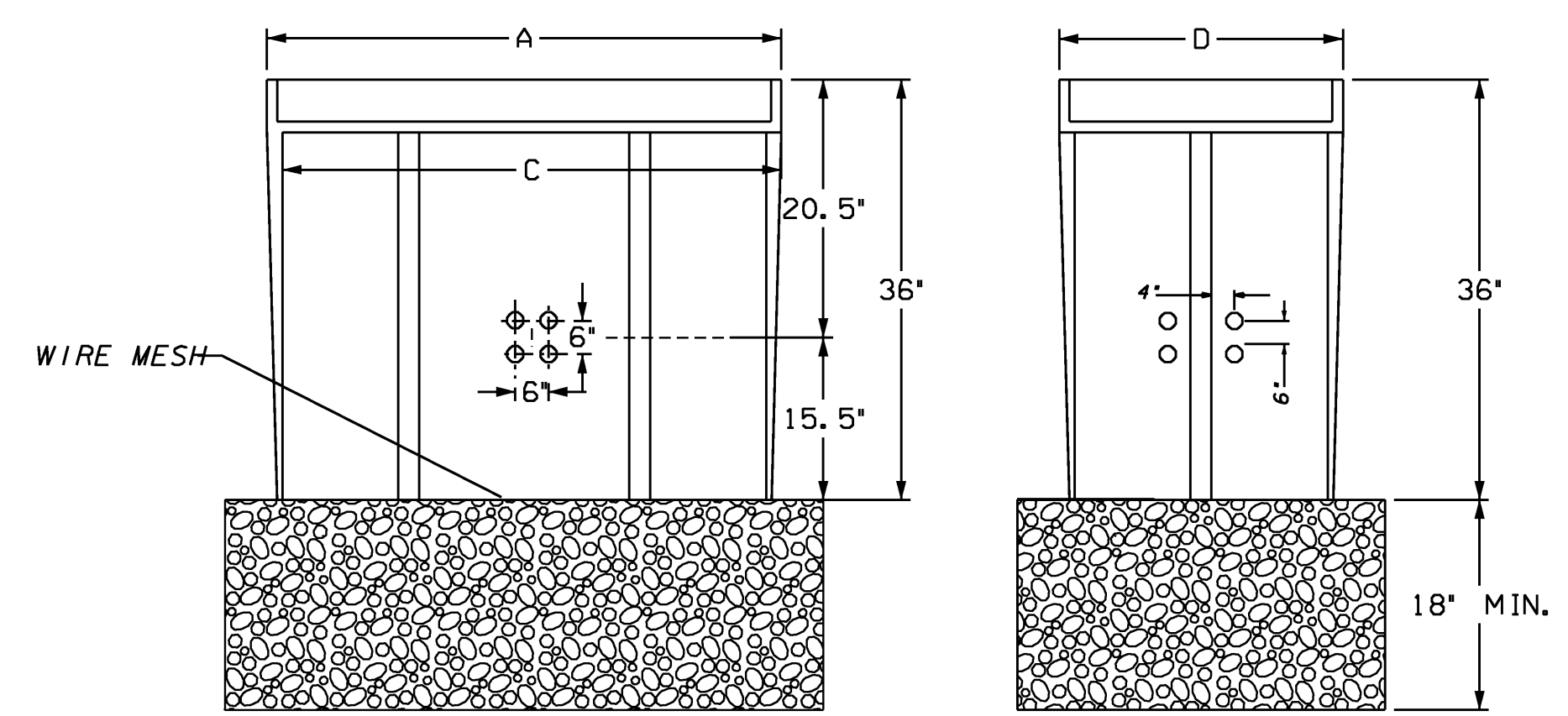
TYPE 4, 5, 4S, 5S, 6, AND 7 PULLBOX ASSEMBLIES



TYPE 4 AND 5
STACKABLE ASSEMBLY

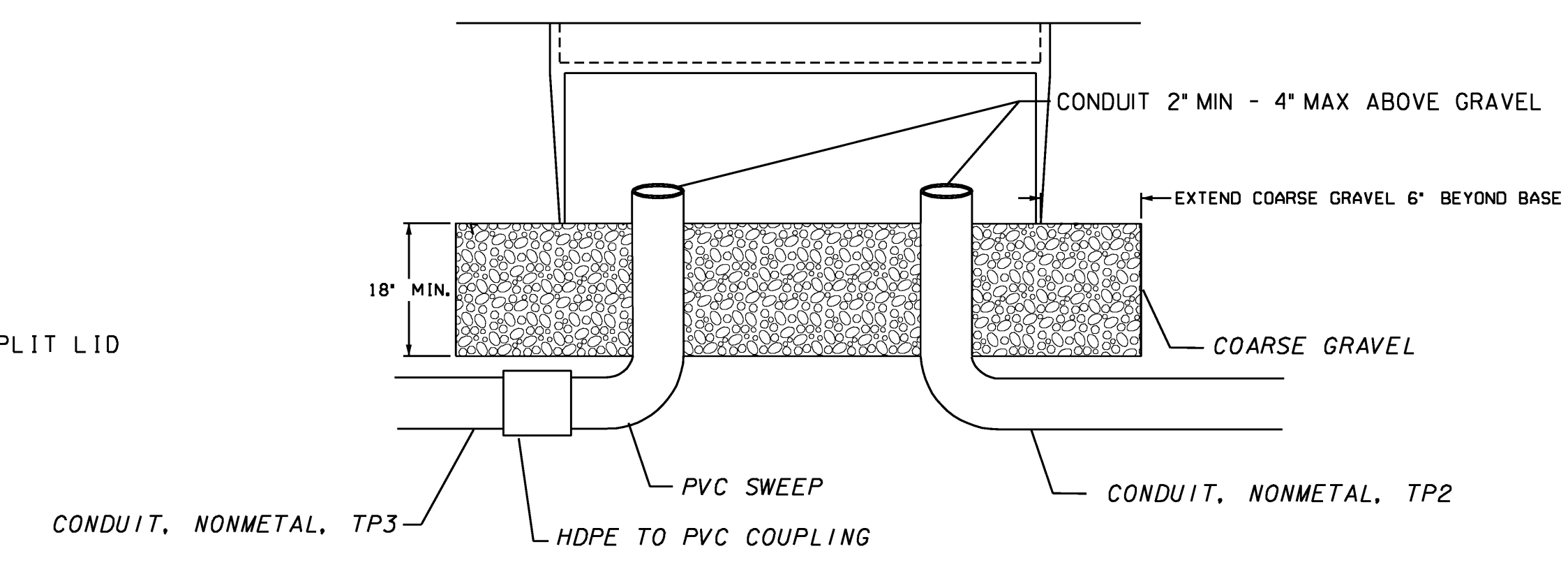


TYPE 4S AND 5S

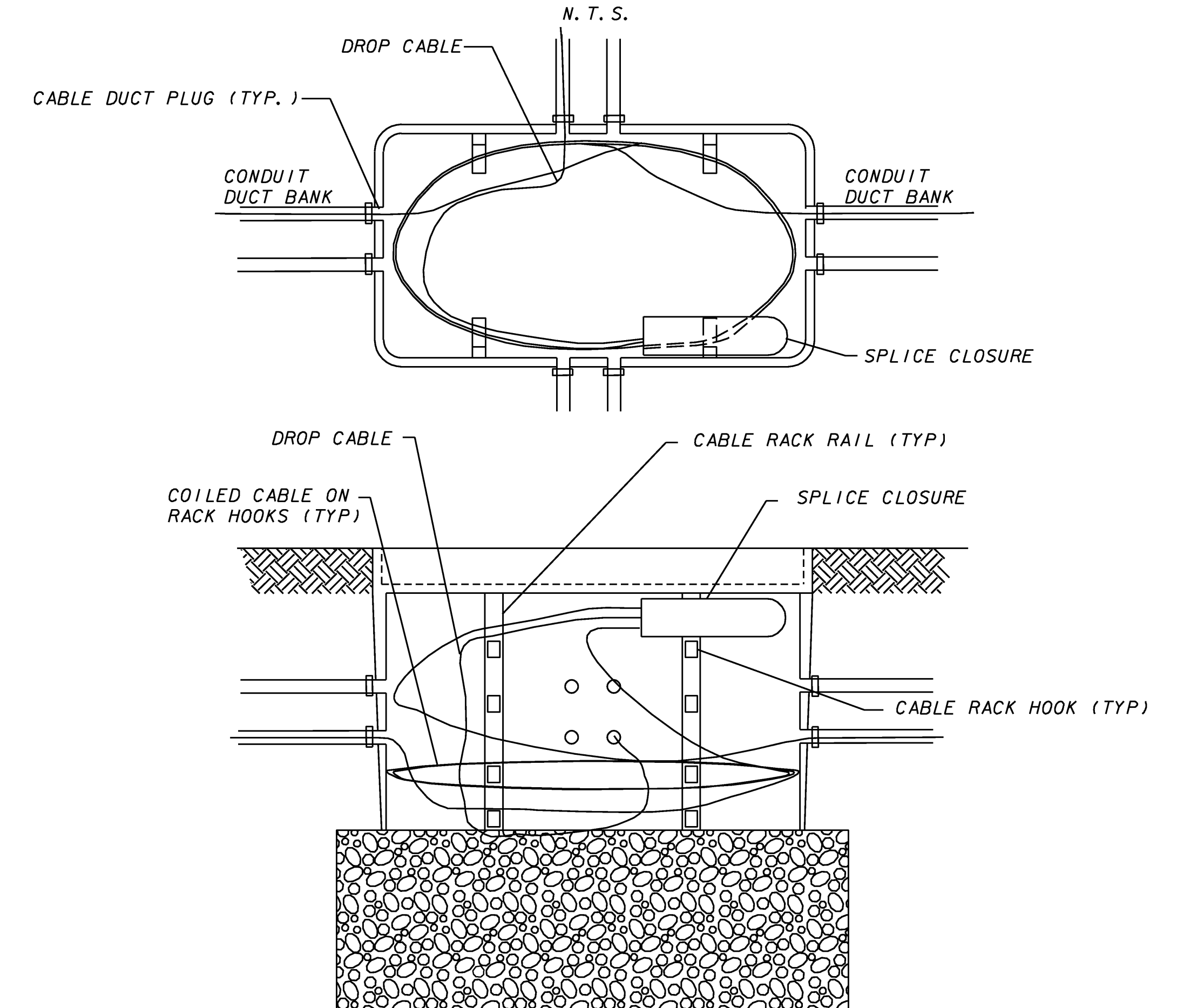


TYPE 6 AND 7

TYPICAL CONDUIT ENTRANCE DETAILS
TYPE 1, 2, 3, 4S & 5S



FIBER OPTIC CABLE MANAGEMENT IN TYPE 4, 5, 6 & 7 PULL BOX



PULL BOX TYPE	* SIZE (IN.)				
	A	B	C	D	E
1	14	14	12	12	12
2	21	14	18	11	12
3	33	20	30	17	12
4S	38	26	36	24	18
4	38	26	36	24	36
5S	50	32	48	30	18
5	50	32	48	30	36
6	38	26	36	24	36
7	50	32	48	30	36

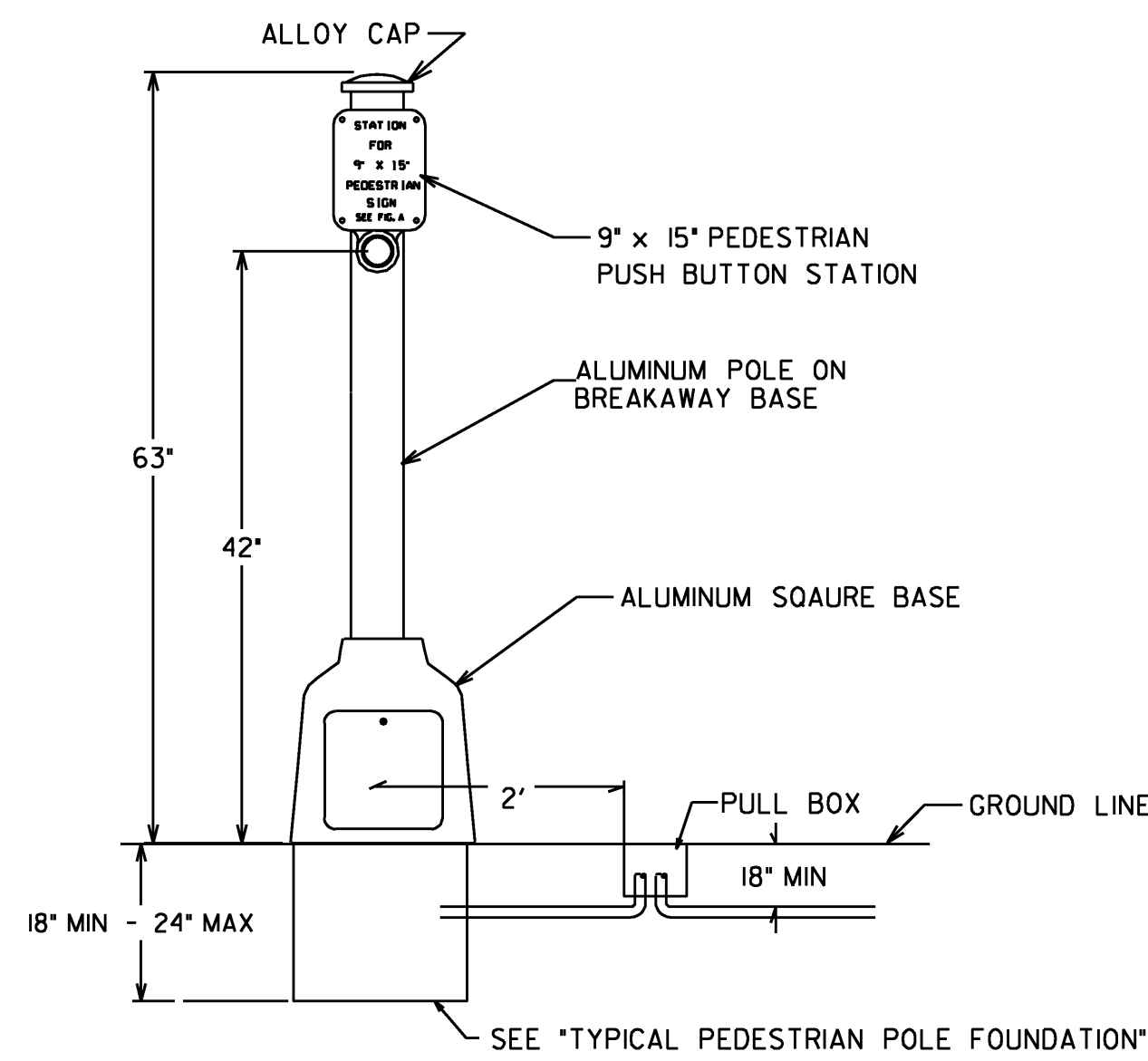
- NOTES:**
- SIZES SHOWN ARE MINIMUM TRADE SIZES.
 - DIMENSIONS "C" AND "D" ARE MINIMUM REQUIREMENTS WITH A TOLERANCE OF NO MORE THAN (-.050 IN/ + 2 IN)
 - EXTEND COARSE GRAVEL 6" BEYOND BASE OF PULL BOX
 - PULL BOXES TYPE 4, 4S, 5, 5S, 6 & 7 SHALL HAVE 1° (DEGREE) FLARES FOR MAXIMUM STRENGTH
 - DESIGN PULL BOXES TO MEET OR EXCEED THE TIER LOADING SET FORTH IN SPECIFICATIONS 647.

Guidelines For Usage On Metric Projects

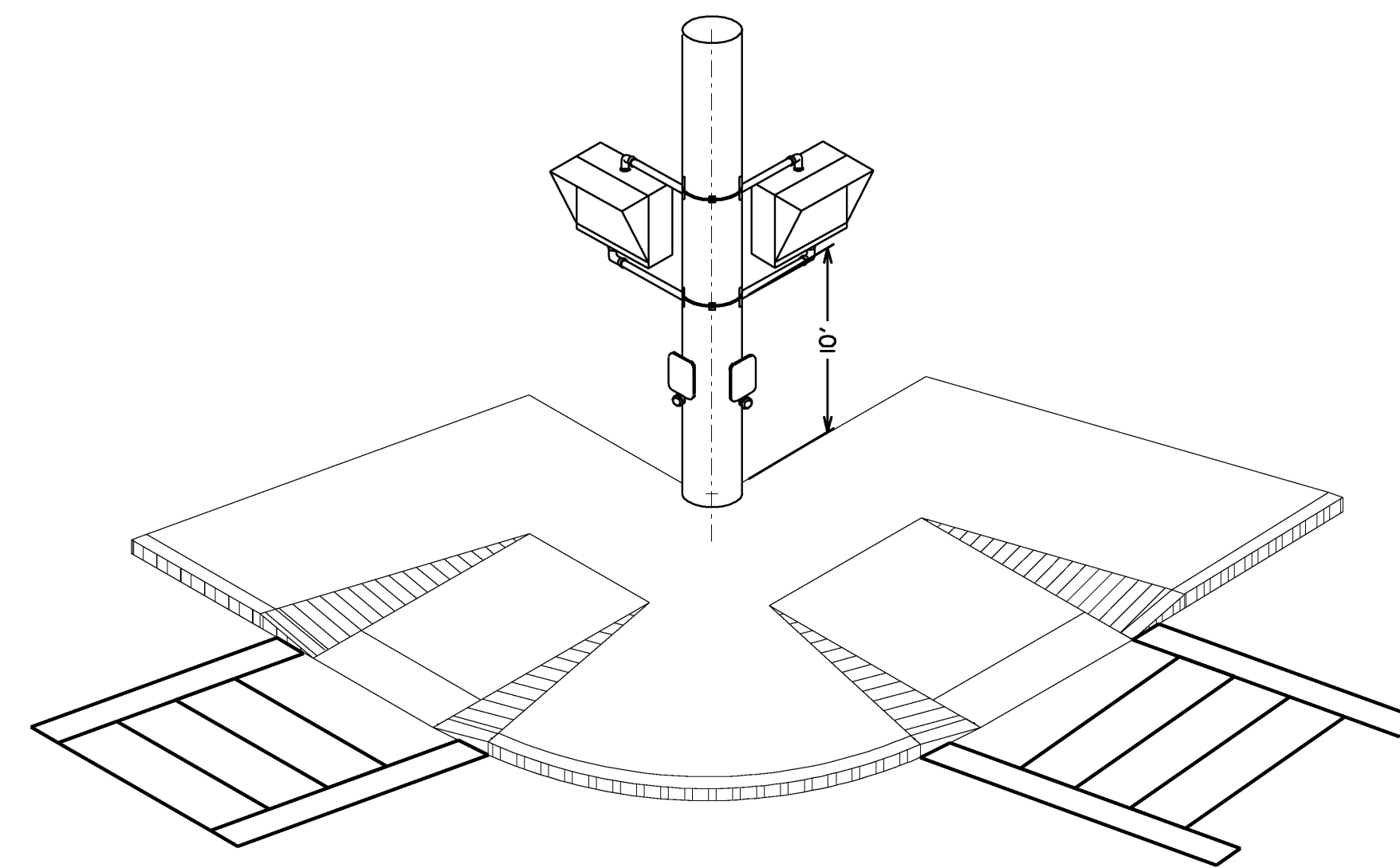
When these details are incorporated into plans and/or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following "Rounded-Off" conversion factors: 1" = 25mm, 4" = 100mm, and 12" or 1' = 300mm. All measurement notes that refer to linear feet and square yards shall be interpreted to mean linear meters and square meters.

40-0016

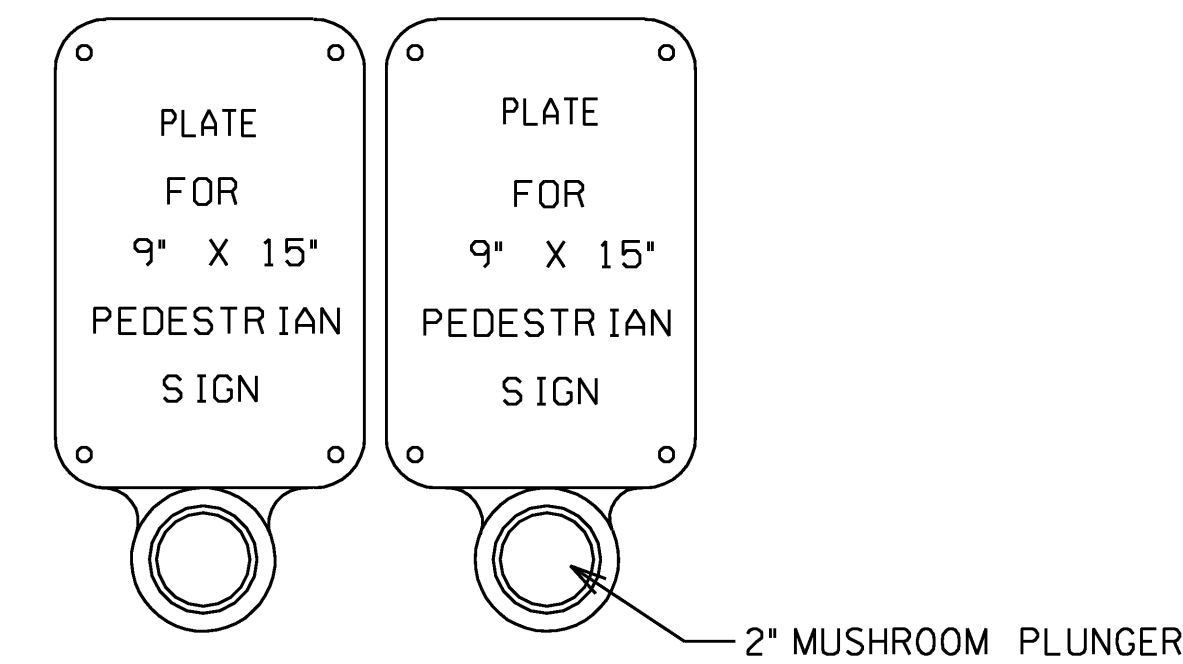
DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		TRAFFIC SIGNAL DETAIL PULLBOX ASSEMBLY AND INSTALLATION	
BY		APRIL 2010	DETAIL NUMBER TS-02
NOT TO SCALE - REPORT ERRORS			



PEDESTRIAN PUSH BUTTON POST

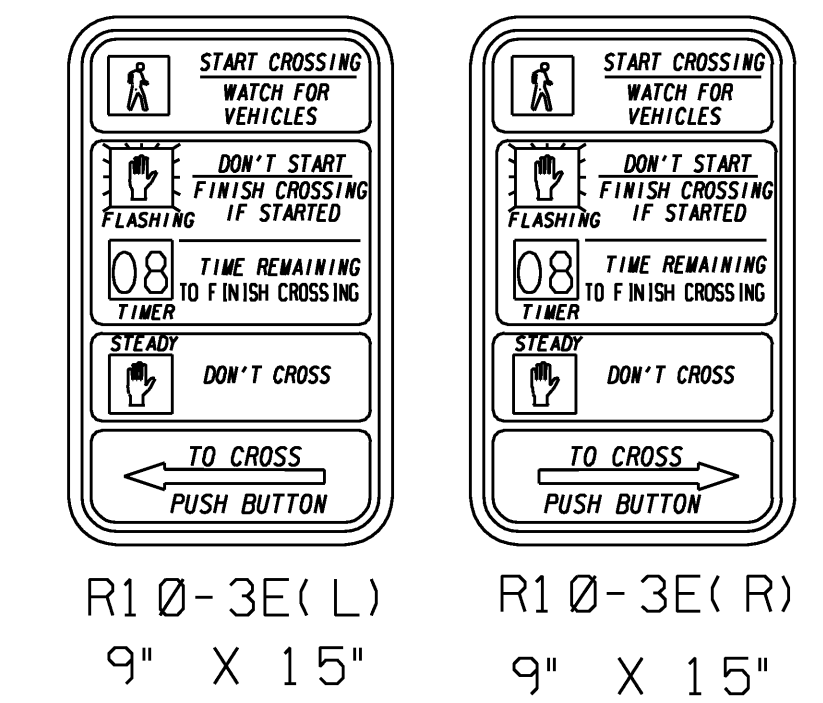


PEDESTRIAN SIGNAL HEAD ORIENTATION FOR SIDE OF POLE MOUNTING



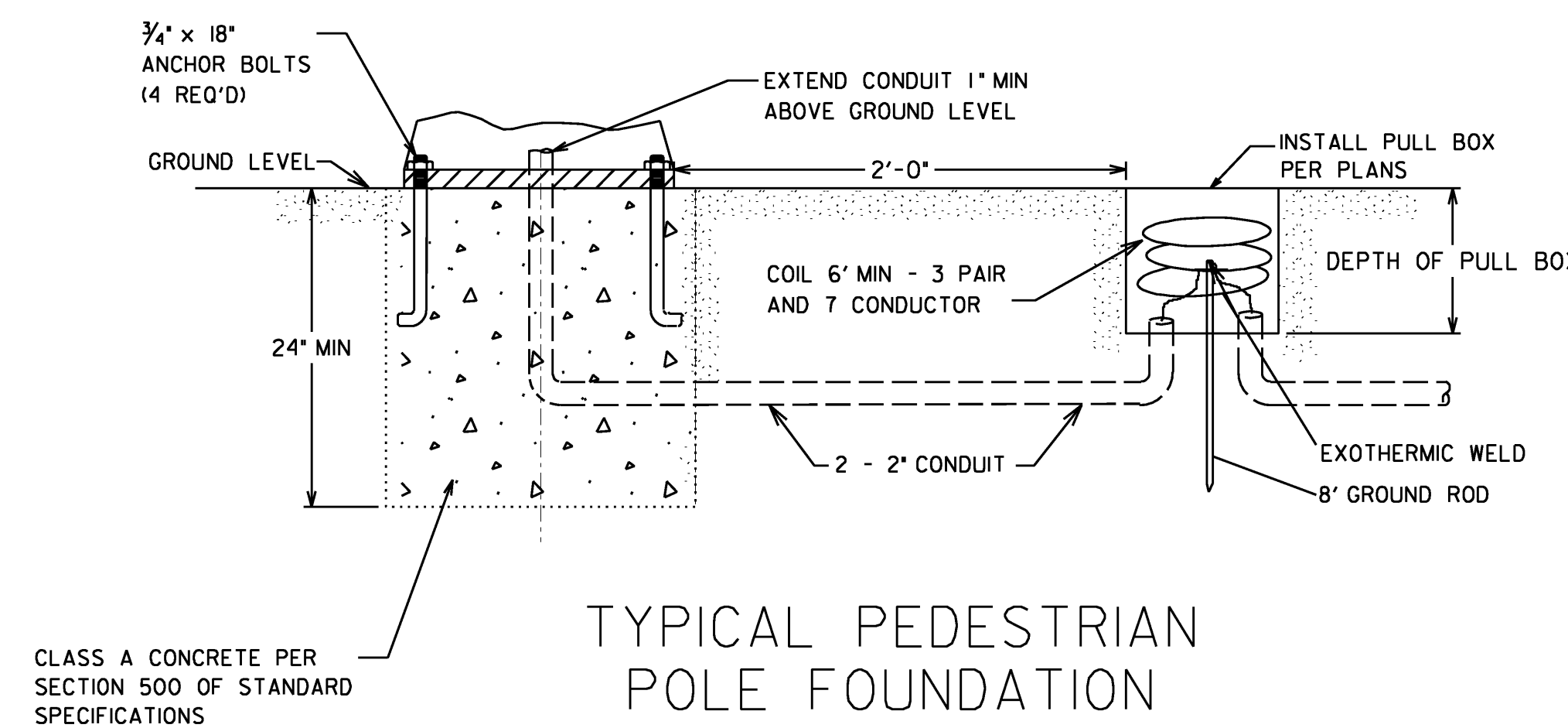
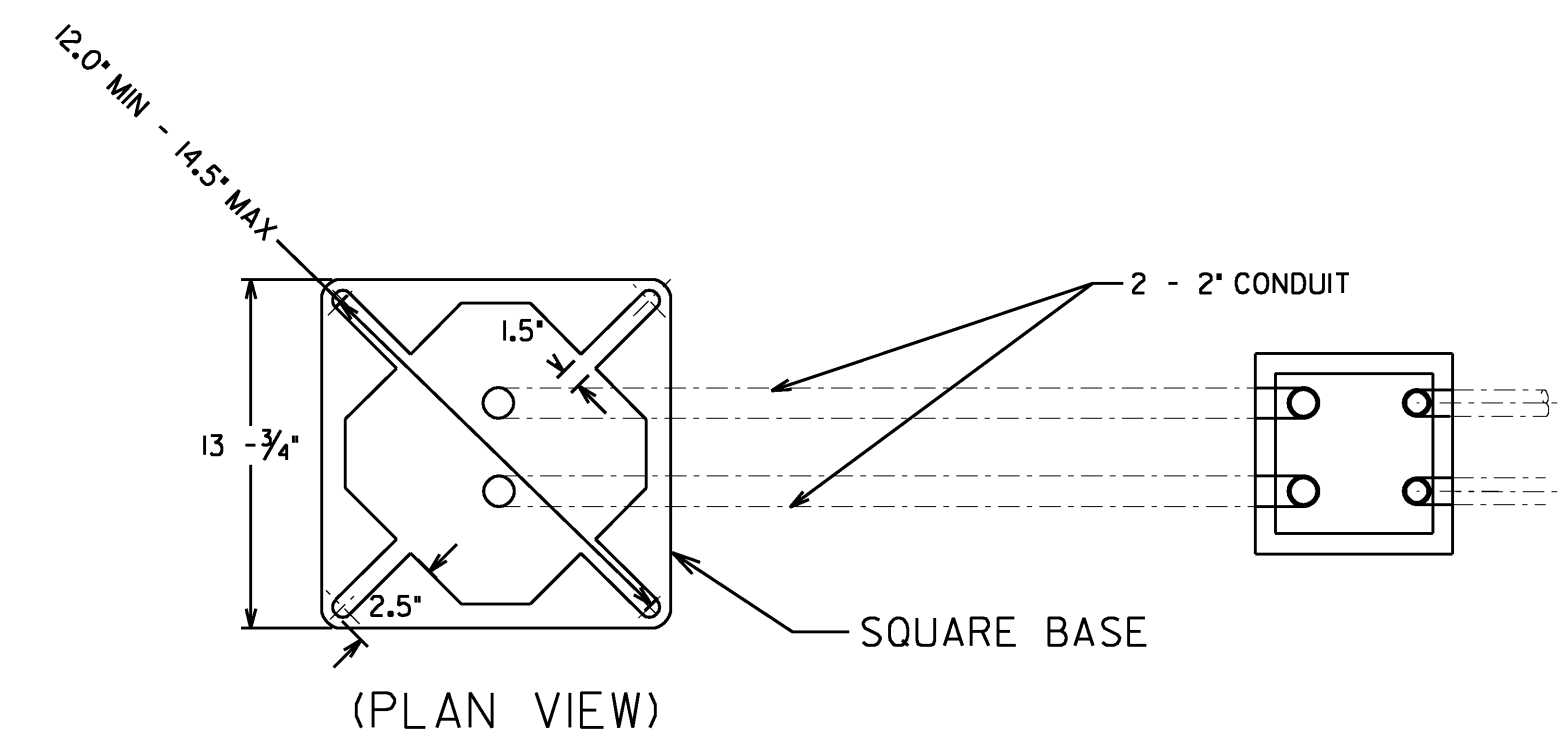
A 'PUSH BUTTON STATION' IS THAT PIECE OF EQUIPMENT THAT CONTAINS THE PEDESTRIAN INSTRUCTIONAL SIGN PLATE AND THE PUSH BUTTON

PEDESTRIAN PUSH BUTTON STATION

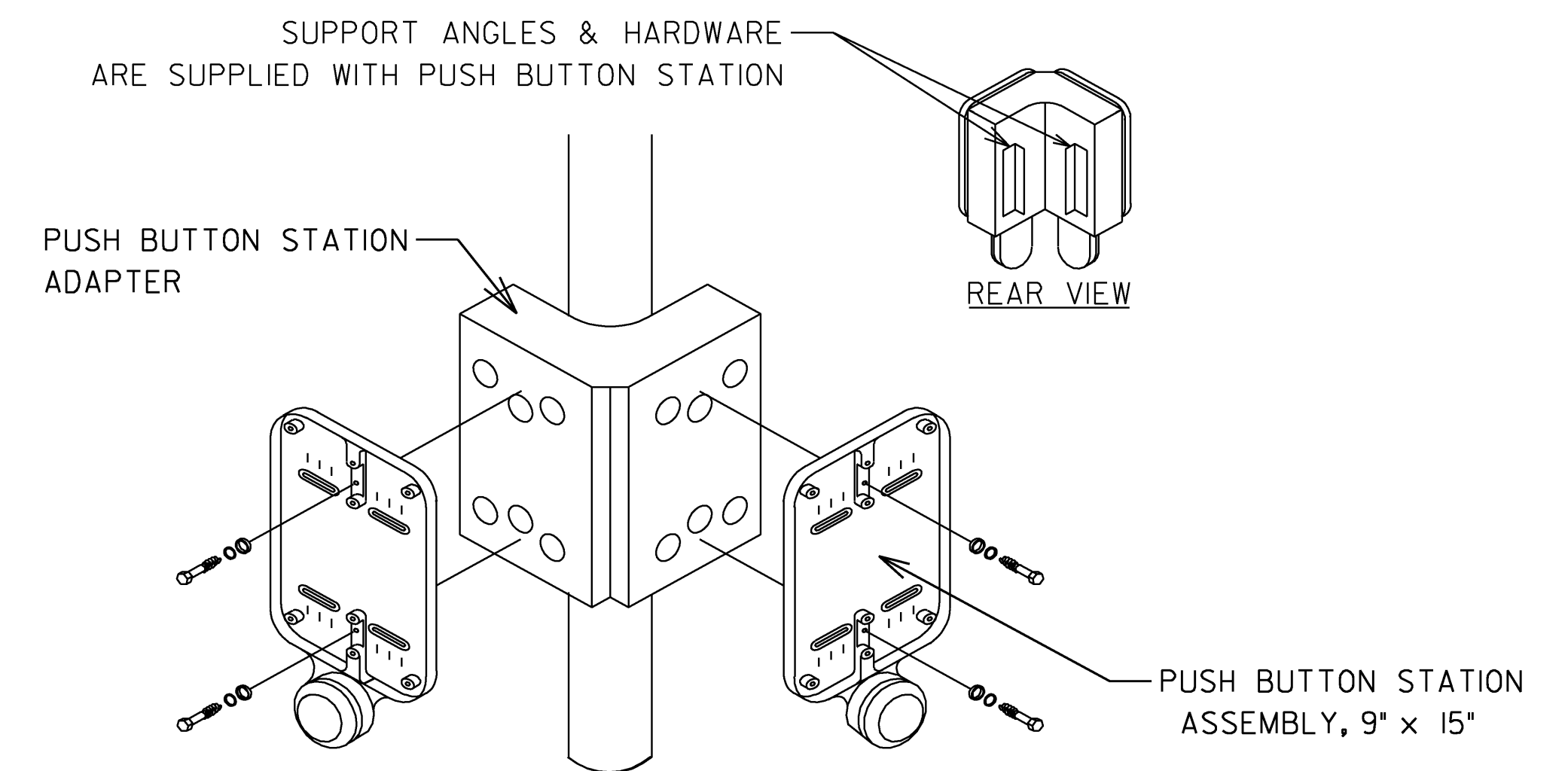


PEDESTRIAN SIGNS

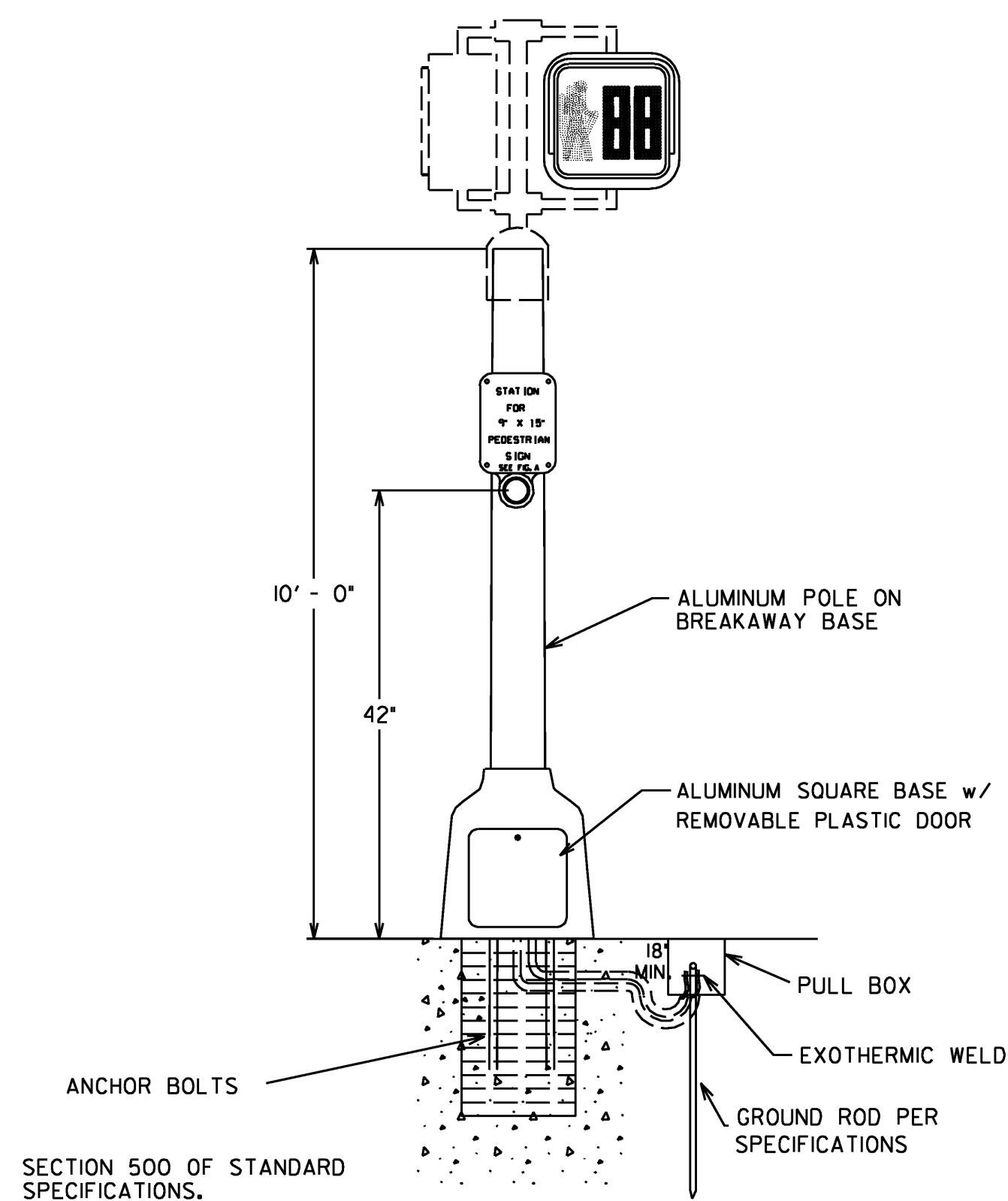
INSTALL PEDESTRIAN SIGNAL HEADS SO THAT VEHICLES MAKING TURNS WILL NOT DAMAGE THE EQUIPMENT



TYPICAL PEDESTRIAN POLE FOUNDATION



DOUBLE PUSH BUTTON STATION ADAPTER FOR 4" DIA. PEDESTRIAN POLE



DETAIL FOR PEDESTRIAN SIGNAL POLES

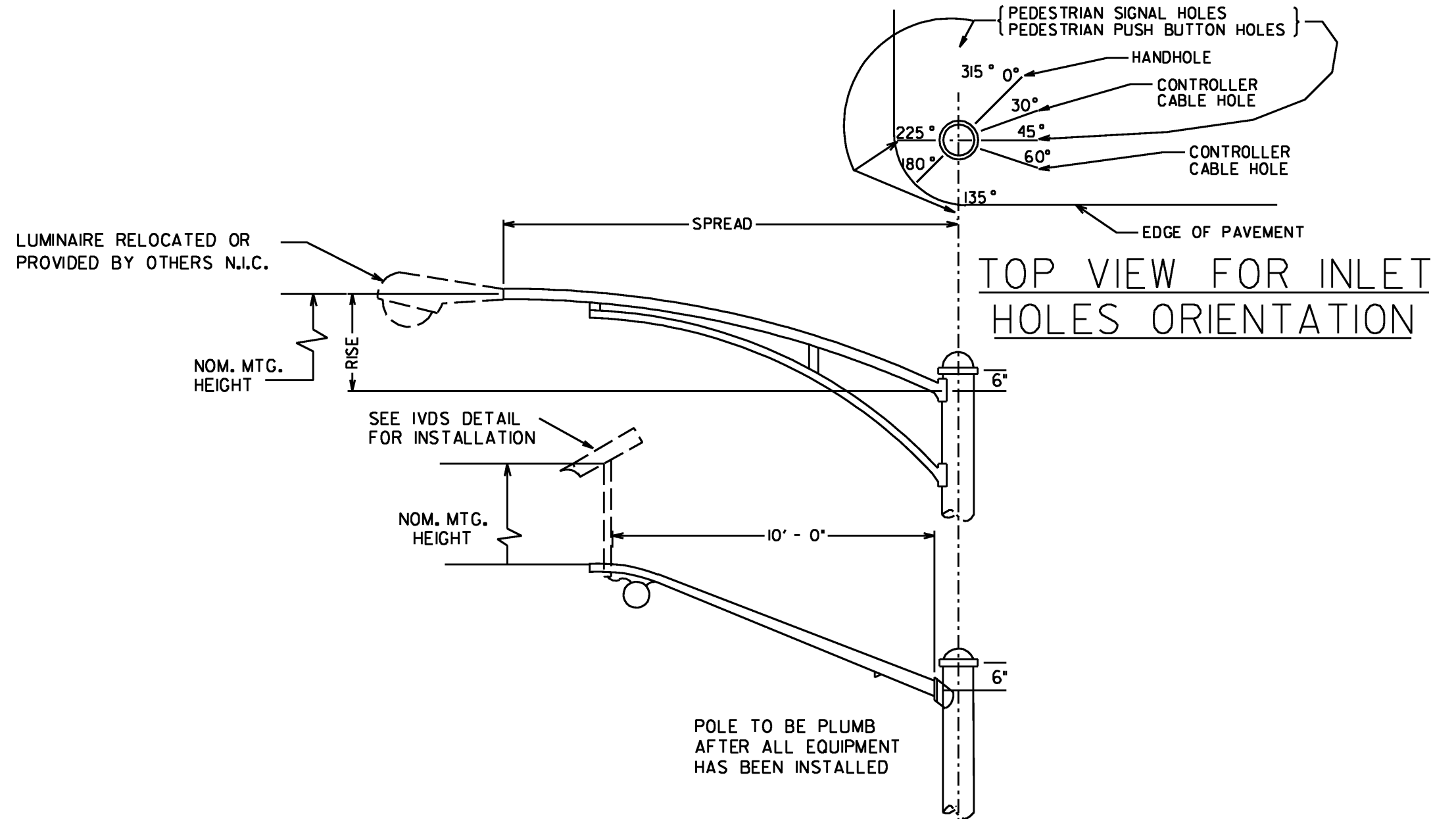
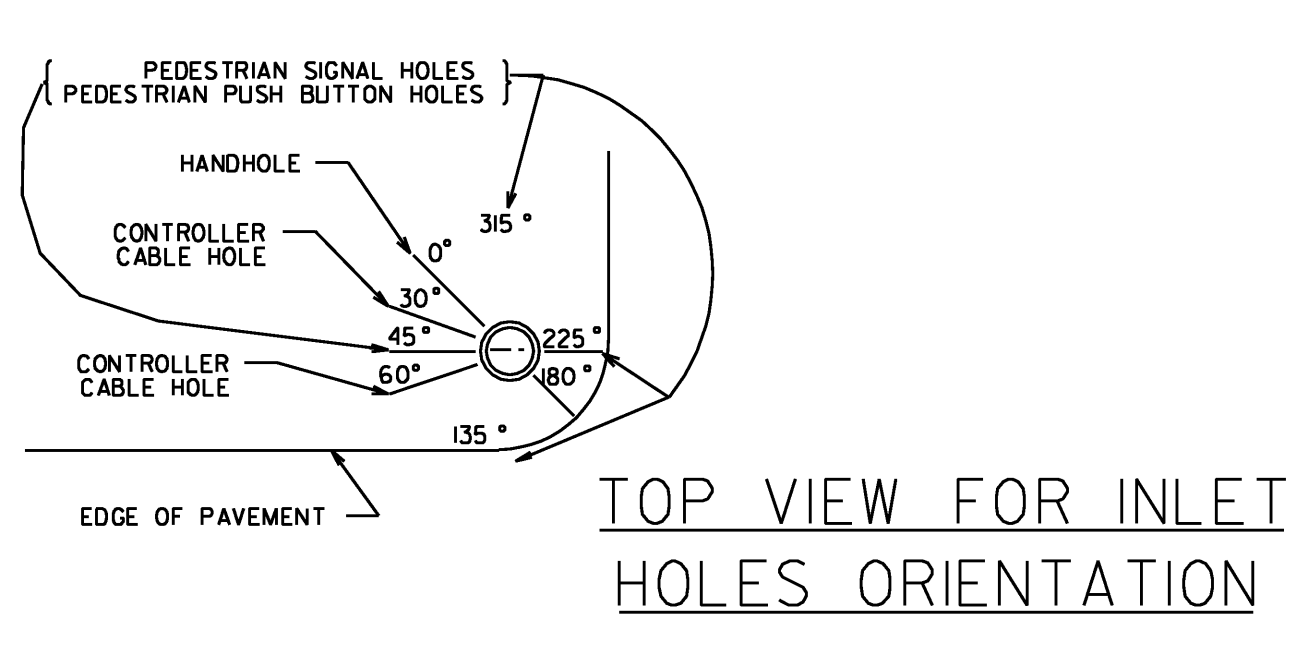
NOTE: DETAILS SHOWN IS FOR TOP POST MOUNTING ASSEMBLY ON 10 FEET PEDESTRIAN POLE. A CLAMHELL MOUNTING ASSEMBLY (NOT SHOWN) MAY BE USED AS APPROVED BY THE DEPARTMENT. THE CLAMHELL MOUNTING HARDWARE ASSEMBLY SHALL MEET THE SAME GDOT STANDARDS AS THE PEDESTRIAN SIGNAL HOUSING IN PAINT AND MATERIAL.

Guidelines For Usage On Metric Projects

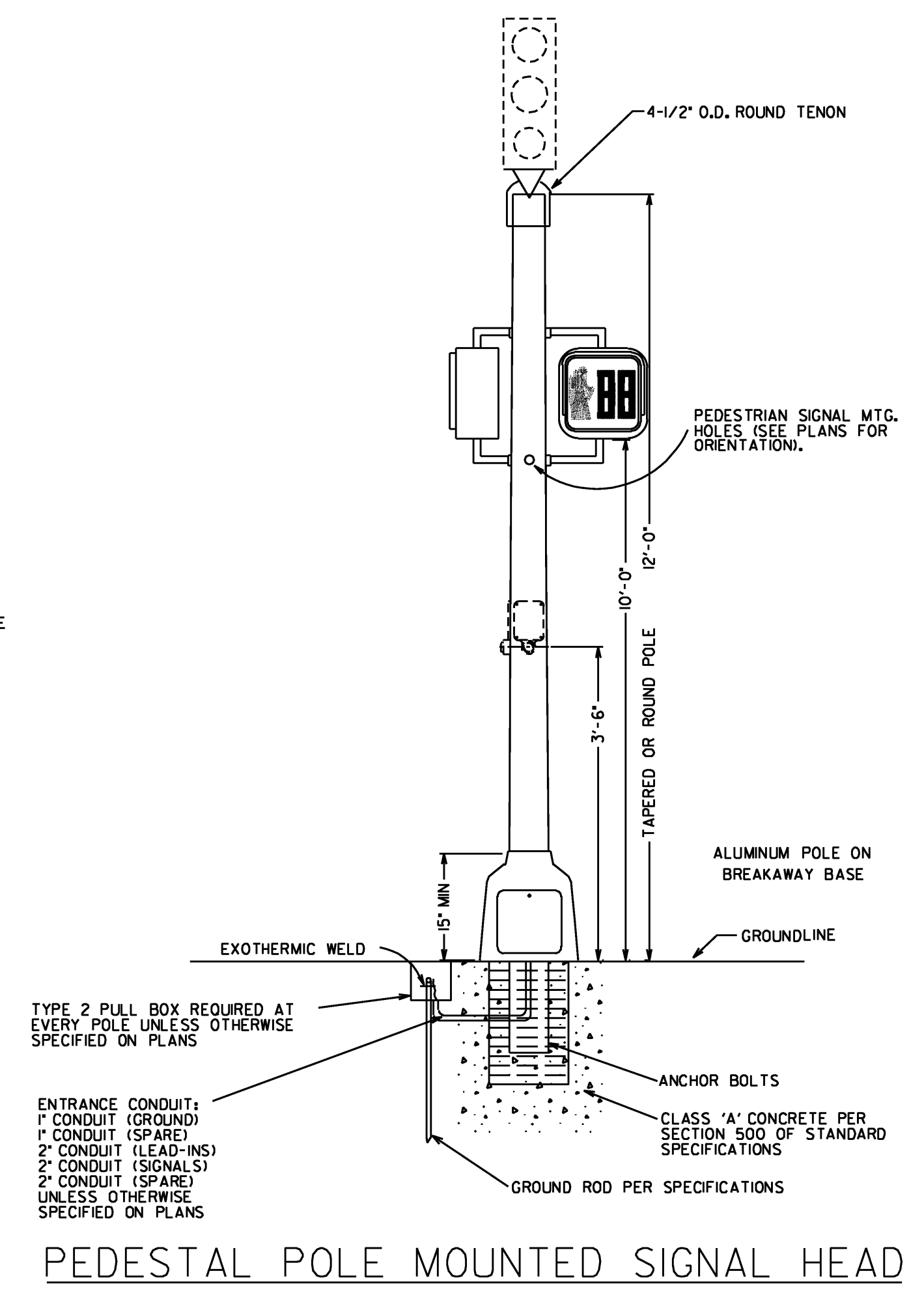
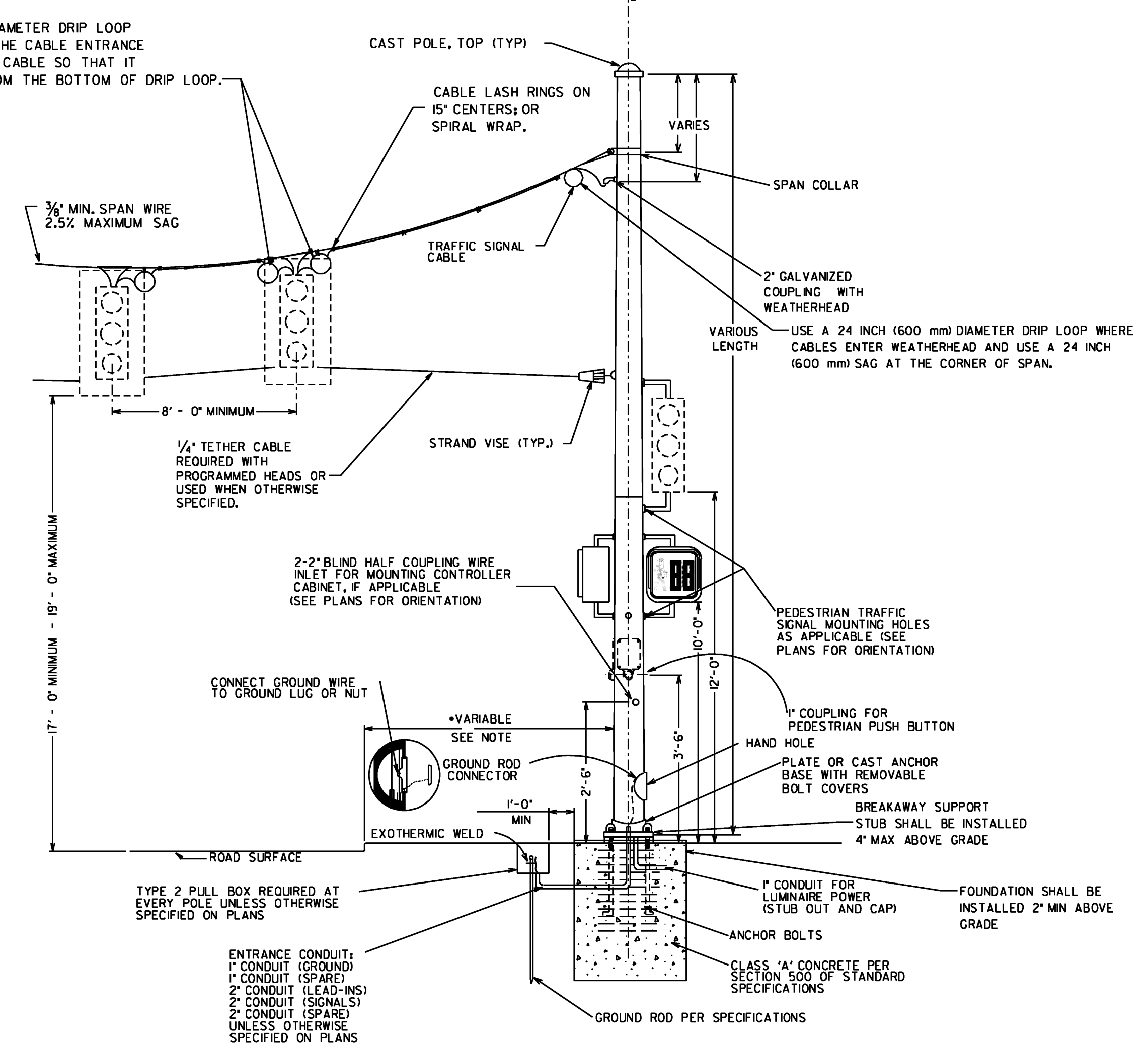
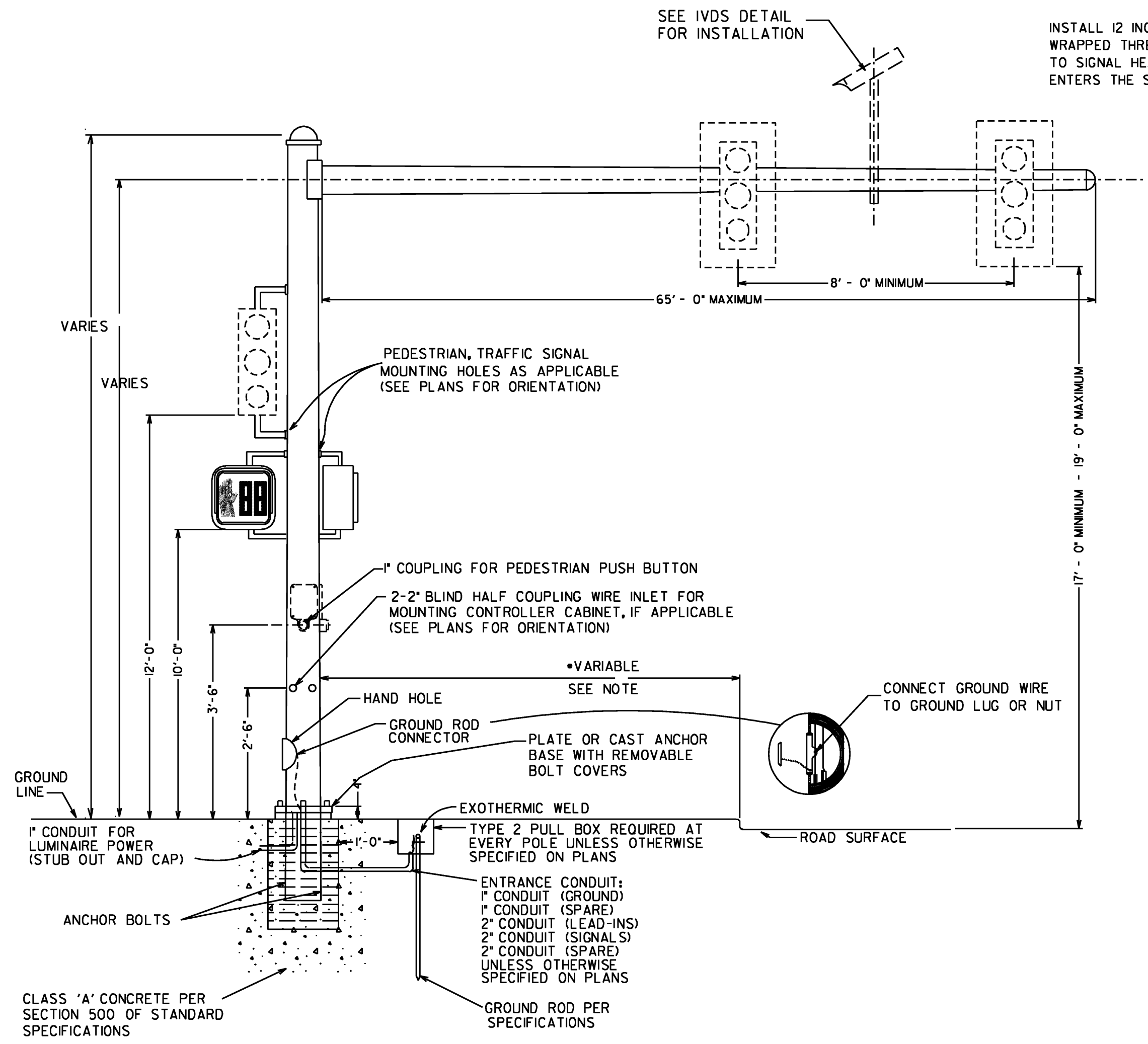
When these details are incorporated into plans and or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following "Rounded-Off" conversion factors: 1" = 25mm, 4" = 100mm, and 12" or 1' = 300mm. All measurement notes that refer to linear feet and square yards shall be interpreted to mean linear meters and square meters.

40-0017

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
REVISION DESCRIPTION		TRAFFIC SIGNAL DETAIL PEDESTRIAN FACILITIES INSTALLATION DETAILS
REV. BY:	APRIL 2010	DETAIL NUMBER TS-03A
NOT TO SCALE - REPORT ERRORS		



NOTES:
 DRAWINGS AND OTHER DATA INDICATING POLE DIMENSIONS AND DESIGN TOGETHER WITH DESIGN OF BASE SHALL BE PREPARED BY THE CONTRACTOR AND APPROVED BY THE DEPT. ENGINEER, PER SPECIFICATIONS AND DETAILS.
 FOUNDATION SIZE AND REINFORCING SHALL BE DETERMINED FROM THE "STRAIN POLE FOUNDATIONS" SHEET WITH THE USE OF THE BENDING MOMENT AT YIELD PROVIDED BY POLE MANUFACTURER.
 ALL HOLES IN MAST ARMS MUST BE FABRICATED BY THE MANUFACTURER. SEE SECTION 925 OF STANDARD SPECIFICATIONS REGARDING RIGID MOUNTING HARDWARE FOR SIGNAL HEADS.
 WHEN POLES ARE LOCATED ON ALL CORNERS, LUMINAIRES ARE TO BE INSTALLED PERPENDICULAR TO THE FAR SIDE APPROACHING TRAFFIC.
 WHEN LUMINAIRES ARE ONLY BEING INSTALLED ON TWO CORNERS, THEY SHOULD BE INSTALLED PERPENDICULAR TO THE FAR SIDE APPROACHING TRAFFIC ON THE MAJOR APPROACH.

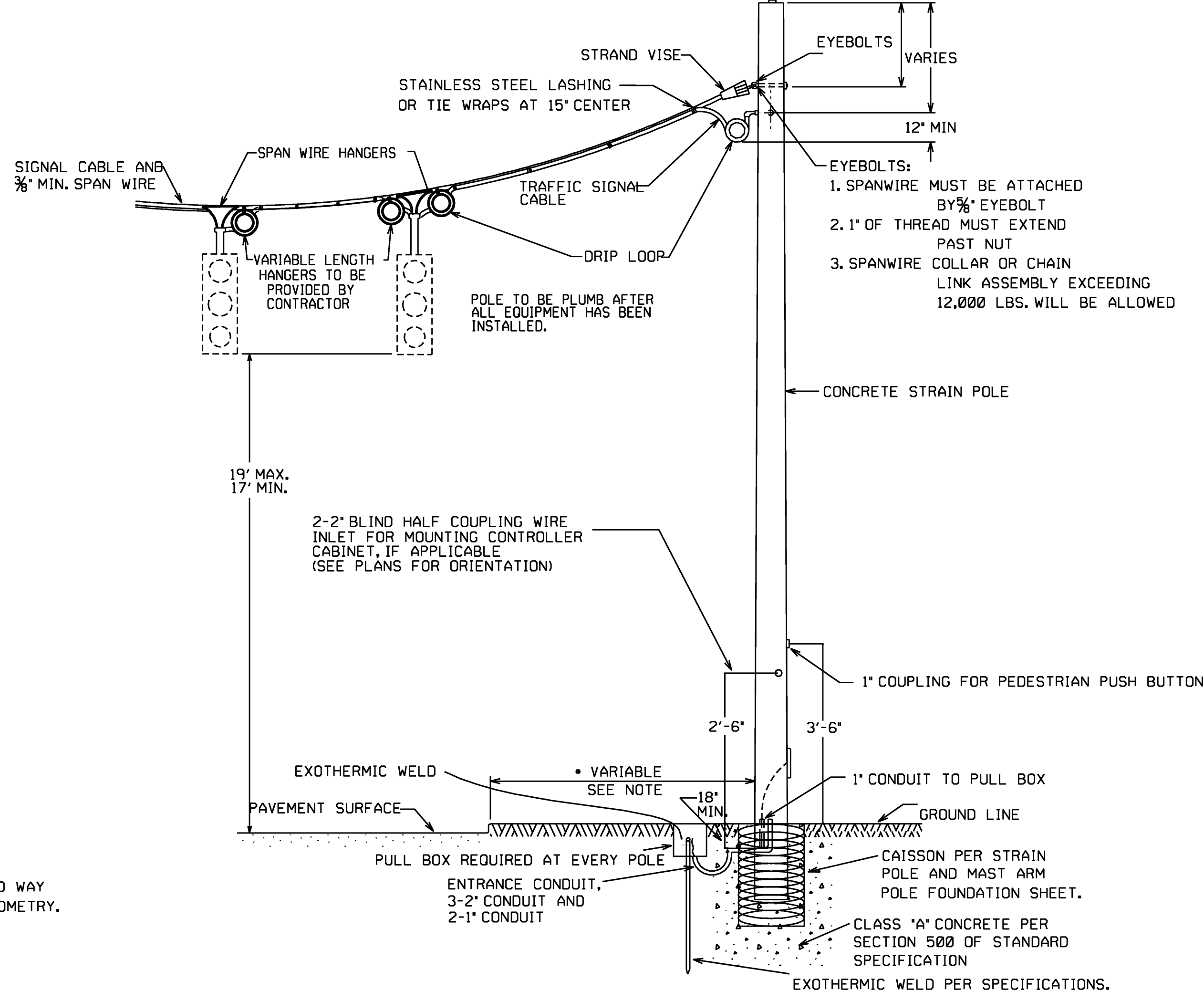
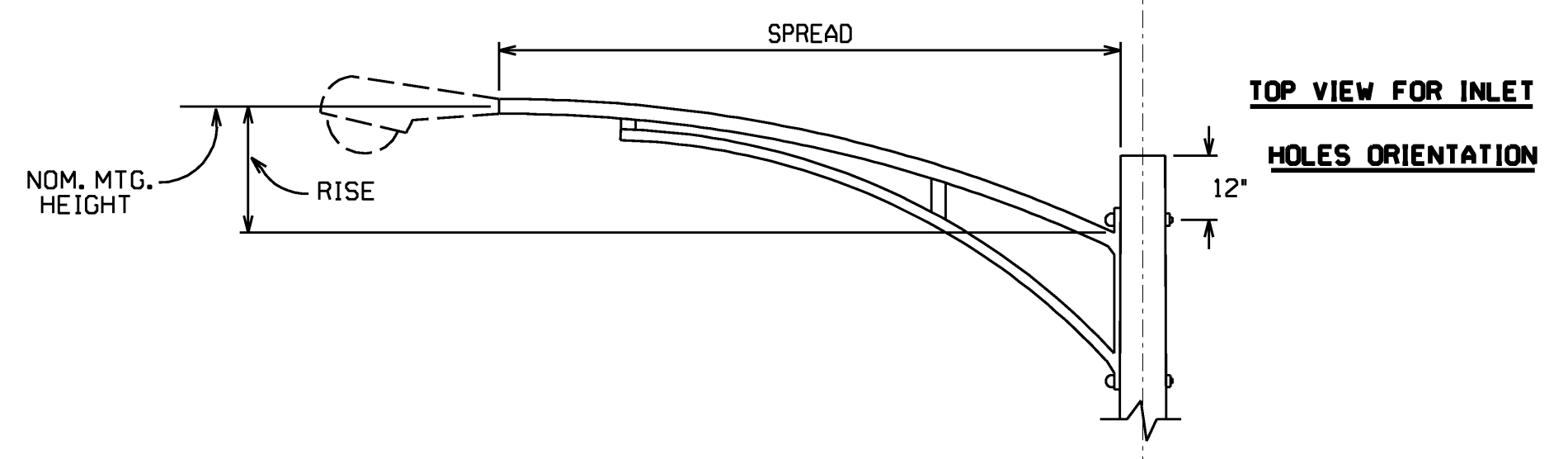
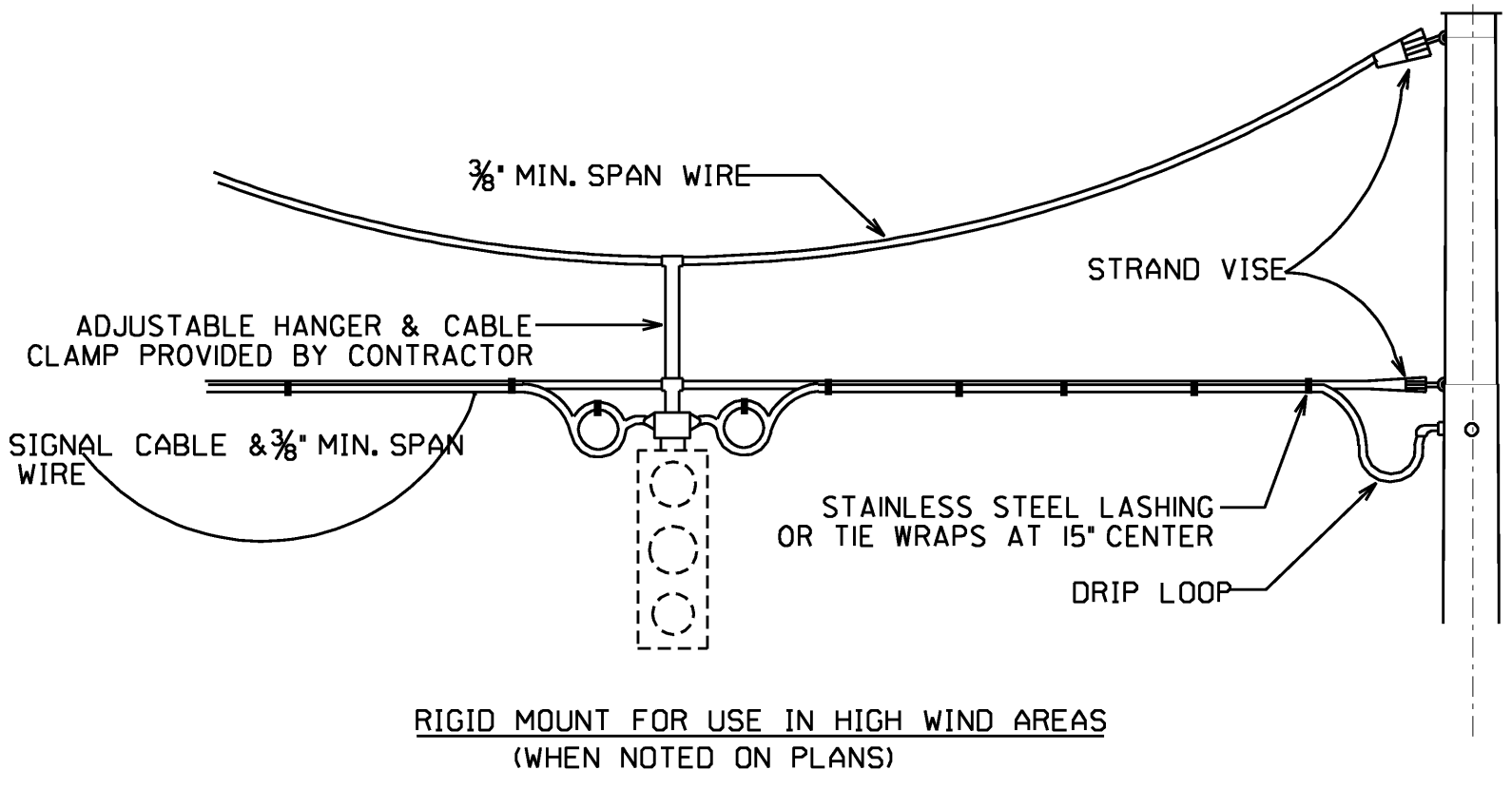


***NOTE:**
 CLEAR-ZONE WIDTH REQUIREMENTS ARE BASED ON AVERAGE DAILY TRAFFIC AND VEHICLE SPEEDS. SEE THE AASHTO "ROADSIDE DESIGN GUIDE" FOR GUIDANCE ON DESIGN OF CLEAR-ZONE AREAS.
 FOUNDATIONS SHALL BE INSTALLED ABOVE GRADE, BUT NOT EXCEED 4" MAXIMUM STUB HEIGHT TO LESSEN SNAGGING OF THE UNDERCARRIAGE OF A VEHICLE

Guidelines For Usage On Metric Projects
 When these details are incorporated into plans and/or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following: * Rounded Off Conversion Factors: 1" = 25mm, 4" = 100mm, and 12" = 300mm. All measurement notes that refer to linear feet and square yards shall be interpreted to mean linear meters and square meters.

40-0018

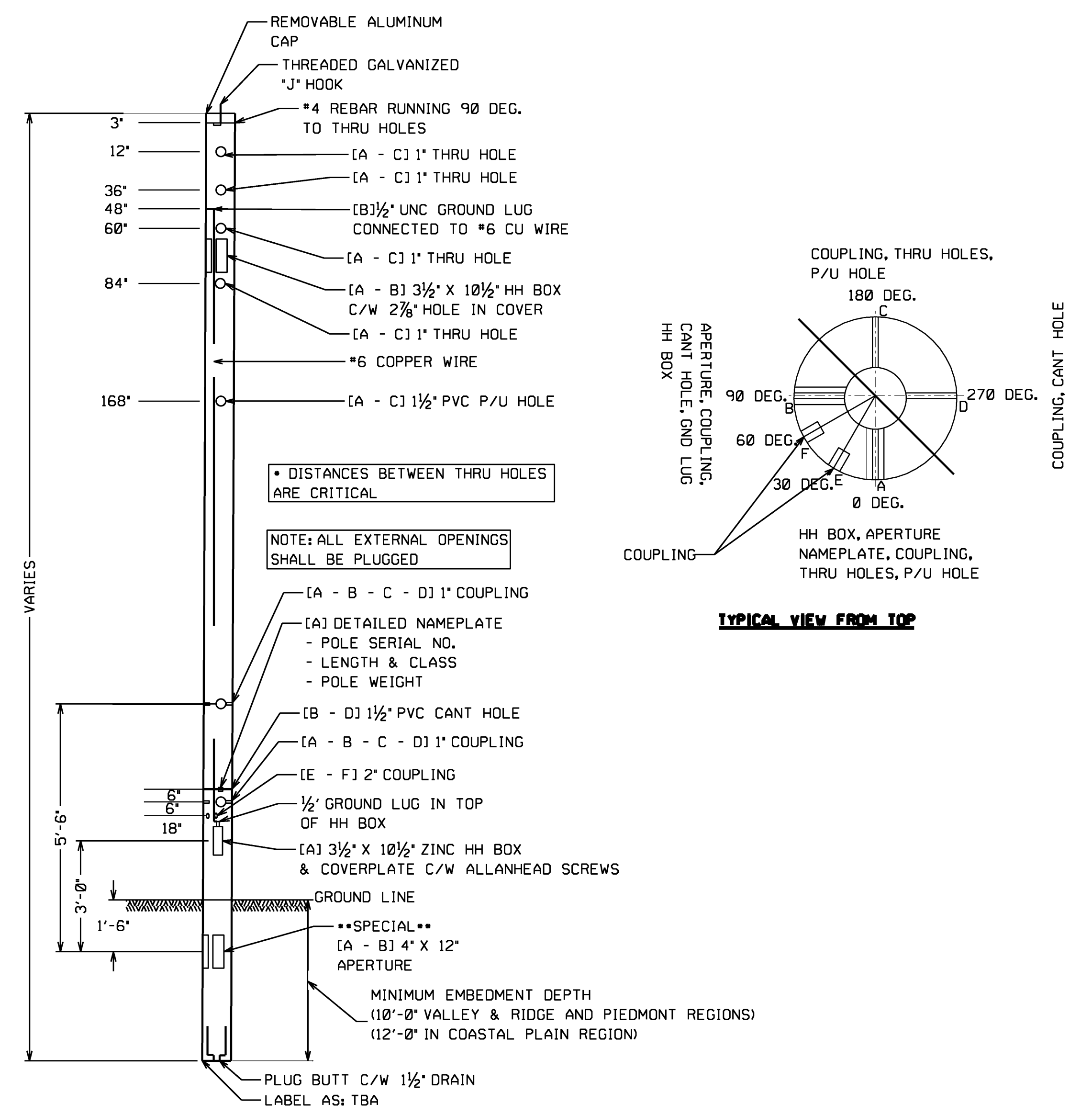
		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
		TRAFFIC SIGNAL DETAIL DETAILS OF METAL TRAFFIC SIGNAL SUPPORT STRUCTURES	
REV. BY:	DATE	APRIL 2010	DETAIL NUMBER TS-04
		NOT TO SCALE - REPORT ERRORS	



NOTE:
 CONCRETE STRAIN POLE FOOTING WILL INCLUDE THE SAME FOOTING DESIGN AS A 'SIMILAR' DESIGN STEEL POLE. THE STEEL REINFORCEMENT FROM STRAIN POLE AND MAST ARM POLE FOUNDATION DESIGN SHEET WILL BE INSTALLED AROUND THE CONCRETE STRAIN POLE. BACK FILL THE POLE AS DESCRIBED IN THE 'CAISSON DETAIL' UP TO THE LEVEL OF THE CONDUIT ENTRANCE/ HAND HOLE DEPTH. ONCE THE CONDUIT AND WIRE CONNECTING ARE MADE INSIDE THE POLE, FINISH BACK FILLING ACCORDING TO 'CAISSON DETAIL.'

ALL POLES SHALL HAVE ATTACHMENT POINTS 2'(MIN.) ABOVE ACTUAL ATTACHMENT POINT FOR FUTURE USE.

NO DRILLING OF POLE WITHOUT APPROVAL FROM GOOT BRIDGE OFFICE.



•NOTE:
 1. THE CLEAR ZONE IS THE TOTAL ROADSIDE BORDER AREA, STARTING AT THE EDGE OF THE TRAVELED WAY
 2. THE WIDTH OF THE CLEAR ZONE IS DEPENDENT UPON TRAFFIC VOLUMES, SPEEDS AND ROADSIDE GEOMETRY.
 3. ADDITIONAL INFORMATION CAN BE FOUND IN THE 'AASHTO ROADSIDE DESIGN GUIDE'.

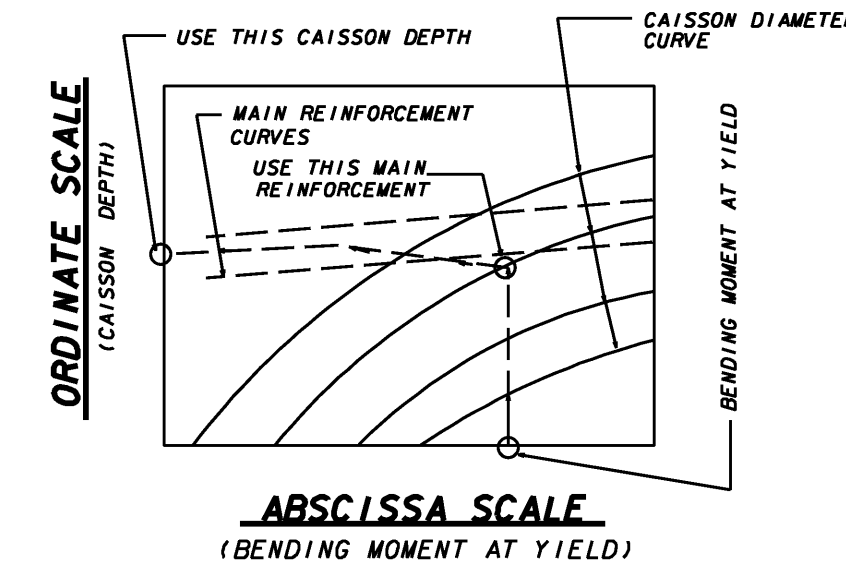
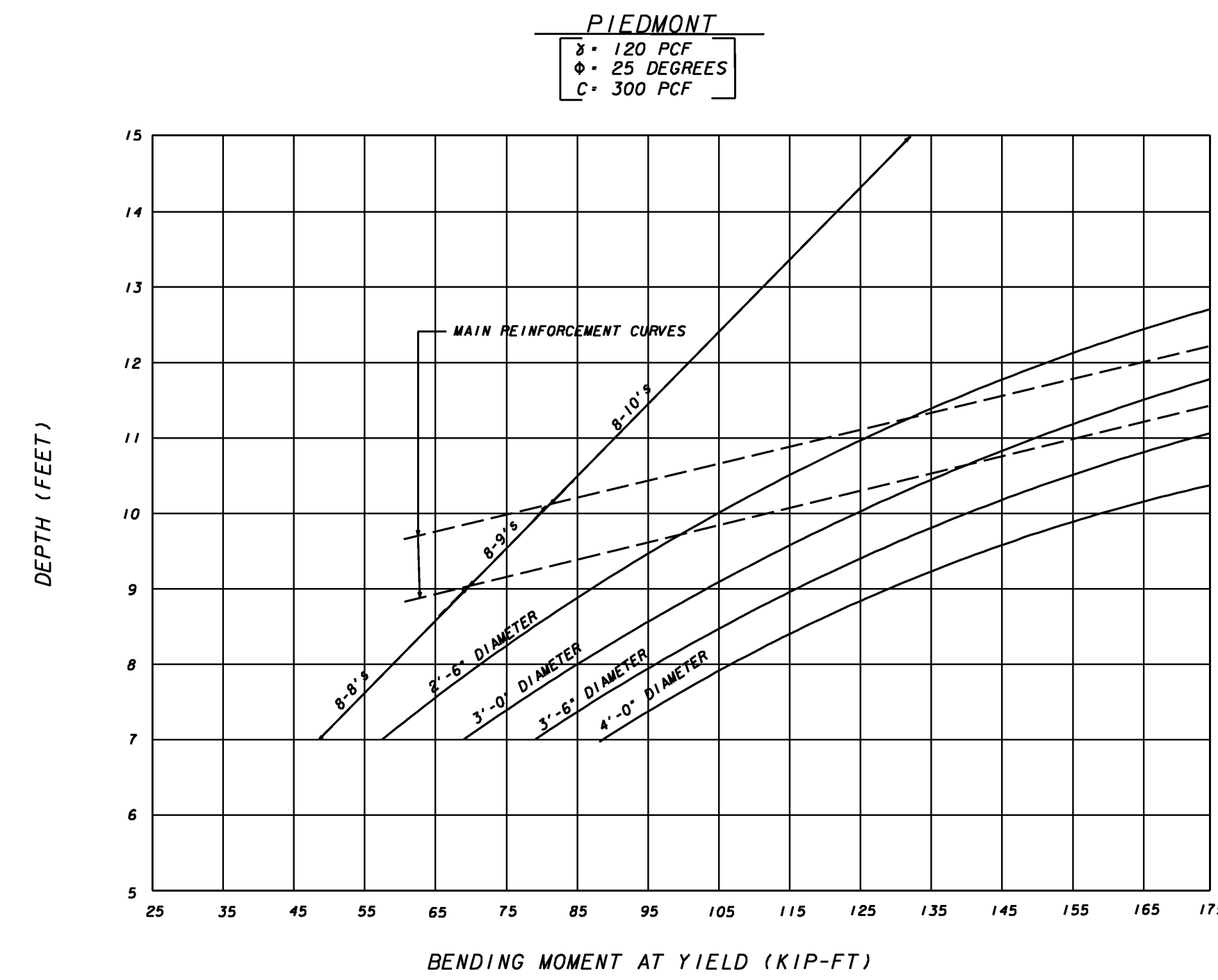
Guidelines For Usage On Metric Projects
 When these details are incorporated into plans and or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following 'Rounded-Off' conversion factors: 1\"/>

CONCRETE STRAIN POLE

TYPICAL POLE SECTION FOR CONCRETE STRAIN POLE

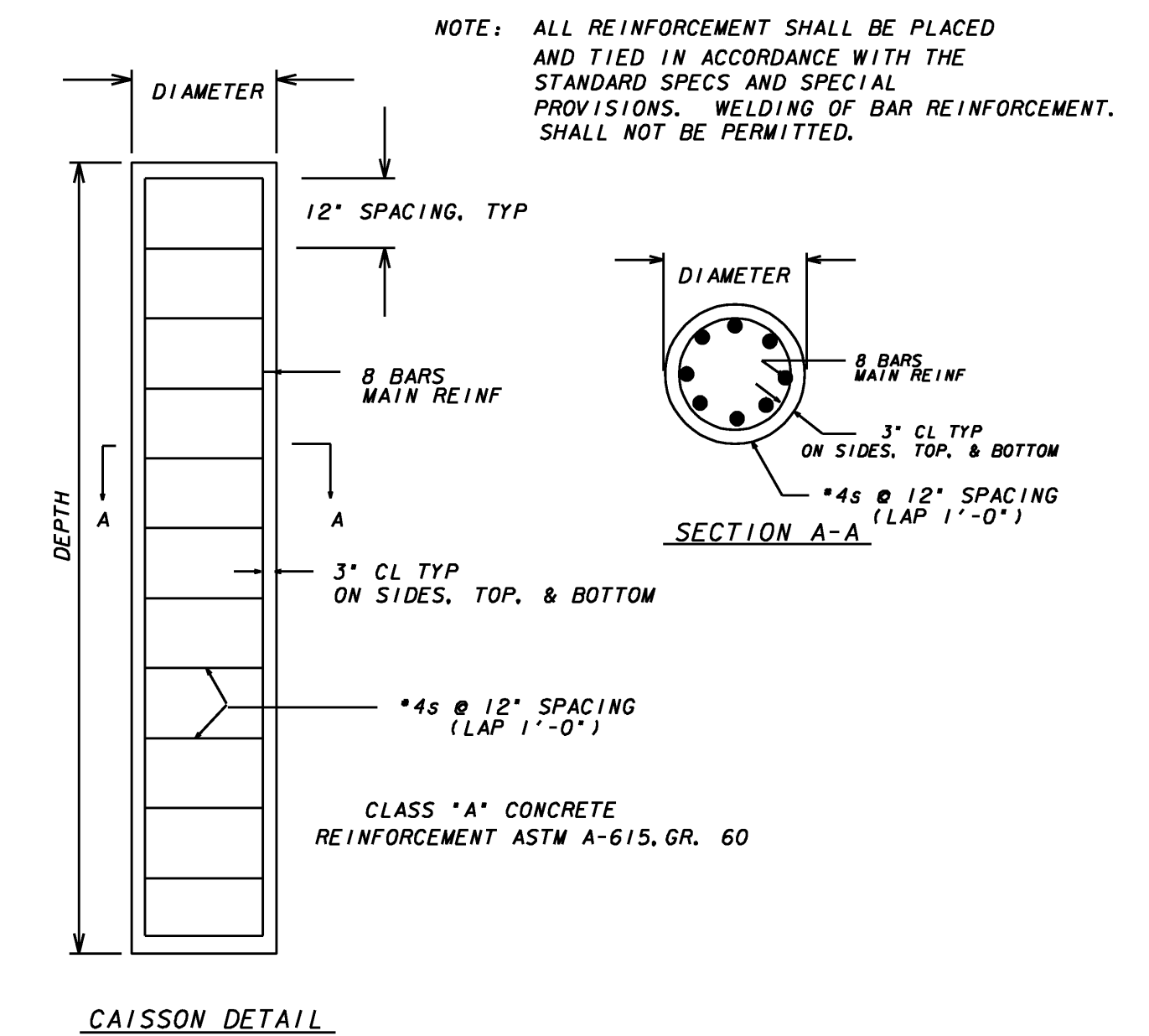
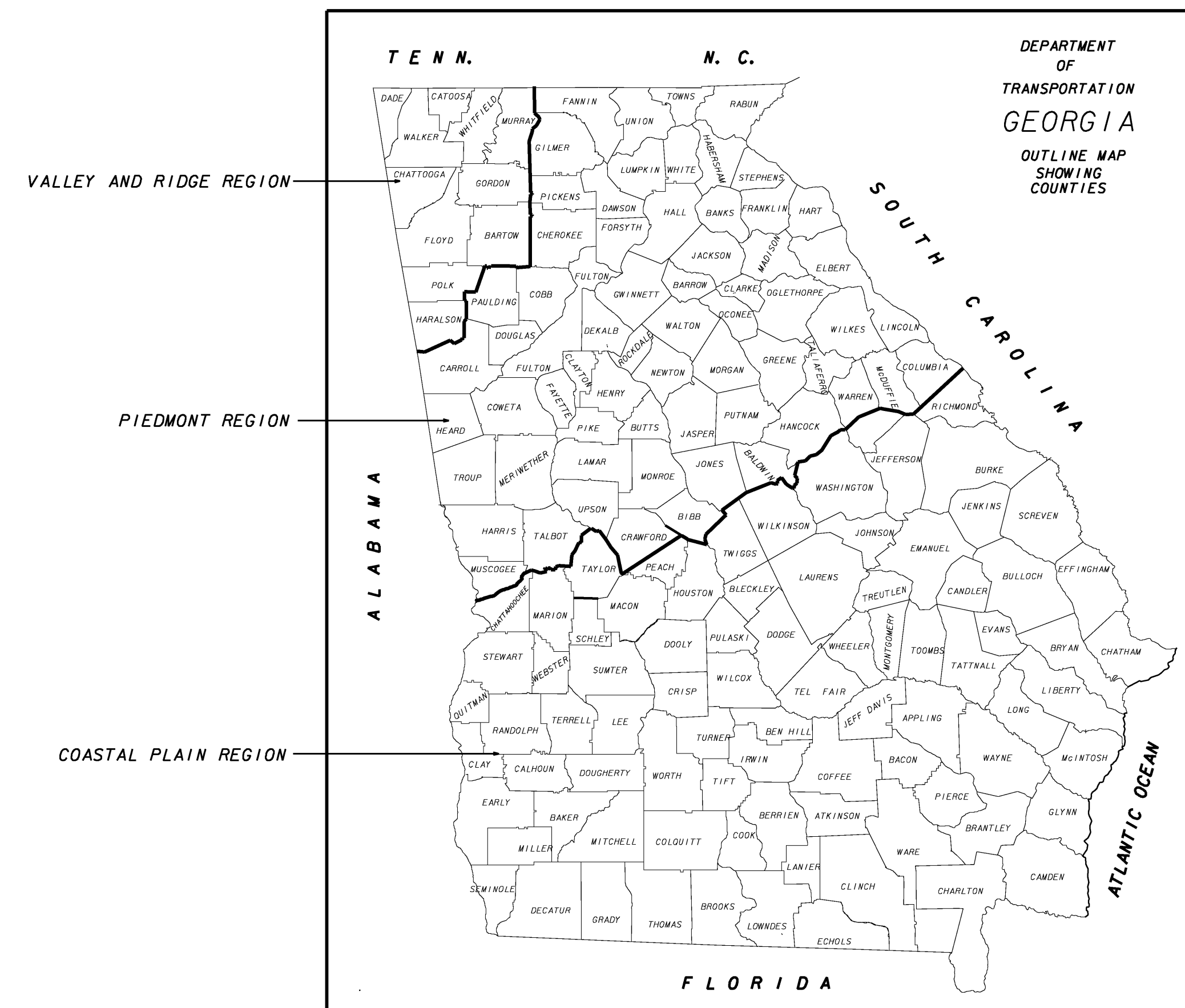
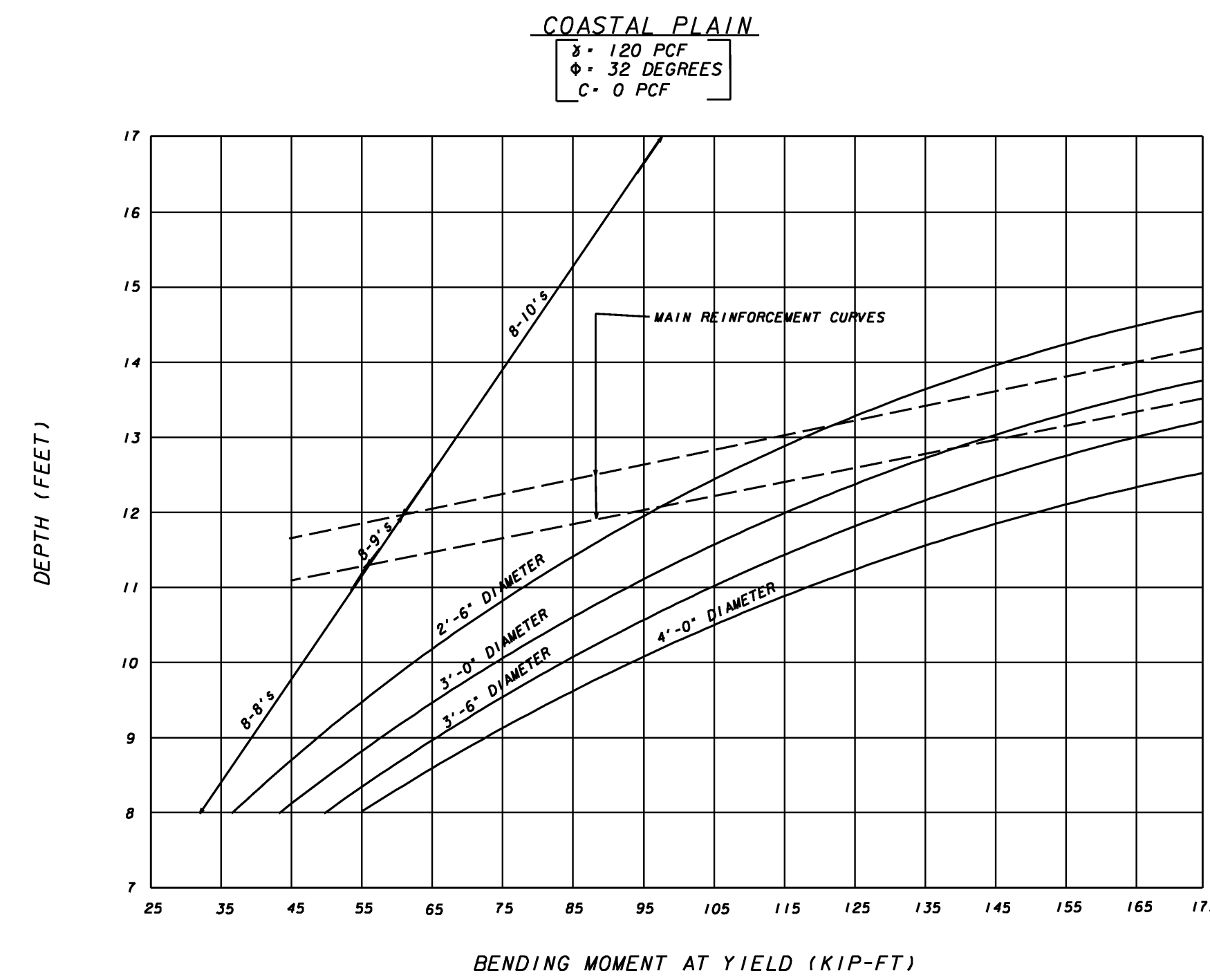
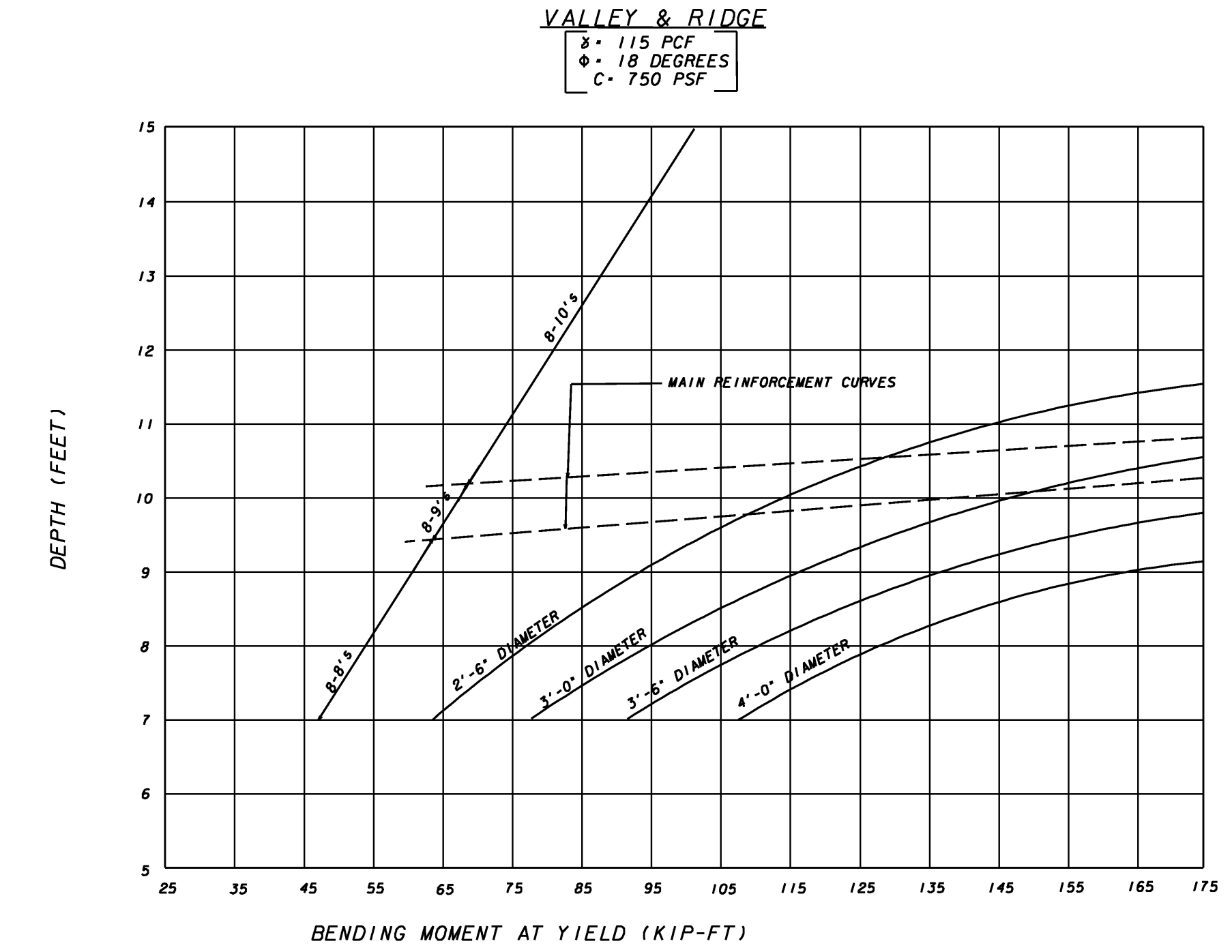
40-0019

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION DESCRIPTION		TRAFFIC SIGNAL DETAIL DETAILS OF CONCRETE POLES	
REV. BY:		DETAIL NUMBER	
		APRIL 2010	
		TS-05	
NOT TO SCALE - REPORT ERRORS			



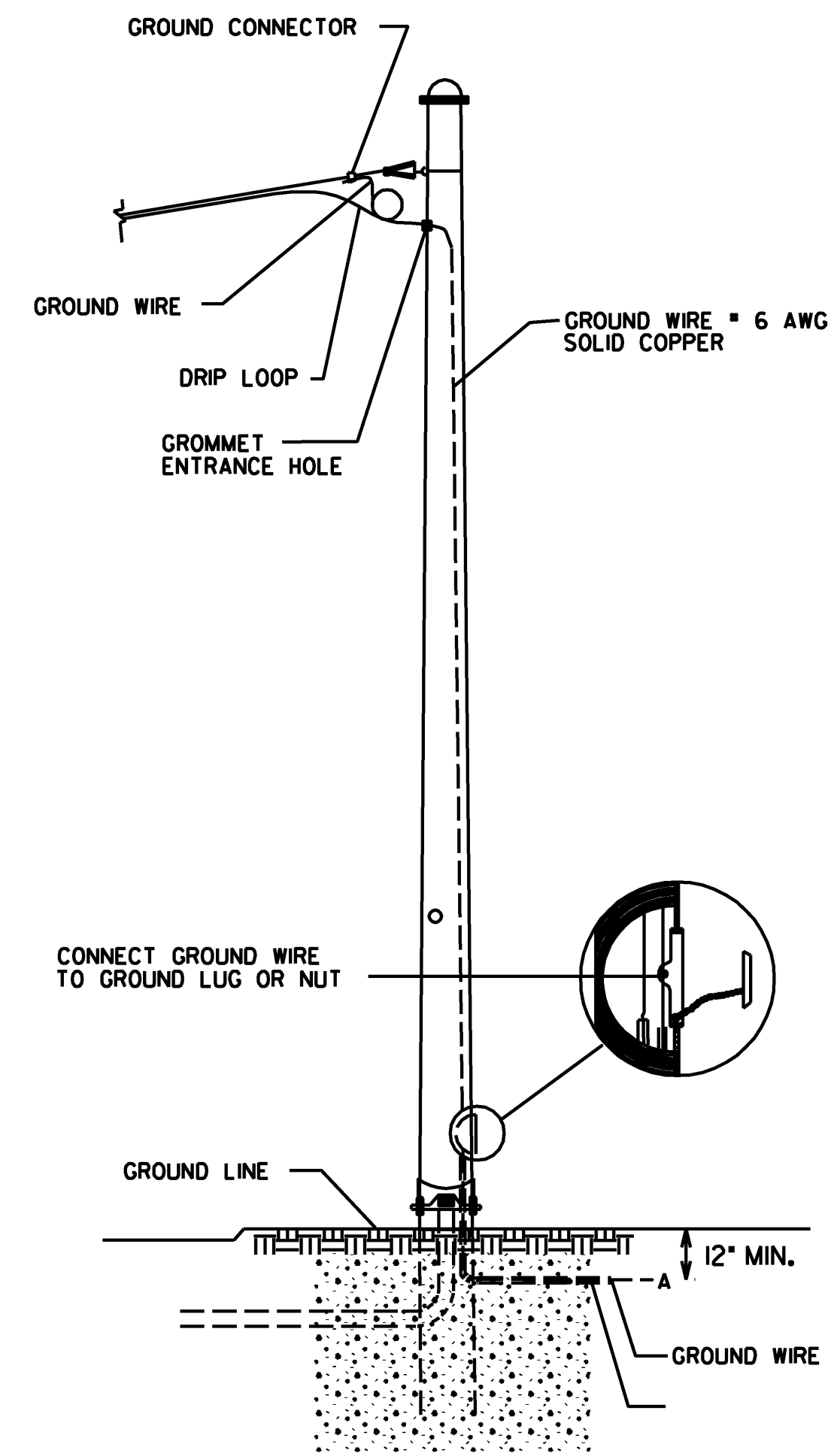
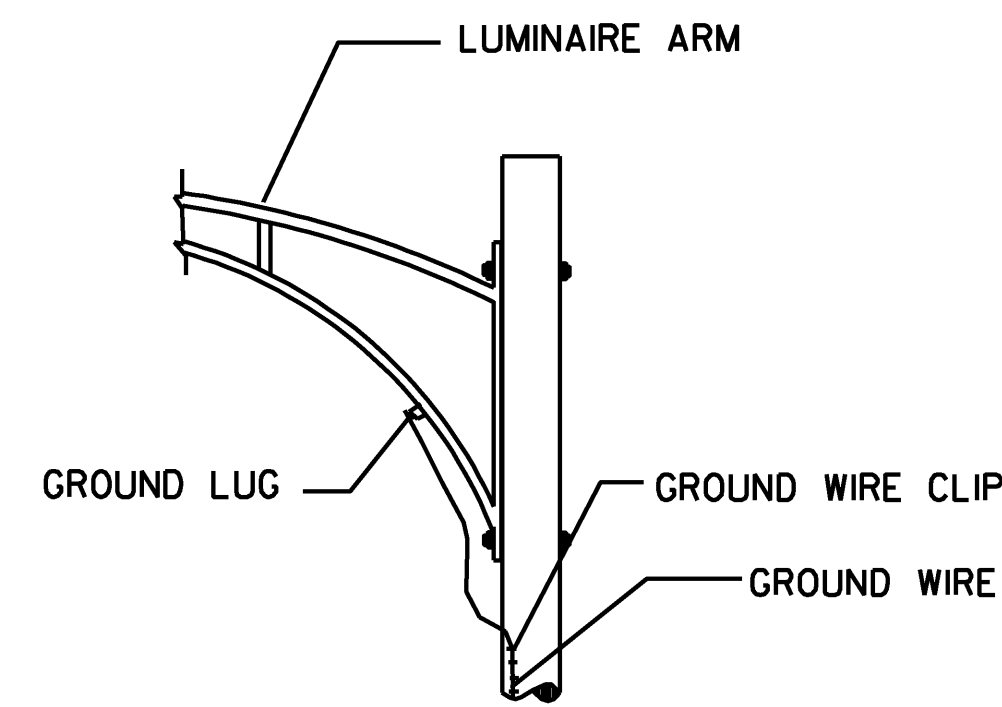
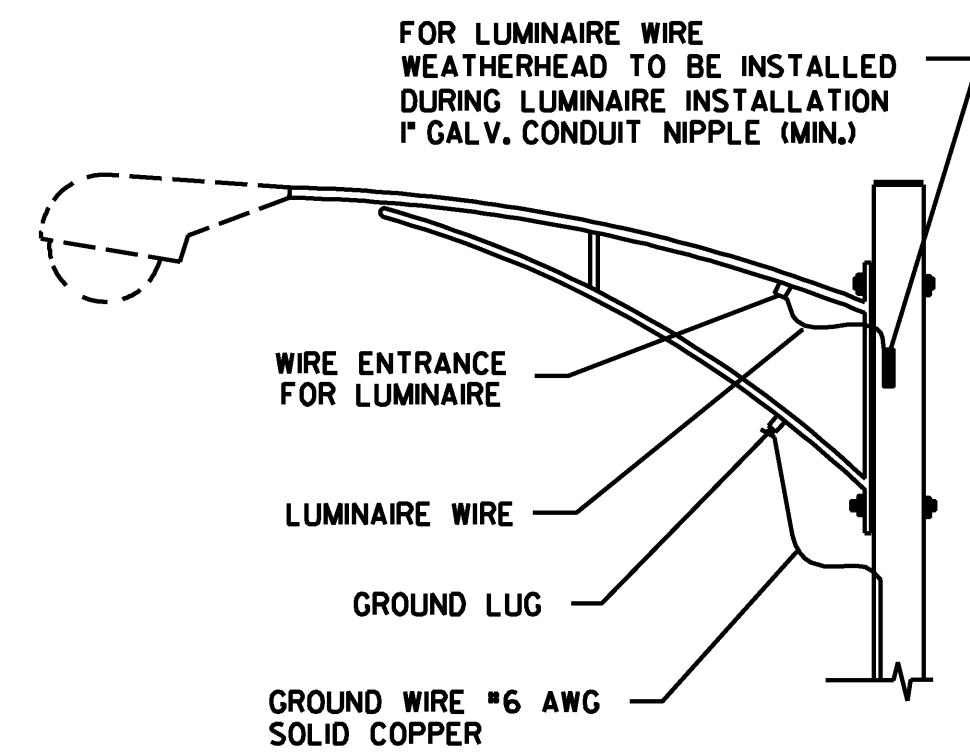
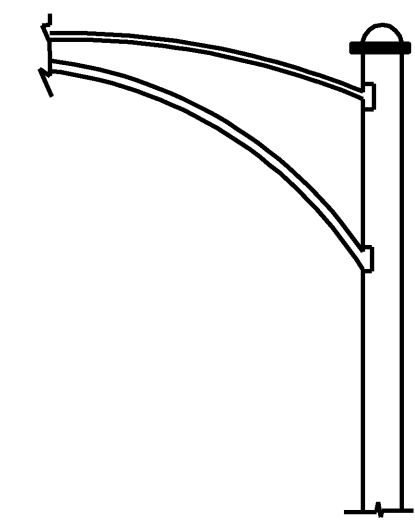
PROCEDURE TO FIND FOOTING SIZE

1. DETERMINE "BENDING MOMENT AT YIELD" FROM APPROVED SHOP DRAWINGS
2. SELECT DIAMETER OF CAISSON.
3. READ "BENDING MOMENT AT YIELD" ON ABCISSA SCALE. PROJECT A VERTICAL LINE UPWARD UNTIL THE DESIRED "CAISSON DIAMETER CURVE" IS INTERSECTED, TURN 90 DEGREES AND PROJECT A HORIZONTAL LINE UNTIL THE ORDINATE SCALE IS INTERSECTED.
4. READ THE REQUIRED "CAISSON DEPTH" FROM THE INTERSECTION POINT ON THE ORDINATE SCALE DEPTH SHALL BE INTERPOLATED TO THE NEAREST 3 INCH INCREMENT.
5. READ THE REQUIRED "MAIN REINFORCEMENT SIZE" FROM THE INTERSECTION POINT ON THE CAISSON DIAMETER CURVE.

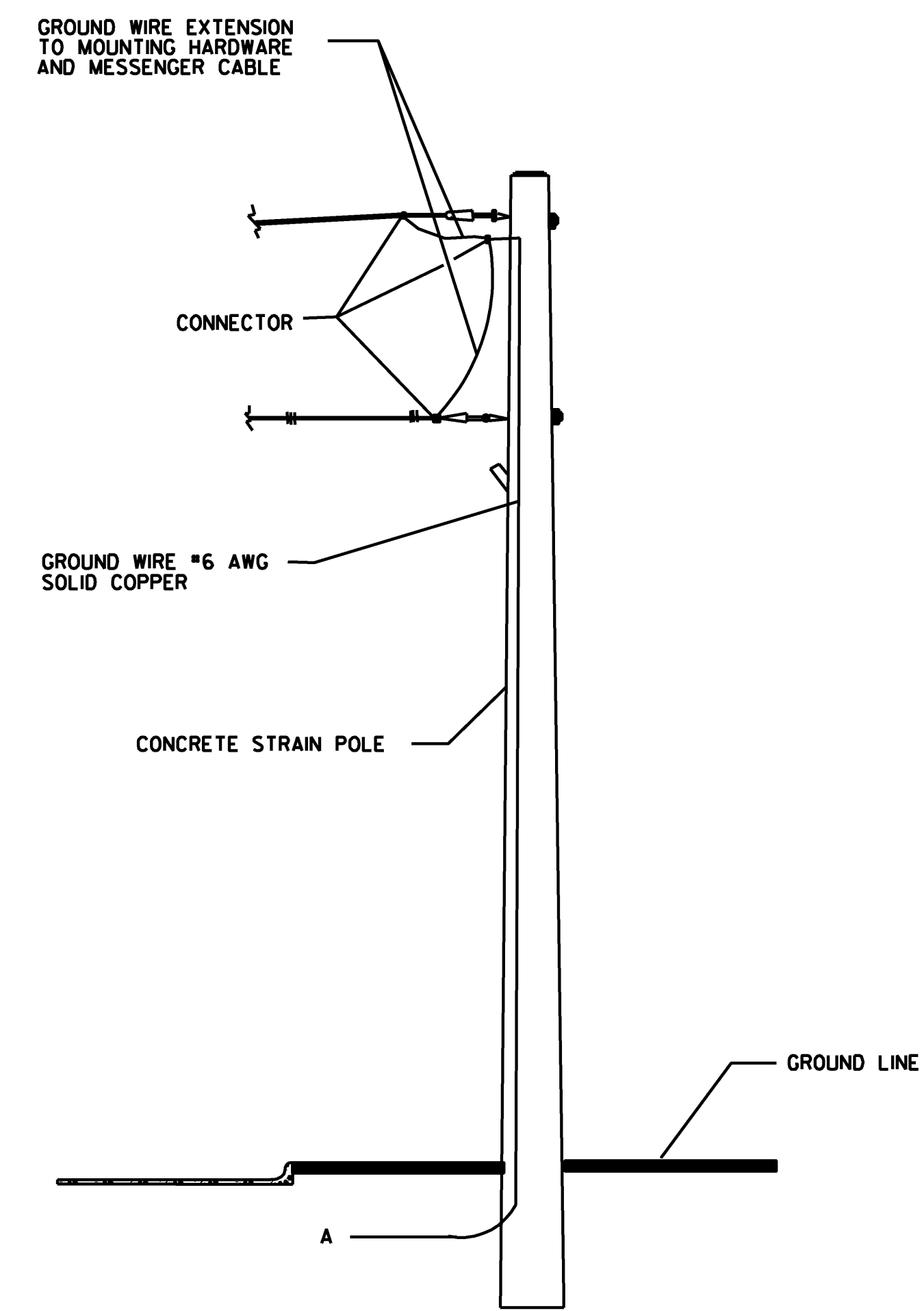


40-0020

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
REVISION DESCRIPTION		TRAFFIC SIGNAL DETAIL DETAILS OF STRAIN POLE AND MAST ARM FOUNDATIONS
REV. BY:	APRIL 2010	DETAIL NUMBER TS-06
NOT TO SCALE - REPORT ERRORS		

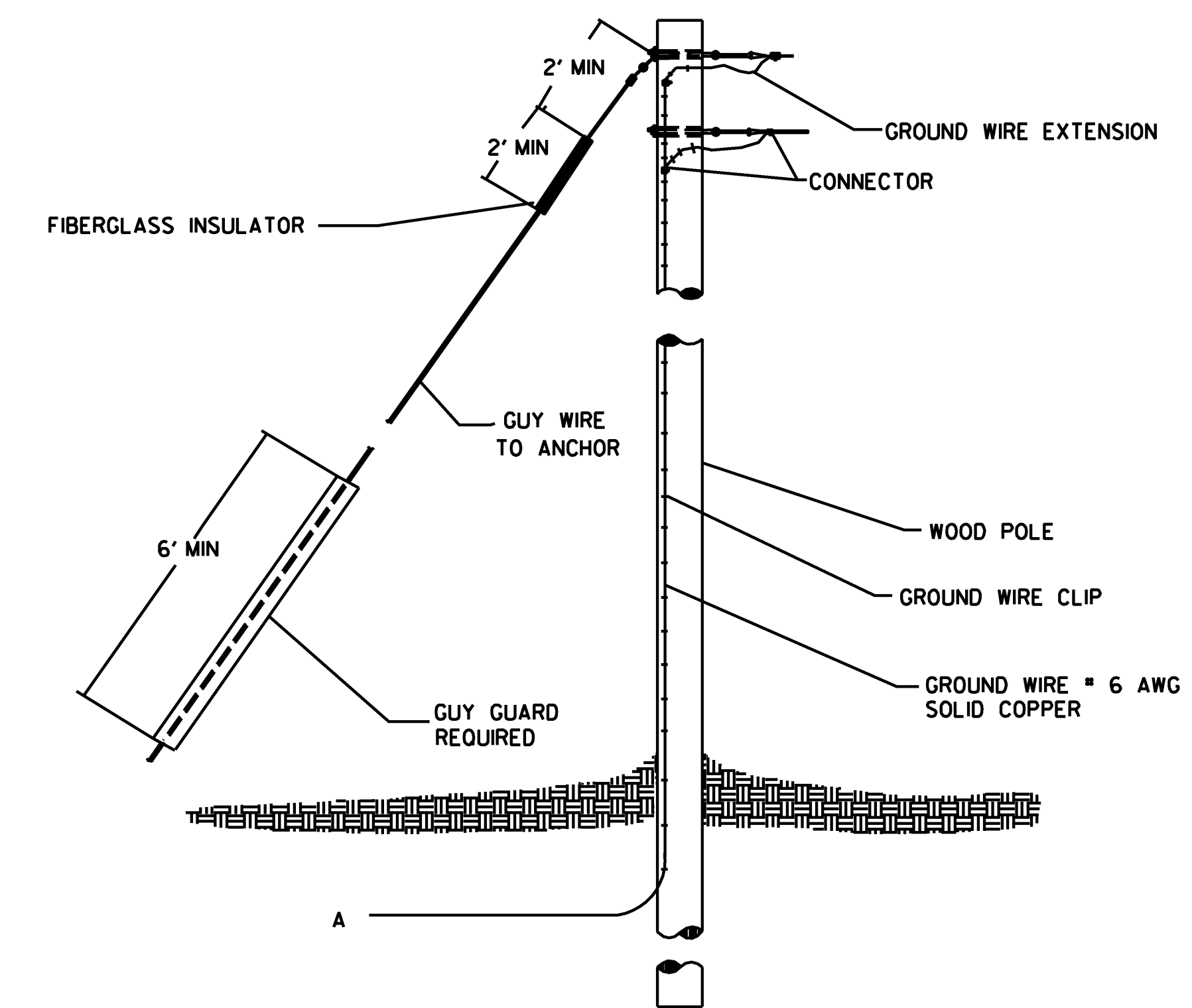


STEEL STRAIN POLE

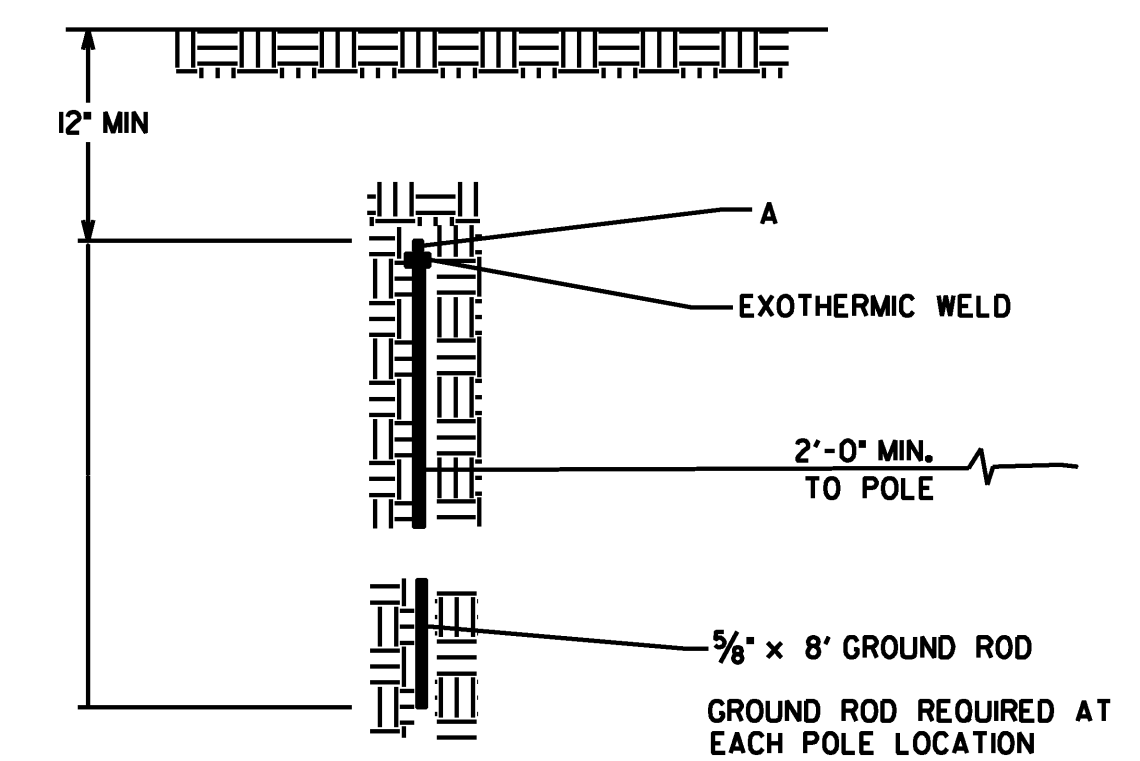


CONCRETE STRAIN POLE

OVERHEAD SIGN GROUNDING SYSTEM SHALL CONFORM TO SECTION 647



TIMBER POLE



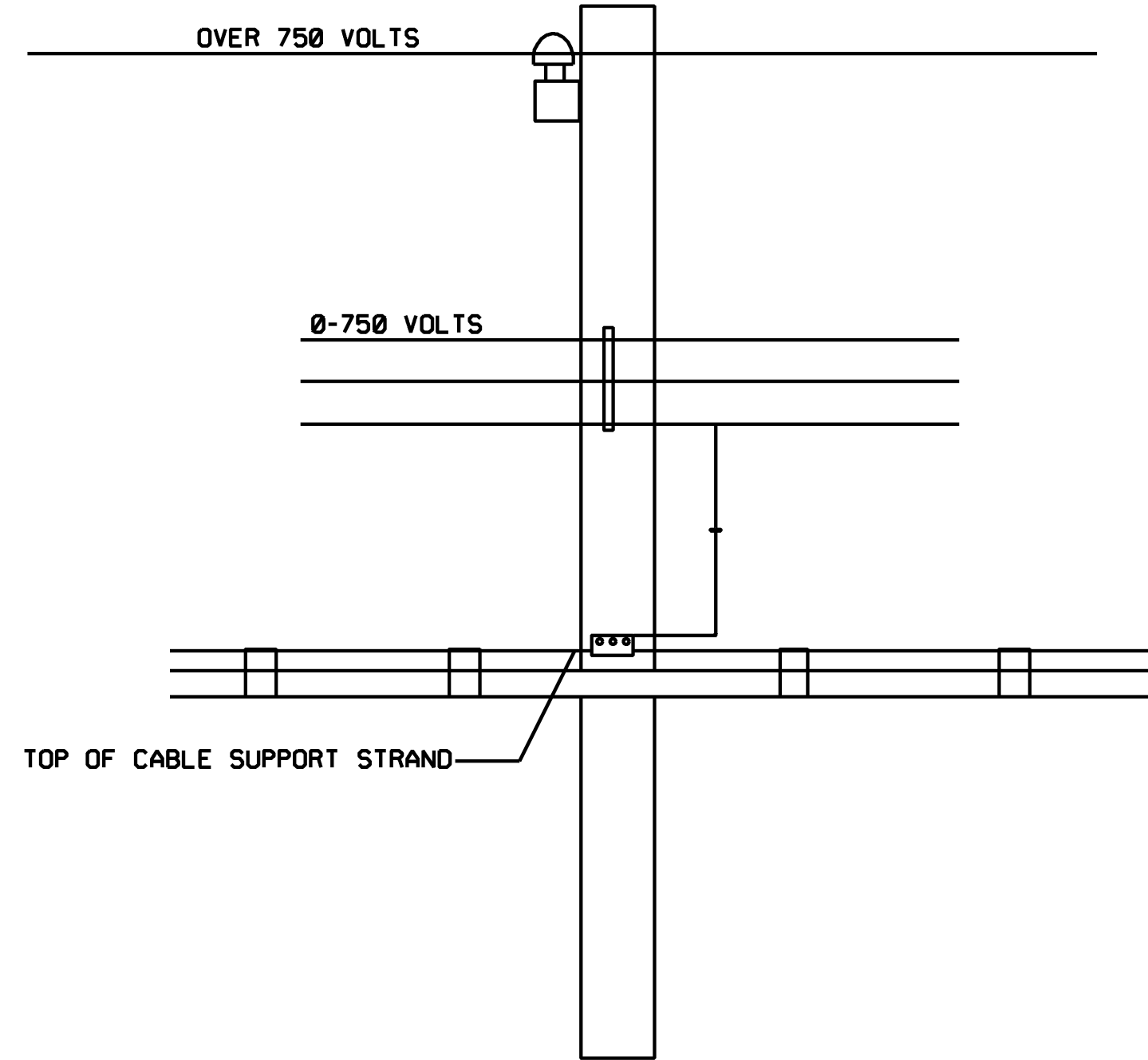
GROUNDING DETAIL

40-0021

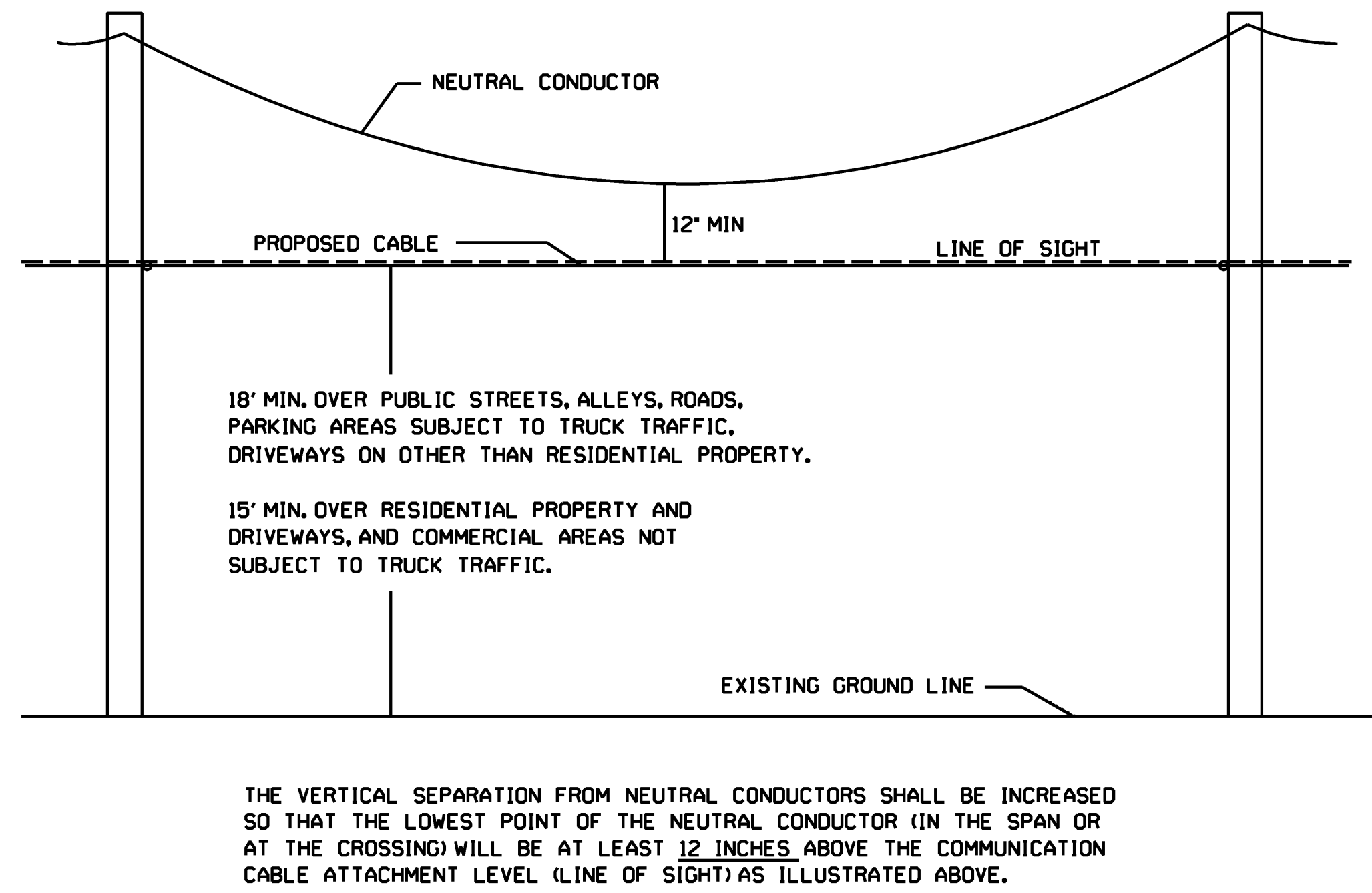
	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
	REVISION DESCRIPTION	TRAFFIC SIGNAL DETAIL GROUNDING DETAILS FOR TRAFFIC SIGNAL SUPPORT STRUCTURES I
	REV. BY:	APRIL 2010
		DETAIL NUMBER TS-07

Guidelines For Usage On Metric Projects
When these details are incorporated into plans and or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following "Rounded-Off" conversion factors: 1/8"=25mm, 1/4"=30mm, and 1/2"=50mm. All measurement notes that refer to linear feet and square yards shall be interpreted to mean linear meters and square meters.

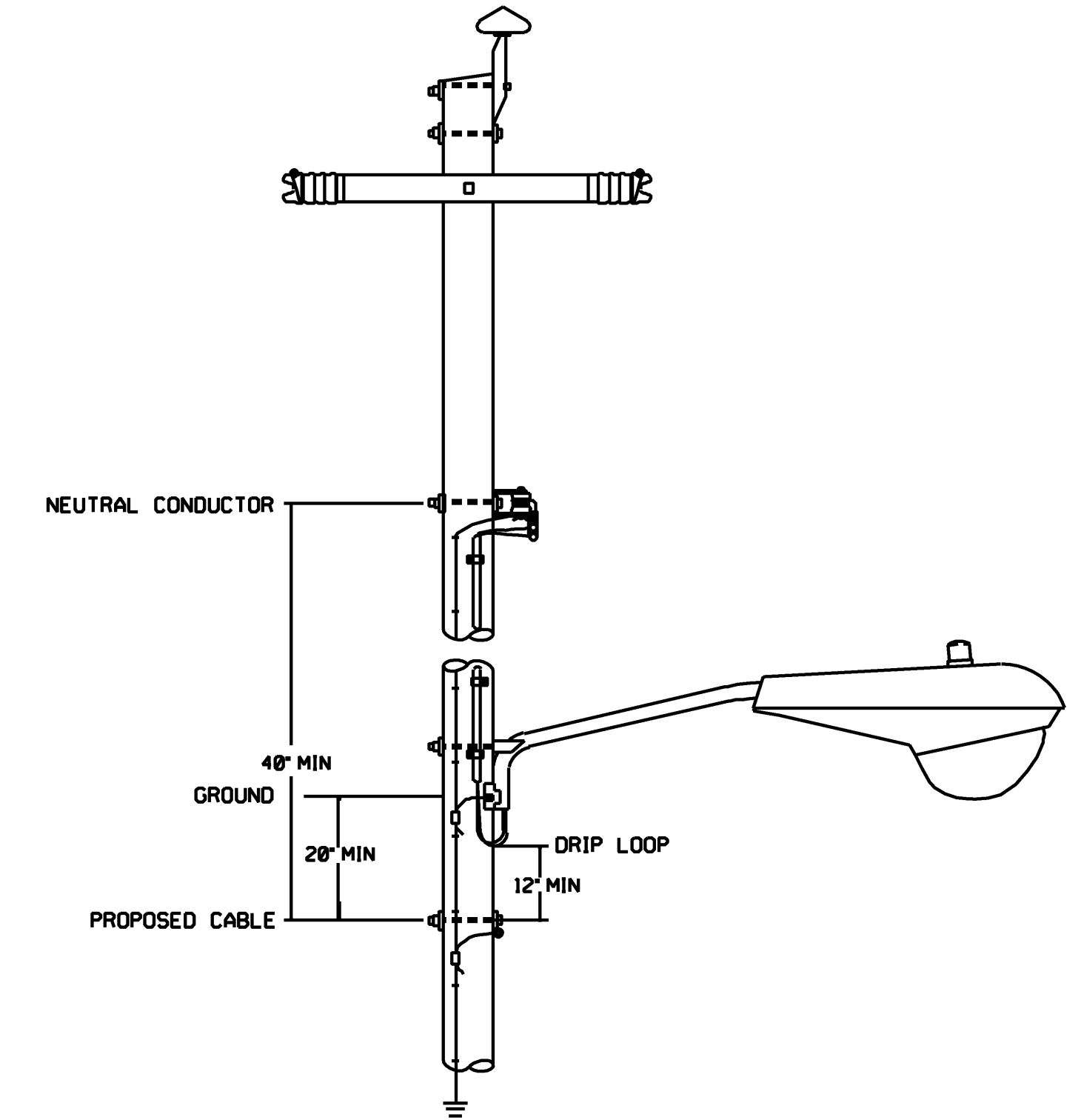
TYPICAL DETAIL "A"
TYPICAL POWER SEPARATION
AT POLE



TYPICAL DETAIL "B"
SEPARATION REQUIREMENTS FOR MID-SPAN
AND AT CROSSINGS

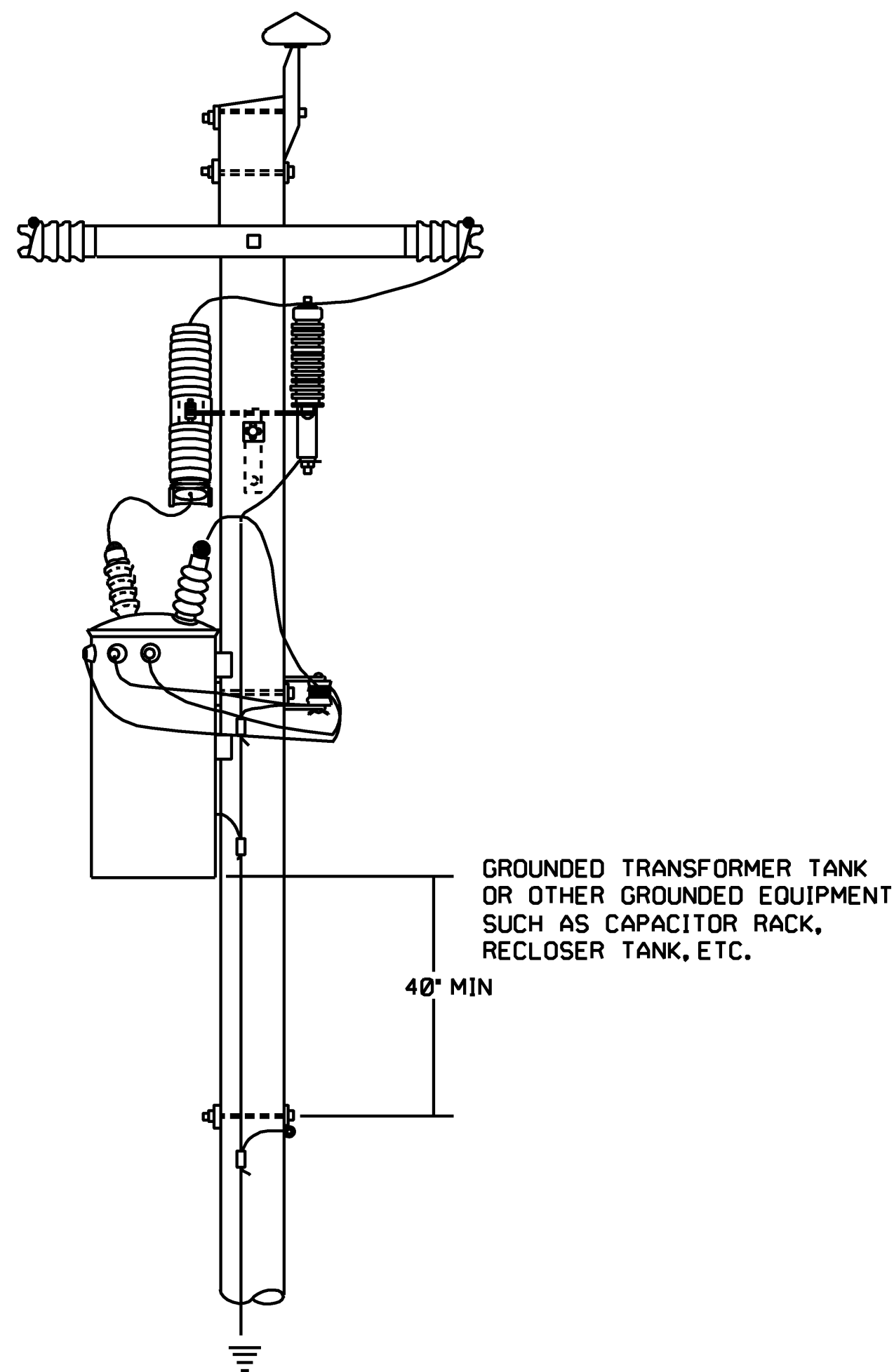


TYPICAL DETAIL "C"
STREET LIGHT BRACKET SEPARATION
NOTE: SEE TABLE BELOW

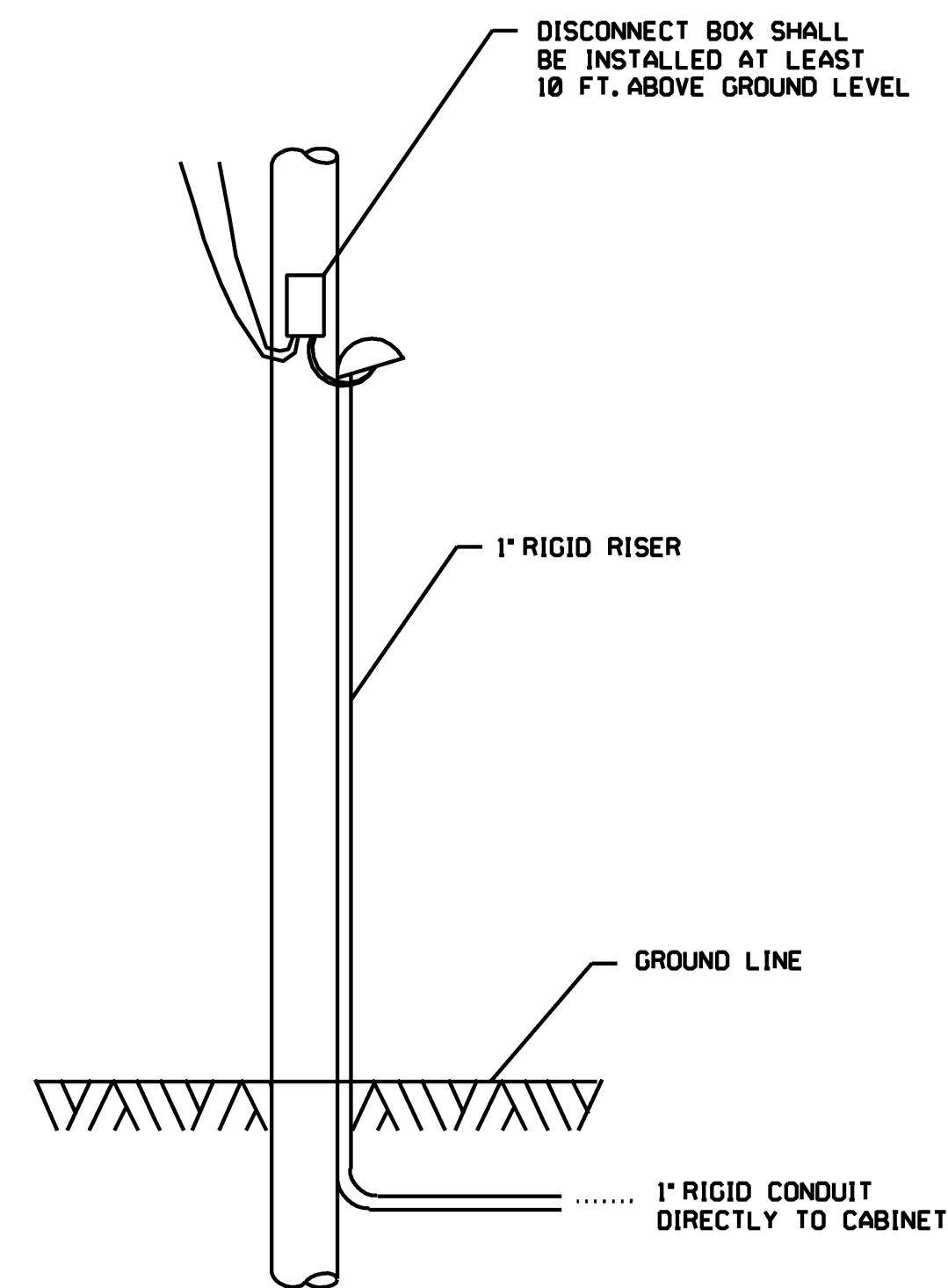


TYPICAL DETAIL "D"

TYPICAL TRANSFORMER AND POWER RISER
SEPARATION WITHOUT GUARD ARM



TYPICAL DETAIL "E"
TYPICAL DISCONNECT BOX INSTALLATION



VERTICAL CLEARANCES AT THE POLE FOR SPAN WIRES
AND BRACKETS FOR STREET LIGHTS (RULE 238C)

TYPE OF CLEARANCE	IF EFFECTIVELY GROUNDED	CLEARANCE (IN.) IF NOT EFFECTIVELY GROUNDED		
		FOR LUMINAIRES UP TO 150V	OVER 150V	FOR TROLLEY CONDUCTORS
ABOVE COMMUNICATION CROSS ARMS	20 (A)	20 (A)	20 (A)	20 (A)
BELOW COMMUNICATION CROSS ARMS	24	24	40	24
ABOVE COMMUNICATION CABLES	4	20 (A)	20 (A)	12
BELOW COMMUNICATION CABLES	4	20	40	12
FROM COMMUNICATION TERMINAL BOXES	4	20 (A)	20 (A)	12 (B)
FROM COMMUNICATION BRACKETS BRIDLE WIRE RINGS, AND DRIVE HOOKS	4	16 (A)	16 (A)	4

NOTES A. MAY BE REDUCED TO 12 IN. FOR WIRES OR PARTS OF BRACKETS 40 IN. OR MORE FROM SURFACE OF POLE
B. IF OBTAINABLE IF NOT, MAXIMUM OBTAINABLE

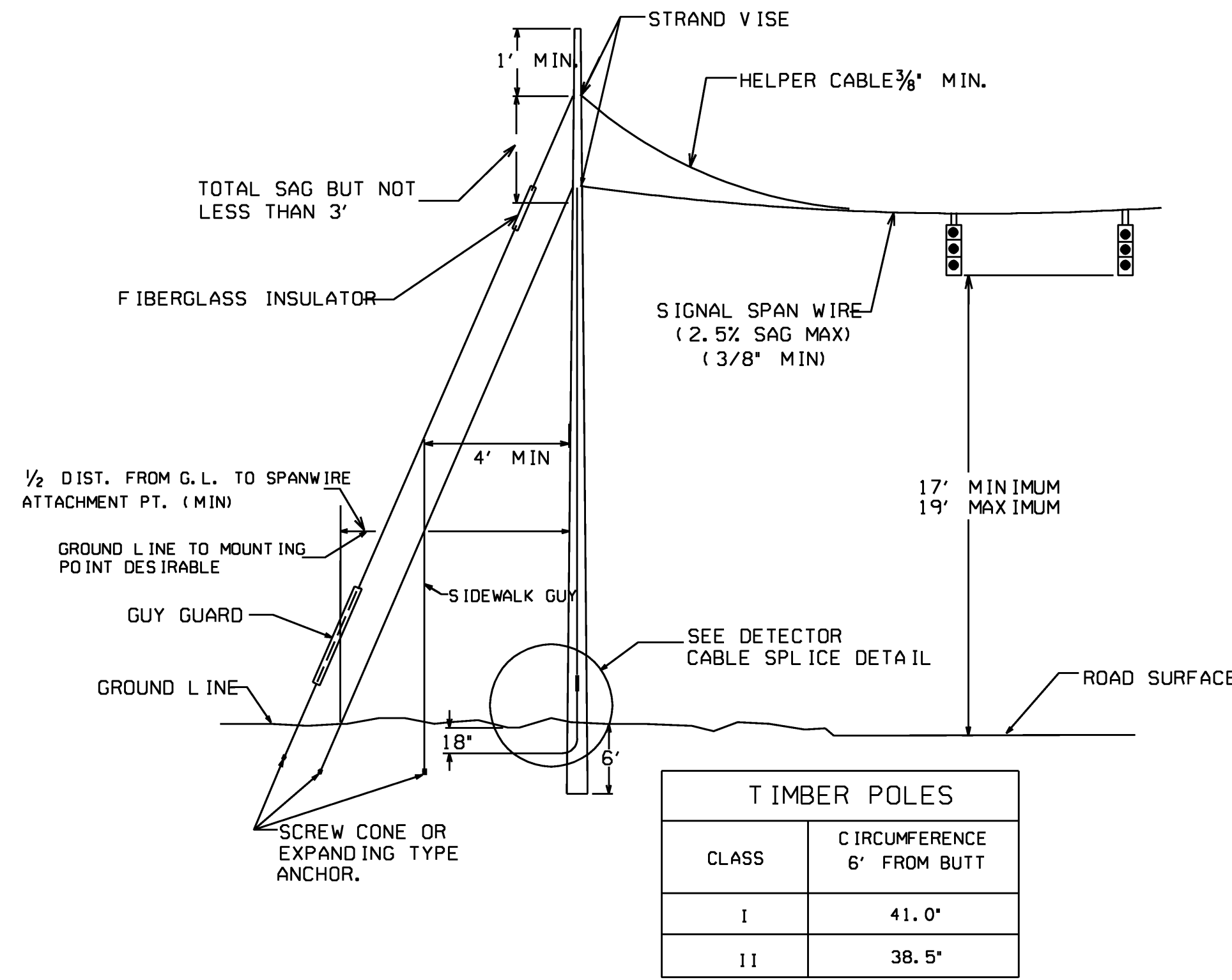
40-0022

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA
REVISION DESCRIPTION		TRAFFIC SIGNAL DETAIL UTILITY CLEARANCE DETAIL
REV. BY:		DETAIL NUMBER APRIL 2010 NOT TO SCALE - REPORT ERRORS
		TS-08

Guidelines For Usage On Metric Projects

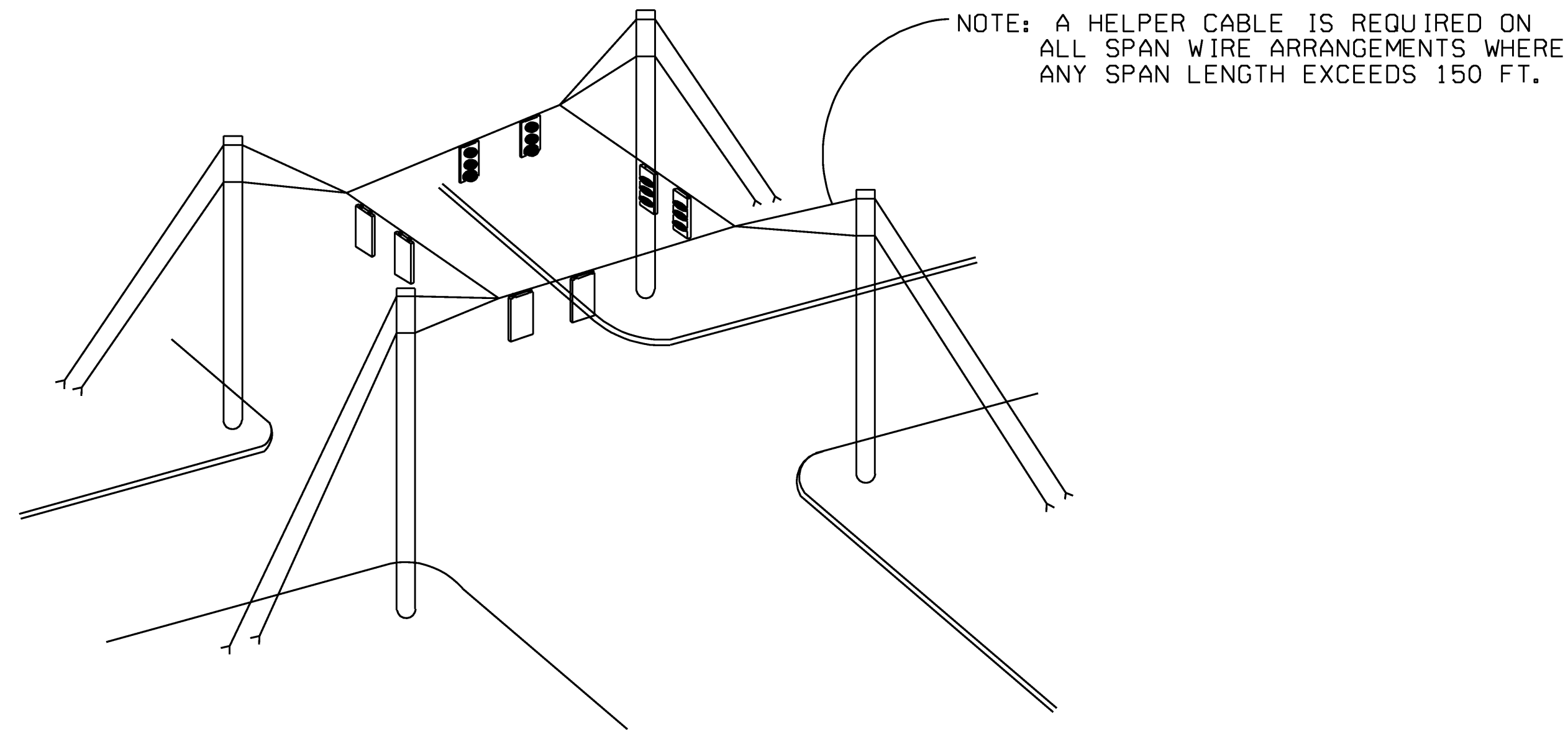
When these details are incorporated into plans and/or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following "Rounded-Off" conversion factors: 1" = 25mm, 4" = 100mm, and 12" or 1' = 300mm. All measurement notes that refer to linear feet and square yards shall be interpreted to mean linear meters and square meters.

SAG = .025 SPAN LENGTH
 SPAN LENGTH = LONGEST DISTANCE BETWEEN ANY TWO SUPPORT POLES IN INSTALLATION.

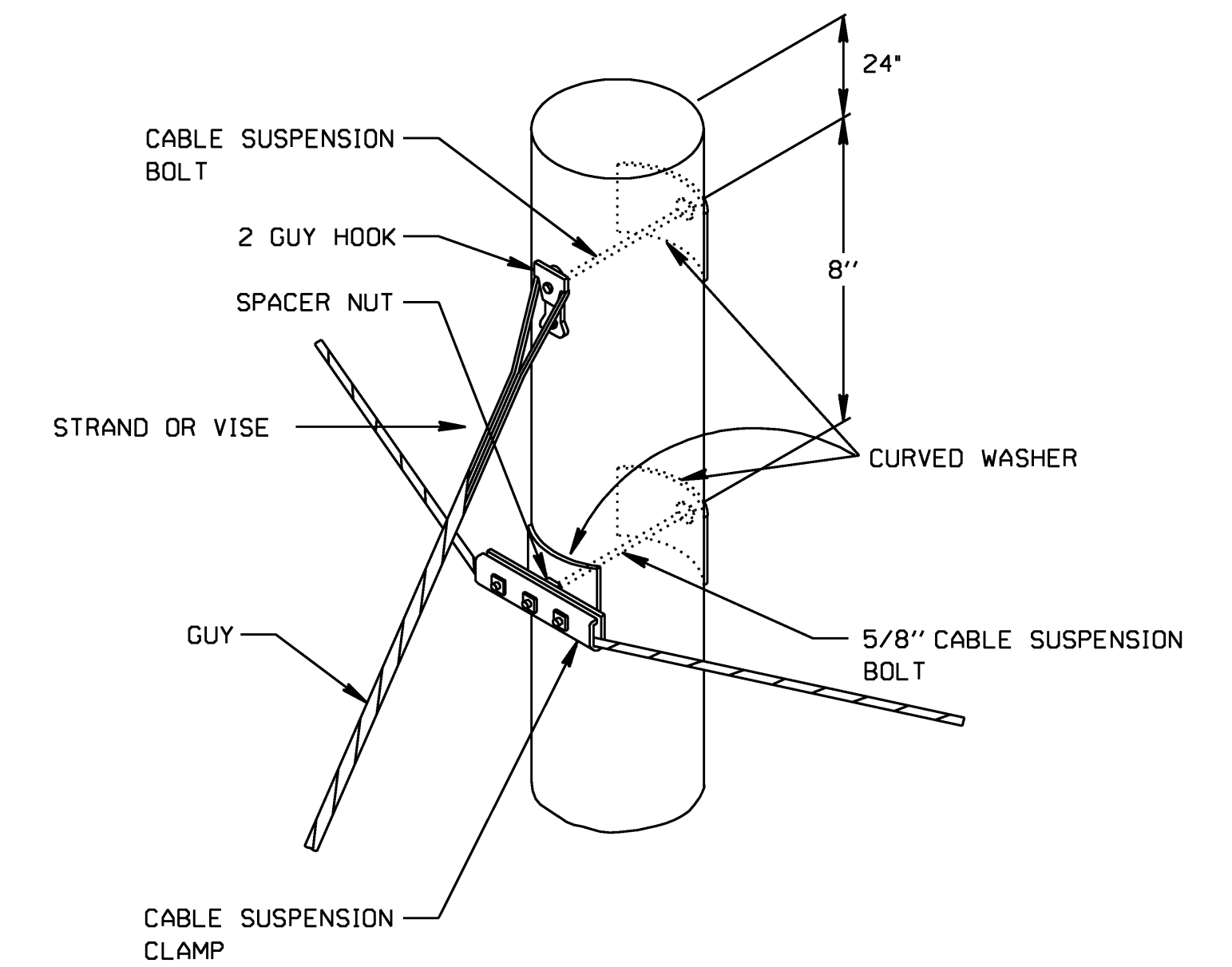


TIMBER POLES	
CLASS	CIRCUMFERENCE 6\"/>
I	41.0'
II	38.5'

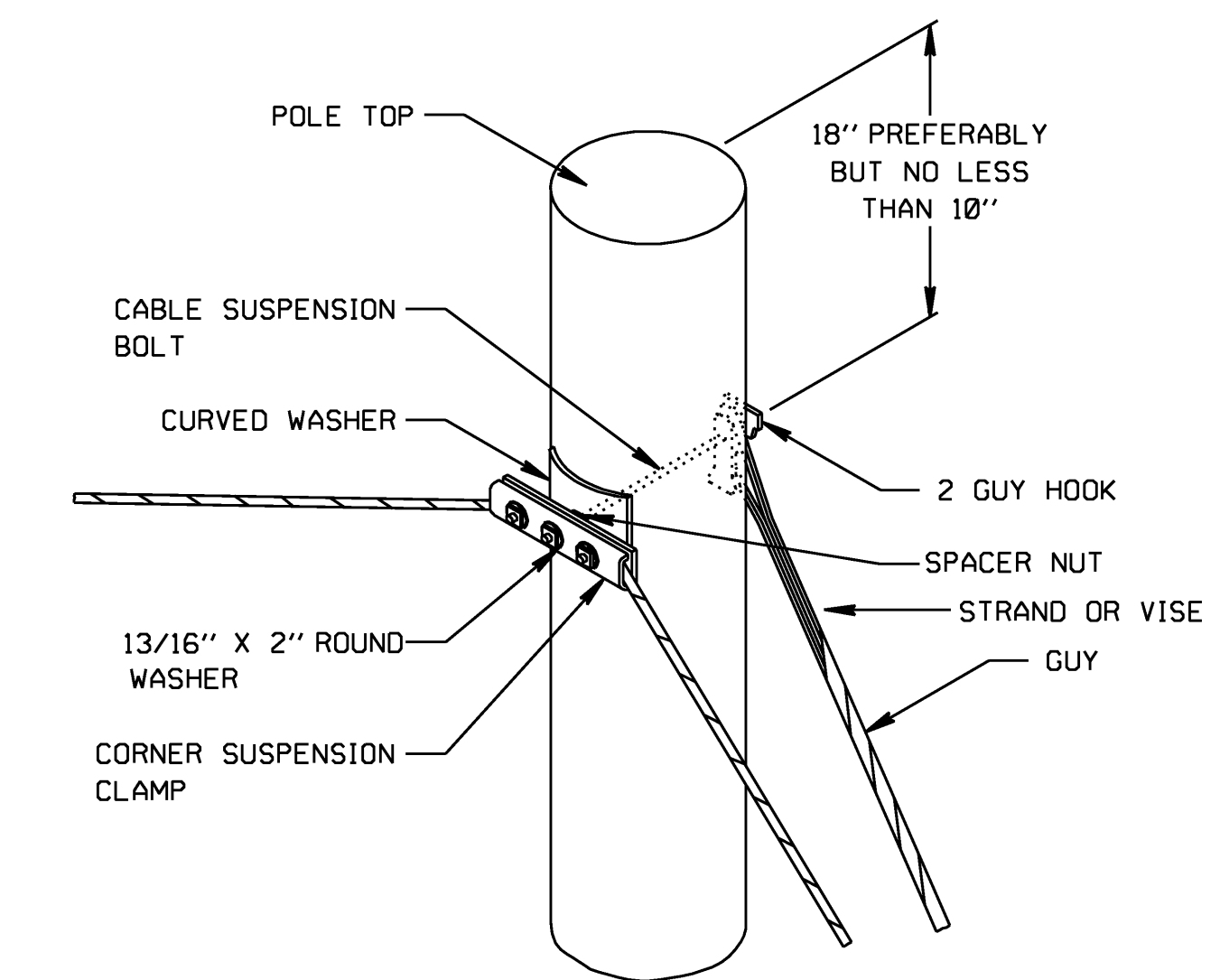
TYP. TIMBER SIGNAL POLE DETAIL



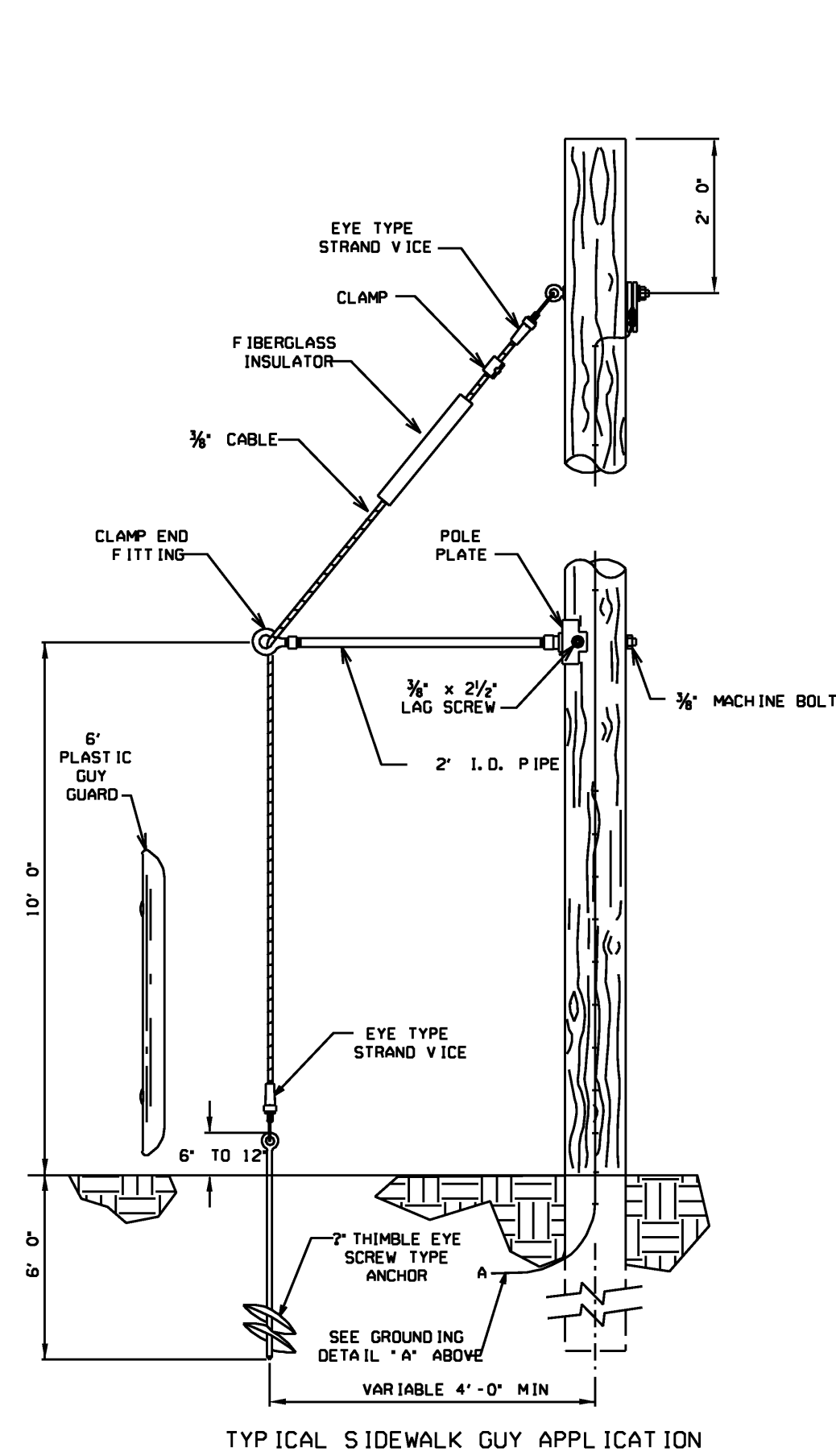
TYPICAL DETAIL "D"
 SUSPENSION STRAND - PULL TOWARD POLE - LESS THAN 5 FEET



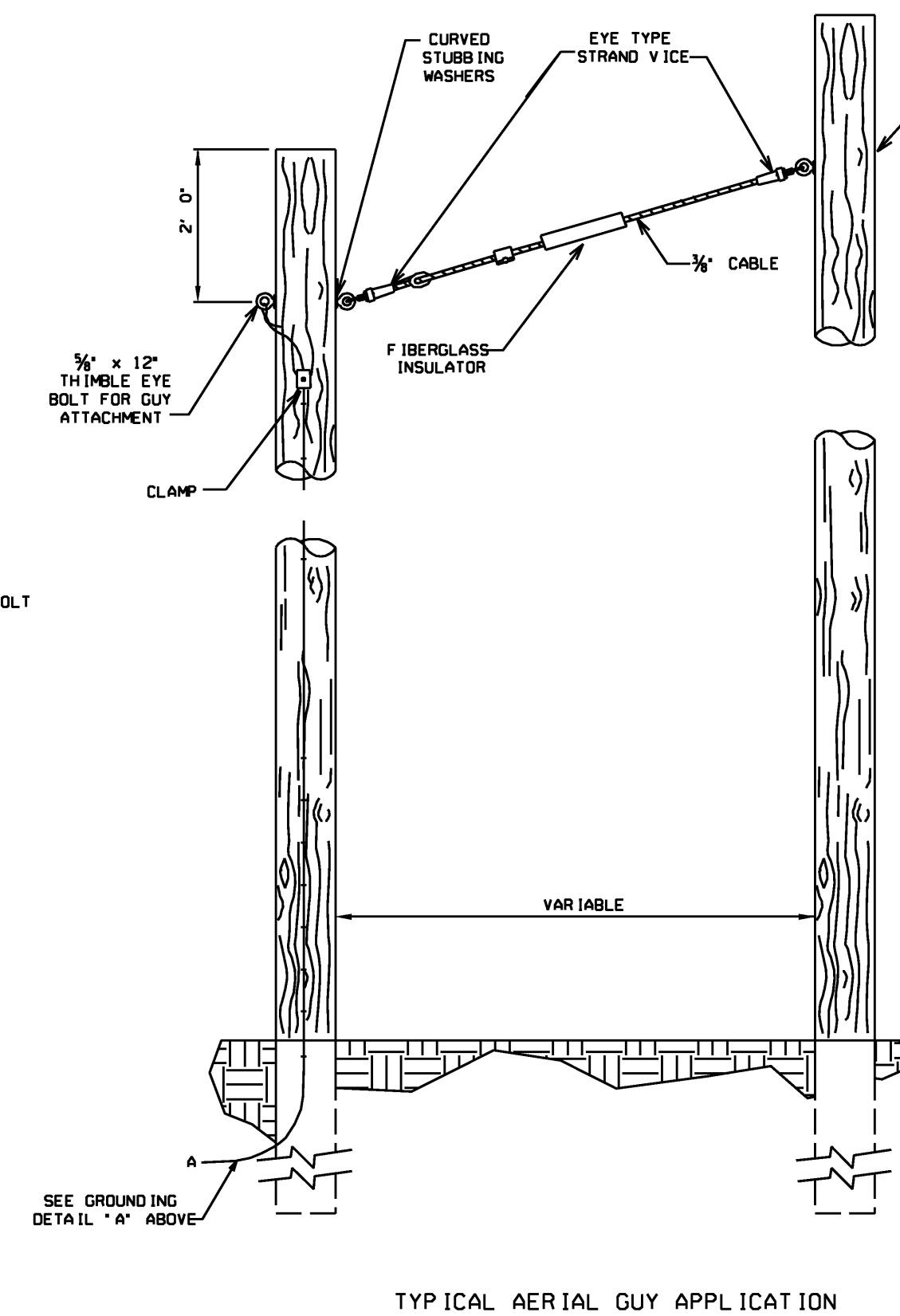
TYPICAL DETAIL "E"
 SUSPENSION STRAND - PULL AWAY FROM POLE - 5 FEET OR MORE



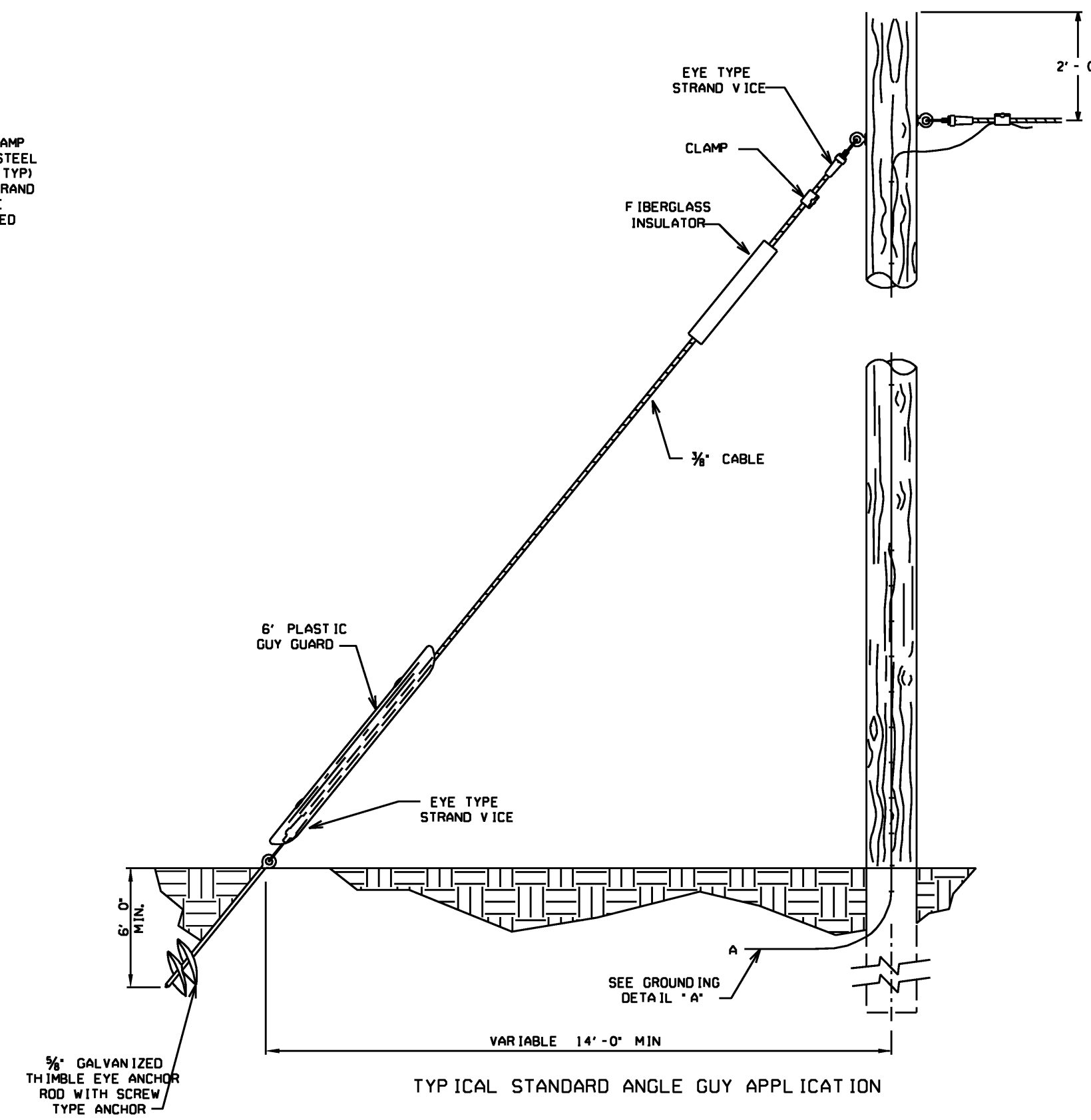
40-0023



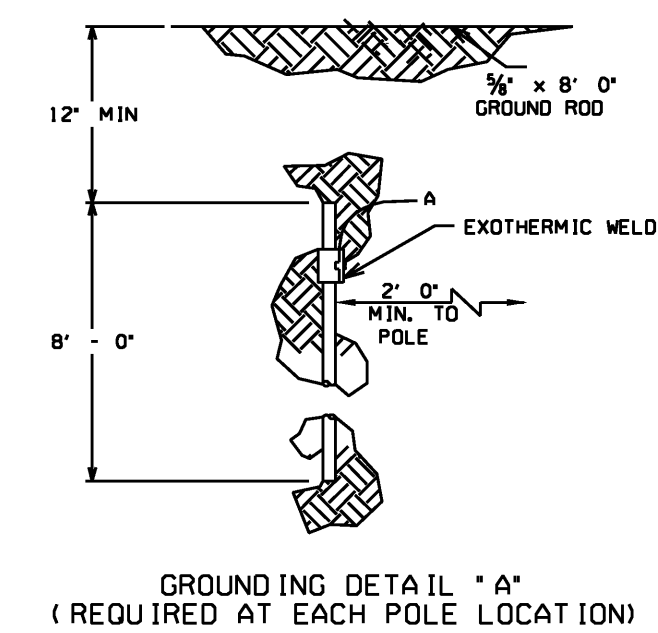
TYPICAL SIDEWALK GUY APPLICATION



TYPICAL AERIAL GUY APPLICATION



TYPICAL STANDARD ANGLE GUY APPLICATION



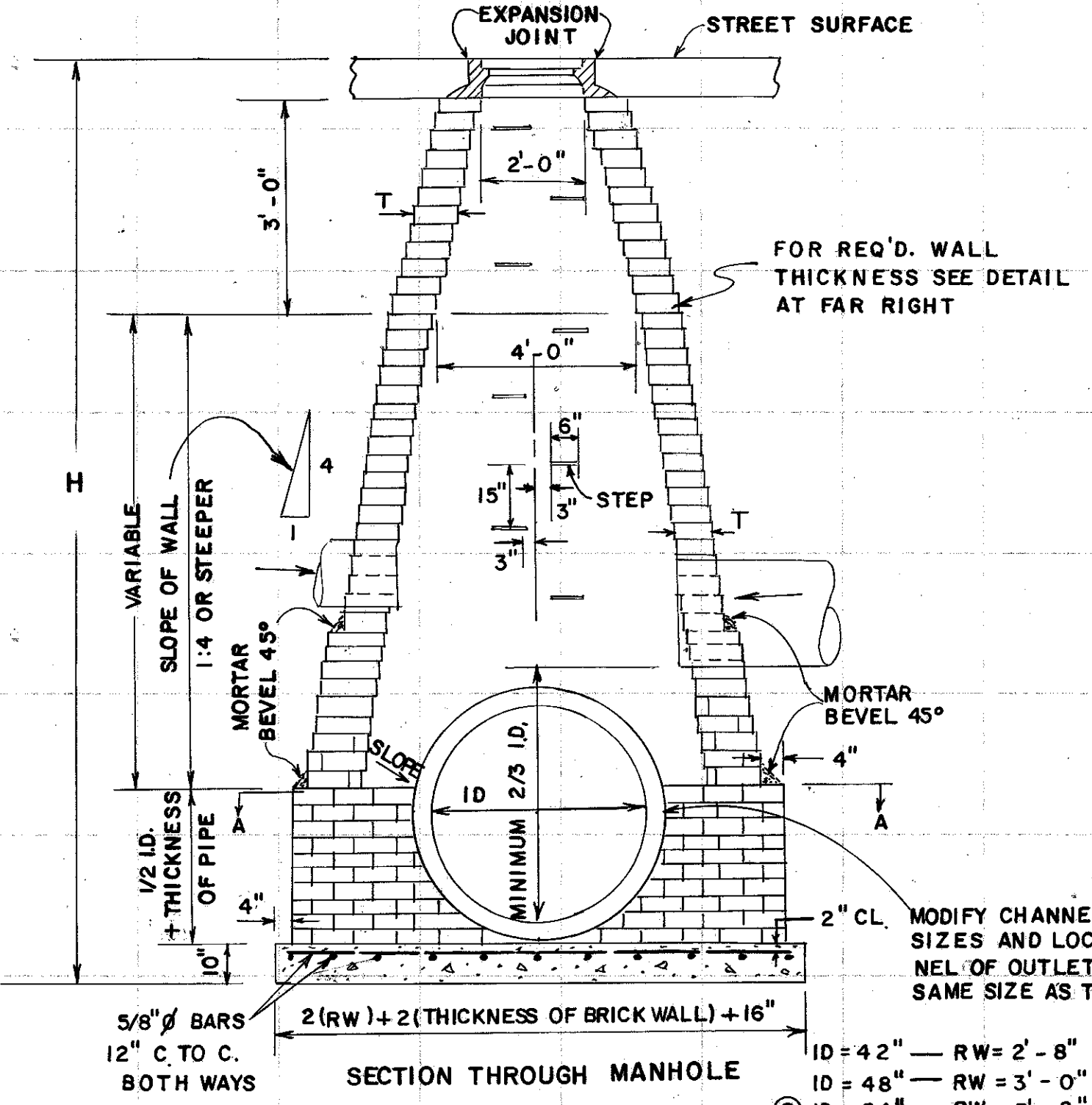
GROUNDING DETAIL "A"
 (REQUIRED AT EACH POLE LOCATION)

Guidelines For Usage On Metric Projects

When these details are incorporated into plans and/or projects that are being prepared or constructed in metric units, exact or precise conversion to metric units is not required. The dimensions shown that are in feet and inches may be converted to corresponding metric units using the following "Rounded-Off" conversion factors: 1/25mm, 4=100mm, and 12 or 1'-300mm. All measurement notes that refer to linear feet and square yards shall be interpreted to mean linear meters and square meters.

