

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ENHANCEMENT PROGRAMS CITY OF RIDGELAND INTERSECTION IMPROVEMENTS, JACKSON ST. & SUNNYBROOK ROAD PROJECT NO. STP-7302-00(005)

GENERAL INDEX

DESCRIPTION	NO. OF SHEETS
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TYPICAL SECTIONS	2
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PLAN & PROFILE SHEETS	5
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PAVEMENT MARKINGS AND SIGNING	2
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STANDARD DRAWINGS	12
CROSS SECTIONS	11
TOTAL	56

BRIDGE STRUCTURES REQ'D.

NONE

LENGTH DATA

ROADWAY			
Length of Roadway	0.3080	MI.	
Length of Bridges	0.0000	MI.	
Length of Exceptions	0.0000	MI.	
Length of Project (Gross)	0.3080	MI.	
MULTI-USE PATH			
Length of Roadway	0.1520	MI.	
Length of Bridges	0.0000	MI.	
Length of Exceptions	0.0000	MI.	
Length of Project (Gross)	0.1520	MI.	

EQUATIONS

NONE

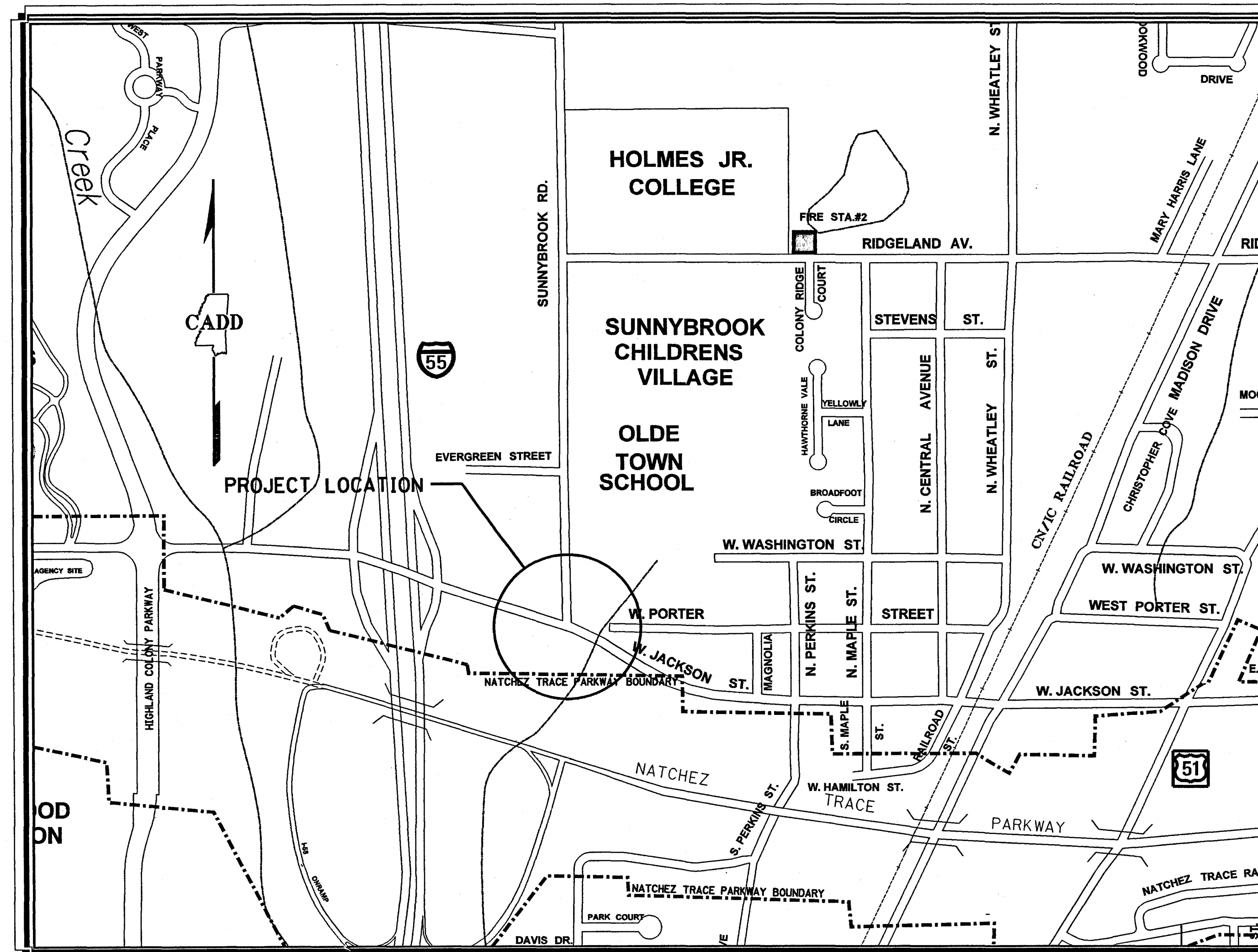
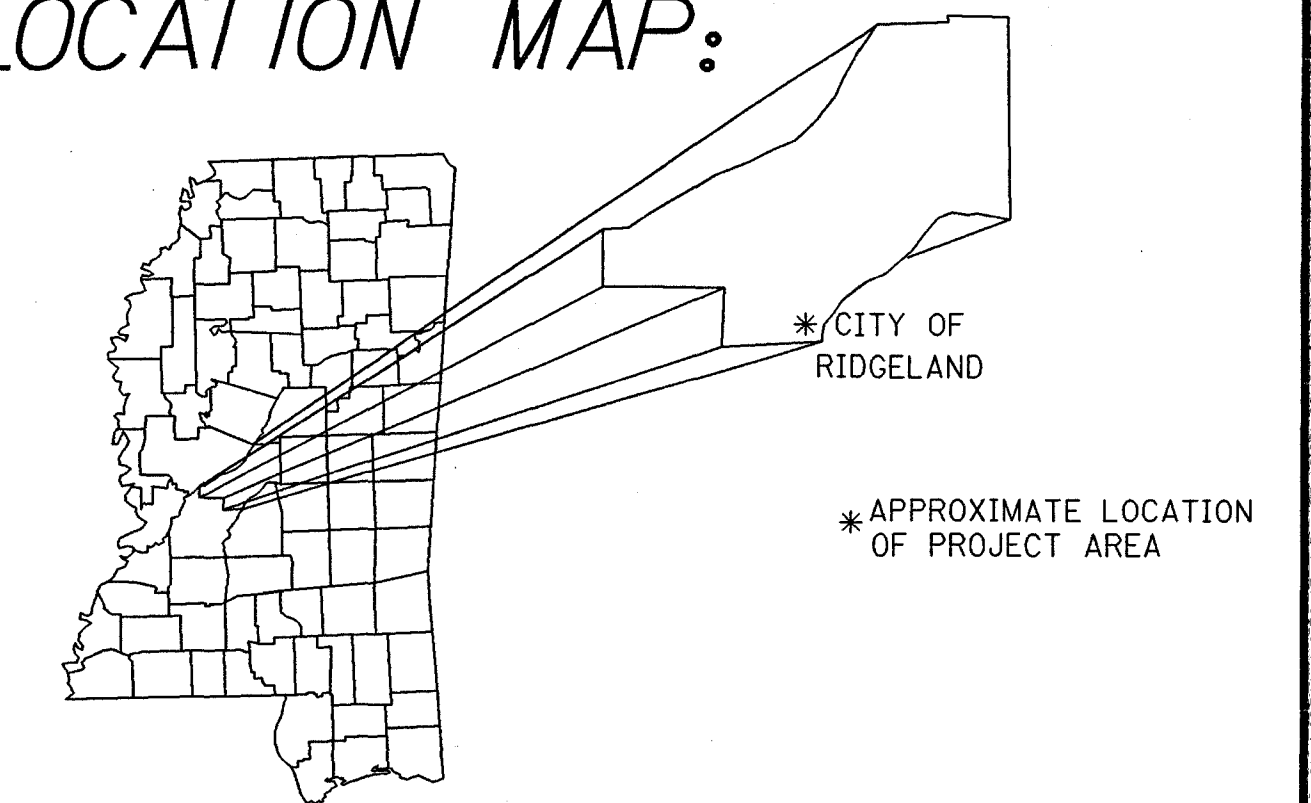
EXCEPTIONS

NONE

DESIGN DATA

DESIGN SPEED = 45 MPH

LOCATION MAP:



VICINITY MAP

RATIOS / SCALES

PLAN: 1" = 20' UNLESS OTHERWISE INDICATED
 PROFILE: HORIZONTAL 1" = 20'
 VERTICAL 1" = 5'

Mayor: Gene F. McGee

Aldermen:
 Linda Davis Trunzler
 Gerald Steen
 Ken Heard
 Chuck Gautier
 Carole A. Davis
 Larry Roberts
 Scott Jones

Public Works Director:
 John M. McCollum, P.E.

Asst. Public Works Director:
 Sid Hawthorne

Asst. City Engineer:
 David Williams, P.E.

City Clerk:
 David W. Overby

Fire Chief:
 Matthew Bailey

Police Chief:
 Jimmy R. Houston, SR.

Madison County

Prepared by: *W. J. B...* 1/16/03
 Project Engineer Date

Approved: *Gene F. McGee* 1/16/03
 Mayor Date
 City of Ridgeland

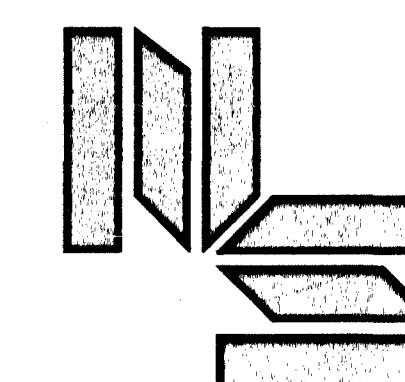
Approved: *[Signature]*
 Executive Director Date
 Mississippi Department of Transportation

Approved: _____ Date
 Division Administrator
 Federal Highway Administration

ENVIRONMENTAL PERMITS

TYPE	REQUIRED		BY
	YES	NO	
N.W. (WATERS OF U.S.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	---
N.W. (WETLANDS)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	---
G.P.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	---
404	<input type="checkbox"/>	<input checked="" type="checkbox"/>	---
STORMWATER	<input type="checkbox"/>	<input checked="" type="checkbox"/>	---

PREPARED BY:



NEEL-SCHAFFER, INC.
 ENGINEERS PLANNERS
 Jackson, Mississippi

#9

PWP-01013 *Received* 3-21-03

DETAIL INDEX

WKG. NO. SH. NO.

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GENERAL NOTES

- ALL SIGNS, SIGNALS, PAVEMENT MARKINGS AND TEMPORARY TRAFFIC CONTROL DEVICES ARE TO CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MILLENNIUM EDITION AND ALL SUBSEQUENT REVISIONS)
- UNDER GROUND UTILITIES SHOWN ON PLANS ARE PLOTTED IN THEIR APPROXIMATE LOCATIONS FROM THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR GUARANTEE THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING FOR HIMSELF INDEPENDENT INVESTIGATIONS, INCLUDING SUBSURFACE INVESTIGATIONS, AS MAY BE NECESSARY.
- ALL RAISED OBJECTS TO BE PLACED A MINIMUM OF 2.0' BEHIND FACE OF CURB. NEW TRAFFIC SIGNAL POLES TO BE PLACED A MINIMUM OF 1.5' BEHIND FACE OF CURB.
- ALL POLES, PULL BOXES, CONTROLLERS, AND PAVEMENT MARKINGS SHALL BE FIELD LOCATED BY THE ENGINEER AND THE CONTRACTOR AT THE NEAREST PRACTICAL LOCATION TO THE LOCATION INDICATED ON THE PLAN SHEETS.
- EXTEND POLE FOUNDATIONS TO APPROXIMATELY 3" ABOVE THE SHOULDER ELEVATION OR THE TOP OF CURB ELEVATION.
- CONTROLLER TIMINGS TO BE PROVIDED BY THE ENGINEER.
- CONTRACTOR SHALL MAKE THE APPLICATION FOR THE POWER SERVICE, COORDINATING WITH CITY OFFICIALS, IN ADVANCE OF REQUIRING THE ELECTRICAL SERVICE.
- THE CONTRACTOR SHALL SUBMIT A COLOR CHART TO THE CITY FOR REVIEW TO DETERMINE THE COLOR FOR PAY ITEM NO. 907-639-A, STEEL TRAFFIC SIGNAL AND EQUIPMENT POLES.
- THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 1990 EDITION, AND THE MISSISSIPPI SUPPLEMENTAL SPECIFICATIONS TO THE 1990 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, TRAFFIC SIGNAL AND LIGHTING, 1991 EDITION, UNLESS OTHERWISE NOTED IN THE PLANS OR AMENDED IN THE SPECIAL PROVISIONS, PROPOSAL AND CONTRACT DOCUMENTS, SHALL BE THE SPECIFICATIONS FOR THE CONSTRUCTION OF THIS PROJECT.
- SEPARATE MEASUREMENT AND PAYMENT WILL NOT BE MADE FOR REMOVAL AND DISPOSAL OF OBSTRUCTIONS AND OLD INSTALLATIONS, ABOVE OR BELOW THE SURFACE OF THE GROUND WHICH INTERFERE WITH THE PROPOSED CONSTRUCTION, OBSTRUCT CLEAR VISION OR ARE OTHERWISE CONSIDERED OBJECTIONABLE; ALL IN ACCORDANCE WITH THESE PLANS, THE SPECIFICATIONS, OR AS REQUIRED BY THE ENGINEER. THESE ITEMS SHALL INCLUDE BUT NOT BE LIMITED TO INLETS, MANHOLES, JUNCTION BOXES, LUMINAIRE POLES AND TRAFFIC SIGNAL POLES TO BE REMOVED. THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO PAY ITEM NO. 202-A, REMOVAL OF OBSTRUCTIONS.
- ACCESS TO ALL BUSINESSES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED BY THE CONTRACTOR AT ALL TIMES. COST TO BE ABSORBED IN PAY ITEM NO. 618-A, MAINTENANCE OF TRAFFIC.
- REMOVAL OF EXISTING STRIPING WILL BE PAID FOR IN PAY ITEM No. 618-A, MAINTENANCE OF TRAFFIC.
- CLOCK TOWER AND ASSOCIATED LANDSCAPING OUTSIDE THE LIMITS OF CONSTRUCTION SHALL NOT BE DISTURBED. CONTRACTOR SHALL REPAIR OR REPLACE ANY DAMAGED ITEMS TO THE SATISFACTION OF THE ENGINEER.
- CONTRACTOR SHALL KEEP AT LEAST ONE DRIVEWAY AT EACH BUSINESS OPEN AT ALL TIMES. BETWEEN THE HOURS OF 10:00 A.M. AND 2 P.M. ON WEEKDAYS AT LEAST TWO DRIVEWAYS MUST BE OPEN AT THE CHEVRON STATION UNLESS APPROVED OTHERWISE BY THE ENGINEER. THE CONTRACTOR SHALL NOTIFY BUSINESS OWNERS OF DRIVEWAY CLOSINGS NOT LESS THAN 24 HOURS BEFORE CLOSING ANY EXISTING DRIVEWAY. WITH THE EXCEPTION OF THE DRIVEWAY WHICH SHALL BECOME THE MULTI-USE TRAIL CROSSING, NO DRIVEWAY SHALL REMAIN CLOSED FOR MORE THAN 10 CONSECUTIVE DAYS WITHOUT CONSENT OF THE ENGINEER.
- MAST ARM LENGTHS SHALL BE FIELD VERIFIED BEFORE ORDERING.
- JACKSON STREET IS A STATE HIGHWAY. THE OWNER HAS OBTAINED A PERMIT FROM THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION FOR THAT PORTION OF THE WORK WHICH LIES WITHIN THE RIGHT-OF-WAY OF JACKSON STREET. THE CONTRACTOR SHALL ABIDE BY ALL PROVISIONS OF THAT PERMIT. COPIES OF THE APPROVED PERMIT ARE AVAILABLE UPON REQUEST FROM THE ENGINEER.

LEGEND

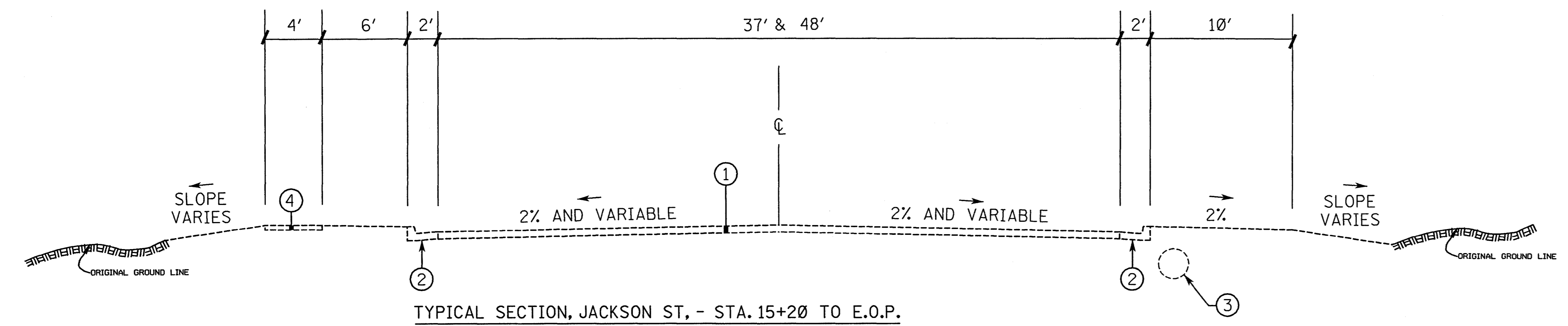
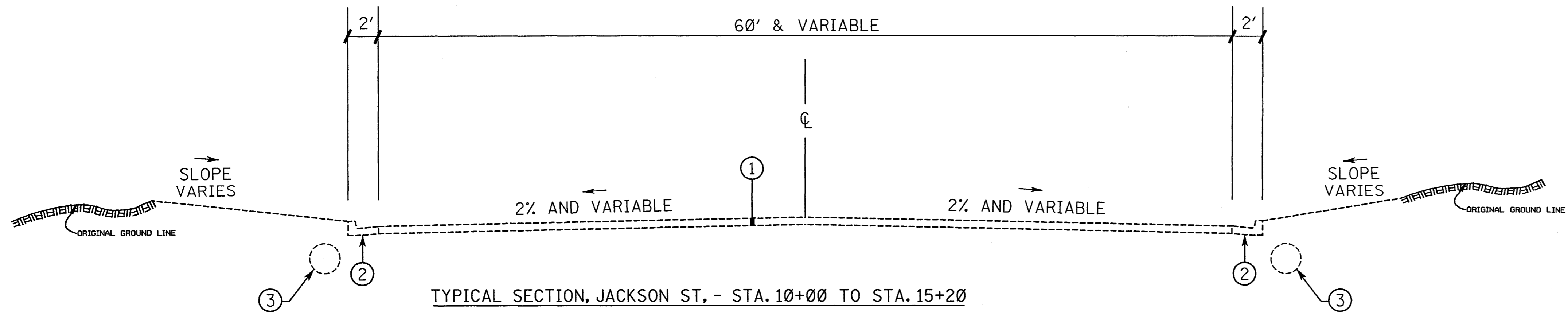
EDGE CURB	-----	CURB INLET		
EDGE PAVEMENT	-----	PIPE	-----	
FOUND IRON ROD	⊙ ^{IR}	GAS REGULATOR		TBM "1" Flange Bolt Located in Word "MEU LLER" N/E Corner, Intersection of Jackson St. and Sunnybrook Rd. Elevation: 352.47
NAIL	⊙	MAILBOX		
EDGE UNPAVED ROAD	-----	FLAG POLE		
SIGN	T	DITCH	-----	TBM "2" Southmost Flange Bolt Painted Orange on East Side of Sunnybrook Rd. +/- 500 FT. North of Jackson St. Elevation: 360.48
TREE	⊙	FLOODLIGHT		
BUSH	o	DYB=DOUBLE YELLOW STRIPE BROKEN		
TREELINE	-----	SW=SINGLE WHITE STRIPE		
GUY WIRE	→	SY=SINGLE YELLOW STRIPE		
OVERHEAD ELECTRICAL	-----	DY=DOUBLE YELLOW STRIPE		
LIGHT POLE		SWB=SINGLE WHITE STRIPE BROKEN		
POWER POLE				
COMMUNICATIONS BOX				
ELECTRICAL BOX				
UNDERGROUND COMM.	----- ^{ug}			
WATER VALVE				
WATER METER				
SPRINKLER				
SANITARY SEWER MANHOLE				
SANITARY SEWER LINE	-----			
DROP INLET				

MISSISSIPPI DEPARTMENT OF TRANSPORTATION			
GENERAL NOTES INTERSECTION IMPROVEMENTS JACKSON ST. AND SUNNYBROOK RD. CITY OF RIDGELAND, MS			
PROJECT NO. STP-7302-00(005)		WORKING NUMBER GN-1	
COUNTY: MADISON		SHEET NUMBER 2	
DATE	FILENAME: GEN-NOTES.dgn	DESIGN TEAM: Neel-Schofer	CHECKED: _____

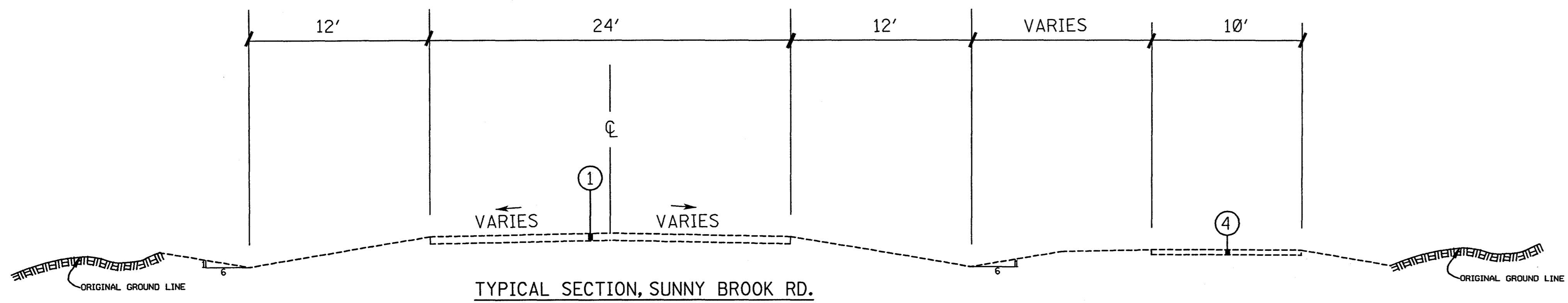
PLAN SECTION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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3/17/2003



- ① EXISTING BITUMINOUS PAVEMENT
- ② EXISTING CONCRETE CURB & GUTTER
- ③ EXISTING STORM SEWER
- ④ EXISTING CONCRETE SIDEWALK
- ⑤ PROPOSED MULTI-USE PATH
- ⑥ 2" HMA 9.5mm MIXTURE
- ⑦ 6" AND VARIABLE GRANULAR MATERAIL

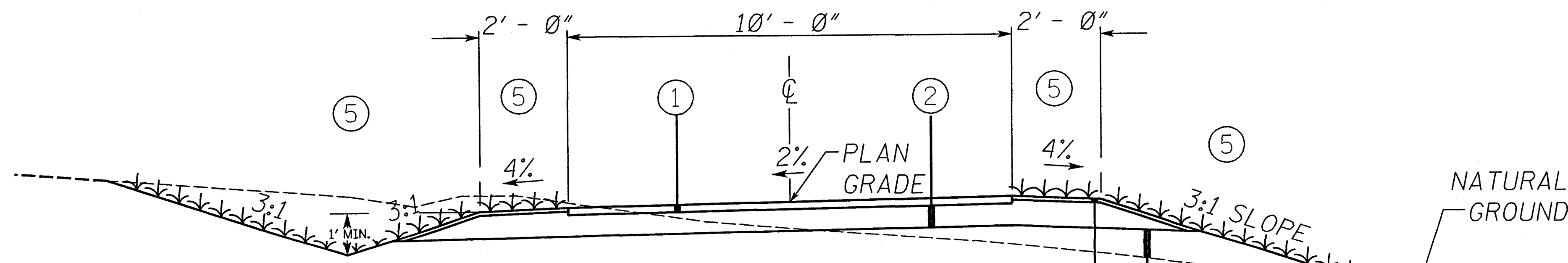


ROADWAY DESIGN DIVISION, C.A.D.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

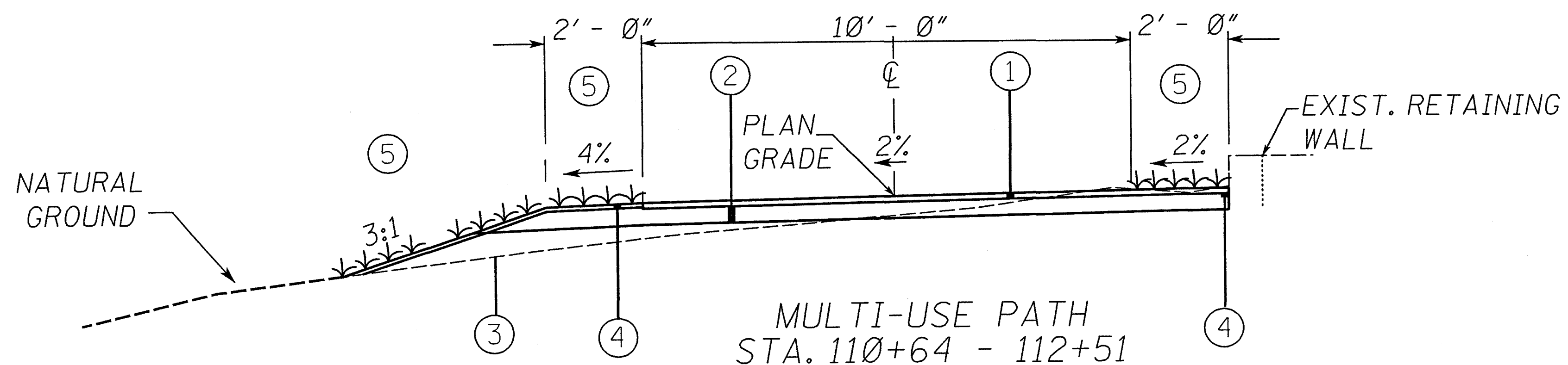
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TYPICAL SECTION JACKSON ST. SUNNY BROOK RD INTERSECTION IMPROVMENTS CITY OF RIDGELAND, MS	
Project No.: STP-730-00(005)	
County: MADISON	
DATE	WORKING NUMBER
DESIGN TEAM: Neel-Schaffer	TS-1
CHECKED	SHEET NUMBER
DATE	3

TYPICAL SECTION

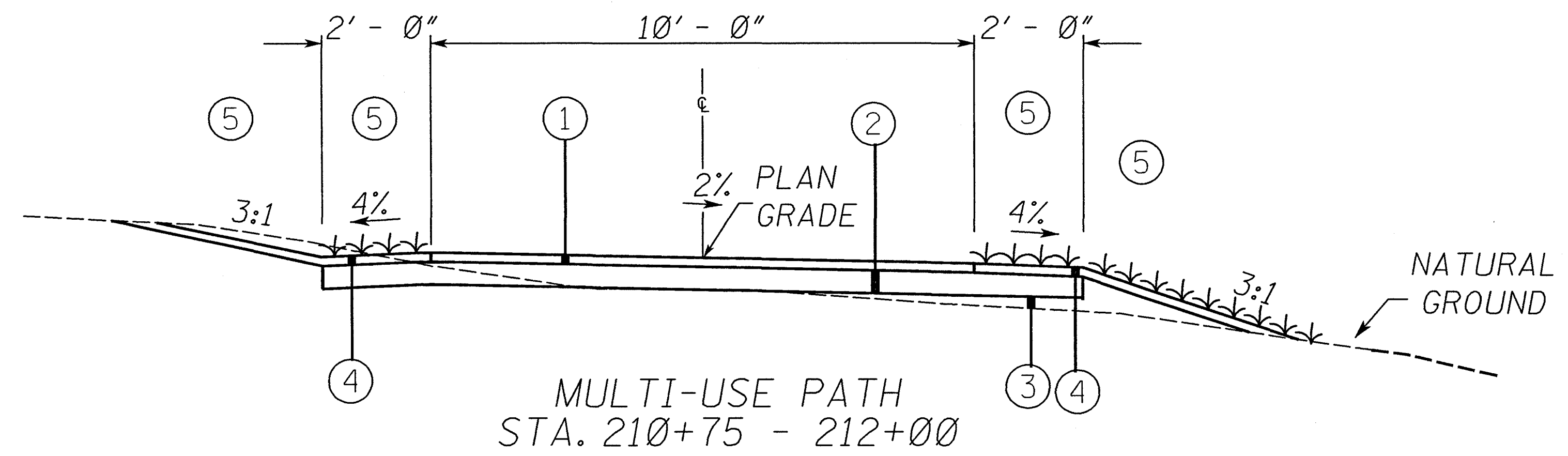
- ① 2" HOT-MIX ASPHALT SURFACE COURSE (HMA MT 9.5mm)
- ② 6" AND VARIABLE GRANULAR MATERIAL (CLASS 5) (GROUP C)
- ③ BORROW MATERIAL (B9)
- ④ 2" AND VARIABLE TOP SOIL REQ'D.
- ⑤ EROSION CONTROL TREATMENT PER PLANS AND VEGETATION SCHEDULE
- ⑥ CONCRETE HEADER CURB
- ⑦ CONCRETE CURB AND GUTTER (TYPE 3A)
- ⑧ EXISTING CONCRETE PAVEMENT OR NEW 6" CONCRETE PAVEMENT (PER PLANS)
- ⑨ EXISTING ASPHALT PAVEMENT



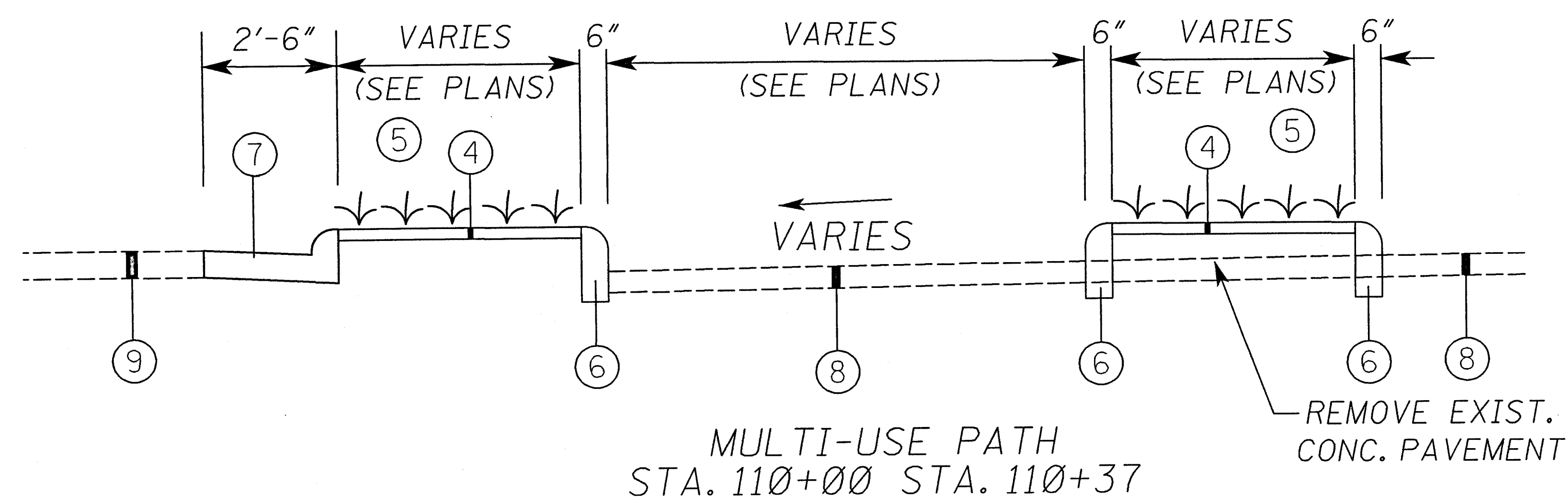
MULTI-USE PATH
 STA. 100+37 - 100+64
 STA. 112+51 - 112+67.466
 STA. 212+00 - 215+00



MULTI-USE PATH
 STA. 110+64 - 112+51

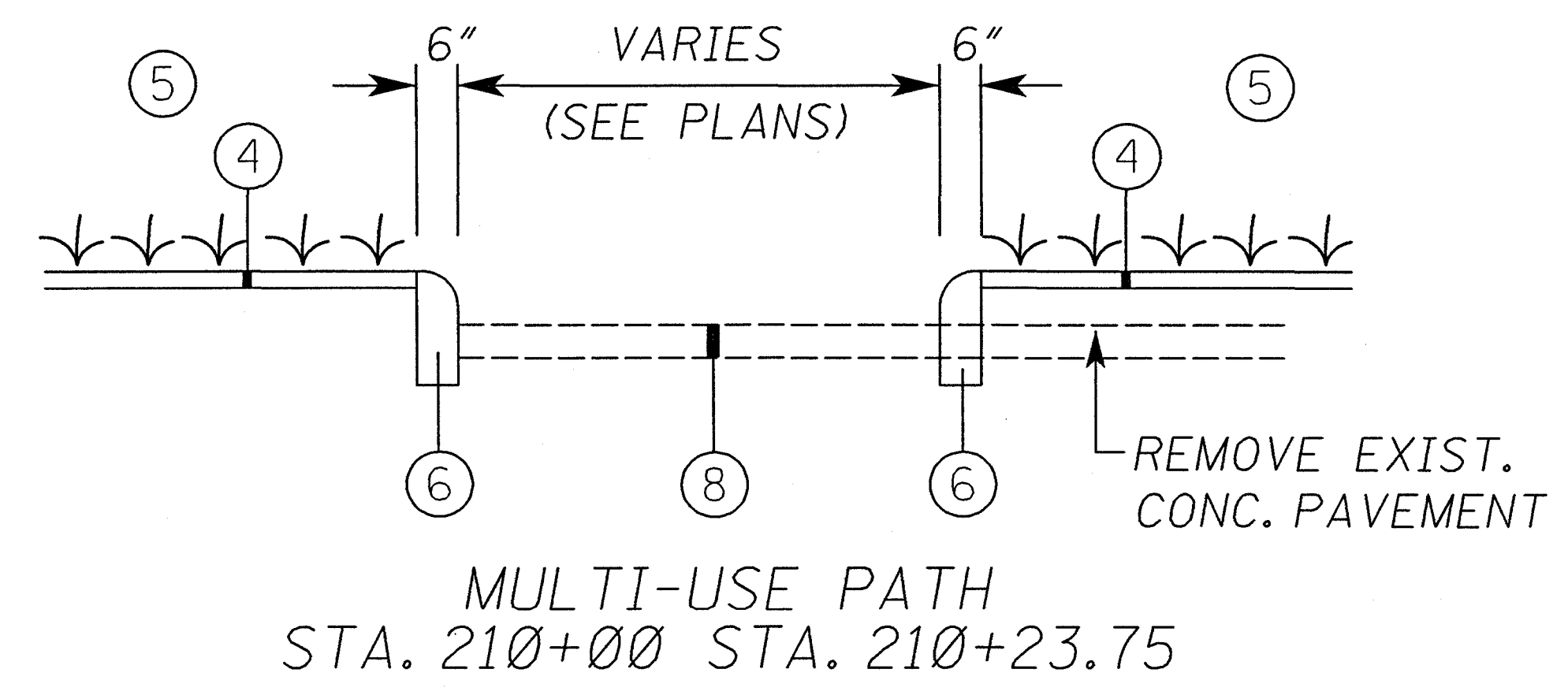


MULTI-USE PATH
 STA. 210+75 - 212+00



MULTI-USE PATH
 STA. 110+00 - 110+37

REMOVE EXIST.
 CONC. PAVEMENT



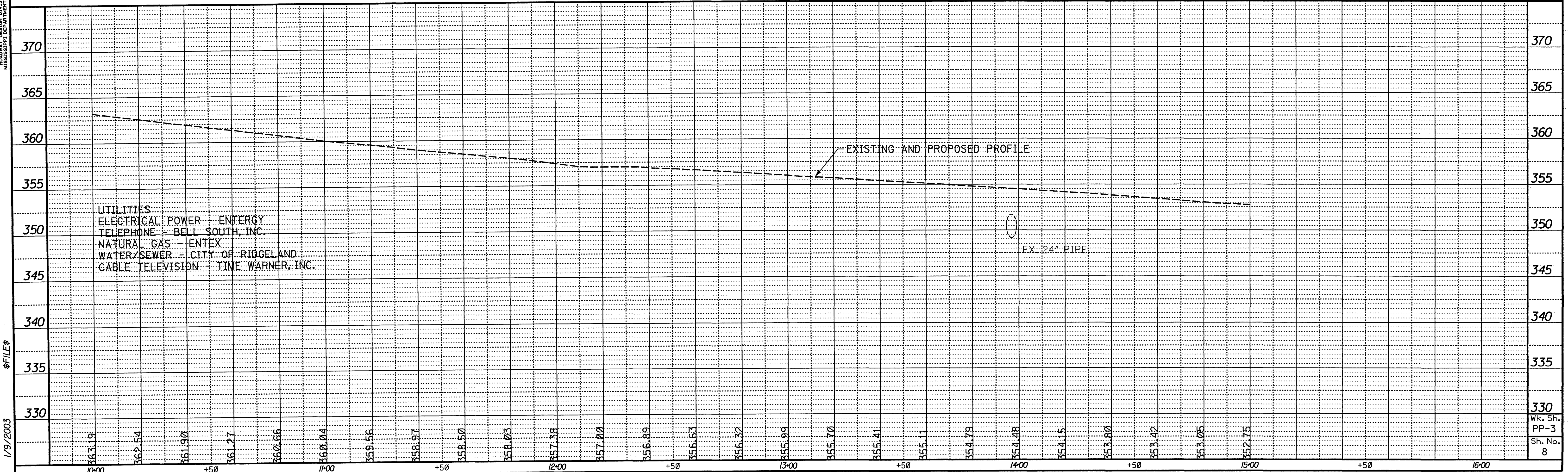
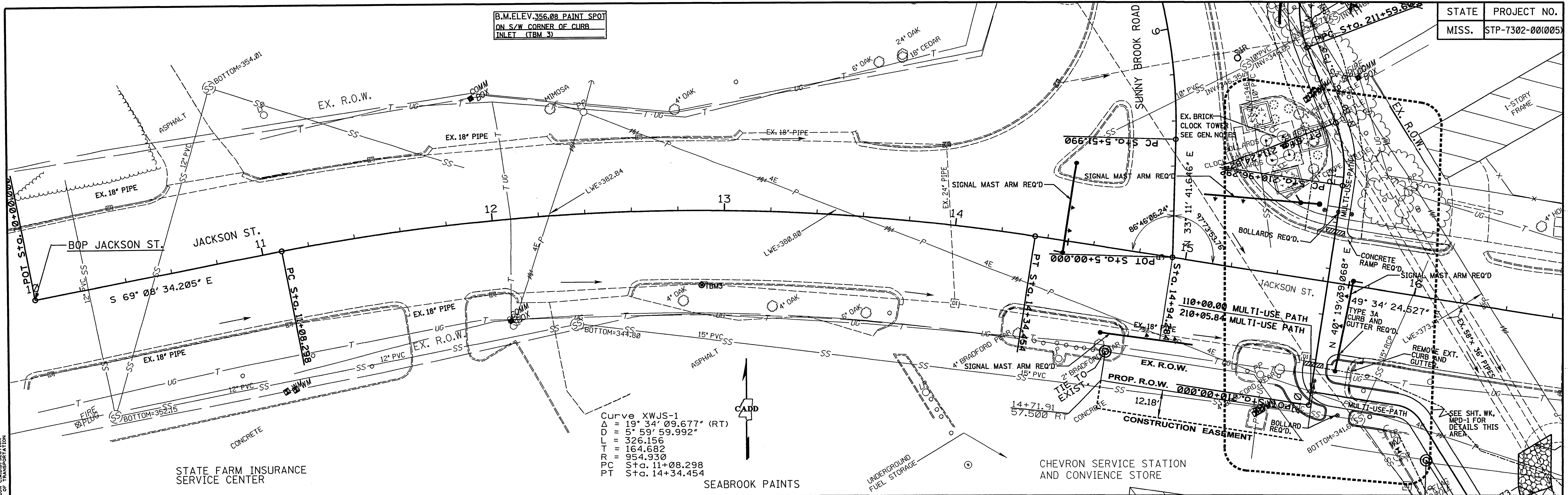
MULTI-USE PATH
 STA. 210+00 - 210+23.75

REMOVE EXIST.
 CONC. PAVEMENT

ROADWAY DESIGN DIVISION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TYPICAL SECTIONS	
MULTI-USE PATH	
INTERSECTION IMPROVEMENTS JACKSON ST. AND SUNNY BROOK RD. CITY OF RIDGELAND	
Project No.: STP-730-00(005)	
County: MADISON	
DATE	WORKING NUMBER
DESIGN TEAM: Neel-Schaffer	TS-2
CHECKED	SHEET NUMBER
	4

B.M. ELEV. 356.08 PAINT SPOT
ON S/W CORNER OF CURB
INLET (TBM 3)

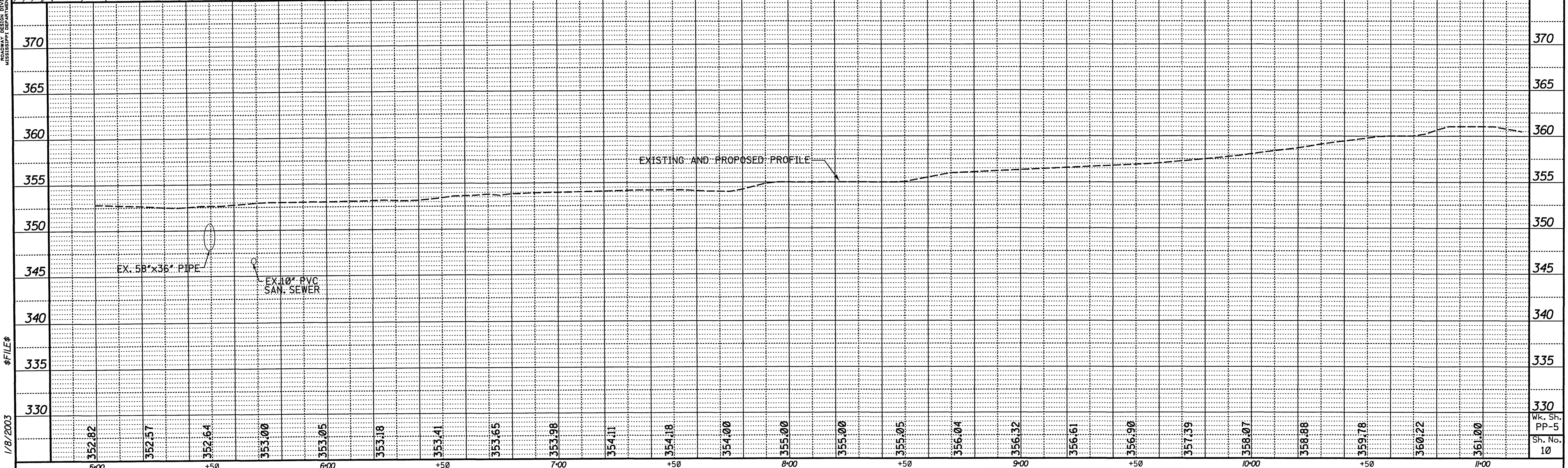
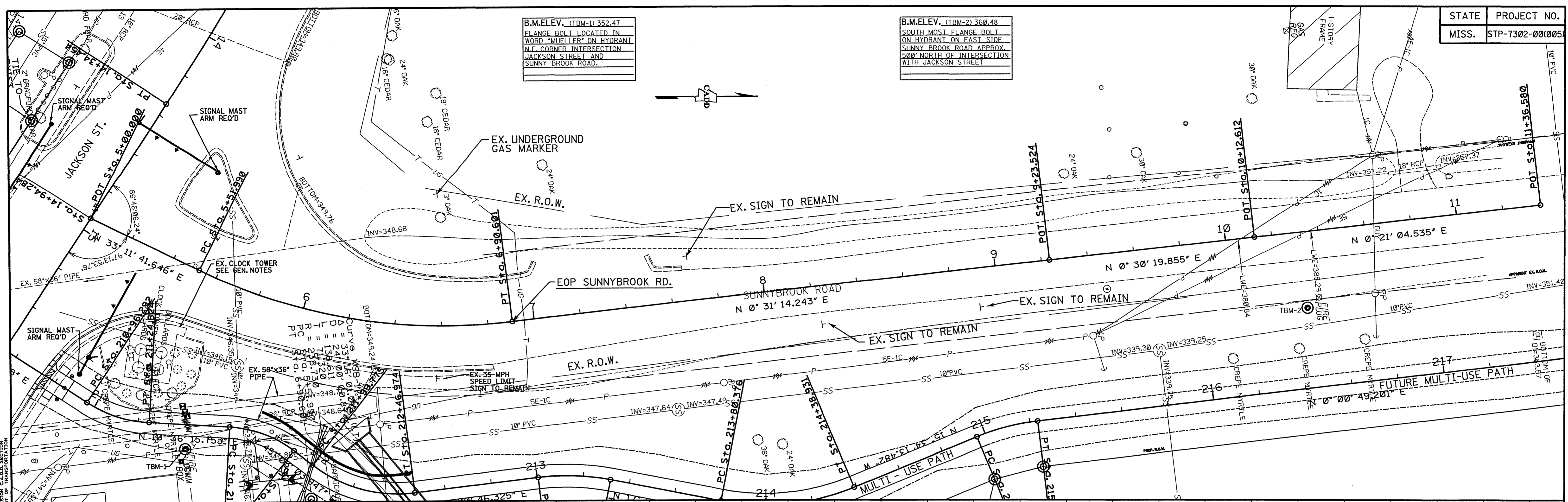
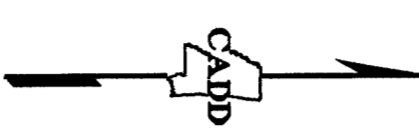


1/9/2003

330
Wk. Sh.
PP-3
Sh. No.
8

B.M.ELEV. (TBM-1) 352.47
 FLANGE BOLT LOCATED IN
 WORD "MUELLER" ON HYDRANT
 N.E. CORNER INTERSECTION
 JACKSON STREET AND
 SUNNY BROOK ROAD.

B.M.ELEV. (TBM-2) 360.48
 SOUTH MOST FLANGE BOLT
 ON HYDRANT ON EAST SIDE
 SUNNY BROOK ROAD APPROX
 500' NORTH OF INTERSECTION
 WITH JACKSON STREET



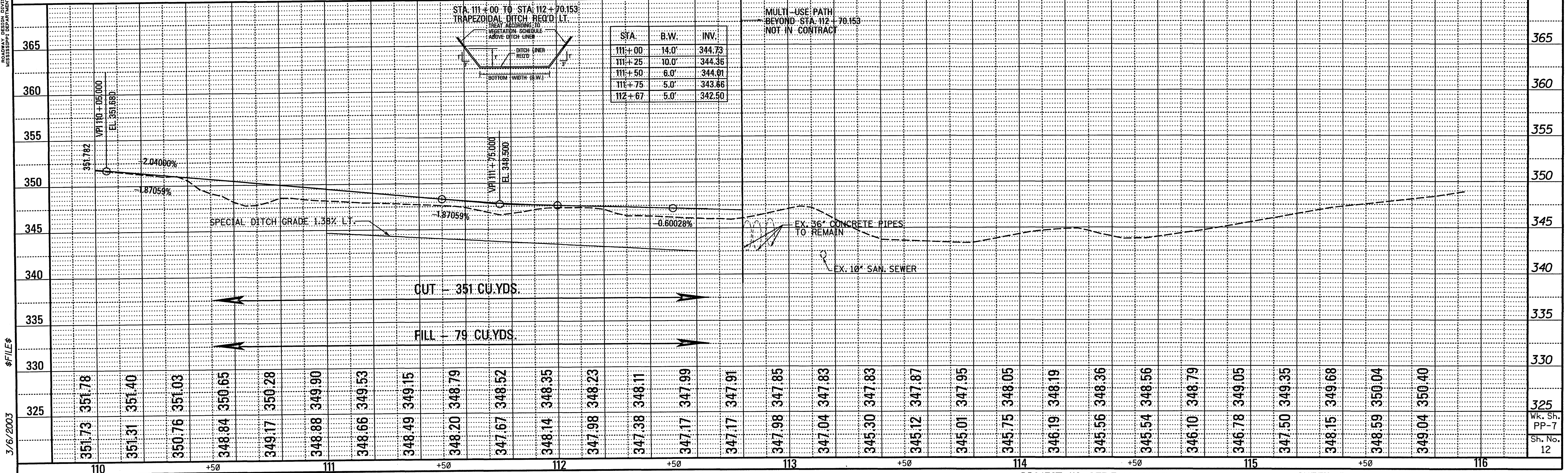
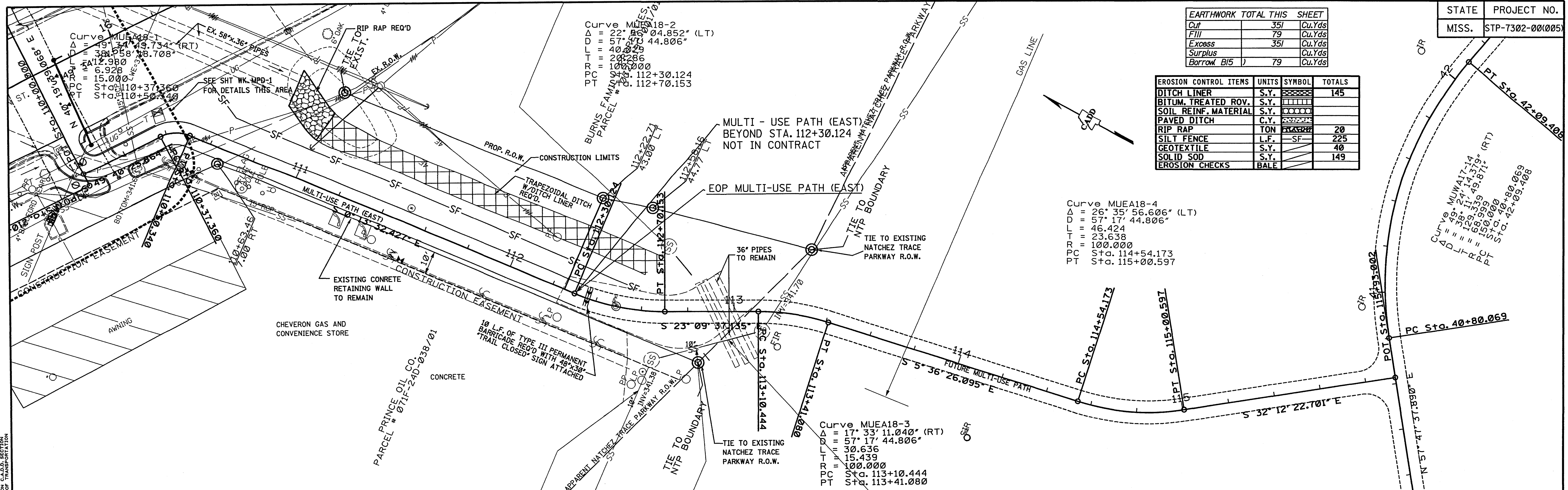
1/8/2003

\$FILE\$

PLANNING & ENGINEERING
 ROADWAY DESIGN DIVISION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

EARTHWORK TOTAL THIS SHEET			
Cut	351	Cu.Yds	
Fill	79	Cu.Yds	
Excess	351	Cu.Yds	
Surplus		Cu.Yds	
Borrow B15	79	Cu.Yds	

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	[Symbol]	145
BITUM. TREATED ROV.	S.Y.	[Symbol]	
SOIL REINF. MATERIAL	S.Y.	[Symbol]	
PAVED DITCH	C.Y.	[Symbol]	
RIP RAP	TON	[Symbol]	20
SILT FENCE	L.F.	[Symbol]	225
GEOTEXTILE	S.Y.	[Symbol]	40
SOLID SOD	S.Y.	[Symbol]	149
EROSION CHECKS	BALE	[Symbol]	



STA.	B.W.	INV.
111+00	14.0'	344.73
111+25	10.0'	344.36
111+50	6.0'	344.01
111+75	5.0'	343.86
112+00	5.0'	342.50

3/16/2003 \$FILES ROADWAY DESIGN DIVISION E.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. Sh. PP-7 Sh. No. 12

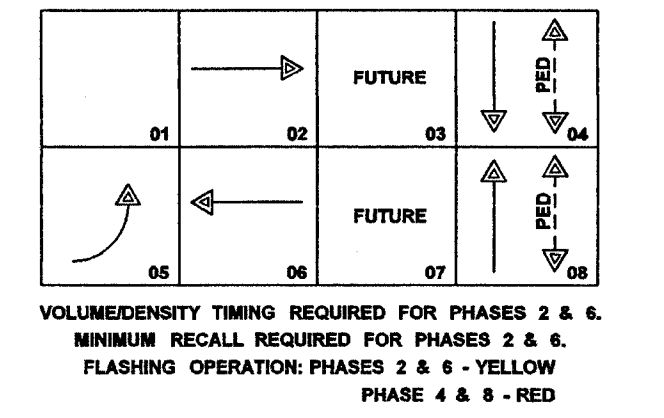
LEGEND

- | | | | |
|--|------------------------------------|---------|-------------------------------------|
| | NEW CONTROLLER /CABINET | | NEW VEHICLE LOOP DETECTOR |
| | EXISTING CONTROLLER /CABINET | 5c | 5 CONDUCTOR SIGNAL CABLE - AWG #14 |
| | TYPE 1 PULLBOX | 7c | 7 CONDUCTOR SIGNAL CABLE - AWG #14 |
| | TYPE 2 PULLBOX | 4c S.C. | 4 CONDUCTOR SHIELDED CABLE - AWG#18 |
| | NEW MAST ARM POLE | POW | POWER CABLE |
| | NEW LUMINAIRE POLE | LUM | STREET LIGHT CABLE AWG #10 |
| | EXISTING UTILITY POLE | | CONDUIT RUN (TRENCHED) |
| | TRAFFIC SIGNAL HEAD w/BACKPLATE | ----- | CONDUIT RUN (JACKED) |
| | NEW PEDESTRIAN SIGNAL w/PUSHBUTTON | | EMERGENCY VEHICLE DETECTOR |
| | OVERHEAD SIGN /STREET NAME SIGN | O.D.C. | OPTICAL DETECTOR CABLE |

NOTES:

- ALL COMPONENTS OF TEMPORARY SIGNAL WHICH CAN BE USED IN PERMANENT SIGNAL SHALL BE USED.
- ALL COMPONENTS OF TEMPORARY SIGNAL WHICH ARE NO LONGER NEEDED SHALL BE REMOVED.