		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
		TRAFFIC SIGNAL DETAIL	
		STANDARD GUYING DETAILS	
REV. BY:	REV. DATE:	APRIL 2010	DETAIL NUMBER
		NOT TO SCALE - REPORT ERRORS	TS-09

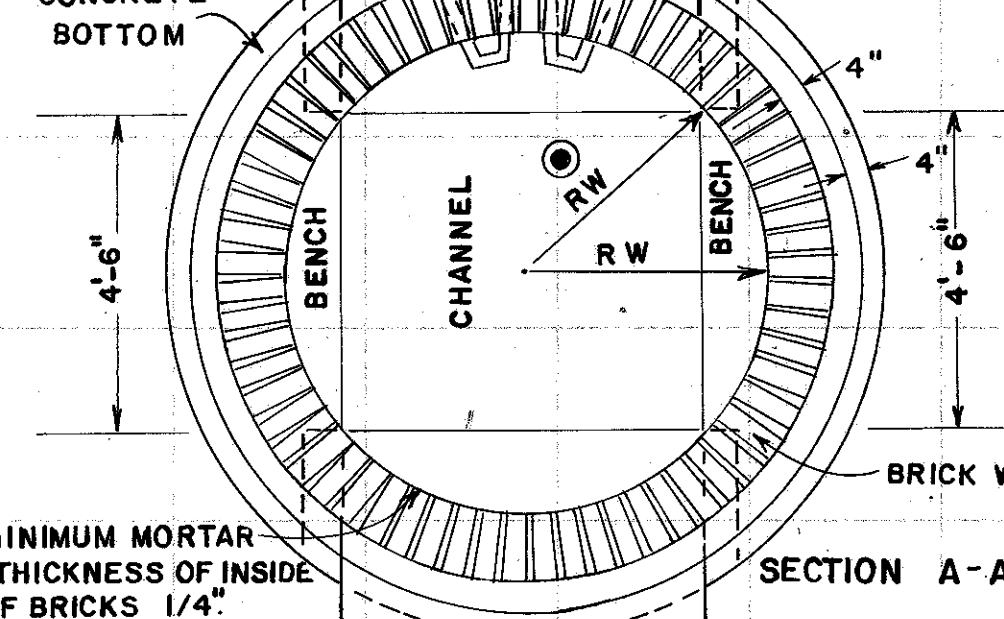
BRICK MANHOLE SECTION (PIPE OUTSIDE DIAMETER IS 48" OR MORE)



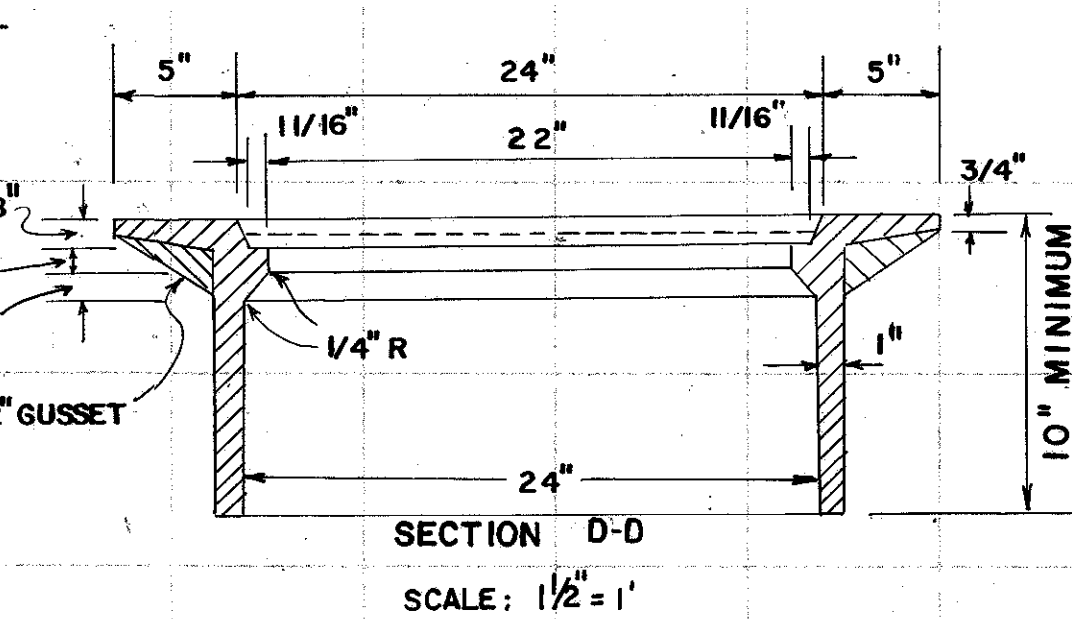
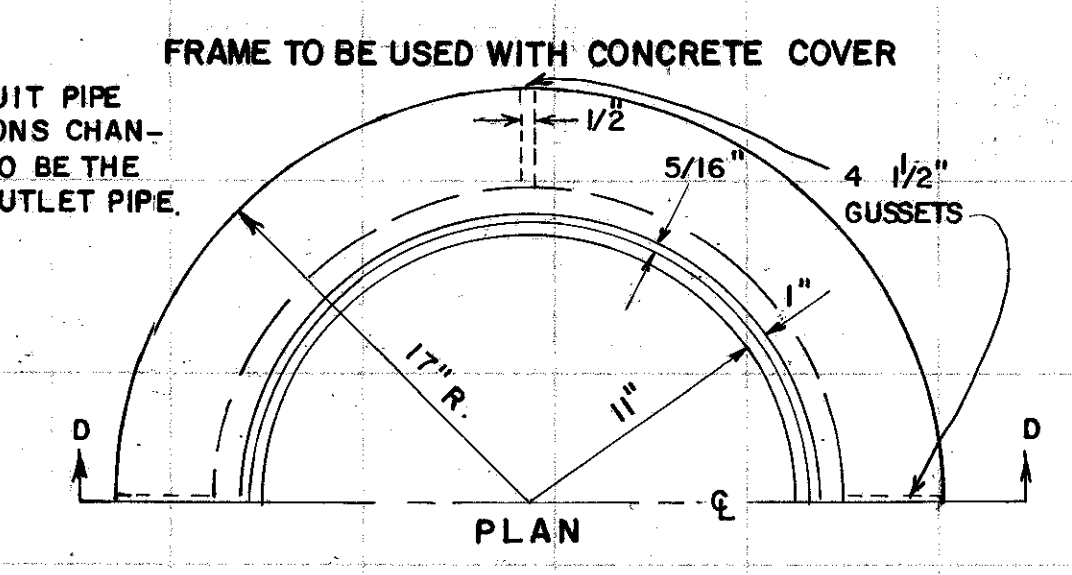
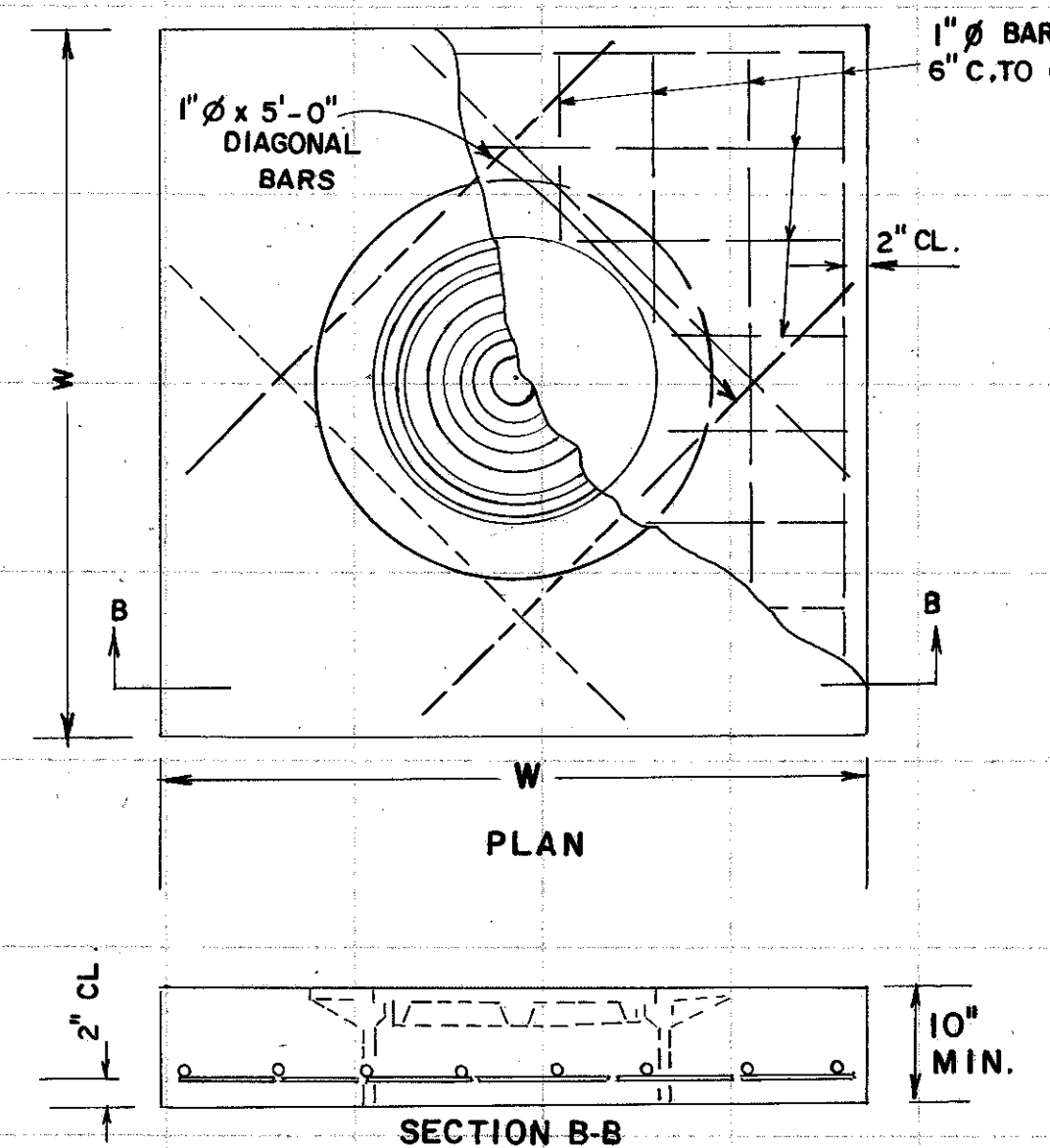
SECTION THROUGH MANHOLE

ID = 42"	RW = 2'-8"
ID = 48"	RW = 3'-0"
ID = 54"	RW = 3'-2"
ID = 60"	RW = 3'-4"
ID = 66"	RW = 3'-6"
ID = 72"	RW = 3'-8"
ID = 78"	RW = 3'-10"
ID = 84"	RW = 4'-2"

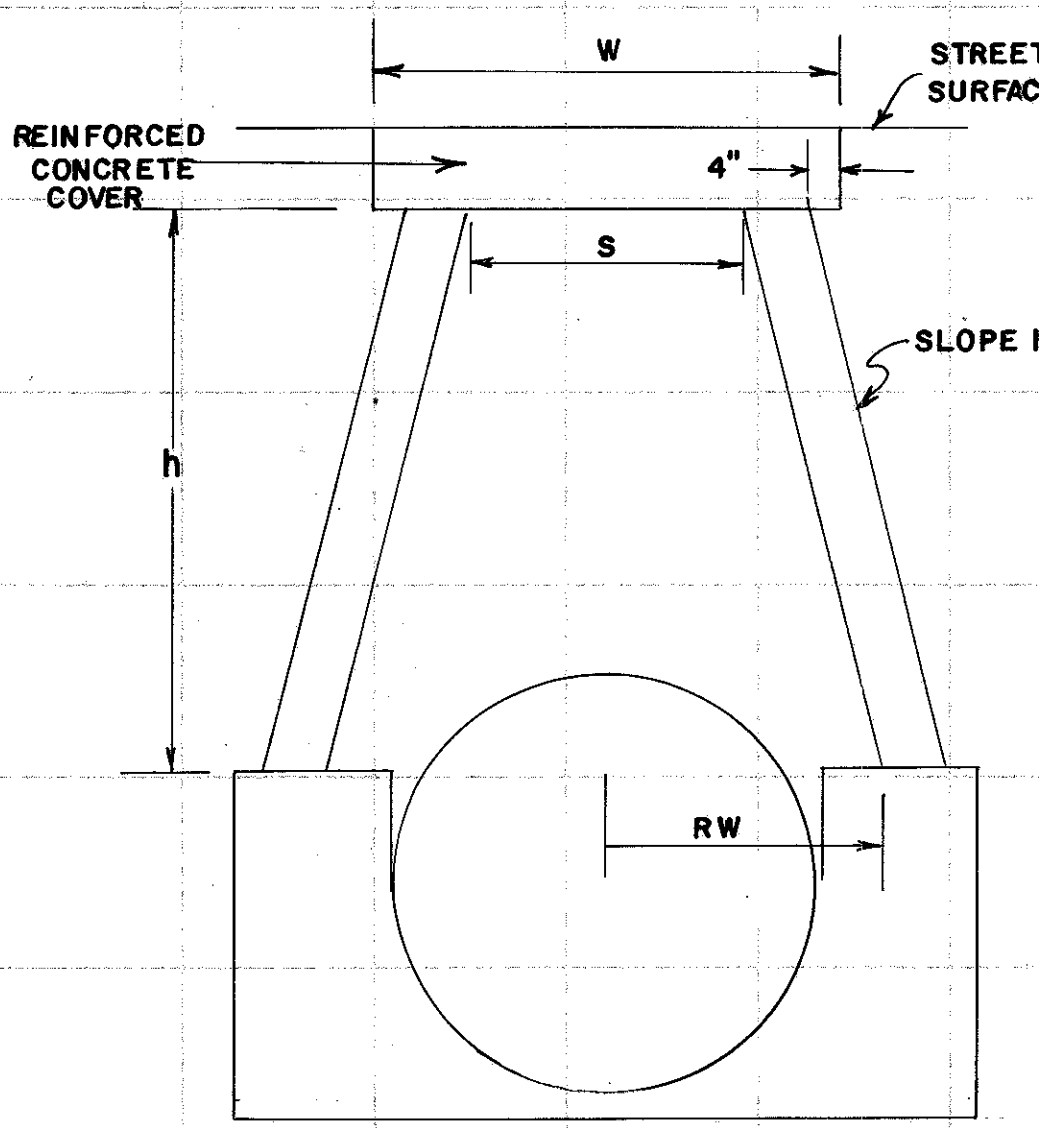
RW = INSIDE RADIUS OF WALL



REINFORCED CONCRETE COVER



PLACEMENT FOR CONCRETE COVER



FORMULA FOR COMPUTING W
 $RW =$ INSIDE RADIUS OF WALL
 $S = 2RW - 1/2$
 $W = S + 24"$

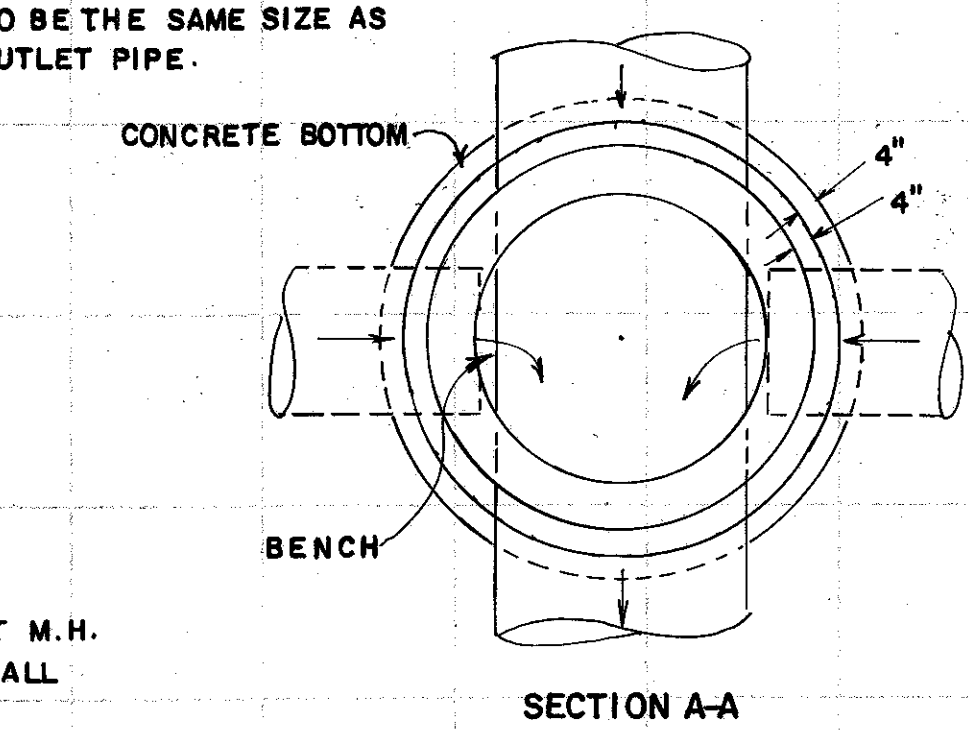
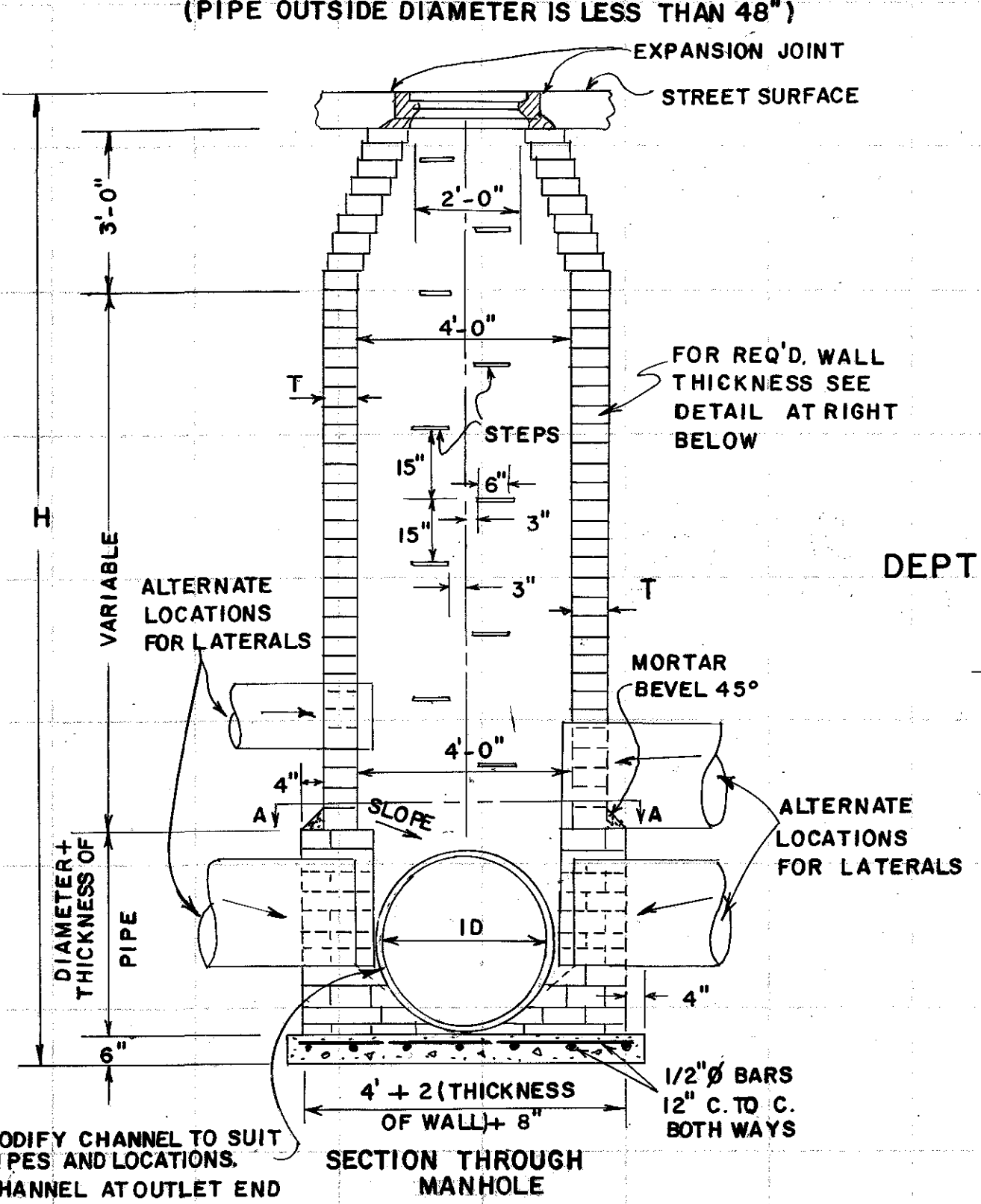
- NOTE: USE CONCRETE COVER WITH MANHOLE CASTINGS IF FILL FROM TOP OF PIPE TO FINISHED SURFACE IS LESS THAN:
- 4'-6" FOR 42" PIPE
 - 5'-0" FOR 48" PIPE
 - 5'-6" FOR 54" PIPE
 - 6'-0" FOR 60" PIPE
 - 6'-6" FOR 66" PIPE
 - 7'-0" FOR 72" PIPE
 - 7'-6" FOR 78" PIPE
 - 8'-0" FOR 84" PIPE

THICKNESS OF BRICK WALL (SEE DETAIL AT FAR RIGHT)

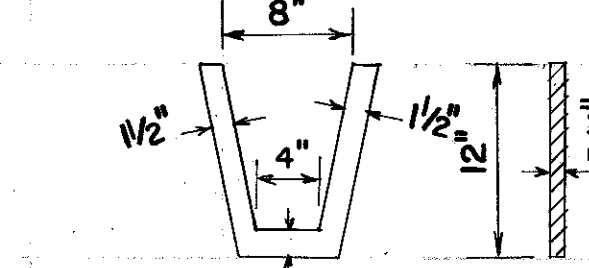
DEPTH	THICKNESS (T)
TO 10'	* 8" MIN.
10' TO 20'	12" MIN.
20' TO 30'	16" MIN.

* FOR COMBINATION BRICK & PRECAST M.H. (SEE BELOW) ONLY 12" OR 16" BRICK WALL THICKNESS IS TO BE USED FOR BASE.

BRICK MANHOLE SECTION (PIPE OUTSIDE DIAMETER IS LESS THAN 48")

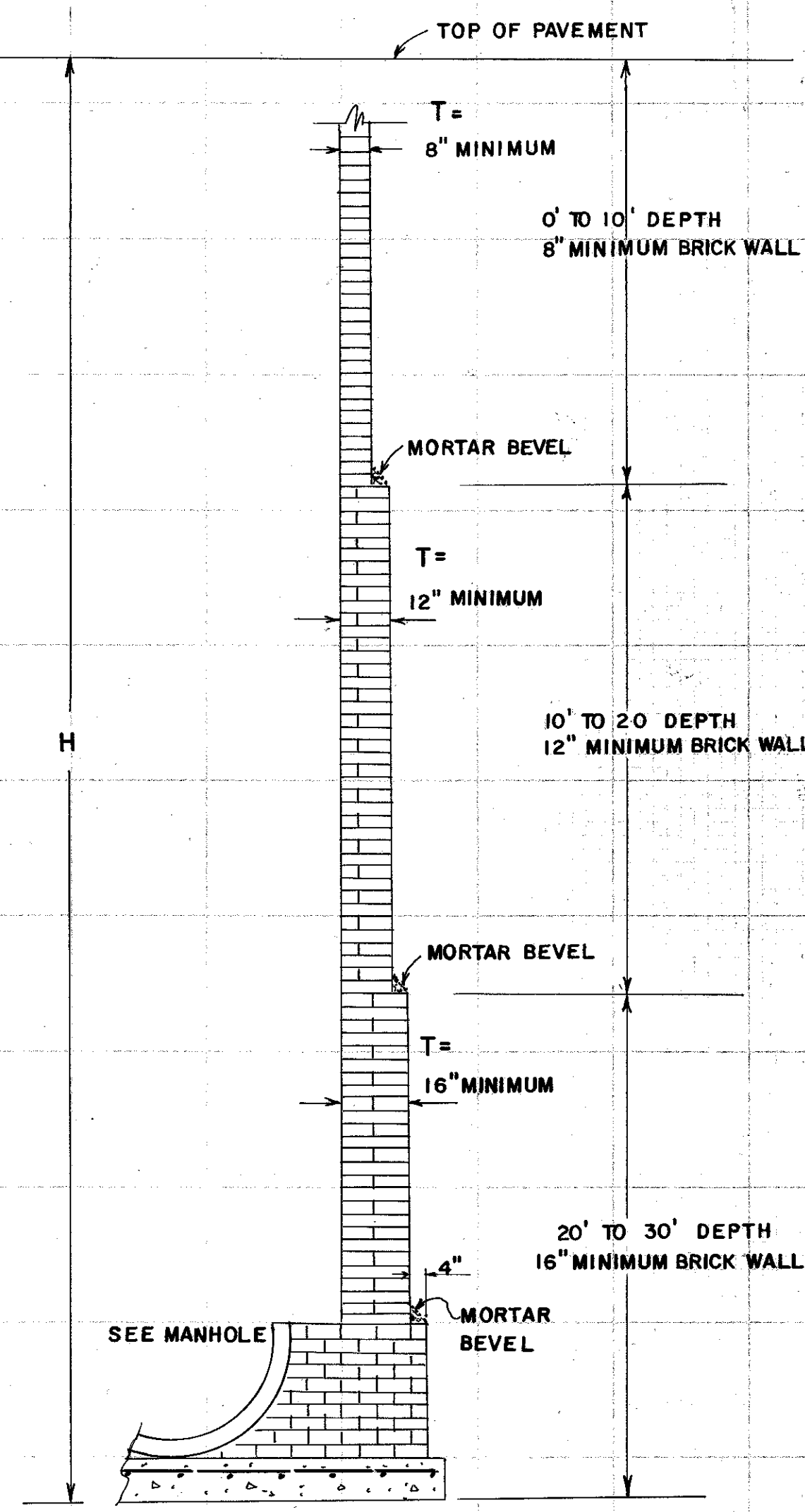


CAST IRON STEP

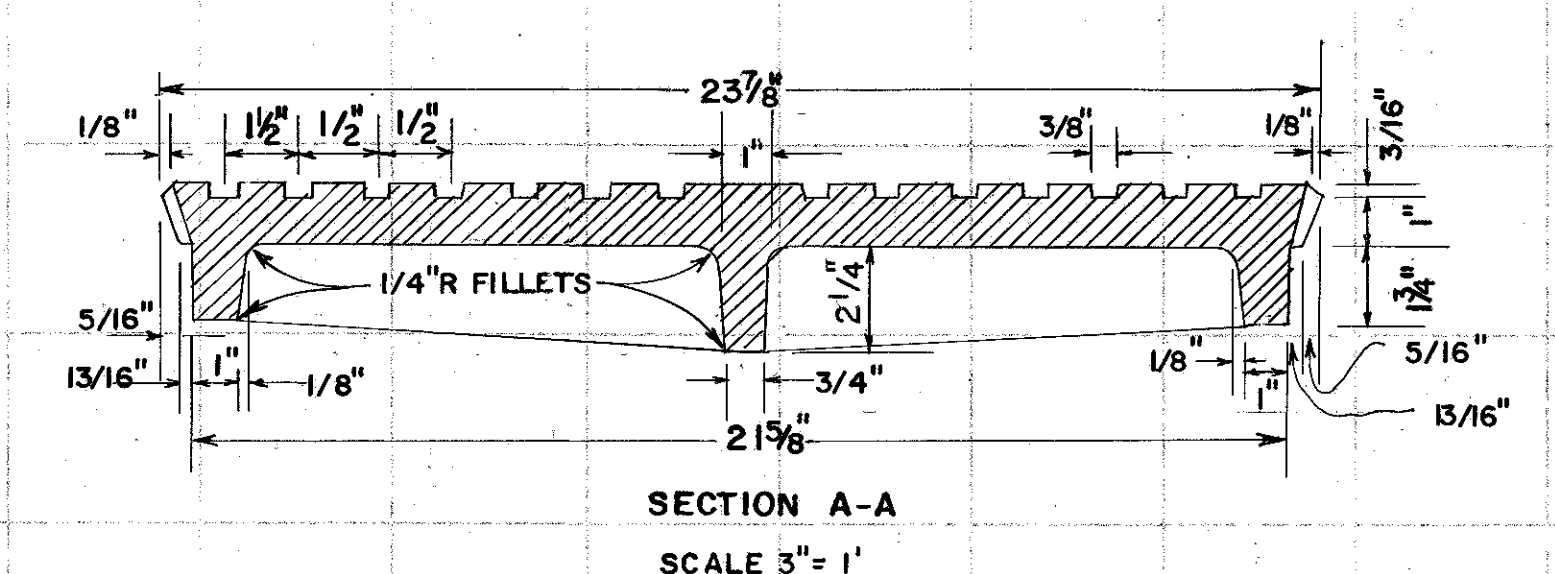
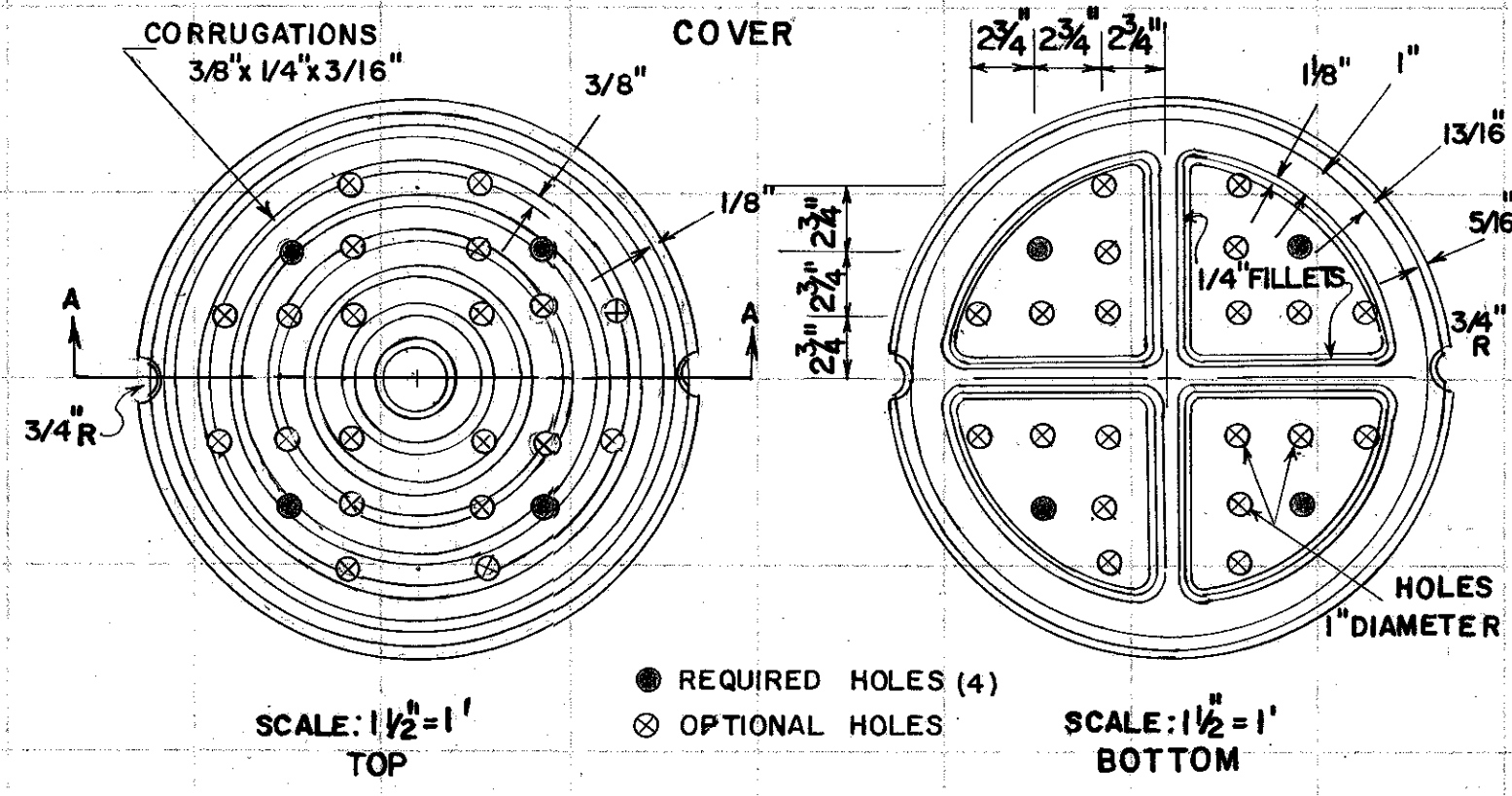


NOTE: STEPS ARE REQUIRED IN ALL MANHOLES WHERE "H" IS GREATER THAN 4'-0". NUMBER AND LOCATION OF STEPS TO BE AS DIRECTED BY THE ENGINEER. PLASTIC OR RUBBER COATED STEPS LISTED IN THE GA. D.O.T. QUALIFIED PRODUCTS MANUAL MAY BE SUBSTITUTED.

DEPTH LIMITS FOR INCREASING WALL THICKNESS



MANHOLE CASTINGS



APPROXIMATE WEIGHTS

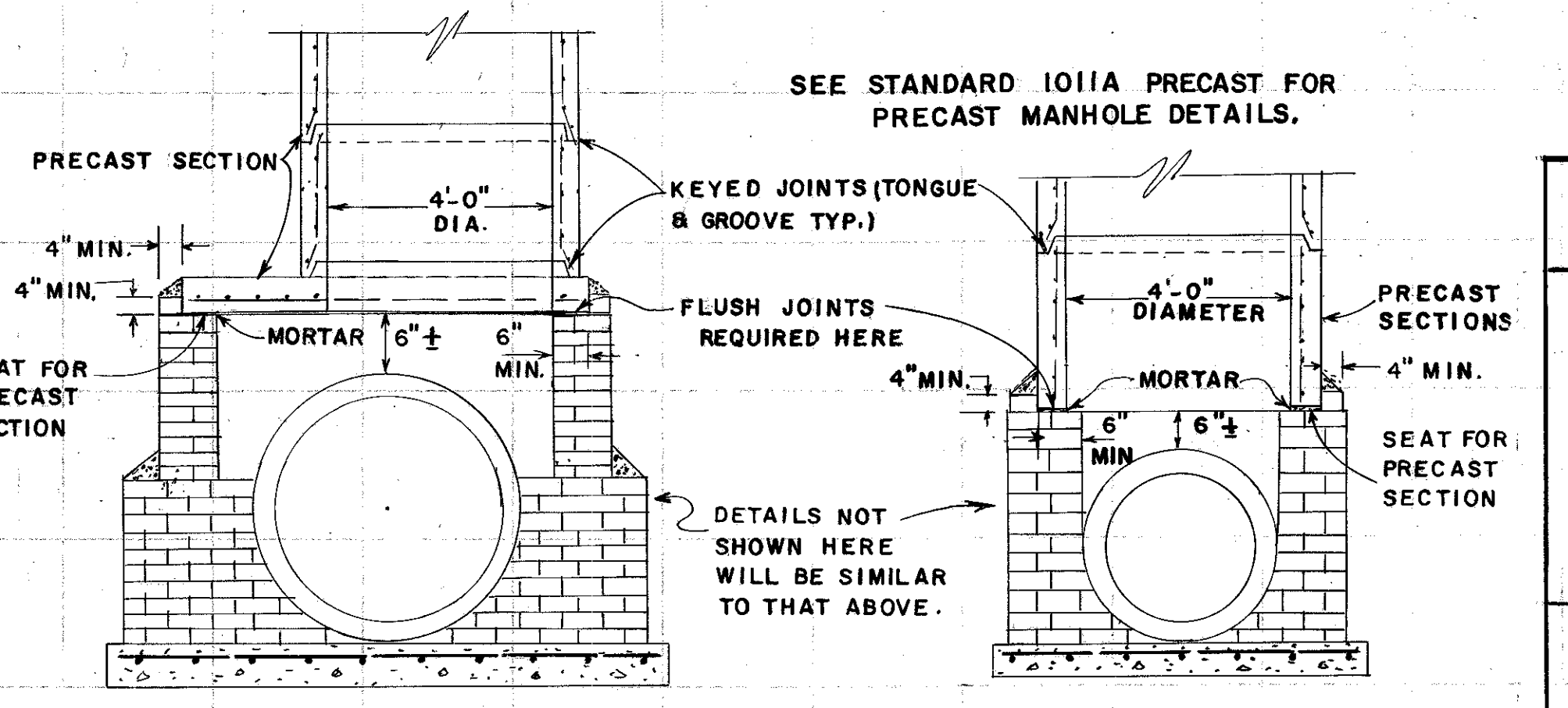
C.I. FRAME	282 LBS.
C.I. COVER	178 LBS.

NOTE: COVER AND FRAME MUST BE FITTED BEFORE LEAVING SHOP. PAINT ACTUAL WEIGHT OF EACH CASTING ON ITS FACE.

MANHOLE FRAME & COVER SHOWN ON STD. 1011A PRECAST MAY BE USED AN ALTERNATE TO CASTINGS SHOWN HERE.

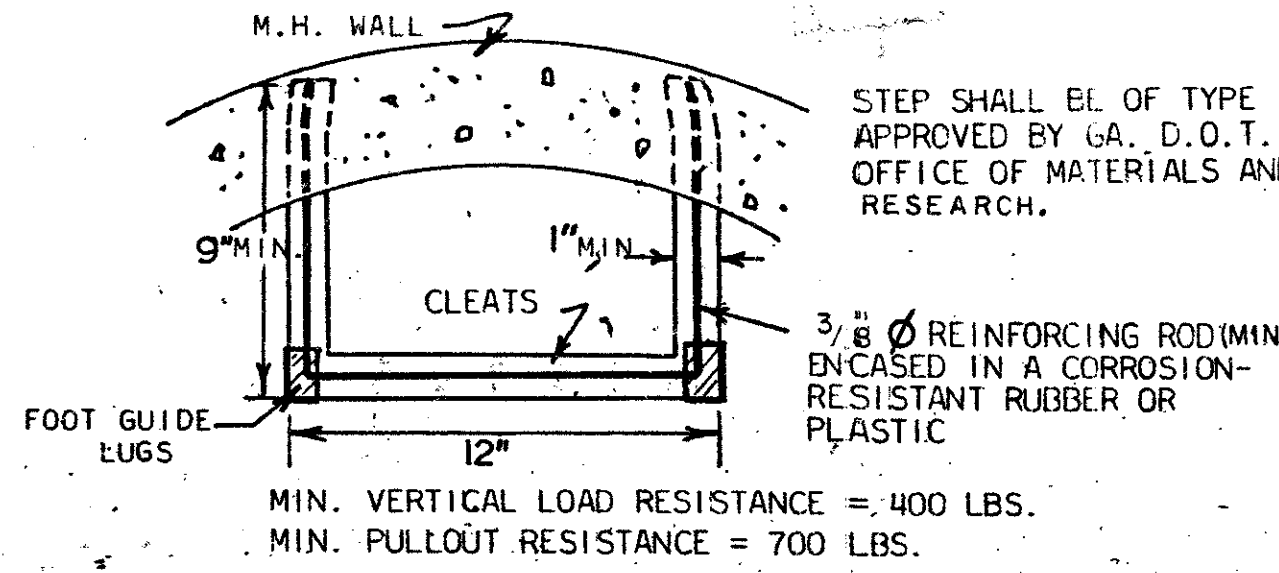
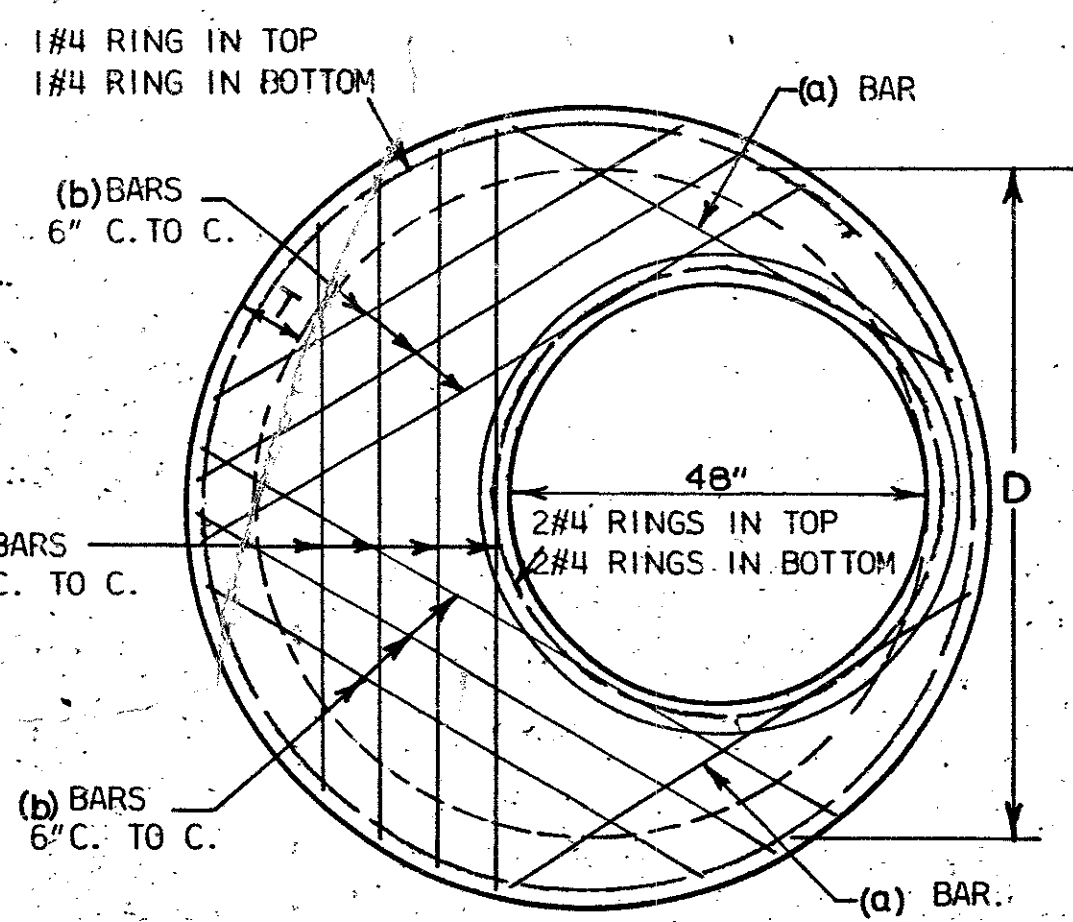
ALTERNATE - COMBINATION BRICK & PRECAST MANHOLES

- NOTES FOR COMBINATION MANHOLE:
- BRICK PORTION OF MANHOLE WILL BE CONSTRUCTED WITH SEAT TO GIVE BEST POSSIBLE FIT FOR PRECAST UNIT. MINIMUM THICKNESS FOR BRICK WALL WILL BE 12" FOR H TO 20 FT. AND 16" FOR H=20 FT. TO 30 FT.
 - PRECAST UNIT WITHOUT TONGUE OR GROOVE AT BOTTOM SHALL BE PLACED IN BRICK SEAT WITH MORTAR IN JOINT ALL ROUND. BRICK BASE SHALL SET FOR 24 HOURS MIN. BEFORE PRECAST SECTIONS ARE INSTALLED.
 - STEPS IN THE BRICK PORTION OF MANHOLE WILL BE IN ALIGNMENT WITH AND MATCH THE STEPS IN THE PRECAST SECTIONS RATHER THAN AS SHOWN FOR THE ALL BRICK MANHOLES.



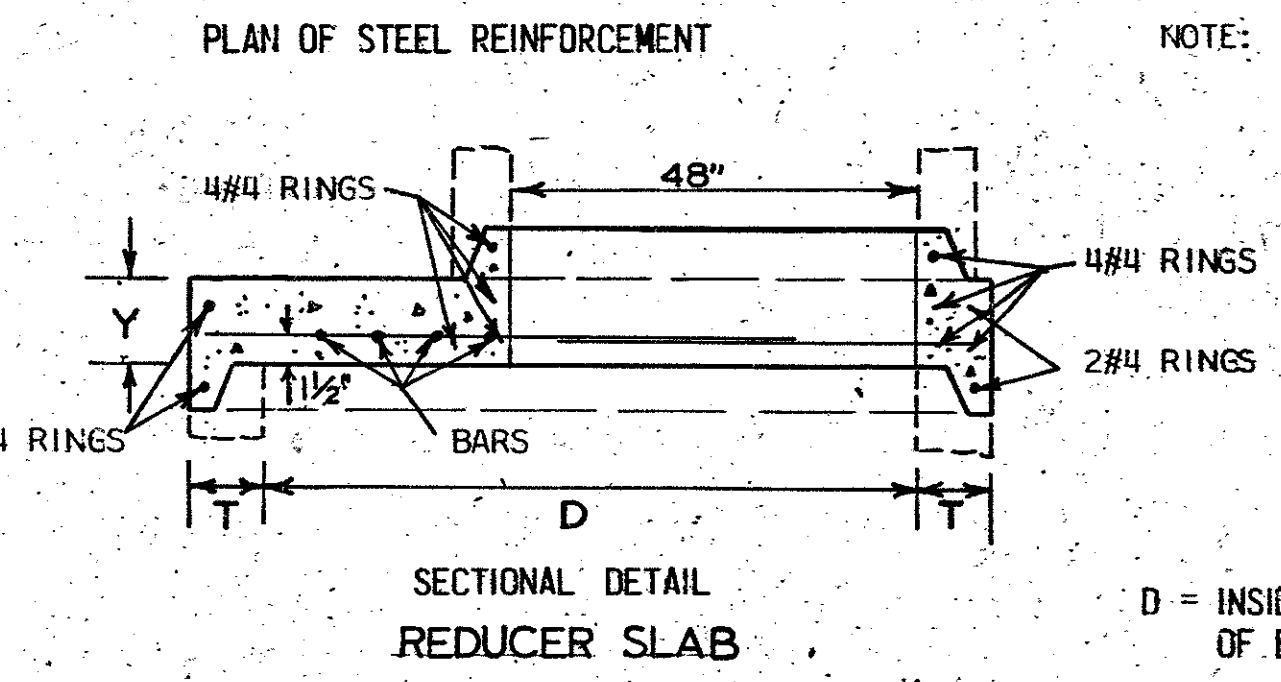
41-0001

DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
STANDARD BRICK MANHOLES	
SCALE AS SHOWN	REV. & REDR. OCTOBER, 1981
DES. 8-58 DRW. R.M.U. TRA. G.M.E. CHK. R.K.C.	(SUBMITTED) <i>Handwritten Signature</i> STATE ROAD & AIRPORT DESIGN ENGR. (APPROVED) <i>Handwritten Signature</i> STATE HIGHWAY ENGINEER
	NUMBER 1011A



D	Y MIN.	(a) BARS No.	(a) BARS SIZE	(b) BARS No.	(b) BARS SIZE	(c) BARS No.	(c) BARS SIZE
60"	8"	2	#6	4	#6	2	#6
72"	9"	2	#6	6	#6	4	#6

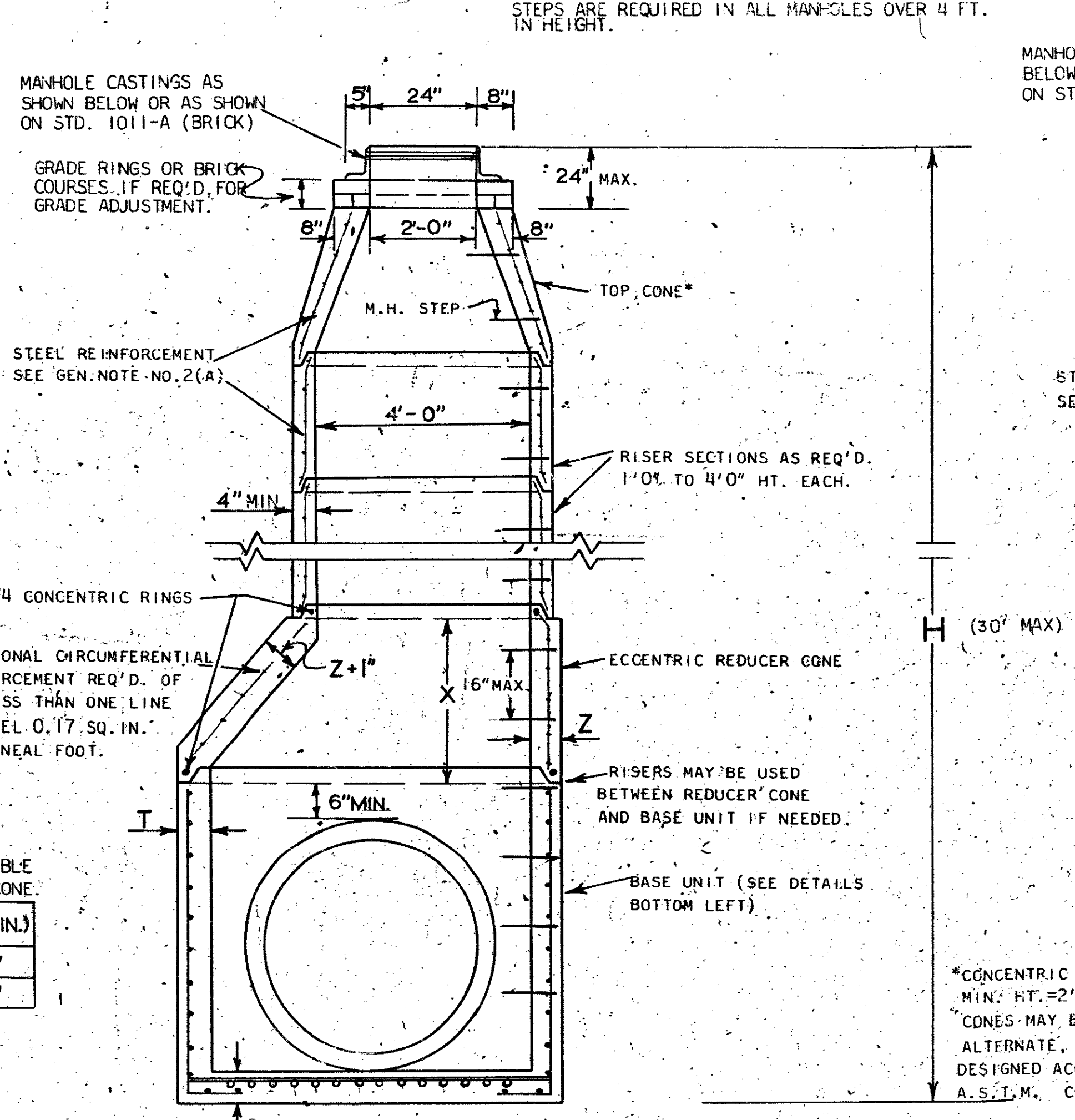
NOTE: 10 FT. MAXIMUM ALLOWANCE COVER ABOVE TOP OF REDUCER SLABS. REDUCER CONES TO BE USED WHERE REDUCER SLABS NOT PERMITTED.



D = INSIDE DIAMETER OF BASE UNIT

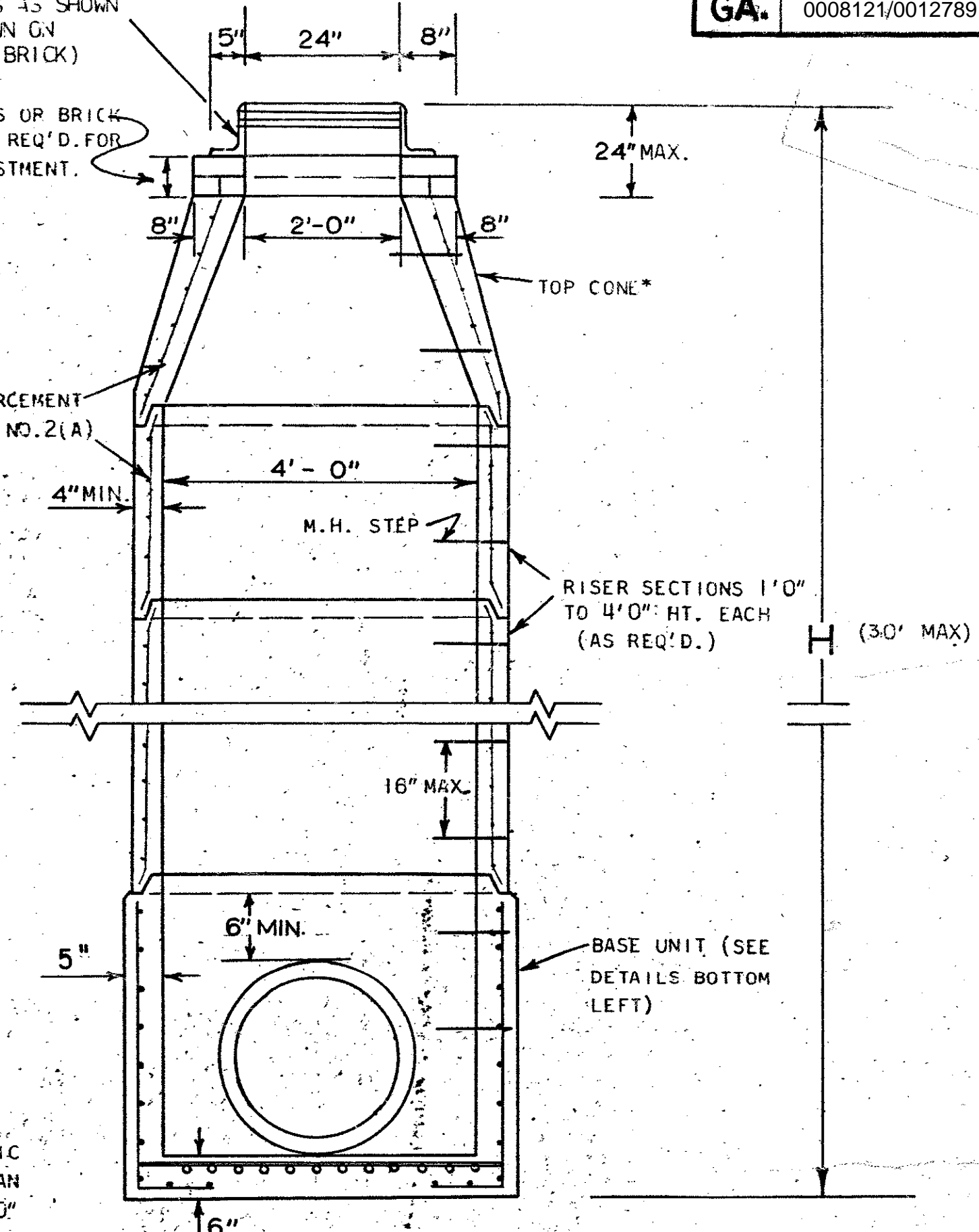
NOTE: 25 FT. MAXIMUM ALLOWABLE COVER ABOVE REDUCER CONE.

D	X (MIN.)	Z (MIN.)
60"	1'-6"	5"
72"	3'-0"	6"



SECTIONAL DETAIL (MANHOLE WITH BASE UNIT OF D-OVER 48")

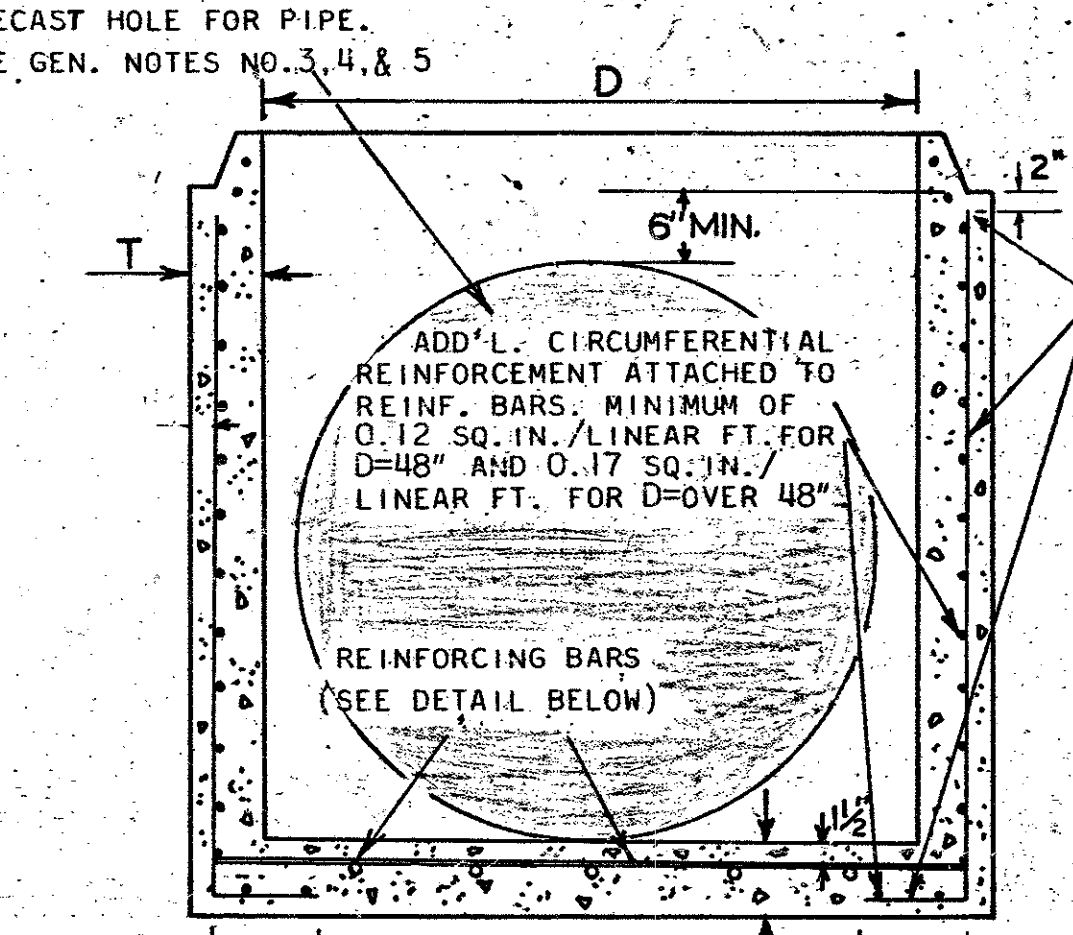
*CONCENTRIC CONE, SHOWN MIN. HT.=2'-0". ECCENTRIC CONES MAY BE USED AS AN ALTERNATE, MIN. HT.=3'-0" DESIGNED ACCORDING TO A.S.T.M. C-478



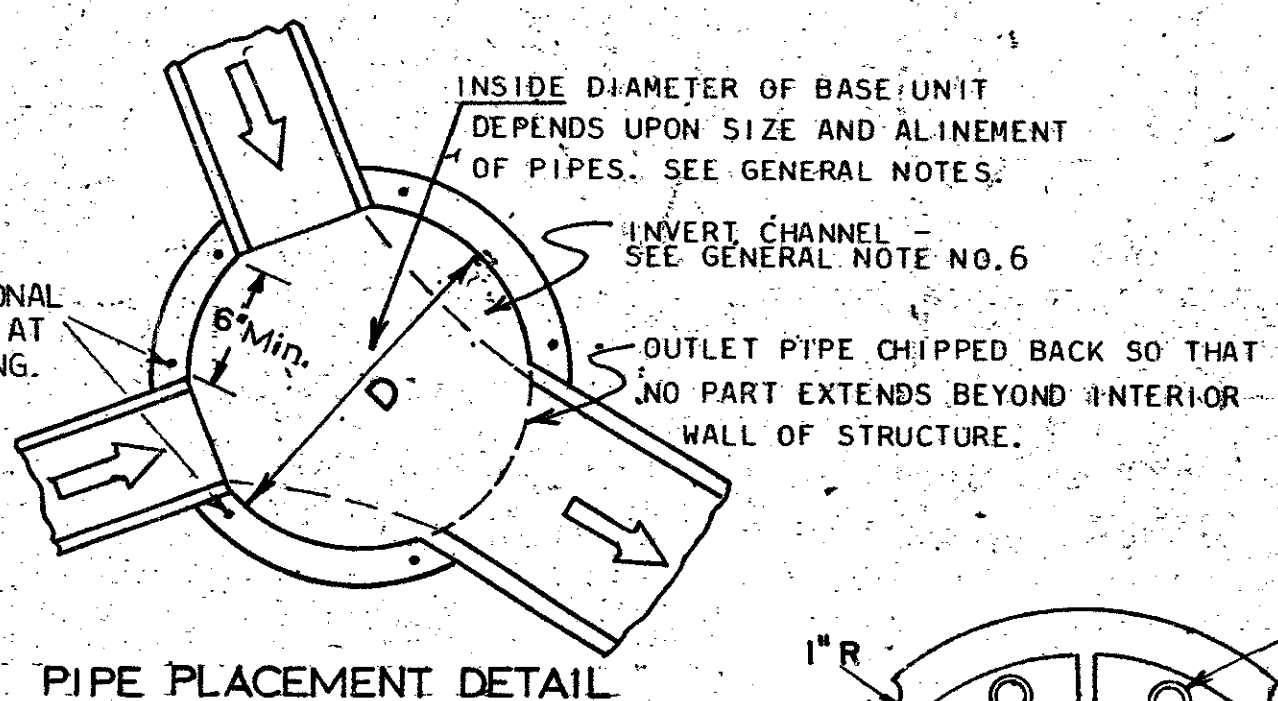
SECTIONAL DETAIL (MANHOLE WITH BASE UNIT OF D=48")

GENERAL NOTES:

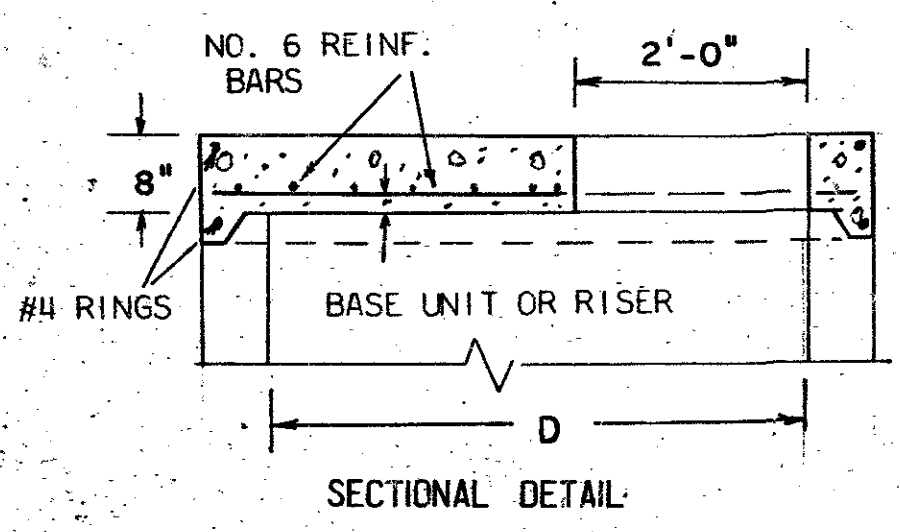
- MATERIALS: ALL CONCRETE, STEEL BARS AND STEEL WIRE REINFORCEMENT SHALL COMPLY WITH SECTION 866.02 OF GEORGIA STANDARD SPECIFICATIONS AND SPECIAL PROVISION WHICH MODIFY SECTION 866.02.
- REINFORCEMENT: (A) PLACEMENT AND DESIGN OF STEEL REINFORCEMENT IN RISER UNITS, CONE SECTIONS, GRADE RINGS AND JOINTS SHALL BE IN COMPLIANCE WITH A.S.T.M. C-478 UNLESS OTHERWISE NOTED. (B) BASE UNITS, REDUCER SLABS AND FLAT TOP SLABS SHALL HAVE STEEL REINFORCEMENT AS SHOWN IN DETAILS AT LEFT.
- OPENINGS FOR PIPES LARGER THAN 6 INCHES IN DIAMETER ARE TO BE PRECAST. A MINIMUM OF 6" ALONG THE INTERCIRCUMFERENCE IS TO REMAIN BETWEEN THE EXTREMITIES OF HOLE FOR ADJACENT PIPE IN ANY SINGLE UNIT. A MINIMUM OF TWO REINF. BARS SHALL REMAIN IN WALL BETWEEN ANY TWO OPENINGS.
- THE CONTRACTOR WILL FURNISH THE FABRICATOR WITH THE ANGLE OF ALIGNMENT AND SIZE OF ALL PIPES TO ENTER MANHOLE AND THE HEIGHT OF STRUCTURE.
- BASE UNITS SHALL HAVE SUFFICIENT HEIGHT TO ALLOW FOR MINIMUM OF 6" OF WALL BETWEEN TOP OF HIGHEST OPENING FOR PIPES AND BOTTOM OF JOINT.
- INVERT CHANNELS: (A) FOR SANITARY SEWER MANHOLES SEE GEORGIA STANDARD SPECIFICATIONS FOR CHANNEL REQUIREMENTS. (B) FOR STORM SEWER MANHOLES, CHANNELS BUILT TO SUIT PIPE SIZES AND LOCATION. HEIGHT OF CHANNEL EQUAL TO 1/2 DIAMETER OF OUTLET PIPE. CHANNEL BUILT FROM GROUT OR CLASS "A" CONCRETE.
- PIPES ARE TO BE EXTENDED INTO STRUCTURE WALL A MINIMUM OF 4" BUT SHOULD NOT EXTEND BEYOND INTERIOR WALL OF STRUCTURE.
- ALL JOINTS, EXCEPT FOR GRADE RINGS AND TOP OF TOP CONE, SHALL HAVE TONGUE AND GROOVE SECTION.



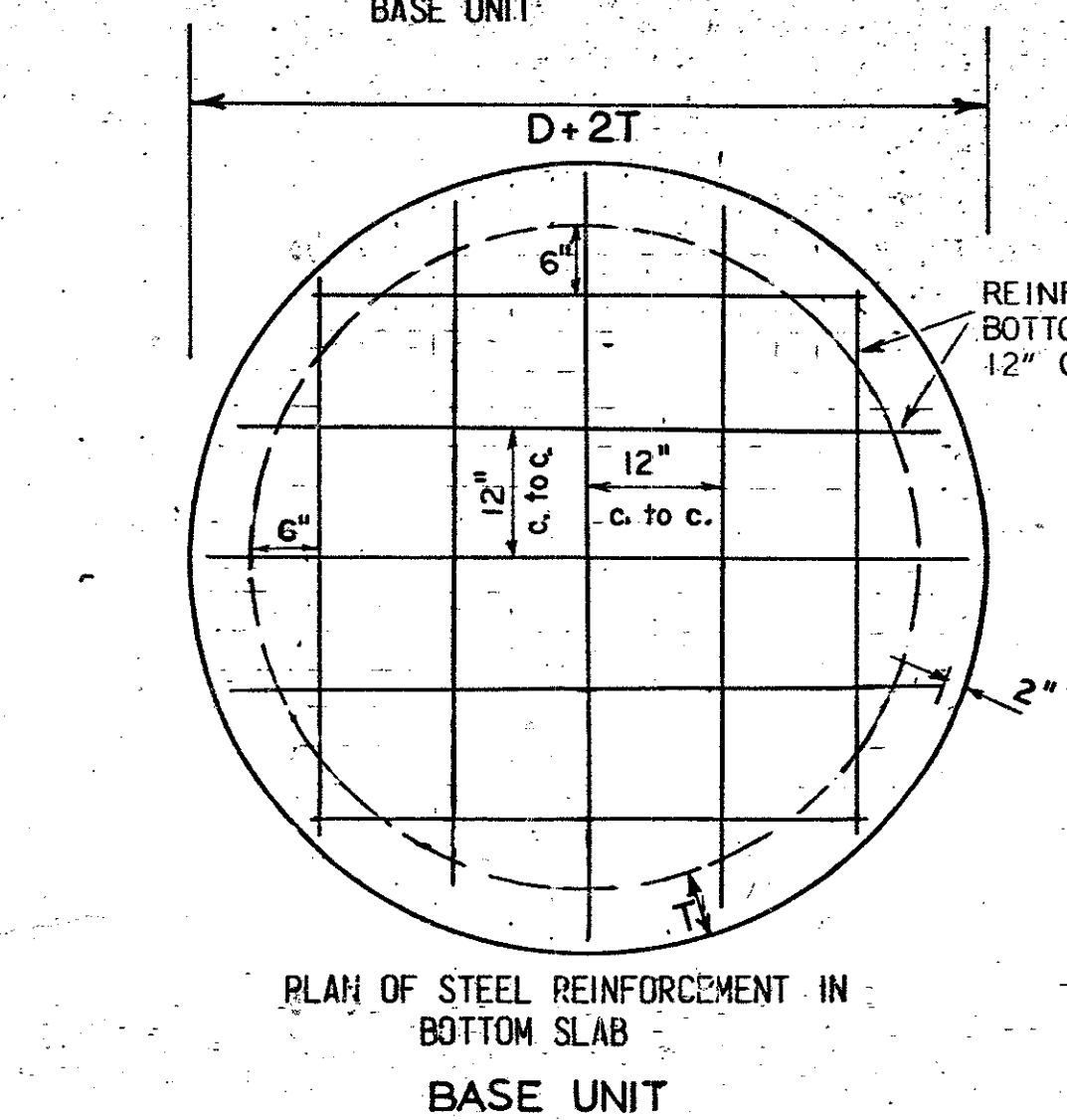
D	T (MIN)
48"	5"
60"	5"
72"	6"



PIPE PLACEMENT DETAIL

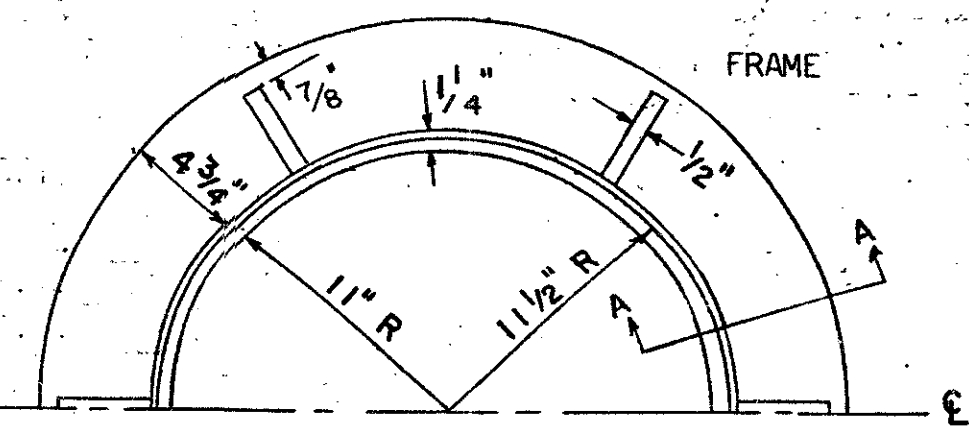


SECTIONAL DETAIL

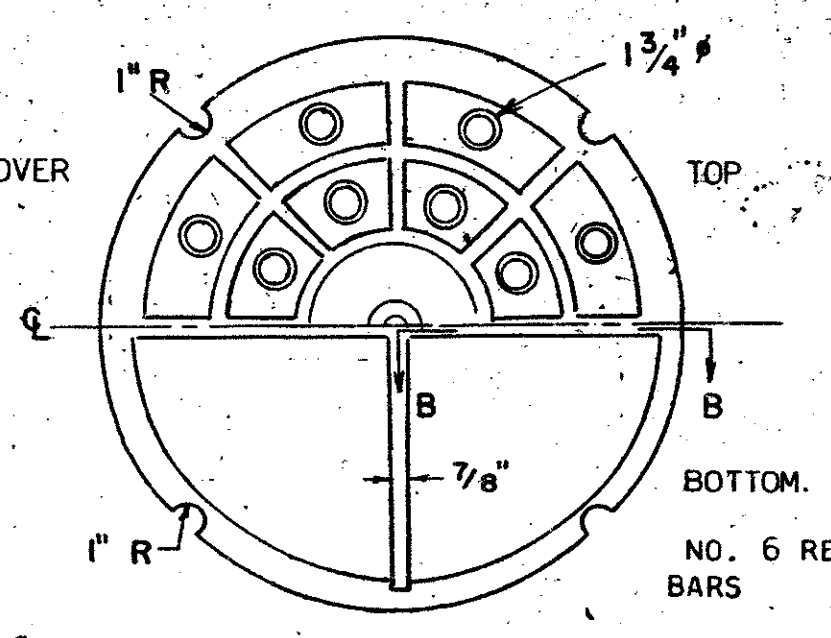


D	BAR SIZE
48"	#5
60"	#6
72"	#6

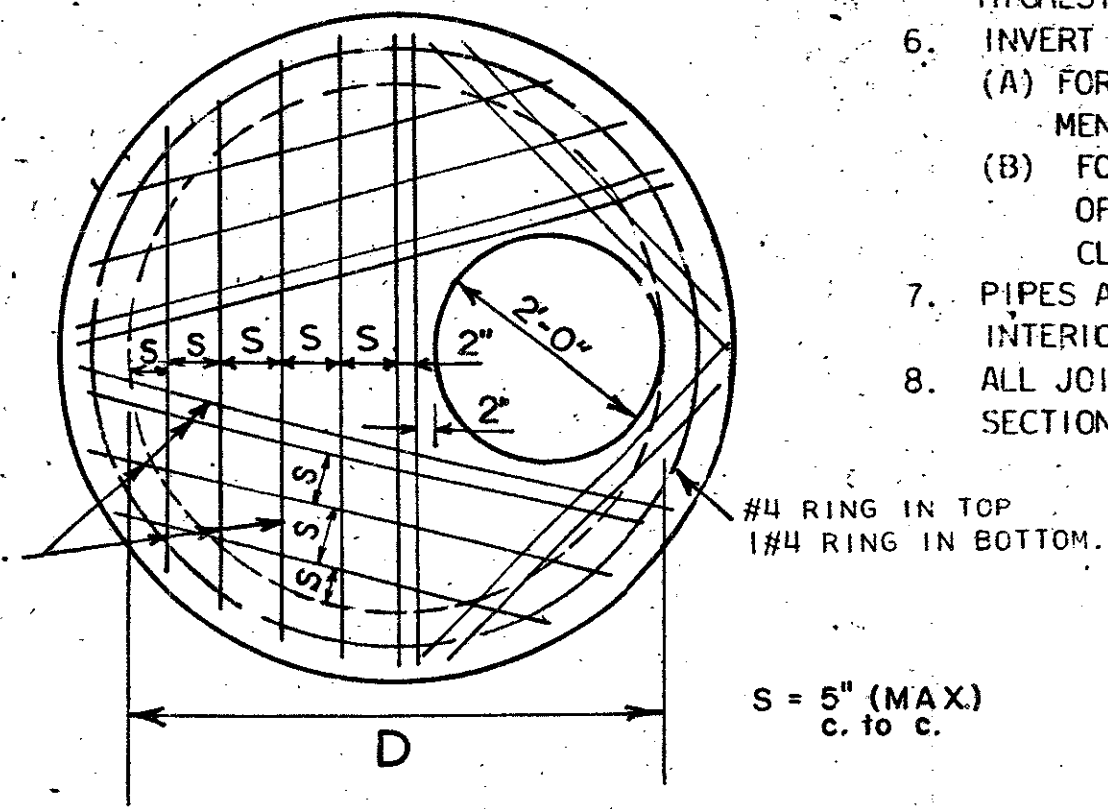
NOTE: FRAME AND COVER TO BE FITTED BEFORE LEAVING SHOP.



MANHOLE CASTINGS (C.I.)



SECTION B-B



PLAN OF REINFORCING STEEL

FLAT TOP SLAB IS FOR USE IN AREA OF MINIMUM COVER ONLY. MAXIMUM HEIGHT OF MANHOLE WITH FLAT TOP SLAB SHALL BE 4 FT. ABOVE TOP OF HIGHEST ENTERING PIPE.

FLAT TOP SLAB

41-0002

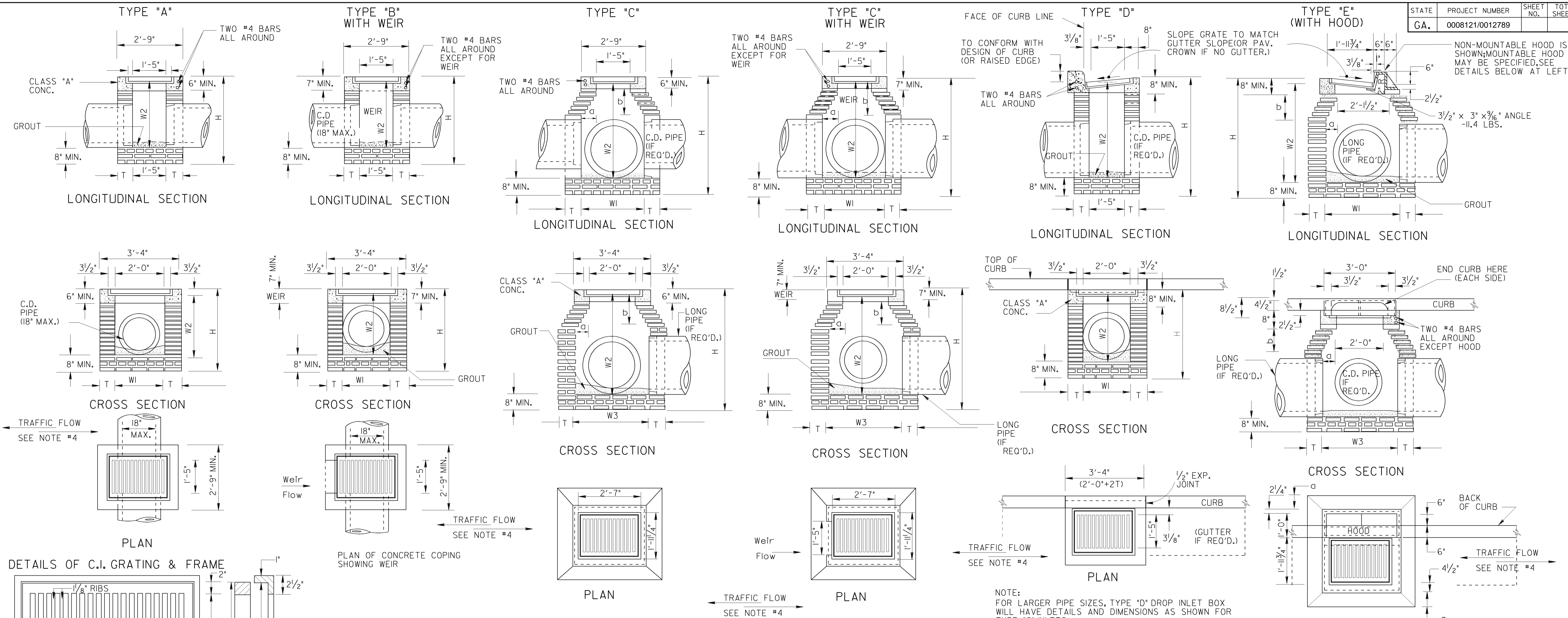
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
PRECAST REINFORCED CONCRETE
MANHOLE

NO SCALE AUGUST, 1973

DESIGNED: GCL
DRAWN: RMJ
CHECKED: JEC
SUBMITTED: J. J. Foster
STATE ROAD DESIGN ENGINEER
APPROVED: [Signature]
STATE HIGHWAY ENGINEER
NUMBER 1011-A
PRECAST

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		



SPECIAL NOTE:
STANDARD 1019A INLETS ARE FOR USE AT LOW POINTS & WHERE HYDRAULIC LOW CAPACITY GRATES ARE SUFFICIENT. WHERE HIGHER CAPACITY GRATES ARE NEEDED ON A CONTINUOUS GRADE, STANDARD 1019B IS RECOMMENDED.

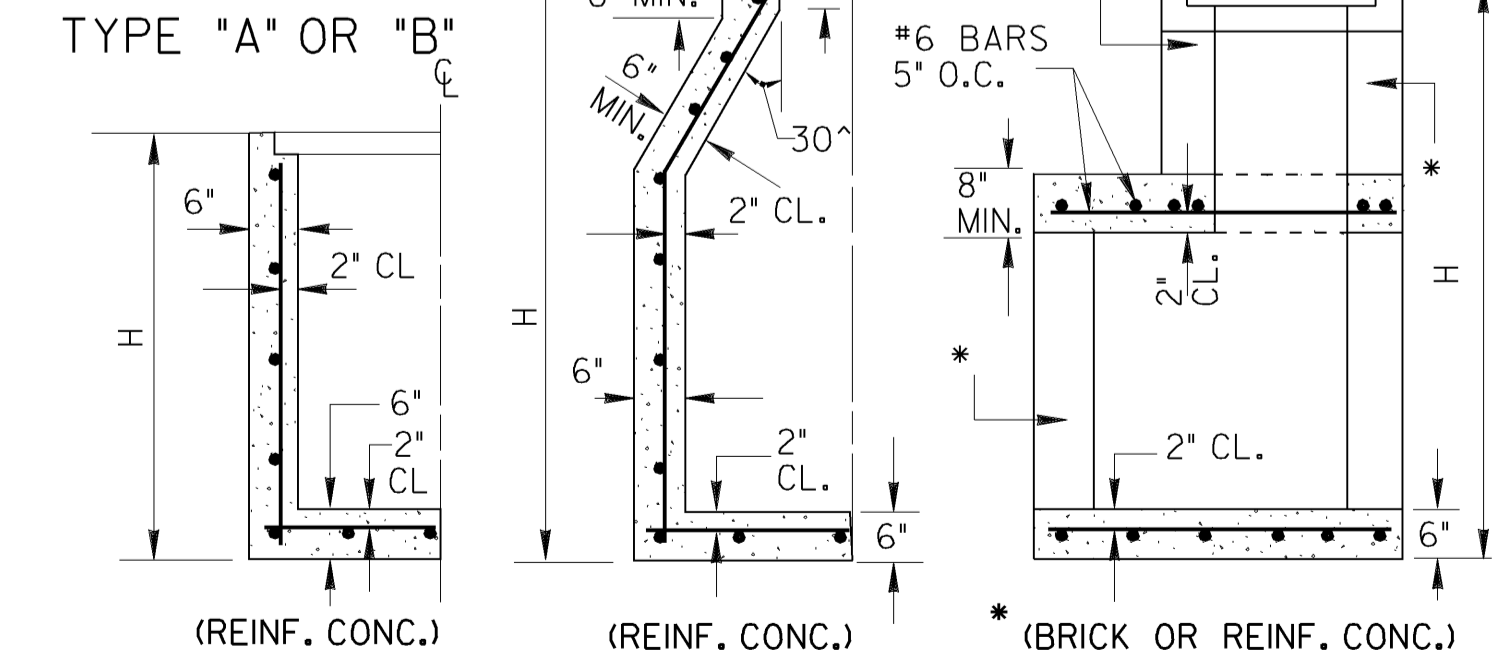
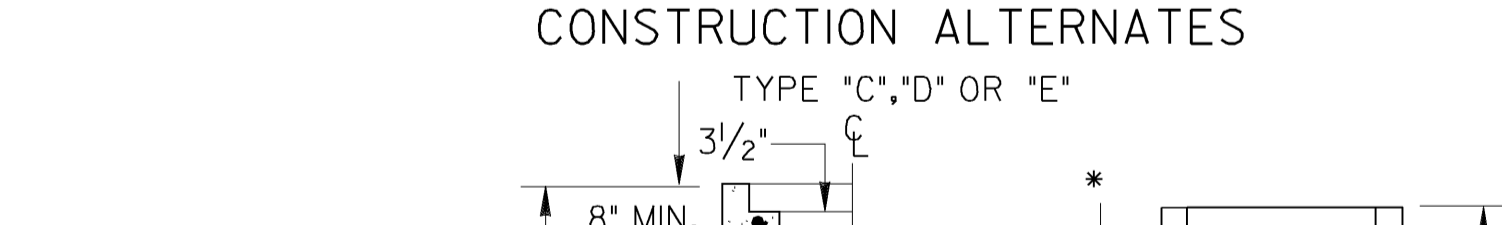
NOTE:
DETAILS NOT SHOWN FOR CONSTRUCTION ALTERNATES WILL BE SIMILAR TO THAT SHOWN FOR BRICK MASONRY.

- GENERAL NOTES:**
- SPECIFICATIONS: GEORGIA STANDARD AND CURRENT EDITION, AND SUPPLEMENTS THERETO.
 - 1/2" EXPANSION JOINT WILL BE REQUIRED WHERE RIGID PAVEMENT, CONCRETE SIDEWALK OR CONCRETE GUTTER MEETS DROP INLETS.
 - ALIGNMENT, NUMBER AND SIZES OF PIPES SHOWN ARE ONLY TYPICAL. SEE PLANS FOR ACTUAL PIPE CULVERT REQUIREMENTS.
 - ALL TYPE DROP INLETS WILL BE CONSTRUCTED (AS SHOWN), SO THAT THE GRATE BARS ARE PERPENDICULAR TO THE FLOW OF TRAFFIC EXCEPT ON LIMITED ACCESS PROJECTS OR WHERE BICYCLES ARE PROHIBITED.
 - BRICK MASONRY WITH CLASS "A" CONC. TOP PORTION IS SHOWN AS STANDARD CONSTRUCTION WITH ALTERNATES PERMITTED AS SHOWN, BOTTOM SLAB MAY BE 8" MIN. NON-REINFORCED CONCRETE, 8" BRICK OR 6" MIN. REINFORCED CONCRETE, SEE APPLICABLE STANDARDS FOR ALTERNATE PRECAST CONSTRUCTION.

NOTE:
MINIMUM DIMENSIONS GIVEN IN TABLE BELOW ARE BASED UPON TYPICAL OUTSIDE DIAMETERS OF CONCRETE PIPES WITH NORMAL COVER AND CLEARANCES, THESE DIMENSIONS MAY BE MODIFIED IF SO DETAILED IN THE PLANS OR AS DIRECTED BY THE ENGINEER, DIMENSIONS GIVEN ARE MINIMUM EXCEPT FOR "a" WHICH IS MAXIMUM.

TABLE OF MINIMUM DIMENSIONS FOR DROP INLETS

D	TYPES "A" or "B" BRICK OR REINF. CONC.			TYPE "C" OR "D" (BRICK)					TYPE "E" (BRICK)					TYPE "C", "D" OR "E" (REINFORCED CONCRETE)								
	W1	W2	H(min.)	W1	W2	W3	a (MAX.)	b	H(min.)	W1	W2	W3	a (MAX.)	b	H(min.)	W1 type "C"	W1 type "E"	W2	W3	a (MAX.)	b	H(min.)
15"	2'-0"	2'-7"	3'-3/2"	2'-2/8"	2'-11"	2'-9/8"	0'-4/8"	0'-7/8"	3'-9/2"	3'-2/8"	3'-1"	3'-0/8"	0'-7/8"	1'-1/8"	3'-11/2"	2'-0"	2'-1"	2'-7"	2'-0"	3/2"	6"	3'-6"
18"	2'-0"	2'-10"	3'-7"	2'-2/8"	3'-2/2"	2'-9/8"	0'-4/8"	0'-7/8"	4'-1"	3'-2/8"	3'-4/2"	3'-0/8"	0'-7/8"	1'-1/8"	4'-1"	2'-0"	2'-1"	3'-0"	2'-0"	3/2"	6"	3'-11"
24"	~	~	~	2'-8/8"	3'-3/8"	3'-3/8"	0'-7/8"	0'-7/8"	4'-9"	3'-2/8"	3'-11/2"	3'-0/8"	0'-7/8"	1'-1/8"	4'-8/4"	2'-8"	2'-9"	3'-8"	2'-6"	6/2"	11/4"	4'-7"
30"	~	~	~	3'-7/4"	4'-0/4"	3'-10/8"	1'-0/8"	1'-9"	5'-10"	3'-5/2"	4'-8/8"	3'-4"	0'-8"	1'-1/8"	5'-6/8"	3'-4"	3'-6"	4'-9"	3'-0"	9/2"	16/2"	5'-10"
36"	~	~	~	4'-1/8"	6'-0/8"	4'-8/8"	1'-4/8"	2'-2/4"	6'-11/8"	3'-11/2"	5'-8/8"	3'-10"	0'-11"	1'-7/8"	6'-7/8"	3'-10"	4'-0"	5'-10"	3'-9"	1'-2"	2'-0"	6'-10"
42"	~	~	~	4'-5"	7'-1/4"	5'-0"	1'-6"	2'-7/8"	8'-0/4"	4'-6/2"	7'-5/8"	4'-5"	1'-2/2"	2'-3/8"	8'-4/8"	4'-5"	4'-6"	7'-0"	4'-3"	1'-5"	2'-5/2"	7'-11"
48"	~	~	~	5'-0"	8'-2/4"	5'-7"	1'-9/2"	3'-1/4"	9'-1/4"	5'-1/2"	8'-6/8"	5'-0"	1'-9/2"	2'-7/8"	9'-5/8"	5'-0"	5'-0"	8'-2"	5'-0"	1'-9/2"	3'-1/2"	9'-2"
54"	~	~	~	5'-7"	9'-4"	6'-2"	2'-1"	3'-7/2"	10'-2/2"	5'-8/2"	9'-7/4"	5'-7"	1'-9/2"	3'-1/4"	10'-6/4"	5'-6"	5'-6"	9'-2"	5'-6"	2'-0/2"	3'-6/2"	10'-0"
60"	~	~	~	6'-2"	1'-4/8"	6'-9"	2'-4/2"	4'-1/8"	11'-3/4"	6'-3/2"	10'-8/8"	6'-2"	2'-1"	3'-1/8"	1'-7/8"	6'-0"	6'-0"	10'-3"	6'-0"	2'-3/2"	4'-0"	11'-1"



NOTE: CONCRETE WALLS WILL BE REINFORCED WITH #4 BARS 12" O.C. BOTH WAYS, BUT WHERE H IS OVER 9 FT., AND PIPE IS OVER 30" I.D., THE HORIZONTAL STEEL, WHICH IS MORE THAN 9 FT. DEEP WILL BE INCREASED TO #4 SPACINGS. 6" CONC. BOTTOM SLABS WILL BE REINFORCED WITH #4 BARS 12" O.C. BOTH WAYS.

NOTE: FOR PRECAST ALTERNATES, SEE STD. 1019-A PRECAST AND/OR STD. 1040 PRECAST AND BUILT-IN-PLACE COMPONENTS MAY BE USED IN COMBINATIONS WHICH PROVIDE PROPER FITS AND STRUCTURAL ADEQUACY.

41-0003

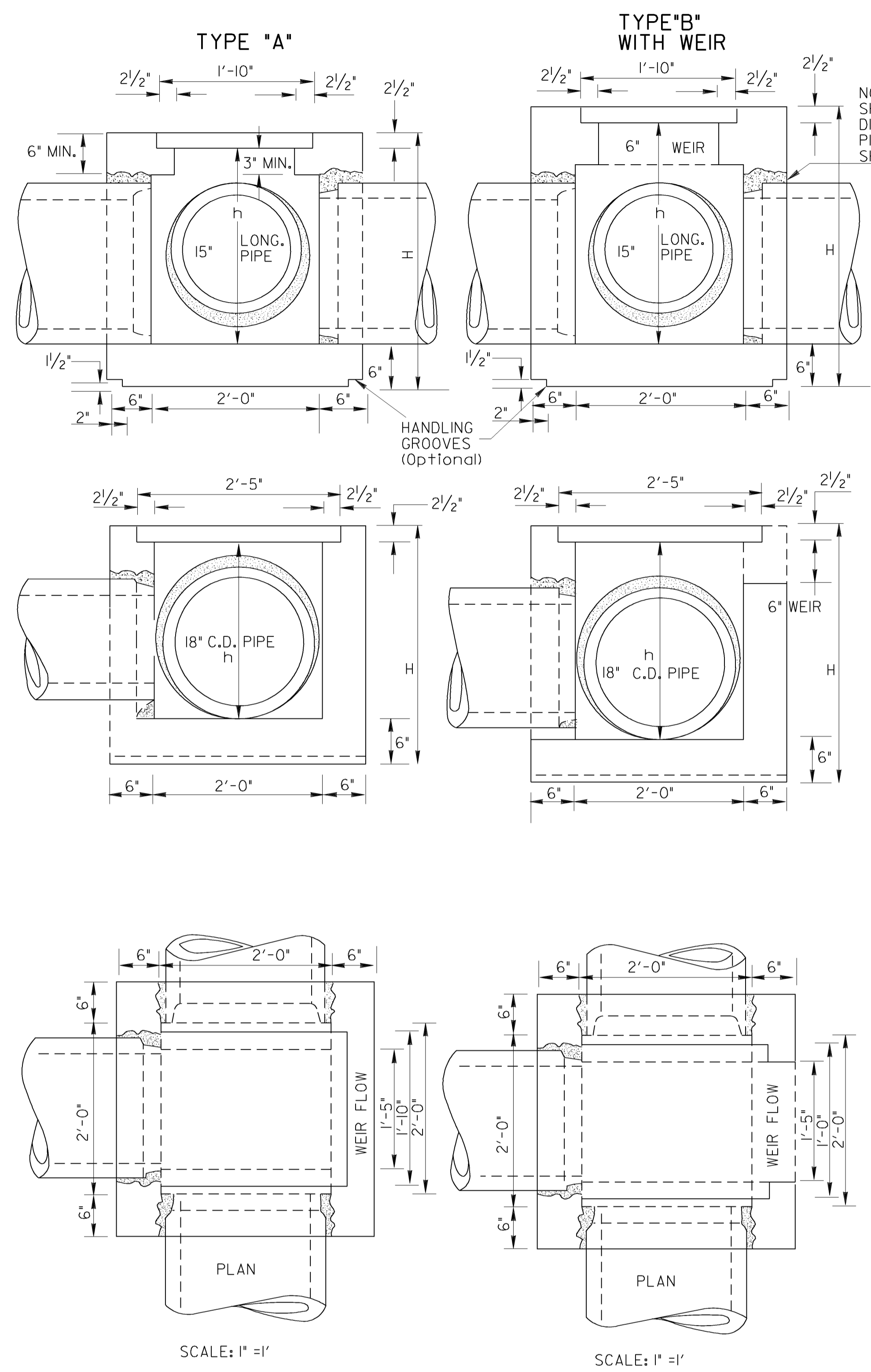
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
DROP INLETS
(BUILT-IN-PLACE)

SCALE AS SHOWN REV. & REDR. AUG., 1999

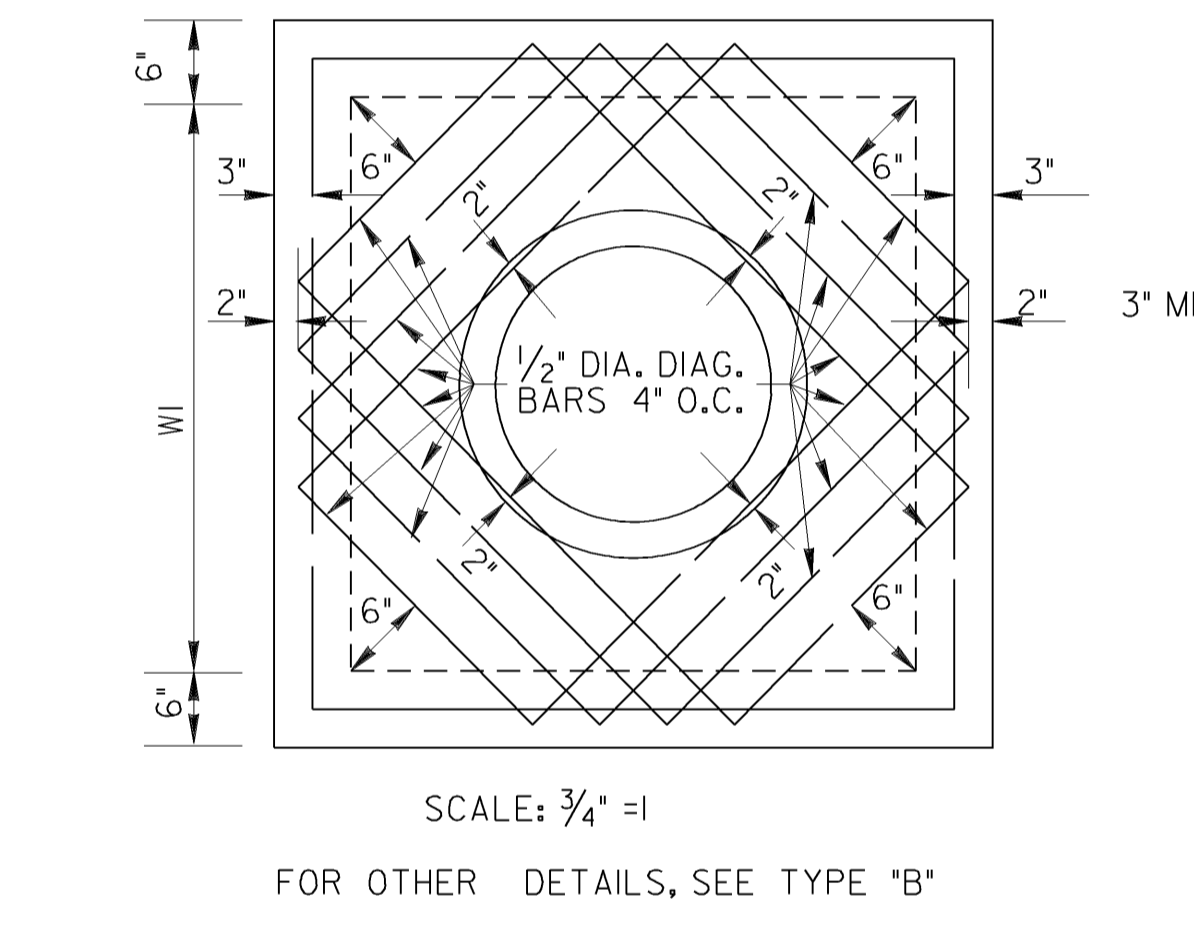
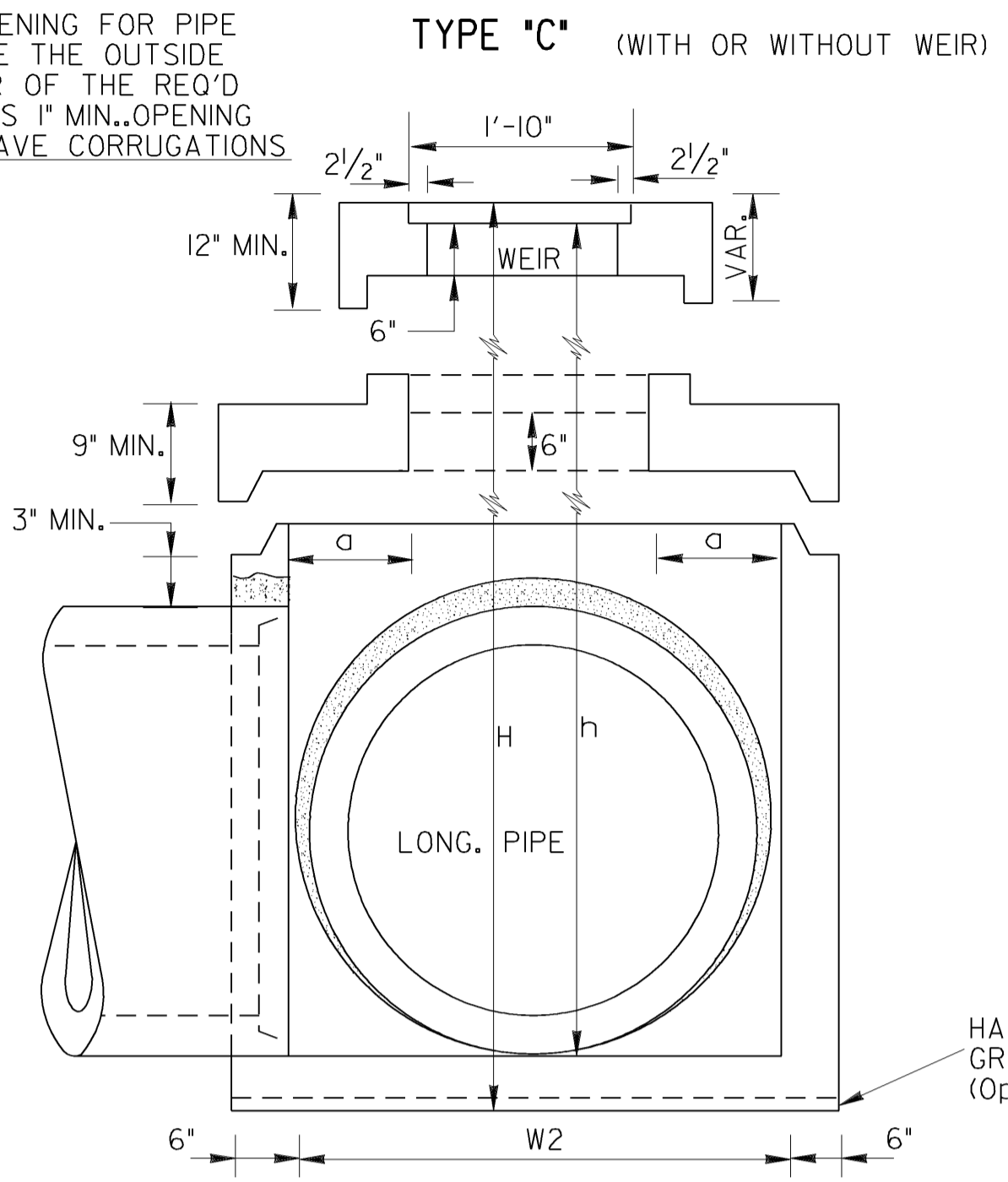
DES.	(SUBMITTED)	James L. Kaul STATE ROAD & AIRPORT DESIGN ENGR.	NUMBER 1019A
REV.	(APPROVED)		
TRA.		Tom L. Fobley CHIEF ENGINEER	
CHK.			

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

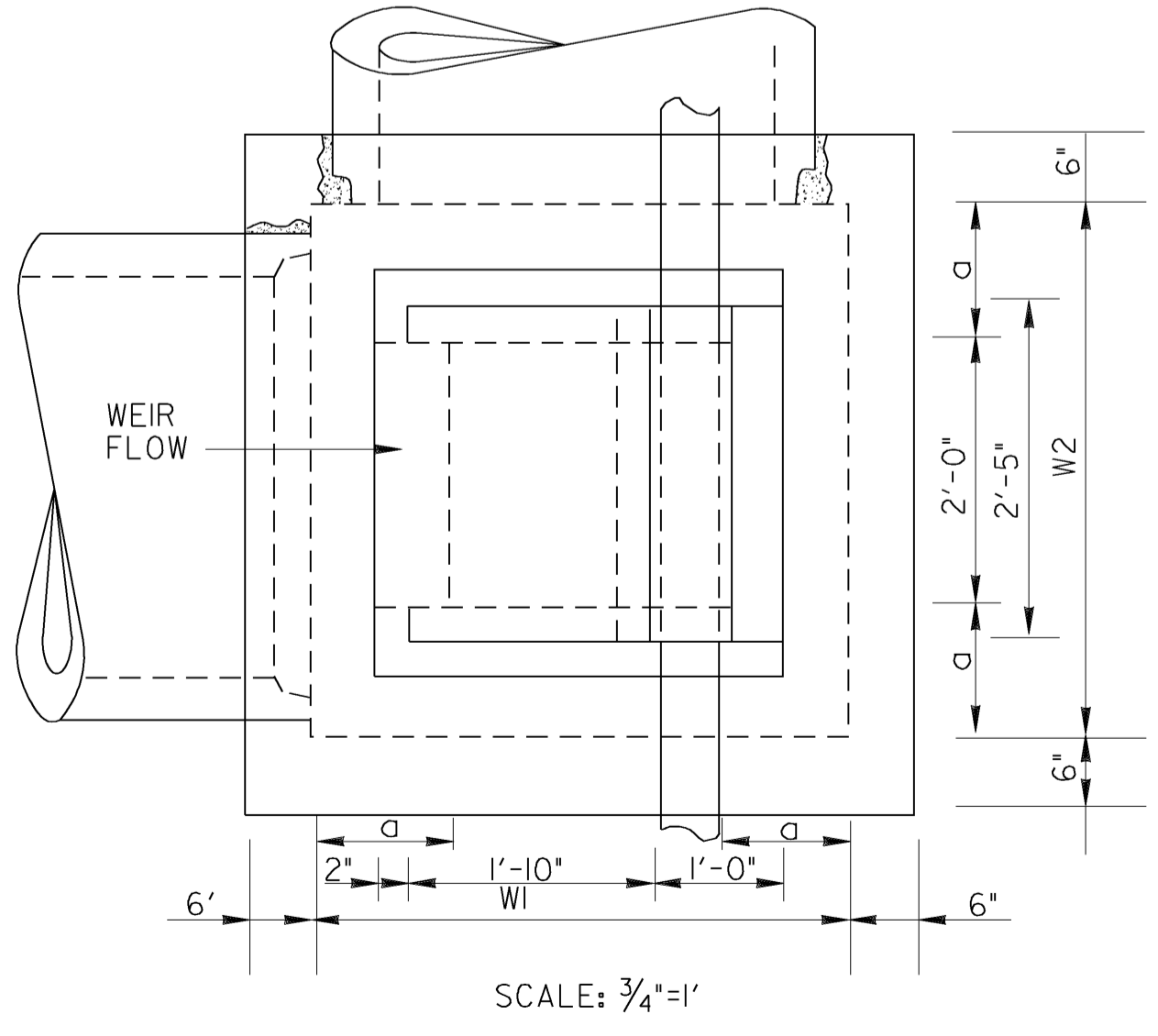
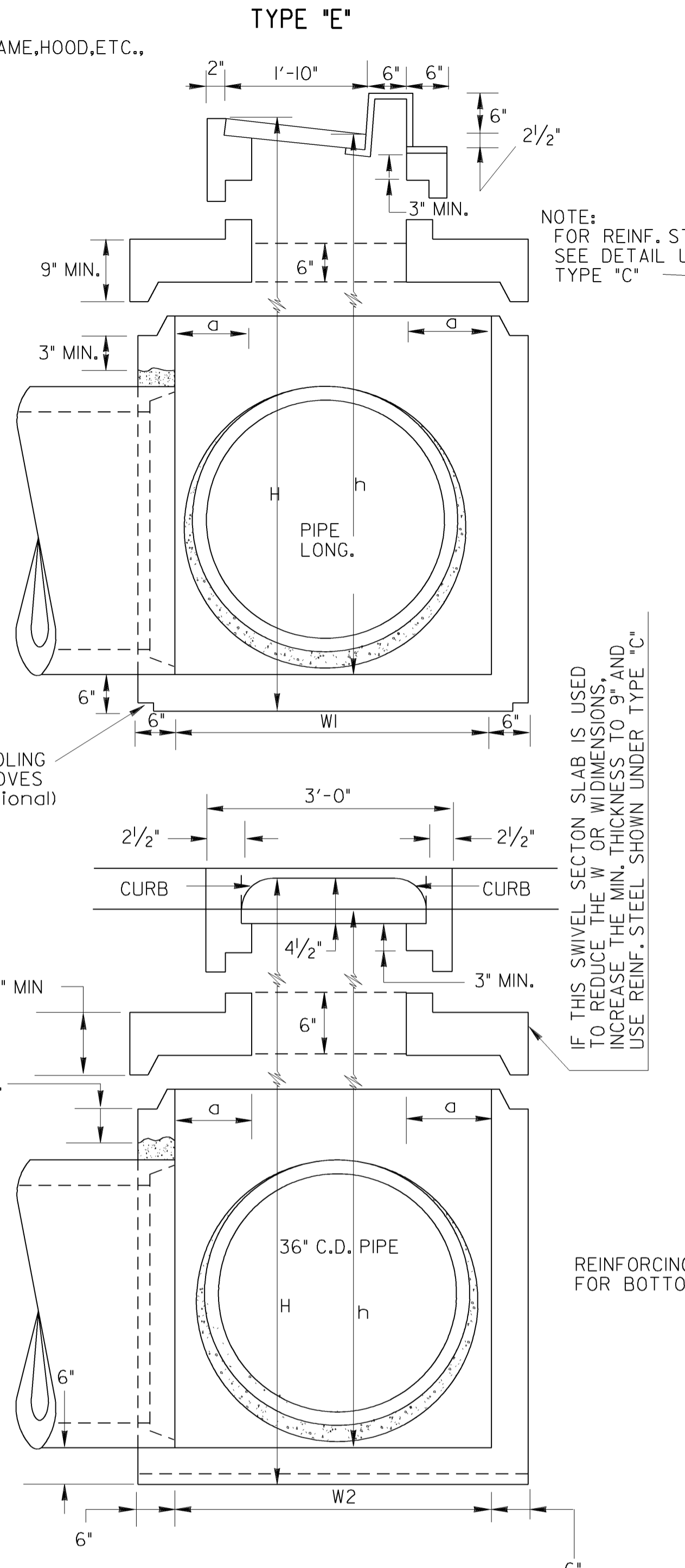


NOTE:
SEE STANDARD 1019-A- BRICK DROP INLETS- FOR DETAIL OF GRATING FRAME,HOOD,ETC., WHERE NEEDED.

NOTE: OPENING FOR PIPE SHALL BE THE OUTSIDE DIAMETER OF THE REQ'D PIPE PLUS 1\"/>

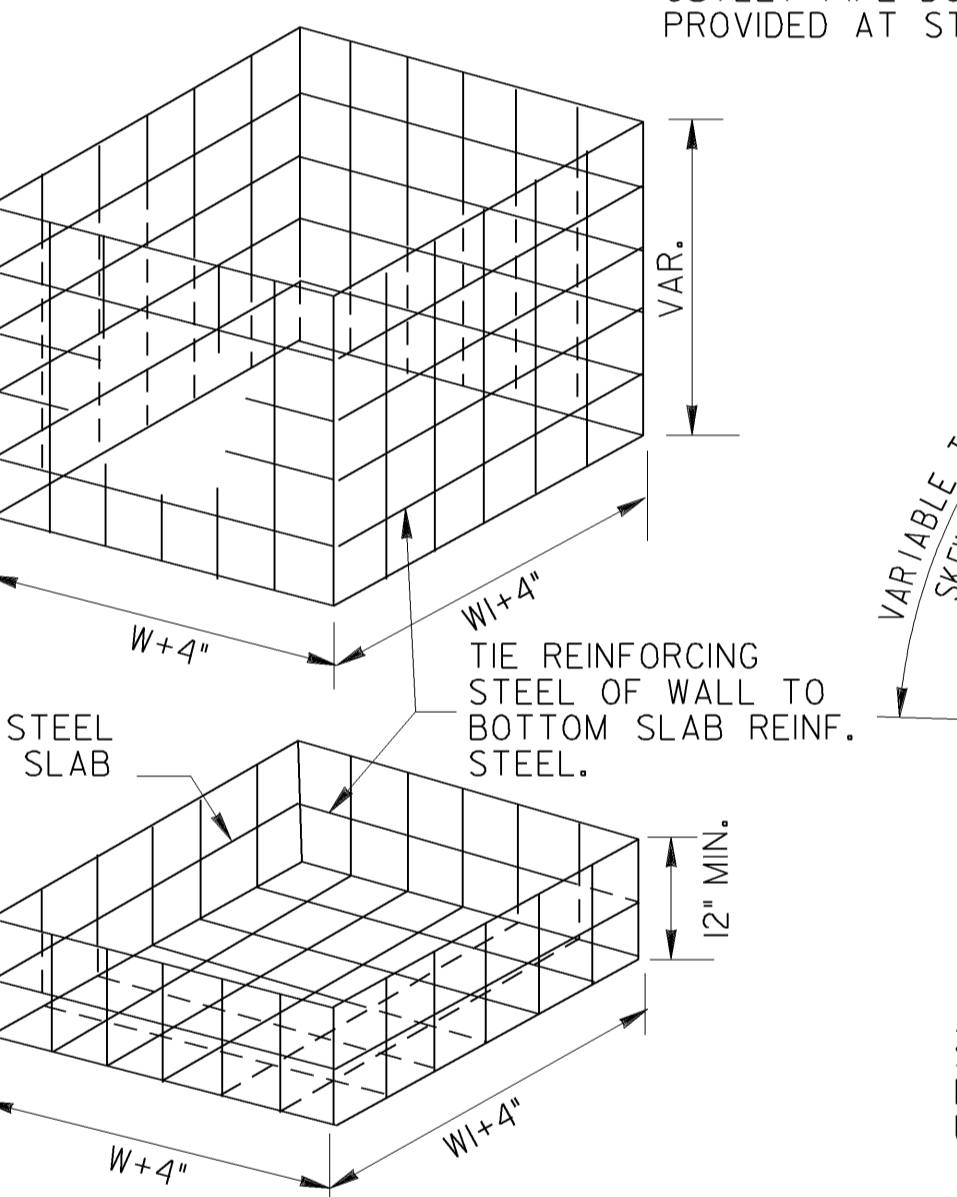
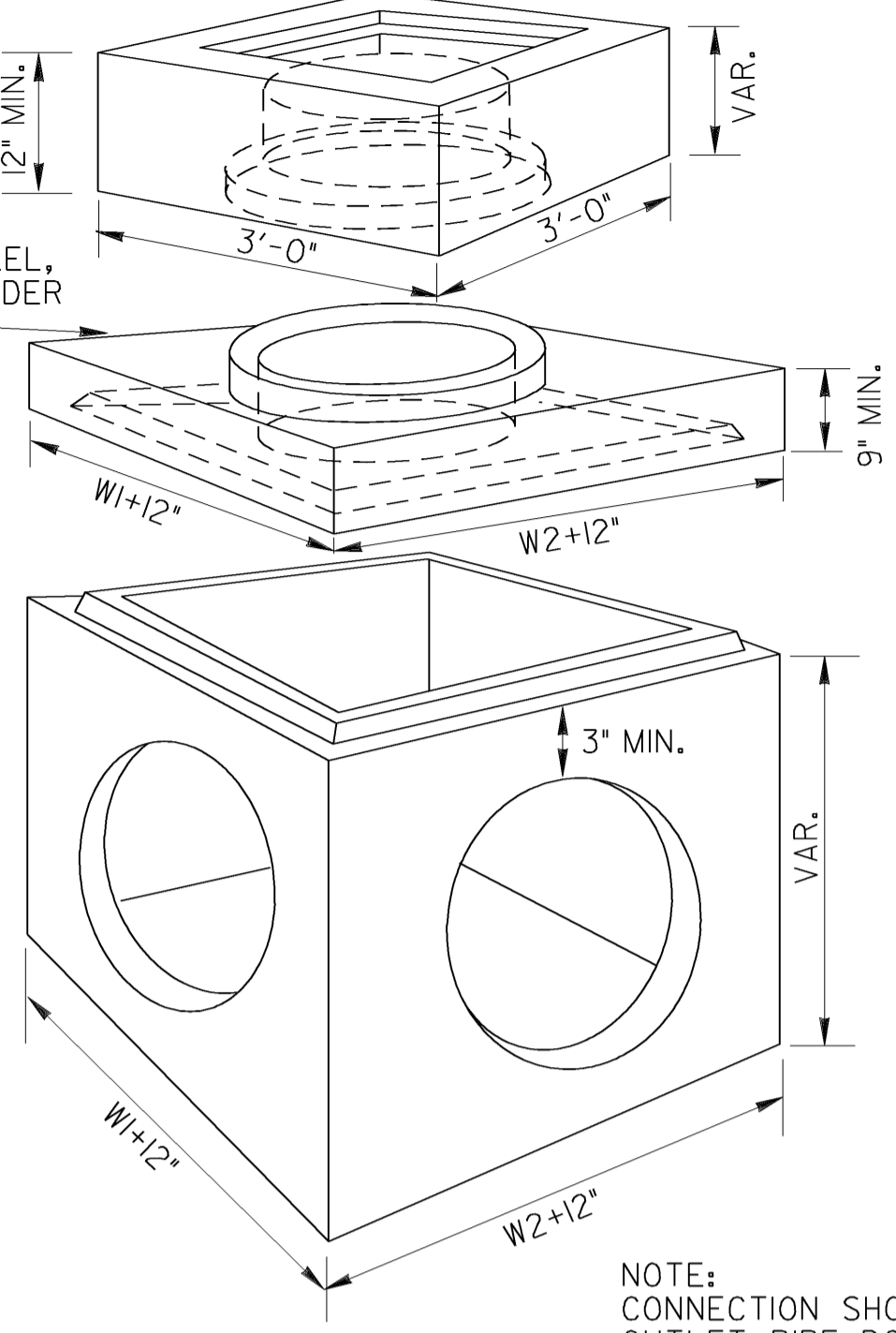


SCALE: 3/4\"/>



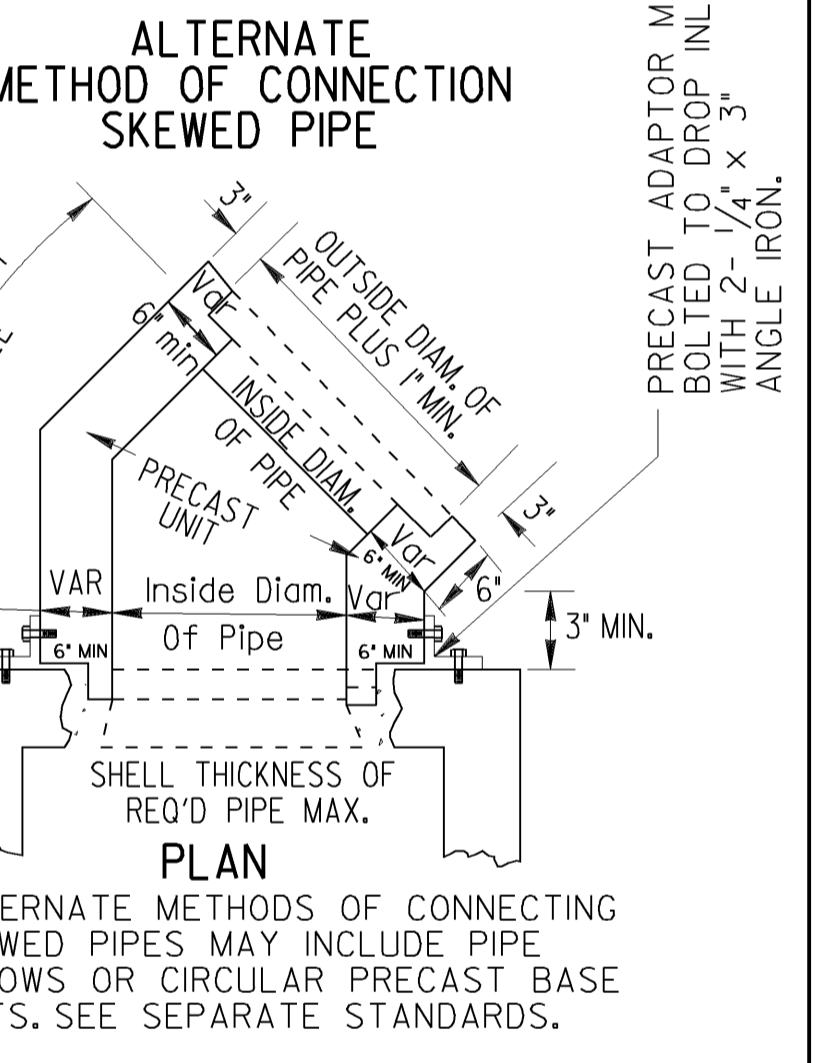
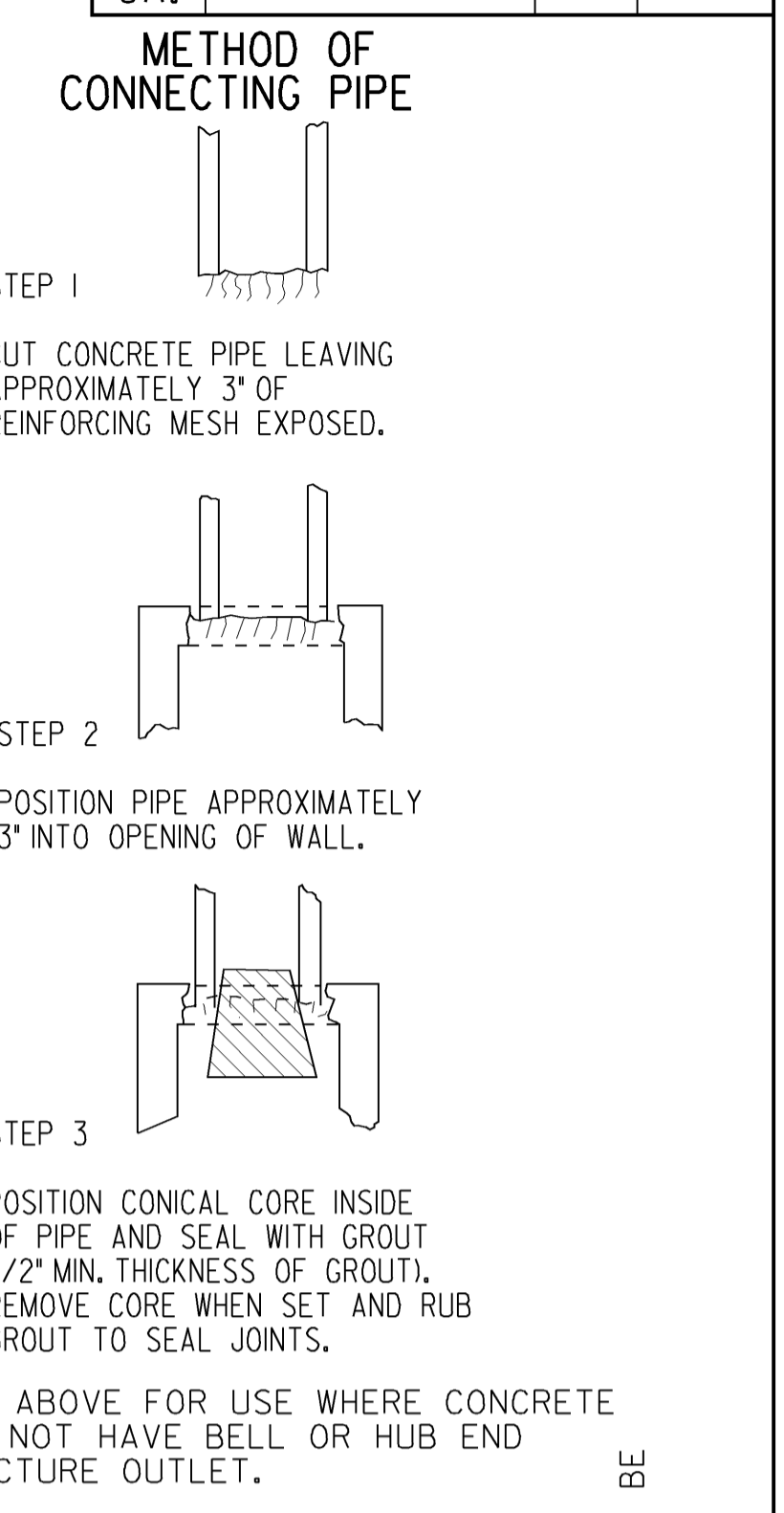
SCALE: 3/4\"/>

ISOMETRIC VIEW OF DROP INLET TYPE 'C' OR 'E' FOR PIPES LARGER THAN 18\"/>



NOTE: REINFORCING STEEL SHALL BE No. 4 STEEL BARS AT 12\"/>

SPECIAL NOTE:
STANDARD 1019A INLETS ARE FOR USE AT LOW POINTS AND WHERE HYDRAULIC LOW CAPACITY GRATES ARE SUFFICIENT. WHERE HIGHER CAPACITY GRATES ARE NEEDED ON A CONTINUOUS GRADE, STANDARD 1019B IS RECOMMENDED.



NOTE: PRECAST ADAPTOR MAY BE BOLTED TO DROP INLET WITH 2- 1/4\"/>

PIPE SIZE	TYPE 'A'		TYPE 'B'		TYPE 'C'				TYPE 'E'			
	MIN. h	MIN. H	MIN. h	MIN. H	WiorW2	a	MIN. h	MIN. H	WiorW2	a	MIN. h	MIN. H
15"	2'-0"	2'-8 1/2"	2'-7"	3'-3 1/2"	2'-0"		2'-7"	3'-3 1/2"	2'-0"		2'-7"	3'-3 1/2"
18"	2'-3 1/2"	3'-0"	2'-10"	3'-6 1/2"	2'-0"		2'-10"	3'-6 1/2"	2'-0"		2'-10"	3'-6 1/2"
24"					3'-0"	0'-6"	4'-3 1/2"	5'-0"	3'-0"	0'-6"	4'-7"	5'-3"
30"					3'-6"	0'-9"	4'-10 1/2"	5'-7"	3'-6"	0'-9"	5'-2"	5'-10"
36"					4'-0"	1'-0"	5'-5 1/2"	6'-2"	4'-0"	1'-0"	5'-9"	6'-3"
42"					4'-6"	1'-3"	6'-1 1/2"	6'-8"	4'-6"	1'-3"	6'-4"	7'-0"
48"					5'-0"	1'-6"	6'-7 1/2"	7'-3"	5'-0"	1'-6"	6'-11"	7'-7"
54"					5'-6"	1'-9"	7'-2 1/2"	7'-10"	5'-6"	1'-9"	7'-6"	8'-2"
60"					6'-0"	2'-0"	7'-9 1/2"	8'-5"	6'-0"	2'-0"	8'-1"	8'-9"

NOTE:
SEE STANDARD 1019A (BRICK) AND STANDARD 1040 FOR CONSTRUCTION ALTERNATES BRICK MASONRY AND CIRCULAR PRECAST SECTIONS RESPECTIVELY.

41-0004

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
PRECAST DROP INLETS

SCALE AS SHOWN

DESIGNED (SUBMITTED) *James A. Kasul*
DRAWN (STATE ROAD & AIRPORT DESIGN ENGINEER)
TRACED (APPROVED) *James L. Conley*
CHECKED (CHIEF ENGINEER)

DATE

REVISION

AUG. 1999

NUMBER
1019A
PRECAST

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

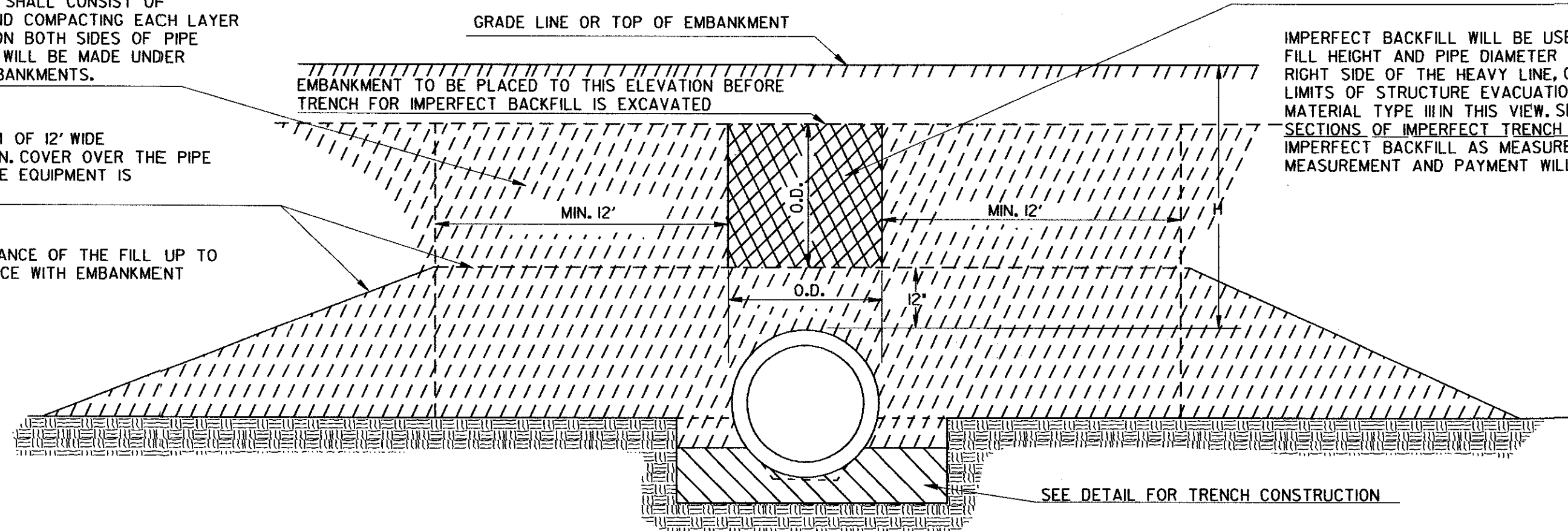
NORMAL BACKFILL

BACKFILL, AS SHOWN BY THE BROKEN LINE SECTIONS, SHALL CONSIST OF PLACING COMPACTABLE SOIL IN 6" (LOOSE) LAYERS AND COMPACTING EACH LAYER (ACCORDING TO GEORGIA STANDARD SPECIFICATIONS) ON BOTH SIDES OF PIPE FOR ITS FULL LENGTH. MEASUREMENT AND PAYMENT WILL BE MADE UNDER ROADWAY EXCAVATION ITEMS FOR FORMATION OF EMBANKMENTS.

NORMAL EMBANKMENT SHALL BE PLACED A MINIMUM OF 12" WIDE ON EACH SIDE OF THE PIPE AND AT LEAST THE MIN. COVER OVER THE PIPE AND COMPACTED TO THE REQUIRED DENSITY BEFORE EQUIPMENT IS ALLOWED TO CROSS.

AFTER BACKFILL HAS BEEN COMPACTED, THE BALANCE OF THE FILL UP TO GRADE LINE SHALL BE CONSTRUCTED IN ACCORDANCE WITH EMBANKMENT SPECIFICATIONS

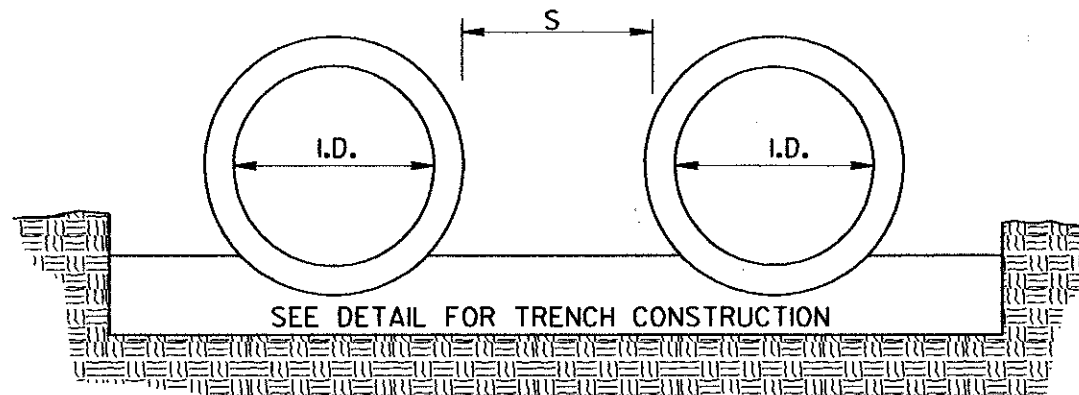
LONGITUDINAL SECTION OF IMPERFECT TRENCH BACKFILL AND BACKFILL METHODS



IMPERFECT BACKFILL

IMPERFECT BACKFILL WILL BE USED WITH CONCRETE PIPE IF FILL HEIGHT AND PIPE DIAMETER IN TABLE NO. 1 FALLS ON THE RIGHT SIDE OF THE HEAVY LINE, CROSS HATCHED AREA SHOWS LIMITS OF STRUCTURE EXCAVATION AND IMPERFECT BACKFILL MATERIAL TYPE III IN THIS VIEW. SEE DETAILS BELOW CROSS SECTIONS OF IMPERFECT TRENCH BACKFILL FOR LIMITS OF IMPERFECT BACKFILL AS MEASURED OVER THE PIPE LENGTHWISE. MEASUREMENT AND PAYMENT WILL BE CONFINED TO THESE LIMITS.

MULTIPLE PIPE CULVERT SPACING

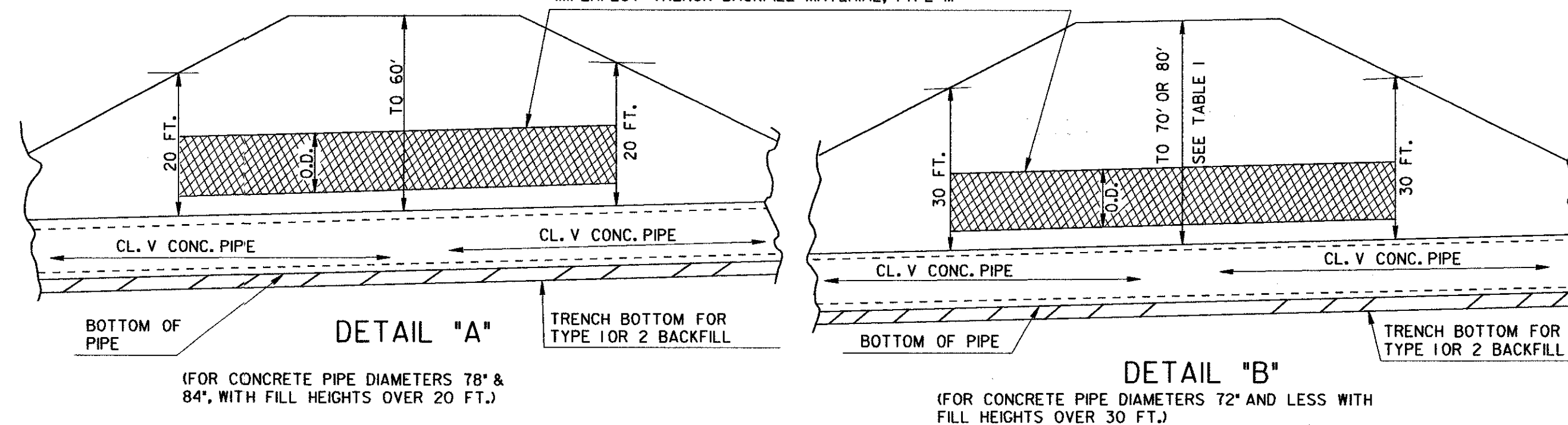


S=ONE INSIDE DIAMETER OF PIPE, OR 3 FEET, WHICHEVER IS SMALLER. FOR PIPE ARCH CULVERTS, SUBSTITUTE SPAN FOR INSIDE DIAMETER.

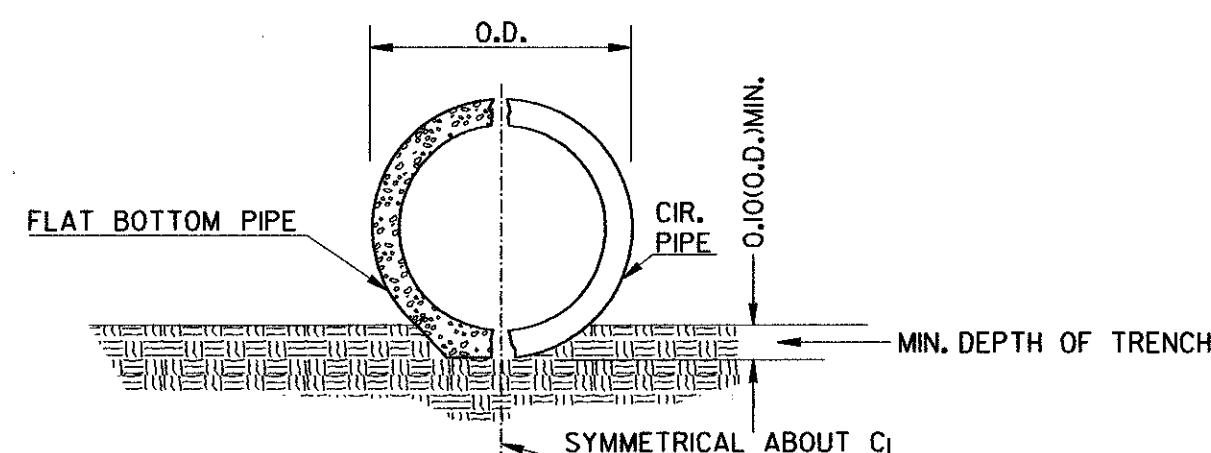
NOTE: FOR MULTIPLE LINES OF C.M. PIPE WITH METAL FLARED END SECTIONS, S MAY BE INCREASED ENOUGH TO AVOID OVERLAP OF END SECTION WINGTIPS. LOCATION OF METAL END SECTION SHOULD BE DETERMINED BEFORE PLACEMENT OF PIPE.

CROSS SECTIONS OF IMPERFECT TRENCH BACKFILL

CROSS HATCHED AREAS SHOW LIMITS OF CONSTRUCTION & MEASUREMENT FOR STRUCTURE EXCAVATION & IMPERFECT TRENCH BACKFILL MATERIAL, TYPE III

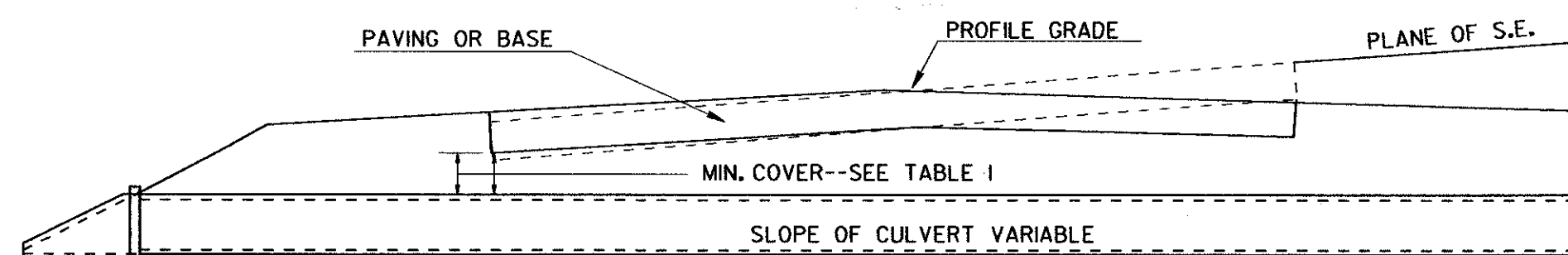


TRENCH CONSTRUCTION FOR SIDE DRAIN



NOTE: THE PIPE SHALL BE BEDDED TO LINE AND GRADE IN A FIRM FOUNDATION SHAPED TO FIT THE LOWER PART OF THE PIPE EXTERIOR. WHERE ROCK EXISTS, EXCAVATE AND BACKFILL WITH COMPRESSIBLE MATERIAL (UNCLASSIFIED EXCAVATION) A MINIMUM OF 6" BELOW THE PIPE.

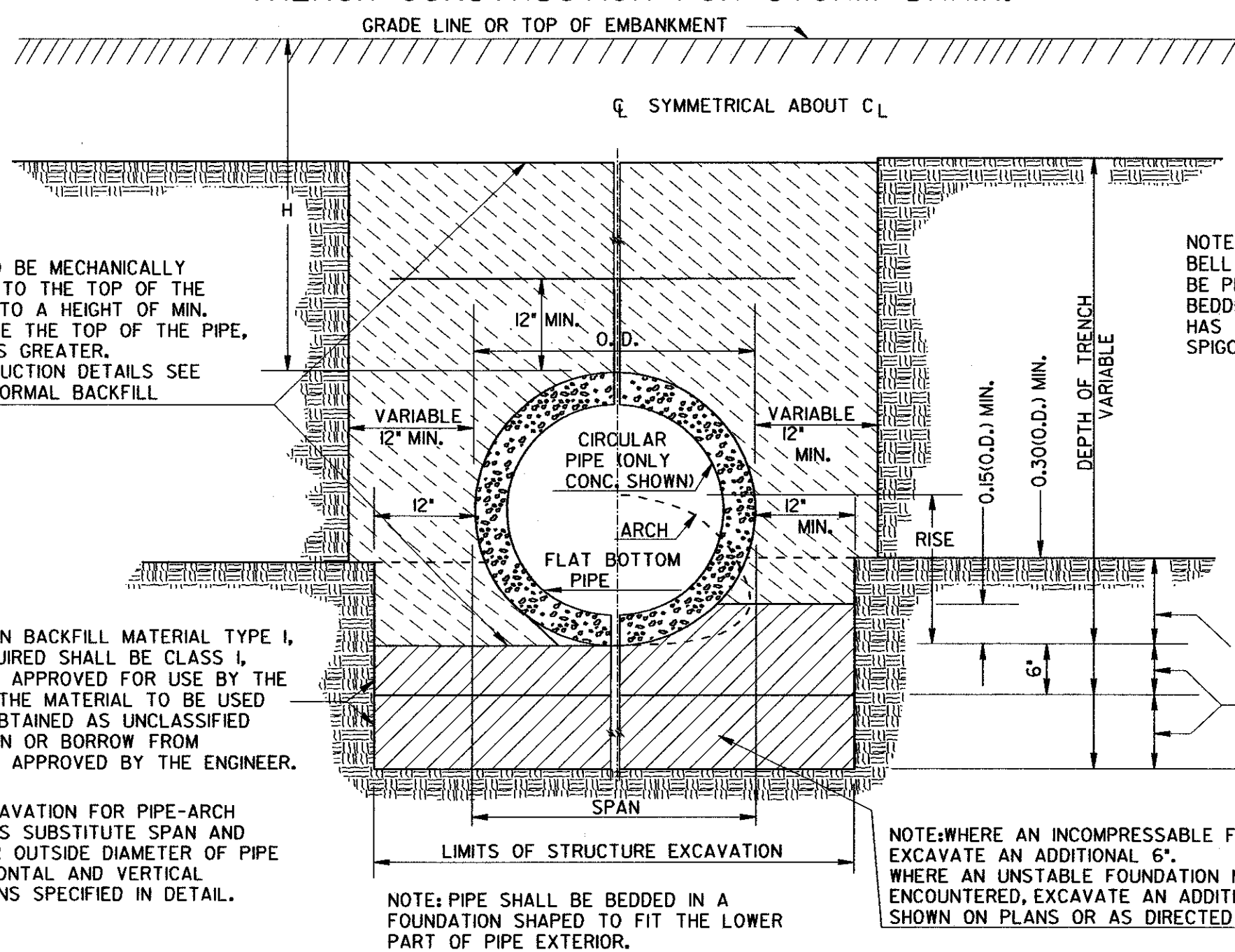
DETAIL SHOWING MINIMUM COVER FOR PIPE CULVERTS



NOTE:

1. FOR FILL HEIGHT TABLES SEE SHEET 2 OF 3 AND SHEET 3 OF 3.
2. ONLY ONE CLASS OR THICKNESS OF PIPE WILL BE SPECIFIED FOR EACH INDIVIDUAL LOCATION. THE CLASS OR THICKNESS WILL BE DETERMINED BY THE MAXIMUM HEIGHT OF FILL.

TRENCH CONSTRUCTION FOR STORM DRAIN.



BACKFILL TO BE MECHANICALLY COMPACTED TO THE TOP OF THE TRENCH OR TO A HEIGHT OF MIN. COVER ABOVE THE TOP OF THE PIPE, WHICHEVER IS GREATER. FOR CONSTRUCTION DETAILS SEE NOTE FOR NORMAL BACKFILL.

NOTE: BELL HOLES SHALL BE PROVIDED IN BEDDING IF PIPE HAS BELL AND SPIGOT JOINTS.

NOTE: TRENCH CONSTRUCTION IS REQUIRED FOR BOTH NORMAL OR IMPERFECT BACKFILL. ALL PIPES WITH BELL & SPIGOT JOINTS SHALL HAVE BELL HOLES IN BEDDING.

FOUNDATION BACKFILL MATERIAL TYPE I, WHEN REQUIRED SHALL BE CLASS I, OR II SOILS APPROVED FOR USE BY THE ENGINEER. THE MATERIAL TO BE USED WILL BE OBTAINED AS UNCLASSIFIED EXCAVATION OR BORROW FROM LOCATIONS APPROVED BY THE ENGINEER.

FOR EXCAVATION FOR PIPE-ARCH CULVERTS SUBSTITUTE SPAN AND RISE FOR OUTSIDE DIAMETER OF PIPE IN HORIZONTAL AND VERTICAL DIMENSIONS SPECIFIED IN DETAIL.

NOTE: PIPE SHALL BE BEDDED IN A FOUNDATION SHAPED TO FIT THE LOWER PART OF PIPE EXTERIOR.

NOTE: WHERE AN INCOMPRESSIBLE FOUNDATION EXISTS, EXCAVATE AN ADDITIONAL 6". WHERE AN UNSTABLE FOUNDATION MATERIAL IS ENCOUNTERED, EXCAVATE AN ADDITIONAL DEPTH AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER

41-0005



DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		STANDARD CONCRETE & METAL PIPE CULVERTS SHEET 1 OF 3 (TRENCH CONSTRUCTION, BEDDING, BACKFILLING)	
NO SCALE		REV. & REDR.: SEPT., 2001	
DES.	(SUBMITTED)	 STATE ROAD & AIRPORT DESIGN ENGR. (APPROVED)  CHIEF ENGINEER	
TRA.	(APPROVED)		
CHK.			
BL.			
		NUMBER	1030D

TABLE NO. 1 ROUND PIPE - CONCRETE - CORRUGATED STEEL - CORRUGATED ALUMINUM
MINIMUM CLASS OF CONCRETE OR MINIMUM THICKNESS OF STEEL AND ALUMINUM

PIPE DIAMETER (INCHES)	PIPE TYPE	MINIMUM COVER (INCHES)	HEIGHT OF FILL IN FEET ABOVE TOP OF PIPE										PIPE DIAMETER (INCHES)				
			1 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 50	50 - 60	60 - 70		70 - 80	80 - 90		
12	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	12
	STEEL 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064
15	ALUM 1	12	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.075
	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	15
18	STEEL 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064
	ALUM 1	12	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.075
24	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	18
	STEEL 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064
30	ALUM 1	12	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.075
	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	24
36	STEEL 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064
	ALUM 1	12	.075	.105	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.075
42	ALUM 2	12	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.075
	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	30
48	STEEL 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064
	ALUM 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.075
54	ALUM 2	12	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.075
	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	42
60	STEEL 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064
	ALUM 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.075
66	ALUM 2	12	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.075
	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	48
72	STEEL 1	12	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.168
	ALUM 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.075
78	ALUM 2	12	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.105
	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	54
84	STEEL 1	12	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.168
	ALUM 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.075
90	ALUM 2	12	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.075
	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	60
96	STEEL 1	12	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.168
	ALUM 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.075
102	ALUM 2	12	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.075	.105
	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	66
108	STEEL 1	12	.168	.168	.168	.168	.168	.168	.168	.168	.168	.168	.168	.168	.168	.168	.200
	ALUM 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.075
114	ALUM 2	12	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.060	.075
	CONCRETE	12	III	III	IV	V	V	V	V	V	V	V	V	V	V	V	72
120	STEEL 1	12	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.138	.168
	ALUM 1	12	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.064	.075

TABLE NO. 3 - INFORMATION ONLY

COR.	METAL	THICKNESS	EQUIVALENT	GAGE
STEEL		.064		16
		.079		14
		.109		12
		.138		10
		.168		8
ALUMINUM		.060		16
		.075		14
		.105		12
		.135		10
		.164		8

IMPERFECT BACKFILL IS NOT REQUIRED FOR CONDITIONS SHOWN ON THE LEFT SIDE OF THE HEAVY LINE. USE NORMAL BACKFILL.
FOR CONDITIONS TO THE RIGHT OF THE HEAVY LINE, CLASS V CONCRETE PIPE REQUIRES IMPERFECT BACKFILL ACCORDING TO DETAIL "A" OR "B" ON SHEET 1 OF 3.