SIGNAL PHASING DIAGRAM



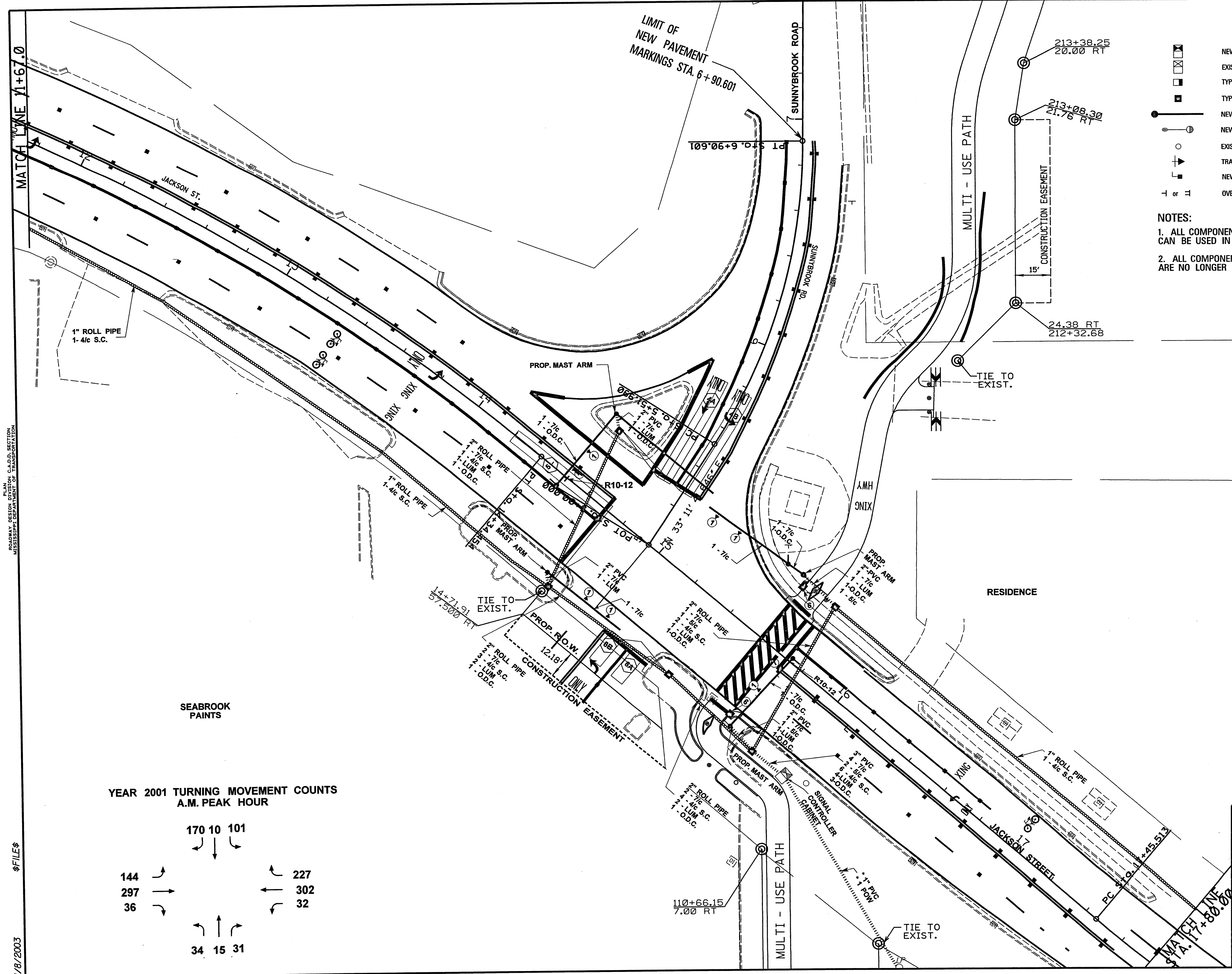
DETECTOR LOOP CHART

NUMBER	SIZE	TURNS	AMP-CHANNEL	COMMENTS
2A	6' X 6'	3	2-2	LOCATED 405' FROM STOPLINE
2B	6' X 6'	3	2-3	LOCATED 405' FROM STOPLINE
4A	6' X 50'	2-4-2	3-1	
4B	6' X 50'	2-4-2	3-2	
5	6' X 50'	2-4-2	2-1	
6	6' X 6'	3	1-2	LOCATED 405' FROM STOPLINE
8A	6' X 15'	3	3-3	
8B	6' X 15'	3	3-4	

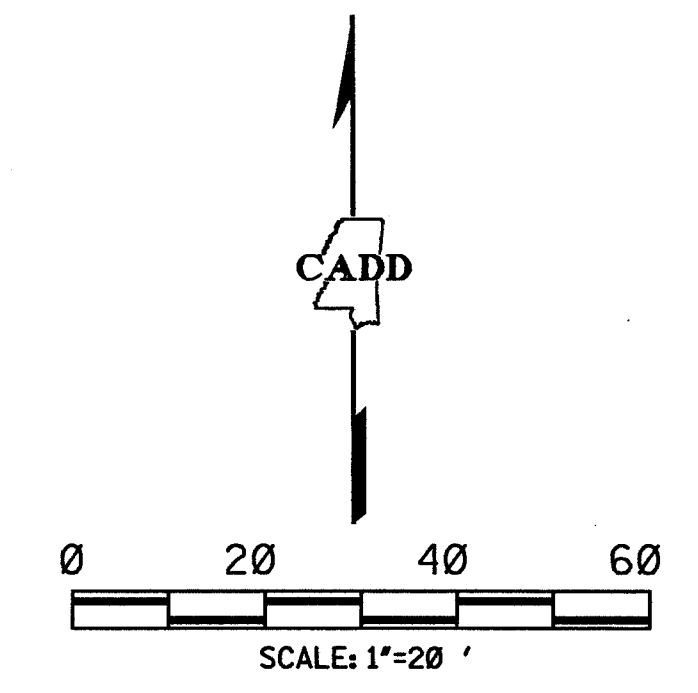
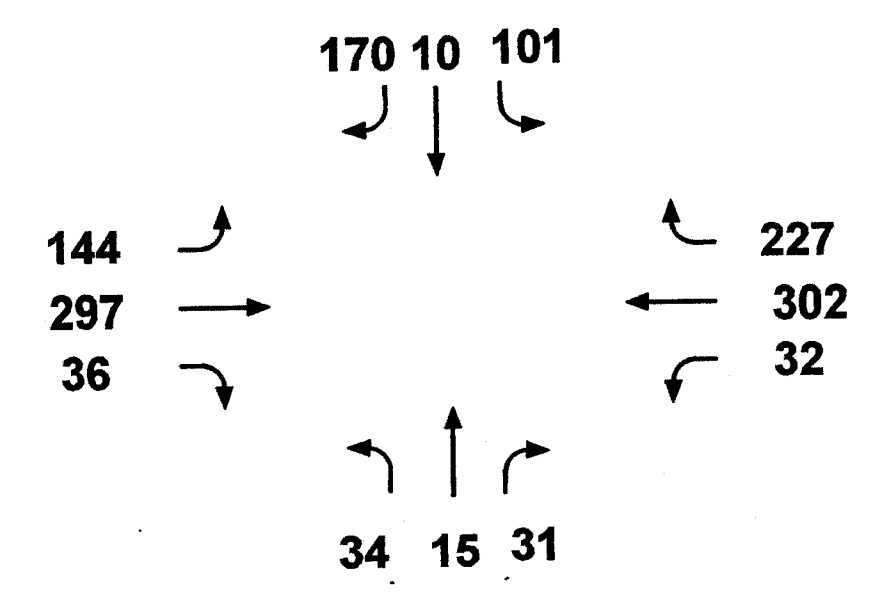
DETECTOR NUMBER CORRESPONDS WITH INPUT PHASE NUMBER.

POLE CHART

POLES	SHAFT LENGTH (ft.)	MAST ARM LENGTH (ft.)	HEAD / SIGN SPACING (ft.)	STREET NAME SIGN
NORTHWEST	22'	40'	20', 30', 35', 40'	SUNNYBROOK RD. →
NORHEAST	22'	50'	8', 33', 45'	JACKSON ST.
SOUTHEAST	22'	40'	20', 33', 38', 40'	← SUNNYBROOK RD.
SOUTHWEST	22'	40'	20', 33'	JACKSON ST.



**YEAR 2001 TURNING MOVEMENT COUNTS
A.M. PEAK HOUR**



MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
JACKSON ST. & SUNNY BROOK RD. INTERSECTION IMPROVEMENTS TRAFFIC SIGNAL PLAN	
Project No.: STP-7302-00(005)	
County: MADISON	
DATE	WORKING NUMBER
FILENAME: SIGPLANR1.DGN	SIG-1
DESIGN TEAM: Neel-Schaffer	CHECKED
DATE	SHEET NUMBER
	13

ROADWAY DESIGN DIVISION, C.A.D.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

1/8/2003 \$FILES

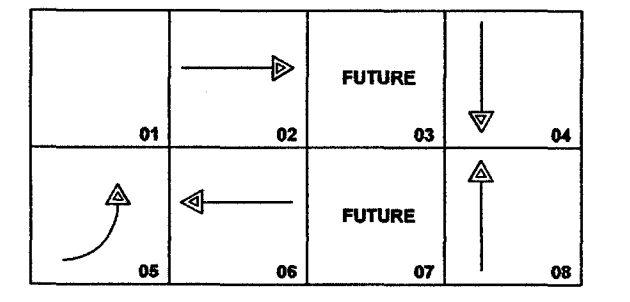
LEGEND

- | | | | |
|--|--|---------|-------------------------------------|
| | NEW CONTROLLER /CABINET | | NEW VEHICLE LOOP DETECTOR |
| | EXISTING CONTROLLER /CABINET | 5c | 5 CONDUCTOR SIGNAL CABLE - AWG #14 |
| | TYPE 1 PULLBOX | 7c | 7 CONDUCTOR SIGNAL CABLE - AWG #14 |
| | TYPE 2 PULLBOX | 4c S.C. | 4 CONDUCTOR SHIELDED CABLE - AWG#18 |
| | NEW MAST ARM POLE | POW | POWER CABLE |
| | NEW LUMINAIRE POLE | LUM | STREET LIGHT CABLE AWG #10 |
| | EXISTING UTILITY POLE | | CONDUIT RUN (TRENCHED) |
| | TRAFFIC SIGNAL HEAD w/BACKPLATE | ----- | CONDUIT RUN (JACKED) |
| | NEW PEDESTRIAN SIGNAL w/PUSHBUTTON | | EMERGENCY VEHICLE DETECTOR |
| | OVERHEAD SIGN /STREET NAME SIGN | O.D.C. | OPTICAL DETECTOR CABLE |
| | TEMPORARY TIMBER POLE (SEE POLE CHART) | | |
| | GUY WIRE WITH ANCHOR | | |

NOTES:

- TEMPORARY SIGNAL SHALL BE INSTALLED AND OPERATING NOT LATER 30 DAYS AFTER NOTICE TO PROCEED.
- EXISTING STREET SIGNS SHALL REMAIN IN PLACE UNTIL PERMANENT MAST ARMS ARE INSTALLED.
- TEMPORARY SIGNAL SHALL OPERATE ON PRESET TIMING UNTIL DETECTOR LOOPS ARE INSTALLED. TIMING TO BE PROVIDED BY ENGINEER.
- ALL COST ASSOCIATED WITH INSTALLATION, MAINTENANCE AND REMOVAL OF TEMPORARY SIGNAL SHALL BE ABSORBED IN PAY ITEM 908-680-A-PP.
- ALL ELEMENTS NOT REUSED FOR PERMANENT SIGNAL OF THE TEMPORARY SIGNAL SHALL BE COMPLETELY REMOVED UNLESS OTHERWISE APPROVED BY THE ENGINEER. REMOVED ITEMS SHALL BECOME PROPERTY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL ARRANGE AND PAY FOR CONNECTION OF POWER TO TEMPORARY SIGNAL. CONTRACTOR SHALL PAY FOR POWER TO TEMPORARY SIGNAL.
- CONTRACTOR SHALL INSTALL TEMPORARY PAVEMENT MARKINGS AS INDICATED ON THIS SHEET. TEMPORARY MARKINGS SHALL BE COST ABSORBED (PAY ITEM 908-680-A-PP) AND SHALL BE REMOVED WHEN PERMANENT MARKINGS ARE INSTALLED.
- CONTRACTOR SHALL INSTALL TEMPORARY ADVANCE SIGNAL WARNING SIGN W3-3 (36" X 36") (ONESIGN ON EACH APPROACH - 3 SIGNS TOTAL) WHEN TEMPORARY SIGNAL IS INSTALLED. COST OF TEMPORARY SIGNS SHALL BE ABSORBED (PAY ITEM 908-680-A-PP).

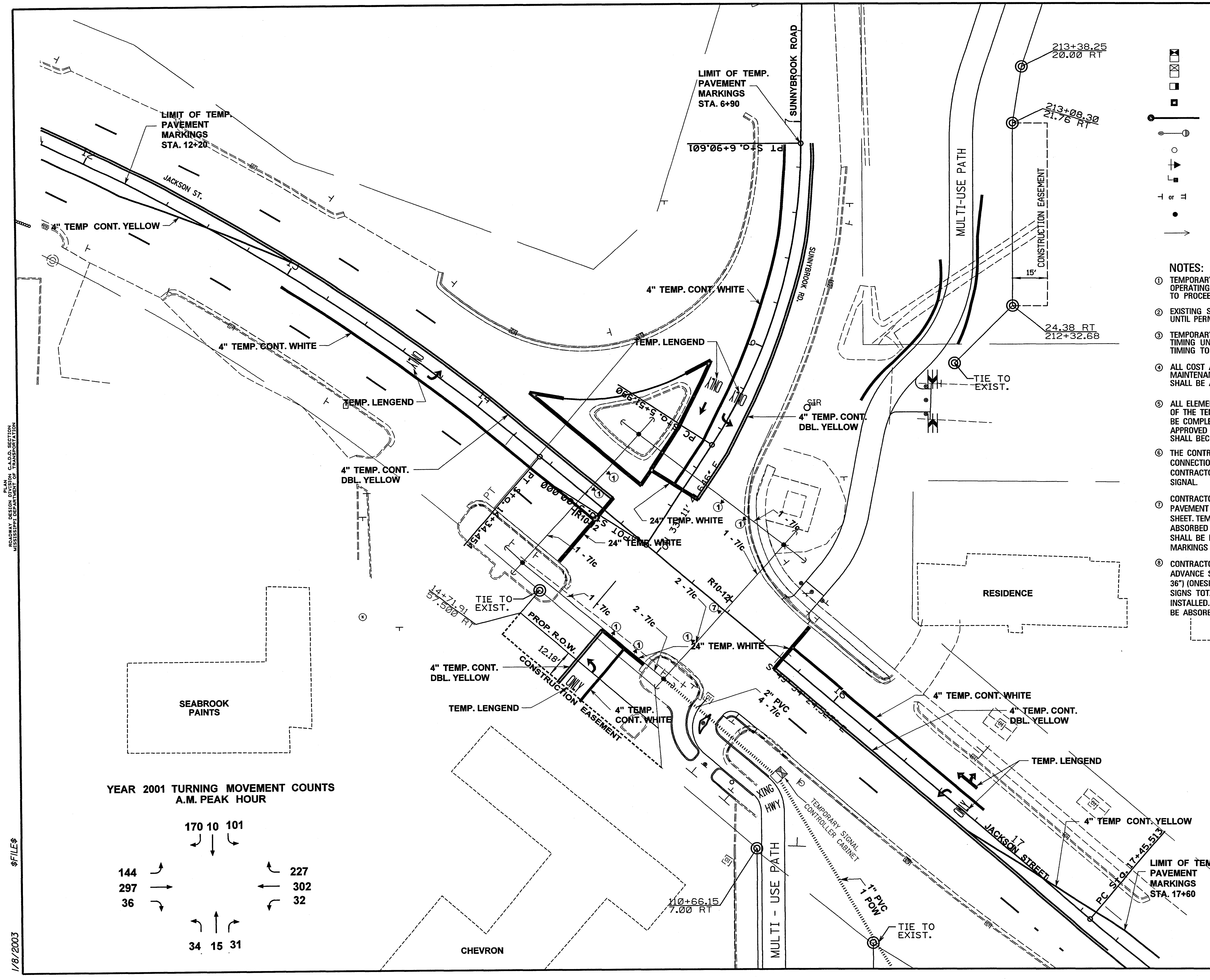
SIGNAL PHASING DIAGRAM



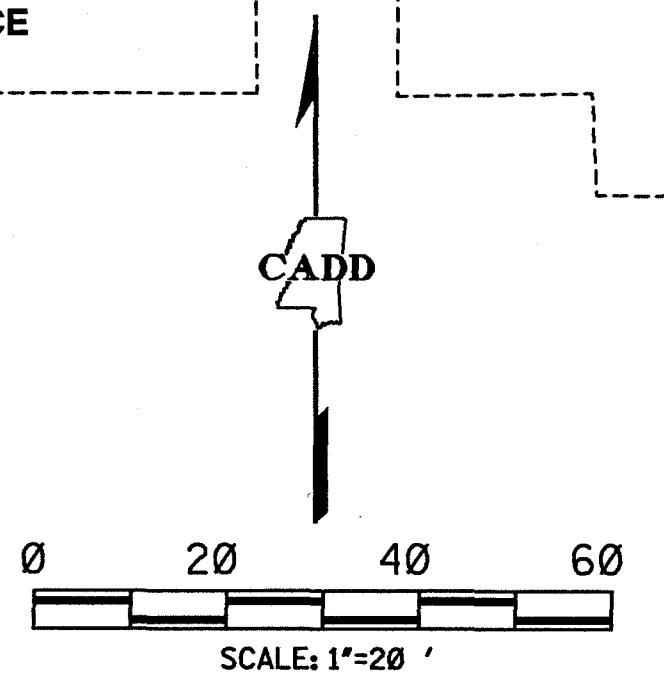
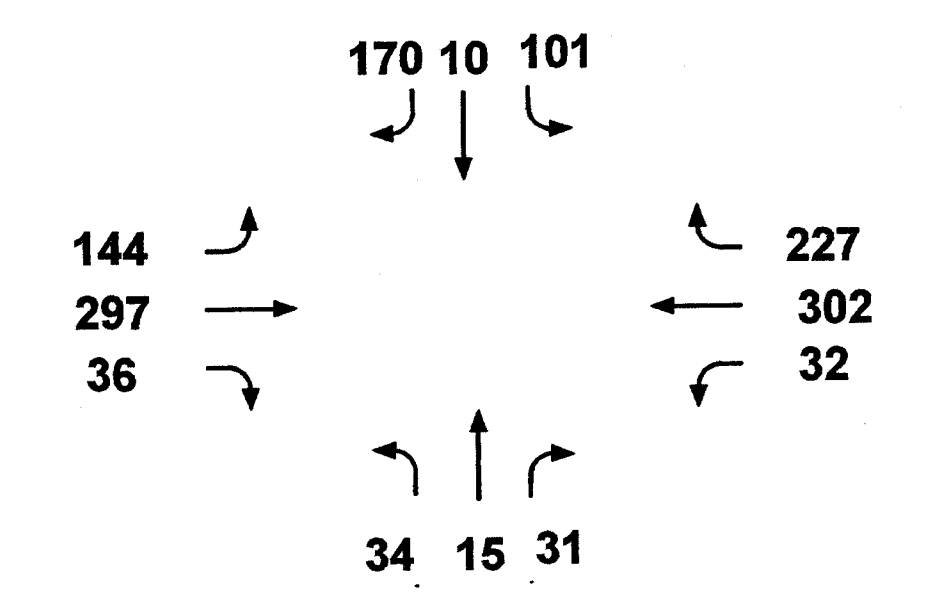
MINIMUM RECALL REQUIRED FOR PHASES 2 & 4.
FLASHING OPERATION: PHASES 2 & 4 - YELLOW
PHASE 1 & 3 - RED

POLE CHART

POLES	LENGTH (ft.)	CLASS
NORTHWEST	40'	5
NORTHEAST	40'	5
SOUTHEAST	40'	5
SOUTHWEST	40'	5



**YEAR 2001 TURNING MOVEMENT COUNTS
A.M. PEAK HOUR**

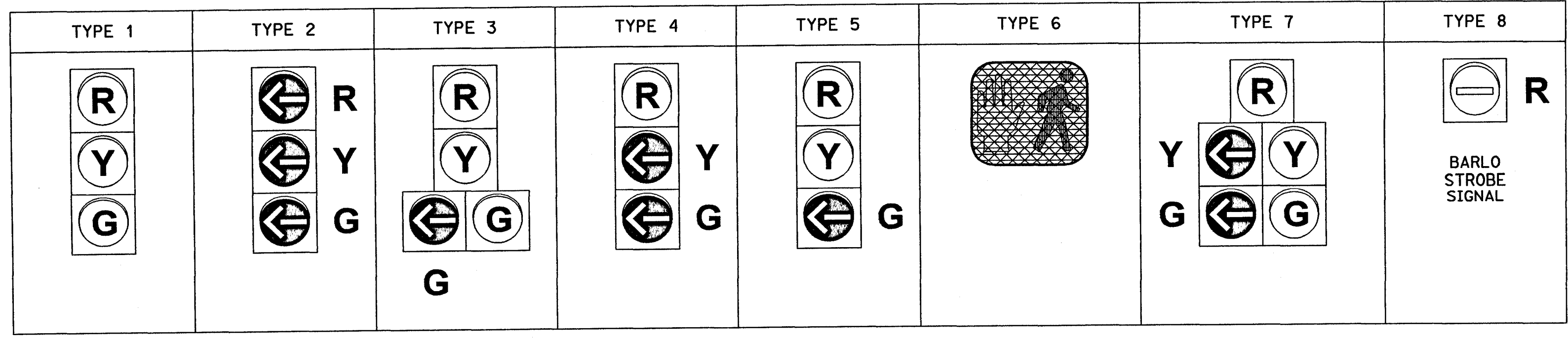


MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
JACKSON ST. & SUNNY BROOK RD. INTERSECTION IMPROVEMENTS TEMPORARY SIGNAL PLAN	
Project No.: STP-7302-00(005)	
County: MADISON	
WORKING NUMBER	TMPSIG-1
SHEET NUMBER	15
FILENAME: SIGPLANR1TEMP.DGN	DATE
DESIGN TEAM: Neel-Schaffer CHECKED	DATE

ROADWAY DESIGN DIVISION, C.A.D.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

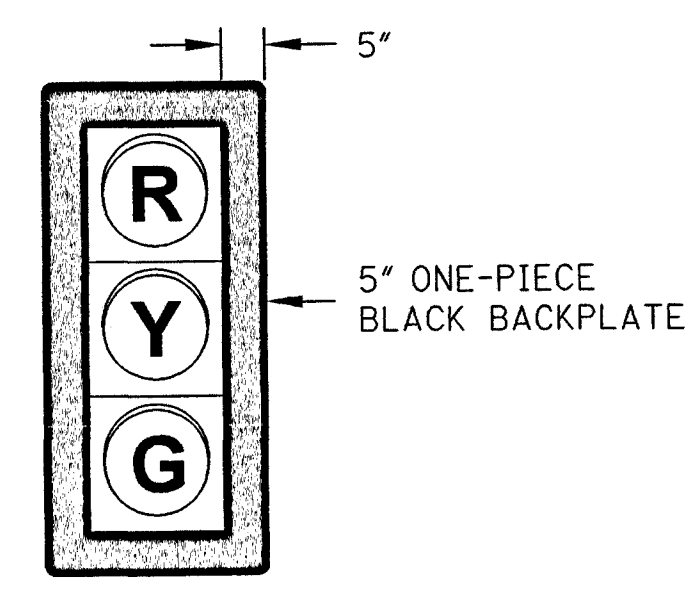
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DETAIL OF TYPICAL TRAFFIC SIGNAL HEADS



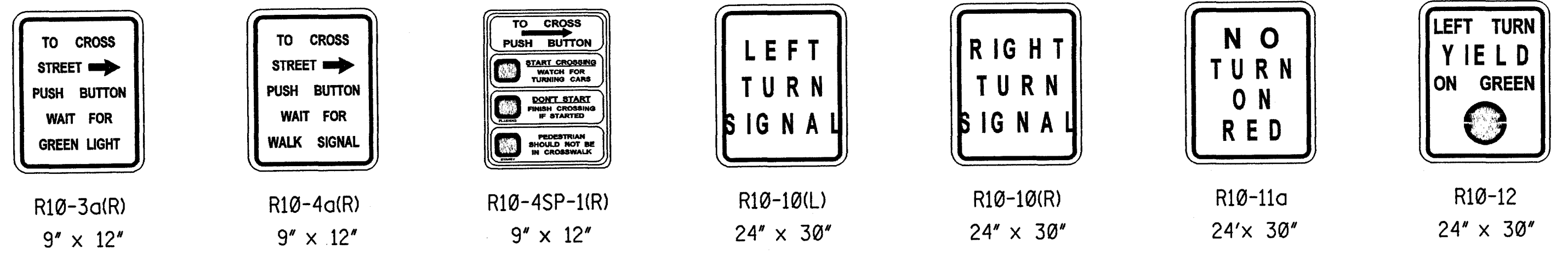
- NOTES:
- TYPE "A" SIGNAL HEAD IS TO BE OPTICALLY PROGRAMMED.
 - LETTER "R" ON HEAD TYPES MEANS RIGHT TURN ARROW(S).
 - TYPE 6 SIGNAL HEAD TO BE FURNISHED WITH R10-4SP-1 SIGN & PEDESTRIAN PUSHBUTTON (PELCO * SE 2039 WITH SE 1013 OR EQUAL).
 - TYPE 7 SIGNAL HEAD TO BE FURNISHED WITH R10-12 SIGN WHEN INDICATED ON PLANS.

DETAIL OF TRAFFIC SIGNAL WITH BACKPLATE



- NOTE:
- ALL TYPE 1, 2, 4 & 5 SIGNAL HEADS SHALL INCLUDE BACKPLATES UNLESS OTHERWISE NOTED ON TRAFFIC SIGNAL INSTALLATION SHEETS.

DETAIL OF TYPICAL TRAFFIC SIGNAL SIGNS



- NOTES:
- ALUMINUM SIGN BLANKS ARE TO BE ALLOY 5052-H38 AND 0.08" (NOMINAL) THICK.
 - THE SIGNS ARE TO BE SUPPLIED WITH MOUNTING BRACKETS FOR SPAN WIRE MOUNTING OR POLE MOUNTING AS REQUIRED.
 - NUMBER 12 PLATED JACK CHAINS SHALL BE ATTACHED TO THE BOTTOM OF ALL SPAN WIRE MOUNTED SIGNS.
 - CHAINS SHALL BE ATTACHED TO SIGN AND TETHER USING "S" HOOKS.
 - THE SIZE OF THE SIGN BLANK, LEGEND, BORDER AND THE COLOR OF THE BACKGROUND AND LEGEND IS TO CONFORM TO THE M.U.T.C.D.
 - THE BACKGROUND SHALL BE REFLECTORIZED USING ENCAPSULATED LENS SHEETING.
 - TYPE R10-3a SIGN REQUIRED WITH PEDESTRIAN PUSHBUTTON WHEN TYPE 6 SIGNAL IS NOT USED.

GENERAL NOTES

- INTERCONNECT CABLE SHALL BE EITHER IMSA 40-2-1991 OR IMSA 40-4-1991 SIGNAL CABLE, STRANDED. AWG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
 - SIGNAL SUPPLY CABLE SHALL BE IMSA 20-1-1991 SIGNAL CABLE, STRANDED. AWG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
 - POWER SUPPLY CABLE SHALL BE IMSA 20-1-1991 SIGNAL CABLE, STRANDED. AWG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
 - DETECTOR SHIELDED CABLE SHALL BE IMSA 50-2-1991 SIGNAL CABLE, AWG #14 OR AWG # 18 STRANDED COPPER CONDUCTORS, FROM PULLBOX TO CONTROLLER. NUMBER OF CONDUCTORS AS SHOWN ON PLANS TO CONTROLLER. NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
 - POLES, SIGNAL HEADS, EQUIPMENT BOXES, PULLBOXES AND CONDUIT LOCATIONS MAY BE VARIED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. HOWEVER, SIGNAL HEAD OR POLE LOCATIONS SHALL BE WITHIN REQUIREMENTS OUTLINED IN MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY.
 - SYMBOLS AND ABBREVIATIONS USED ON PLANS:
 - ☒ BASE MOUNTED OR POLE MOUNTED CABINET FOR SIGNAL CONTROLLER
 - ☒ DETECTOR EQUIPMENT BOX
 - EXISTING POLE
 - POLE REQUIRED
 - EXISTING PULLBOX
 - PULLBOX REQUIRED
 - EXISTING SIGNAL HEAD
 - ① SIGNAL HEAD REQUIRED / TYPE
 - ⊥ SIGN
 - ▭ VEHICLE LOOP DETECTOR
 - OR □ QUADRAPOLE VEHICLE LOOP DETECTOR
 - ① VEHICLE LOOP DETECTOR NUMBER
 - MICROWAVE OR VIDEO DETECTION UNIT
 - OPTICAL DETECTOR UNIT
 - CONDUIT
 - P.B. PUSH BUTTON
 - S.C. SHIELDED CABLE
 - E.C. OPTICAL DETECTOR CABLE
 - 4c NUMBER OF CONDUCTORS
 - I.C. INTERCONNECT CABLE
 - POW POWER CABLE
 - LUM LUMINAIRE POWER CABLE
 - ⊥ RADIO INTERCONNECT ANTENNA
 - POLES AND FOUNDATIONS OF EXISTING SIGNAL INSTALLATIONS SHALL BE CUT OFF 6" BELOW GROUND OR REMOVED AND AREA RESTORED TO MATCH ADJACENT SURFACE AS DIRECTED BY THE ENGINEER.
 - LOOP AMPLIFIERS SHALL BE REQUIRED AS SHOWN ON PLANS. WHERE TWO OR MORE LOOPS ARE CONNECTED TO THE SAME TO 70 M.P.H. THE CONTRACTOR SHALL PROVIDE DESIGN CHANNEL, THEY SHALL BE WIRED IN SERIES.
 - DESIGN WIND LOADS FOR TRAFFIC SIGNAL SUPPORTS SHALL BE CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS.
 - DETERMINATION OF REQUIRED SIZES, LENGTHS AND GAUGES OF TYPE I, II, III AND IV STEEL POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND SECTION 722.02 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN PLANS OR SPECIFICATIONS.
 - THE TOP OF THE POLE FOUNDATION SHALL BE 6" ABOVE THE GROUND. THE CONTRACTOR SHALL PROVIDE POLES OF SUFFICIENT LENGTH PLUS 2 FEET TO PROVIDE REQUIRED VERTICAL CLEARANCE OF THE TRAFFIC SIGNAL HEADS WITHOUT EXTENDING THE FOUNDATION ABOVE THE FINISHED GRADE OF THE POINT WHERE THE POLE IS LOCATED, EVEN THOUGH THIS MAY BE BELOW THE FINISHED GRADE OF THE ROADWAY.
 - ALL STRAIN POLES AT AN INTERSECTION SHALL BE THE SAME DIAMETER AND UTILIZE THE SAME BOLT CIRCLE SPACING.
 - POLE AND BASE MOUNTED CABINET - GRADES TO BE ESTABLISHED TO (±) 3" AS DIRECTED BY THE ENGINEER.
 - TRAFFIC SIGNAL CABINETS AND CONTROLLERS ARE TO BE WIRED TO PROVIDE FOR ALL PHASES INCLUDING FUTURE PHASES IN ACCORDANCE WITH THE PHASES SEQUENCE DIAGRAM.
 - ALL EXISTING TRAFFIC SIGNAL EQUIPMENT IS TO BE REMOVED AND SALVAGED BY THE CONTRACTOR WITH THE COST TO BE ABSORBED. THE EXISTING SIGNAL CABINETS, CONTROLLERS, TRAFFIC SIGNAL HEADS, AND OTHER ITEMS AS NOTED ON PLANS ARE TO BE STOCKPILED AS DIRECTED BY THE ENGINEER FOR PICKUP BY STATE FORCES OR AS NOTED ON PLANS. ALL OTHER SIGNAL EQUIPMENT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
 - THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ELECTRICAL SERVICE FROM THE POWER COMPANY SERVICE POINT TO THE TRAFFIC SIGNAL POLE NEAREST THE CONTROLLER. COST TO BE ABSORBED. THE SERVICE SHALL THEN BE RUN TO THE CONTROLLER AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAKE APPLICATION WITH THE POWER COMPANY IN ADVANCE OF NEEDING THE SERVICE.
 - IF IT IS NECESSARY TO RUN ELECTRIC SERVICE CABLE FROM ONE POLE TO ANOTHER, THE SERVICE CABLE SHALL BE LASHED TO A SEPARATE MESSENGER CABLE LOCATED 2 FT. MIN. ABOVE THE SIGNAL CABLE.
 - VEHICLE LOOP ASSEMBLIES SHALL BE INSTALLED IN THE TOP LAYER OF BINDER OR EXISTING SURFACE BEFORE THE FINAL SURFACE COURSE IS APPLIED.
 - PEDESTRIAN PUSHBUTTONS AND SIGNS WHERE REQUIRED ON PLANS SHALL BE INSTALLED WITH NO ADDITIONAL PAYMENT (ABSORBED ITEM). SIDE OF POLE LOCATIONS OF PUSHBUTTONS MAY BE FIELD ADJUSTED. PUSHBUTTONS TO BE PELCO * SE 2039 WITH SE 1013 (ISOLATOR WITH LED LATCH ASSEMBLY) OR EQUAL.
 - FIELD DRILL AND TAP EXISTING POLES WHERE PEDESTRIAN SIGNALS AND PUSHBUTTONS ARE REQUIRED ON PLANS. (ABSORBED ITEM).
 - REFER TO WORKING NUMBER TSD-5 "CONDUIT ENTRANCE DETAIL" WHEN NEW CONDUIT(S) ARE REQUIRED AT EXISTING SIGNAL POLES OR CONTROLLERS.
 - MESSENGER CABLE AND OTHER SUPPORTING DEVICES WHERE REQUIRED SHALL BE ABSORBED IN THE PAY ITEMS FOR ELECTRIC CABLE (SEE SECTION 908-666.03.3).
 - PULLBOXES WHERE REQUIRED ON THE PLANS OR INCLUDED BY THE CONTRACTOR FOR HIS CONVENIENCE, SHALL BE ABSORBED IN THE PAY ITEMS FOR LIGHTING AND TRAFFIC SIGNAL CONDUIT.
 - ALL CONDUIT IS TYPE IV (PVC) UNLESS OTHERWISE NOTED ON PLANS. ALL PULLBOXES ARE TYPE I UNLESS OTHERWISE NOTED ON PLANS.
 - FOR PROTECTED/PERMITTED LEFT TURN PHASING, TYPE 7 OR 7A TRAFFIC SIGNAL HEADS (FIVE SECTION HEADS) SHALL OPERATE SUCH THAT THE CIRCULAR INDICATIONS DISPLAYED WILL BE IDENTICAL AND SIMULTANEOUS TO THE CIRCULAR INDICATIONS FOR THE ADJACENT THROUGH MOVEMENT SIGNAL HEADS; i.e. A CIRCULAR RED AND EITHER A GREEN ARROW OR YELLOW ARROW MAY BE DISPLAYED SIMULTANEOUSLY IN THE SAME FIVE SECTION HEAD.
 - CONTRACTOR RESPONSIBLE FOR PROVIDING TEMPORARY SIGNALS IF NECESSARY TO ACCOMMODATE ROADWAY CONSTRUCTION AND WILL BE ABSORBED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
- * NOTES NO. 9, 10 & 11 THAT REFERENCE THE CONTRACTOR TO DESIGN SIGNAL POLES DO NOT APPLY IF THE SIGNAL POLE CHART DESIGN(S) ARE INDICATED ON THE PLAN SHEET(S).
- ** DESIGN WIND LOADS INCREASE TO 80 M.P.H. FOR SIGNAL INSTALLATIONS IN THE THREE COAST COUNTIES (HANCOCK, HARRISON & JACKSON).

ROADWAY DESIGN DIVISION C.A.D.S. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

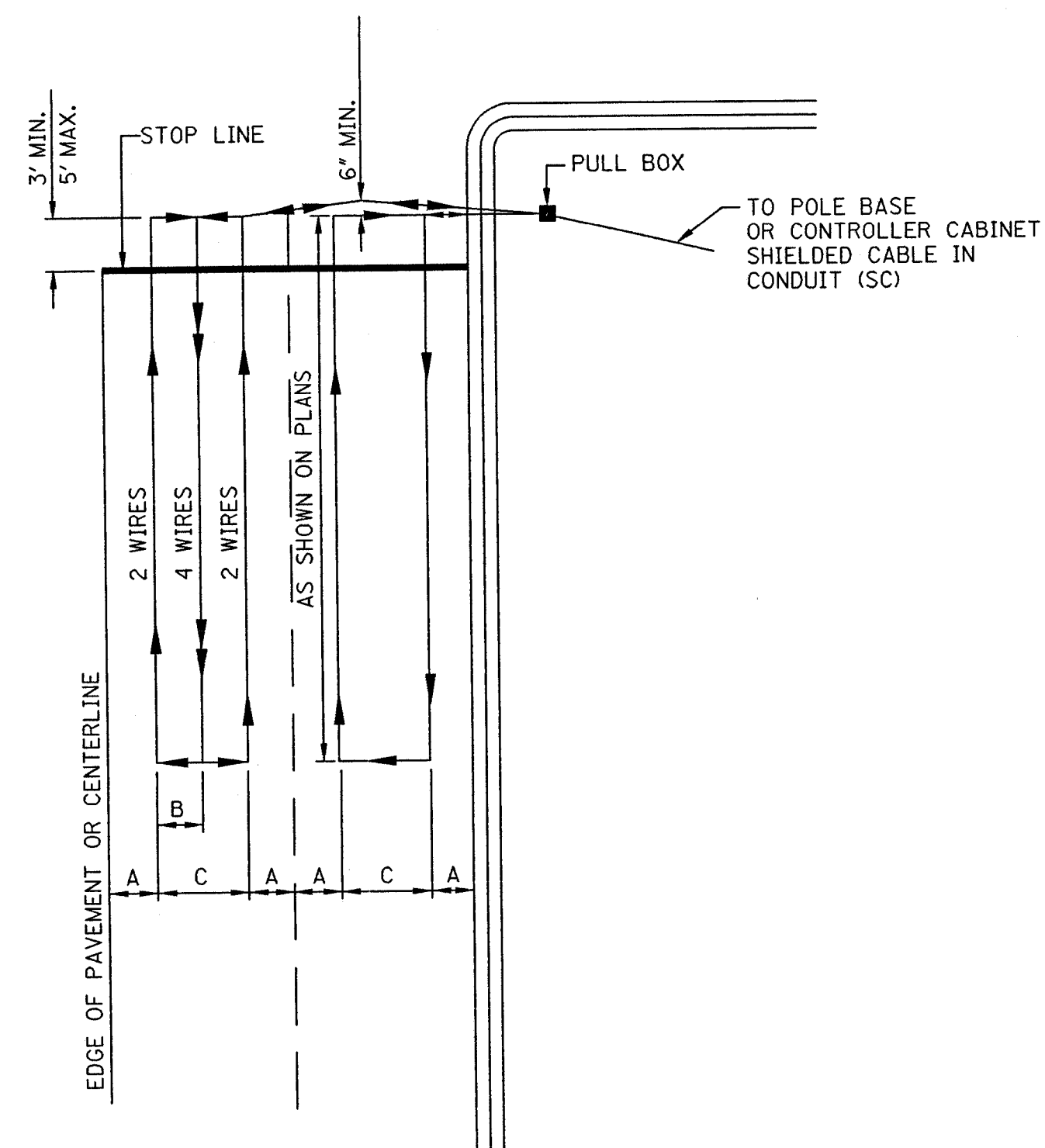
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MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DETAIL OF TRAFFIC SIGNAL HEADS, TRAFFIC SIGNAL SIGNS AND GENERAL NOTES	
Project No.: STP-7302-00(005)	
County: MADISON	
DATE	WORKING NUMBER
DESIGN TEAM: Neel-Schaffer	TSD-1
CHECKED	SHEET NUMBER
DATE	16

LANE WIDTH	"A"	"B"	"C"
10'	2.5'	2.5'	5'
11'	2.5'	3'	6'
12'	3'	3'	6'
14'	3'	4'	8'

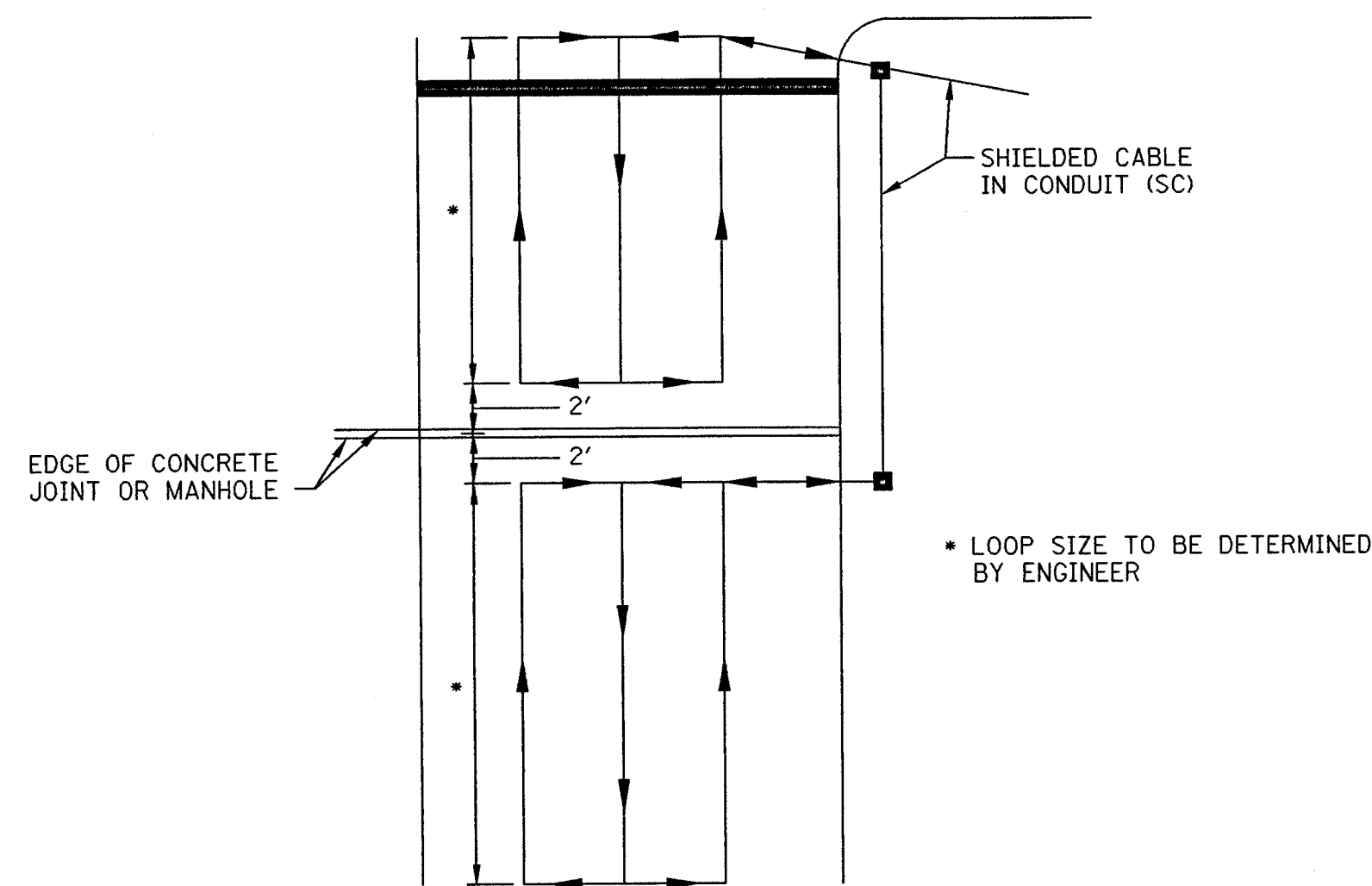
MINIMUM LOOP SEPARATION WHEN NO LANE LINES ARE PRESENT IS 3'



LARGE LOOP DETECTOR INSTALLATION DETAIL

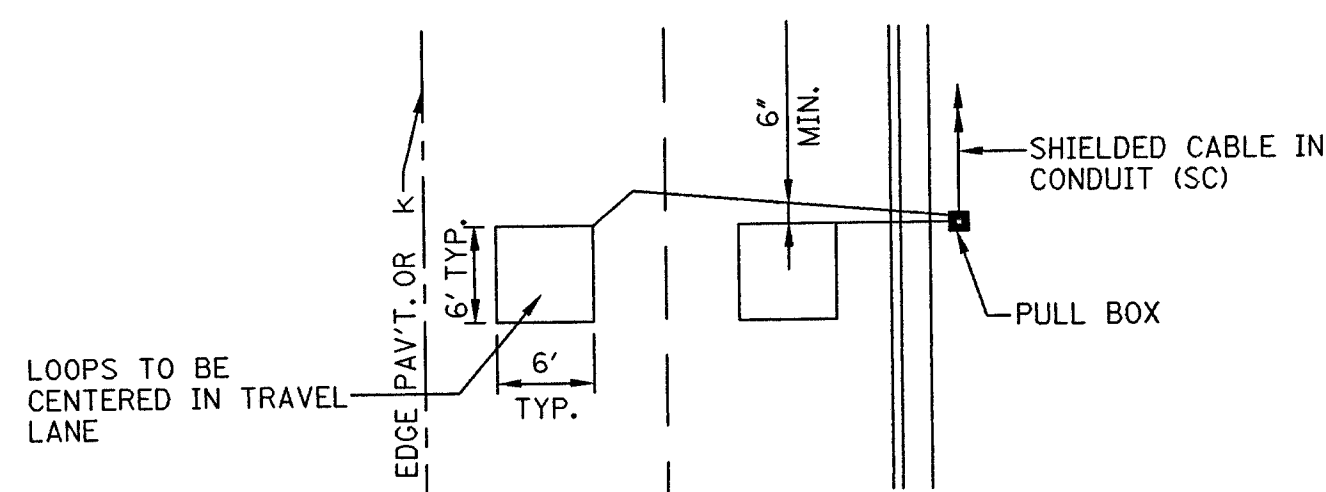
NOT TO SCALE

NOTE: NO LOOPS ARE TO BE INSTALLED THROUGH, OVER, OR UNDER TRANSVERSE CONCRETE JOINTS IN CONCRETE PAVEMENT, AND NO MANHOLES, INLETS, ETC. MAY BE LOCATED WITHIN A LOOP. IF ANY OF THE ABOVE ARE ENCOUNTERED THE LOCATION OF THE LOOP MAY BE VARIED SLIGHTLY AS DIRECTED BY THE ENGINEER. IF THE ABOVE ITEMS ARE UNAVOIDABLE, SMALLER LOOPS AS SHOWN BELOW MAY BE USED. SMALLER LOOPS USED TO REPLACE ONE LARGE LOOP MAY BE CONNECTED TO ONE CHANNEL.



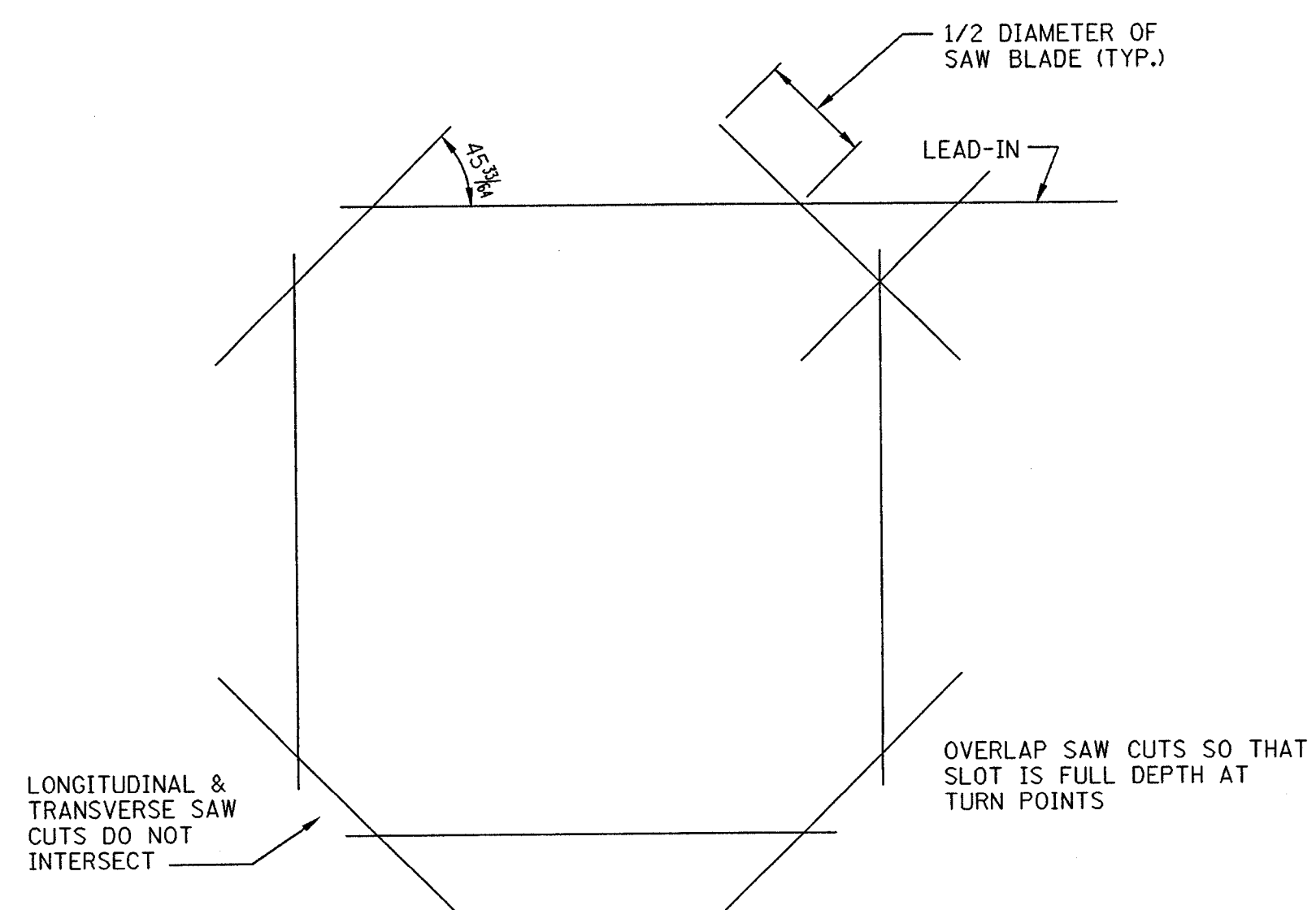
TYPICAL DETAIL OF LOOP DETECTOR WHERE TRANSVERSE CONCRETE JOINTS, MANHOLES, ETC. ARE ENCOUNTERED

NOT TO SCALE



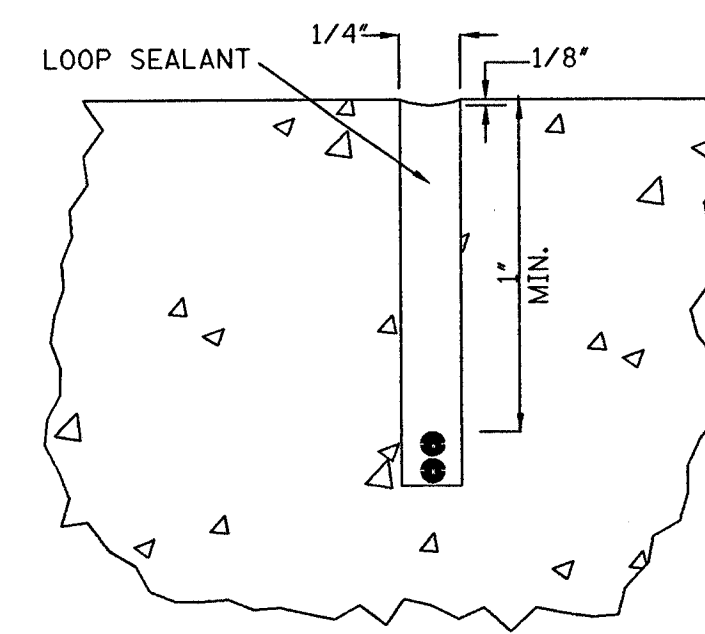
SMALL LOOP DETECTOR INSTALLATION DETAIL

NOT TO SCALE

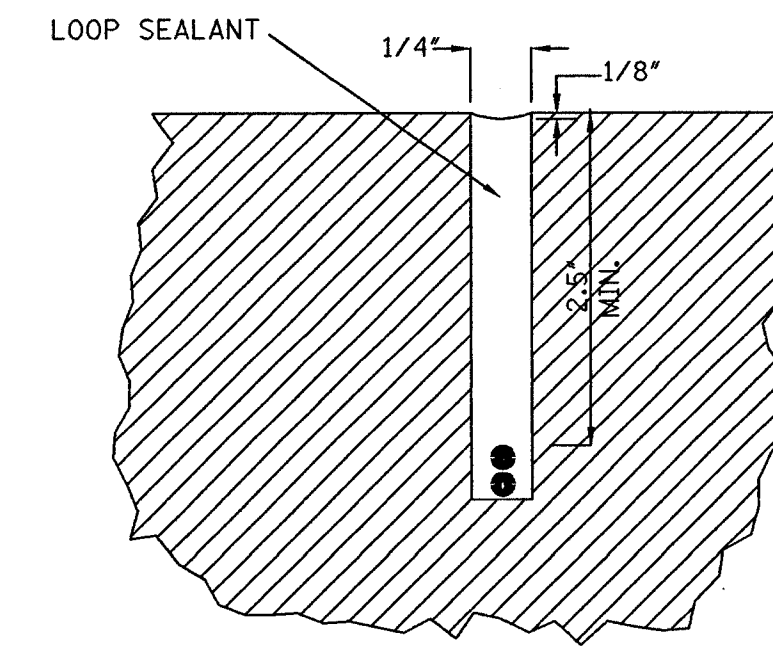


LOOP SLOT CONSTRUCTION DETAIL

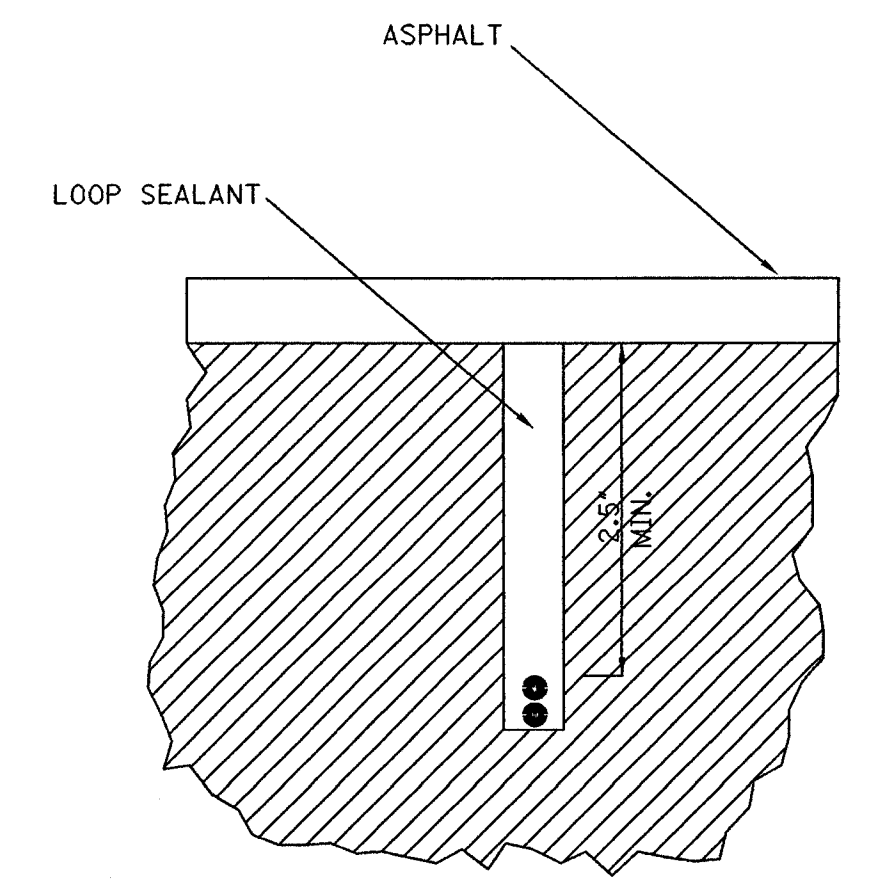
NOT TO SCALE



CONCRETE



IN PLACE ASPHALT



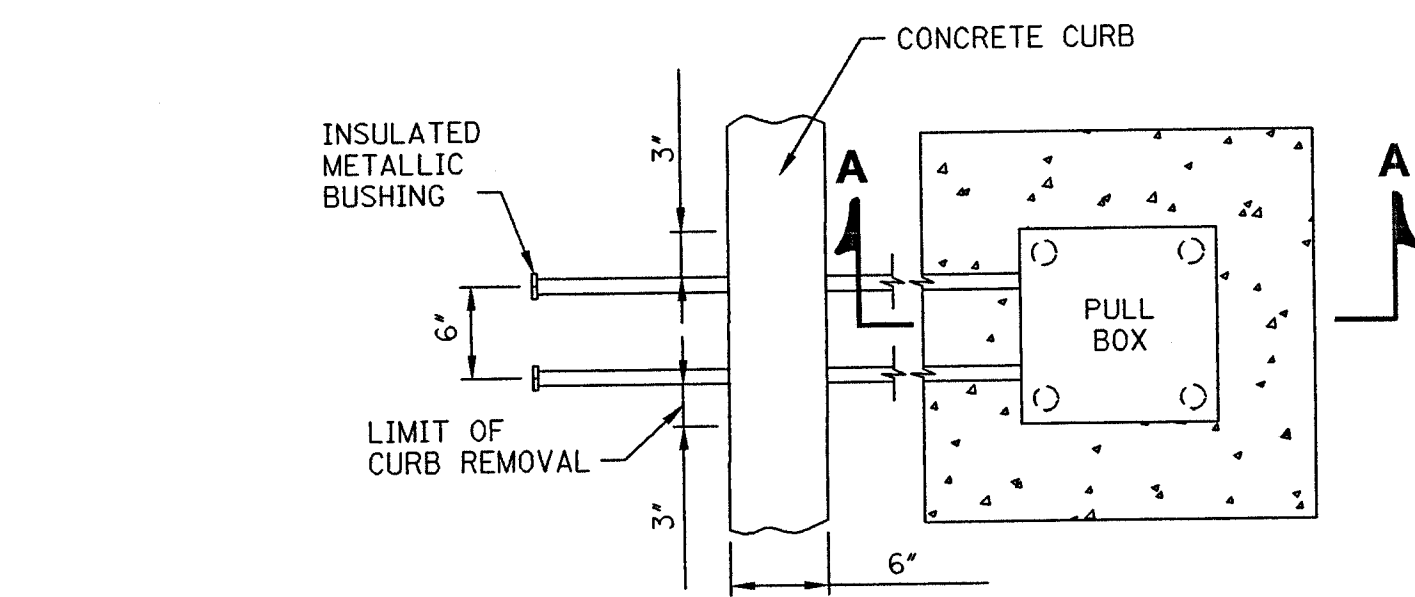
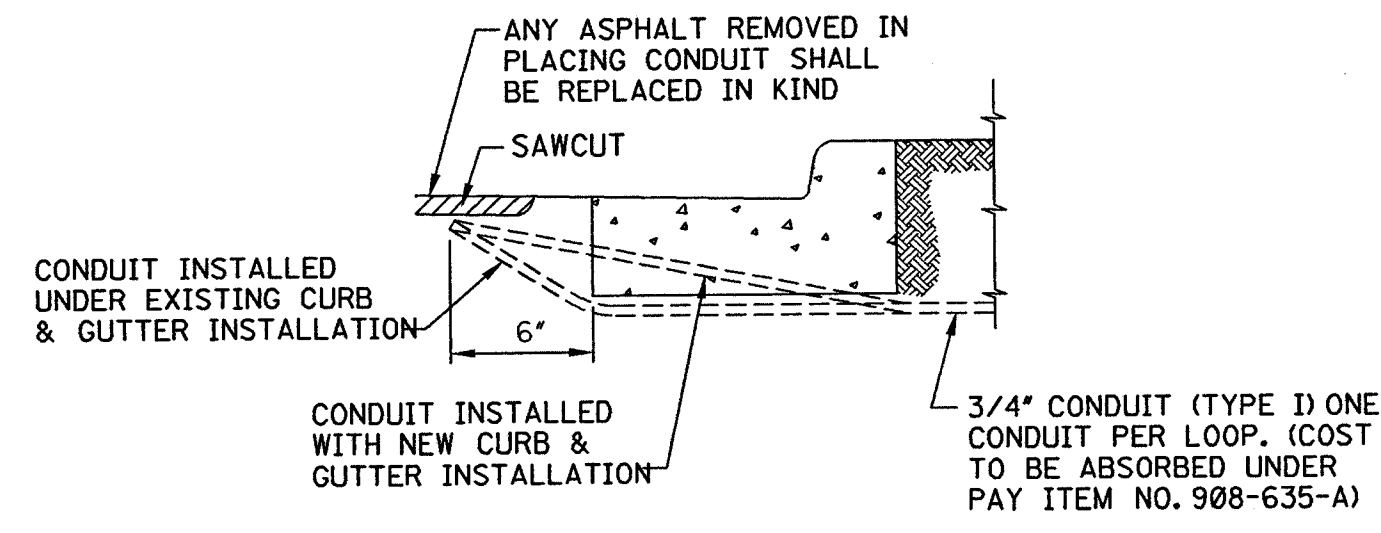
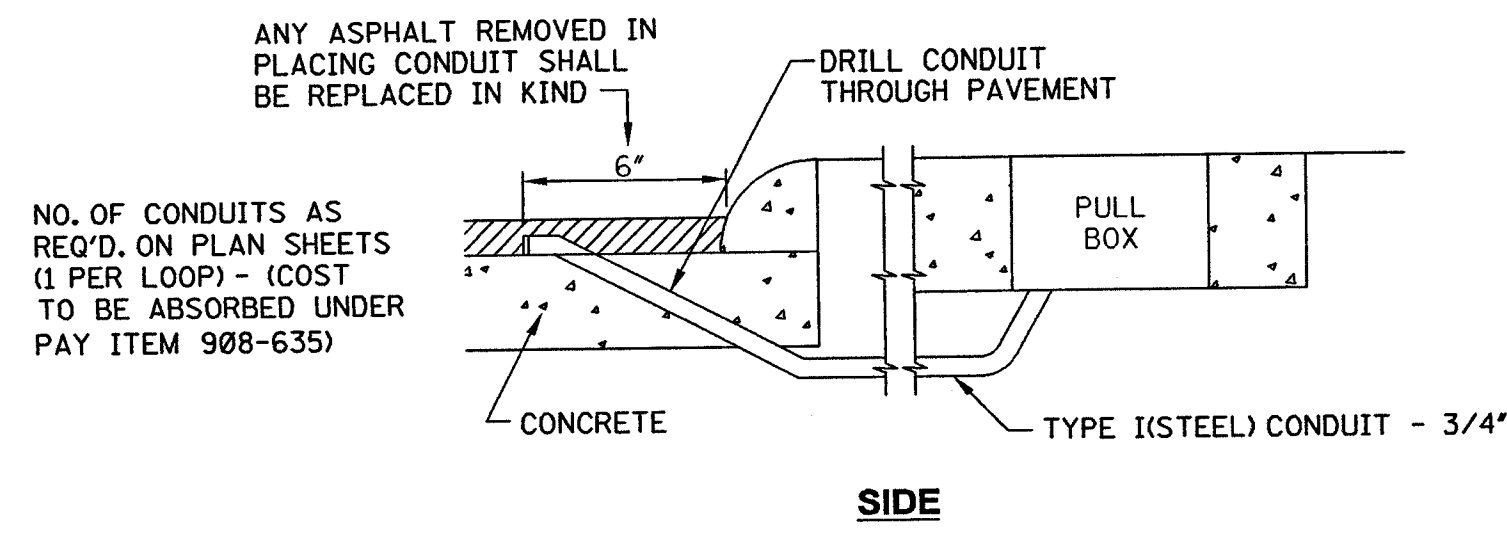
ASPHALT (NEW CONSTRUCTION)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

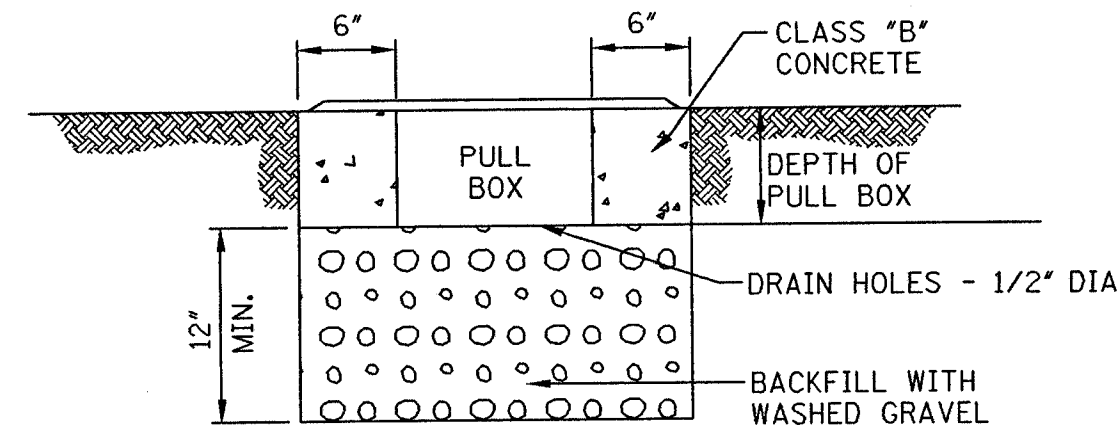
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1/8/2003

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
LOOP DETECTOR DETAILS FOR TRAFFIC SIGNAL INSTALLATION	
Project No.: STP-7302-00(005)	
County: MADISON	
DATE	WORKING NUMBER
DESIGN TEAM: Neel-Schaffner	TSD-2
CHECKED	SHEET NUMBER
DATE	17

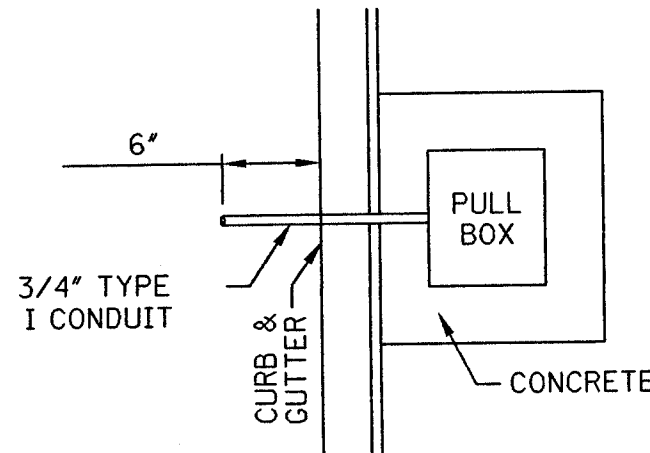


**TOP
DETAIL OF CONDUIT
THROUGH CURB
AND GUTTER**

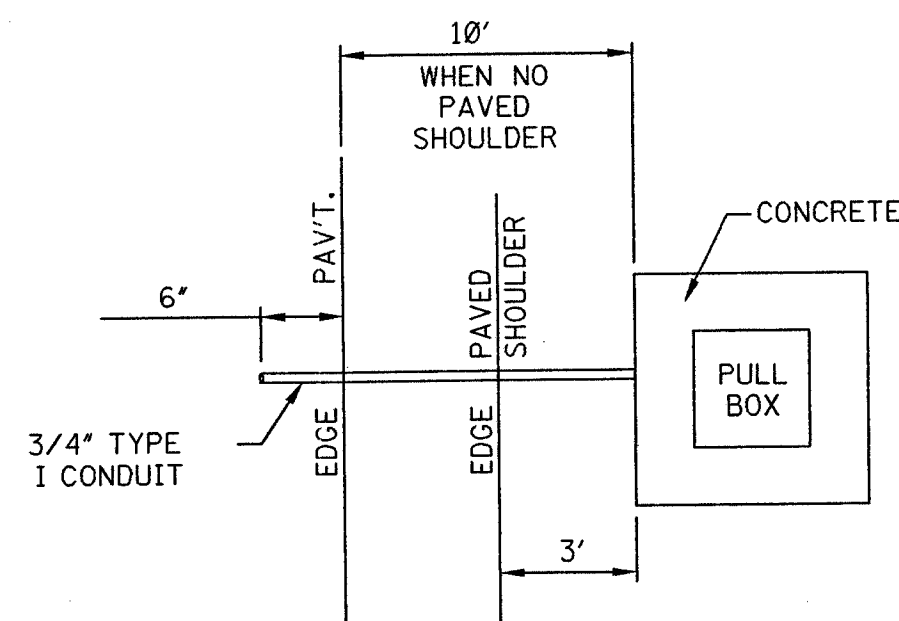


SECTION A-A

**PULL BOX DETAILS
NOT TO SCALE**



CURB AND GUTTER

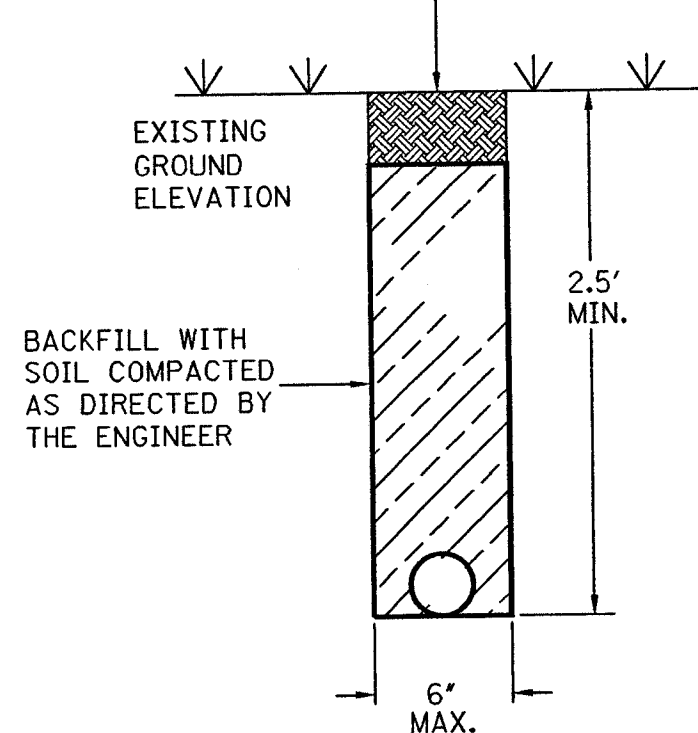


SHOULDER SECTION

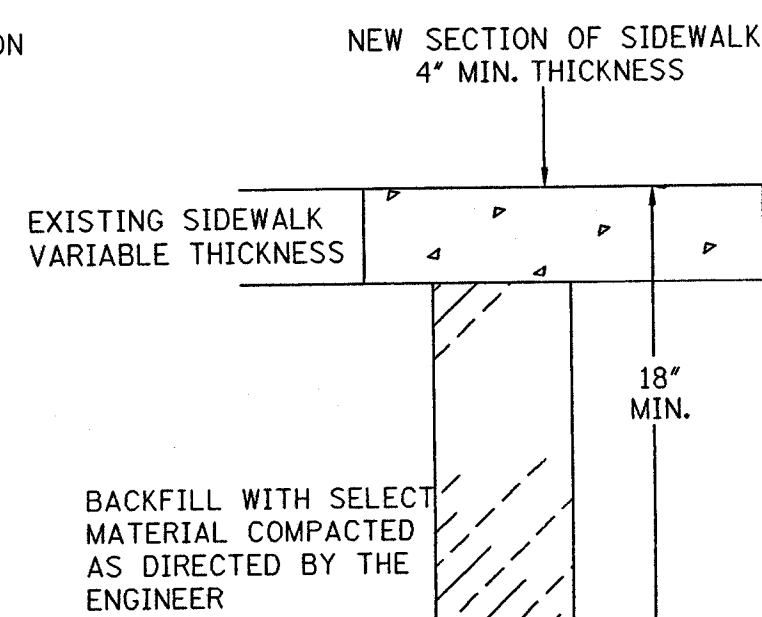
**PULL BOX LOCATION DETAIL
NOT TO SCALE**

NOTE: IF PULL BOX IS LOCATED IN EXISTING SIDEWALK, CONTRACTOR TO REMOVE SIDEWALK TO SECTION JOINTS, FOR A CLEAN INSTALLATION. COST TO BE ABSORBED IN BID ITEM FOR CONDUIT. AVOID LOCATING PULL BOXES IN DRIVEWAYS.

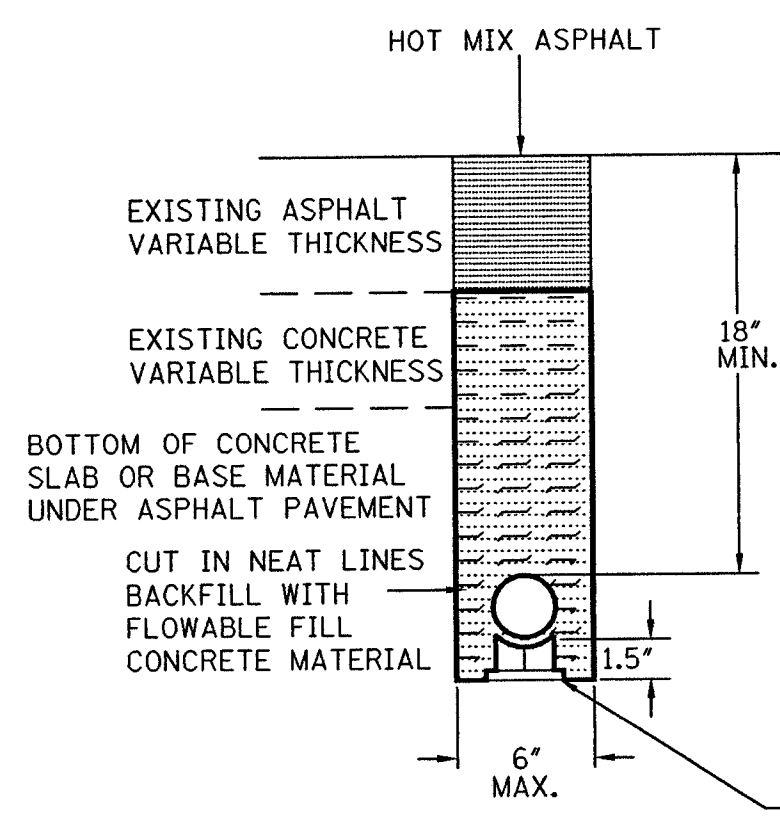
SURFACE TO BE RESTORED TO ORIGINAL CONDITION TO THE SATISFACTION OF THE ENGINEER



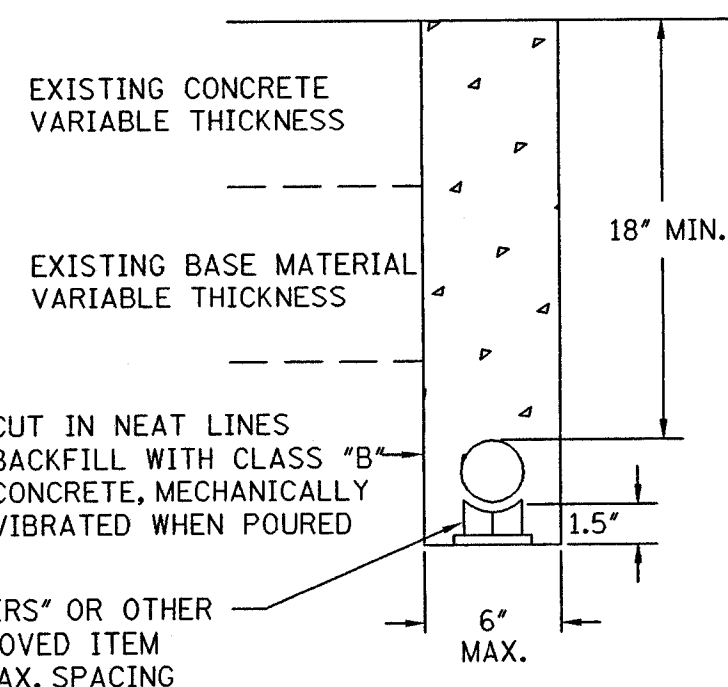
NON-PAVED AREA



SIDEWALK

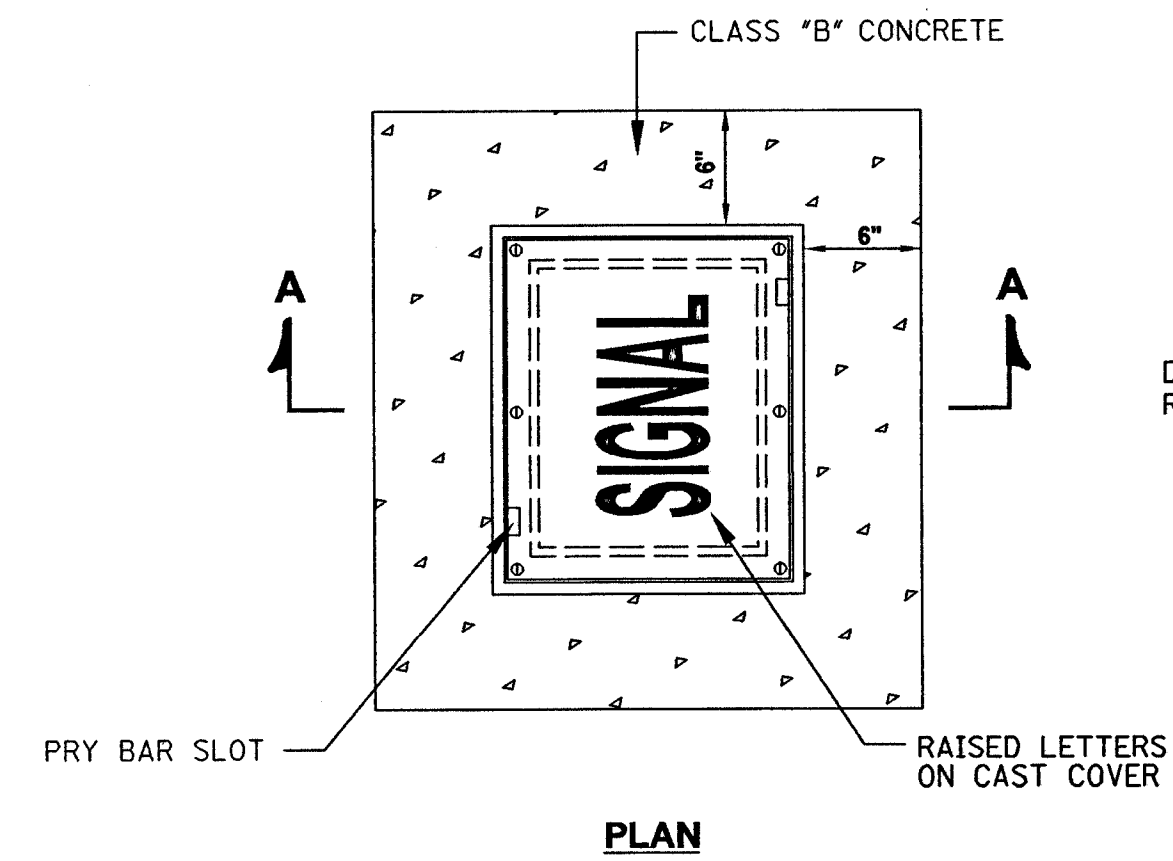


ASPHALT

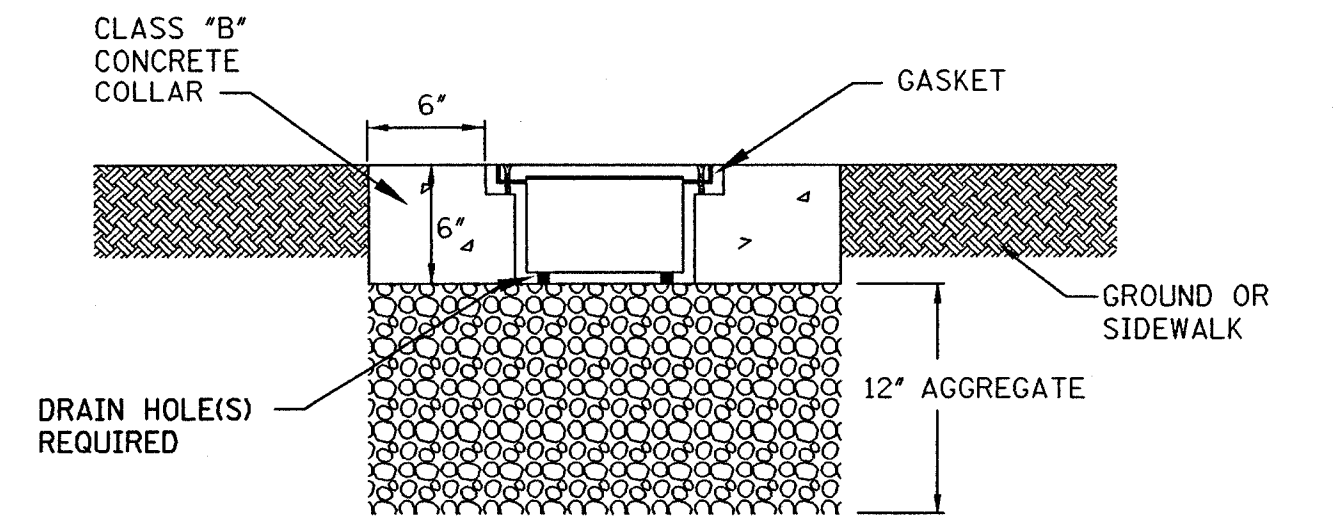


CONCRETE

**CONDUIT TRENCHING DETAIL
NOT TO SCALE**



PLAN

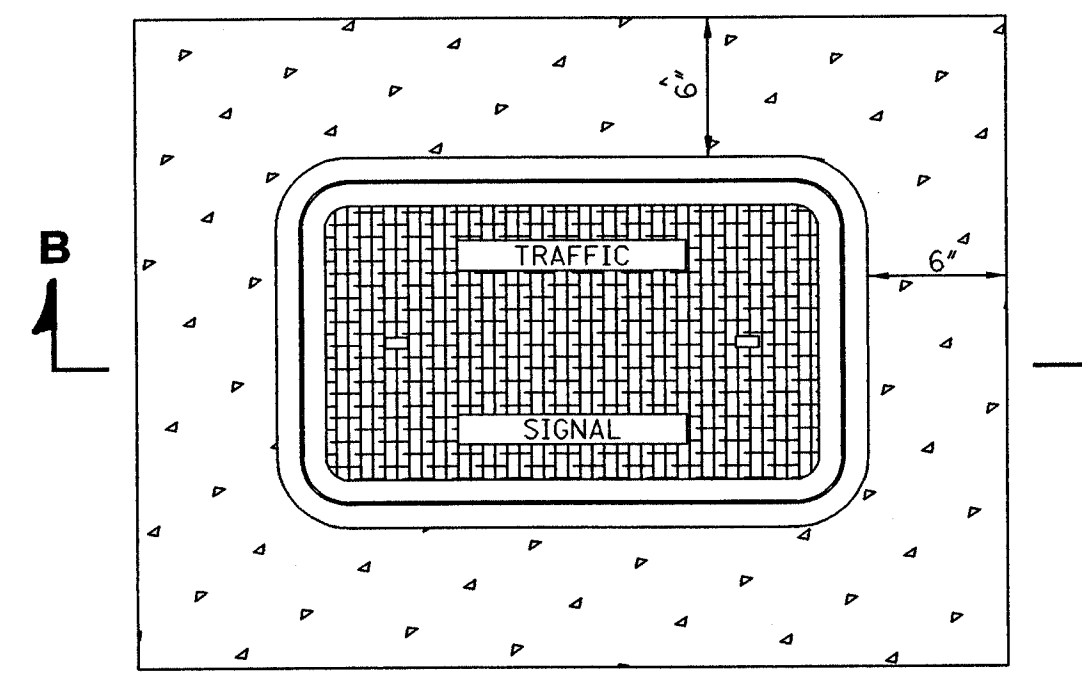


SECTION A-A

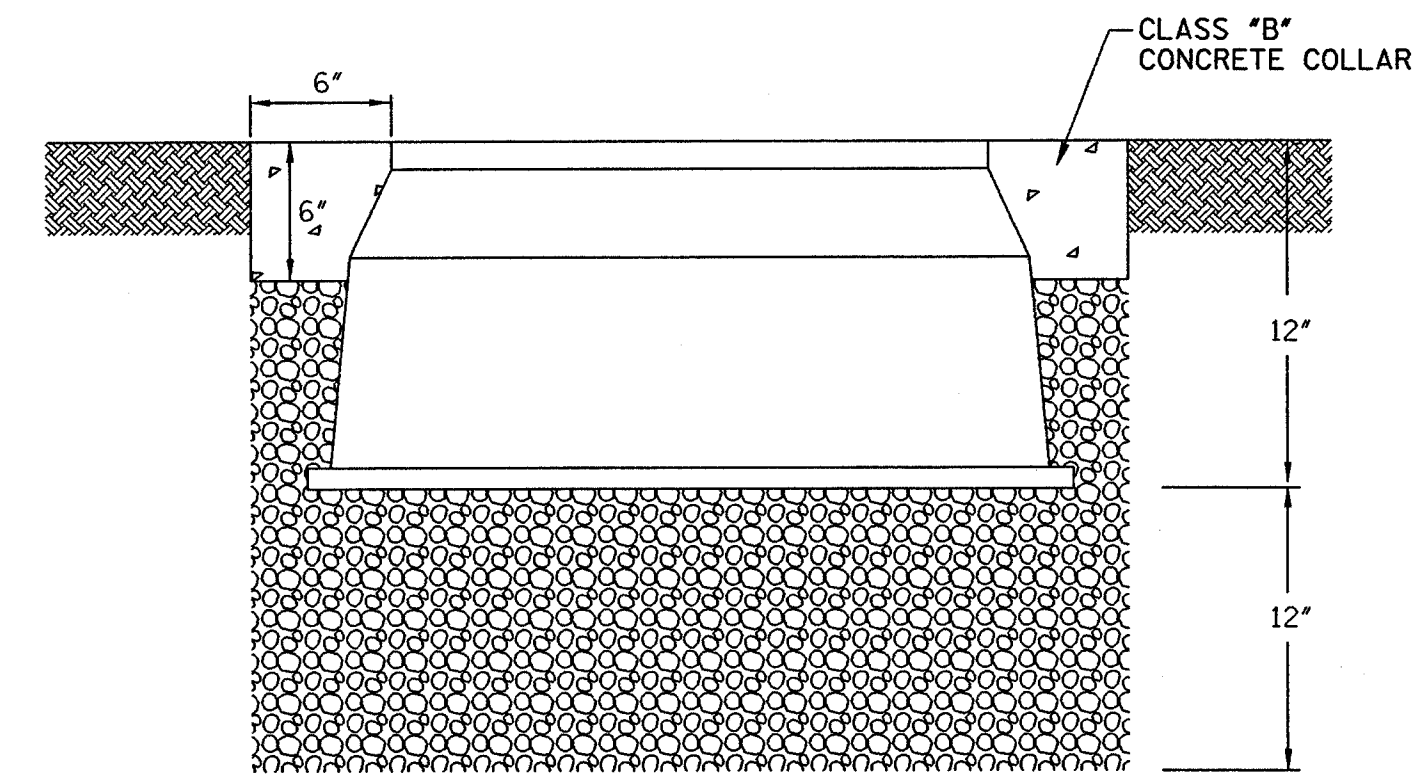
- PULLBOX NOTES:**
1. NOMINAL PULLBOX DIMENSIONS:
TYPE 1 - 8" x 8" x 6"
TYPE 2 - TOP BODY - 25" x 15" x 12"
 2. GRAVEL, 12" DEEP, IS REQUIRED UNDER PULLBOXES FOR DRAINAGE.
 3. CONCRETE COLLAR, 6" x 6", IS REQUIRED FOR PULLBOXES PLACED IN SOIL. (COST ABSORBED)
 4. TRAFFIC SIGNAL, TRAFFIC OR SIGNAL LEGEND REQUIRED.
 5. COVERS SHALL BOLT DOWN.
 6. PULL BOXES AND COVERS SHALL BE TRAFFIC LOAD BEARING BASED ON 15,000 LB. LOAD OVER 10" x 10" AREA.

**TWO-PIECE PULLBOX
(TYPE 1)
NOT TO SCALE**

CAST IRON, CAST ALUMINUM, WELDED ALUMINUM, OR APPROVED EQUAL



PLAN



SECTION B-B

**TWO-PIECE PULLBOX
(TYPE 2 OR TYPE 3)
NOT TO SCALE**

PRECAST CLASS "B" CONCRETE, CAST IRON, COMPOSOLITE, OR APPROVED EQUAL

NOTES :

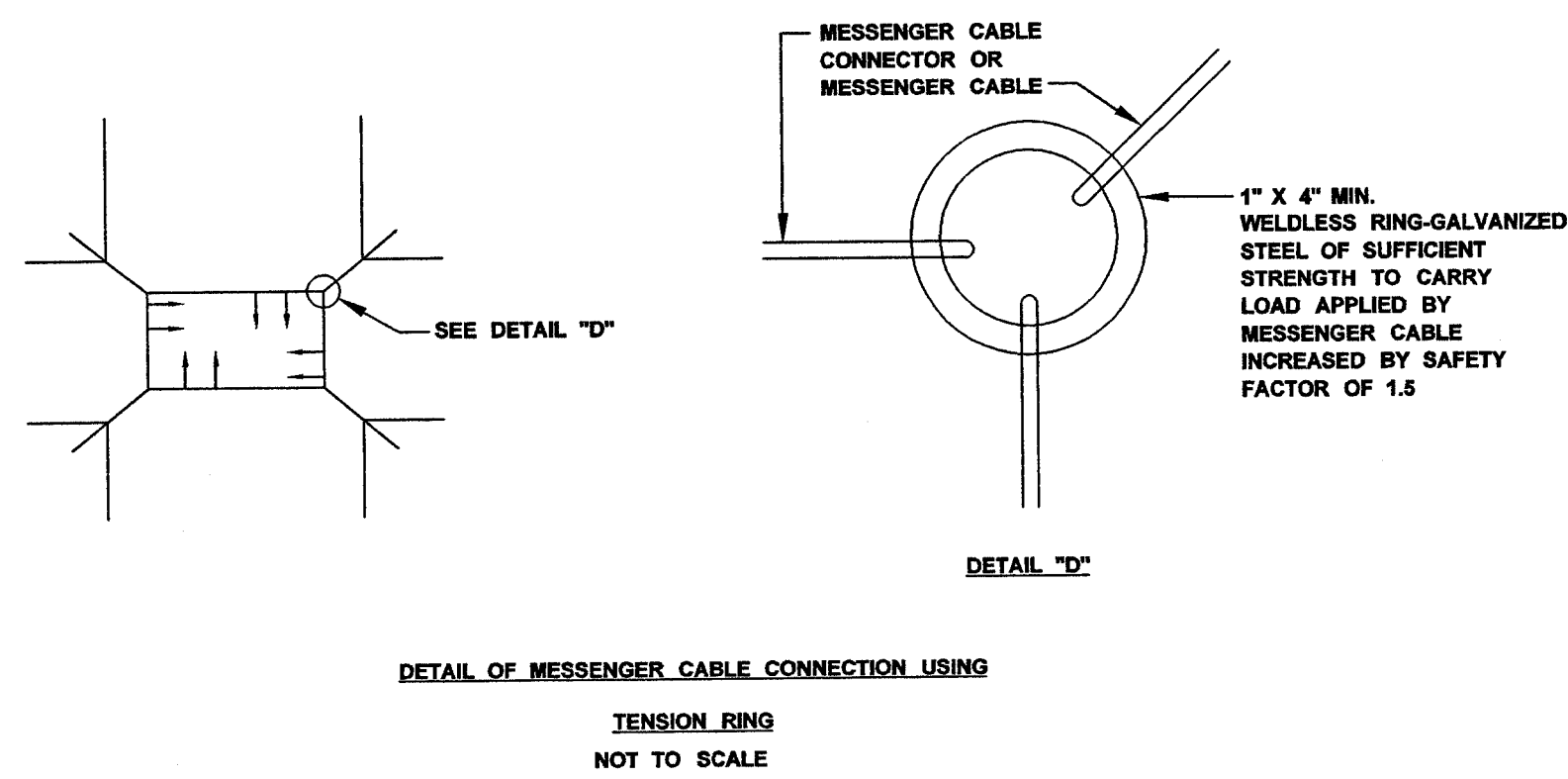
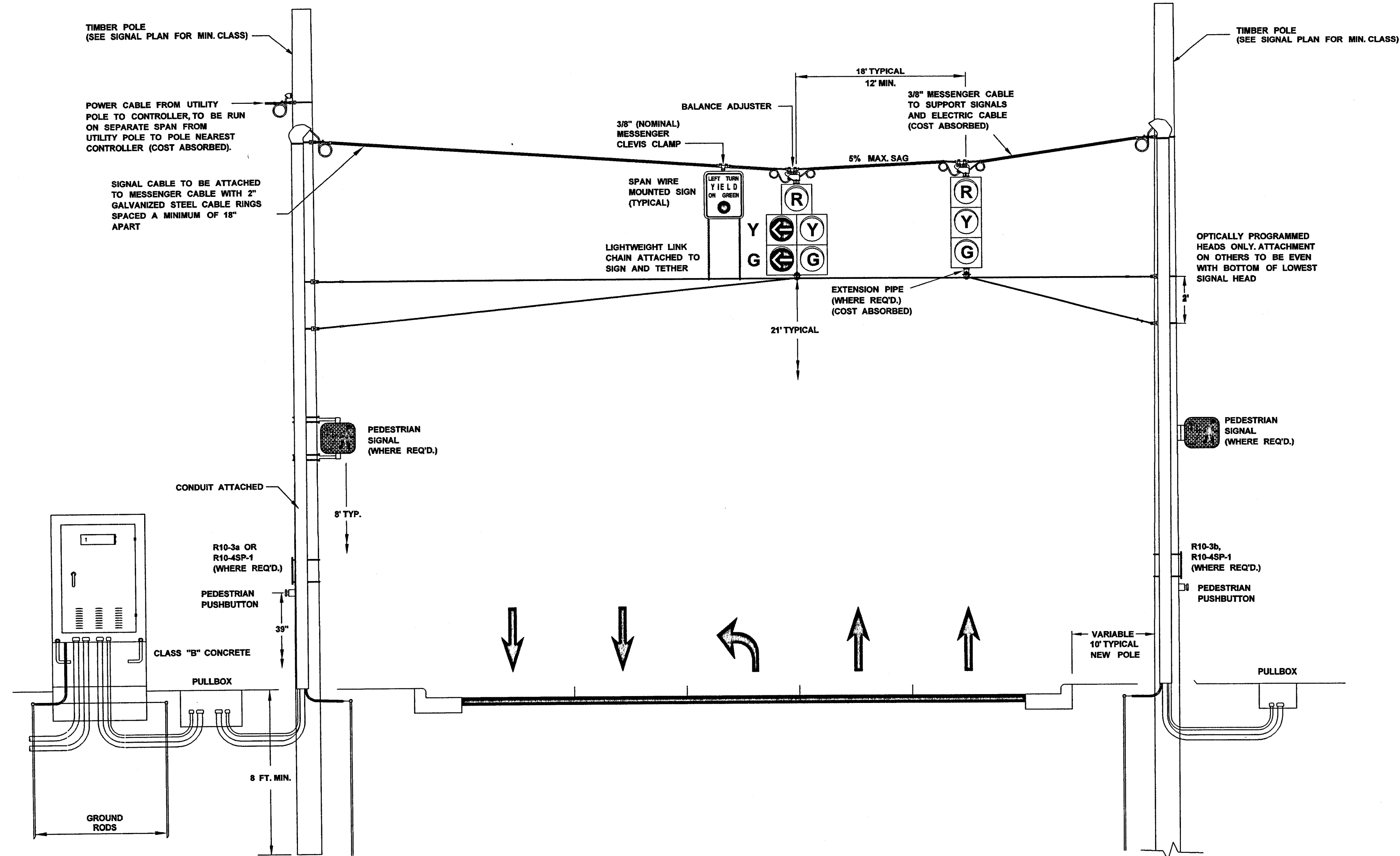
1. CONDUIT TO BE SEALED WITH DUCT SEALER ONCE CABLE IS INSTALLED.
2. SAWCUT SIDEWALK AT EXISTING JOINTS AND REPLACE ENTIRE SECTION TO MATCH EXISTING MATERIAL. WHEN NEW SIDEWALK IS BEING CONSTRUCTED, CONDUIT, PULLBOX, AND POLE ARE TO BE INSTALLED BEFORE SIDEWALK IS POURED.
3. TYPE I CONDUIT IS RIGID STEEL; TYPE IV CONDUIT IS PVC.
4. CONDUIT MAY BE TRENCHED OR JACKED. ELECTRICAL SUBCONTRACTOR SHALL COORDINATE CONDUIT INSTALLATION WORK UNDER ROADWAY WITH ROADWAY CONSTRUCTION PHASING IN ORDER TO MINIMIZE JACKING.
5. MATERIAL REMOVED THAT IS NOT SUITABLE FOR BACKFILL OR IS EXCESS SHALL BE DISPOSED OF BY THE CONTRACTOR.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		<p align="center">PULL BOX AND CONDUIT TRENCHING DETAILS FOR TRAFFIC SIGNAL INSTALLATION</p> <p>Project No.: STP-7302-00(005) County: MADISON</p>	
DATE	DESIGN		
FILENAME:	TSD-3r1	WORKING NUMBER	TSD-3
DESIGN	Neel-Schoffner	CHECKED	DATE
			SHEET NUMBER
			18

ROADWAY DESIGN DIVISION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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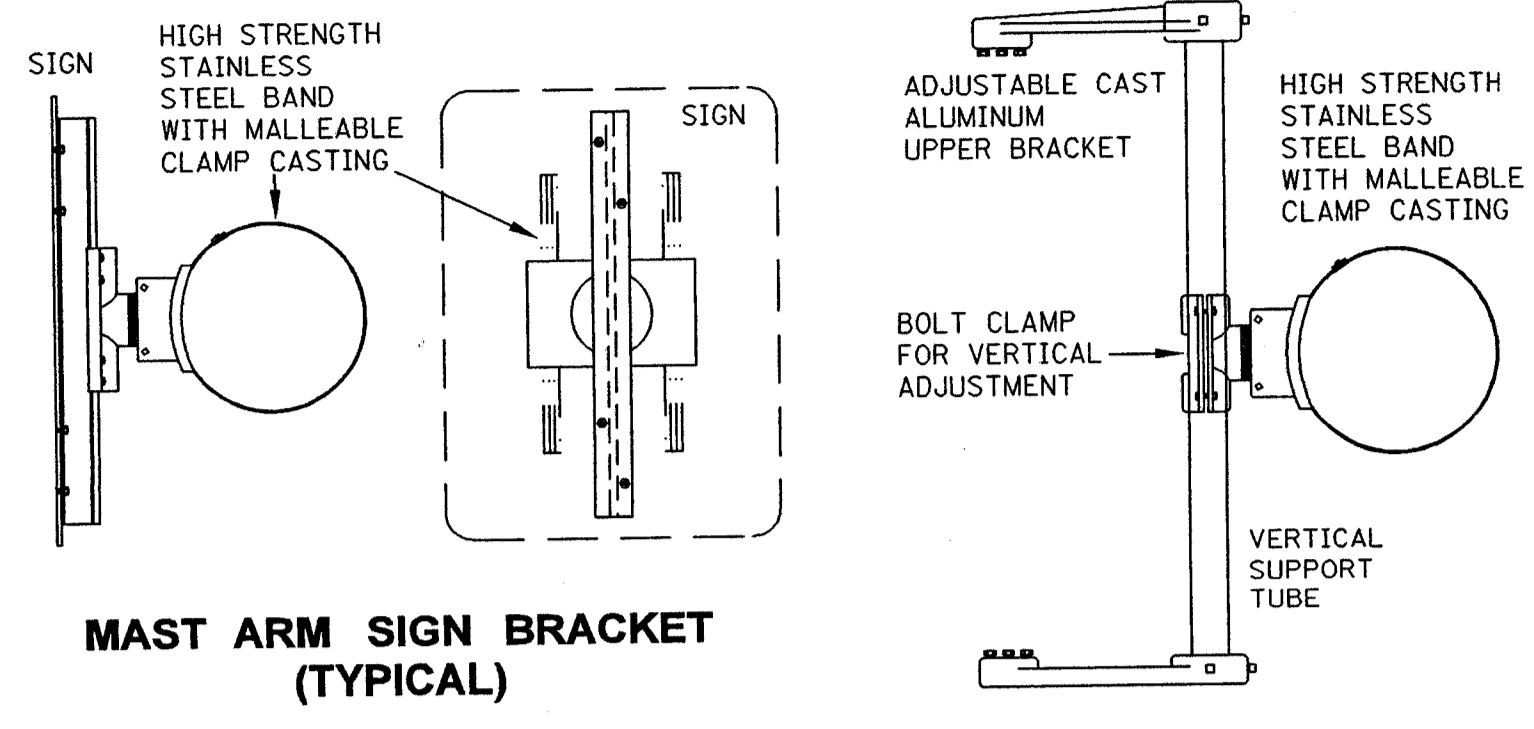
1/8/2003



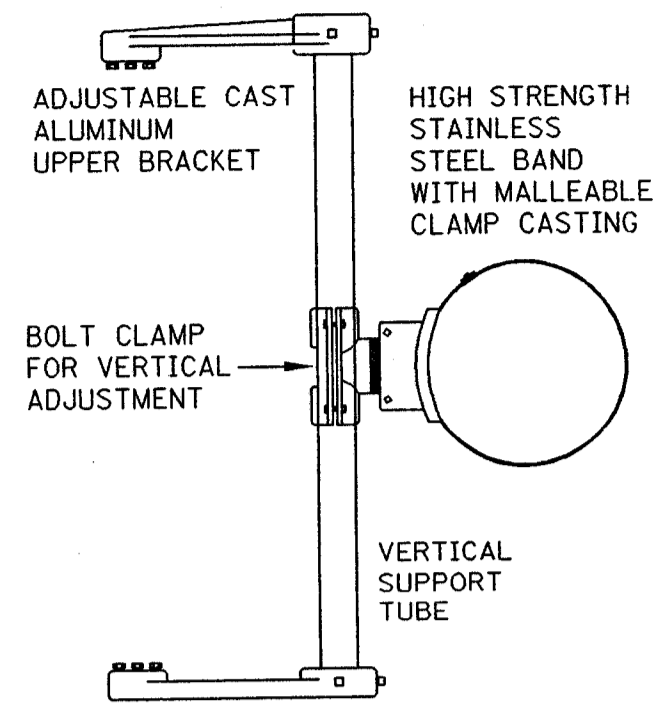
DETAIL OF MESSENGER CABLE CONNECTION USING TENSION RING NOT TO SCALE

PLAN ROADWAY DESIGN DIVISION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TEMPORARY SIGNAL DETAILS JACKSON ST. AND SUNNYBROOK RD. INTERSECTION IMPROVEMENTS CITY OF RIDGELAND, MS	
PROJECT NO.: STP-7302-00(005)	WORKING NUMBER TSD-4
COUNTY: MADISON	SHEET NUMBER 19
FILENAME: DET4r1.dgn	DATE
DESIGN TEAM: Neel-Schaffner	CHECKED: DATE

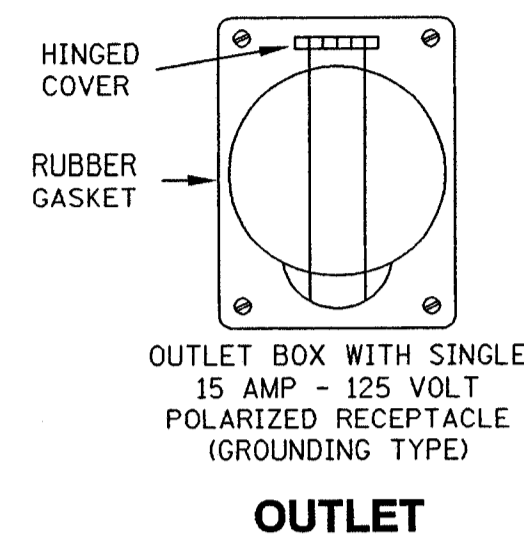


MAST ARM SIGN BRACKET (TYPICAL)



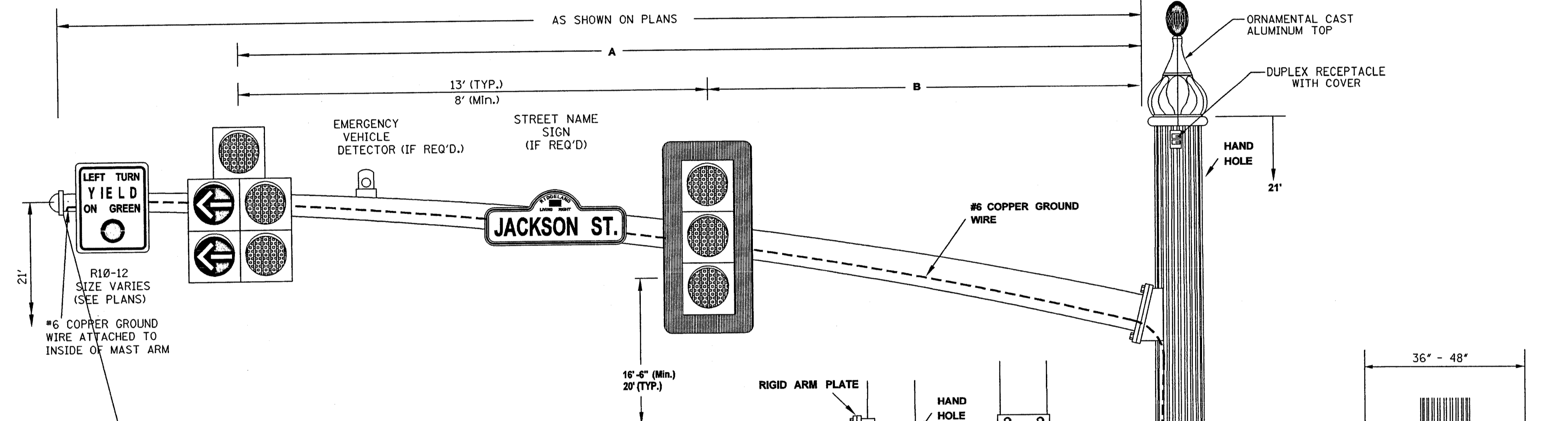
SIGNAL MOUNTING BRACKET (TYPICAL)

NOTES:
 LIGHT FIXTURE WITH 150 WATT LAMPS AND PHOTO CELL TO BE PROVIDED BY THE CONTRACTOR. (COST ABSORBED)
 LUMINAIRE CABLE SHALL BE COST ABSORBED.

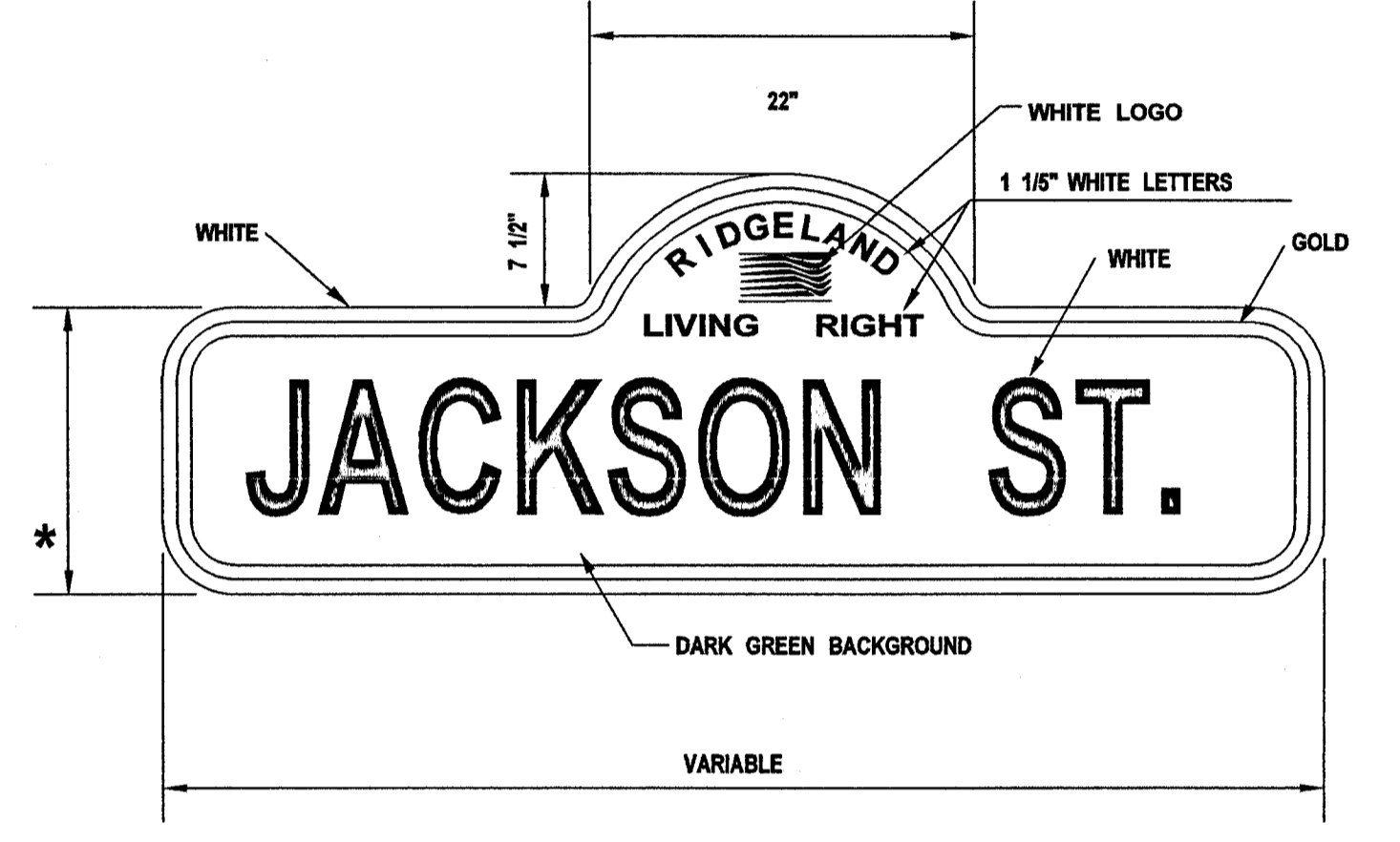


OUTLET

- NOTES:
1. WIRE ENTRANCE TO MAST ARM WILL BE FIELD DRILLED TO CORRESPOND TO THE LOCATION OF THE SIGNAL HEADS WHEN ALIGNED IN FIELD.
 2. ALL POLES, BASES, MAST ARMS ACCESSORIES AND SIGNAL HEADS TO BE BLACK IN COLOR.
 3. RED SECTION INDICATIONS TO BE APPROXIMATELY SAME HEIGHT.
 4. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE POLE MANUFACTURER.
 5. DESIGN WIND LOAD FOR POLES AND MAST ARMS IS 70 MPH.
 6. #6 COPPER GROUND WIRE INSIDE POLE AND MAST ARM TO BE COST ABSORBED.
 7. ALL SIGNAL POLES SHALL BE DESIGNED FOR ULTIMATE LOADING OF ONE FIVE SECTION HEAD, TWO THREE SECTION HEADS AND ONE R10-12 SIGN PER MAST ARM.
 8. ACCESS DOOR IN BASE TO COINCIDE WITH HAND HOLE IN SHAFT.
 9. SIGNAL HEADS TO BE VERTICALLY ADJUSTED IN FIELD TO MAXIMIZE LINE OF SIGHT.
 10. SIGNAL HEADS AND BACKPLATES SHALL BE BLACK IN COLOR.
 11. MAST ARMS SHALL BE "NOSTALGIC" TYPE SIMILAR TO UNION METAL CORP. NOSTALGIA SERIES, COLUMBIAN FAMILY CONTRACTOR SHALL SUBMIT MAST ARM TYPE TO ENGINEER FOR APPROVAL.
 12. LAMPS SHALL BE SIMILAR TO UNION METAL CORP. DESIGN NL109. CONTRACTOR SHALL SUBMIT LAMP STYLE TO ENGINEER FOR APPROVAL.
 13. ORNAMENTAL TOP SHALL BE SIMILAR TO UNION METAL CORP. STYLE L107-J1 TOP. CONTRACTOR SHALL SUBMIT ORNAMENTAL TOP STYLE TO ENGINEER FOR APPROVAL.
 14. ORNAMENTAL POLE BASE SHALL BE SIMILAR TO UNION METAL CORP. BASE NO. 230. CONTRACTOR SHALL SUBMIT BASE DESIGN TO ENGINEER FOR APPROVAL.
 15. LUMINAIRE CROSS ARMS SHALL BE SIMILAR TO UNION METAL CORP. STYLE 1075. CONTRACTOR SHALL SUBMIT CROSS ARM DESIGN TO ENGINEER FOR APPROVAL.