STEEL 1 OR ALUM 1 DENOTES CORRUGATION PROFILE 2 2/3" X 1/2"
STEEL 2 OR ALUM 2 DENOTES CORRUGATION PROFILE 3" X 1" (OR 5" X 1" FOR STEEL PIPE ONLY)

ALL STEEL AND ALUMINUM PIPE SHALL BE LOCK-SEAM OR WELDED-SEAM (HELICAL) CONSTRUCTION. MINIMUM COVER VALUES APPLY TO HS-20 LIVE LOAD. MINIMUM COVER NEEDED FOR CONSTRUCTION VEHICLES MAY BE GREATER AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
TRENCH CONSTRUCTION IS REQUIRED FOR CONDITIONS ON BOTH SIDES OF HEAVY LINE. SEE SHEET 1 OF 3.
FOR CONDITIONS TO RIGHT OF HEAVY LINE, CONCRETE PIPE REQUIRES IMPERFECT BACKFILL ACCORDING TO SPECIFICATIONS AND THIS STANDARD.

TABLE VALUES FOR ALUMINUM CORRUGATED PIPE (OR ALUMINUM SPIRAL RIB PIPE) ARE COMPUTED BASED UPON ALCLAD ALLOY 3004-H34 HAVING MINIMUM YIELD STRENGTH, fy=24,000 PSI. IF ALUMINUM PIPE IS OTHERWISE FURNISHED AS 3004-H32 (fy=20,000 PSI), THE TABLE NO. 1 ALLOWABLE FILL HEIGHTS SHALL BE ADJUSTED AS FOLLOWS:
A. ALL MINIMUM COVER VALUES SHALL BE INCREASED BY 15 PERCENT. (EXAMPLE: 12 INCHES BECOMES 13.8 INCHES)
B. ALL HEIGHT OF FILL VALUES SHALL BE DECREASED BY 15 PERCENT. (EXAMPLE: 35-40 FEET BECOMES 29.7-34.0 FEET)

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
STANDARD
CONCRETE & METAL PIPE CULVERTS
SHEET 2 OF 3
(FILL HEIGHTS FOR CONCRETE & CORRUGATED METAL PIPE)

41-0006

NO SCALE
OCTOBER 21, 1998
NUMBER 1030D
DES. (SUBMITTED) James A. Kaul
TRA. (APPROVED) David L. Galley
CHK. CHIEF ENGINEER

TABLE NO. 1R ROUND PIPE - SPIRAL RIB STEEL - SPIRAL RIB ALUMINUM
MINIMUM THICKNESS OF STEEL AND ALUMINUM
HEIGHT OF FILL (FEET) ABOVE TOP OF PIPE

PIPE DIAMETER (INCHES)	TYPE	MINIMUM COVER (INCHES)	1 - 10	10 - 15	15 - 20	20 - 25	25 - 30	30 - 35	35 - 40	40 - 50	50 - 60	60 - 70	70 - 80	80 - 90	PIPE DIAMETER (INCHES)
12															12
15															15
18	STEEL R ALUM R	12	.064 .060	.064 .060	.064 .060	.064 .060	.064 .060	.064 .060	.064 .075	.064 .075	.064 .075	.079			18
24	STEEL R ALUM R	12	.064 .060	.064 .060	.064 .060	.064 .060	.064 .075	.064 .075	.064 .105	.079 .105	.079 .105	.109			24
30	STEEL R ALUM R	12	.064 .060	.064 .060	.064 .060	.064 .075	.064 .075	.064 .105	.079 .105	.079 .105	.109 .135	.109			30
36	STEEL R ALUM R	12	.064 .060	.064 .060	.064 .075	.064 .075	.064 .105	.079 .105	.079 .105	.109 .135	.109 .135				36
42	STEEL R ALUM R	21	.064 .075	.064 .075	.064 .075	.064 .105	.079 .105	.079 .105	.109 .135	.109 .135					42
48	STEEL R ALUM R	24	.064 .105	.064 .105	.064 .105	.079 .105	.079 .105	.109 .135	.109 .135						48
54	STEEL R ALUM R	15	.064 .105	.064 .105	.064 .105	.079 .105	.079 .135	.109 .135	.109 .135						54
60	STEEL R ALUM R	15	.079 .105	.079 .105	.079 .105	.079 .105	.109 .135	.109 .135	.109						60
66	STEEL R ALUM R	18	.079 .135	.079 .135	.079 .135	.079 .135	.109 .135	.109	.109						66
72	STEEL R ALUM R	18	.109 .135	.109 .135	.109 .135	.109 .135	.109 .135	.109							72
78	STEEL R	21	.109	.109	.109	.109	.109								78
84	STEEL R	21	.109	.109	.109	.109	.109								84
90															90
96															96
102															102
108															108
114															114
120															120

R DENOTES SPIRAL RIB PROFILE 3/4" X 3/4" X 7-1/2"

TABLE VALUES FOR ALUMINUM SPIRAL RIB PIPE ARE COMPUTED BASED UPON ALCLAD ALLOY 3004-H34 HAVING MINIMUM YIELD STRENGTH, $f_y=24,000$ PSI. IF ALUMINUM PIPE IS OTHERWISE FURNISHED AS 3004-H32 ($f_y=20,000$ PSI), ALLOWABLE FILL HEIGHTS SHALL BE ADJUSTED AS FOLLOWS:
 A. ALL MINIMUM COVER VALUES SHALL BE INCREASED BY 15 PERCENT. (EXAMPLE: 12 IN. BECOMES 13.8 IN.)
 B. ALL HEIGHT OF FILL VALUES SHALL BE DECREASED BY 15 PERCENT. (EXAMPLE: 35-40 FT. BECOMES 29.7-34.0 FT.)

MINIMUM COVER VALUES APPLY TO HS-20 LIVE LOAD. MINIMUM COVER NEEDED FOR CONSTRUCTION VEHICLES MAY BE GREATER AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
 TRENCH CONSTRUCTION IS REQUIRED FOR ALL INSTALLATIONS.

41-0007

REVISION		DATE	
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA STANDARD CONCRETE & METAL PIPE CULVERTS SHEET 3 OF 3 (FILL HEIGHTS FOR SPIRAL RIB METAL PIPE & FOR PIPE ARCH)			
NO SCALE		SEPT., 2001	
BY	DESIGNED	(SUBMITTED)	NUMBER
	TRACED	STATE ROAD	10300
	CHECKED	(APPROVED)	
	REVISED	CHIEF ENGINEER	

TABLE NO. 2 (PIPE-ARCH)

TABLE SHOWING MINIMUM THICKNESS IN INCHES OF CORRUGATED STEEL AND CORRUGATED ALUMINUM PIPE-ARCH AND MAXIMUM HEIGHTS OF FILL IN FEET ABOVE THE TOP OF THE PIPE-ARCH.

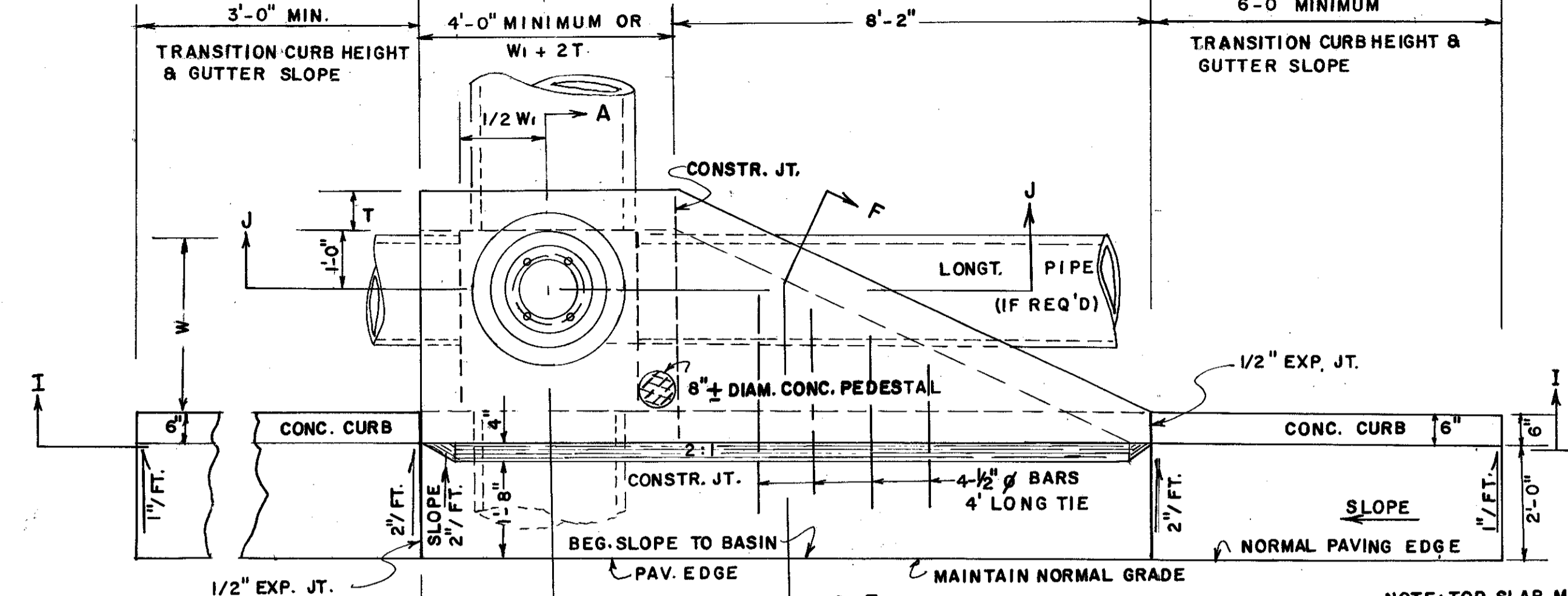
DIAMETER OF PIPE OF EQUAL PERIPHERY INCH	NOM.-MIN. SPAN INCH	NOM.-MIN. INCH	MIN. THICKNESS (INCHES)		COR. ALUMINUM	MIN. COVER (INCHES)	MAX.-HT. FILL (FEET)
			COR. STEEL	COR. ALUMINUM			
15	17	13	.064	.060	.060	.18	13
18	21	15	.064	.060	.060	.18	15
21	24	18	.064	.060	.060	.18	18
24	28	20	.064	.060	.060	.18	20
30	35	24	.064	.075	.075	.18	24
36	42	29	.064	.075	.075	.18	29
40	49	31	.079	.105	.105	.18	31
42	46	36	.079	.105	.105	.18	36
48	57	38	.109	.135	.135	.18	38
54	64	43	.109	.135	.135	.18	43
60	71	47	.138	.164	.164	.18	47
66	77	51	.168	.168	.168	.18	51
72	83	55	.168	.168	.168	.18	55
78	87	59	.168	.168	.168	.18	59
84	95	67	.109	.109	.109	.18	67
90	103	71	.109	.109	.109	.18	71

NOTE FOR TABLE NO. 2: COMBINATIONS FOR PIPE-ARCHES HAVING EQUAL PERIPHERY TO THAT SHOWN, MAY BE SUBSTITUTED IF LISTED IN AASHTO SPECIFICATION.

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

CATCH BASIN

(IF CATCH BASIN HAS LONGITUDINAL PIPE OVER 24", SEE DETAILS AT RIGHT)



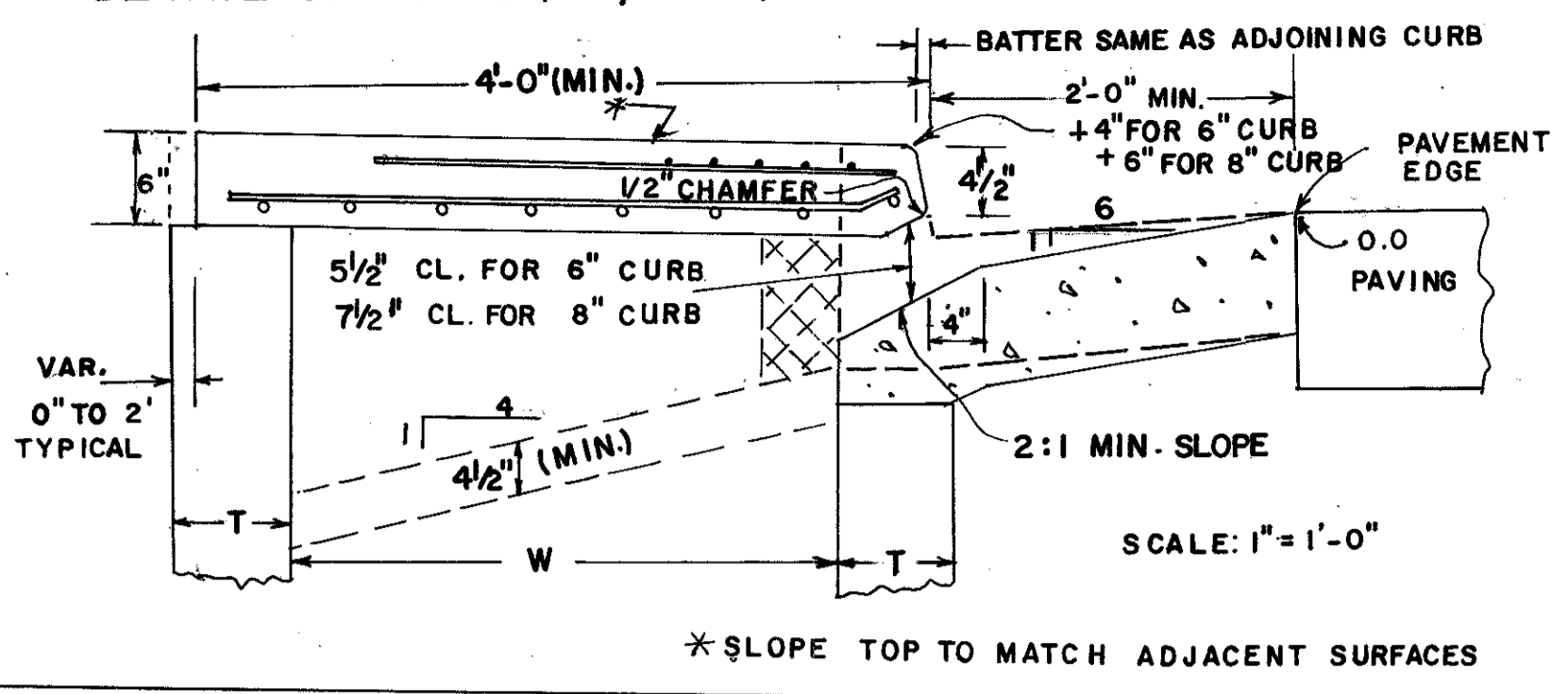
NOTE: 12'-0" (MIN.) PAYMENT FOR CATCH BASIN INCLUDES ALL QUANTITIES BETWEEN THESE LINES EXCEPT ADDITIONAL DEPTH (UNLESS OTHERWISE NOTED IN THE PLANS)

PLAN

NOTE: TOP SLAB MAY BE CAST IN PLACE OR PRECAST, IF SLAB IS CAST IN PLACE, BUILDERS PAPER IS TO BE PLACED BETWEEN THE CATCH BASIN AND TOP SLAB.

SCALE: 1/2" = 1'

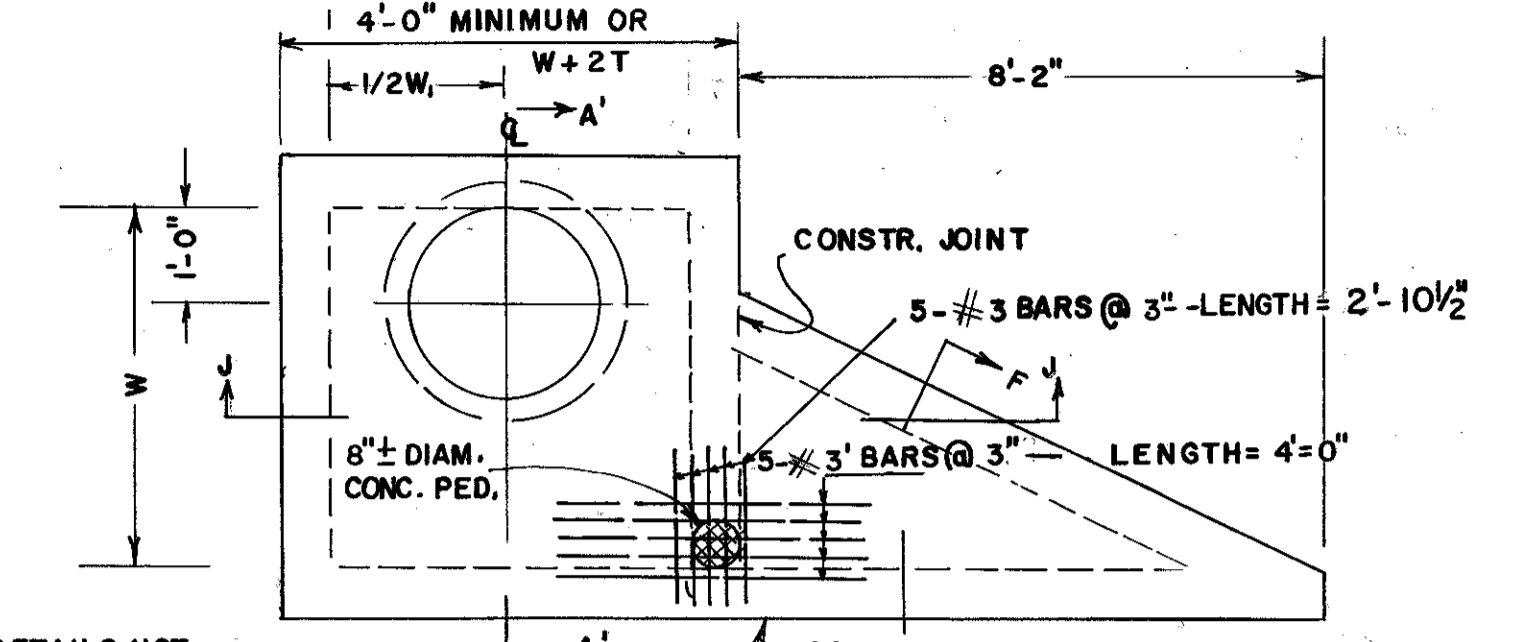
DETAIL OF TOP SLAB, REINF. STEEL & CLEARANCES REQ'D.



*SLOPE TOP TO MATCH ADJACENT SURFACES

(TYPICAL FOR CATCH BASIN WITH LARGE LONGITUDINAL PIPE OR RECESSED BOX)

CATCH BASIN - (WITH PROTRUDED BACK)



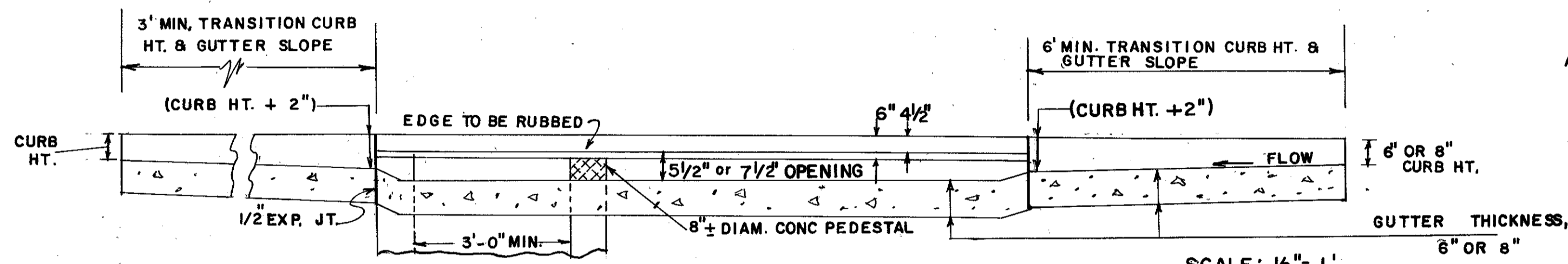
PART PLAN

NOTE: CATCH BASIN DETAILS NOT SHOWN HERE WILL BE SIMILAR TO THOSE AT LEFT FOR NORMAL CATCH BASIN.

NOTE: RECESSED BOX TO BE USED ONLY WHERE SPECIFIED, SHALLOW LONG. PIPE OR UNDERGROUND OBSTRUCTION TYPICAL

NOTE: H2 & W2 TO BE SHOWN IN THE PLANS

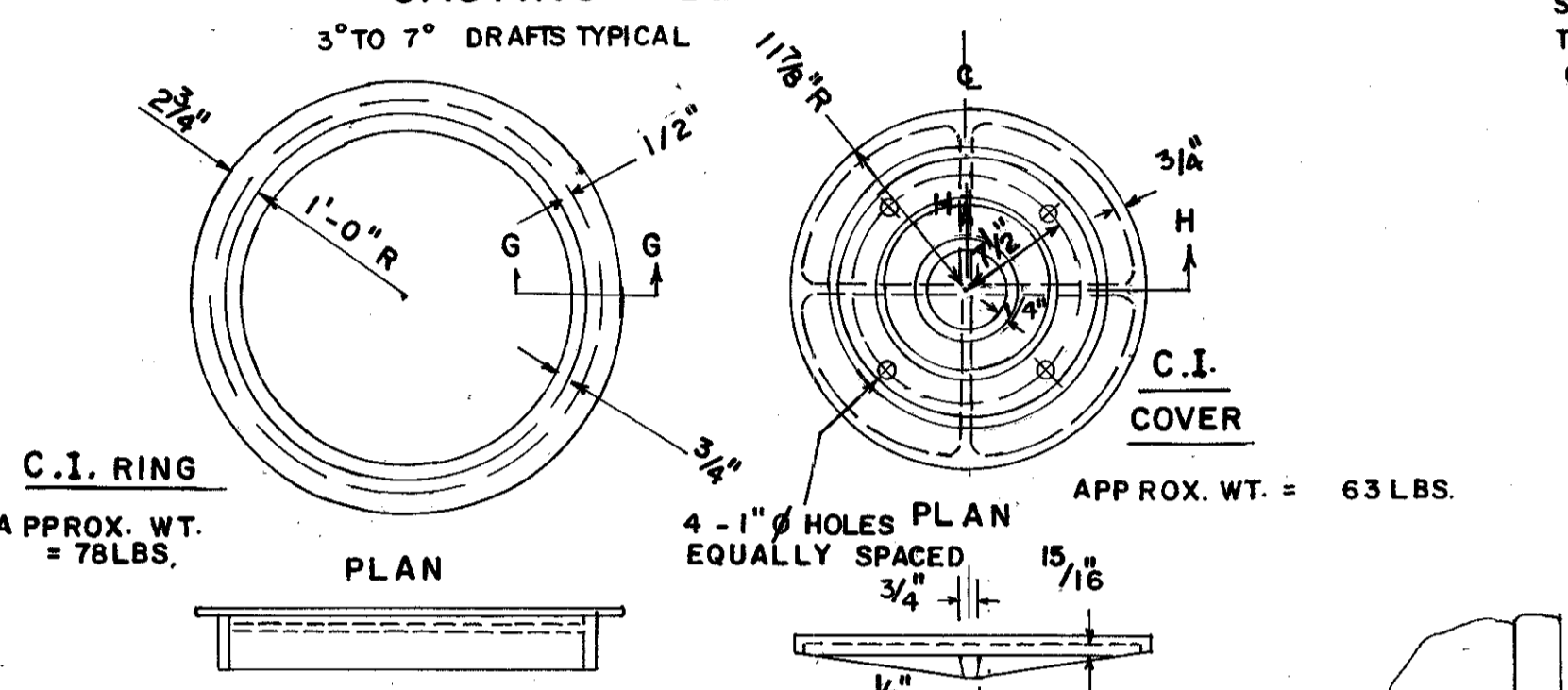
SECTION A-A' (WITH RECESSED BOX)



SECTION I-I

SCALE: 1/2" = 1'

CASTING DETAILS



PLAN

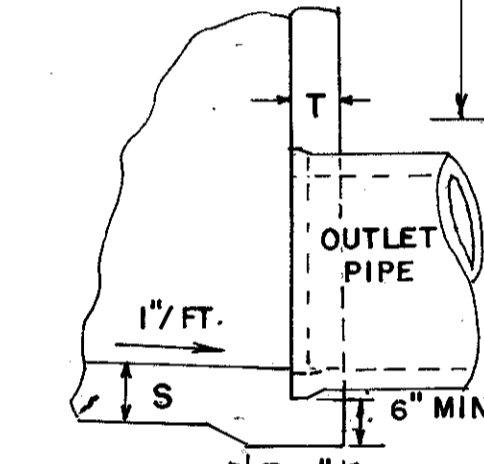
ELEVATION

SCALE: 1" = 1'

PLAN

ELEVATION

SCALE: 1" = 1'



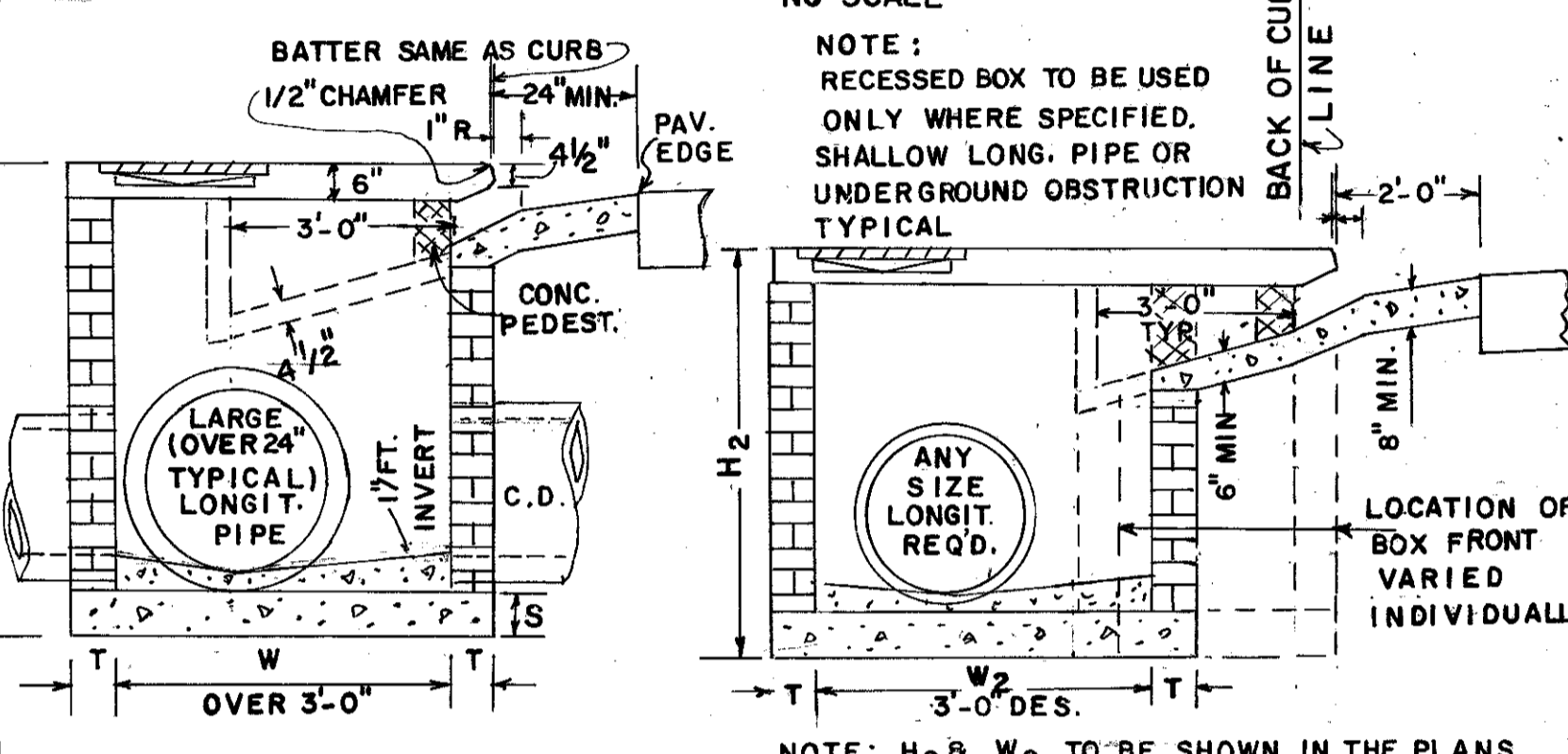
SECTION G-G

SCALE: 3" = 1'

SECTION H-H

SCALE: 3" = 1'

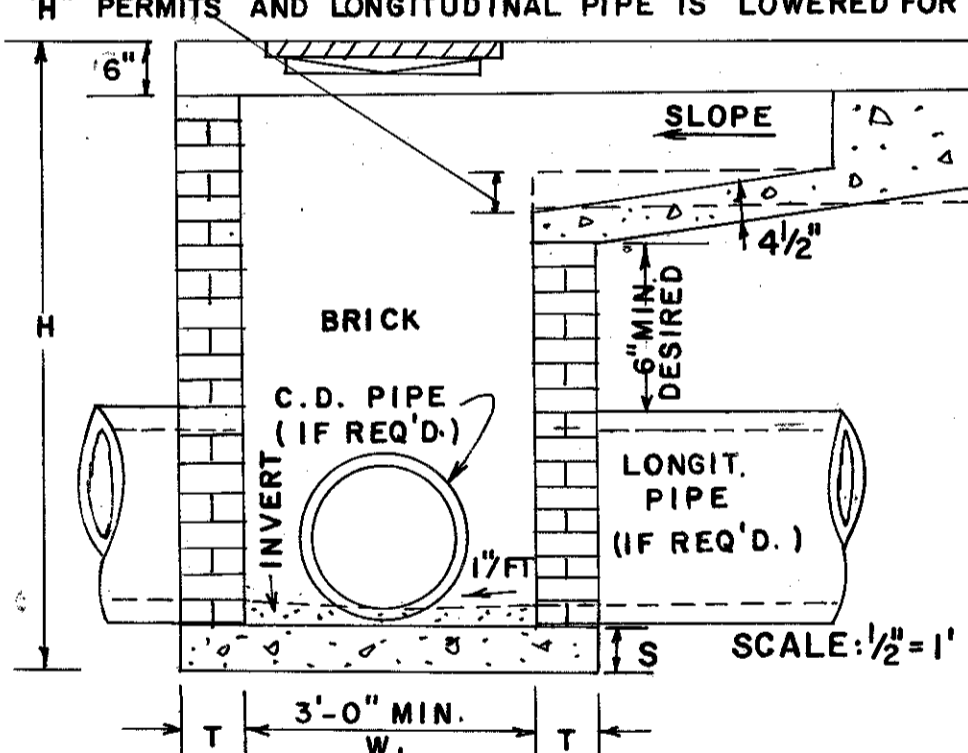
ALTERNATE TO INVERT



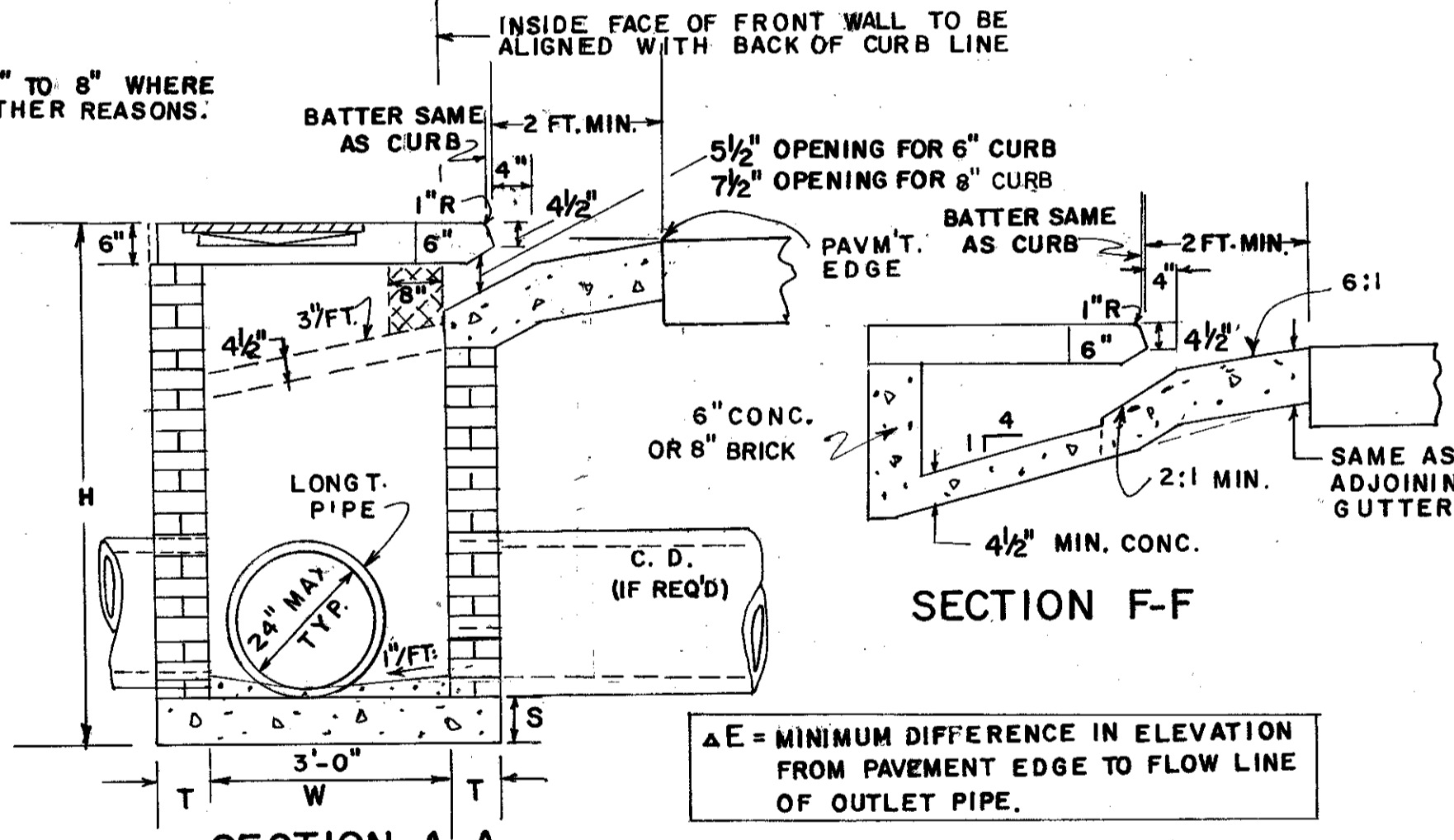
SECTION A-A' (WITH LARGE LONGITUDINAL PIPE)

SECTION A-A' (WITH RECESSED BOX)

NOTE: NORMAL SLOPE OF CONCRETE APRON TO BE INCREASED BY 4" TO 8" WHERE "H" PERMITS AND LONGITUDINAL PIPE IS LOWERED FOR OTHER REASONS.



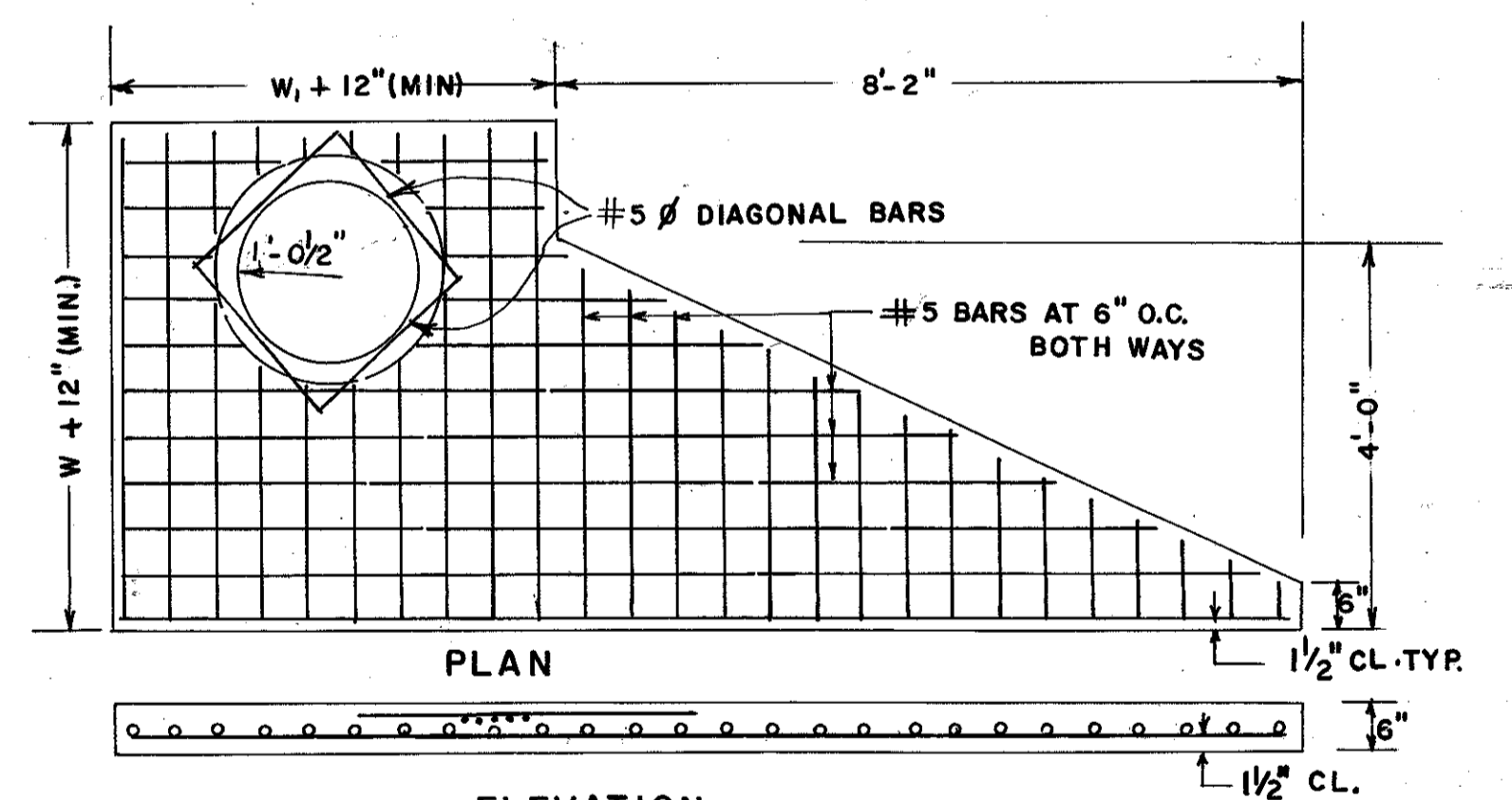
SECTION J-J



SECTION A-A'

ΔE = MINIMUM DIFFERENCE IN ELEVATION FROM PAVEMENT EDGE TO FLOW LINE OF OUTLET PIPE.

DETAIL OF TOP REINFORCED CONCRETE SLAB



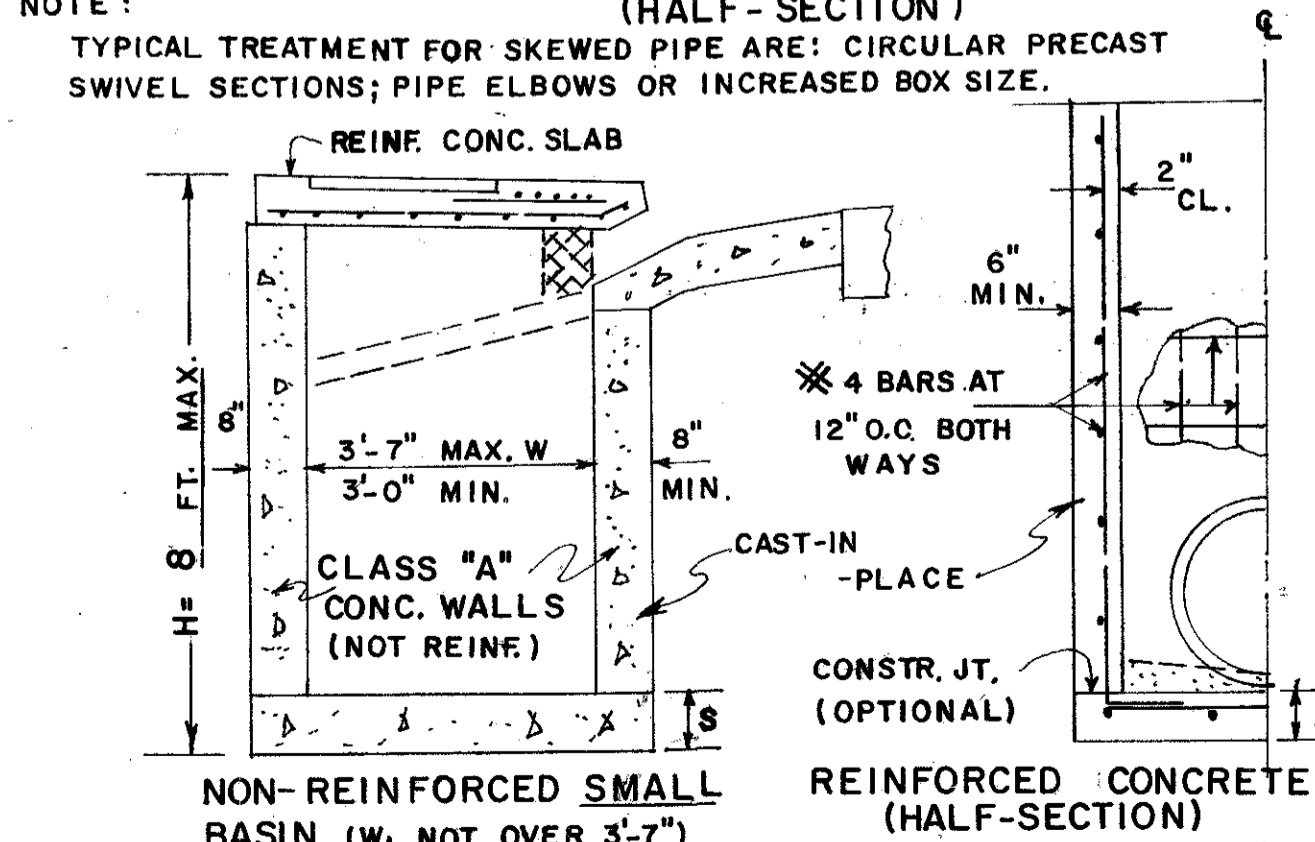
PLAN

ELEVATION

NOTE: PIPE SIZES, NUMBER, ALIGNMENT, AND INVERT SHOWN ARE ILLUSTRATIVE, SEE PLANS FOR SPECIFICS, INVERTS TO BE FORMED WITH GROUT OR CONCRETE AS DIRECTED BY THE ENGINEER OR AS SHOWN IN THE PLANS.

NOTE: SEE SEPARATE STDS. FOR PRECAST ALTERNATES ADAPTERS (STD. 1040) WILL BE REQUIRED WITH CIRCULAR PRECAST BOX UNITS. PRECAST BOX, CIRCULAR, AND/OR BUILT-IN-PLACE CONSTR. MAY BE USED IN COMBINATIONS.

PRECAST BOX ON BRICK (HALF SECTION)



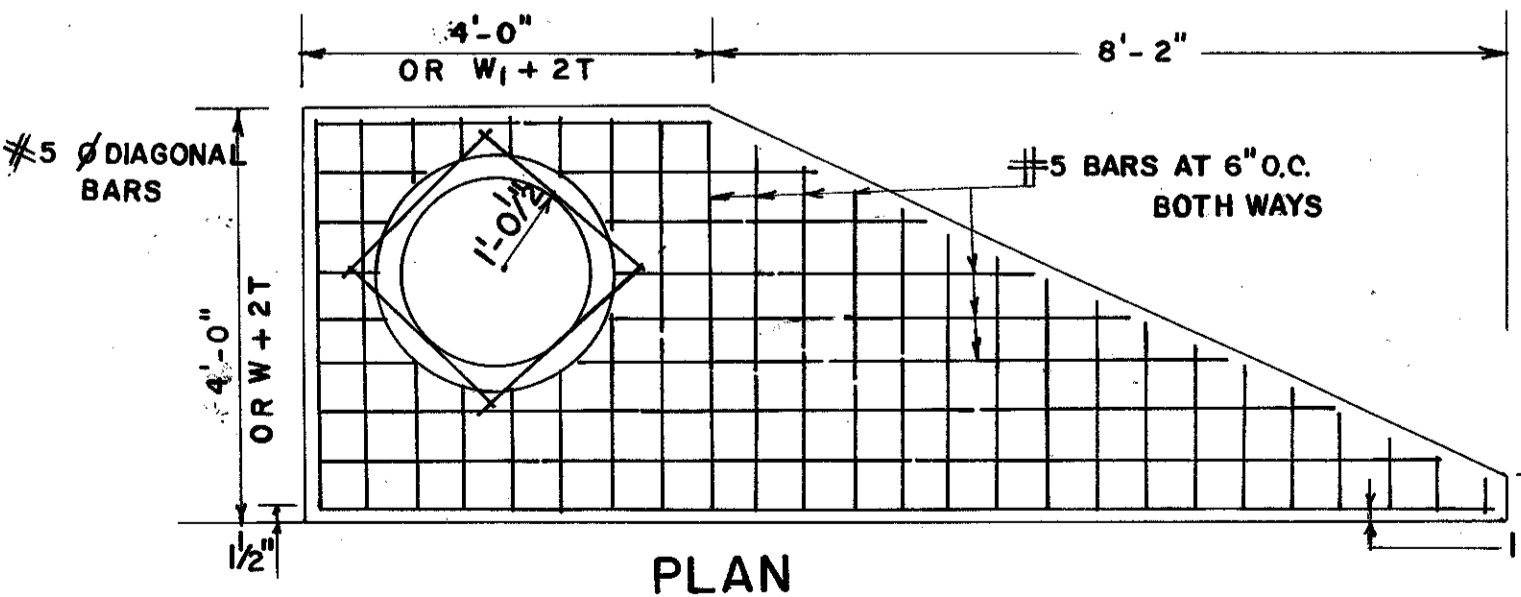
NON-REINFORCED SMALL BASIN (W1 NOT OVER 3'-7")

REINFORCED CONCRETE (HALF-SECTION)

CONSTRUCTION ALTERNATES

NOTE: DETAILS NOT SHOWN ABOVE FOR CONSTRUCTION ALTERNATES WILL BE SIMILAR TO BRICK CATCH BASIN DETAILS. SEE SEPARATE STANDARDS FOR PRECAST ALTERNATES.

DETAIL OF TOP REINFORCED CONCRETE SLAB

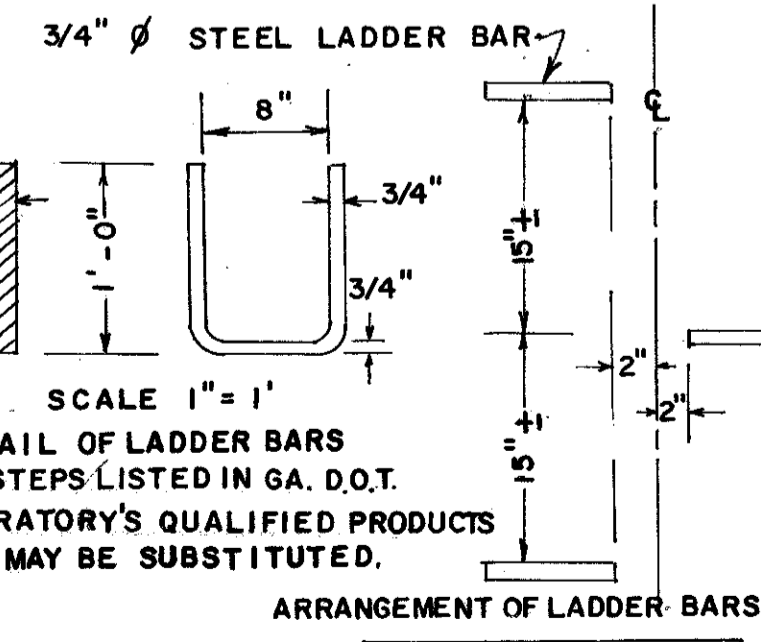


PLAN

ELEVATION

NOTE: ALL BARS IN PLAN VIEW ARE SPACED AT 6" O.C.

NOTE: FOR PLAN DETAIL OF REINFORCING STEEL IN TOP PORTION OF SLAB, SEE PART PLAN AT TOP RIGHT.



ARRANGEMENT OF LADDER BARS

NOTE: ALL CATCH BASINS WILL HAVE STEPS OR LADDER BARS, NUMBER & LOCATION TO BE AS DIRECTED BY THE ENGINEER.

NOTE: DETAIL OF LADDER BARS M.H. STEPS LISTED IN GA. D.O.T. LABORATORY'S QUALIFIED PRODUCTS LIST MAY BE SUBSTITUTED.

WOR W1 (MAX.)	BOTTOM SLAB MATERIALS	S
TO 4'-6"	NON-REINF. CONCRETE	6"
	OR BRICK	8"
OVER 4'-6"	CONC. REINF. W1, #4 BARS 12" O.C. BOTH WAYS 2' CL. FROM SLAB TOP	8"

PIPE DIA.	H (MIN.)	W or W1 (MIN.)	ΔE (MIN.)
12	4'-4"	3'-0"	3'-3"
15	4'-7"	3'-0"	3'-6"
18	4'-10"	3'-0"	3'-9"
24	5'-6"	3'-0"	4'-4"
30	6'-2"	3'-7"	5'-0"
36	6'-10"	4'-6"	5'-7"
42	7'-4"	5'-3"	5'-11"
48	8'-0"	6'-0"	6'-6"
54	8'-6"	6'-8"	7'-0"
60	9'-2"	7'-4"	7'-7"

NOTE: THE MIN. R & MIN. ΔE GIVEN IN ABOVE TABLE ARE BASED UPON TYPICAL OUTSIDE DIAMETERS OF CONC. PIPE AND MAY BE VARIED IF CONDITIONS PERMIT WITH VARIED DIMENSIONS SPECIFIED IN THE PLANS OR DIRECTED BY THE ENGINEER. W & W1 DIMENSIONS DO NOT HAVE TO BE EQUAL.

41-0008

DEPARTMENT OF TRANSPORTATION

STATE OF GEORGIA

STANDARD CATCH BASINS

FOR USE WITH CURB (6" HT. OR 8" HT.) & GUTTER

SCALE AS SHOWN

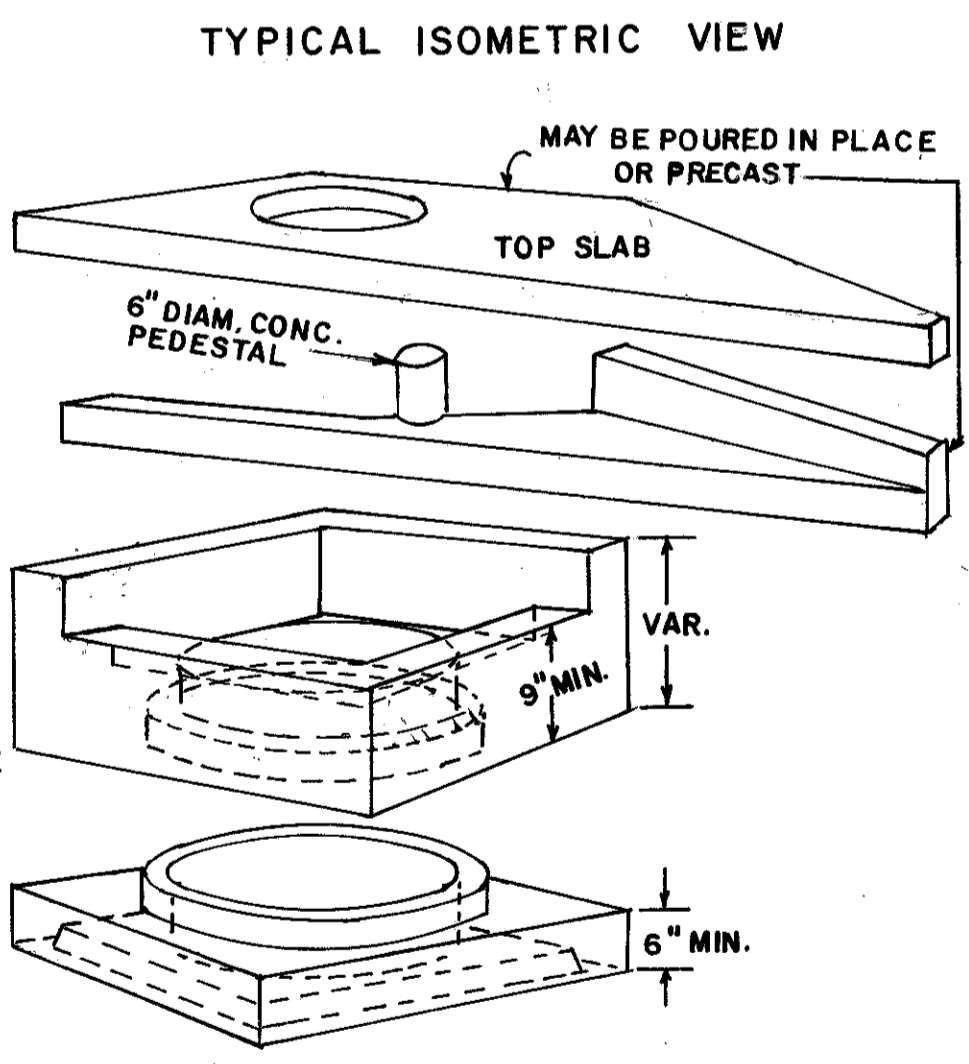
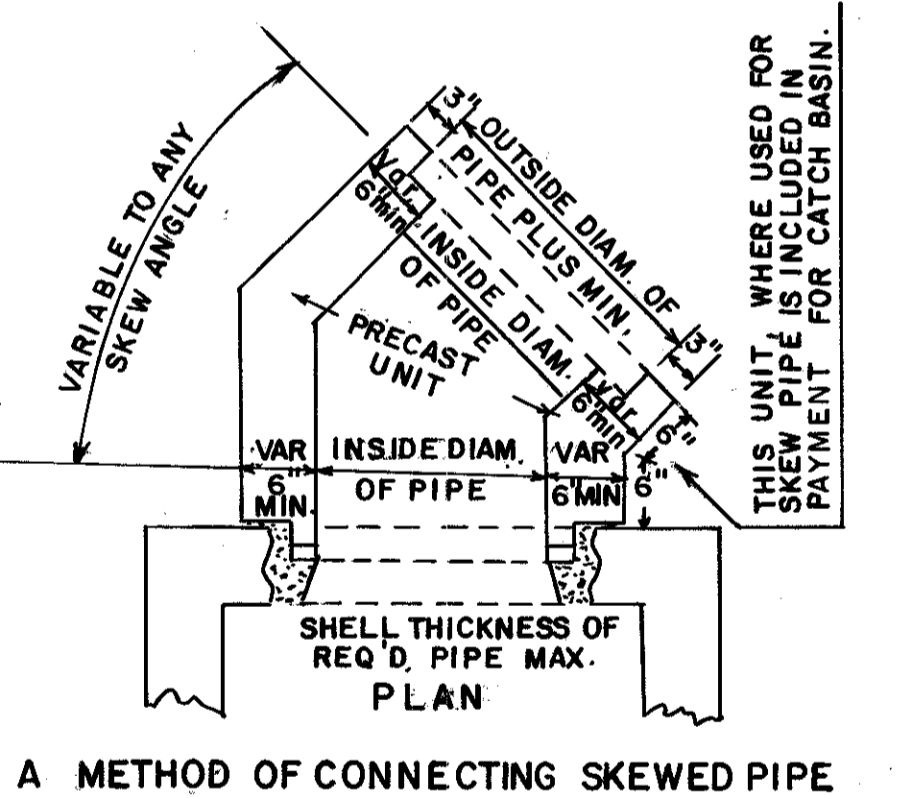
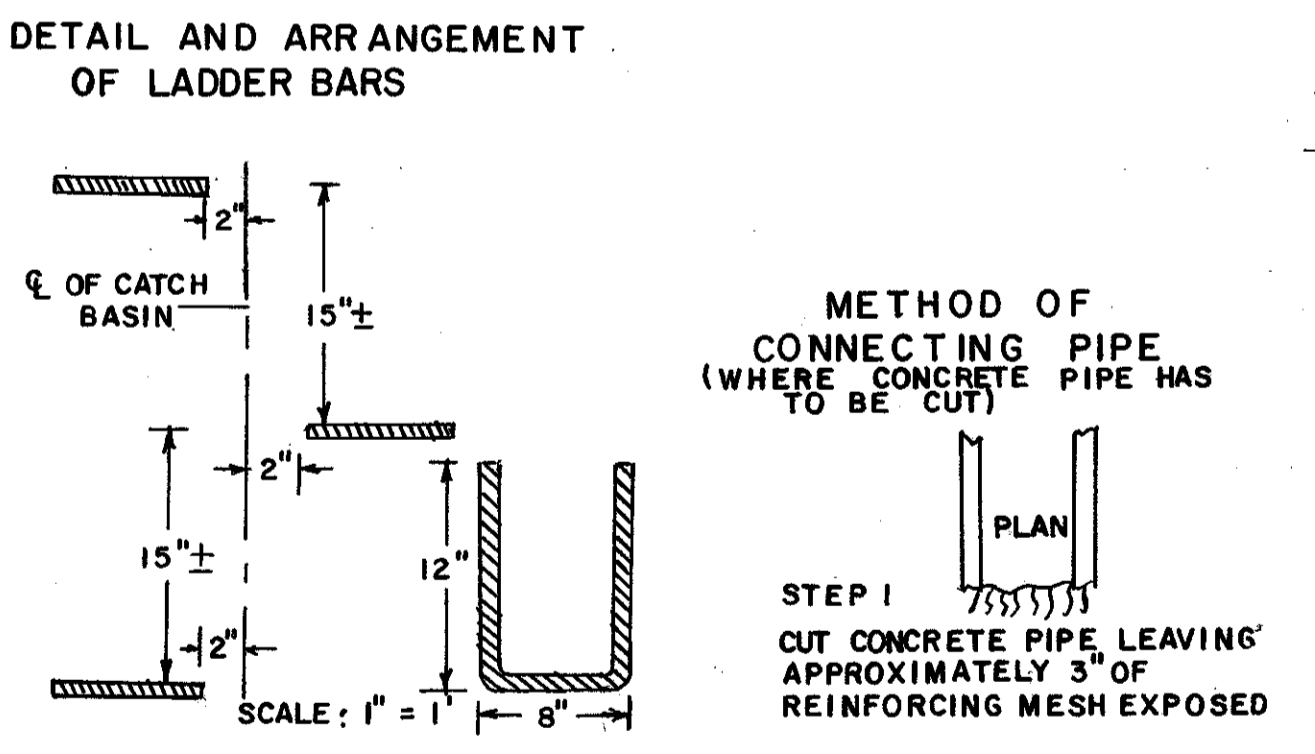
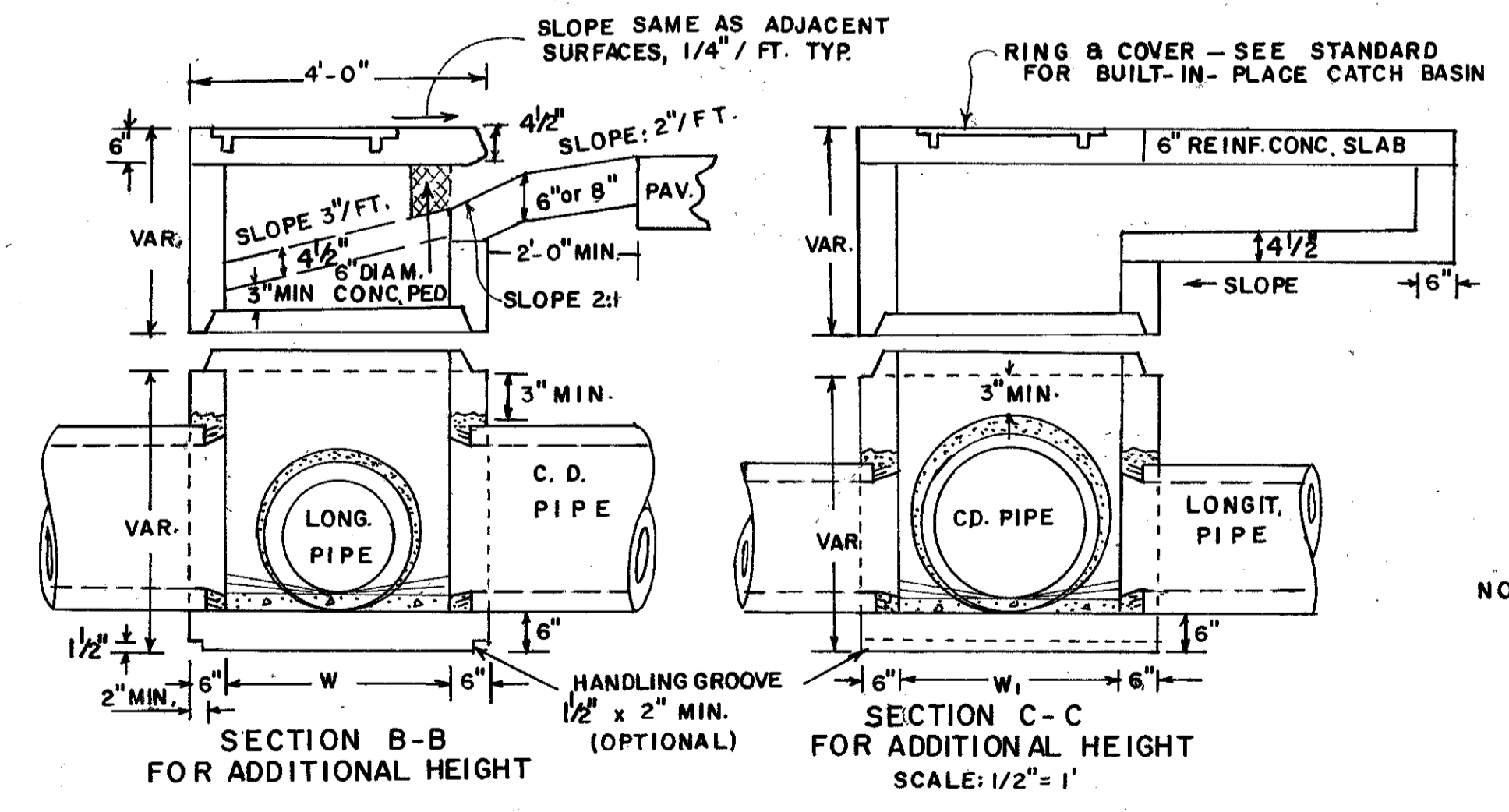
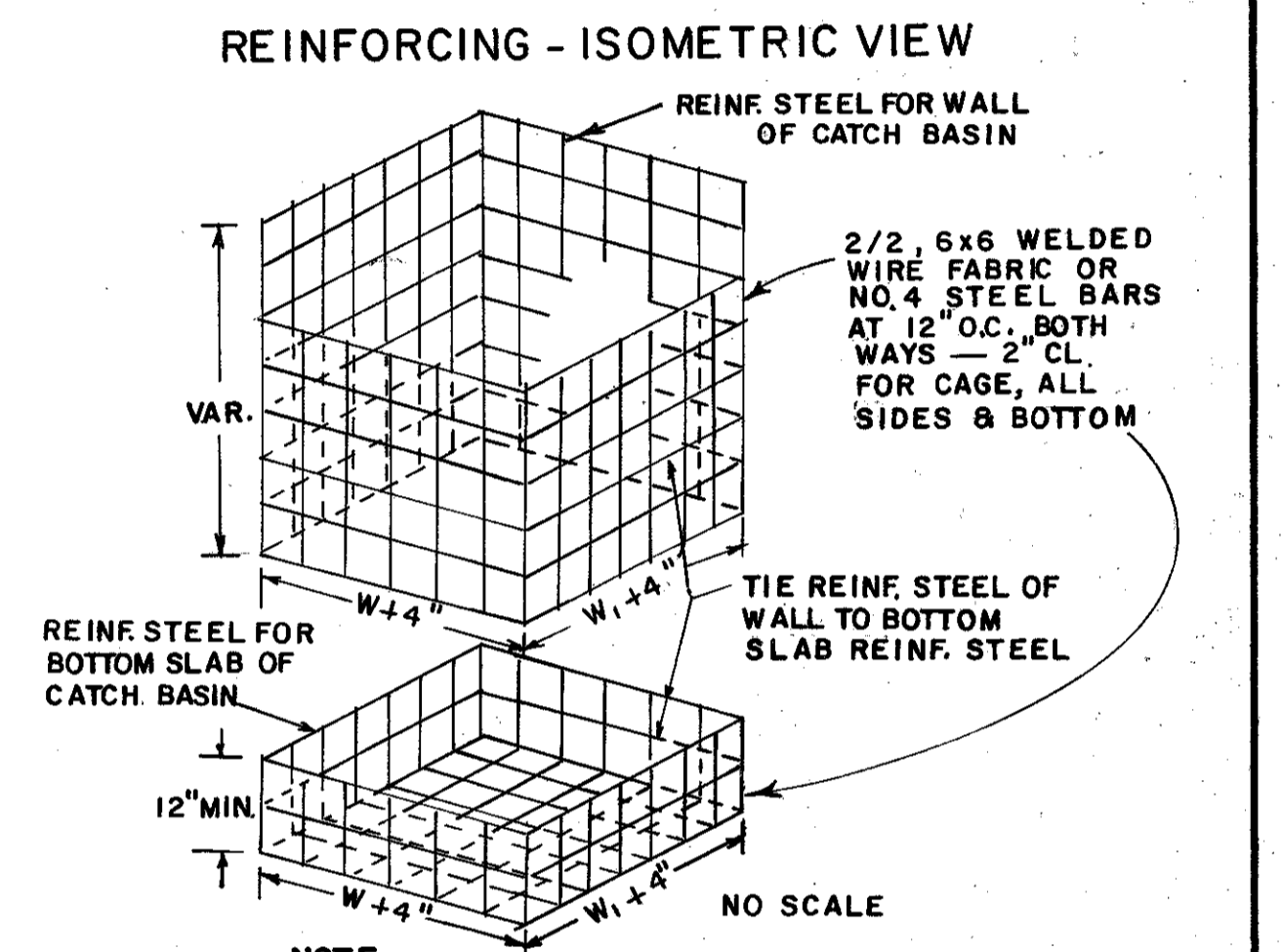
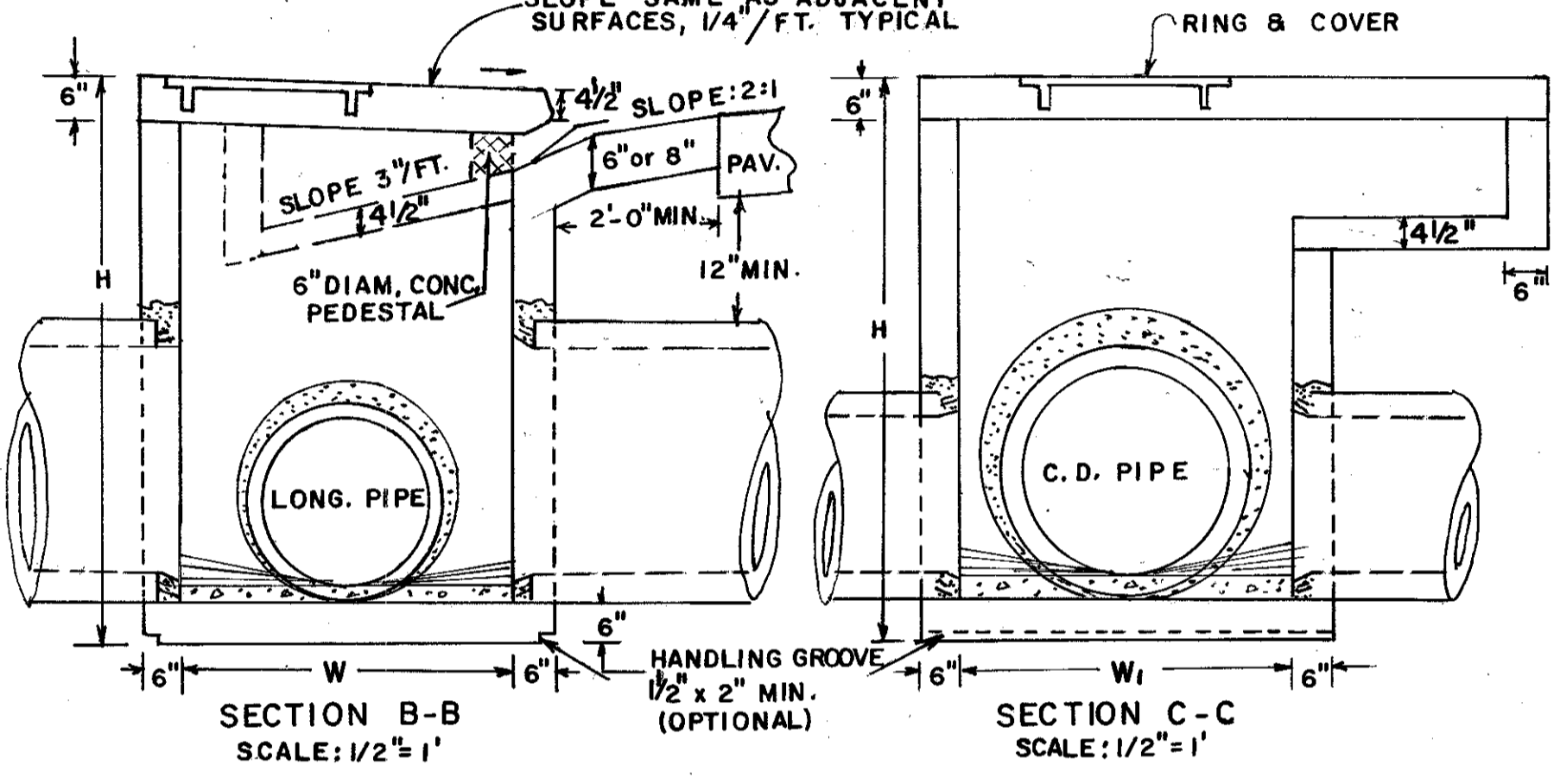
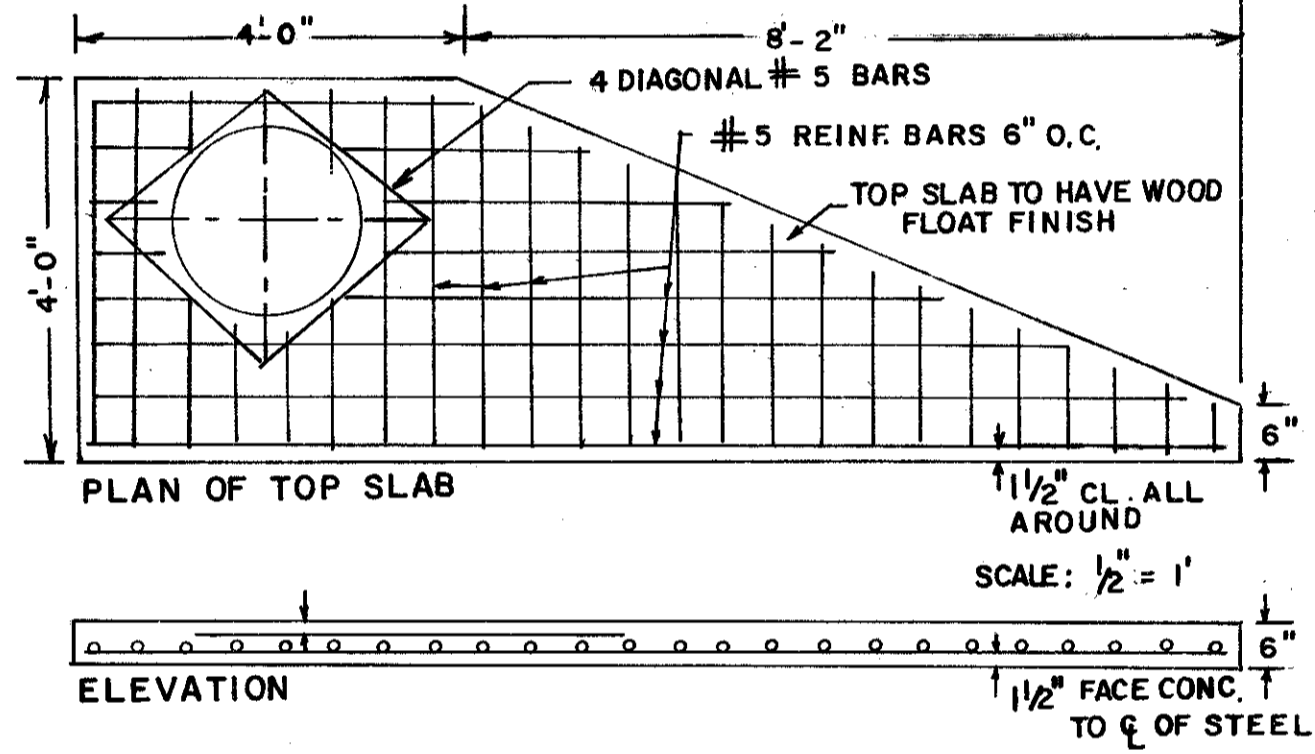
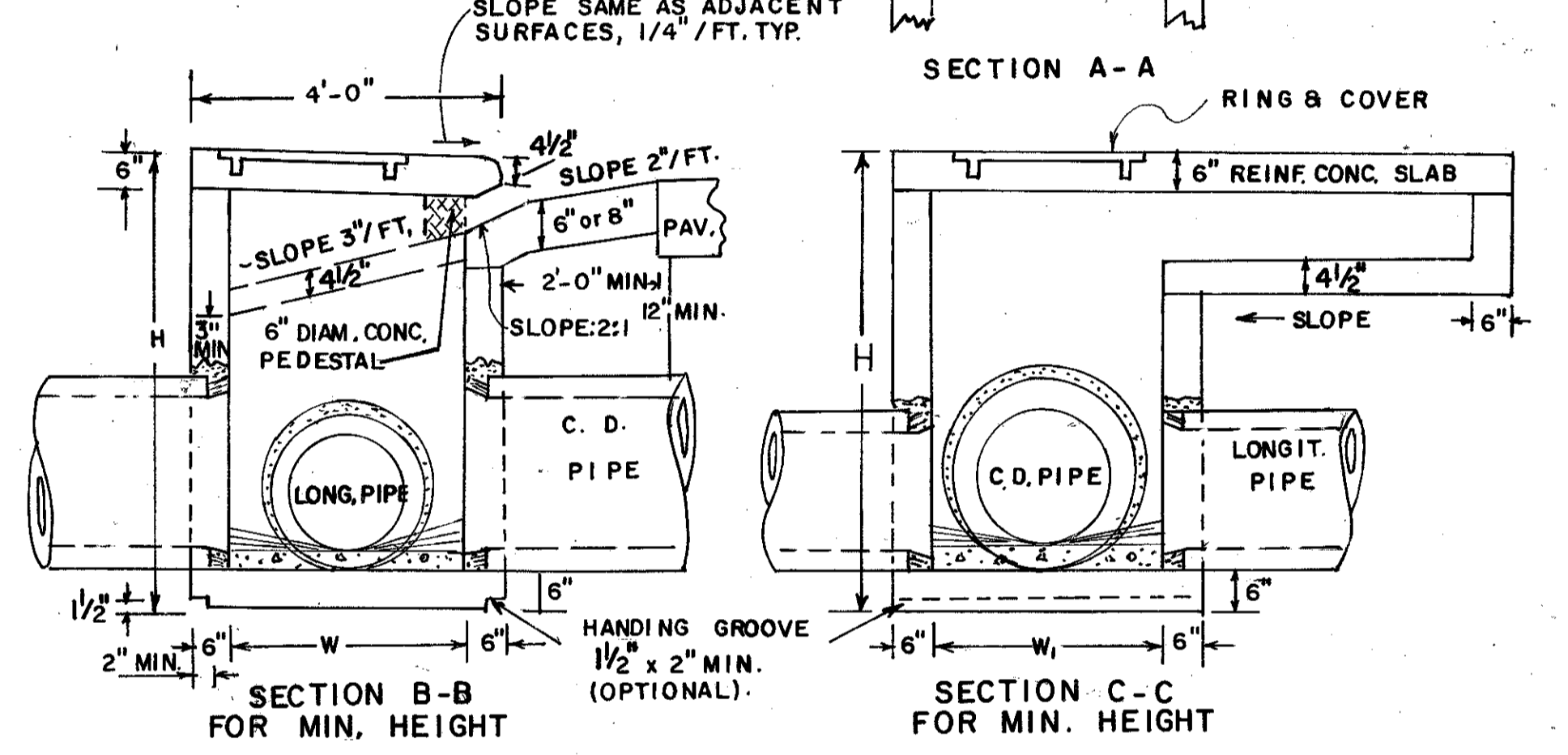
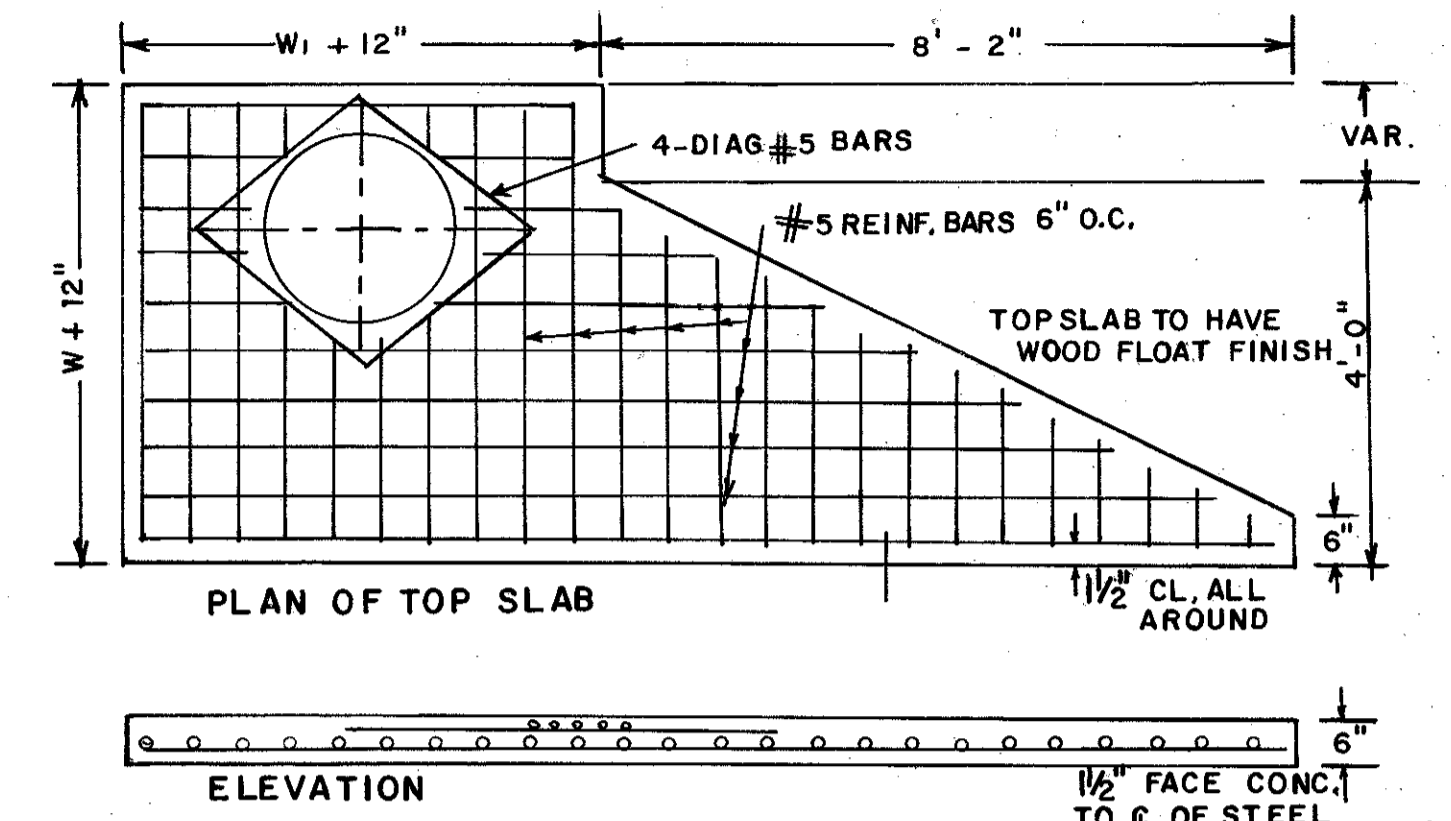
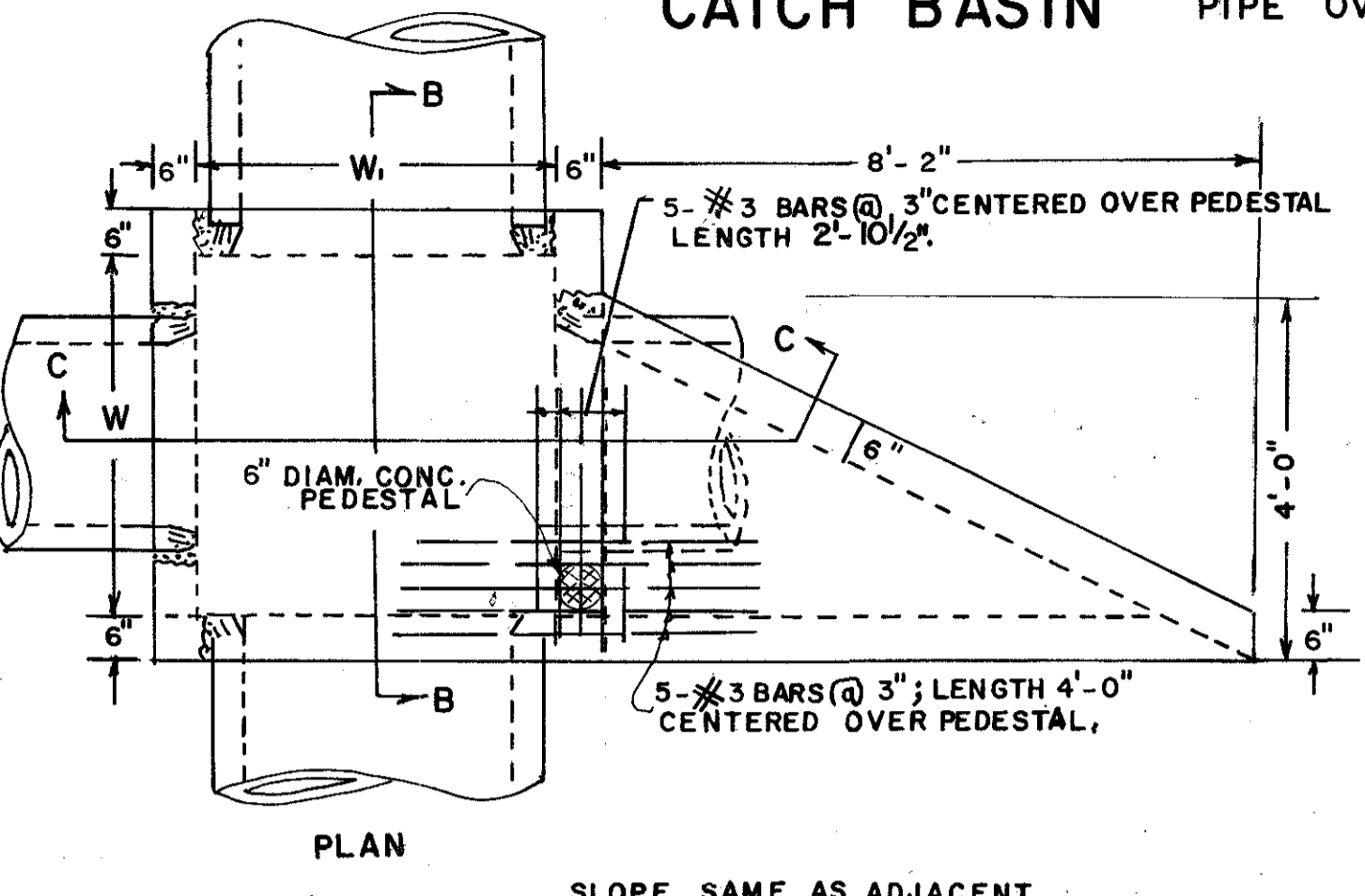
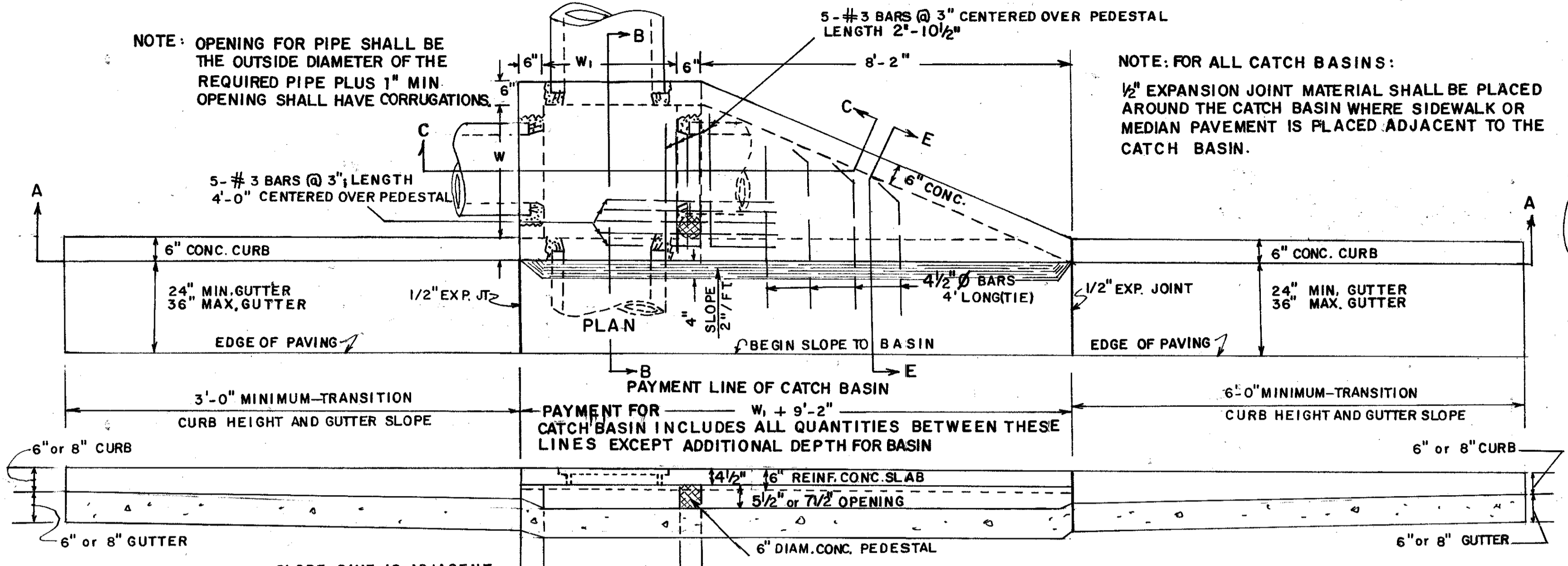
RED. & REDR. AUGUST, 1982

REV. & REDR. RML (SUBMITTED) *Frank E. Hardy*
 TRA. S.M.E. (STATE ROAD & AIRPORT DESIGN ENGR.)
 CHK. RKC (APPROVED) *Thomas D. ...*
 STATE HIGHWAY ENGINEER

NUMBER 1033 D

CATCH BASIN (IF CATCH BASIN HAS LONGITUDINAL PIPE OVER 24", SEE DETAILS AT RIGHT.)

CATCH BASIN (TYPICAL FOR CATCH BASIN WITH LONGITUDINAL PIPE OVER 24")

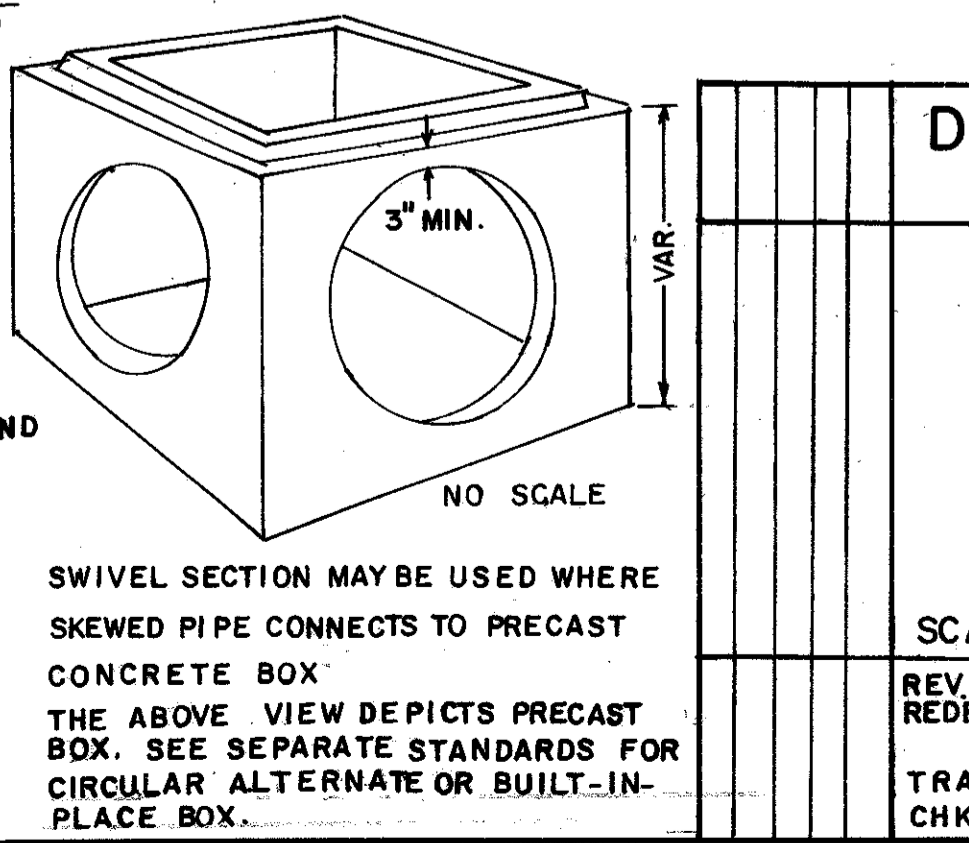
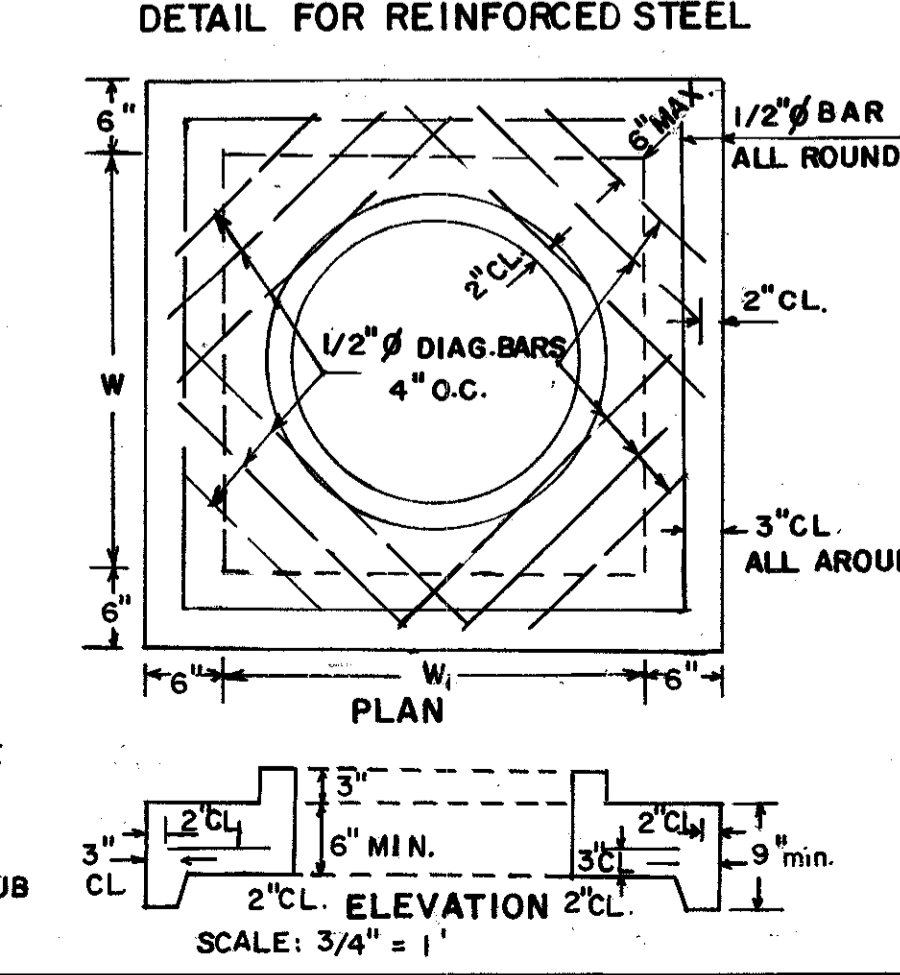
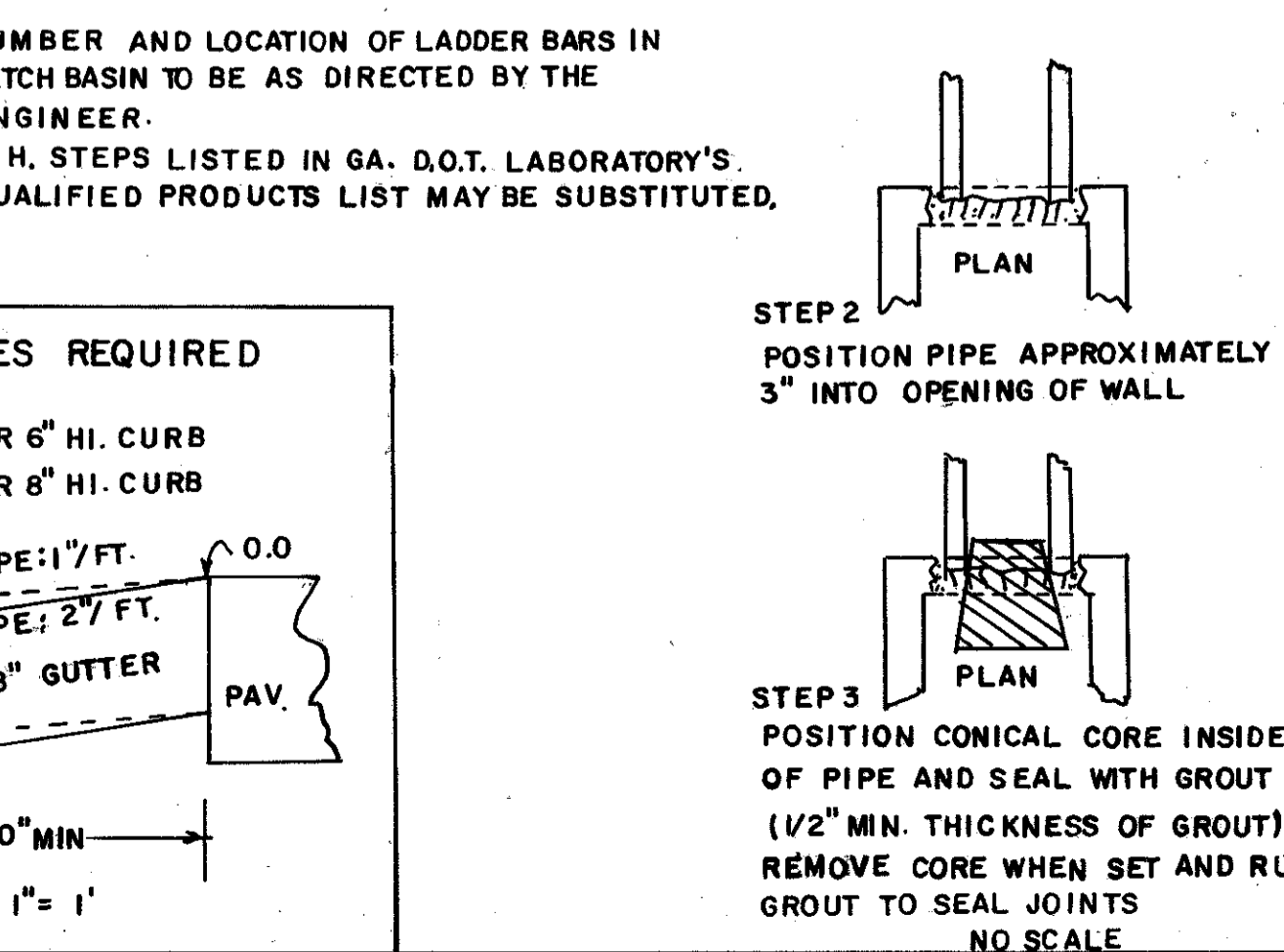
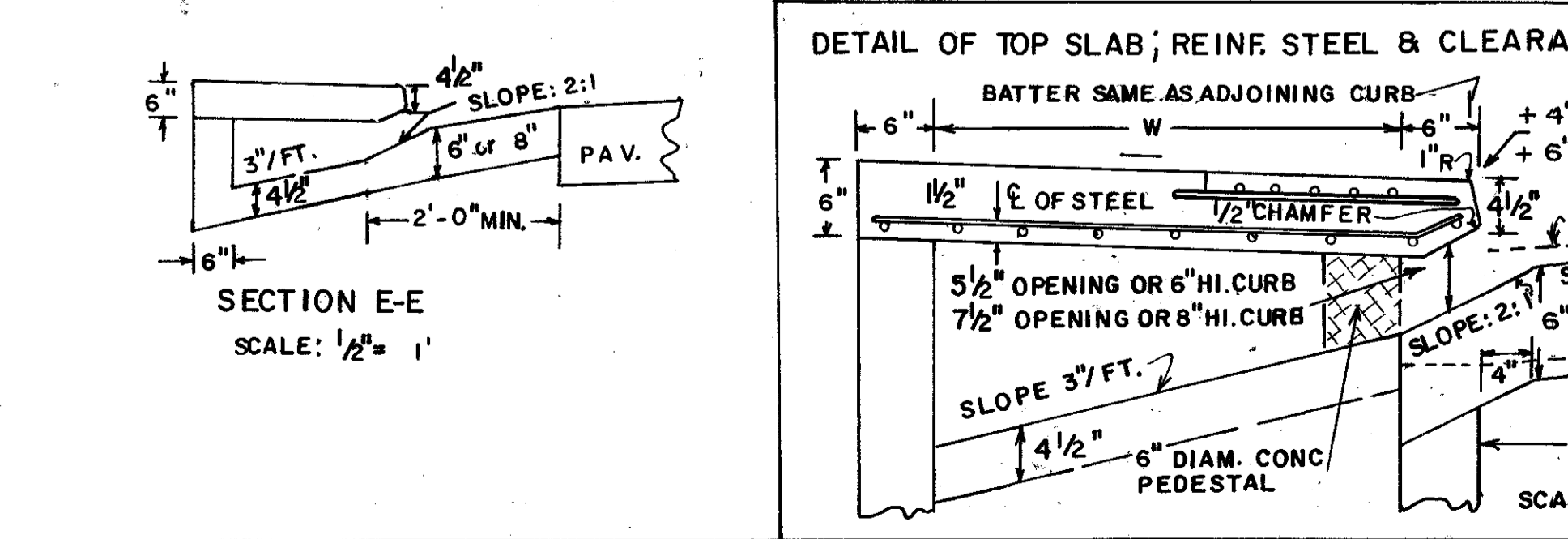


NOTE: DIMENSIONS FOR CATCH BASINS ARE BASED UPON TYPICAL OUTSIDE DIAMETERS OF CONCRETE PIPES AND MAY BE VARIED IF CONDITIONS PERMIT AND THE ENGINEER APPROVES. W & W₁ DIMENSIONS DO NOT HAVE TO BE EQUAL.

ALTERNATE: BUILT-IN-PLACE PRECAST BOX, AND/OR PRECAST CIRCULAR UNITS WITH THE REQUIRED ADAPTERS, REDUCERS, FITTINGS, CONNECTIONS, ETC. MAY BE USED IN COMBINATIONS.

NOTE: FOR RING & COVER DETAILS AND OTHER DETAILS NOT SHOWN, SEE STANDARD 1033D FOR BUILT-IN-PLACE CATCH BASIN.

PIPE SIZE	NORMAL W OR W ₁	MIN H
12"	3'-0"	4'-4"
15"	3'-0"	4'-7"
18"	3'-0"	4'-10"
24"	3'-0"	5'-6"
30"	3'-6"	6'-2"
36"	4'-0"	6'-10"
42"	5'-0"	7'-4"
48"	5'-0"	8'-0"
54"	6'-0"	8'-6"
60"	6'-0"	9'-2"



DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD PRECAST CATCH BASINS
FOR USE WITH CURB (6" OR 8" HT.) & GUTTER

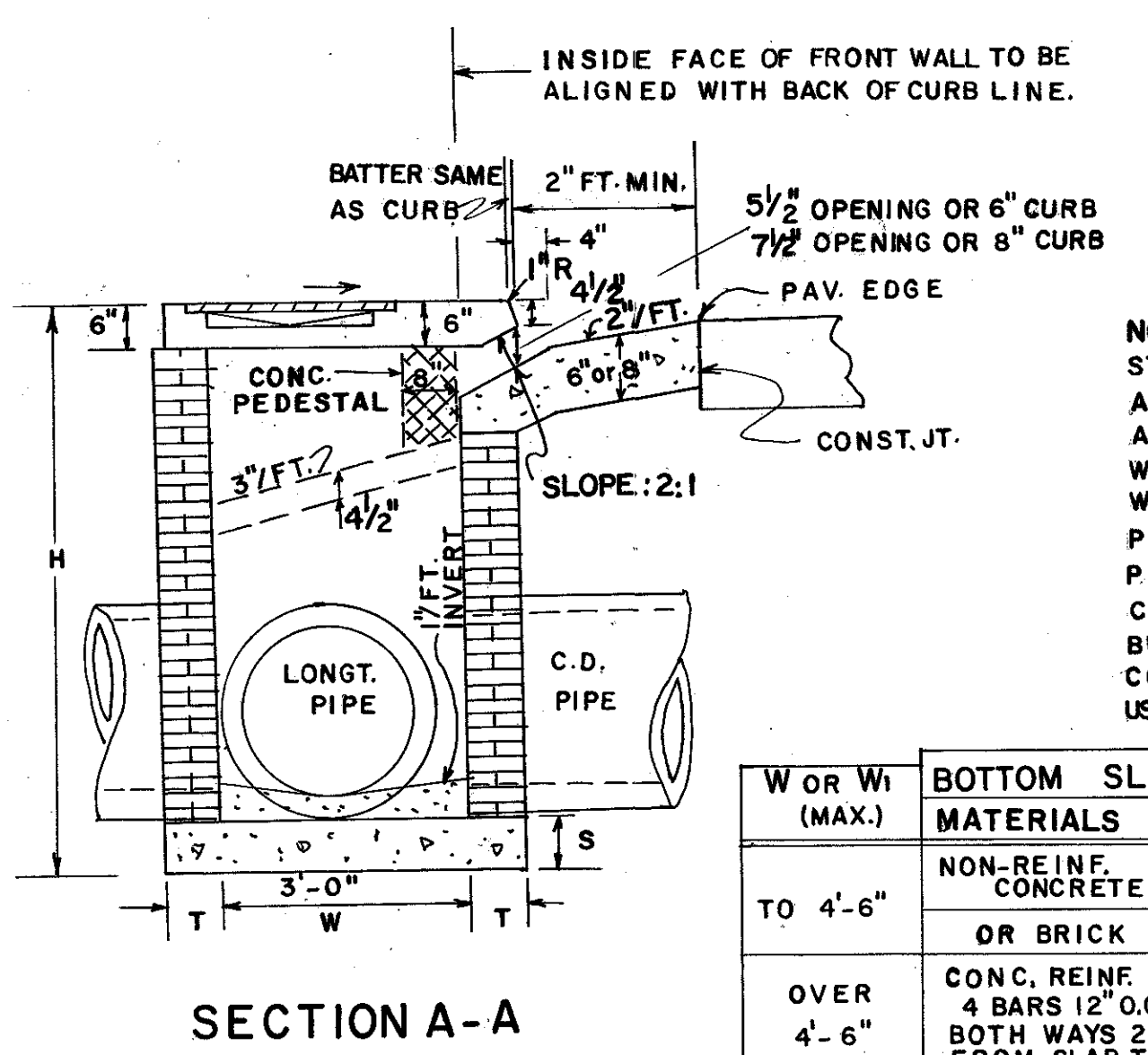
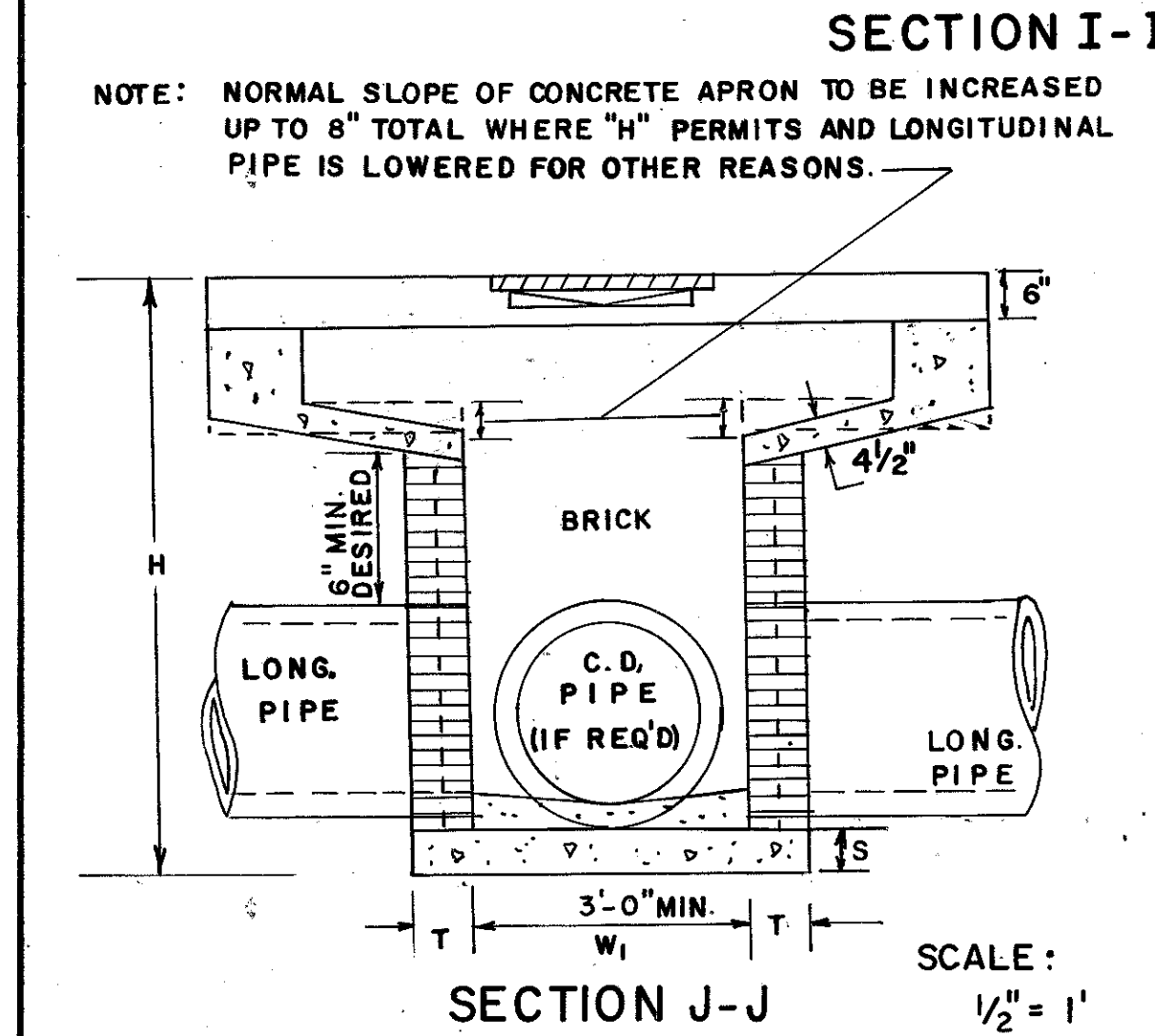
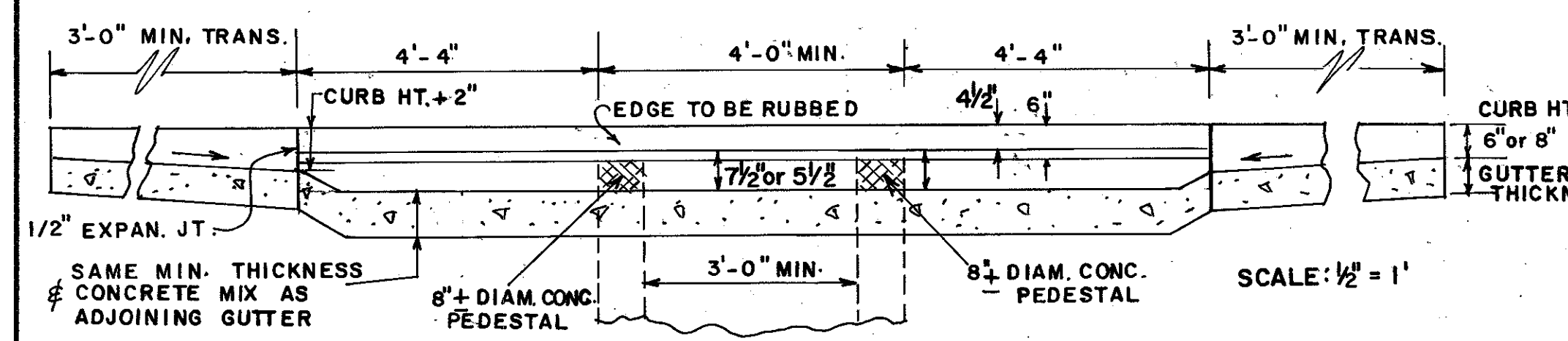
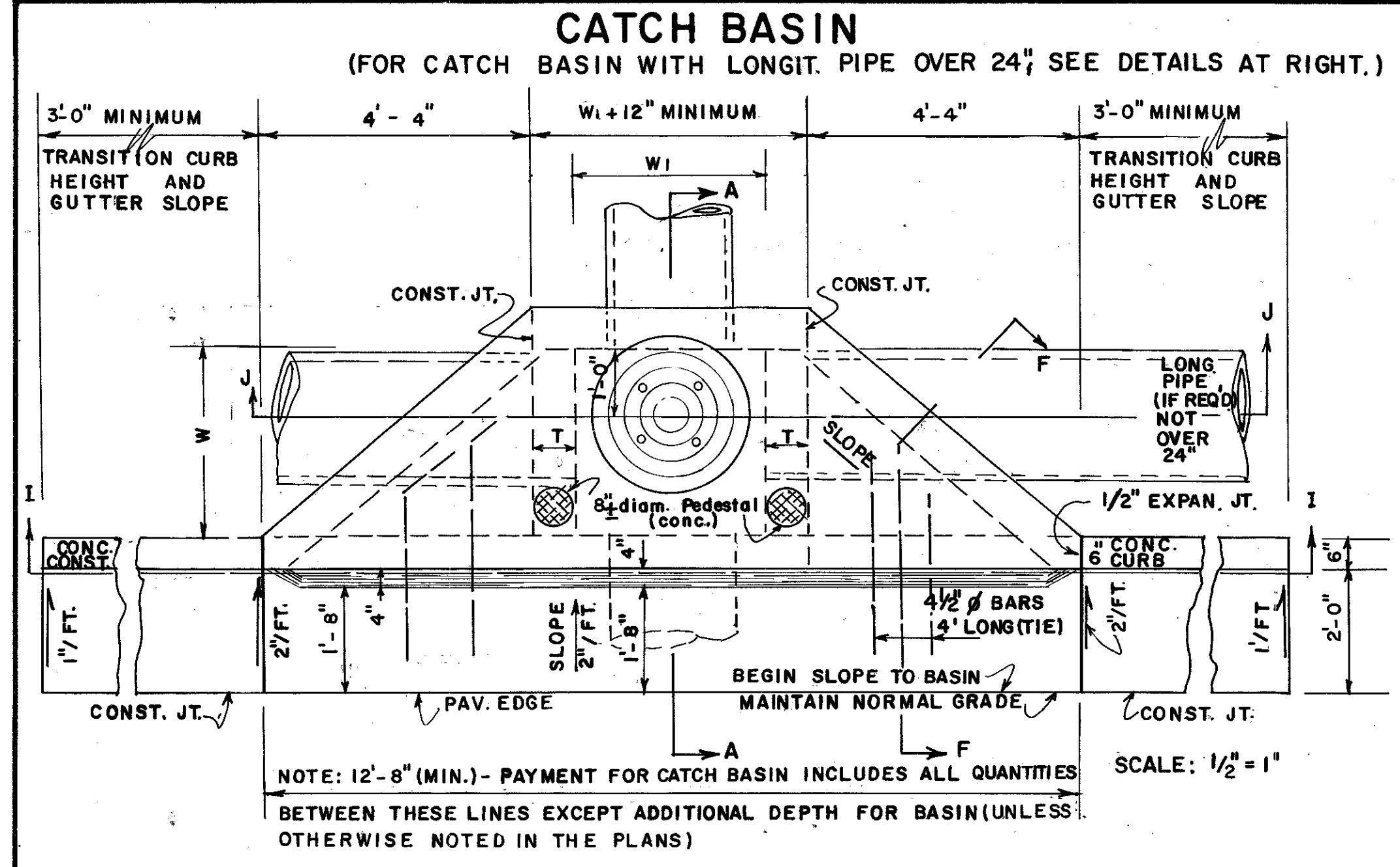
SCALE AS SHOWN

REV. & REDR., SEPT., 1982

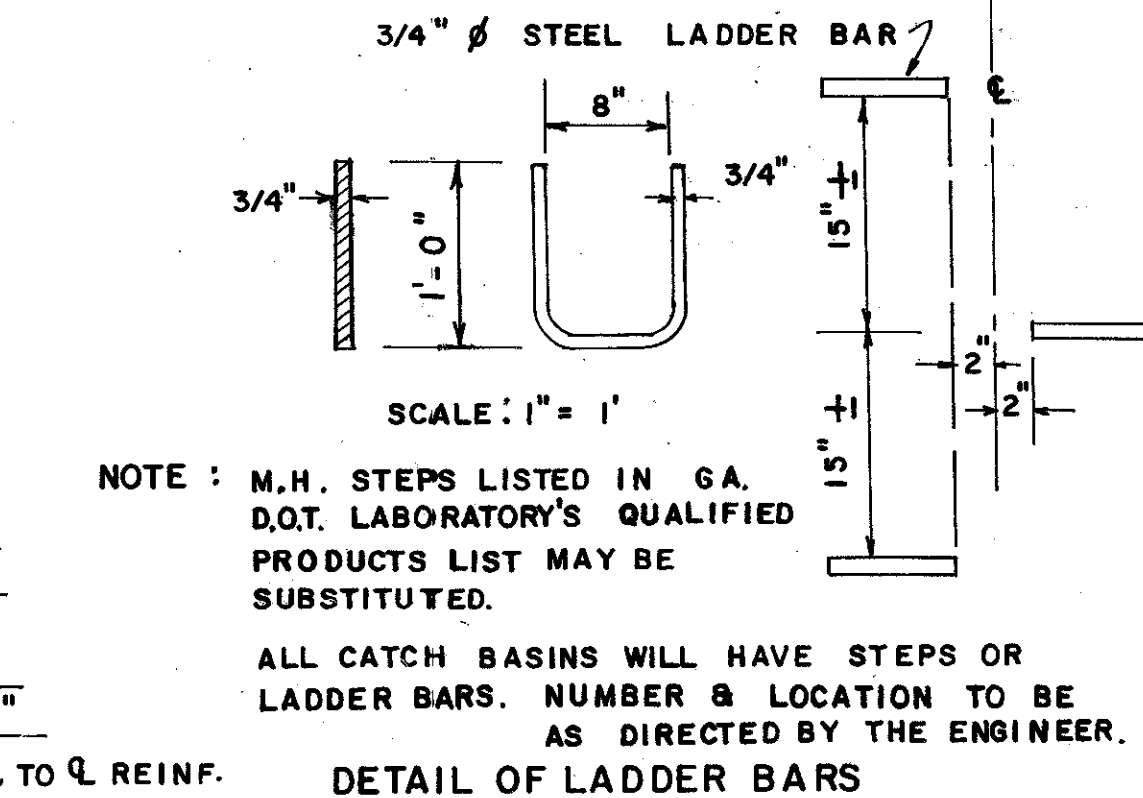
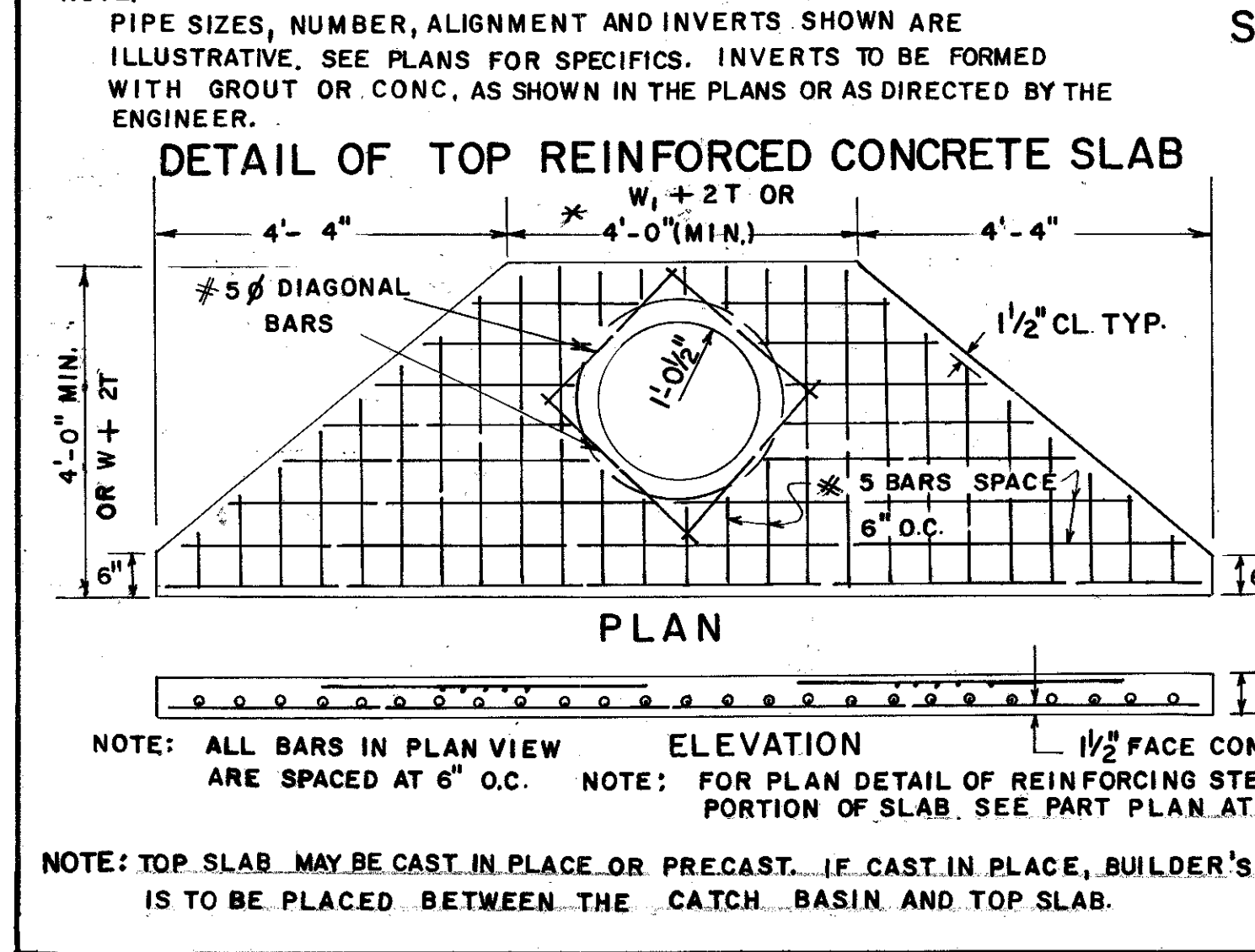
REV. & REDR. RMU (SUBMITTED) *Frank E. Hardy*
STATE ROAD & AIRPORT DESIGN ENGR

TRA GME (APPROVED) *Thomas D. Moreland*
STATE HIGHWAY ENGINEER

NUMBER 1033D
PRECAST

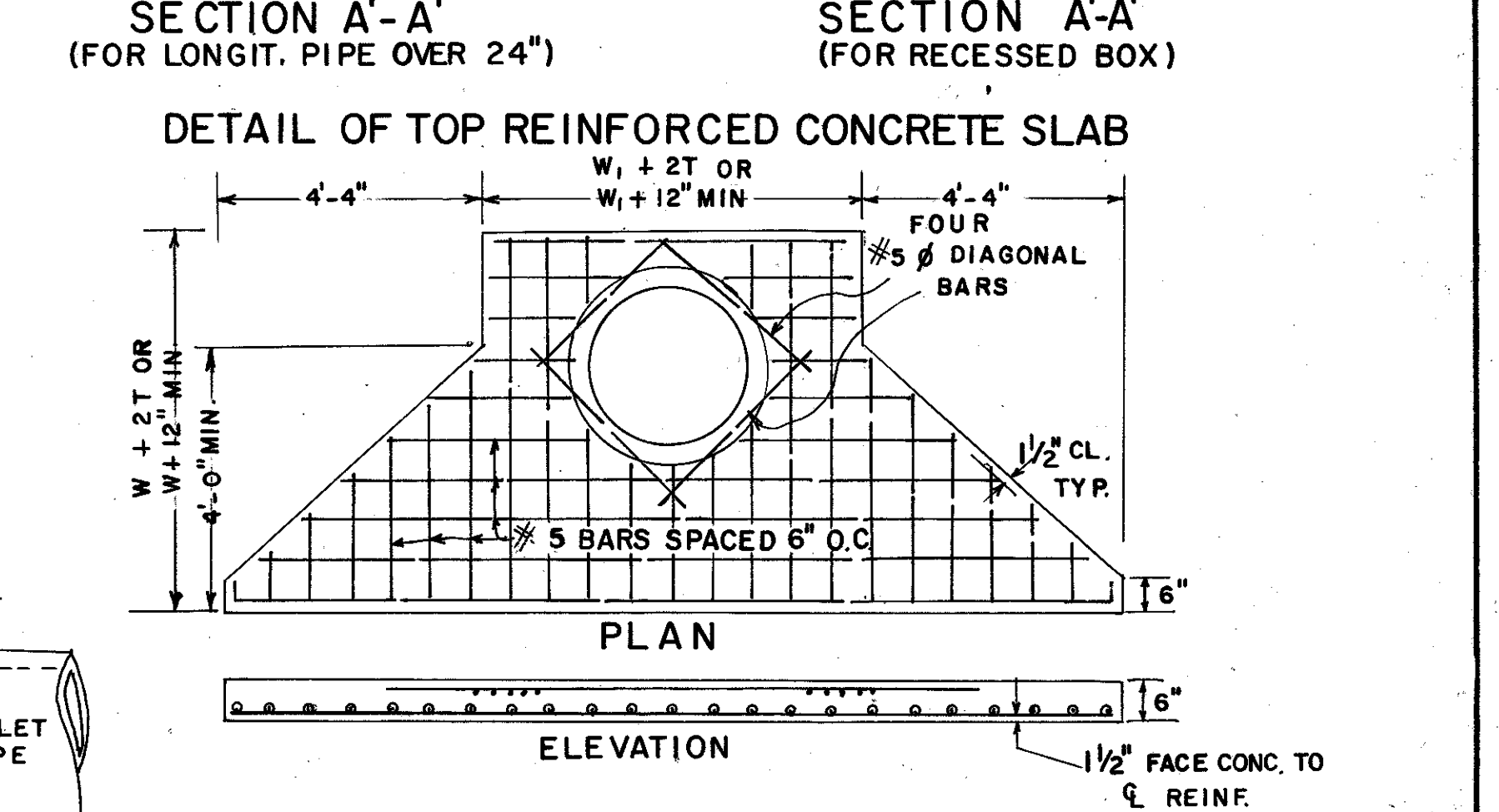
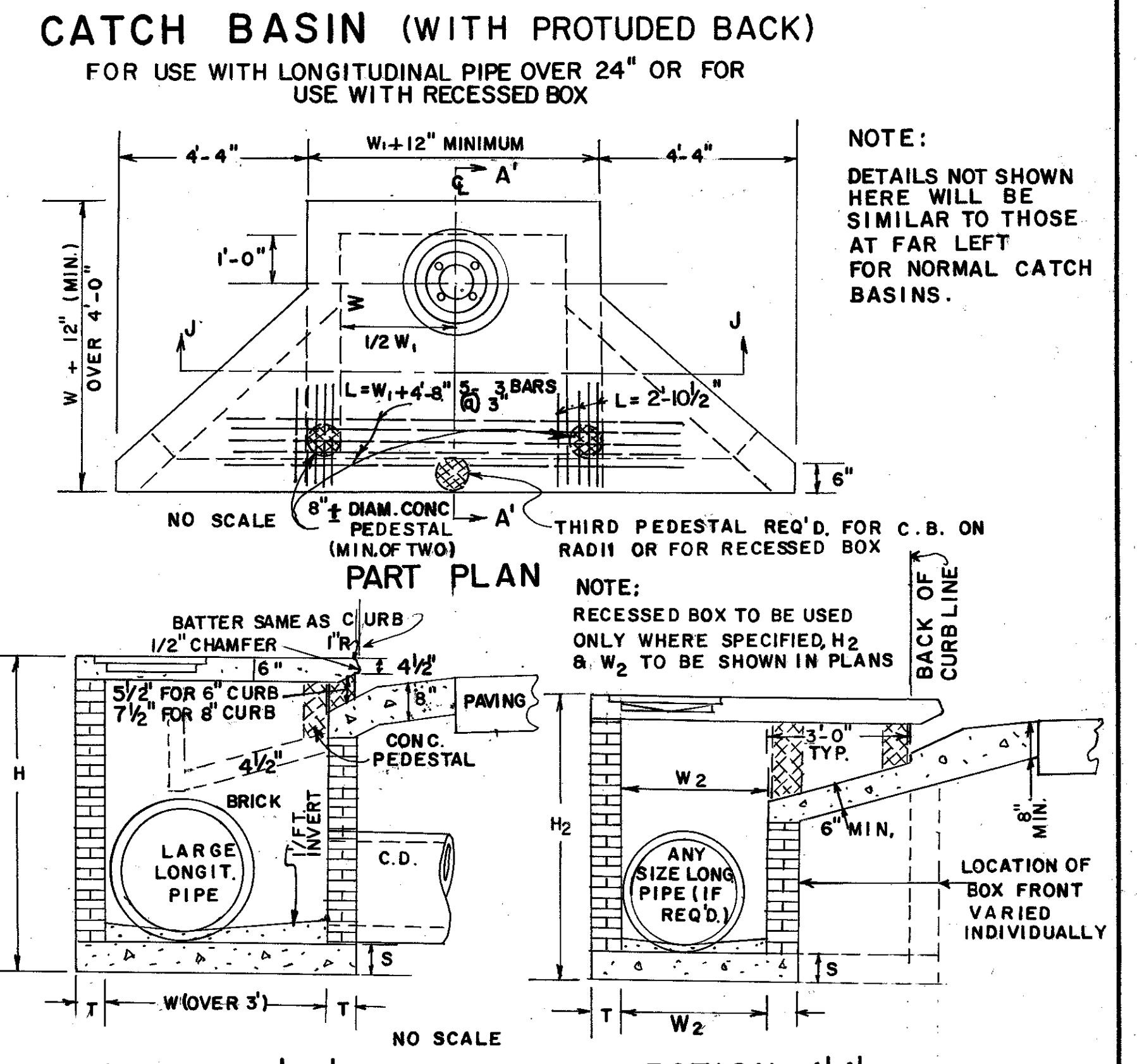
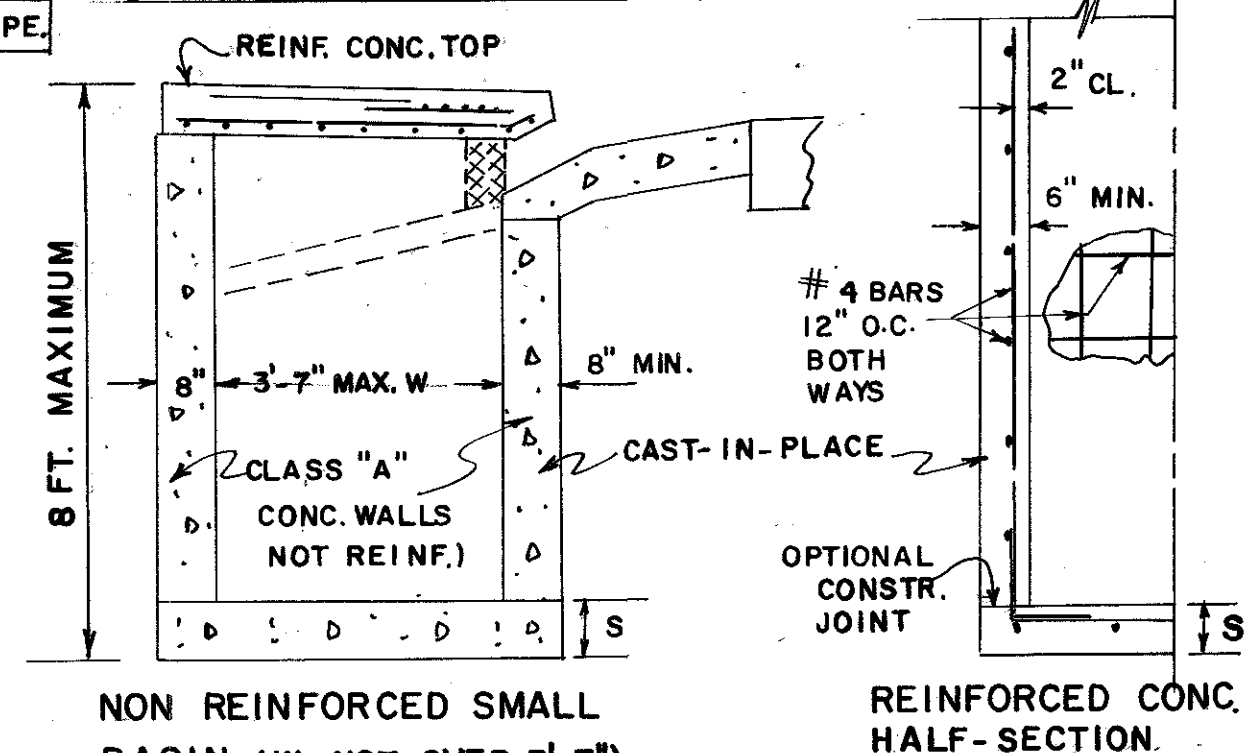
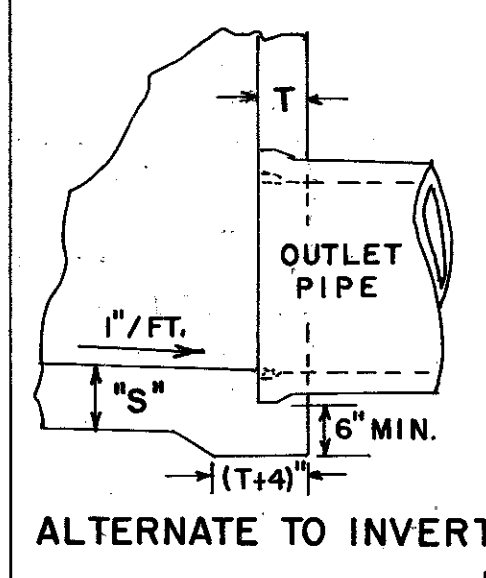
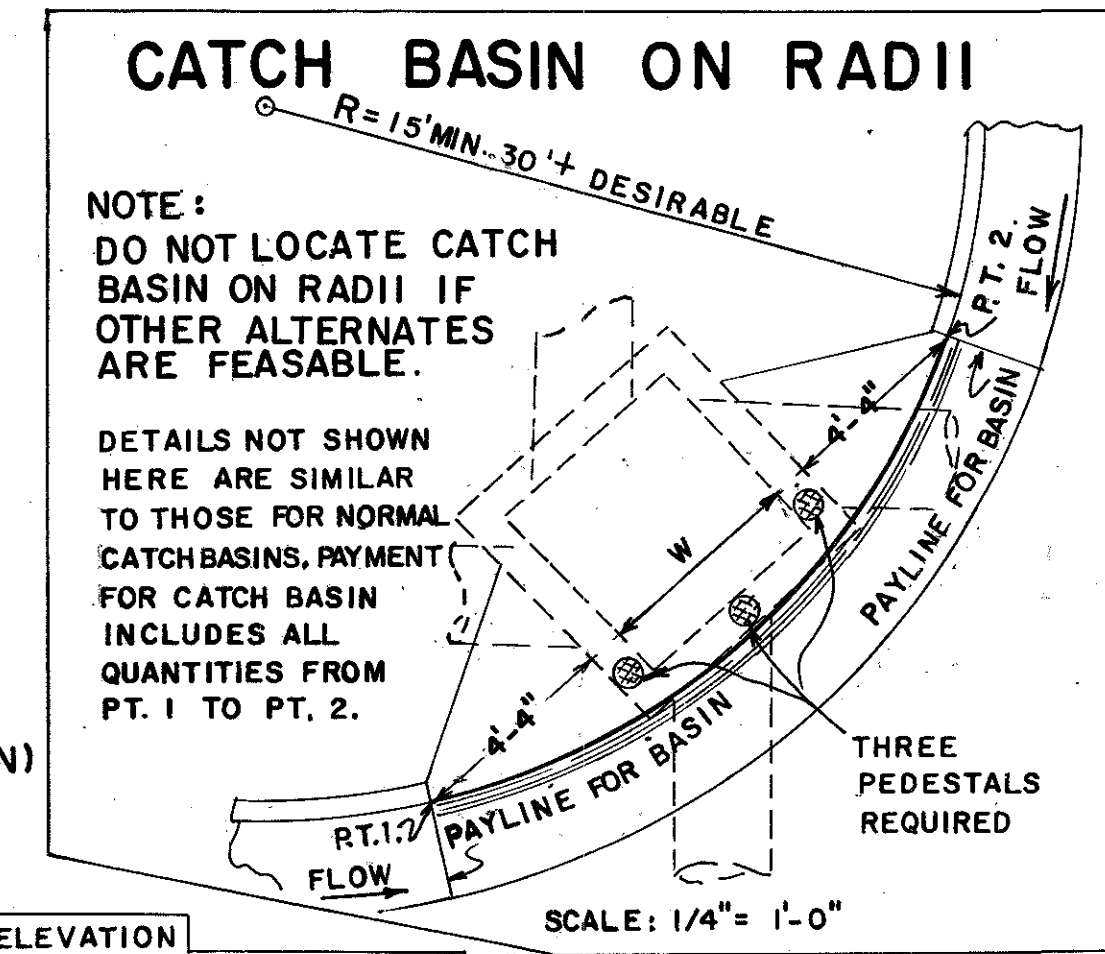
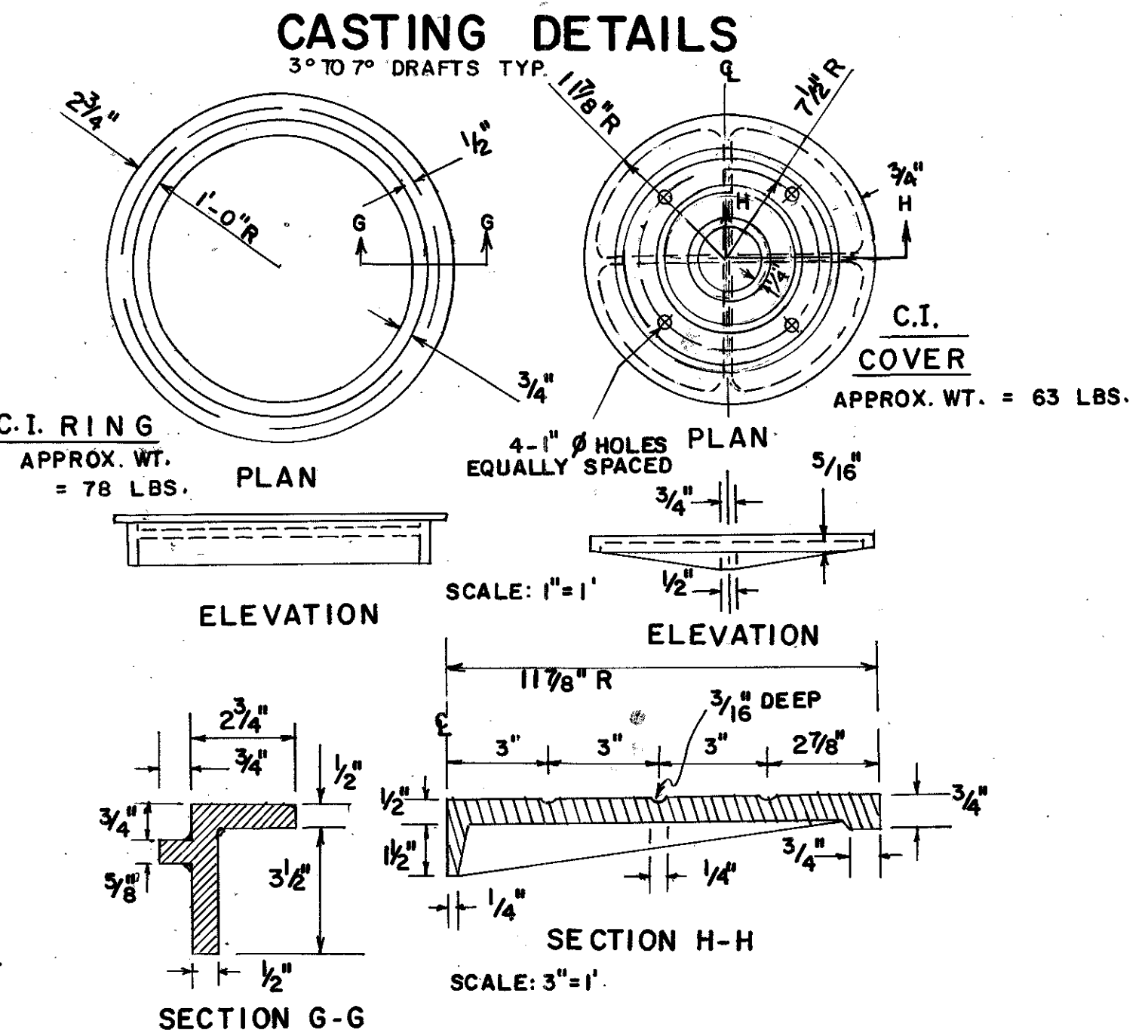
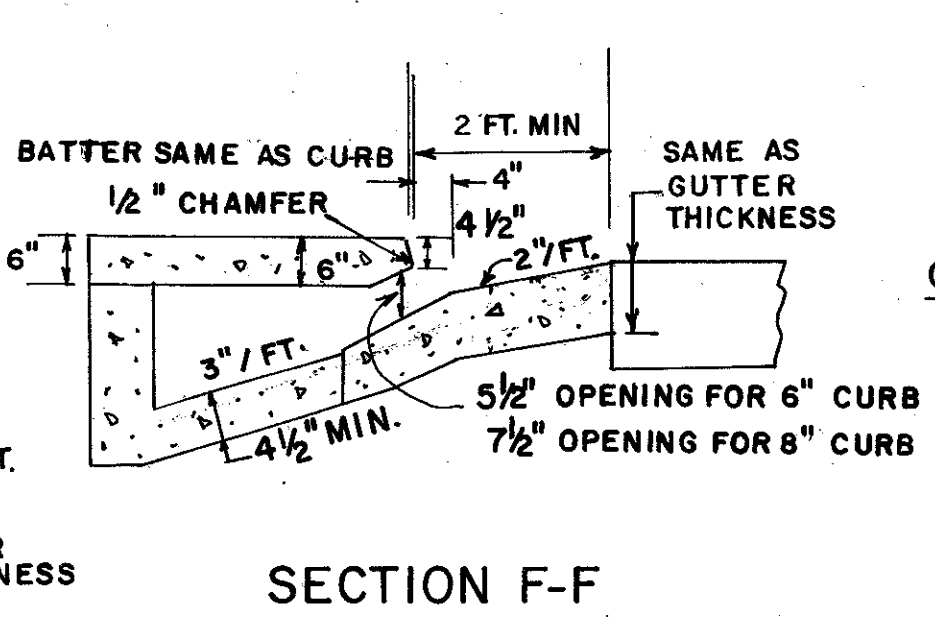
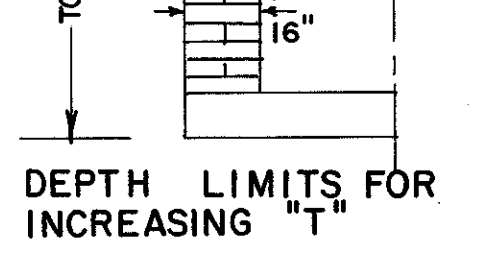
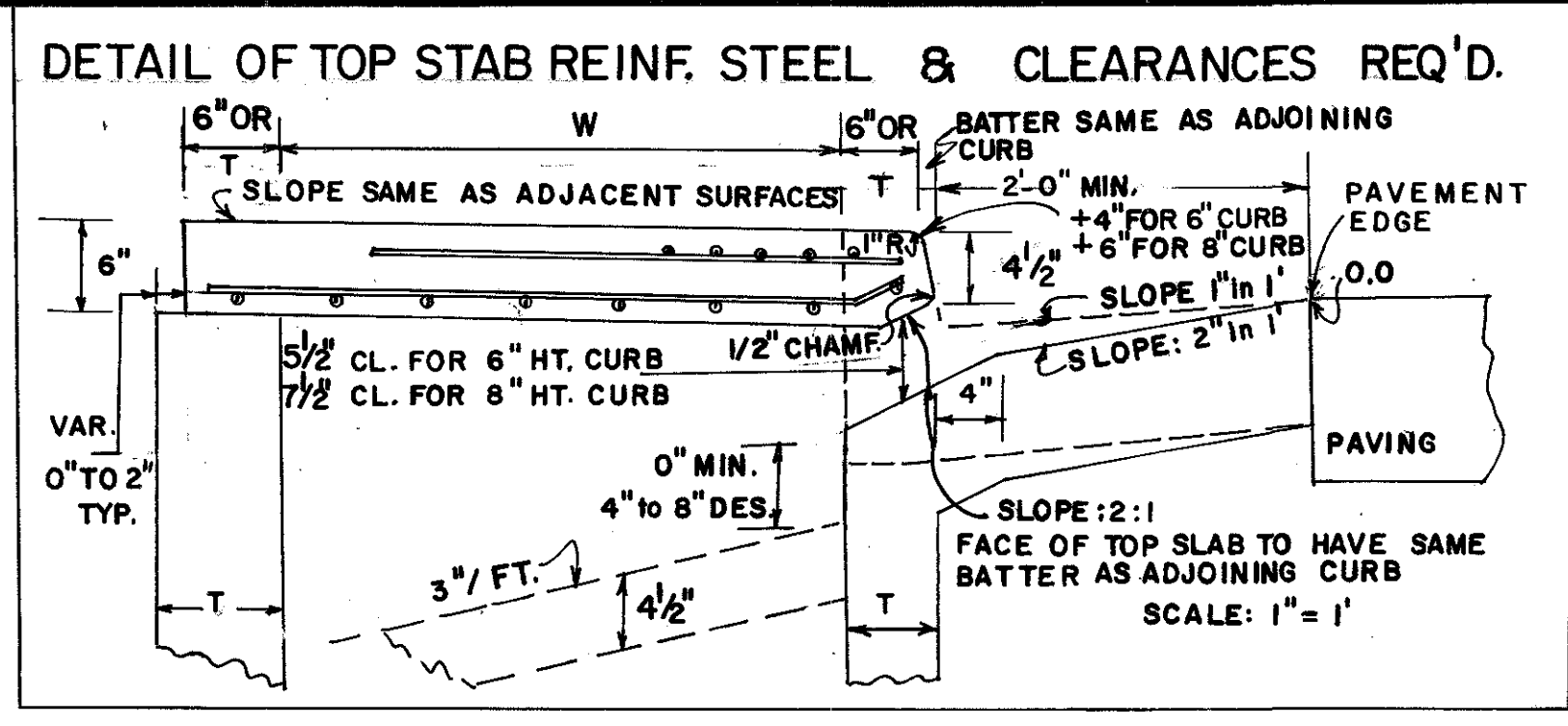


W OR W1 (MAX.)	BOTTOM SLAB MATERIALS	"S"
TO 4'-6"	NON-REINF. CONCRETE OR BRICK	6"
OVER 4'-6"	CONC. REINF. W/ 4 BARS 12" O.C. BOTH WAYS 2" CL. FROM SLAB TOP	8"



TYPICAL MIN. DIMENSIONS

PIPE DIA.	H (MIN.)	W or W1	MIN. ΔE
12	4'-4"	3'-0"	3'-3"
15	4'-7"	3'-0"	3'-6"
18	4'-10"	3'-0"	3'-9"
24	5'-6"	3'-0"	4'-4"
30	6'-2"	3'-7"	5'-0"
36	6'-10"	4'-6"	5'-7"
42	7'-4"	5'-3"	5'-11"
48	8'-0"	6'-0"	6'-6"
54	8'-6"	6'-8"	7'-0"
60	9'-2"	7'-4"	7'-7"



NOTE: TYPICAL TREATMENT FOR SKEWED PIPES ARE: CIRCULAR PRECAST UNITS; PRECAST SWIVEL SECTIONS; PIPE ELBOWS OR INCREASED BOX SIZES TO ACCOMMODATE THE SKEWS. SEE SEPARATE STANDARDS FOR PRECAST ALTERNATES.

41-0010

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD CATCH BASINS
FOR USE WITH CURB (6" OR 8" HT.) & GUTTER (IN SAGS OR LOW POINTS)

SCALE AS SHOWN REV. & RED. AUGUST, 1982

REV. & RED. R.M.J. (SUBMITTED)	<i>Floyd E. Hardy</i>	NUMBER
TRA. G.M.E. (APPROVED)	<i>James D. Andrews</i>	1034D
CHK. R.K.C.	STATE HIGHWAY ENGINEER	

CATCH BASIN (IF CATCH BASIN HAS LONGITUDINAL PIPE OVER 24", SEE DETAILS AT RIGHT)

CATCH BASIN (TYPICAL FOR CATCH BASIN WITH LONGITUDINAL PIPE OVER 24")

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

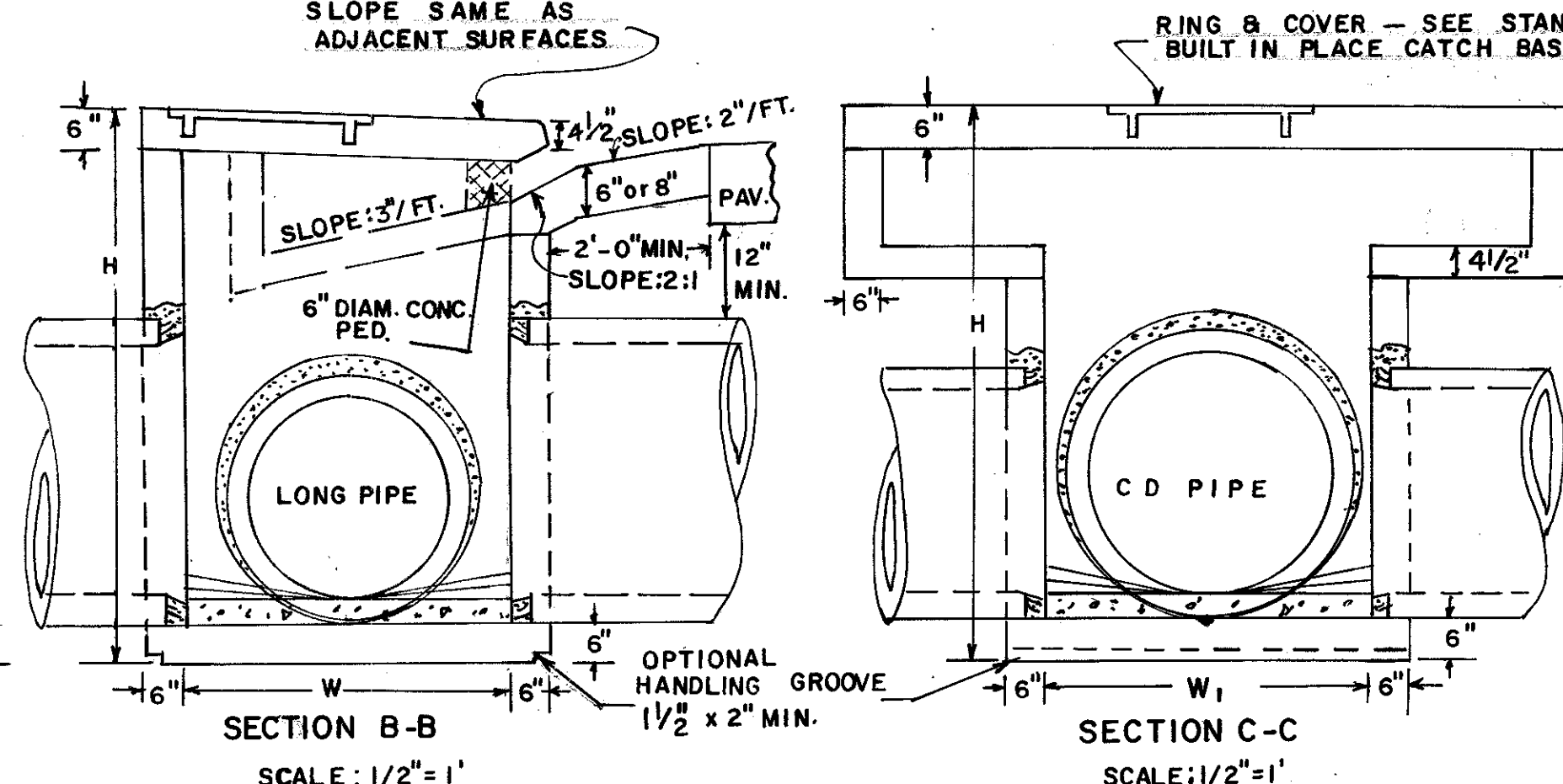
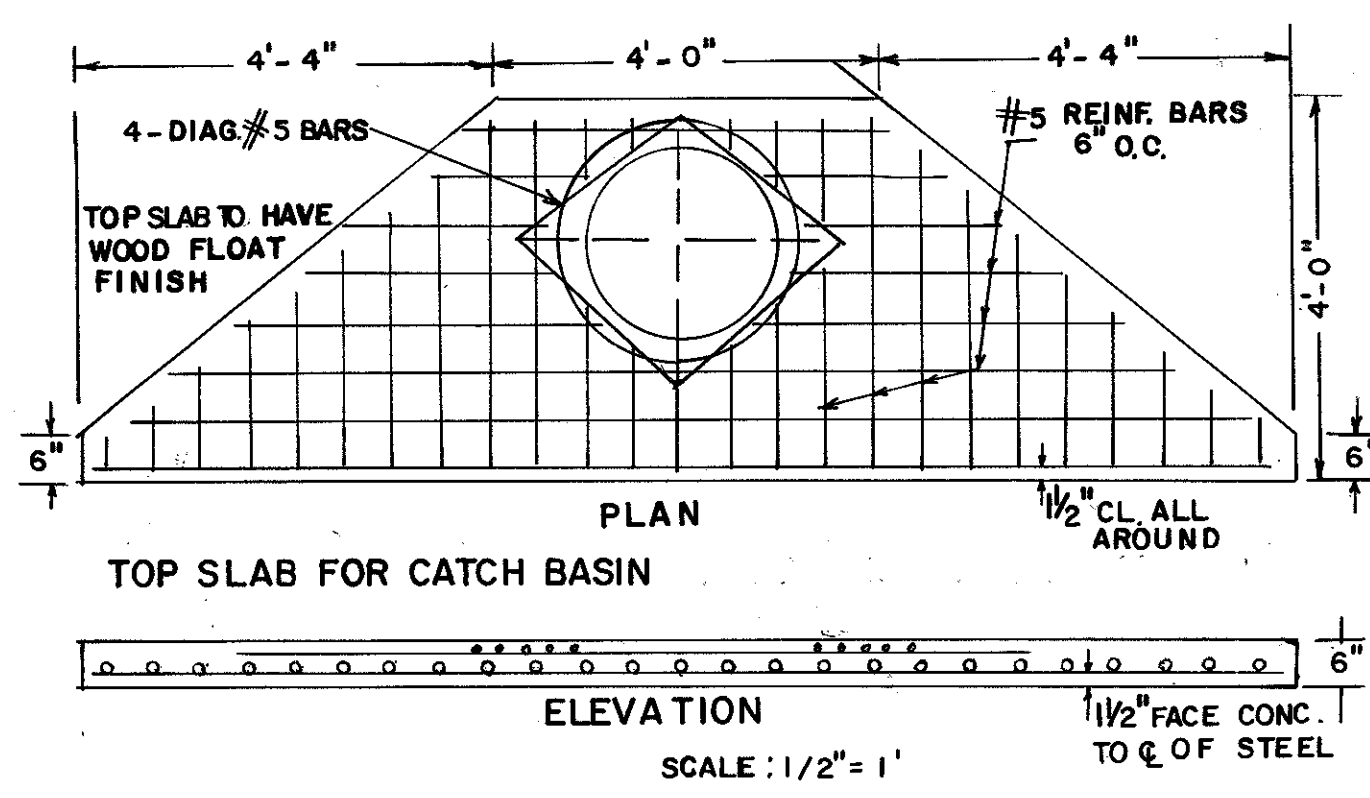
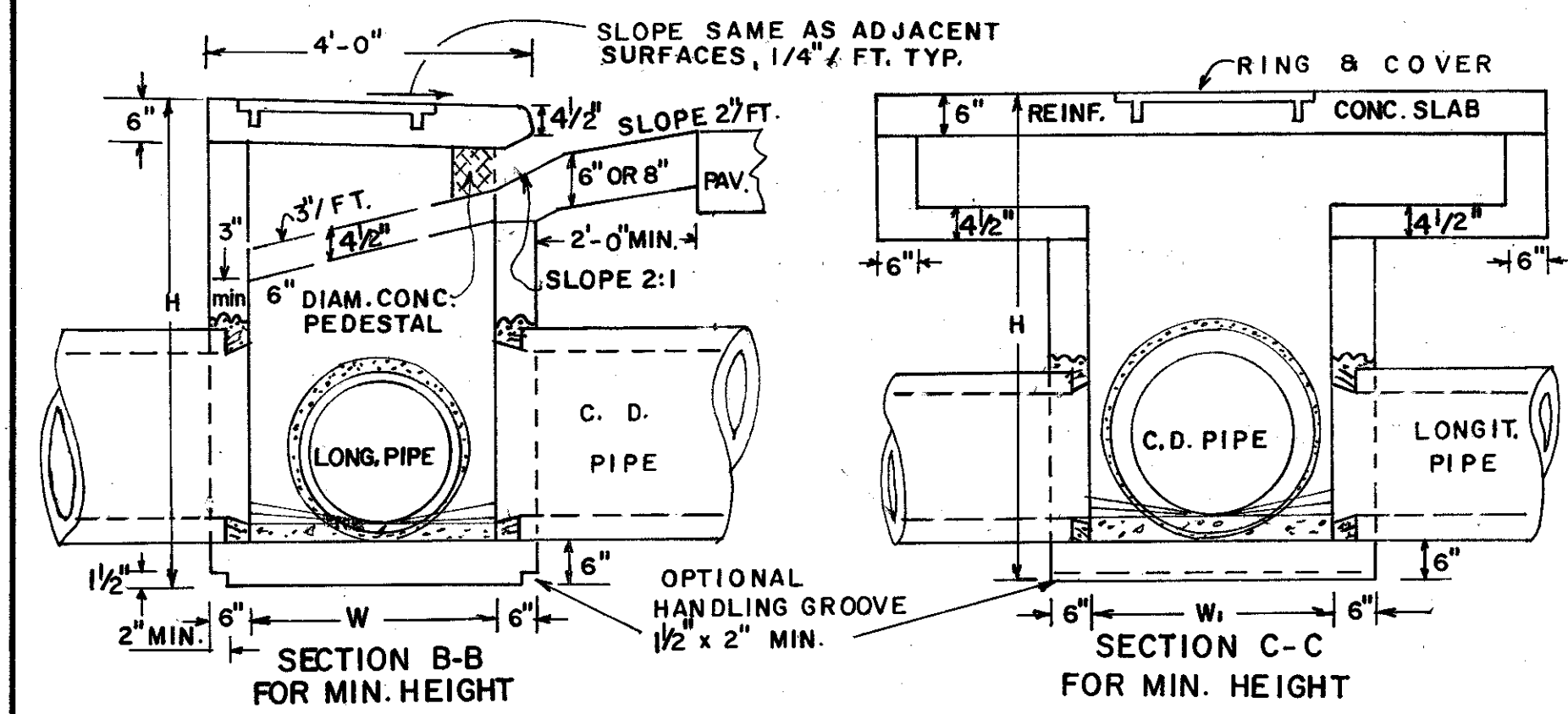
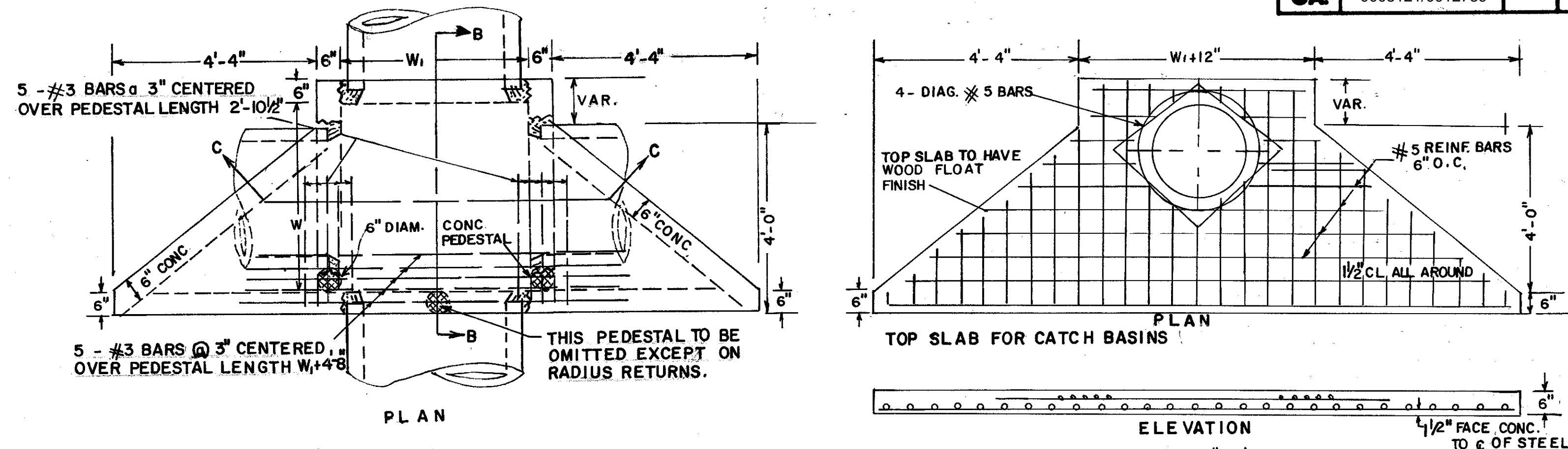
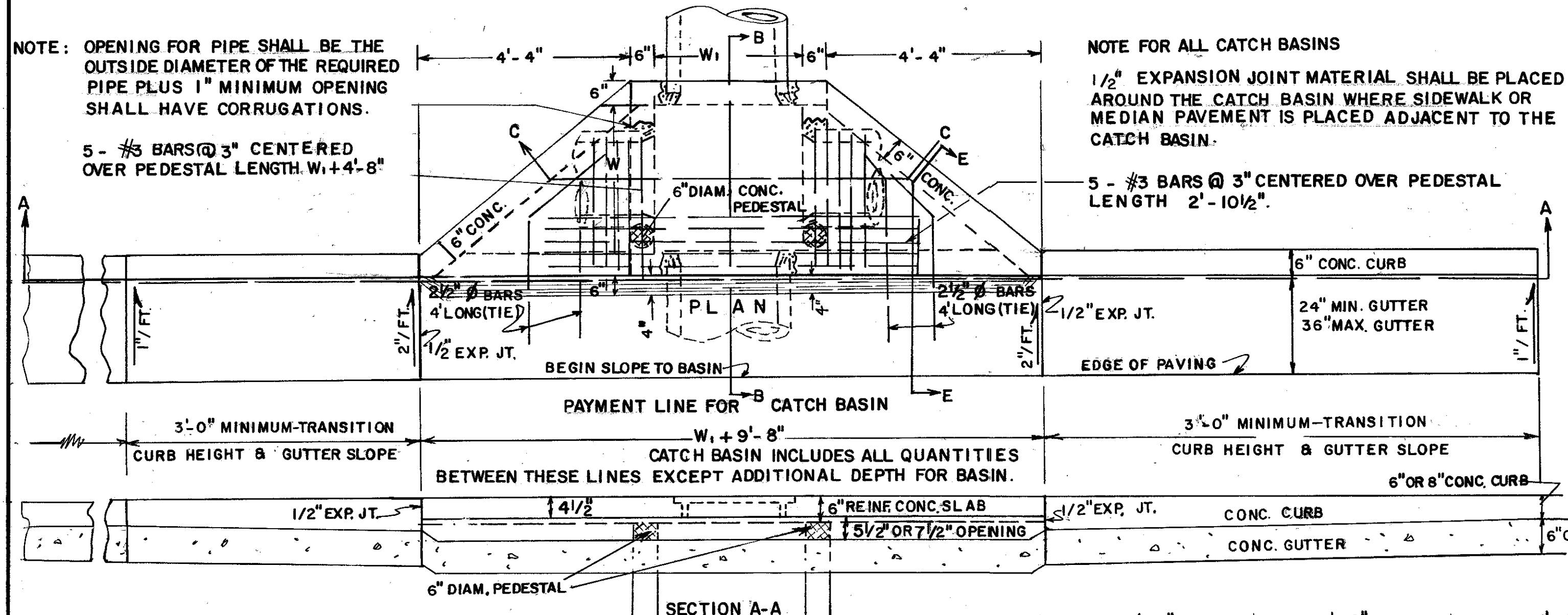
NOTE: OPENING FOR PIPE SHALL BE THE OUTSIDE DIAMETER OF THE REQUIRED PIPE PLUS 1" MINIMUM OPENING SHALL HAVE CORRUGATIONS.