MAST ARM ATTACHMENT



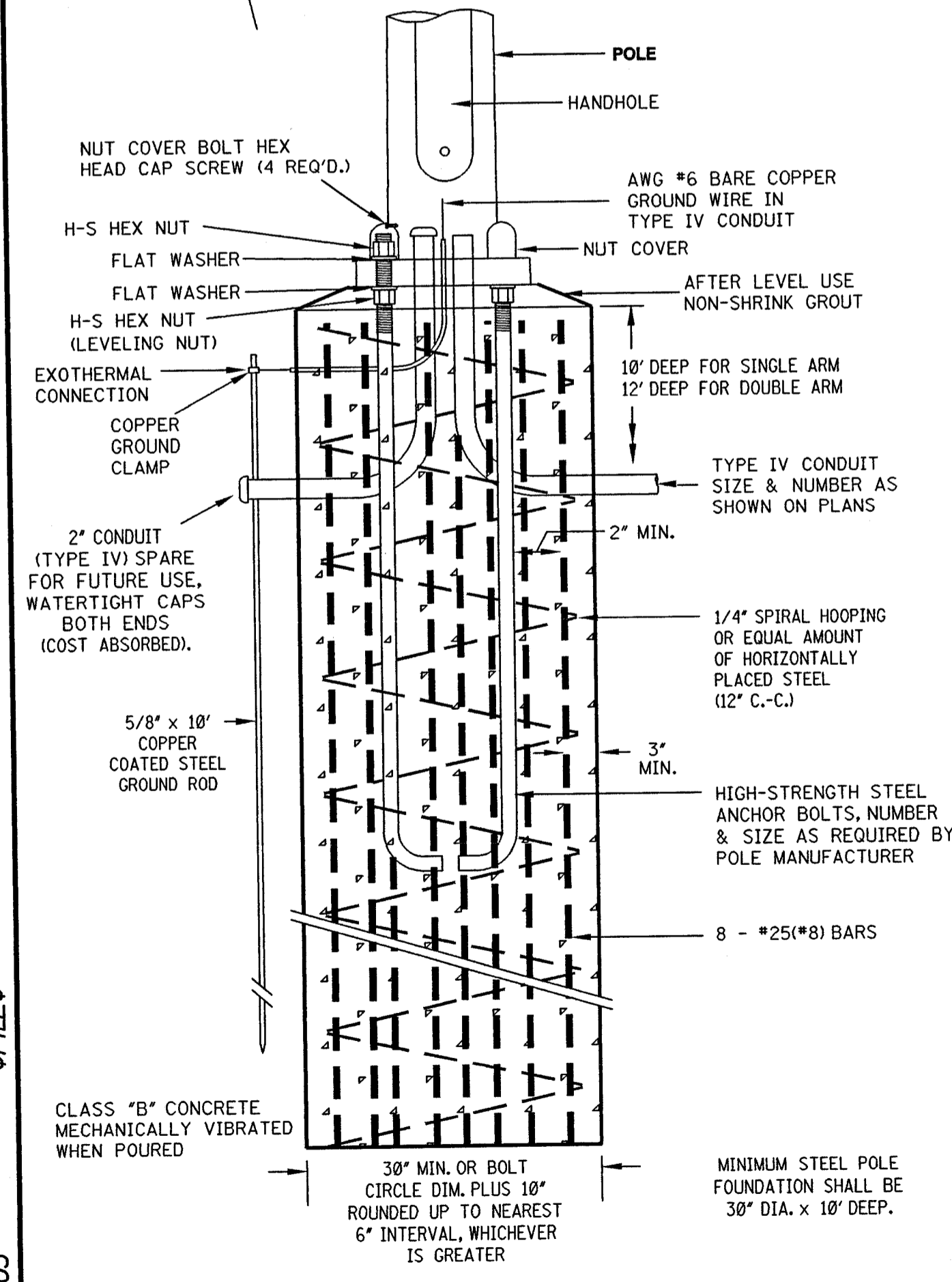
STREET NAME SIGNS (TYPICAL)

* HEIGHT = 1'-6" FOR SINGLE NAME, 2'-0" FOR 2 NAMES
 8" UPPER CASE, 6" EXTENSIONS : RD., DR., CR., ETC. "TIMES NEW ROMAN BOLD"
 THE SIGN BLANK SHALL BE A SINGLE PIECE OF SMOOTH CUT ALUMINUM FROM
 ASTM B-209 ALLOY 5052H36, 5052-H38, 5154-H38 OR 6061-T6 SHEETS
 IN 0.080 INCH THICKNESS. THE ALUMINUM SHALL BE DEGREASED AND
 LIGHTLY ACID ETCHED BEFORE THE SIGN SHEETING IS APPLIED. THE SIGN
 SHEETING SHALL BE APPLIED TO THE PANELS IN ACCORDANCE WITH THE
 RECOMMENDATIONS OF THE RETROFLECTIVE SHEETING MANUFACTURER.

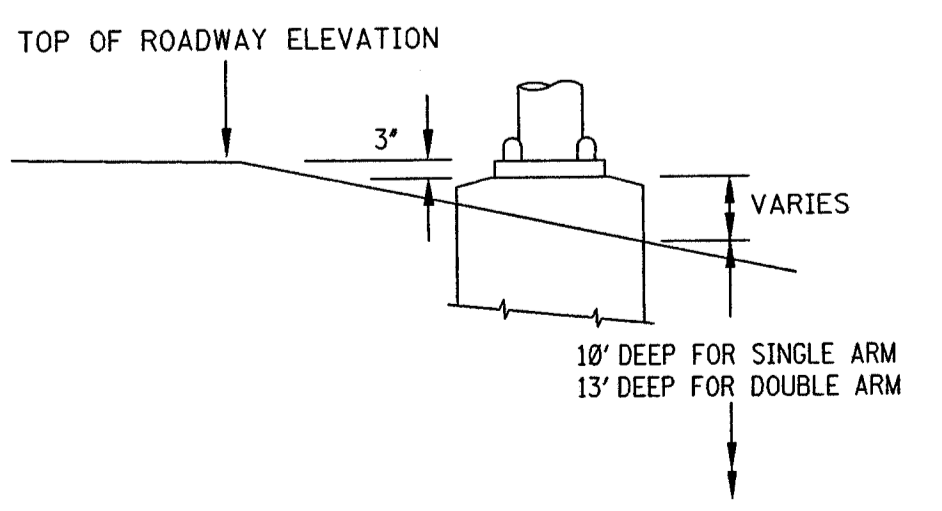
THE DECORATIVE STREET NAME SIGNS SHALL BE FINISHED ON BOTH SIDES.
 THE SIGN SHEETING MATERIAL SHALL BE (ITEM #1) REFLECTIVE ENCLOSED
 LINES (ENGINEER GRADE) CONFORMING TO FEDERAL SPECIFICATIONS FP92.
 THE COLORS OF THE DECORATIVE STREET NAME SIGNS SHALL MATCH THE
 EXISTING DECORATIVE STREET NAME SIGNS.

ROADWAY DESIGN DIVISION C.A.D.D. SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

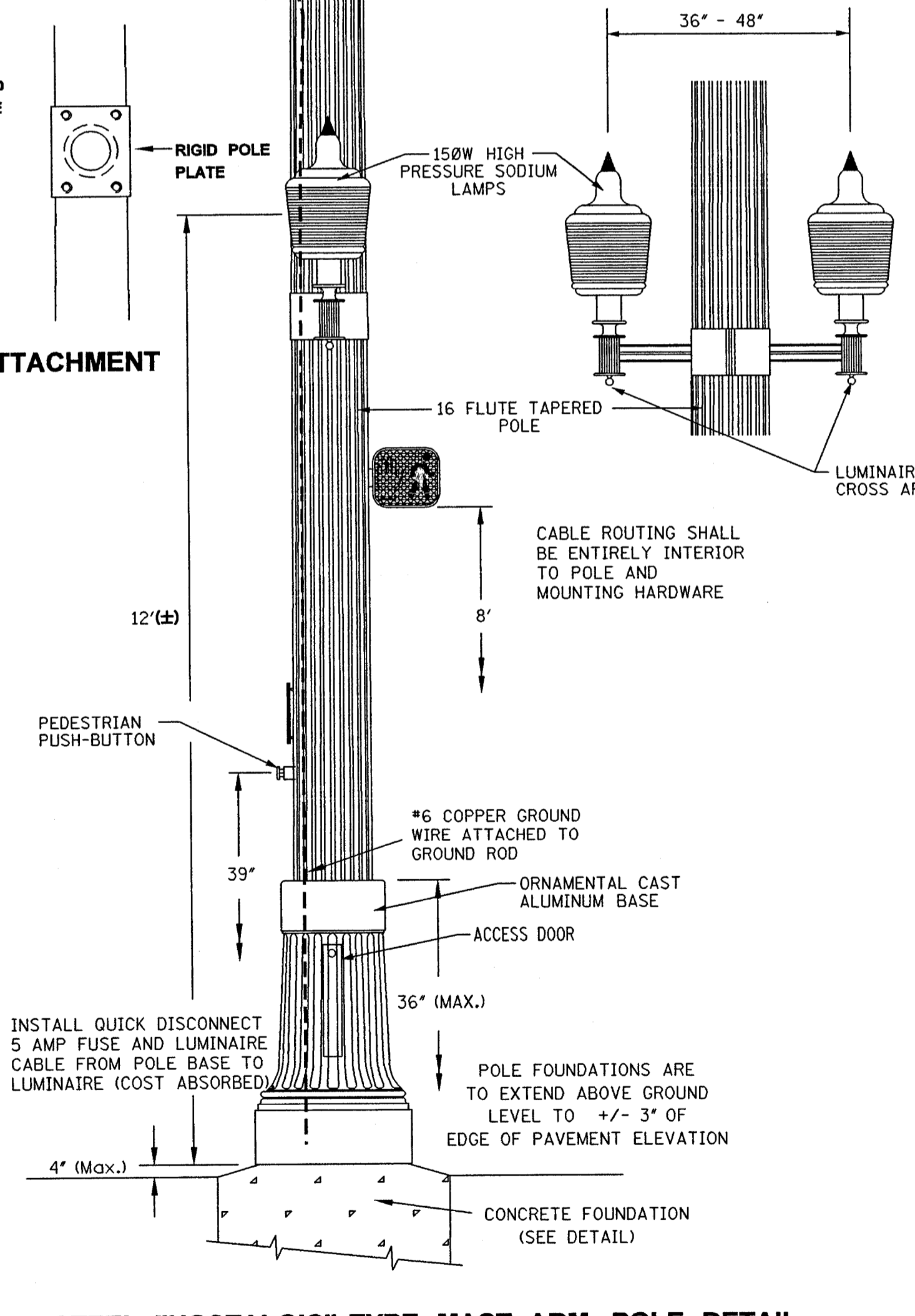
\$ FILE 1/8/2003



STEEL MAST ARM POLE FOUNDATION DETAIL

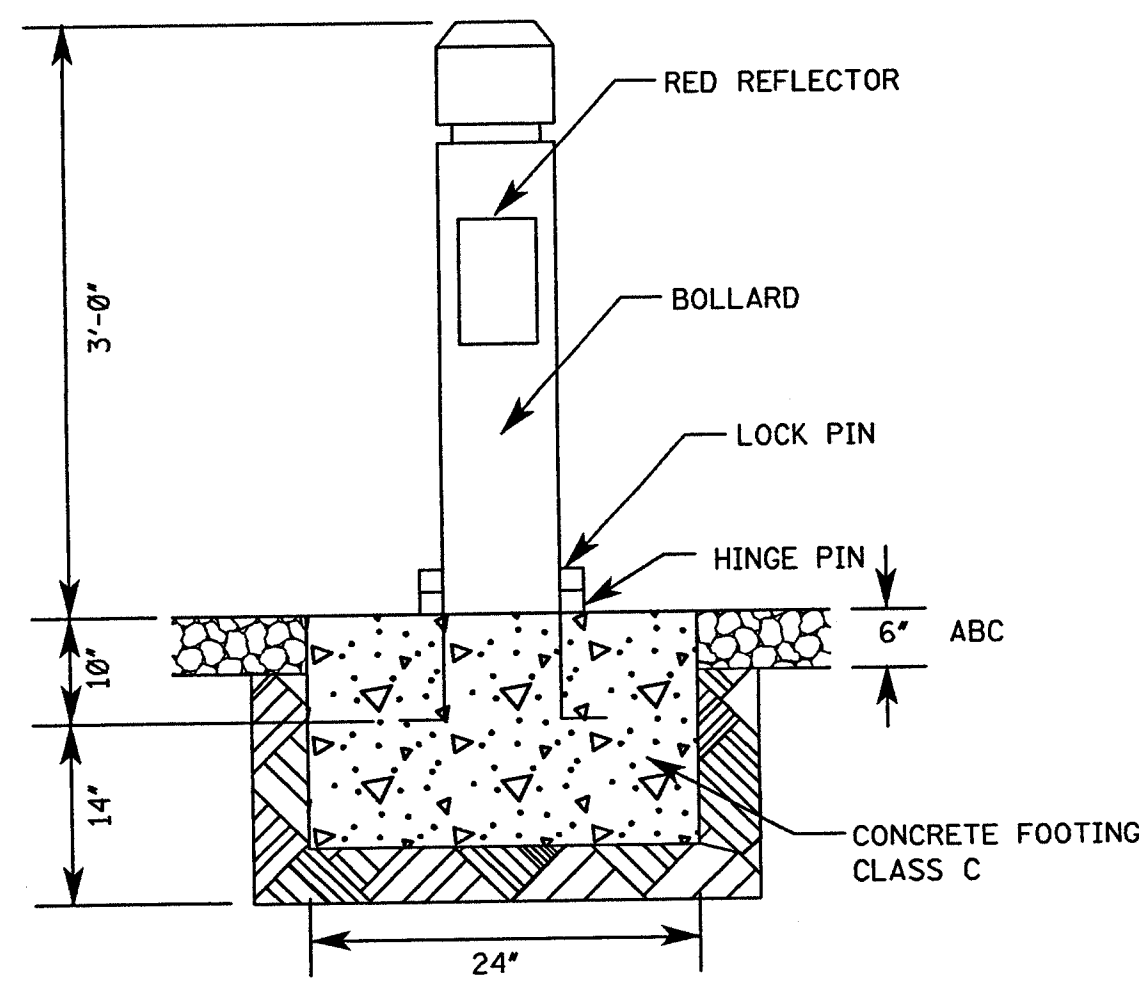


LOW SHOULDER FOUNDATION DETAIL

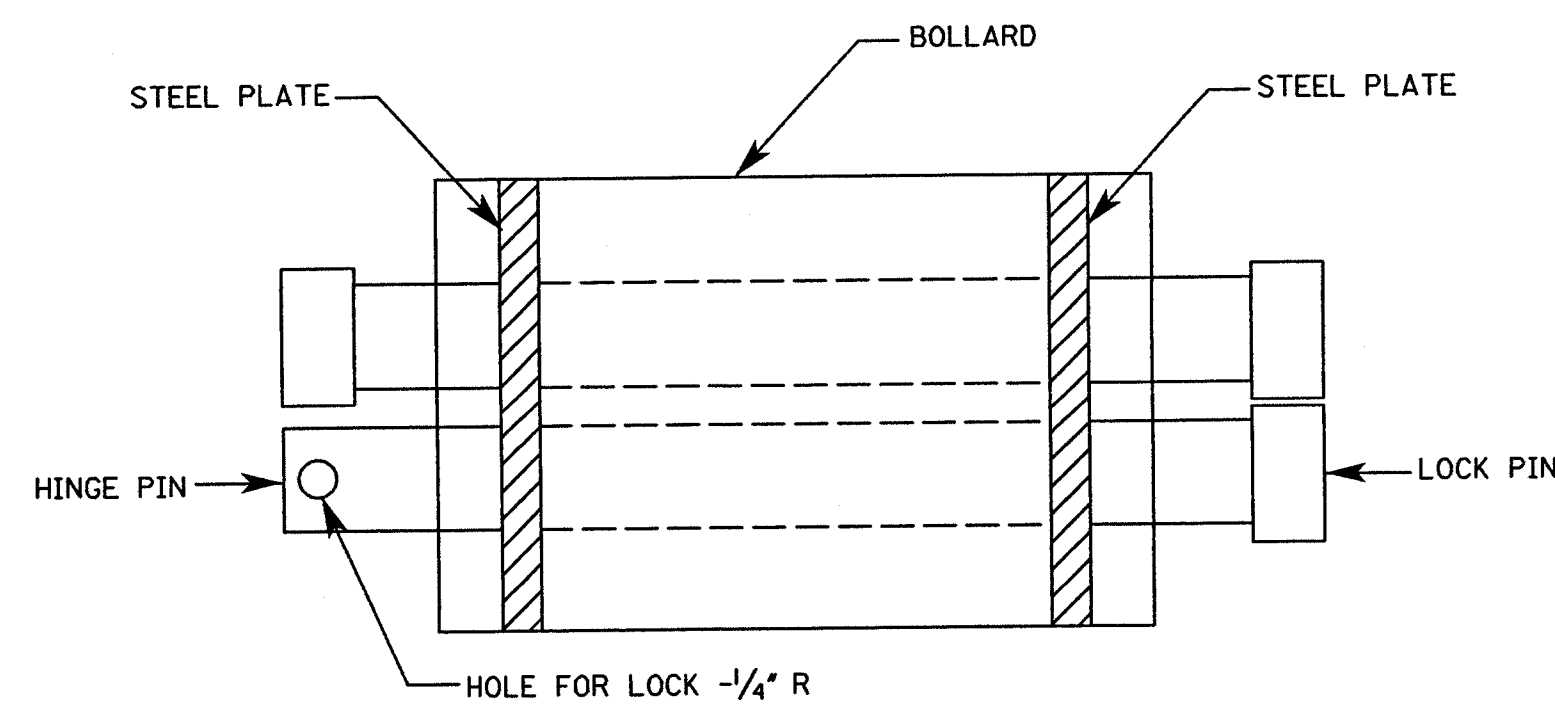


STEEL "NOSTALGIC" TYPE MAST ARM POLE DETAIL

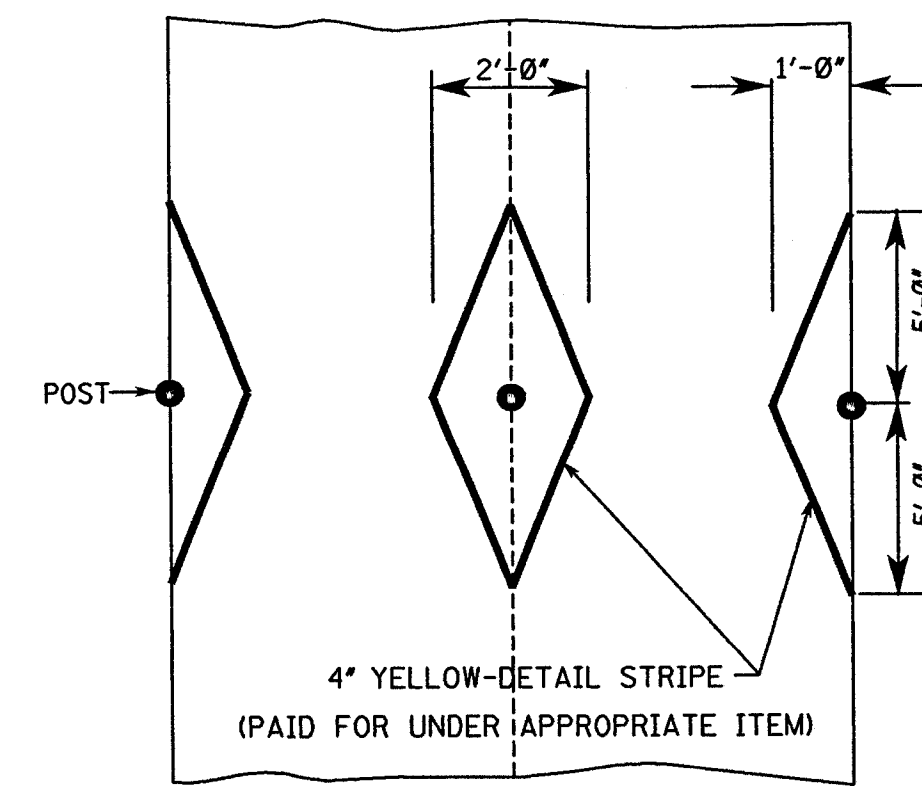
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
MAST ARM AND PEDESTAL POLE DETAILS FOR TRAFFIC SIGNAL INSTALLATION	
Project No.: STP-7302-00(005)	
County: MADISON	
DATE	FILENAME: TSD-6N
DESIGN TEAM: Neel-Schaffner	CHECKED: DATE
REVISION	WORKING NUMBER
	TSD-6
	SHEET NUMBER
	21



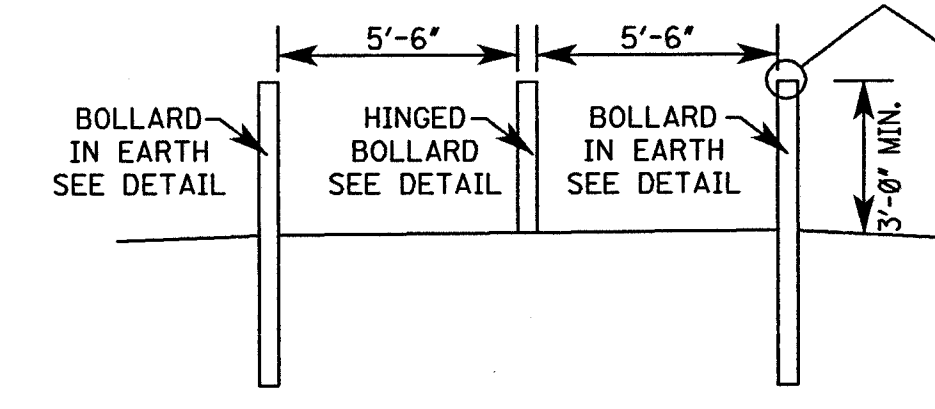
HINGED BARRIER BOLLARD



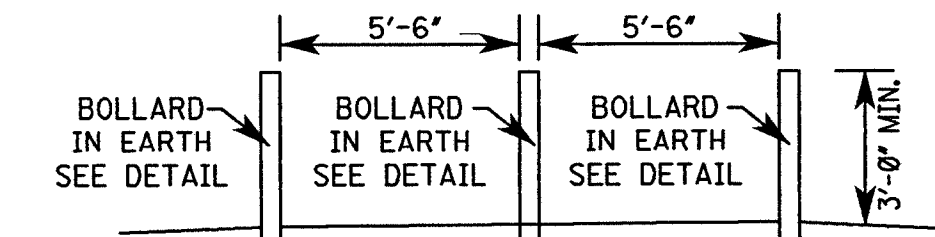
HINGED BARRIER BOLLARD
PLAN VIEW



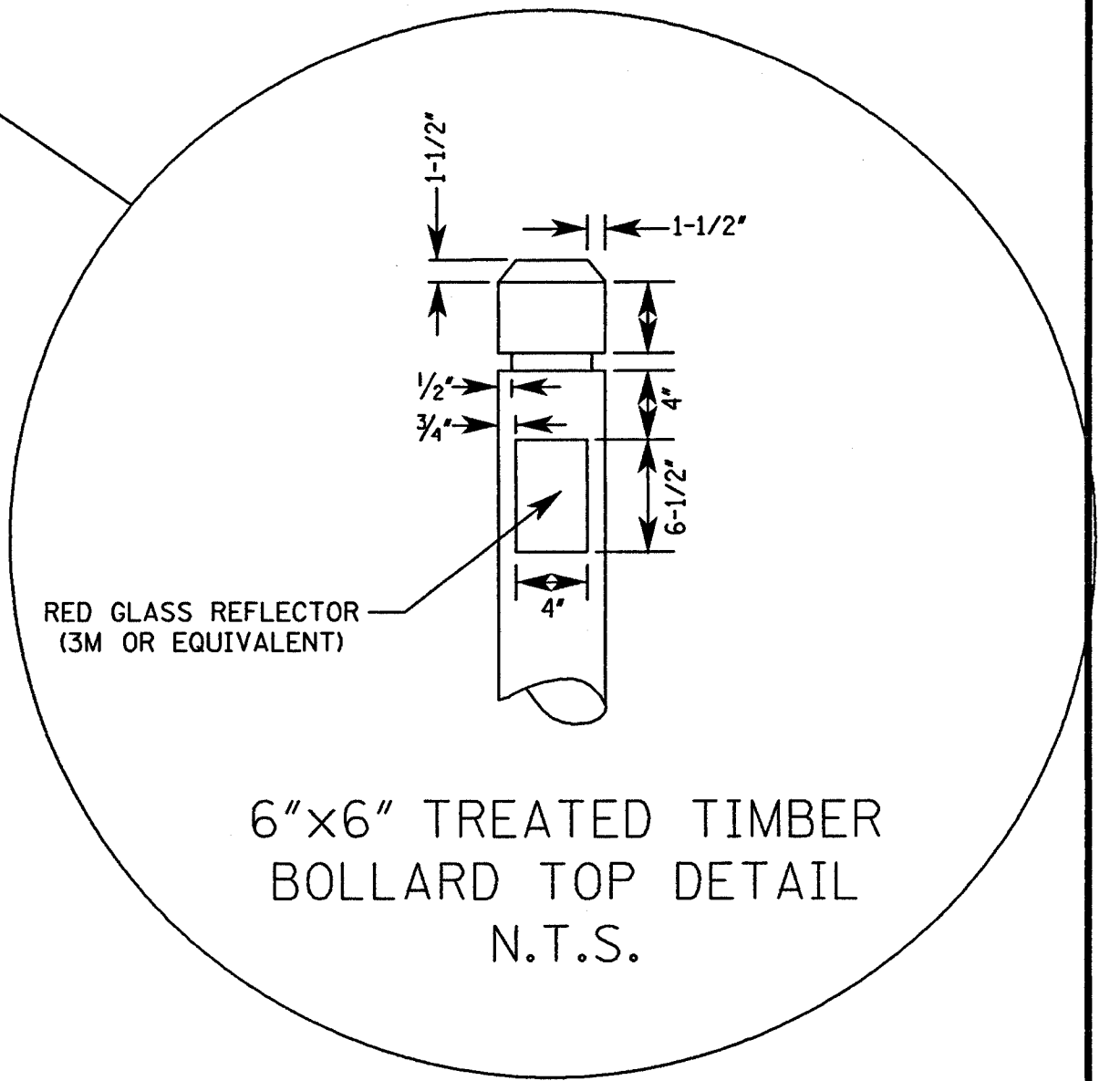
MARKING DETAIL



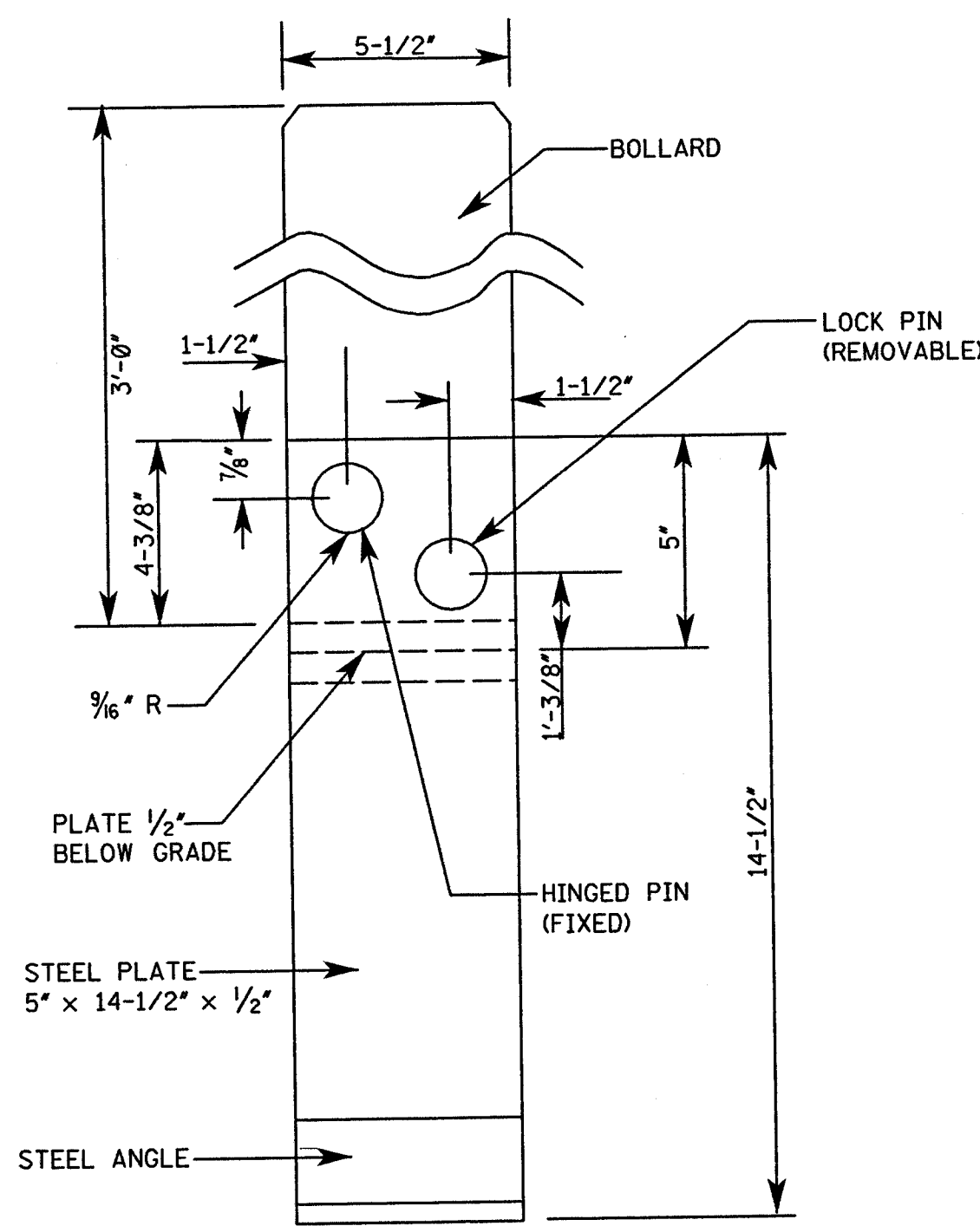
"HINGED" BOLLARD DETAIL
N.T.S.



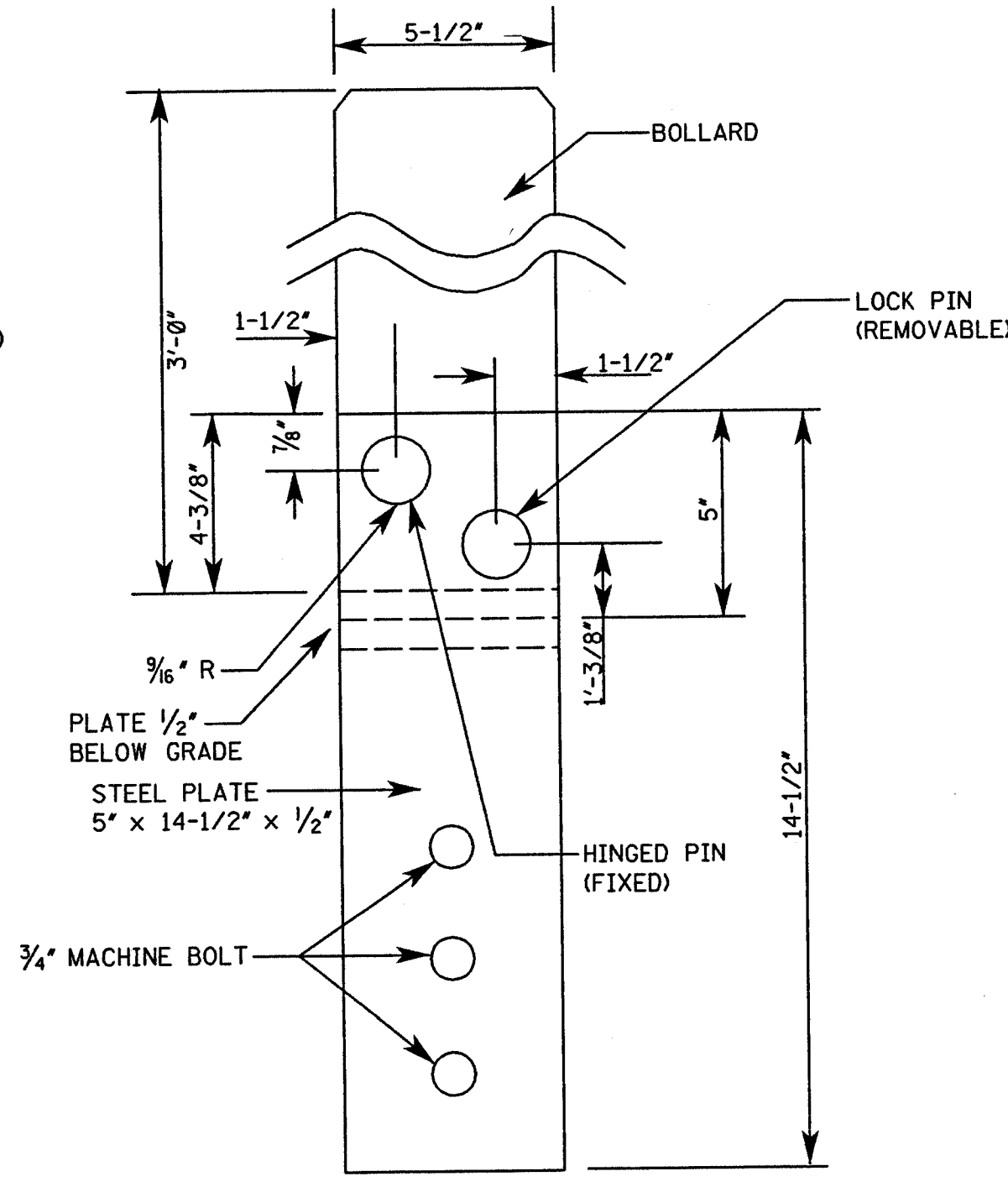
"EARTH" BOLLARD DETAIL
N.T.S.



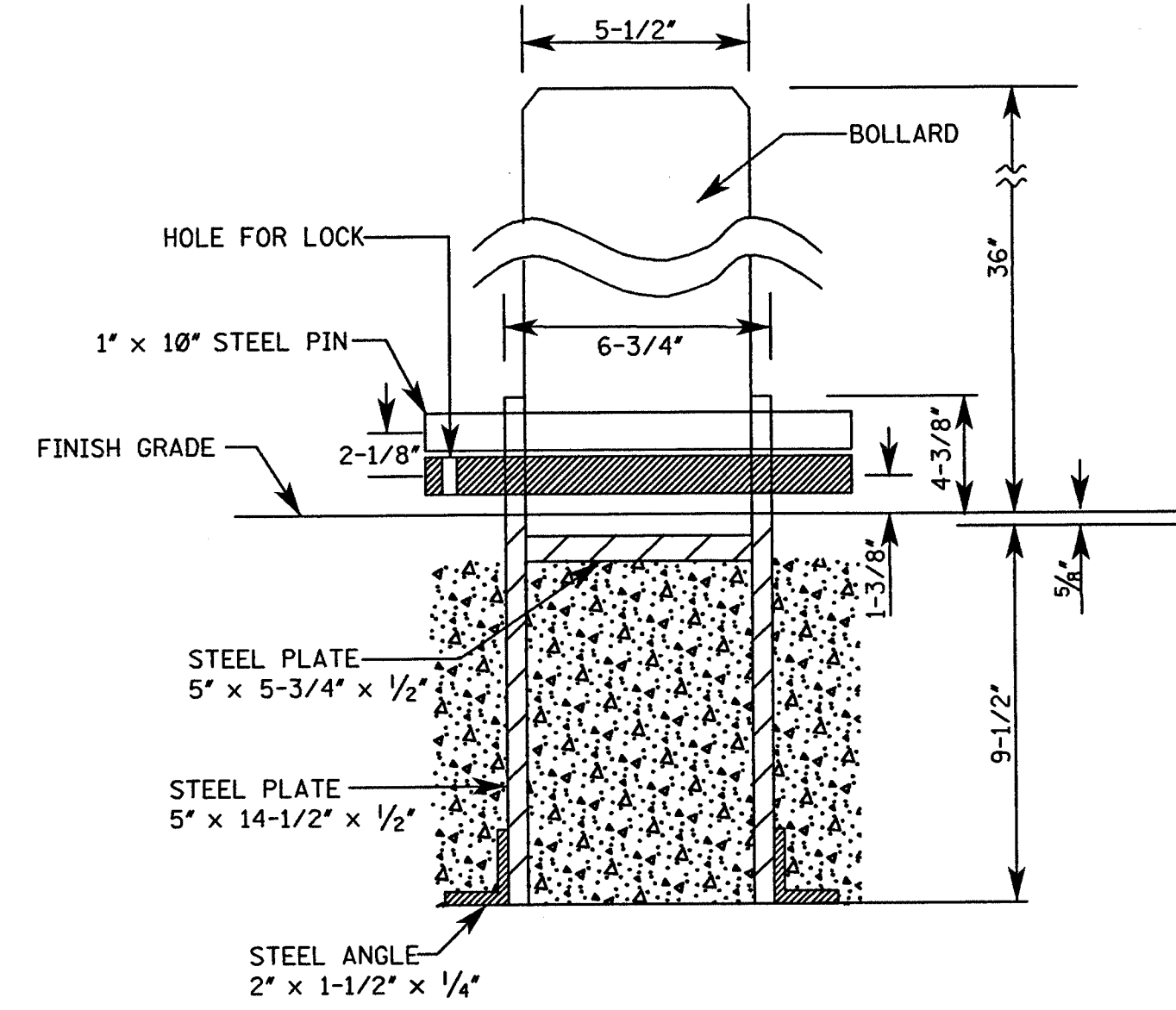
6"x6" TREATED TIMBER
BOLLARD TOP DETAIL
N.T.S.



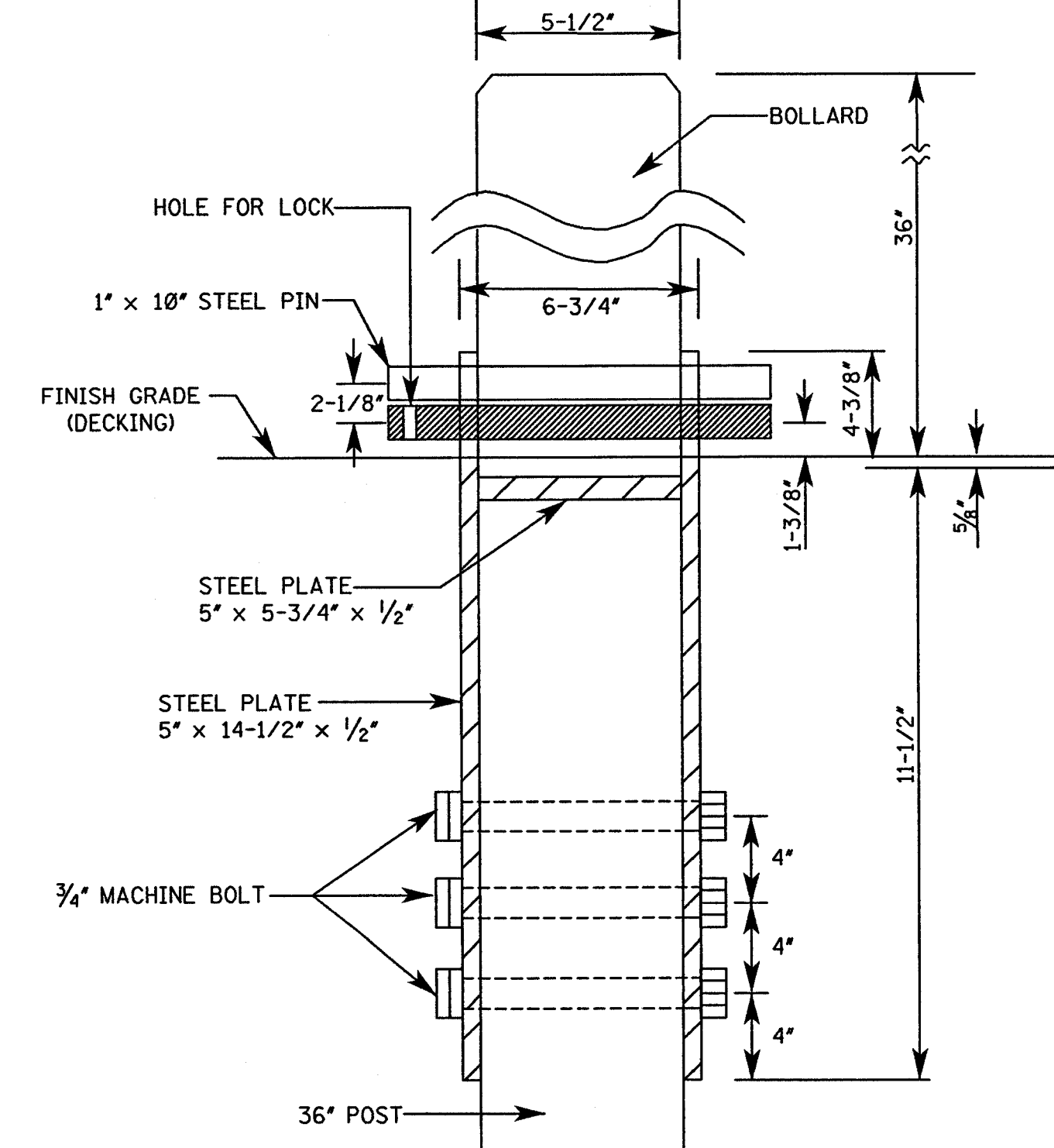
HINGED BARRIER BOLLARD
RIGHT SIDE ELEVATION



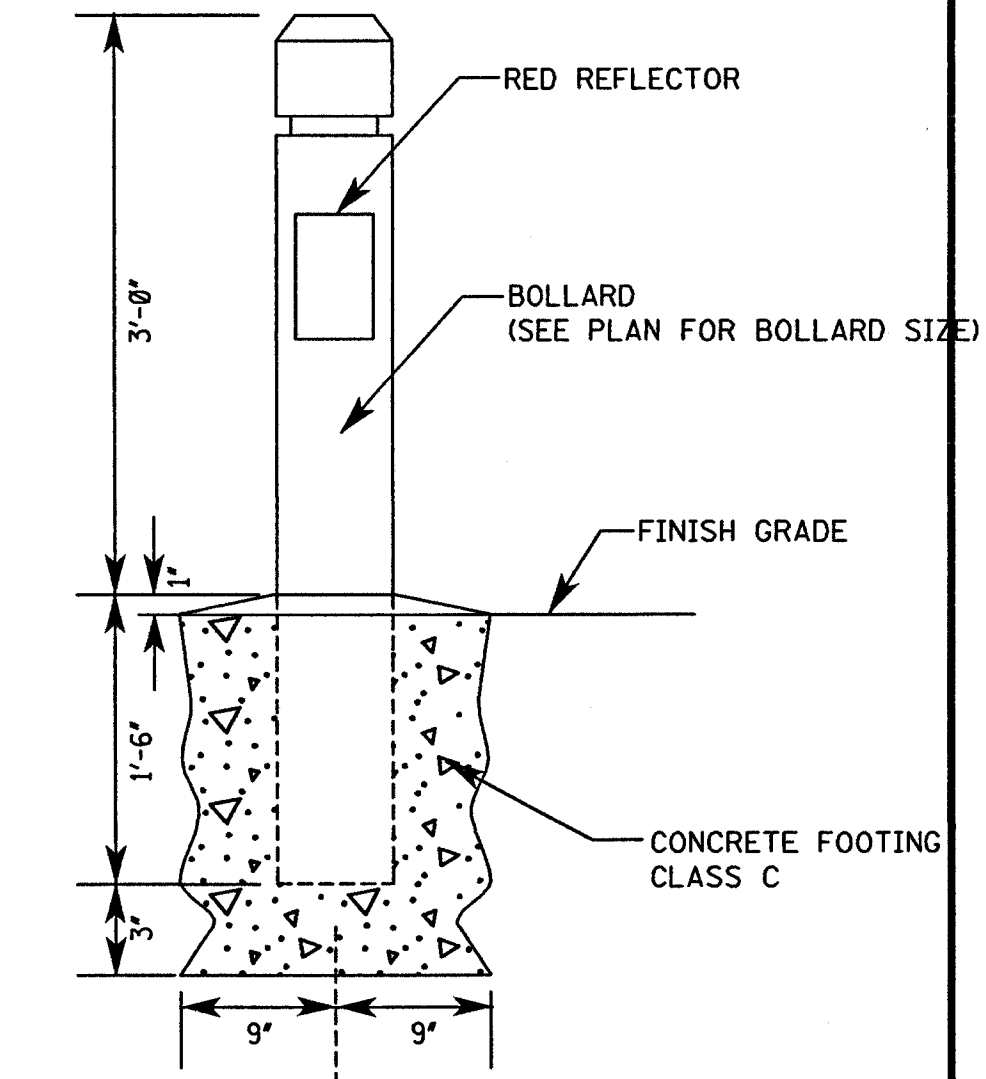
HINGED BARRIER BOLLARD
RIGHT SIDE ELEVATION



HINGED BARRIER BOLLARD
SECTION THROUGH LOCK PIN



HINGED BARRIER BOLLARD
SECTION THROUGH LOCK PIN



DETAIL
BOLLARD IN EARTH

NOTE:
BOLLARD POST TO BE REFLECTORIZED
BOLLARD FOOTING TO BE PLACED PRIOR
TO FINAL SURFACE COURSE.
BOLLARD PLACEMENT OFFSET FROM INTERSECTION
IS NOTED ON PLANS.
BOLLARDS TO BE INSTALLED BY THE CONTRACTOR
BOLLARDS AND POST ARE TO BE PRESSURE-TREATED AND
GROUND CONTACT RATED

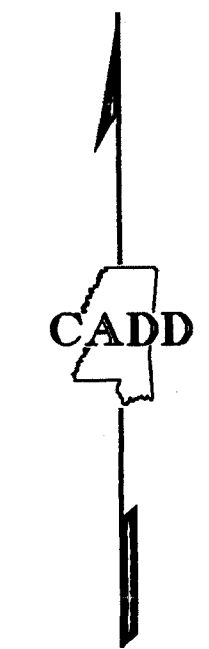
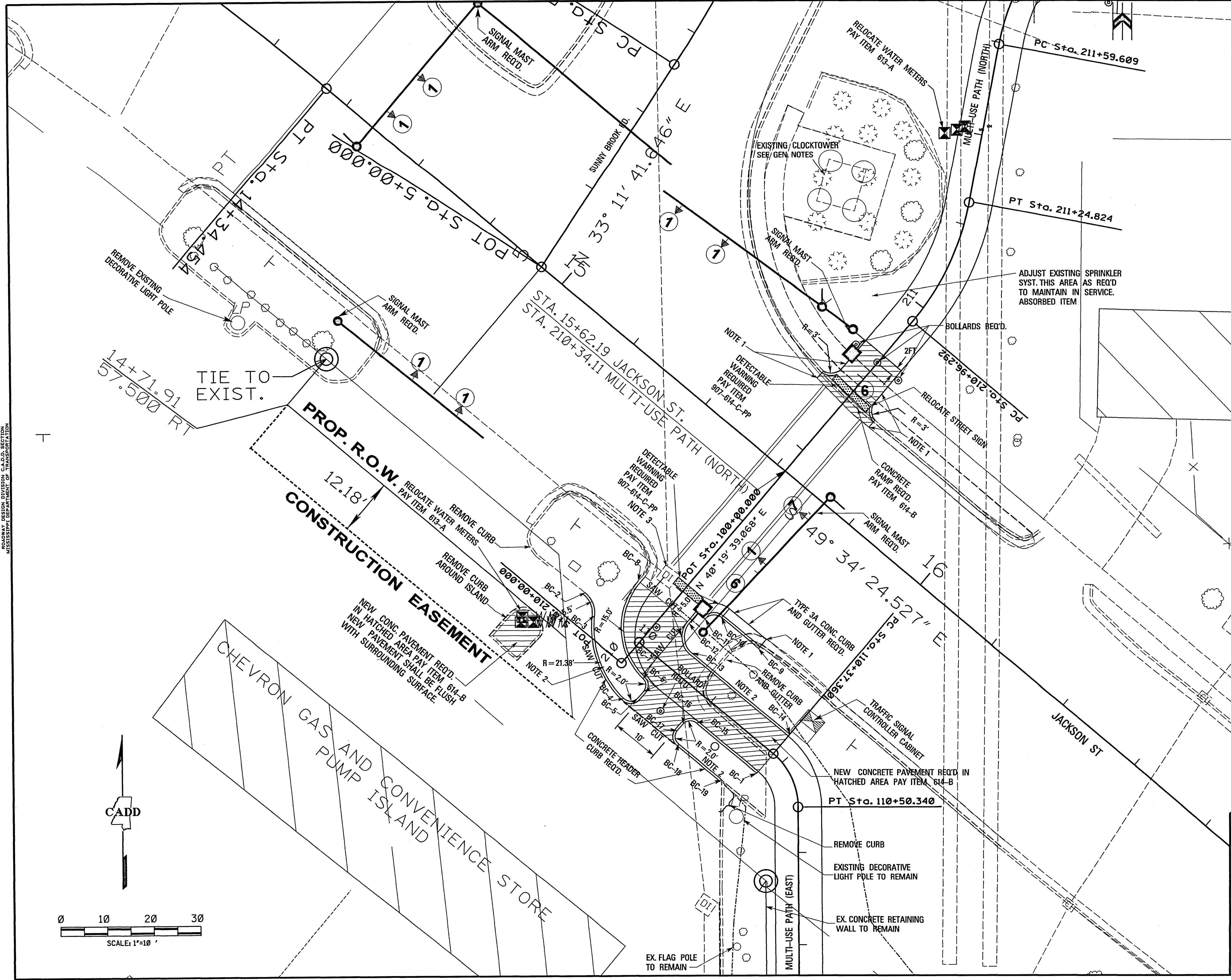
NOTE
1. ALL CONCRETE SHALL MEET THE REQUIREMENTS OF SECTION 601
2. ALL LUMBER SHALL MEET THE REQUIREMENTS OF SECTIONS 718 AND 820.
3. ALL STEEL SHALL MEET THE REQUIREMENTS OF SECTION 810 718 AND 820.
4. ALL ITEMS ON THIS SHEET RELATED TO EARTH BOLLARDS ARE TO BE
INCLUDED IN PAY ITEM #907-630-N-PP
5. ALL ITEMS ON THIS SHEET RELATED TO HINGED BOLLARDS ARE TO BE
INCLUDED IN PAY ITEM #907-630-O-PP AND #907-630-P-PP

NOTE:
ALL BOLLARDS IN THIS PROJECT SHALL BE "EARTH" TYPE.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION		WORKING NUMBER	
BOLLARD DETAILS		BOL-1	
INTERSECTION IMPROVEMENTS		SHEET NUMBER	
JACKSON ST. & SUNNYBROOK RD.		22	
CITY OF RIDGELAND, MS			
Project No.: STP-7302-00(005)			
County: MADISON			
DATE	FILENAME: BOLLARDET.DGN	DESIGN TEAM	N-S
REVISION	CHECKED	DATE	

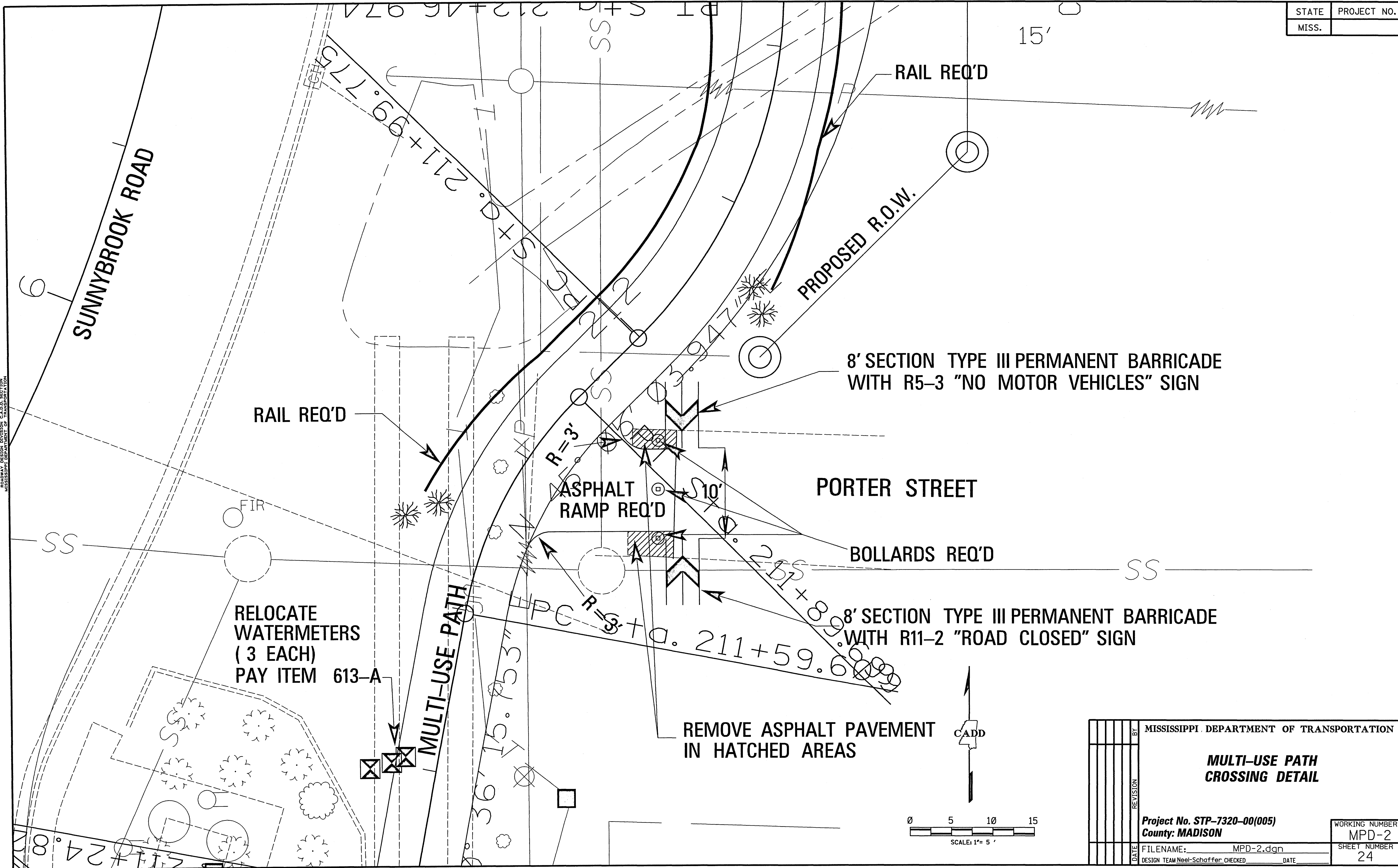
- NOTES:
1. SAW CUT CONCRETE AND PROVIDE 1/2" EXPANSION JOINT BETWEEN NEW AND EXISTING CONCRETE
 2. AREA TO RECEIVE TOPSOIL AND SOLID SOD. (SEE LANDSCAPING PLAN).
 3. REMOVE EXISTING GRATE AND REPLACE WITH RETICULINE STYLE GALVANIZED STEEL GRATE OF EQUAL SIZE. ABSORBED IN PAY ITEM 613-A
 4. ALL BOLLARDS SHALL BE "EARTH" TYPE UNLESS OTHERWISE NOTED.