5 - #3 BARS @ 3" CENTERED OVER PEDESTAL LENGTH $W_1 + 4'-8"$

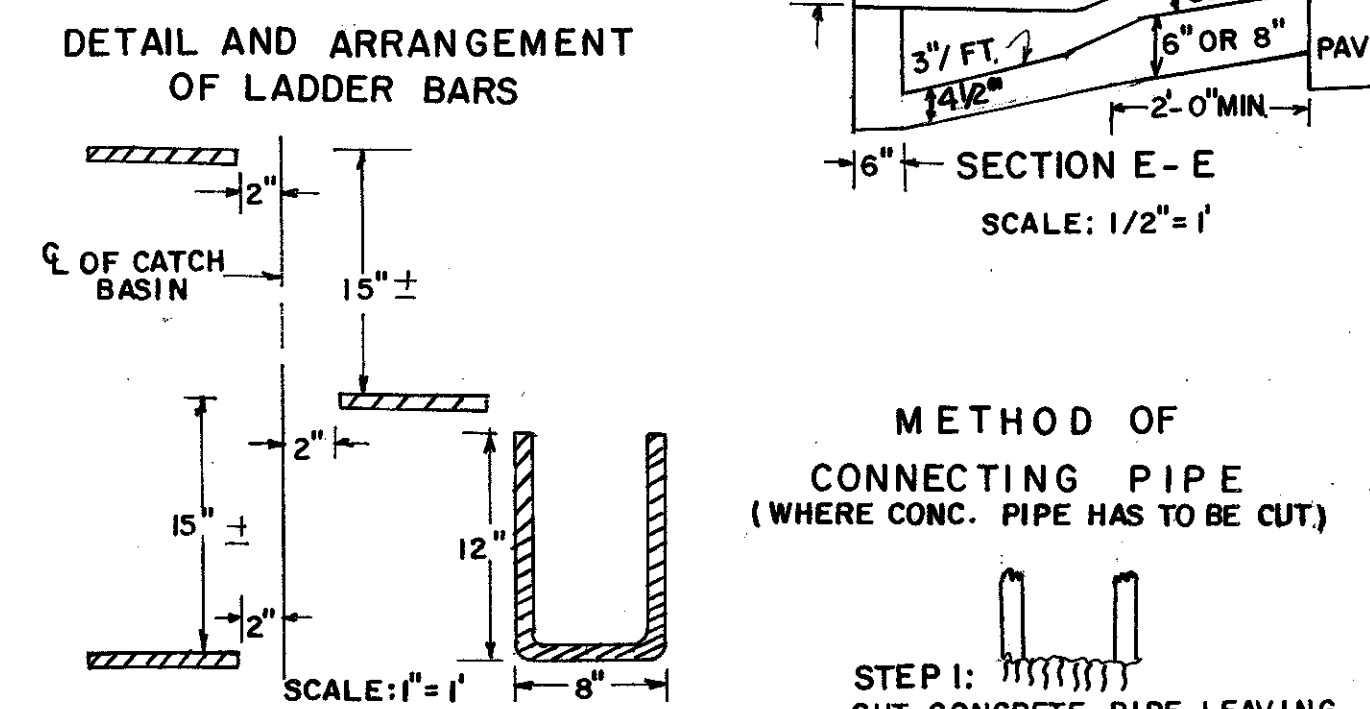
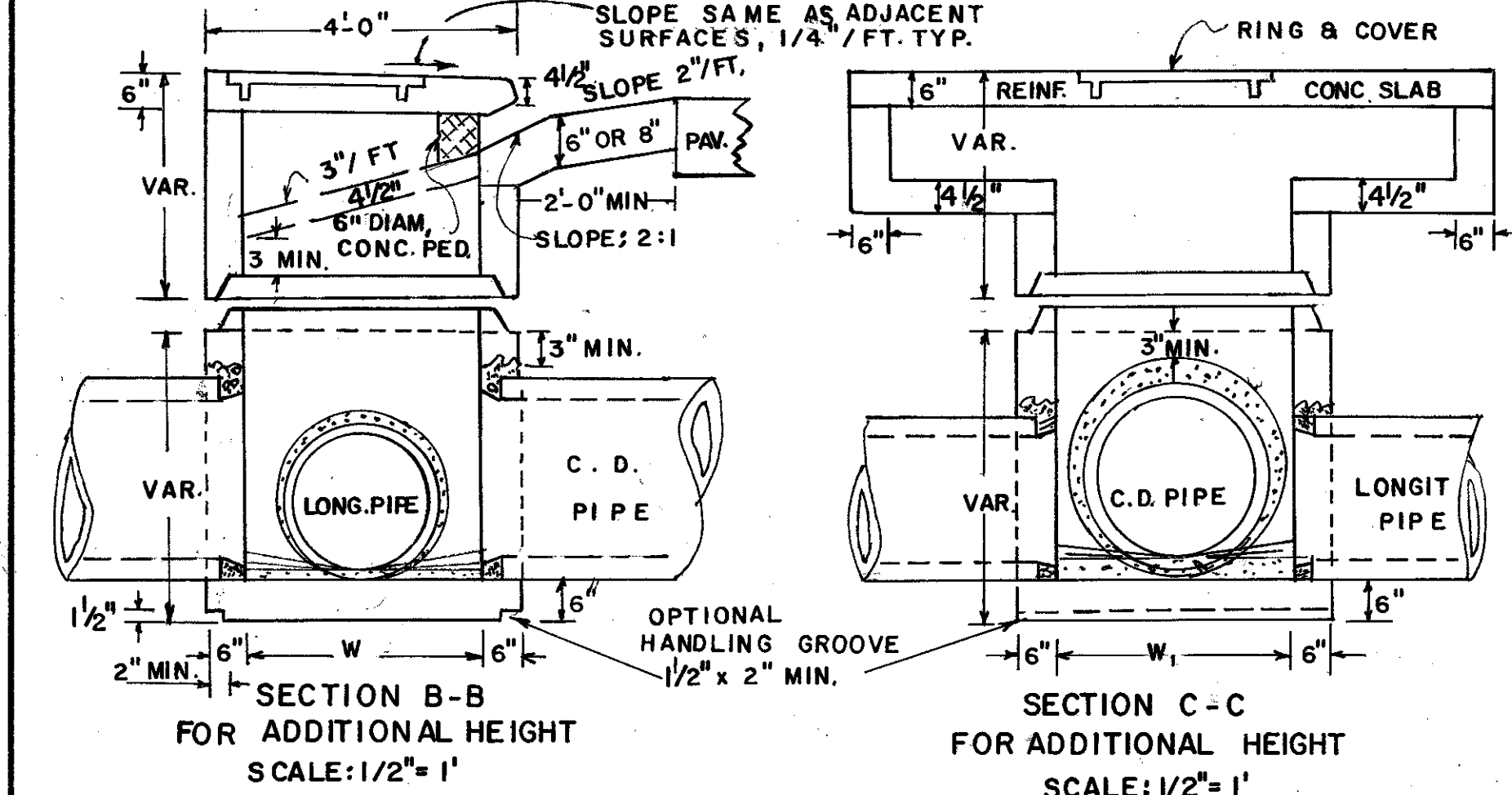
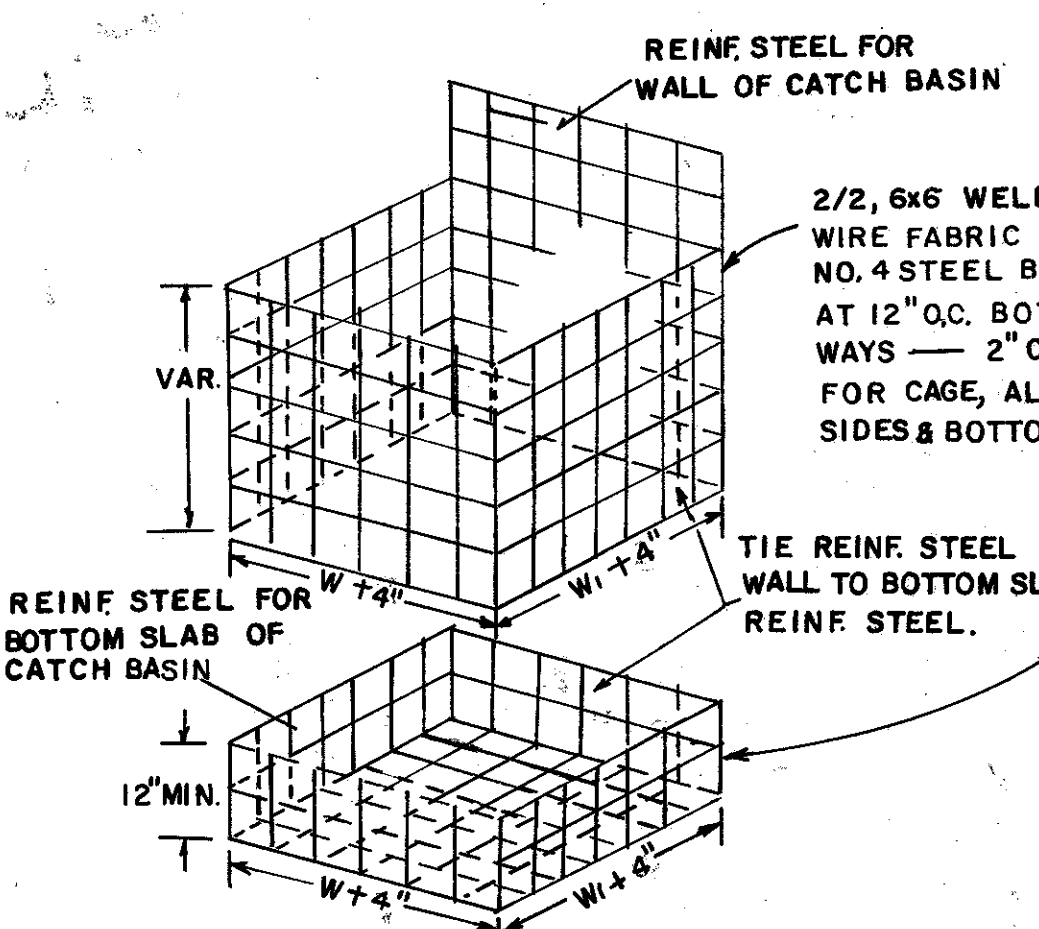
NOTE FOR ALL CATCH BASINS

1/2" EXPANSION JOINT MATERIAL SHALL BE PLACED AROUND THE CATCH BASIN WHERE SIDEWALK OR MEDIAN PAVEMENT IS PLACED ADJACENT TO THE CATCH BASIN.

5 - #3 BARS @ 3" CENTERED OVER PEDESTAL LENGTH $2'-10\frac{1}{2}"$



REINFORCING - ISOMETRIC VIEW

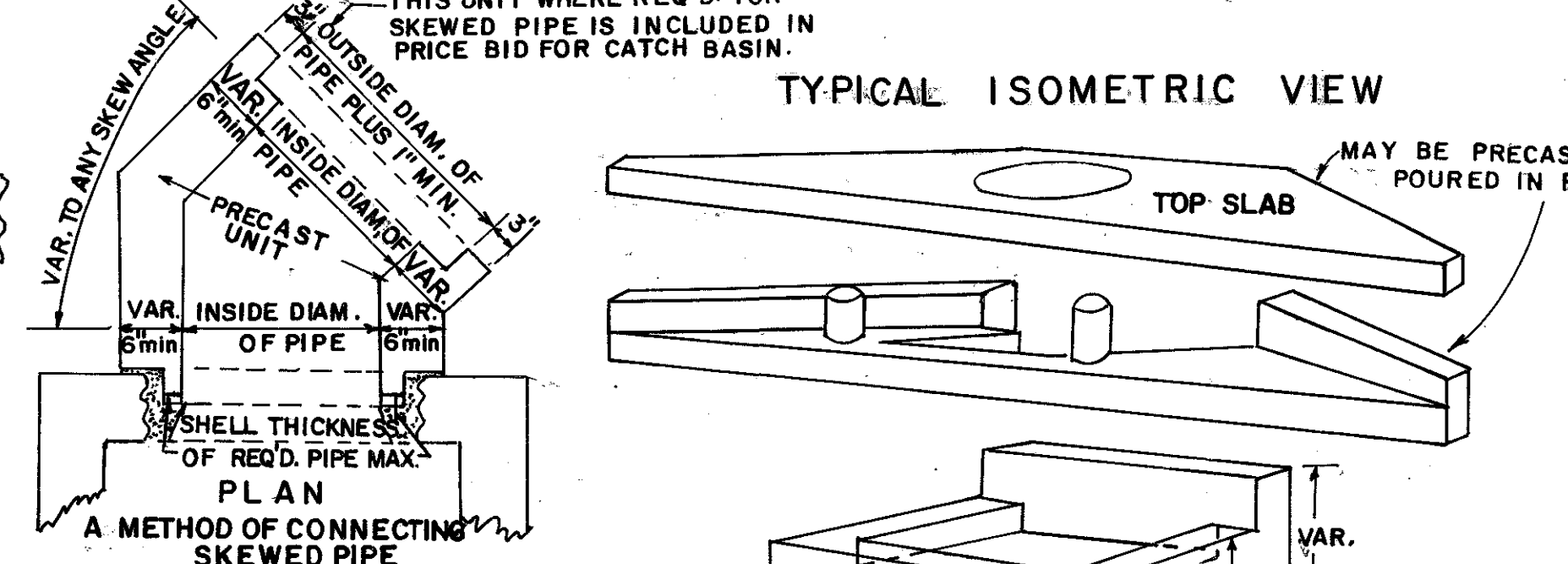


METHOD OF CONNECTING PIPE (WHERE CONC. PIPE HAS TO BE CUT)

STEP 1: CUT CONCRETE PIPE LEAVING APPROXIMATELY 3" OF REINFORCING MESH EXPOSED

STEP 2: POSITION PIPE APPROXIMATELY 3" INTO OPENING OF WALL.

STEP 3: POSITION CONICAL CONE INSIDE OF PIPE AND SEAL WITH GROUT (1/2" MIN. THICKNESS OF GROUT). REMOVE CORE WHEN SET AND RUB GROUT TO SEAL JOINTS.



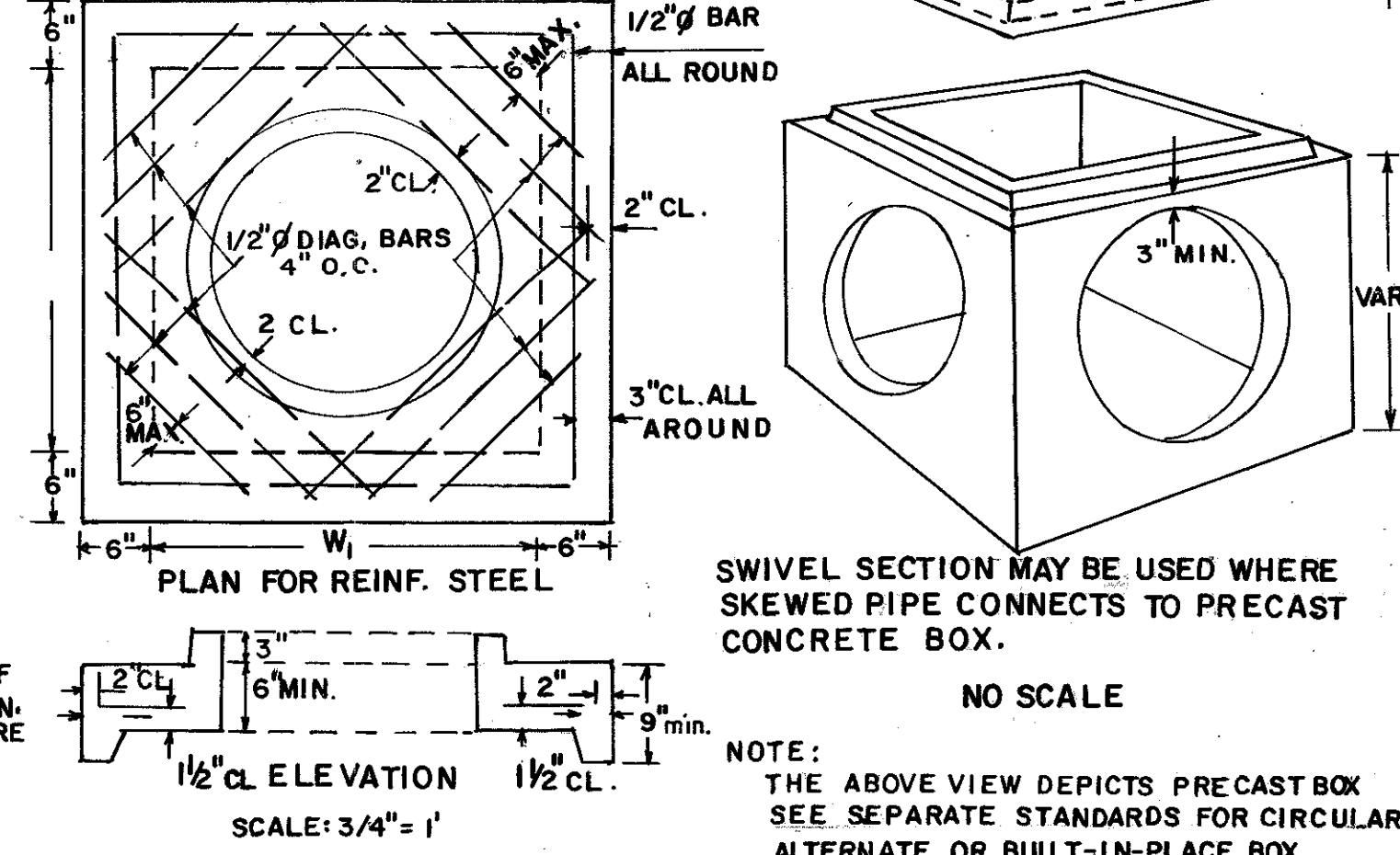
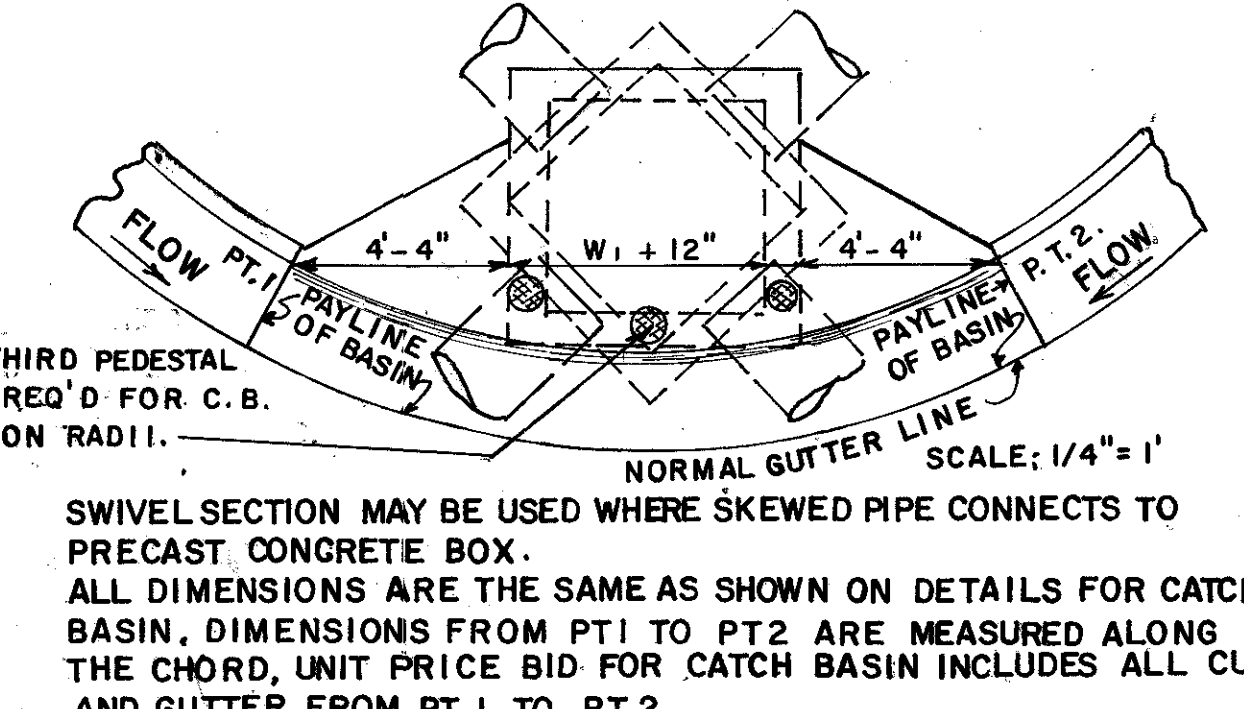
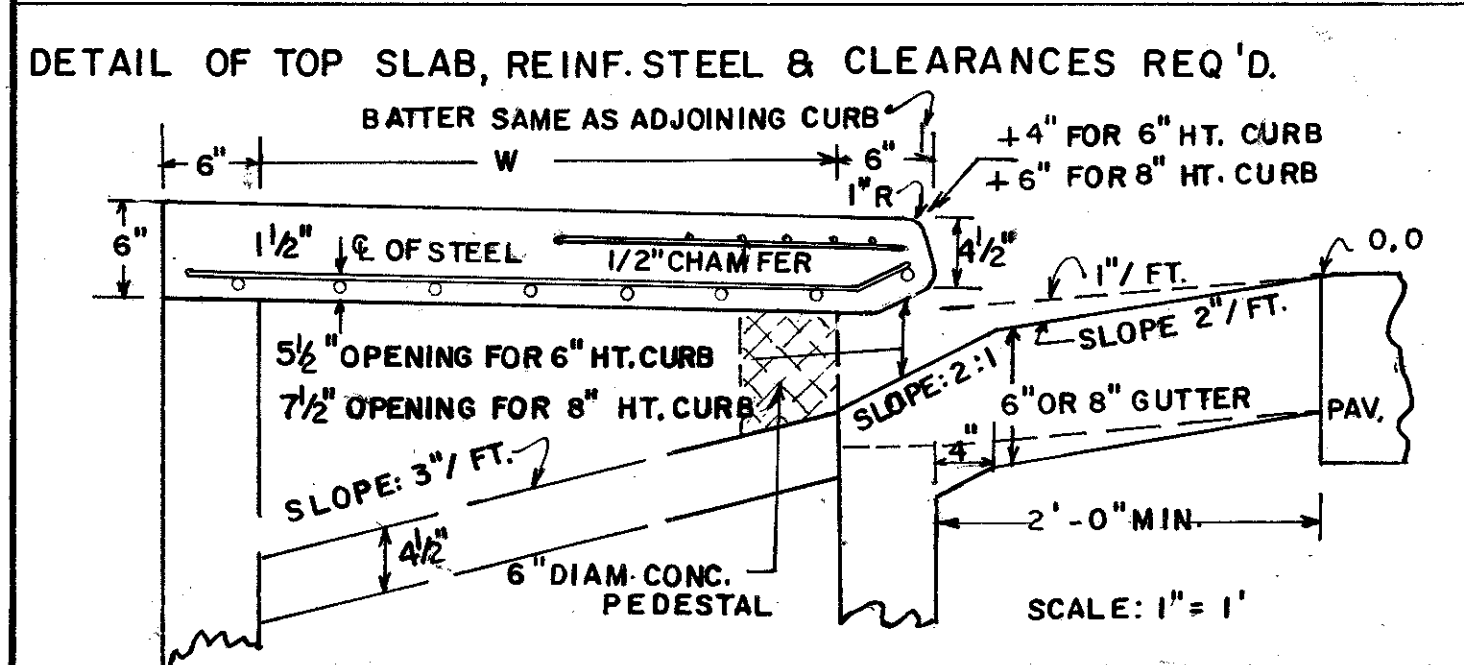
DIMENSIONS FOR CATCH BASINS

PIPE SIZE	NORMAL W or W ₁	MIN. H
12"	3'-0"	4'-4"
15"	3'-0"	4'-7"
18"	3'-0"	4'-10"
24"	3'-0"	5'-6"
30"	3'-6"	6'-2"
36"	4'-0"	6'-10"
42"	5'-0"	7'-4"
48"	5'-0"	8'-0"
54"	6'-0"	8'-6"
60"	6'-0"	9'-2"

NOTE: DIMENSIONS FOR CATCH BASINS ARE BASED UPON TYPICAL OUTSIDE DIAMETERS OF CONCRETE PIPES AND MAY BE VARIED IF CONDITIONS PERMIT AND THE ENGINEER APPROVES. W & W₁ DIMENSIONS DO NOT HAVE TO BE EQUAL.

ALTERNATE: BUILT-IN-PLACE, PRECAST BOX, AND/OR PRECAST CIRCULAR UNITS WITH THE REQUIRED ADAPTERS, REDUCERS, FITTINGS, CONNECTIONS, ETC. MAY BE USED IN COMBINATIONS.

NOTE: FOR RING & COVER DETAILS AND OTHER DETAILS NOT SHOWN, SEE STANDARD 1034 D FOR BUILT-IN-PLACE CATCH BASIN.



41-0011

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

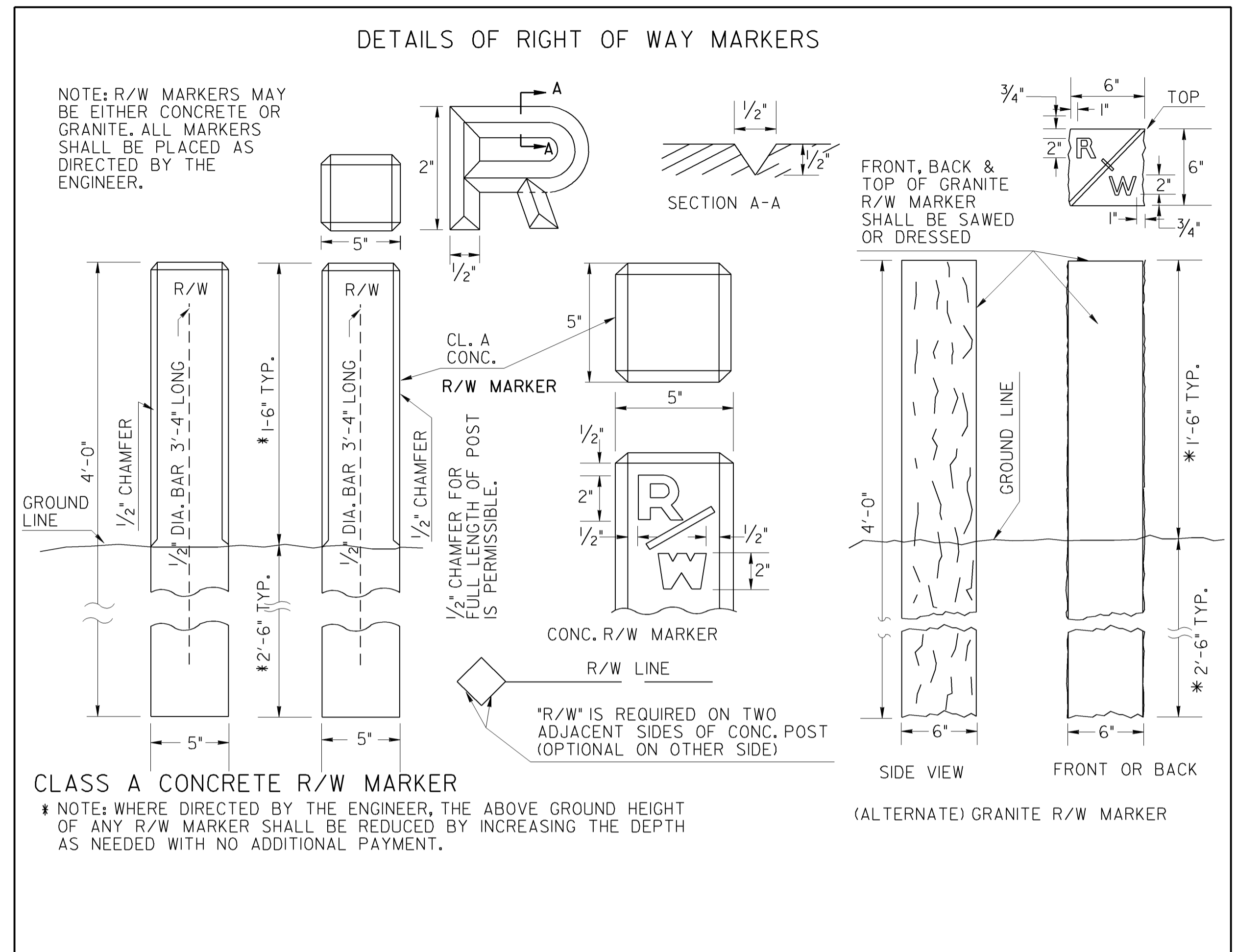
STANDARD PRECAST CATCH BASINS
FOR USE WITH CURB (6" OR 8" HT.) & GUTTER (IN SAGS OR LOW POINTS)

SCALE AS SHOWN

REV. & REDR. R.M.J.	(SUBMITTED) <i>Alfred E. Hardy</i>	NUMBER 1034D PRECAST
TRA. G.M.E.	(APPROVED) <i>Thomas D. Moore</i>	
CHK. R.K.C.	STATE HIGHWAY ENGINEER	

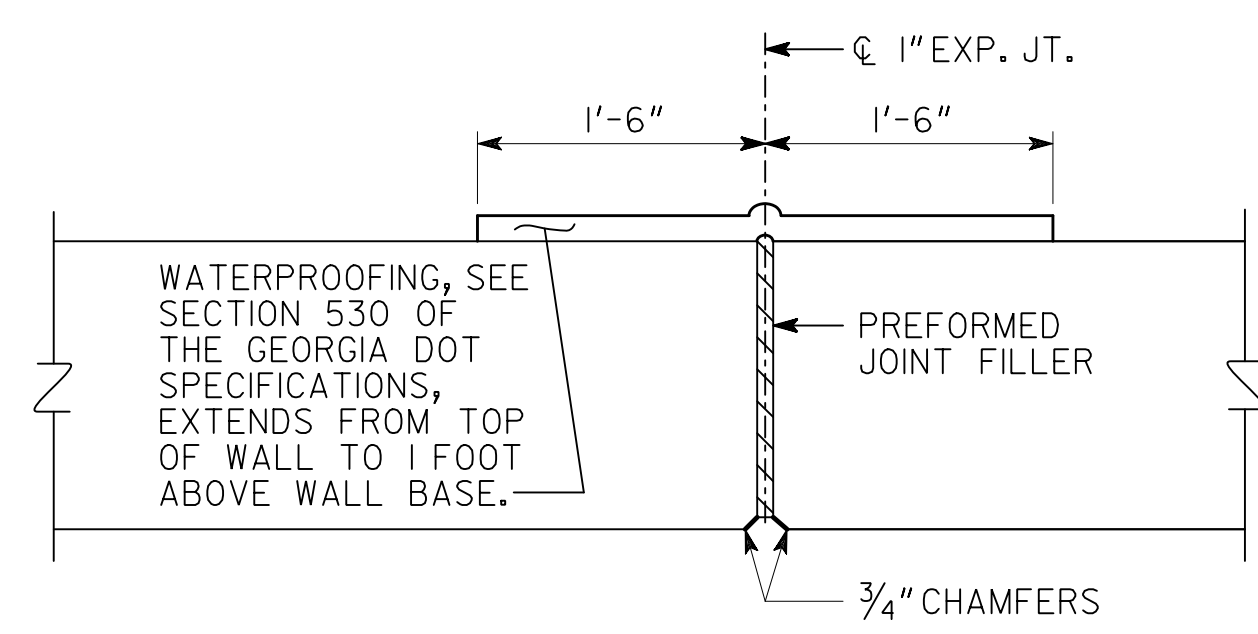
REV. & REDR., SEPT. 1982

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

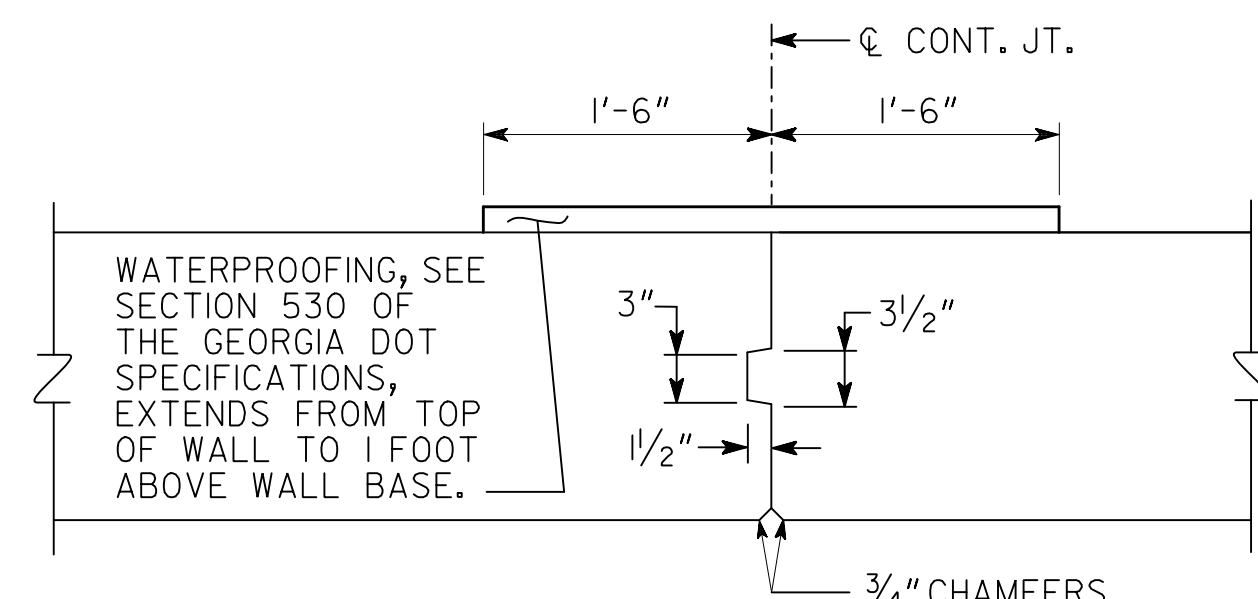


41-0012

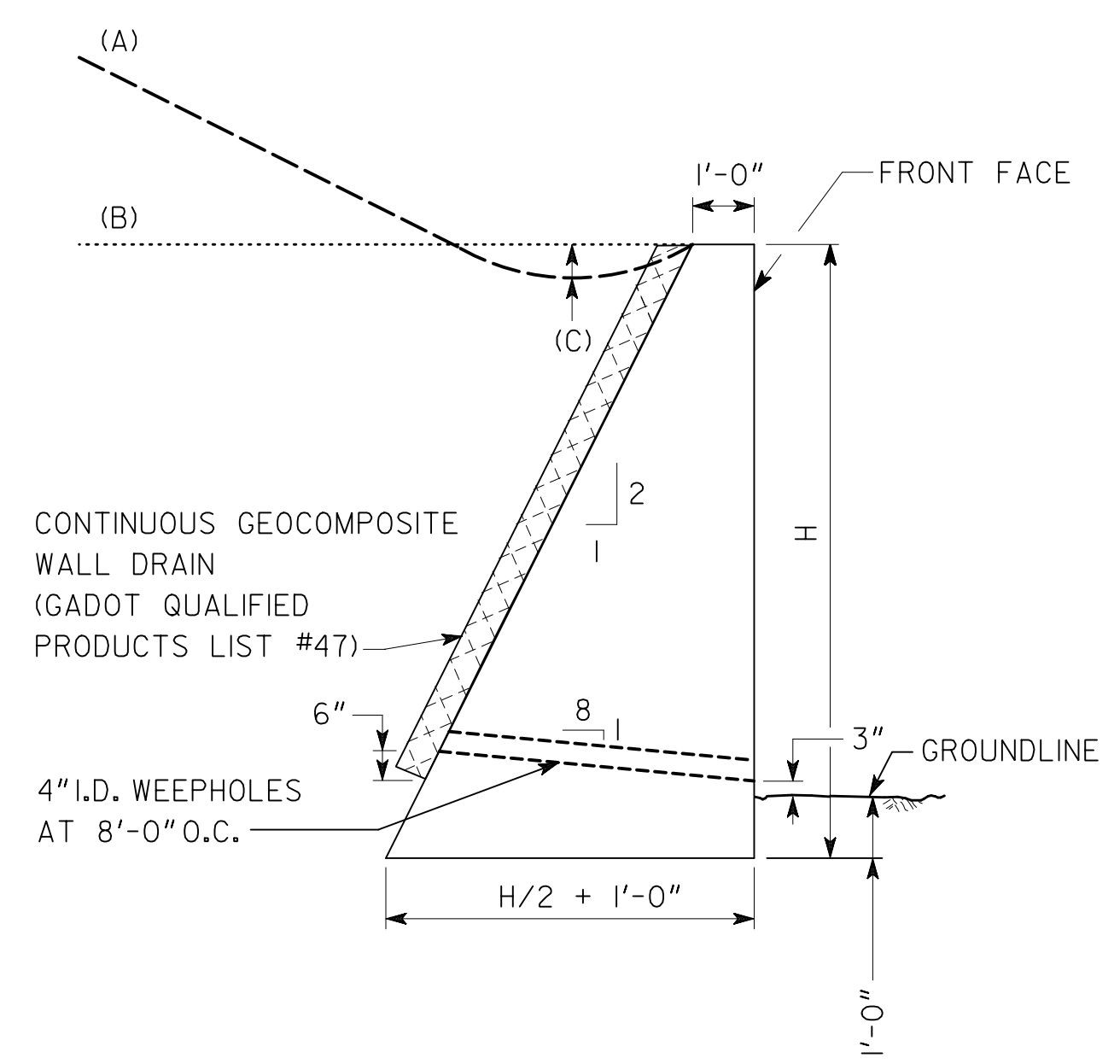
REDRAWN TO MATCH METRIC 4-10-06		GA. STD. 9003		REDRAWN 6-30-98		REV. F.A.P. - SP. POST ALT. 9-28-90		VAR. HT. R/W MARKER 10-11-88		ADD GRANITE R/W M. 5-24-85		REVISION		DATE	
G.L.O.		G.J.P.		R.M.U.		R.M.U.		R.M.U.		R.M.U.		BY		DES. (SUBMITTED) <i>[Signature]</i>	
														STATE ROAD & AIRPORT DESIGN ENGINEER	
														TRA. C.M.E. (APPROVED) <i>[Signature]</i>	
														CHIEF ENGINEER	
DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA												STANDARD DETAILS OF MARKERS FEDERAL AID AND STATE RIGHT OF WAY MARKERS			
NO SCALE												REV. & REDR. DEC., 1981			
												NUMBER 9003			



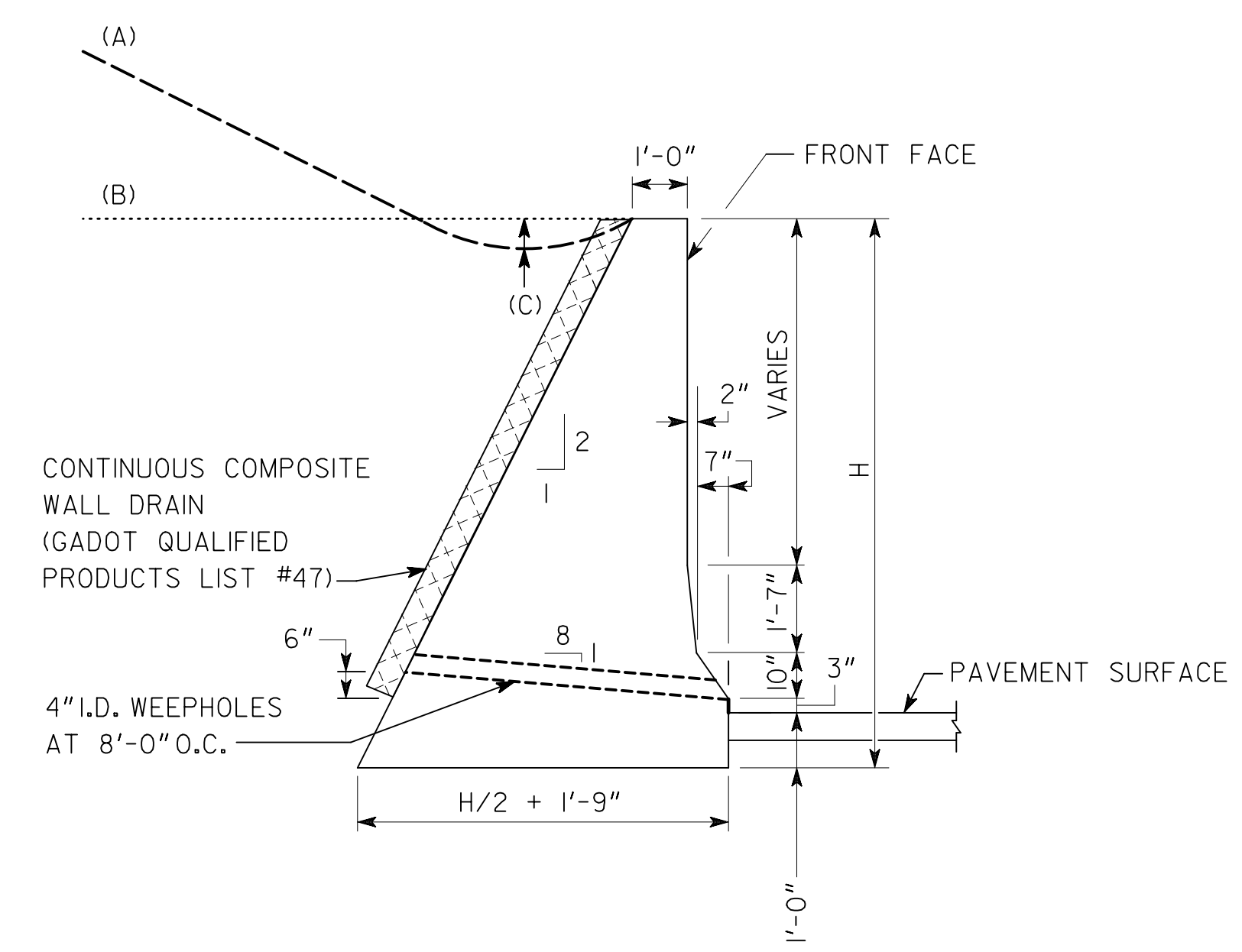
DETAIL OF EXPANSION JOINT
SEE GENERAL NOTE #3



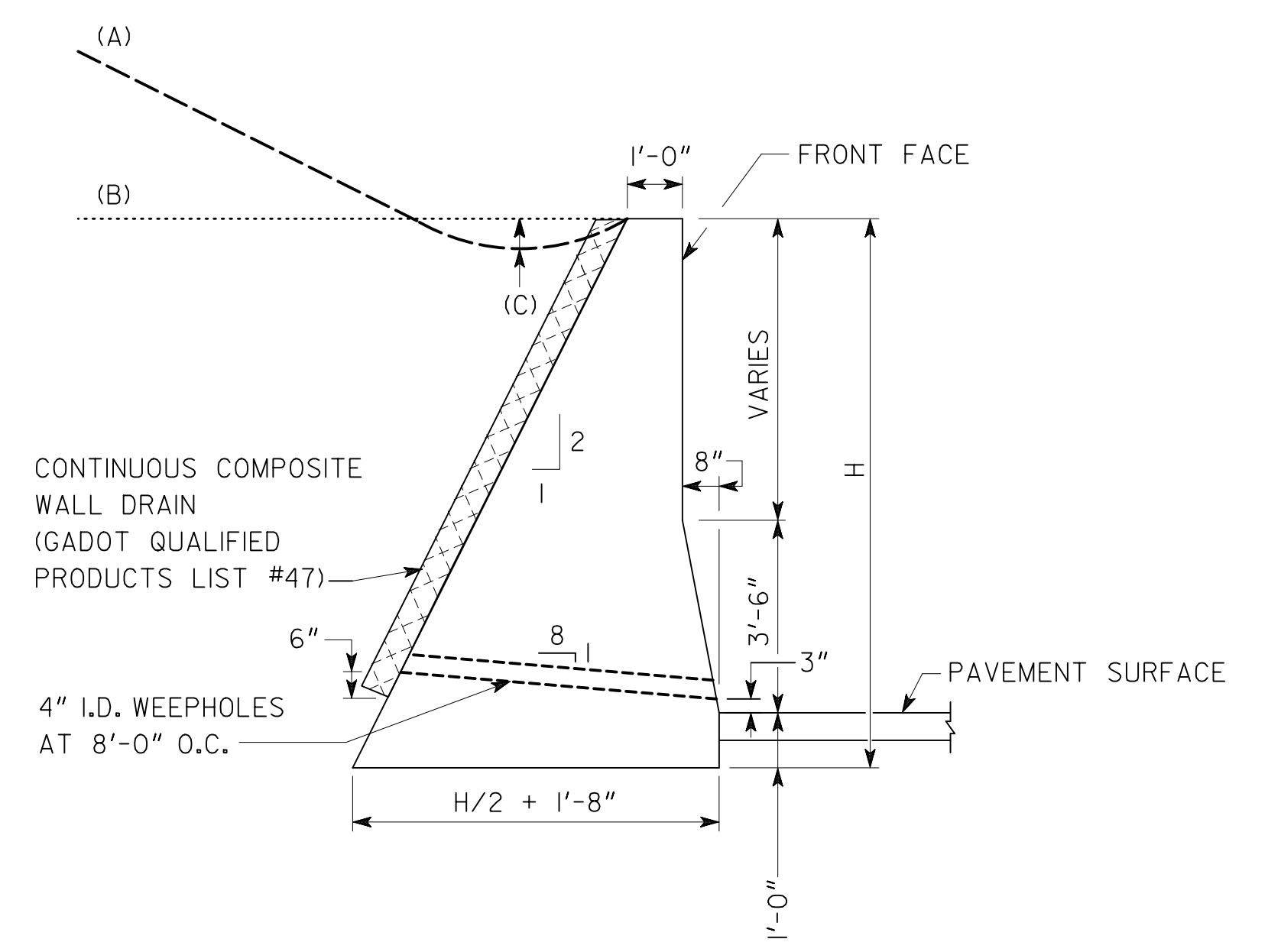
DETAIL OF CONTRACTION JOINT
SEE GENERAL NOTE #3



TYPICAL SECTION A



TYPICAL SECTION B
(NEW JERSEY BARRIER FACE)



TYPICAL SECTION C
(SINGLE SLOPE BARRIER FACE)

(A) - SLOPED BACKFILL WITH DITCH
(B) - FLAT BACKFILL
(C) - DITCH DEPTH, 6" - 12" TYPICAL
SEE PLANS FOR DESIGN

BACKSLOPE	MAXIMUM "H"*		
	TYP. SECTION A	TYP. SECTION B **	TYP. SECTION C **
FLAT	8'-6"	10'-0"	10'-0"
SLOPE TO 4:1	6'-3"	7'-0"	7'-0"
SLOPE TO 2:1	4'-6"	4'-9"	4'-9"

* GREATER "H" PERMITTED IF APPROVED BY BRIDGE DESIGN.
** TYPICAL SECTION B SHALL HAVE A MINIMUM H OF 3'-8"
TYPICAL SECTION C SHALL HAVE A MINIMUM H OF 4'-6"

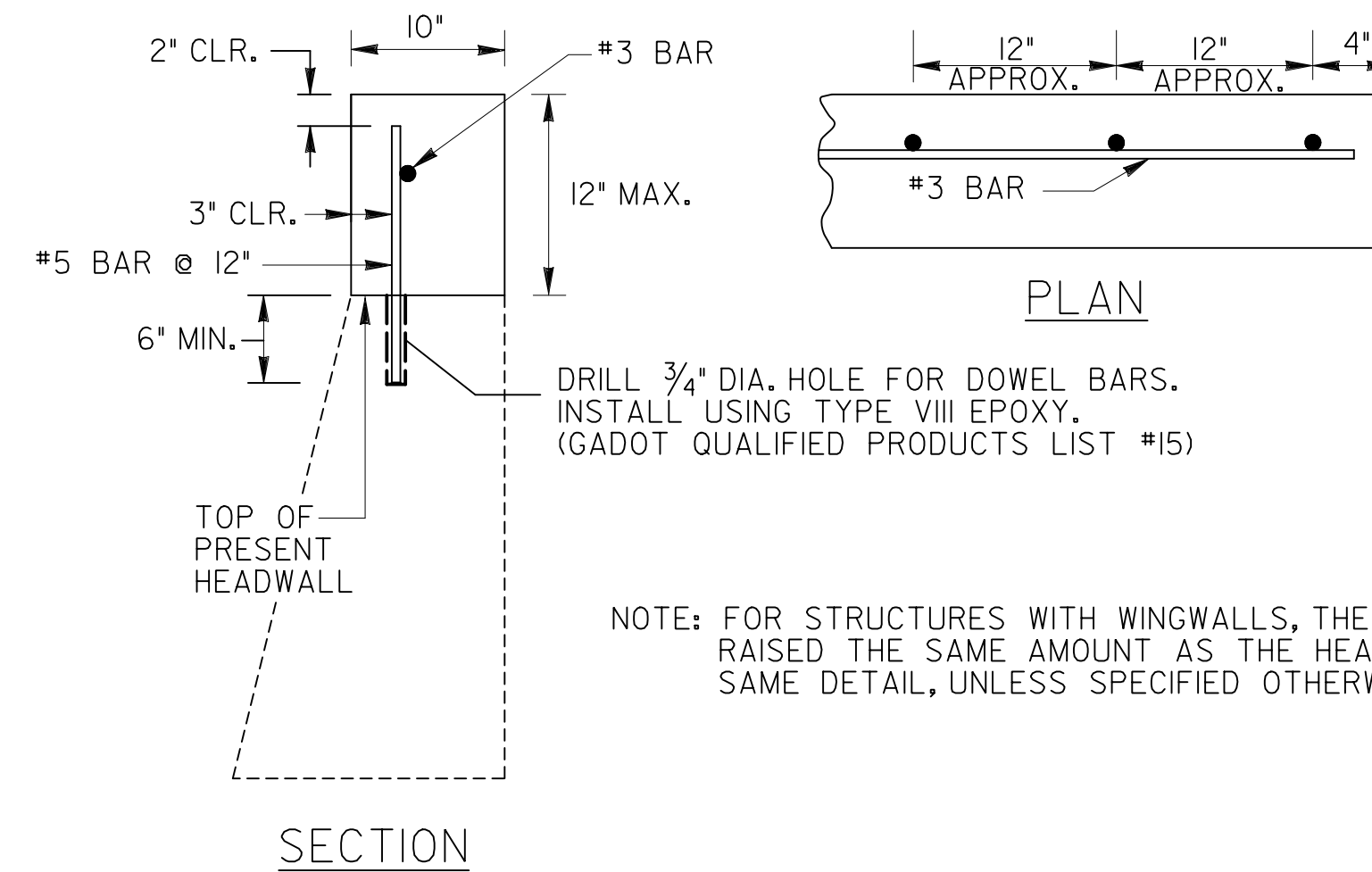
GENERAL NOTES:

- GRAVITY WALLS SHALL NOT BE USED WHEN HORIZONTAL DISTANCE FROM EDGE OF TRAVEL WAY TO FRONT FACE OF WALL IS LESS THAN $(H + 1'0")$.
- GRAVITY WALLS DESIGNED FOR THE FOLLOWING SOIL PROPERTIES:

	FOUNDATION	BACKFILL
COHESION =	0 PSF	0 PSF
$\theta =$	28°	28°
UNIT WEIGHT =	120 PCF	120 PCF
- EXPANSION JOINTS SHALL BE LOCATED AT A MAXIMUM SPACING OF 90'-0" AND EXTEND THROUGH THE WALL. CONTRACTION JOINTS SHALL BE LOCATED AT A MAXIMUM SPACING OF 30'-0".
- GRAVITY WALLS WITH A VERTICAL FRONT FACE SHALL BE PAID FOR AS "CLASS B CONCRETE OR MORTAR RUBBLE MASONRY, RETAINING WALL". GRAVITY WALLS WITH A BARRIER FRONT FACE SHALL BE PAID FOR AS "CLASS A CONCRETE, RETAINING WALL". WATERPROOFING, JOINT FILLER, WALL DRAIN, AND OTHER INCIDENTAL ITEMS SHALL BE INCLUDED IN OVERALL BID SUBMITTED.

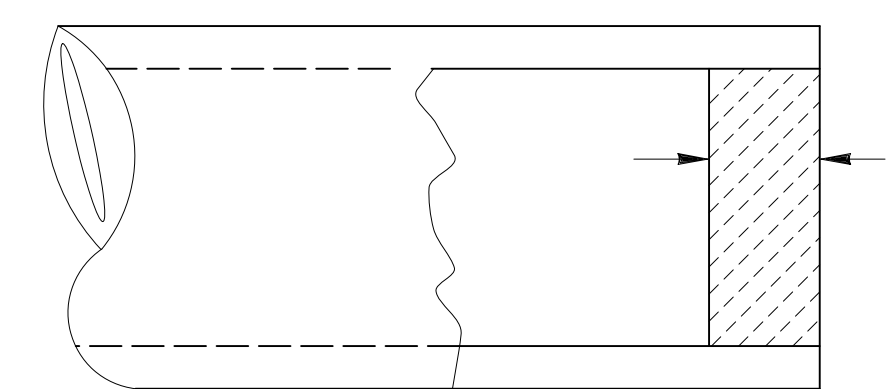
- A CONCRETE DITCH DETAIL FOR THE TOP OF THE WALL SHOULD BE INCLUDED IN THE ROADWAY PLANS WHEN WATER IS FLOWING TOWARDS THE BACK OF THE WALL. SEE CONSTRUCTION DETAIL D-49.
- FINISH EXPOSED SURFACES OF THE WALL WITH A TYPE III FINISH.
- APPLY GRAFFITI PROOF COATING AS PER SECTIONS 500 AND 838 OF THE GEORGIA DOT SPECIFICATIONS.
- ALL NECESSARY FENCE AND HANDRAIL SHOULD BE INCLUDED IN THE ROADWAY PLANS WHEN APPROPRIATE.
- GRAVITY WALL TYPICAL SECTIONS A, B, AND C HAVE BEEN DESIGNED PER THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION, 2014.

DETAIL FOR RAISING HEADWALL



NOTE: FOR STRUCTURES WITH WINGWALLS, THE WINGS SHALL BE RAISED THE SAME AMOUNT AS THE HEADWALL, USING THIS SAME DETAIL, UNLESS SPECIFIED OTHERWISE.

TYPICAL PIPE PLUG



SECTION

NOTE: PLAN PAY QUANTITIES ARE TO REFLECT PIPE PLUGS AS CU. YDS. OF CL. B CONCRETE. ON CONSTRUCTION PLUGS MAY BE BUILT WITH BRICK MASONRY, MORTAR RUBBLE MASONRY, CL. A CONC., OR CL. B CONC. WITH NO ADJUSTMENT IN PAYMENT MADE FOR ALTERNATES.

D	T (MIN)	PIPE PLUG (CU. YDS.)
12"	8"	0.0194
15"	8"	0.0303
18"	8"	0.0436
24"	8"	0.0776
30"	8"	0.1212
36"	8"	0.1745
42"	8"	0.2376
48"	8"	0.3103
54"	12"	0.5890
60"	12"	0.7272
66"	12"	0.8799
72"	12"	1.0472

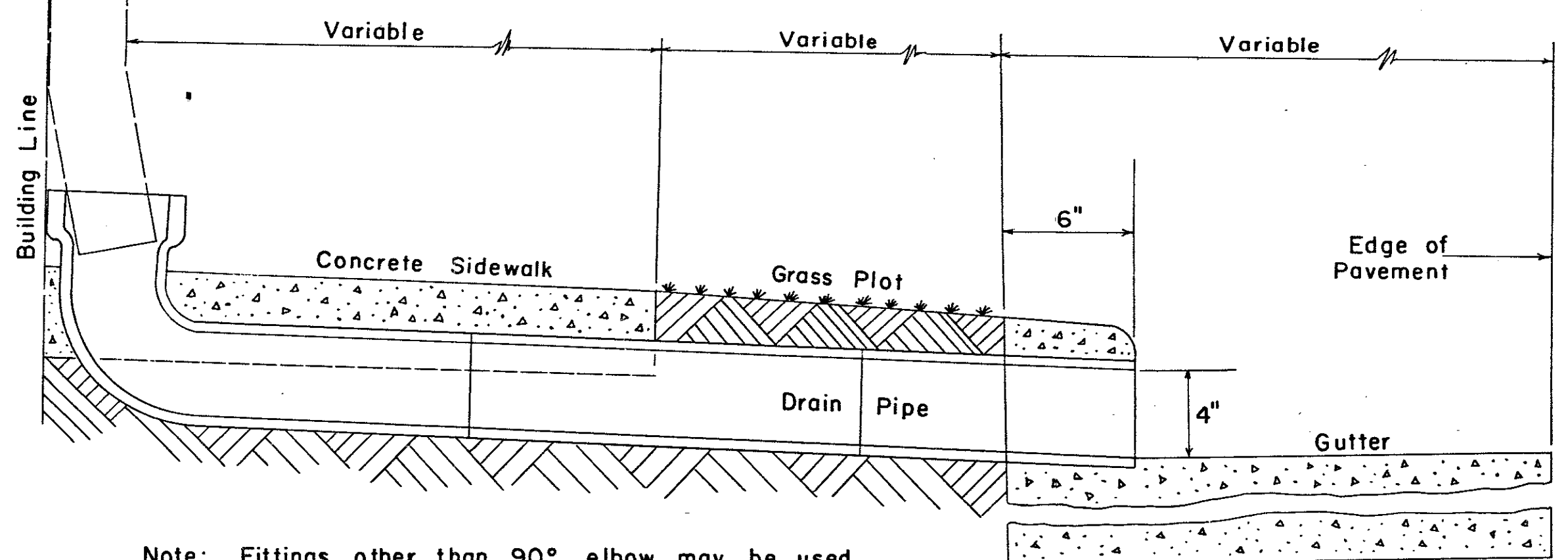
41-0013

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		STANDARD GRAVITY WALL TYPICAL SECTIONS, RAISING HEADWALL, AND TYPICAL PIPE PLUG	
NO SCALE:		REV. & REDR. SEPT, 2016	
BY	REV. & C.E.W. (SUBMITTED)	NUMBER 9031L	
CHK.	REDR. (APPROVED)	SHEET 1 OF 2	

9031L_Revise.dwg_2016-10-25.dgn

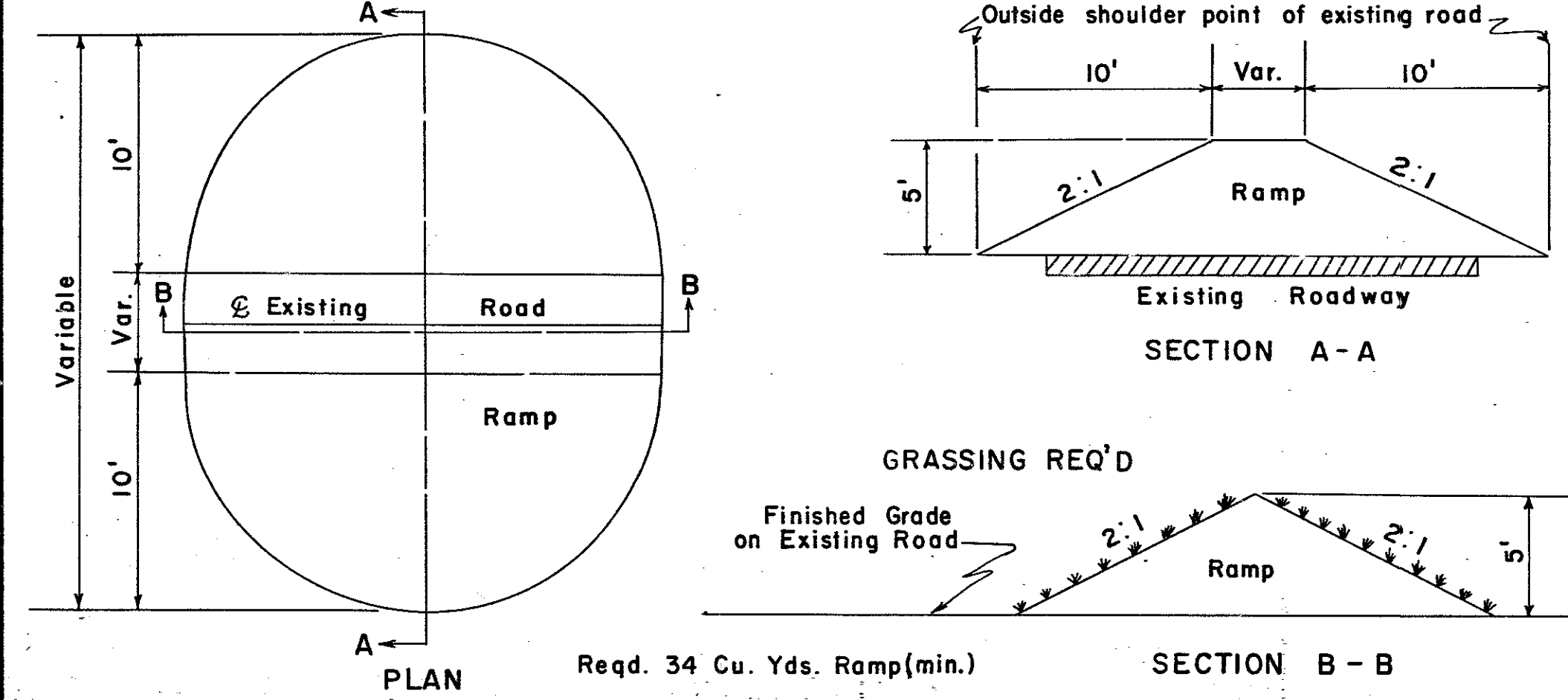
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

DETAIL FOR PLACING ROOF DRAIN PIPE UNDER SIDEWALK



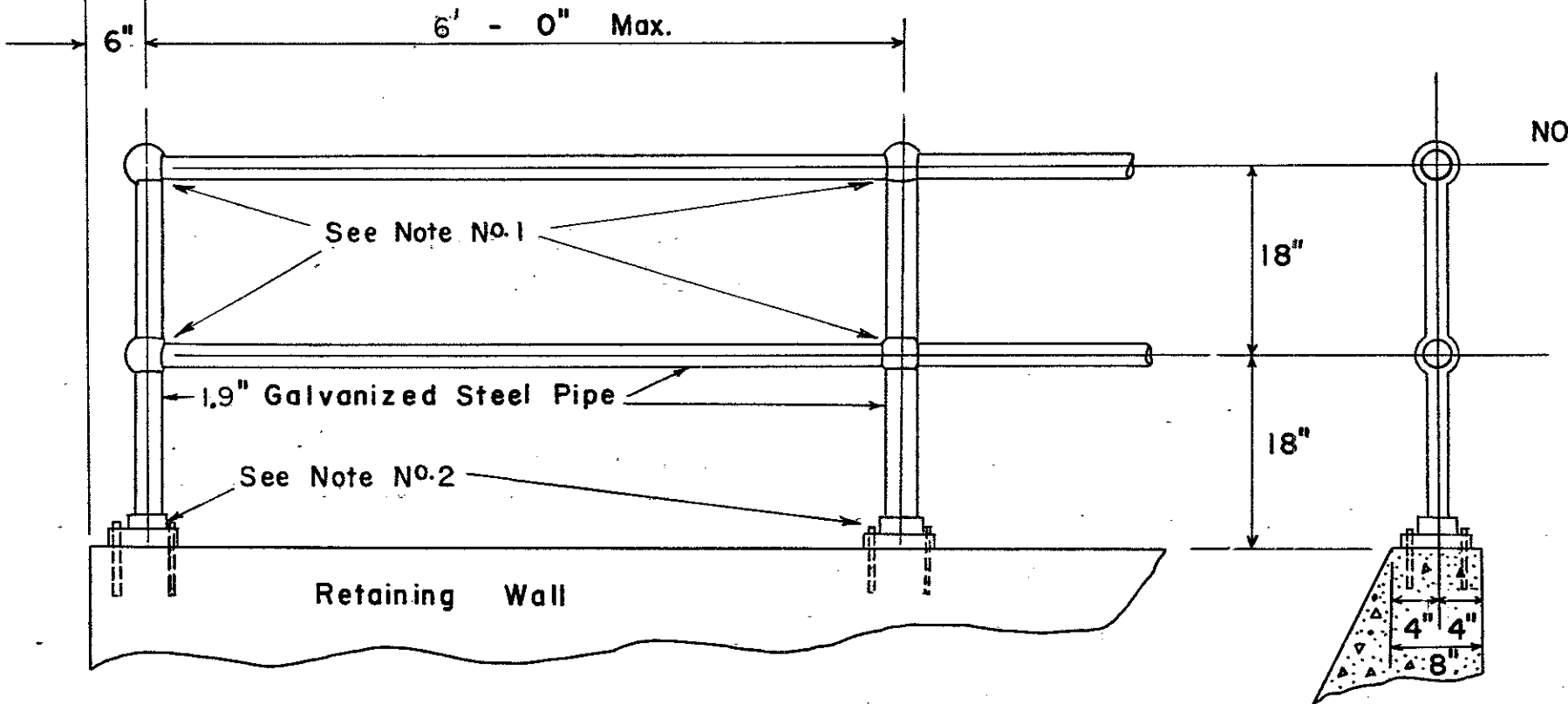
Note: Fittings other than 90° elbow may be used to satisfy other conditions.

DETAIL OF RAMP TYPE BARRICADE



NOTE: Materials and construction to be in accordance with Standard Specifications

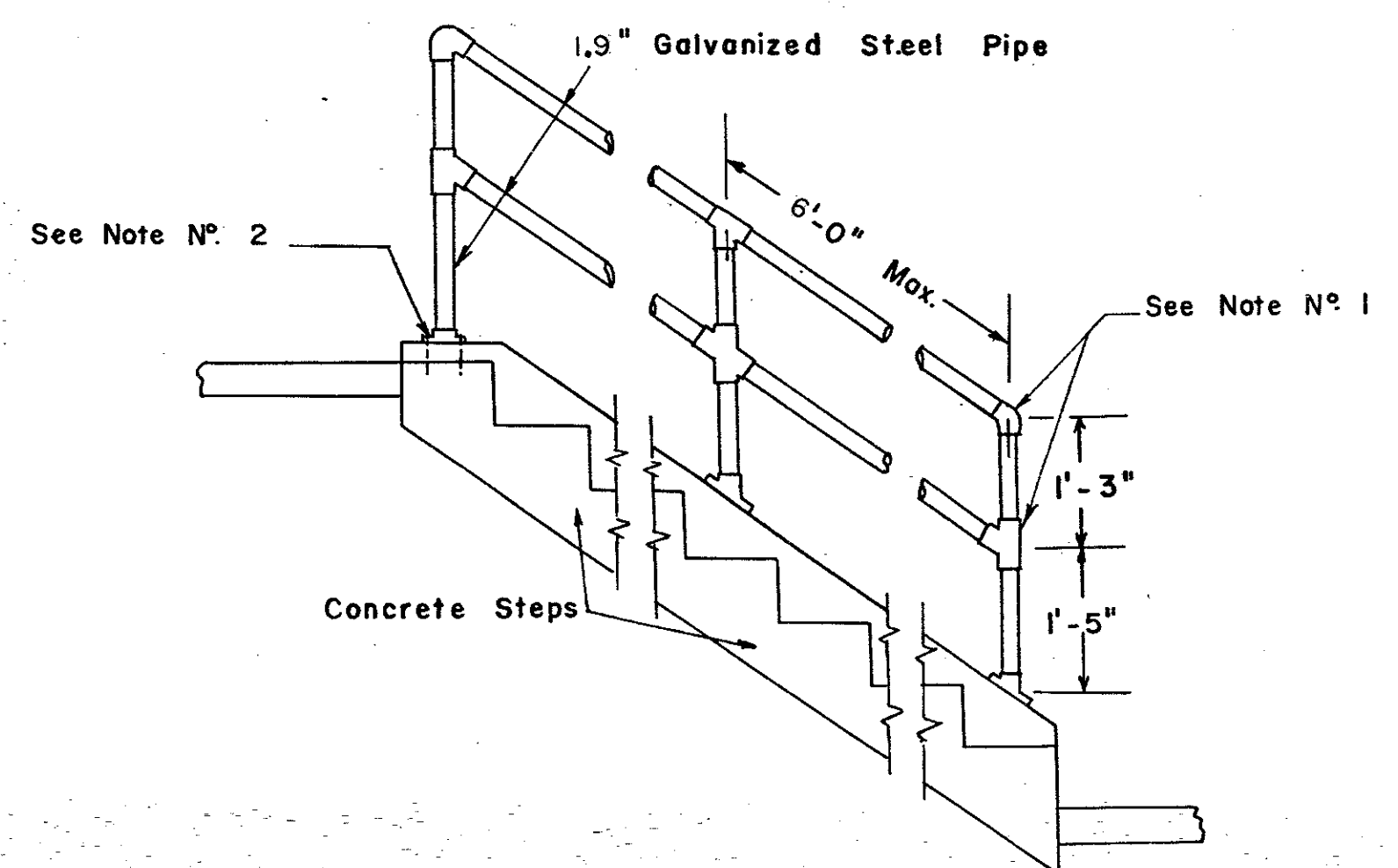
DETAIL OF PIPE HANDRAIL FOR RETAINING WALL



NOTE: If wall is long, and expansion and contraction joints are used in the wall, slip joints are to be provided for in that section of handrailing over the expansion or contraction joint. Stripping the threads in the part of the ball fittings where required to form a slip joint will be permitted.

NOTE: Pipe, pipe fittings, floor flanges and bolts shall be of an approved standard type.

DETAIL OF PIPE HANDRAIL FOR CONCRETE STEPS



NOTE: PIPE, FITTINGS, FLANGES AND BOLTS SHALL BE OF AN APPROVED STANDARD TYPE.

NOTES FOR PIPE HANDRAILING

1. JOINTS —
 - a.) Standard or Special galvanized steel or galvanized iron fittings may be used at joints (as shown).
— OR —
 - b.) Joints may be welded. If welded, all exposed joints shall be finished by grinding or filling to give a neat appearance. All damage to galvanizing shall be repaired in accordance with the Ga. Standard Specifications.
2. FOOTINGS —
 - a.) Post may be anchored with 2 1/2" x 6 1/2" galvanized Floor Flanges with 4 - 1/2 x 9" galvanized bolts (as shown).
— OR —
 - b.) Post may be grouted in 6" deep, 3" diam. hole. Total length of post will be 6" greater than that in details to give some useable height as if Floor Flanges were used.
3. 1.9" (galv. steel pipe) denotes O.D. for rail sections. I.D. = 1 1/2".

R. M. U.	Designated 1.9" O.D. Handrail 10-11-68
BY	REVISIONS
R. M. U.	Add Cont. Patch Detail B
R. M. U.	Handrail for Concrete Steps
R. M. U.	Handrail for Concrete Steps
R. M. U.	Ramp detail - Rem. Spring

41-0014

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

**STANDARD
CONSTRUCTION DETAILS**

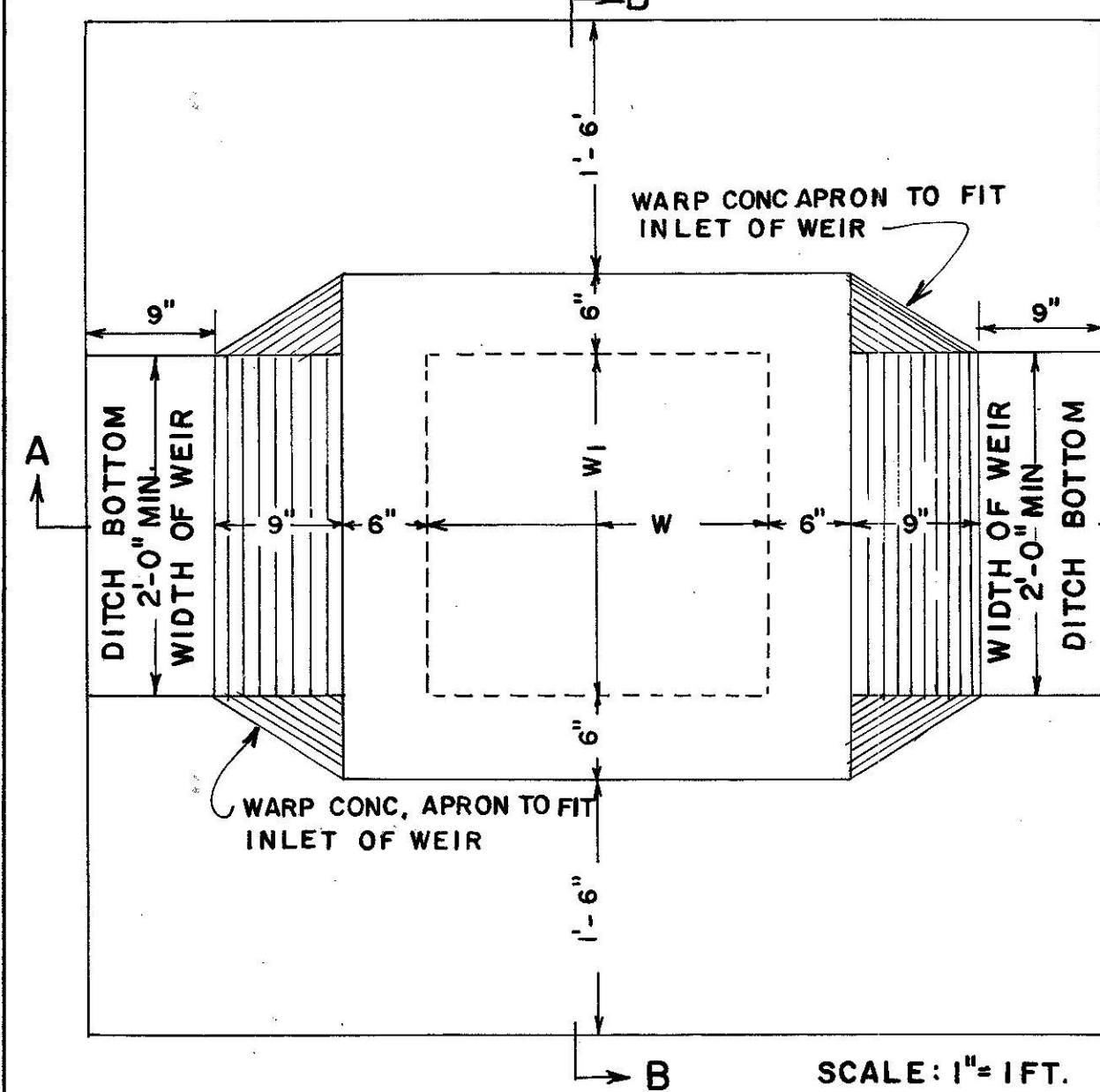
PLACING ROOF DRAIN PIPE UNDER SIDEWALK
RAMP TYPE BARRICADE
PIPE HANDRAIL FOR RETAINING WALL
PIPE HANDRAIL FOR CONCRETE STEPS

NO SCALE REVISED: FEB., 1966

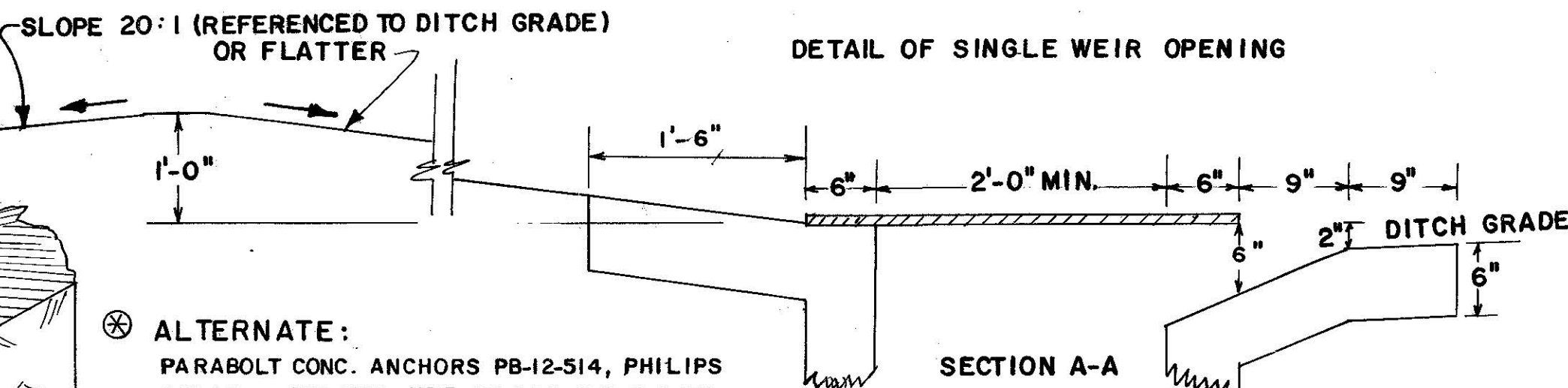
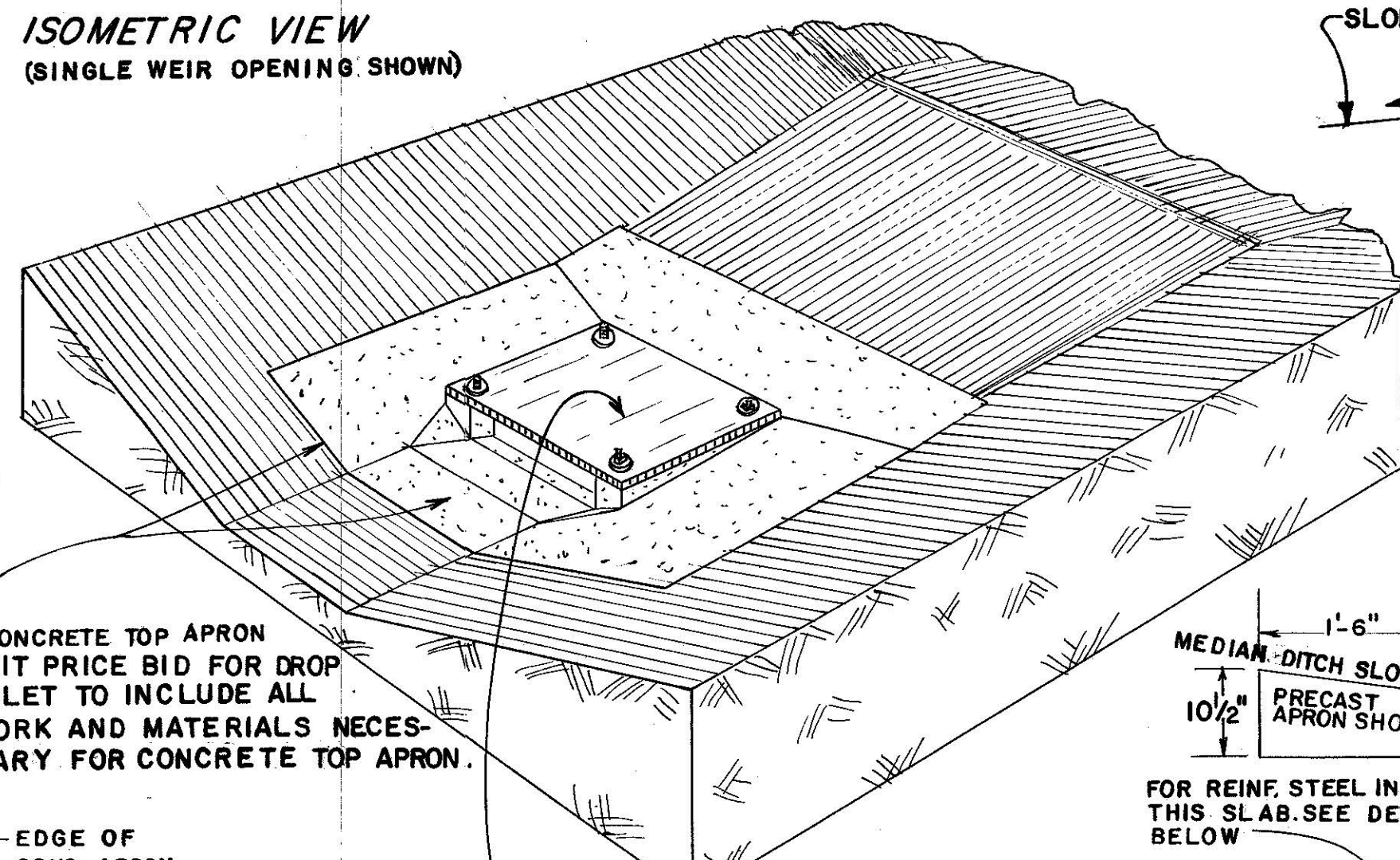
DESIGNED: _____	SUBMITTED: <i>John Williams</i> STATE ROAD DESIGN ENGINEER	NUMBER 9031R
DRAWN: A.V.S.		
TRACED: A.V.S.		
CHECKED: R.B.S.		

APPROVED: *William Adams*
STATE HIGHWAY ENGINEER

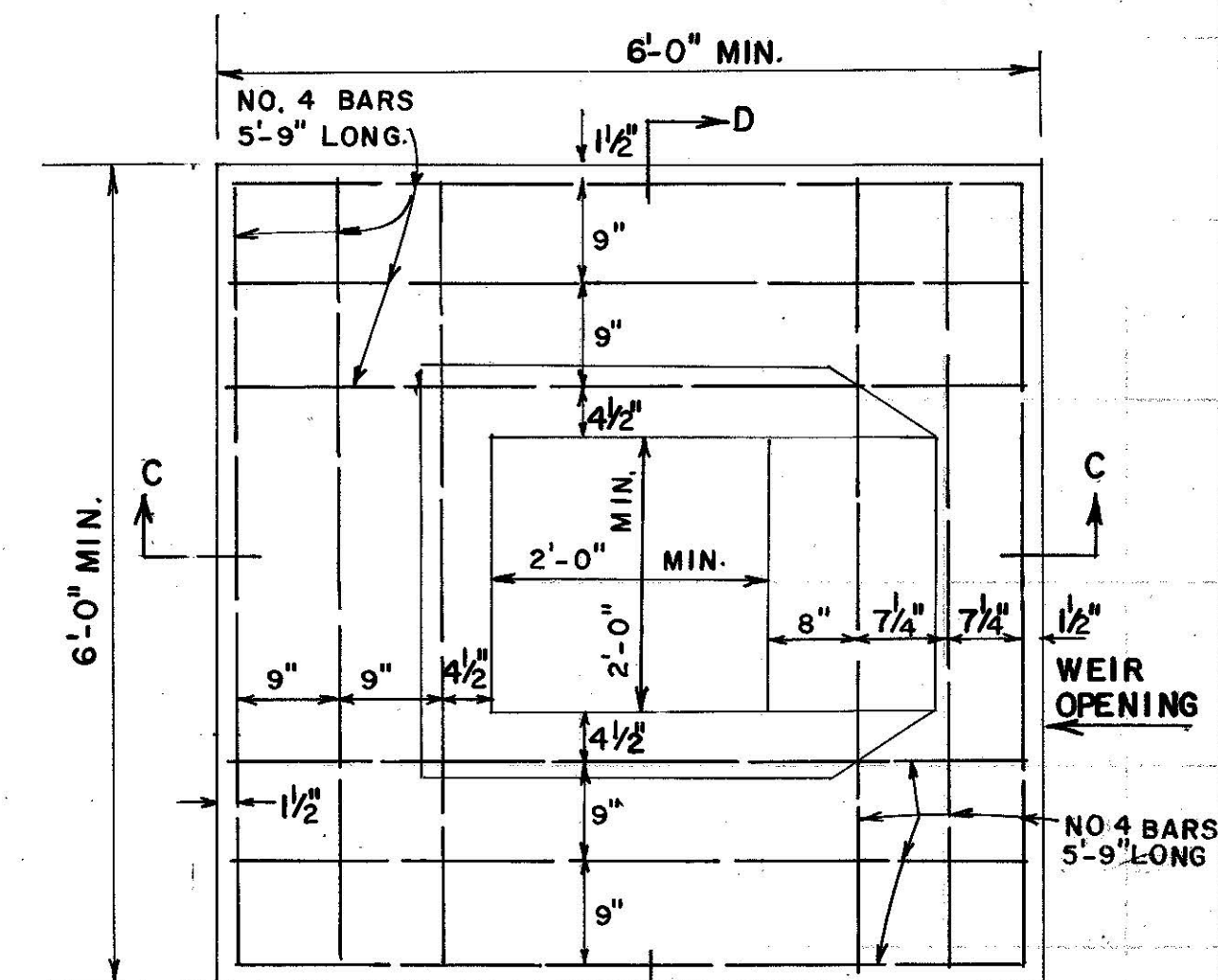
DETAILS OF DROP INLET WITH DOUBLE WEIR OPENING



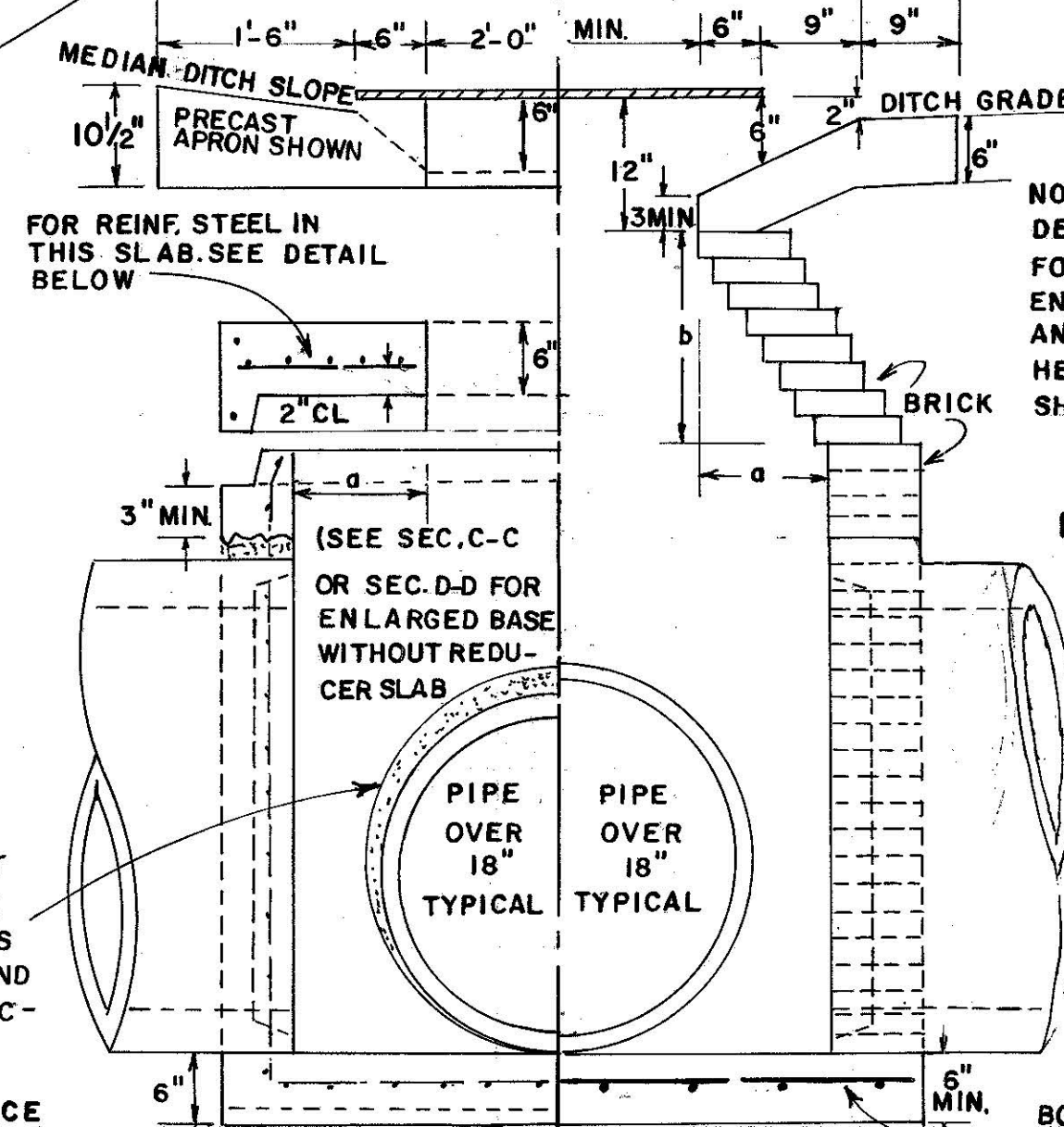
ISOMETRIC VIEW (SINGLE WEIR OPENING SHOWN)



REINFORCING FOR OPTIONAL PRECAST APRON (MAY BE USED WITH A PRECAST OR BUILT-IN-PLACE INLET)

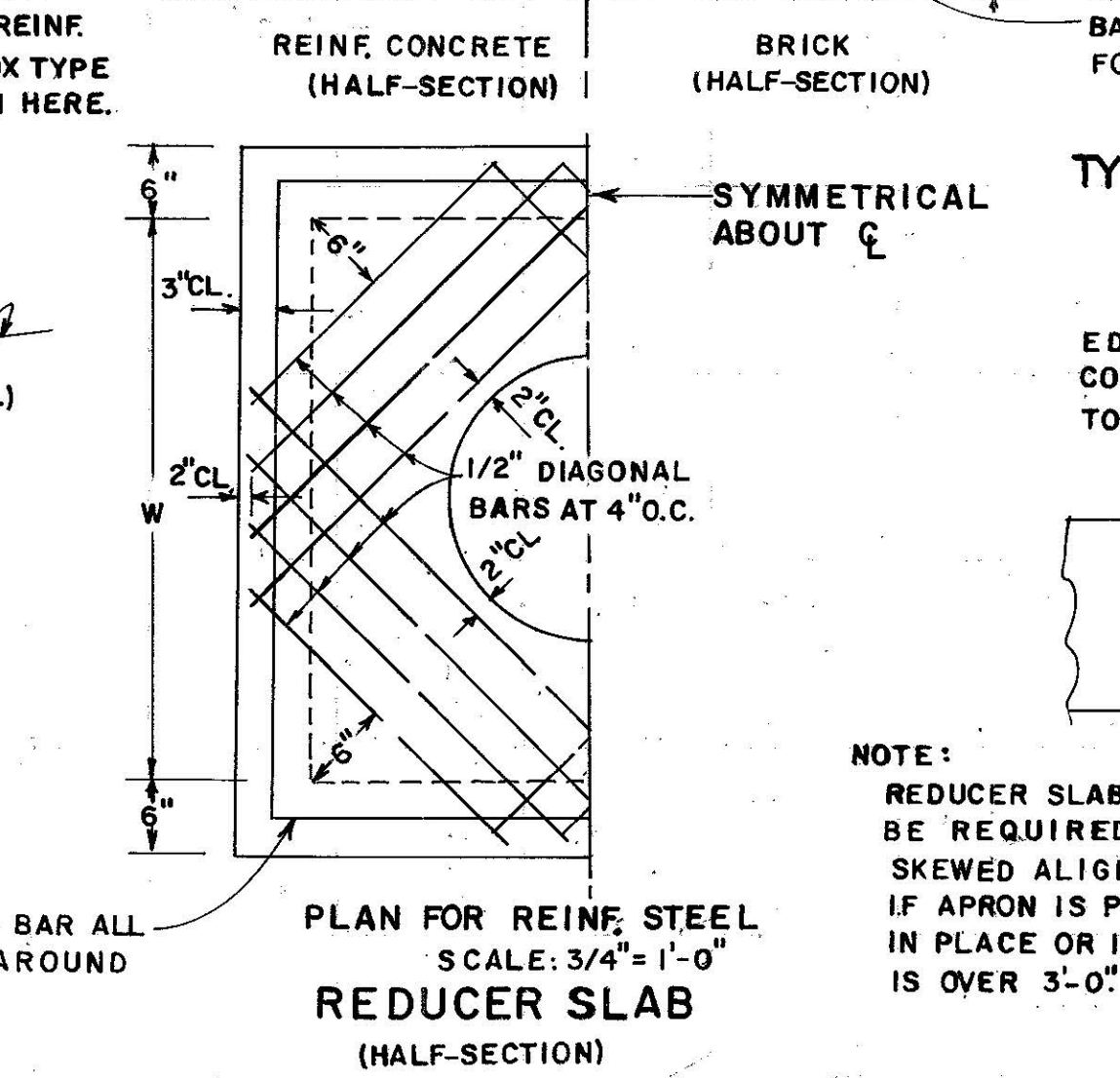
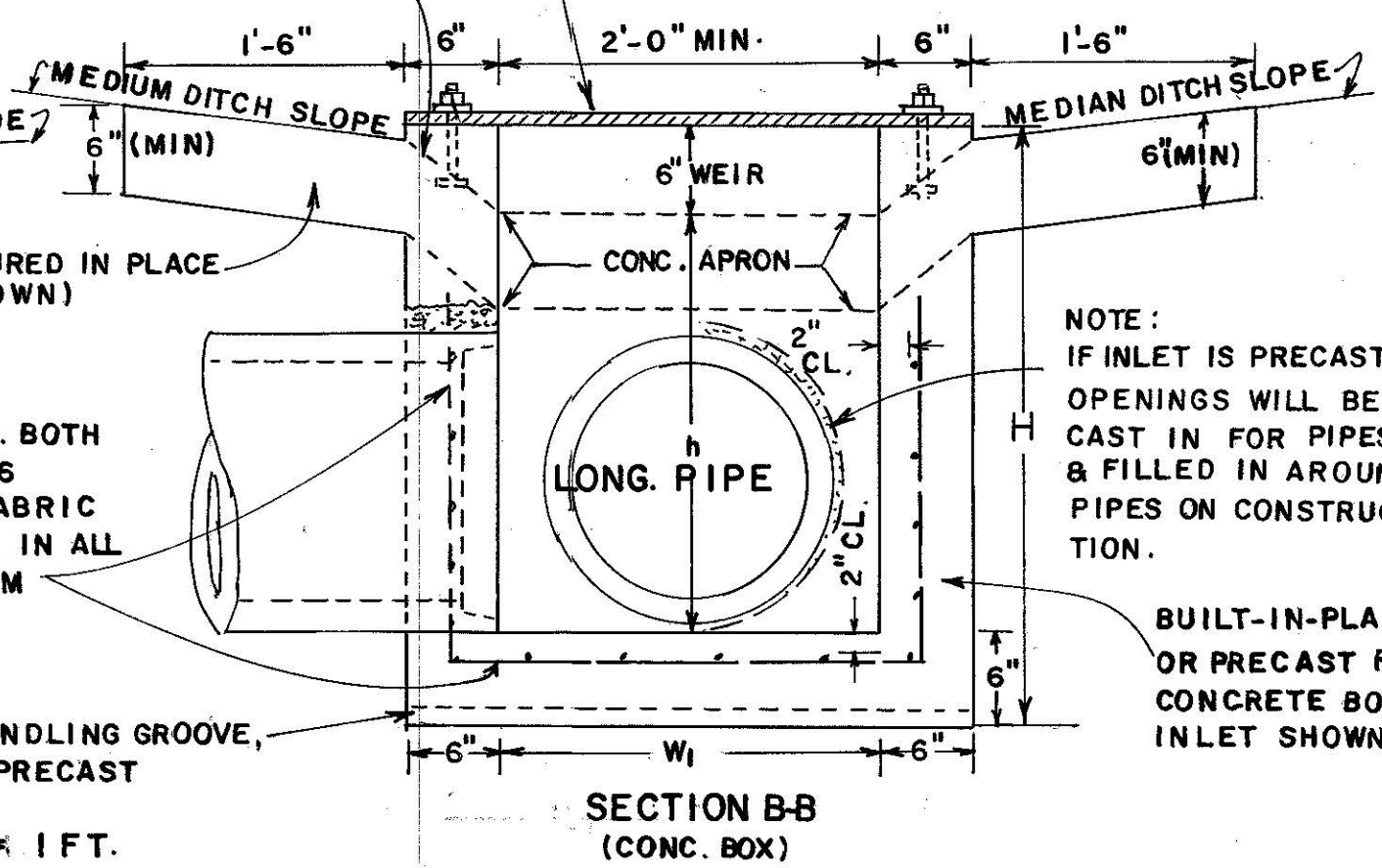
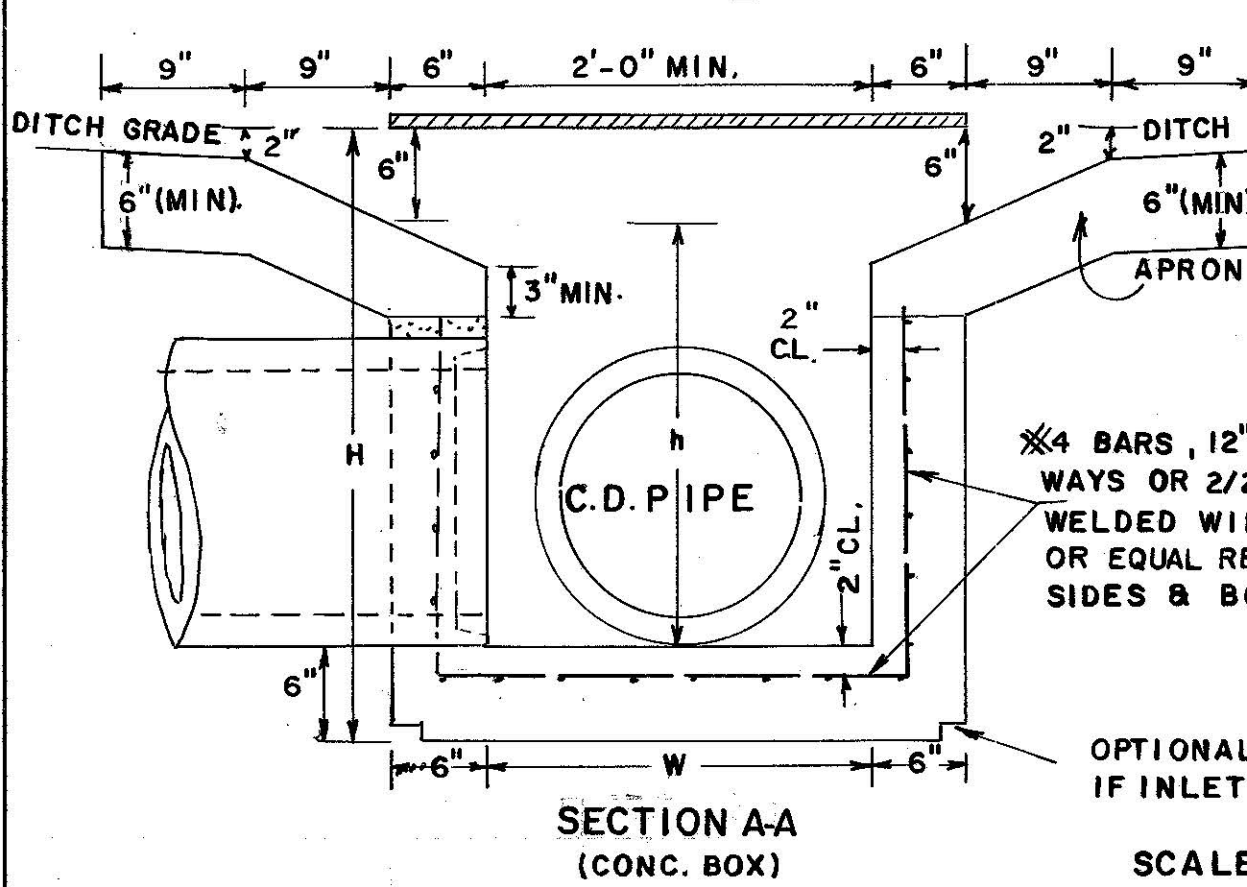
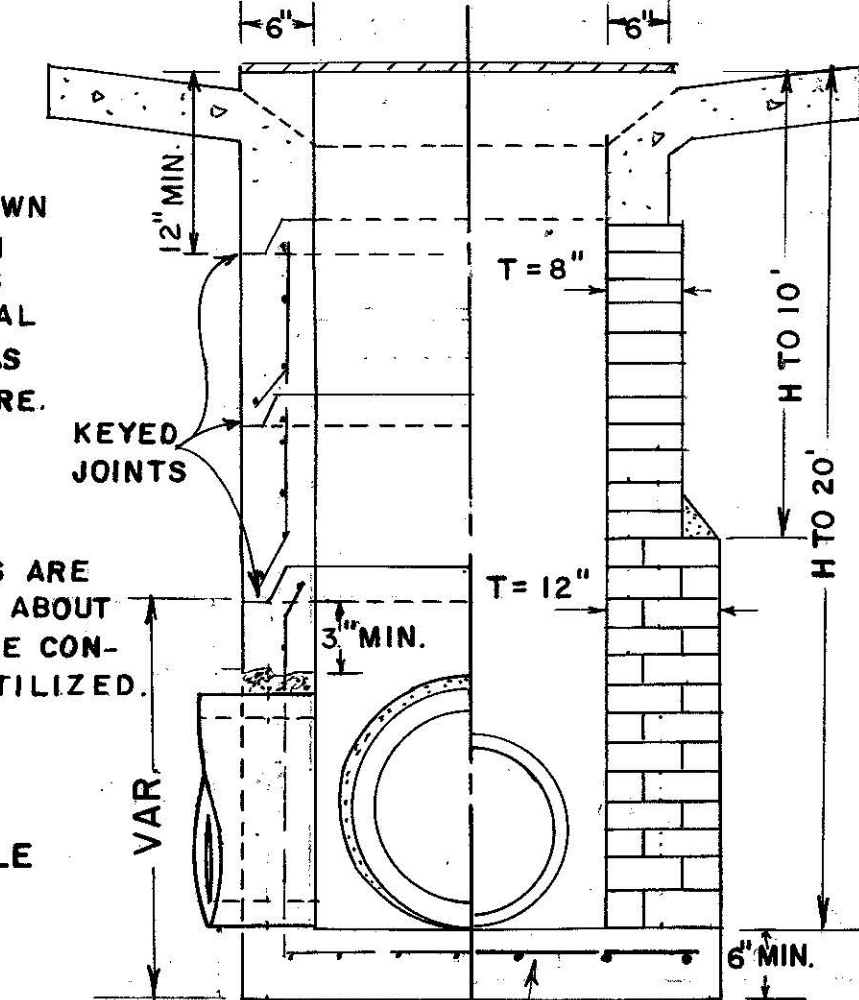


DROP INLET WITH ENLARGED BASE

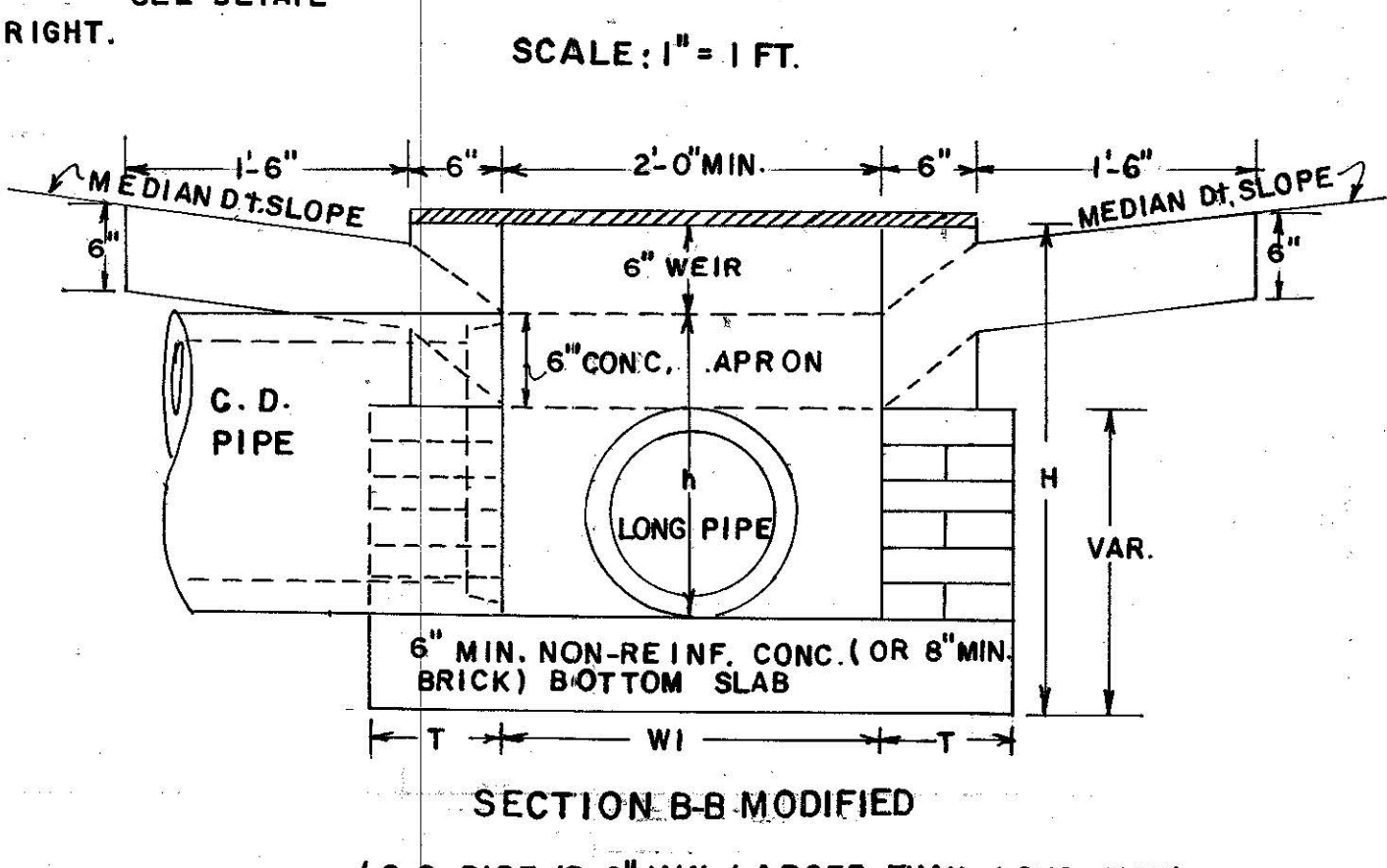
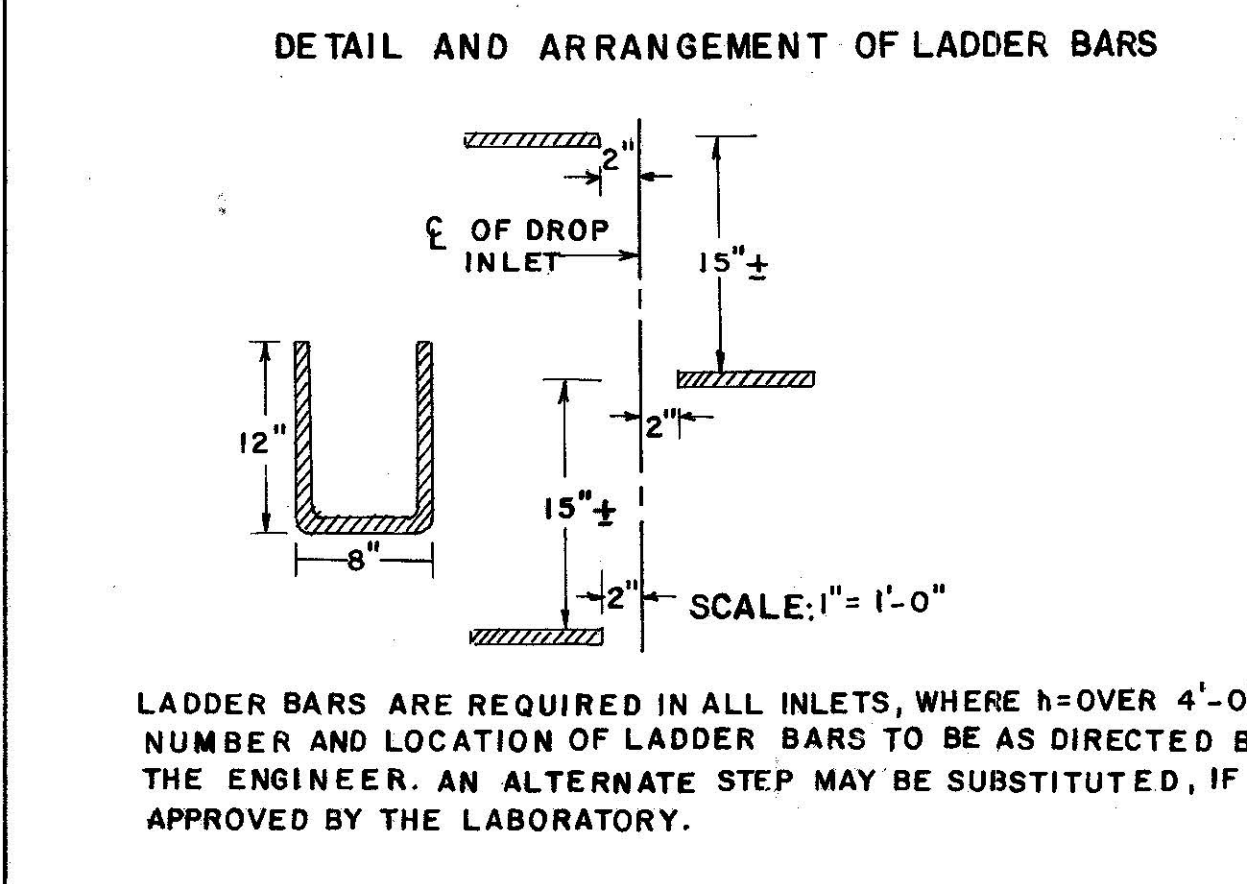
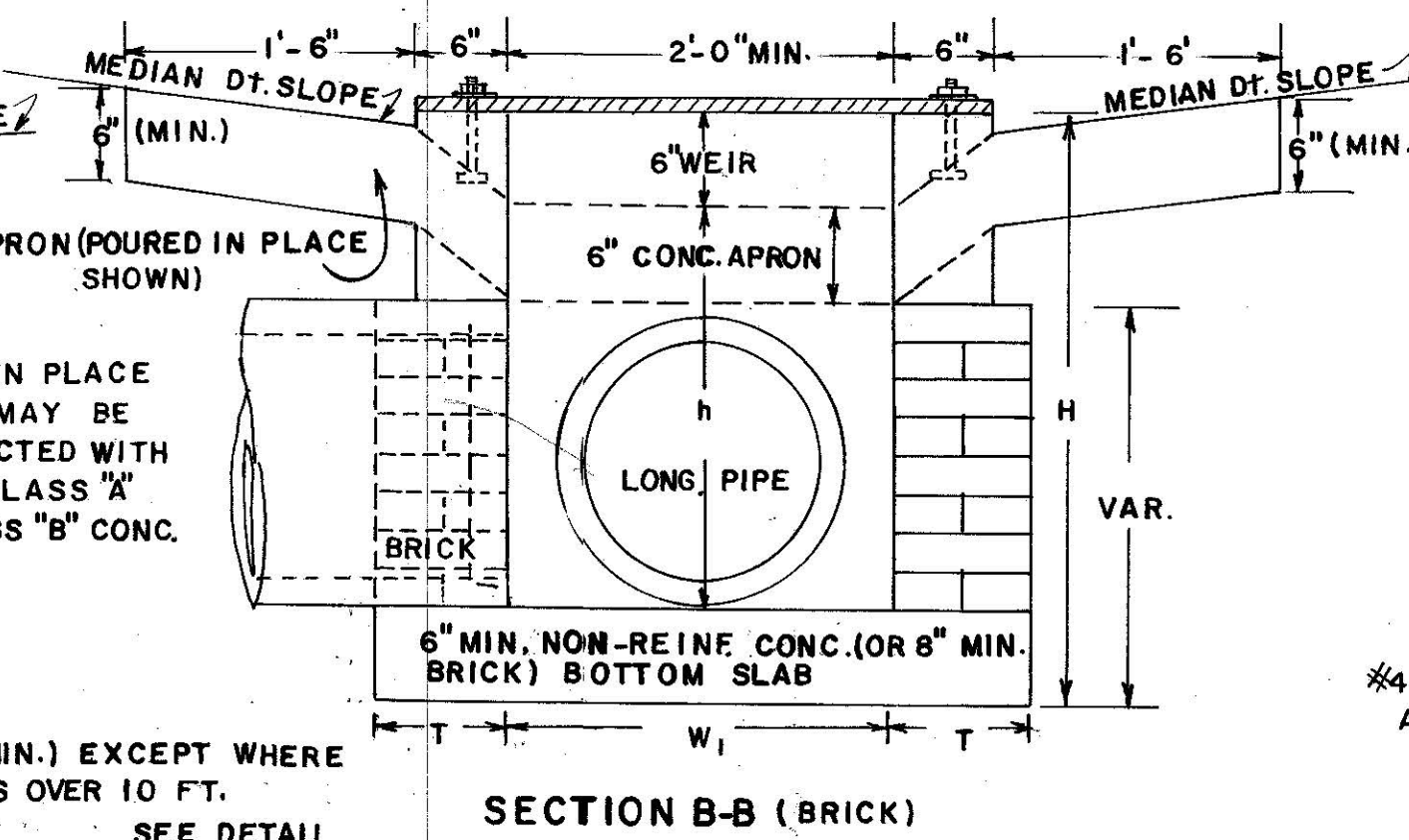
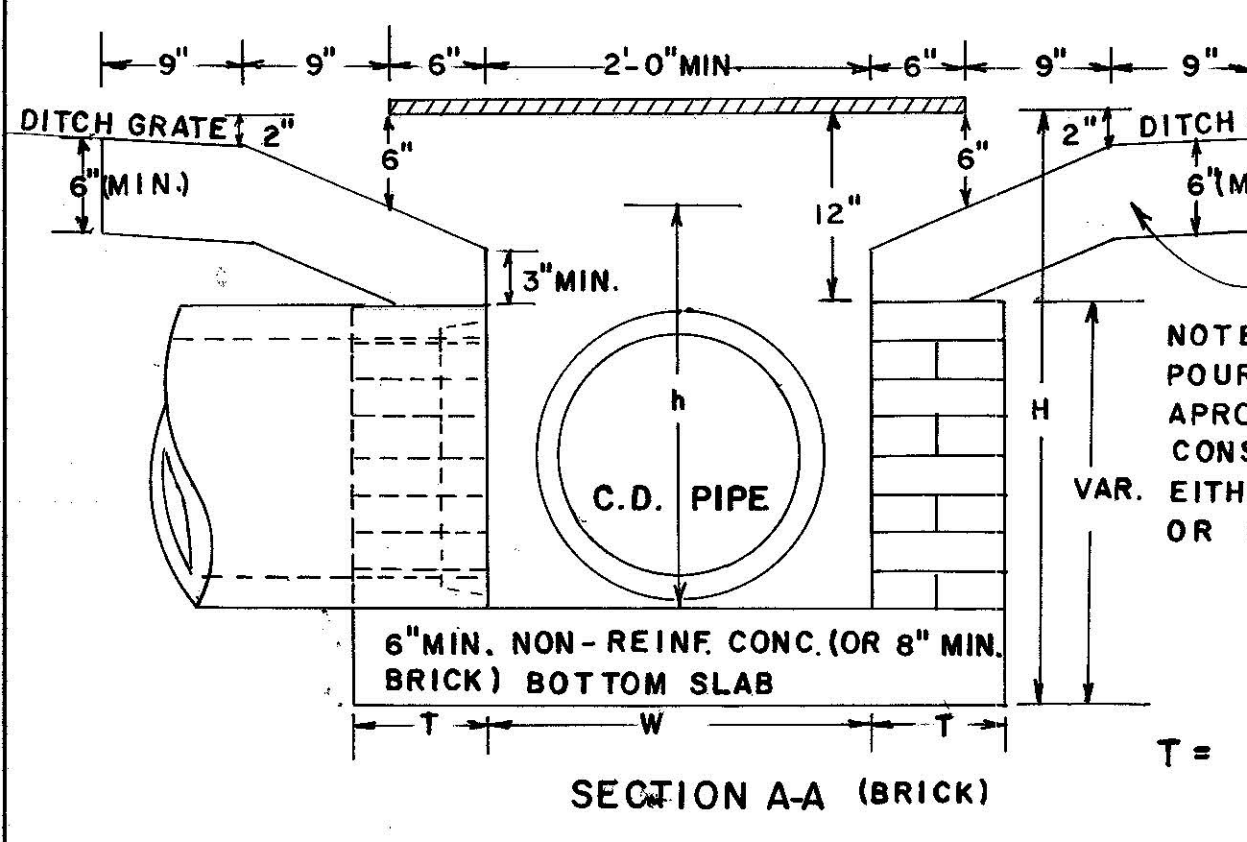
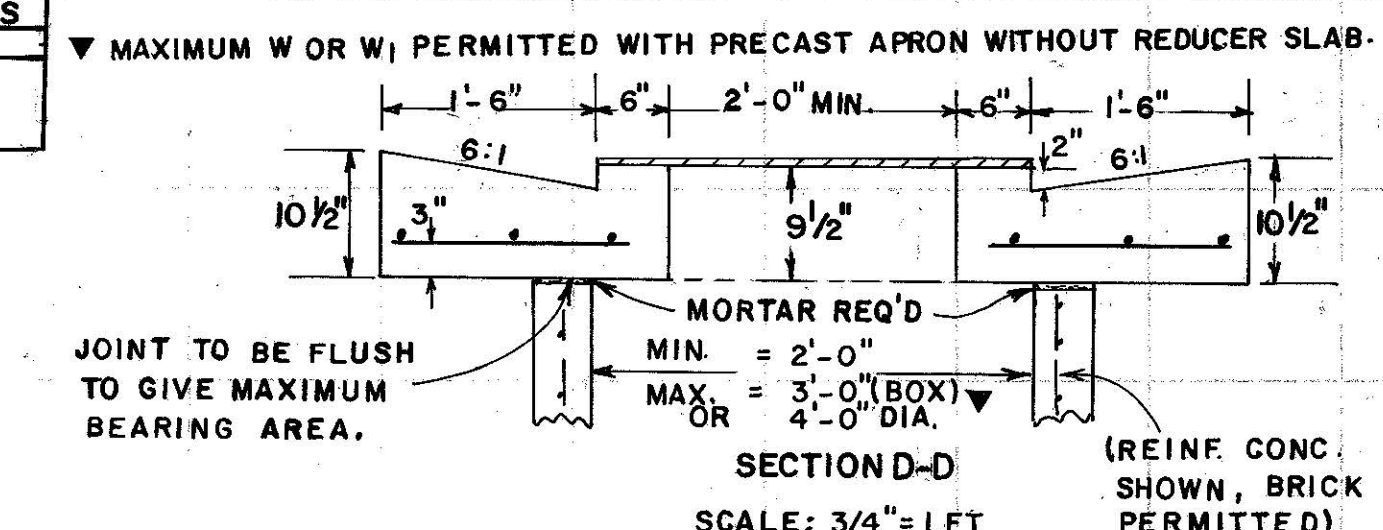
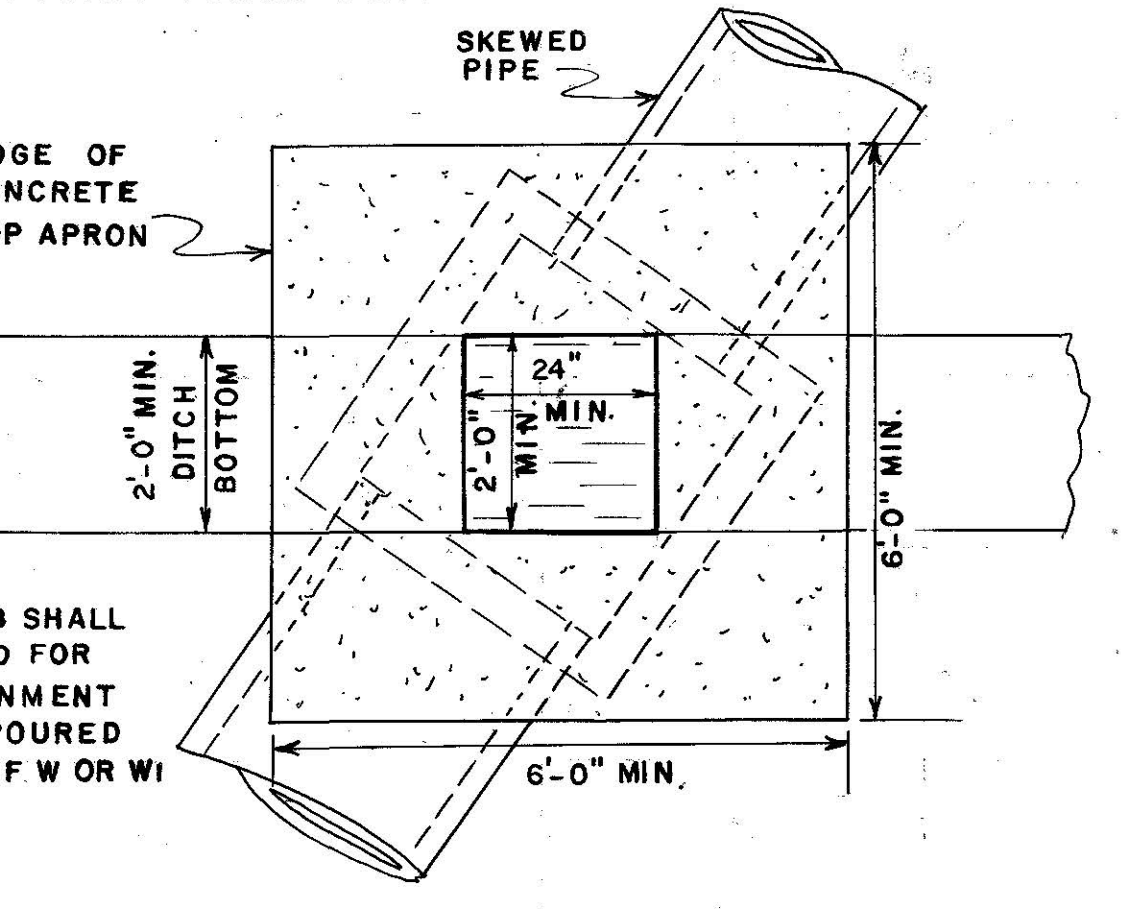


DROP INLET WITH ADDITIONAL HEIGHT

(DETAILS SHOWN ARE TYPICAL BOX ENCLOSURE FOR PIPE MAY BE BRICK MASONRY WITH PRECAST RISERS, ALSO SEE STD. 1040 FOR ADAPTERS USED WITH CIRCULAR ALTERNATES).



TYPICAL PLAN FOR SKEWED PIPE



PIPE SIZE	TYPICAL DROP INLET DIMENSIONS * *										
	BRICK MASONRY					REINF. CONCRETE *					
	MIN. W OR W ₁	MIN. H	MIN. h	a (MAX.)	b (MIN.)	MIN. H	MIN. h	MIN. W OR W ₁	MIN. H	MIN. h	a (MAX.)
15"	2'-0"	3'-1"	2'-1"	1"	2 1/2"	2'-7 1/2"	1'-7 1/2"	2'-0"	3'-2"	2'-2"	—
18"	2'-3"	3'-10"	2'-10"	1 1/2"	2 1/2"	2'-11"	1'-11"	2'-3"	3'-5"	2'-5"	—
24"	2'-10"	4'-11"	3'-11"	5"	8 3/8"	3'-6"	2'-6"	3'-0"	4'-10"	3'-10"	6"
30"	3'-5"	6'-0"	5'-0"	8 1/2"	11 2 1/8"	4'-1"	3'-1"	3'-6"	5'-5"	4'-5"	9"
36"	4'-0"	7'-1"	6'-1"	1'-0"	1'-8 3/4"	—	—	4'-0"	6'-0"	5'-0"	1'-0"
42"	4'-7"	8'-6"	7'-2"	1'-3 1/2"	2'-2 3/4"	—	—	4'-6"	6'-7"	5'-7"	1'-3"
48"	5'-2"	9'-7"	8'-3"	1'-7"	2'-8 3/8"	—	—	5'-0"	7'-2"	6'-2"	1'-6"

* * DIMENSIONS ARE BASED UPON TYPICAL OUTSIDE DIAMETERS OF CONCRETE PIPE AND MAY BE VARIED IF CONDITIONS PERMIT, AND THE VARIED DIMENSIONS ARE SHOWN IN THE PLANS OR SPECIFIED BY THE ENGINEER. DIMENSIONS "a" ARE BASED UPON 2'-0" WEIR OPENING. MINIMUM H AND A ARE BASED UPON LARGEST PIPE INVOLVED. BOX ENCLOSURE FOR PIPE DOES NOT HAVE TO BE SQUARE. W AND W₁ DIMENSIONS MAY DIFFER. (DIMENSIONS HAVE BEEN SPECIFIED FOR BOX SHAPED INLETS, SEE STD. 1040 FOR DIMENSIONS OF CIRCULAR ALTERNATES)

- GENERAL NOTES:**
- SPECIFICATIONS: GA, STANDARD, CURRENT EDITION, & SUPPLEMENTS THERETO.
 - SEE STD. 9031-L FOR ADDITIONAL DETAILS WHERE INLET IS CONSTRUCTED ON BOX CULVERT.
 - SEE STD. 1040 FOR CIRCULAR PRECAST ALTERNATES.
 - PRECAST ON BRICK MASONRY: BRICK CONSTRUCTION SHALL EXTEND 6" ABOVE TOP OF PIPE. JOINTS BETWEEN PRECAST & BRICK SECTIONS SHALL BE FLUSH OR CONC. FILLED TO GIVE MAX. BEARING AREA.
 - TYPICAL TREATMENT FOR SKEWED PIPES:
 - WITH PRECAST APRON — CONSTRUCT BOX WITH WALLS PERPENDICULAR TO PIPE AND SET PRECAST APRON PARALLEL TO DITCH AND SKEWED RELATIVE TO PIPE OR USE CIRCULAR SECTIONS (STD. 1040)
 - WITH BUILT-IN-PLACE APRON — CONSTRUCT BOX AS DESCRIBED IN (a) AND USE REDUCER SLAB OR INCREASE W OR W₁ DIMENSIONS AS NECESSARY OR USE CIRCULAR SECTIONS (STD. 1040)

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
MEDIAN DROP INLET
(PRECAST OR BUILT-IN-PLACE)
& CONCRETE APRON

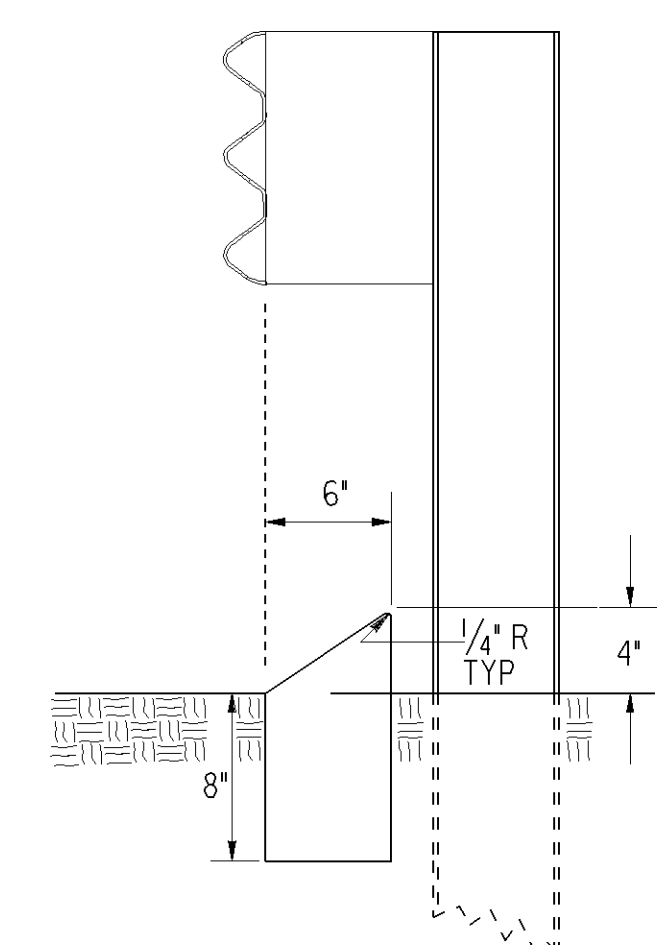
SCALE AS SHOWN REV. & REDR. AUGUST 26, 1981

DES. 2-67	(SUBMITTED)	Floyd E. Hardy	NUMBER
REV. R.M.U.	STATE ROAD & AIRPORT DESIGN ENGR.		9031-S
TRA. G.M.E.	(APPROVED)	Thomas D. Moreland	
CHK. R.K.C.	STATE HIGHWAY ENGINEER		

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

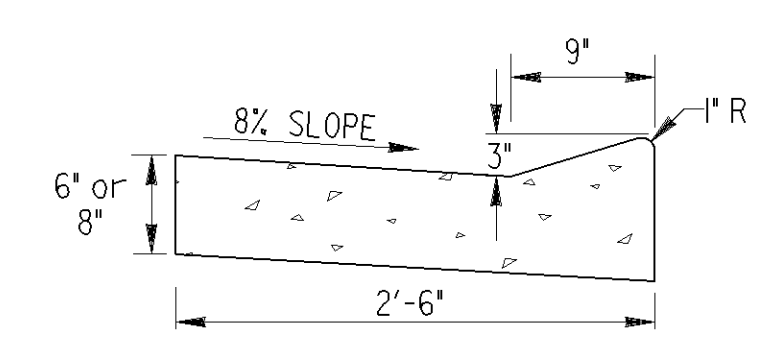
RAISED EDGE WITH CONCRETE GUTTER

FACE OF CURB MUST ALIGN WITH BACK EDGE OF GUARDRAIL AND THE FACE OF THE OFFSET BLOCK.



TYPE 8

TYPE 8 CURB IS USED IN CONJUNCTION WITH GUARDRAIL CONNECTIONS TO CONCRETE BARRIER AS NOTED ON GA. STD. 4012C.

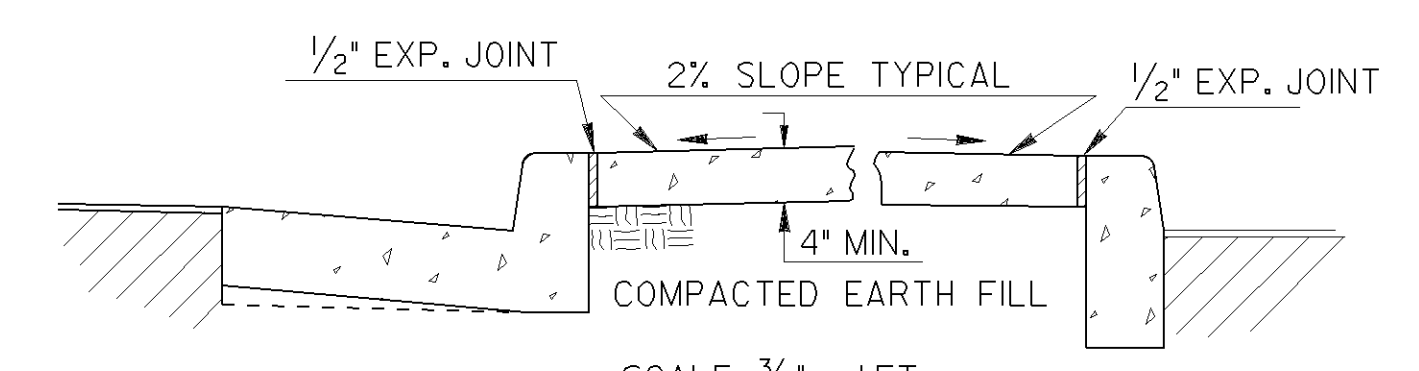


SCALE: 1" = 1 FT.

RAISED EDGE TO BE CONSTRUCTED WITH SAME CONCRETE MIX AS THE GUTTER AND SHALL BE FORMED MONOLITHIC WITH GUTTER. JOINTS IN RAISED EDGE SHALL MATCH THOSE IN THE GUTTER.

CONCRETE MEDIAN (Between Curbs)

NOTE: CURB TYPES SHOWN ARE TYPICAL. OTHER TYPES MAY BE SPECIFIED.



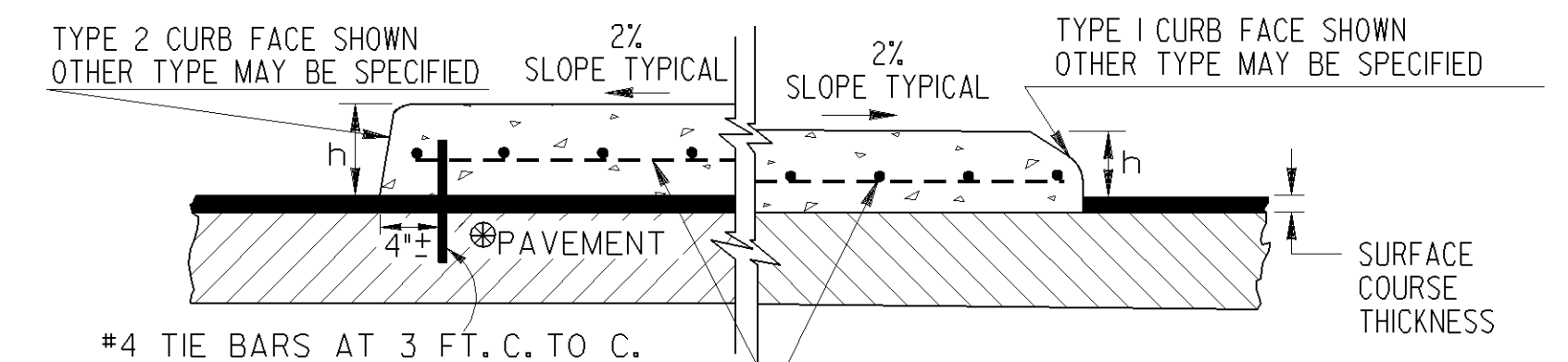
SCALE: 3/4" = 1 FT.

NOTE: WIDTH OF CONCRETE MEDIAN WILL BE AS SHOWN IN PLANS

CONCRETE MEDIANS (Integral)

SCALE: 1" = 1 FT.

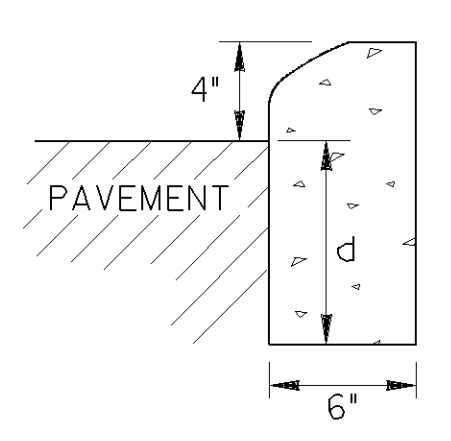
-WITH TIE BARS- -WITHOUT TIE BARS-



#4 TIE BARS AT 3 FT. C. TO C. #3 BARS AT 12" C. TO C. BOTH WAYS OR 6 x 6-W2.9 x W2.9 WELDED WIRE FABRIC OR 4 x 4-W2.0 x W2.0 WELDED WIRE FABRIC

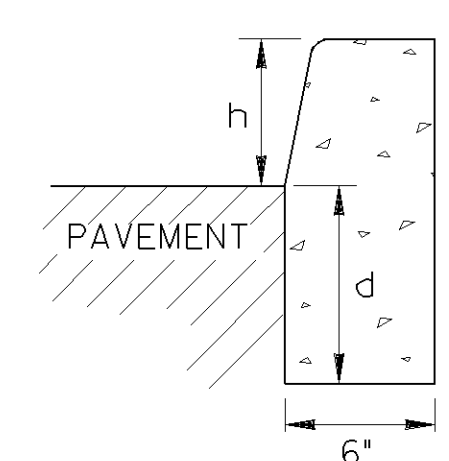
NOTE: IF FINAL SURFACE COURSE IS PRESENT OR MUST BE INSTALLED BEFORE THE CONCRETE MEDIAN CAN BE INSTALLED, THEN DOWELED IN CONCRETE MEDIAN IS REQUIRED.

CONCRETE HEADER CURBS

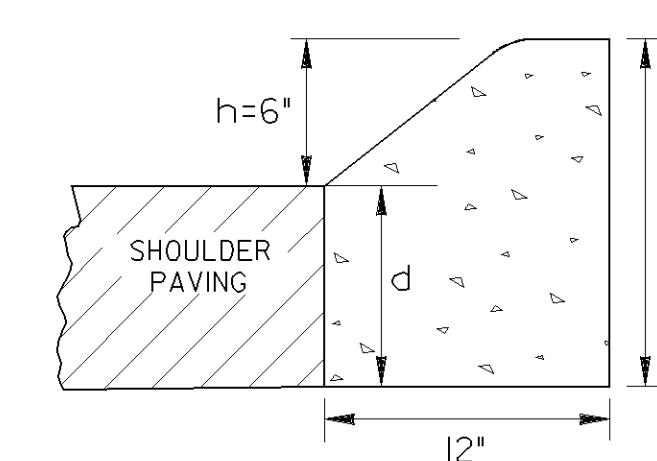


TYPE 1

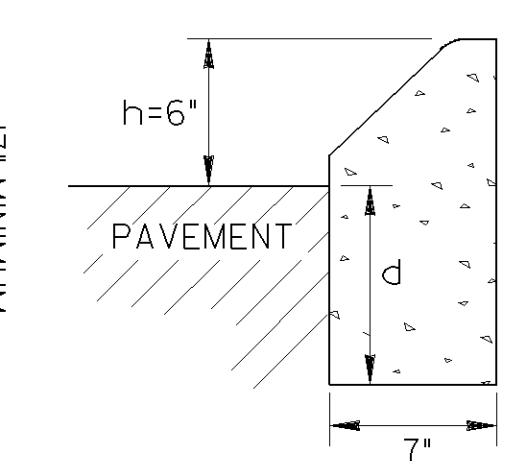
CURB TYPE	h	d
1	4"	6' min.
2	6"	8' min.
3	8"	10' min.
4	10"	12' min.
6	6"	7' min.
7	6"	8' min.
9	4"	8' min.



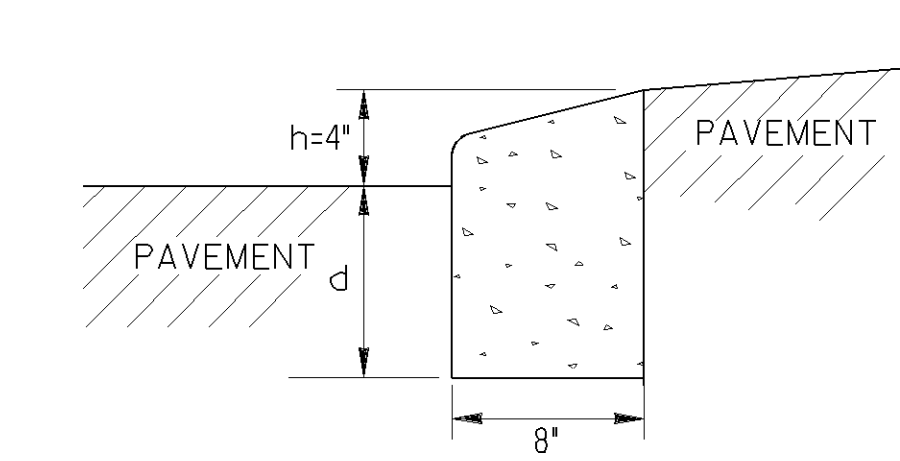
TYPE 2, 3 OR 4



TYPE 6



TYPE 7



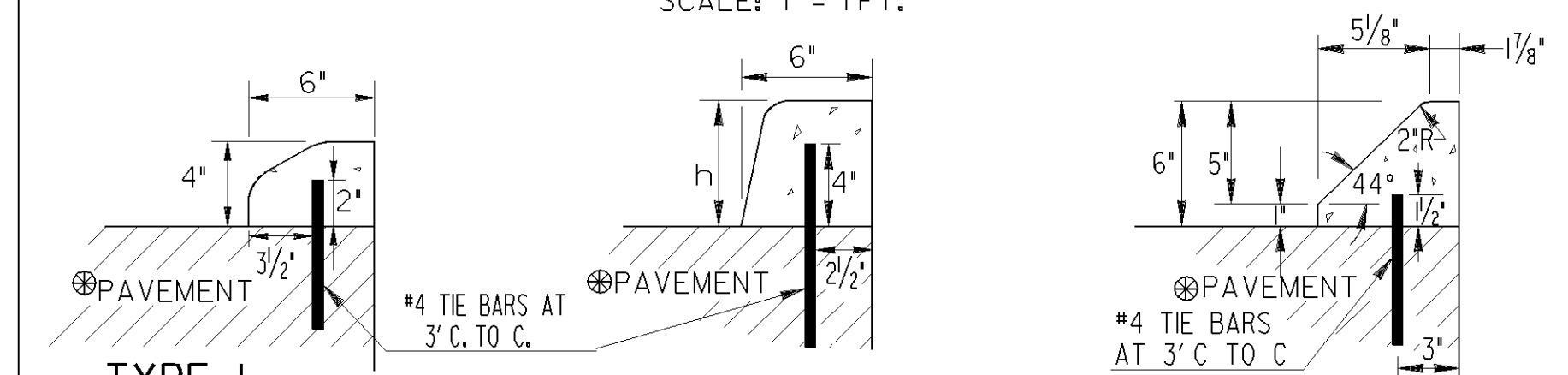
TYPE 9
TRUCK APRON
IN ROUNDABOUTS

THE DIMENSION d MAY BE INCREASED AT CONTRACTOR'S OPTION SO BOTTOM OF HEADER CURB WILL ALIGN WITH BOTTOM OF PAVEMENT TYPICAL SECTION.

SCALE: 1 1/2" = 1 FT.

CONCRETE DOWELED INTEGRAL CURBS

SCALE: 1" = 1 FT.



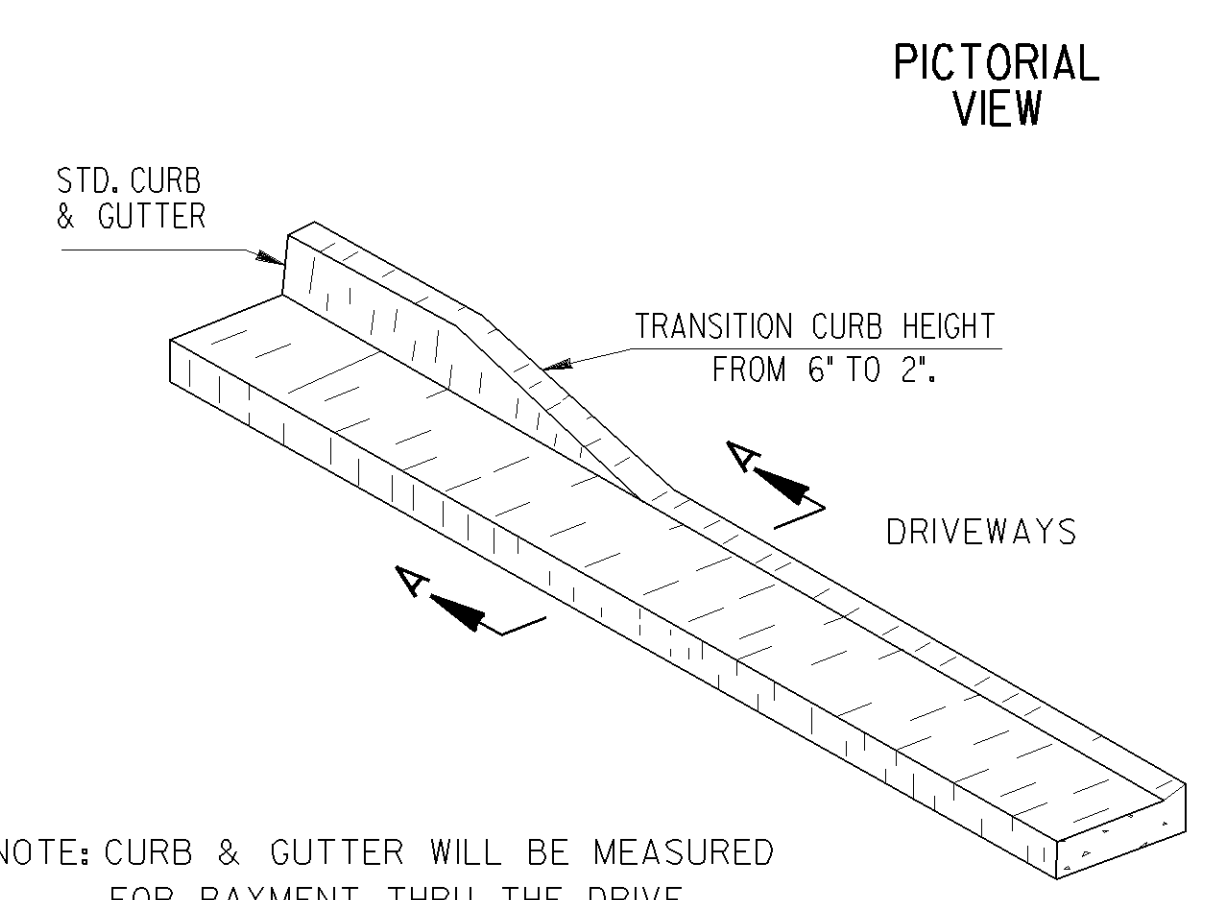
- NOTES:
- CONCRETE CURB CAN BE INSTALLED AFTER INITIAL SET AS LONG AS TIE BARS ARE DRILLED INTO UNDERLYING CONCRETE PAVEMENT.
 - CONCRETE CURB CAN BE INSTALLED BEFORE INITIAL SET WITH DOWELS THAT ARE DRIVEN INTO UNDERLYING CONCRETE PAVEMENT.
 - JOINTS IN CURB AND CONCRETE MEDIAN WILL MATCH THOSE IN THE CONCRETE PAVEMENT.
 - ALL TYPES OF CONCRETE CURB CAN BE PLACED ON ASPHALT PAVEMENTS WHERE TIE BARS MAY BE EITHER DRIVEN OR DRILLED INTO THE UNDERLYING PAVEMENT. CONTRACTION JOINTS SHALL BE CONSTRUCTED IN CURB OR CONCRETE MEDIAN AT 20 FT. SPACING.

CURB TYPE	MINIMUM TIE BAR LENGTHS (FOR CONC. DOWELED CURBS OR CONC. MEDIAN)	
	P.C. CONC. PAV.	ASPHALT PAV.
1	6"	8"
2, 3 or 4	8"	12"
7	6"	8"

NOTE: TIE BARS FOR DOWELED CURBS MAY BE UNCOATED PLAIN OR DEFORMED BILLET-STEEL BARS (GRADE 40) AS USED FOR CONCRETE REINFORCEMENT, (AASHTO M-31)

DETAILS OF RECESSED CURB FOR DRIVEWAYS

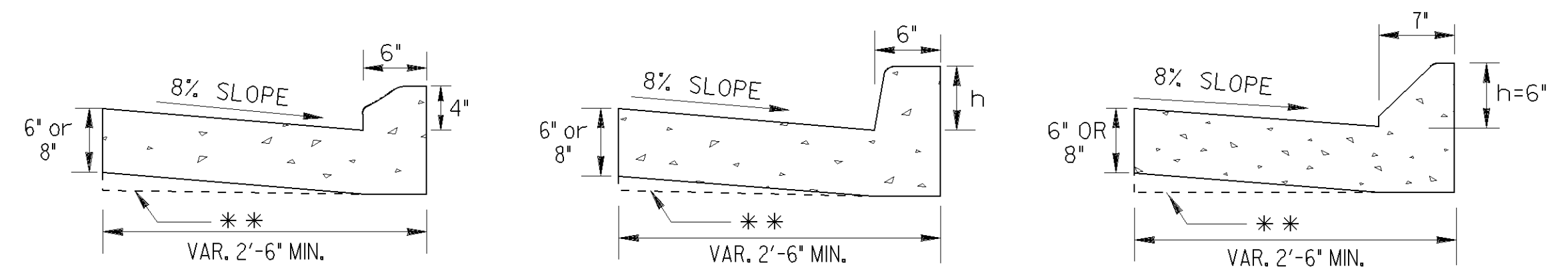
NO SCALE



PICTORIAL VIEW

NOTE: CURB & GUTTER WILL BE MEASURED FOR PAYMENT THRU THE DRIVE

CONCRETE CURB & GUTTER



TYPE 1

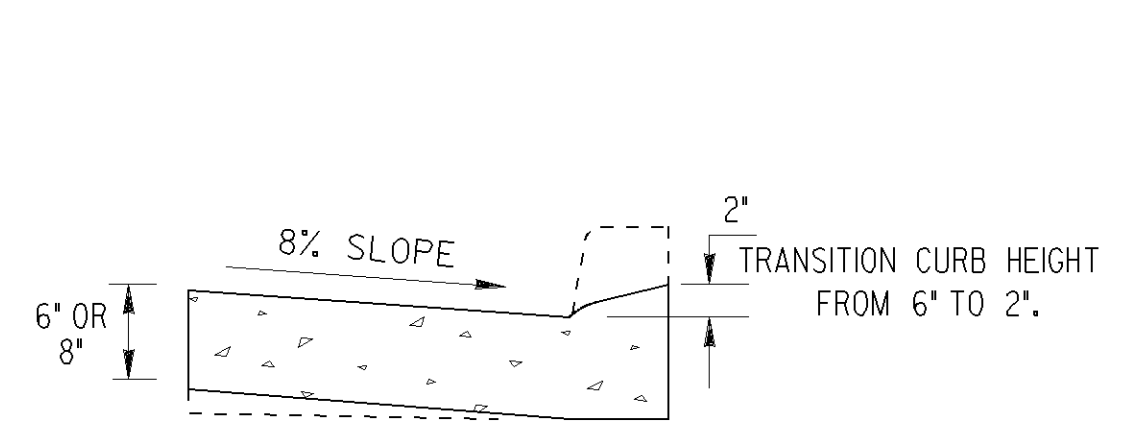
TYPE 2, 3 OR 4

TYPE 7

** AT CONTRACTOR'S OPTION THE GUTTER THICKNESS MAY BE INCREASED AT EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER PARALLEL WITH PAVING OF BASE COURSE, BUT THE GUTTER THICKNESS MUST NOT BE LESS THAN THE SPECIFIED 6" OR 8" AT ANY POINT.

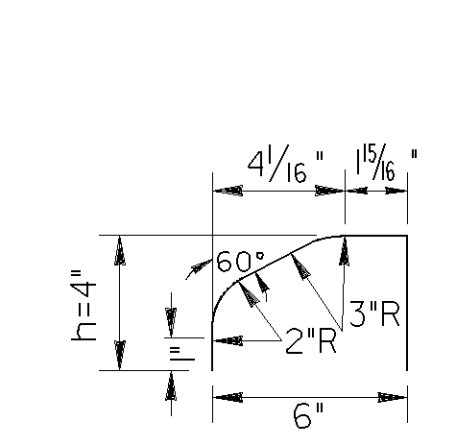
SCALE: 1" = 1 FT.