COORDINATE LISTING			
I.D.	STATION	OFFSET	REMARKS
BC-1	110+37.47	5.48	LT. MULTI-USE PATH EAST
BC-2	210+06.59	15.69	LT. MULTI-USE PATH NORTH
BC-3	210+04.54	10.99	LT. MULTI-USE PATH NORTH
BC-4	110+05.36	11.32	RT. MULTI-USE PATH EAST
BC-5	110+07.49	9.30	RT. MULTI-USE PATH EAST
BC-6	110+07.49	7.42	RT. MULTI-USE PATH EAST
BC-7	110+05.65	5.46	RT. MULTI-USE PATH EAST
BC-8	210+15.84	8.66	LT. MULTI-USE PATH NORTH
BC-9	210+21.28	20.25	RT. MULTI-USE PATH EAST
BC-10	210+21.25	9.97	RT. MULTI-USE PATH NORTH
BC-11	210+18.75	7.50	RT. MULTI-USE PATH NORTH
BC-12	210+15.84	5.50	RT. MULTI-USE PATH NORTH
BC-13	210+11.34	9.78	RT. MULTI-USE PATH NORTH
BC-14	210+11.34	37.41	RT. MULTI-USE PATH NORTH
BC-15	110+20.46	5.50	RT. MULTI-USE PATH EAST
BC-16	110+18.49	7.48	RT. MULTI-USE PATH EAST
BC-17	110+18.49	9.36	RT. MULTI-USE PATH EAST
BC-18	110+20.50	11.37	RT. MULTI-USE PATH EAST
BC-19	110+32.37	11.38	RT. MULTI-USE PATH EAST



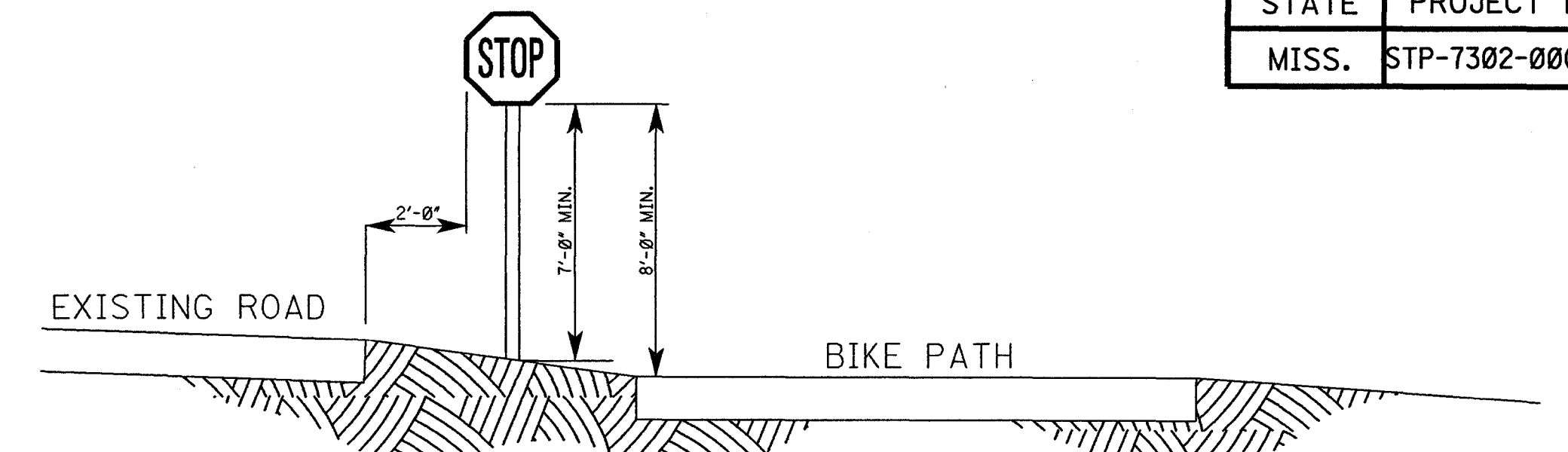
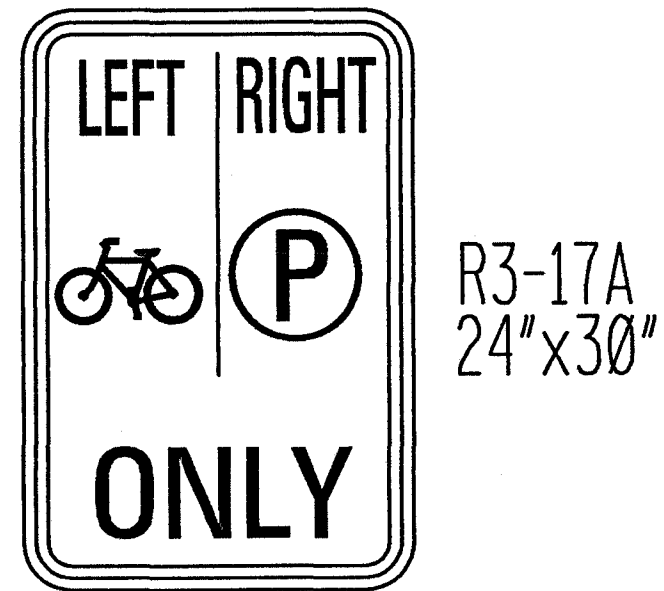
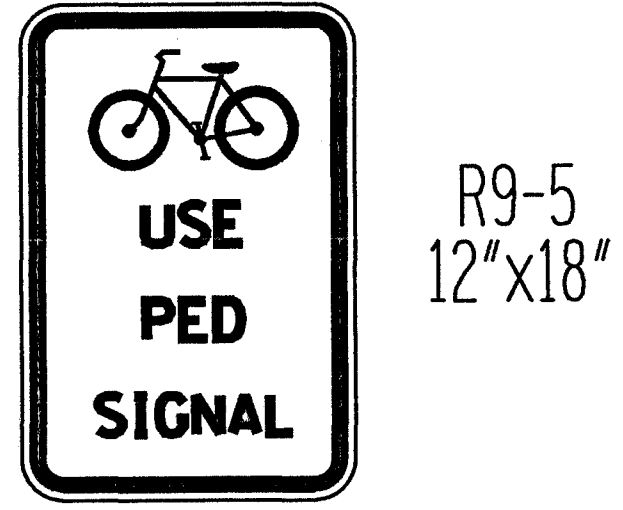
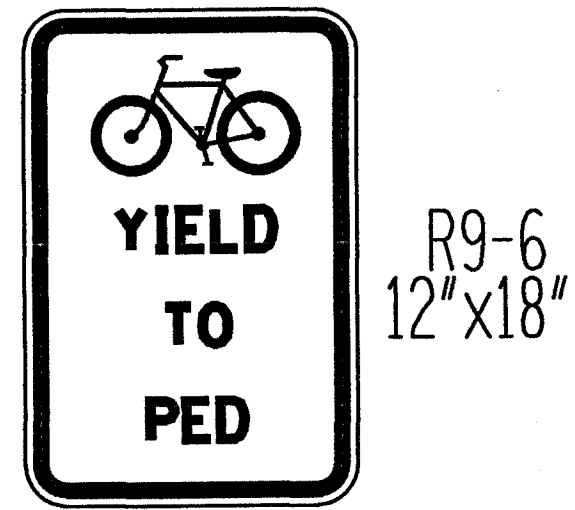
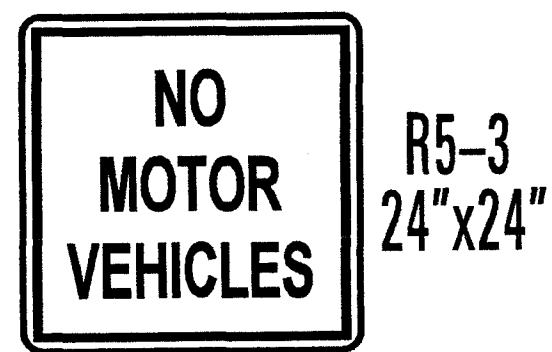
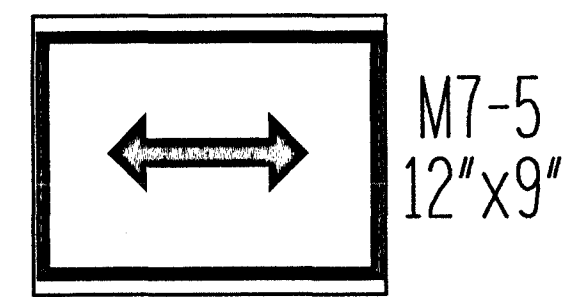
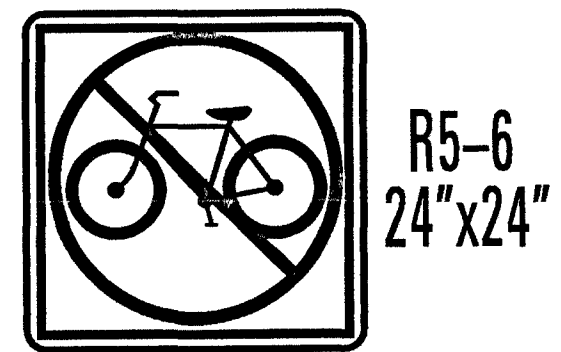
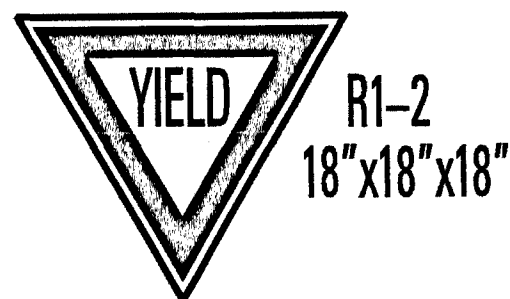
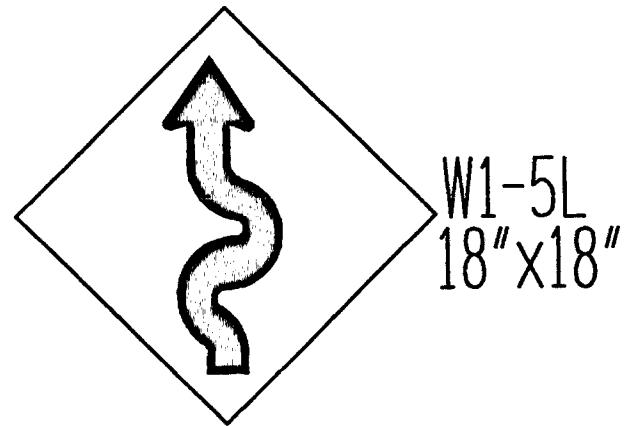
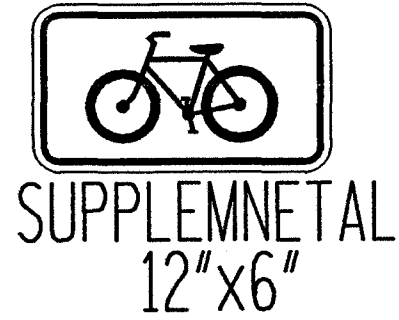
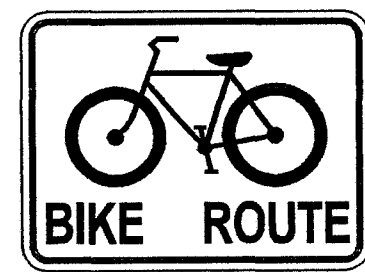
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
MULTI-USE PATH CROSSING DETAIL	
Project No. STP-7320-00(005)	
County: MADISON	
WORKING NUMBER	MPD-1
SHEET NUMBER	23
DATE	FILENAME: MPD-1.dgn
DESIGN TEAM	N-S
CHECKED	DATE

ROADWAY DESIGN DIVISION, CADD SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

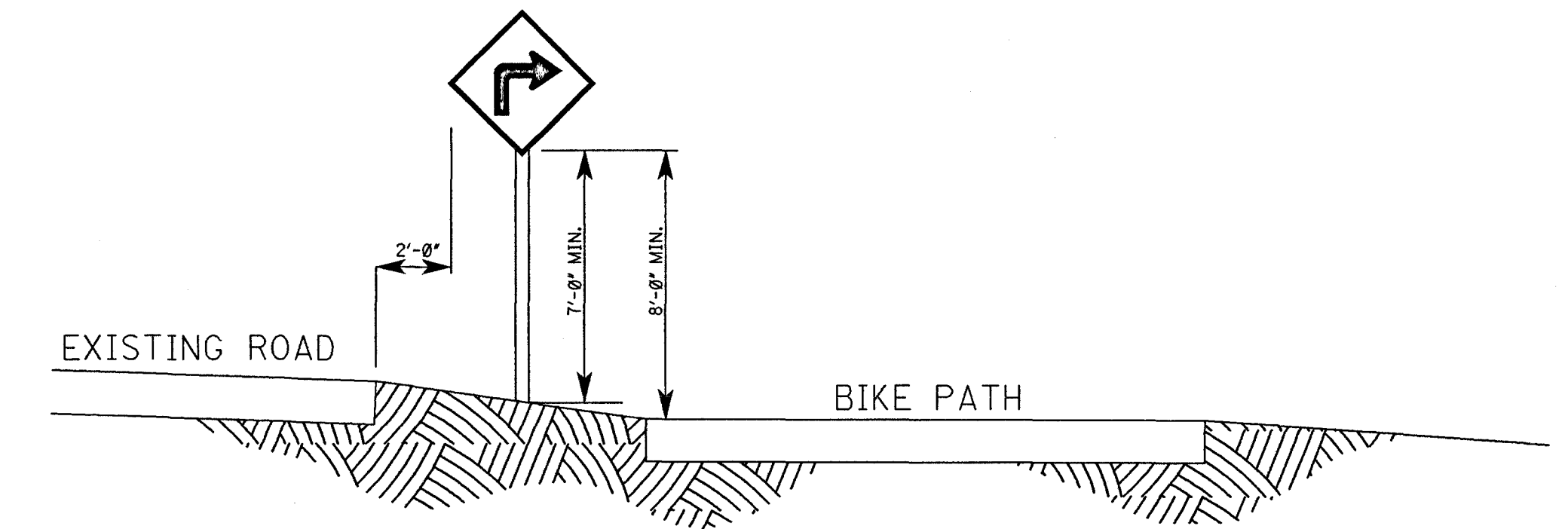


PLAN
 ROADWAY DESIGN DIVISION C.A.D.D. SECTION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION

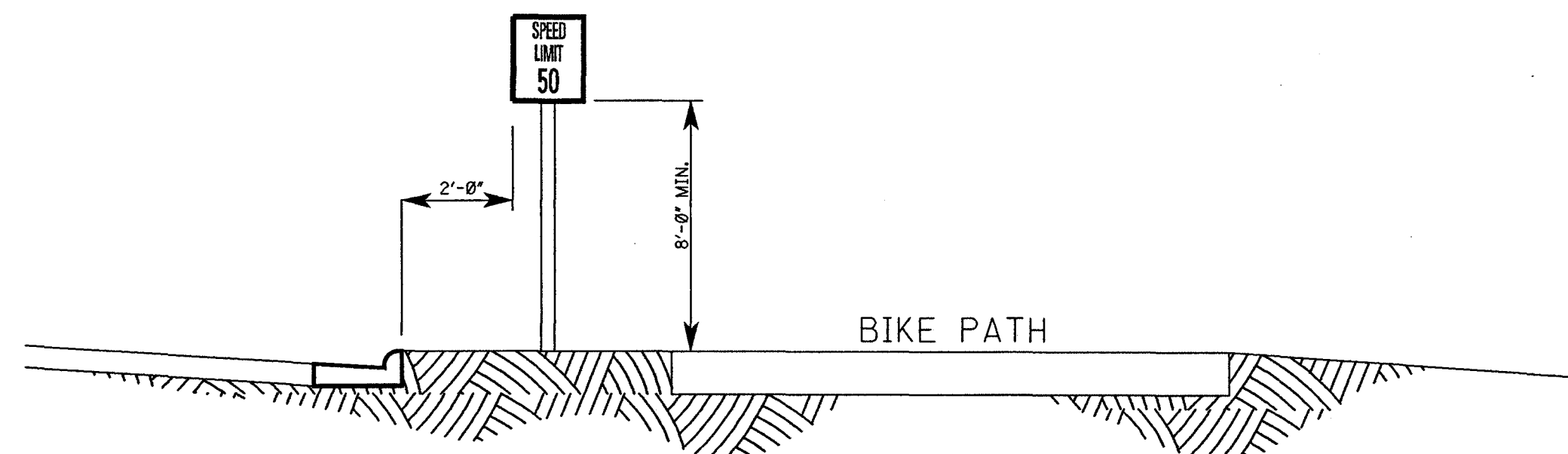
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
MULTI-USE PATH CROSSING DETAIL	
Project No. STP-7320-00(005)	WORKING NUMBER MPD-2
County: MADISON	SHEET NUMBER 24
FILENAME: MPD-2.dgn	DATE
DESIGN TEAM: Neel-Schaffer	CHECKED



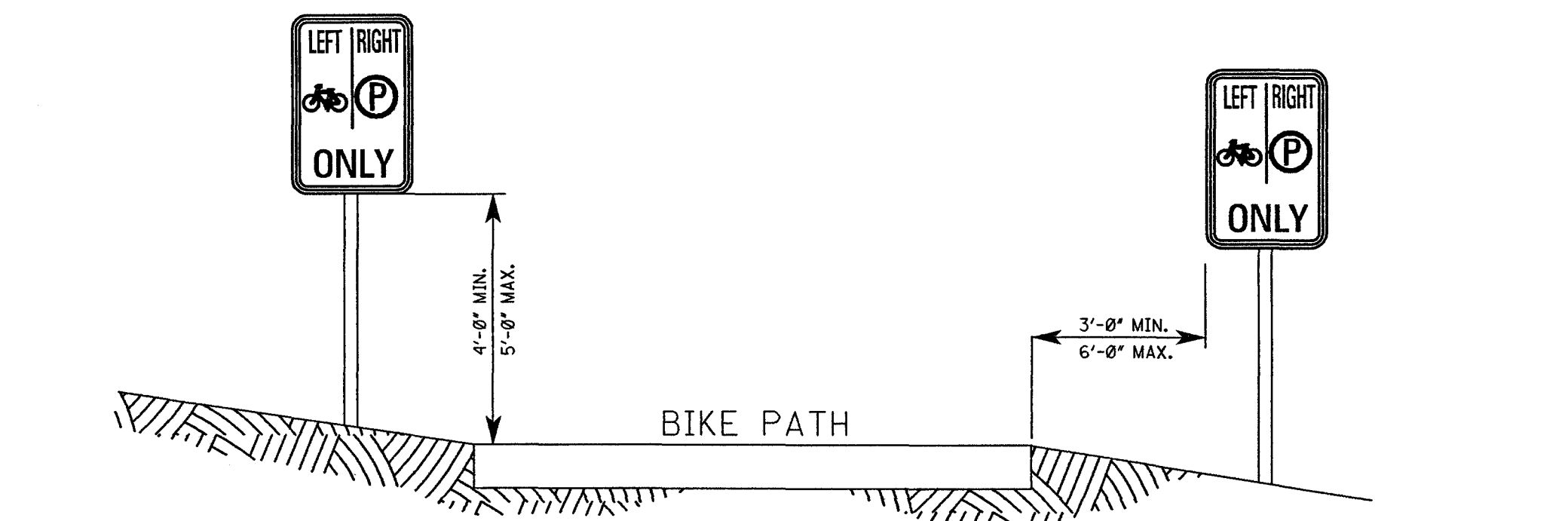
ROADSIDE SIGN



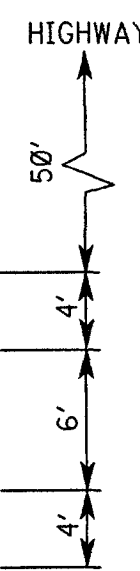
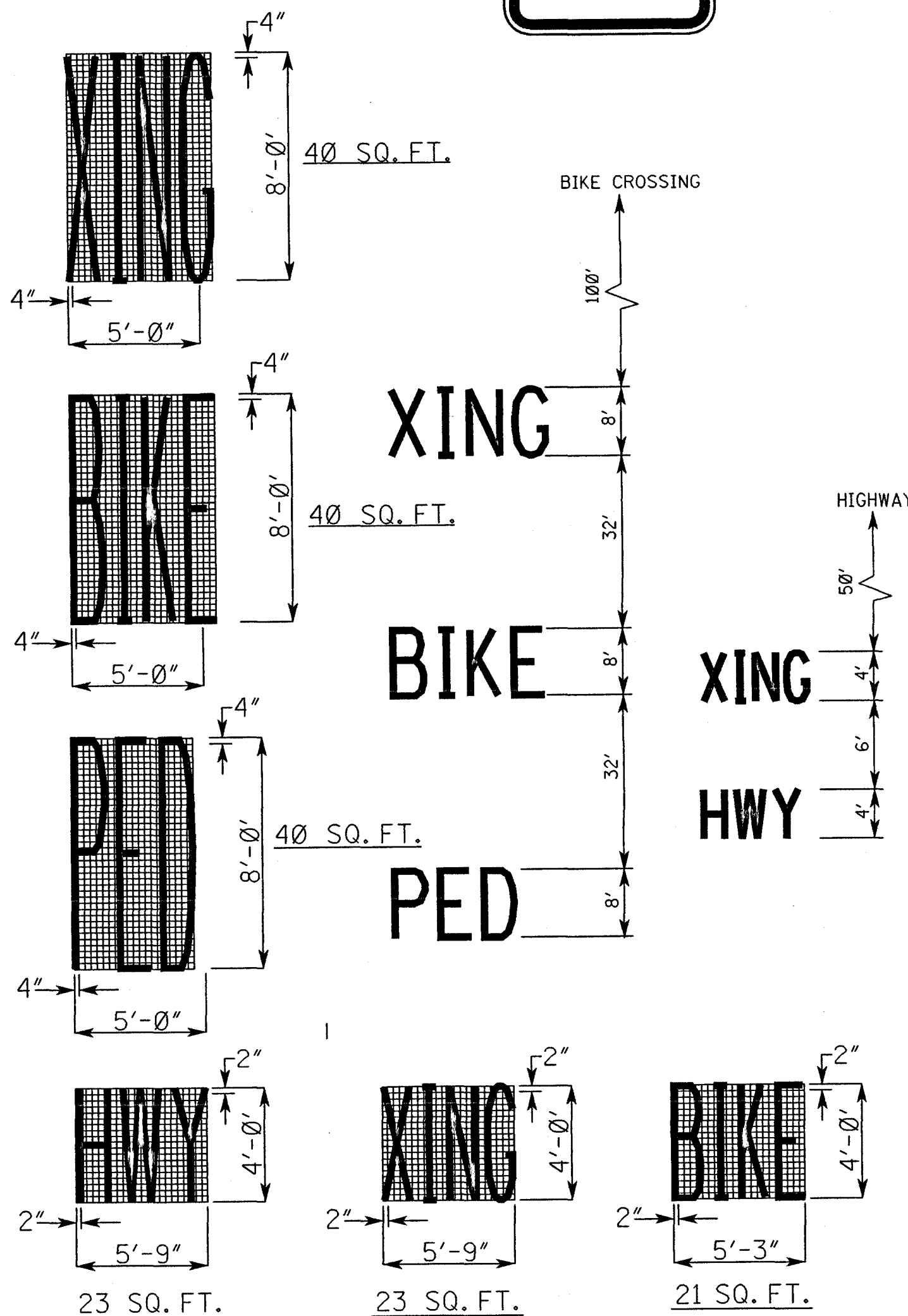
WARNING SIGN



ROADSIDE SIGN

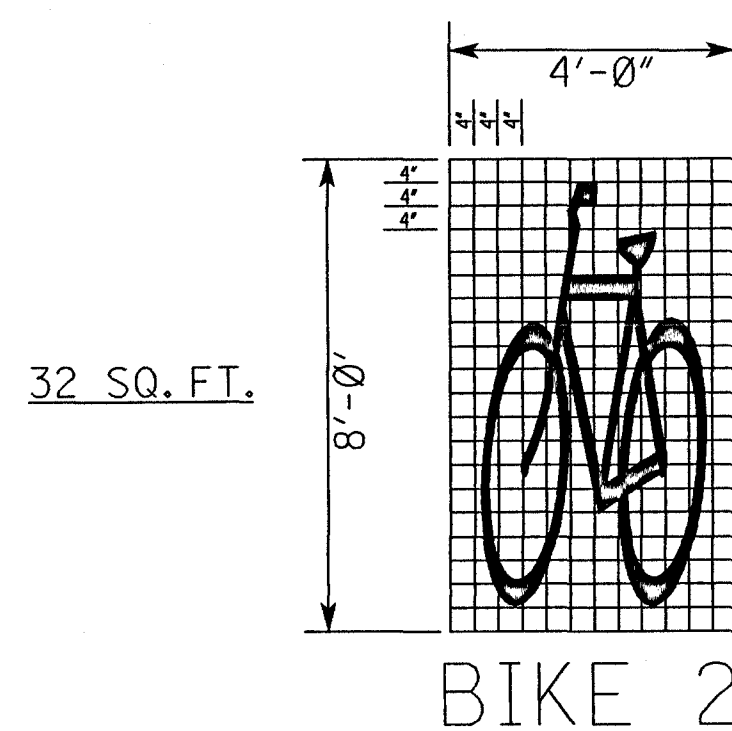


SIGN PLACEMENT ON TRAIL



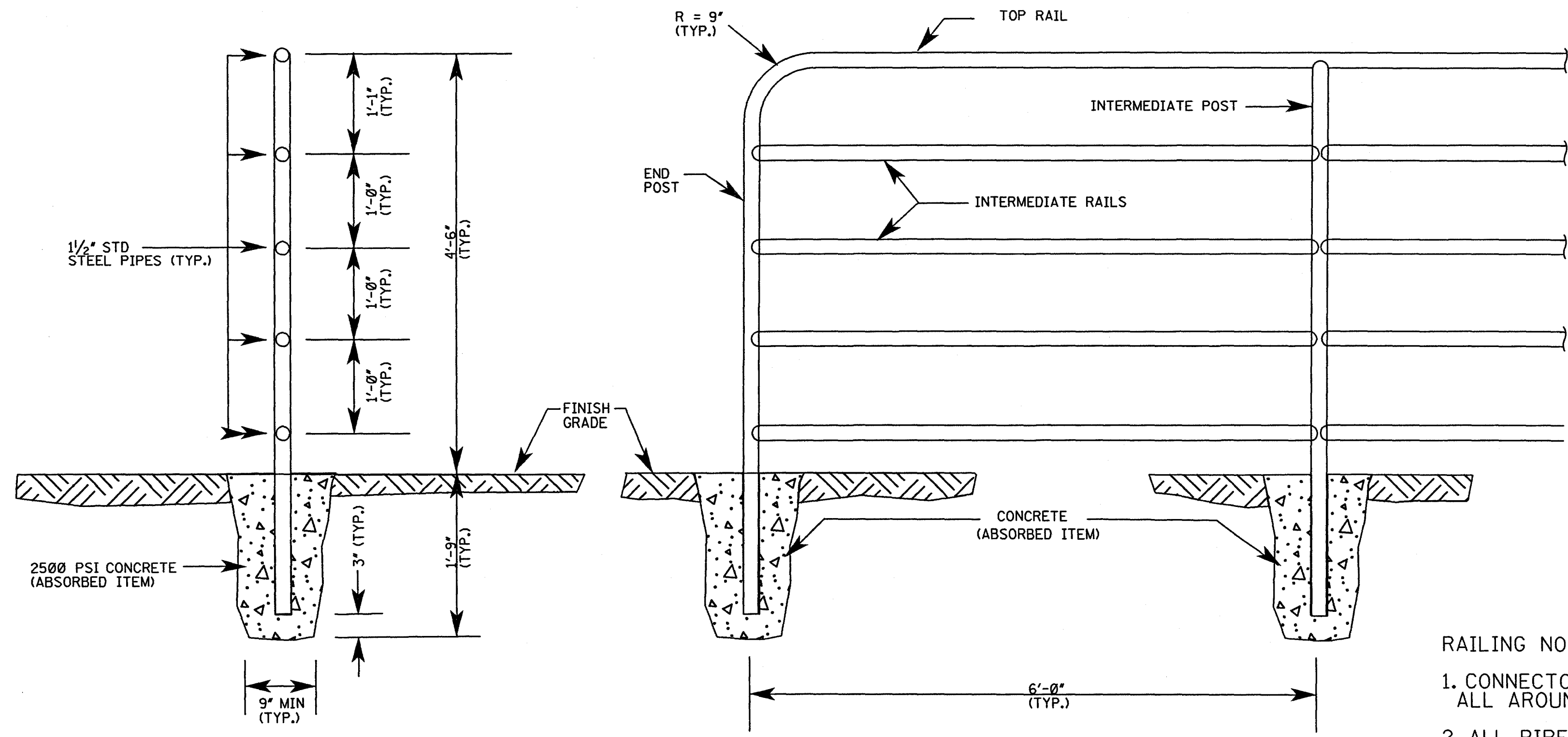
NOTES

1. THE DESIGN OF SIGNS FOR BICYCLE FACILITIES SHOULD BE IDENTICAL TO THAT USED FOR MOTOR VEHICLE TRAVEL.
2. THE SIGN DIMENSIONS SHOWN SHALL BE CONSIDERED STANDARD FOR THIS BICYCLE FACILITY
3. THE SMALLER SIGNS ARE INTENDED FOR EXCLUSIVE BICYCLE USE.
4. WHERE SIGNS ARE FOR EXCLUSIVE USE OF BICYCLISTS, CARE SHOULD BE TAKEN THAT THEY ARE LOCATED SO THAT MOTORIST ARE NOT CONFUSED BY THEM.
5. WHERE INDICATED ON PLANS, ANGLE "STOP" AND "YIELD" SIGNS TOWARD THE BIKE PATH.

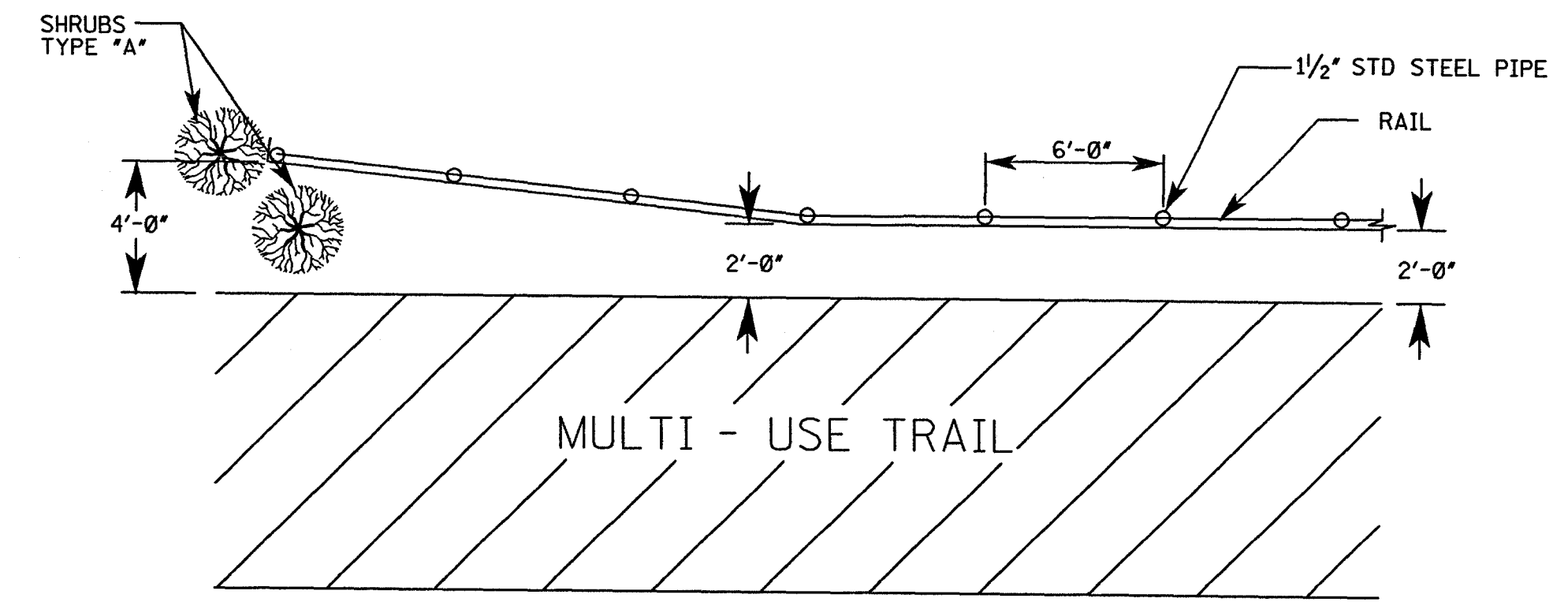


ROADWAY DESIGN DIVISION, C.A.D.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
SIGN & MARKINGS DETAILS INTERSECTION IMPROVEMENTS JACKSON ST. & SUNNY BROOK RD	
Project No.: STP-7302-00(005) County: MADISON	
DATE	FILENAME: DET6.DGN
DESIGN TEAM: Neel-Schaffer	CHECKED: DATE
WORKING NUMBER	SD-1
SHEET NUMBER	25

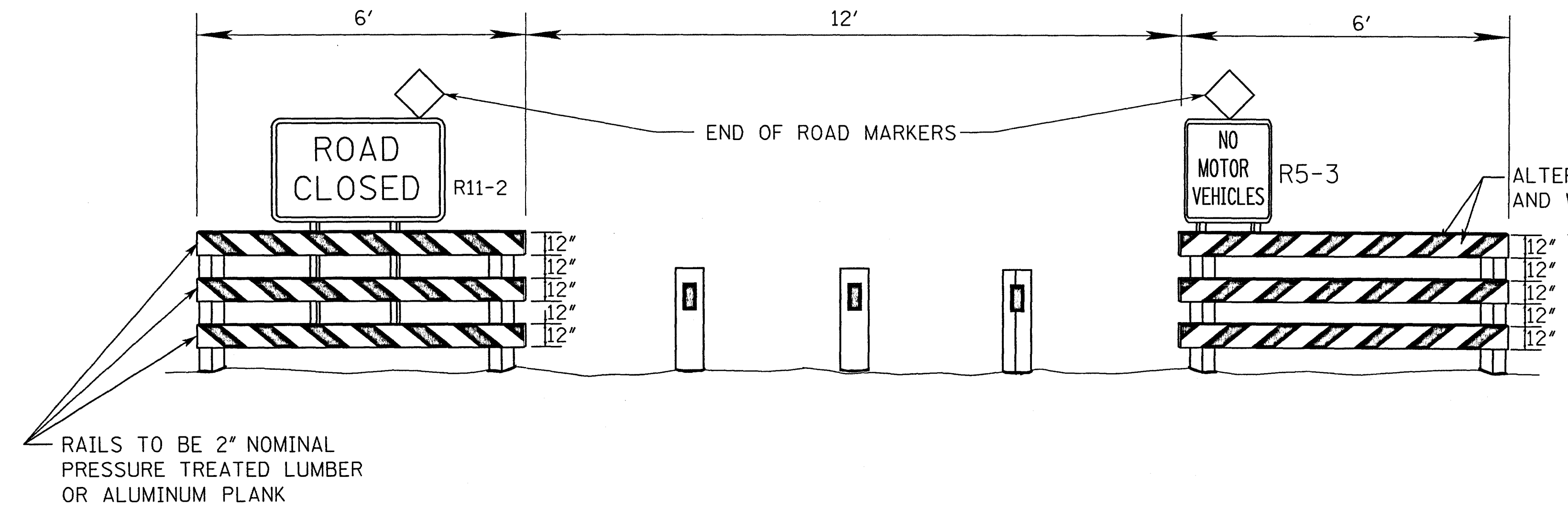


TYPICAL RAIL DETAILS
N.T.S.



TYPICAL RAIL INSTALLATION PLAN
N.T.S.

- RAILING NOTES:
- CONNECTORS BETWEEN POST AND RAILS SHALL BE FILLET WELDED ALL AROUND AND GROUND SMOOTH.
 - ALL PIPE SHALL BE 1/2" STANDARD WEIGHT ASTM A501 GRADE B OR A501 STEEL PIPE.
 - ALL STEEL PIPE SHALL BE HOT DIP GALVANIZED (G60).
 - ALL RAILINGS SHALL BE PRIMED AND PAINTED WITH ONE COAT OF PRIMER AND TWO COATS OF TOP COAT (COLOR).

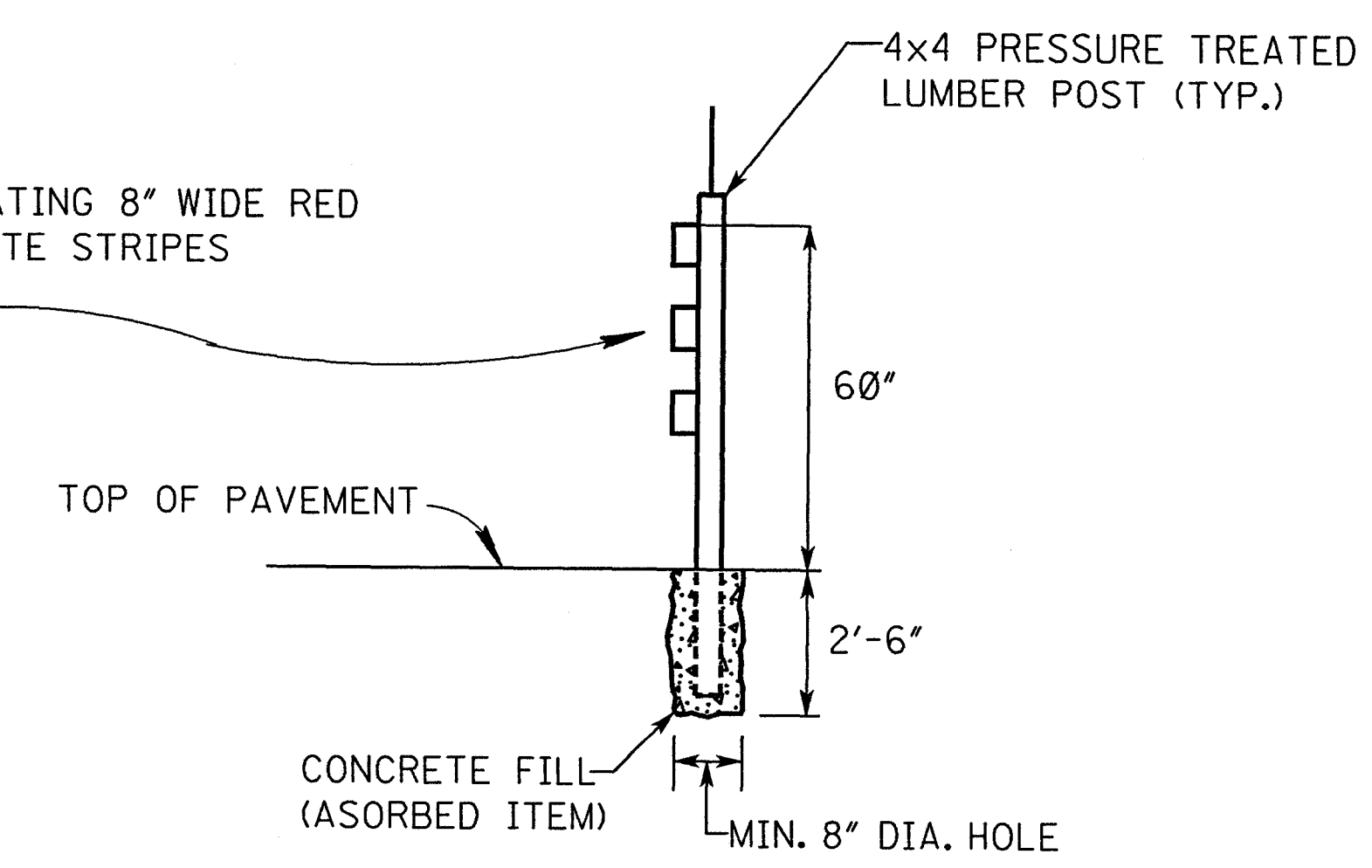


TYPE III BARRICADE DETAIL (PERMANENT)

TYPE III BARRICADE REQ'D. (RED AND WHITE STRIPES - ENCAPSULATED LENS REFLECTIVE SHEETING). END OF ROAD MARKERS ARE ABSORBED PAY ITEMS (18" DIAMOND ENCAPSULATED LENS PANELS). BARRICADES AND SIGNS TO BE PAID FOR UNDER PAY ITEM 619-G4. BARRICADES (PERMANENT) TO REMAIN IN PLACE AFTER COMPLETION OF PROJECT.

FINISH OF PERMANENT BARRICADE

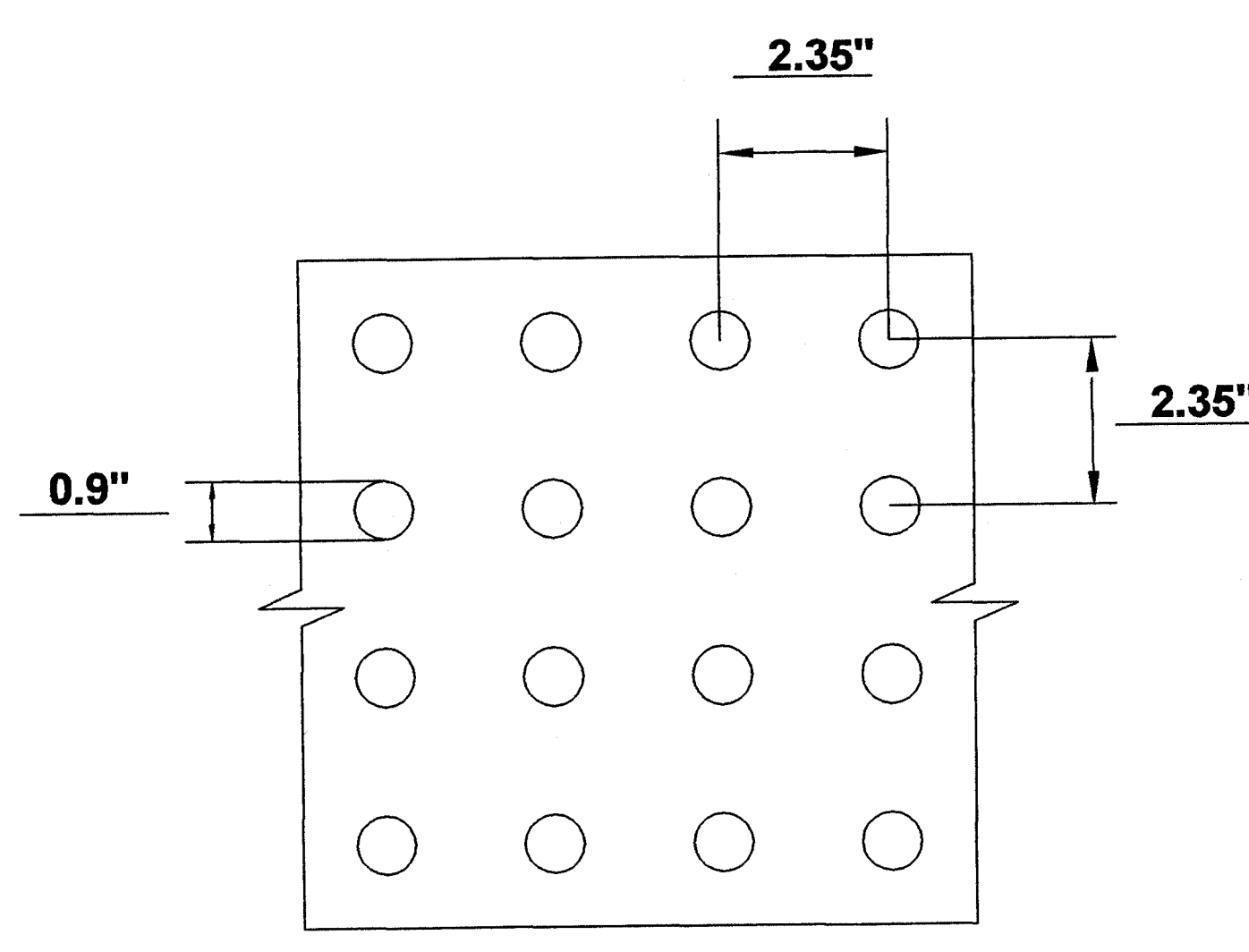
ALL WOOD ELEMENTS SHALL RECEIVE ONE COAT OF PRIMER AND TWO COATS OF TOP COAT. TOP COAT SHALL BE EXTERIOR GRADE LATEX PAINT. ALL FRONT SURFACES SHALL BE FINISHED WHITE IN COLOR. BACK AND SIDE SURFACES SHALL BE FINISHED PARK BROWN IN COLOR. BACKS OF SIGN AND ALUMINUM PLANKS, IF USED SHALL BE FINISHED DARK BROWN IN COLOR. CONTRACTOR SHALL SUBMIT FINISH COLOR SAMPLES FOR APPROVAL.



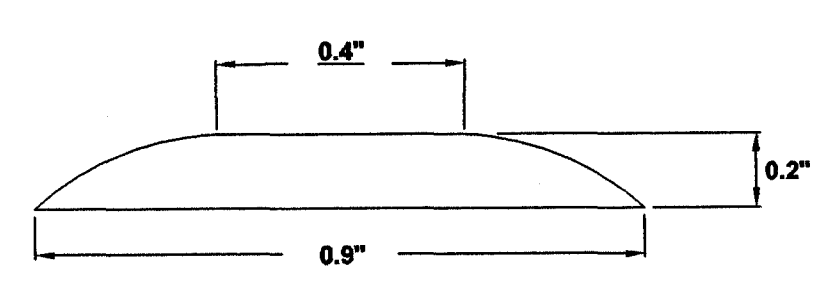
ROAD CLOSED R11-2
48x30

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		MISCELLANEOUS DETAILS	
		INTERSECTION IMPROVEMENTS	
		JACKSON ST. & SUNNYBROOK RD.	
		CITY OF RIDGELAND	
DATE		Project No.: STP-7302-00(005)	
DESIGN TEAM		County: MADISON	
FILENAME: BOLLARDET2(BARS).DGN		WORKING NUMBER	
N-S		DET-1	
CHECKED		SHEET NUMBER	
DATE		26	

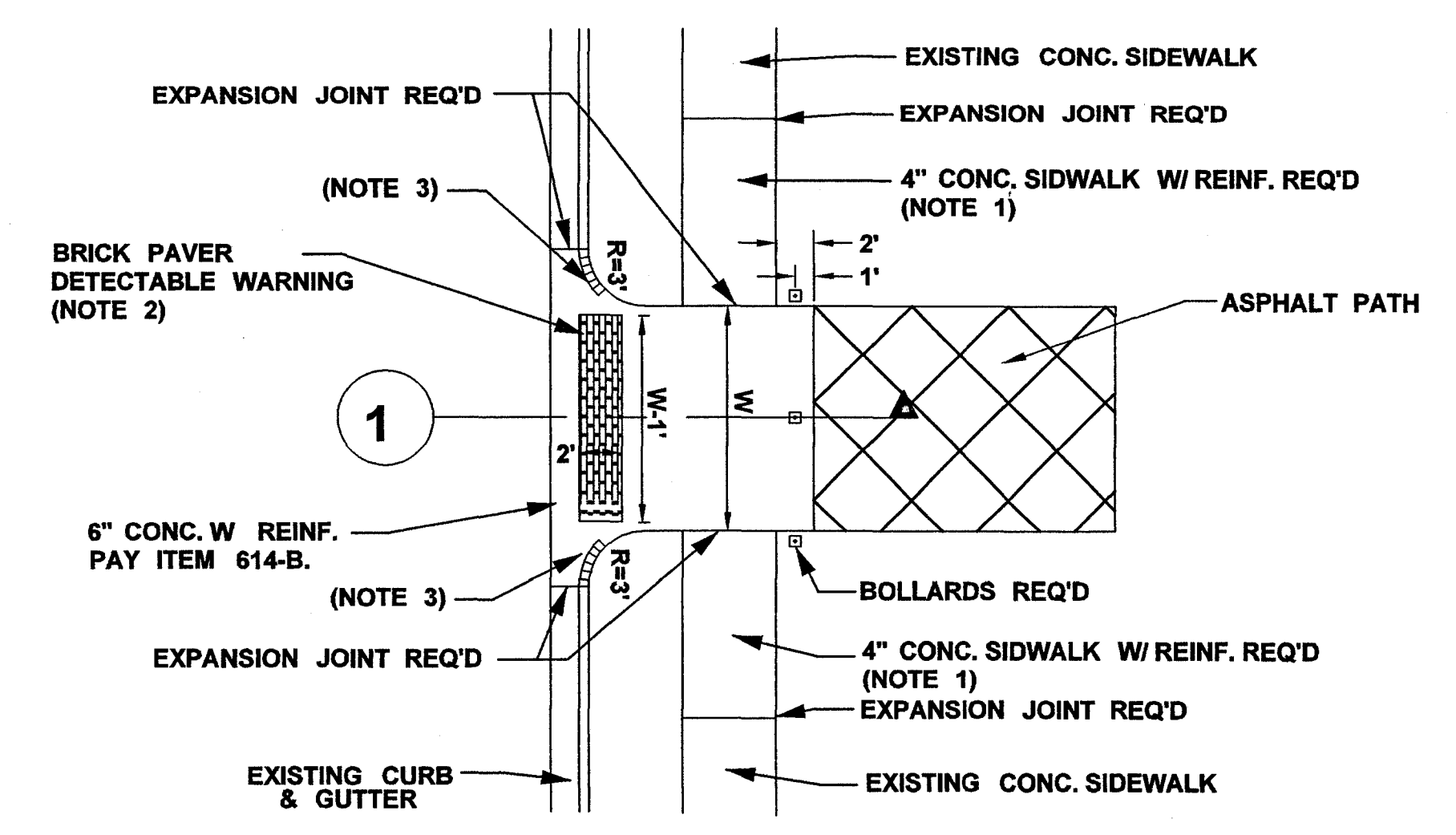
PLAN, C.A.S.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION



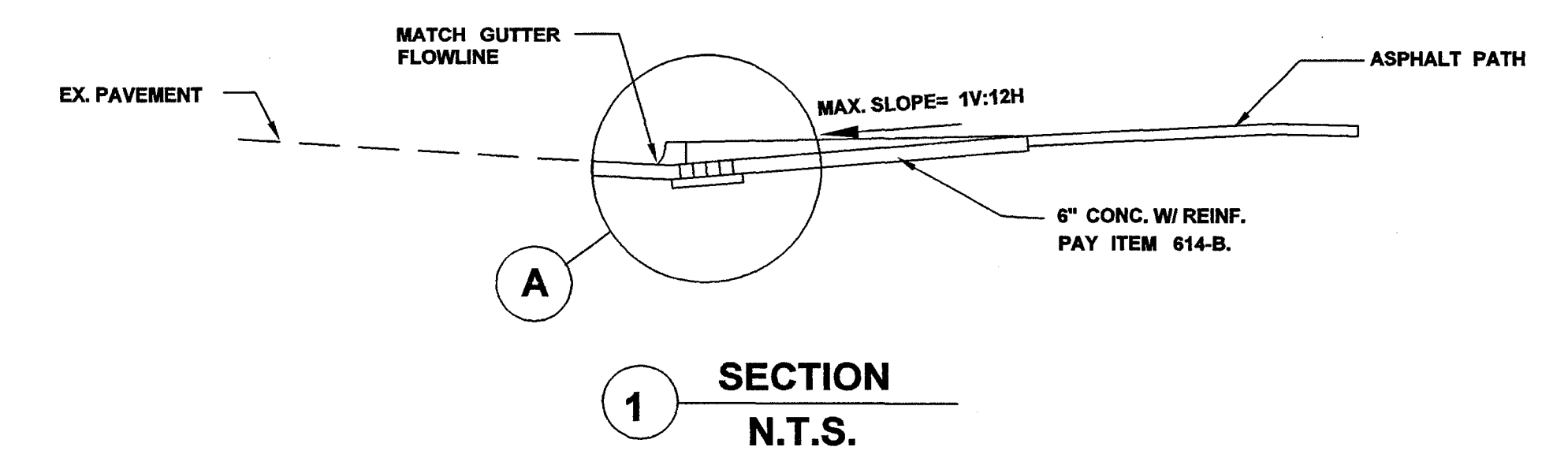
DETAIL-TRUNCATED DOME PATTERN/SPACING
(TYPICAL ALL DETECTABLE WARNINGS)
 N.T.S.



TYPICAL SECTION-TRUNCATED DOME
 N.T.S.

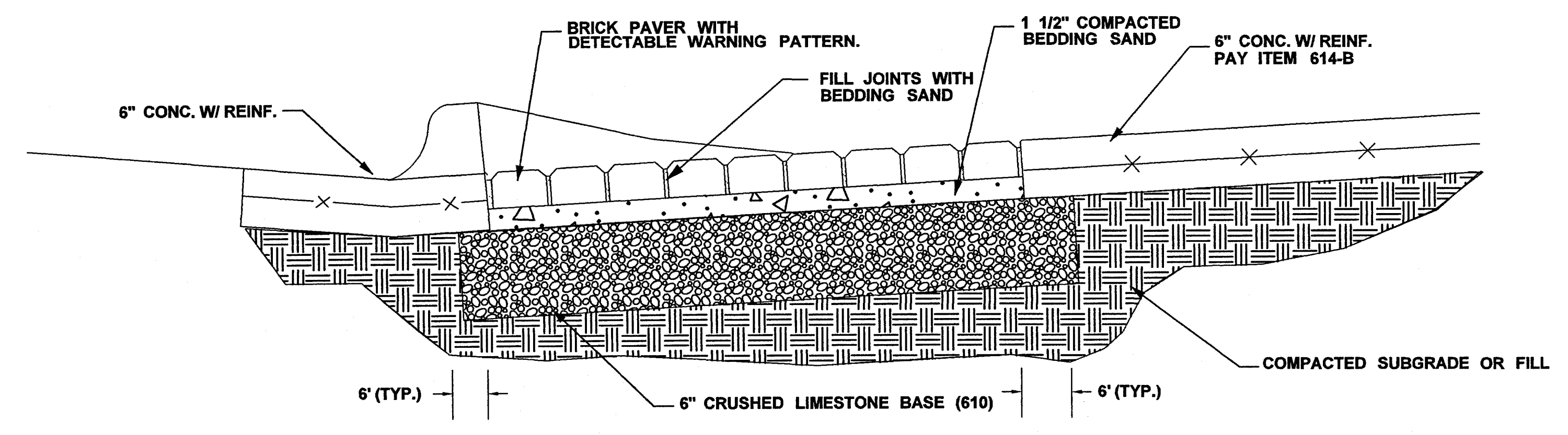


CURB RAMP WITH DETECTABLE WARNING (TYP.)
 N.T.S.



NOTES:

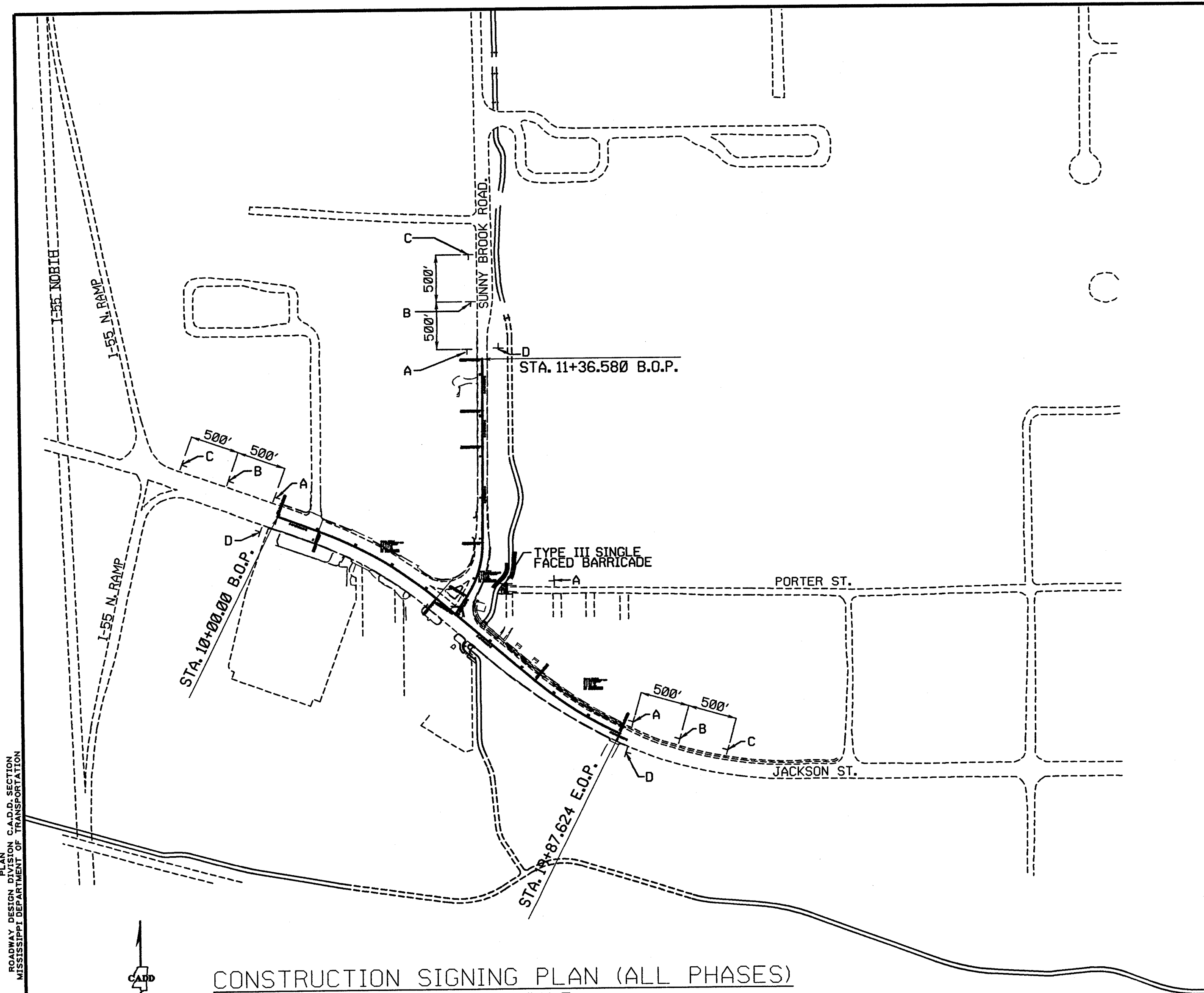
1. REMOVE EXISTING SIDEWALK EACH SIDE FOR THE MINIMUM DISTANCE REQ'D TO PROVIDE A FINISHED LONGITUDINAL SLOPE ON NEW SIDEWALK NOT STEEPER THAN 1V:12H. NEW SIDEWALKS SHALL BE FLUSH WITH NEW AND EXISTING PAVEMENT AT END. CARRY DEMOLITION AND REPLACEMENT OF SIDEWALK TO NEXT TRANSVERSE JOINT IN EXISTING SIDEWALK. STREET SIDE OF WARNING STRIP SHALL ALIGN WITH BACK OF CURB.
2. BRICK PAVERS FOR DETECTABLE WARNINGS SHALL BE "PAVESTONE DETECTABLE WARNING PAVERS" OR APPROVED BY EQUAL PAVER. COLOR SHALL BE PAVESTONE "CHARCOAL" OR APPROVED EQUAL. PAY ITEM 907-614-C "DETECTABLE WARNINGS (PER PLANS)"
3. TRANSITION CURB TO FLUSH AT MID POINT OF RADIUS.