CURB FACE DESIGN



SECTIONAL VIEW
SECTION A-A

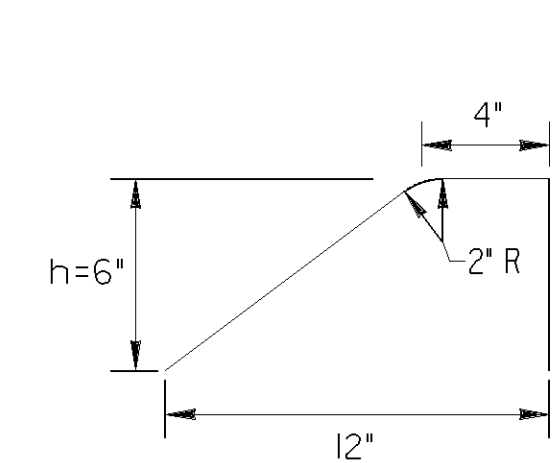
(SEE SEPARATE CONSTRUCTION DETAILS FOR DRIVEWAYS)



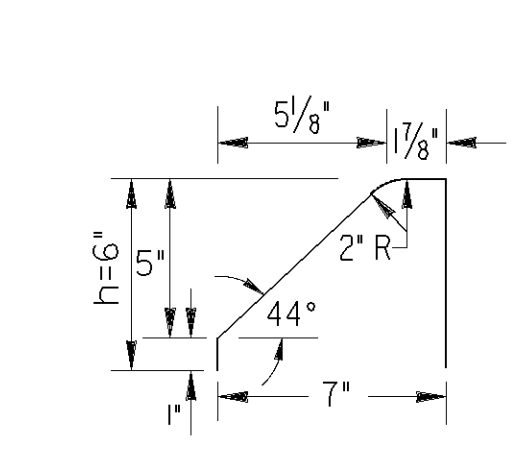
TYPE 1

TYPE	h
1	4"
2	5"
3	8"
4	10"
6	5"
7	6"
9	4"

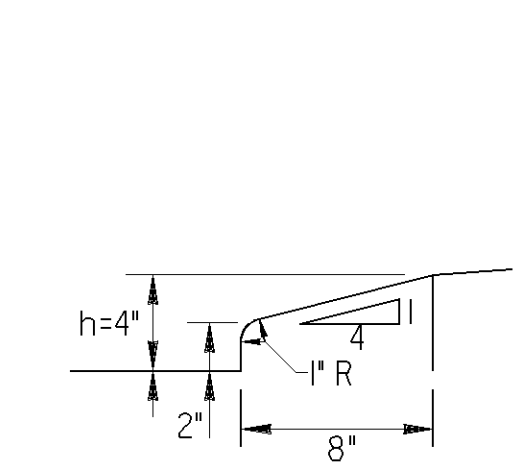
TYPE 2, 3 OR 4



TYPE 6



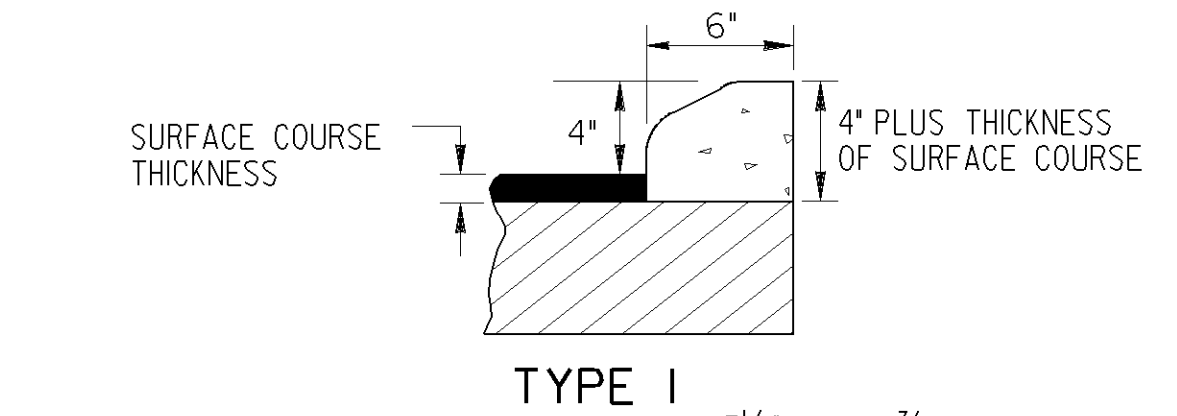
TYPE 7



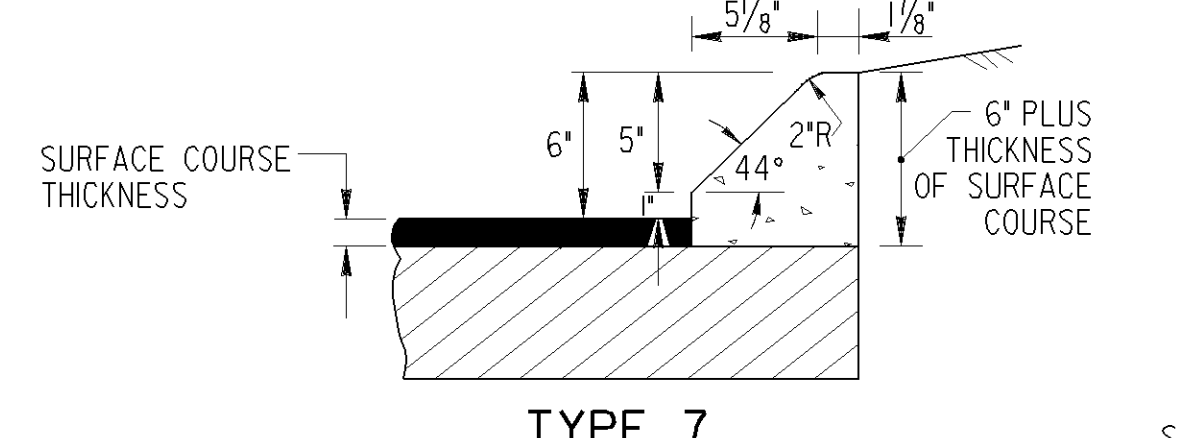
TYPE 9

SCALE: 2" = 1 FT.

CONCRETE INTEGRAL CURB



TYPE 1



TYPE 7

41-0016
SCALE: 1 1/2" = 1 FT.

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD
CONCRETE CURB & GUTTER
CONCRETE CURBS, CONCRETE MEDIANS

SCALE: AS SHOWN REVISED AND REDRAWN OCT. 2011

REV. TYPE 9 CURB DETAIL & REV. OVERALL LAYOUT	11-5-11				
REV. MEDIAN NOTE AND ADDED TYPE 9 CURB DETAIL	1-27-11				
ADDED TYPE 9 DETAIL	3-03				
REVISION	DATE				
DES. (SUBMITTED) <i>B. A. Ste...</i>					
DRW. (APPROVED) <i>Dorell M. Ben...</i>					
TRA. CHIEF ENGINEER					
TC					
GLO					
BY					
NUMBER					
9032B					

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

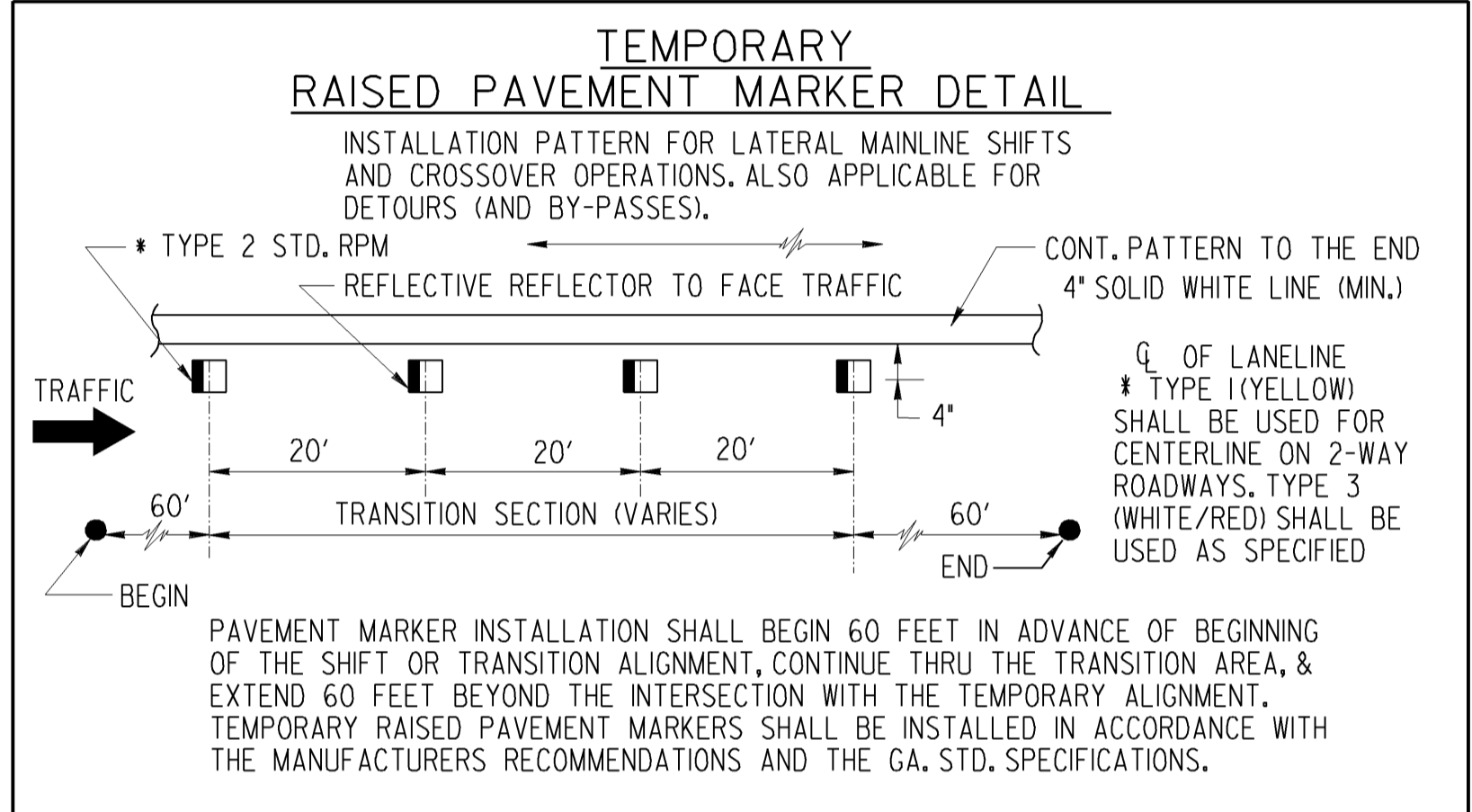
GENERAL NOTES :

- ALL TRAFFIC CONTROL DEVICES SHALL BE MADE AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS; THE MUTCD; THE GEORGIA STANDARD SPECIFICATIONS, AND/OR SPECIAL PROVISIONS. (SEE SECTION 150)
- ALL TRAFFIC CONTROL DEVICES SHALL BE AS SHOWN, OR AS DIRECTED BY THE ENGINEER. ADDITIONAL DEVICES MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
- ALL PORTABLE SIGNS SHALL BE MOUNTED A MINIMUM OF 10 FEET ABOVE THE LEVEL OF PAVEMENT EDGE FOR DIRECTIONAL TRAFFIC OF TWO (2) LANES OR LESS AND A MINIMUM OF 7 FEET FOR DIRECTIONAL OF THREE (3) OR MORE LANES. ALL PORTABLE SIGNS AND SIGN MOUNTING DEVICES UTILIZED IN THE WORK SHALL BE NCHRP 350 COMPLIANT. PORTABLE SIGNS MAY BE USED WHEN THE DURATION OF THE WORK IS LESS THAN 3 DAYS.
- WHEN THE CONSTRUCTION AREA HAS ENTRANCE/EXIT RAMP OR INTERSECTIONS, WORK WILL BE PERFORMED IN SUCH A MANNER TO PERMIT TRAFFIC TO OPERATE WITH THE LEAST AMOUNT OF INCONVENIENCE AS POSSIBLE. ADDITIONAL CHANNELIZATION AND SIGNING SHALL BE INSTALLED, AS REQUIRED, TO ALLOW TRAFFIC TO REMAIN AS OPERATIONAL AS POSSIBLE. WHEN ENTRANCE RAMP/INTERSECTIONS ARE INOPERABLE, FLAGGERS WILL BE UTILIZED TO CONTROL AND PROHIBIT MOVEMENT INTO THE PROJECT AT THAT POINT UNTIL CONSTRUCTION HAS CLEARED THE RESTRICTION SUFFICIENT TO RETURN TO OPERATIONAL STATUS.
- FOR NIGHT TIME OPERATIONS, DRUMS SHALL HAVE, FOR THE LENGTH OF THE TAPER ONLY, A SIX (6") INCH ORANGE REFLECTIZED TOP STRIPE ON EACH DRUM IN THE TAPER AS REQUIRED IN SECTION 150. SPACING OF DEVICES SHALL BE AS SHOWN. DURING DAYLIGHT HOURS, CONES (28" MIN.) MAY BE USED IN ADVANCE OF AND THROUGHOUT WORK AREA.
- SIGN LOCATIONS ARE APPROXIMATE AND MAY BE ADJUSTED TO MEET FIELD CONDITIONS BUT MUST BE WITHIN THE LIMITATIONS SET FORTH IN THE MUTCD.
- A PORTABLE SELF-SUSTAINED SEQUENTIAL OR FLASHING ARROW SIGN SHALL BE USED AT THE BEGINNING OF EACH LANE CLOSURE ON MULTI-LANE HIGHWAYS. ARROW PANELS SHALL NOT BE USED ON TWO-LANE TWO-WAY HIGHWAYS EXCEPT IN CAUTION MODE.
- WHEN NOT IN USE, PORTABLE SIGNS SHALL BE REMOVED FROM THE TRAVELWAY SO THAT THE MESSAGE IS NOT VISIBLE TO THE MOTORIST. INTERIM SIGNS THAT ARE PERMANENTLY MOUNTED SHALL BE COVERED WHEN NOT APPLICABLE. SEE SECTION 150.
- PROJECT SIGNS W20-1, G20-1 & G20-2 FOR THIS PROJECT SHALL BE COORDINATED WITH ADJACENT CONSTRUCTION PROJECTS. ONLY ONE SET OF SIGNS IS REQUIRED IN EACH DIRECTION FOR THE TOTAL LENGTH OF ALL PROJECTS- AT THE BEGINNING OF THE FIRST PROJECT AND AT THE ENDING OF THE LAST PROJECT. ADVANCE CONSTRUCTION SIGNS ARE NOT REQUIRED ON INTERMEDIATE PROJECTS, UNLESS CONSTRUCTION ON THE ADJACENT PROJECTS IS COMPLETED BEFOREHAND, THEN PROJECT CONSTRUCTION SIGNS WILL BE ADDED AS NECESSARY.
- ALL THE COST OF THE MATERIALS, LABOR AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHALL BE INCLUDED IN THE PRICE BID FOR TRAFFIC CONTROL SECTION 150, LUMP SUM, WHEN SHOWN AS A PAYMENT ITEM IN THE PROPOSAL. OTHERWISE, ALL THE COST WILL BE INCLUDED IN THE OVER-ALL BID SUBMITTED, EXCEPT ON CERTAIN PROJECTS SOME ITEMS MAY BE PAID FOR SEPARATELY BY THE UNIT WHEN SPECIFIED ON THE PLANS AND IN THE PROPOSAL.
- FOR FREEWAY CONSTRUCTION THE CONTRACTOR SHALL ARRANGE HIS WORK SO THAT THERE IS AN EXIT GORE SIGN AND AN EXIT DIRECTION SIGN IN PLACE FOR ALL EXIT RAMP AT ALL TIMES.
- ALL CROSSROADS, SIDEROADS, RAMP OR OTHER ENTRANCES TO MAINLINE CONSTRUCTION SHALL REQUIRE W20-1 SIGNS LOCATED AS SHOWN IN THE PLANS, OR AS DIRECTED BY THE ENGINEER.
- MARKINGS AND/OR SIGNS IN CONFLICT WITH INTERIM TRAFFIC CONTROL SHALL BE REMOVED, RELOCATED OR COVERED; APPLICABLE EXISTING AND INTERIM MARKINGS AND/OR SIGNING SHALL BE MAINTAINED PER SECTION 150.
- ANY CHANNELIZING DEVICES (DRUMS OR BARRICADES) IN CONFLICT WITH CONCRETE BARRIERS SHALL BE OMITTED.
- CONTRACTOR SHALL PROVIDE THE NECESSARY TRAFFIC CONTROL DURING THE TIE-IN OPERATION.
- THE TRAFFIC CONTROL DEVICES SHOWN FOR ANY STAGE CONSTRUCTION SHALL REMAIN IN PLACE AND BE UTILIZED SO LONG AS NECESSARY FOR THE FOLLOWING STAGES AND SHALL BE REMOVED IMMEDIATELY WHEN NO LONGER REQUIRED. THE DEVICES MAY OR MAY NOT BE SHOWN ON THE PLANS FOR THESE FOLLOWING STAGES, REFER TO THE PLAN SHEET FOR THE INITIAL STAGE FOR THESE TRAFFIC CONTROLS.
- EXISTING GUIDE SIGNS SHALL REMAIN IN PLACE SO LONG AS THEY DO NOT CONFLICT WITH THE CONSTRUCTION OF THIS PROJECT. WHEN IN CONFLICT, THEY SHALL BE RELOCATED ON TEMPORARY POSTS AT THE LOCATION AS DIRECTED BY THE ENGINEER. ANY DISTANCE SHOWN ON THE SIGN SHALL BE ADJUSTED ACCORDINGLY. IF THE SIGNS CANNOT BE RELOCATED, THEN THE SIGN SHALL BE REMOVED AND STORED AT A PLACE DESIGNATED BY THE ENGINEER. IF NEITHER OF THE ABOVE CAN BE DONE, THEN THE CONTRACTOR SHALL PROVIDE INTERIM GUIDE SIGNS AS COVERED IN SECTION 150.
- (a) ON PROJECTS WITH LOW OR SOFT SHOULDERS, THE CONTRACTOR SHALL ERECT IMMEDIATELY AHEAD OF CONSTRUCTION OPERATIONS "LOW/SOFT SHOULDER" WARNING SIGNS AT THE PROJECT TERMINII, AT INTERVALS NOT TO EXCEED 1 MILE AND IMMEDIATELY PAST EACH CROSSROAD.

(b) WHERE THE CONTRACTOR IS NOT RESPONSIBLE FOR SHOULDER CONSTRUCTION, THE DEPARTMENT WILL FURNISH THESE SIGNS FOR THE CONTRACTOR TO PICK UP, TRANSPORT, AND ERECT. THE DEPARTMENT WILL LATER REMOVE AND RETAIN THE SIGNS.

STANDARD LEGEND

- STRIPED DRUM
- ▨ TYPE III BARRICADES
- ⊗ SPECIAL BARRICADE WITH BI-DIRECTIONAL, TYPE "C" STEADY BURNING LIGHT OR HIGHWAY SIGN AS SPECIFIED (SEE DETAIL)
- ⬢ SEQUENTIAL OR FLASHING ARROW
- ⎓ PORTABLE CHANGEABLE MESSAGE SIGN
- ⊥ PERMANENT TYPE POST MOUNTED SIGN
- ⊕ TEMPORARY POST MOUNTED SIGN
- Ⓚ PORTABLE MOUNTED SIGN - FLAGS NOT REQUIRED
- ▨ WORK AREA
- ▲ TRAFFIC CONE - 28" MIN. - (DAYTIME USE ONLY)
- FLAGGER WITH STOP-SLOW PADDLE
- ⊞ TRAFFIC IMPACT ATTENUATOR (CRASH CUSHION)
- TYPE I CLEAR (WHITE) DELINEATOR - SINGLE FACE
- TYPE I YELLOW DELINEATOR - SINGLE FACE
- ⊖ TYPE I CLEAR (WHITE) DELINEATOR DOUBLE FACE
- TYPE I YELLOW DELINEATOR DOUBLE FACE



41-0017

3-30-06		4-24-01		DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISED GENERAL NOTES AND LEGEND, DELETED TWO DETAILS.		SPEC. BAR. SH. SPEC.		REVISION		STANDARD TRAFFIC CONTROL GENERAL NOTES, STANDARD LEGEND, MISCELLANEOUS DETAILS	
GLO		BY		NO SCALE			
DES. _____		(SUBMITTED) <i>[Signature]</i>		STATE ROAD & AIRPORT DESIGN ENGINEER		NUMBER	
DRW. _____		(APPROVED) <i>[Signature]</i>		CHIEF ENGINEER		9100	
TRA. _____		CHK. _____					

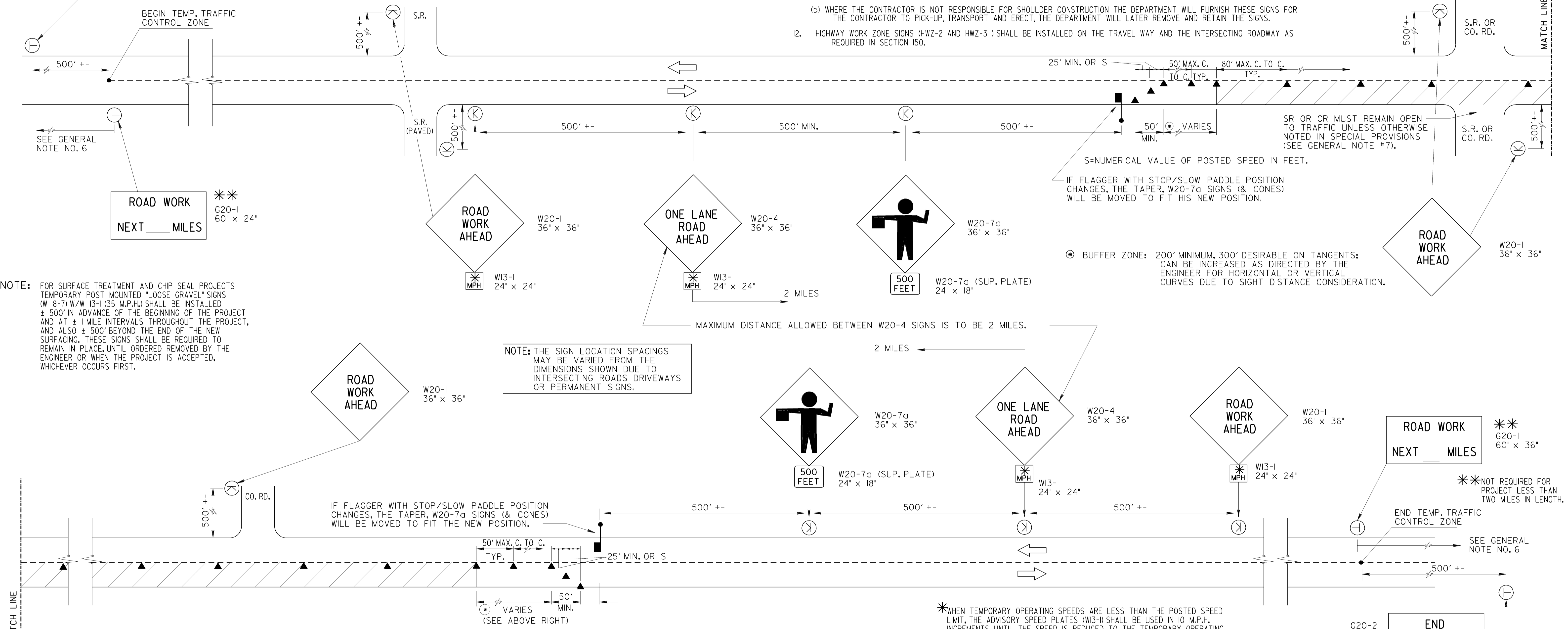
STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		

GENERAL NOTES:

- ALL TRAFFIC CONTROL DEVICES SHALL BE MADE AND ERECTED IN ACCORDANCE WITH THE DETAILS SHOWN ON THE PLANS; THE MUTCD; THE GEORGIA STANDARD SPECIFICATIONS, AND/OR SPECIAL PROVISIONS. (SEE SECTION 150)
- ALL TRAFFIC CONTROL DEVICES SHALL BE AS SHOWN, OR AS DIRECTED BY THE ENGINEER. ADDITIONAL DEVICES MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.
- ALL PORTABLE SIGNS SHALL BE MOUNTED A MINIMUM OF 1 FOOT ABOVE THE LEVEL OF PAVEMENT EDGE FOR DIRECTIONAL TRAFFIC OF TWO (2) LANES OR LESS AND A MINIMUM OF 7 FEET FOR DIRECTIONAL OF THREE (3) OR MORE LANES. ALL PORTABLE SIGNS AND SIGN MOUNTING DEVICES UTILIZED IN THE WORK SHALL BE NCHRP 350 COMPLIANT. PORTABLE SIGNS MAY BE USED WHEN THE DURATION OF THE WORK IS LESS THAN 3 DAYS.
- WHEN THE CONSTRUCTION AREA HAS ENTRANCE/EXIT RAMP OR INTERSECTIONS, WORK WILL BE PERFORMED IN SUCH A MANNER TO PERMIT TRAFFIC TO OPERATE WITH THE LEAST AMOUNT OF INCONVENIENCE AS POSSIBLE. ADDITIONAL CHANNELIZATION AND SIGNING SHALL BE INSTALLED, AS REQUIRED, TO ALLOW TRAFFIC TO REMAIN AS OPERATIONAL AS POSSIBLE. WHEN ENTRANCE RAMP/INTERSECTIONS ARE INOPERABLE, FLAGGERS WILL BE UTILIZED TO CONTROL AND PROHIBIT MOVEMENT INTO THE PROJECT AT THAT POINT UNTIL CONSTRUCTION HAS CLEARED THE RESTRICTION SUFFICIENT TO RETURN TO OPERATIONAL STATUS.

- FOR NIGHT TIME OPERATIONS, DRUMS SHALL HAVE, FOR THE LENGTH OF THE TAPER ONLY, A SIX (6) INCH ORANGE REFLECTORIZED TOP STRIPE ON EACH DRUM IN THE TAPER AS REQUIRED IN SECTION 150. SPACING OF DEVICES SHALL BE AS SHOWN. DURING DAYLIGHT HOURS, CONES (28" MIN.) MAY BE USED IN ADVANCE OF AND THROUGHOUT WORK AREA.
- SIGNS SHOWN HERE ARE IN ADDITION TO ALL ADVANCE WARNING SIGNS REQUIRED IN SECTION 150.
- FLAGGERS SHALL BE PROVIDED AS NECESSARY TO PROHIBIT WRONG DIRECTION OF TRAFFIC THRU WORK AREAS.
- WHEN NOT IN USE, PORTABLE SIGNS SHALL BE REMOVED FROM THE TRAVELWAY SO THAT THE MESSAGE IS NOT VISIBLE TO THE MOTORIST. INTERIM SIGNS THAT ARE PERMANENT MOUNTED SHALL BE COVERED WHEN NOT APPLICABLE. SEE SECTION 150.
- PAYMENT FOR TRAFFIC CONTROL SHALL BE PER SECTION 150.
- PAVEMENT MARKINGS FOR TEMPORARY TRAFFIC CONTROL, IF REQUIRED, SHALL BE IN ACCORDANCE WITH SECTION 150 AND AS DIRECTED BY THE ENGINEER OR SHOWN IN THE PLANS.
- (a) ON PROJECTS WITH LOW OR SOFT SHOULDERS, THE CONTRACTOR SHALL ERECT IMMEDIATELY AHEAD OF CONSTRUCTION OPERATIONS "LOW/SOFT SHOULDER" WARNING SIGNS AT THE PROJECT TERMINI, AT INTERVALS NOT TO EXCEED ONE MILE AND IMMEDIATELY PAST EACH CROSSROAD.
- (b) WHERE THE CONTRACTOR IS NOT RESPONSIBLE FOR SHOULDER CONSTRUCTION THE DEPARTMENT WILL FURNISH THESE SIGNS FOR THE CONTRACTOR TO PICK-UP, TRANSPORT AND ERECT, THE DEPARTMENT WILL LATER REMOVE AND RETAIN THE SIGNS.
- HIGHWAY WORK ZONE SIGNS (HWZ-2 AND HWZ-3) SHALL BE INSTALLED ON THE TRAVEL WAY AND THE INTERSECTING ROADWAY AS REQUIRED IN SECTION 150.

G20-2
48" x 24"
END ROAD WORK



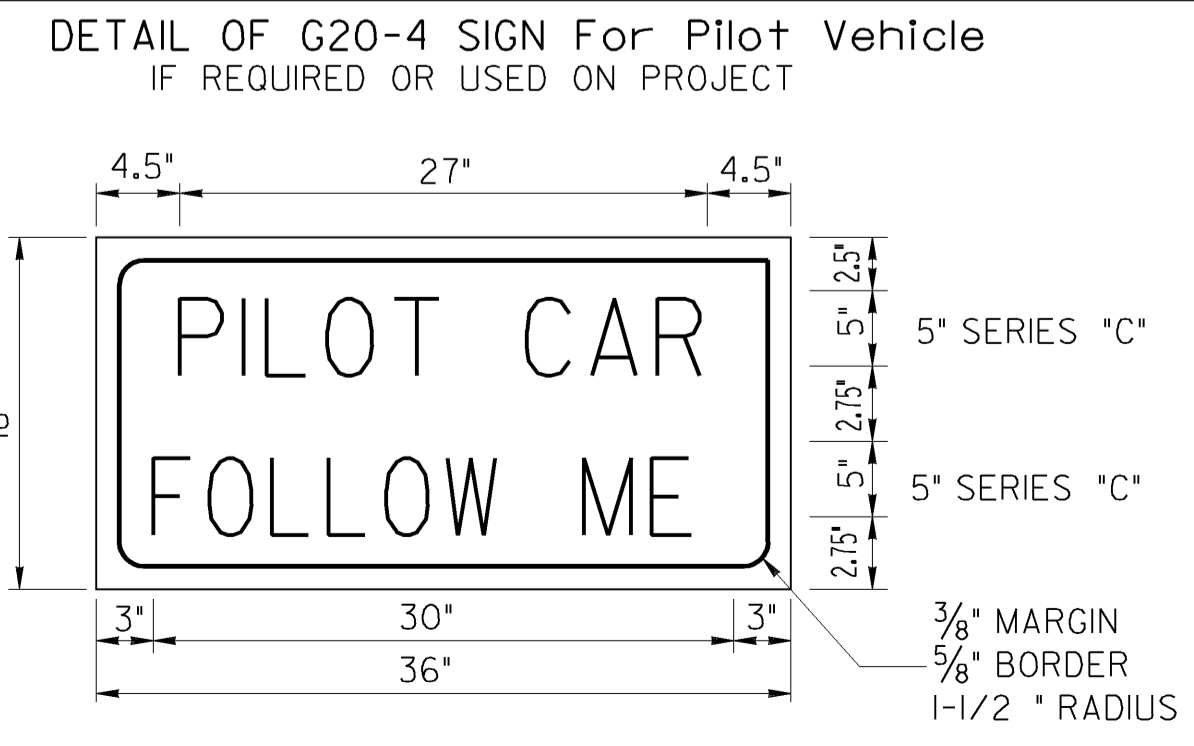
NOTE: FOR SURFACE TREATMENT AND CHIP SEAL PROJECTS TEMPORARY POST MOUNTED "LOOSE GRAVEL" SIGNS (W 8-7) W/W 13-1 (35 M.P.H.) SHALL BE INSTALLED ± 500' IN ADVANCE OF THE BEGINNING OF THE PROJECT AND AT ± 1 MILE INTERVALS THROUGHOUT THE PROJECT, AND ALSO ± 500' BEYOND THE END OF THE NEW SURFACING. THESE SIGNS SHALL BE REQUIRED TO REMAIN IN PLACE, UNTIL ORDERED REMOVED BY THE ENGINEER OR WHEN THE PROJECT IS ACCEPTED, WHICHEVER OCCURS FIRST.

NOTE: THE SIGN LOCATION SPACINGS MAY BE VARIED FROM THE DIMENSIONS SHOWN DUE TO INTERSECTING ROADS DRIVEWAYS OR PERMANENT SIGNS.

⊙ BUFFER ZONE: 200' MINIMUM, 300' DESIRABLE ON TANGENTS; CAN BE INCREASED AS DIRECTED BY THE ENGINEER FOR HORIZONTAL OR VERTICAL CURVES DUE TO SIGHT DISTANCE CONSIDERATION.

STANDARD LEGEND

- STRIPED DRUM
- PERMANENT TYPE POST MOUNTED SIGN (7' MOUNT HEIGHT)
- ⊕ TEMPORARY POST MOUNTED SIGN - (7' MOUNT HEIGHT)
- Ⓚ PORTABLE MOUNTED SIGN - MINIMUM HEIGHT OF 1 FT. ABOVE THE EDGE OF PAVEMENT; INSTALLED AS PER NCHRP 350 TESTING REQUIREMENTS.
- ▨ WORK AREA
- ▲ TRAFFIC CONE - 28" MIN. - DAYTIME USE ONLY
- FLAGGER WITH STOP-SLOW PADDLE



*WHEN TEMPORARY OPERATING SPEEDS ARE LESS THAN THE POSTED SPEED LIMIT, THE ADVISORY SPEED PLATES (W13-1) SHALL BE USED IN 10 M.P.H. INCREMENTS, UNTIL THE SPEED IS REDUCED TO THE TEMPORARY OPERATING SPEED. TEMPORARY OPERATING SPEED SHALL BE 35 M.P.H. UNLESS OTHERWISE DETERMINED BY THE ENGINEER.

REMOVED FLAGS AND REV. 3-30-06		DATE	
GENERAL NOTES REV. SIGN G20-2A TO G20-2.		REVISION	
GLO		BY	
DES. _____		STATE ROAD & AIRPORT DESIGN ENGINEER	
DRAW. _____		(APPROVED) <i>[Signature]</i>	
TRA. _____		CHIEF ENGINEER	
CHK. _____			

DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA

STANDARD TRAFFIC CONTROL DETAIL FOR LANE CLOSURE ON TWO-LANE HIGHWAY

NO SCALE REV. & REDR. JULY, 1999

41-0018

NUMBER 9102

UTILITY LINECODES

UTILITY SYMBOLS

OVERHEAD

Table with columns: EXISTING, TO BE REMOVED, PROPOSED, TYPE OF UTILITY. Lists utility codes like E, T, TV, TC, GW, etc.

UNDERGROUND

Table with columns: EXISTING, TO BE REMOVED, PROPOSED, TYPE OF UTILITY. Lists utility codes like E(C), T(C), W, NW, STM, SS, SFM, G, P, etc.

Table with columns: EXISTING, PROPOSED, TEMPORARY. Lists utility symbols for poles, manholes, valves, etc.

Table with columns: ABBREVIATIONS, MULTI-UTILITY IDENTIFICATION. Lists abbreviations like MANHOLE, PVC, STR, etc.

QUALITY LEVELS AND DEFINITIONS
QL-D DEPICTED ACCORDING TO UTILITY RECORD INFORMATION AND IN-FIELD VISUAL INSPECTION.

QL-C EXISTING UTILITY STRUCTURES HAVE BEEN FIELD LOCATED AND SURVEYED TO ASSIST IN DEPICTING THE UTILITIES SHOWN ON RECORDS.

QL-B INFORMATION WAS OBTAINED THROUGH THE APPLICATION OF APPROPRIATE SURFACE GEOPHYSICAL METHODS TO DETERMINE THE EXISTENCE AND APPROPRIATE HORIZONTAL POSITION OF THE SUBSURFACE UTILITIES.

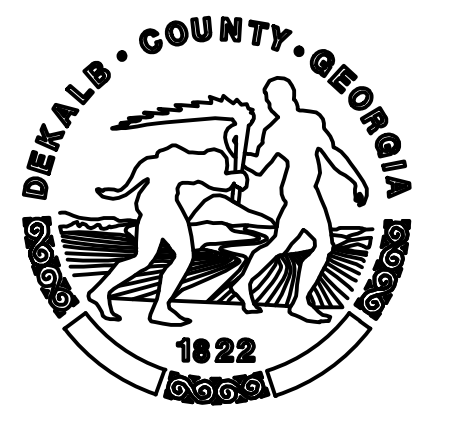
QL-A OBTAIN PRECISE HORIZONTAL AND VERTICAL POSITION OF THE UTILITY LINE BY EXCAVATING A TEST HOLE.

TELEPHONE PAIR SIZE TABLE
TELEPHONE PAIR SIZE | TELEPHONE CABLE DIAMETER
5-100 | 0.50 TO 2.00 IN
101-2400 | UP TO 3.50 IN



PROPERTY AND EXISTING R/W LINE, REQUIRED R/W LINE, CONSTRUCTION LIMITS, EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES, etc.

BEGIN LIMIT OF ACCESS.....BLA, END LIMIT OF ACCESS.....ELA, LIMIT OF ACCESS, REQ'D R/W & LIMIT OF ACCESS, etc.



REVISION DATES table and CHECKED/BACKCHECKED/CORRECTED/VERIFIED table with dates and drawing number 44-0001.

GENERAL NOTES

EXISTING UTILITIES

1. THE FOLLOWING UTILITY OWNERS MAY HAVE FACILITIES THAT CONFLICT WITH CONSTRUCTION ON THIS PROJECT:

NAME OF UTILITY OWNER	UTILITY
AGL RESOURCES	GAS
ZAYO GROUP	FIBER OPTICS
AT&T	PHONE
COMCAST	CABLE
GEORGIA POWER COMPANY	ELECTRIC
DEKALB COUNTY WATERSHED MANGEMENT	WATER & SEWER



THE CONTRACTOR SHALL ADHERE TO THE CALL BEFORE YOU DIG LAW BY CALLING THE UNDERGROUND PROTECTION CENTER BEFORE BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNDERGROUND UTILITIES AND SHALL COORDINATE WORK WITH THE UTILITY COMPANIES.

- EXISTING UTILITIES SHOWN ON THE DRAWINGS ARE APPROXIMATE, BASED ON THE BEST AVAILABLE INFORMATION AND MAY NOT REFLECT ALL FACILITIES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY EXISTING UTILITY LOCATIONS PRIOR TO CONSTRUCTION. FOR UTILITY LOCATES CONTACT: GEORGIA 811 BY PHONE (811 OR 1-800-282-7411) AT LEAST 48 HOURS (TWO BUSINESS DAYS) PRIOR TO EXCAVATION.
- THE CONTRACTOR WILL NOT BE COMPENSATED FOR ANY DELAY OR DAMAGE CAUSED BY UTILITY FACILITIES, OBSTRUCTION, OR ANY OTHER ITEM NOT BEING REMOVED OR RELOCATED IN ADVANCE OF THIS WORK.

SPECIFICATIONS

- ANY REFERENCE TO THE DEPARTMENT SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN THE DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT (DWM), AND REFERENCES TO THE , DEPARTMENT'S SPECIFICATIONS, SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT DESIGN STANDARDS (2009 EDITION, VERSION 1.0). THE PROJECT SPECIFICATIONS AND THE GEORGIA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS, CURRENT EDITION.
- ALL DESIGN AND CONSTRUCTION FOR WATER, SEWER, FIRE LINES, LIFT STATIONS AND BACKFLOW PREVENTION SHALL COMPLY WITH DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT DESIGN STANDARDS (2009 EDITION, VERSION 1.0) .
- TO PURCHASE A COPY OF THE ABOVE-MENTIONED DESIGN STANDARDS. PLEASE CALL (770) 414-2383 OR (770) 621-7272.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONFORM WITH ALL REQUIREMENTS OF THE SPECIFICATIONS. ESPECIALLY AS THEY RELATE TO COOPERATING WITH THE UTILITY OWNERS AND THE EXISTING UTILITY LOCATIONS THAT EXIST ON THE SITE.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE HIS WORK WITH ANY WORK TO BE PERFORMED BY THE UTILITY OWNERS OR OTHERS IN THE RIGHT-OF-WAY, AND ARRANGE A SCHEDULE OR OPERATIONS THAT WILL ALLOW FOR COMPLETION OF THIS PROJECT WITHOUT ANY DELAY.
- DELETED.
- REFERENCES IN THE PLANS TO A "QPL NUMBER" SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN THE GEORGIA DEPARTMENT OF TRANSPORTATION'S QUALIFIED PRODUCT LIST (QPL) , AS PUBLISHED ON THE GEORGIA DEPARTMENT OF TRANSPORTATION'S WEBSITE. THE PRODUCT TO BE INSTALLED SHALL BE LISTED UNDER THE RESPECTIVE "QPL NUMBER.
- ALL REFERENCES TO "OR EQUAL" SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN "OR APPROVED EQUAL." THE ENGINEER SHALL BE RESPONSIBLE FOR APPROVING ALL "EQUALS."
- REFERENCES IN THE PLANS TO A SPECIFICATIONS NUMBER OR SPECIAL PROVISION NUMBER SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN THE GEORGIA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS, 2013 EDITION. AS MODIFIED BY THE DEPARTMENT'S CURRENT SUPPLEMENTAL SPECIFICATIONS AND ANY CURRENT SHELF SPECIAL PROVISIONS PUBLISHED ON THE GEORGIA DEPARTMENT OF TRANSPORTATION'S WEBSITE. REFERENCES IN THE PLANS TO THE FOLLOWING SPECIFICATION OR SPECIAL PROVISION NUMBERS SHALL BE UNDERSTOOD BY THE CONTRACTOR TO MEAN SHELF SPECIAL PROVISIONS:

150	SPECIAL PROVISIONS TRAFFIC CONTROL
161	CONTROL OF SOIL EROSION AND SEDIMENTATION
163	MISCELLANEOUS EROSION CONTROL ITEMS
165	MAINTENANCE OF TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES
171	SILT FENCE
700	GRASSING
882	LIME
891	FERTILIZERS
894	FENCING
919	RAISED PAVEMENT MARKERS

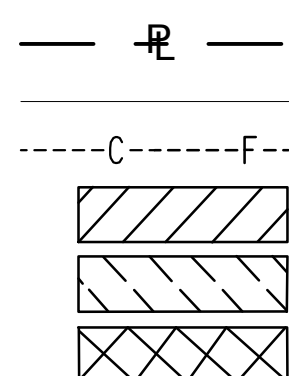
TRAFFIC CONTROL

- TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION BY PERMITTING AT LEAST ONE LANE OF TRAFFIC TO MOVE THROUGH THE CONSTRUCTION SITE. ALL FLAG MEN, WARNING SIGNS, BARRICADES AND LIGHTS NECESSARY TO CONTROL TRAFFIC AND PROTECT THE PUBLIC SHALL BE FURNISHED BY THE CONTRACTOR AND INCLUDED IN THE APPROPRIATE LUMP SUM TRAFFIC CONTROL COST LINE ITEM. TEMPORARY TRAFFIC CONTROL AND TRAFFIC CONTROL DEVICES WILL BE IN ACCORDANCE WITH "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) , CURRENT EDITION. IN ADDITION, PROVISIONS OF GDOT'S SHELF SPECIAL PROVISION SECTION 150 - TRAFFIC CONTROL MUST BE MET.
- THE CONTRACTOR SHALL RESTRICT WORK HOURS TO THE PERIOD FROM 7:00 AM TO 7:00 PM MONDAY THROUGH SATURDAY.
- THE CONTRACTOR SHALL NOT INSTALL LANE CLOSURES, PACE TRAFFIC OR MOVE EQUIPMENT OR MATERIALS ON THE ROADWAY BETWEEN THE HOURS OF 7:00 AM TO 9:00 AM AND 4:00 PM TO 7:00 PM MONDAY THROUGH FRIDAY.
- TRAFFIC LOOPS REMOVED OR DAMAGED DURING CONSTRUCTION SHALL BE REPLACED AND OPERATIONAL WITHIN 48 HOURS. FAILURE IN HAVING REPLACEMENT TRAFFIC LOOPS OPERATIONAL WITHIN THE TIME SPECIFIED WILL RESULT IN THE ASSESSMENT OF LIQUIDATED DAMAGES PER THE CONTRACT.

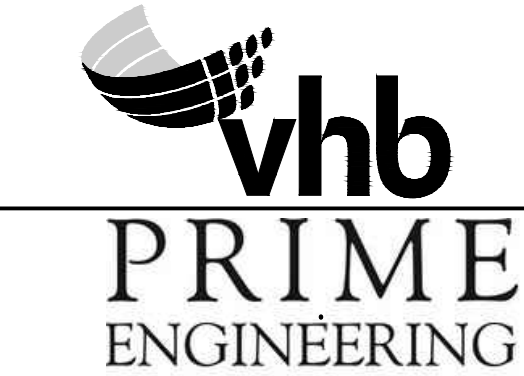
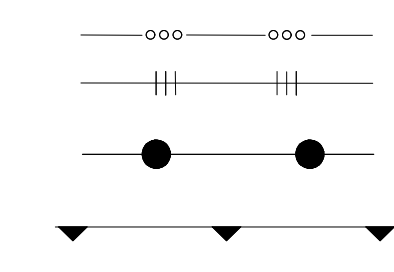
WATERLINE INSTALLATION

- CONTRACTOR SHALL NOTIFY THE DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT INSPECTOR AT (404) 371-2135 48 HOURS PRIOR TO START OF CONSTRUCTION.
- IN CASE OF EMERGENCY, CONTACT THE DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT AT (404) 270-6423 (24 HOURS A DAY) .
- THIS SITE CAN BE USED SAFELY FOR BUILDING PURPOSES WITHOUT UNDUE DANGER FROM FLOOD OR ADVERSE SOIL OR FOUNDATION CONDITIONS.
- THE CONTRACTOR WILL COORDINATE WITH COUNTY COMMUNICATIONS OFFICE TO NOTIFY RESIDENTS OF WORK TO BE PERFORMED AND WATER SHUT OFFS. CONTRACTOR MUST PROVIDE SEVEN (7) DAYS' NOTICE TO COUNTY COMMUNICATIONS OFFICE IN ADVANCE OF ANY DISRUPTION OF SERVICE TO RESIDENTS. THE COUNTY WILL PROVIDE NOTICES TO RESIDENTS. THE CONTRACTOR SHALL PROVIDE ADDRESSES OF AFFECTED RESIDENTS.
- THE COST FOR 2-INCH BALL VALVES SHALL BE INCLUDED IN THE COST OF THE 2-INCH COPPER PIPE.
- ALL 6-INCH THROUGH 24-INCH WATER LINES ARE TO BE INSTALLED INSIDE SINGLE LAYER POLYETHYLENE WRAP. COST OF POLYETHYLENE WRAP TO BE INCLUDED IN THE COST OF THE 6-INCH THROUGH 24-INCH WATER LINE.
- THE COST FOR THE 6-INCH THROUGH 12-INCH GATE VALVES INCLUDE THE VALVE BOX AND COVER, AND MARKER.
- THE COST FOR THE 16-INCH AND 24-INCH GATE VALVES INCLUDE THE CONCRETE VAULT.
- THE COST FOR THE 6-INCH THROUGH 16-INCH INSERTION VALVES INCLUDES THE VALVE BOX AND COVER.
- THE BID PRICE FOR WATER MAIN SHALL INCLUDE THE COST FOR RESTRAINED JOINTS, MECHANICAL RETAINER GLANDS, TIE-RODS, AND ALL FITTINGS.
- THE BID PRICE FOR WATER MAIN SHALL INCLUDE THE COST FOR WET TAP AND CUT IN CONNECTIONS.
- ALL CONCRETE AND/OR ASPHALT DRIVEWAYS ARE TO BE FREE BORED UNLESS OTHERWISE NOTED FOR WATERLINES 12 INCH DIAMETER AND LESS. THE COST FOR FREE BORE SHALL BE INCLUDED IN THE BID PRICE FOR WATER MAIN.
- THE COST FOR REMOVAL AND DISPOSAL OF EXISTING ROADWAY MATERIAL AND UNSUITABLE SOILS SHALL BE INCLUDED IN THE BID PRICE FOR WATER MAIN. ALL MATERIALS SHALL BE REMOVED FROM THE PROJECT AND DISPOSED OF IN AN APPROVED LANDFILL OR PROPERLY RECYCLED.
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SUITABLE MATERIAL IN THE TRENCH AND OVER THE PIPE, AT NO ADDITIONAL COST (SEE DETAILS) . THE COST OF SAWCUTTING, TRENCH EXCAVATION, BEDDING, BACKFILL, CONCRETE ENCASEMENT, TEMPORARY COLD PATCH, AND TRENCH CAP SHALL BE INCLUDED IN THE BID PRICE FOR WATER MAIN. NO SEPARATE MEASUREMENT WILL BE MADE AND NO CLAIMS WILL BE CONSIDERED FOR EXTRA COST.
- ALL FILL MATERIAL SHALL BE COMPACTED TO THE FOLLOWING MAXIMUM DRY DENSITY, STANDARD PROCTOR:
 - UNPAVED AREAS OUTSIDE OF ROADWAY RIGHT-OF-WAY - 90% FOR ALL LIFTS
 - UNPAVED AREAS OF ROADWAY RIGHT-OF-WAY - 95% FOR ALL LIFTS
 - PAVED AREAS - 98% FOR ALL LIFTS
- PLACE MATERIAL FROM EXCAVATION AWAY FROM DRIVEWAY CROSS DRAINS TO PREVENT OBSTRUCTION OF STORM DRAINAGE FLOW. NO EXCAVATION MATERIAL TO BE STOCKPILED IN GRASS AREAS.
- NO SPOILS OR EXCAVATED MATERIAL SHALL BE PLACED ON THE PAVEMENT OR BEYOND THE CURB OR EDGE OF PAVEMENT AT ANY TIME DURING CONSTRUCTION. PAVEMENT SHALL BE CLEANED BY SWEEPING EACH DAY EXCAVATION OCCURS.
- CONTRACTOR MAY STRING PIPE AS NECESSARY ALONG ROADWAY BETWEEN CURB/EDGE OF PAVEMENT AND RIGHT-OF-WAY. THE CONTRACTOR MAY NOT STRING MORE PIPE THAN WILL BE PLACED THAT DAY.
- CONTRACTOR SHALL FILL IN ALL TRENCHES AT THE END OF EACH DAY TO ALLOW LOCAL TRAFFIC ACCESS. TRENCHES SHALL BE COVERED WITH PLATES IF PAVEMENT HAS NOT BEEN REPLACED.
- THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE EXACT LOCATION, SIZE AND MATERIAL OF ANY EXISTING WATER FACILITY PROPOSED FOR CONNECTION OR USE BY THIS PROJECT. THE RELOCATION OF ANY UTILITY REQUIRED TO AVOID ANY PART OF THIS PROJECT IS THE RESPONSIBILITY OF THE CONTRACTOR.
- FOR TAPS SMALLER THAN 20 INCHES, THE DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT WILL FURNISH THE TAPPING MACHINE, PROVIDE FOR WELDING, AND DO THE ACTUAL TAPPING OF THE MAIN.
- ALL PLUGS SHALL BE INSTALLED PER END OF WATER LINE PLUG DETAILS.
- ROCK EXCAVATION WILL NOT BE MEASURED SEPARATELY FOR COMPENSATION. COST SHALL BE INCLUDED IN THE BID PRICE FOR WATER MAIN.
- FITTINGS SHALL BE INCLUDED IN THE COST OF THE WATER PIPE.
- ALL BENDS, PLUGS AND TEES REQUIRE THRUST BLOCKS OR RESTRAINED JOINTS AND SHALL BE INSTALLED PER THRUST BLOCKING DETAILS. THE THRUST BLOCKS ARE NOT SHOWN ON DRAWINGS FOR CLARITY.
- MINIMUM VERTICAL CLEARANCE REQUIRED BETWEEN WATER AND SEWER LINE IS 36 INCHES, ALL OTHER UTILITIES IS 18 INCHES, UNLESS DIRECTED OR APPROVED BY THE ENGINEER.
- MINIMUM HORIZONTAL CLEARANCE REQUIRED BETWEEN WATER AND SEWER LINES IS 10 FEET, UNLESS DIRECTED OR APPROVED BY THE ENGINEER.
- ALL WATER MAINS SHALL BE PRESSURE TESTED, DISINFECTED AND PASS THE BACTERIA TEST PRIOR TO CUSTOMER TIE IN. NO WATERLINE INSTALLATION WILL BE PAID FOR UNTIL LINE HAS SUCCESSFULLY BEEN PRESSURE AND BAC-T TESTED.
- FIRE HYDRANT LOCATIONS CAN BE ADJUSTED IN FIELD ONLY WHEN DIRECTED OR APPROVED BY THE ENGINEER.
- FIELD CHANGES DURING CONSTRUCTION MUST BE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER.

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES		

WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
DRAWING No.			44-0002

GENERAL NOTES (CONTINUED)

43. THE CONTRACTOR SHALL MAINTAIN RECORDS AS WORK PROGRESSES AND SUBMIT DIMENSIONAL SKETCHES WITH MONTHLY PAY ESTIMATES. AN AS-BUILT SET OF CONSTRUCTION PLANS IN HARD COPY AND ELECTRONIC FORMAT (PDF AND AUTOCAD OR MICROSTATION) SHALL BE SUBMITTED WITH FINAL PAY REQUEST. CONTRACTOR TO OBTAIN GPS COORDINATES AND ADD TO AS-BUILTS AT ALL BENDS, TEES, VALVES, FIRE HYDRANTS, PIPE DEFLECTIONS, AND PLUGS. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR WATER MAIN.

44. THE CONTRACTOR SHALL HAVE A SET OF APPROVED PLANS AVAILABLE FOR THE OWNER AT ALL TIMES WHEN WORK IS BEING PERFORMED. A DESIGNATED RESPONSIBLE EMPLOYEE SHALL BE AVAILABLE FOR CONTACT BY COUNTY INSPECTORS.

SERVICE LINE INSTALLATION

45. ALL SERVICES SHALL BE CHANGED OVER TO THE NEW WATER MAIN IN AREAS WHERE THE WATER MAIN IS ABANDONED. PROPERTY OWNERS SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF CUTTING OFF THEIR SERVICE.

46. ALL SERVICE LINES SHALL BE 1" DIAMETER. WHERE TWO METERS ARE LOCATED SIDE BY SIDE. THE CONTRACTOR SHALL PROVIDE A SINGLE 1" DIAMETER SERVICE LINE FROM THE WATER MAIN WITH A WYE BRANCHING TO 3/4" DIAMETER SERVICE LINES TO EACH METER. THE WYE SHALL BE PLACED IN CLOSE PROXIMITY TO THE METERS.

47. ALL SERVICE LATERALS SHALL BE FREE BORED. THE FREE BORE SHALL BE INCLUDED IN THE BID PRICE FOR "WATER SERVICE LINE." MEASUREMENT AND PAYMENT WILL BE MADE FOR IN-PLACE SERVICE LINES ONLY.

48. DEKALB COUNTY DEPARTMENT OF WATERSHED MANAGEMENT (DWM) SHALL SUPPLY WATER METER AND RETRO SETTER TO CONTRACTOR FOR METERS THAT HAVE NOT BEEN UPGRADED. CONTRACTOR SHALL PROVIDE ALL OTHER MATERIAL REQUIRED FOR INSTALLATION PER DWM STANDARDS. ANY METERS THAT ARE REMOVED SHALL BE RETURNED TO DEKALB COUNTY'S STORAGE FACILITY AT 1580 ROADHAVEN DRIVE.

49. ANY METERS OR BACKFLOW DEVICES REMOVED DURING CONSTRUCTION SHALL BE REMOVED, RELOCATED AND REPLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE COMMERCIAL WATER METER INSTALLATION DETAIL AND PAID FOR UNDER THE BID ITEM FOR "REPLACE WATER METER." METER BOXES REPLACED WHEN DIRECTED BY THE ENGINEER SHALL BE INCLUDED IN THE BID PRICE FOR "REPLACE WATER METER."

50. ALL SERVICE CHANGE OVERS SHALL HAVE NEW MATERIAL FROM WATER MAIN TO METER, WHICH INCLUDES:

- A. CORPORATION STOP: FORD F-600-F-NL, MUELLER H-15000N OR H-10003N, OR JAMES JONES E-1500 OR E89 ONLY.
- B. CURB STOP: FORD B21-233W-NL OR B21-334W-NL, A.Y. MCDONALD 76102-W, OR JAMES JONES E-1901 ONLY.
- C. COPPER SERVICE LINE: TYPE 'K' IN ACCORDANCE WITH ASTM B88.
- D. ALL FITTINGS AND PIPE SHALL BE NO LEAD. FITTINGS SHALL BE INCLUDED IN THE BID PRICE FOR "WATER SERVICE LINE."

WATERLINE ABANDONMENT

51. ALL CUT & PLUGS OF EXISTING WATER MAINS, INCLUDING ABANDONMENT OF VALVE BOXES, WILL NOT BE MEASURED SEPARATELY FOR PAYMENT. NO SEPARATE PAYMENT FOR CUT AND PLUGS OR ASSOCIATED PAVEMENT REPAIR WILL BE MADE.

52. FOR WATER MAINS TO BE ABANDONED, CUT AND REMOVE A SMALL SECTION OF PIPE, PLUG BOTH SECTIONS, AND INSTALL THRUST BLOCK WHERE PLUG(S) MAY BE PRESSURIZED. ABANDONED WATER MAIN WILL NOT BE MEASURED FOR SEPARATE PAYMENT.

53. AS DIRECTED BY THE ENGINEER, THE CONTRACTOR SHALL INSTALL FLOWABLE FILL IN SECTIONS OF PVC PIPE UNDER PAVEMENT AND ALL ASBESTOS CEMENT PIPE TO BE ABANDONED. FLOWABLE FILL SHALL BE PROVIDED AND INSTALLED IN ACCORDANCE WITH "SECTION 500 - CONTROLLED LOW STRENGTH FLOWABLE FILL" OF THE GEORGIA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS, 2013 EDITION. MEASUREMENT AND PAYMENT WILL BE MADE BY THE LINEAR FEET OF PIPE ABANDONED AND FILLED WITH FLOWABLE FILL.

54. ALL ABANDONED VALVES SHALL HAVE THE LID AND TOP SECTION OF THE VALVE BOX REMOVED, AND THE HOLE SHALL BE FILLED WITH CONCRETE FROM THE VALVE TO THE ROADWAY SURFACE. NO SEPARATE PAYMENT FOR VALVE ABANDONMENT WILL BE MADE.

ROADWAY

55. PAVEMENT REMOVED SHALL BE REPLACED BY CONCRETE UNTIL MILLING AND RESURFACING IS DONE. THIS WILL BE INCLUDED IN THE PRICE BID FOR WATER MAIN. AFFECTED ROADWAY SURFACES SHALL BE PLATED OR FLUSH WITH ADJACENT PAVEMENT AT ALL TIMES.

56. STORM DRAIN STRUCTURES, VALVES, MANHOLES, ETC. SHALL BE ADJUSTED TO GRADE AS DIRECTED BY ENGINEER. COST OF ADJUSTMENTS SHALL BE INCLUDED IN THE PRICE BID FOR PAVEMENT OVERLAY.

57. OPEN CONSTRUCTION PITS SHALL BE BACKFILLED AND CLOSED AT THE END OF EACH WORKING DAY. EXCEPTIONS MAY BE APPROVED BY THE ENGINEER. ANY ROAD CUT THAT IS NOT POURED BACK FLUSH BY THE END OF THE DAY MUST BE COVERED BY A STEEL PLATE.

58. STEEL PLATES SHALL BE SECURED TO THE PAVEMENT BY PLACING TEMPORARY ASPHALT AROUND ALL EDGES TO ENSURE THAT NO DAMAGE TO VEHICLES WILL OCCUR. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO VEHICLES CAUSED BY STEEL PLATES. CONTRACTOR SHALL INSPECT PLATES TWICE DAILY TO ENSURE THEY REMAIN SECURE TO THE PAVEMENT.

59. CONTRACTOR SHALL MILL AND REPAVE ALL LANES OF ROADWAY AS DESIGNATED BY THE LIMITS OF OVERLAY SHOWN ON THE PLANS. THIS WORK WILL INCLUDE MILLING THE TOP OF

THE CONCRETE CAP OVER THE WATERLINE TRENCHES DURING THE MILLING OF THE ENTIRE ROADWAY.

60. ALL MILLED SURFACES SHALL BE COVERED WITHIN 7 DAYS. FAILURE TO COVER MILLED SURFACES WITH ASPHALTIC CONCRETE MIX AS REQUIRED BY THE APPLICABLE TYPICAL SECTION SHALL BE CONSIDERED A FAILURE TO COMPLY WITH THE REQUIREMENTS OF SECTION 150 TRAFFIC CONTROL AND SHALL RESULT IN THE ASSESSMENT OF LIQUIDATED DAMAGES PER THE CONTRACT.

PRESERVATION OF PROPERTY AND IMPROVEMENTS

61. PRIOR TO CONSTRUCTION, THE CONTRACTOR IS REQUIRED TO RECORD A VIDEO WITHIN THE RIGHT OF WAY AND ALL ADJACENT AREA, INCLUDING DRIVEWAYS, SIDEWALKS, MAILBOXES AND ANYTHING THAT ALREADY LOOKS BROKEN.

62. NO SPOILS SHALL BE PLACED BEYOND THE CURB OR EDGE OF PAVEMENT AT ANY TIME DURING CONSTRUCTION.

63. EVERY DISTURBED, UNPAVED AREA SHALL BE SODDED IN KIND, INCLUDING FESCUE GRASS AREA. THE WORK SHALL BE PERFORMED BY A LANDSCAPE SPECIALIST SKILLED IN THIS TYPE OF WORK. MATERIALS SHALL NOT BE STORED ON ANY GRASSED AREAS.

64. IF A MAILBOX MUST BE TAKEN DOWN DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE IT OR TEMPORARILY RELOCATE IT SO AS NOT TO CAUSE ANY DISRUPTION OF MAIL DELIVERY. THE WORK WILL NOT BE MEASURED SEPARATELY FOR PAYMENT. THE COST SHALL BE INCLUDED IN OTHER WORK.

65. ANY SIGNS, TREES, MAILBOXES, FENCE, WALLS OR SPRINKLER SYSTEM WHICH MUST BE REMOVED DURING CONSTRUCTION SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR UNLESS NOTED OTHERWISE AT NO ADDITIONAL COST TO THE COUNTY. COST WILL BE INCLUDED IN OTHER WORK.

66. CURBS, SIDEWALKS, HANDICAP RAMPS, DRIVEWAYS, ETC. DISTURBED BY CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR AT PROPER GRADE AND CONDITION. NO CLAIMS WILL BE CONSIDERED FOR EXTRA COMPENSATION UNLESS PRIOR APPROVAL BY ENGINEER IS PROVIDED.

67. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROTECT DRIVEWAYS, SIDEWALKS, CURBS AND CATCH BASINS DURING CONSTRUCTION (TAKE A VIDEO).

68. ALL EXISTING DRAINAGE PIPES AND STRUCTURES WITHIN THE PROJECT SHALL REMAIN UNLESS OTHERWISE NOTED ON PLANS. ALL COSTS ASSOCIATED WITH THE REMOVAL OF THESE ITEMS SHALL BE INCLUDED IN THE BID PRICE FOR WATER MAIN.

69. THE CONTRACTOR SHALL REPLACE OR REPAIR ANY STORM DRAINAGE, SANITARY SEWER, POTABLE WATER, OR OTHER UTILITY INFRASTRUCTURE DAMAGED AS A RESULT OF THE PROPOSED WORK AT NO ADDITIONAL COST TO THE DEPARTMENT OR UTILITY OWNER.

70. THE CONTRACTOR SHALL PROTECT ALL POST-MOUNTED STREET SIGNS WITHIN THE PROJECT LIMITS. IF A STREET SIGN MUST BE MOVED DURING THE COURSE OF CONSTRUCTION, IT MUST BE RESET AT THE END OF EACH WORKDAY. ALL LABOR AND MATERIALS REQUIRED TO SATISFY THIS REQUIREMENT SHALL BE INCLUDED IN THE BID PRICE FOR TRAFFIC CONTROL.

71. ALL SIGNS AND LIGHT POLES WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT SHALL REMAIN UNLESS PLANS OR PROJECT ENGINEER INDICATE OTHERWISE. ALL WORK ASSOCIATED WITH THIS REQUIREMENT SHALL BE INCLUDED IN THE BID PRICE FOR TRAFFIC CONTROL.

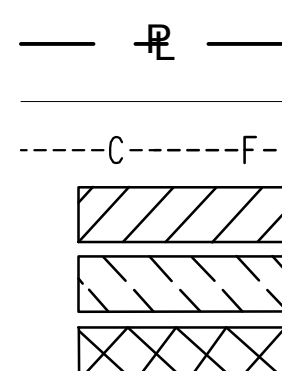
72. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING ALL LOOP DETECTORS AFFECTED BY CONSTRUCTION.

PERMITS

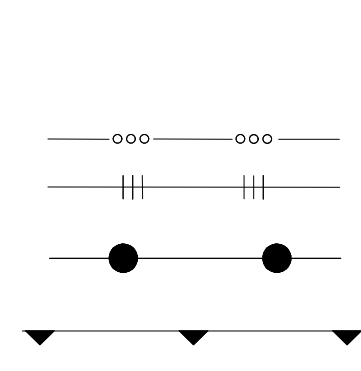
73. A NOTICE OF INTENT (NOI) WILL BE REQUIRED FOR THIS PROJECT SINCE DISTURBED AREA IS GREATER THAN ONE ACRE, AS PER GA EPD PERMIT NO. GARI00002.

74. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED PERMITS AND LICENSES AND SHALL BE RESPONSIBLE FOR ALL FEES INVOLVED WITH OBTAINING PERMITS.

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



REVISION DATES		

WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
DRAWING No.			44-0003

PAY ITEM NO.	PAY ITEM DESCRIPTION	UNIT	TOTAL QUANTITY	44-005	44-006	44-007	44-008	44-009	NOTES
WATER									
670-1020	WATER MAIN, 2 IN	LF	60	20			40		NO WORK THIS SHEET
670-1060	WATER MAIN, 6 IN	LF	405	20	120	85	180		
670-1080	WATER MAIN, 8 IN	LF	2,191	640	560	400	591		
670-1120	WATER MAIN, 12 IN	LF	25	25					
670-1160	WATER MAIN, 16 IN	LF	90	40			50		
670-1240	WATER MAIN, 24 IN	LF	1,693	417	460	400	416		
670-2060	GATE VALVE, 6 IN	EA	10	1	4	1	4		
670-2080	GATE VALVE, 8 IN	EA	12	6	1		5		
670-2120	GATE VALVE, 12 IN	EA	1	1					
670-2160	GATE VALVE, 16 IN, IN VAULT	EA	2	1			1		
670-2240	GATE VALVE, 24 IN, IN VAULT	EA	2	1			1		
670-2003	AIR RELEASE VALVE ASSEMBLY, 8 IN	EA	2	1		1			
670-2003	AIR RELEASE VALVE ASSEMBLY, 12 IN	EA	2	1	1				
670-7215	INSERTION VALVE, 6 IN	EA	3		1		2		
670-7220	INSERTION VALVE, 8 IN	EA	2	1			1		
670-7230	INSERTION VALVE, 12 IN	EA	1	1					
670-7240	INSERTION VALVE, 16 IN	EA	2	1			1		
670-4000	FIRE HYDRANT	EA	9	1	4	1	3		
670-9920	REMOVE EXISTING FIRE HYDRANT	EA	6	1	2	1	2		
670-5010	WATER SERVICE LINE, 1 IN	LF	550	185	60	205	100		
670-5020	WATER SERVICE LINE, 2 IN	EA	125			65	60		
670-9730	RELOCATE EXIST WATER METER, INCL BOX	EA	1				1		
670-0800	WATER METER	EA	15	2	4	7	2		
670-1650	BACKFLOW PREVENTION ASSEMBLY	EA	4	2	1		1		
INCIDENTAL COSTS									
670-2700	ABANDONMENT OF WATER VALVES	EA	8	8					COST FOR ABANDONMENT OF EXISTING VALVE TO INCLUDE IN PAVEMENT WITH CONCRETE AND OUT OF PAVEMENT WITH CONCRETE
600-0001	FLOWABLE FILL	CY	1				5		GROUT FILL 6-INCH DIP
600-0001	FLOWABLE FILL	CY	33	7	8	8	10		GROUT FILL 8-INCH DIP
600-0001	FLOWABLE FILL	CY	35	30			5		GROUT FILL 12-INCH DIP

1 SUMMARY OF QUANTITIES
44-0004 SCALE: NOT TO SCALE

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)

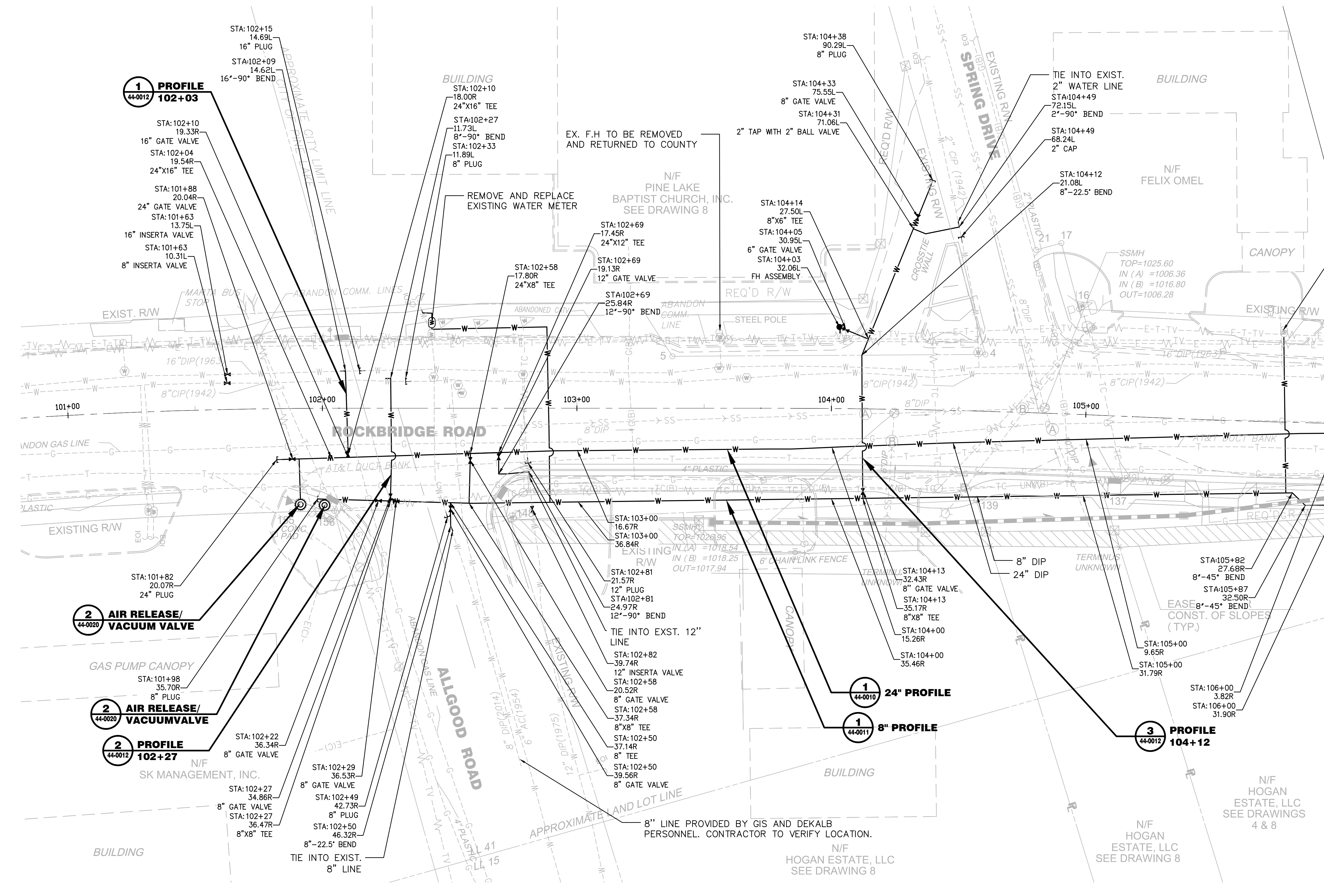


REVISION DATES	

WATERLINE RELOCATION PLANS
 ROCKBRIDGE ROAD
 FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No. 44-0004
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	

- NOTE:
 1. CONTRACTOR RESPONSIBLE FOR ANY LANE CLOSURES OR ROAD CLOSURE PERMITS WITH DEKALB COUNTY.
 2. ALL 6", 8", 12", 16", AND 24" PIPE SHALL BE POLYWRAPPED.



1 PROFILE 102+03
44-0012

- STA: 102+10 19.33R 16" GATE VALVE
- STA: 102+04 19.54R 24"x16" TEE
- STA: 101+88 20.04R 24" GATE VALVE
- STA: 101+63 13.75L 16" INSERTA VALVE
- STA: 101+63 10.31L 8" INSERTA VALVE

2 AIR RELEASE/VACUUM VALVE
44-0020

- STA: 101+82 20.07R 24" PLUG

2 AIR RELEASE/VACUUM VALVE
44-0020

- STA: 101+98 35.70R 8" PLUG

2 PROFILE 102+27
44-0012

- STA: 102+22 36.34R 8" GATE VALVE
- STA: 102+29 36.53R 8" GATE VALVE
- STA: 102+49 42.73R 8" PLUG
- STA: 102+50 46.32R 8"x8" TEE

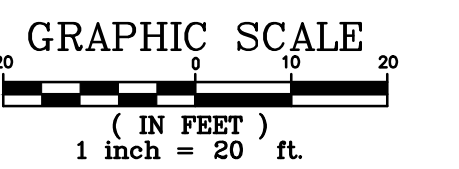
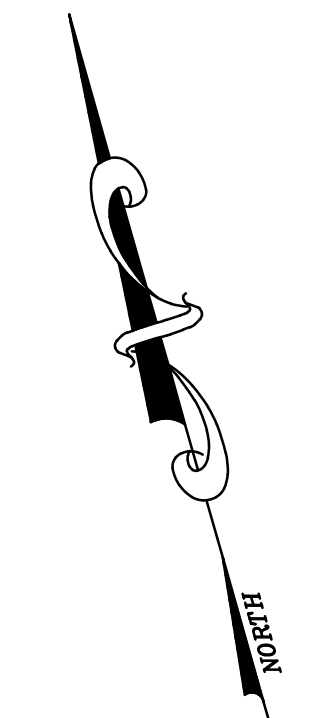
1 24" PROFILE
44-0010

1 8" PROFILE
44-0011

3 PROFILE 104+12
44-0012

- REMOVE AND REPLACE EXISTING WATER METER (TYP. OF 2)

MATCH LINE STA. 106+00.00 DRAWING No. 44-0005



PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

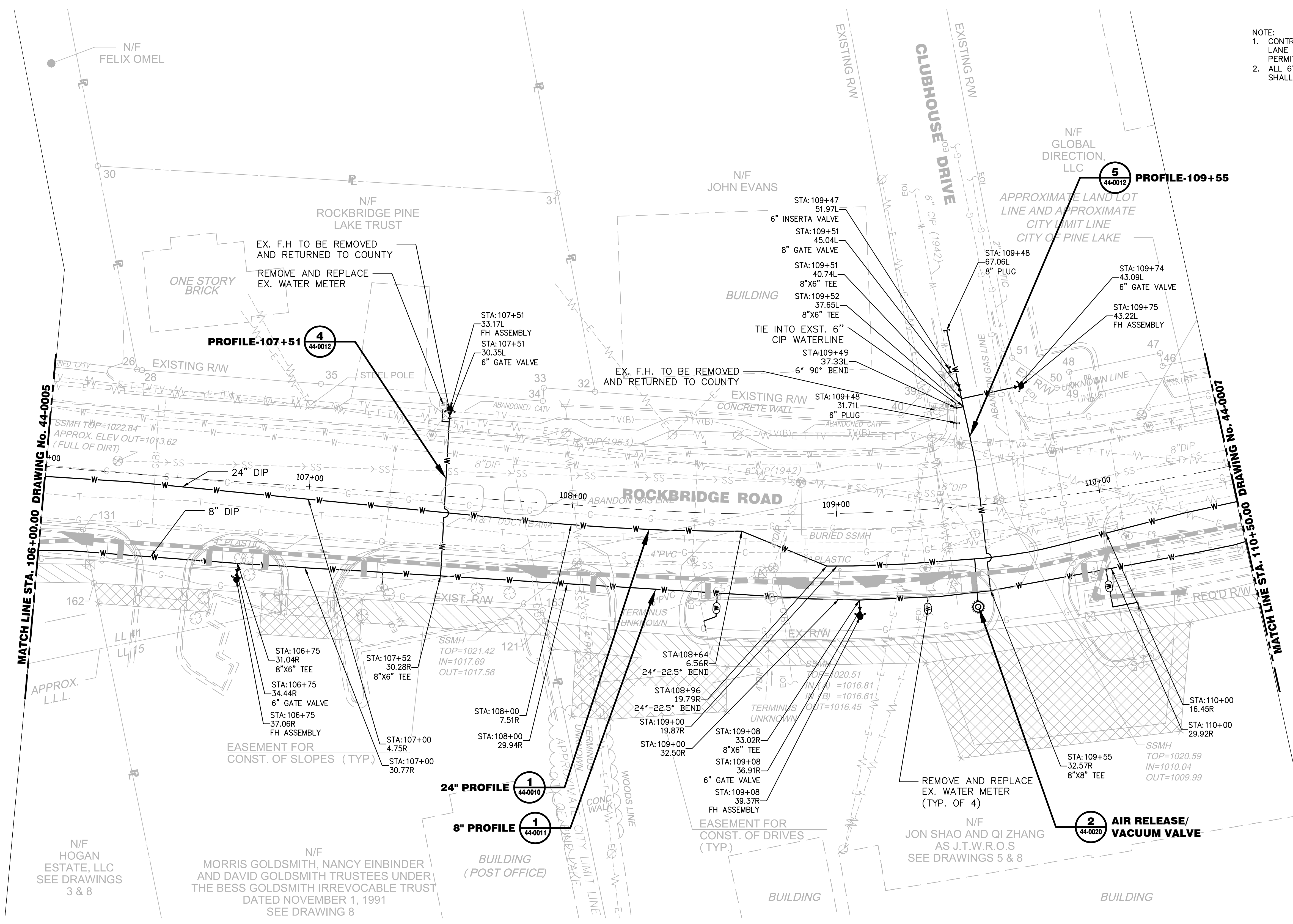
BEGIN LIMIT OF ACCESS.....BLA	
END LIMIT OF ACCESS.....ELA	
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	



REVISION DATES	

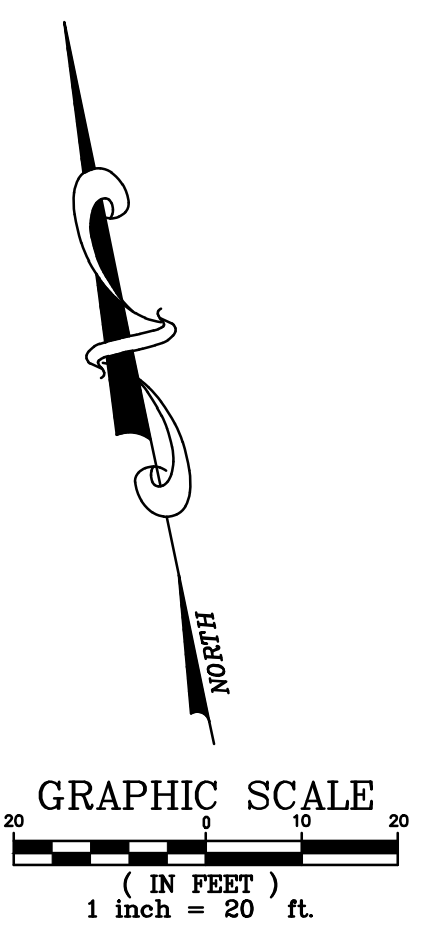
WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0005	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

NOTE:
1. CONTRACTOR RESPONSIBLE FOR ANY LANE CLOSURES OR ROAD CLOSURE PERMITS WITH DEKALB COUNTY.
2. ALL 6", 8", 12", 16", AND 24" PIPE SHALL BE POLYWRAPPED.



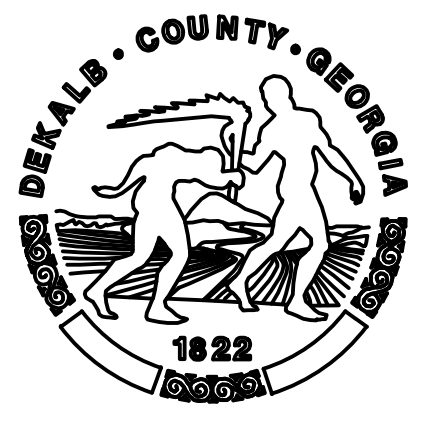
MATCH LINE STA. 106+00.00 DRAWING No. 44-0005

MATCH LINE STA. 110+50.00 DRAWING No. 44-0007



PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

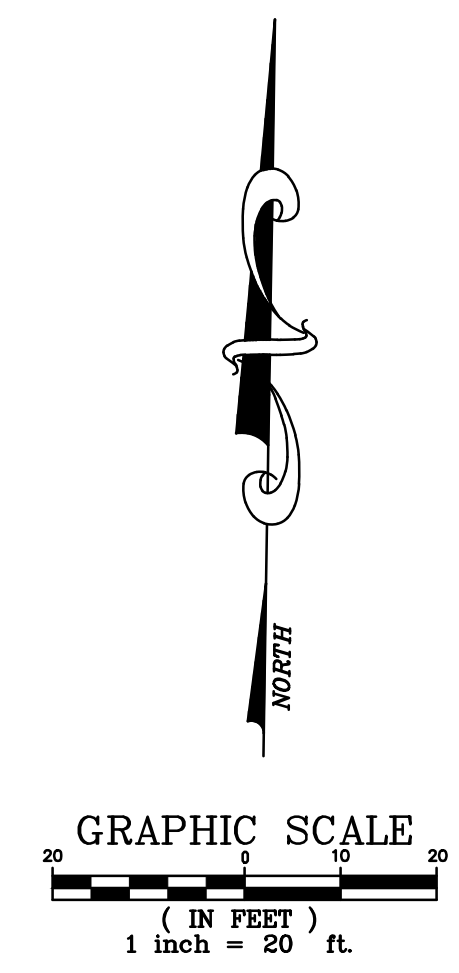
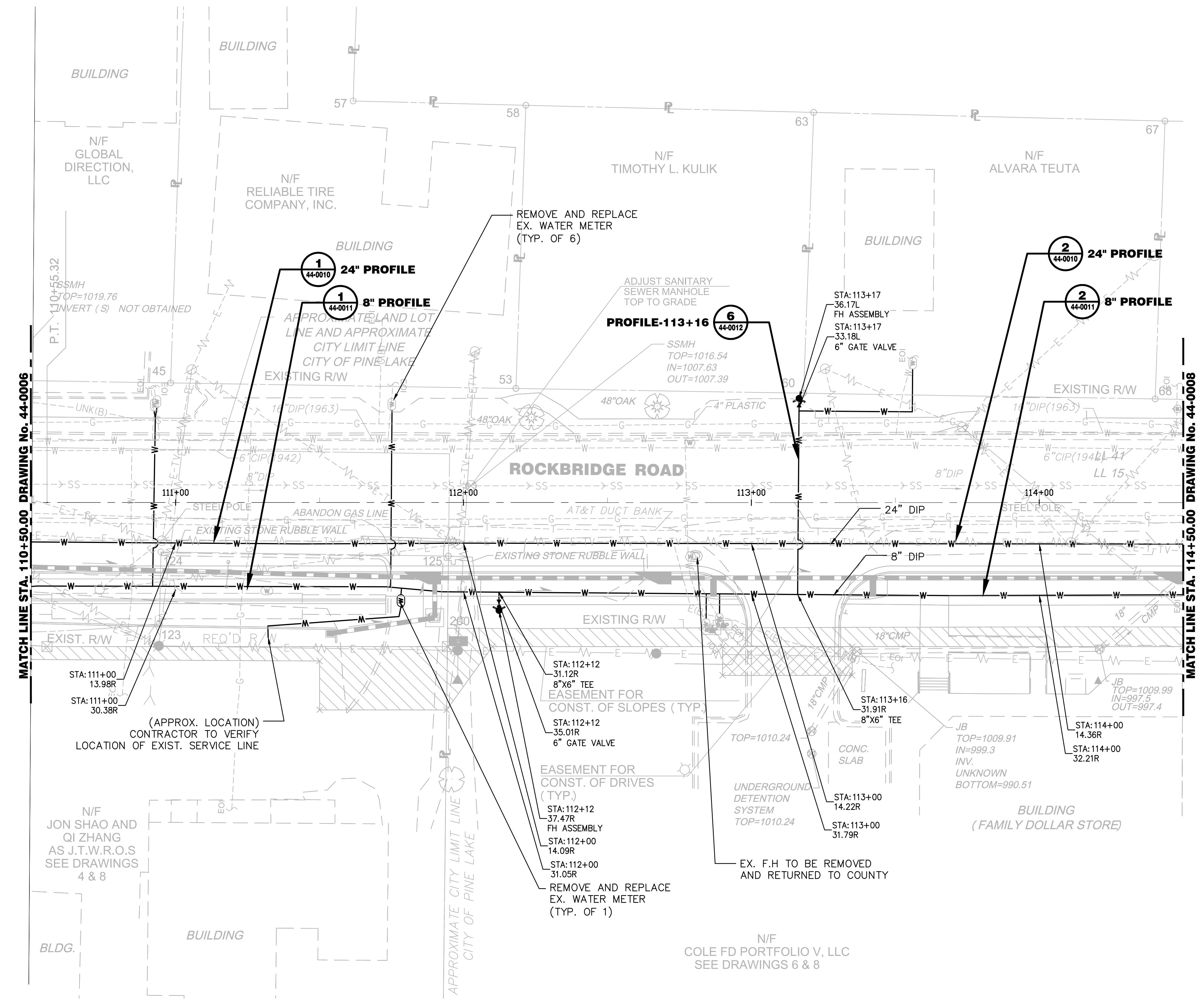
BEGIN LIMIT OF ACCESS.....BLA	
END LIMIT OF ACCESS.....ELA	
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	



REVISION DATES	

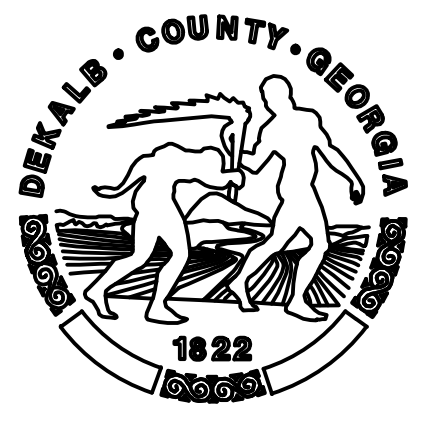
WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
DRAWING No.			44-0006

NOTE:
1. CONTRACTOR RESPONSIBLE FOR ANY LANE CLOSURES OR ROAD CLOSURE PERMITS WITH DEKALB COUNTY.
2. ALL 6", 8", 12", 16", AND 24" PIPE SHALL BE POLYWRAPPED.



PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

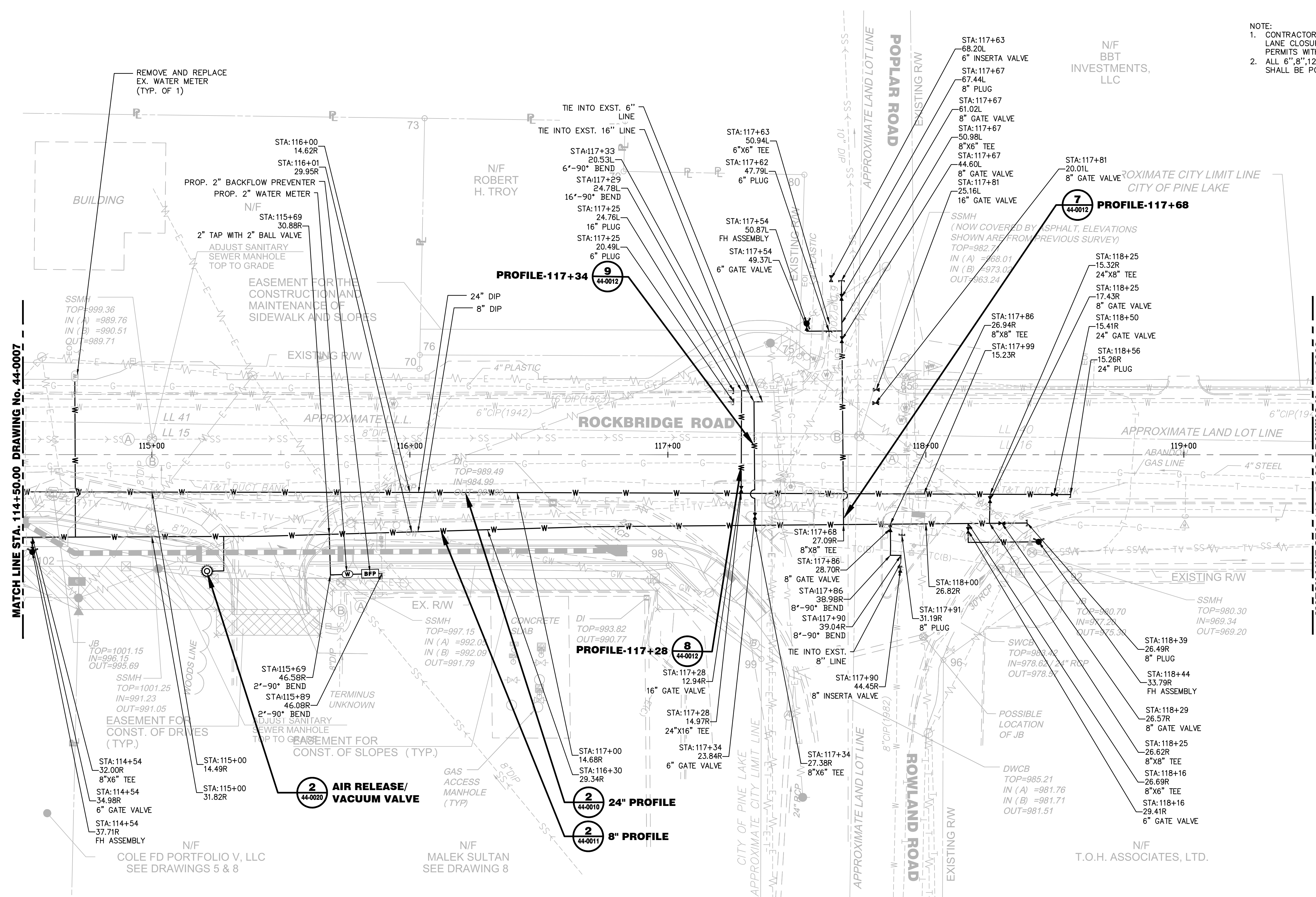
BEGIN LIMIT OF ACCESS.....BLA	
END LIMIT OF ACCESS.....ELA	
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	



REVISION DATES	

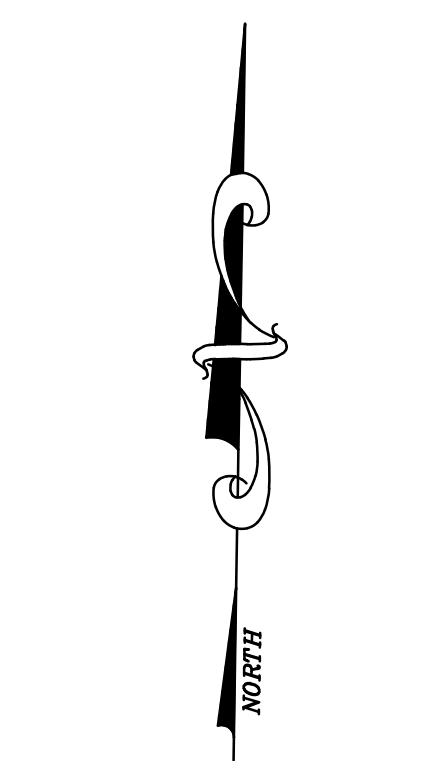
WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-007	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

- NOTE:
 1. CONTRACTOR RESPONSIBLE FOR ANY LANE CLOSURES OR ROAD CLOSURE PERMITS WITH DEKALB COUNTY.
 2. ALL 6", 8", 12", 16", AND 24" PIPE SHALL BE POLYWRAPPED.



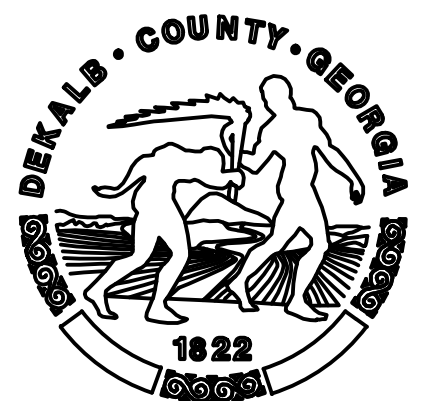
MATCH LINE STA. 114+50.00 DRAWING No. 44-0007

MATCH LINE STA. 119+50.00 DRAWING No. 44-0009



PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

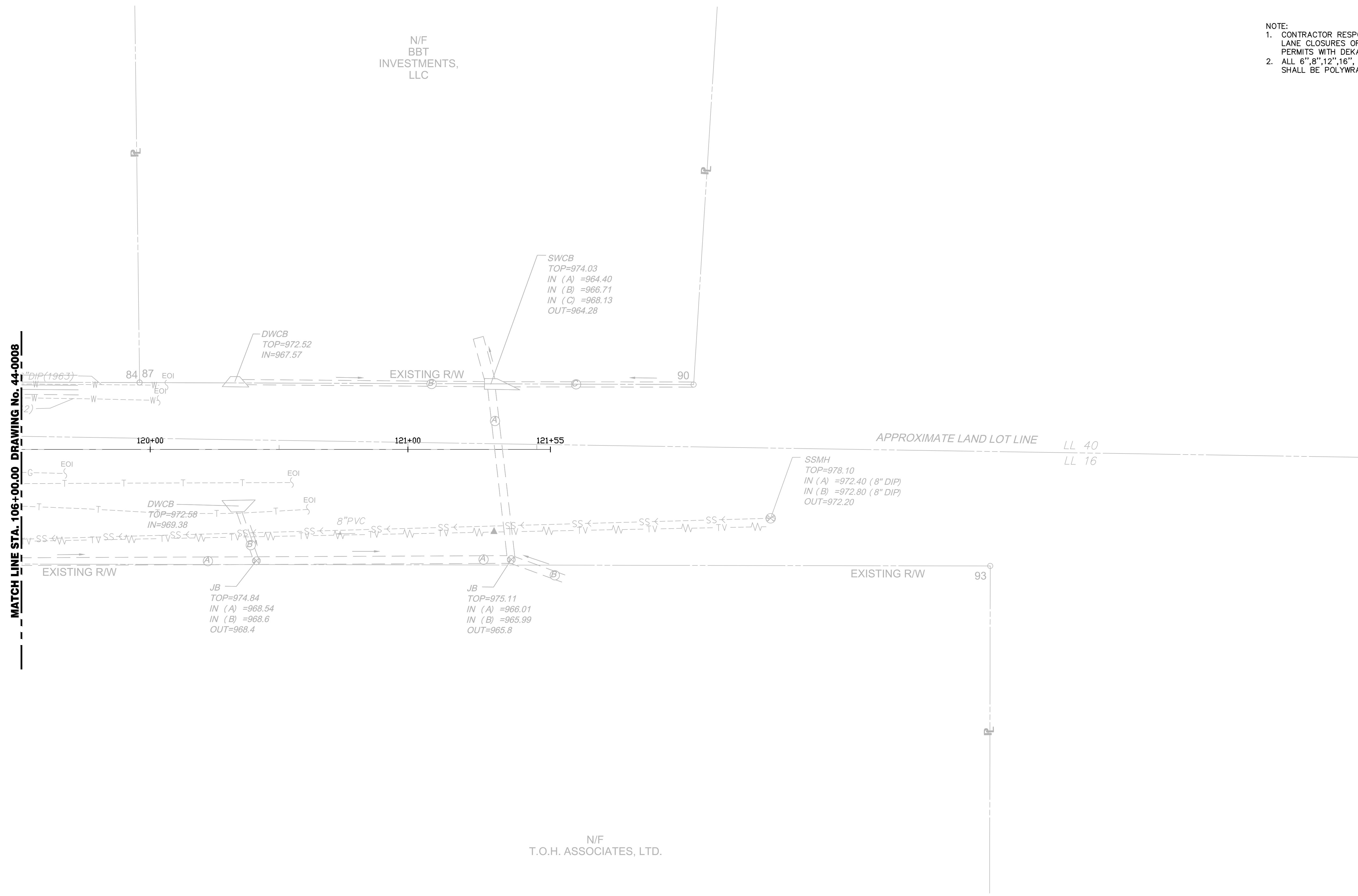
BEGIN LIMIT OF ACCESS.....BLA	
END LIMIT OF ACCESS.....ELA	
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	



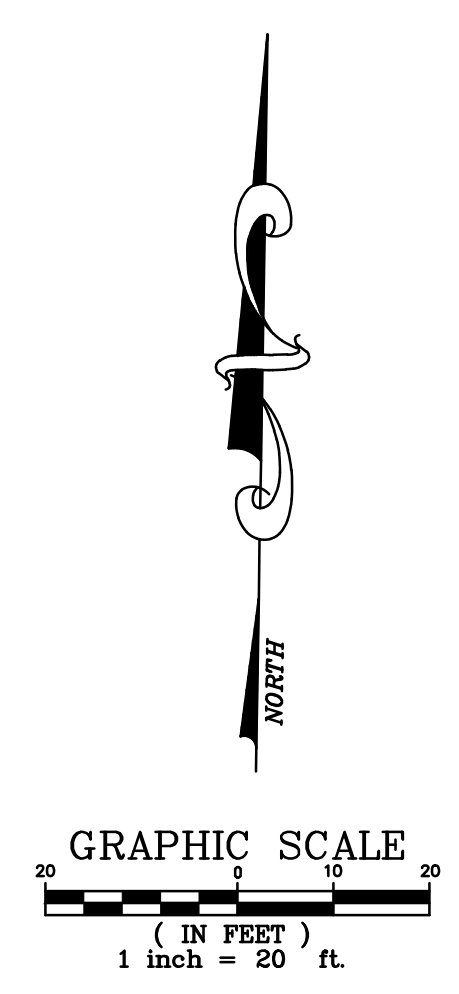
REVISION DATES	

WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
DRAWING No.			44-0008

- NOTE:
 1. CONTRACTOR RESPONSIBLE FOR ANY LANE CLOSURES OR ROAD CLOSURE PERMITS WITH DEKALB COUNTY.
 2. ALL 6", 8", 12", 16", AND 24" PIPE SHALL BE POLYWRAPPED.

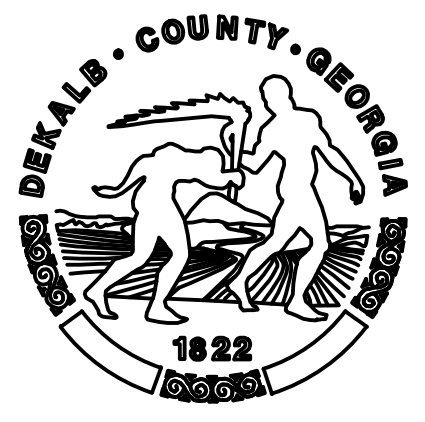


MATCH LINE STA. 106+00.00 DRAWING No. 44-0008



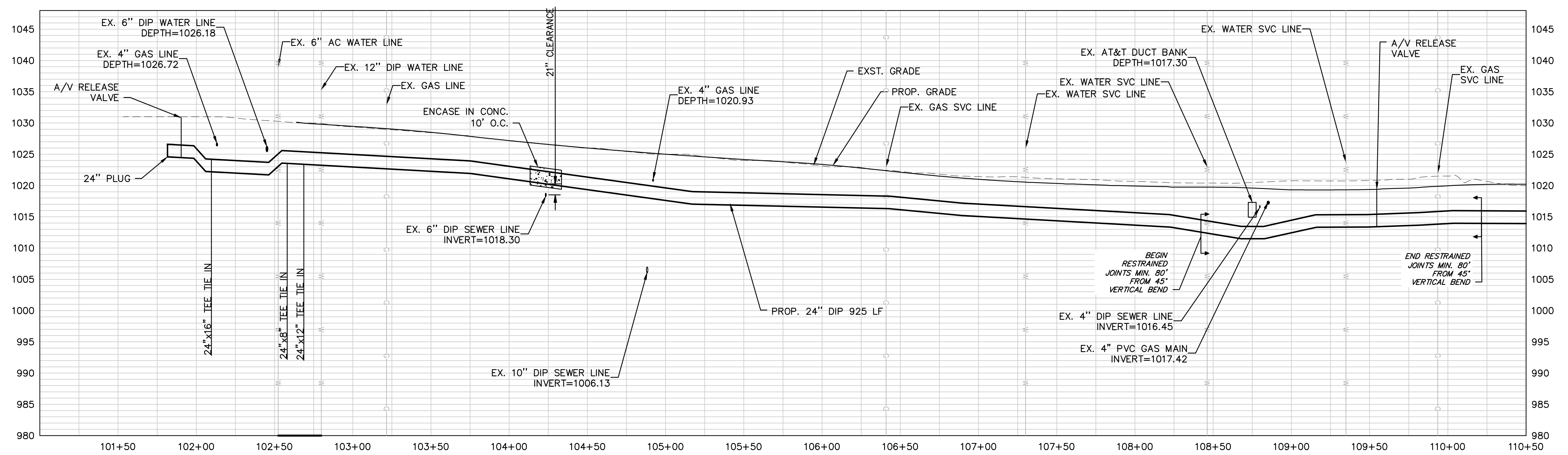
PROPERTY AND EXISTING R/W LINE	
REQUIRED R/W LINE	
CONSTRUCTION LIMITS	
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	
EASEMENT FOR CONSTR OF SLOPES	
EASEMENT FOR CONSTR OF DRIVES	

BEGIN LIMIT OF ACCESS.....BLA	
END LIMIT OF ACCESS.....ELA	
LIMIT OF ACCESS	
REQ'D R/W & LIMIT OF ACCESS	
ORANGE BARRIER FENCE	
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	

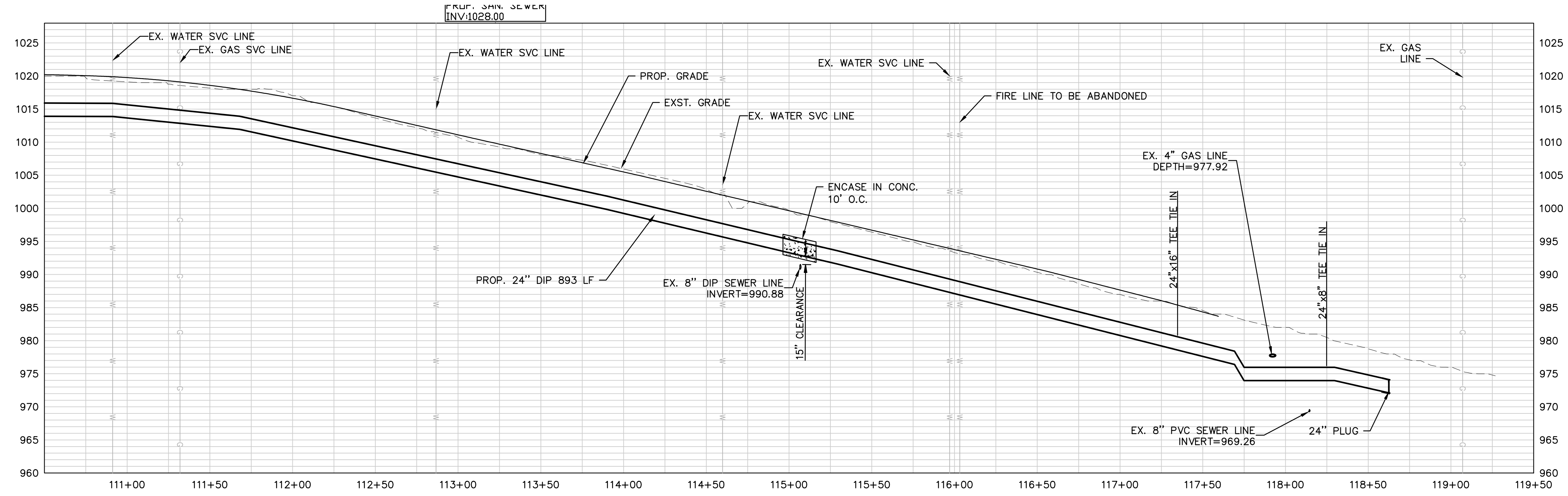


REVISION DATES		

WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
DRAWING No.			44-0009



1 24" PROFILE (STA 101+25 TO STA 110+50)
 SCALE: 1"=40'-HORZ.
 1"=10'-VERT.



2 24" PROFILE (STA 110+50 TO STA 119+50)
 SCALE: 1"=40'-HORZ.
 1"=10'-VERT.

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

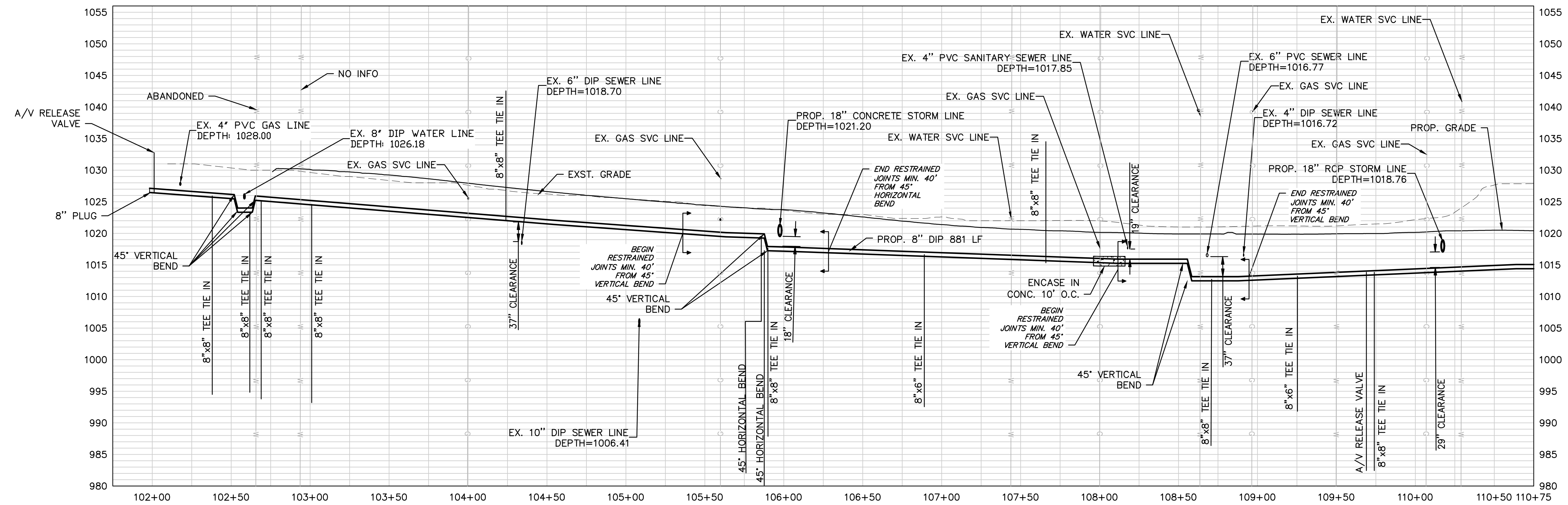
— — — — —
 — — — — —
 - - - - -
 [Hatched Box]
 [Hatched Box]
 [Hatched Box]

BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)

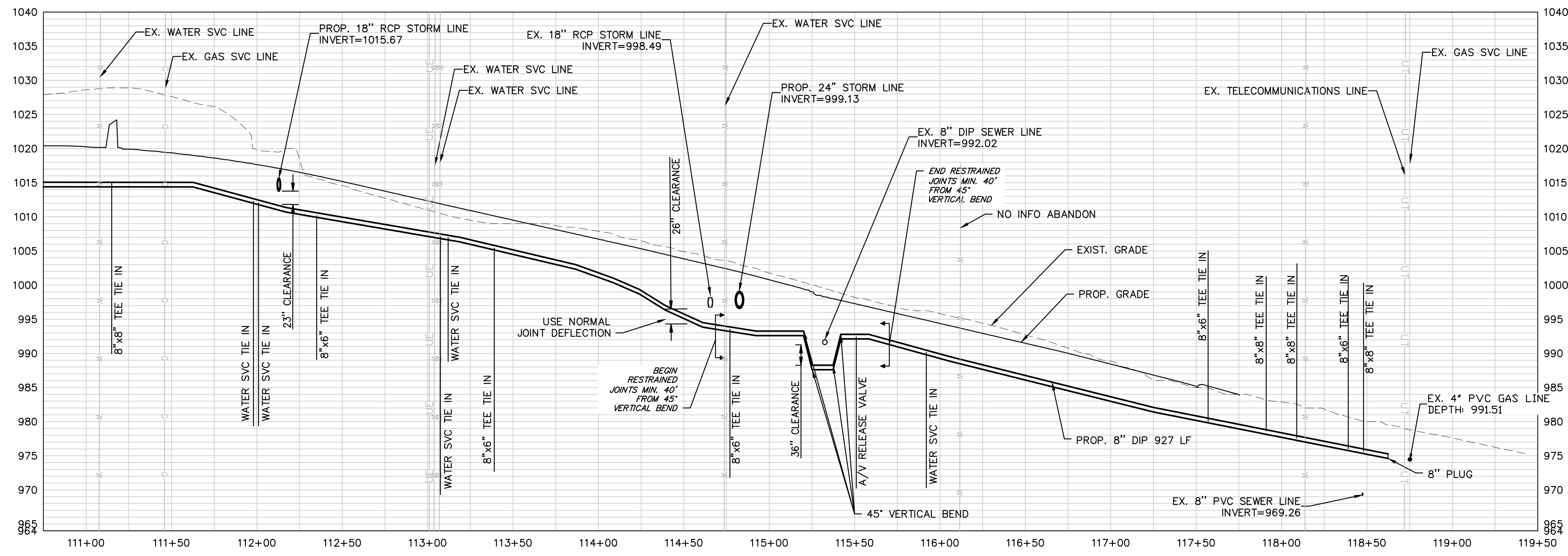


REVISION DATES	

WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0010	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



1 8" PROFILE (STA 101+75 TO STA 110+75)
SCALE: 1"=40'-HORZ.
1"=10'-VERT.



2 8" PROFILE (STA 110+75 TO STA 119+50)
SCALE: 1"=40'-HORZ.
1"=10'-VERT.

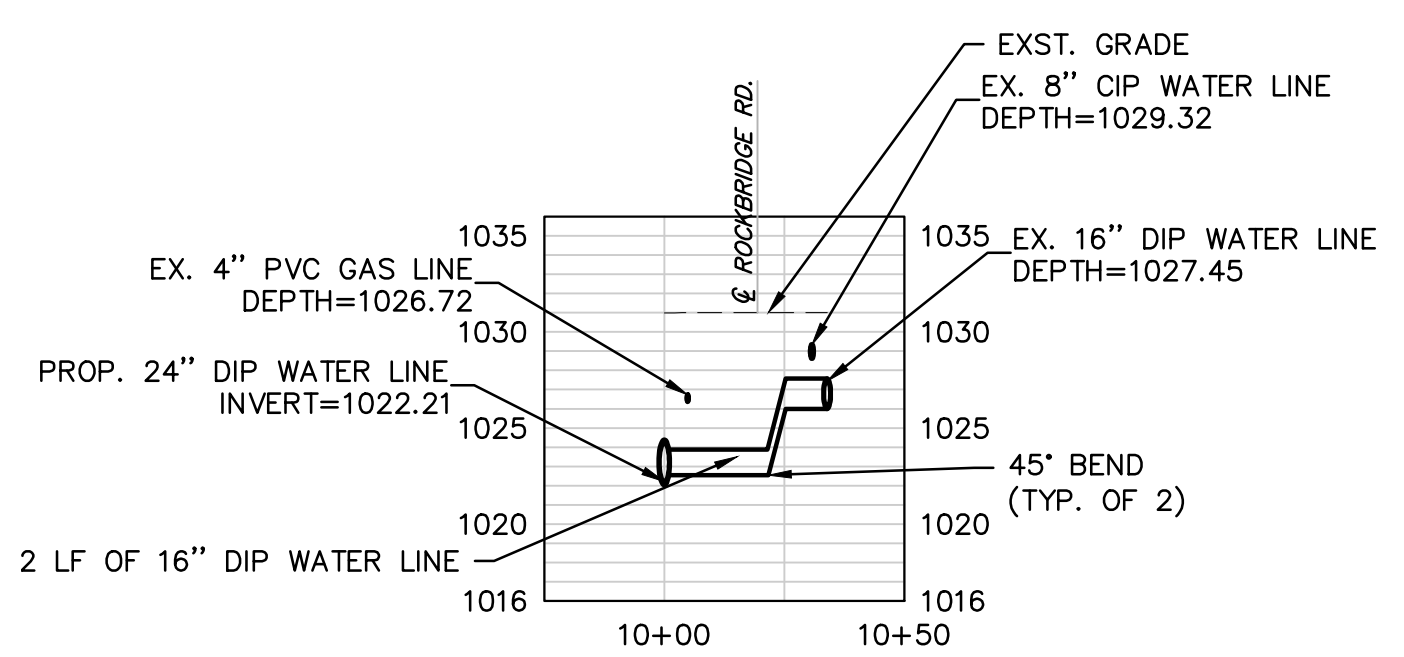
PROPERTY AND EXISTING RW LINE	— P —
REQUIRED RW LINE	— R —
CONSTRUCTION LIMITS	--- C ---
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	▨
EASEMENT FOR CONSTR OF SLOPES	▩
EASEMENT FOR CONSTR OF DRIVES	▤

BEGIN LIMIT OF ACCESS.....BLA	—•••••
END LIMIT OF ACCESS.....ELA	—•••••
LIMIT OF ACCESS	—•••••
REQ'D RW & LIMIT OF ACCESS	—•••••
ORANGE BARRIER FENCE	—•••••
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	—•••••

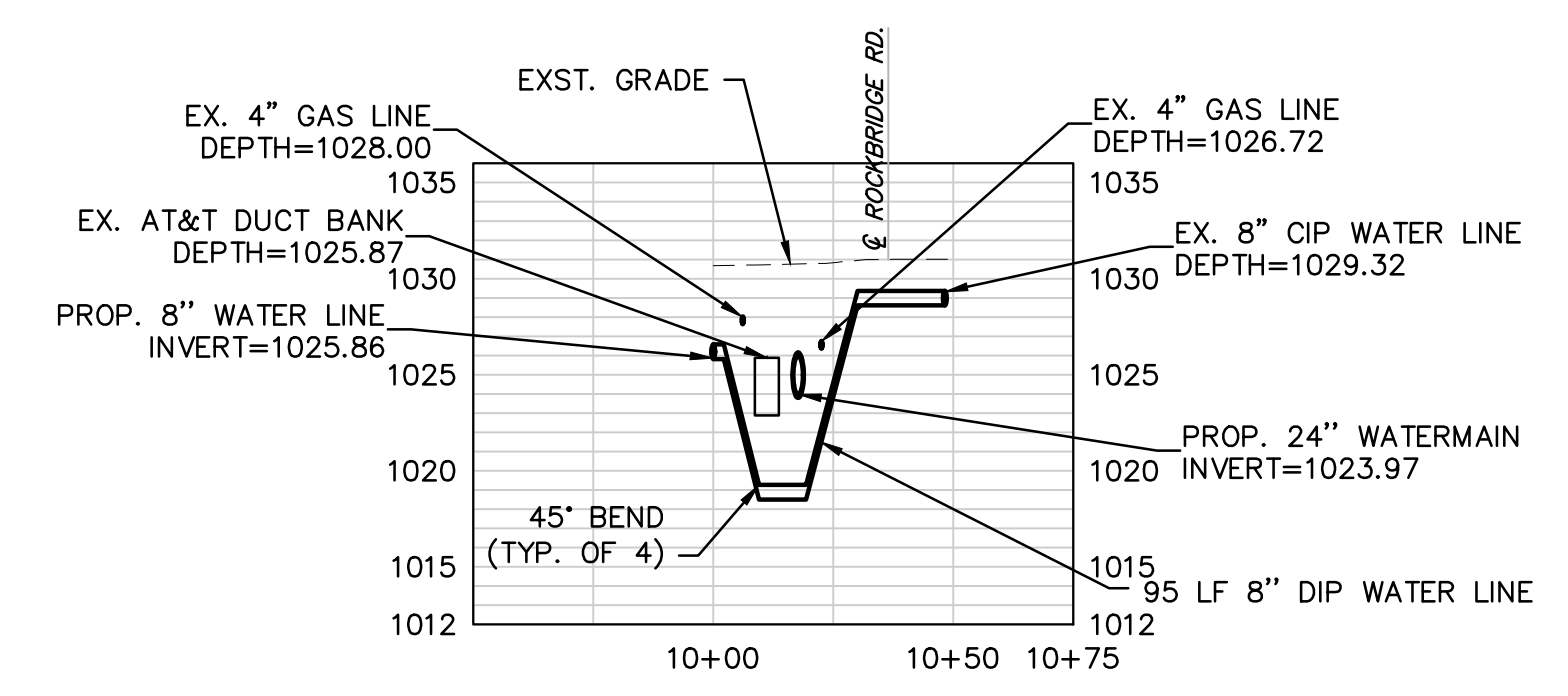


REVISION DATES	

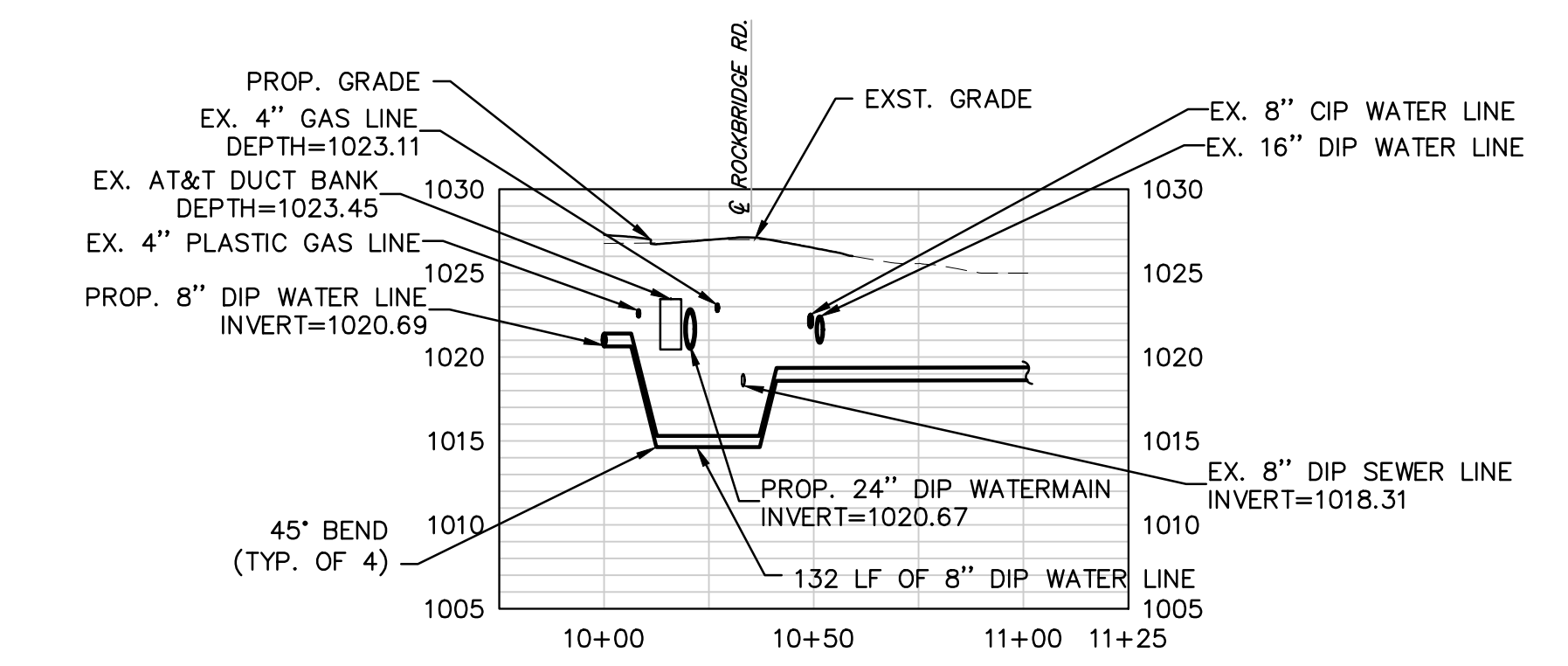
WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0011	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



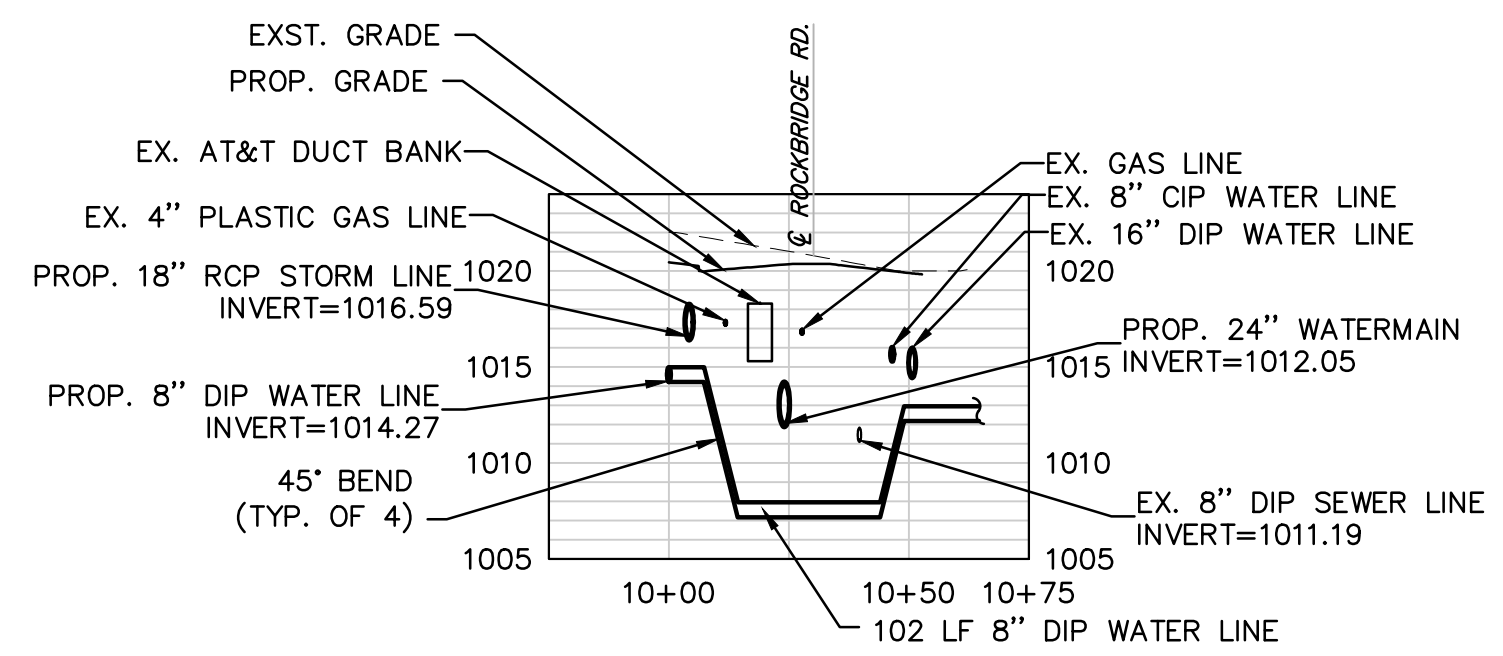
1 PROFILE-102+03
SCALE: 1"=40'-HORZ.
1"=10'-VERT.



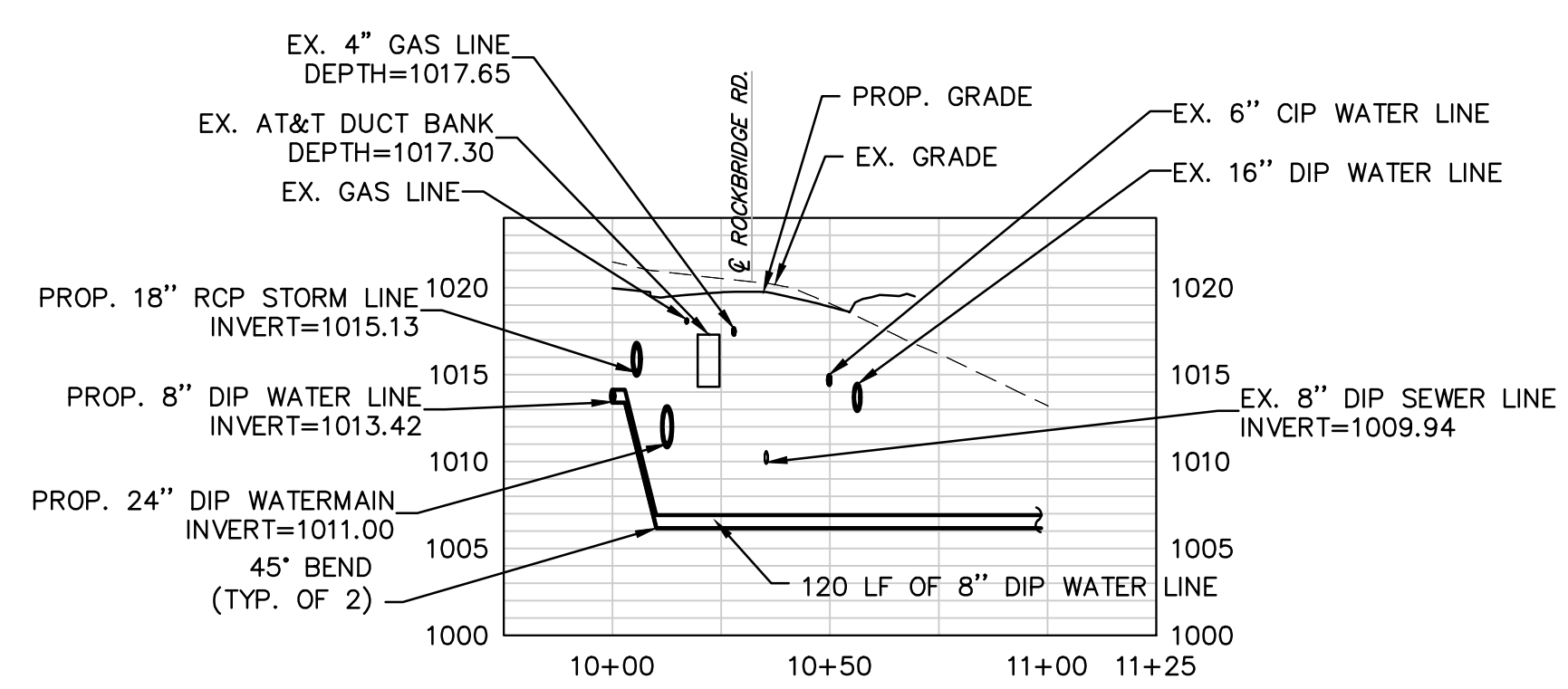
2 PROFILE-102+27
SCALE: 1"=40'-HORZ.
1"=10'-VERT.



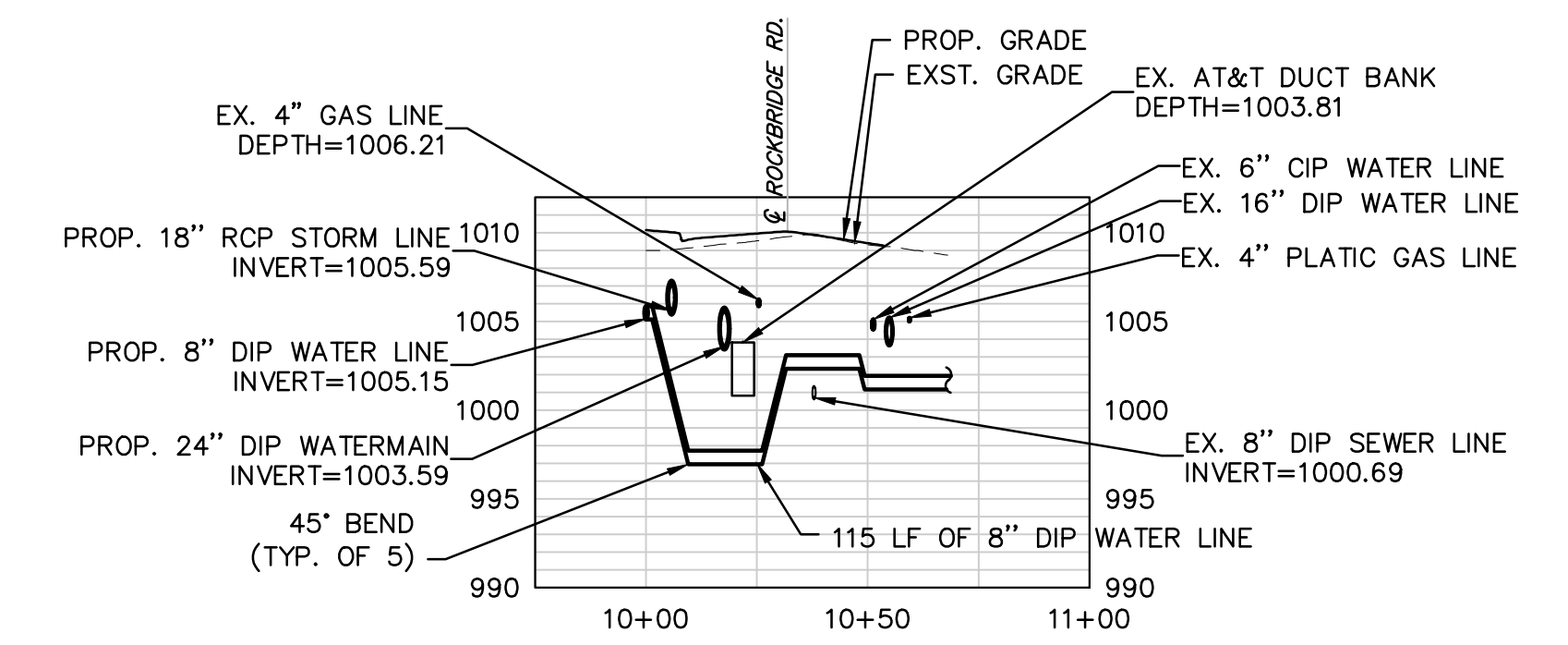
3 PROFILE-104+12
SCALE: 1"=40'-HORZ.
1"=10'-VERT.



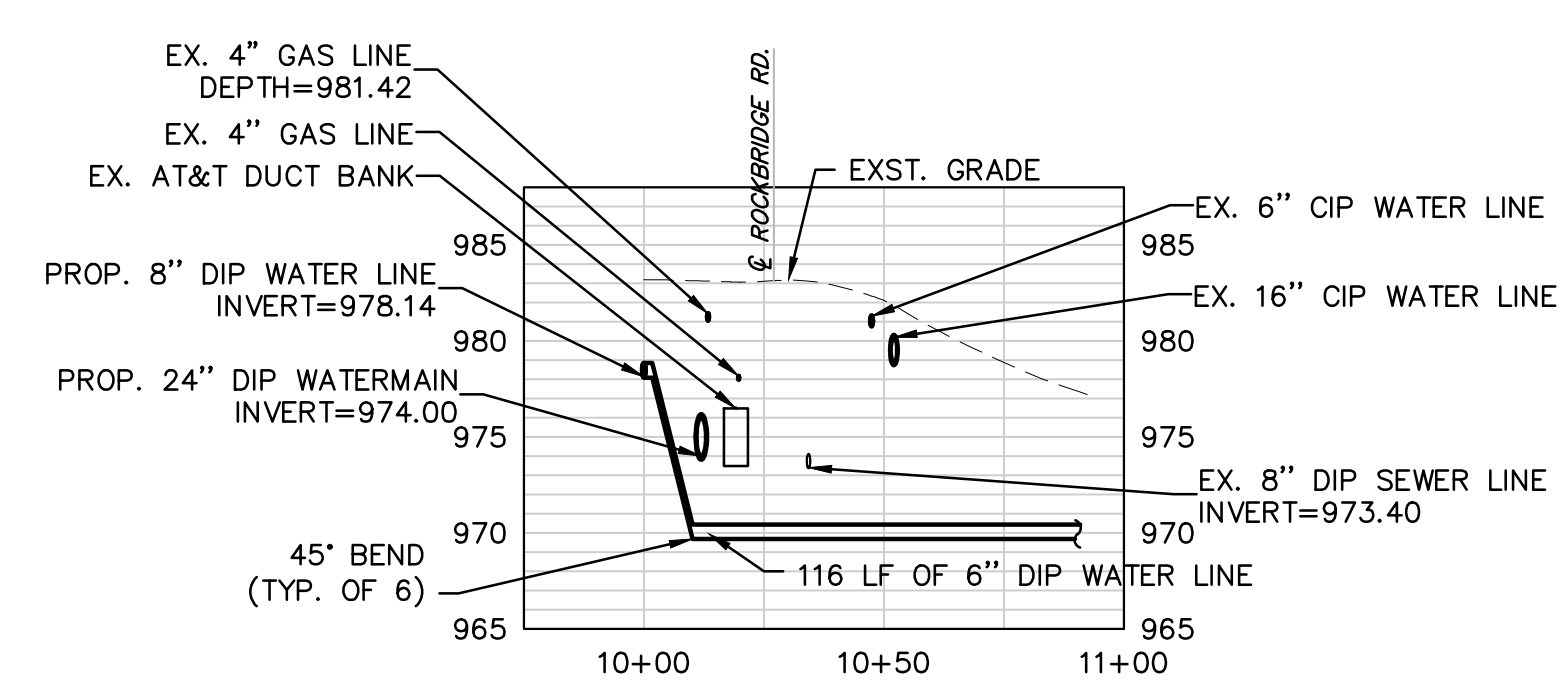
4 PROFILE-107+51
SCALE: 1"=40'-HORZ.
1"=10'-VERT.



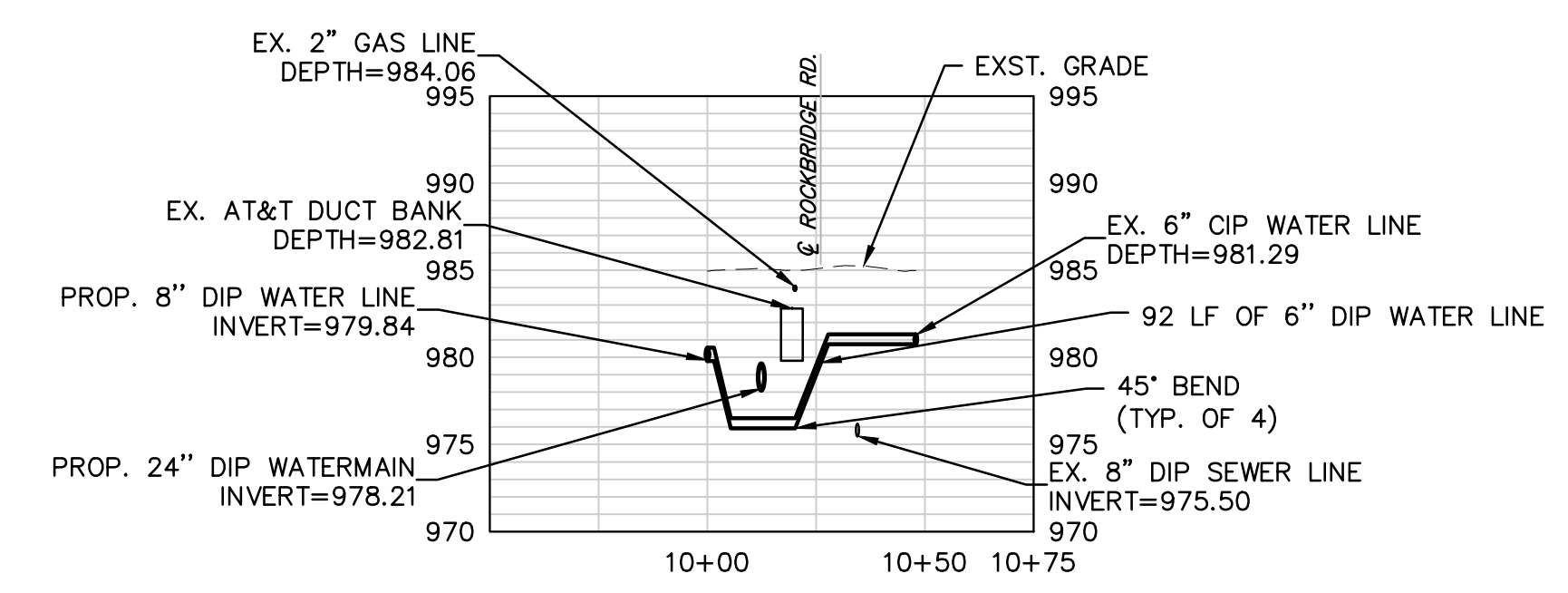
5 PROFILE-109+55
SCALE: 1"=40'-HORZ.
1"=10'-VERT.



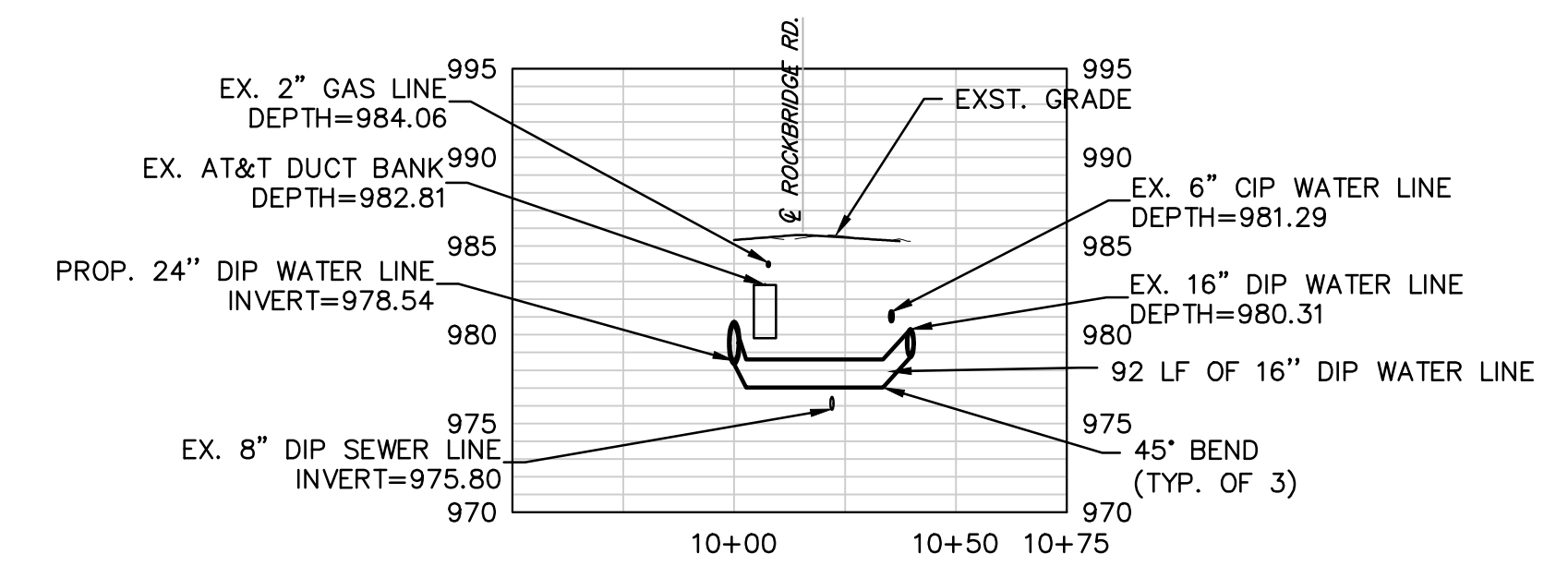
6 PROFILE-113+16
SCALE: 1"=40'-HORZ.
1"=10'-VERT.



7 PROFILE-117+68
SCALE: 1"=40'-HORZ.
1"=10'-VERT.



8 PROFILE-117+28
SCALE: 1"=40'-HORZ.
1"=10'-VERT.

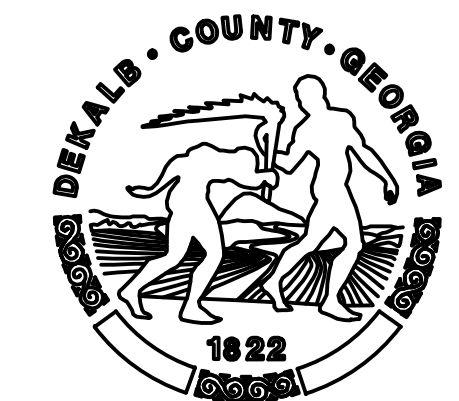


9 PROFILE-117+34
SCALE: 1"=40'-HORZ.
1"=10'-VERT.

NOTE: THESE PROFILES TO BE ADJUSTED ONCE VACUUM EXTRACTION LOCATION WORK IS COMPLETE.

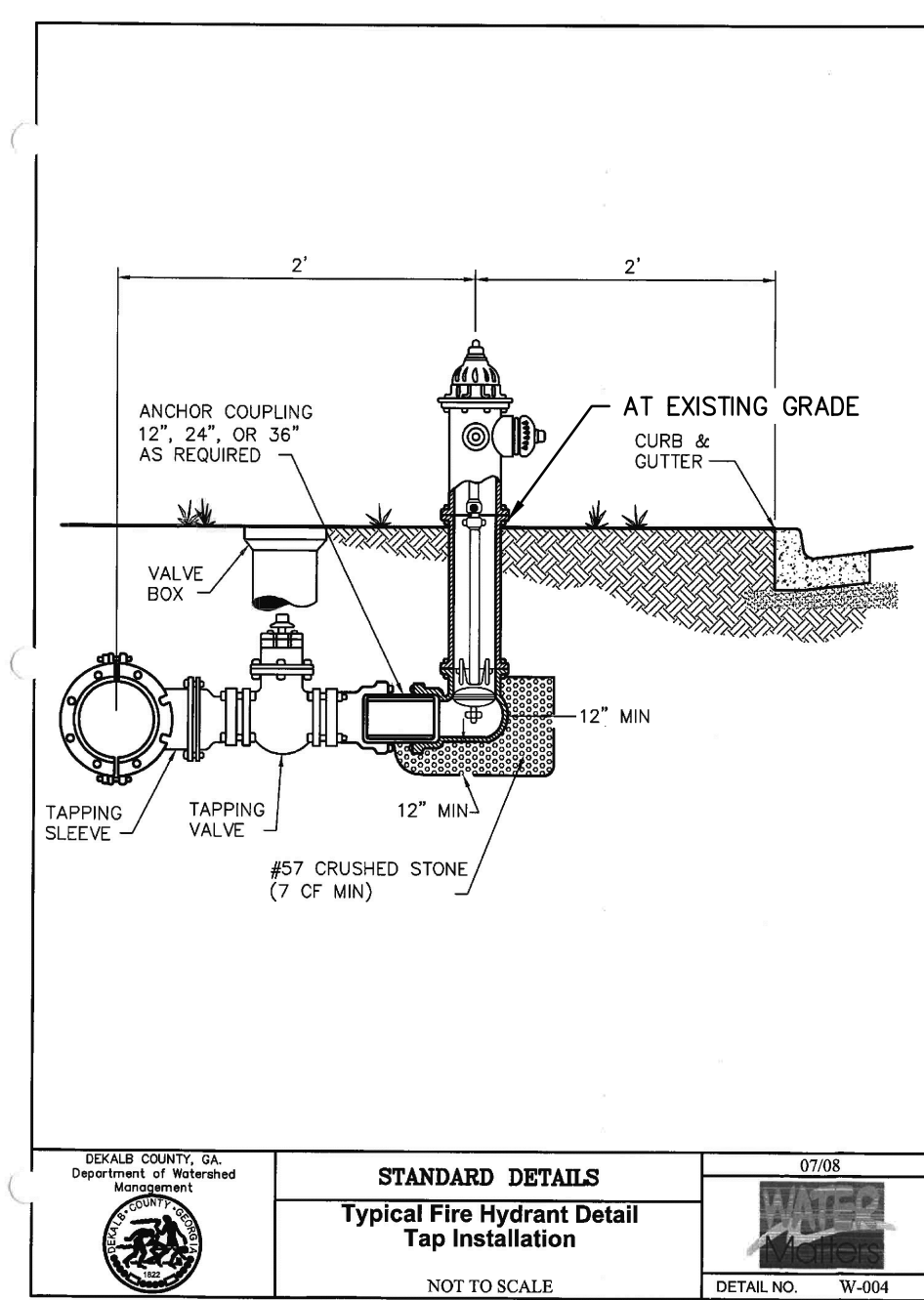
PROPERTY AND EXISTING R/W LINE	— ± —
REQUIRED R/W LINE	— — — — —
CONSTRUCTION LIMITS	— C — — — — —
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF DRIVES	[Hatched Box]

BEGIN LIMIT OF ACCESS.....BLA	— — — — —
END LIMIT OF ACCESS.....ELA	— — — — —
LIMIT OF ACCESS	— — — — —
REQ'D R/W & LIMIT OF ACCESS	[Hatched Box]
ORANGE BARRIER FENCE	[Dotted Line]
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	[Dotted Line]



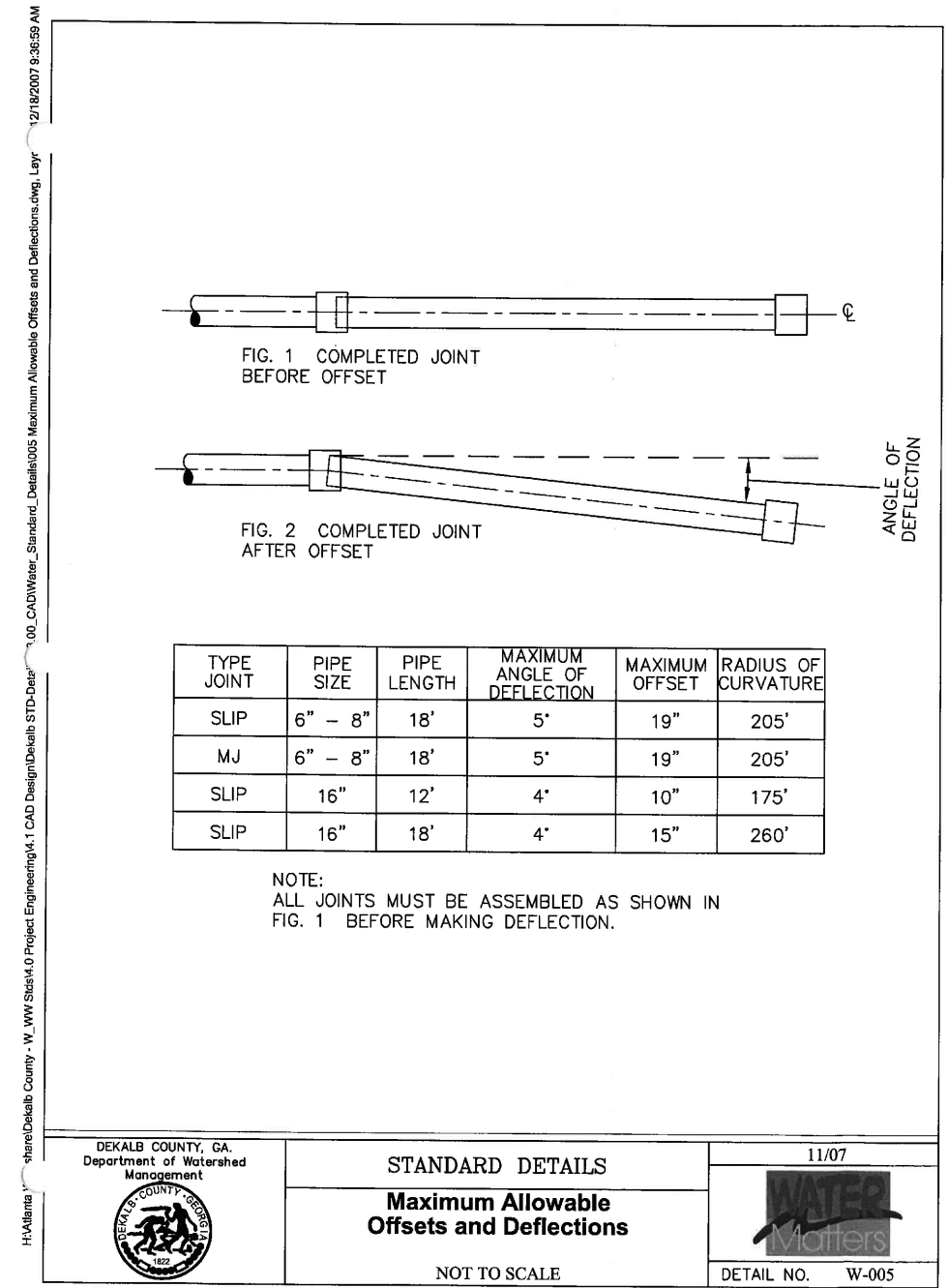
REVISION DATES	

WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0012	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

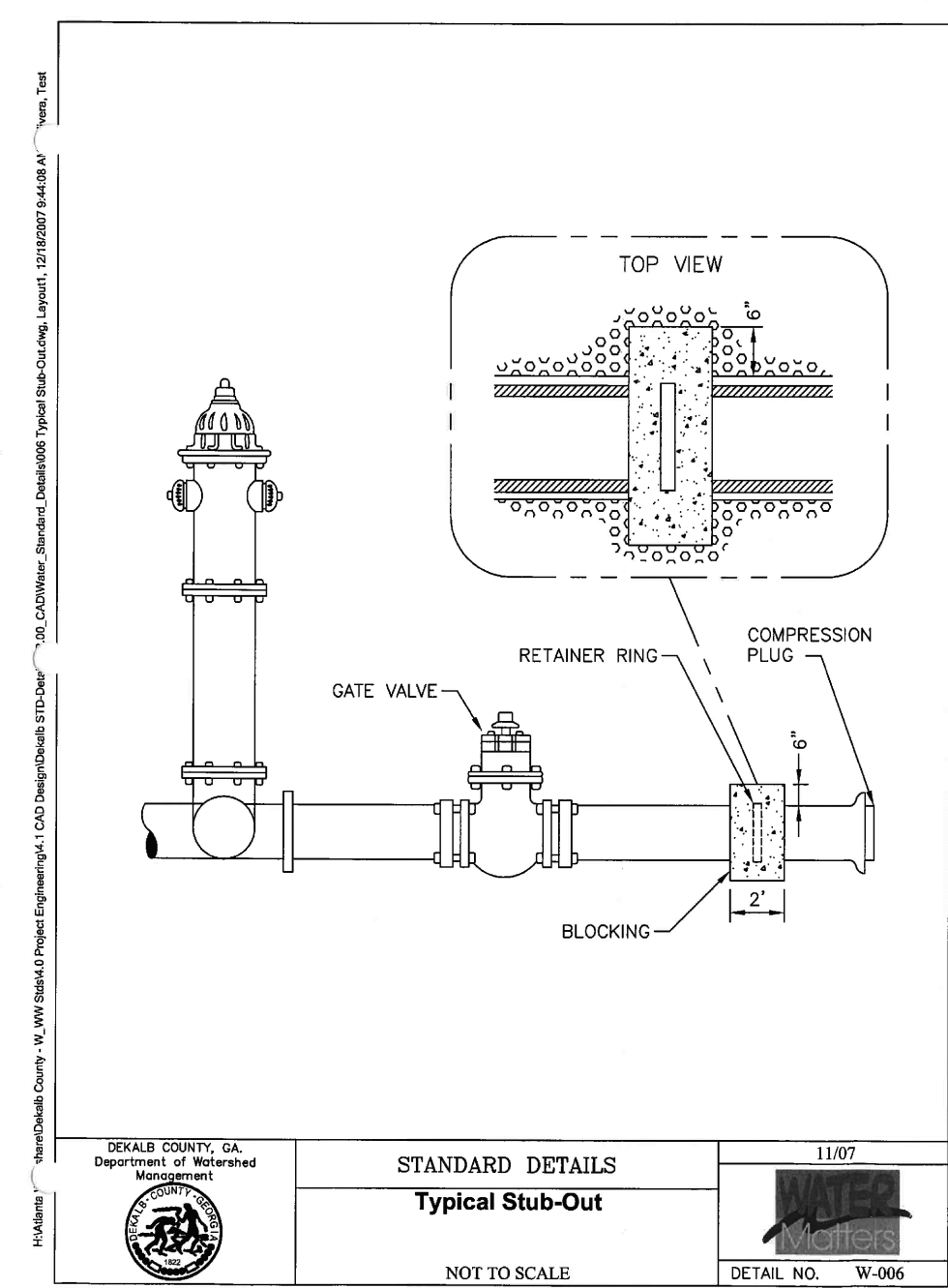


1 FIRE HYDRANT ASSEMBLY (SIMILAR)
44-0013 NOT TO SCALE

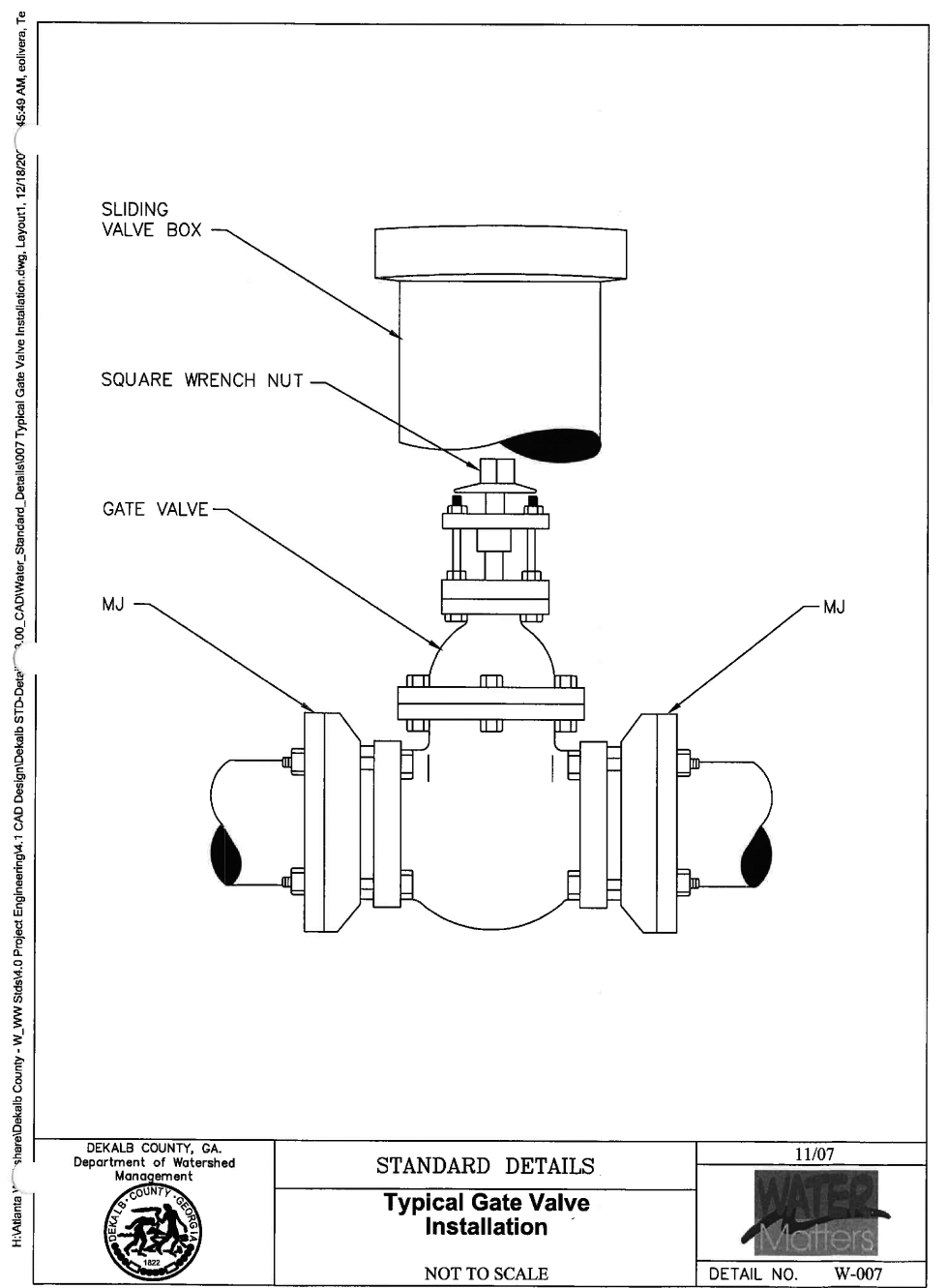
* MOST FH LOCATIONS HAVE WATERLINE IN PAVEMENT AREA.



2 ALLOWABLE DEFLECTION
44-0013 NOT TO SCALE



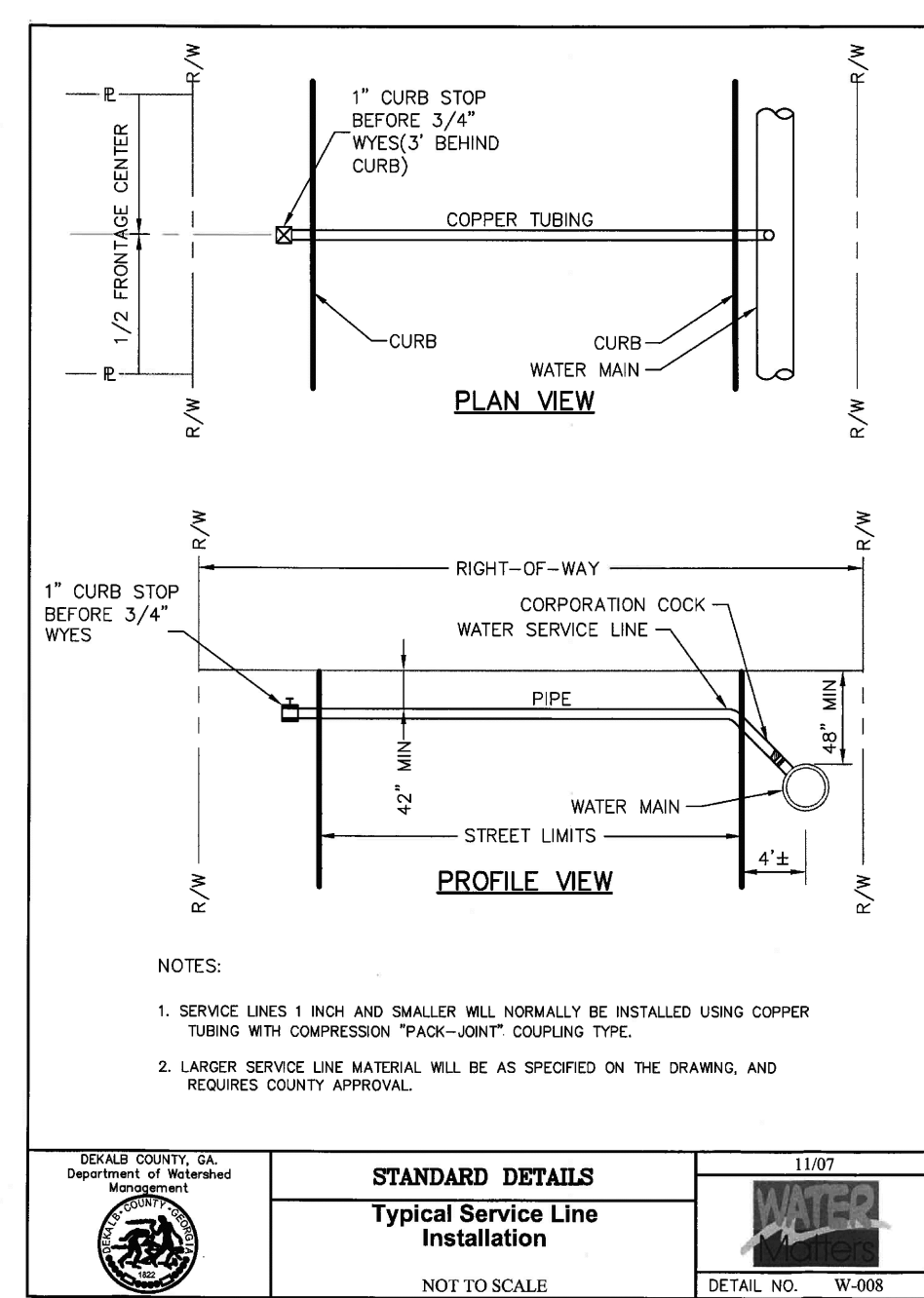
3 STUBOUT
44-0013 NOT TO SCALE



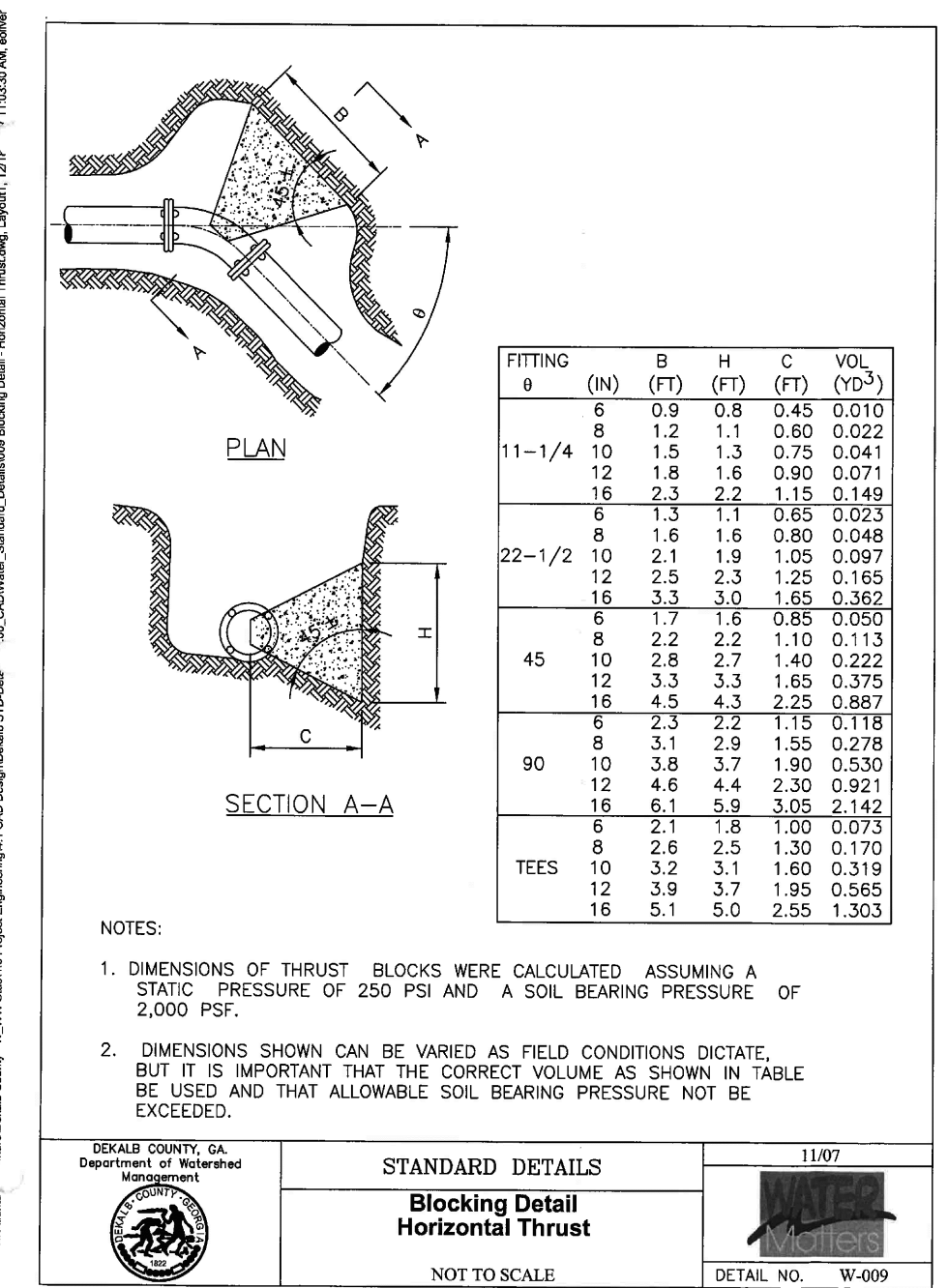
4 GATE VALVE INSTALLATION
44-0013 NOT TO SCALE

DIMENSIONS FOR CONCRETE BLOCKING FOR BENDS - HORIZONTAL					DIMENSIONS FOR CONCRETE BLOCKING FOR BENDS - VERTICAL			
BEND	SIZE	H (FT.)	B (FT.)	C = B/2 (FT.)	BEND	SIZE	H (FT.)	B (FT.)
11 1/4"	30"	6	8.7	4.4	11 1/4"	30"	2	2.60
22 1/2"	30"	8	12.9	6.5	22 1/2"	30"	5	4.10
45"	30"	11	18.5	9.3	45"	30"	7	11.5

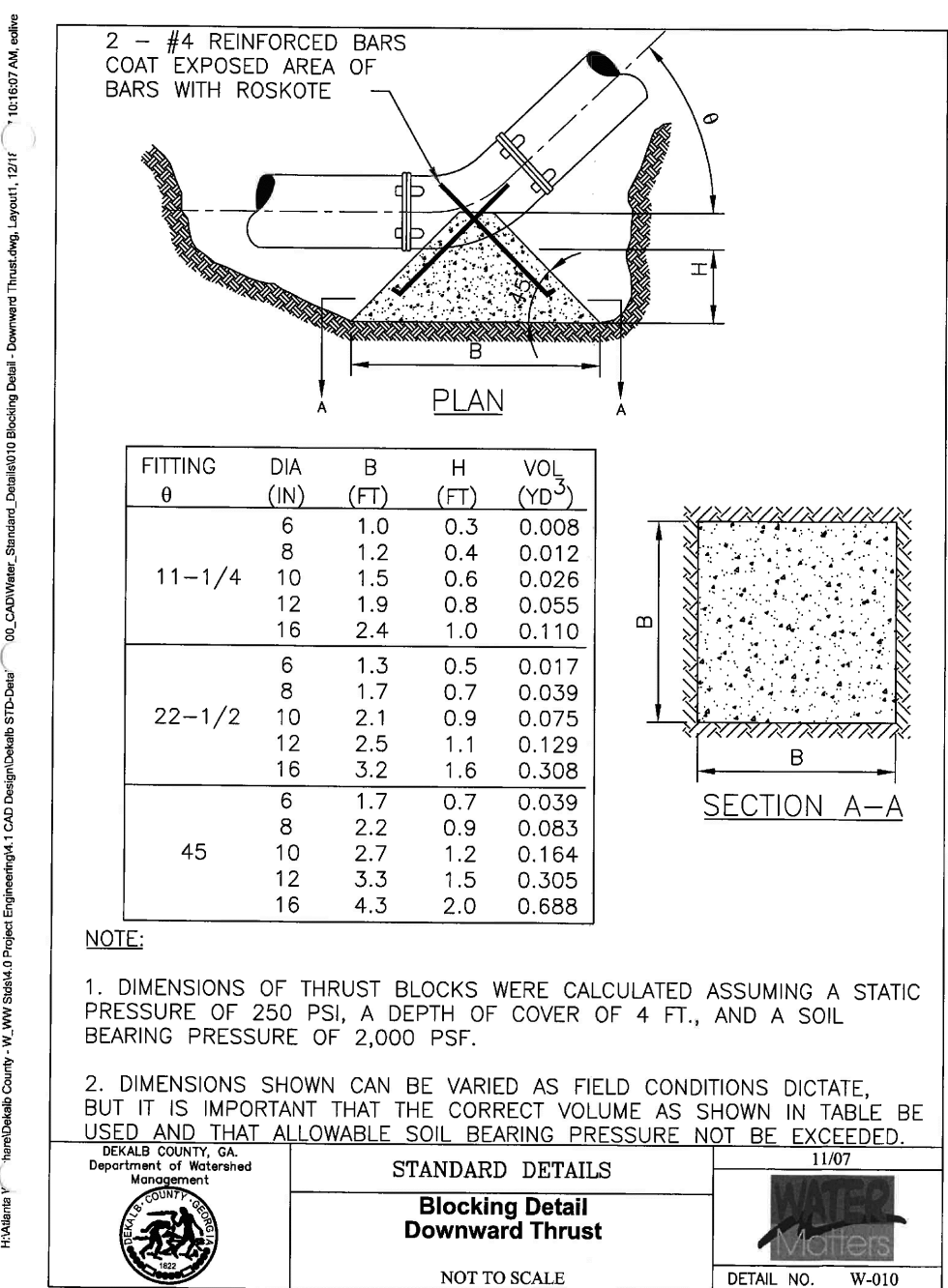
NOTE: SEE DETAIL 6.7, & 6/C-404 FOR DIMENSION DETAILS.



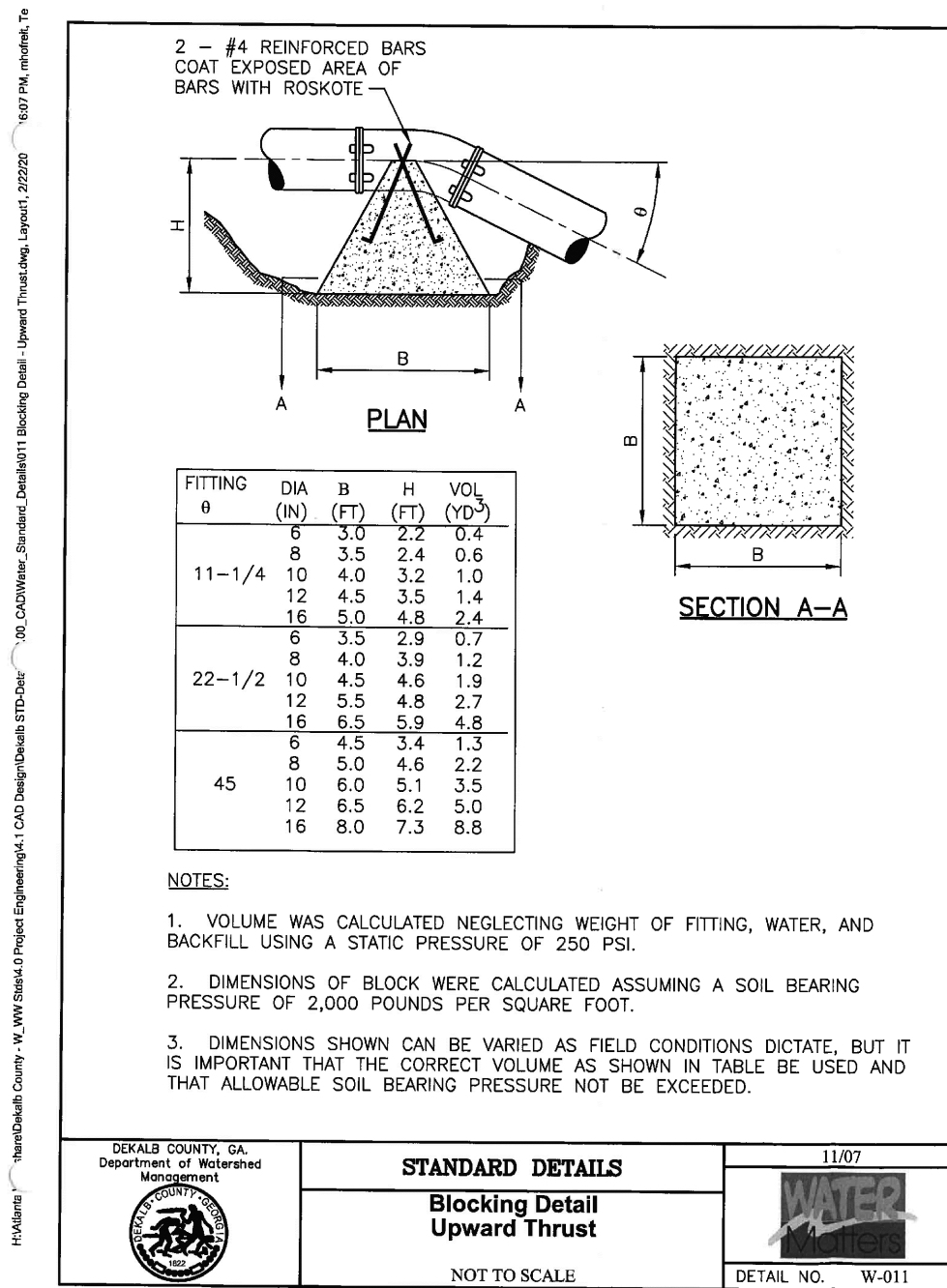
5 SERVICE LINE INSTALLATION
44-0013 NOT TO SCALE



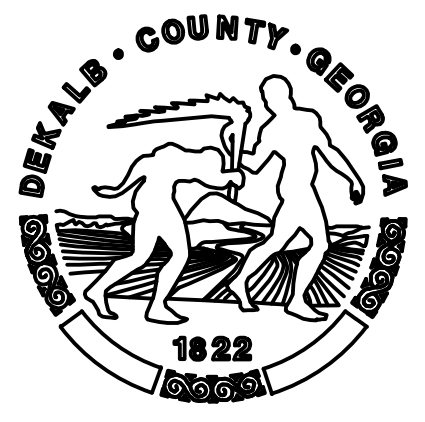
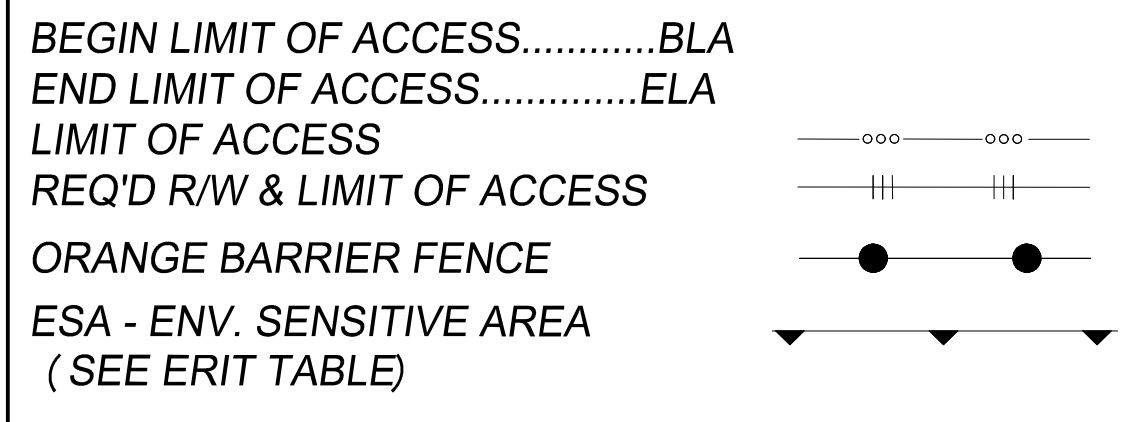
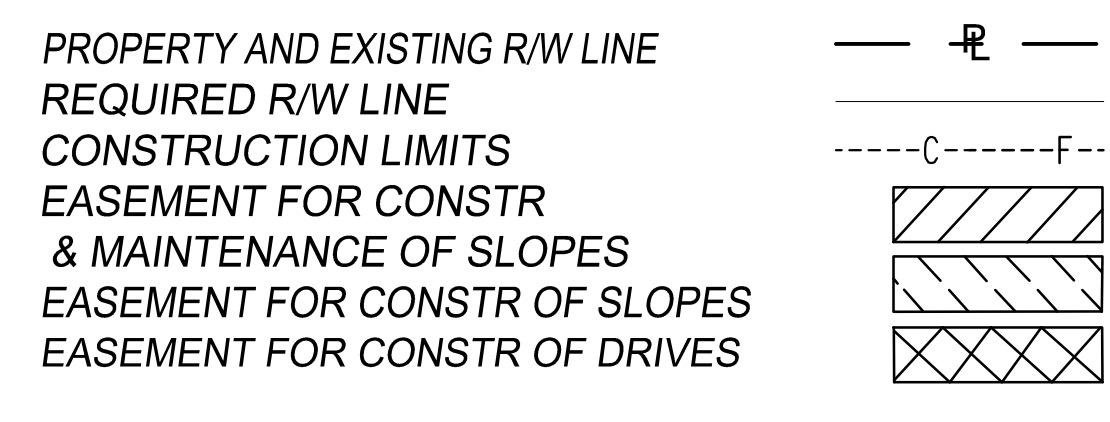
6 HORIZONTAL THRUST BLOCK
44-0013 NOT TO SCALE



7 DOWNWARD THRUST BLOCK
44-0013 NOT TO SCALE

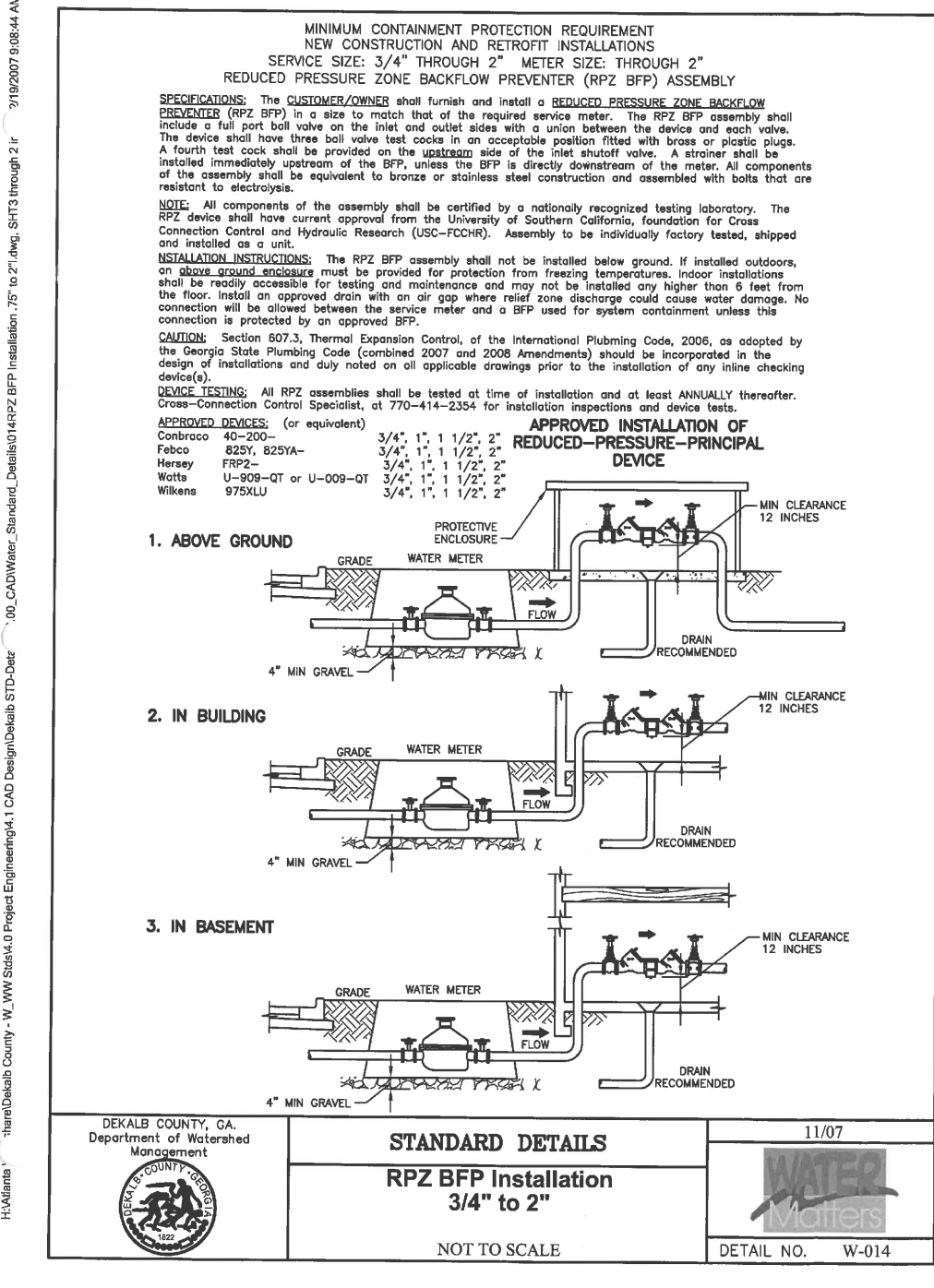


8 UPWARD THRUST BLOCK
44-0013 NOT TO SCALE

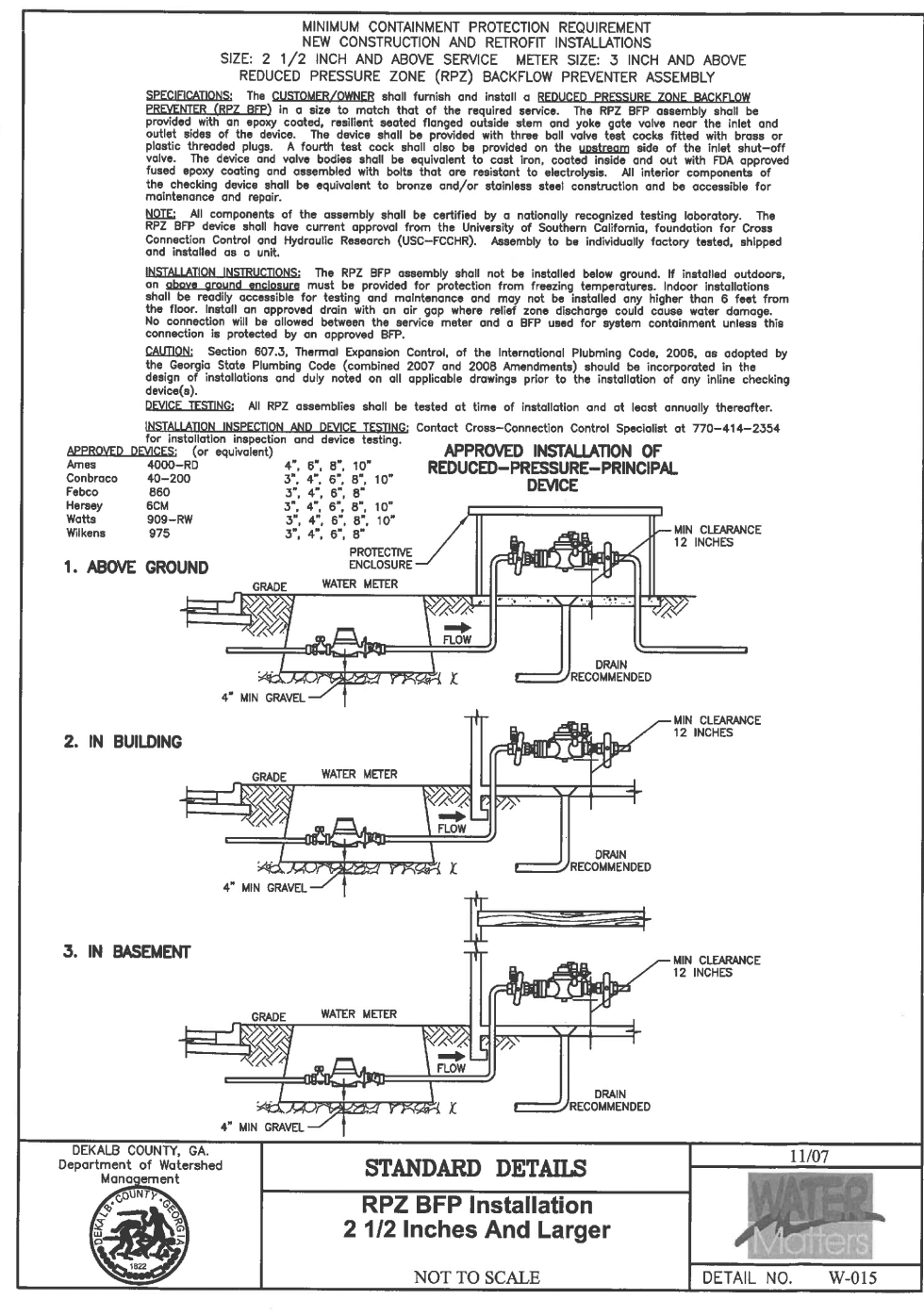


REVISION DATES	

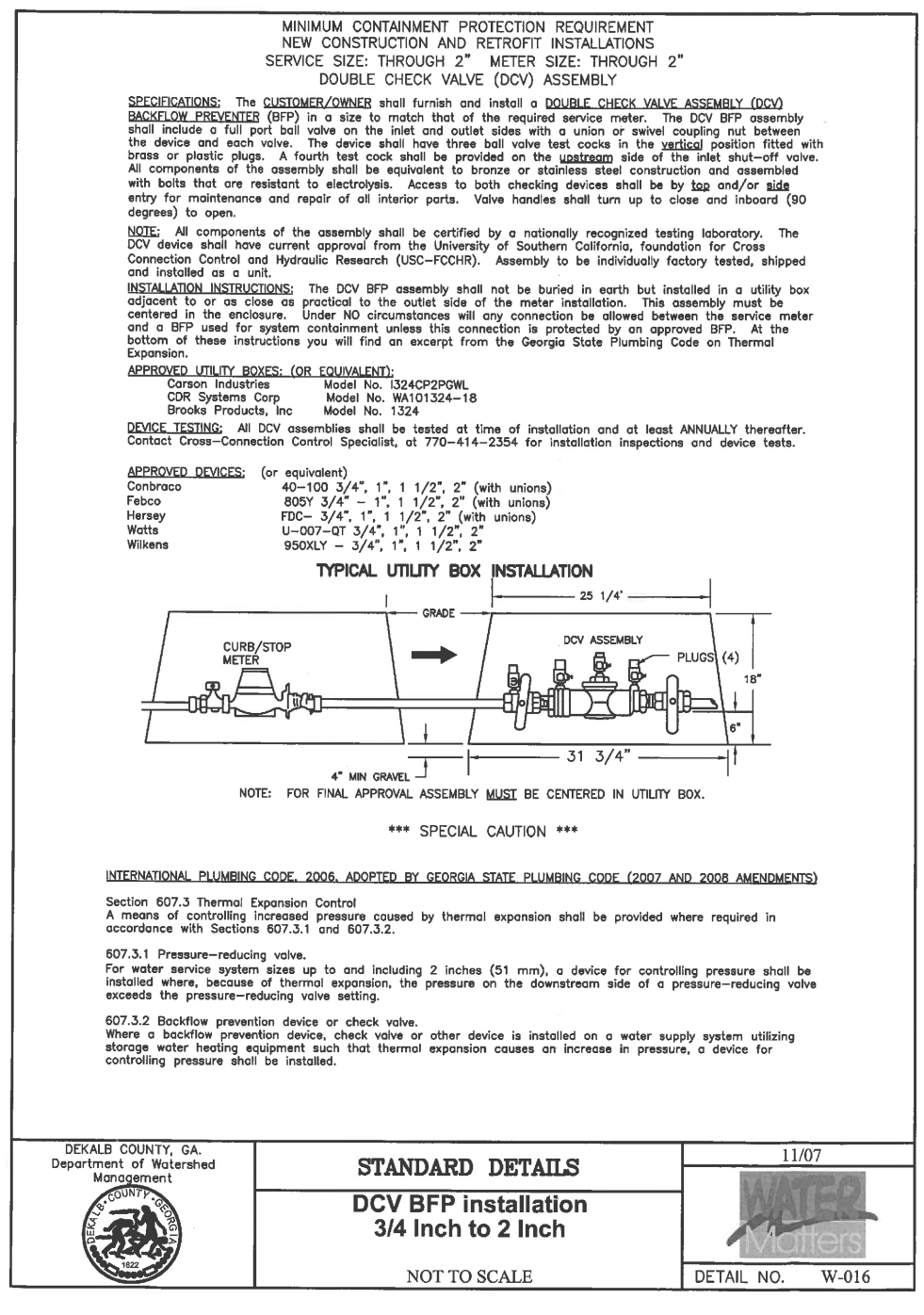
WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0013	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



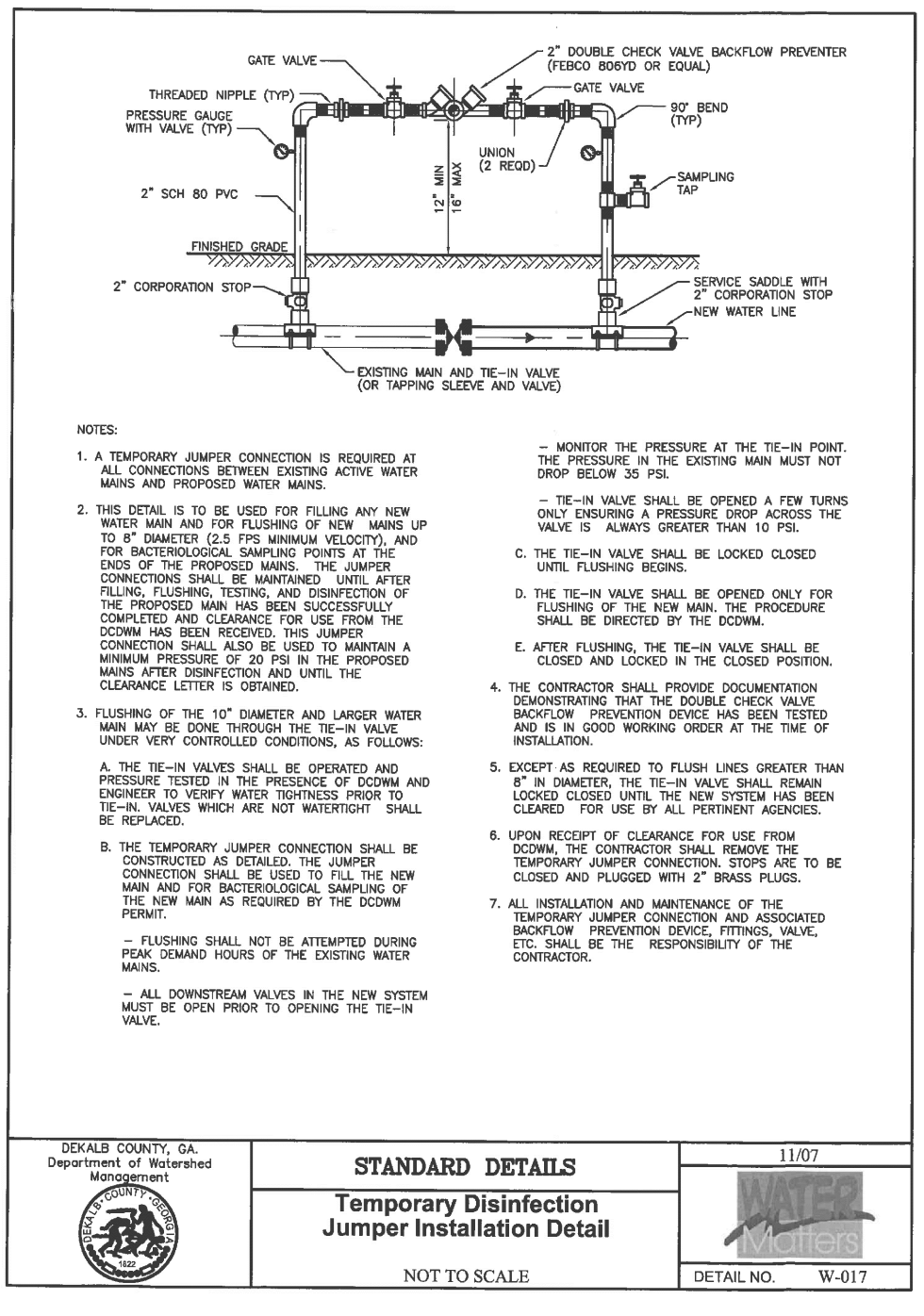
1 RPZ BFP INSTALLATION 3/4" TO 2" NOT TO SCALE 44-0014



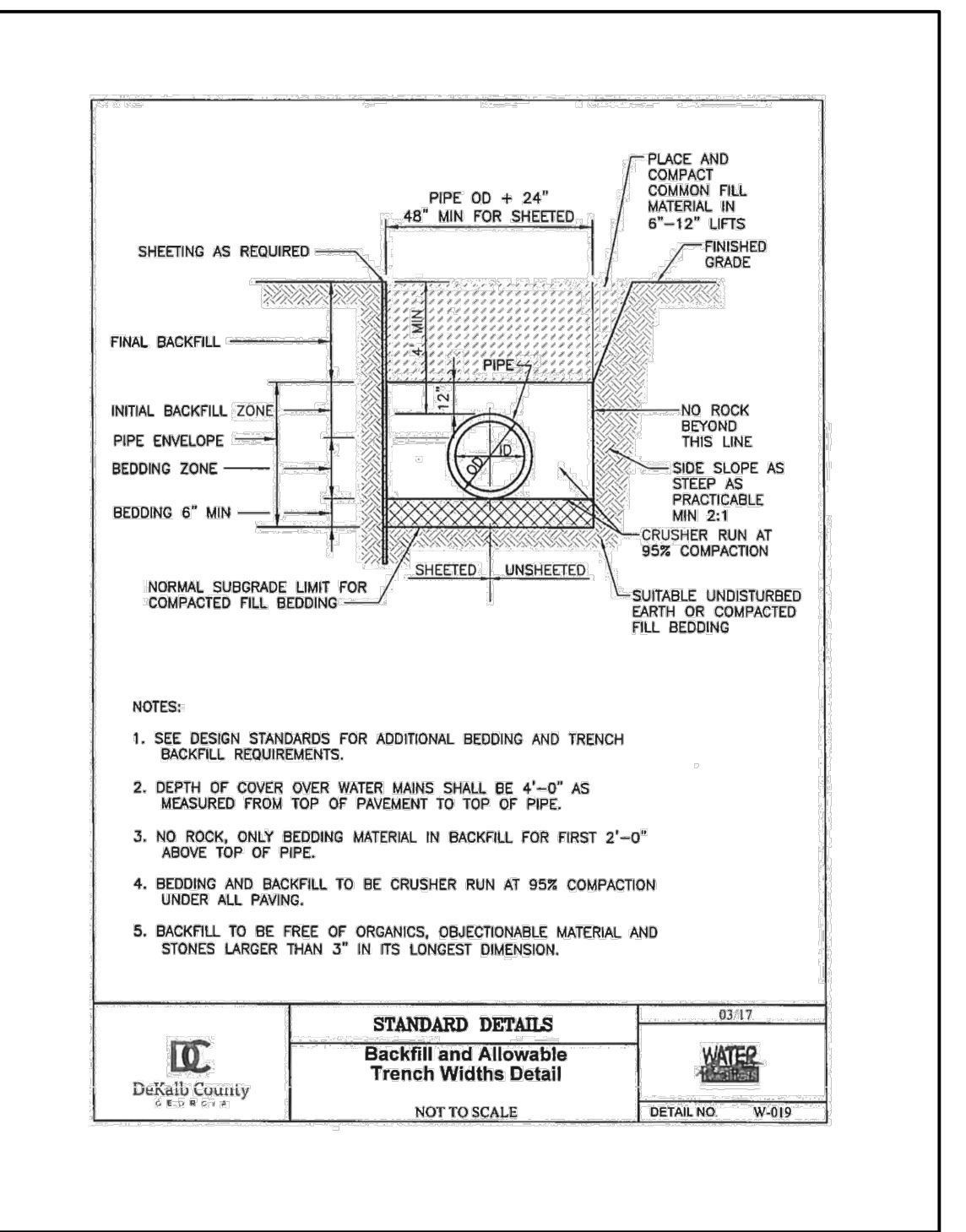
2 RPZ BFP INSTALLATION 2 1/2" AND LARGER NOT TO SCALE 44-0014



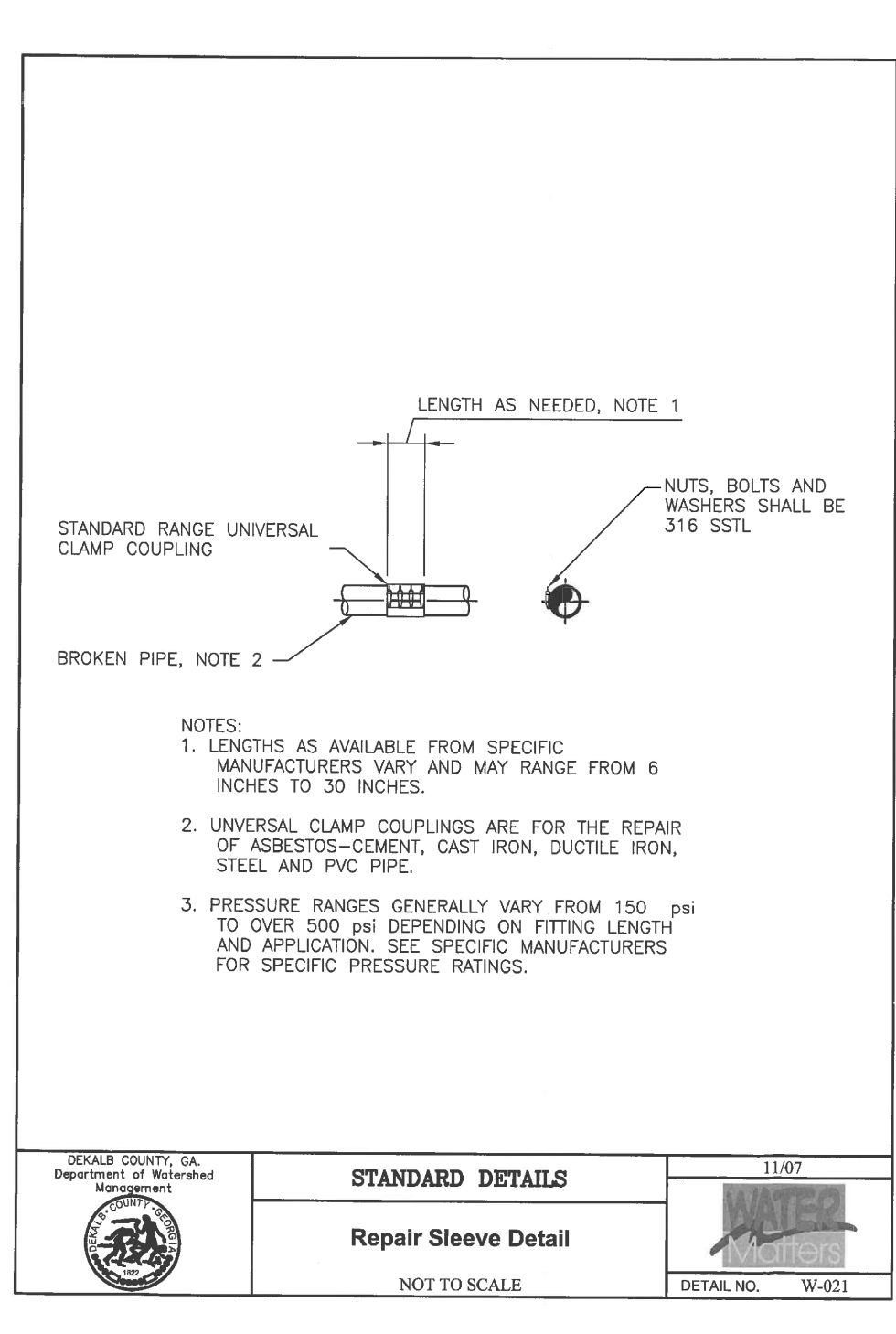
3 DCV BFP INSTALLATION 3/4" TO 2" NOT TO SCALE 44-0014



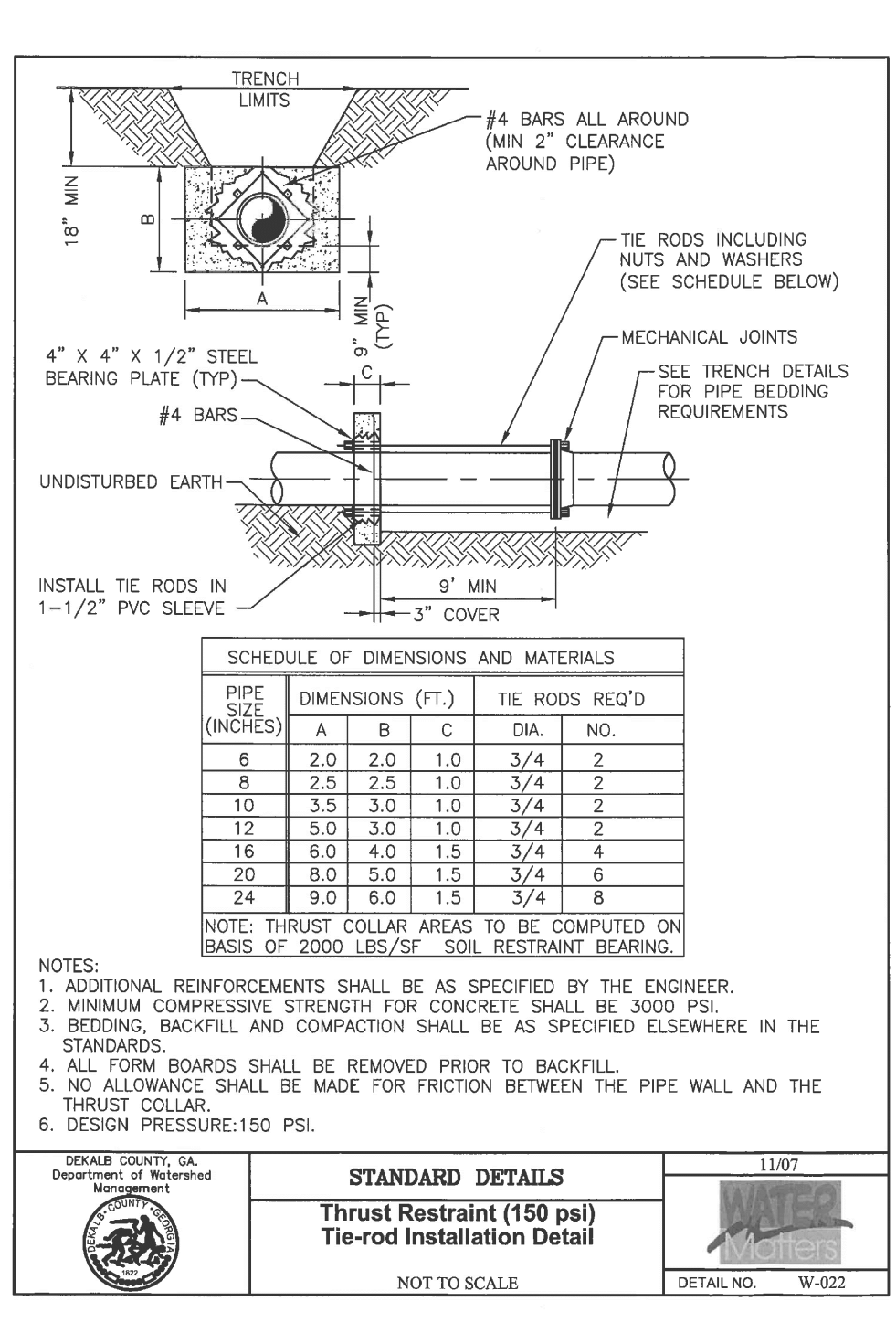
4 TEMP. DISINFECTION JUMPER INSTALLATION NOT TO SCALE 44-0014



5 BACKFILL AND ALLOWABLE TRENCH WIDTHS NOT TO SCALE 44-0014



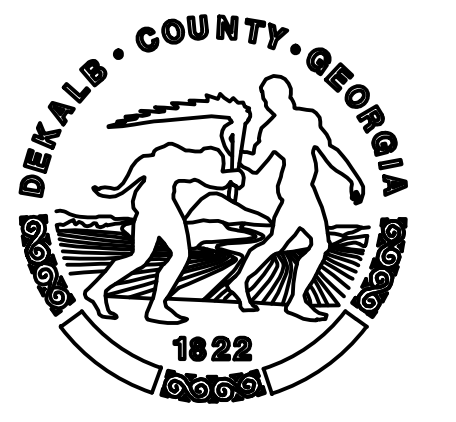
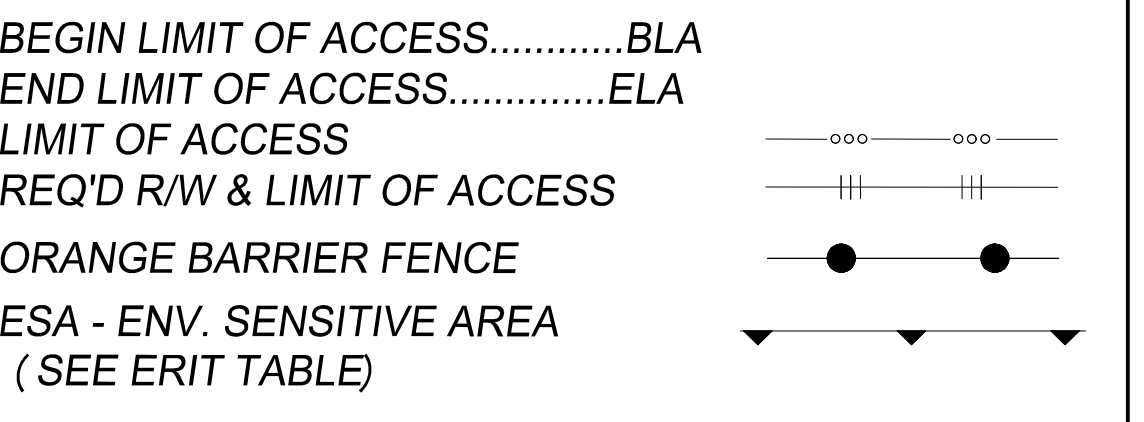
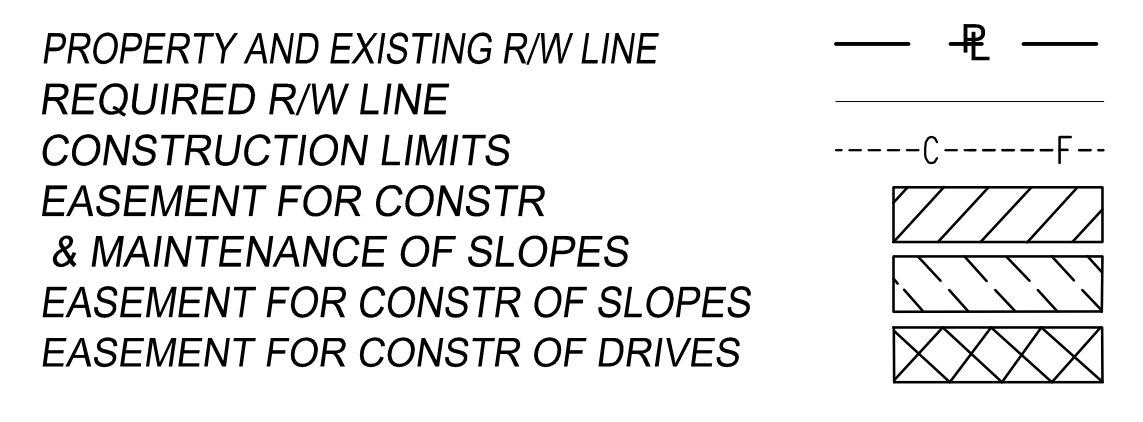
6 REPAIR SLEEVE NOT TO SCALE 44-0014



7 THRUST RESTRAINT NOT TO SCALE 44-0014

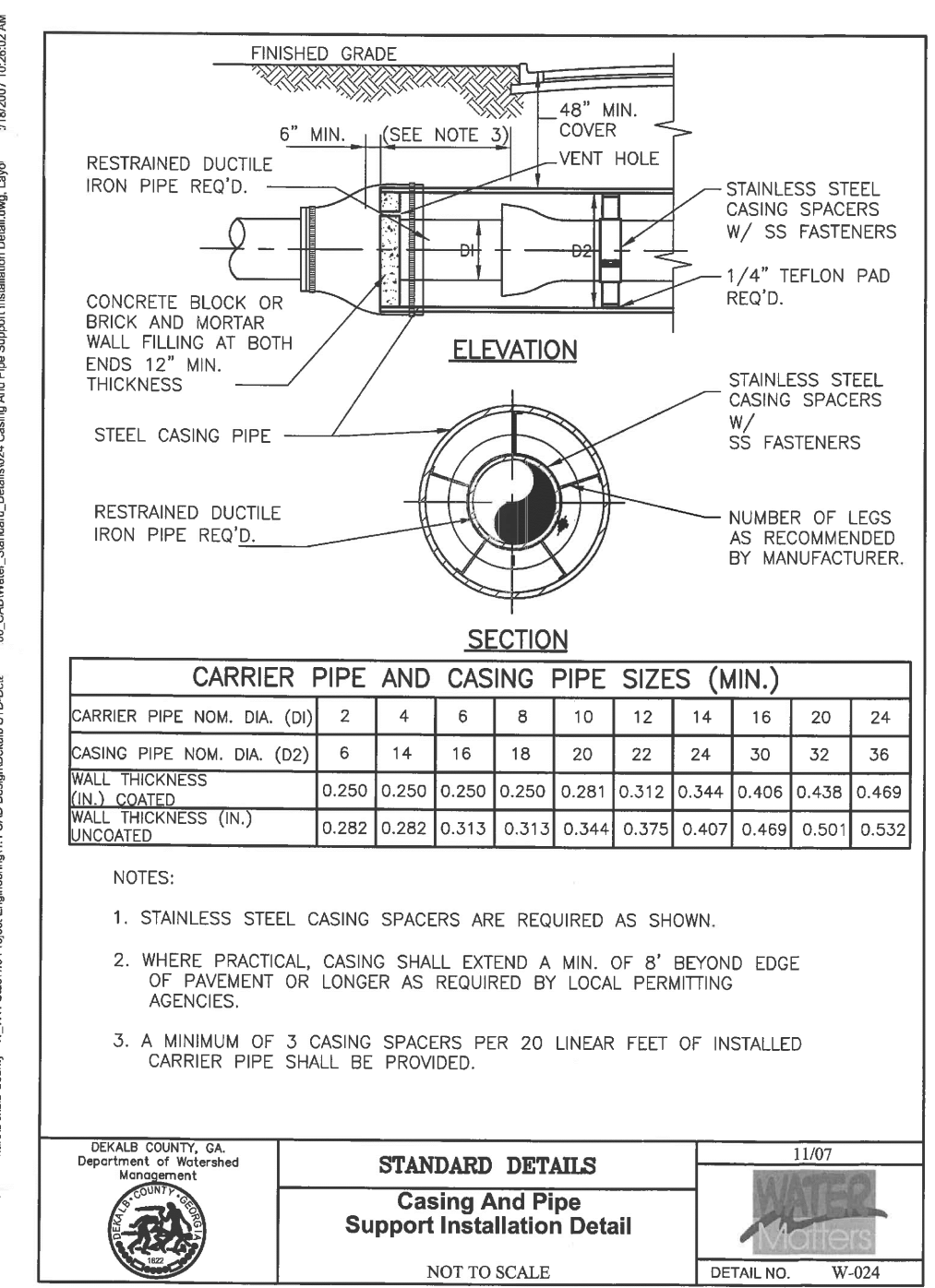
RESTRAINED JOINTS REQUIREMENTS	
FITTING	LENGTH OF PIPE TO BE RESTRAINED (FT)
11 1/4"	20
22 1/2"	40
45"	80

8 RESTRAINED JOINTS REQUIREMENTS NOT TO SCALE 44-0014

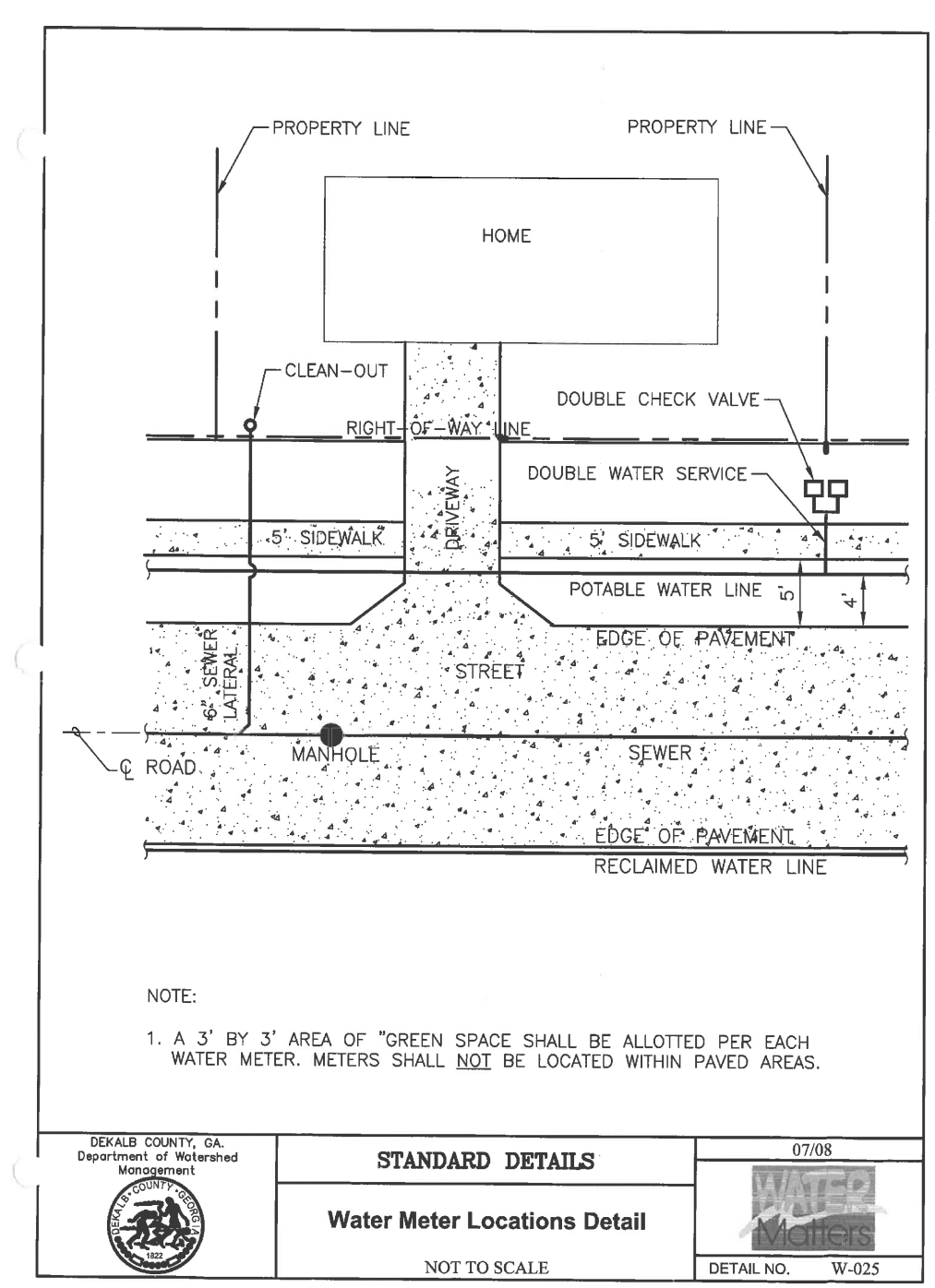


REVISION DATES	

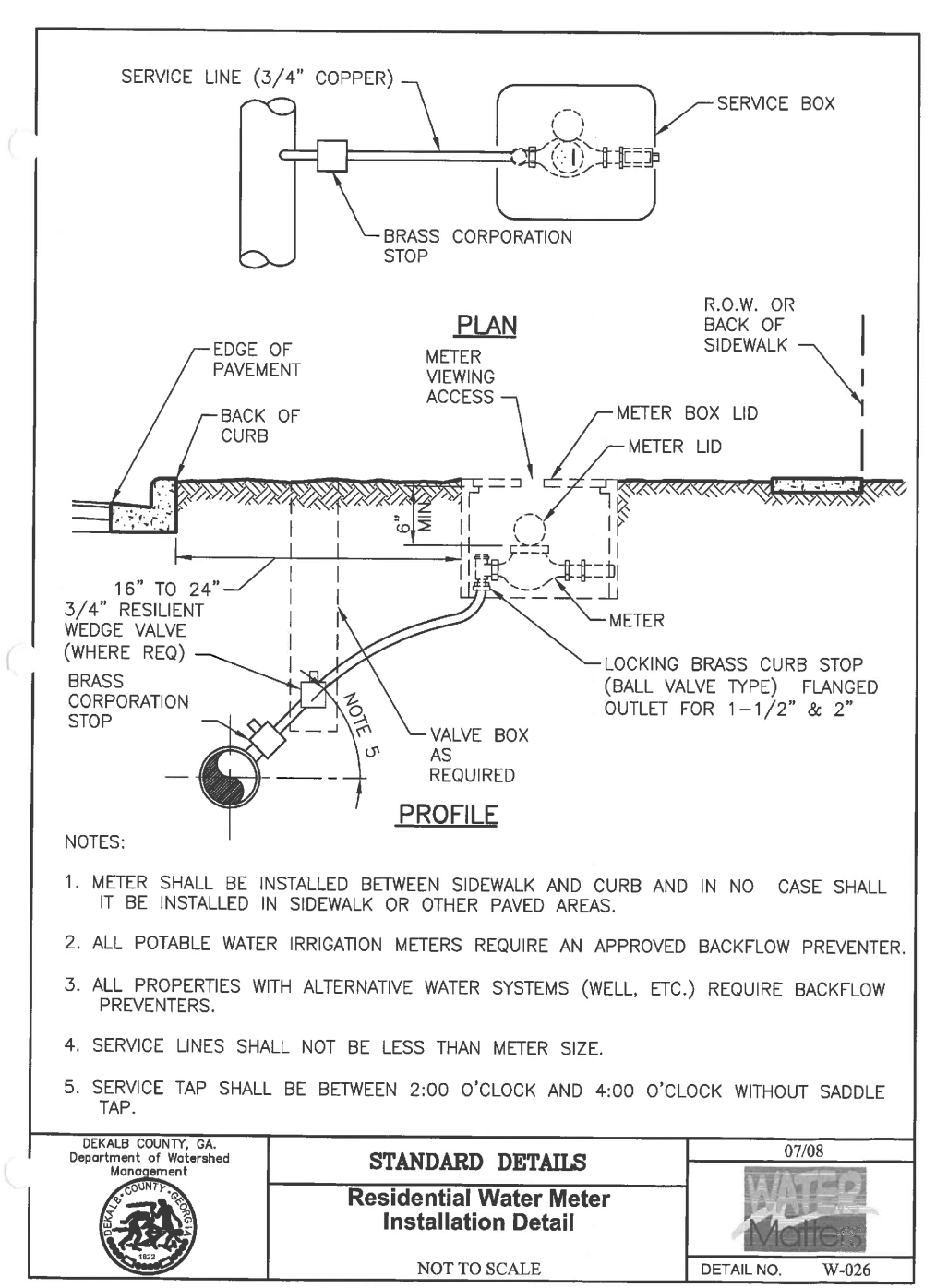
WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No. 44-0014	
BACKCHECKED:	DATE:		
CORRECTED:	DATE:		
VERIFIED:	DATE:		



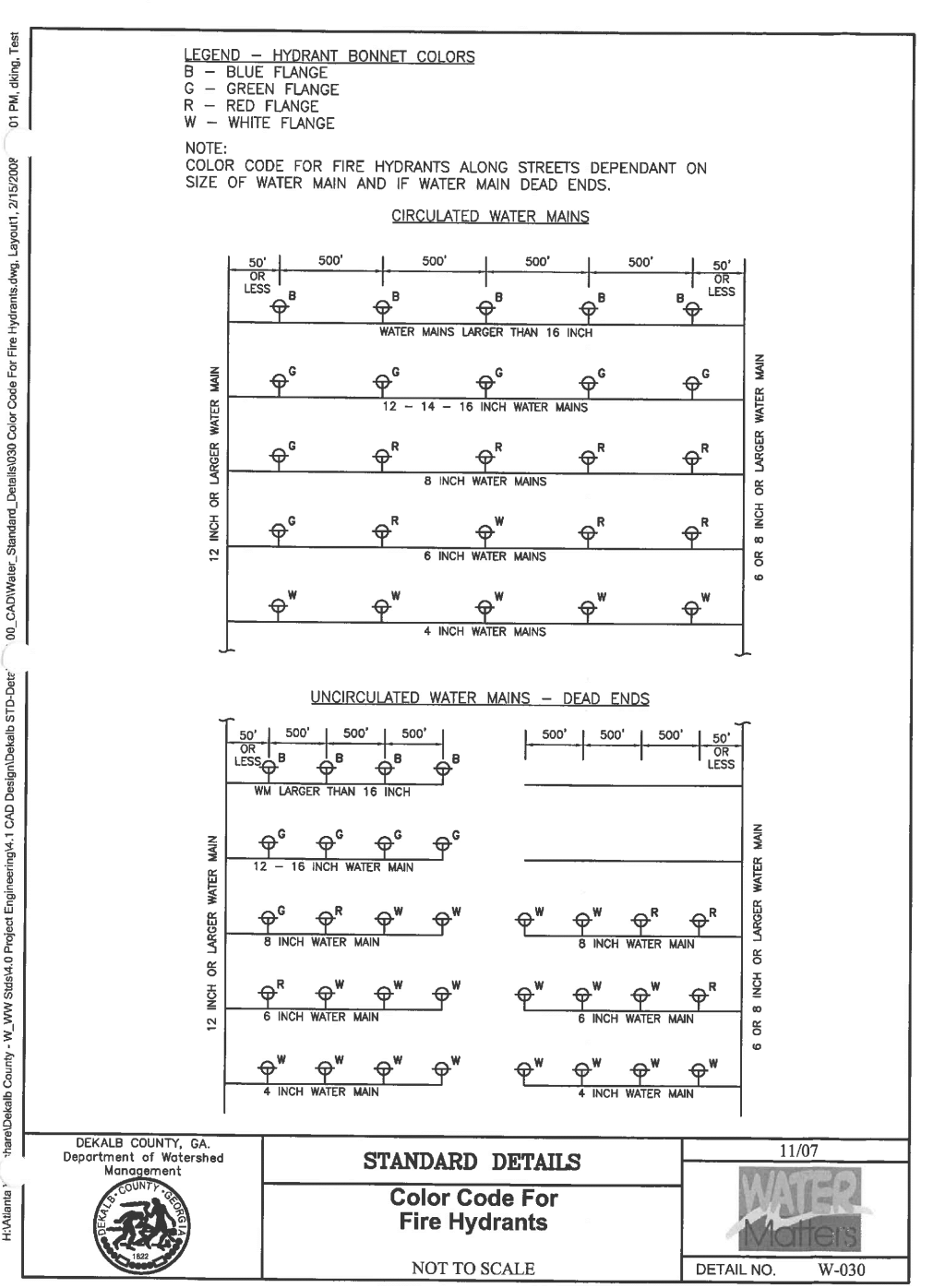
1 CASING & PIPE SUPPORT INSTALLATION
44-0015 NOT TO SCALE



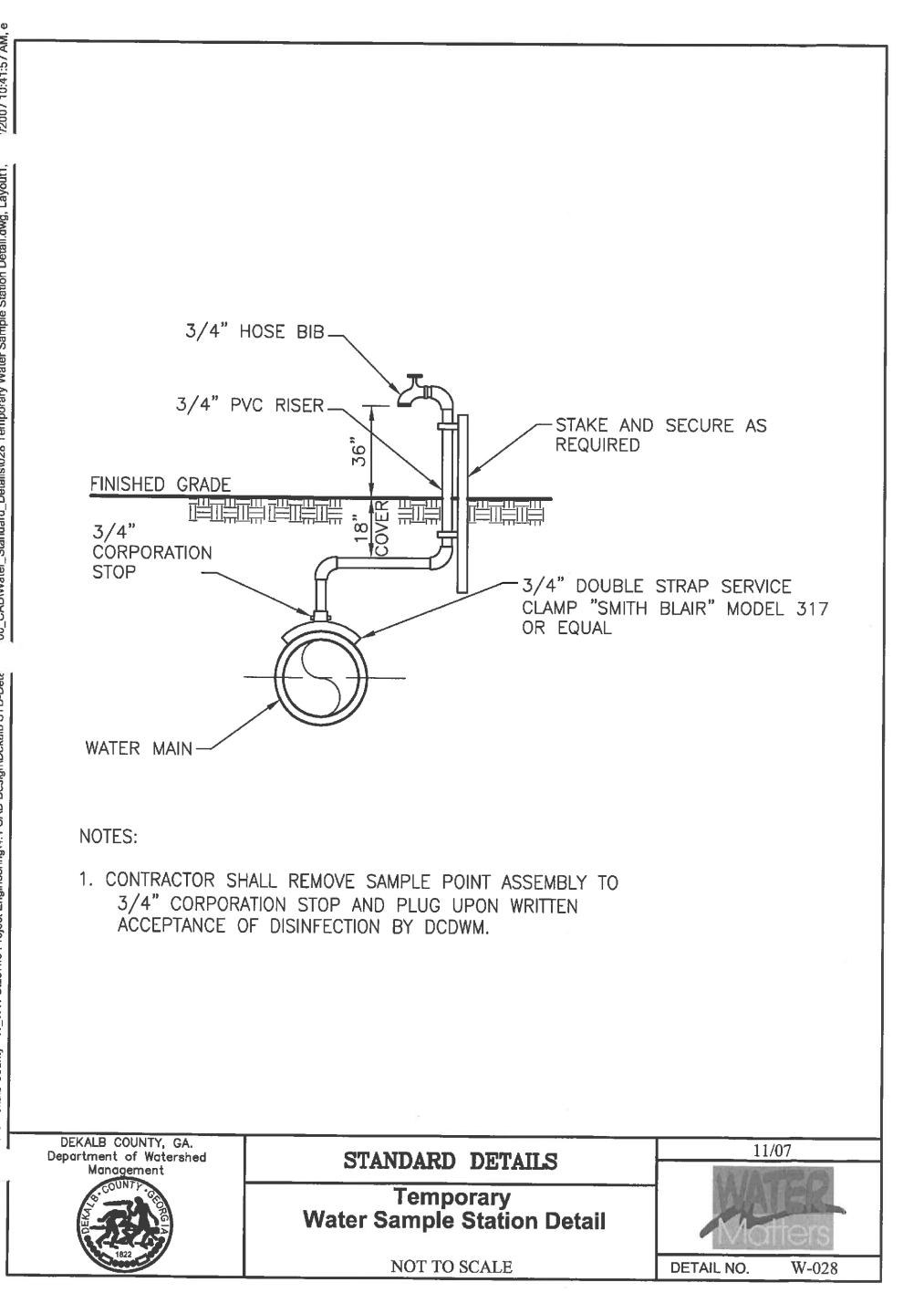
2 WATER METER LOCATIONS
44-0015 NOT TO SCALE



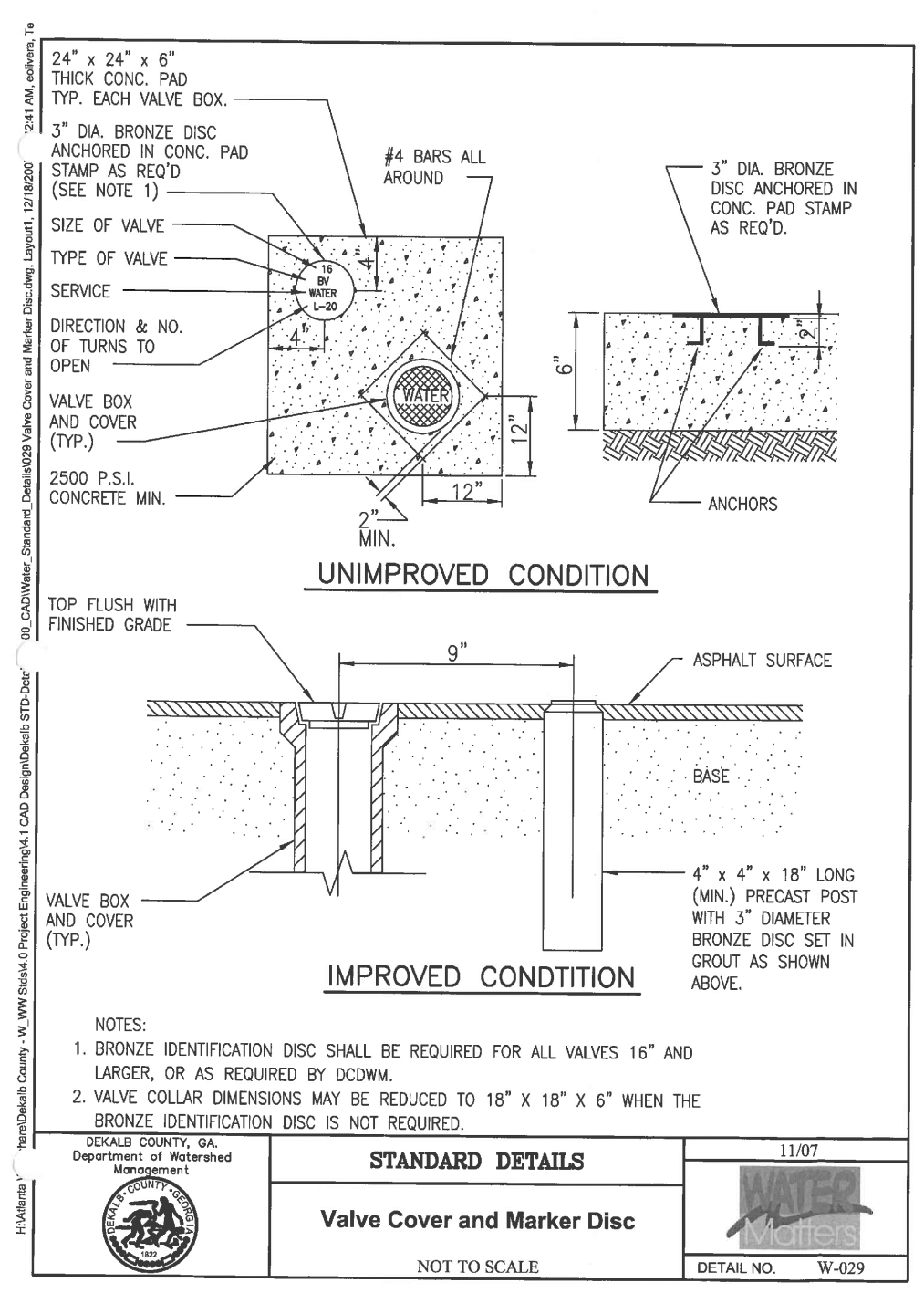
3 RESIDENTIAL WATER METER INSTALLATION
44-0015 NOT TO SCALE



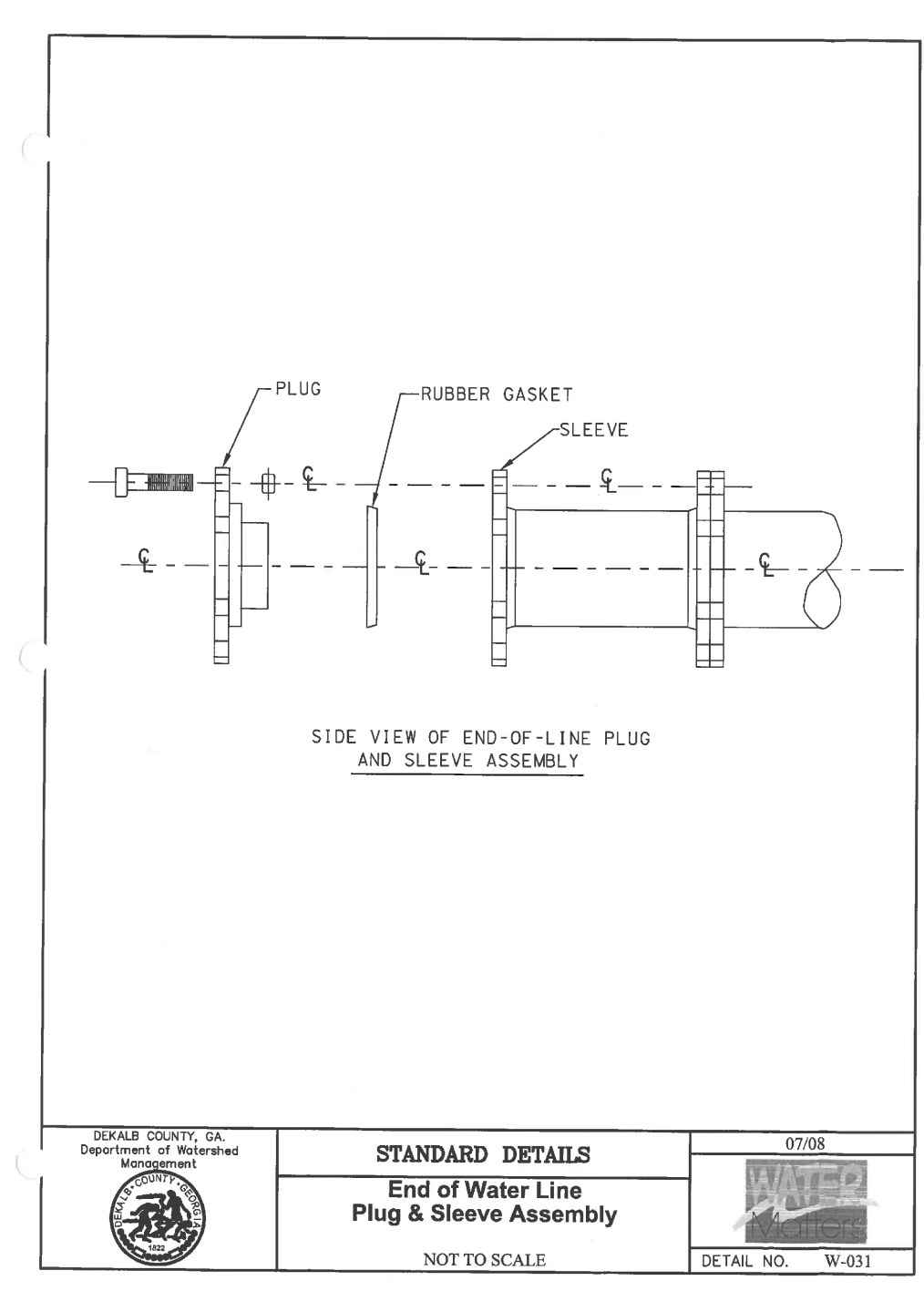
4 HYDRANT COLOR CODE
44-0015 NOT TO SCALE



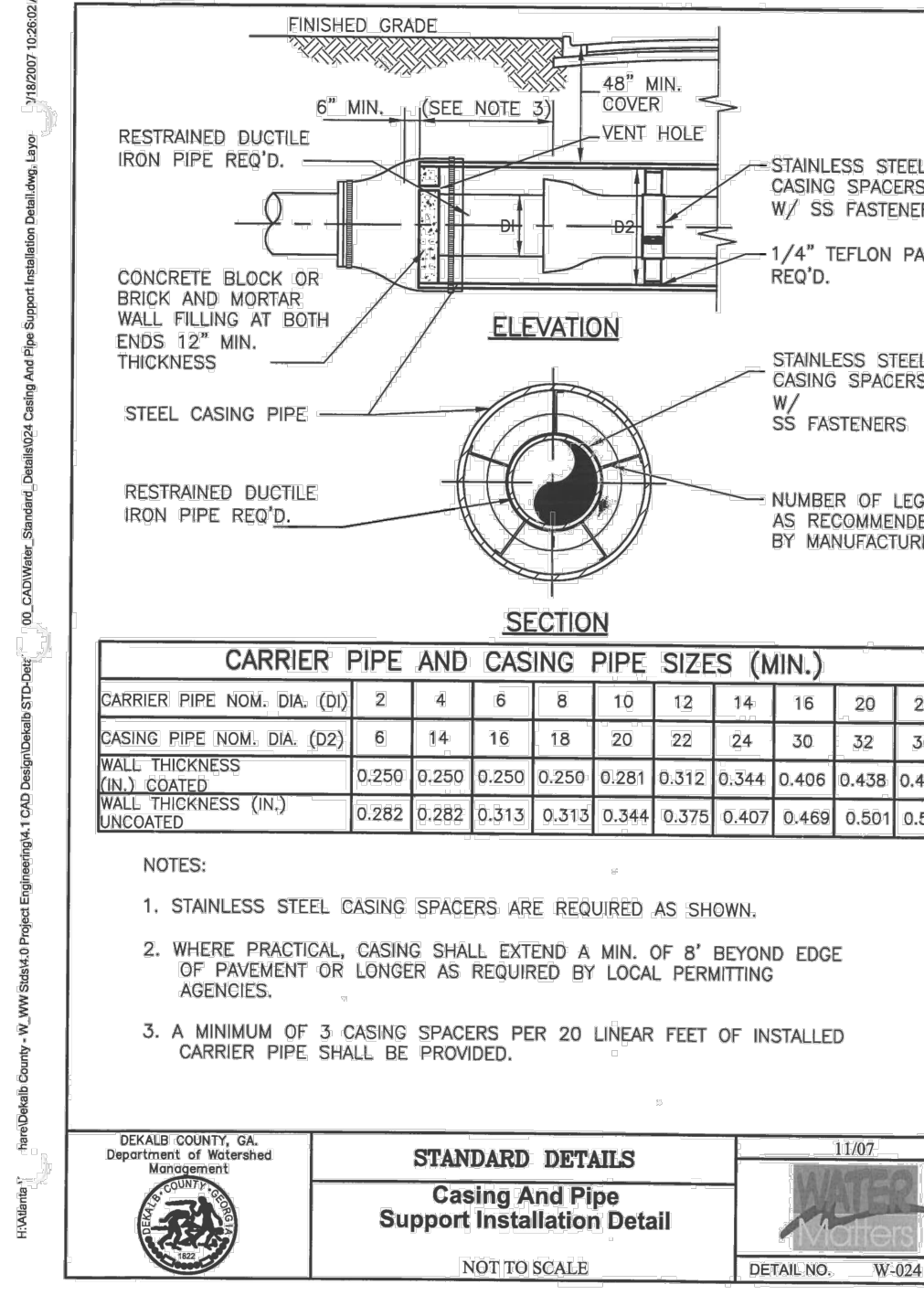
5 TEMP. WATER SAMPLE STATION
44-0015 NOT TO SCALE



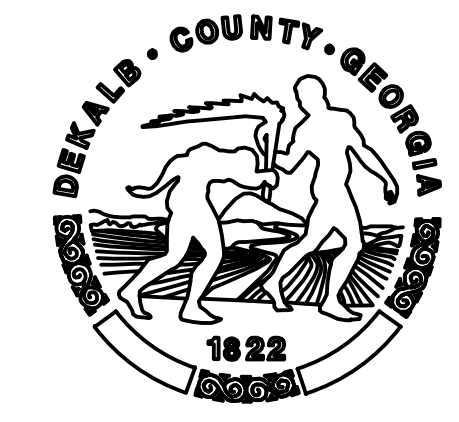
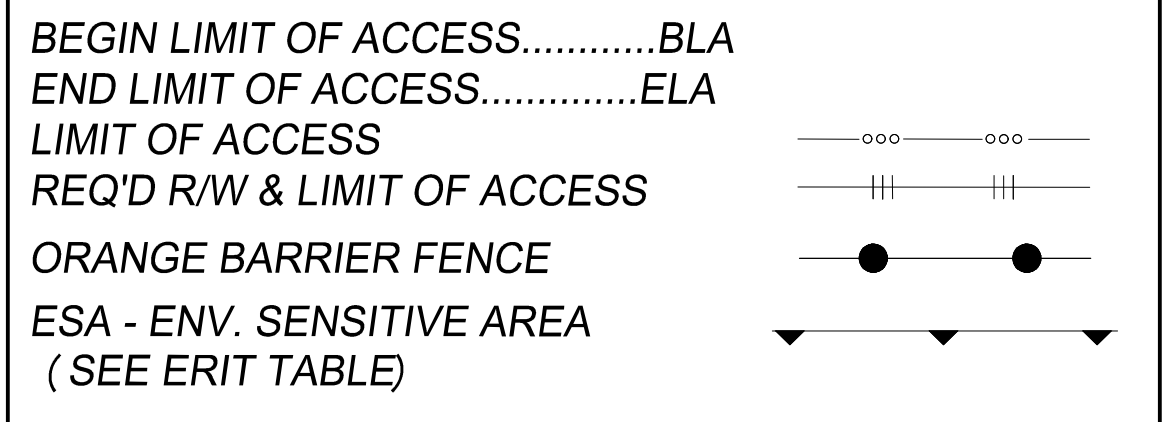
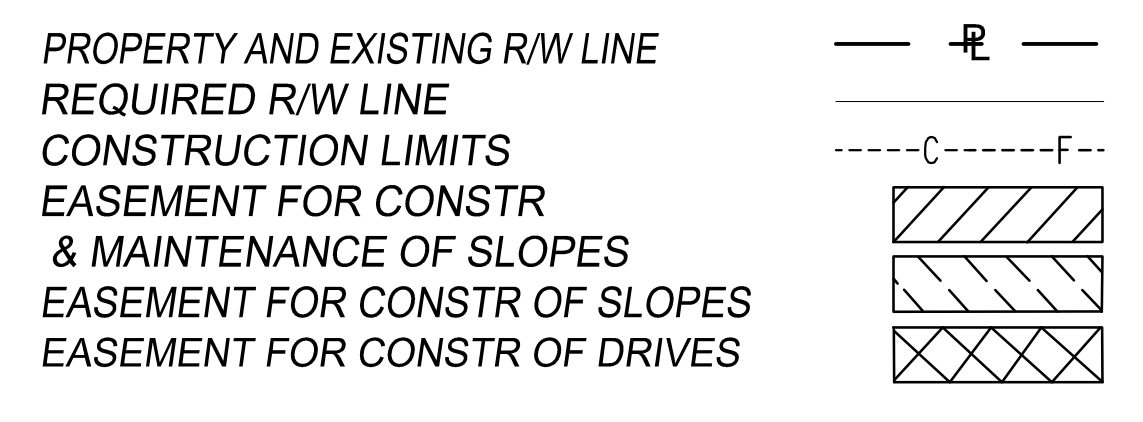
6 VALVE COVER & MARKER DISC
44-0015 NOT TO SCALE



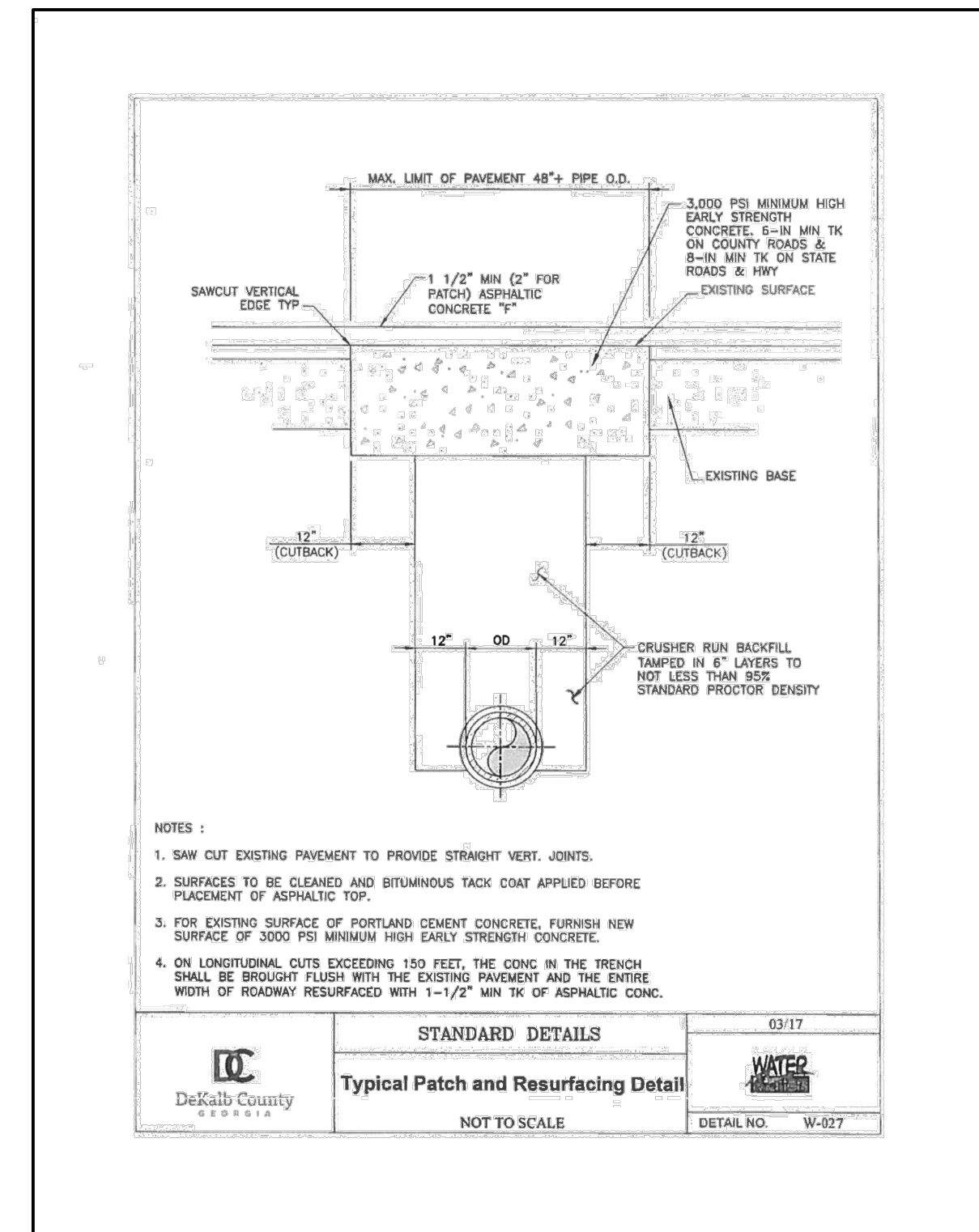
7 PLUG & SLEEVE ASSEMBLY
44-0015 NOT TO SCALE



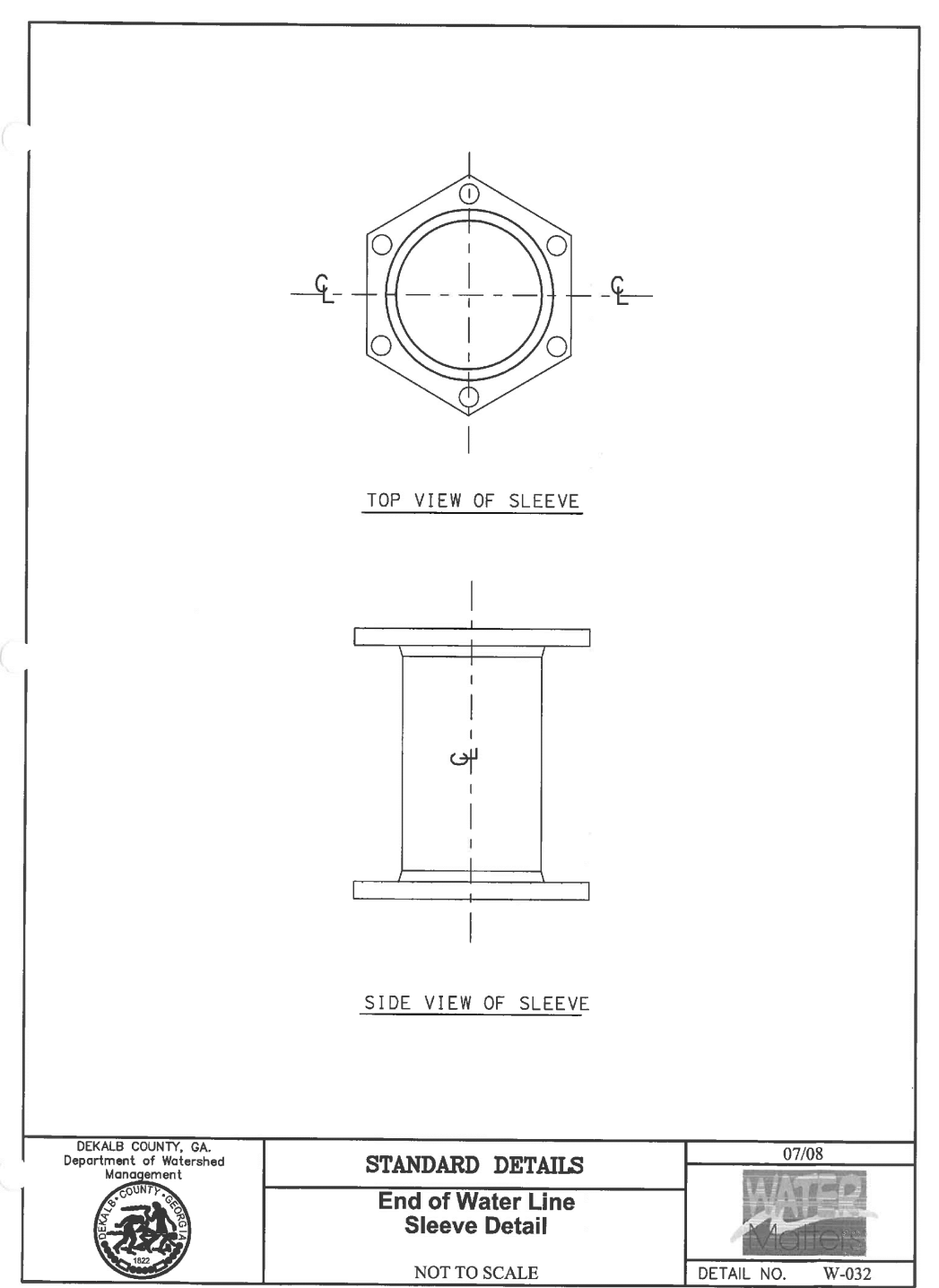
8 CASING AND PIPE SUPPORT INSTALLATION
44-0015 NOT TO SCALE



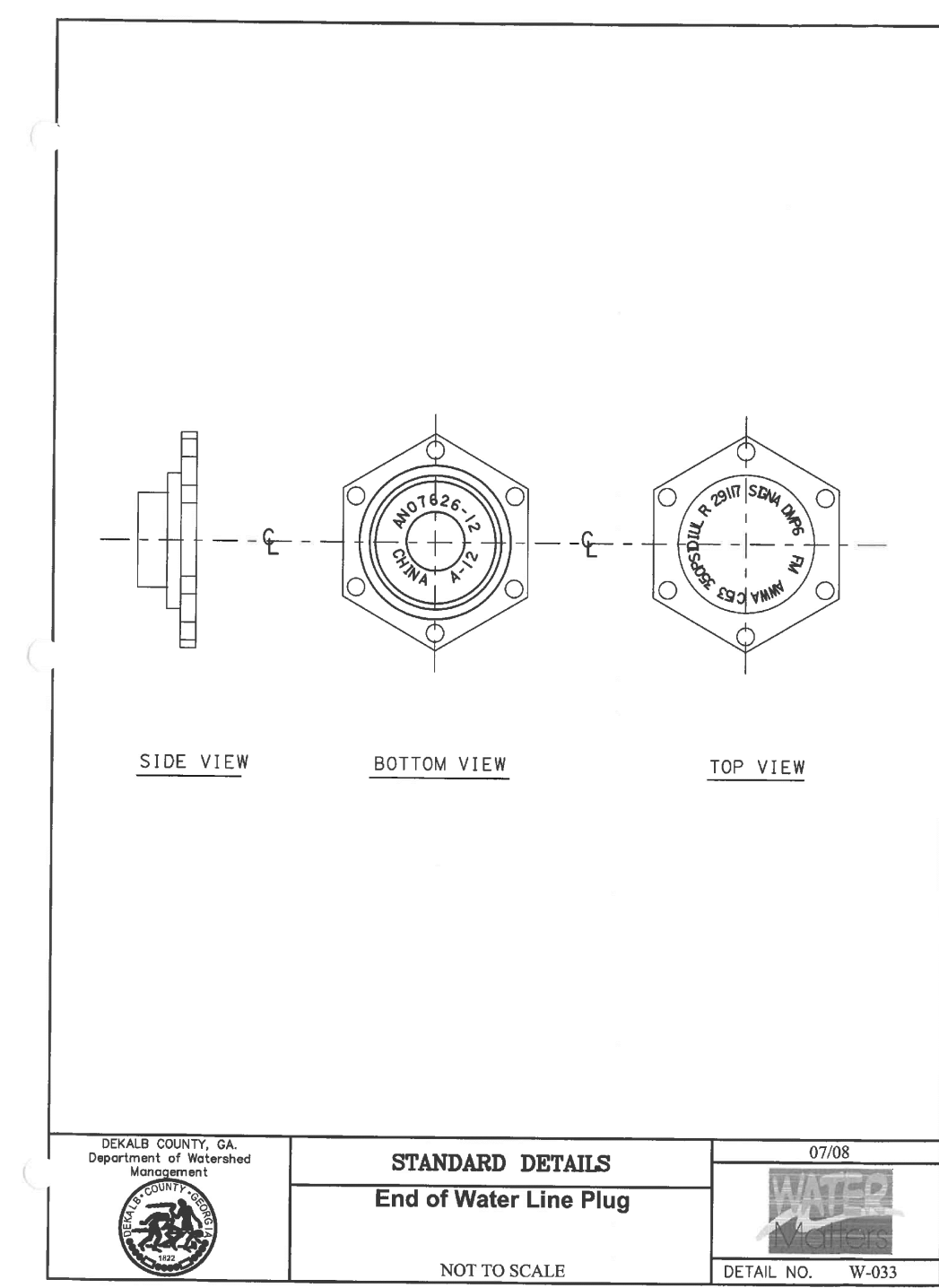
REVISION DATES		WATERLINE RELOCATION PLANS	
		ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD	
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0015	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



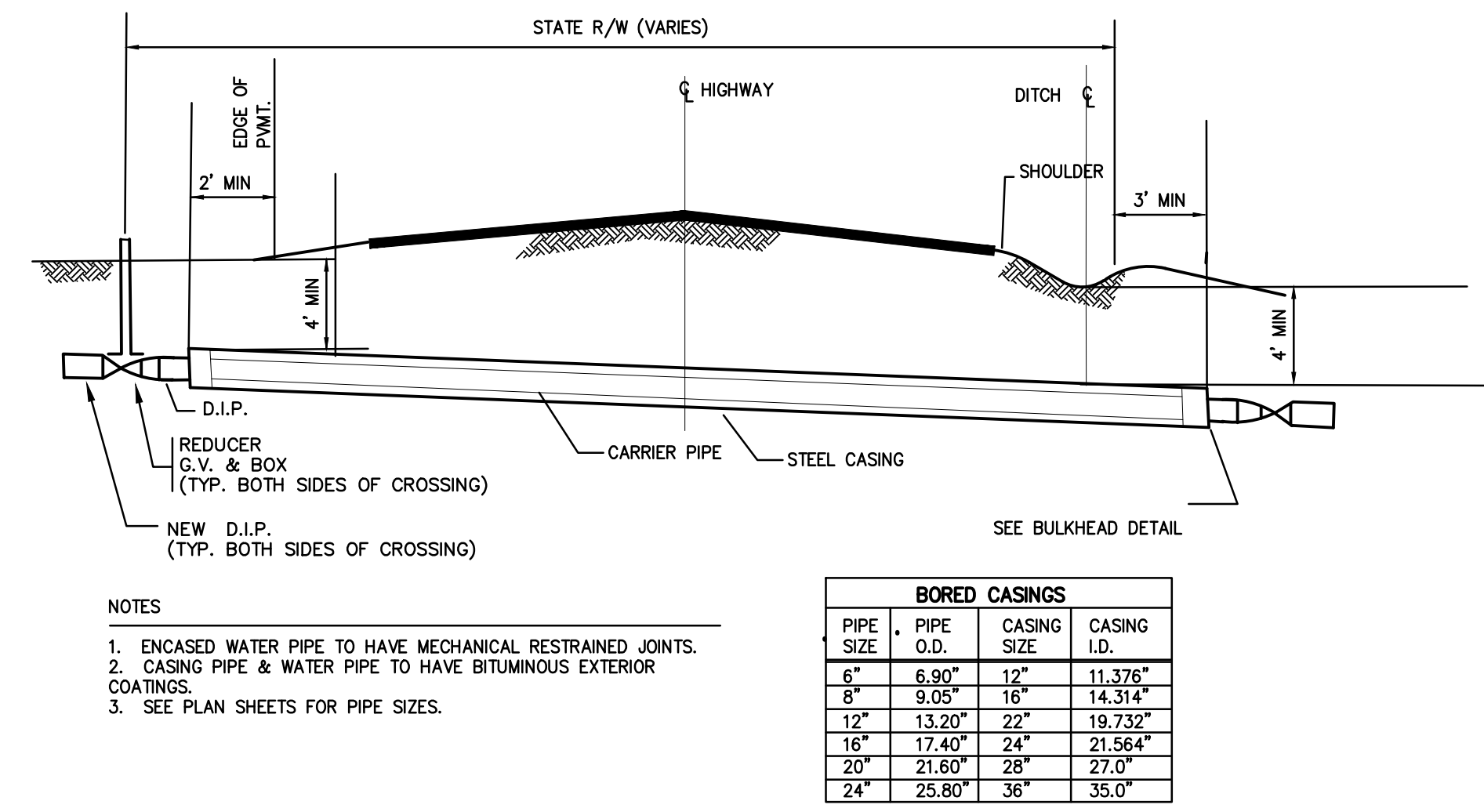
1 TYPICAL PATCH AND RESURFACING
44-0016 NOT TO SCALE



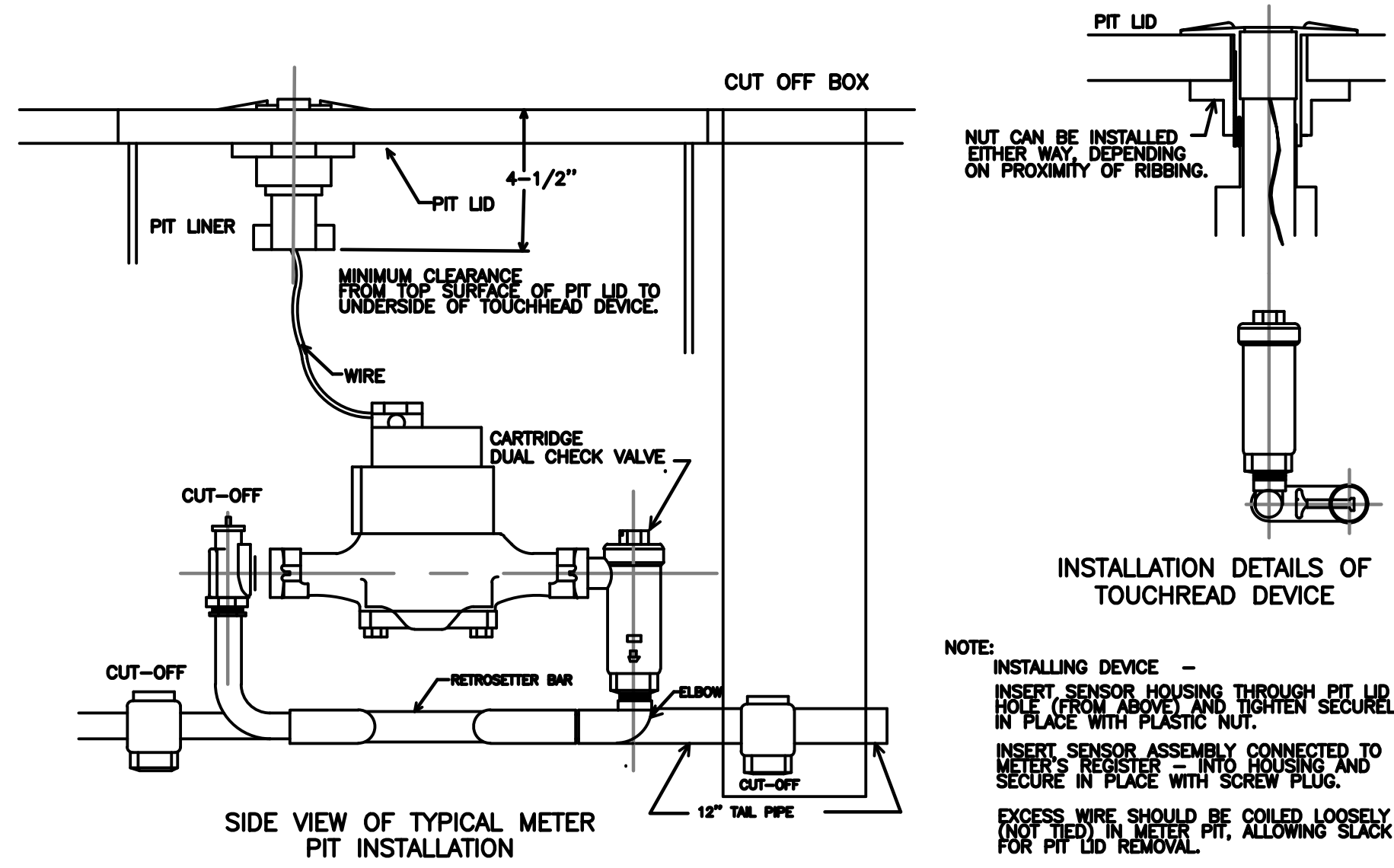
2 SLEEVE
44-0016 NOT TO SCALE



3 PLUG
44-0016 NOT TO SCALE



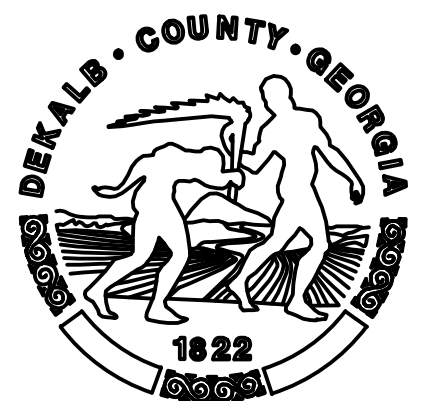
4 JACK & BORE
44-0016 NOT TO SCALE



5 TOUCHREAD METER DETAIL
44-0016 NOT TO SCALE

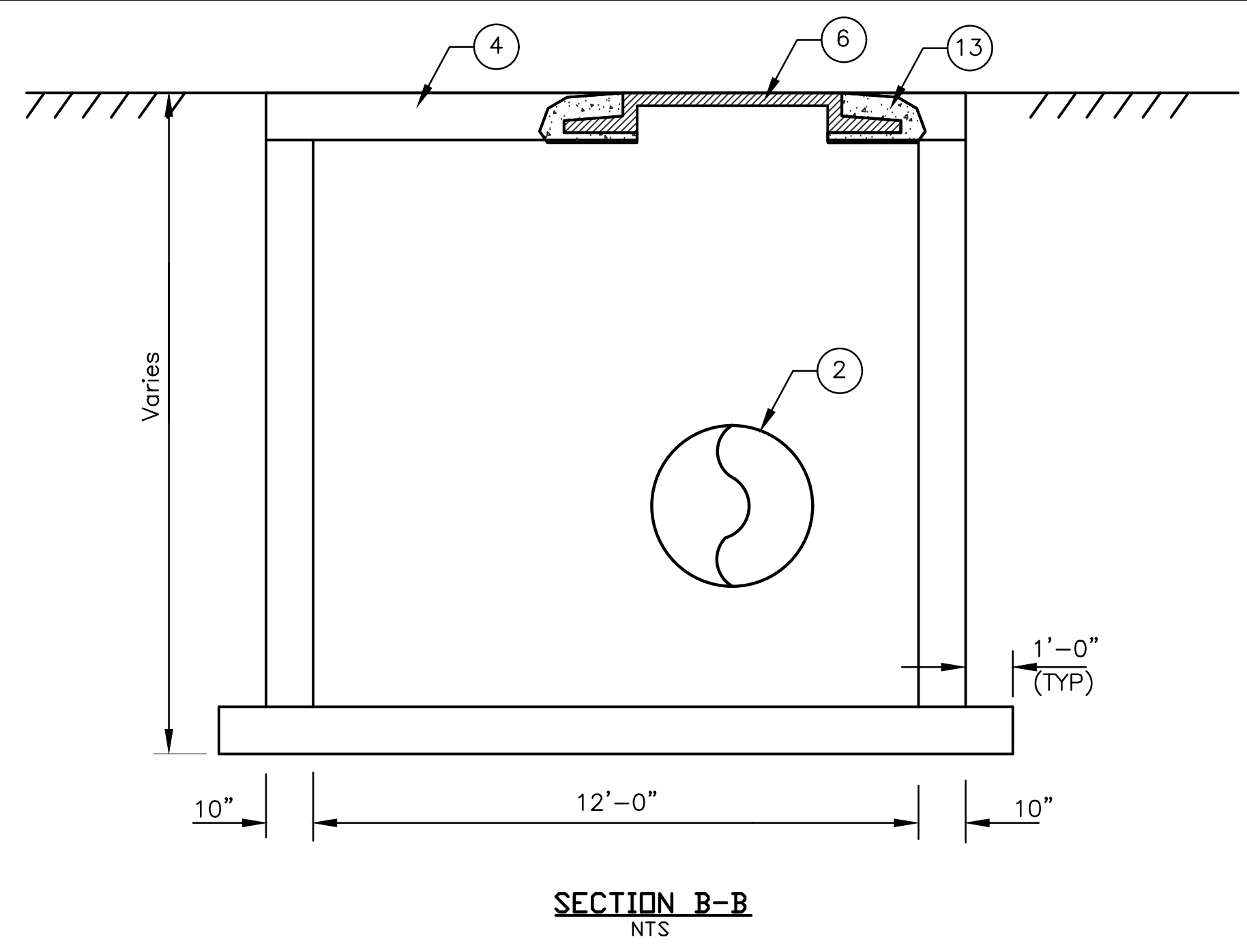
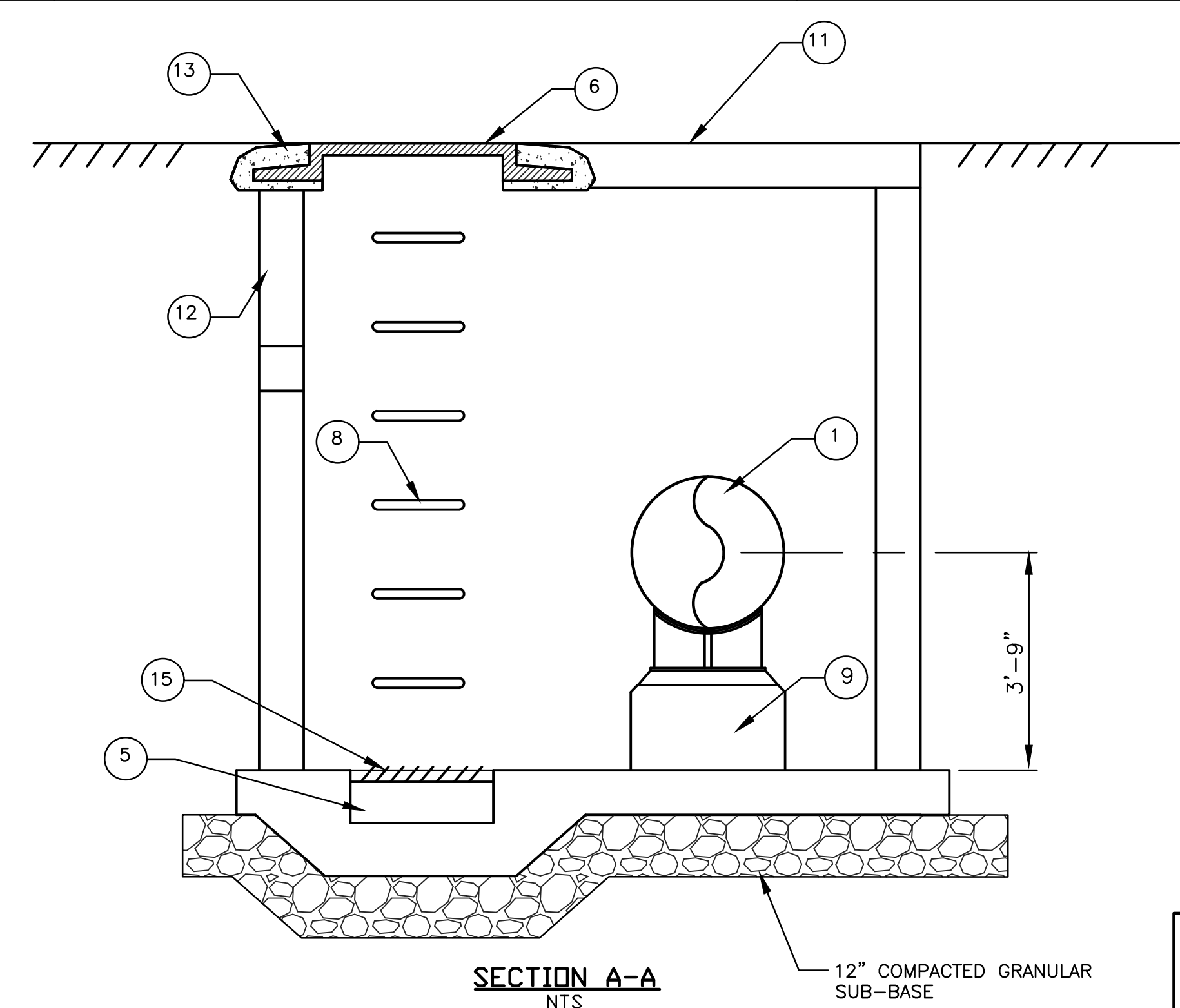
PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)

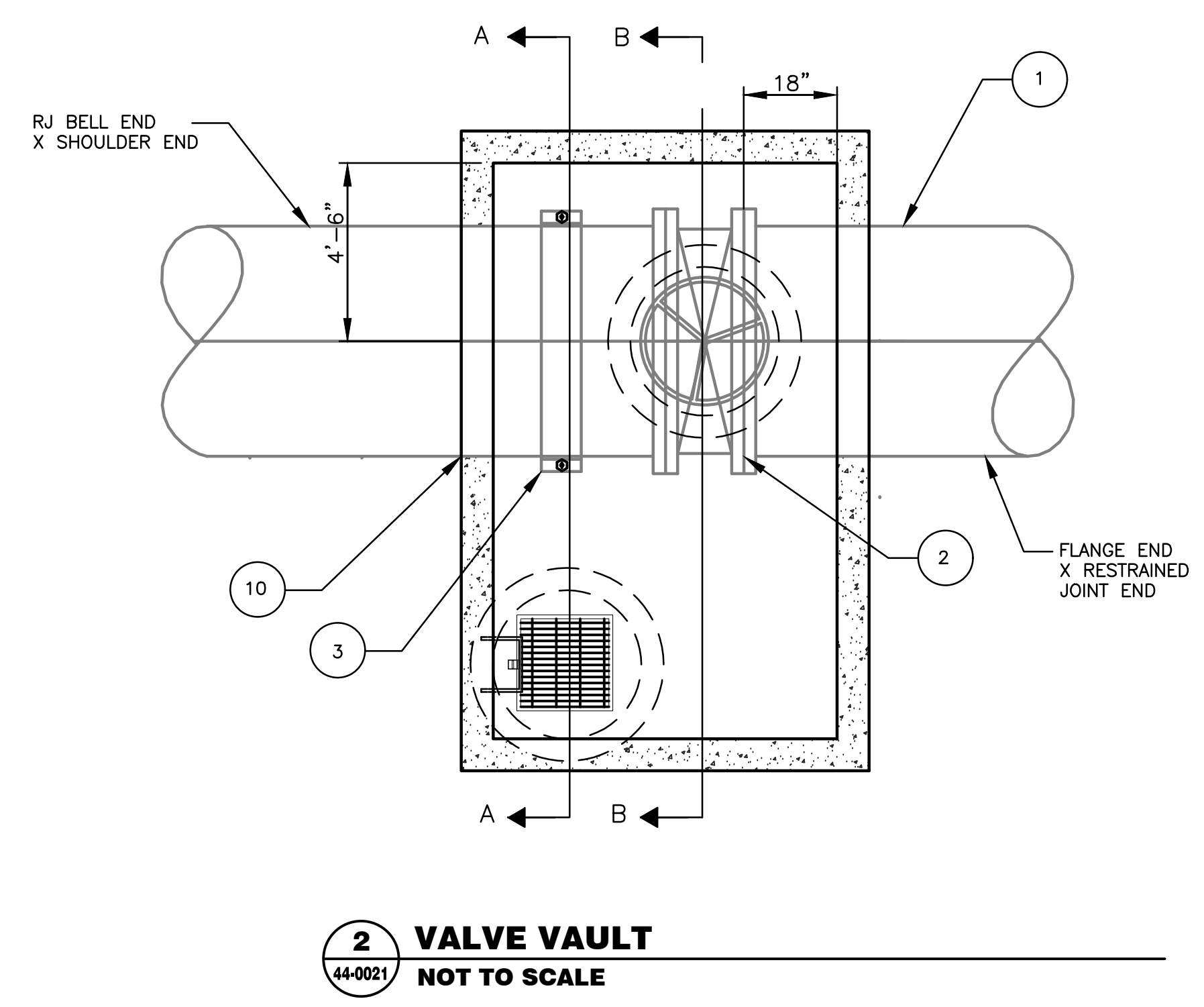


REVISION DATES	

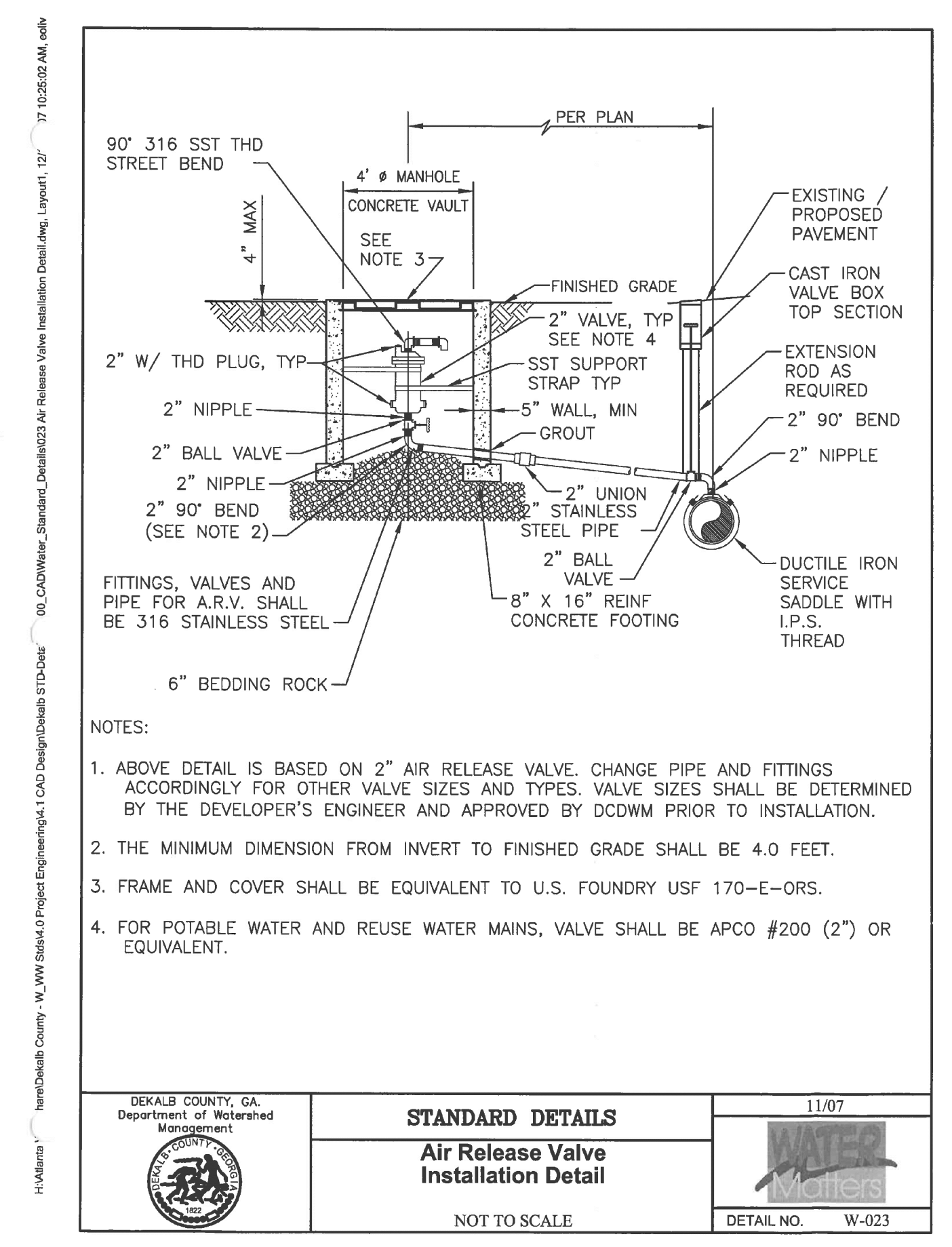
WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0016	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



- ① DIP WATER MAIN RJ & FL
- ② GATE VALVE, FL/FL W/HORIZONTAL SEAT
- ③ VICTAULIC GROOVED COUPLING, STYLE 44
- ④ NOT USED
- ⑤ 2' SQ SUMP
- ⑥ C.I. MH FRAME & COVER SEE DEKALB COUNTY STD. DETAIL S-006
- ⑦ NOT USED
- ⑧ STEPS 16" O.C.
- ⑨ PIPE SUPPORT, SEE DETAIL AA, 1/C-409
- ⑩ WALL PENETRATION, SEE DETAIL 2/C-409
- ⑪ PRECAST TOP SLAB W/36" DIA OPENING
- ⑫ 36" DIA PRECAST MH RINGS
- ⑬ 8" THICK CONCRETE COLLAR
- ⑭ CAST IN LIFTING EYE
- ⑮ CAST IRON GRATE OVER SUMP



2 VALVE VAULT
44-0021 NOT TO SCALE



- NOTES:
1. ABOVE DETAIL IS BASED ON 2" AIR RELEASE VALVE. CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES SHALL BE DETERMINED BY THE DEVELOPER'S ENGINEER AND APPROVED BY DCDWM PRIOR TO INSTALLATION.
 2. THE MINIMUM DIMENSION FROM INVERT TO FINISHED GRADE SHALL BE 4.0 FEET.
 3. FRAME AND COVER SHALL BE EQUIVALENT TO U.S. FOUNDRY USF 170-E-ORS.
 4. FOR POTABLE WATER AND REUSE WATER MAINS, VALVE SHALL BE APCO #200 (2") OR EQUIVALENT.

DEKALB COUNTY, GA.
Department of Watershed Management

STANDARD DETAILS
Air Release Valve Installation Detail

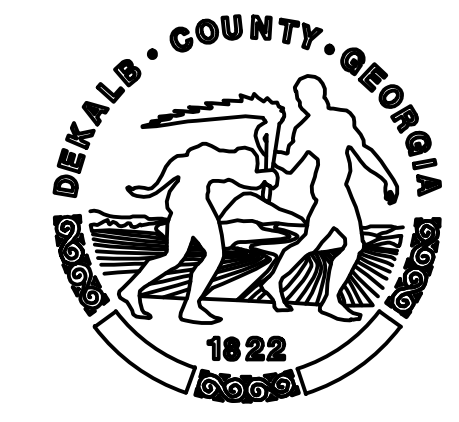
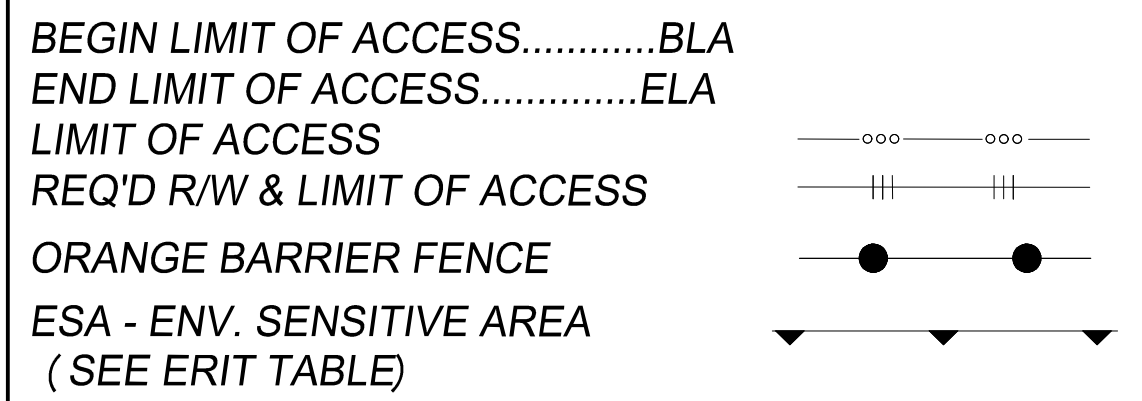
NOT TO SCALE

11/07

DETAIL NO. W-023

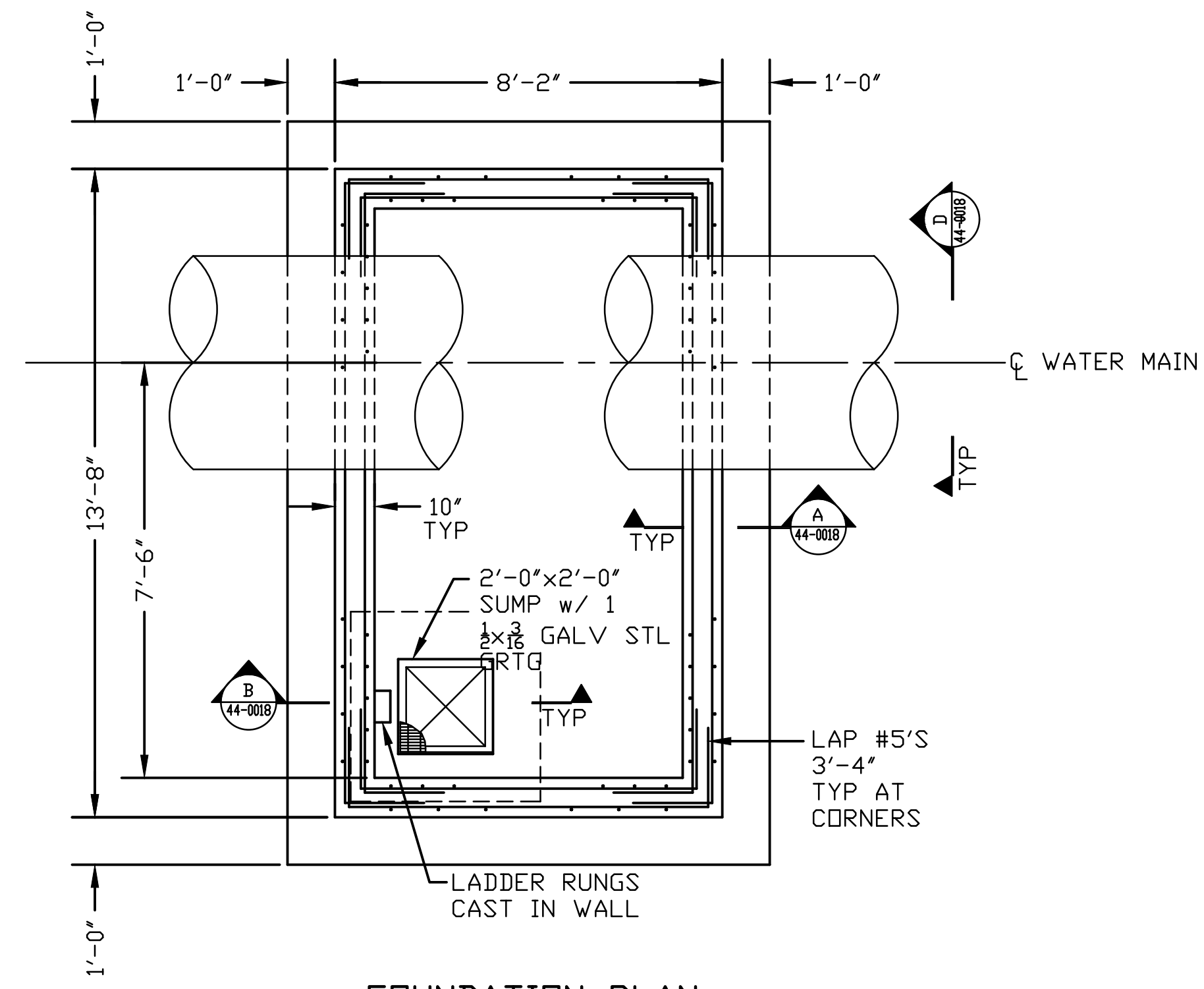
2 AIR RELEASE VALVE INSTALLATION DETAIL
44-0021 NOT TO SCALE

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

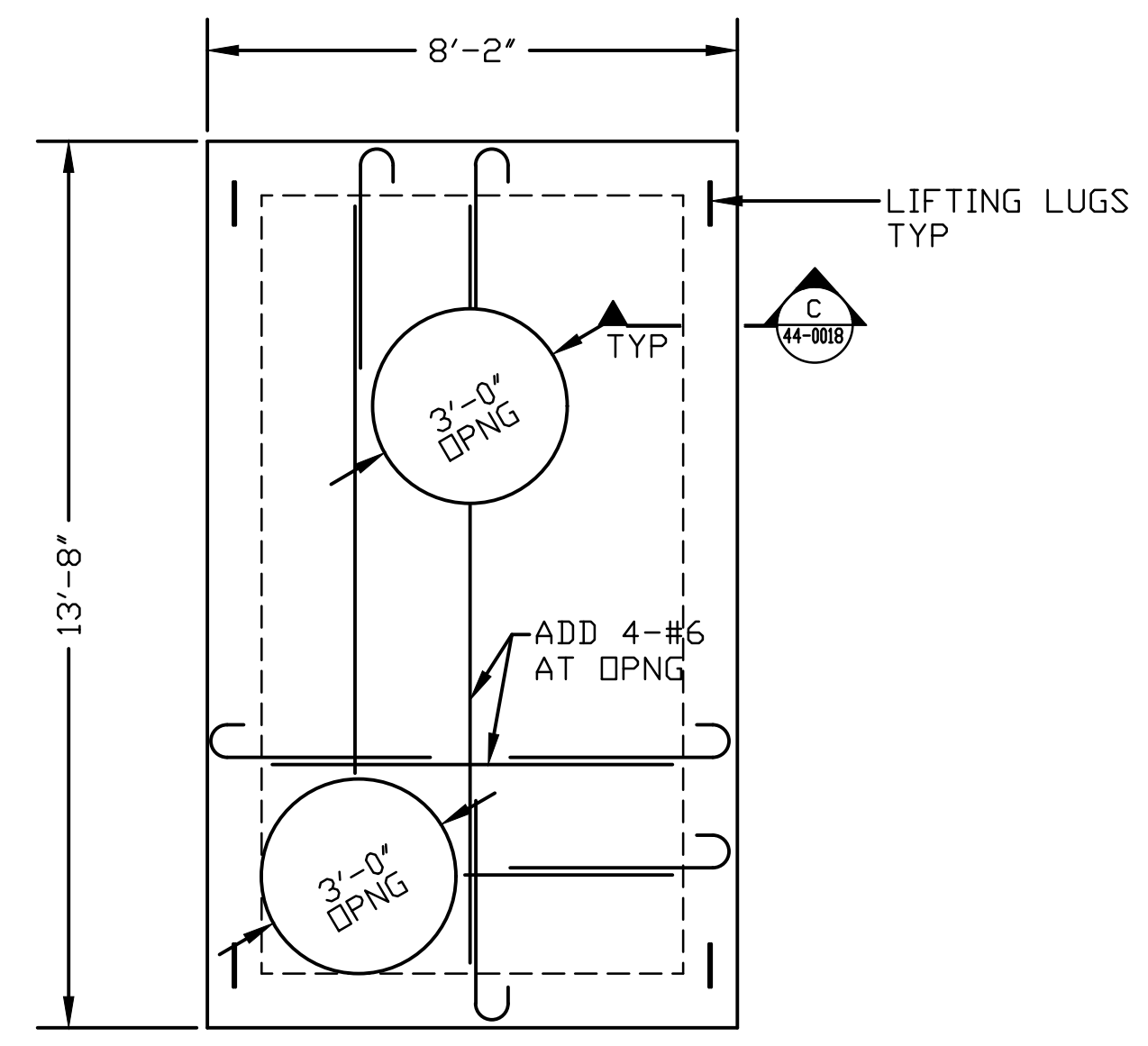


REVISION DATES	

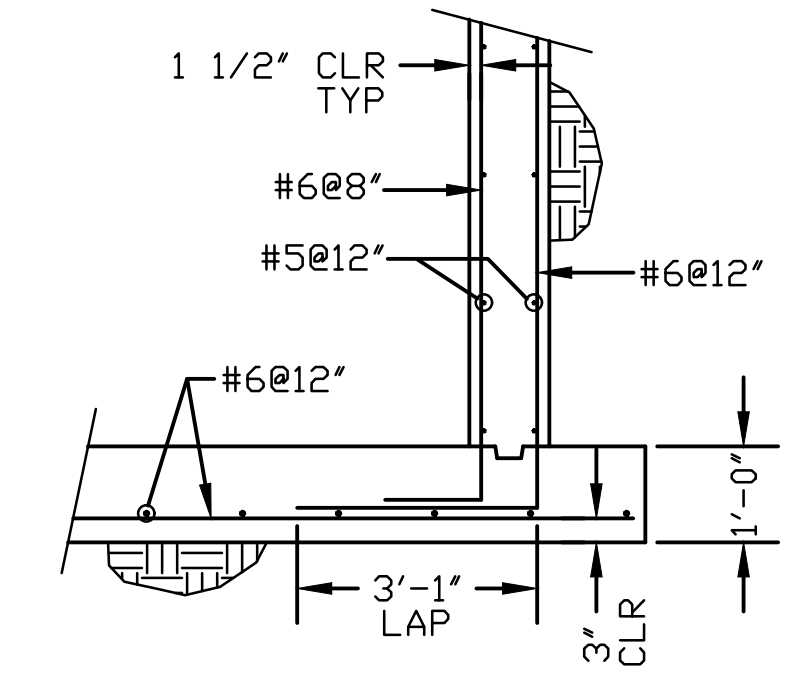
WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0017	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



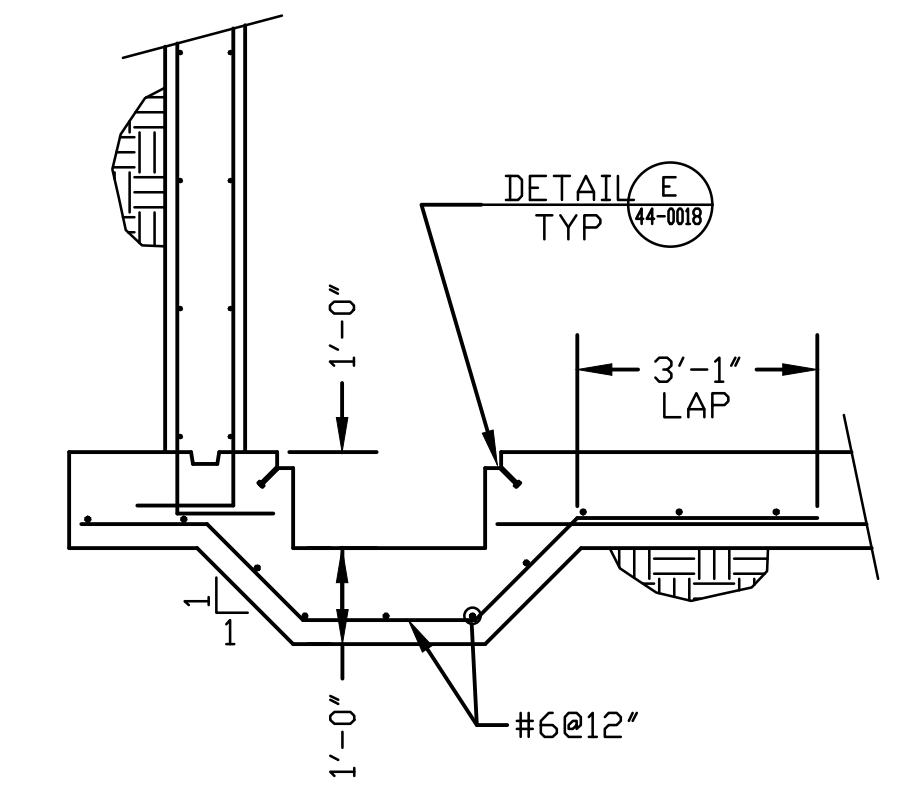
FOUNDATION PLAN
N.T.S.



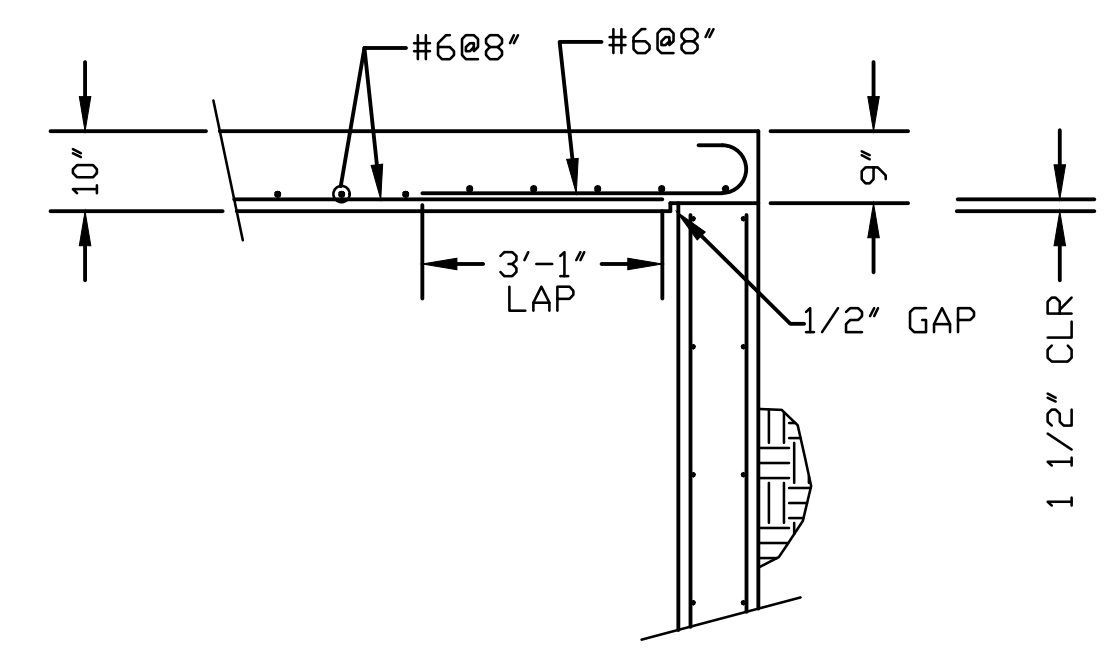
ROOF PLAN
N.T.S.



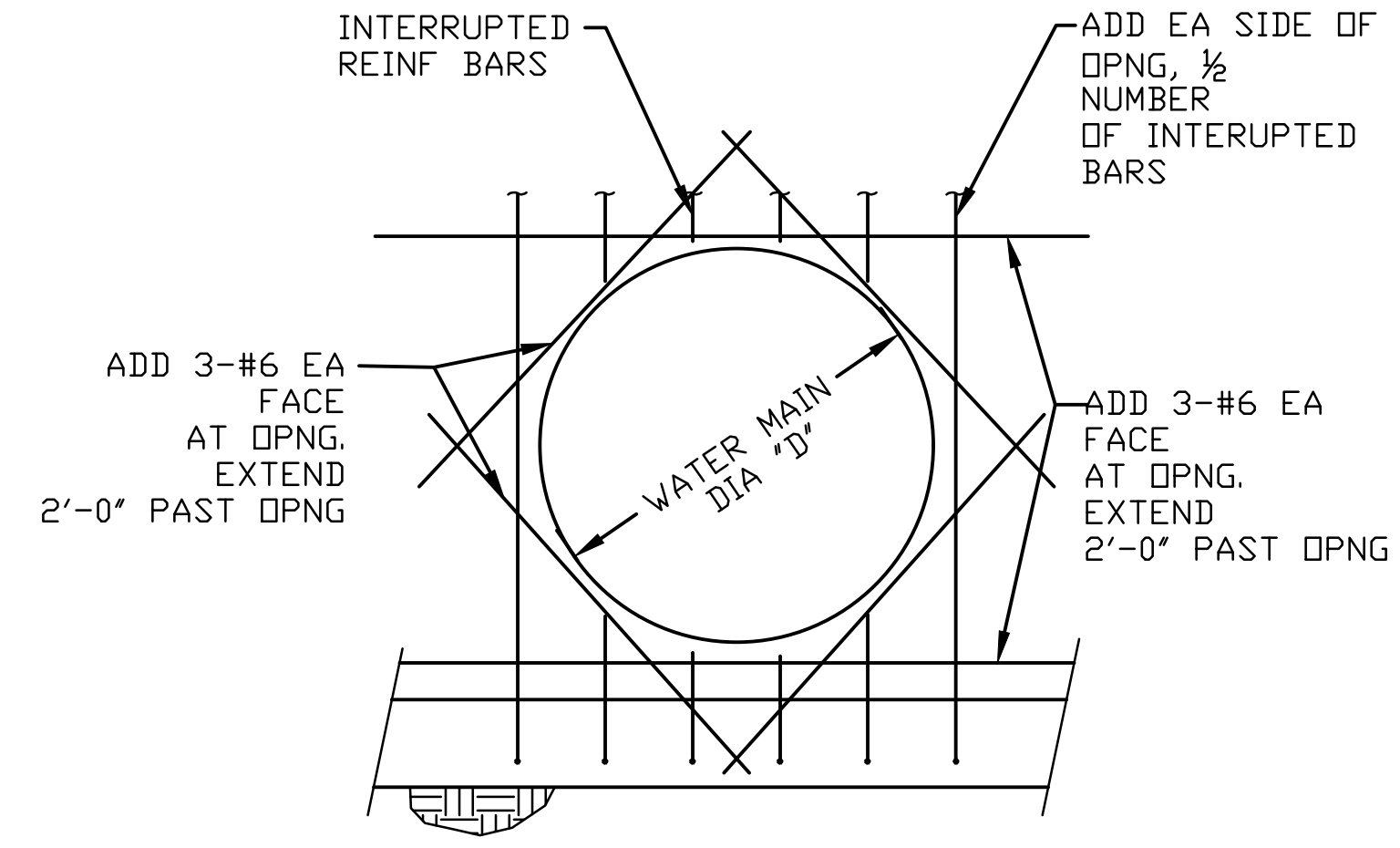
SECTION A
N.T.S.



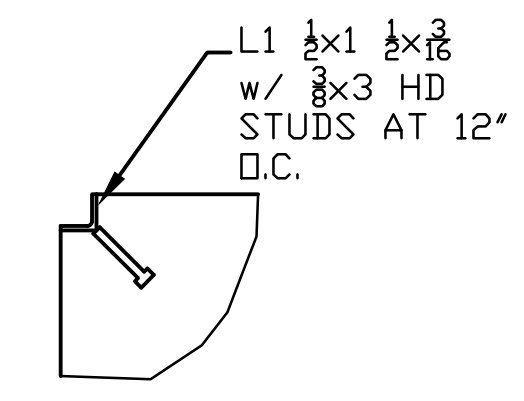
SECTION B
N.T.S.



SECTION C
N.T.S.



SECTION D
N.T.S.

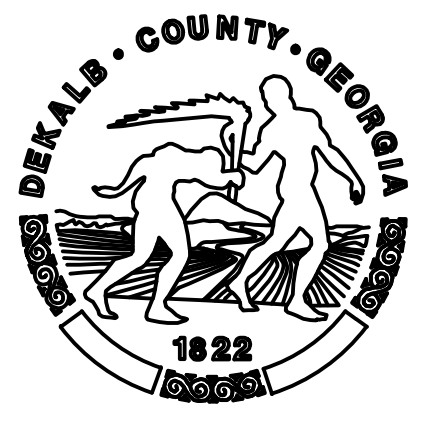


SECTION E
N.T.S.

1 GATE VALVE VAULT - PLAN AND SECTIONS
44-0018 NOT TO SCALE

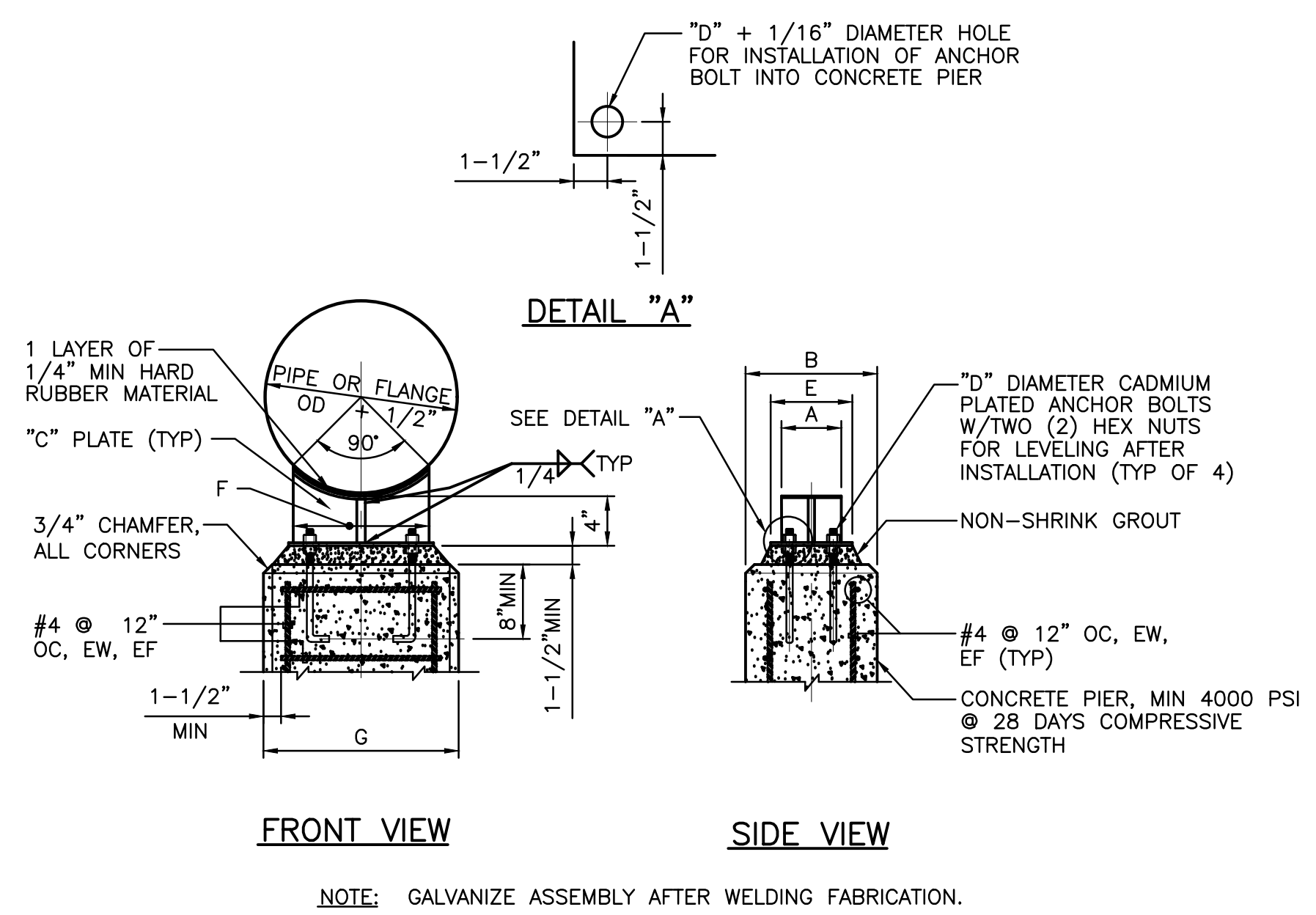
PROPERTY AND EXISTING R/W LINE	— P —
REQUIRED R/W LINE	— P —
CONSTRUCTION LIMITS	— C —
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	— F —
EASEMENT FOR CONSTR OF SLOPES	[Hatched Box]
EASEMENT FOR CONSTR OF DRIVES	[Cross-hatched Box]

BEGIN LIMIT OF ACCESS.....BLA	— P —
END LIMIT OF ACCESS.....ELA	— P —
LIMIT OF ACCESS	— C —
REQ'D R/W & LIMIT OF ACCESS	[Hatched Box]
ORANGE BARRIER FENCE	[Dashed Line]
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	[Dotted Line]



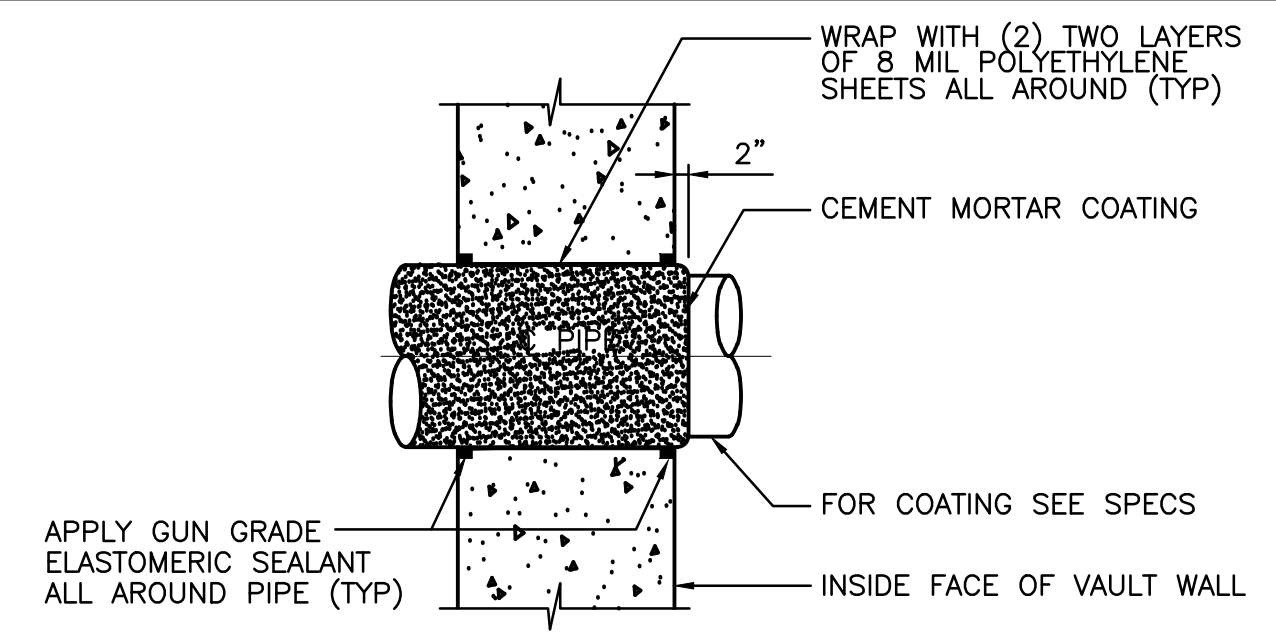
REVISION DATES	

WATERLINE RELOCATION PLANS			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0018	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

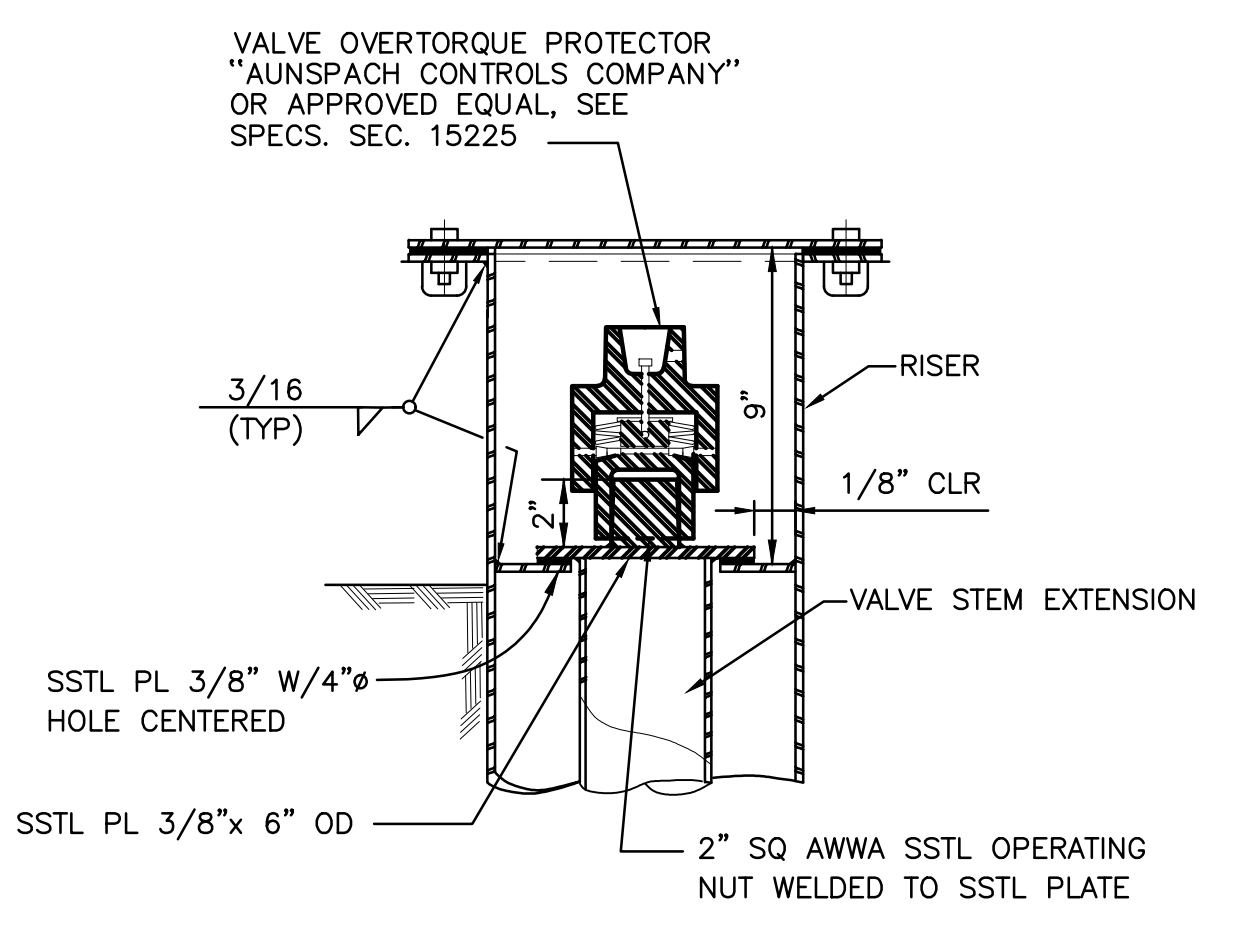
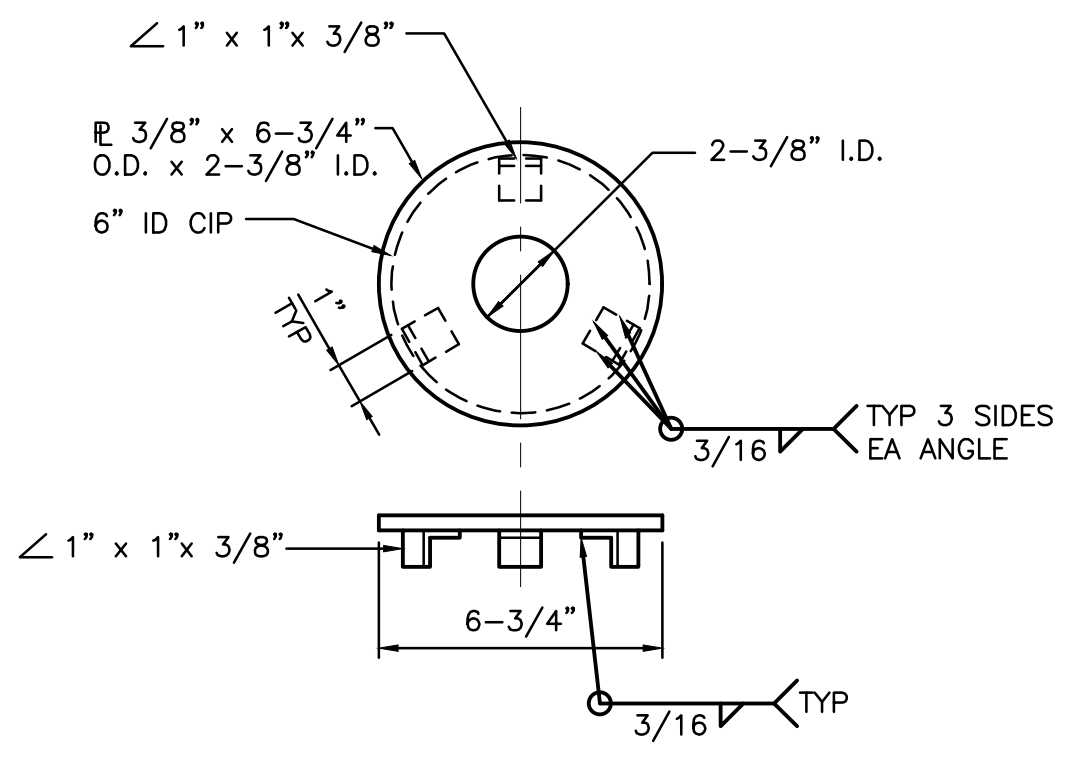
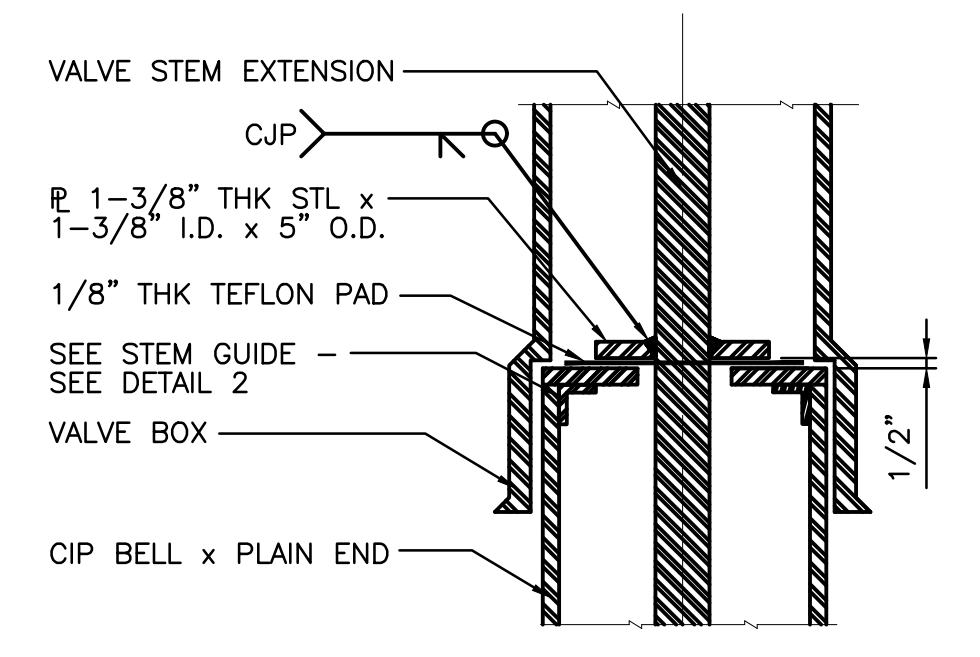
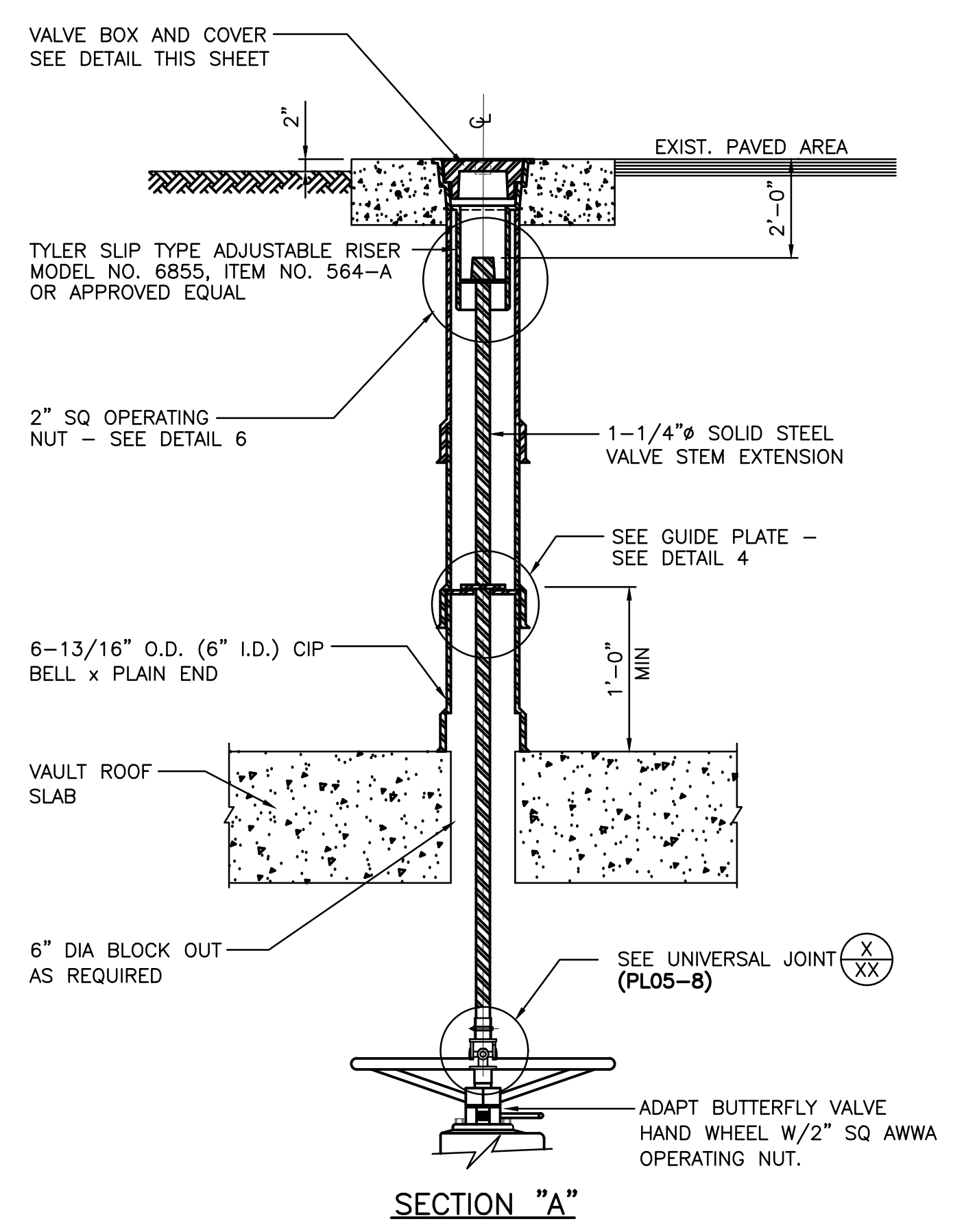


NOMINAL PIPE SIZE	PIPE SUPPORT TABLE								
						SUPPORTING			
	A	B	C	D	E	STL	CYL PIPE	FLANGE	
12"	4"	12"	3/8"	5/8"	6"	10"	14"	14"	18"
16"	4"	12"	3/8"	5/8"	6"	12"	16"	17"	21"
18"	4"	12"	3/8"	5/8"	6"	14"	18"	18"	22"
20"	4"	12"	3/8"	5/8"	6"	16"	20"	20"	24"
24"	4"	12"	3/8"	5/8"	6"	19"	23"	23"	27"
30"	5"	12"	3/8"	3/4"	6"	23"	29"	28"	34"
36"	6"	15"	3/8"	3/4"	6"	27"	33"	33"	39"
42"	6"	18"	1/2"	1"	8"	32"	38"	38"	44"
48"	6"	18"	1/2"	1"	8"	36"	42"	42"	48"
54"	6"	18"	1/2"	1"	8"	40"	46"	47"	53"
60"	6"	18"	1/2"	1"	8"	44"	50"	52"	58"
66"	6"	18"	1/2"	1"	8"	48"	54"	57"	63"
72"	6"	18"	1/2"	1"	8"	52"	58"	62"	68"

1 PIPE SUPPORT DETAIL
44-0019 NOT TO SCALE



2 WALL PENETRATION DETAIL
44-0019 NOT TO SCALE



3 VALVE BOX ON VAULT
44-0019 NOT TO SCALE

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



REVISION DATES		WATERLINE RELOCATION PLANS	
		ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD	
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	44-0019	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

DEKALB COUNTY PUBLIC WORKS

EROSION, SEDIMENTATION, & POLLUTION CONTROL PLAN

ROCKBRIDGE ROAD

FROM ALLGOOD ROAD TO ROWLAND ROAD

CSTEE-0008-00(121)
DEKALB COUNTY

FEDERAL ROUTE * N/A
STATE ROUTE * N/A
P.I. NO. 0008121/0012789

"I certify that this Erosion, Sedimentation and Pollution Control Plan has been prepared in accordance with Part IV, of the General NPDES Permit No. GARI00002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for an appropriate and comprehensive system of best management practices required by the Georgia Water Quality Control Act and the document 'Manual for Erosion and Sediment Control in Georgia' (Manual) published by the State Soil and Water Conservation Commission as of January 1 of the year in which the land disturbing activity was permitted, provides for sampling of the receiving water(s) or the sampling of the storm water outfalls and that the designed system of best management practices and sampling methods is expected to meet the requirements contained in the General NPDES Permit No. GARI00002."