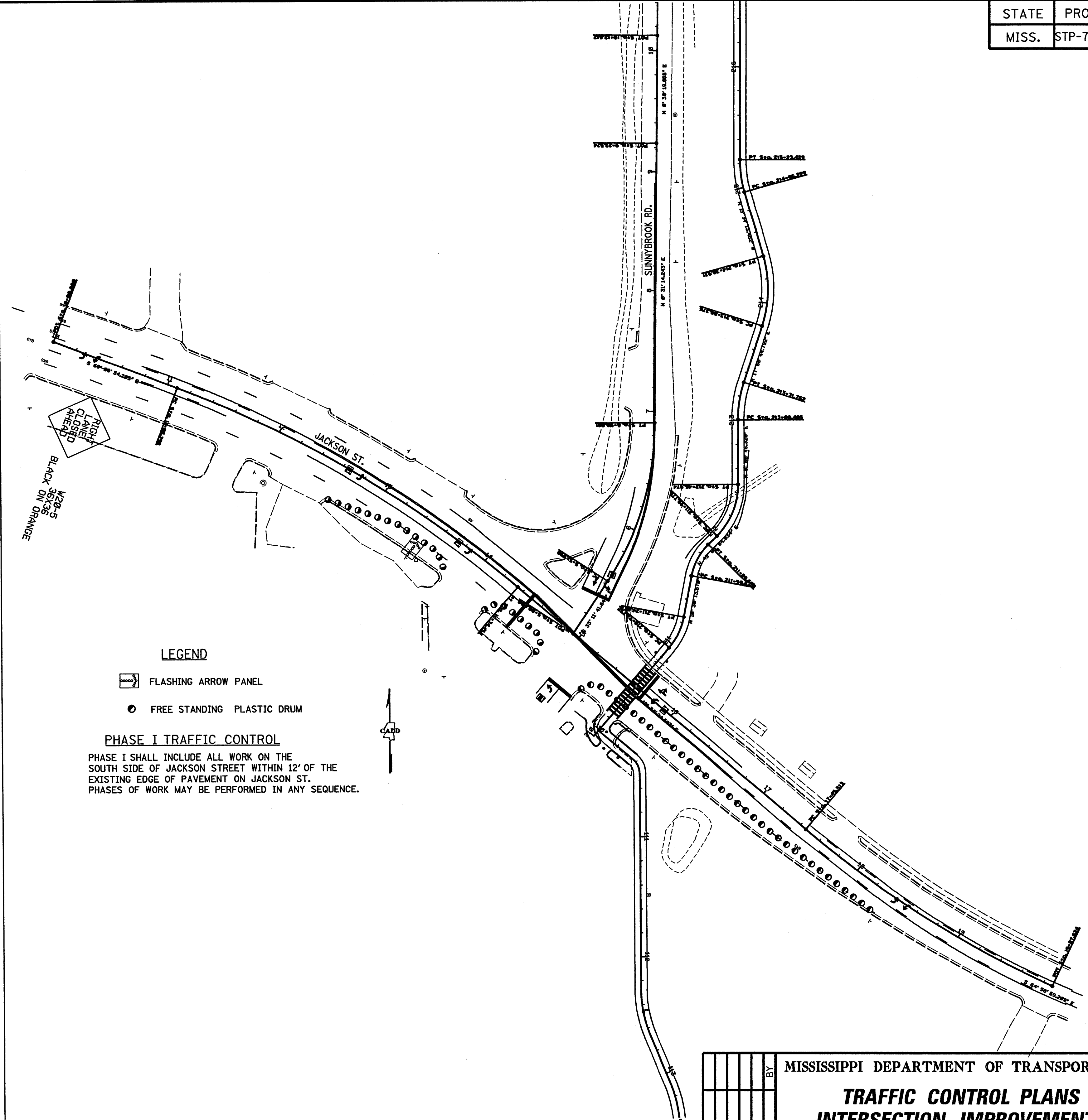
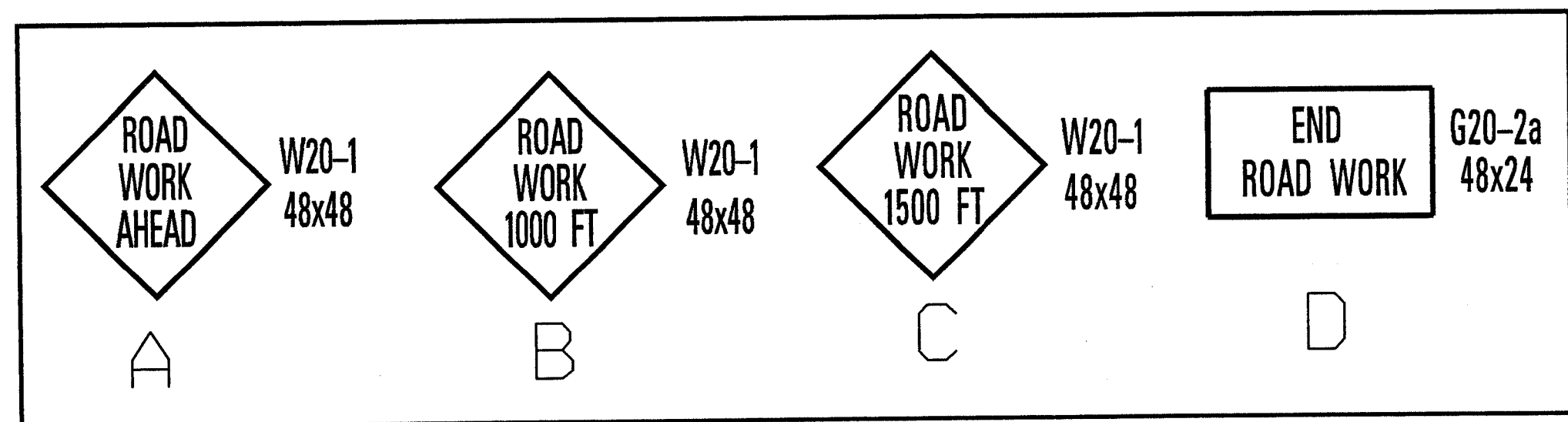
TYPICAL INSTALLATION DETAIL
BRICK PAVER DETECTABLE WARNING
 N.T.S.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
DETECTABLE WARNING DETAILS	
INTERSECTION IMPROVEMENTS	
JACKSON ST. & SUNNYBROOK RD.	
CITY OF RIDGELAND	
Project No.: STP-7302-00(005)	
County: MADISON	
WORKING NUMBER	DET-2
FILENAME: DETECTABLEWARNING.DGN	SHEET NUMBER
DESIGN TEAM N-S	CHECKED DATE
	26.1

PLAN
 SECTION
 MISSISSIPPI DEPARTMENT OF TRANSPORTATION



CONSTRUCTION SIGNING PLAN (ALL PHASES)
NOT TO SCALE



LEGEND

- FLASHING ARROW PANEL
- FREE STANDING PLASTIC DRUM

PHASE I TRAFFIC CONTROL
PHASE I SHALL INCLUDE ALL WORK ON THE SOUTH SIDE OF JACKSON STREET WITHIN 12' OF THE EXISTING EDGE OF PAVEMENT ON JACKSON ST. PHASES OF WORK MAY BE PERFORMED IN ANY SEQUENCE.

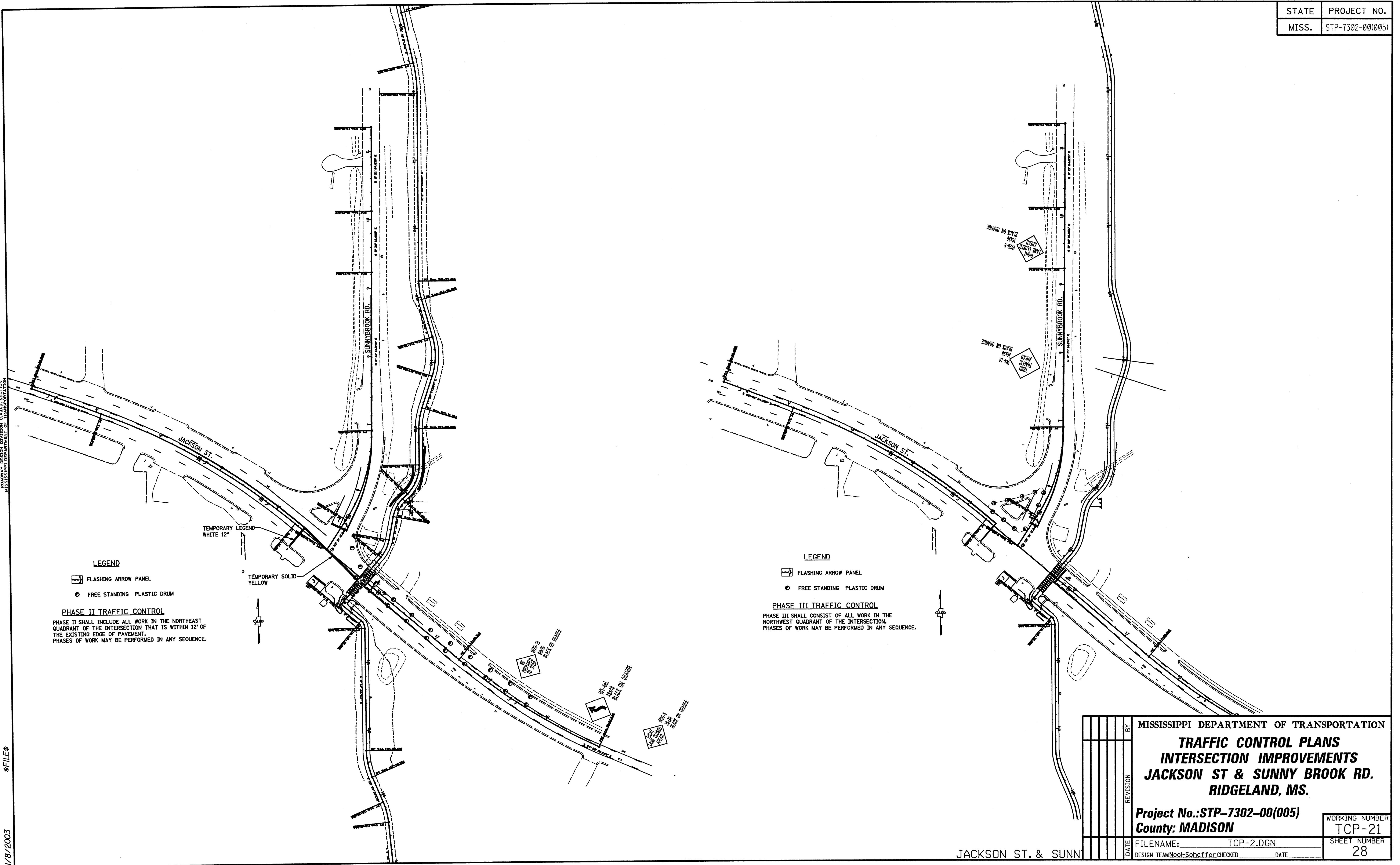
MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLANS INTERSECTION IMPROVEMENTS JACKSON ST & SUNNY BROOK RD. RIDGELAND, MS.	
Project No.: STP-7302-00(005)	
County: MADISON	
DATE	WORKING NUMBER
DESIGN TEAM Neel-Schaffer	TCP-20
CHECKED	SHEET NUMBER
DATE	27

ROADWAY DESIGN DIVISION C.A.D.S. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PLAN
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

\$FILE\$

1/8/2003



LEGEND

FLASHING ARROW PANEL

FREE STANDING PLASTIC DRUM

PHASE II TRAFFIC CONTROL

PHASE II SHALL INCLUDE ALL WORK IN THE NORTHEAST QUADRANT OF THE INTERSECTION THAT IS WITHIN 12' OF THE EXISTING EDGE OF PAVEMENT. PHASES OF WORK MAY BE PERFORMED IN ANY SEQUENCE.

TEMPORARY LEGEND WHITE 12"

TEMPORARY SOLID YELLOW

LEGEND

FLASHING ARROW PANEL

FREE STANDING PLASTIC DRUM

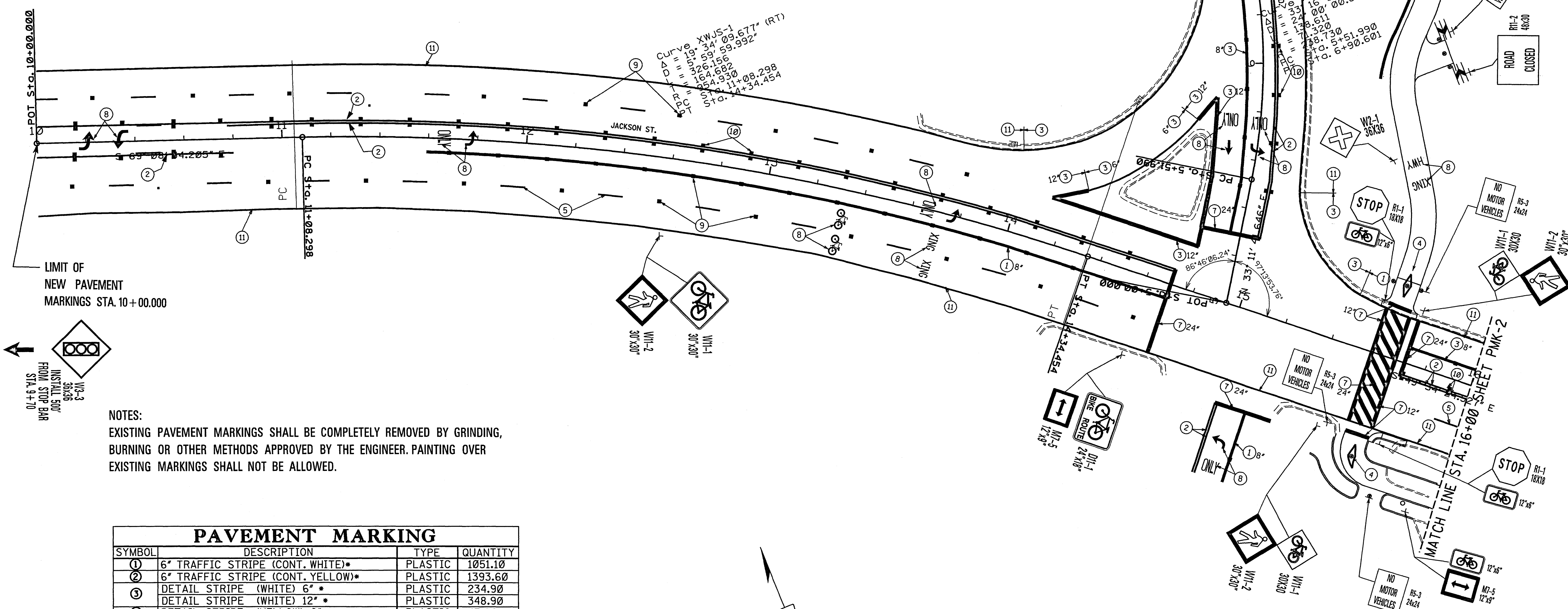
PHASE III TRAFFIC CONTROL

PHASE III SHALL CONSIST OF ALL WORK IN THE NORTHWEST QUADRANT OF THE INTERSECTION. PHASES OF WORK MAY BE PERFORMED IN ANY SEQUENCE.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
TRAFFIC CONTROL PLANS INTERSECTION IMPROVEMENTS JACKSON ST & SUNNY BROOK RD. RIDGELAND, MS.	
Project No.: STP-7302-00(005)	
County: MADISON	
WORKING NUMBER	TCP-21
FILENAME:	TCP-2.DGN
DESIGN TEAM: Neel-Schoffner	CHECKED: DATE
SHEET NUMBER	28

JACKSON ST. & SUNNY

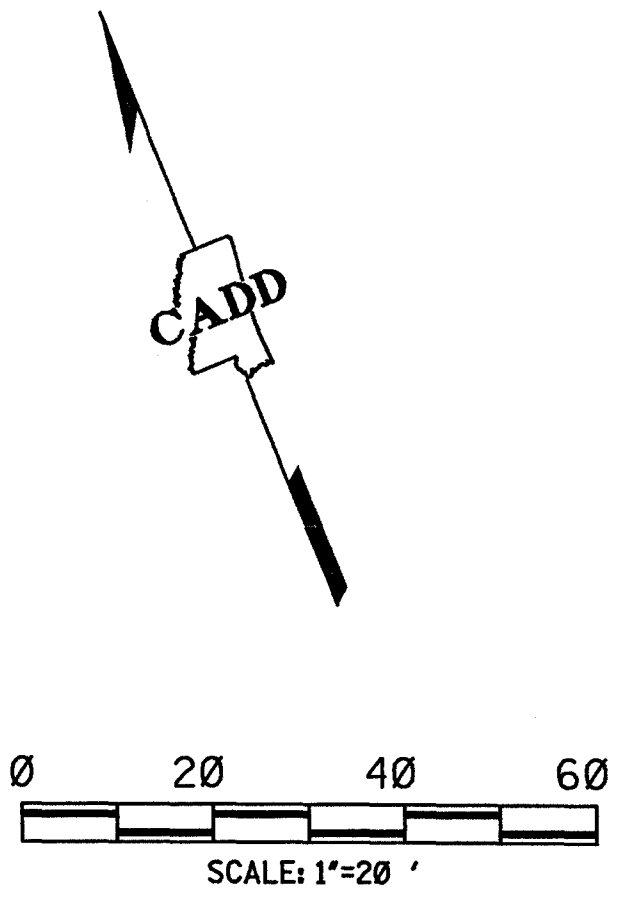
LIMIT OF
NEW PAVEMENT
MARKINGS STA. 6+90.601



NOTES:
EXISTING PAVEMENT MARKINGS SHALL BE COMPLETELY REMOVED BY GRINDING,
BURNING OR OTHER METHODS APPROVED BY THE ENGINEER. PAINTING OVER
EXISTING MARKINGS SHALL NOT BE ALLOWED.

PAVEMENT MARKING			
SYMBOL	DESCRIPTION	TYPE	QUANTITY
①	6" TRAFFIC STRIPE (CONT. WHITE)*	PLASTIC	1051.10
②	6" TRAFFIC STRIPE (CONT. YELLOW)*	PLASTIC	1393.60
③	DETAIL STRIPE (WHITE) 6" *	PLASTIC	234.90
④	DETAIL STRIPE (WHITE) 12" *	PLASTIC	348.90
⑤	DETAIL STRIPE (YELLOW) 6" *	PLASTIC	47.00
⑥	TRAFFIC STRIPE (SKIP WHITE) 6"	PLASTIC	1056.30
⑦	TRAFFIC STRIPE (SKIP YELLOW) 6"	PLASTIC	80.00
⑧	LEGEND (WHITE) LIN. FT. 6" EQUIVALENT	PLASTIC	1374.40
⑨	LEGEND (WHITE) SQ. FT	PLASTIC	438.20
⑩	RED-CLEAR REFLECTIVE RAISED MARKERS		51
⑪	TWO-WAY YELLOW REFLEC. RAISED MARKER		70
⑫	EDGE STRIPE (CONT. WHITE) 6"	PLASTIC	1240.80

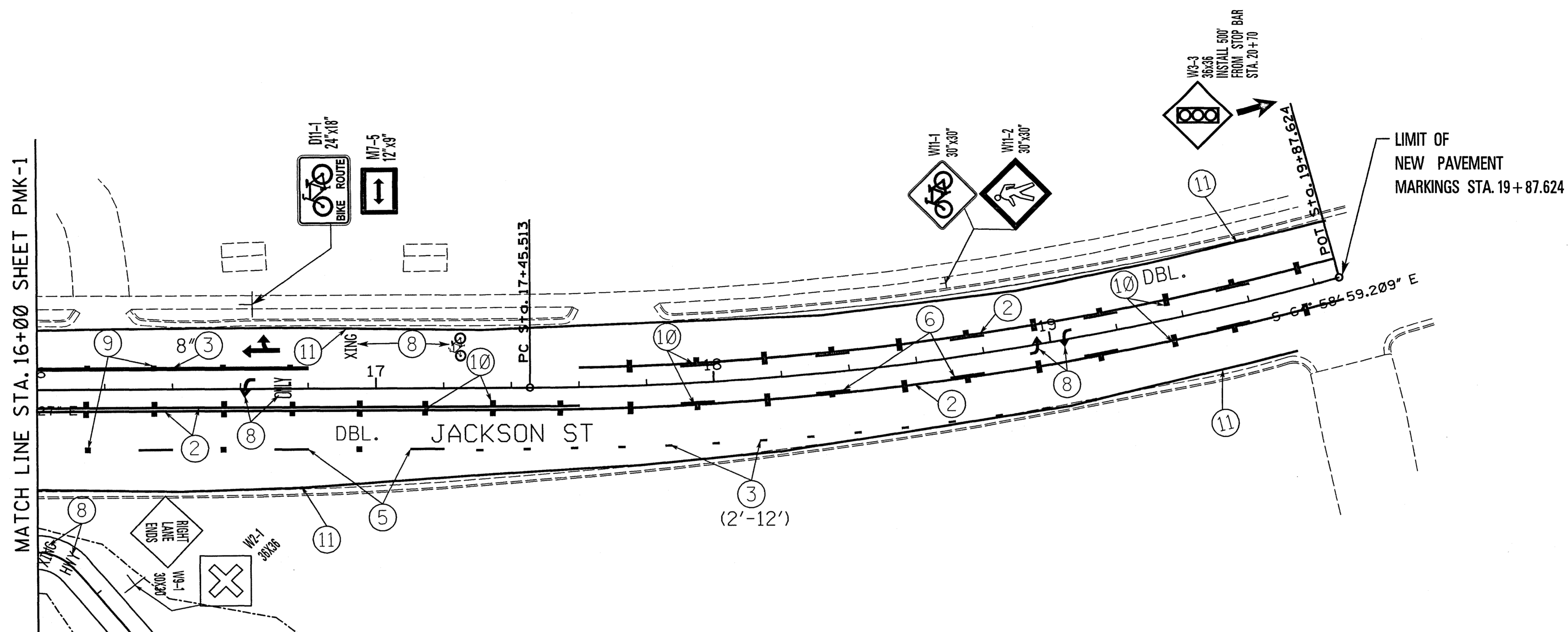
* UNLESS NOTED OTHERWISE



BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		PAVEMENT MARKING AND SIGNING PLAN	
		INTERSECTION IMPROVEMENTS	
		JACKSON ST. SUNNYBROOK RD.	
		CITY OF RIDGELAND, MS	
		Project No.: STP-7302-00(005)	
		County: MADISON	
		WORKING NUMBER	PMK-1
DATE		FILENAME: J-SPMK-1.DGN	SHEET NUMBER
		DESIGN TEAM: Neel-Schaffner:CHECKED	29
		DATE: 10/4/02	

ROADWAY DESIGN DIVISION, C.A.D.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

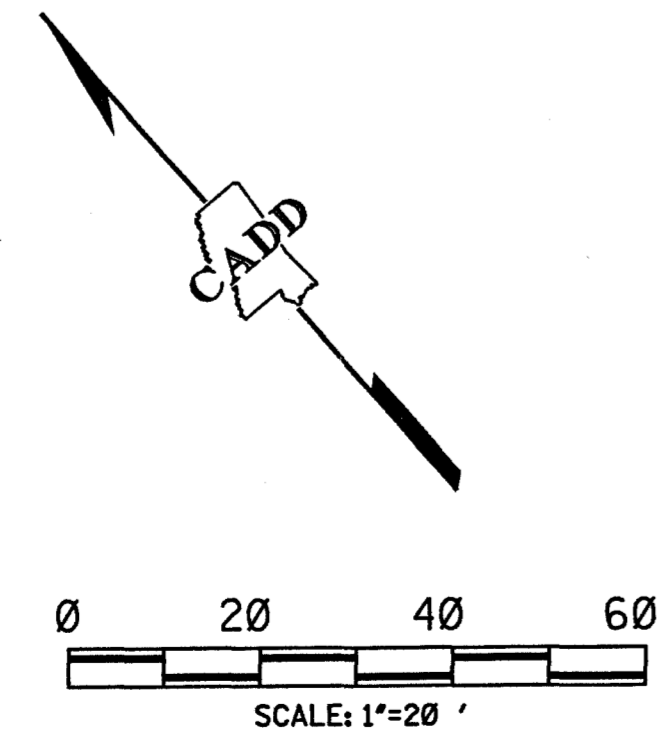
1/9/2003



PAVEMENT MARKING			
SYMBOL	DESCRIPTION	TYPE	QUANTITY
(1)	TRAFFIC STRIPE (CONT. WHITE) 6" *	PLASTIC	---
(2)	TRAFFIC STRIPE (CONT. YELLOW) 6" *	PLASTIC	920.8
(3)	DETAIL STRIPE (WHITE) 8" *	PLASTIC	188.0
(4)	DETAIL STRIPE (YELLOW) 6" *	PLASTIC	---
(5)	TRAFFIC STRIPE (SKIP WHITE) 6"	PLASTIC	120
(6)	TRAFFIC STRIPE (SKIP YELLOW) 6"	PLASTIC	400.0
(7)	LEGEND (WHITE) LIN. FT. 6" EQUIVALENT	PLASTIC	---
(8)	LEGEND (WHITE) SQ. FT.	PLASTIC	200.4
(9)	RED-CLEAR REFLECTIVE RAISED MARKERS	---	7
(10)	TWO-WAY YELLOW REFLEC. RAISED MARKER	---	50
(11)	EDGE STRIPE (CONT WHITE) 6"	PLASTIC	777.4

* UNLESS NOTED OTHERWISE

NOTES:
 EXISTING PAVEMENT MARKINGS SHALL BE COMPLETELY REMOVED BY GRINDING, BURNING OR OTHER METHODS APPROVED BY THE ENGINEER. PAINTING OVER EXISTING MARKINGS SHALL NOT BE ALLOWED.



ROADWAY DESIGN CADD SECTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

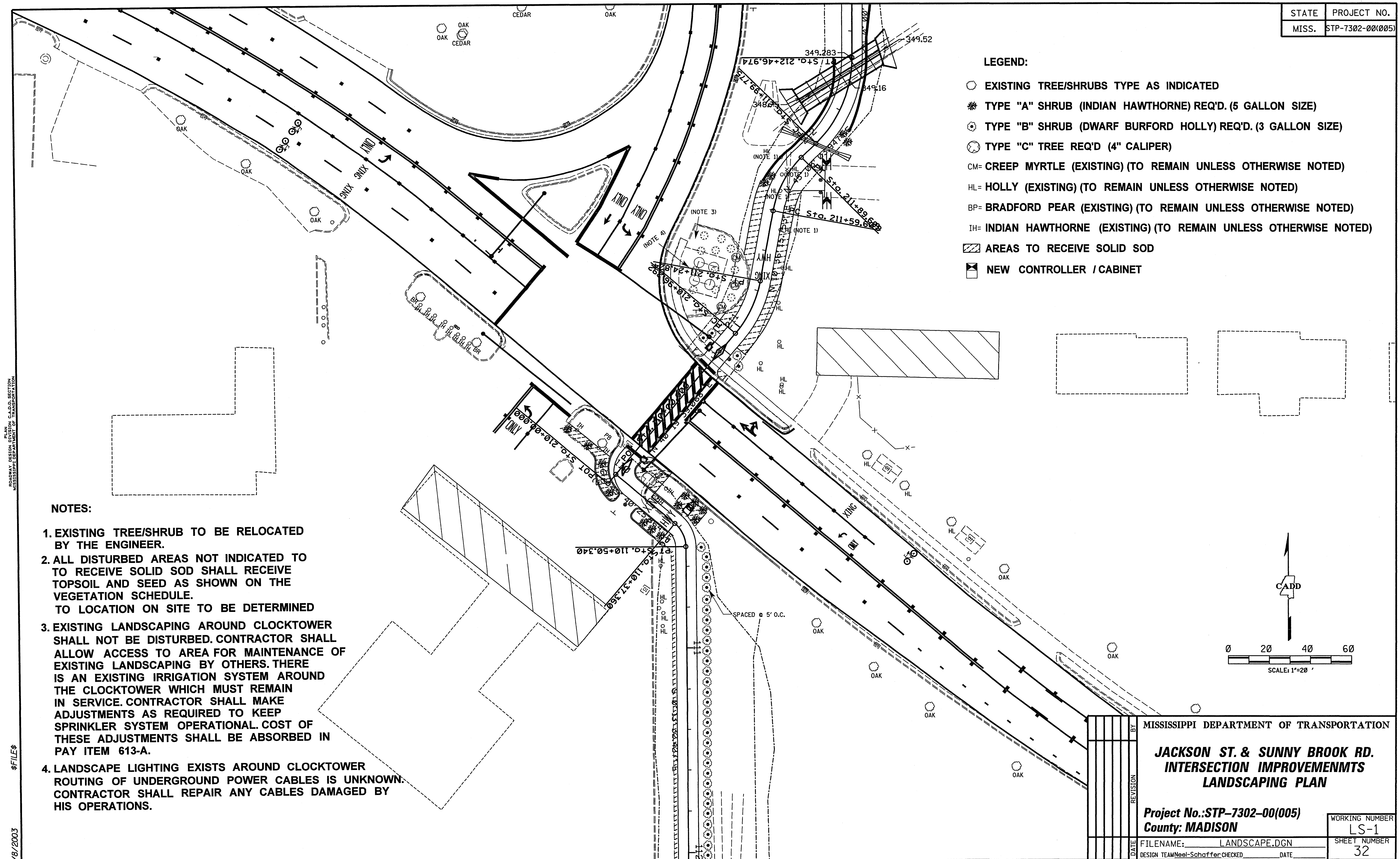
\$FILE\$

1/9/2003

MISSISSIPPI DEPARTMENT OF TRANSPORTATION PAVEMENT MARKING AND SIGNING PLAN INTERSECTION IMPROVEMENTS JACKSON ST. SUNNYBROOK RD. CITY OF RIDGELAND, MS Project No.: STP-7302-00(005) County: MADISON		WORKING NUMBER PMK-2
DATE: _____ DESIGN TEAM: Neel-Schaffner CHECKED: _____ DATE: _____	FILENAME: 4360-01/J-SPMK2.DGN	SHEET NUMBER 30

LEGEND:

- EXISTING TREE/SHRUBS TYPE AS INDICATED
- * TYPE "A" SHRUB (INDIAN HAWTHORNE) REQ'D. (5 GALLON SIZE)
- ⊙ TYPE "B" SHRUB (DWARF BURFORD HOLLY) REQ'D. (3 GALLON SIZE)
- ⊗ TYPE "C" TREE REQ'D (4" CALIPER)
- CM= CREEP MYRTLE (EXISTING) (TO REMAIN UNLESS OTHERWISE NOTED)
- HL= HOLLY (EXISTING) (TO REMAIN UNLESS OTHERWISE NOTED)
- BP= BRADFORD PEAR (EXISTING) (TO REMAIN UNLESS OTHERWISE NOTED)
- IH= INDIAN HAWTHORNE (EXISTING) (TO REMAIN UNLESS OTHERWISE NOTED)
- ▨ AREAS TO RECEIVE SOLID SOD
- ☐ NEW CONTROLLER / CABINET



NOTES:

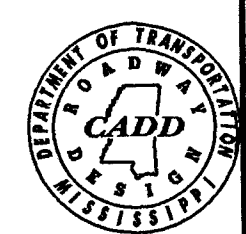
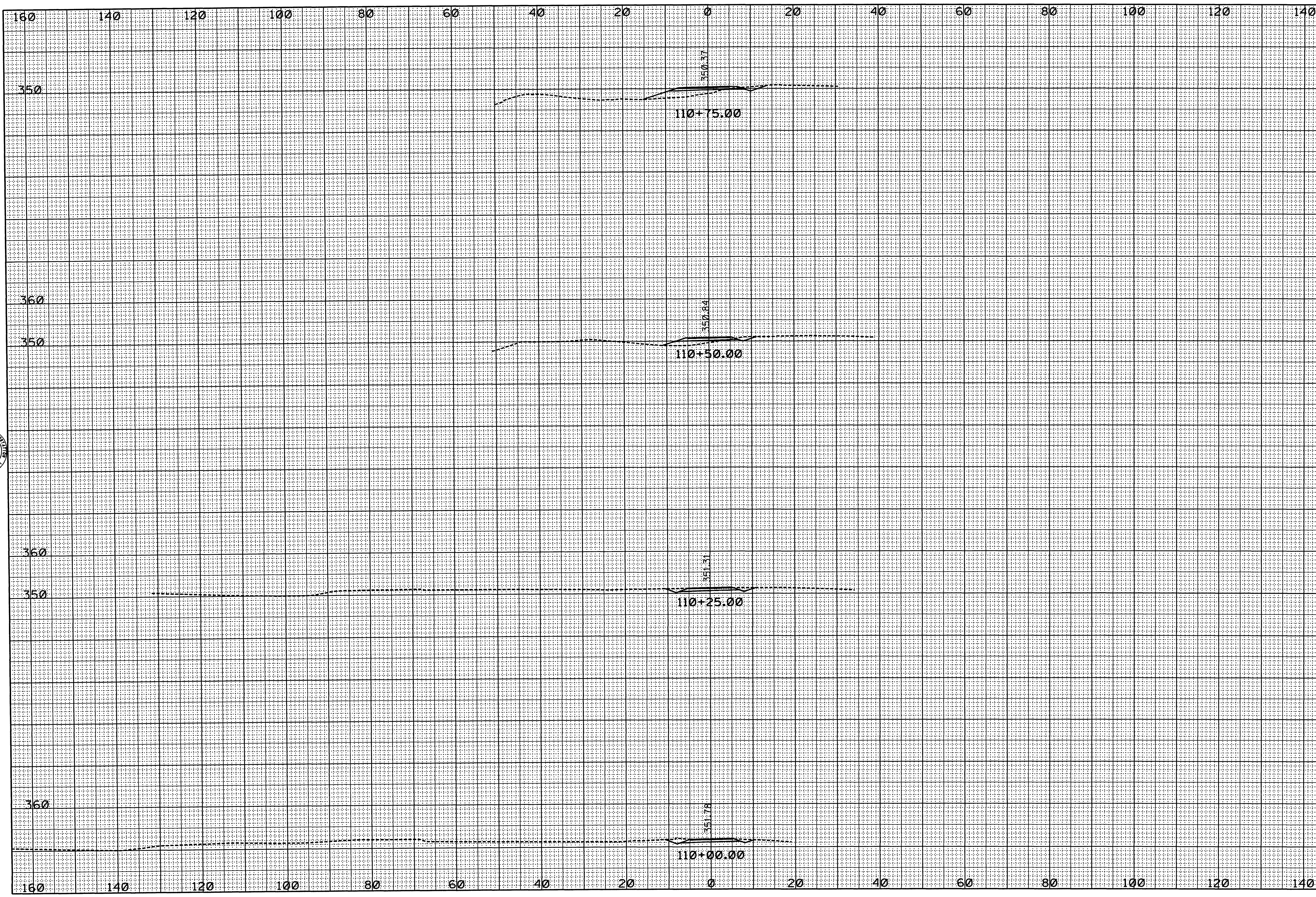
1. EXISTING TREE/SHRUB TO BE RELOCATED BY THE ENGINEER.
2. ALL DISTURBED AREAS NOT INDICATED TO RECEIVE SOLID SOD SHALL RECEIVE TOPSOIL AND SEED AS SHOWN ON THE VEGETATION SCHEDULE. TO LOCATION ON SITE TO BE DETERMINED
3. EXISTING LANDSCAPING AROUND CLOCKTOWER SHALL NOT BE DISTURBED. CONTRACTOR SHALL ALLOW ACCESS TO AREA FOR MAINTENANCE OF EXISTING LANDSCAPING BY OTHERS. THERE IS AN EXISTING IRRIGATION SYSTEM AROUND THE CLOCKTOWER WHICH MUST REMAIN IN SERVICE. CONTRACTOR SHALL MAKE ADJUSTMENTS AS REQUIRED TO KEEP SPRINKLER SYSTEM OPERATIONAL. COST OF THESE ADJUSTMENTS SHALL BE ABSORBED IN PAY ITEM 613-A.
4. LANDSCAPE LIGHTING EXISTS AROUND CLOCKTOWER. ROUTING OF UNDERGROUND POWER CABLES IS UNKNOWN. CONTRACTOR SHALL REPAIR ANY CABLES DAMAGED BY HIS OPERATIONS.

ROADWAY DESIGN DIVISION, C.A.D.D. SECTION, MISSISSIPPI DEPARTMENT OF TRANSPORTATION

\$FILE\$

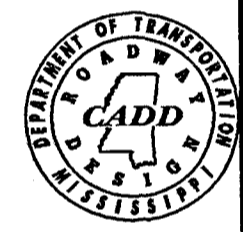
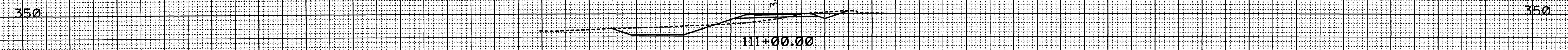
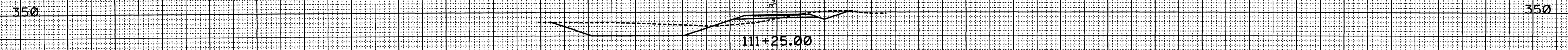
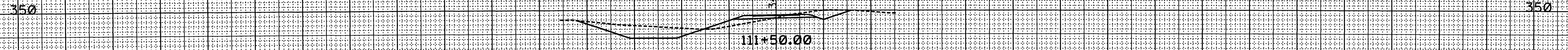
1/8/2003

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
JACKSON ST. & SUNNY BROOK RD. INTERSECTION IMPROVEMENTS LANDSCAPE PLAN	
Project No.: STP-7302-00(005)	
County: MADISON	
DATE	WORKING NUMBER
DESIGN TEAM: Neel-Schaffer	LS-1
CHECKED	SHEET NUMBER
DATE	32



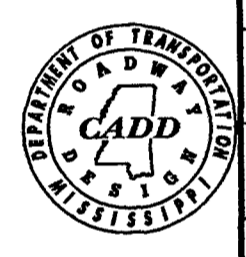
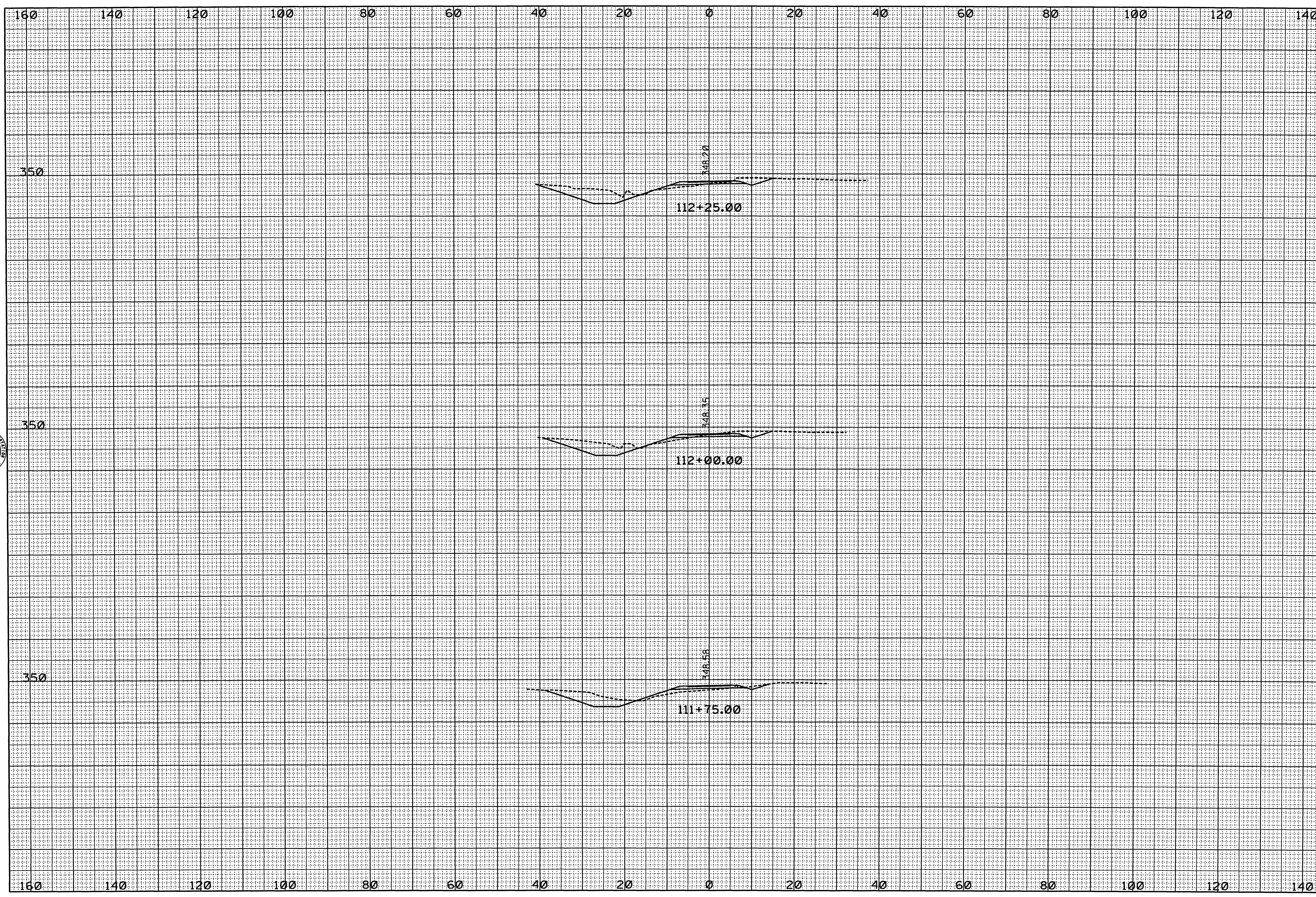
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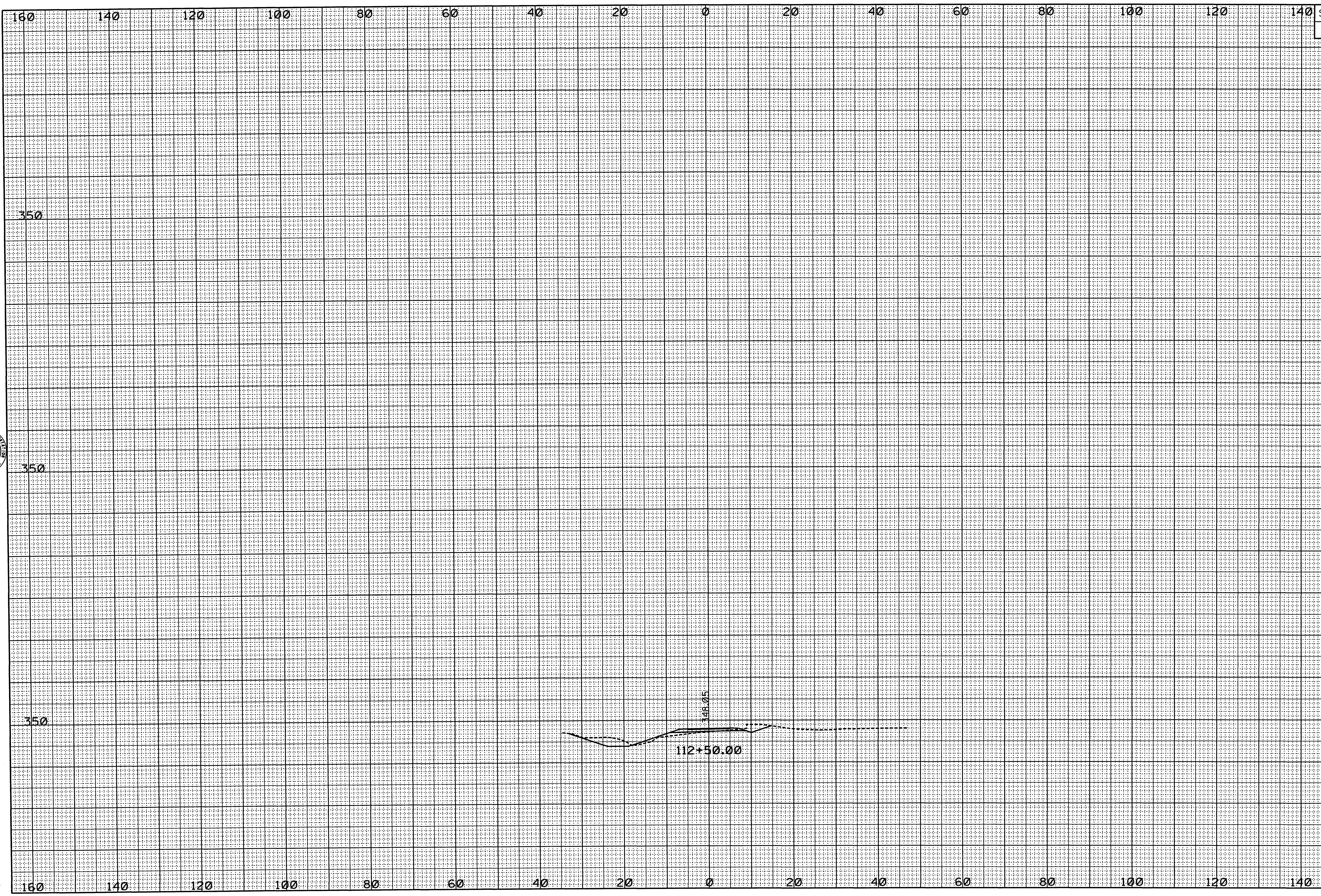
STATE PROJECT NO.
MISS. STP-7302-00(005)



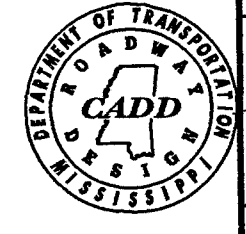
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Wk. No.
XS-2
Sh. No.
34

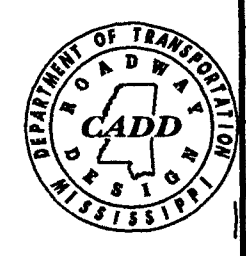
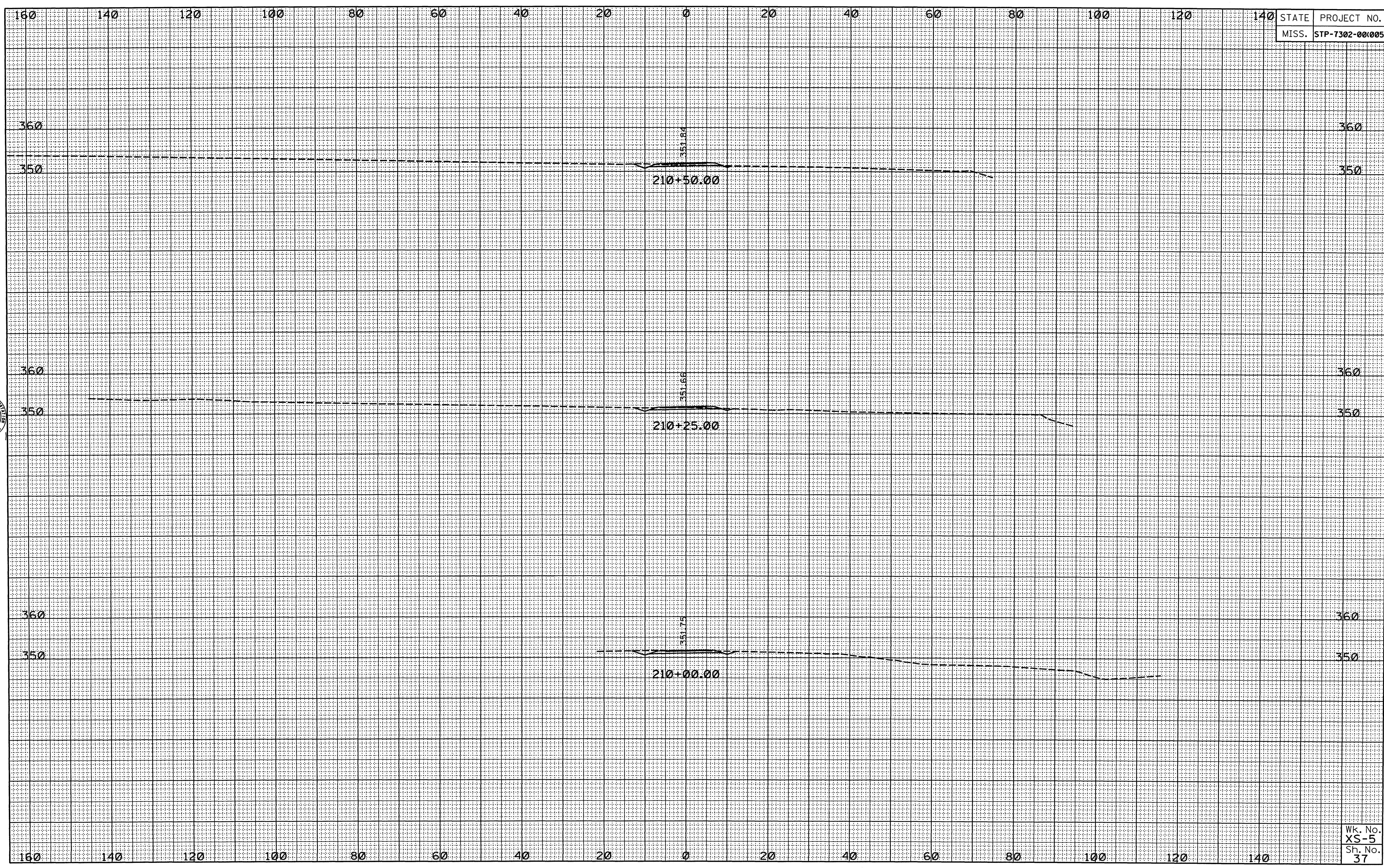


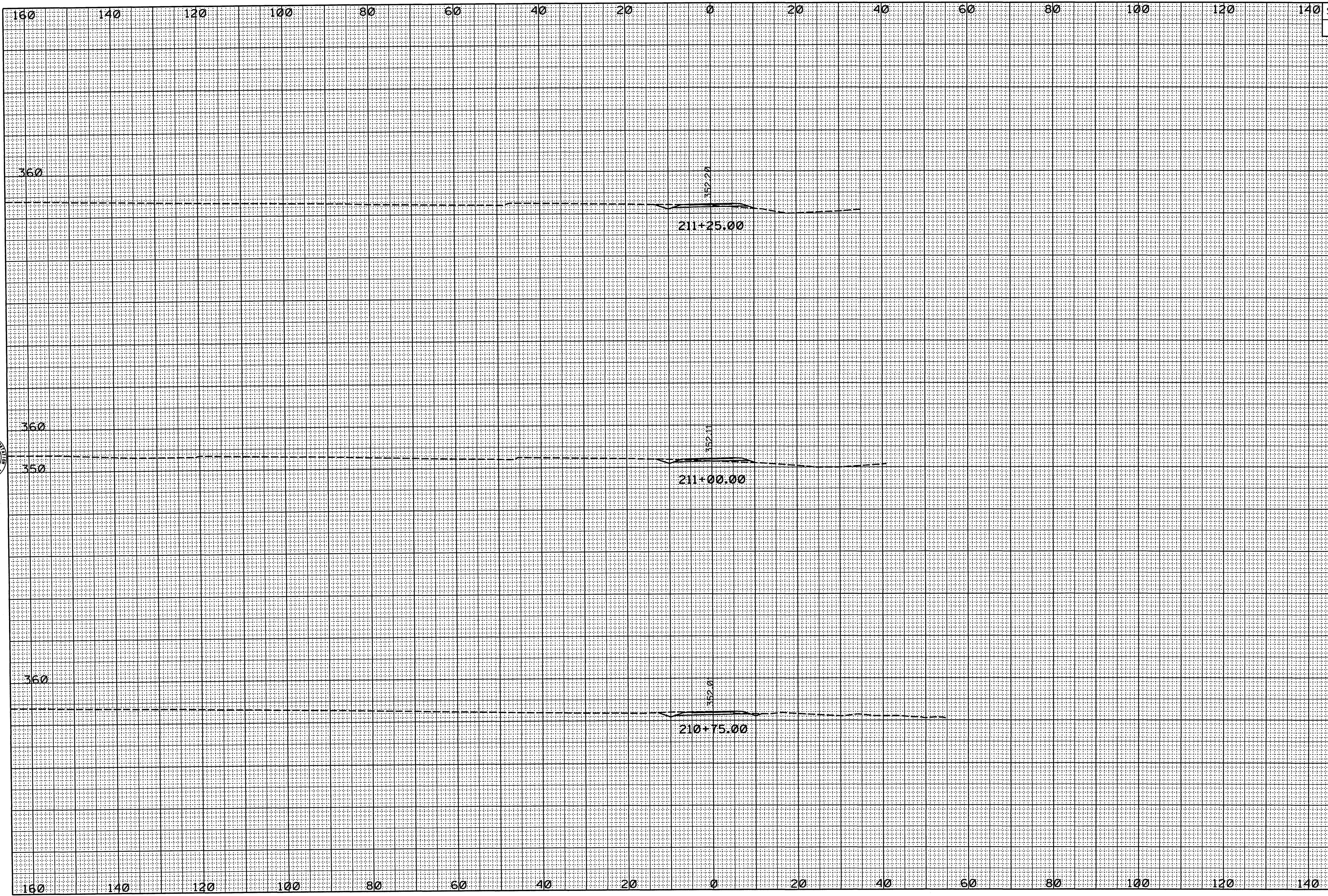


STATE	PROJECT NO.
MISS.	STP-7302-00(005)

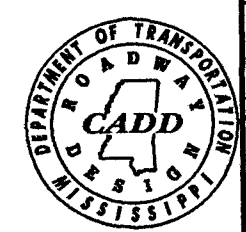


Wk. No.
XS-4
Sh. No.
36

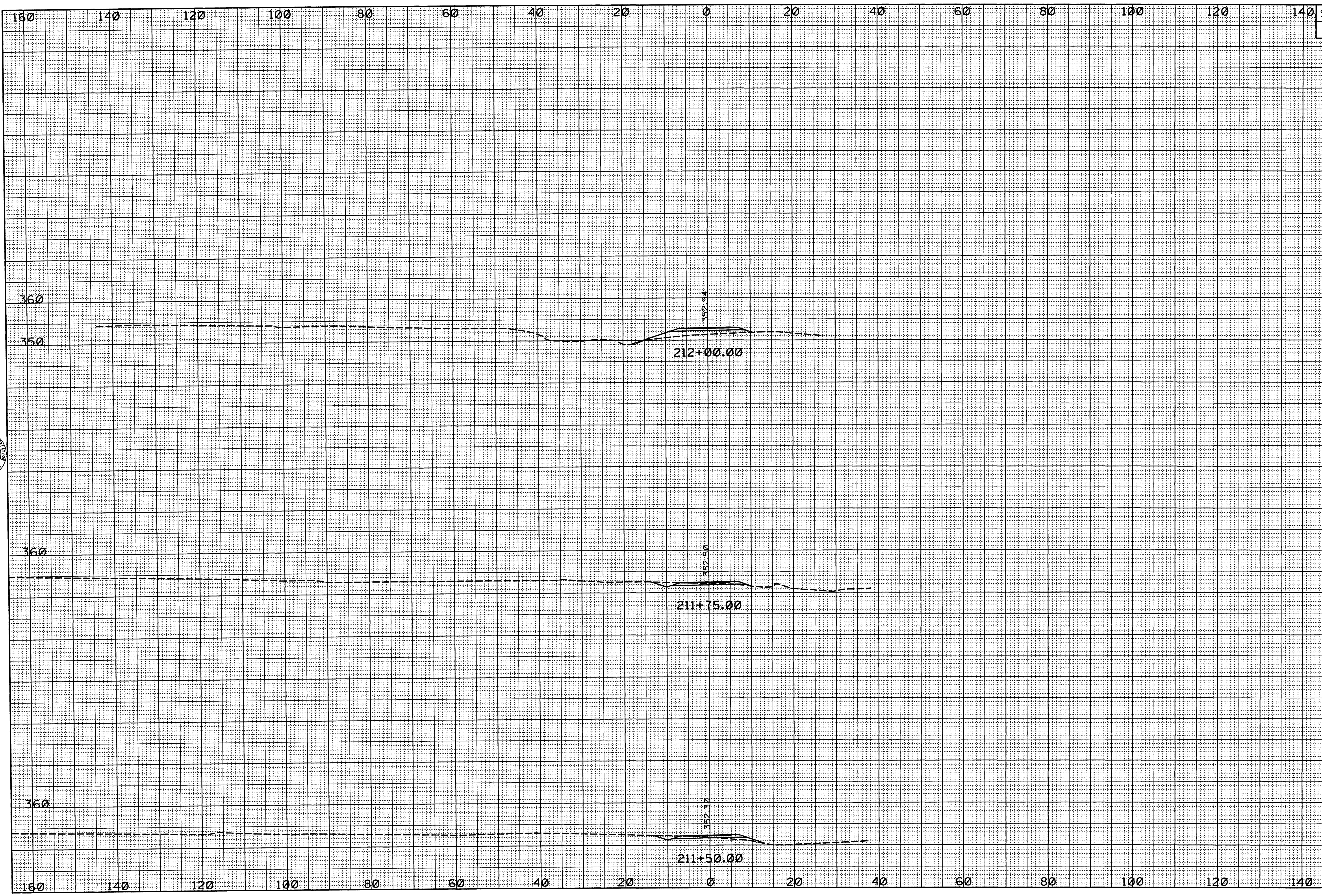




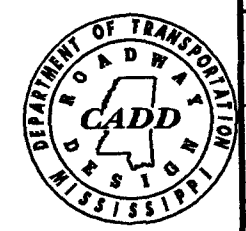
STATE	PROJECT NO.
MISS.	STP-7302-00(005)