"I certify that the permittee's Erosion, Sedimentation and Pollution Control Plan provides for the monitoring of: (a) all perennial and intermittent streams and other water bodies shown on the USGS topographic map and all other field verified perennial and intermittent streams and other water bodies, or (b) where any such specific identified perennial or intermittent stream and other water body is not proposed to be sampled, I have determined in my professional judgment, utilizing the factors required in the General NPDES Permit No. GARI00002, that the increase in the turbidity of each specific identified sampled receiving water will be representative of the increase in the turbidity of a specific identified un-sampled receiving water."

"I certify under penalty of law that this plan was prepared after a site visit to the location described herein by myself or my authorized agent, under my direct supervision."

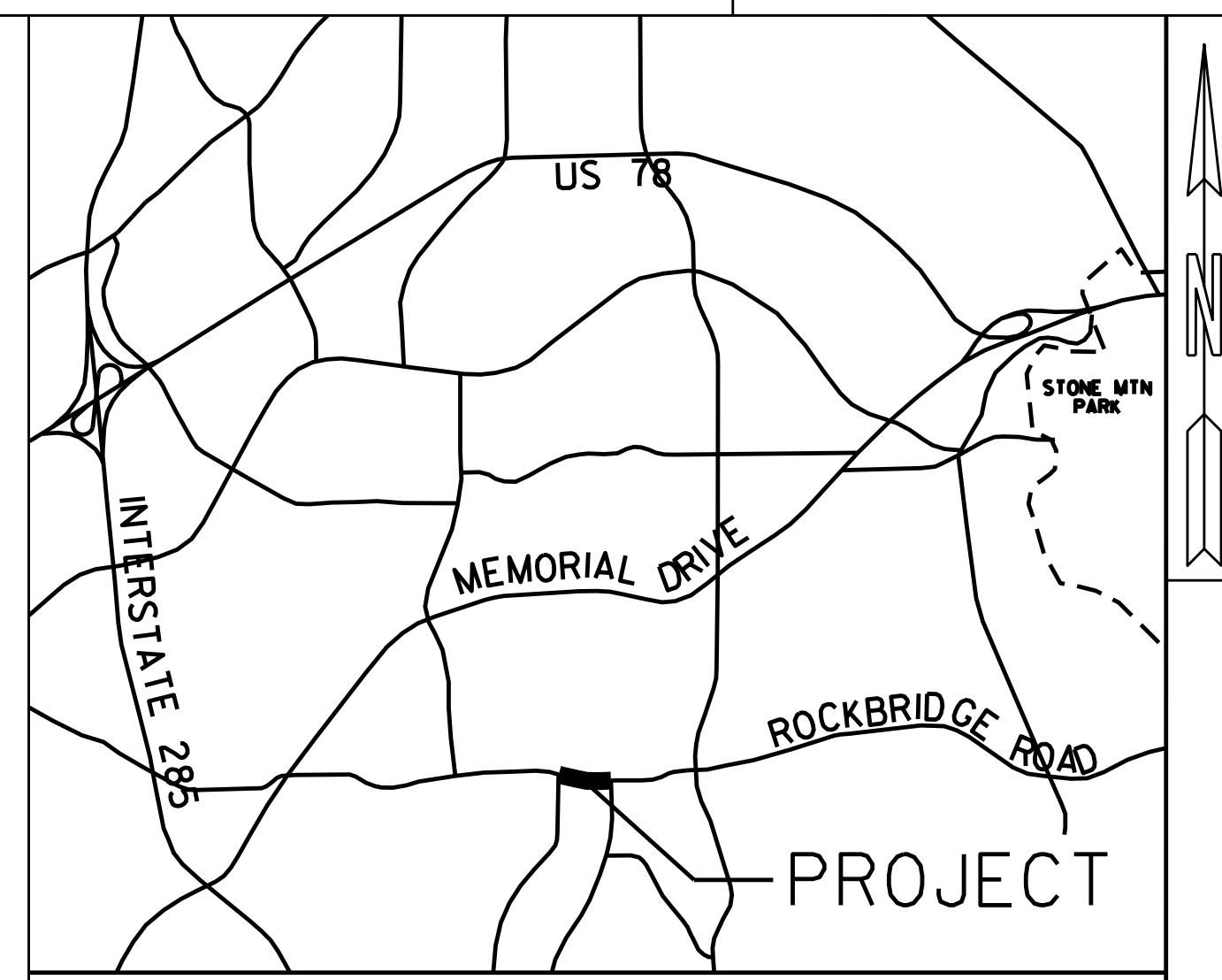
PLANS PREPARED BY:



UNDER THE SUPERVISION OF:

JENNY C. JENKINS, P.E.

GSWCC LEVEL II CERTIFICATION NO. 7817



LOCATION SKETCH

BEGIN-POINT COORDINATES

Longitude: 84.2090°
Latitude: 33.7869°

MID-POINT COORDINATES

Longitude: 84.2061°
Latitude: 33.7862°

END-POINT COORDINATES

Longitude: 84.2033°
Latitude: 33.7863°

THIS DOCUMENT HAS BEEN PREPARED USING THE GEORGIA COORDINATE SYSTEM OF 1985 WEST ZONE (NAD 83/94) AND THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

THIS PROJECT IS 100% IN DEKALB COUNTY AND IS 100% IN CONGRESSIONAL DISTRICT NO. 4

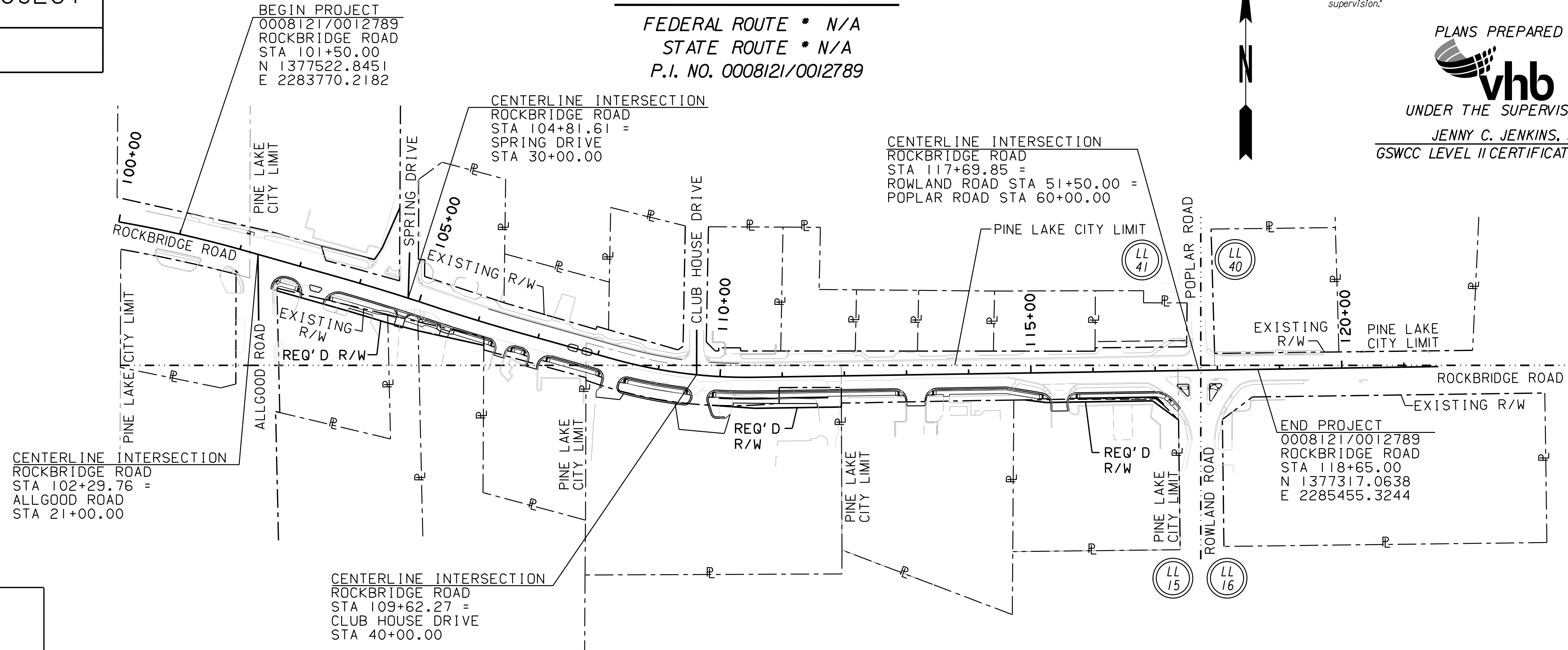
PRIMARY PERMITTEE

DEKALB COUNTY PUBLIC WORKS - TRANSPORTATION DIVISION
1950 West Exchange Place
Tucker, GA 30084
(770) 492-5200

24 HOUR CONTACT:

Name _____
Phone Number _____
Email Address _____

Contractor shall complete the information in this box.



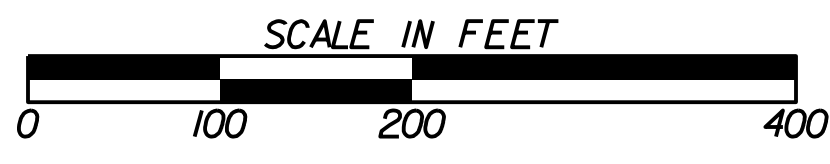
CENTERLINE INTERSECTION
ROCKBRIDGE ROAD
STA 102+29.76 =
ALLGOOD ROAD
STA 21+00.00

CENTERLINE INTERSECTION
ROCKBRIDGE ROAD
STA 109+62.27 =
CLUB HOUSE DRIVE
STA 40+00.00

CENTERLINE INTERSECTION
ROCKBRIDGE ROAD
STA 117+69.85 =
ROWLAND ROAD STA 51+50.00 =
POPLAR ROAD STA 60+00.00

BEGIN PROJECT
0008121/0012789
ROCKBRIDGE ROAD
STA 101+50.00
N 1377522.8451
E 2283770.2182

END PROJECT
0008121/0012789
ROCKBRIDGE ROAD
STA 118+65.00
N 1377317.0638
E 2285455.3244



PLANS COMPLETED 07-10-18

DATE	ENTITY REQUESTING REVISION(S)	DRAWING NUMBER(S)	SIGNATURE	GSWCC LEVEL II CERT.*
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-
-	-	-	-	-



7/10/18
GSWCC LEVEL II CERTIFICATION
NO. 7817

DRAWING No.
50-0001

REVISED JANUARY 2017

ESPCP GENERAL NOTES

The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land-disturbing activities.

Erosion and sedimentation control measures will be maintained at all times. If full implementation of the approved plan does not provide for effective control, additional erosion and sedimentation control measures shall be implemented to control or treat the sediment source.

PLAN ALTERATIONS

This Erosion, Sedimentation, and Pollution Control Plan (ESPCP) is provided by the Department. It addresses the staged construction of the project on the basis of common construction methods and techniques. If the Contractor elects to alter the staged construction from that shown in the plans or utilize construction techniques that render this plan ineffective, the Contractor shall revise the plans in accordance to Special Provision 161 of the contract.

The Contractor, the Certified Design Professional, and the WECS shall carefully evaluate this plan prior to commencing land-disturbing activities. A major modification or deletion of structural BMP's with a hydraulic component requires a formal revision of the ESPCP and the signature of a GSWCC Level-II Certified Design Professional. Additional BMP's may be added per Special Provision 161-Control of Soil Erosion and Sedimentation.

TEMPORARY MULCHING

EPD General Permit GAR 100002 states that any disturbed area where construction activities have temporarily or permanently ceased shall be stabilized within 14 days of such cessation as soon as practicable with a suitable material listed in Standard Specification (or Special Provision) Sections 163, 700, or 711. However in special cases, the Project Engineer may require the contractor to perform stabilization more often than 14 days.

VEGETATION AND PLANTING SCHEDULE

All temporary and permanent vegetative practices including plant species, planting dates, seeding, fertilizing, liming, and mulching for this project can be found in Section 700 of the current edition of the Department's Standard Specifications (or special provisions) and other applicable contract documents, or landscaping plans.

For Disturbed Area Stabilization (with Temporary Seeding) or Disturbed Area Stabilization (with Permanent Vegetation), do not use any species or cultivars of species that are on the GDOT list of Non-native Invasive Plants (6755-9, Table 5.1), or the Georgia Exotic Pest Plant Council's Non-native Invasive list in Category 1, 2, or 3. Category 4 plants should be avoided if possible.

For permanent grassing/erosion control in stream buffer areas, use Riparian Seed Mix from GDOT Specification Section 700 - Grassing. (Per GDOT Spec 700, no lime or fertilizer should be applied in stream buffer areas, and only wheat straw shall be used as mulch.) For all other permanent grassing/erosion control, use Native Grass Seeding Table 3 and/or Herbaceous Plant Seeding Table 4 from GDOT Specification Section 700 - Grassing where possible.

SEQUENCE OF MAJOR ACTIVITIES

The Contractor is responsible for developing the construction schedule for the project. The construction schedule for this project shall be submitted after the project is awarded along with the NOI. A copy of the construction schedule shall be maintained at the project site.

The project budget includes sufficient funds for the payment of construction exits. The Contractor is responsible for establishing at least one (1) construction exit per the specifications of the construction exit detail included in this ESPCP. To facilitate project logistics, the Contractor is also responsible for selecting the location(s) of the construction exit(s).

INITIAL PHASE BMPs - Install the following BMPs prior to construction:

1. Perimeter control silt fence
2. Construction exits
3. Install inlet sediment traps where specified.
4. Apply temporary grassing and mulch as necessary to disturbed areas.

INTERMEDIATE PHASE BMPs

1. Install additional silt fence.
2. Install check dams.
3. Install inlet sediment traps where specified.
4. Install slope stabilization where specified in the plans.
5. Mulch and plant temporary grass as required.

FINAL PHASE BMPs - As soon as final grade has been established in any area of the project, install the following:

1. Slope stabilization
2. Permanent grassing/Sod

PETROLEUM STORAGE, SPILLS AND LEAKS

These plans expressly delegate the responsibility of proper on-site hazardous material management to the Contractor. The Contractor shall at a minimum provide an action plan and keep the necessary materials on site for the capture, clean up, and disposal of any petroleum product, or other hazardous material, leaks or spills associated with the servicing, refueling or operation of any equipment utilized at the site. A copy of the action plan shall be submitted to the Project Engineer and maintained on the project site. All personnel operating or servicing equipment shall be familiar with the action plan. The Contractor shall not park, refuel, or maintain equipment within stream buffers.

If the Contractor elects to store petroleum products on site, the Contractor shall prepare an ESPCP addendum that addresses the additional BMPs needed for onsite storage and spill prevention for petroleum products. This plan shall be prepared by a Certified Design Professional as required by GAR100002 for inclusion with these plans. The Contractor's attention is specifically directed to Standard Specification 107-Legal Regulations and Responsibility to the public for additional requirements.

SOIL SERIES INFORMATION

The following is a summary of the soils that are expected to be found on the project site:

Soil Type	Map Unit Name	Percent of AOI
CuC	Cecil-Urban land complex, 2 to 10 percent slopes	33.0%
PuE	Pacolet-Urban land complex, 10 to 25 percent slopes	36.9%
Ud	Urban land	30.1%

Due to the size and scope of this project and the nature of soil series maps, it is not reasonably practical to delineate the precise locations of the above listed soils on the construction plans. The NRCS soil survey and soil series maps for the project site are also available online at <http://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm>.

POSTCONSTRUCTION BMP'S FOR STORMWATER MANAGEMENT

All permanent postconstruction BMP's are shown in the construction plans and in the ESPCP plan. The postconstruction BMP's for this project consist of vegetation, riprap at pipe outlets for velocity dissipation and outlet stabilization, and vegetated swales/ditches where practical. The postconstruction BMP's will provide permanent stabilization of the site and prevent abnormal transportation of sediment and pollutants into receiving waters.

SILT FENCE INSTALLATION WITH J HOOKS AND SPURS

Silt fence should never be run continuously. The silt fence should turn back into the fill or slope to create small pockets that trap silt and force stormwater to flow through the silt fence. This technique is called using J hooks (or spurs). The J hooks shall be utilized on all silt fences that are located around the perimeter of the project and along the toe of embankments or slopes. The J hooks shall be spaced in accordance with GDOT Construction Detail D-24C. The maximum J-hook spacing is reached when the top of the J hook is at the same elevation as the bottom of the immediately upgradient J hook. J Hooks shall be paid for as silt fence items per linear foot. All costs and other incidental items are included in cost of installing and maintaining the silt fence.

SITE STABILIZATION AND BMP MAINTENANCE MEASURES

See the Department's Standard Specifications (or Special Provisions) 161, 163, 165, 700, 711, and other contract documents for stabilization and maintenance measures.

WASTE DISPOSAL

Where attainable, locate waste collection areas, dumpsters, trash cans and portable toilets at least 50 feet away from streets, gutters, watercourses and storm drains. Secondary containment shall be provided around liquid waste collection areas to minimize the likelihood of contaminated discharges. The Contractor shall comply with applicable state and local waste storage and disposal regulations and obtain all necessary permits. Solid materials, including building materials, shall not be discharged to Waters of the State, unless authorized by a Section 404 Permit.

NONSTORMWATER DISCHARGES

Nonstormwater discharges defined in Part III.A.2 of the NPDES Permit will be identified after construction has commenced. These discharges shall be subject to the same requirements as storm water discharges required by the Georgia Erosion and Sedimentation Control Act, the NPDES Permit, the Clean Water Act, the Manual for Erosion and Sediment Control in Georgia, Department Standards, and other contract documents. The NPDES does not authorize the discharge of soaps or solvents used in vehicle and equipment washing or the discharge of wastewater containing stucco, paint, oils, curing compounds, and other construction materials.

INSPECTIONS

The primary permittee must retain the design professional who prepared the ESPCP, or an alternative design professional approved by EPD in writing, to inspect the installation of the initial sediment storage requirements and perimeter control BMPs within seven (7) days of installation over the entire infrastructure project. Alternatively, for linear infrastructure projects, the permittee must retain either of these personnel to inspect the initial sediment storage requirements and perimeter control BMPs for the initial segment, as defined by Part IV.A.5. of the current GAR100002 Permit, within seven (7) days of installation and all sediment basins within the entire linear infrastructure project within seven (7) days of installation. The inspecting design professional shall report the results to the primary permittee within seven (7) days, and the permittee must correct all deficiencies within two (2) business days of receipt of the inspection report, unless on-site weather conditions are such that more time is required. Additionally, the County's Construction Project Engineer will be responsible for all subsequent seven-day inspections for all new BMP installations.

All other inspections shall be documented on the appropriate County inspection forms. See Standard Specification (or Special Provision) 167 and other contract documents for inspection requirements. These inspections shall continue until the Notice of Termination (NOT) is submitted.

Failure to perform inspections as required by the contract documents and the NPDES permit shall result in the cessation of all construction activities with the exception of Traffic Control and Erosion Control. Continued failure to perform inspections shall result in non-refundable deductions as specified in the contract documents.

DEWATERING AND PUMPING ACTIVITIES

Any pumped discharge from an excavation or disturbed area shall be routed through an appropriately sized sediment basin, silt filter bag, or shall be treated equivalently with suitable BMP's. The contractor shall ensure the post BMP treated discharge is sheet flowing. Failure to create sheet flow will obligate the contractor to perform water quality sampling of pumped discharges. The contractor shall prepare sampling plans in accordance with the current GAR100002 NPDES permit by utilizing a Certified Design Professional. No separate payment will be made for water quality sampling of pump discharges.

OTHER CONTROLS

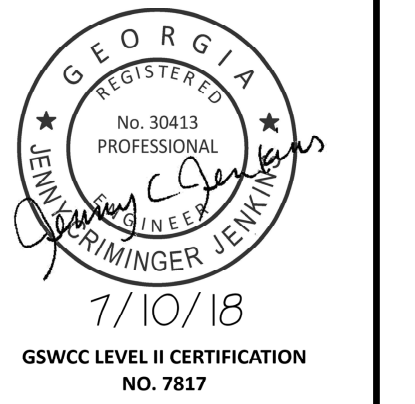
The Contractor shall follow this ESPCP and ensure and demonstrate compliance with all applicable State and/or local regulations for waste disposal, sanitary sewer and septic systems, and petroleum storage.

The Contractor shall control dust from the site in accordance with Section 161 of the current edition of the Department's Standard Specifications.

RETENTION OF RECORDS

The Department will retain all records related to the implementation of this ESPCP in accordance with Part IV.F of the General Permit GAR100002.

PROPERTY AND EXISTING R/W LINE REQUIRED R/W LINE CONSTRUCTION LIMITS EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES EASEMENT FOR CONSTR OF SLOPES EASEMENT FOR CONSTR OF DRIVES		BEGIN LIMIT OF ACCESS.....BLA END LIMIT OF ACCESS.....ELA LIMIT OF ACCESS REQ'D R/W & LIMIT OF ACCESS ORANGE BARRIER FENCE ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)			REVISION DATES	ESPCP GENERAL NOTES ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD				
					<table border="1"> <tr> <td>CHECKED:</td> <td>DATE:</td> <td>DRAWING No.</td> </tr> <tr> <td>BACKCHECKED:</td> <td>DATE:</td> <td rowspan="3">51-0001</td> </tr> <tr> <td>CORRECTED:</td> <td>DATE:</td> </tr> <tr> <td>VERIFIED:</td> <td>DATE:</td> </tr> </table>		CHECKED:	DATE:	DRAWING No.	BACKCHECKED:
CHECKED:	DATE:	DRAWING No.								
BACKCHECKED:	DATE:	51-0001								
CORRECTED:	DATE:									
VERIFIED:	DATE:									



SEDIMENT STORAGE

The site has a total disturbed area of 1.17 acres. The following table summarizes the required and available sediment storage for every outfall on this project. The Contractor shall provide and maintain the storage volumes for the BMP's specified in this table.

Location	Total Drainage Area (acres)	Disturbed Area (acres)	Required Sediment Storage Volume (ydf)	Total Storage Volume Provided (ydf)	Sediment Basins		Check Dam (yd ³ /each)		Inlet Sediment Traps (yd ³ /each)		Silt Gates (yd ³ /each)		Silt Fence (0.3 yd ³ /ft)	
					Basin #	Total Volume (yd ³)	# of Devices	Total Volume (yd ³)	# of Devices	Total Volume (yd ³)	# of Devices	Total Volume (yd ³)	Length of Fence (ft)	Total Volume (yd ³)
Outfall 1	2.14	1.17	143.38	97.0	-	-	0	0	16	20.8	0	0	254.0	76.2

To prevent runoff from bypassing inlet sediment traps, a temporary sump shall be installed around all inlet sediment traps that are not located in a low point or an excavated sump. Construct temporary sumps in accordance with Construction Detail D-24C. Temporary sumps shall be installed in a manner that ensures stormwater does not bypass the inlet. The Contractor may submit alternate temporary containment berm designs to the Project Engineer for approval.

OUTFALL 1:

The area drained is 2.14 acres; however, the disturbed area within this drainage basin is 1.17 acres. The disturbance activities consist of roadway reconstruction and widening, new curb and gutter, new sidewalk, and some walls. The BMPs shown on the erosion control plans provide 97.0 CY of the 143.38 CY required for sediment storage within this basin. The outfall for this basin is an existing pipe. Due to the constricted location of the outfall, a sediment basin is NOT recommended. BMPs have been shown on the plans to the fullest extent possible. The contractor shall strictly adhere to the BMP maintenance requirements and shall establish vegetation on disturbed areas as soon as possible.

USE OF ALTERNATIVE AND/OR ADDITIONAL BMPS:

Fabric check dams will be used on this project as an alternate BMP. The use of the alternate BMP for stone check dams has been reviewed by the Georgia EPD and has been determined by the Georgia EPD to be allowable only for this ESCP. This review was site specific and based on documentation submitted and certified by the Level II Certified Design Professional and was required by the Georgia EPD and GSWCC.

DISCHARGES INTO OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT

The following is a summary of project outfalls within 1 mile and within the watershed of an identified impaired stream segment that has been listed for criteria violated, "Bio F" (impaired fish community) and/or "Bio M" (impaired macro invertebrate community), within Category 4a, 4b or 5, and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

Outfall ID # and Location (Station and Offset)	Reach Name	Location of the Impaired Stream Segment as Indicated in the 305b/303d List	Criteria Violated (Bio F or Bio M)	Potential Cause (NP or UR)	Category (4a, 4b, or 5)	Numeric waste load allocation for sediment*
Outfall 1 Station 116+83.50 38.17' RT	Snapfinger Creek	Headwaters to South River	Bio F, Bio M	UR	4a, 5	0

- Use anionic polyacrylamide (PAM) and/or mulch to stabilize areas left disturbed for more than 7 calendar days in accordance with Part III, D.1 of the NPDES Permit.
- Limit the amount of disturbed area at any one time to no greater than 25 acres or 50% of the total planned site, whichever is less.
- Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1.
- Install sod for a minimum of 20 foot width (in lieu of seeding) after final grade has been achieved, along the site perimeter wherever storm water (including sheet flow) may be discharged.

READY MIX CHUTE WASH DOWN

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of Portland cement concrete is prohibited on this site.

In accordance with Standard Specification 107: Legal Regulations and Responsibility to the Public, only the discharge chute utilized in the delivery of Portland cement concrete may be rinsed free of fresh concrete remains. The Contractor shall excavate a pit outside of State water buffers, at least 25 feet from any storm drain and outside of the travelled way, including shoulders, for a wash-down pit. The pit shall be large enough to store all wash-down water without overflowing. Immediately after the wash-down operations are completed and after the wash-down water has soaked into the ground, the pit shall be filled in, and the ground above it shall be graded to match the elevation of the surrounding areas. Alternate wash-down plans must be approved by the Project Engineer.

Wash-down plans describe procedures that prevent wash-down water from entering streams and rivers. Never dispose of wash-down water down a storm drain. Establish a wash-down pit that includes the following: (1) a location away from any storm drain, stream, or river, (2) access to the vehicle being used for wash down, (3) sufficient volume for wash-down water, and (4) permission to use the area for wash down.

On sites where permission or access to excavate a wash-down pit is unavailable, the Contractor may have to wash-down into a sealable 55-gallon drum or other suitable container and then transport the container to a proper disposal site. For additional information, refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

STATE-WATER BUFFER IMPACTS

State-water buffers, as defined by O.C.G.A. 12-7-1, are not impacted by this project.

Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of westerly vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits.

SAMPLING GENERAL NOTES

Representative sampling may be utilized on this project as explained here. The individual outfall drainage basins along the project corridor have been carefully evaluated and compared on the basis of four characteristics: the type of construction activity, the disturbed acreage, the average slope about the outfall, and the soil erosion index 0-10, 10 being the most erodible soil. The construction activity types are new road on fill, new road in cut, road widening, and maintenance/safety. The disturbed area classes are less than or equal to 1 acre, greater than 1 acre to less than 2 acres, and equal to or greater than 2 acres. The average outfall slope is mild if it is equal to or less than 0.03, and steep if it is greater than 0.03. The soil erosion index is low if it is less than or equal to 5 and high if it is greater than 5. After evaluation of these characteristics as presented in the project's drainage area map, hydrology and hydraulic studies, construction plans, geotechnical soil survey, and erosion sedimentation and pollution control plans, the Department has determined that the representative sampling scheme shown below is valid for the duration of the project. The table shows the groups of similar outfall drainage basins.

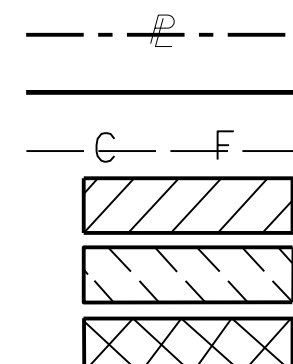
The increase in turbidity at the specified locations in the table below will be representative of the alternate outfall drainage basins when similar outfall drainage basins exist. Approved primary and alternate representative sampled features are identified in the table below.

Note: The Total site area is 3.28 acres.										Representative Sampling Scheme					
SAMPLING INFORMATION										OUTFALL CHARACTERISTICS					
Primary Sampled Feature	Location (Station and Offset)	Name of Receiving Water	Applicable Construction Stage for Sampling	Sampling Type (Outfall or Receiving water)	Drainage Area for Receiving Water (mi ²)	Upstream Disturbed Area (acres)	Warm or Cold Water Stream	Appendix B NTU Value (Outfall Sampling only)	Allowable NTU Increase (Receiving water sampling only)	Location Description	Construction Activity	Disturbed Area (acres)	Average Outfall Slope (Rise/Run)	Soil Erosion Index	Represented Outfall Drainage Basins
1	116+83.50, 38.17' RT	Snapfinger Creek	All	Outfall	0.003	0.002	Warm	75	N/A	End of Pipe	N/A	N/A	N/A	N/A	N/A

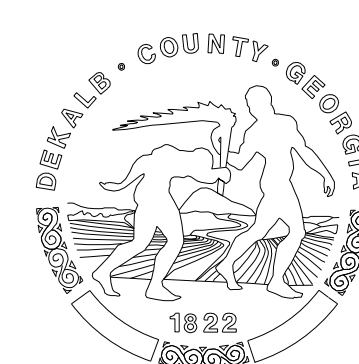
WATER QUALITY INSPECTING AND SAMPLING PROCEDURES

See Special Provision 167 and other contract documents for the inspecting and sampling procedures.

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES

ESPCP GENERAL NOTES

**ROCKBRIDGE ROAD
 FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	51-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	



EROSION, SEDIMENTATION & POLLUTION CONTROL PLAN CHECKLIST
INFRASTRUCTURE CONSTRUCTION PROJECTS
 SWCD: DeKalb County SWCD

Project Name: Rockbridge Rd from Allgood Rd to Rowland Rd Address: 4567 Rockbridge Rd SW, Pine Lake, GA 30072
 City/County: DeKalb County, GA Date on Plans: _____

Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN
51-0003	Y	1 The applicable Erosion, Sedimentation and Pollution Control Plan Checklist established by the Commission as of January 1 of the year in which the land-disturbing activity was permitted.
50-0001	Y	2 Level II certification number issued by the Commission, signature and seal of the certified design professional.
50-0001	Y	3 The name and phone number of the 24-hour local contact responsible for erosion, sedimentation and pollution controls.
50-0001	Y	4 Provide the name, address and phone number of primary permittee.
53-0001	Y	5 Note total and disturbed acreage of the project or phase under construction.
50-0001	Y	6 Provide the GPS locations of the beginning and end of the Infrastructure project. Give the Latitude and Longitude in decimal degrees.
50-0001	Y	7 Initial date of the Plan and the dates of any revisions made to the Plan including the entity who requested the revisions.
51-0001	Y	8 Description of the nature of construction activity.
50-0001	Y	9 Provide vicinity map showing site's relation to surrounding areas. Include designation of specific phase, if necessary.
55-0001	Y	10 Identify the project receiving waters and describe all sensitive adjacent areas including streams, lakes, residential areas, wetlands, marshlands, etc. which may be affected.
50-0001	Y	11 Design professional's certification statement and signature that the site was visited prior to development of the ES&PC Plan as stated on page 15 of the permit.
50-0001	Y	12 Design professional's certification statement and signature that the permittee's ES&PC Plan provides for an appropriate and comprehensive system of BMPs and sampling to meet permit requirements as stated on page 15 of the permit.*
50-0001	Y	13 Design professional certification statement and signature that the permittee's ES&PC Plan provides for representative sampling as stated on page 26 of permit as applicable.*
51-0001	Y	14 Clearly note the statement that "The design professional who prepared the ES&PC Plan is to inspect the installation of the initial sediment storage requirements, perimeter control BMPs, and sediment basins in accordance with part IV.A.5. within 7 days after installation."
51-0002	Y	15 Clearly note the statement that "Non-exempt activities shall not be conducted within the 25 or 50-foot undisturbed stream buffers as measured from the point of wrested vegetation or within 25-feet of the coastal marshland buffer as measured from the Jurisdictional Determination Line without first acquiring the necessary variances and permits."
N/A	N	16 Provide a description of any buffer encroachments and indicate whether a buffer variance is required.
51-0001	Y	17 Clearly note the statement that "Amendments/revisions to the ES&PC Plan which have a significant effect on BMPs with a hydraulic component must be certified by the design professional."
51-0001	Y	18 Clearly note the statement that "Waste materials shall not be discharged to waters of the State, except as authorized by a section 404 permit"
51-0001	Y	19 Clearly note statement that "The escape of sediment from the site shall be prevented by the installation of erosion and sediment control measures and practices prior to land disturbing activities."
51-0001	Y	20 Clearly note statement that "Erosion control measures will be maintained at all times. If full implementation of the approved Plan does not provide for effective erosion control, additional erosion and sediment control measures shall be implemented to control or treat the sediment source."
51-0001	Y	21 Clearly note the statement "Any disturbed area left exposed for a period greater than 14 days shall be stabilized with mulch or temporary seeding."
51-0004	Y	22 Any construction activity which discharges storm water into an Impaired Stream Segment, or within 1 linear mile upstream of and within the same watershed as, any portion of an Biot Impaired Stream Segment must comply with Part III, C. of the Permit. Include the completed Appendix 1 listing all the BMPs that will be used for those areas of the site which discharge to the Impaired Stream Segment."
51-0004	Y	23 If a TMDL Implementation Plan for sediment has been finalized for the Impaired Stream Segment (identified in item 22 above) at least six months prior to submittal of NOI, the ES&PC Plan must address any site-specific conditions or requirements included in the TMDL Implementation Plan."
51-0002	Y	24 BMPs for concrete washdown of tools, concrete mixer chutes, hoppers and the rear of the vehicles. Washout of the drum at the construction site is prohibited."
51-0001	Y	25 Provide BMPs for the remediation of all petroleum spills and leaks.
51-0001	Y	26 Description of the measures that will be installed during the construction process to control pollutants in storm water that will occur after construction operations have been completed.*
51-0001	Y	27 Description of the practices that will be used to reduce the pollutants in storm water discharges.*
51-0001	Y	28 Description and chart or timeline of the intended sequence of major activities which disturb soils for the major portions of the site (i.e., initial perimeter and sediment storage BMPs, clearing and grubbing activities, excavation activities, utility activities, temporary and final stabilization).

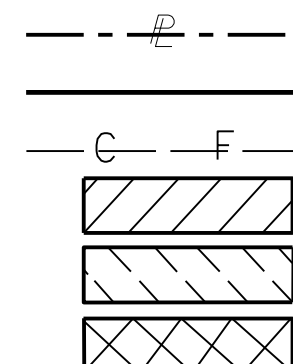
Plan Page #	Included Y/N	TO BE SHOWN ON ES&PC PLAN				
51-0001	Y	29 Provide complete requirements of inspections and record keeping by the primary permittee.*				
51-0002	Y	30 Provide complete requirements of sampling frequency and reporting of sampling results.*				
51-0001	Y	31 Provide complete details for retention of records as per Part IV.F. of the permit.*				
51-0002	Y	32 Description of analytical methods to be used to collect and analyze the samples from each location.*				
51-0002	Y	33 Appendix B rationale for NTU values at all outfall sampling points where applicable.*				
55-0001	Y	34 Delineate all sampling locations, perennial and intermittent streams and other water bodies into which storm water is discharged also provide a summary chart of the justification and analysis for the representative sampling as applicable.*				
51-0001	Y	35 A description of appropriate controls and measures that will be implemented at the construction site including: (1) initial sediment storage requirements and perimeter control BMPs, (2) intermediate grading and drainage BMPs, and (3) final BMPs. For construction sites where there will be no mass grading and the initial perimeter control BMPs, intermediate grading and drainage BMPs, and final BMPs are the same, the plan may combine all of the BMPs into a single phase.*				
54 SERIES	Y	36 Graphic scale and North arrow.				
54 SERIES	Y	37 Existing and proposed contour lines with contour lines drawn at an interval in accordance with the following: <table border="1" style="margin-left: 20px;"> <tr> <td>Existing Contours</td> <td>USGS 1": 2000' Topographical Sheets</td> </tr> <tr> <td>Proposed Contours</td> <td>1" : 400' Centerline Profile</td> </tr> </table>	Existing Contours	USGS 1": 2000' Topographical Sheets	Proposed Contours	1" : 400' Centerline Profile
Existing Contours	USGS 1": 2000' Topographical Sheets					
Proposed Contours	1" : 400' Centerline Profile					
51-0002	Y	38 Use of alternative BMPs whose performance has been documented to be equivalent to or superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the Georgia Soil and Water Conservation Commission). Please refer to the Alternative BMP Guidance Document found at www.gaswcc.org.				
51-0002	Y	39 Use of alternative BMP for application to the Equivalent BMP List. Please refer to Appendix A-2 of the Manual for Erosion & Sediment Control in Georgia 2016 Edition.*				
54 SERIES	Y	40 Delineation of the applicable 25-foot or 50-foot undisturbed buffers adjacent to State waters and any additional buffers required by the Local Issuing Authority. Clearly note and delineate all areas of impact				
54 SERIES	Y	41 Delineation of on-site wetlands and all State waters located on and within 200 feet of the project site.				
53-0001	Y	42 Delineation and acreage of contributing drainage basins on the project site.				
55-0001	Y	43 Delineate on-site drainage and off-site watersheds using USGS 1" :2000' topographical sheets.				
53-0001	Y	44 An estimate of the runoff coefficient or peak discharge flow of the site prior to and after construction activities are completed.				
53-0001	Y	45 Storm-drain pipe and weir velocities with appropriate outlet protection to accommodate discharges without erosion. Identify/Delineate all storm water discharge points.				
51-0001	Y	46 Soil series for the project site and their delineation.				
54 SERIES	Y	47 The limits of disturbance for each phase of construction.				
51-0002	Y	48 Provide a minimum of 67 cubic yards of sediment storage per acre drained using a temporary sediment basin, retrofitted detention pond, and/or excavated inlet sediment traps for each common drainage location. Sediment storage volume must be in place prior to and during all land disturbance activities until final stabilization of the site has been achieved. A written justification explaining the decision to use equivalent controls when a sediment basin is not attainable must be included in the plan for each common drainage location in which a sediment basin is not provided. A written justification as to why 67 cubic yards of storage is not attainable must also be given. Worksheets from the Manual must be included for structural BMPs and all calculations used by the design professional to obtain the required sediment storage when using equivalent controls. When discharging from sediment basins and impoundments, permittees are required to utilize outlet structures that withdraw water from the surface, unless infeasible. If outlet structures that withdraw water from the surface are not feasible, a written justification explaining this decision must be included in the plan.				
54 SERIES	Y	49 Location of Best Management Practices that are consistent with and no less stringent than the Manual for Erosion and Sediment Control in Georgia. Use uniform coding symbols from the Manual, Chapter 6, with legend.				
56 SERIES	Y	50 Provide detailed drawings for all structural practices. Specifications must, at a minimum, meet the guidelines set forth in the Manual for Erosion and Sediment Control in Georgia.				
51-0001	Y	51 Provide vegetative plan, noting all temporary and permanent vegetative practices. Include species, planting dates and seeding, fertilizer, lime and mulching rates. Vegetative plan shall be site specific for appropriate time of year that seeding will take place and for the appropriate geographic region of Georgia.				

*If using this checklist for a project that is less than 1 acre and not part of a common development but within 200 ft of a perennial stream the * checklist items would be N/A.

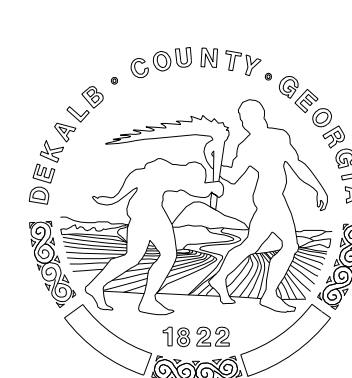
Effective January 1, 2017



PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES

ESPCC GENERAL NOTES

ROCKBRIDGE ROAD
 FROM ALLGOOD ROAD TO ROWLAND ROAD

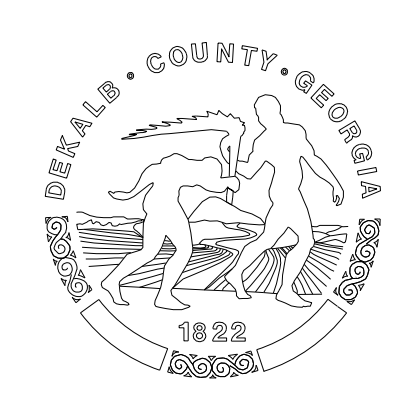
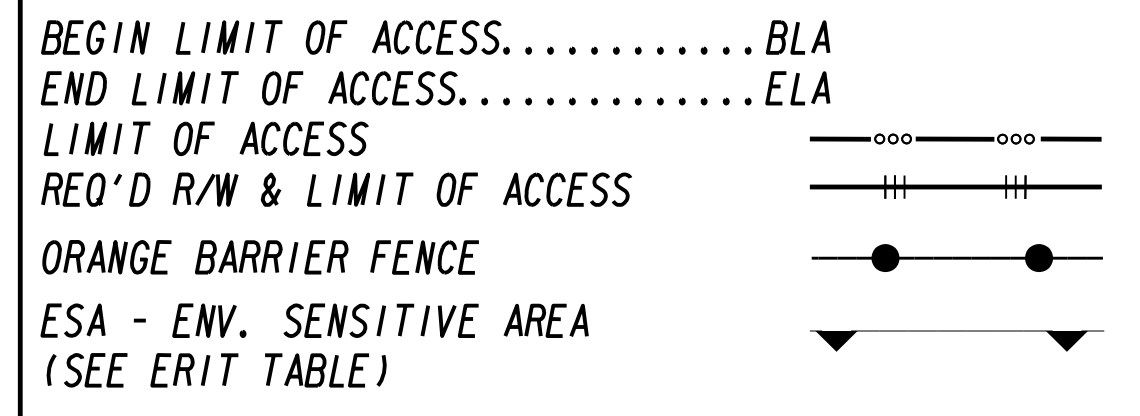
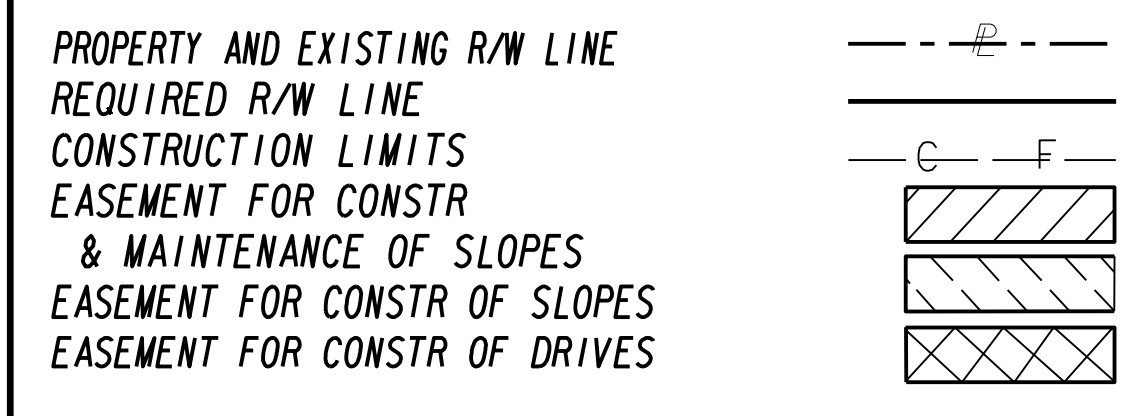
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VERIFIED:	DATE:	

APPENDIX 1
THE ES&PC PLAN MUST INCLUDE AT LEAST FOUR (4) OF THE FOLLOWING BMPs FOR THOSE AREAS OF THE SITE WHICH DISCHARGE TO A IMPAIRED STREAM SEGMENT AND FOR SITES WHICH EPD HAS APPROVED IN WRITING A REQUEST TO DISTURB 50 ACRES OR MORE AT ANY ONE TIME.

The four items chosen must be appropriate for the site conditions.

Plan Page #	Included Y/N	
N/A	N	a. During construction activities, double the width of the 25 foot undisturbed vegetated buffer along all State waters requiring a buffer and the 50 foot undisturbed vegetated buffer along all State waters classified as "trout streams" requiring a buffer. During construction activities, EPD will not grant variances to any such buffers that are increased in width.
N/A	N	b. Increase all temporary sediment basins and retrofitted storm water management basins to provide sediment storage of at least 3600 cubic feet (134 cubic yards) per acre drained.
N/A	N	c. Use baffles in all temporary sediment basins and retrofitted storm water management basins to at least double the conventional flow path length to the outlet structure.
N/A	N	d. A large sign (minimum 4 feet x 8 feet) must be on the site on the actual start date of construction visible from a public roadway identifying the construction site, the permittee(s), and the contact person(s) and telephone number(s) until a NOT has been submitted.
51-0004	Y	e. Use anionic polyacrylamide (PAM) and/or mulch to stabilize areas left disturbed for more than seven (7) calendar days in accordance with Part III. D.1. of the NPDES Permit.
N/A	N	f. Conduct turbidity sampling after every rain event of 0.5 inch or greater within any 24 hour period, recognizing the exceptions specified in Part IV.D.6.d. of the NPDES Permits.
N/A	N	g. Comply with the applicable end-of-pipe turbidity effluent limit, without the "BMP defense" as provided for in O.C.G.A. 12-7-6 (a)(1).
N/A	N	h. Reduce the total planned site disturbance to less than 50% impervious surfaces (excluding any State-mandated buffer areas from such calculations). All calculations must be included on the plan.
53-0001	Y	i. Limit the amount of disturbed area at any one time to no greater than 25 acres or 50% of the total planned site, whichever is less. All calculations must be included on the plan.
N/A	N	j. Use "Dirt II" techniques available on the EPD website, www.gaepd.org (e.g., seep berms, sand filters, anionic PAM) to model and manage construction storm water runoff (including sheet flow). All calculations must be included on the Plan.
N/A	N	k. Add appropriate organic soil amendments (e.g., compost) and conduct pre- and post-construction soil sampling to a depth of six (6) inches to document improved levels of soil carbon after final stabilization of the construction site.
N/A	N	l. Use mulch filter berms, in addition to a silt fence, on the site perimeter wherever construction storm water (including sheet flow) may be discharged. Mulch filter berms cannot be placed in waterways or areas of concentrated flow.
52-0002	Y	m. Apply the appropriate Georgia Department of Transportation approved erosion control matting or blankets or bonded fiber matrix to all slopes steeper than 3:1. All graphical illustrations must be included on the Plan.
N/A	N	n. Use appropriate erosion control matting or blankets instead of concrete in all construction storm water ditches and storm drainages designed for a 25 year, 24 hour rainfall event.
N/A	N	o. Use anionic PAM under a passive dosing method (e.g., flocculant blocks) within construction storm water ditches and storm drainages that feed into temporary sediment basins and retrofitted management basins.
52-0001	Y	p. Install sod for a minimum 20 foot width (in lieu of seeding) after final grade has been achieved, along the site perimeter wherever storm water (including sheet flow) may be discharged.
N/A	N	q. Conduct soil tests to identify and to implement site-specific fertilizer needs.
N/A	N	r. Certified personnel for primary permittees shall conduct inspections at least twice every seven (7) calendar days and within 24 hours of the end of the storm that is 0.5 inches rainfall or greater in accordance with Part IV.D.4.a.(3).(a) - (c); secondary permittees, Part IV.D.4.b.(3). (a) - (c); and tertiary permittees Part IV.D.4.c.(3).(a) - (c). *
N/A	N	s. Apply the appropriate compost blankets (minimum depth 1.5 inches) to protect soil surfaces until vegetation is established during the final stabilization phase of the construction activity.
N/A	N	t. Use alternative BMPs whose performance has been documented to be superior to conventional BMPs as certified by a Design Professional (unless disapproved by EPD or the State Soil and Water Conservation Commission). (If using this item please refer to the Alternative BMP guidance document found at www.gaswcc.georgia.gov)
N/A	N	u. Limit the total planned site disturbance to less than 15% impervious surfaces (excluding any state mandated buffer areas from such calculations). All calculations must be included in the plan.

Effective January 1, 2017



REVISION DATES	

ESPCP GENERAL NOTES			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	51-0004	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
	ORANGE BARRIER FENCE		ORANGE BARRIER FENCE DELINEATES ENVIRONMENTALLY SENSITIVE AREAS WHERE THE CONTRACTOR SHALL NOT CLEAR, GRUB, OR PLACE CONSTRUCTION MATERIALS OR EQUIPMENT WITHIN THIS AREA.
		LINE CODE ORANGE BARRIER FENCE	
ESA	ENVIRONMENTALLY SENSITIVE AREA		AN ENVIRONMENTALLY SENSITIVE AREA (ESA) CONTAINS RESOURCES THAT ARE ENVIRONMENTALLY, CULTURALLY, OR HISTORICALLY SENSITIVE. ESAs INCLUDE, BUT ARE NOT LIMITED TO: STATE WATER BUFFERS, HISTORIC SITES, ARCHAEOLOGICAL SITES, AND PROTECTED ANIMAL AND PLANT SPECIES HABITATS. IF WORK IS AUTHORIZED IN THIS AREA, THE WORK MUST BE PERFORMED IN ACCORDANCE WITH SECTION 107 AND ANY OTHER APPLICABLE SPECIAL PROVISIONS AND APPLICABLE PLAN NOTES.
		LINE CODE ESA-25' (OR 50') STREAM BUFFER, ETC.	
Bf	BUFFER ZONE		A STRIP OF UNDISTURBED ORIGINAL VEGETATION, ENHANCED OR RESTORED EXISTING VEGETATION, OR THE RE-ESTABLISHMENT OF VEGETATION SURROUNDING AN AREA OF DISTURBANCE OR BORDERING STREAMS, PONDS, WETLANDS, LAKES, AND COASTAL WATERS. WHEN NECESSARY, BUFFER ZONES ARE TO BE PROTECTED BY ORANGE BARRIER FENCE.
		SYMBOL 	
Ds1	MULCH SECTION 163		THIS IS AN APPLICATION OF STRAW MULCH USED TO REDUCE SOIL EROSION AND STABILIZE THE SOIL. IT IS USED TO CONTROL EROSION IN AREAS WHERE PERMANENT VEGETATION IS OUT OF SEASON OR TO TEMPORARILY STABILIZE AREAS PRIOR TO FINAL GRADING. MULCHING REQUIREMENTS ARE ADDRESSED BY STANDARD SPECIFICATIONS AND/OR THE PROJECT ENGINEER.
		SYMBOL 	THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
Ds2	TEMPORARY GRASSING SECTION 163, 700		THE SOWING OF A QUICK GROWING SPECIES OF GRASS SUITABLE TO THE AREA AND SEASON. IT IS TYPICALLY USED TO CONTROL EROSION IN AREAS LONGER THAN MULCHING IS EXPECTED TO LAST. TEMPORARY GRASSING SHOULD BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATIONS.
		SYMBOL 	THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ds3	PERMANENT GRASSING SECTION 700		THE SOWING OF PERMANENT VEGETATION, SUCH AS GRASS, SUITABLE TO THE AREA AND SEASON. PERMANENT VEGETATION SHALL BE USED ON ALL PROJECTS ACCORDING TO THE STANDARD SPECIFICATION. THE BMP SYMBOL FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		SYMBOL 	
Ds4	SODDING CONSTRUCTION DETAIL D-54 SECTION 700, 890		THE INSTALLATION OF A SPECIES OF GRASS SODDING SUITABLE TO THE AREA AND SEASON TO PROVIDE IMMEDIATE PERMANENT VEGETATION. SODDING MAY BE SHOWN FOR HIGHLY SENSITIVE AREAS, TO IMPROVE AESTHETICS, OR FOR SPECIAL PLANTING REQUIREMENTS ON THE BASIS OF ENVIRONMENTAL COMMITMENTS OR LANDSCAPING REQUIREMENTS. THE BMP PATTERN FOR APPLICABLE AREAS AND/OR A NOTE SHALL BE INCLUDED ON APPLICABLE SHEETS IN SECTION 54.
		PATTERN 	
Fl-Co	FLOCCULANTS COAGULANTS SECTION 163, 700, 895		FLOCCULANTS AND COAGULANTS ARE USED TO SETTLE SUSPENDED SEDIMENT, HEAVY METALS, AND HYDROCARBONS (TSS) IN SLOW MOVING RUNOFF FROM CONSTRUCTION SITES FOR WATER CLARIFICATION. ANIONIC POLYACRYLAMIDES (PAM) MAY BE USED IN CONJUNCTION WITH BMPs WITHIN CHANNELS UPSTREAM OF A POST-CONSTRUCTION POND, TEMPORARY SEDIMENT BASIN, OR TEMPORARY SEDIMENT TRAP. FLOCCULANTS SHALL NOT BE USED DOWNSTREAM OF AFOREMENTIONED BMPs! FLOCCULANTS/COAGULANTS ARE TO BE SHOWN ON PLANS WITH APPLICABLE BMP IF NEEDED. PAYMENT FOR PAM AS A FLOCCULANT WILL BE INCLUDED IN THE PRICE FOR THE INSTALLATION AND/OR MAINTENANCE OF THE BMP IT IS USED IN CONJUNCTION WITH. NO SEPARATE PAYMENT WILL BE MADE.
		SYMBOL 	POLYACRYLAMIDE
Sb	STREAMBANK STABILIZATION SECTION 702		STREAMBANK STABILIZATION IS THE USE OF READILY AVAILABLE NATIVE PLANT MATERIALS TO MAINTAIN AND ENHANCE STREAMBANKS, OR TO PREVENT, OR RESTORE AND REPAIR SMALL STREAMBANK EROSION PROBLEMS. STREAMBANK STABILIZATION AREAS SHOULD BE SHOWN ON THE PLANS WHEN APPLICABLE TO THE PROJECT. REFER TO THE PROJECT'S STREAM AND STREAM BUFFER MITIGATION PLANS FOR PLANT SPECIES, LOCATIONS, AND OTHER PLANTING DETAILS.
		PATTERN 	

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".



NO SCALE

REVISION DATES

DATE	DESCRIPTION
3/2/2017	

EROSION CONTROL LEGEND
UNIFORM CODE SHEET
SHEET 1 OF 7

CHECKED:	DATE:	DRAWING No.
D. EAGLETON	01/01/16	
BACKCHECKED:	DATE:	
CORRECTED:	DATE:	
VERIFIED:	DATE:	52-0001

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ss	SLOPE STABILIZATION CONSTRUCTION DETAIL D-35 SECTION 716		SLOPE STABILIZATION (EROSION CONTROL MATTING) IS A PROTECTIVE COVERING USED TO PREVENT EROSION AND ESTABLISH TEMPORARY OR PERMANENT VEGETATION ON STEEP SLOPES, SHORE LINES, OR CHANNELS. SLOPE STABILIZATION MAY BE A ROLLED EROSION CONTROL PRODUCT (RECP) OR A HYDRAULIC EROSION CONTROL PRODUCT (HECP). SLOPE STABILIZATION SHALL BE USED ON ALL CUT OR FILL SLOPES OF 2.5:1 OR STEEPER AND WITHIN 50 FEET OF ALL CROSS DRAINS AND CULVERTS. NOTE: ONLY COCONUT FIBER BLANKET OR WOOD FIBER BLANKET SHALL BE USED AS SLOPE STABILIZATION WITHIN BUFFERED AREAS.
		PATTERN 	
Tac	TACKIFIERS SECTION 163, 700, 895		TACKIFIERS HYDRATE IN WATER AND READILY BLEND WITH OTHER SLURRY MATERIALS AND ARE USED TO TIE-DOWN FOR SOIL, COMPOST, SEED, STRAW, HAY OR MULCH. TACKIFIERS REQUIREMENTS, SUCH AS ANIONIC POLYACRYLAMIDES (PAM) ARE ADDRESSED BY STANDARD SPECIFICATIONS AND ARE NOT TYPICALLY SHOWN ON THE PLANS. PAM IS TYPICALLY USED BY THE CONTRACTOR FOR TEMPORARY OR PERMANENT GRASSING. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR CRITERIA.
		SYMBOL 	POLYACRYLAMIDE
Cd-F	FABRIC CHECK DAM CONSTRUCTION DETAIL D-24D SECTION 171		A CHECK DAM COMPOSED OF SYNTHETIC FIBER FABRIC, WIRE REINFORCED, POST, OVERFLOW WEIR, AND TURF REINFORCEMENT MATTING (TRM) SPLASHPAD PLACED IN DITCHES IN A SPECIAL CONFIGURATION WHICH CONTROLS ENERGY DISSIPATION AND FILTRATION OF STORM WATER. SEE CONSTRUCTION DETAIL D-24D FOR ADDITIONAL INFORMATION AND SPACING REQUIREMENTS. THIS ITEM IS SUITABLE FOR USE IN ROADSIDE DITCHES THAT ARE PART OF INFRASTRUCTURE CONSTRUCTION PROJECTS AND WITHIN THE CLEAR ZONE. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Cd-Fs	COMPOST FILTER SOCK CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A COMPOST FILTER SOCK CHECK DAM IS COMPOSED OF A PHOTODEGRADABLE OR BIODEGRADABLE KNITTED MESH MATERIAL CONTAINING A WEED FREE FILLER MATERIAL DERIVED FROM A WELL-DECOMPOSED SOURCE OF ORGANIC MATTER. THEY SHALL BE PROPERLY STAKED FOR DITCH APPLICATIONS. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR MATERIAL SPECIFICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Cd-Hb	BALED STRAW CHECK DAM CONSTRUCTION DETAIL D-52 SECTION 163		A BALE STRAW CHECK DAM IS COMPOSED OF BALES PREFERABLY BOUND WITH WIRE OR NYLON INSTEAD OF TWINE. BALES SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING ADJACENT BALES. THE DOWNSTREAM ROW OF BALES SHALL BE PLACED IN A TRENCH TO ALLOW THE TOP OF THE BALE'S LONG, WIDE SIDE TO BE LEVEL WITH THE GROUND AS A NON-ERODIBLE SPLASH PAD. PROPER STAKING IS ALSO REQUIRED FOR DITCH APPLICATIONS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Cd-S	STONE CHECK DAM OR SANDBAG CHECK DAM GA. STD 1031 SECTION 163, 603		STONE CHECK DAMS ARE CONSTRUCTED OF TYPE-3 RIP-RAP WITH GEOTEXTILE UNDERLINER. STONE CHECK DAMS ARE PREFERRED IN ROADWAY DITCHES OUTSIDE THE CLEAR ZONE. CONSIDERATION SHOULD BE GIVEN TO USING OTHER APPROPRIATE CHECK DAMS AND/OR BMPs WITHIN THE CLEAR ZONE. SANDBAG CHECK DAMS ARE RECOMMENDED IN CONCRETE LINED CHANNELS FOR TEMPORARY VELOCITY CONTROL ONLY. ENSURE DISCHARGE POINT IS PROPERLY STABILIZED AND INCLUDE APPROPRIATE BMPs FOR SEDIMENT STORAGE UPSTREAM AND/OR DOWNSTREAM OF CONCRETE LINED CHANNELS. IF THIS ITEM IS USED IN AN AREA WITH FLOWS GREATER THAN 2.0-CFS OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM SHALL BE USED AT THE DOWNSTREAM DISCHARGE POINT.
		SYMBOL 	
Ch-1	VEGETATED CHANNEL STABILIZATION SECTION 700		A NEW OR EXISTING CHANNEL MAY BE LINED WITH PERMANENT VEGETATION ONLY FOR VELOCITIES UP TO 5.0 fps. THIS MEASURE SHALL BE DESIGNED IN ACCORDANCE WITH THE GDOT CHANNEL LINING DESIGN PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. TYPICALLY NOT SHOWN IN PLANS.
		LINE CODE 	
Ch-2R1	CHANNEL STABILIZATION RIP-RAP, TYPE 1 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 1 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
		LINE CODE 	
Ch-2R3	CHANNEL STABILIZATION RIP-RAP, TYPE 3 CONSTRUCTION DETAIL D-49 SECTION 603		THIS ITEM CONSISTS OF LINING A CHANNEL WITH TYPE 3 RIP-RAP 24" THICK (UNLESS SPECIFIED OTHERWISE) PLACED ON TOP OF A GEOTEXTILE UNDERLINER. THE RIP-RAP SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM. ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED. "Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
		LINE CODE 	

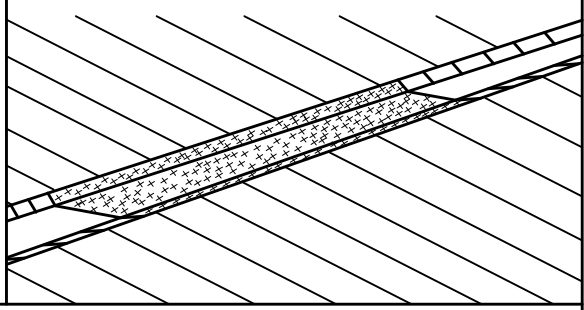
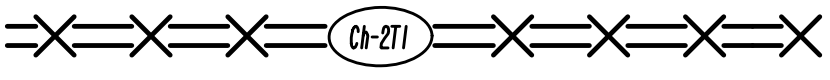
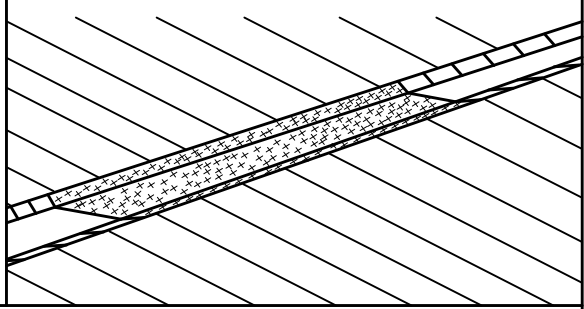
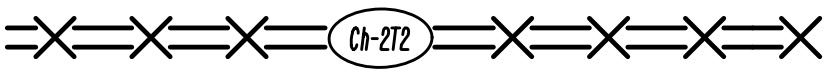
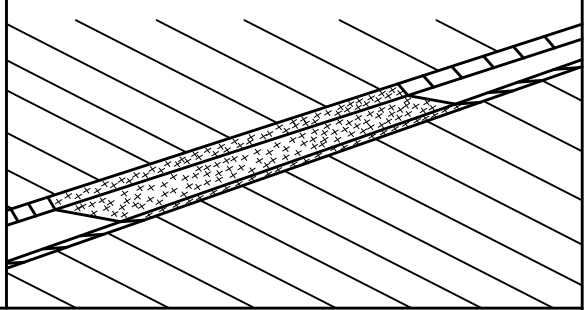
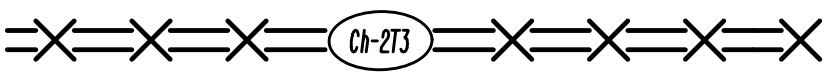
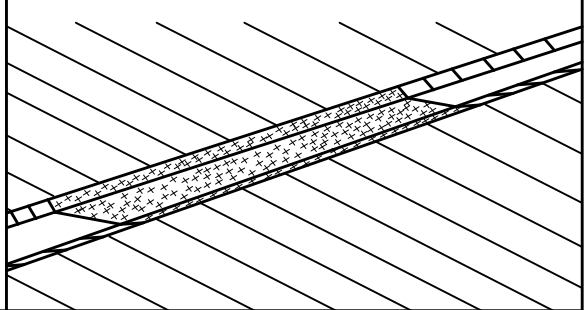
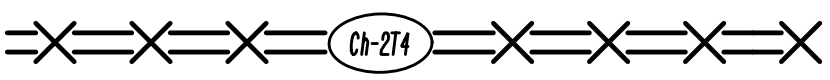
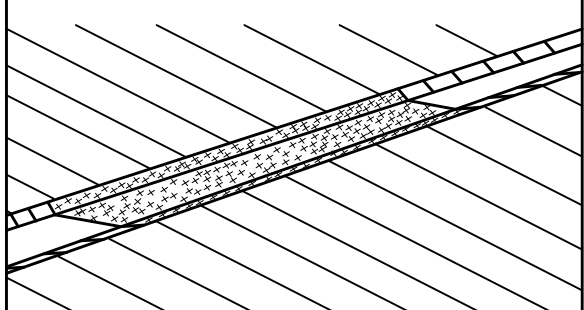
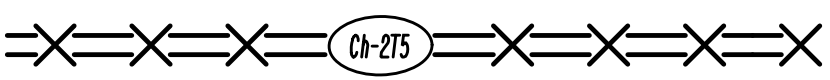
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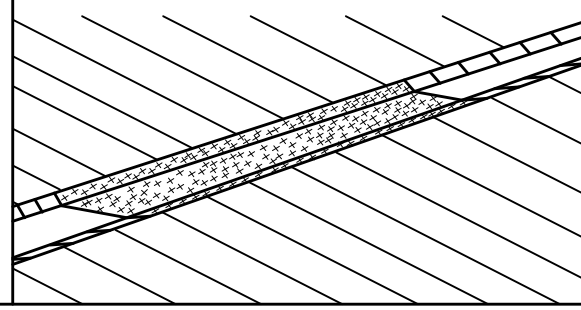
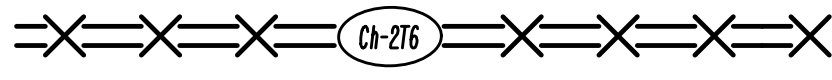
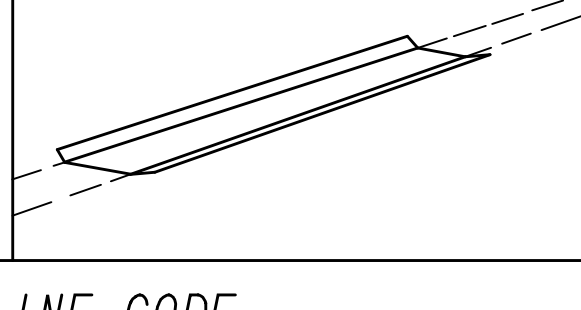

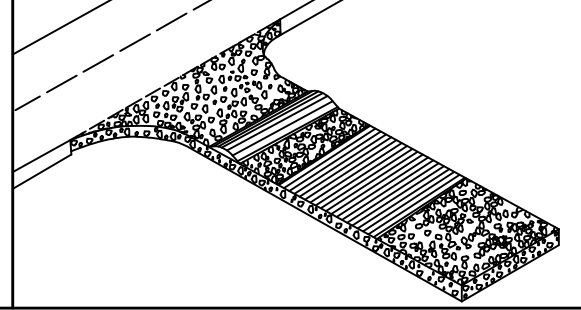

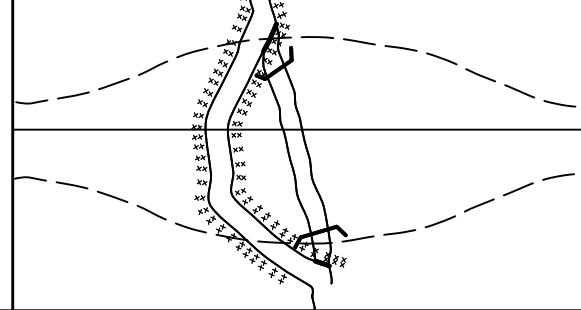

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".



NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 2 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
			DRAWING No.
			52-0002

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T1	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-2 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
		LINE CODE 	"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T2	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-4 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
		LINE CODE 	"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T3	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-6 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
		LINE CODE 	"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T4	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-8 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
		LINE CODE 	"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-2T5	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-10 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
		LINE CODE 	"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Ch-2T6	TURF REINFORCEMENT MAT (TRM) CONSTRUCTION DETAIL D-35 SECTION 711		THIS THREE DIMENSIONAL EROSION CONTROL MAT IS USED IN CONJUNCTION WITH PERMANENT VEGETATION IN CHANNELS TO STABILIZE THE SOIL BY REINFORCING THE GRASS ROOTS TO PROVIDE LONG-TERM PROTECTION FOR SHEAR STRESSES 0-12 psf. THE TRM SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
		LINE CODE 	"Dp" SHALL BE IDENTIFIED IN A TABLE LOCATED ON THE SUMMARY OF QUANTITIES SHEETS AND IN THE EROSION, SEDIMENTATION, AND POLLUTION CONTROL PLAN.
Ch-3	CONCRETE CHANNEL STABILIZATION		CHANNELS ARE LINED WITH CONCRETE FOR VELOCITIES >= 10 fps. THIS ITEM CONSISTS OF CONSTRUCTING A 4" THICK CONCRETE CHANNEL. THE CONCRETE SHALL PROTECT THE CHANNEL FLOWING TO A DEPTH "Dp" RECOMMENDED BY THE GDOT CHANNEL LINING PROGRAM.
	CONSTRUCTION DETAIL D-10, D-49 SECTION 441		LINE CODE 
Co	CONSTRUCTION EXIT		A CONSTRUCTION EXIT IS A STONE STABILIZED PAD THAT REDUCES OR ELIMINATES THE TRANSPORT OF MUD FROM CONSTRUCTION AREAS ONTO PUBLIC ROADS BY EQUIPMENT OR RUNOFF. BEST USED AT ACCESS POINTS, I.E. NEW LOCATION PROJECTS, BORROW PITS, WASTE PITS, ACCESS ROADS, ETC. SHOULD BE MINIMUM 20' WIDE, 50' LONG, 6" THICK, AND REQUIRES A GEOTEXTILE UNDERLINER. ON SITES WHERE THE GRADE TOWARD A PAVED AREA IS GREATER THAN 2%, A FULL WIDTH DIVERSION RIDGE 6" TO 8" HIGH WITH 3:1 SLOPES SHALL BE CONSTRUCTED APPROXIMATELY 15' UPSTREAM OF PAVED AREA. A TIRE WASHING AREA TO REMOVE MUD MAY ALSO BE REQUIRED PRIOR TO ENTRANCE ONTO PUBLIC ROADWAYS.
	CONSTRUCTION DETAIL D-41 SECTION 163, 800		SYMBOL 
Dc-A	STREAM DIVERSION CHANNEL GEOTEXTILE, POLYETHYLENE FILM		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE OR POLYETHYLENE FILM. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 0 - 2.5 fps.
	SECTION 163		LINE CODE 

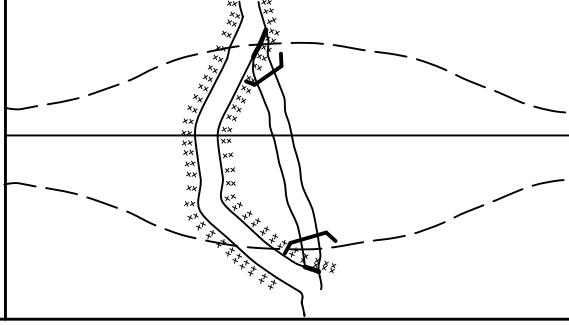

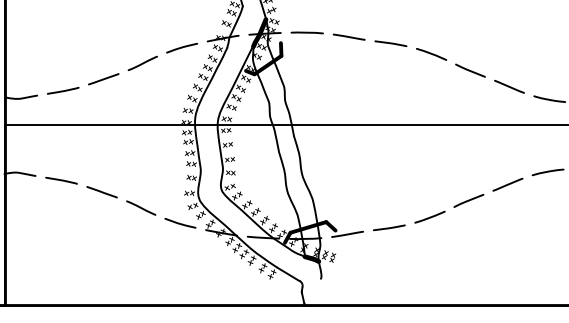

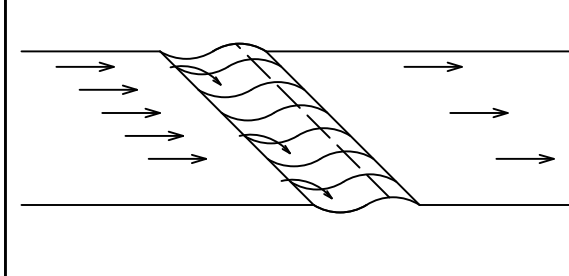

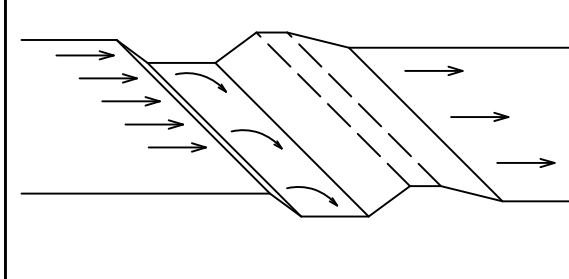
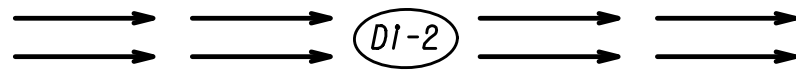
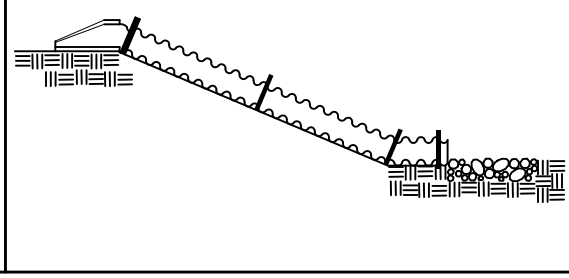
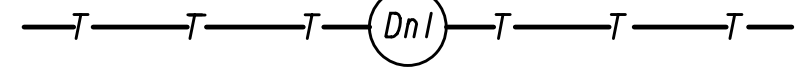
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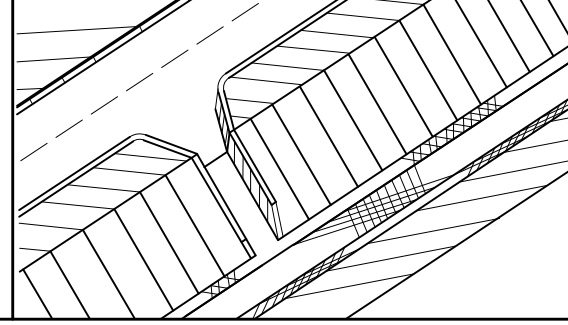
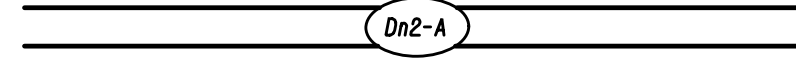
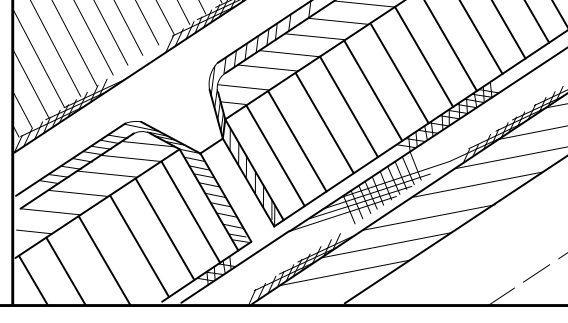

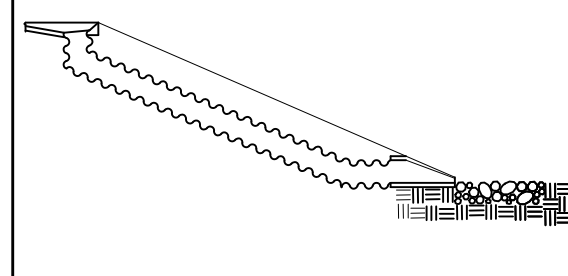
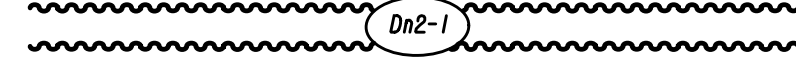
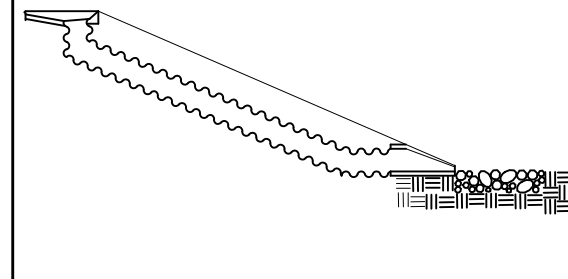
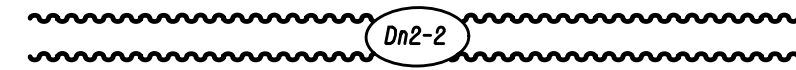
- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".



NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 3 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
		DRAWING No.	
		52-0003	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dc-B	STREAM DIVERSION CHANNEL GEOTEXTILE ONLY SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH GEOTEXTILE ONLY. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 2.5 - 9.0 fps. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
	LINE CODE 		
Dc-C	STREAM DIVERSION CHANNEL RIP-RAP & GEOTEXTILE SECTION 163		A TEMPORARY CHANNEL CONSTRUCTED TO CONVEY FLOW AROUND A CONSTRUCTION SITE WHILE A PERMANENT DRAINAGE STRUCTURE IS BEING CONSTRUCTED IN A NATURAL STREAM. THIS IS A MEASURE USED TO PROTECT STREAM BEDS FROM EROSION. LINE THE CHANNEL WITH RIP-RAP AND GEOTEXTILE. INSTALL TWO ROWS OF Sd1-S PARALLEL TO THE CHANNEL TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE STREAM. THE SIZE OF THE CHANNEL WILL DEPEND ON THE DISCHARGE, CHANNEL GEOMETRY, CHANNEL SLOPE AND ROUGHNESS. IT IS ACCEPTABLE FOR VELOCITIES BETWEEN 9.0 - 13.0 fps. THE DRAINAGE AREA SHALL BE NOT GREATER THAN 1 SQUARE MILE. CONSTRUCTION OF THE DIVERSION CHANNEL IS INCLUDED IN THE COST OF THE STRUCTURE.
	LINE CODE 		
D1-1	DIVERSION BERM CONSTRUCTION DETAIL D-47 SECTION 205		A NON-DESIGNED TEMPORARY EARTHEN BERM WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO BE USED AT THE EDGE OF EMBANKMENT DURING THE GRADING OPERATION. THE BERMS ARE ALSO CONSTRUCTED ABOVE, ACROSS OR BELOW A SLOPE TO REDUCE THE LENGTH OF A SLOPE. THEY ARE USED TO INTERCEPT RUNOFF, PREVENTING SLOPE EROSION AND TO DIRECT THE RUNOFF TO A STABLE OUTLET, DOWN DRAINS *Dn1* OR CATCHMENT AREAS AND ON ALL GRADING PROJECTS.
	LINE CODE 		
D1-2	DIVERSION CHANNEL SECTION 205		A DESIGNED TEMPORARY OR PERMANENT CHANNEL WITH A COMPACTED SUPPORTING RIDGE ON THE LOWER SIDE TO DIVERT OFFSITE RUNOFF AWAY FROM DISTURBED AREAS WITHIN THE PROJECT AREA. CHANNEL FOR OFFSITE RUNOFF SHALL BE STABILIZED WITH APPROPRIATE CHANNEL STABILIZATION. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA. A DIVERSION CHANNEL DETAIL MUST ALSO BE PROVIDED IN THE ESPCP. RUNOFF FROM DISTURBED AREAS WITHIN THE PROJECT AREA SHALL NOT BE ALLOWED TO CONVERGE WITH OFFSITE RUNOFF WITHIN THIS DIVERSION.
	LINE CODE 		
Dn1	TEMPORARY DOWNDRAIN STRUCTURE FLEXIBLE CONSTRUCTION DETAIL D-19 SECTION 163		A TEMPORARY PIPE SLOPE DRAIN IS A PLASTIC FLEXIBLE PIPE TO CARRY WATER FROM THE WORK AREA TO A LOWER ELEVATION. TEMPORARY SLOPE DRAINS SHOULD BE PLACED AT INTERVALS OF 350 FEET ON 0% - 2% GRADES, 200 FEET ON STEEPER GRADES AND MORE FREQUENTLY AS DICTATED BY FIELD CONDITIONS. THE TYPICAL PIPE SIZE IS A CORRUGATED 10". THE PIPE WILL BE ANCHORED WITH STAKES AT INTERVALS NOT TO EXCEED 10'. THE OUTLET AREA SHALL BE STABILIZED FOR VELOCITY DISSIPATION AND EROSION CONTROL.
	LINE CODE 		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Dn2-A	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441		A CONCRETE FLUME TYPE "A" IS USED TO DIRECT SURFACE RUNOFF DOWN A ROADWAY SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN ALL DEPRESSED AREAS WHERE WATER WILL FLOW DOWN THE SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OTHER CRITERIA).
	LINE CODE 		
Dn2-B	PERMANENT DOWNDRAIN STRUCTURE CONCRETE CONSTRUCTION DETAIL D-9 SECTION 441		A CONCRETE FLUME TYPE "B" IS USED TO DIRECT SURFACE DITCH RUNOFF DOWN A BACK SLOPE INTO ANOTHER FORM OF CONTROL. IT IS USED IN DEPRESSED AREAS WHERE CONCENTRATED OFFSITE WATER REACHES THE CUT SLOPE. IT IS DESIGNED TO SAFELY CONVEY WATER DOWN THE CUT SLOPE. IT IS DESIGNED FOR A 25-YEAR STORM AND MUST HAVE SOME FORM OF OUTLET PROTECTION. ADDITIONAL LABELING IS NOT REQUIRED IF SHOWN AS A PERMANENT DRAINAGE STRUCTURE ON THE CONSTRUCTION PLANS. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE 		
Dn2-1	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP1, 9017J TP1, DETAIL D-26 TP1 SECTION 576, 577		CONCRETE DRAIN INLET WITH METAL PIPE IS USED TO DRAIN CURBS, ON A GRADE, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE 		
Dn2-2	PERMANENT DOWNDRAIN STRUCTURE GA. STD 9013 TP2, 9017J TP2, DETAIL D-26 TP2 SECTION 576, 577		CONCRETE DRAIN INLET AND METAL PIPE IS USED TO DRAIN CURB, IN A SAG, DOWN TO A LOWER ELEVATION. THIS IS A PERMANENT STRUCTURE, REQUIRING OUTLET PROTECTION, TEMPORARY AND PERMANENT. INLETS SHALL BE SPACED ACCORDING TO GDOT GUIDELINES (REGARDING GUTTER SPREAD AND OR OTHER CRITERIA).
	LINE CODE 		

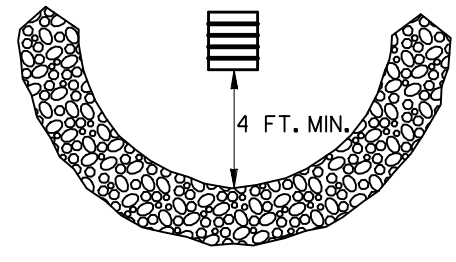

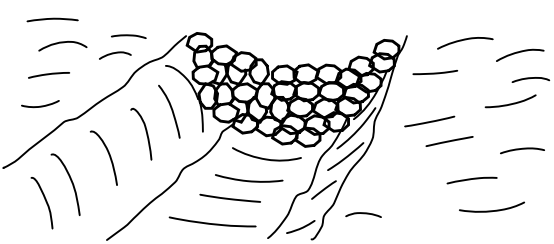
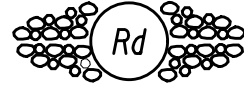
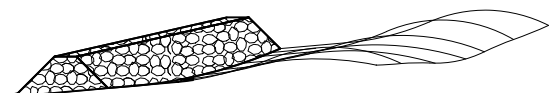
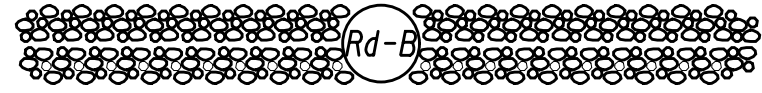
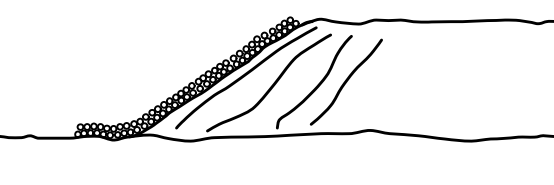

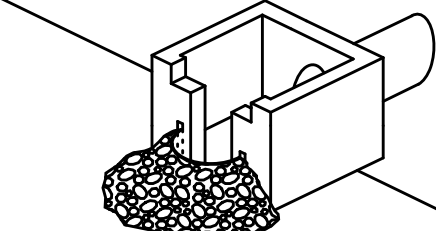

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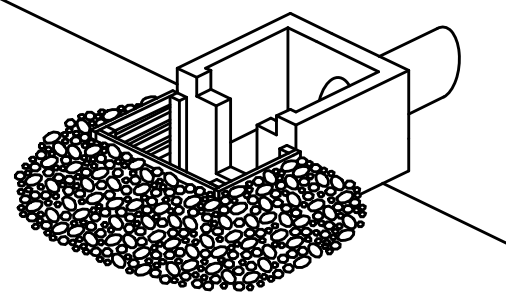

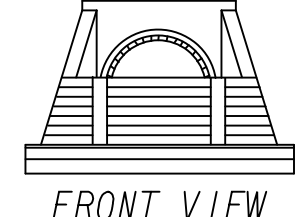
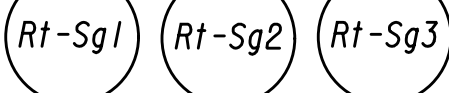
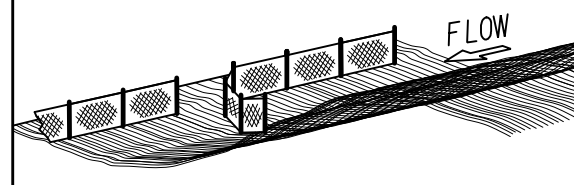

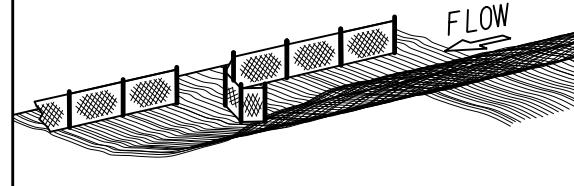
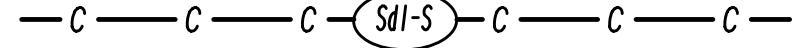
- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".



NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 4 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
			DRAWING No. 52-0004

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Fr	FILTER RING CONSTRUCTION DETAIL D-46 SECTION 163		A TEMPORARY STONE BARRIER CONSTRUCTED AT DRAINAGE STRUCTURE INLETS AND POST-CONSTRUCTION POND OUTLETS. IT REDUCES RUNOFF VELOCITY AND HELPS PREVENT SEDIMENT FROM LEAVING SITE PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED AREA. REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR ADDITIONAL INFORMATION ON USAGE.
	SYMBOL		
			
Rd	ROCK FILTER DAM CONSTRUCTION DETAIL D-43 SECTION 163, 603		ROCK FILTER DAMS ARE CONSTRUCTED OF TYPE 3 STONE RIP-RAP FACED WITH #57 STONE ON THE UPSTREAM SIDE. THEY ARE PLACED ACROSS DRAINAGEWAYS WHICH DRAIN 50 ACRES OR LESS. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING ROCK FILTER DAMS. THE DAM SHOULD NOT BE HIGHER THAN THE CHANNEL BANKS. ROCK FILTER DAMS SHOULD BE USED IN DITCHES PRIOR TO DISCHARGING INTO STREAMS, WETLANDS, OPEN-WATERS, OR OTHER ESAs.
	SYMBOL		
			
Rd-B	STONE FILTER BERM CONSTRUCTION DETAIL D-50 SECTION 163, 603		STONE FILTER BERMS ARE CONSTRUCTED SIMILAR TO ROCK FILTER DAMS FOR A LINEAR APPLICATION. THEY ARE CONSTRUCTED OF TYPE-3 STONE RIP-RAP FACED WITH #57 STONE ON THE UPSTREAM SIDE. GEOTEXTILE UNDERLINER SHALL BE USED WHEN PLACING STONE FILTER BERMS. STONE FILTER BERMS ARE IDEAL ALONG THE PERIMETER FOR SHEET FLOW AND/OR SHALLOW CONCENTRATED FLOW TO A COMMON LOW AREA WHERE PERIMETER SILT FENCE ALONE MAY BE INSUFFICIENT. THERE IS NO WELL-DEFINED CHANNEL FOR A STANDARD ROCK FILTER DAM, AND/OR CONSTRUCTING A ROCK OUTLET TEMPORARY SEDIMENT TRAP IS NOT APPLICABLE.
	LINE CODE		
			
Rp	RIP-RAP SECTION 603		RIP-RAP IS A FLEXIBLE PERMANENT BLANKET FOR PROTECTION OF FILL SLOPES AND BRIDGE END ROLLS. RIP-RAP TYPE-1 SHOULD BE PLACED ON TOP OF A GEOTEXTILE UNDERLINER AT A MINIMUM 24" THICKNESS OR AS INDICATED ON THE PLANS. RIP-RAP MAY ALSO BE USED AT DRAINAGE STRUCTURE OUTLETS WITHIN THE RIGHT-OF-WAY. HOWEVER, APPROPRIATE OUTLET PROTECTION SHOULD BE PROVIDED AT OUTFALLS. REFER TO STORM DRAIN OUTLET PROTECTION FOR ADDITIONAL INFORMATION ON USING RIP-RAP AT OUTFALLS.
	PATTERN		
			
Rt-P	RETROFITTING PERFORATED HALF-ROUND PIPE CONSTRUCTION DETAIL D-44 SECTION 163		A PERFORATED HALF-ROUND PIPE WITH STONE FILTER PLACED IN FRONT OF A PERMANENT STORMWATER DETENTION POND OUTLET STRUCTURE TO SERVE AS A TEMPORARY SEDIMENT FILTER. SHOULD BE USED ONLY IN DETENTION PONDS WITH LESS THAN 30 ACRES TOTAL DRAINAGE AREA. SHALL ONLY BE USED IN DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA. REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR DESIGN CRITERIA.
	SYMBOL		
			

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION		
Rt-B	RETROFITTING SLOTTED BOARD DAM CONSTRUCTION DETAIL D-45 SECTION 163		A SLOTTED BOARD DAM CONSISTS OF STONE AND/OR FILTER FABRIC AND BOARDS WITH 0.5' - 1.0' SPACING TO SERVE AS A TEMPORARY SEDIMENT FILTER. PERMANENT STORMWATER DETENTION POND OUTLET: -DRAINAGE AREA UP TO 100 ACRES -DETENTION BASINS LARGE ENOUGH TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DISTURBED AREA ROADWAY DRAINAGE STRUCTURE: -OPEN END PIPES, WINGED HEADWALLS, OR CONCRETE WEIR OUTLETS WITH DRAINAGE AREA LESS THAN 30 ACRES REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR DESIGN CRITERIA.		
	SYMBOL				
					
Rt-Sg1	RETROFITTING SILT CONTROL GATES CONSTRUCTION DETAIL D-20 SECTION 163	 FRONT VIEW	A SILT CONTROL GATE CONSISTS OF BOARDS WITHOUT SPACING AND FILTER FABRIC TO BE USED FOR TEMPORARY SEDIMENT STORAGE ON ROADWAY PROJECTS AT THE INLET OF STRUCTURES WITH A DRAINAGE AREA UP TO 50 ACRES. THE DISTURBED AREA WITHIN THE DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. SILT CONTROL GATES SHOULD NOT BE USED ALONE, BUT WITH ANOTHER BMP DOWNSTREAM PRIOR TO DISCHARGE LEAVING PROJECT AREA. DO NOT USE SILT GATES IN STATE WATERS. Rt-Sg1-TYPE 1: USED ON BOX CULVERTS Rt-Sg2-TYPE 2: USED ON STRAIGHT HEADWALLS Rt-Sg3-TYPE 3: USED ON FLARED END SECTIONS AND TAPERED HEADWALLS		
				SYMBOL	
					
SdI-NS	SEDIMENT BARRIER (NON-SENSITIVE) SILT FENCE TYPE A CONSTRUCTION DETAIL D-24 SECTION 171		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-A SILT FENCE IS TYPICALLY USED IN NON-ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS LESS THAN 10'. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.		
				LINE CODE	
					
SdI-S	SEDIMENT BARRIER (SENSITIVE) SILT FENCE TYPE C CONSTRUCTION DETAIL D-24 SECTION 171		SEDIMENT BARRIERS MINIMIZE AND PREVENT SEDIMENT CARRIED BY SHEET FLOW FROM LEAVING THE PROJECT AREA BY CAUSING DEPOSITION AND/OR FILTRATION OF SEDIMENT. SILT FENCE USED AS PERIMETER CONTROL SHALL NOT BE INSTALLED ACROSS CONCENTRATED FLOW. TYPE-C SILT FENCE IS TYPICALLY USED IN ENVIRONMENTALLY SENSITIVE AREAS (ESAs) OR IN AREAS WITH FILLS 10' AND GREATER. ALL ENVIRONMENTALLY SENSITIVE AREAS (ESAs) SHALL BE PROTECTED WITH A DOUBLE-ROW OF TYPE-C SILT FENCE REGARDLESS OF FILL HEIGHT. A SINGLE-ROW MAY BE USED FOR OTHER APPLICATIONS. IT SHOULD BE PLACED A MINIMUM OF 10' FROM CONSTRUCTION LIMITS OR ALONG THE RIGHT-OF-WAY LINE.		
				LINE CODE	
					

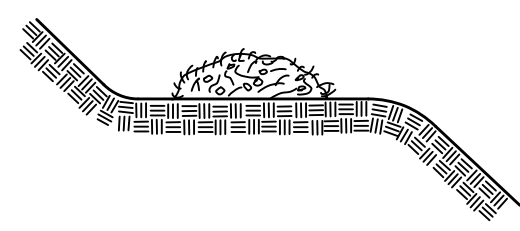
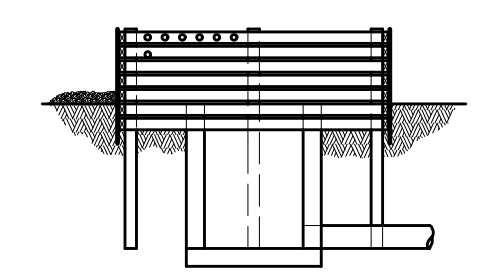
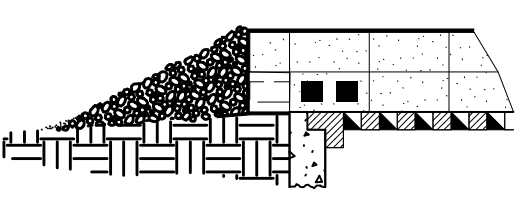
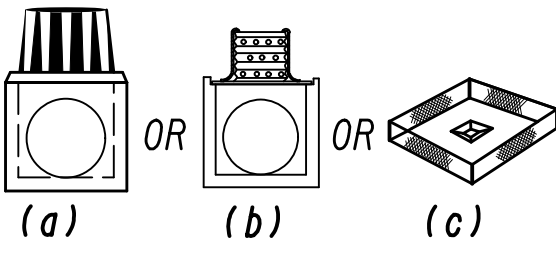
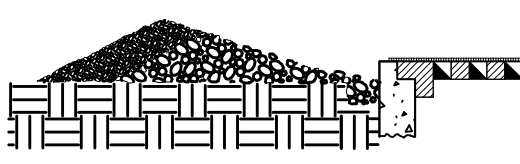
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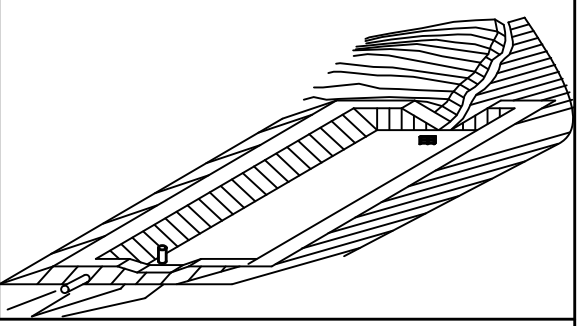
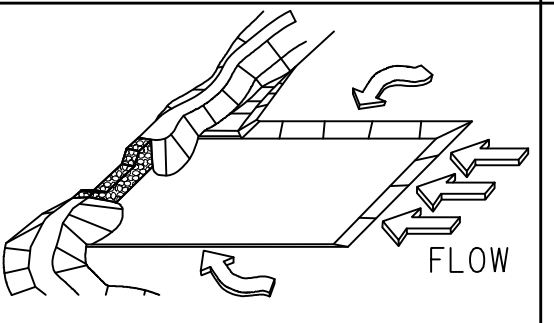
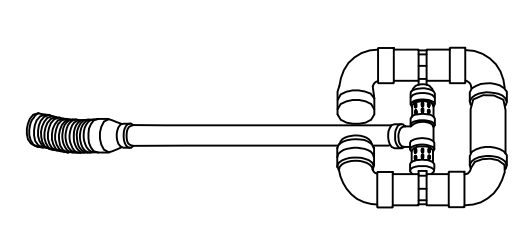
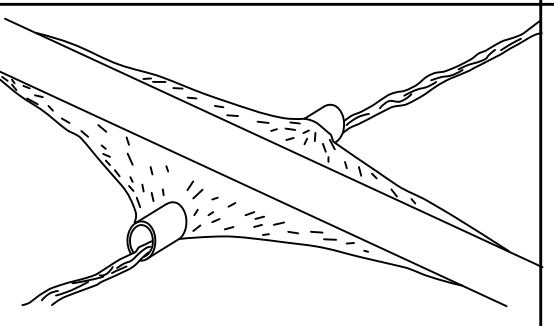
- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA'.



NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 5 OF 7	
CHECKED:	B. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
		DRAWING No.	
		52-0005	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd1-BB	SEDIMENT BARRIER BRUSH BARRIER CONSTRUCTION DETAIL D-24B SECTION 201		THIS ITEM CONSISTS OF INTERMINGLED BRUSH, LOGS, ETC. SO AS NOT TO FORM A SOLID DAM. CONSTRUCTED AT THE TOE OF FILL SLOPES ONLY DURING THE CLEARING AND GRUBBING OPERATION. THE BARRIER SHOULD BE USED AT THE TOE OF FILL SLOPES ON GRADING PROJECTS IN RURAL AREAS WHERE SUFFICIENT RIGHT OF WAY OR EASEMENT IS AVAILABLE (10 FEET OR MORE). THE BARRIER SHOULD RUN ROUGHLY PERPENDICULAR TO THE FLOW OF WATER WHERE THIS DOES NOT CONFLICT WITH RIGHT-OF-WAY OR EASEMENT LIMITS. THEY WILL NOT BE PLACED IN WETLANDS. TYPICALLY NOT SHOWN ON PLANS. PAYMENT FOR THIS ITEM IS INCLUDED IN THE CLEARING AND GRUBBING COST. NO SEPARATE PAYMENT SHALL BE MADE.
	LINE CODE * * * Sd1-BB * * *		
Sd2-B	INLET SEDIMENT TRAP (BAFFLE BOX) CONSTRUCTION DETAIL D-42 SECTION 163		BAFFLE BOX INLET SEDIMENT TRAP USED FOR INLETS RECEIVING HIGH FLOW RATE AND/OR VELOCITY. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES 7 cfs AND GREATER.
	SYMBOL Sd2-B		
Sd2-Bg	INLET SEDIMENT TRAP (BLOCK & GRAVEL) CONSTRUCTION DETAIL D-42 SECTION 163		BLOCK AND GRAVEL DROP INLET PROTECTION USED FOR WHERE HEAVY FLOWS ARE EXPECTED AND WHERE OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE. CAN BE USED AT CULVERT INLETS. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 5 - 7 cfs.
	SYMBOL Sd2-Bg		
Sd2-F	INLET SEDIMENT TRAP (FILTER FABRIC) CONSTRUCTION DETAIL D-42 SECTION 163		(a) A SEDIMENT BARRIER CONSISTING OF A PREFABRICATED FRAME WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (b) A SEDIMENT BARRIER CONSISTING OF A PERFORATED METAL STAND PIPE WITH FILTER FABRIC USED AROUND A DROP INLET OR CATCH BASIN. (c) TYPE C SILT FENCE WITH SUPPORTING FRAME CAN BE USED AS AN ALTERNATE TO INLET SEDIMENT TRAP FOR AREAS WITH SLOPES < 5%. THIS ITEM IS USED TO PREVENT SILT FROM ENTERING THE PIPE SYSTEM. SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS. RECOMMENDED FOR INLET RECEIVING FLOW RATES THAT RANGE FROM 0 - 4 cfs.
	SYMBOL Sd2-F		
Sd2-G	INLET SEDIMENT TRAP (GRAVEL) CONSTRUCTION DETAIL D42 SECTION 163		GRAVEL DROP INLET PROTECTION USED WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED. STONE AND GRAVEL ARE USED TO TRAP SEDIMENT. THE SLOPE TOWARD THE INLET SHALL BE NO MORE THAN 3:1. A GUIDE FOR USE WILL BE FOR AN INLET RECEIVING FLOW RATES THAT RANGE FROM 3 - 5 cfs.
	SYMBOL Sd2-G		

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
Sd3	TEMPORARY SEDIMENT BASIN CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BASIN CREATED BY EXCAVATING AN AREA, DAMMING CONCENTRATED FLOW, OR A COMBINATION OF BOTH. THE BASIN IS DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER ACRE OF DRAINAGE AREA. THE DRAINAGE AREA SHOULD NOT EXCEED 150 ACRES. BASINS TYPICALLY CONSISTS OF A DAM, PRINCIPAL SPILLWAY, AND AN EMERGENCY SPILLWAY. A FLOATING SURFACE SKIMMER SHALL BE REQUIRED AS PART OF THE PRINCIPAL SPILLWAY UNLESS INFEASIBLE. SUFFICIENT RIGHT-OF-WAY OR EASEMENT IS NEEDED FOR BASIN CONSTRUCTION AND MAINTENANCE ACCESS. SEDIMENT BASINS SHALL BE CONSIDERED ON ALL PROJECTS, BUT MAY NOT BE PRACTICAL. BASINS SHOULD BE LOCATED TO MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES AND UTILITIES. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
	SYMBOL Sd3		
Sd4-C	ROCK OUTLET TEMPORARY SEDIMENT TRAP CONSTRUCTION DETAIL D-53 SECTION 163		TEMPORARY POND WITH ROCK OUTLET DESIGNED TO STORE 67 CUBIC YARDS OF SEDIMENT PER DRAINAGE AREA. DRAINAGE AREA SHALL NOT EXCEED 5 ACRES. DISTINGUISHED FROM TEMPORARY SEDIMENT BASIN BY LACK OF PRINCIPAL SPILLWAY. MAXIMUM POND DEPTH FROM BOTTOM OF POND TO EMERGENCY SPILLWAY IS 4 FEET. A TEMPORARY SEDIMENT BASIN SHALL BE EVALUATED PRIOR TO CONSIDERING A TEMPORARY SEDIMENT TRAP. A TEMPORARY SEDIMENT TRAP IS IDEAL FOR SMALL AREAS WITH NO UNUSUAL DRAINAGE FEATURES AND EFFECTIVE AGAINST COARSE SEDIMENT, BUT NOT AGAINST SILT OR CLAY PARTICLES THAT REMAIN SUSPENDED. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR DESIGN CRITERIA.
	SYMBOL Sd4-C		
Sk	FLOATING SURFACE SKIMMER CONSTRUCTION DETAIL D-22A, D-22B SECTION 163		A BUOYANT DEVICE THAT DRAINS WATER FROM THE SURFACE OF A TEMPORARY SEDIMENT BASIN AT A CONTROLLED FLOW RATE. THE INLET/ORIFICE SIZE IS DESIGNED TO DRAIN THE BASIN WITHIN 24 - 48 HOURS. THE SKIMMER INFORMATION SHALL BE PROVIDED IN CONJUNCTION WITH THE SEDIMENT BASIN INFORMATION IN PLANS. IF A SKIMMER IS INFEASIBLE, THE DESIGNER SHALL PROVIDE A WRITTEN JUSTIFICATION IN THE PLANS. SKIMMERS ARE ATTACHED TO A RISER WITHOUT PERFORATIONS AND ACTS AS THE PRIMARY SPILLWAY. THE SKIMMER BMP SYMBOL SHALL BE SHOWN IN CONJUNCTION WITH THE TEMPORARY SEDIMENT BASIN BMP SYMBOL WHEN APPLICABLE. REFER TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA" FOR ADDITIONAL INFORMATION.
	SYMBOL Sk		
Sr	TEMPORARY STREAM CROSSING SECTION 107		A TEMPORARY STRUCTURE INSTALLED ACROSS A FLOWING STREAM OR WATERCOURSE FOR USE BY CONSTRUCTION EQUIPMENT. THIS BMP PROVIDES A MEANS TO CROSS STREAMS OR WATERCOURSES WITHOUT MOVING SEDIMENT INTO STREAMS, DAMAGING THE STREAM BED OR CHANNEL, OR CAUSING FLOODING. THIS BMP SHOULD NOT BE USED ON STREAMS WITH DRAINAGE AREAS GREATER THAN ONE SQUARE MILE, UNLESS SPECIFICALLY DESIGNED TO ACCOMMODATE THE ADDITIONAL DRAINAGE AREA BY THE DESIGN PROFESSIONAL. A CERTIFICATION STATEMENT AND SIGNATURE SHALL ACCOMPANY THE DESIGN. THIS BMP SHALL BE DESIGNED ACCORDING TO THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". FOR CONTRACTOR'S USE ONLY!
	SYMBOL Sr		

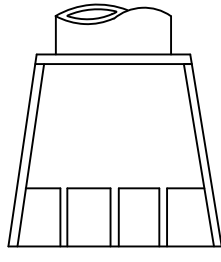

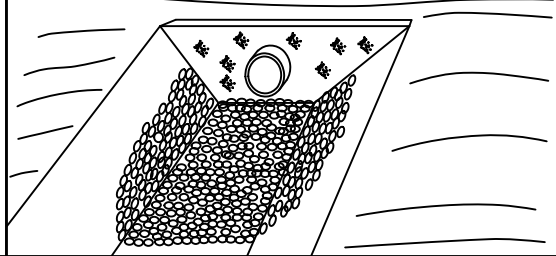
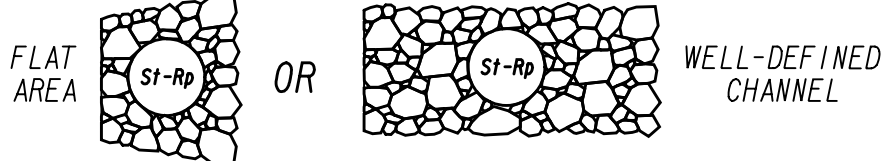
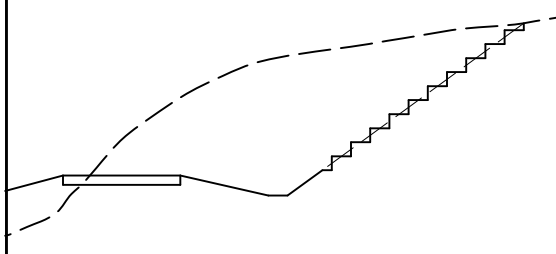
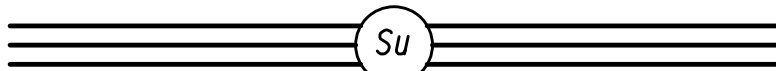
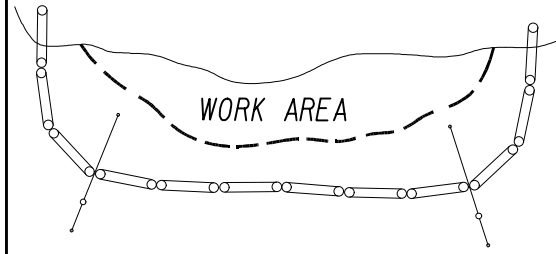

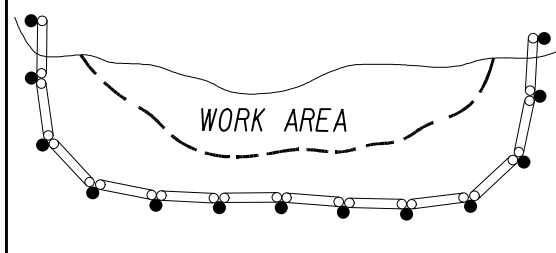
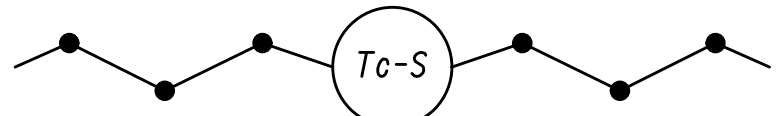
NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
- FOR ADDITIONAL INFORMATION ON THE DESIGN AND APPLICATION OF EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMPs), REFER TO THE LATEST EDITION OF THE GEORGIA SOIL AND WATER CONSERVATION COMMISSION'S, "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA".



NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 6 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
		DRAWING No.	
		52-0006	

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION
St	STORM DRAIN OUTLET PROTECTION GA. STD. 1125 & 2332		A PIPE OR BOX CULVERT OUTLET HEADWALL WITH AN APRON AND DISSIPATOR BLOCKS IS USED TO REDUCE VELOCITY AT THE OUTLET OF A PIPE PRIOR TO ENTERING AN EXISTING STREAM OR PUBLICLY MAINTAINED DRAINAGE SYSTEM. IT IS USED ON THE OUTLET OF ALL BOX CULVERTS AND ON 48" AND LARGER PIPES. MAY BE USED ON INLET FOR FLOWING STREAMS. USE ON SMALL PIPES WHEN OUTLET VELOCITY OF THE 25-YEAR STORM IS 12 fps AND GREATER.
	SYMBOL 		
St-Rp	STORM DRAIN OUTLET PROTECTION (RIP-RAP) CONSTRUCTION DETAIL D-55 SECTION 603		RIP-RAP OUTLET PROTECTION IS USED TO REDUCE VELOCITY AT THE OUTLET OF A PIPE, CHANNEL, OR STRUCTURE PRIOR TO ENTERING AN EXISTING STREAM OR PUBLICLY MAINTAINED DRAINAGE SYSTEM. THE MINIMUM DESIGN OF RIP-RAP OUTLET PROTECTION SHALL BE THE 25-YEAR STORM PEAK FLOW, BUT LARGER STORMS ARE RECOMMENDED. TYPE-1 RIP-RAP AT A DEPTH OF 36" AND PLACED ON FILTER FABRIC IS PREFERRED FOR ALL d50 ≤ 1.2 FEET. TYPE-3 RIP-RAP AT A DEPTH OF 18" AND PLACED ON FILTER FABRIC MAY BE USED FOR d50 ≤ 0.7 FEET.
	PATTERN 		REFER TO THE LATEST EDITION OF THE 'MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA' FOR REQUIRED DESIGN DIMENSIONS AND OTHER INFORMATION TO BE INCLUDED IN THE PLANS.
Su	SURFACE ROUGHENING SERRATED SLOPES CONSTRUCTION DETAIL S-7 SECTION 205		PROVIDING A ROUGH SOIL SURFACE WITH HORIZONTAL DEPRESSIONS, BY OPERATING A CLEATED DOZER ON THE SLOPE IN A VERTICAL DIRECTION. CREATING SERRATED SLOPES IN THE GRADING PROCESS TO CONSTRUCT BENCHES WILL REDUCE RUNOFF VELOCITY AND INCREASE INFILTRATION OF WATER. IN MOST CASES THIS BMP IS NOT REQUIRED TO BE SHOWN ON THE PLANS, BUT REQUIRED TO BE COMPLETED BY THE CONTRACTOR UNDER ALL PROJECTS.
	LINE CODE 		IF SERRATED SLOPES ARE SPECIFIED BY THE SOIL SURVEY, THEN THIS BMP SHALL BE SHOWN ON THE PLANS WHERE SERRATED SLOPES ARE TO BE USED.
Tc-F	TURBIDITY CURTAIN FLOATING CONSTRUCTION DETAIL D-51 SECTION 170		A FLOATING TURBIDITY CURTAIN IS USED TO PREVENT SEDIMENT FROM MOVING IN WATER BY ALLOWING IT TO DROP OUT OF SUSPENSION AND REMAIN WITHIN THE CONSTRUCTION AREA. IT IS TYPICALLY USED WHERE CONSTRUCTION IS REQUIRED IN A LARGE BODY OF WATER SUCH AS LAKES AND RIVERS. IT SHOULD BE USED AS DIRECTED BY THE ENGINEER. THIS BMP IS ONLY TO BE USED WHEN PERMITTED FILL IS BEING PLACED INTO A STATE WATER, OR AS A SUPPLEMENT TO ADEQUATELY PLACED PERIMETER BMPs.
	LINE CODE 		IT MAY ALSO BE REFERRED TO AS A FLOATING BOOM, SILT BARRIER, OR SILT CURTAIN.
Tc-S	TURBIDITY CURTAIN STAKED CONSTRUCTION DETAIL D-51 SECTION 170		A STAKED TURBIDITY CURTAIN IS USED TO PREVENT SEDIMENT FROM MOVING IN WATER BY ALLOWING IT TO DROP OUT OF SUSPENSION AND REMAIN WITHIN THE CONSTRUCTION AREA. IT IS TYPICALLY USED IN SHALLOW INUNDATED AREAS. IT MAY BE USED TO PROTECT A SMALL STREAM BEING REALIGNED OR RESTORED. IN THIS CASE, CURTAIN SHOULD EXTEND TO BOTTOM OF STREAMBED. THE HEIGHT SHOULD BE LIMITED TO 5 FEET UNLESS DIRECTED AND EXTEND 2 FEET ABOVE NORMAL WATER ELEVATION. IT SHOULD BE USED AS DIRECTED BY THE ENGINEER. THIS BMP IS ONLY TO BE USED WHEN PERMITTED FILL IS BEING PLACED INTO A STATE WATER, OR AS A SUPPLEMENT TO ADEQUATELY PLACED PERIMETER BMPs.
	LINE CODE 		IT MAY BE REFERRED TO AS A SILT BARRIER OR SILT CURTAIN.

CODE	PRACTICE STD OR DETAIL SPEC. SECT.	DETAIL	DESCRIPTION

NOTE:

- DO NOT USE EROSION CONTROL ITEMS IN A FLOWING STREAM OR IN A TIDAL AREA BELOW HIGH TIDE.
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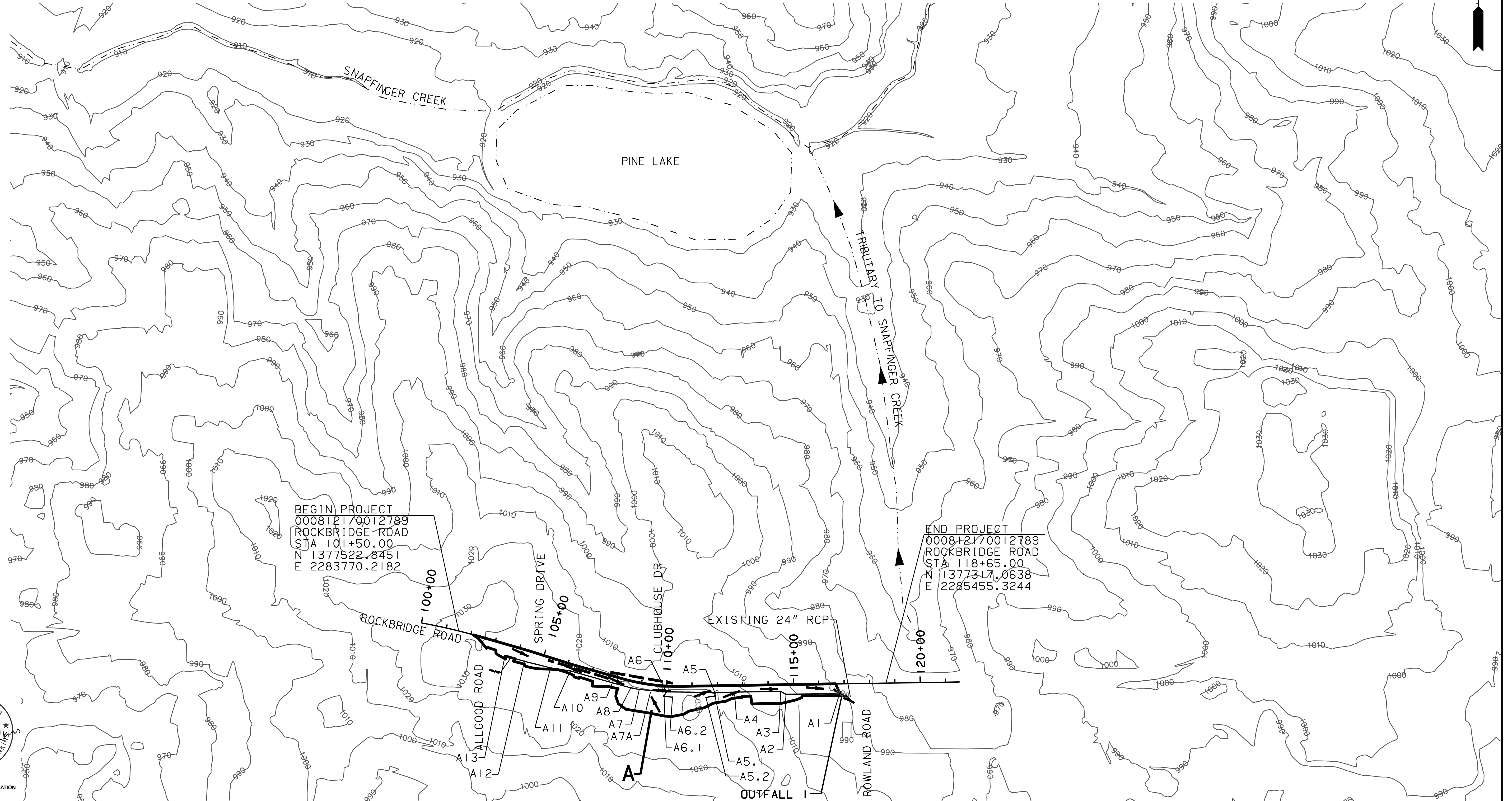


NO SCALE

REVISION DATES		EROSION CONTROL LEGEND	
3/2/2017		UNIFORM CODE SHEET	
		SHEET 7 OF 7	
CHECKED:	D. EAGLETON	DATE:	01/01/16
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
			DRAWING No. 52-0007

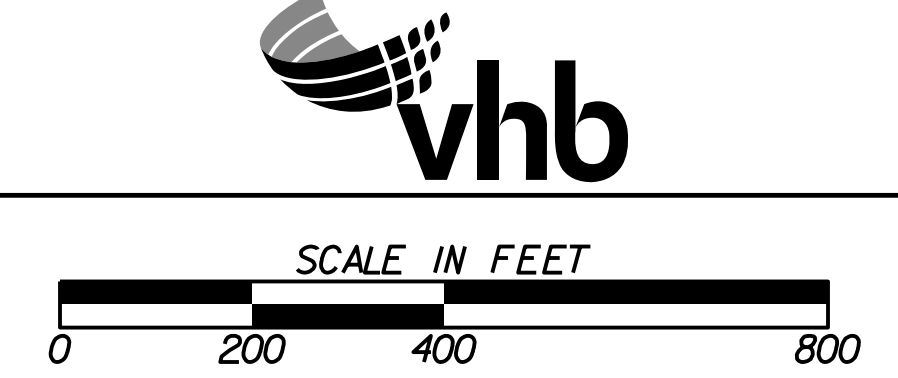
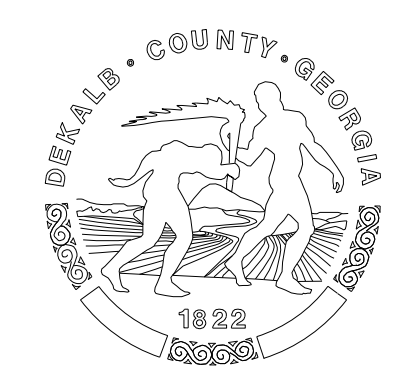
OUTFALL DESIGNATION	STATION	OFFSET	DESCRIPTION	RUNOFF COEFFICIENT		PRE		POST		PRE		POST		PRE		POST		DRAINAGE AREA (AC)	DISTURBED AREA (AC)	OUTFALL CHANNEL SLOPE (%)	RECEIVING WATERS
				PRE	POST	Q(50) (CFS)	Q(100) (CFS)	Q(50) (CFS)	Q(100) (CFS)	HW(50) (FT)	HW(100) (FT)	HW(50) (FT)	HW(100) (FT)	V(50) (FPS)	V(100) (FPS)	V(50) (FPS)	V(100) (FPS)				
1	116+83.5	38.17' RT	EX 24" RCP	0.75	0.81	9.32	10.15	13.32	14.52	0.68	0.71	0.82	0.86	9.99	10.23	11.01	11.27	2.12	1.17	2.81%	TRIB TO SNAPPINGER CREEK

TOTAL PROJECT SIZE = 3.28 AC
 TOTAL DISTURBED AREA = 1.17 AC



PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

---#--- BEGIN LIMIT OF ACCESS.....BLA
 --- END LIMIT OF ACCESS.....ELA
 --- LIMIT OF ACCESS
 --- REQ'D R/W & LIMIT OF ACCESS
 --- ORANGE BARRIER FENCE
 --- ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)

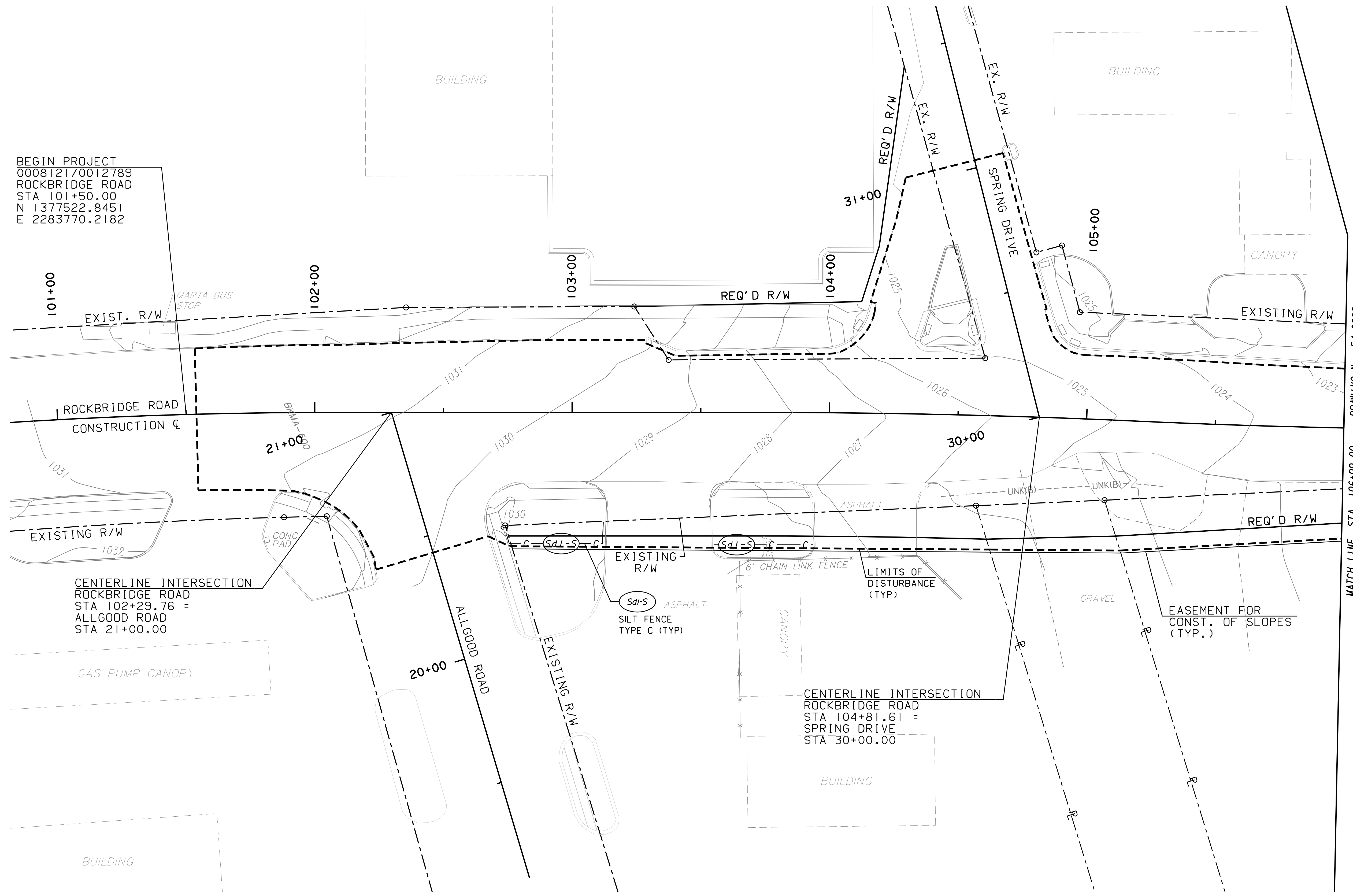


REVISION DATES	

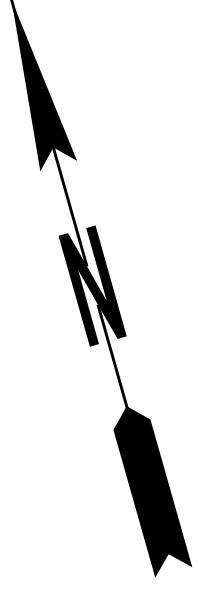
EROSION CONTROL DRAINAGE AREA MAP
ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD

CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	53-0001
CORRECTED:	DATE:	
VERIFIED:	DATE:	

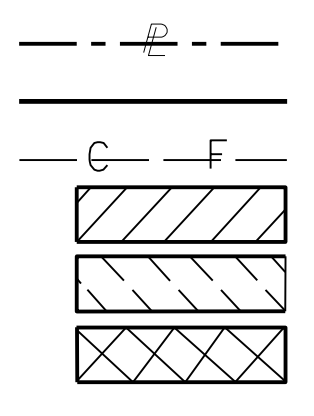
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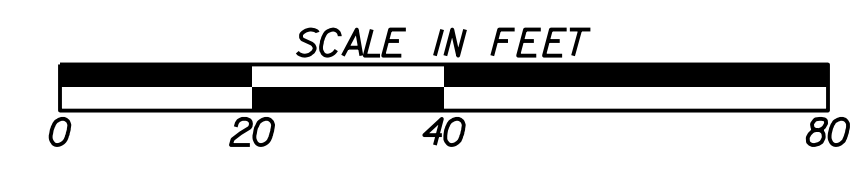
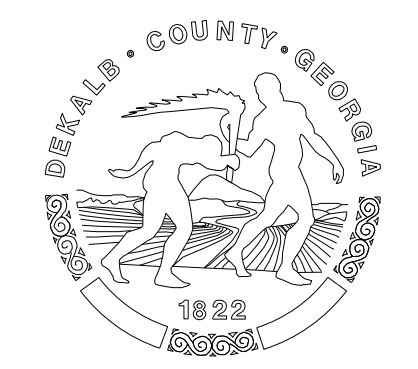
DRAWING No. 54-0002
MATCH LINE STA. 106+00.00



PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

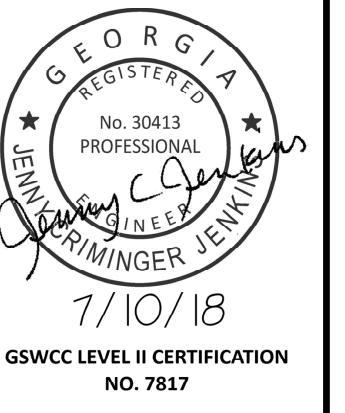


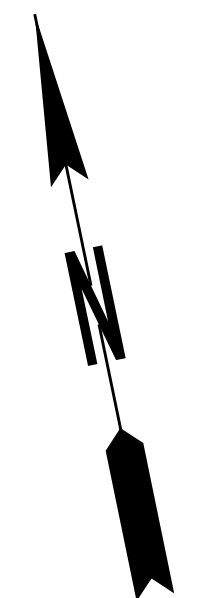
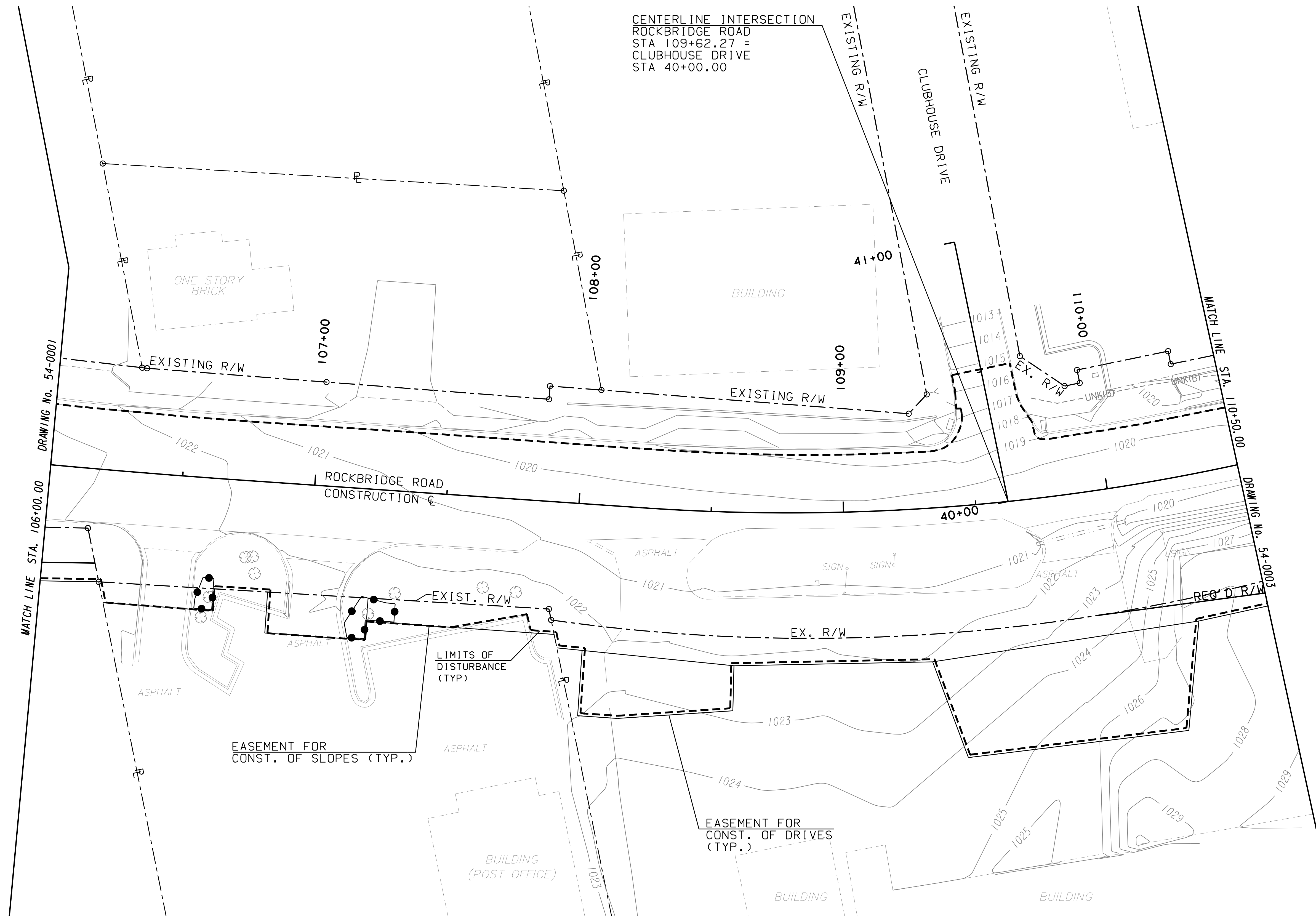
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 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



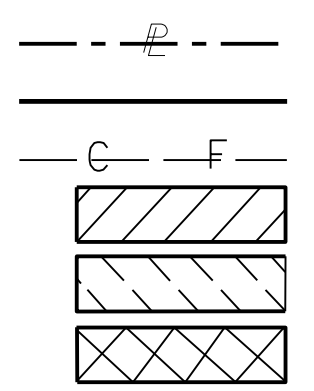
REVISION DATES	

BMP LOCATION DETAILS INITIAL PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
DRAWING No.			54-0001

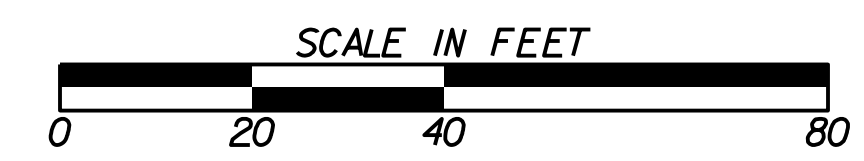
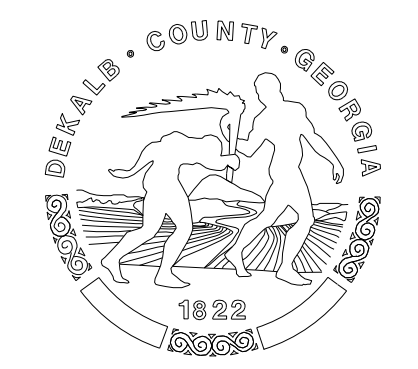




PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES



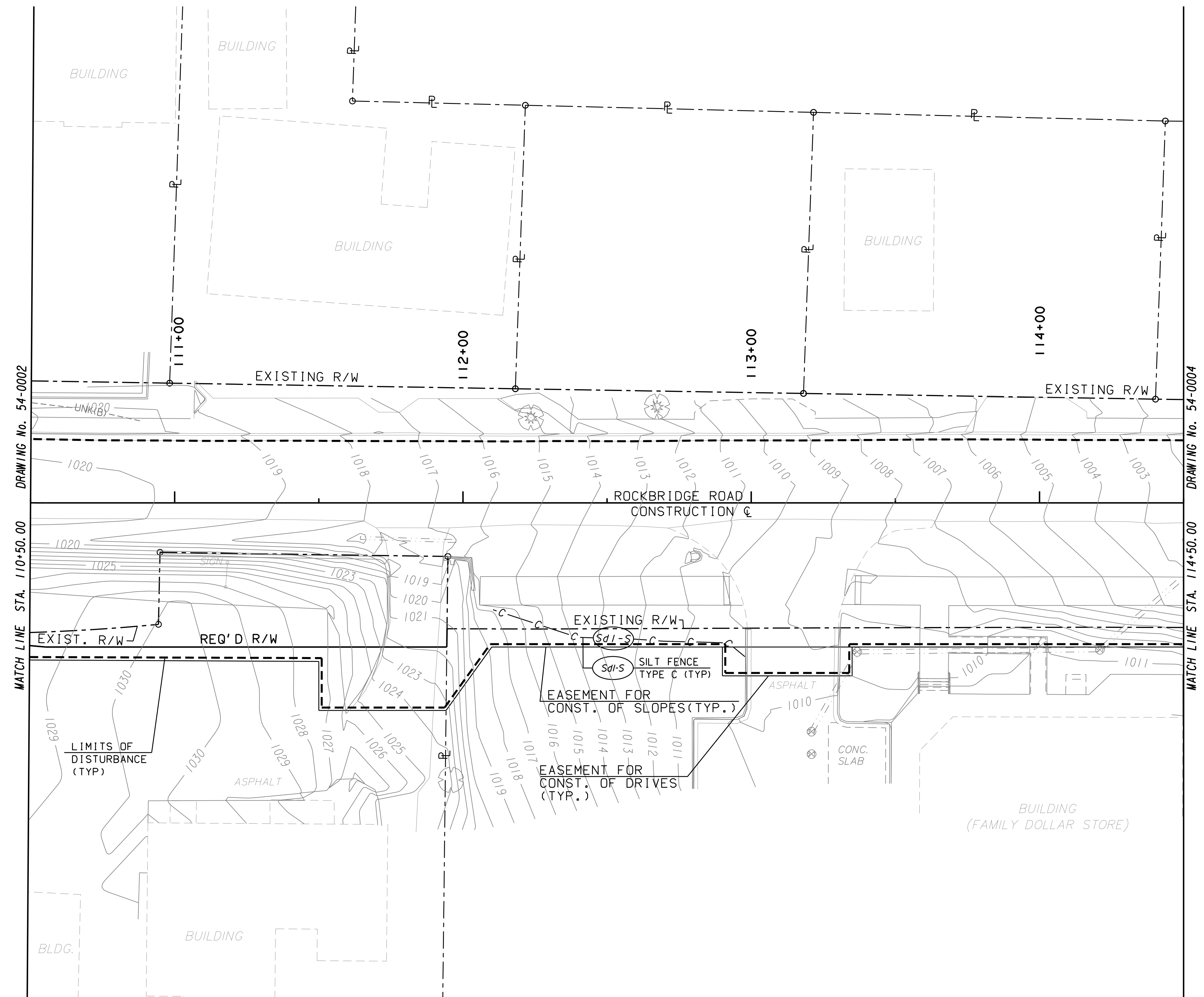
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 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

BMP LOCATION DETAILS INITIAL PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD		
CHECKED:	DATE:	DRAWING No.
BACKCHECKED:	DATE:	54-0002
CORRECTED:	DATE:	
VERIFIED:	DATE:	



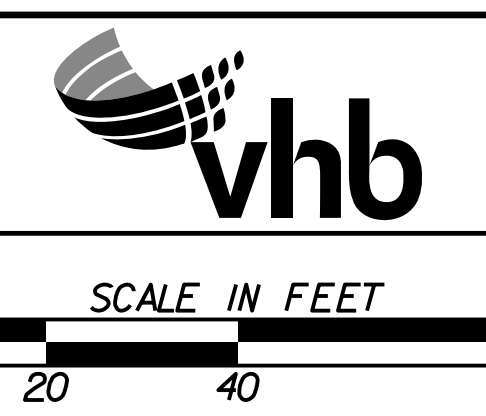
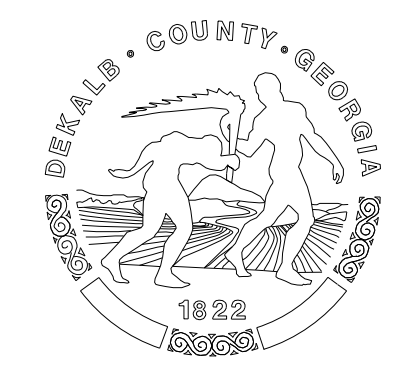


DRAWING No. 54-0002
MATCH LINE STA. 110+50.00

DRAWING No. 54-0004
MATCH LINE STA. 114+50.00

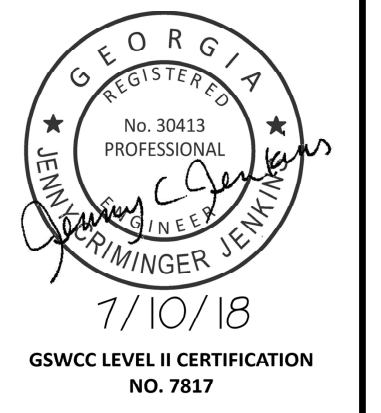
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

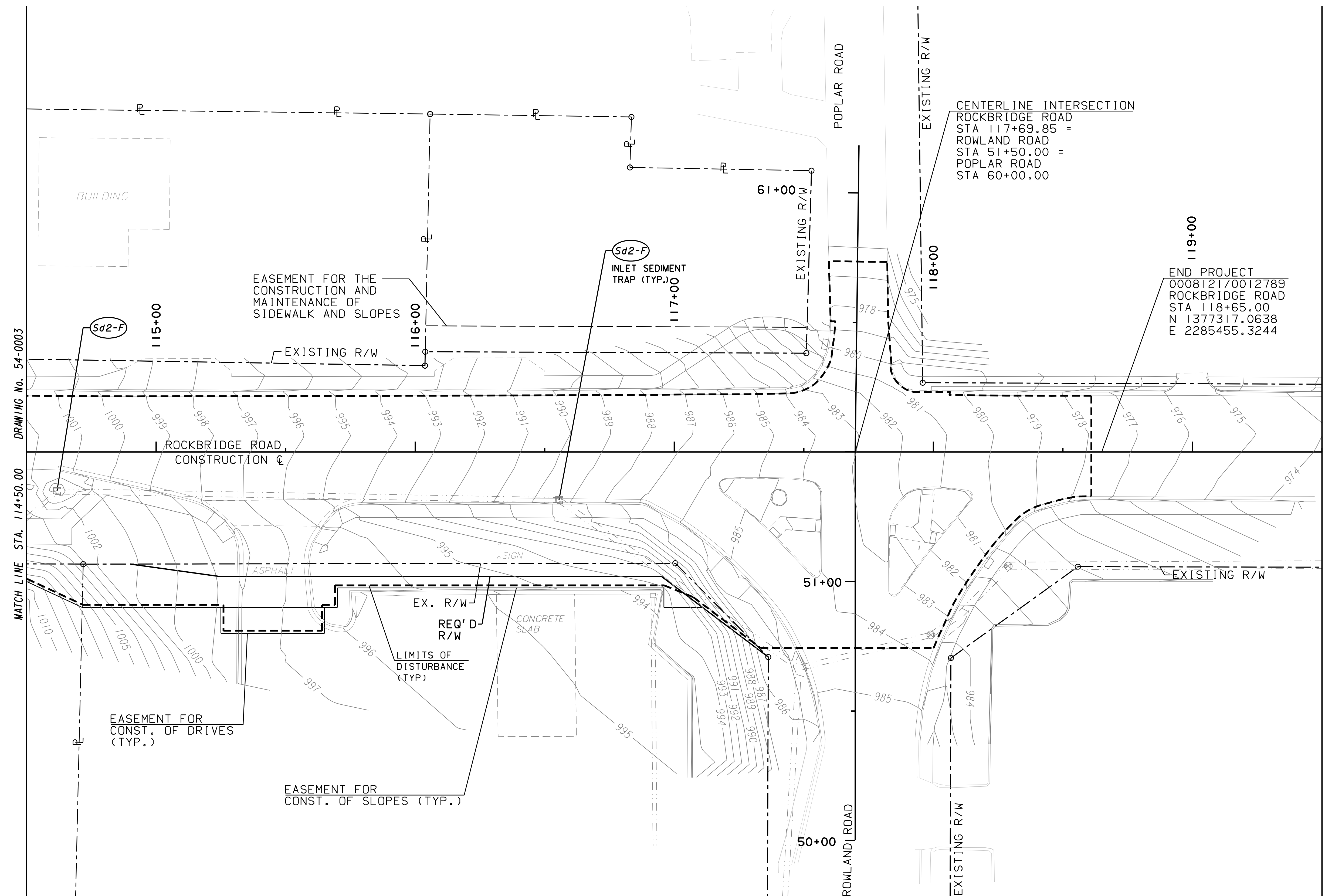
--- P --- BEGIN LIMIT OF ACCESS.....BLA
 --- ELA --- END LIMIT OF ACCESS.....ELA
 --- C --- F --- LIMIT OF ACCESS
 --- H --- H --- REQ'D R/W & LIMIT OF ACCESS
 [Hatched Box] ORANGE BARRIER FENCE
 [Cross-hatched Box] ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

BMP LOCATION DETAILS INITIAL PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	54-0003	
CORRECTED:	DATE:		
VERIFIED:	DATE:		





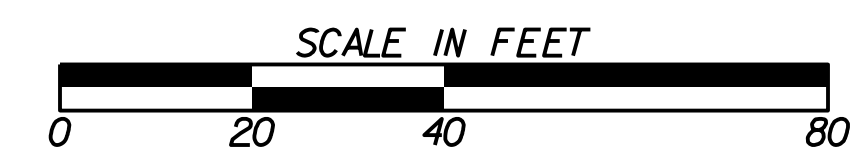
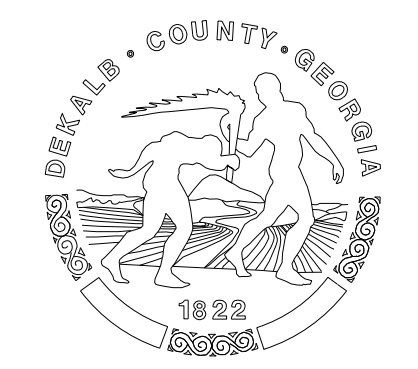
MATCH LINE STA. 114+50.00 DRAWING No. 54-0003

MATCH LINE STA. 119+50.00 DRAWING No. 54-0005

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

--- P ---
 --- R ---
 --- C --- F ---
 [Hatched Box]
 [Hatched Box]
 [Hatched Box]

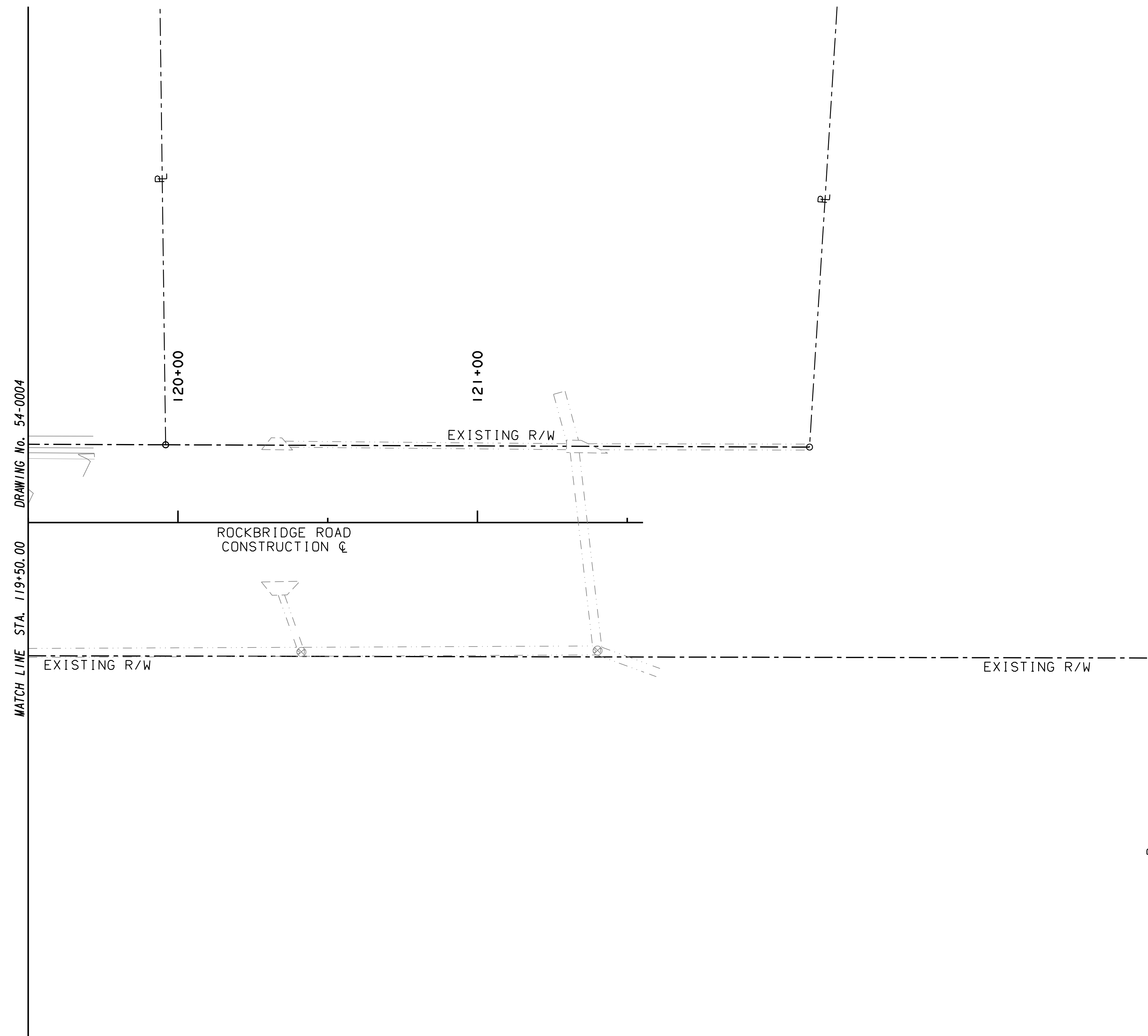
BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

BMP LOCATION DETAILS INITIAL PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	54-0004	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

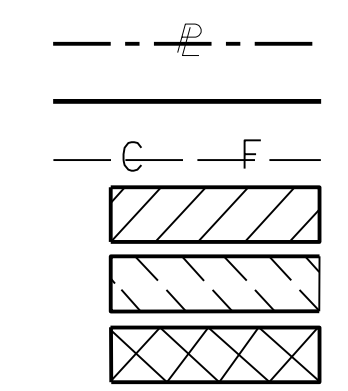




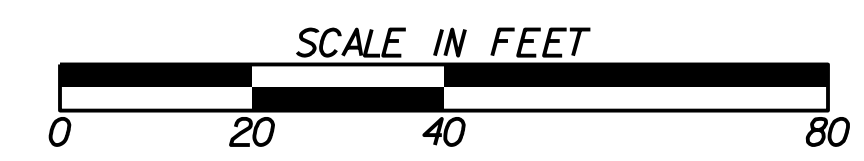
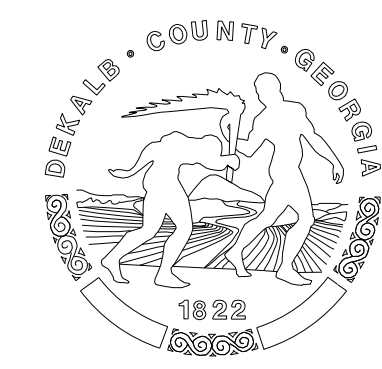
THERE ARE NO CONSTRUCTION ACTIVITIES SHOWN ON THIS DRAWING.
THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



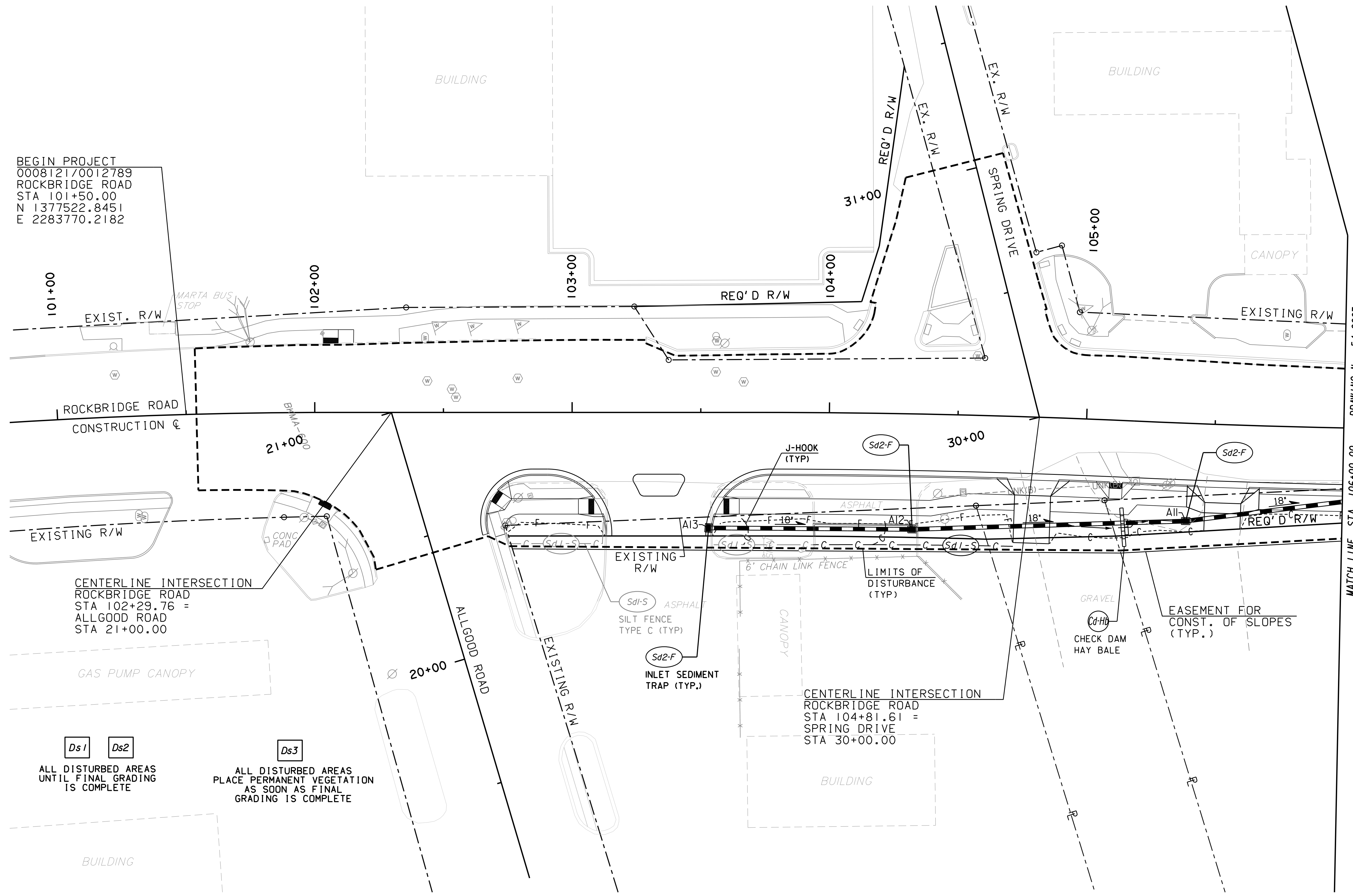
REVISION DATES	

**BMP LOCATION DETAILS
INITIAL PHASE
ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:
BACKCHECKED:	DATE:
CORRECTED:	DATE:
VERIFIED:	DATE:

DRAWING No.
54-0005

BEGIN PROJECT
 0008121/0012789
 ROCKBRIDGE ROAD
 STA 101+50.00
 N 1377522.8451
 E 2283770.2182



CENTERLINE INTERSECTION
 ROCKBRIDGE ROAD
 STA 102+29.76 =
 ALLGOOD ROAD
 STA 21+00.00

CENTERLINE INTERSECTION
 ROCKBRIDGE ROAD
 STA 104+81.61 =
 SPRING DRIVE
 STA 30+00.00

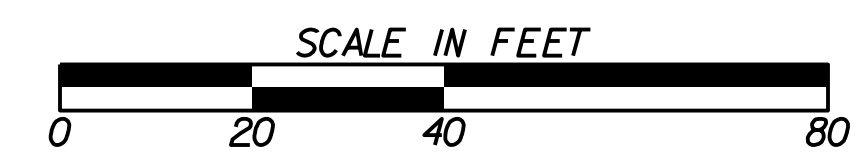
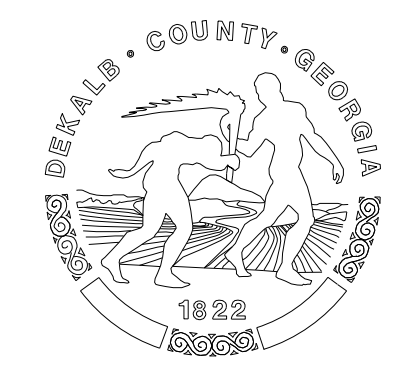
Ds1 Ds2
 ALL DISTURBED AREAS
 UNTIL FINAL GRADING
 IS COMPLETE

Ds3
 ALL DISTURBED AREAS
 PLACE PERMANENT VEGETATION
 AS SOON AS FINAL
 GRADING IS COMPLETE



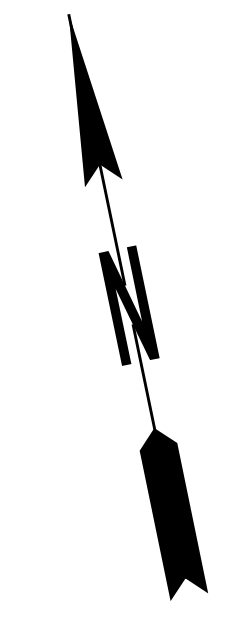
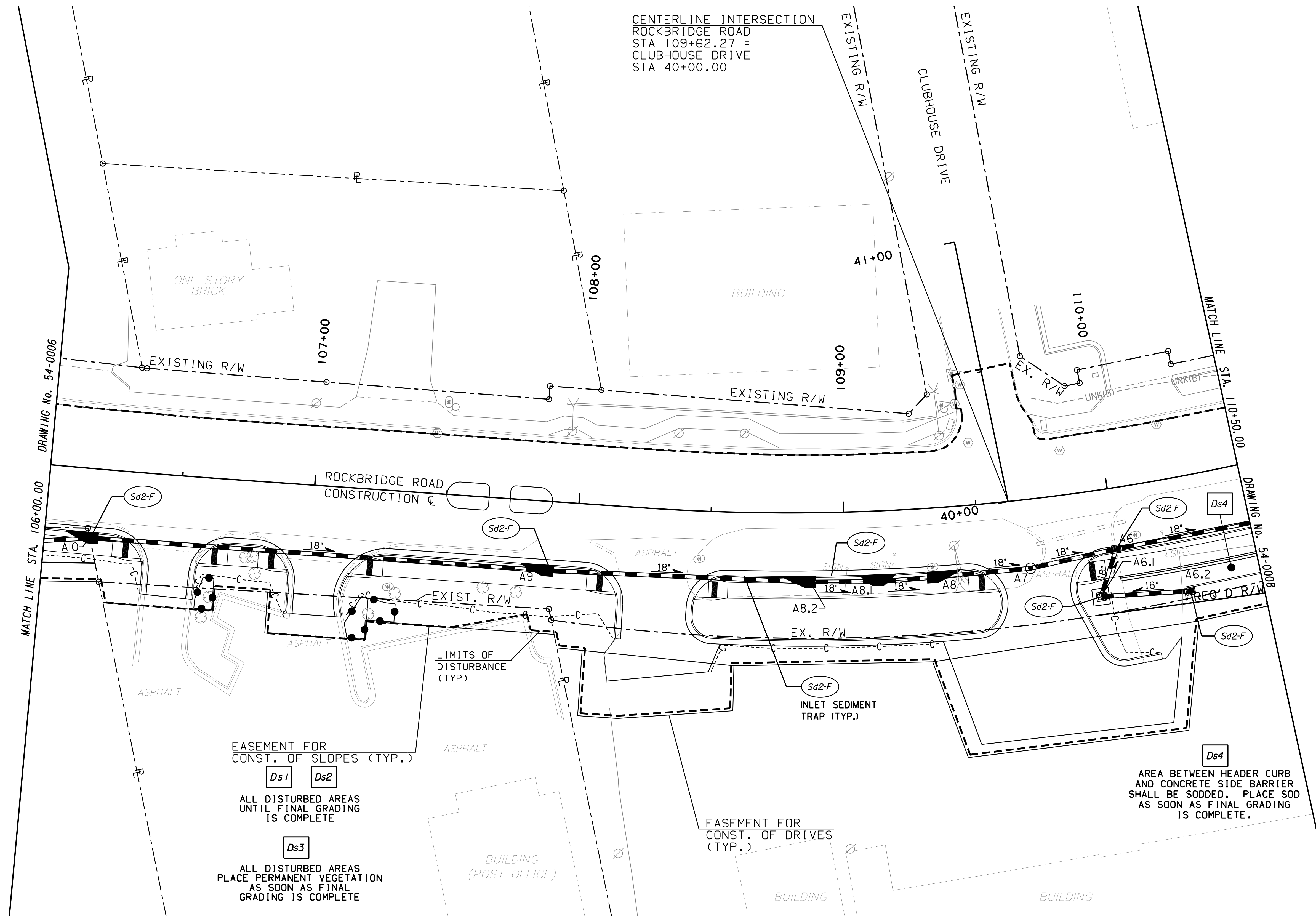
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

--- P --- BEGIN LIMIT OF ACCESS.....BLA
 --- ELA --- END LIMIT OF ACCESS.....ELA
 --- C --- F --- LIMIT OF ACCESS
 --- H --- H --- REQ'D R/W & LIMIT OF ACCESS
 --- O --- O --- ORANGE BARRIER FENCE
 --- S --- S --- ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

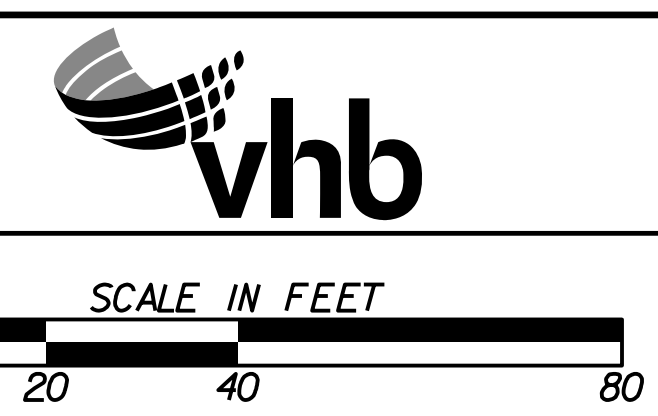
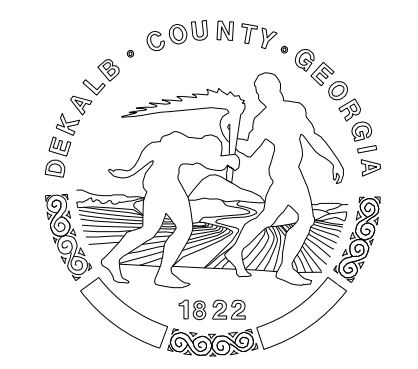
BMP LOCATION DETAILS INTERMEDIATE PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	
BACKCHECKED:		DATE:	
CORRECTED:		DATE:	
VERIFIED:		DATE:	
DRAWING No.			54-0006



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

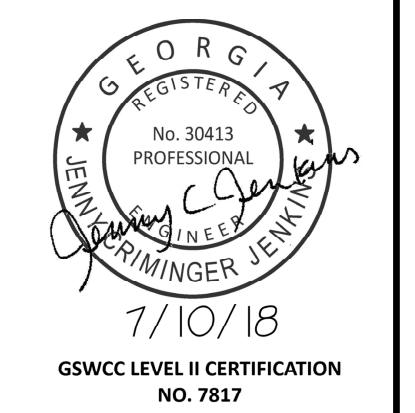
--- P ---
--- E ---
--- C --- F ---
[Hatched Box]
[Hatched Box]
[Hatched Box]

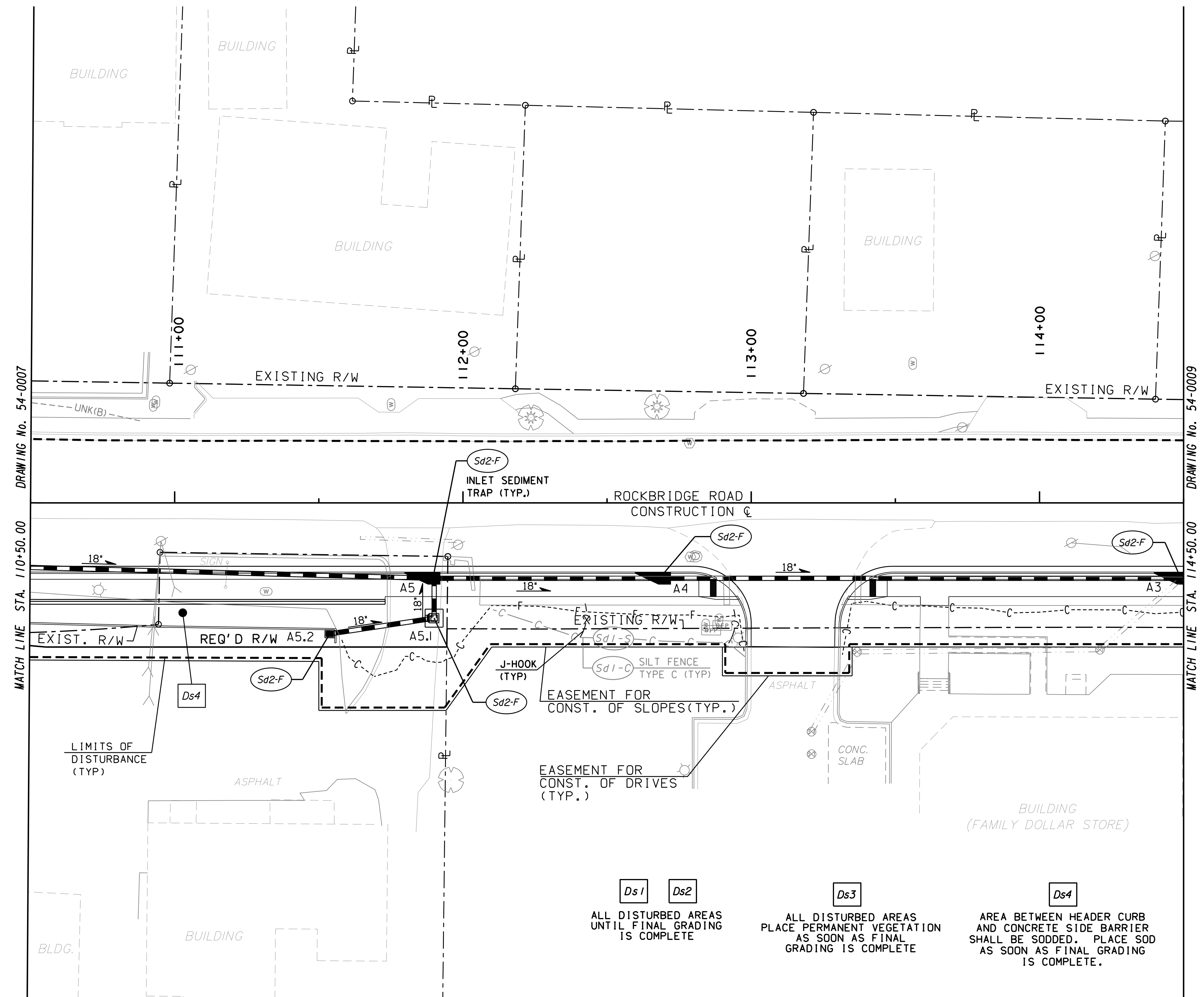
BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



REVISION DATES	

BMP LOCATION DETAILS INTERMEDIATE PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:		DATE:	DRAWING No.
BACKCHECKED:		DATE:	54-0007
CORRECTED:		DATE:	
VERIFIED:		DATE:	





MATCH LINE STA. 110+50.00 DRAWING No. 54-0007

MATCH LINE STA. 114+50.00 DRAWING No. 54-0009



Ds1 **Ds2** **Ds3** **Ds4**

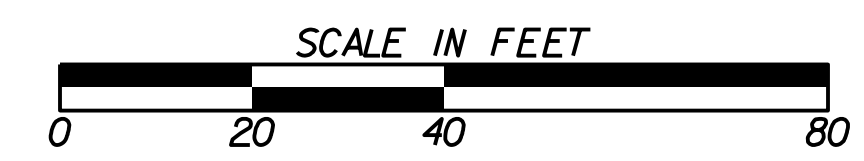
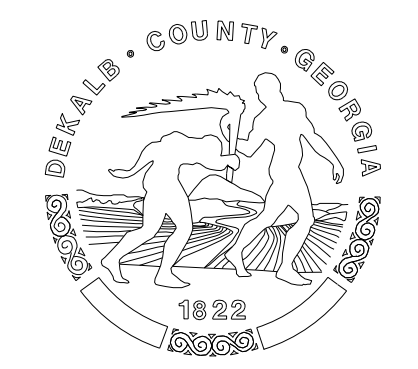
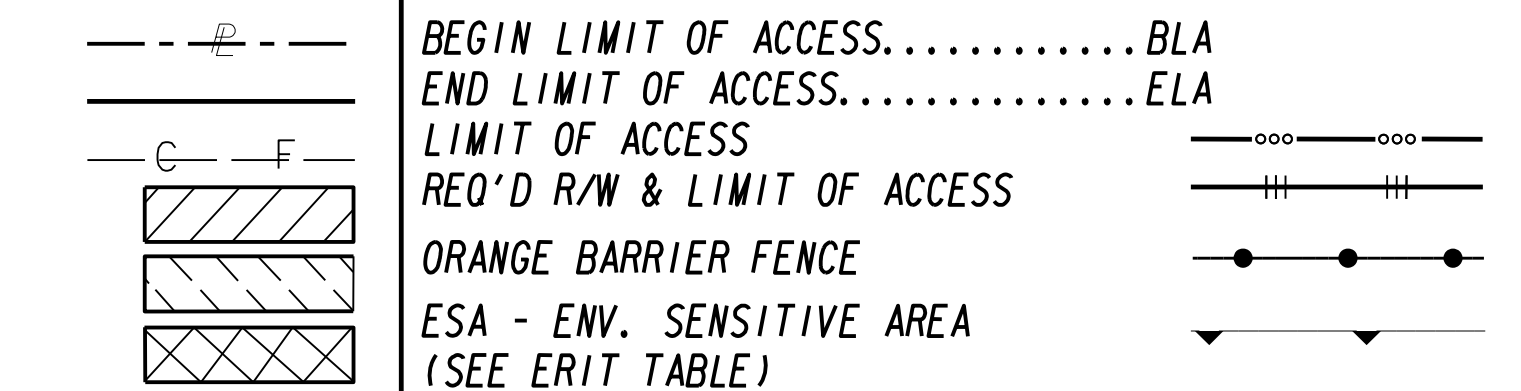
ALL DISTURBED AREAS UNTIL FINAL GRADING IS COMPLETE

ALL DISTURBED AREAS PLACE PERMANENT VEGETATION AS SOON AS FINAL GRADING IS COMPLETE

AREA BETWEEN HEADER CURB AND CONCRETE SIDE BARRIER SHALL BE SODDED. PLACE SOD AS SOON AS FINAL GRADING IS COMPLETE.

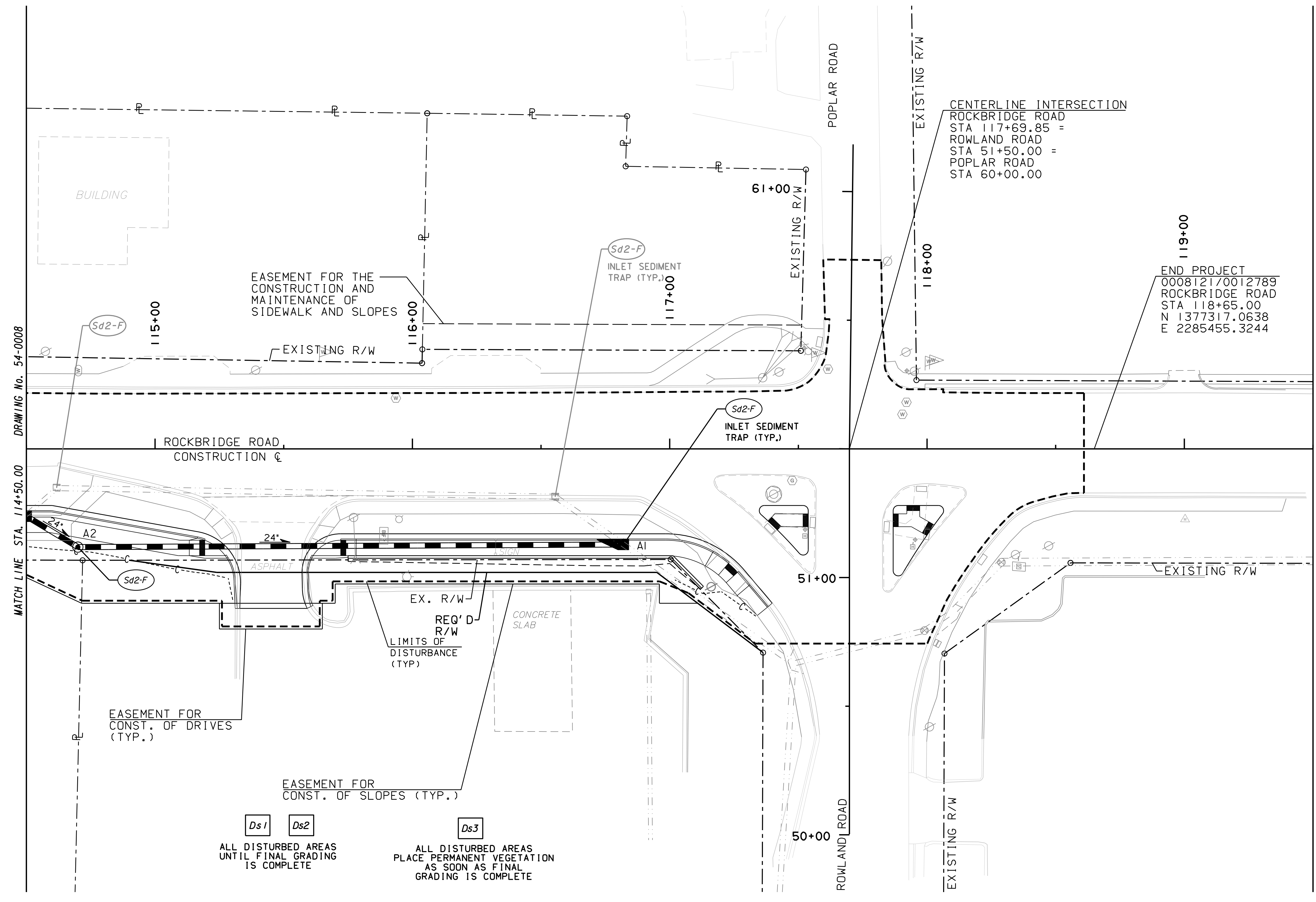


PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES



REVISION DATES	

BMP LOCATION DETAILS INTERMEDIATE PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	54-0008	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



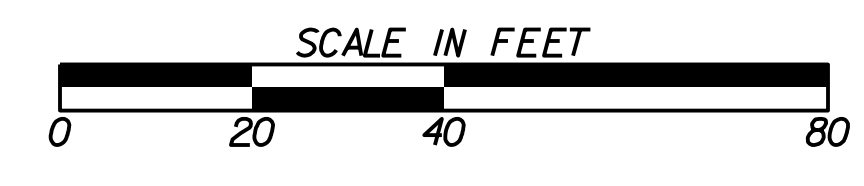
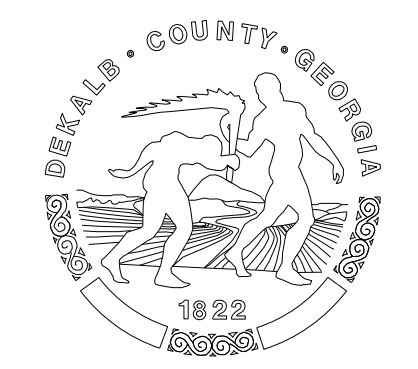
DRAWING No. 54-0008
 MATCH LINE STA. 114+50.00

DRAWING No. 54-0010
 MATCH LINE STA. 119+50.00



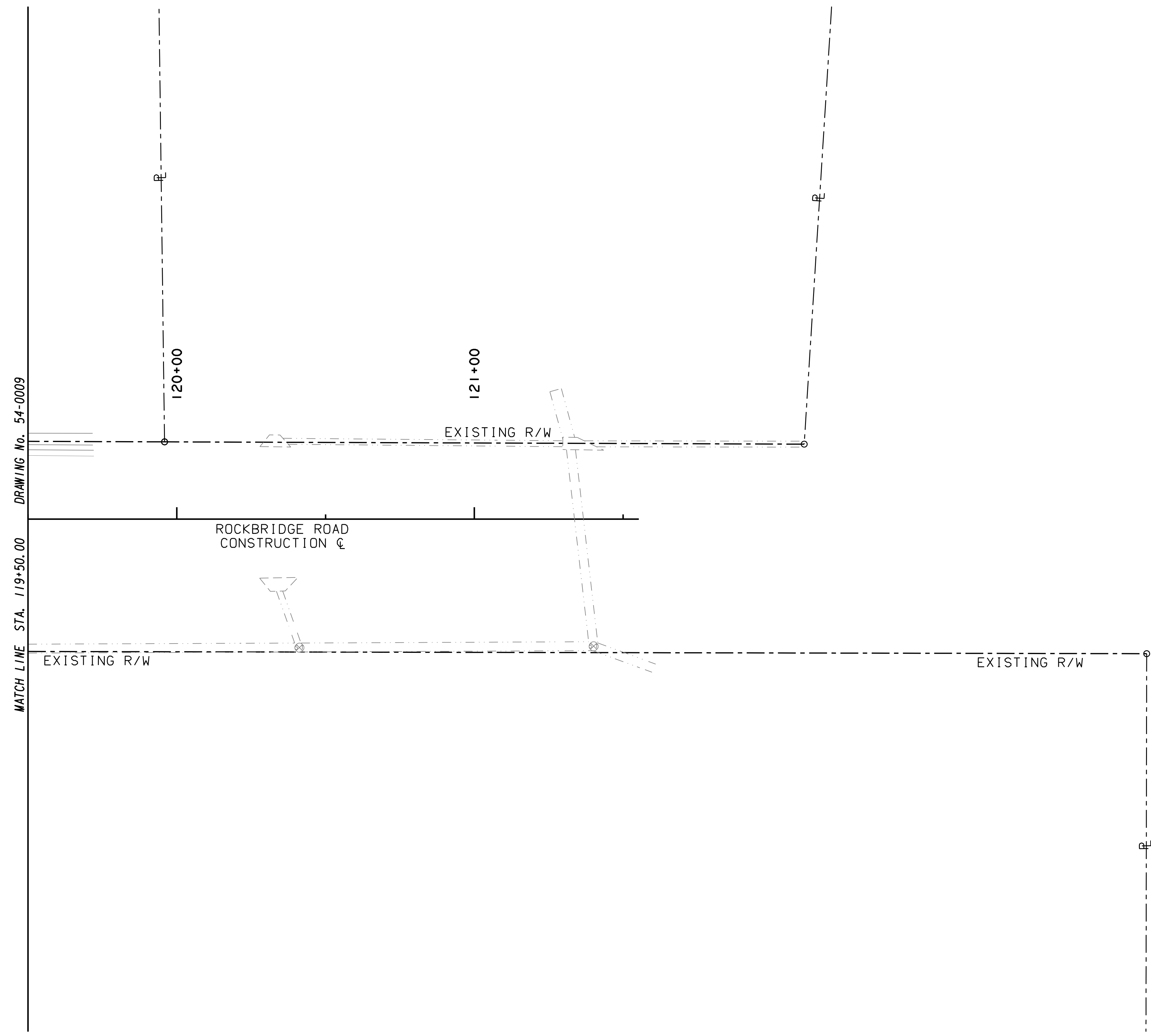
PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	---
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	---
EASEMENT FOR CONSTR OF SLOPES	---
EASEMENT FOR CONSTR OF DRIVES	---

BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
LIMIT OF ACCESS	---
REQ'D R/W & LIMIT OF ACCESS	---
ORANGE BARRIER FENCE	---
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	---



REVISION DATES	

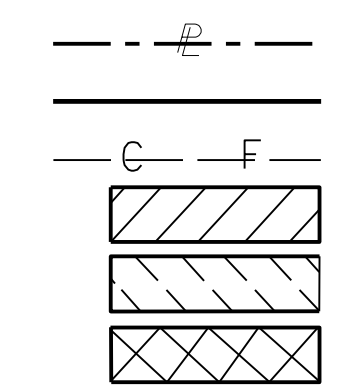
BMP LOCATION DETAILS INTERMEDIATE PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	54-0009	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



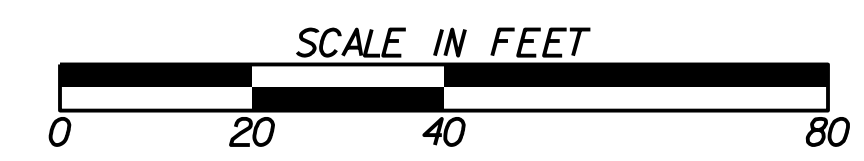
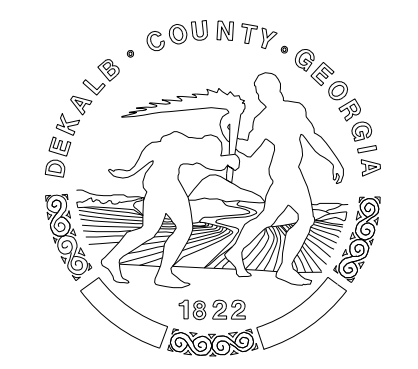
THERE ARE NO CONSTRUCTION ACTIVITIES SHOWN ON THIS DRAWING.
THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.



PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



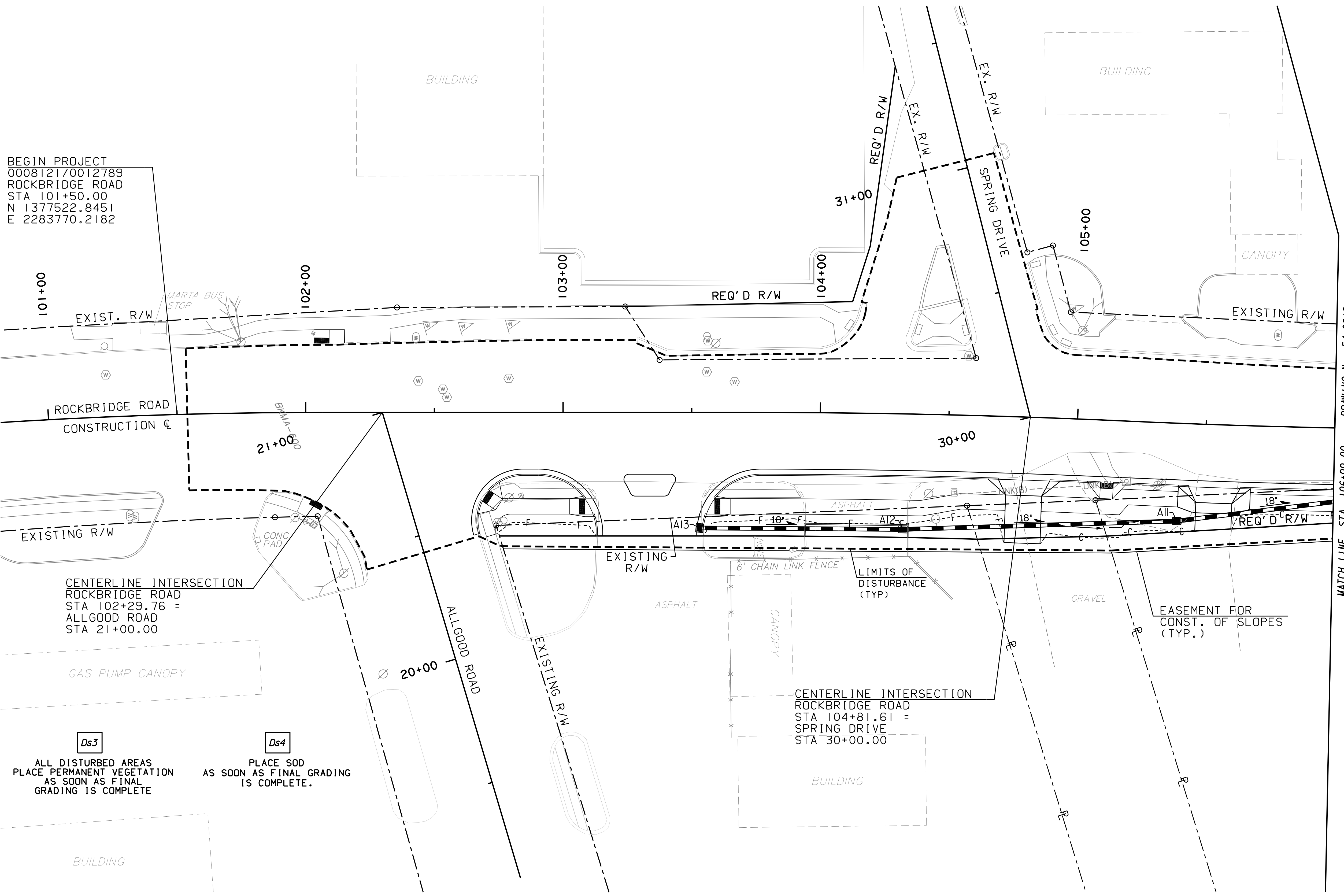
REVISION DATES	

**BMP LOCATION DETAILS
INTERMEDIATE PHASE
ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

CHECKED:	DATE:
BACKCHECKED:	DATE:
CORRECTED:	DATE:
VERIFIED:	DATE:

DRAWING No.
54-0010

BEGIN PROJECT
 0008121/0012789
 ROCKBRIDGE ROAD
 STA 101+50.00
 N 1377522.8451
 E 2283770.2182



CENTERLINE INTERSECTION
 ROCKBRIDGE ROAD
 STA 102+29.76 =
 ALLGOOD ROAD
 STA 21+00.00

CENTERLINE INTERSECTION
 ROCKBRIDGE ROAD
 STA 104+81.61 =
 SPRING DRIVE
 STA 30+00.00

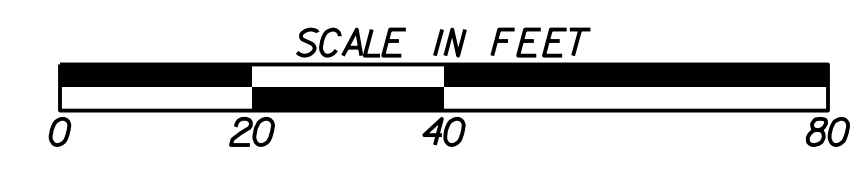
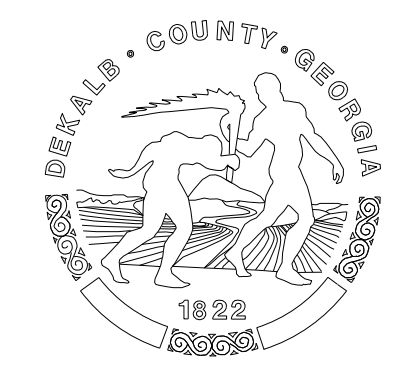
Ds3
 ALL DISTURBED AREAS
 PLACE PERMANENT VEGETATION
 AS SOON AS FINAL
 GRADING IS COMPLETE

Ds4
 PLACE SOD
 AS SOON AS FINAL GRADING
 IS COMPLETE.

PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

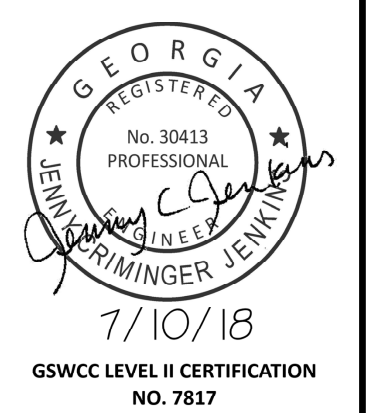
--- P ---
 --- R ---
 --- C --- F ---
 [Hatched Box]
 [Hatched Box]
 [Hatched Box]

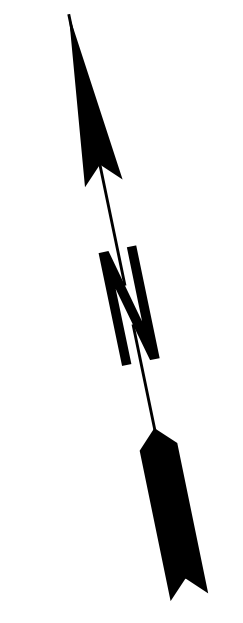
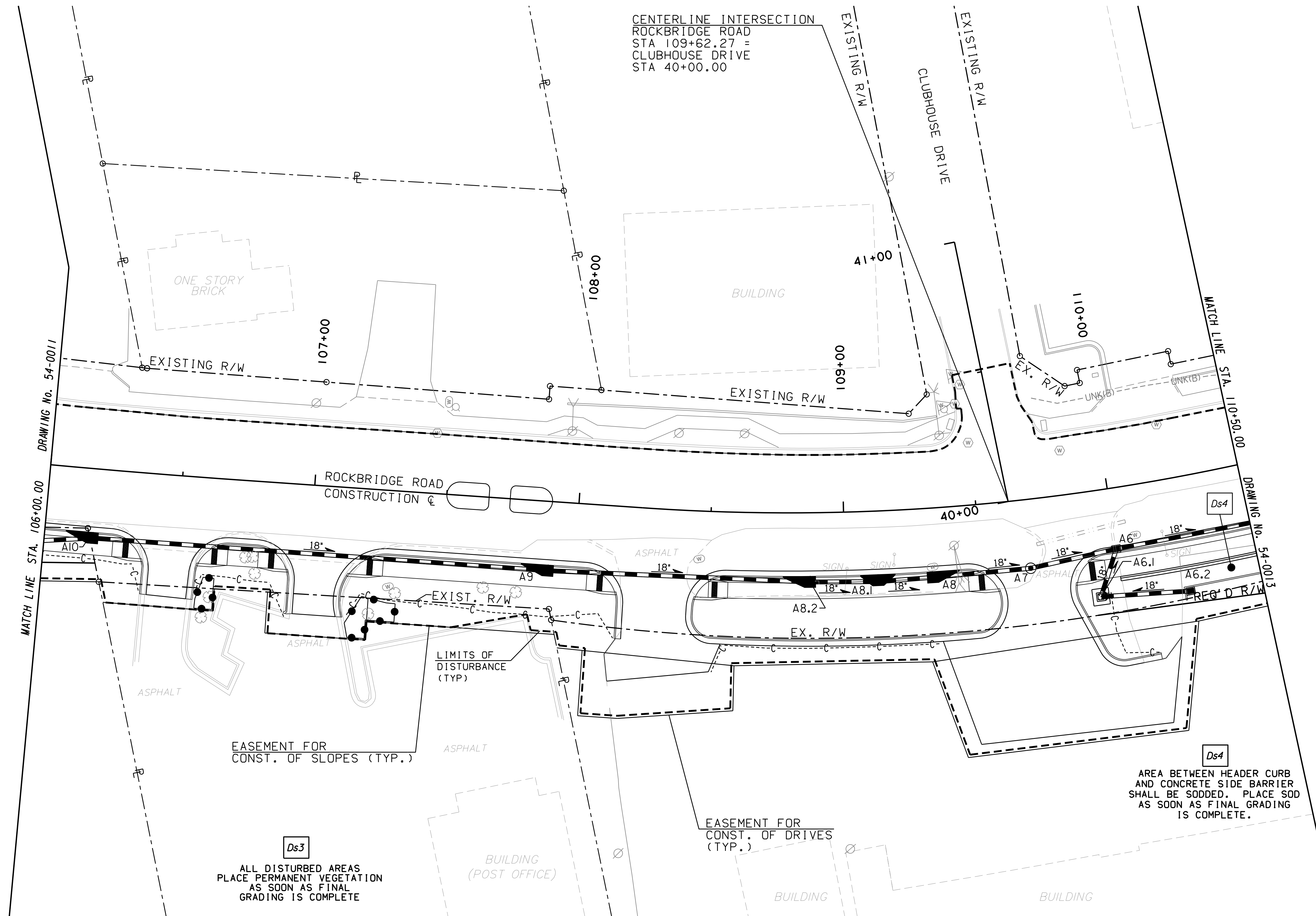
BEGIN LIMIT OF ACCESS.....BLA
 END LIMIT OF ACCESS.....ELA
 LIMIT OF ACCESS
 REQ'D R/W & LIMIT OF ACCESS
 ORANGE BARRIER FENCE
 ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

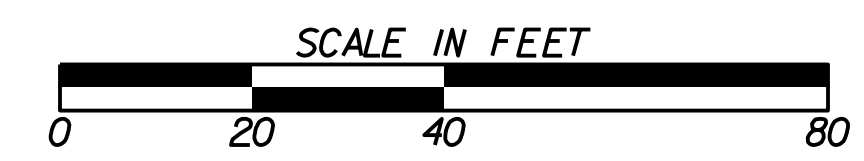
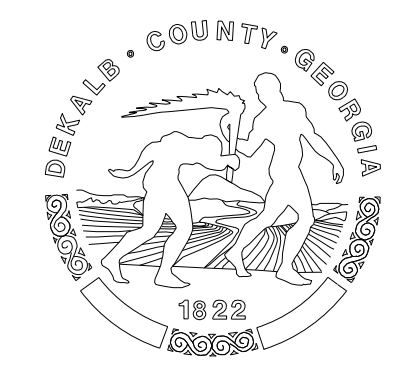
BMP LOCATION DETAILS FINAL PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	54-0011	
CORRECTED:	DATE:		
VERIFIED:	DATE:		





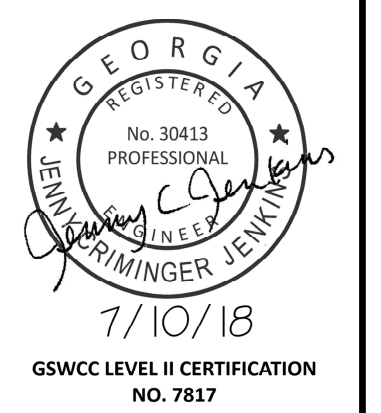
PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	---
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	---
EASEMENT FOR CONSTR OF SLOPES	---
EASEMENT FOR CONSTR OF DRIVES	---

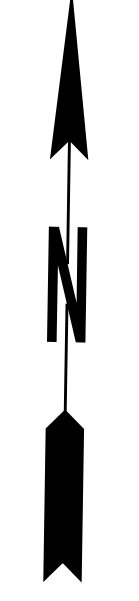
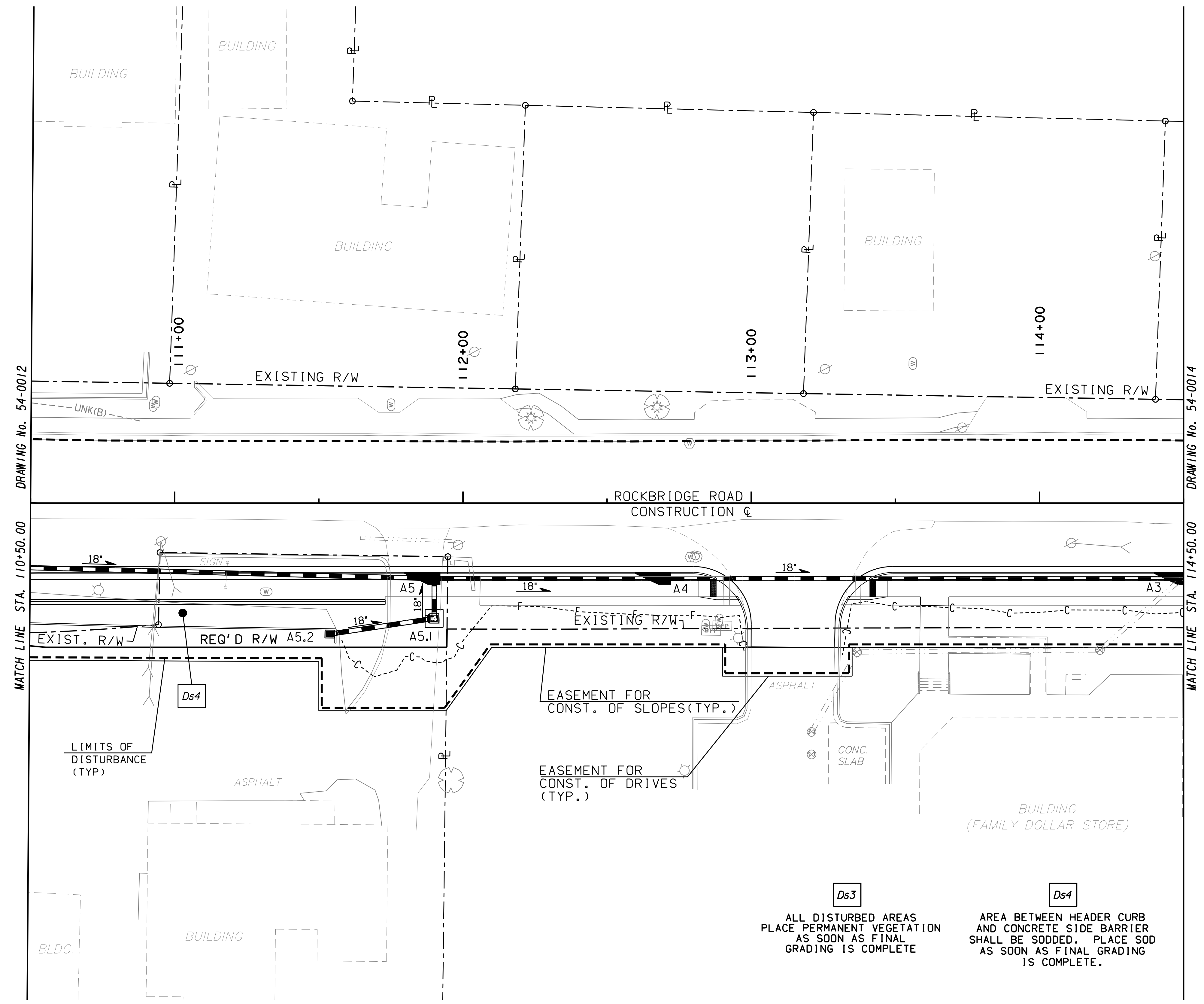
BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
LIMIT OF ACCESS	---
REQ'D R/W & LIMIT OF ACCESS	---
ORANGE BARRIER FENCE	---
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	---



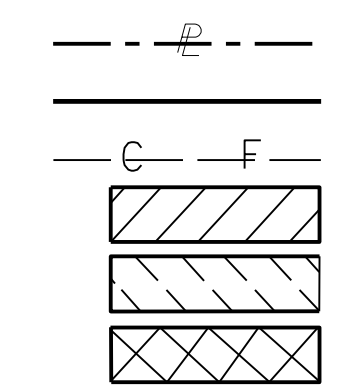
REVISION DATES	

BMP LOCATION DETAILS FINAL PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	54-0012	
CORRECTED:	DATE:		
VERIFIED:	DATE:		

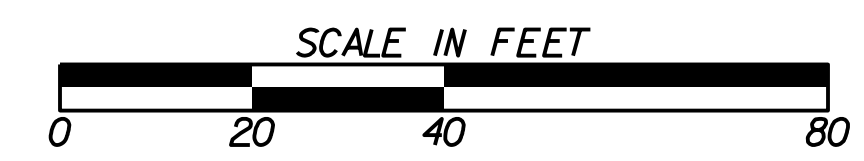
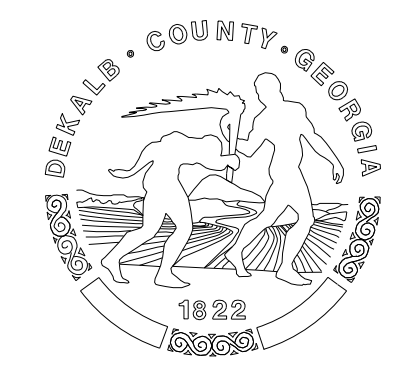




PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES

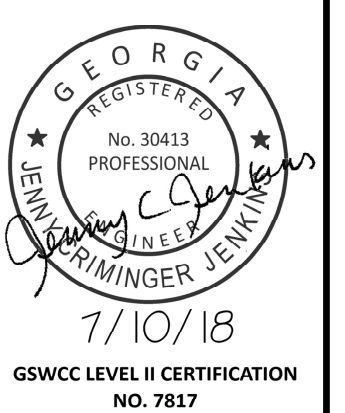


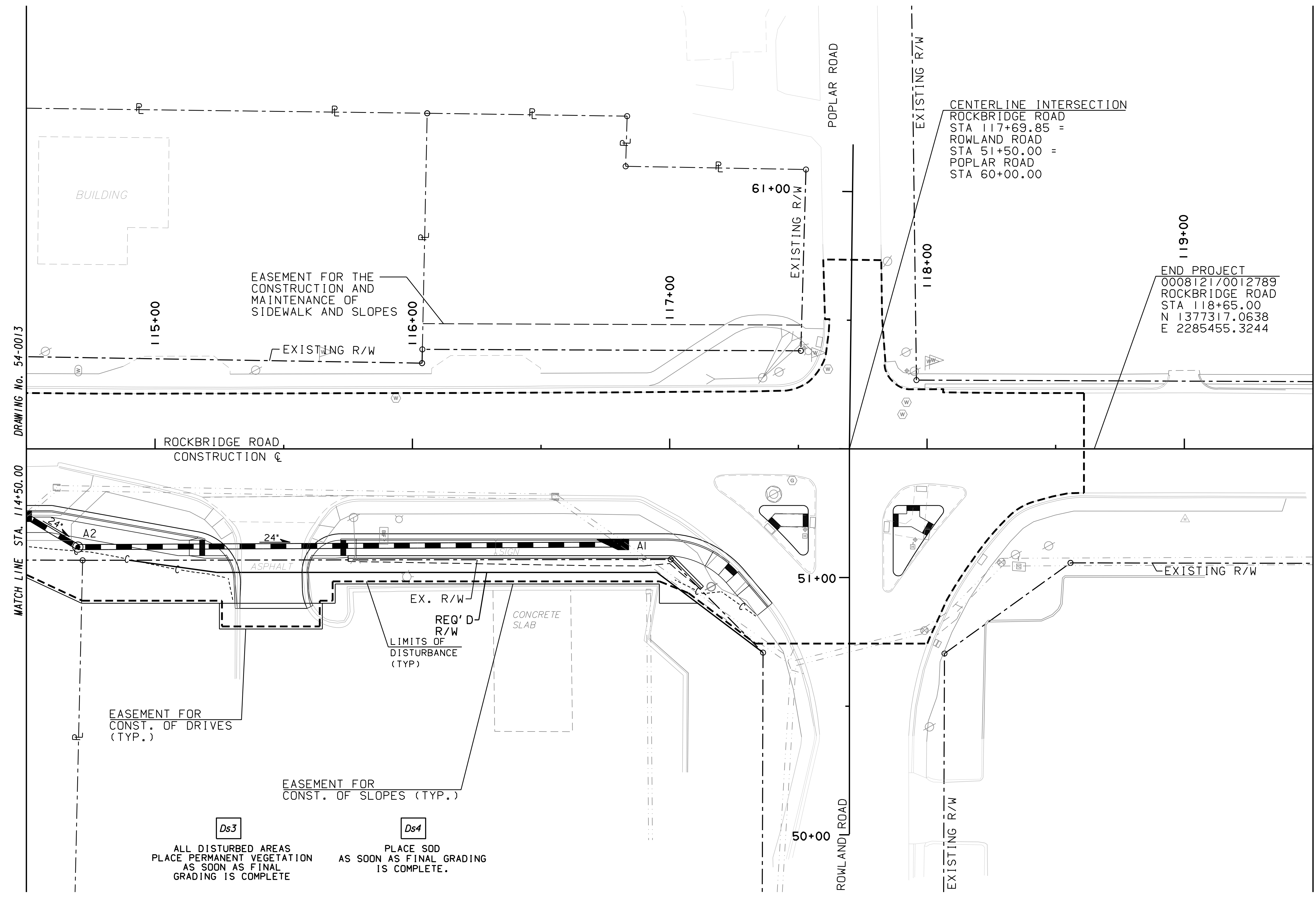
BEGIN LIMIT OF ACCESS.....BLA
END LIMIT OF ACCESS.....ELA
LIMIT OF ACCESS
REQ'D R/W & LIMIT OF ACCESS
ORANGE BARRIER FENCE
ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)



REVISION DATES	

BMP LOCATION DETAILS FINAL PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	54-0013	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



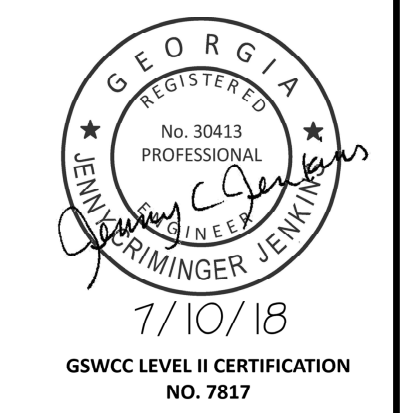


DRAWING No. 54-0013
MATCH LINE STA. 114+50.00

DRAWING No. 54-0015
MATCH LINE STA. 119+50.00

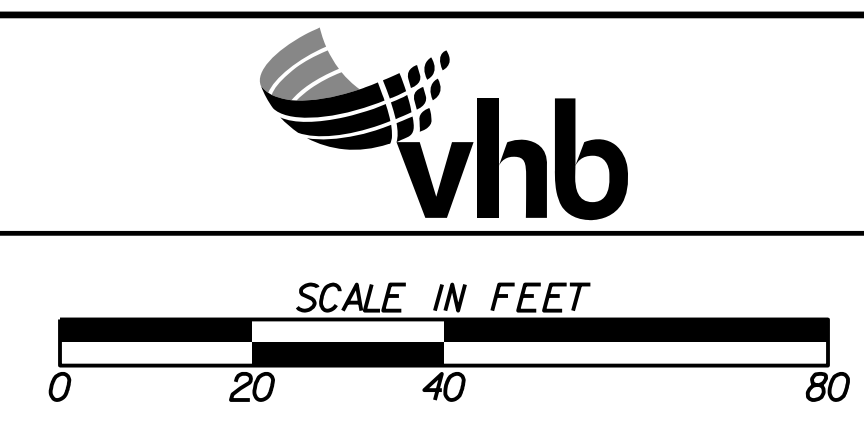
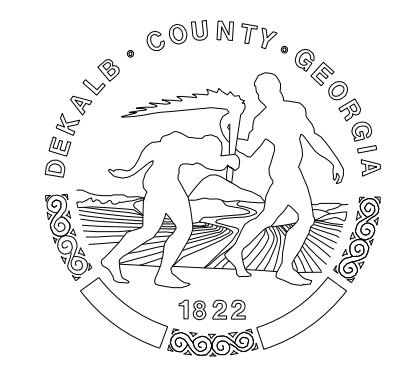
Ds3
ALL DISTURBED AREAS
PLACE PERMANENT VEGETATION
AS SOON AS FINAL
GRADING IS COMPLETE

Ds4
PLACE SOD
AS SOON AS FINAL GRADING
IS COMPLETE.



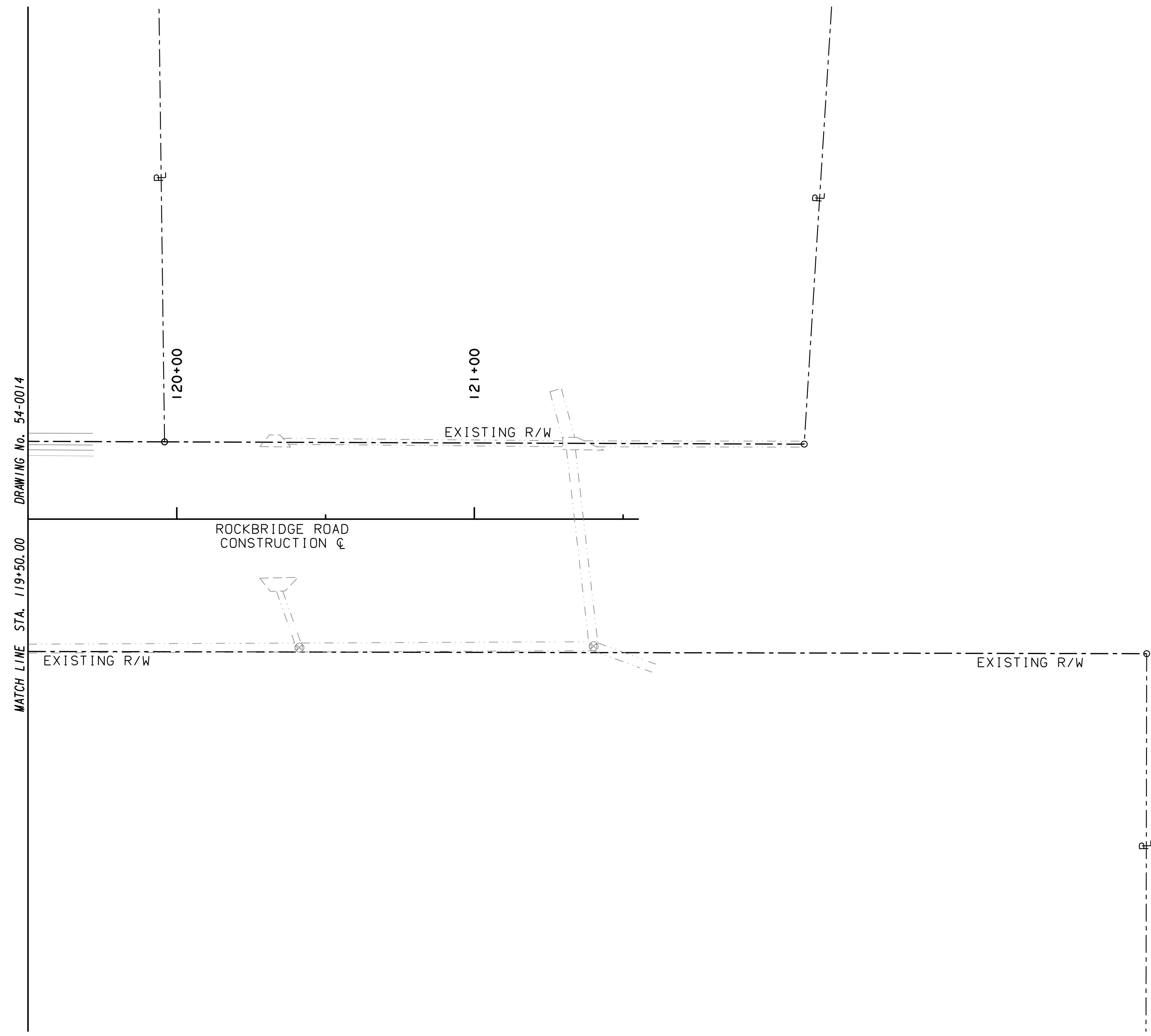
PROPERTY AND EXISTING R/W LINE	---
REQUIRED R/W LINE	---
CONSTRUCTION LIMITS	---
EASEMENT FOR CONSTR & MAINTENANCE OF SLOPES	---
EASEMENT FOR CONSTR OF SLOPES	---
EASEMENT FOR CONSTR OF DRIVES	---

BEGIN LIMIT OF ACCESS.....BLA	---
END LIMIT OF ACCESS.....ELA	---
LIMIT OF ACCESS	---
REQ'D R/W & LIMIT OF ACCESS	---
ORANGE BARRIER FENCE	---
ESA - ENV. SENSITIVE AREA (SEE ERIT TABLE)	---



REVISION DATES	

BMP LOCATION DETAILS FINAL PHASE ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	54-0014	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



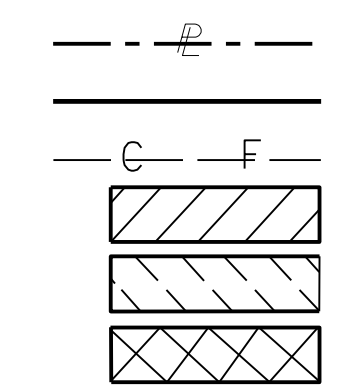
DRAWING No. 54-0014
MATCH LINE STA. 119+50.00



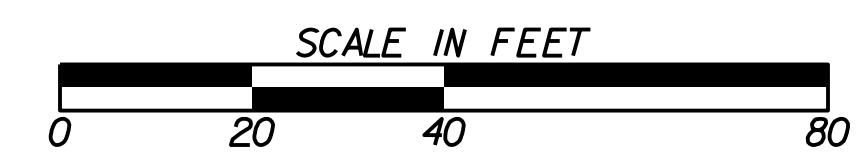
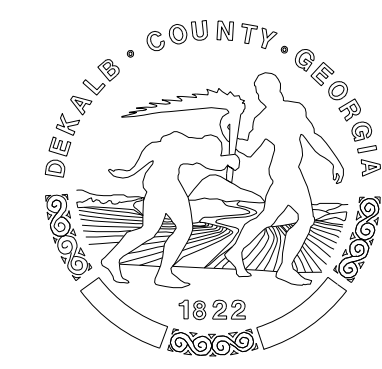
THERE ARE NO CONSTRUCTION ACTIVITIES SHOWN ON THIS DRAWING.
THIS DRAWING IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

7/10/18
GSWCC LEVEL II CERTIFICATION
NO. 7817

PROPERTY AND EXISTING R/W LINE
REQUIRED R/W LINE
CONSTRUCTION LIMITS
EASEMENT FOR CONSTR
& MAINTENANCE OF SLOPES
EASEMENT FOR CONSTR OF SLOPES
EASEMENT FOR CONSTR OF DRIVES



--- P --- BEGIN LIMIT OF ACCESS.....BLA
_____ END LIMIT OF ACCESS.....ELA
--- C --- F --- LIMIT OF ACCESS
--- III --- REQ'D R/W & LIMIT OF ACCESS
--- ● --- ORANGE BARRIER FENCE
--- ▼ --- ESA - ENV. SENSITIVE AREA
(SEE ERIT TABLE)

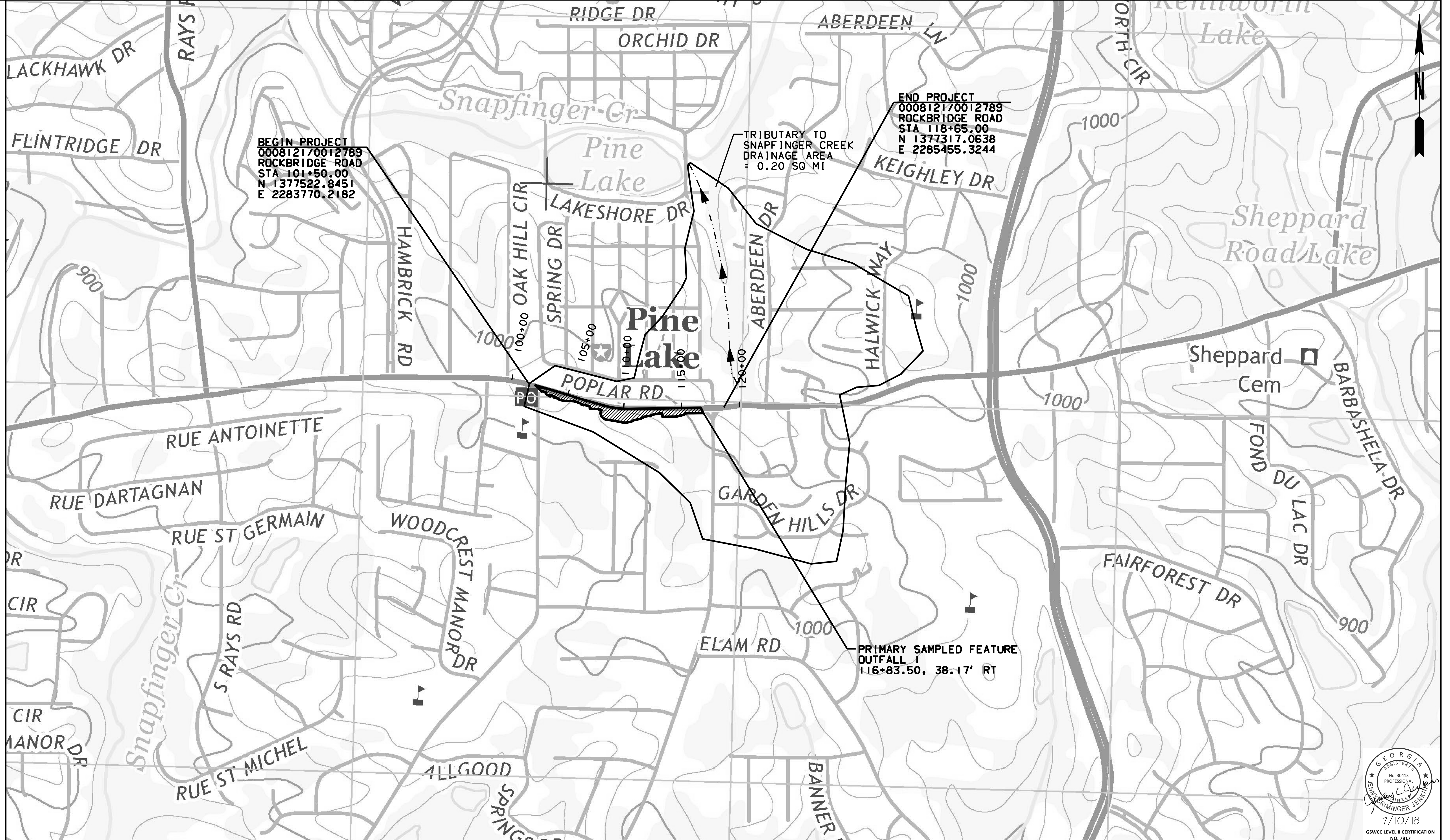


REVISION DATES	

**BMP LOCATION DETAILS
FINAL PHASE
ROCKBRIDGE ROAD
FROM ALLGOOD ROAD TO ROWLAND ROAD**

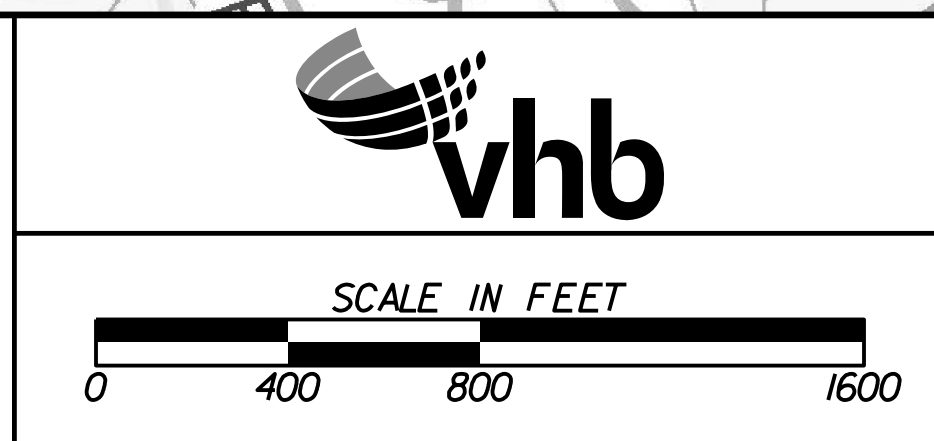
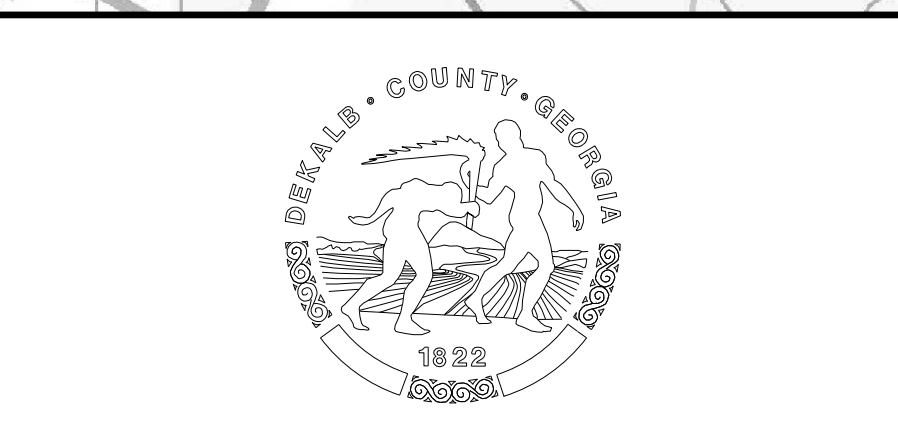
CHECKED:	DATE:
BACKCHECKED:	DATE:
CORRECTED:	DATE:
VERIFIED:	DATE:

DRAWING No.
54-0015



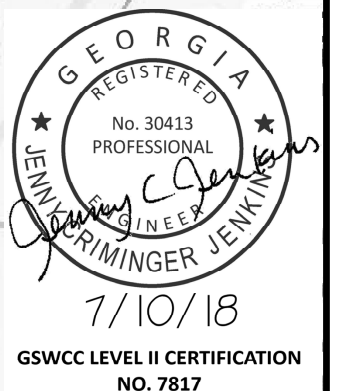
PROPERTY AND EXISTING R/W LINE
 REQUIRED R/W LINE
 CONSTRUCTION LIMITS
 EASEMENT FOR CONSTR
 & MAINTENANCE OF SLOPES
 EASEMENT FOR CONSTR OF SLOPES
 EASEMENT FOR CONSTR OF DRIVES

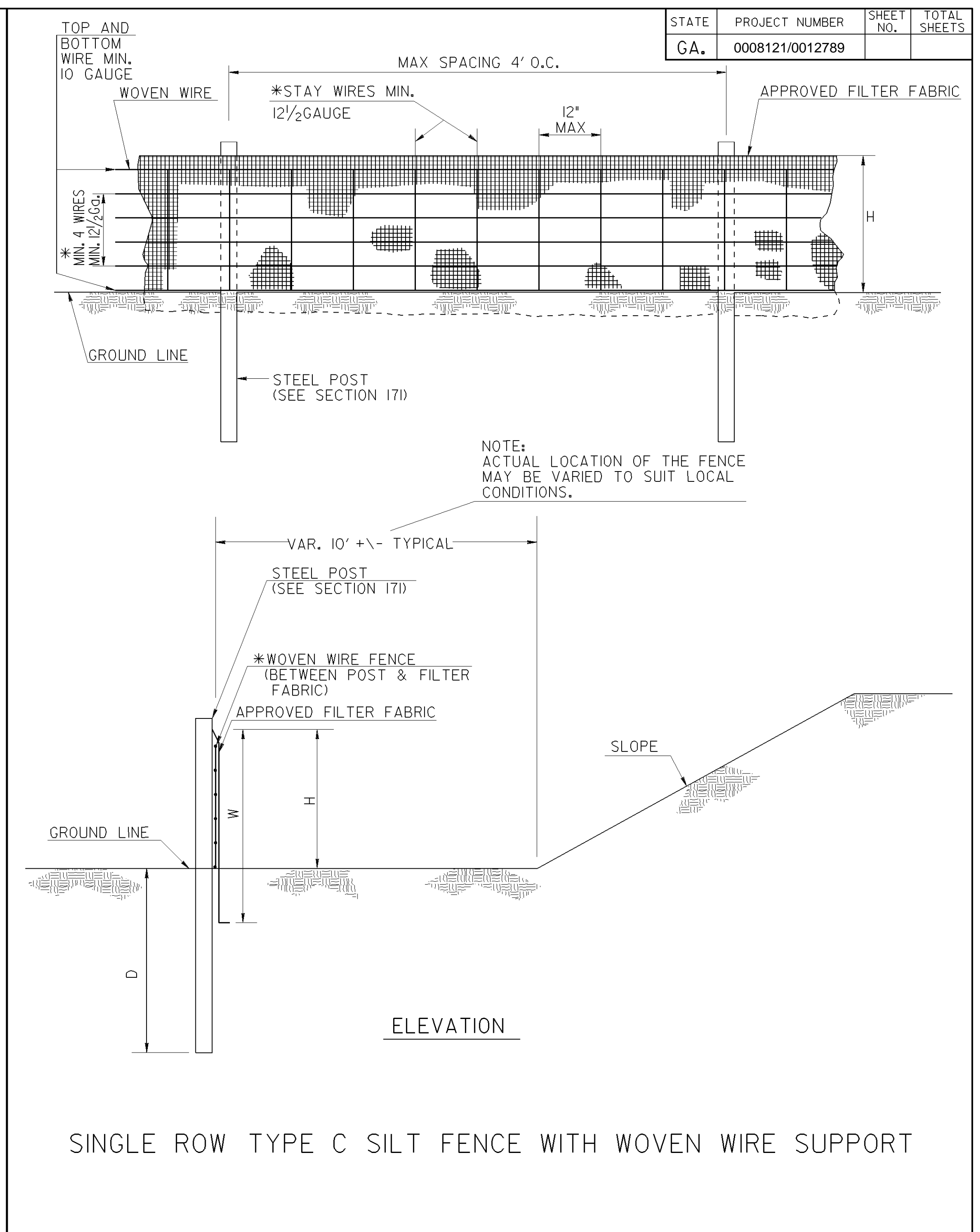
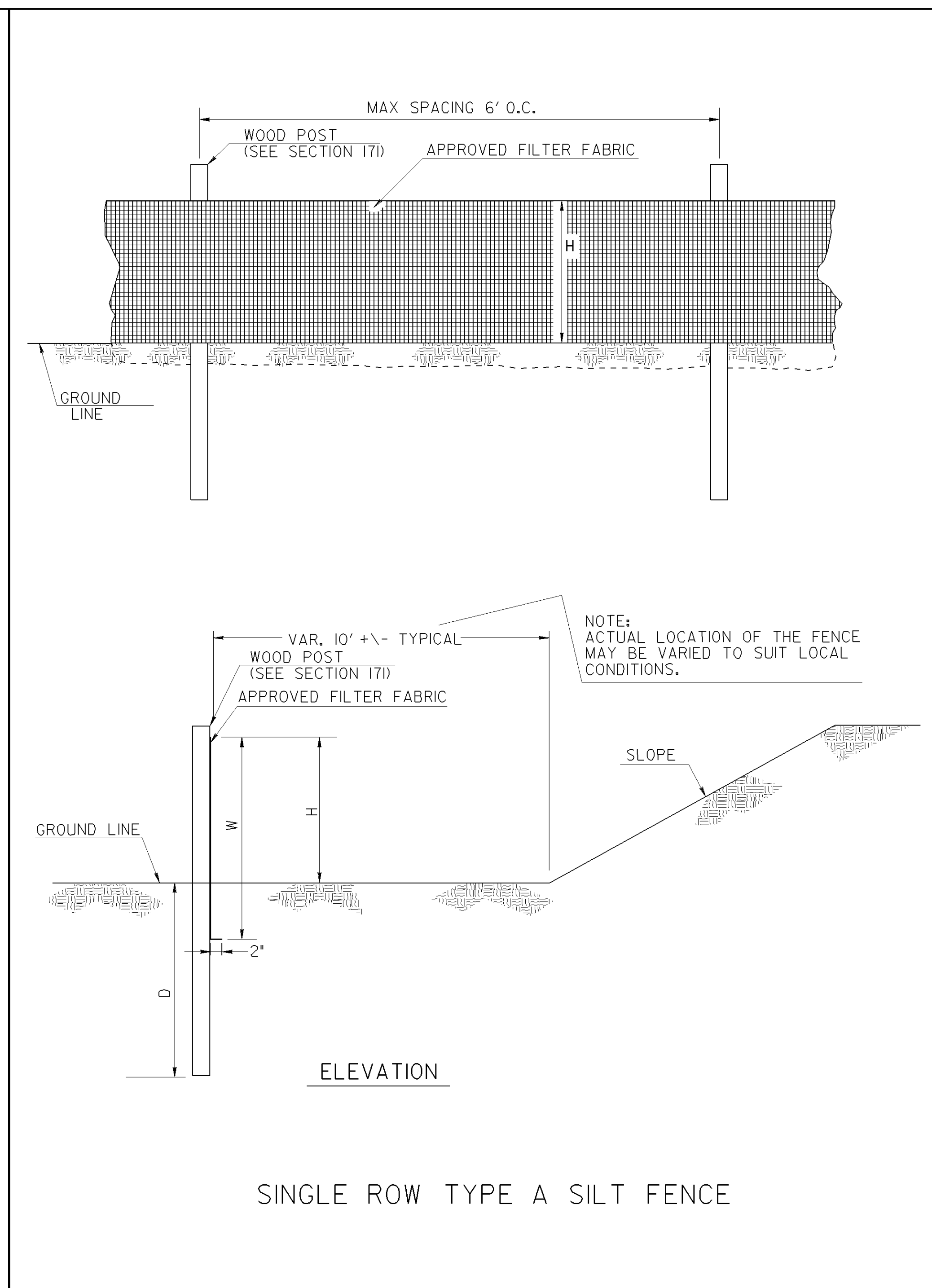
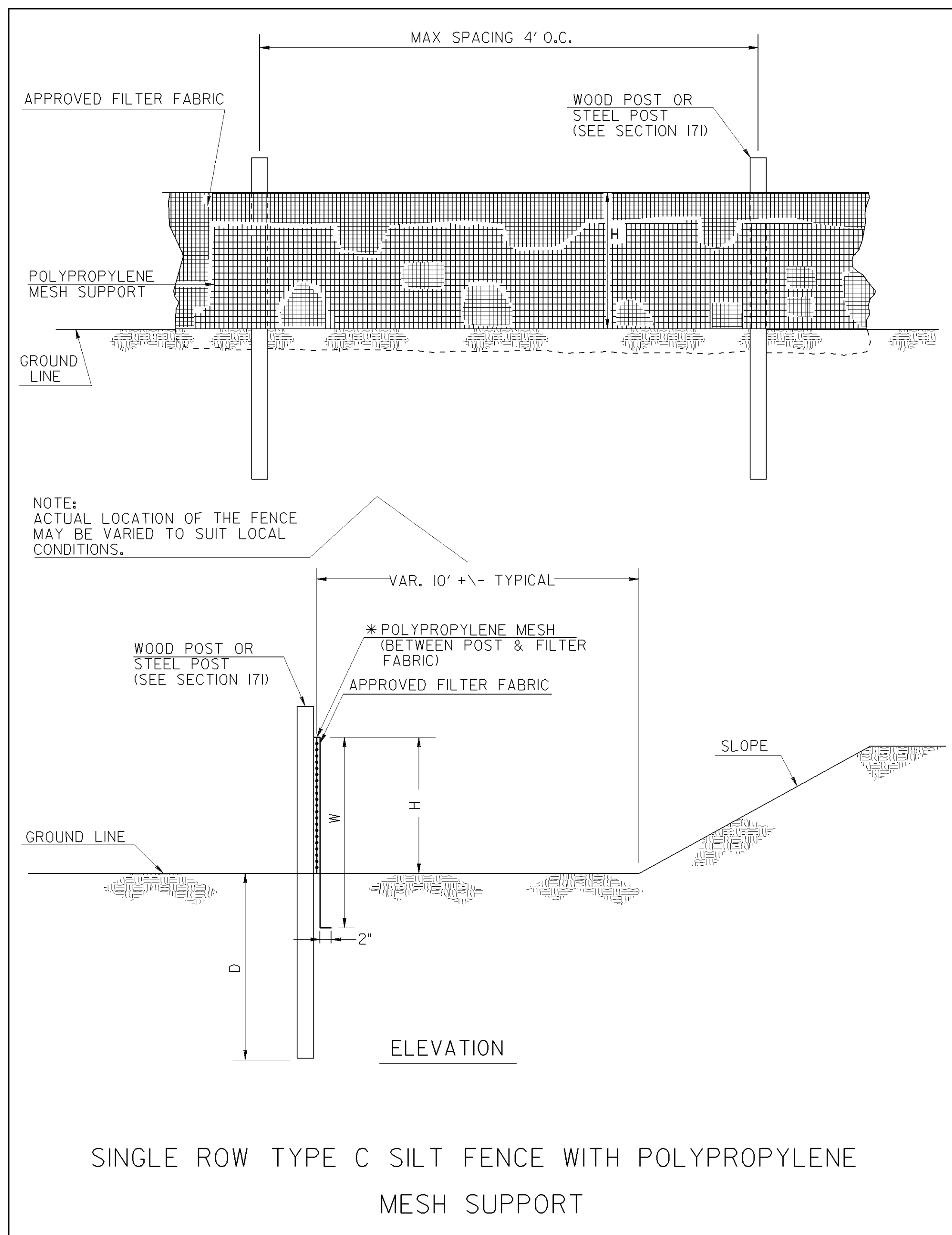
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 ---#--- END LIMIT OF ACCESS.....ELA
 ---#--- LIMIT OF ACCESS
 ---#--- REQ'D R/W & LIMIT OF ACCESS
 ---#--- ORANGE BARRIER FENCE
 ---#--- ESA - ENV. SENSITIVE AREA
 (SEE ERIT TABLE)



REVISION DATES	

WATERSHED MAP SITE MONITORING PLAN			
ROCKBRIDGE ROAD FROM ALLGOOD ROAD TO ROWLAND ROAD			
CHECKED:	DATE:	DRAWING No.	
BACKCHECKED:	DATE:	55-0001	
CORRECTED:	DATE:		
VERIFIED:	DATE:		



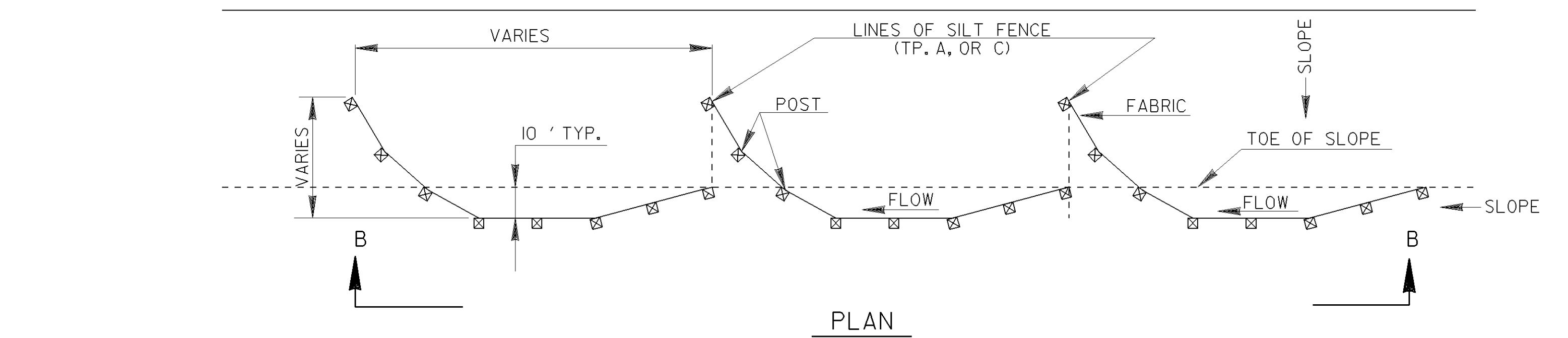
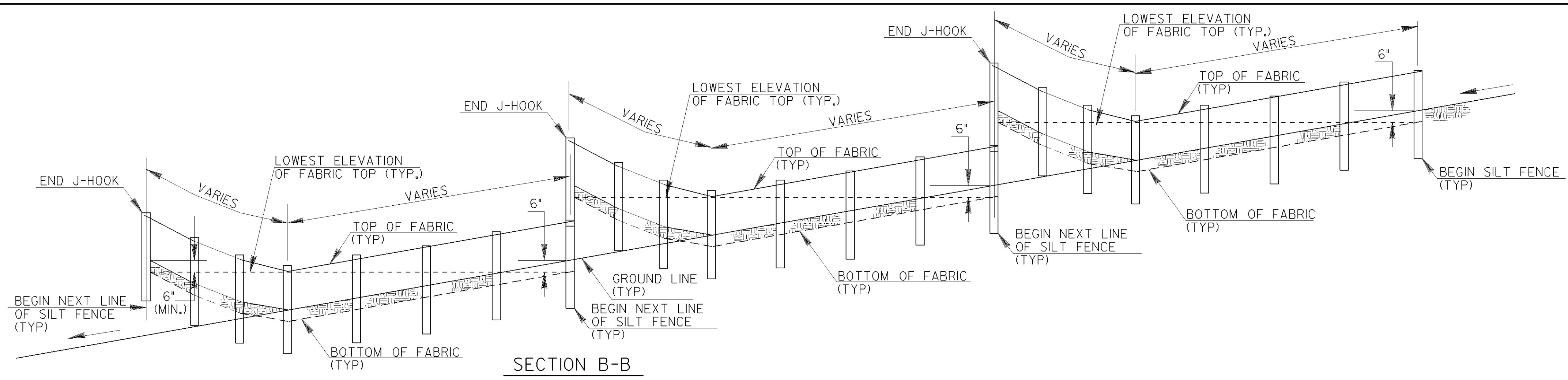


FENCE TYPE	POST LENGTH	H	D	W	TYPICAL USES
TYPE "A"	4 FT.	2'-4"	1'-6"	3'-0"	
TYPE "C"	4 FT.	2'-4"	1'-6"	3'-0"	AT BRIDGE END ROLLS, DOUBLE ROW ALONG STREAMS, WETLANDS AND ENVIRONMENTALLY SENSITIVE AREAS FOR USE OF THIS MATERIAL IN FABRIC CHECKDAMS SEE D-24D.

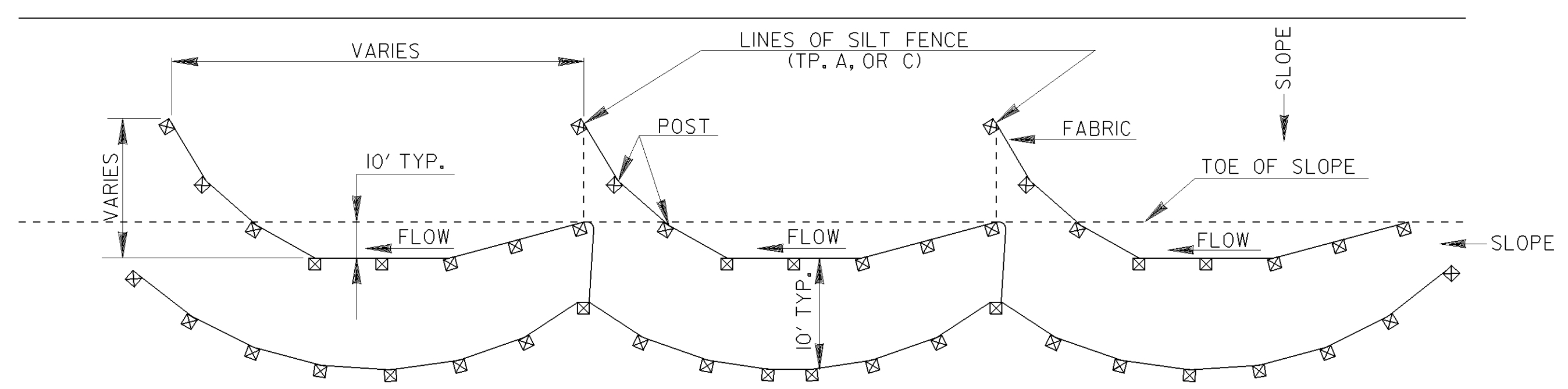
- NOTES:
1. WIRE STAPLES SHALL BE AT LEAST 17 GAUGE, WITH LEGS AT LEAST 1/2 INCHES LONG AND A CROWN AT LEAST 3/4 INCHES WIDE. NAILS SHALL BE AT LEAST 14 GAUGE, 1 INCH LONG, WITH BUTTON HEADS AT LEAST 3/4 INCHES WIDE.
 2. NAILS OR STAPLES SHALL BE EVENLY PLACED WITH AT LEAST 5 PER POST FOR TYPE A FENCE AND 4 PER POST FOR TYPE C FENCE.
 3. THE VERTICAL WIRES FOR THE WOVEN WIRE SUPPORT FENCE SHALL HAVE A MAXIMUM SPACING OF 12 INCHES. THE TOP AND BOTTOM WIRES SHALL BE AT LEAST 10 GAUGE AND ALL OTHER WIRES SHALL BE AT LEAST 12 1/2 GAUGE.
 4. TEMPORARY SILT FENCE INSTALLATION IS DIFFERENT THAN THE SILT RETENTION BARRIER INSTALLATION.
 5. SEE SECTION 171 FOR SILT FENCE SPECIFICATIONS.
 6. SEE SECTION 894 FOR FENCING SPECIFICATIONS.
 7. SEE QPL-36 FOR A LIST APPROVED SILT FENCE FABRIC.
 8. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS UNLESS PERMITTED.

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		CONSTRUCTION DETAILS TEMPORARY SILT FENCE	
BY		NO SCALE	REV. AND REDRAWN JAN. 2011
		56-0001	NUMBER D-24A (SHEET 1 OF 4)

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	0008121/0012789		



PLAN
SINGLE ROW SILT FENCE

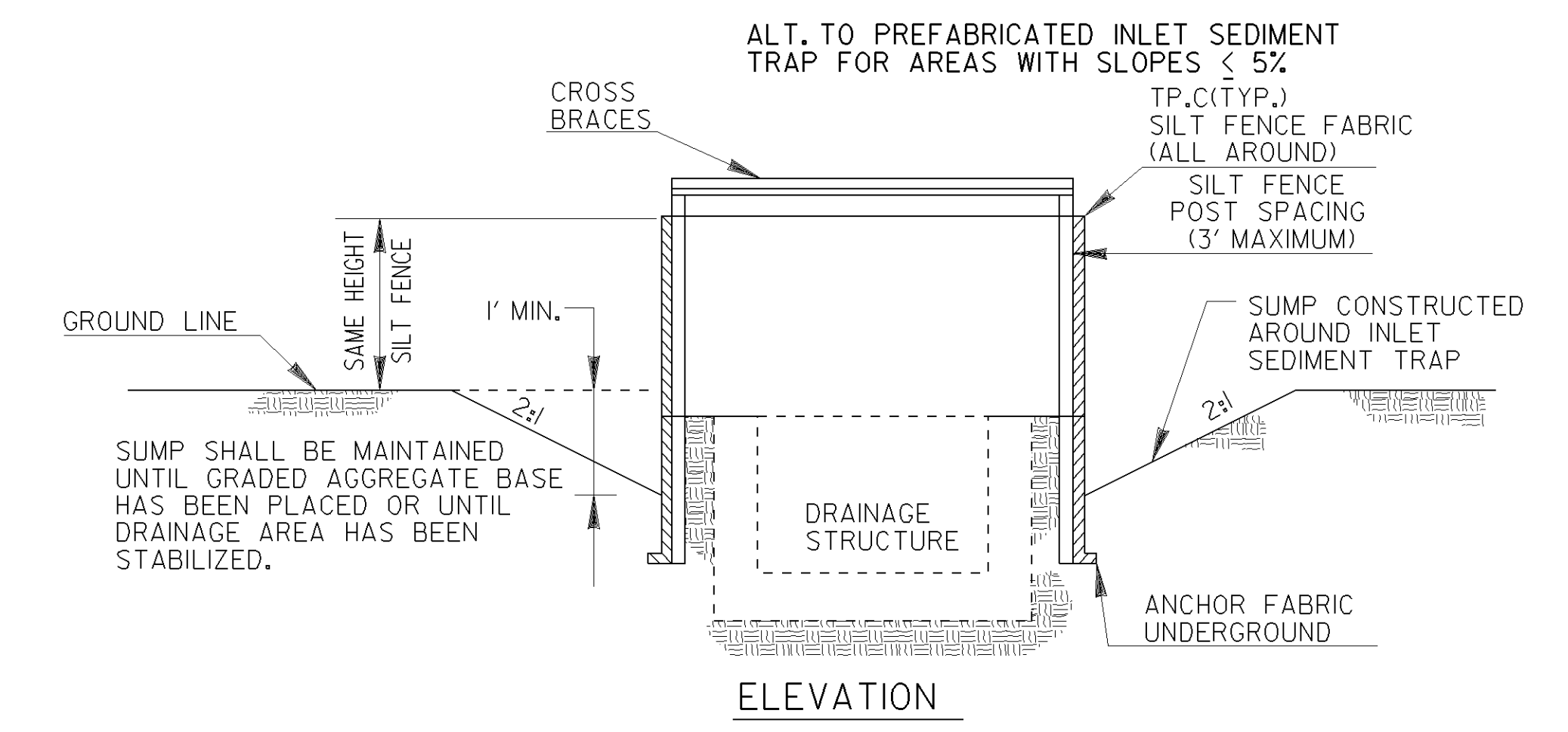


PLAN
DOUBLE ROW SILT FENCE

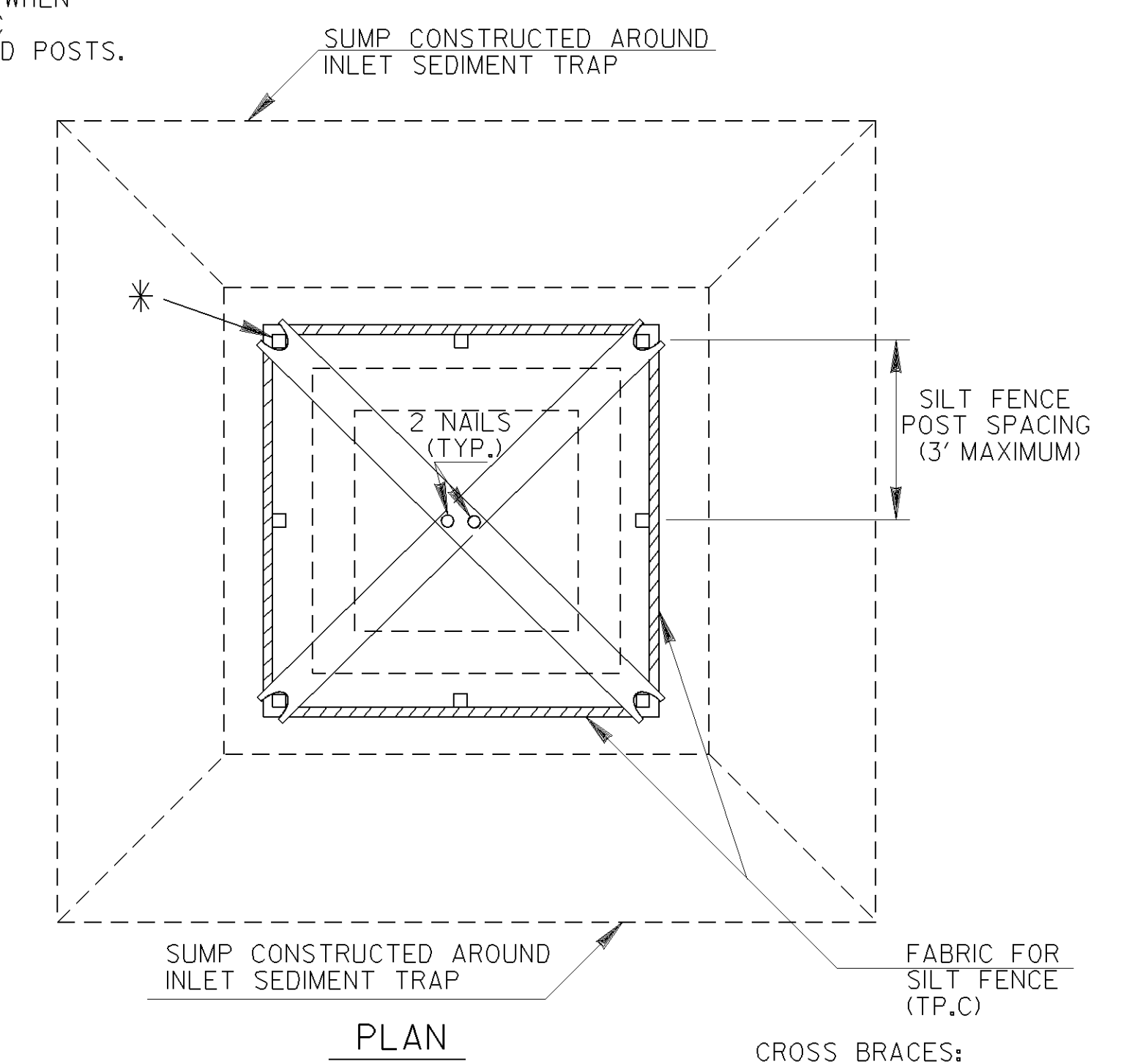
TYPICAL J HOOK SPACING		
SLOPE PERCENT	TYPE OF SILT FENCE	MINIMUM SPACING (FEET)
1% TO 2%	TYPE A	100' ±
2% TO 3%	TYPE A	50' ±
3% TO 4%	TYPE C	50' ±
4% TO 5%	TYPE C	25' ±

NOTE:
 1. IF THE GRADE IS BETWEEN 0 TO 1 PERCENT, THE SILT FENCE SHALL BE PLACED ACROSS THE DITCH.
 2. TEMPORARY SILT FENCE SHALL NOT BE PLACED WITHIN STATE WATERS.

TYPICAL LOCATION AROUND DROP INLETS



* CROSS BRACING REQUIRED WHEN USING "ALTERNATE" TYPE C PRODUCTS WHICH USE WOOD POSTS.



CROSS BRACES:
 TWO - 2 X 4's WITH ENDS TO FIT POST, PROVIDING STURDY SUPPORT, OR AN APPROVED ALTERNATE

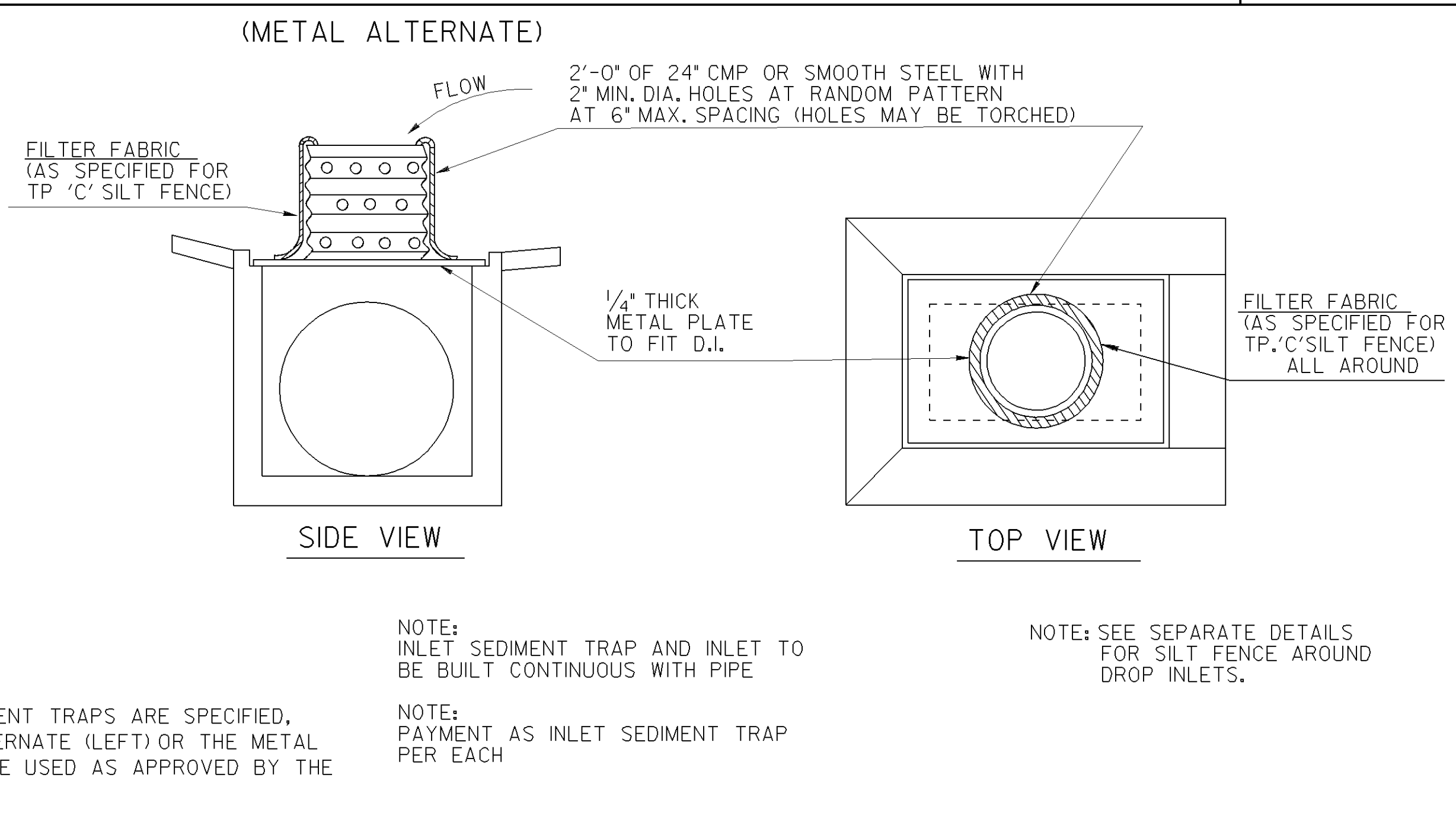
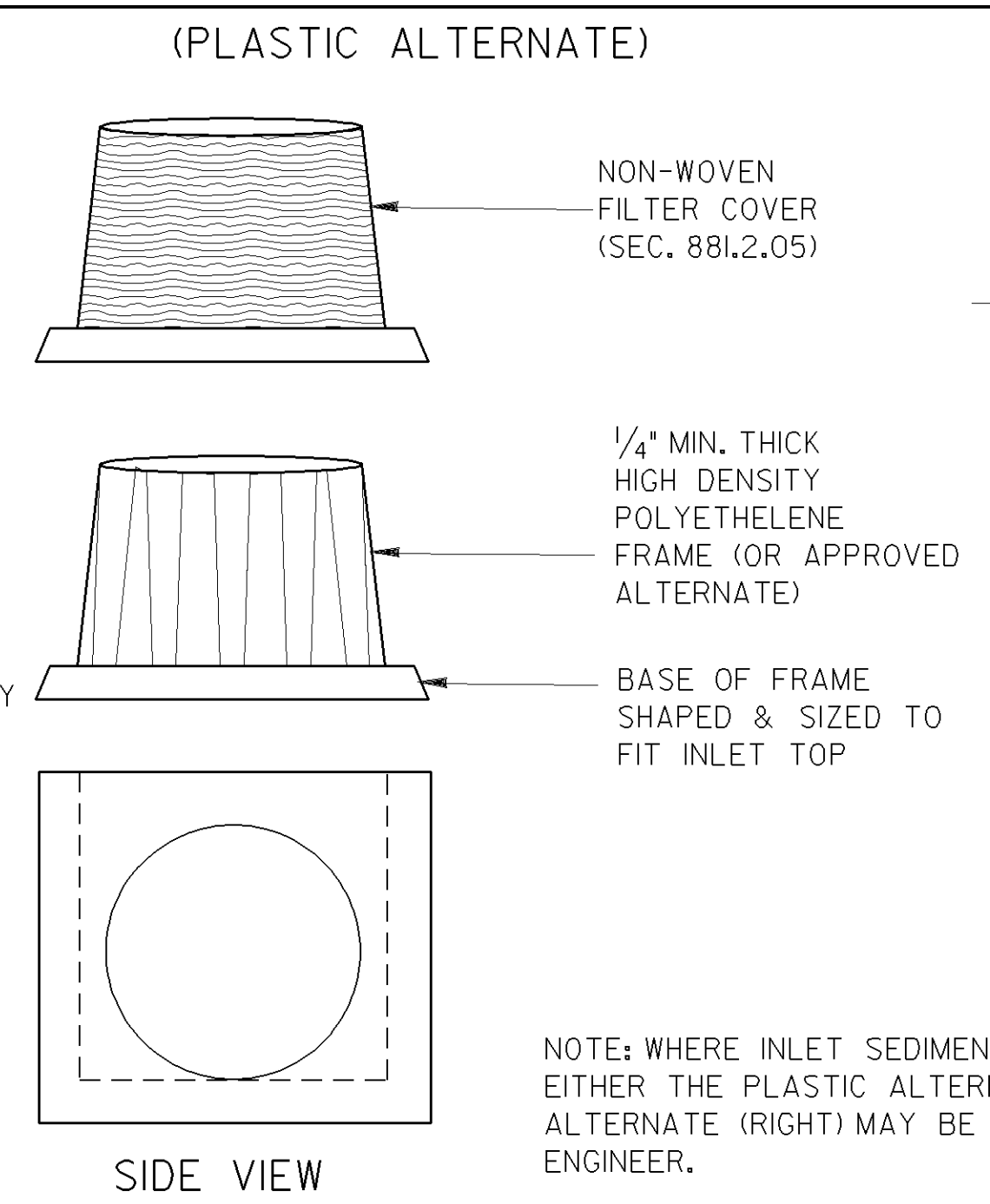
NOTE:
 PAYMENT AS INLET SEDIMENT TRAP PER EACH.
 NOTE:
 SEE SEPARATE SHEET ENTITLED "TEMPORARY SILT FENCE DETAILS" FOR SILT FENCE ERECTION DETAILS.

NOTE:
 THE DRAINAGE AREA ENTERING THE INLET SEDIMENT TRAP SHALL BE NO GREATER THAN ONE ACRE.

TYPICAL CONSTRUCTION SEQUENCE FOR INLET SEDIMENT TRAP ALTERNATE

- EXCAVATE APPROXIMATELY 4" TO 6" BELOW THE TOP OF THE INLET STRUCTURE.
- PLACE THE FRAME ONTO THE INLET STRUCTURE, ENSURING PROPER SEATING OF FRAME TO STRUCTURE.
- SLIDE THE FILTER OVER THE FRAME.
- FILL THE FILTER POCKETS WITH SOIL, #57 GRAVEL OR EQUIVALENT. THE FILTER POCKETS SHOULD BE COMPLETELY FILLED TO ENSURE A GOOD SEAL BETWEEN THE GROUND AND INLET STRUCTURE.
- BACK FILL AROUND THE FRAME AND FILTER ASSEMBLY IS NOT REQUIRED TO COMPLETE INSTALLATION; HOWEVER, BACK FILLING MAY BE NECESSARY TO COMPLETE EXCAVATION REQUIREMENTS FOR THE SITE.

NOTE:
 INLET SEDIMENT TRAP ALTERNATE SHALL BE AS APPROVED BY THE GA. D.O.T. OFFICE OF MATERIALS & RESEARCH. DETAILS & SPECIFICATIONS NOT SHOWN ARE PER THE MANUFACTURER'S REQUIREMENTS.



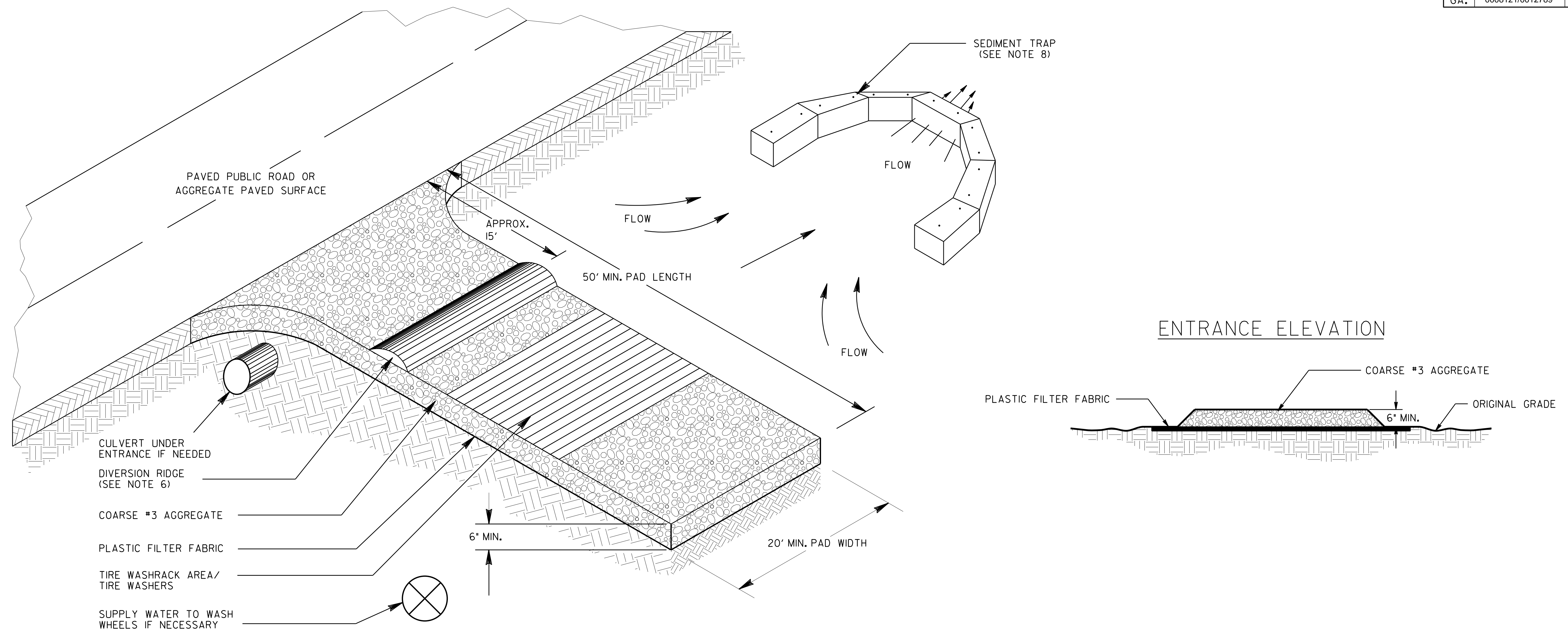
INLET SEDIMENT TRAP - FOR DROP INLETS

NOTE:
 INLET SEDIMENT TRAP AND INLET TO BE BUILT CONTINUOUS WITH PIPE

NOTE:
 PAYMENT AS INLET SEDIMENT TRAP PER EACH

NOTE: SEE SEPARATE DETAILS FOR SILT FENCE AROUND DROP INLETS.

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		CONSTRUCTION DETAILS TEMPORARY SILT FENCE J-HOOK, INLET SEDIMENT TRAPS	
BY		NO SCALE	JANUARY 2011
		56-0002	NUMBER D-24C (SHEET 3 OF 4)

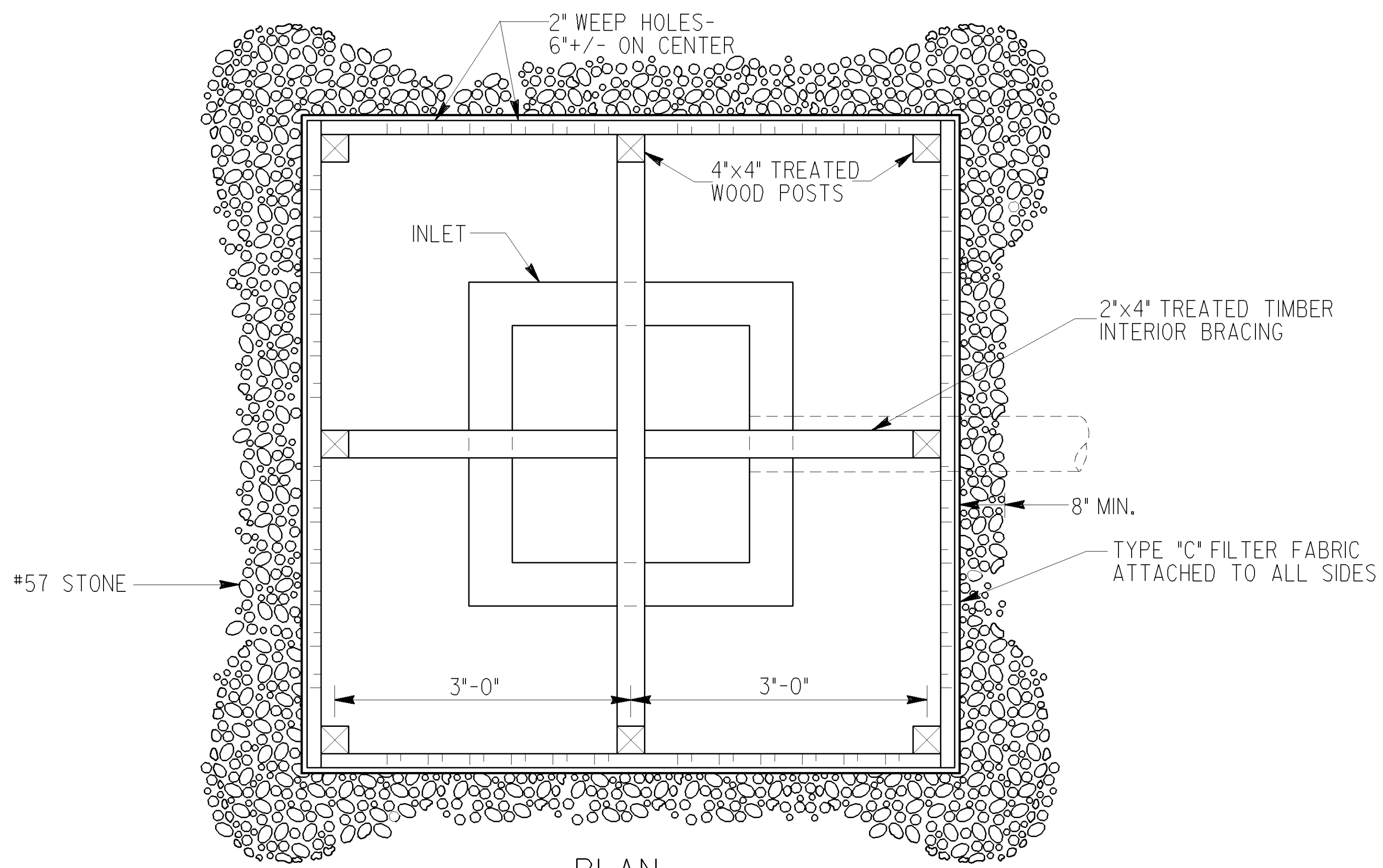


GENERAL NOTES:

1. AVOID LOCATING CONSTRUCTION EXITS ON STEEP SLOPES OR AT SHARP CURVES ON PUBLIC ROADS. CONSTRUCTION EXITS ARE NOT REQUIRED FOR DIRT PUBLIC ROADS.
2. REMOVE ALL VEGETATION AND OTHER UNSUITABLE MATERIAL FROM THE FOUNDATION AREA, GRADE, AND CROWN FOR POSITIVE DRAINAGE.
3. AGGREGATE SIZE SHALL BE COARSE #3 AGGREGATE WITH 0.0% PASSING THE 1" U.S. STANDARD SIEVE.
4. GRAVEL PAD SHALL HAVE A MINIMUM THICKNESS OF 6".
5. GRAVEL PAD WIDTH SHALL BE EQUAL FULL WIDTH AT ALL POINTS OF VEHICULAR EGRESS, BUT NO LESS THAN 20'.
6. A DIVERSION RIDGE SHOULD BE CONSTRUCTED 6" TO 8" HIGH WHEN GRADE TOWARD PAVED AREA IS GREATER THAN 2%.
7. INSTALL PIPE UNDER THE ENTRANCE IF NEEDED TO MAINTAIN DRAINAGE DITCHES.
8. IF THE ACTION OF THE VEHICLE TRAVELING OVER THE GRAVEL PAD DOES NOT SUFFICIENTLY REMOVE THE MUD, THE TIRES SHALL BE WASHED PRIOR TO ENTERING PUBLIC ROADS. THE WASHING SHOULD BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN (DIVERT ALL SURFACE RUNOFF AND DRAINAGE FROM THE ENTRANCE TO A SEDIMENT CONTROL DEVICE).
9. WASHRACKS AND/OR TIRE WASHERS MAY BE REQUIRED DEPENDING ON SCALE AND CIRCUMSTANCE. IF NECESSARY, WASHRACK DESIGN MAY CONSIST OF ANY MATERIAL SUITABLE FOR TRUCK TRAFFIC THAT REMOVE MUD AND DIRT.
10. AGGREGATE SHALL BE KEPT LOOSE OR SCARIFIED WHEN AGGREGATE BECOMES CONSOLIDATED.
11. MAINTAIN AREA IN A WAY THAT PREVENTS TRACKING AND/OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR, AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL MUD AND DEBRIS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES OR SITE ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

PAY ITEM:
163-0300 CONSTRUCTION EXIT (EA)
165-0101 MAINTENANCE OF CONSTRUCTION EXIT (EA)

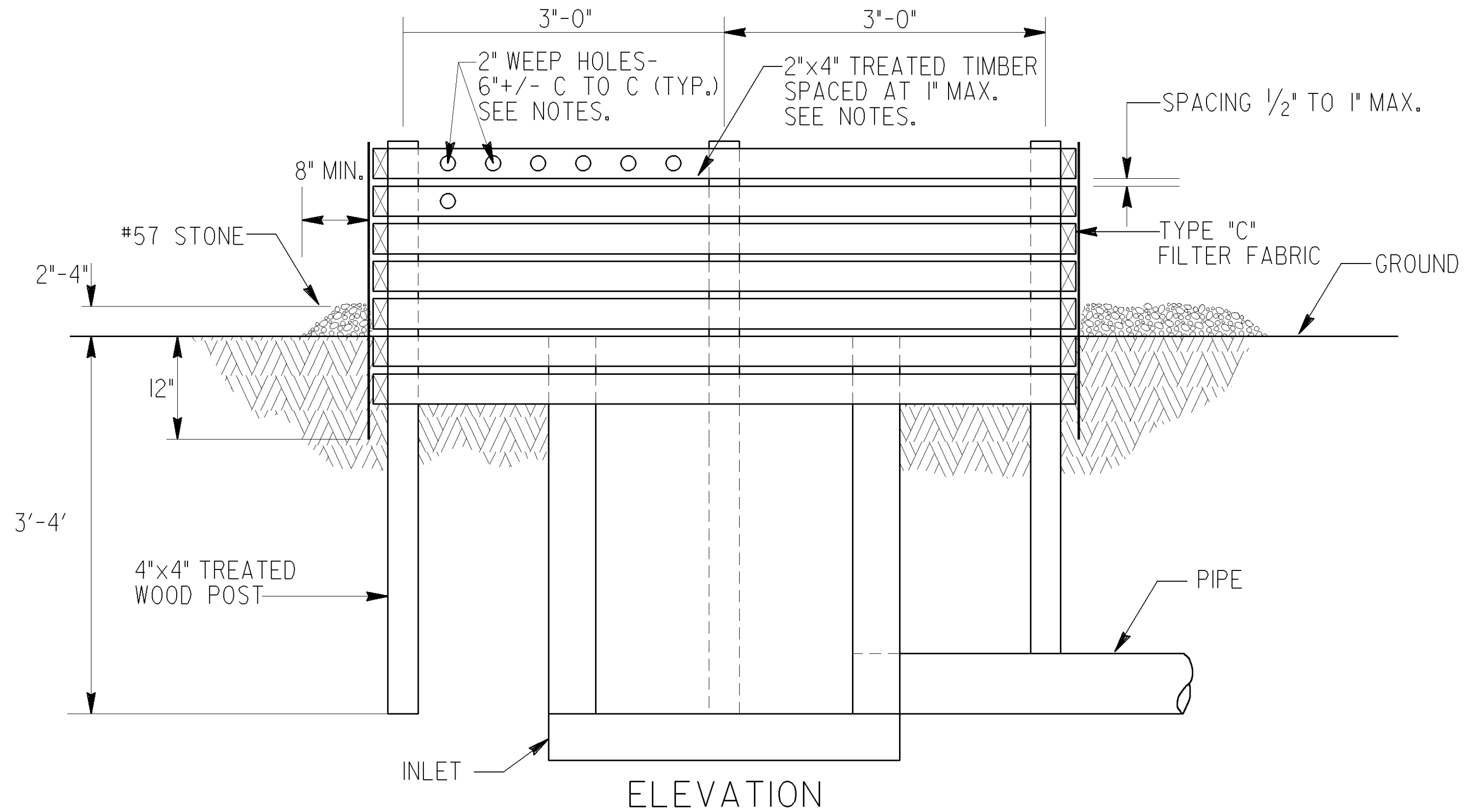
REV. GSWCC 2016 MANUAL 4-22-2016	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REV. CONSTR. EXIT LABELS 01-19-11	REVISION	CONSTRUCTION DETAILS	
		CONSTRUCTION EXIT	
		NO SCALE	FEBRUARY 2001
DLE	DESIGNED	56-0003	NUMBER D-41
TPC	DRAWN		
	TRACED		
	CHECKED		



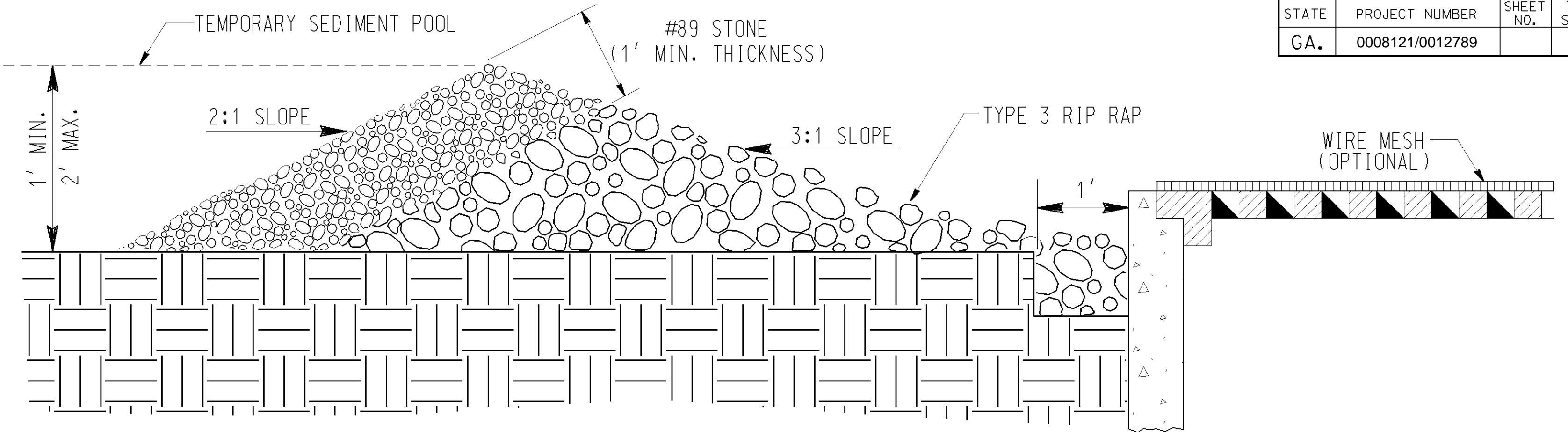
NOTES:

BAFFLE BOX SHALL BE CONSTRUCTED OF 2"x4" TREATED TIMBER SPACED A MAXIMUM OF 1' APART OR OF PLYWOOD WITH WEEP HOLES 2" IN DIAMETER PLACED APPROXIMATELY 6" ON CENTER VERTICALLY AND HORIZONTALLY.

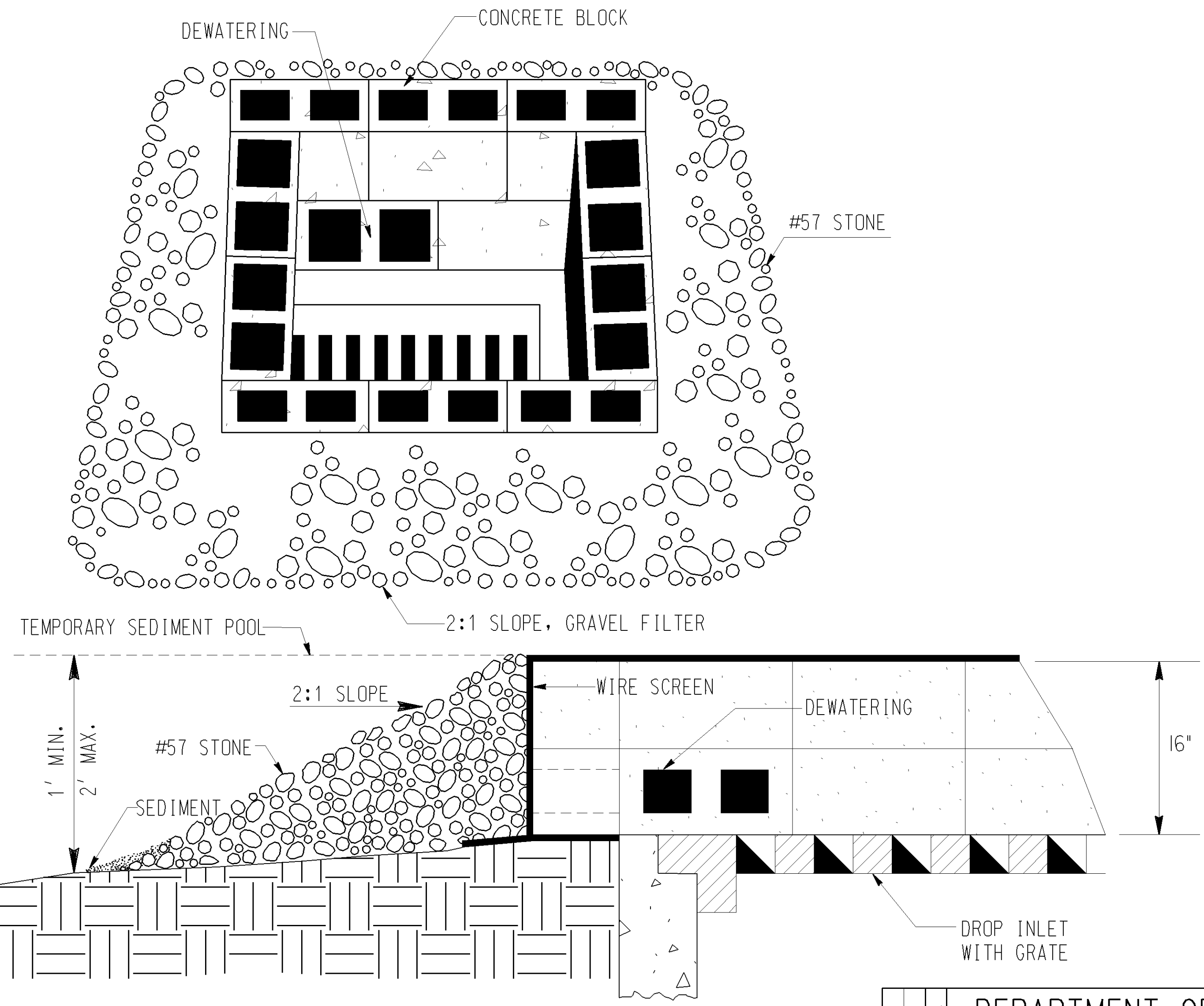
GRAVEL SHALL BE PLACED OUTSIDE THE BOX, ALL AROUND THE INLET, TO A DEPTH OF 2 TO 4 INCHES. THE ENTIRE BOX SHALL BE WRAPPED IN TYPE "C" FILTER FABRIC THAT SHALL BE ENTRENCHED 12 INCHES AND BACKFILLED.



BAFFLE BOX (Sd2-B)



GRAVEL DROP INLET PROTECTION (GRAVEL DONUT) Sd2-G



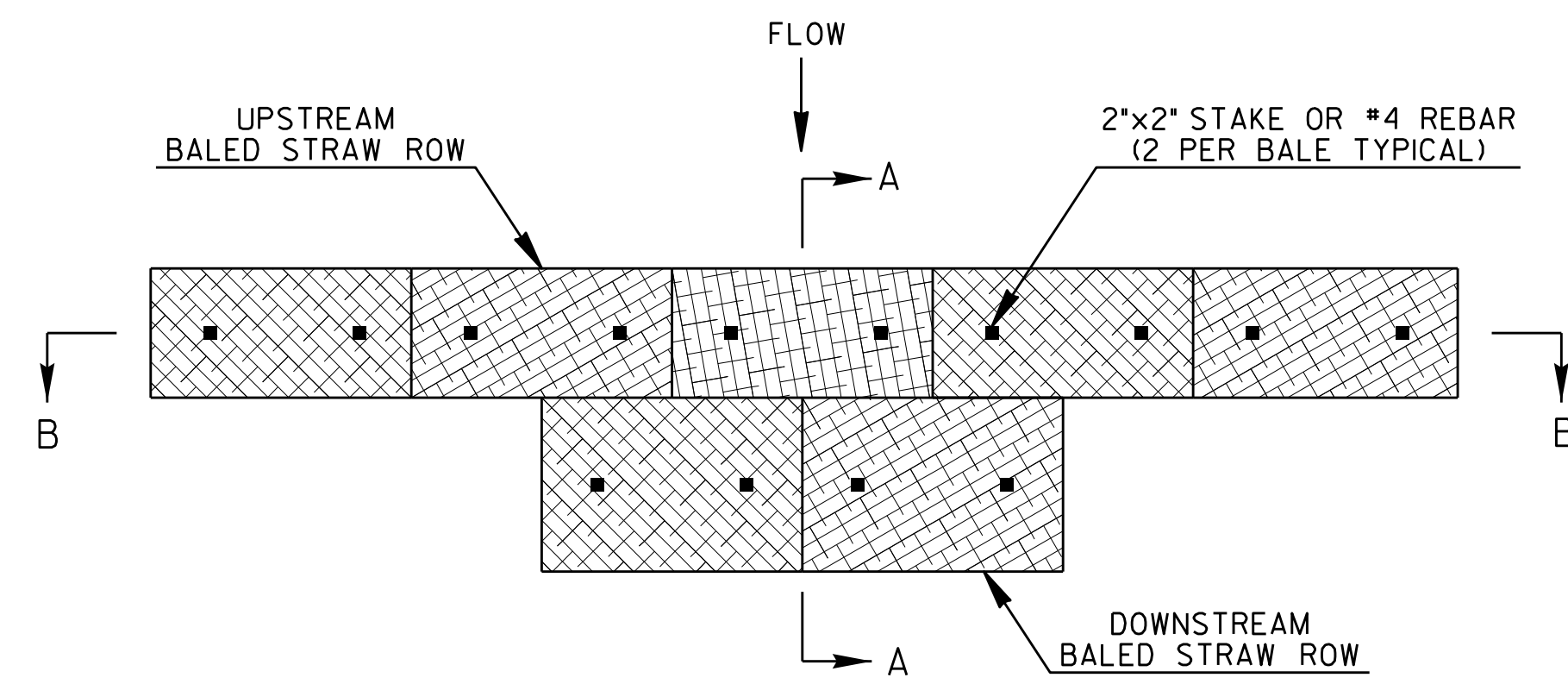
BLOCK & GRAVEL DROP INLET PROTECTION (Sd2-Bg)

BASIS OF PAYMENT:
CONSTRUCT AND REMOVE INLET SEDIMENT TRAP _____ EACH

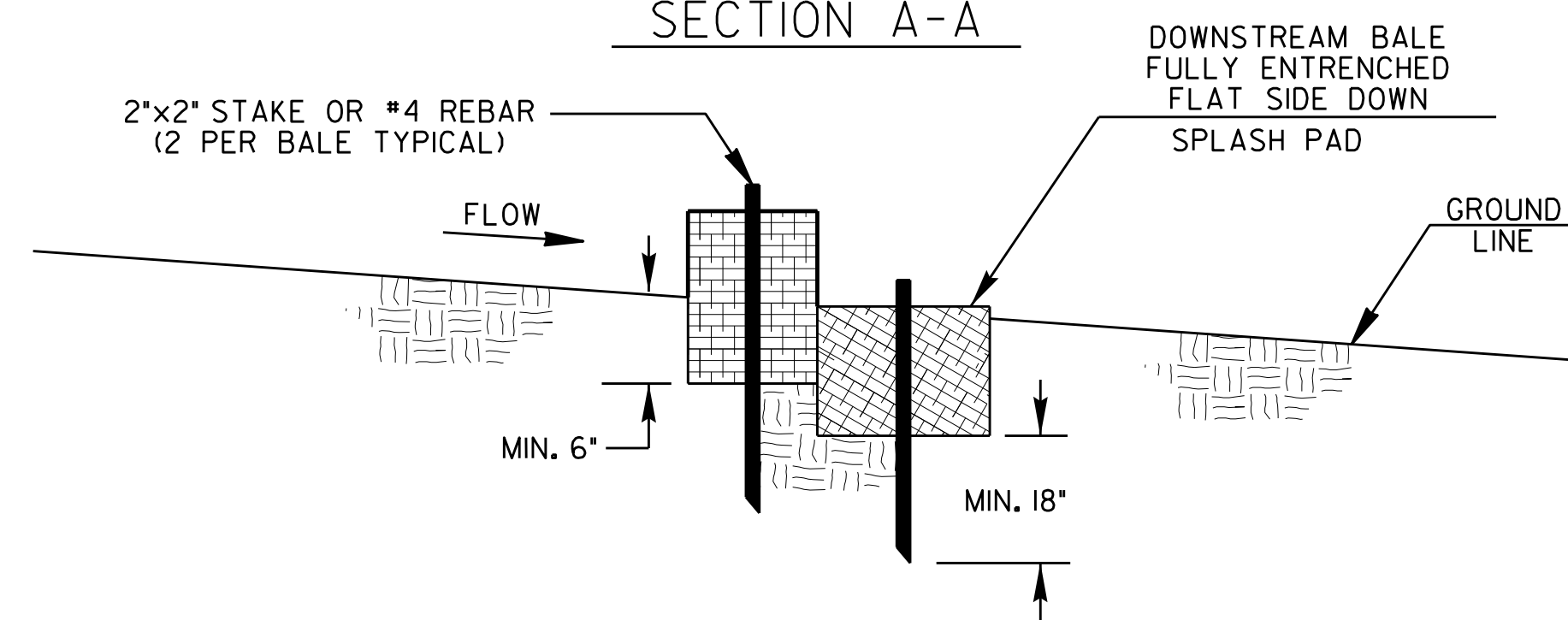
DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		CONSTRUCTION DETAIL INLET SEDIMENT TRAPS BAFFLE BOX Sd2-B BLOCK AND GRAVEL DROP INLET PROTECTION Sd2-Bg GRAVEL DROP INLET PROTECTION Sd2-G NO SCALE MAY 2008	
BY		56-0004	NUMBER D-42

BALED STRAW CHECK DAM

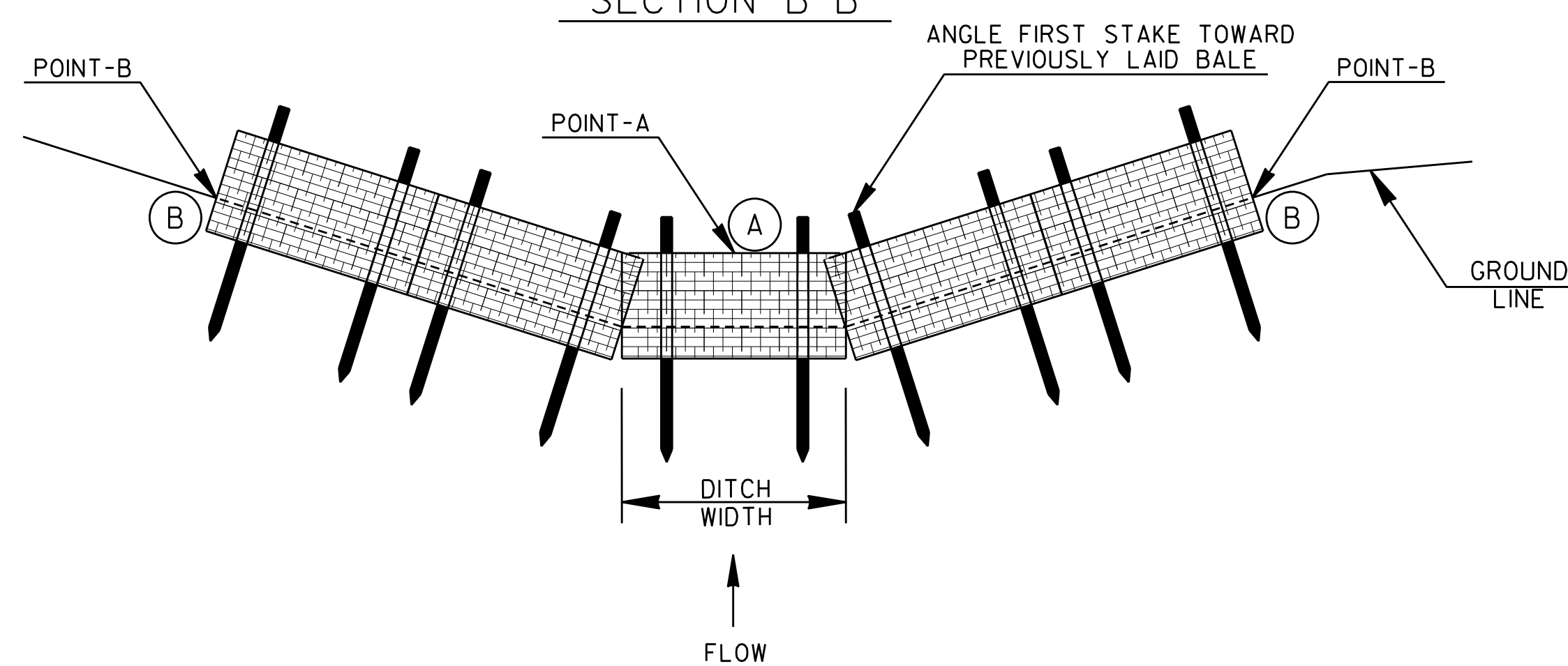
PLAN VIEW



SECTION A-A



SECTION B-B



BALED STRAW CHECK DAM GENERAL NOTES:

- BALED STRAW DIMENSIONS MAY VARY. ASSUME APPROXIMATE DIMENSIONS OF 14"Wx18"Hx36"L FOR A TWO STRINGER AND 16"Wx24"Hx48"L FOR A THREE STRINGER. BALES SHOULD BE BOUND WITH WIRE OR NYLON INSTEAD OF TWINE.
- BALES SHOULD BE PLACED IN ROWS WITH BALE ENDS TIGHTLY ABUTTING THE ADJACENT BALES. THE TOP OF THE UPSTREAM BALES IN THE CENTER OF CHANNEL SHOULD BE LEVEL AND SET AT THE SAME ELEVATION. THE DOWNSTREAM BALES SHOULD BE ENTRENCHED EVEN WITH THE CHANNEL BOTTOM.
- THE GROUND LINE AT POINT-B SHALL ALWAYS BE AT MINIMUM OF 6 INCHES ABOVE POINT-A.
- REMOVE SEDIMENT ONCE THE ACCUMULATED HEIGHT HAS REACHED HALF THE STORAGE HEIGHT.
- INSTALLATION MAY BE ADJUSTED SLIGHTLY TO MEET FIELD CONDITIONS; HOWEVER, SPLASH PAD IS REQUIRED.

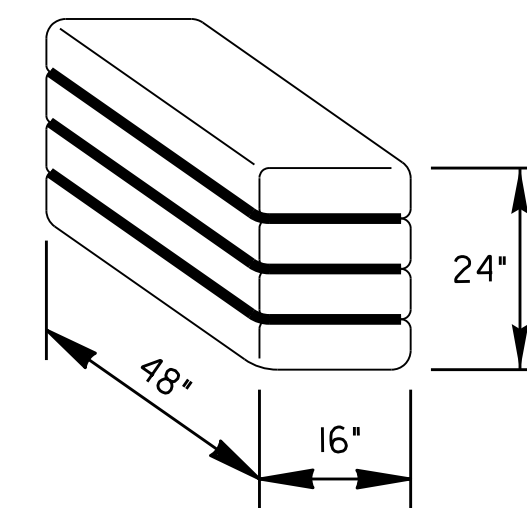
PAY ITEMS:
 163-0529 CONSTRUCT & REMOVE TEMPORARY SEDIMENT BARRIER OR BALED STRAW CHECK DAM (LF)
 165-0041 MAINTENANCE OF CHECK DAMS - ALL TYPES (LF)

SPECIAL NOTES:

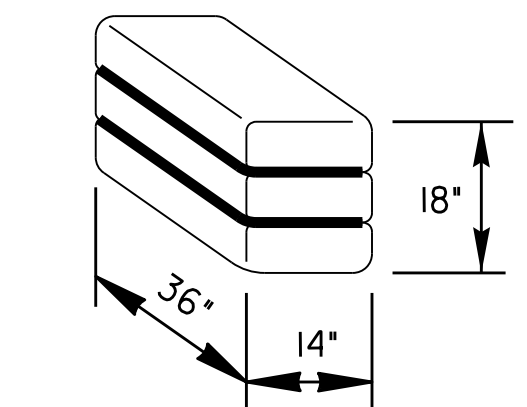
- BALED STRAW AND COMPOST FILTER SOCK CHECK DAMS MAY BE USED FOR FLOWS UP TO 2.0 CFS OR DRAINAGE AREAS UP TO 1.0 ACRE. IF THESE ITEMS ARE USED IN DRAINAGE AREAS GREATER THAN 1.0 ACRE, FLOWS GREATER THAN 2.0 CFS, OR WITHOUT A SEDIMENT BASIN, A MINIMUM OF ONE ROCK FILTER DAM AT THE DOWNSTREAM DISCHARGE POINT SHALL BE USED IN CONJUNCTION WITH BALED STRAW OR COMPOST FILTER SOCK CHECK DAMS.
- BALED STRAW AND COMPOST FILTER SOCK CHECK DAMS SHALL NOT BE PLACED WITHIN FLOWING STREAMS OR IN A TIDAL AREA BELOW HIGH TIDE.

APPROXIMATE BALED STRAW DIMENSIONS (SEE NOTE # 1)

THREE STRINGER BOUNDING

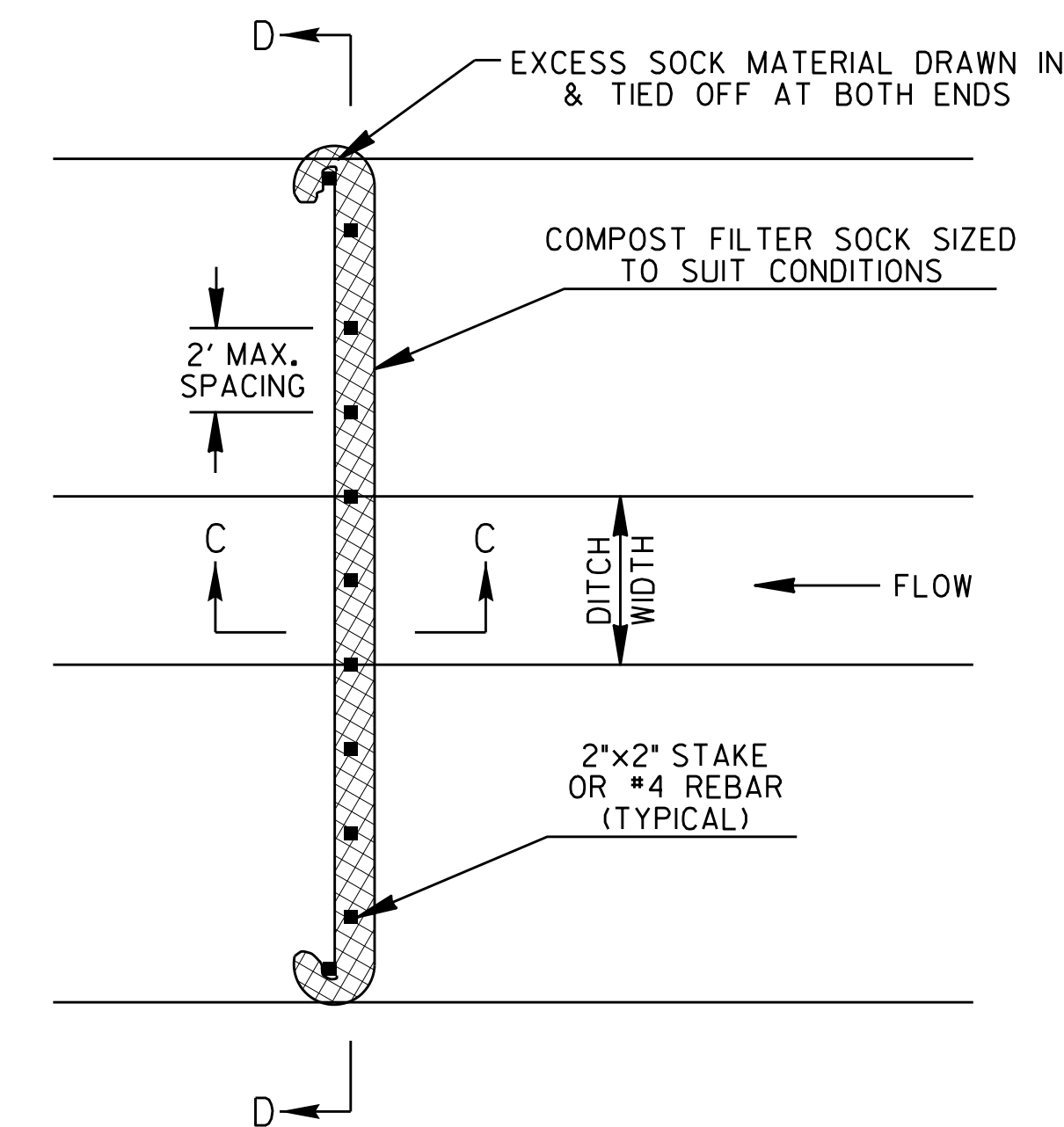


TWO STRINGER BOUNDING

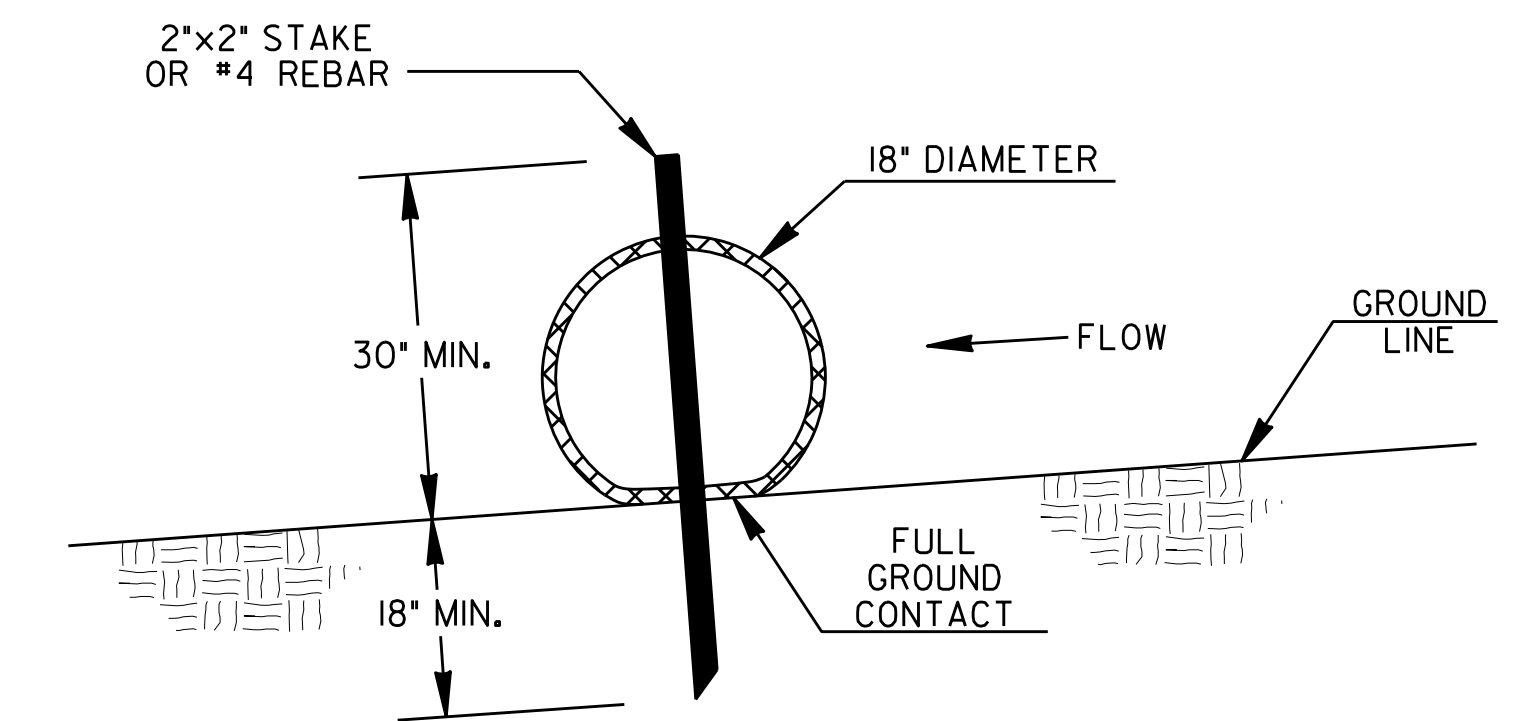


COMPOST FILTER SOCK CHECK DAM

PLAN VIEW

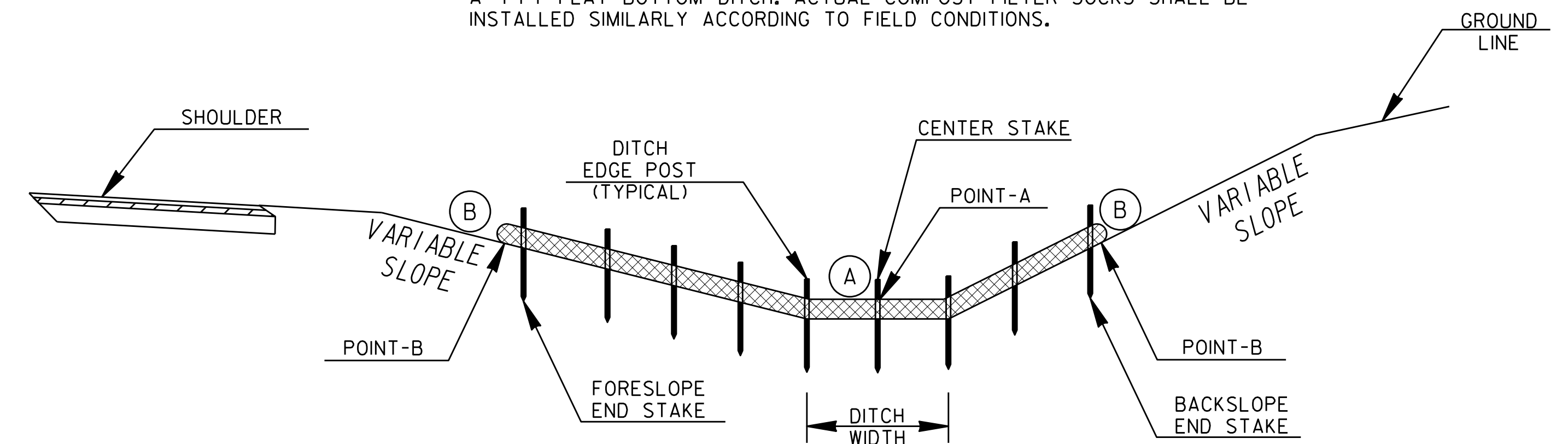


SECTION C-C



SECTION D-D

NOTE: CROSS-SECTION SHOWN IS AN EXAMPLE OF A TYPICAL CUT SECTION WITH A 4-FT FLAT BOTTOM DITCH. ACTUAL COMPOST FILTER SOCKS SHALL BE INSTALLED SIMILARLY ACCORDING TO FIELD CONDITIONS.

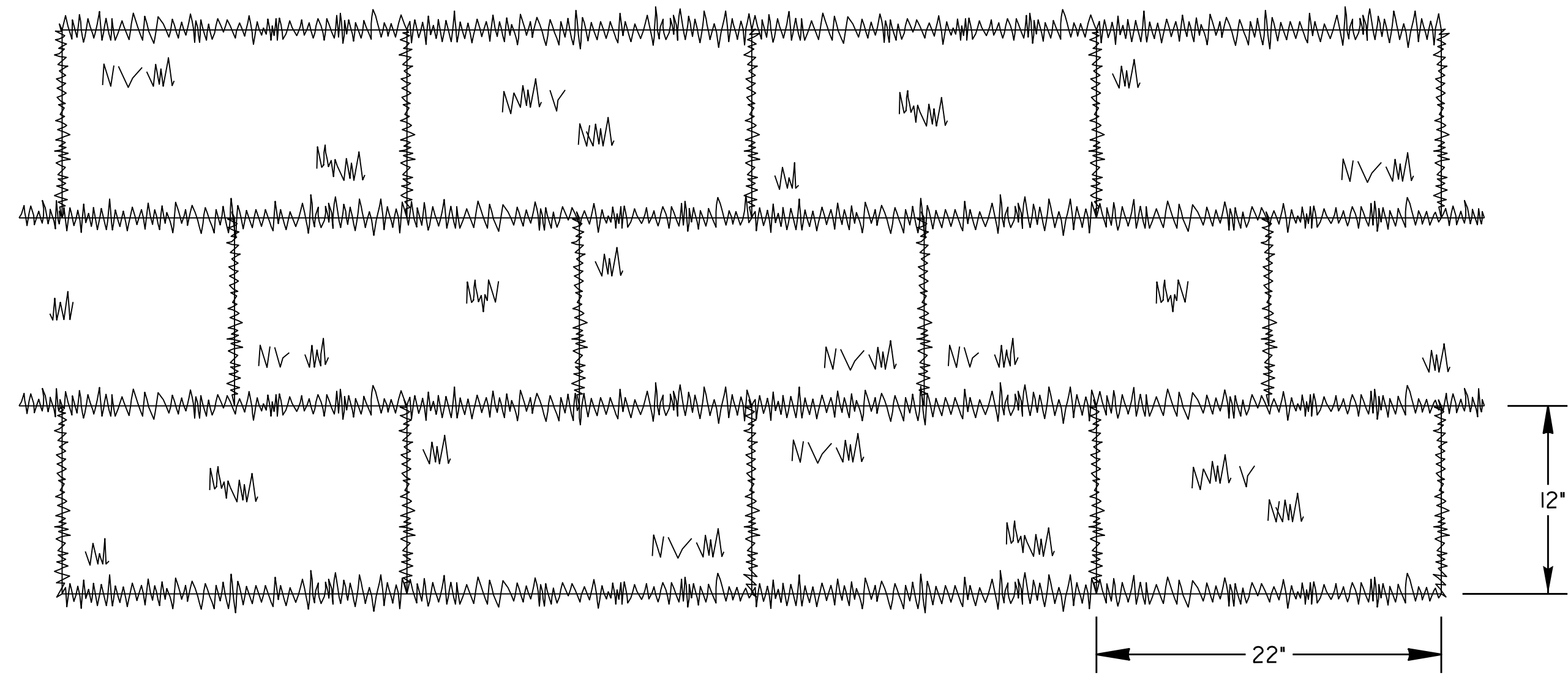


COMPOST FILTER SOCK CHECK DAM GENERAL NOTES:

- THE CONTRACTOR MAY ELECT TO USE 18" DIAMETER COMPOST FILTER SOCK CHECK DAMS IN LIEU OF BALED STRAW CHECK DAMS. NO ADDITIONAL PAYMENT WILL BE MADE FOR THE CONSTRUCTION, REMOVAL, OR MAINTENANCE OF COMPOST FILTER SOCK CHECK DAMS.
- COMPOST FILTER MEDIA SHALL MEET THE SPECIFICATIONS IN THE LATEST EDITION OF THE "MANUAL FOR EROSION AND SEDIMENT CONTROL IN GEORGIA". THE CONTRACTOR SHALL PROVIDE VERIFICATION OF MEETING SPECIFICATIONS IF REQUESTED.
- THE GROUND LINE AT POINT-B SHALL BE A MINIMUM OF 6 INCHES ABOVE POINT-A.
- ENSURE COMPOST FILTER SOCK HAS FULL CONTACT WITH GROUND SURFACE. PLACE ONE STAKE AT THE CENTER OF CHANNEL, AT THE TOE OF FORESLOPE AND BACKSLOPE, AND AT THE ENDS OF DEVICE. STAKES SHALL HAVE A MAXIMUM SPACING OF 2 FEET.
- REMOVE SEDIMENT ONCE THE ACCUMULATED HEIGHT HAS REACHED HALF THE STORAGE HEIGHT.

DATE		DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
REVISION		CONSTRUCTION DETAILS	
		BALED STRAW & COMPOST FILTER SOCK CHECK DAMS FOR EROSION CONTROL	
		NO SCALE	
		4-22-2016	
DESIGNED	DLE	56-0005	NUMBER D-52
DRAWN			
TRACED			
CHECKED			

SOD LAYOUT

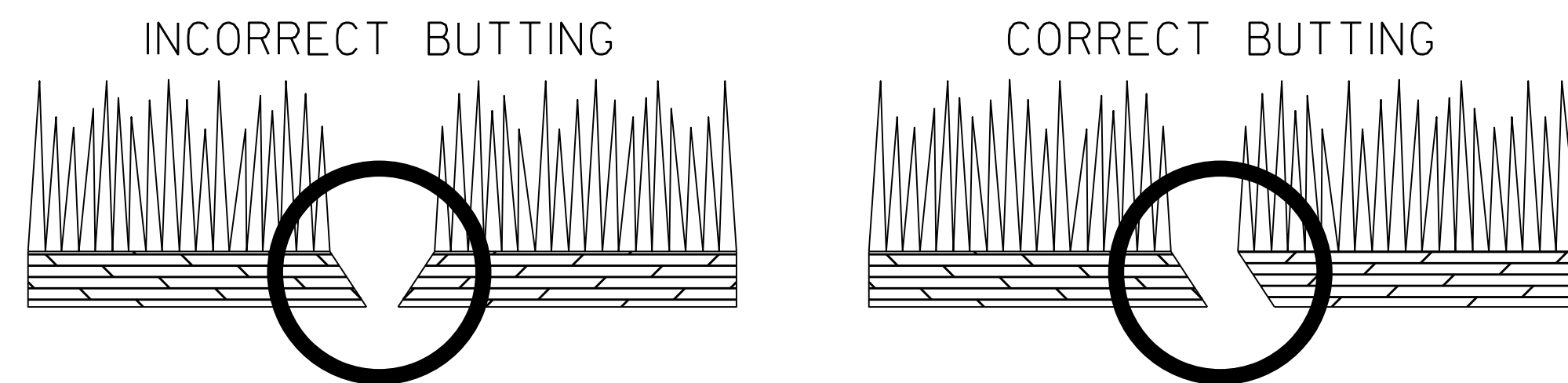


NOTE: SOD MAY BE EITHER 12" WIDE BY 22" LONG BLOCKS OR 21" WIDE BY 52" LONG ROLLS.

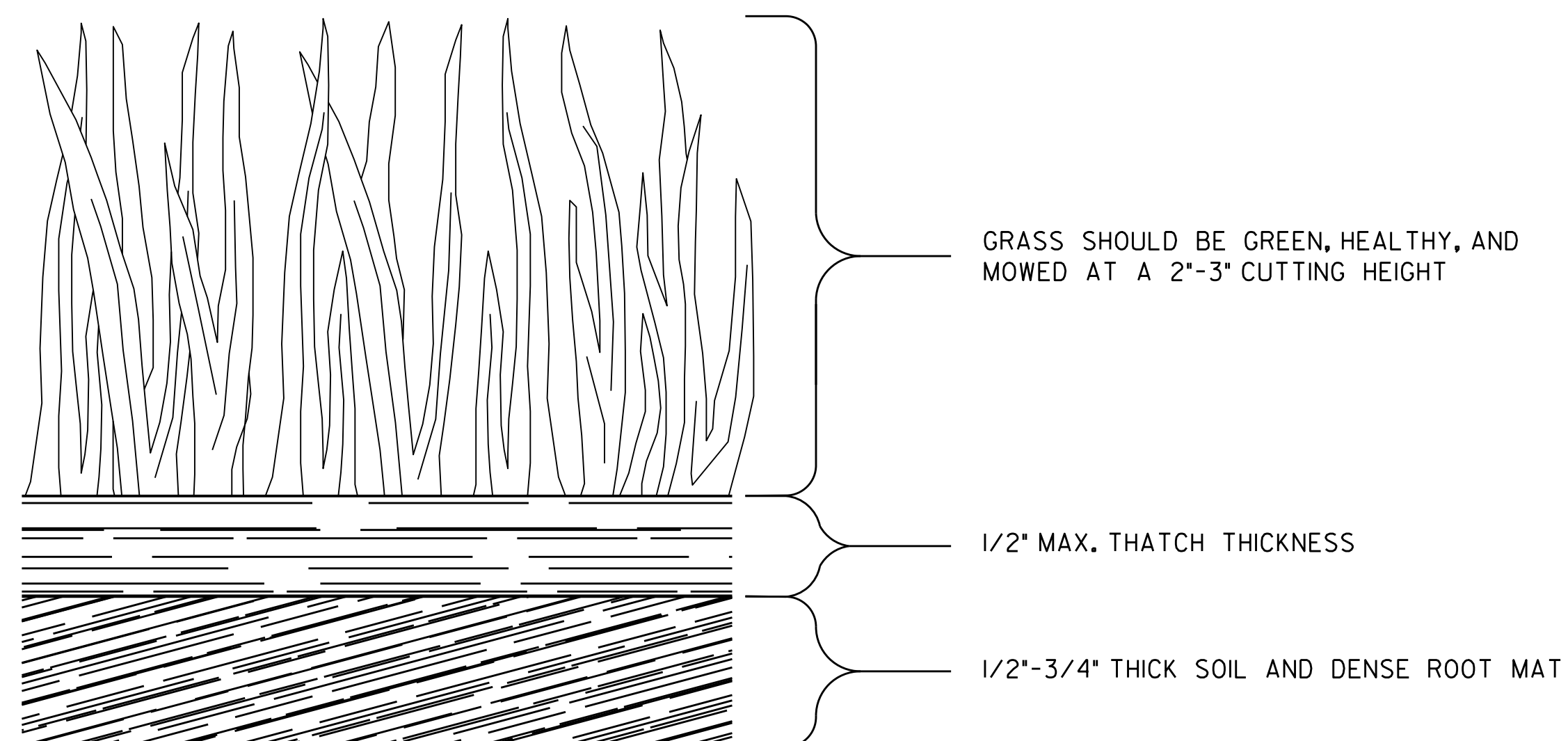
GENERAL NOTES:

1. SOD SHALL MEET SECTIONS 700 AND 890 OF THE STANDARD SPECIFICATIONS AND SUPPLEMENTS THERETO. SOD SHALL BE CUT INTO 12"Wx22"L BLOCKS OR 21"Wx52"L ROLLS.
2. PLACE SOD IN A STAGGERED PATTERN ENSURING FIRM CONTACT WITH THE SOIL. BUTT THE STRIPS TIGHTLY AGAINST EACH OTHER WITH THE AUTOMATIC SOD CUTTER ANGLES CORRECTLY MATCHED WITHOUT SPACES OR OVERLAP.
3. PLACE THE LONG SIDE OF SOD PERPENDICULAR TO DRAINAGE FLOW IF INSTALLED IN DITCHES.
4. STAKE SOD PLACED IN DITCHES OR SLOPES STEEPER THAN 2:1 OR ANY OTHER AREAS WHERE SOD SLIPPING MAY OCCUR. USE WOOD STAKES THAT ARE A MINIMUM OF 8" LONG AND A MAXIMUM OF 1" WIDE. DRIVE STAKES FLUSH WITH THE TOP OF SOD AND USE A MINIMUM OF 8 STAKES PER SQUARE YARD TO HOLD SOD IN PLACE.
5. ROLL SOD IMMEDIATELY TO ACHIEVE FIRM CONTACT WITH THE SOIL.
6. WATER THE SOD IMMEDIATELY AFTER INSTALLATION AND WATER TO A DEPTH OF 4" AS NEEDED.
7. MOW ESTABLISHED SOD TO A HEIGHT NOT LESS THAN 2"-3" AS NECESSARY.

ABUTTING SOD



SOD APPEARANCE



PAY ITEM:
700-9300 SOD (SY)

	DATE	DEPARTMENT OF TRANSPORTATION STATE OF GEORGIA	
	REVISION	CONSTRUCTION DETAILS SOD INSTALLATION	
		NO SCALE	4-22-2016
	BY	DESIGNED _____ DRAWN <u>DLE</u> TRACED _____ CHECKED _____	NUMBER 56-0006 D-54