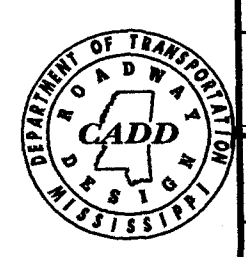
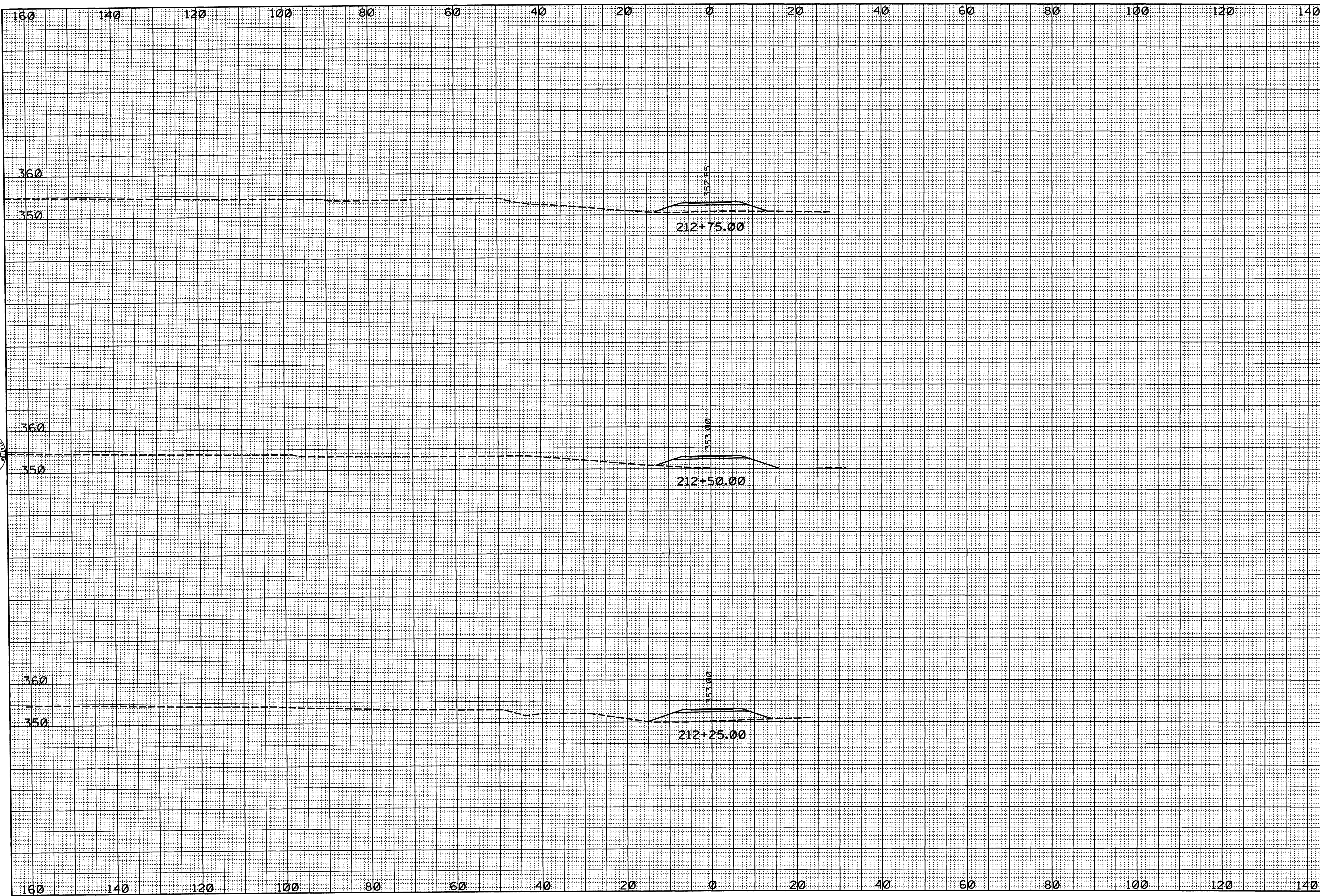
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Sh. No.
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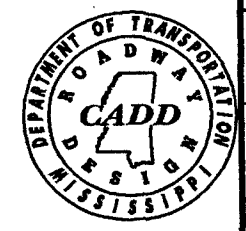
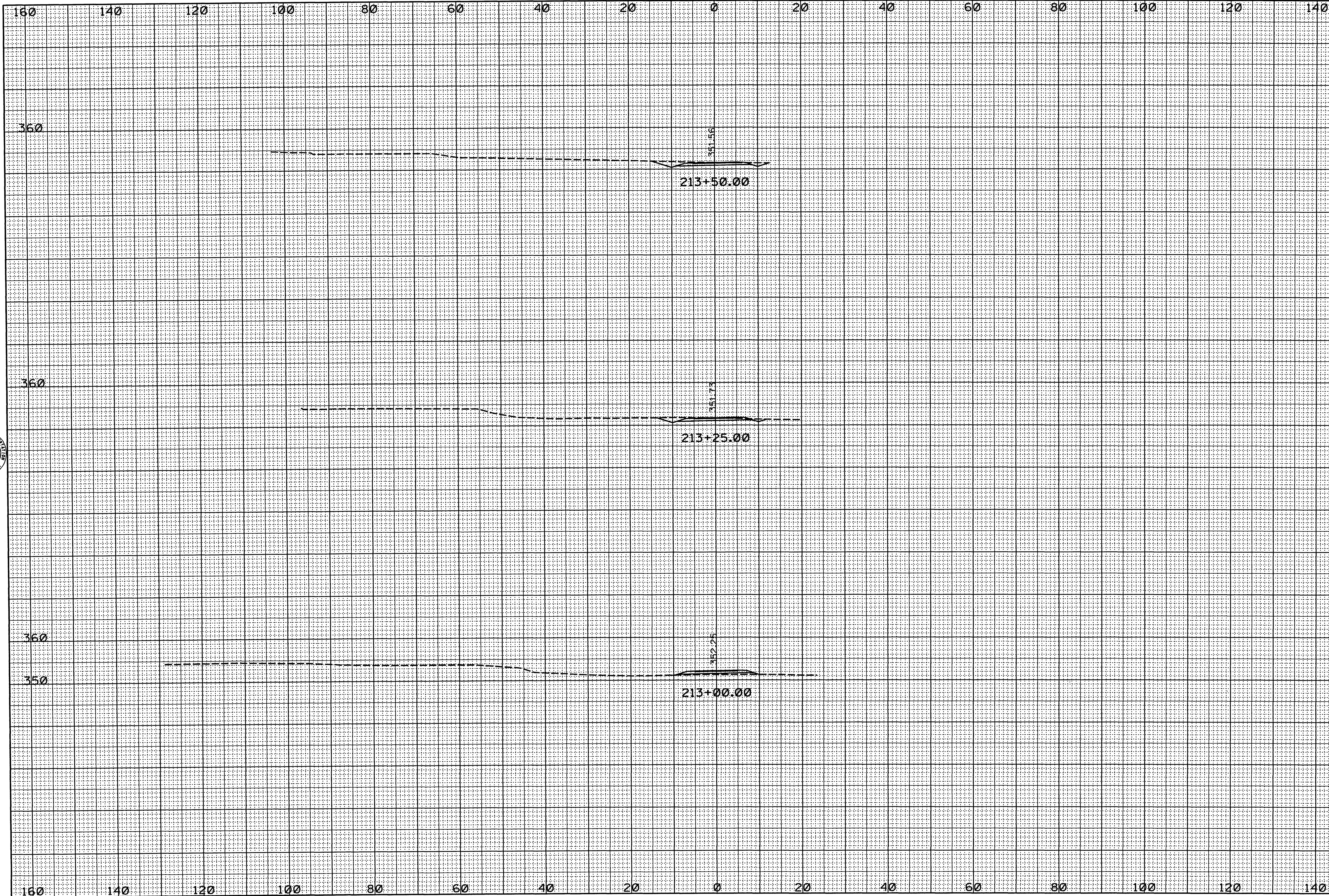


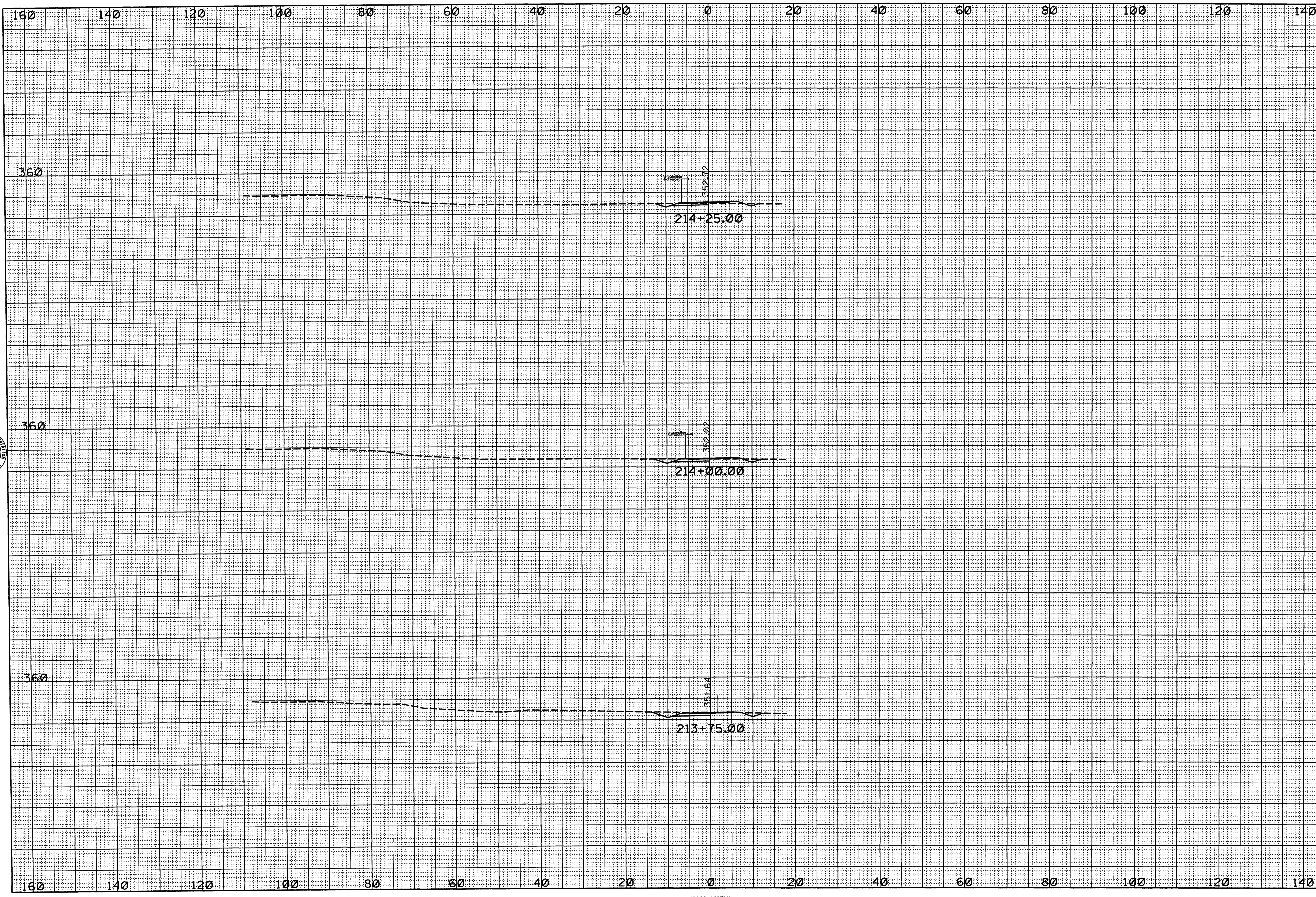
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MISS.	STP-7302-00(005)

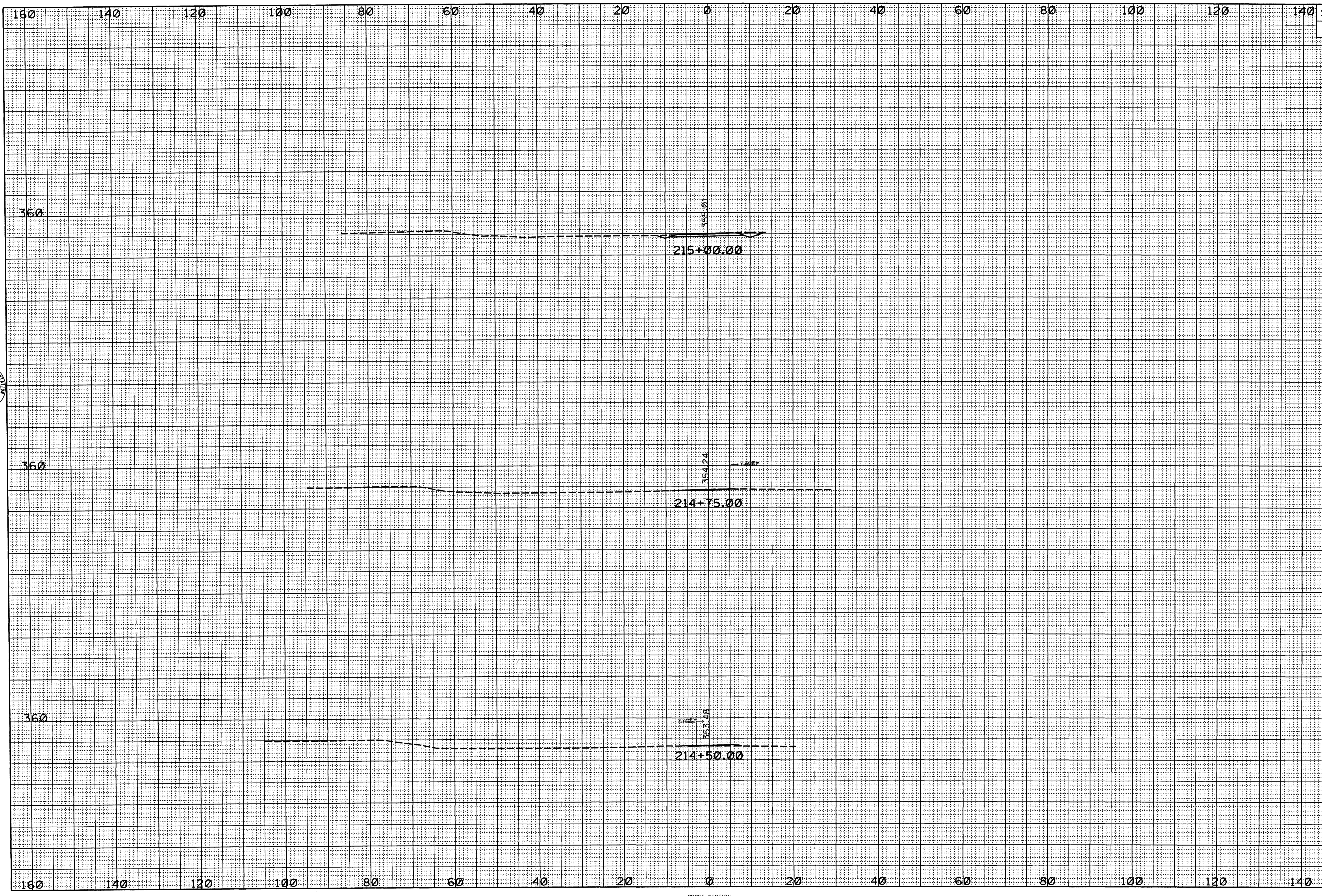


Wk. No.
XS-7
Sh. No.
39





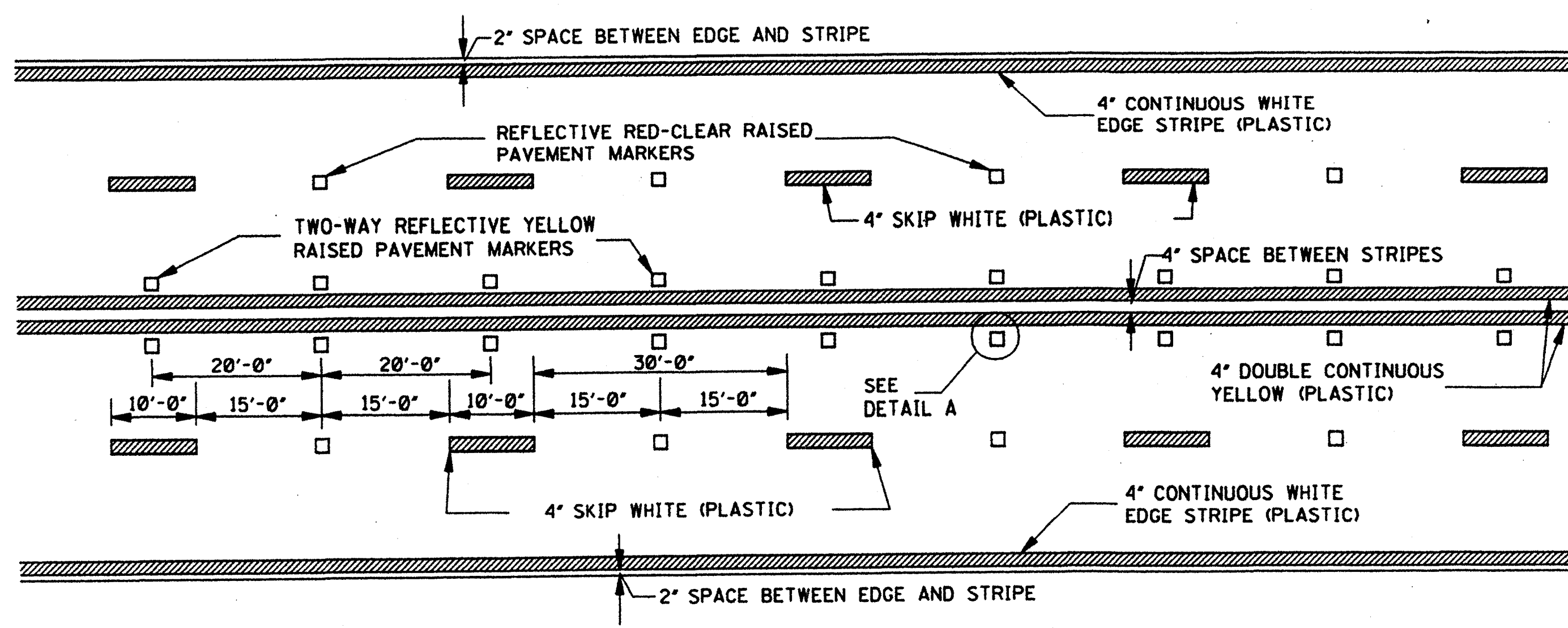




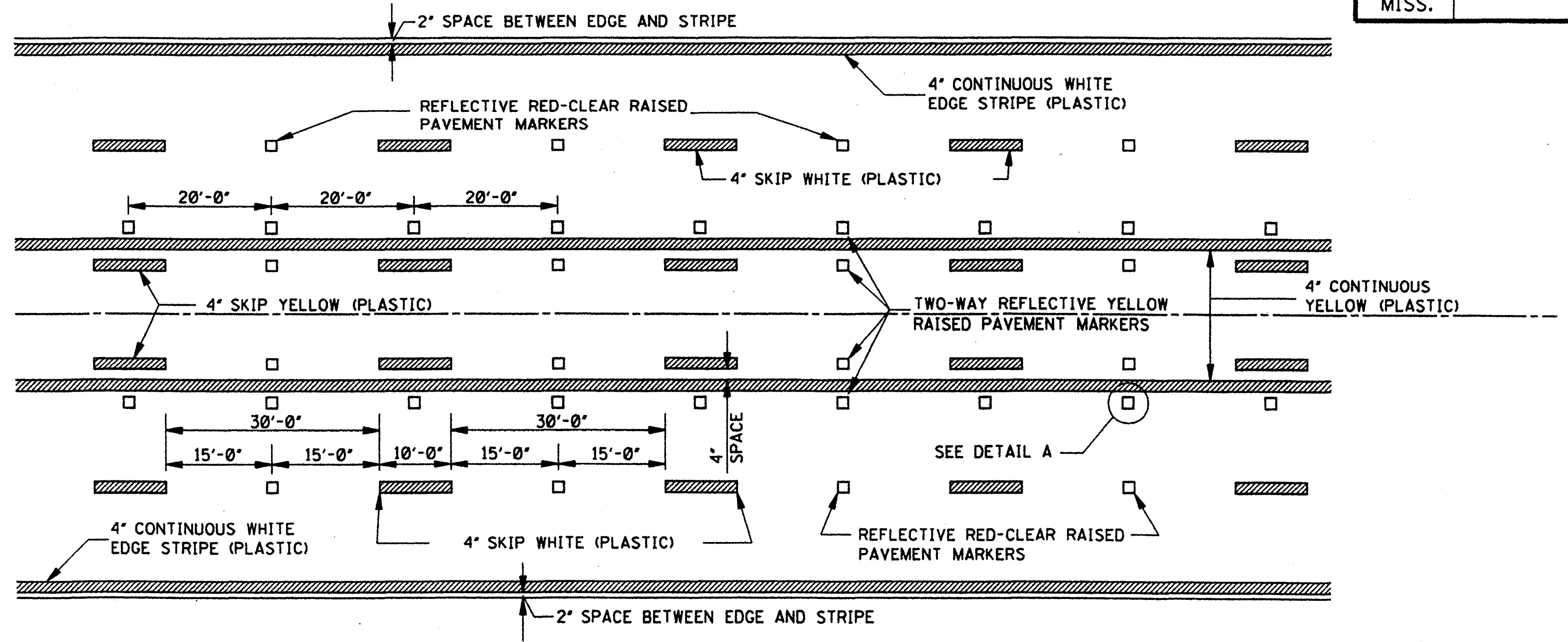
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MISS.	STP-7302-00(005)



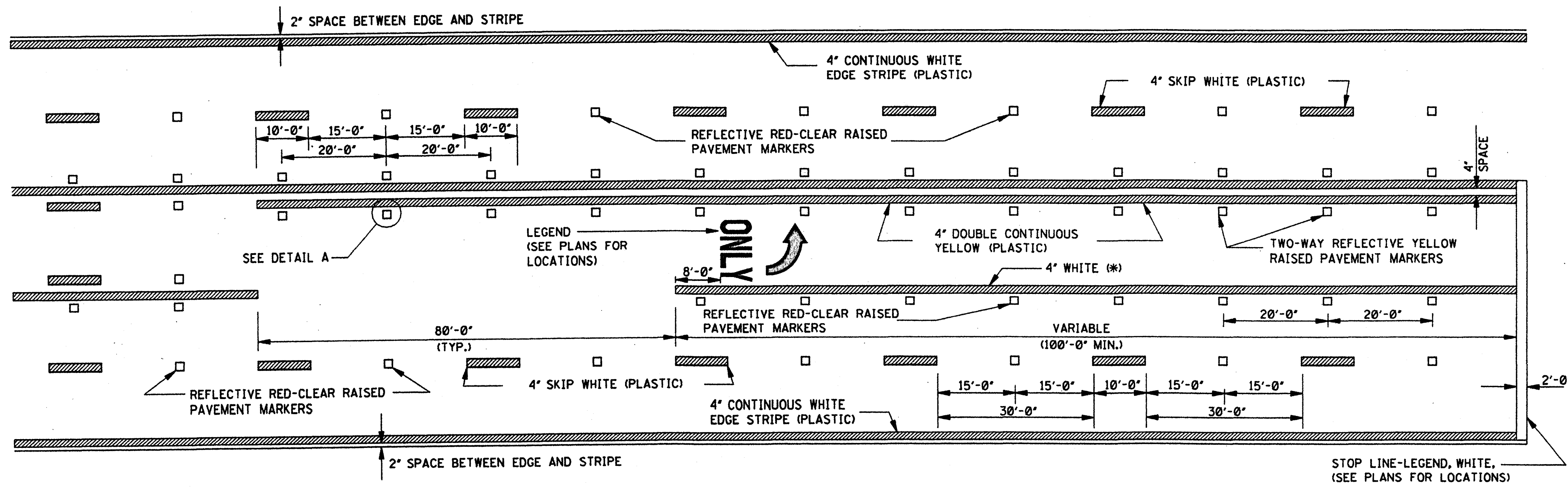
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XS-11
Sh. No.
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TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION

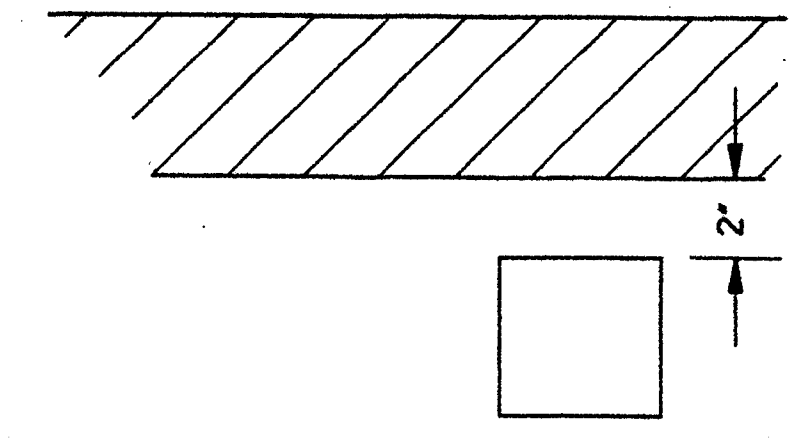


TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION



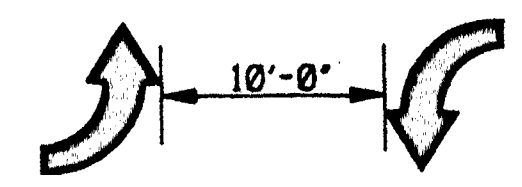
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES

*NOTE: USE DETAIL STRIPING IF LENGTH ≤ 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.



DETAIL A LATERAL PLACEMENT OF PAVEMENT MARKERS

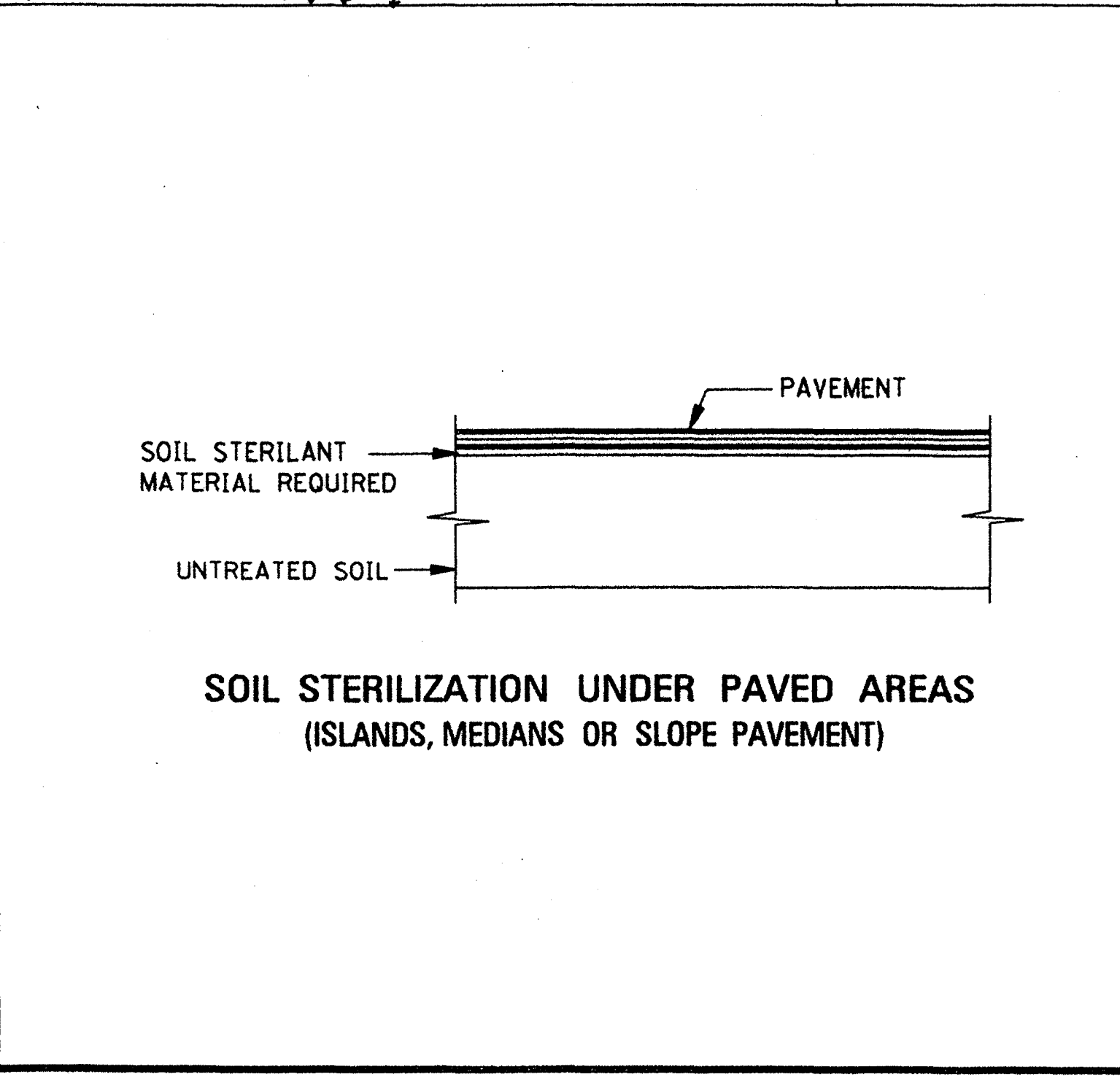
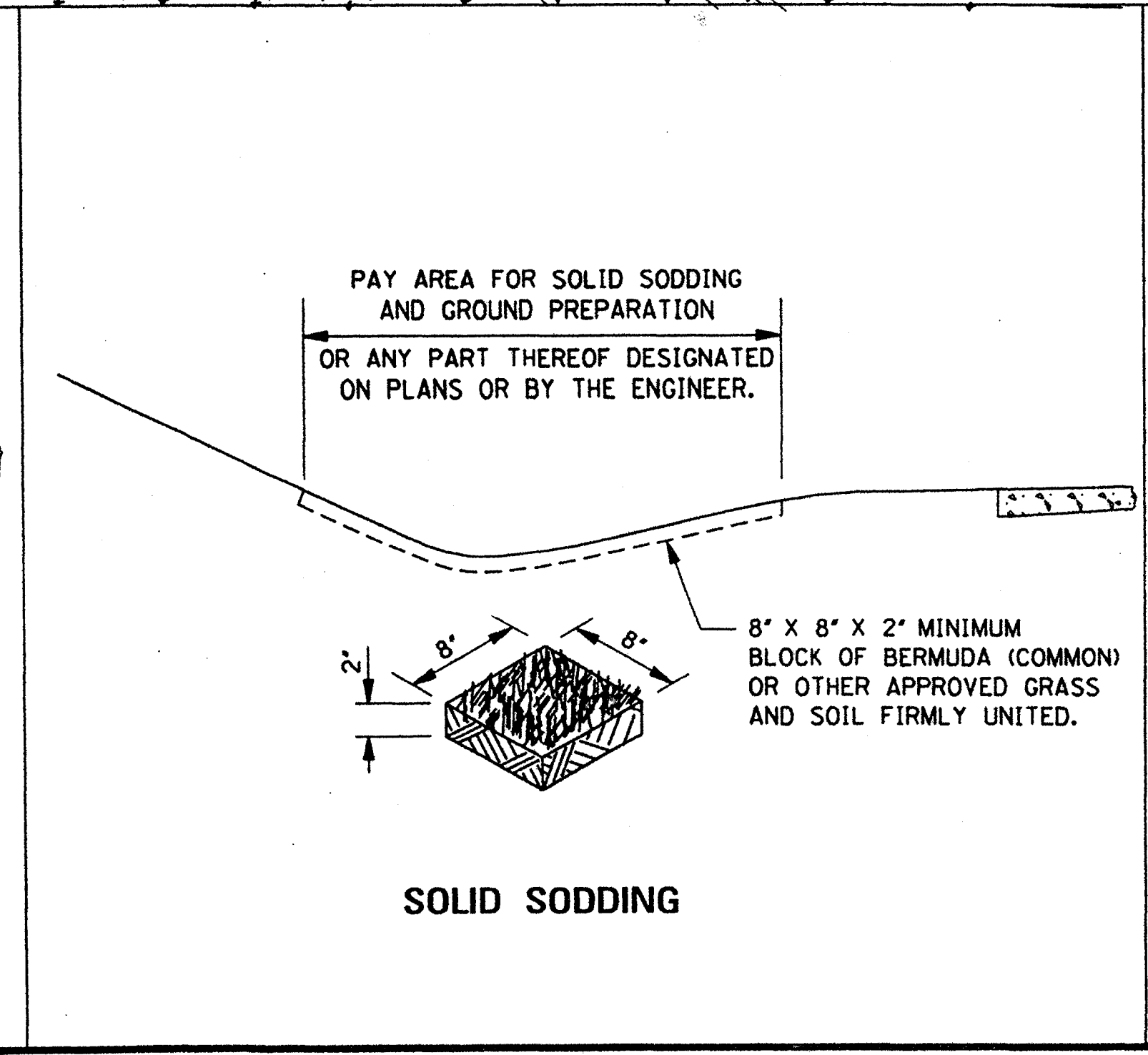
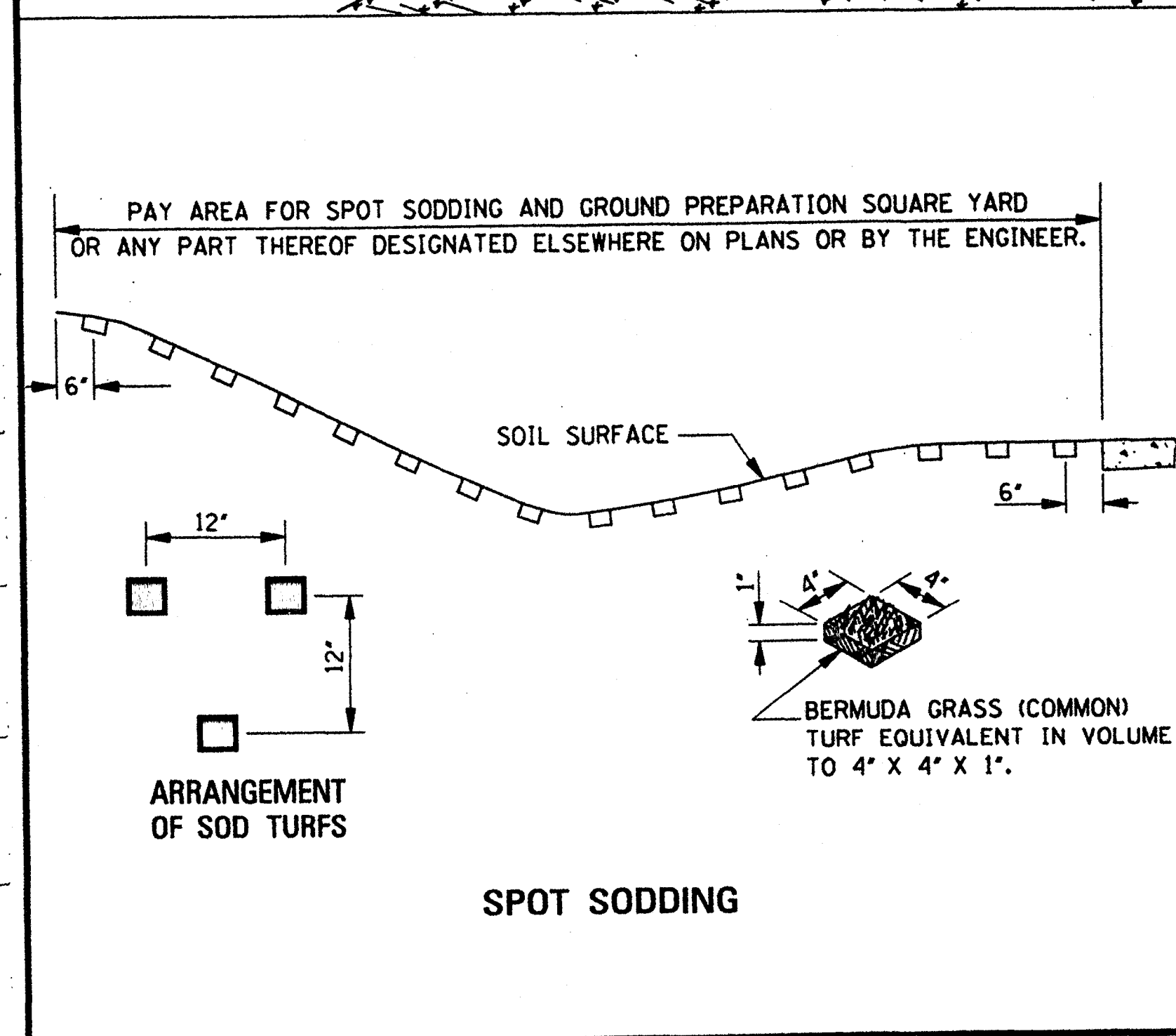
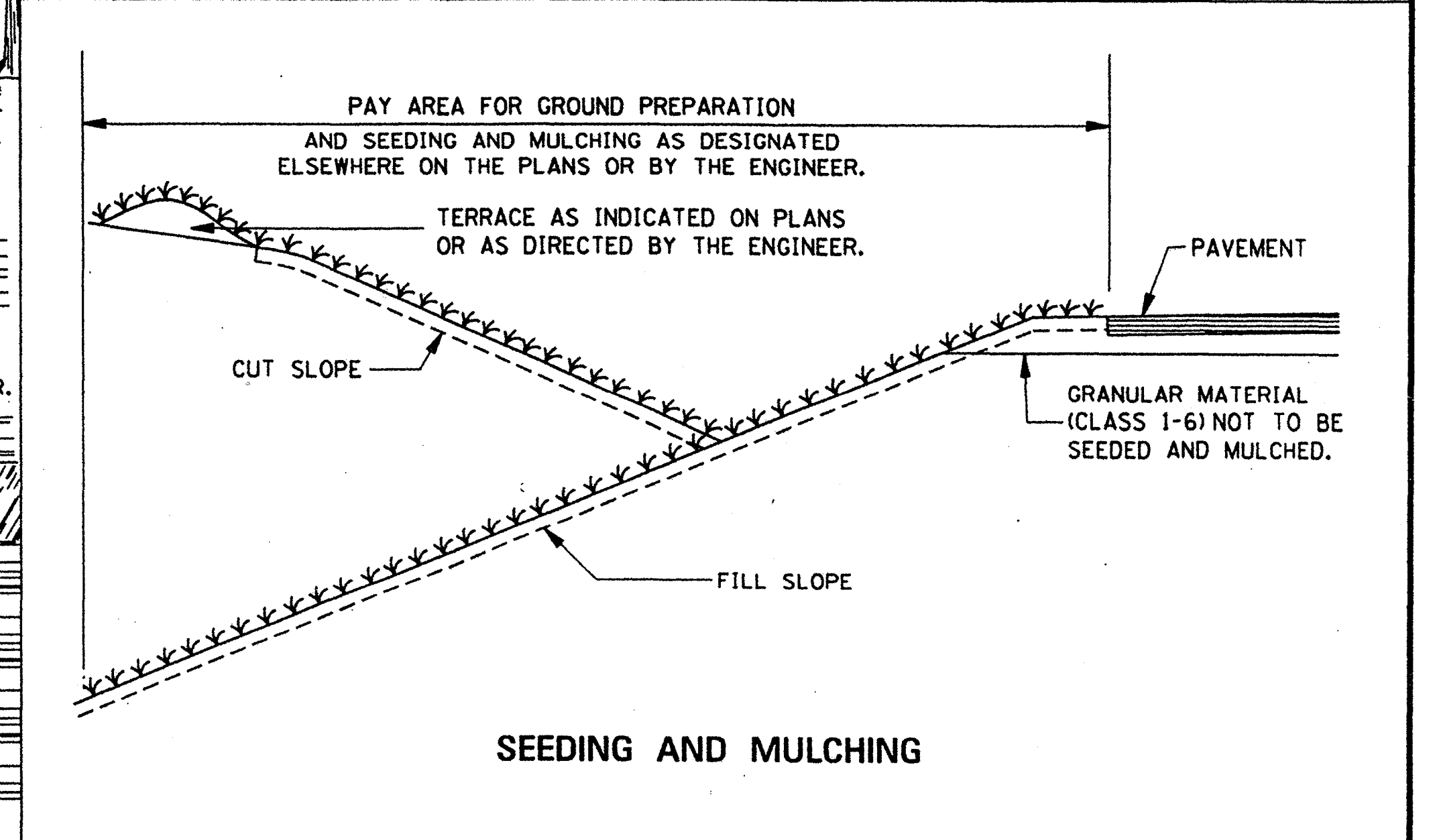
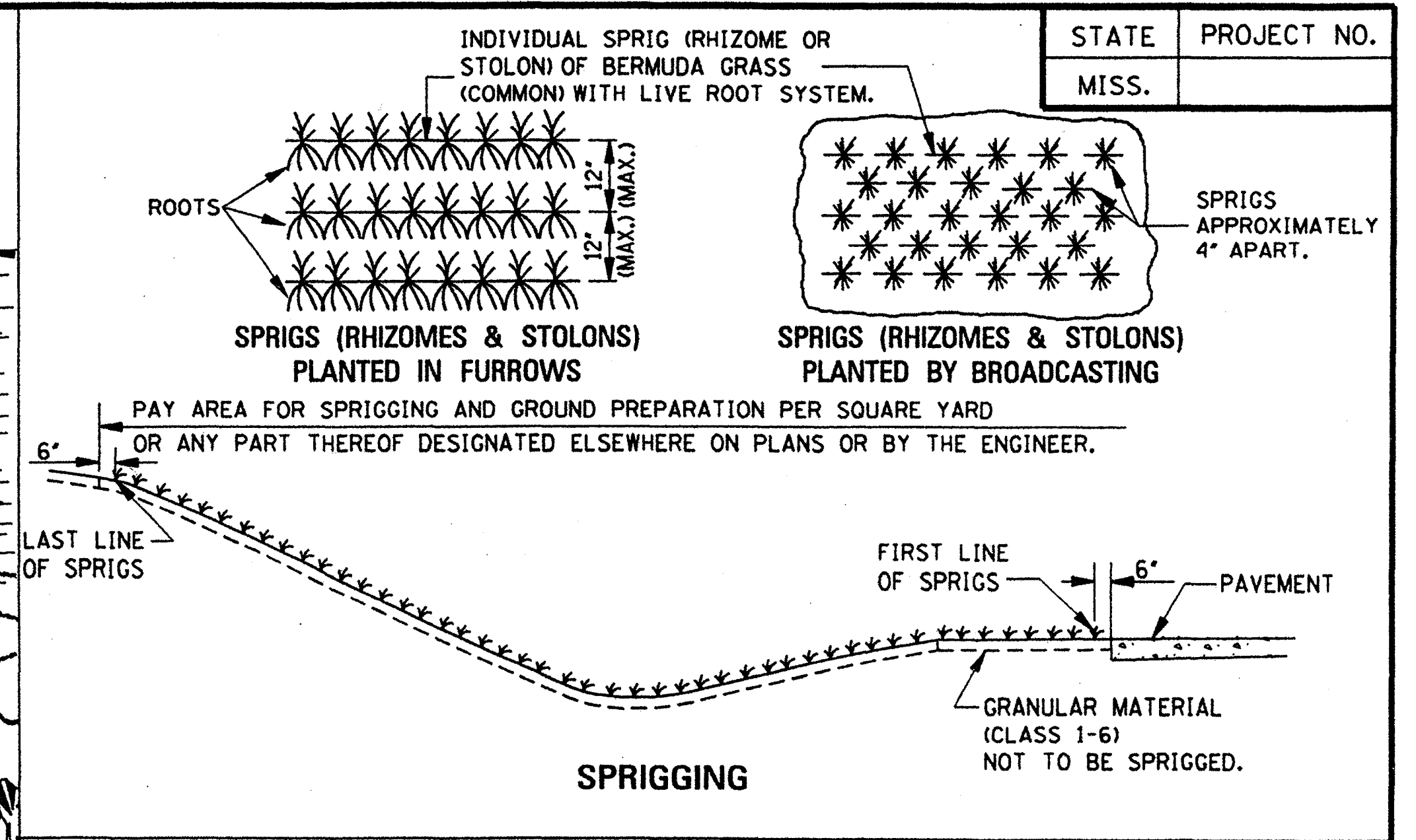
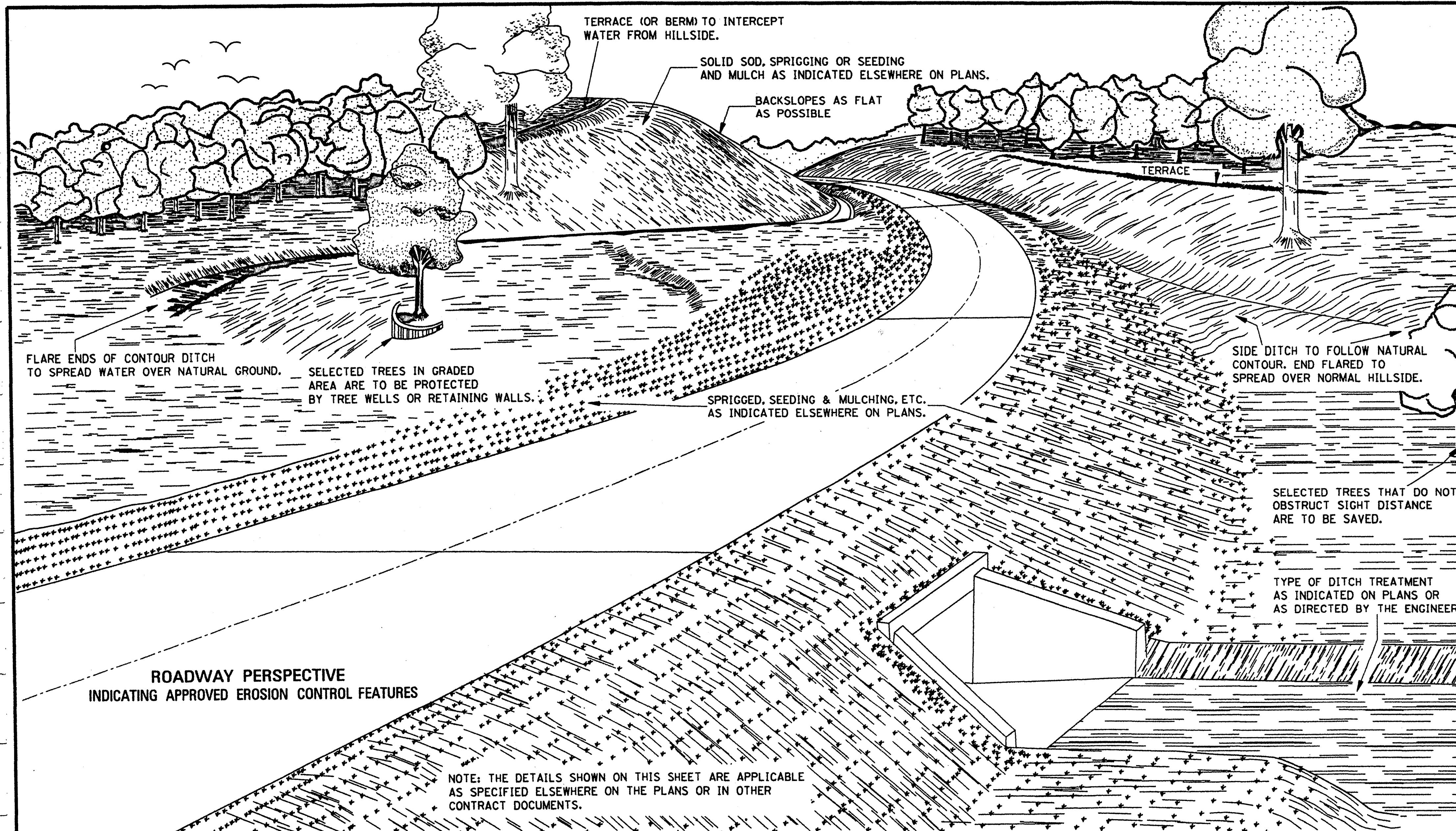
GENERAL NOTE:
1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDT 'APPROVED SOURCES OF MATERIALS'.



TYPICAL TWO-WAY ARROW INSTALLATION

- NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.
3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>PAVEMENT MARKING DETAILS FOR 4-LANE AND 5-LANE UNDIVIDED ROADWAYS</p> 	
DATE			
		WORKING NUMBER PM-2	SHEET NUMBER 121



GENERAL NOTE:

1. LONGITUDINAL AND TRANSVERSE MEASUREMENTS FOR THE PAY AREA SHALL BE TAKEN ALONG THE SLOPES.

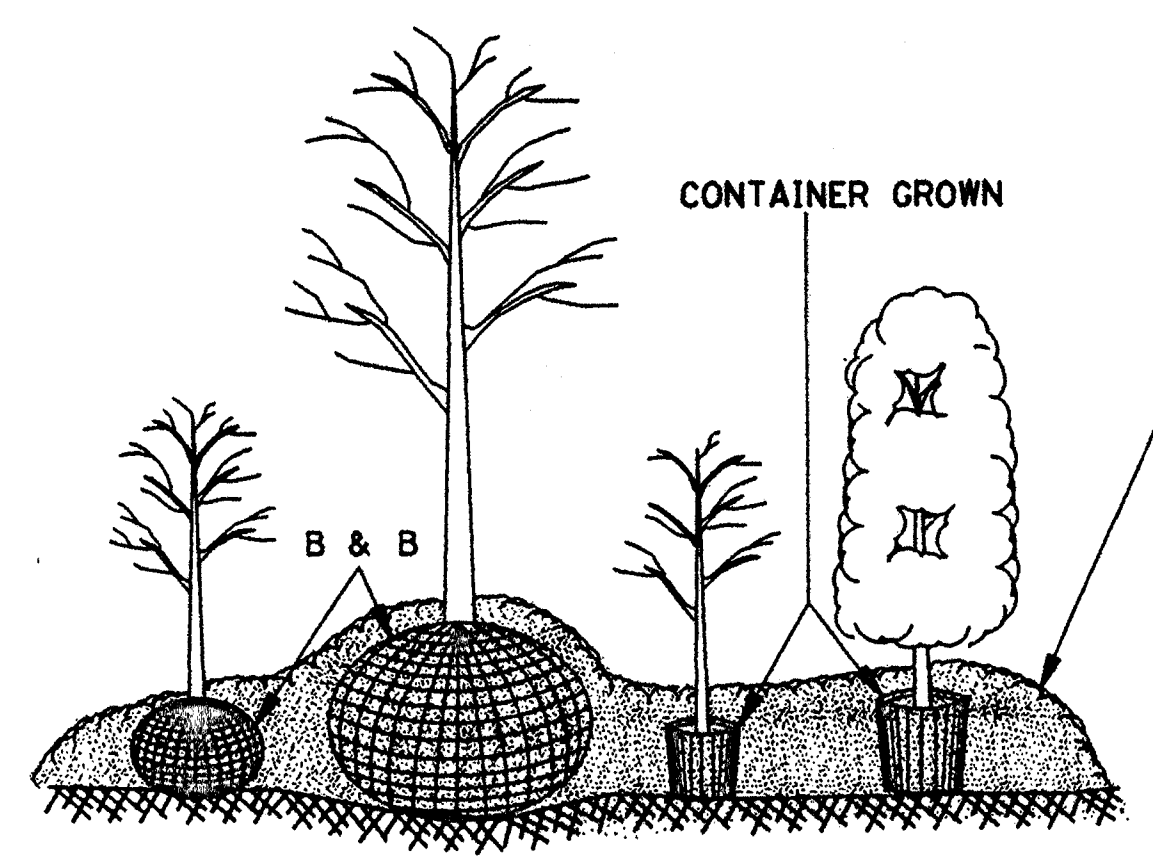
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

EROSION CONTROL

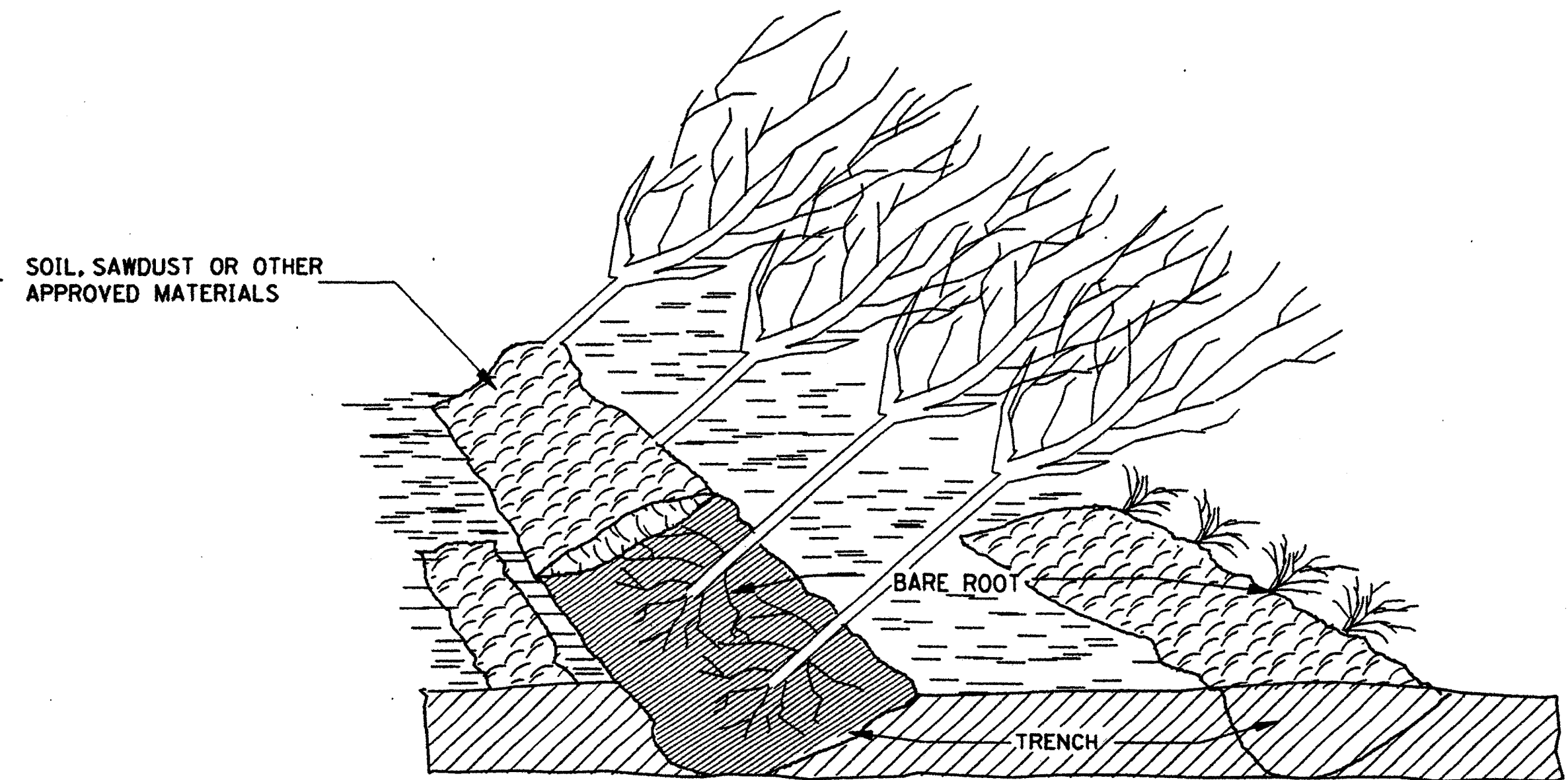
BY	REVISION
DATE	ISSUE DATE: OCTOBER 1, 1998

WORKING NUMBER EC-1

SHEET NUMBER 140

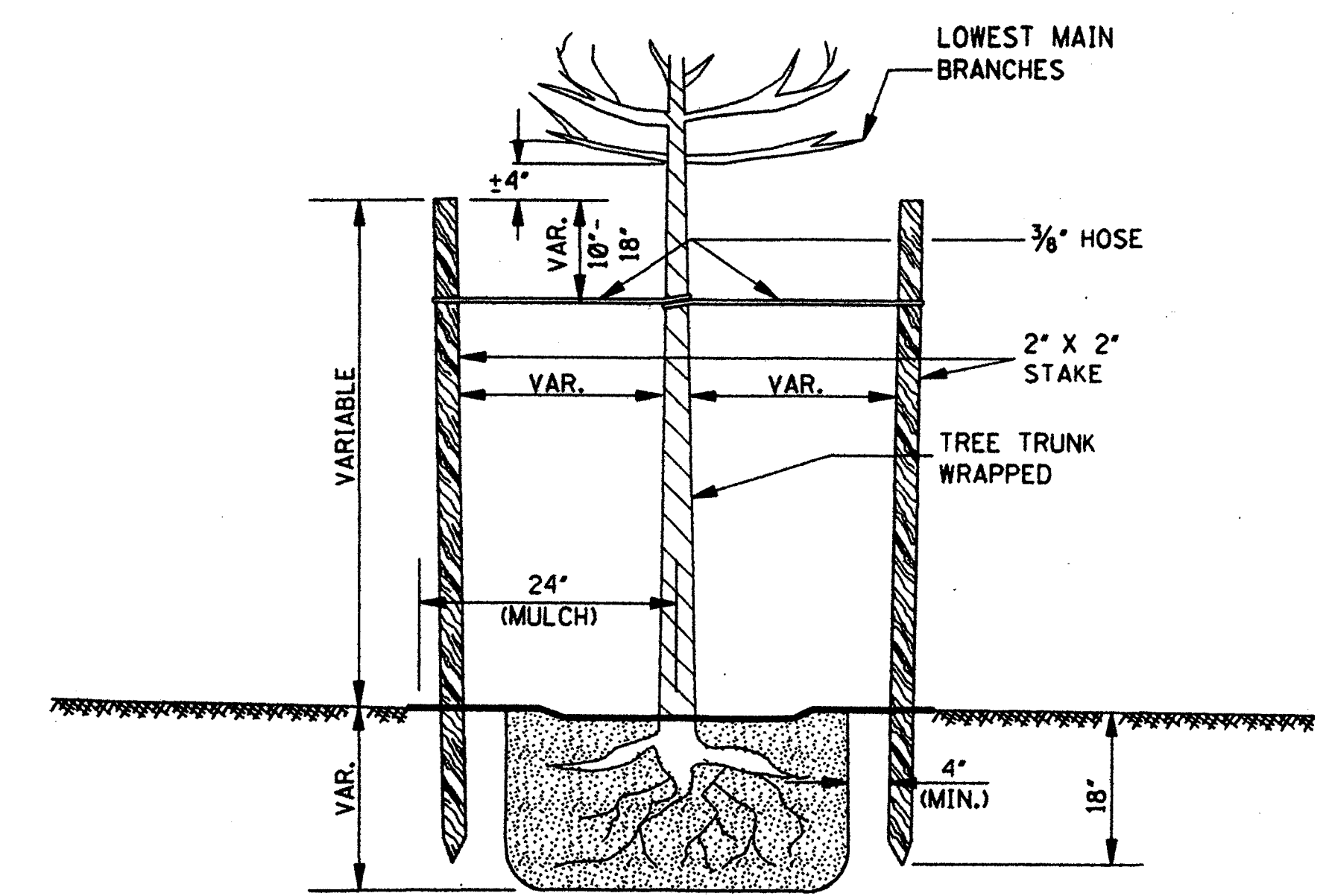


B & B AND CONTAINER GROWN PLANTS

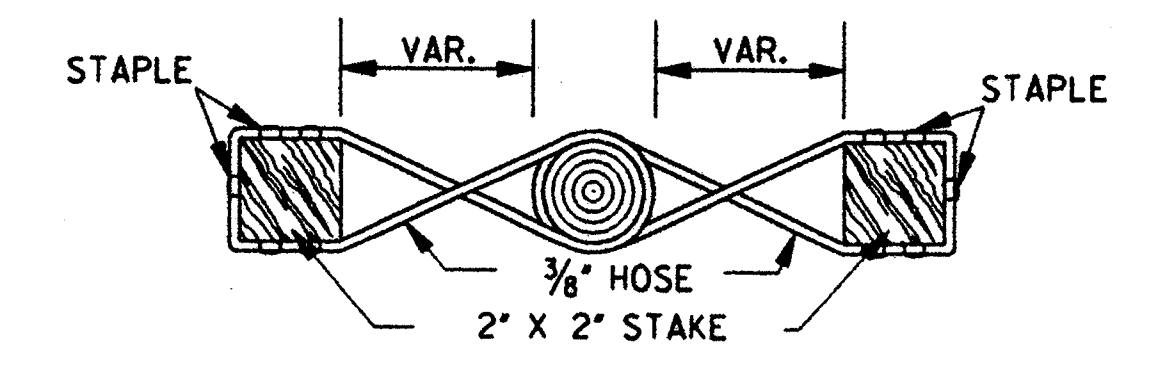


BARE ROOT PLANTS

NOTE: METHOD OF "HEELING IN" BEFORE PLANTING CONSISTS OF PLACING THE PLANTS IN A TRENCH AND COVERING THE ROOTS WITH DIRT. THIS MAY BE DONE ON TRUCK FOR EASE OF MOVEMENT. SAW DUST OR OTHER APPROVED MATERIAL MAY BE USED. ROOTS MUST BE KEPT MOIST AT ALL TIMES.



ELEVATION

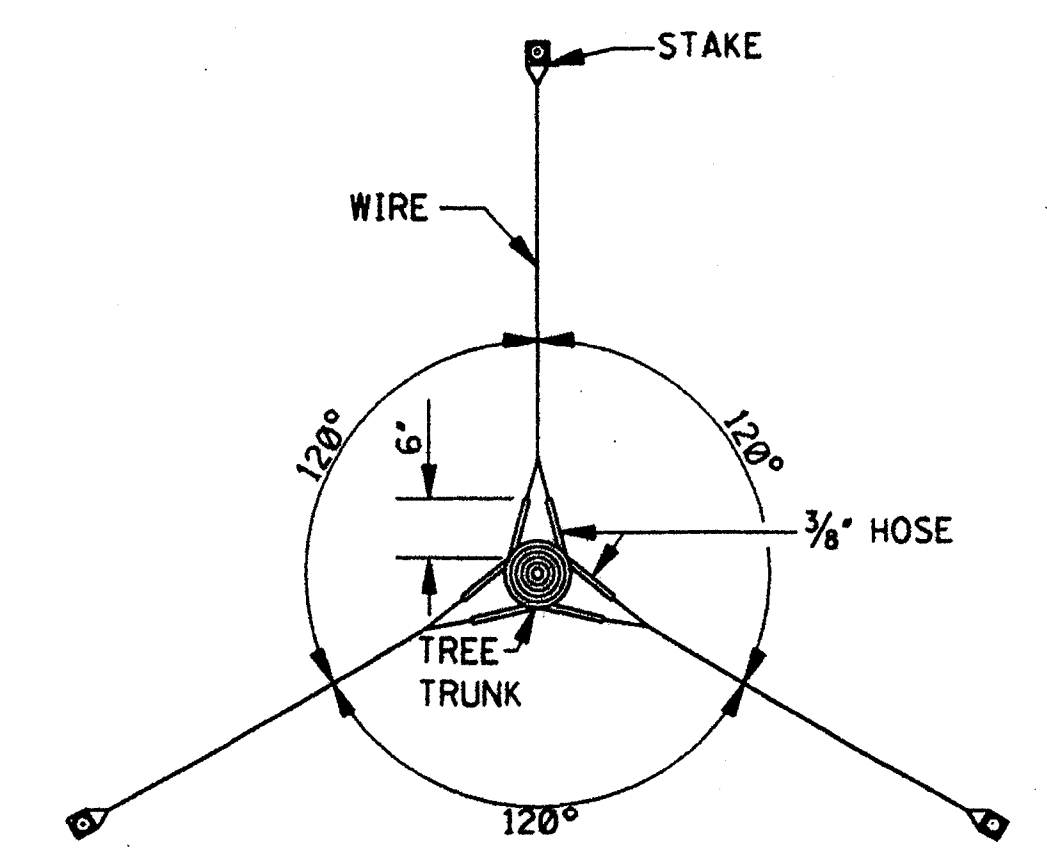
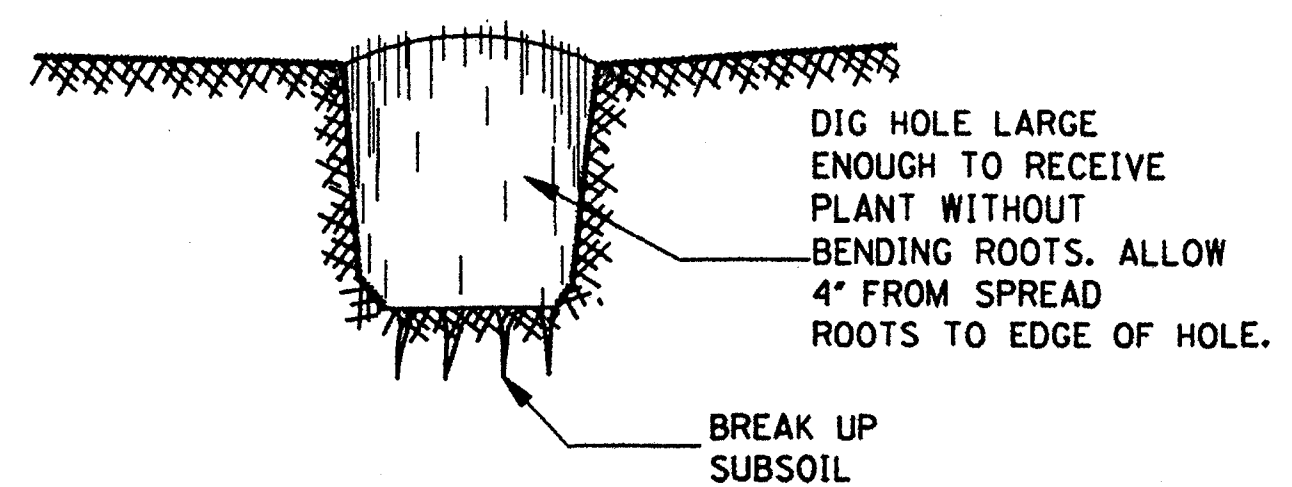
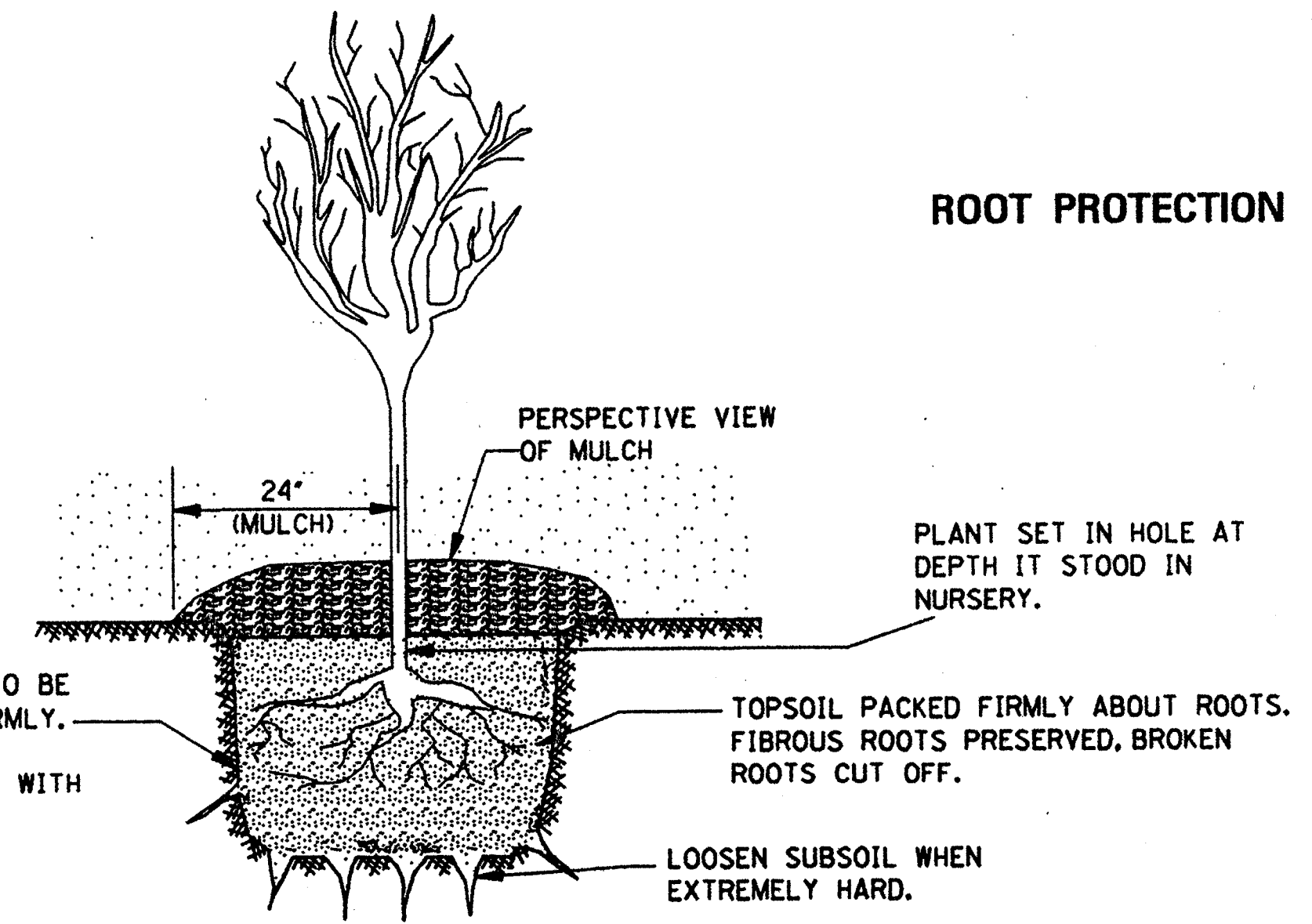


PLAN

DOUBLE VERTICAL STAKING METHOD

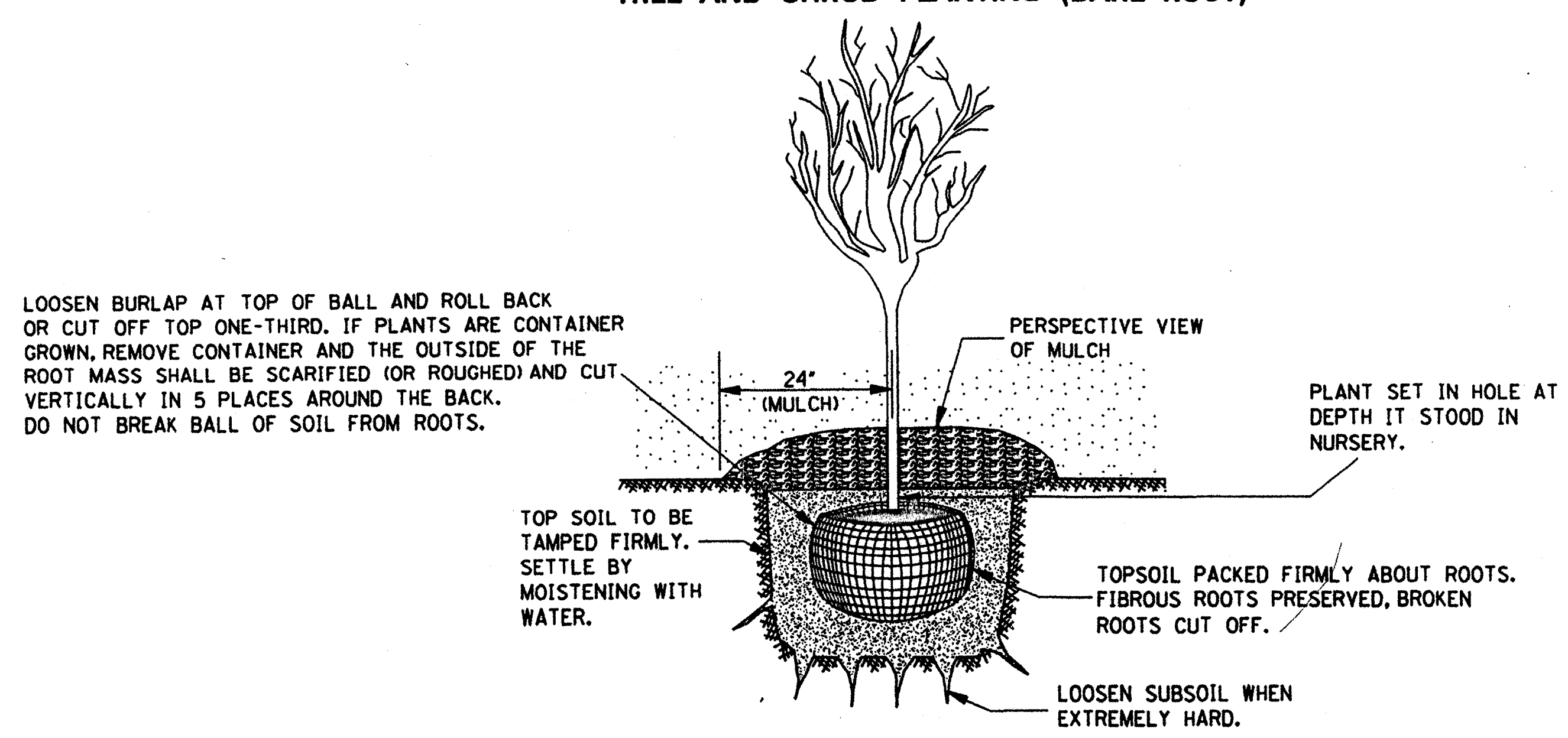
NOTE: ALL TREES SHALL BE STAKED OR GUYED. THE TRUNK OF ALL SMOOTH BARKED TREES SHALL BE WRAPPED. LARGE SHRUBS TO BE STAKED AND WRAPPED WHEN SPECIFIED ON PLANS.

ROOT PROTECTION ("HEELING-IN") DURING STORAGE

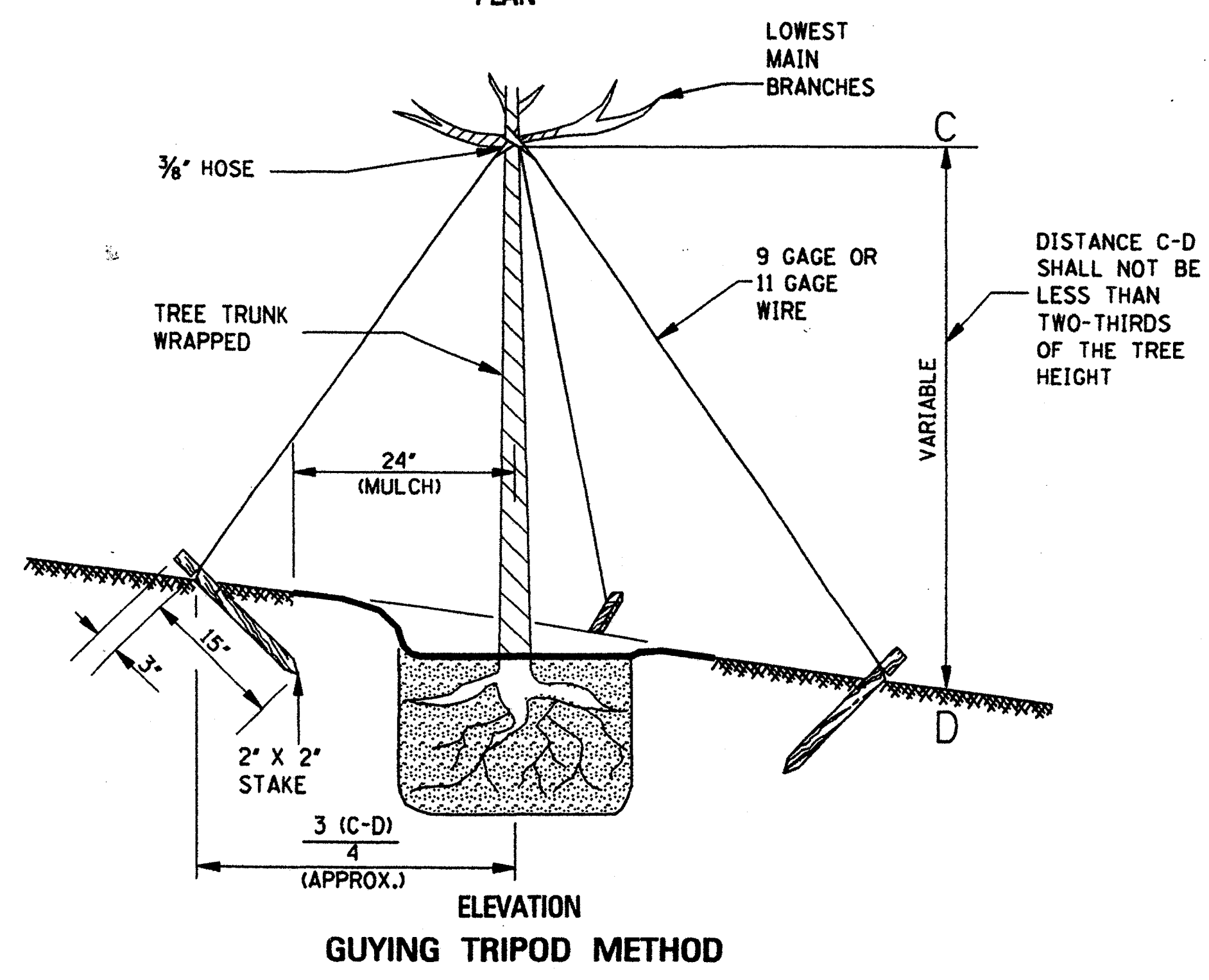


PLAN

TREE AND SHRUB PLANTING (BARE ROOT)

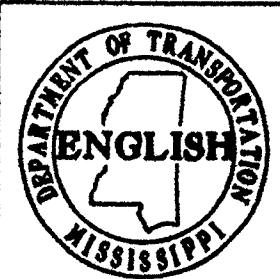


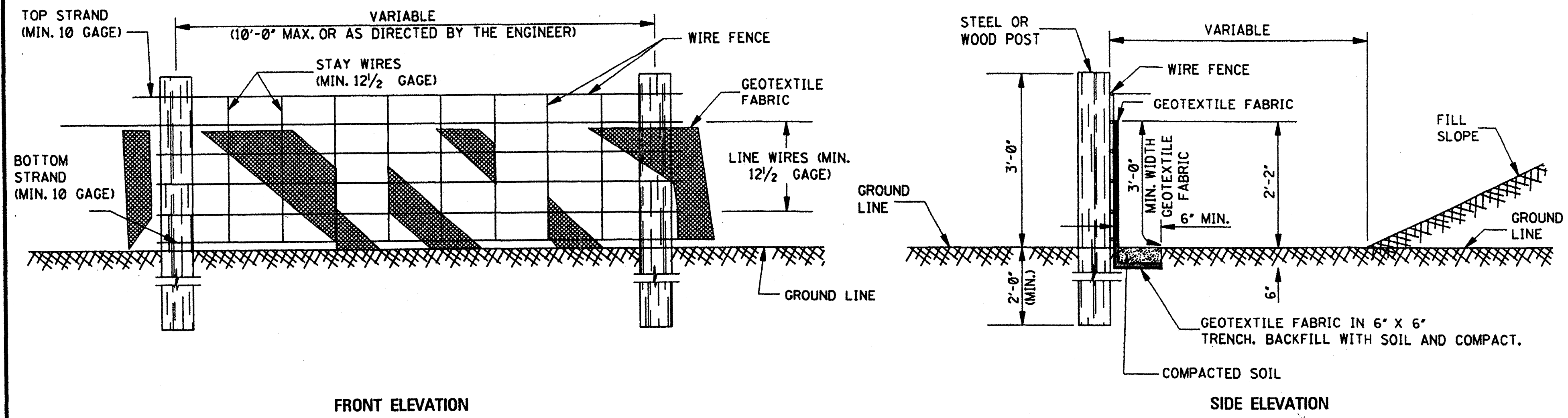
TREE AND SHRUB PLANTING (B & B OR CONTAINER GROWN)



ELEVATION
GUYING TRIPOD METHOD

GENERAL NOTES:
1. THE TYPE(S), RATE(S) OF APPLICATION AND PLACEMENT OF FERTILIZER AND MULCH SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE PLANS AND SPECIFICATIONS.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p>TYPICAL PLANTING DETAILS FOR TREES & SHRUBS</p> 	
DATE			
ISSUE DATE:		OCTOBER 1, 1998	
WORKING NUMBER		PD-1	
SHEET NUMBER		141	



FRONT ELEVATION

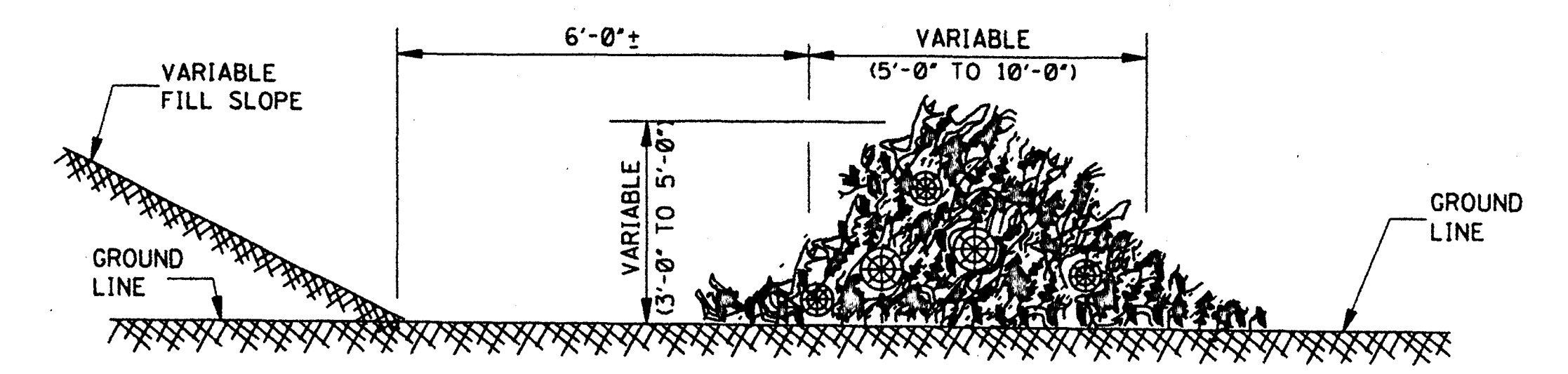
SIDE ELEVATION

TEMPORARY SILT FENCE

- NOTES:
1. WIRE SHALL BE MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
 2. GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE FASTENED ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.
 3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND OF THE SELF-FASTENER ANGLE STEEL TYPE. WOOD POST SHALL BE A MINIMUM OF 5'-0" IN HEIGHT AND 3" OR MORE IN DIAMETER. WIRE FENCE SHALL BE FASTENED TO WOODEN POST WITH NOT LESS THAN 9 GAGE WIRE STAPLES 1" LONG.
 4. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATIONS MAY BE USED WITHOUT WIRE FENCE.



FRONT ELEVATION



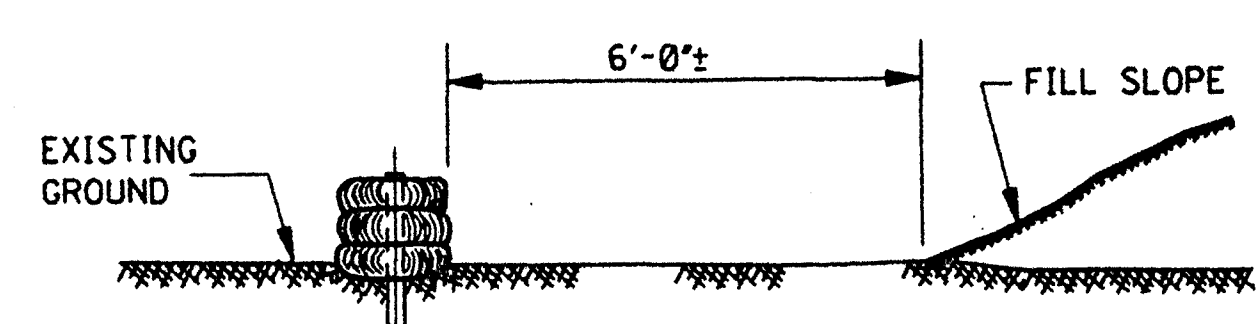
SIDE ELEVATION

TEMPORARY BRUSH BARRIER

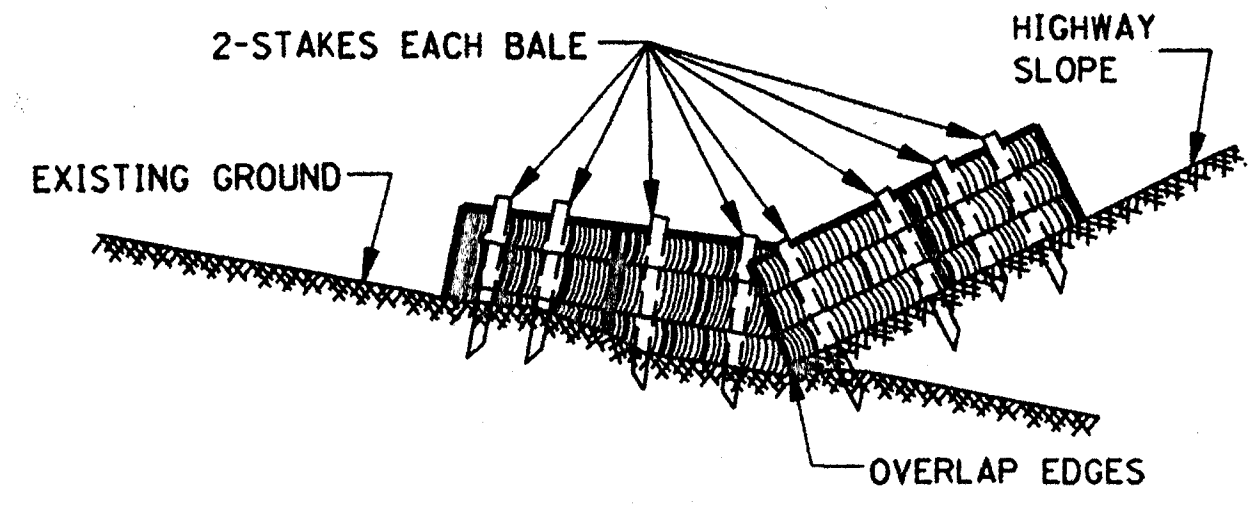
- NOTES:
1. BRUSH BARRIER TO BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
 2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TOP TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
 3. TO ALLOW WATER TO FLOW THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES NECESSARY TO CONTROL SILTATION.
2. TEMPORARY BRUSH BARRIERS SHALL BE USED AS REQUIRED BUT WILL NOT BE MEASURED FOR SEPARATE PAYMENT.
3. THE USE OF TEMPORARY EROSION CONTROL MEASURES OTHER THAN TEMPORARY BRUSH BARRIERS WILL ONLY BE REQUIRED AND MEASURED FOR SEPARATE PAYMENT WHEN APPROPRIATE PAY ITEM(S) IS INCLUDED IN THE BID SCHEDULE OF THE PROPOSAL.

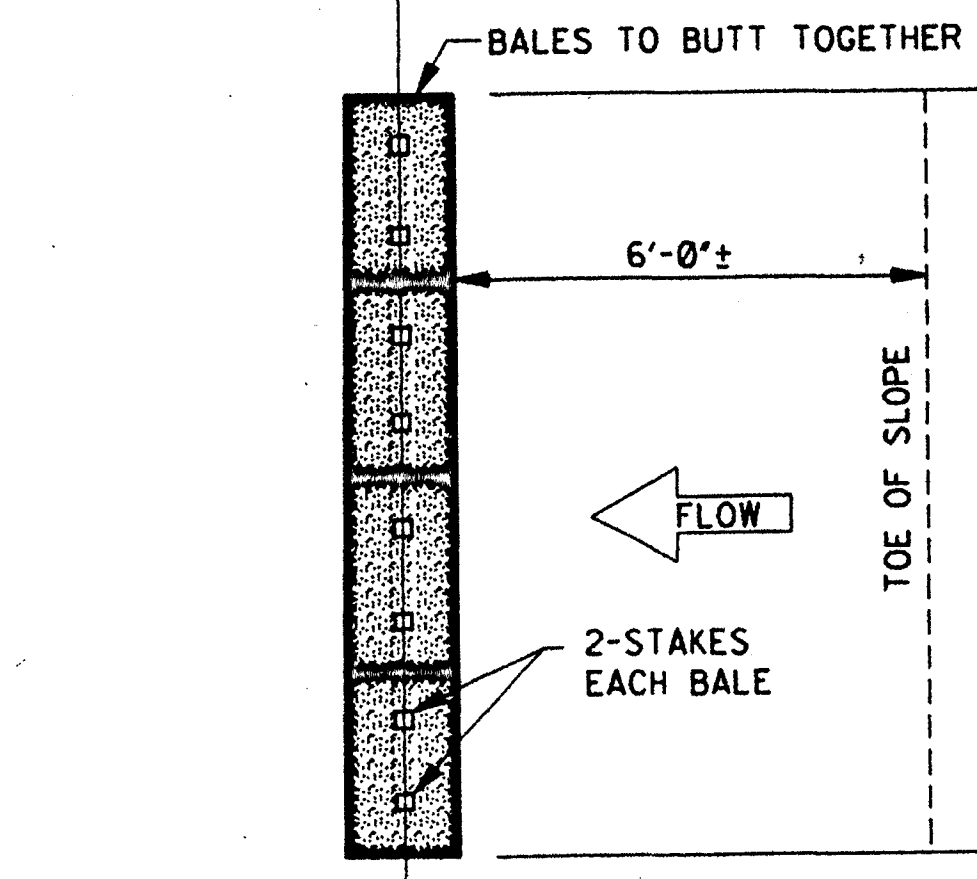


ELEVATION



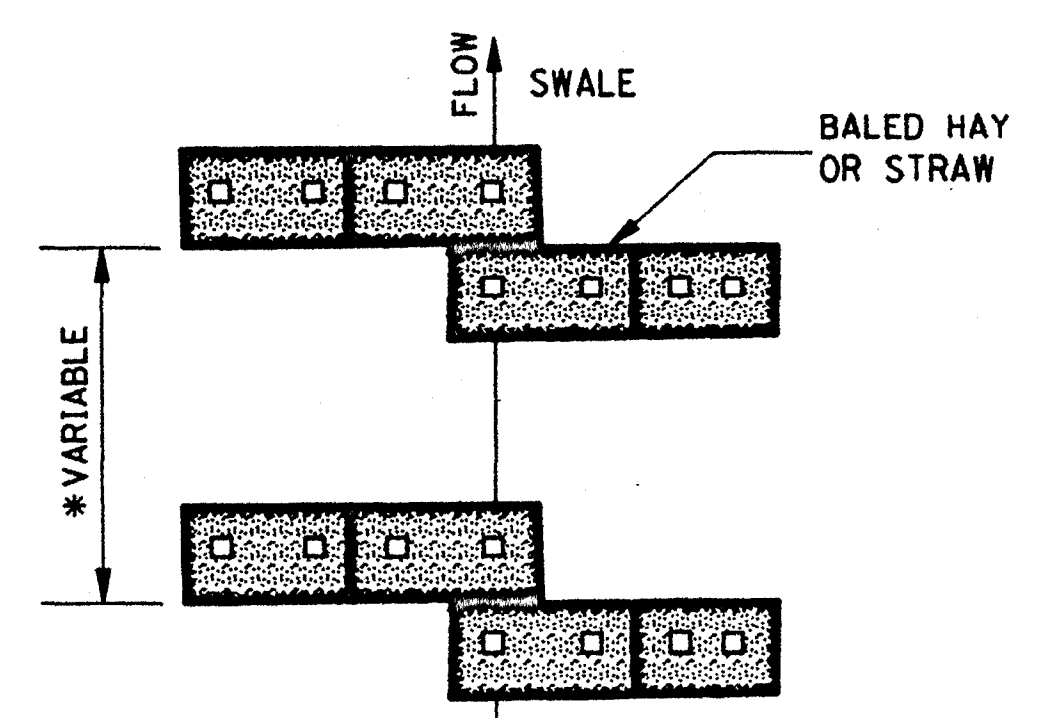
ELEVATION

NOTE: SIMILAR TREATMENT TO BE USED IN DITCHES.

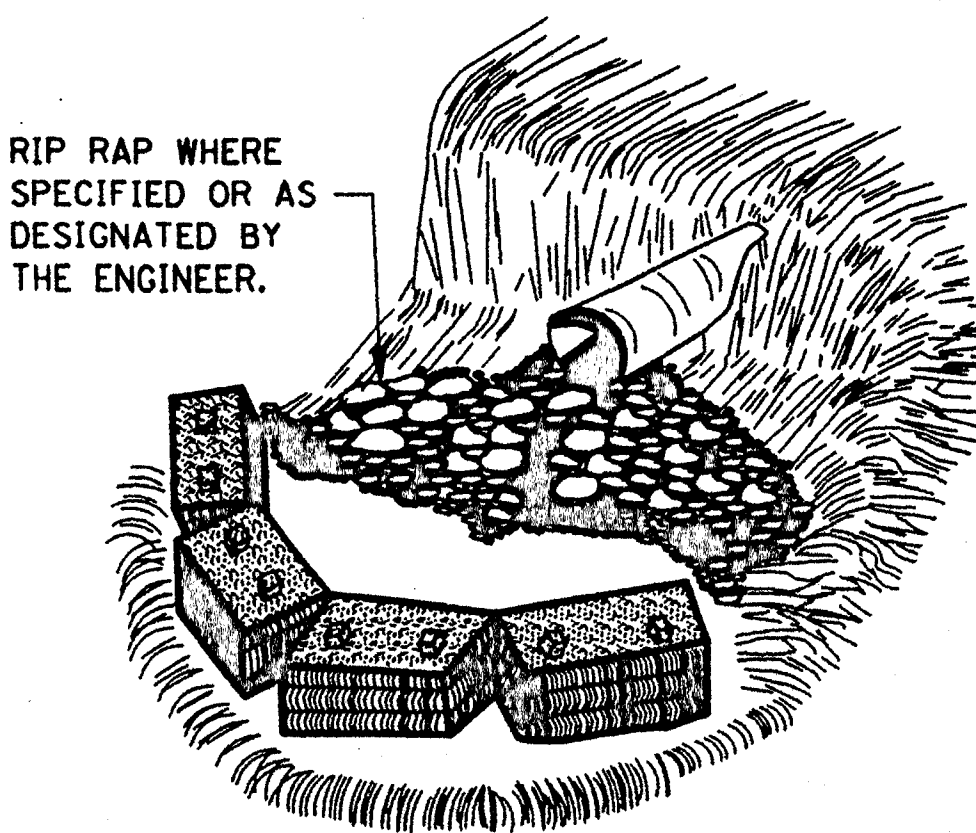


PLAN

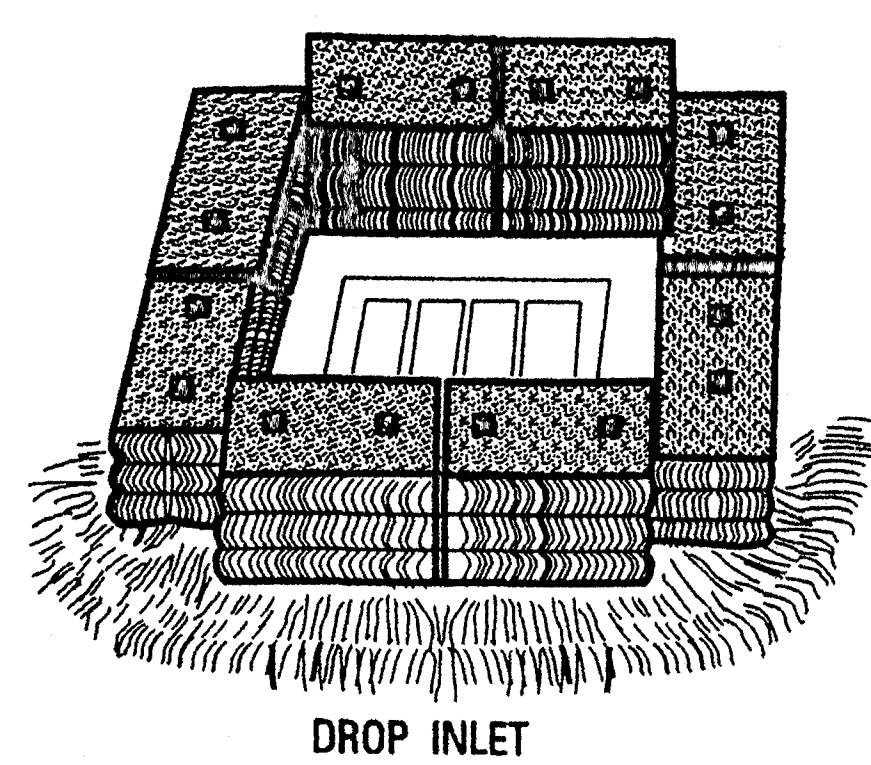
FALL OF DITCH (%)	DISTANCE* (ft)
0 - 1	100'
1 - 2	50'
>2	25'



PLAN




CULVERT



DROP INLET

TEMPORARY EROSION CHECKS USING HAY OR STRAW BALES

NOTE: EMBED ALL BALES 3" MINIMUM INTO GROUND AND STAKE (2" X 2" X 36") SECURELY.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN		
<p>TYPICAL TEMPORARY EROSION CONTROL MEASURES (SILT FENCE, HAY BALES & BRUSH BARRIER)</p>		
DATE	ISSUE DATE: OCTOBER 1, 1998	WORKING NUMBER TEC-1
REVISION		SHEET NUMBER 142

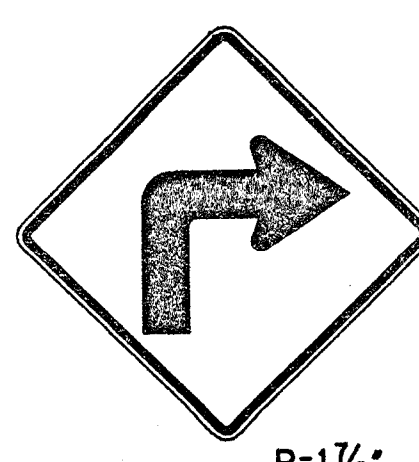
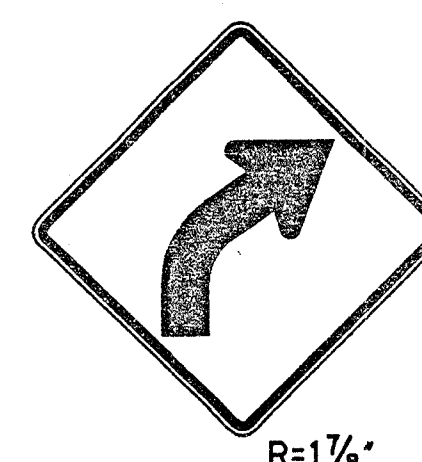
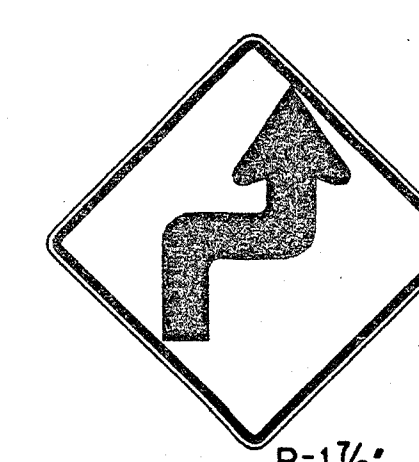
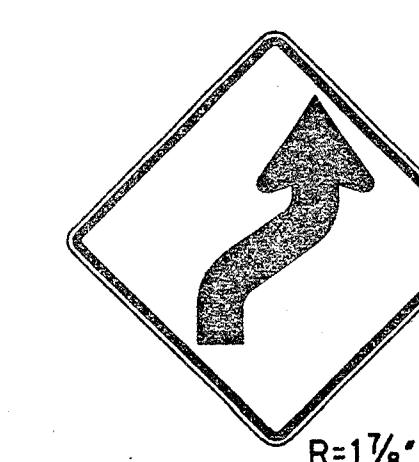
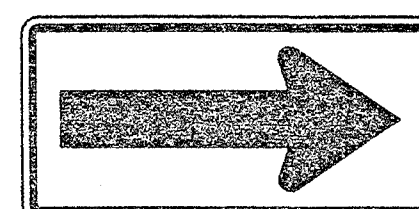
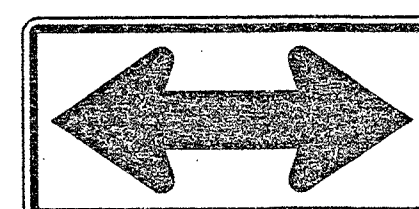
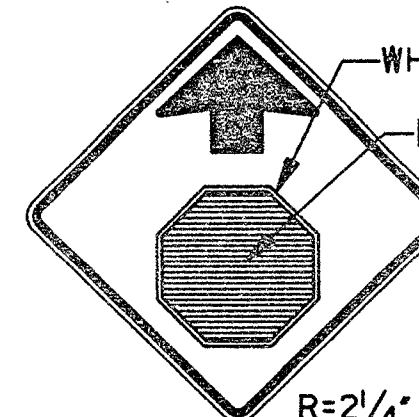
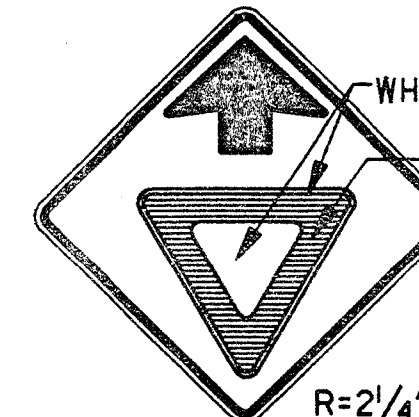
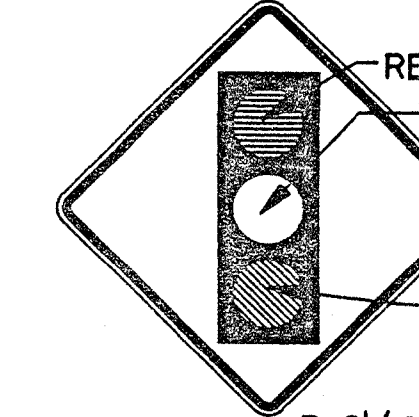

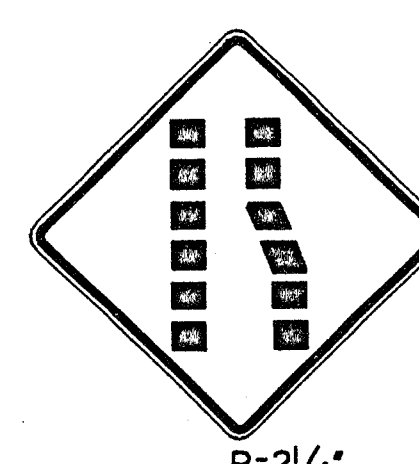

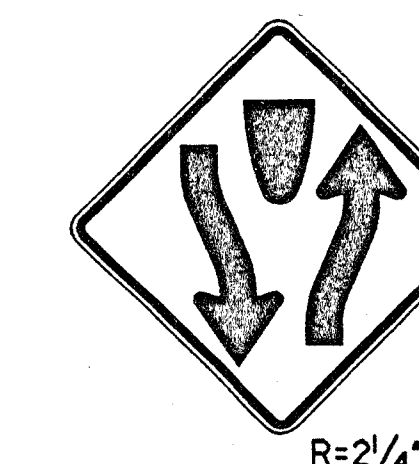
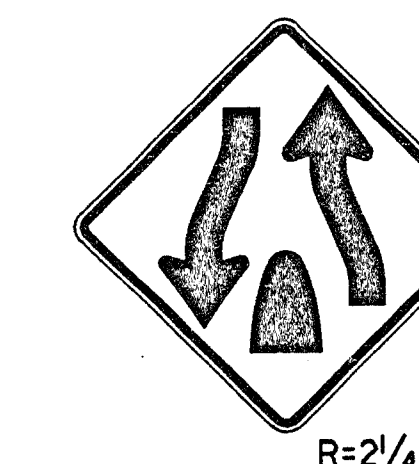
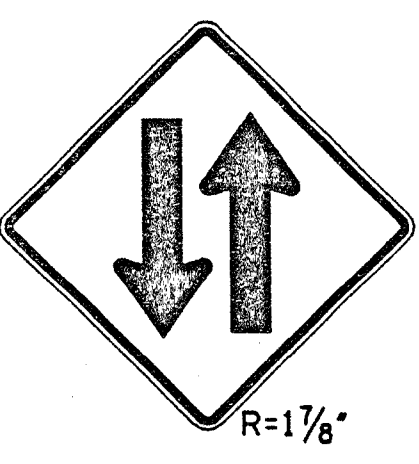
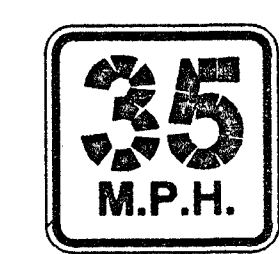
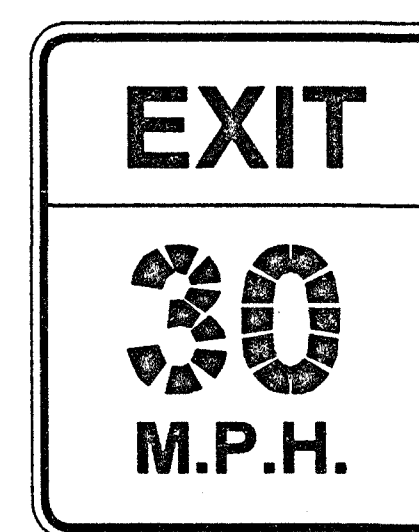
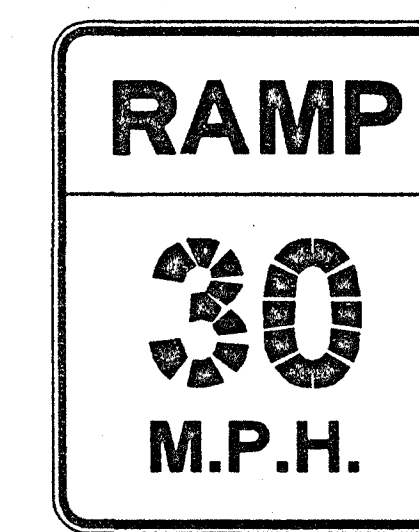

SIGN NUMBER	R1-1	R1-101	R1-2	R1-102	R2-1	R2-101	R2-102	R2-104	R3-1	R3-2	R3-3	R3-4	R3-5	R4-103
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"	0.125"	0.125"	0.125"	0.080"	0.125"	0.125"	0.125"	0.080"	0.080"	0.080"	0.080"	0.080"	0.125"
LEGEND														
LETTER & NUMERAL SERIES	12" SERIES "C"	16" SERIES "C"	3" SERIES "C"	5" SERIES "C"	4" SERIES "E" 4" SERIES "E" 10" SERIES "E"	8" SERIES "E" 8" SERIES "E" 16" SERIES "E"	8" SERIES "D" 16" SERIES "E"	8" SERIES "C" 8" SERIES "C" 16" SERIES "D"			6" SERIES "D" 5" SERIES "D"		6" SERIES "D"	8" SERIES "D"
WIDTH OF BORDER INSIDE	7/8" WHITE	1/4" WHITE	5" RED 3/4" WHITE	8" RED 1/2" WHITE	5/8" BLACK 3/8" WHITE	1/4" BLACK 3/4" WHITE	1/4" BLACK 3/4" WHITE	1/8" BLACK 3/4" WHITE	3/4" BLACK 1/2" WHITE	3/4" BLACK 1/2" WHITE	3/8" BLACK 3/8" WHITE	3/4" BLACK 1/2" WHITE	3/4" BLACK 1/2" WHITE	1/4" BLACK 3/4" WHITE
WIDTH OF BORDER OUTSIDE														
SIZE (WIDTH X HEIGHT)	36" OCTAGON	48" OCTAGON	36" EQUIL. TRIANGLE	60" EQUIL. TRIANGLE	24" X 30"	48" X 60"	48" X 48"	48" X 48"	30" X 30"	30" X 30"	24" X 24"	30" X 30"	30" X 36"	48" X 60"
COPY BACKGROUND	WHITE	WHITE	RED	RED	BLACK	BLACK	BLACK	BLACK	BLACK & RED	BLACK & RED	BLACK	BLACK & RED	BLACK	BLACK
REFLECTORIZATIONS	ALL	ALL	ALL	ALL	B'GROUND	B'GROUND	BACKGROUND	BACKGROUND	BACKGROUND, CIRCLE, & DIAGONAL	BACKGROUND, CIRCLE, & DIAGONAL	BACKGROUND	BACKGROUND, CIRCLE, & DIAGONAL	BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	---	---	1	1	1	1	1	1
NUMBER OF HOLES TO BE PUNCHED (3/8" DIA.)	2	4	2	4	2	6	4	4	2	2	2	2	2	6
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	18" (VERT. CENTER)	10"	18" (VERT. CENTER)	20"	12" (VERT. CENTER)	10"	10"	10"	15" (VERT. CENTER)	15" (VERT. CENTER)	12" (VERT. CENTER)	15" (VERT. CENTER)	15" (VERT. CENTER)	10"
PUNCHING DISTANCE FROM TOP EDGE	3"; 33"	10"; 38"	2"; 26"	3"; 27"	3"; 27"	4"; 30"; 56"	4"; 44"	4"; 44"	3"; 27"	3"; 27"	3"; 21"	3"; 27"	3"; 33"	4"; 30"; 56"
SIGN NUMBER	R4-7	R4-107	R4-8	R5-1	R5-101	R5-10	R6-1L, R6-1R	R6-2L, R6-2R	R8-104	R11-101				
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"	0.125"	0.080"	0.080"	0.125"	0.125"	0.125"	0.080"	0.125"	0.125"				
LEGEND														
LETTER & NUMERAL SERIES			4" SERIES "D"	6" SERIES "D"	8" SERIES "D"	4" SERIES "D"	5" SERIES "D"	6" SERIES "D"	10" SERIES "C"					
WIDTH OF BORDER INSIDE	3/8" BLACK 3/8" WHITE	1/8" BLACK 3/8" WHITE	5/8" BLACK 3/8" WHITE	WHITE OUT-SIDE BORDER WHITE OUT-SIDE BORDER	1" WHITE	1/2" WHITE	3/8" BLACK 3/8" WHITE	1/8" BLACK 3/8" WHITE	1/4" BLACK 3/4" WHITE					
WIDTH OF BORDER OUTSIDE														
SIZE (WIDTH X HEIGHT)	24" X 30"	36" X 48"	24" X 30"	30" X 30"	42" X 42"	42" X 36"	36" X 12"	18" X 24"	48" X 36"	48" X 60"				
COPY BACKGROUND	BLACK	BLACK	BLACK	WHITE	WHITE	WHITE	BLACK (WHITE ARROW) BLACK	BLACK	BLACK	BLACK				
REFLECTORIZATIONS	BACKGROUND	BACKGROUND	BACKGROUND	ALL	ALL	ALL	ARROW & BORDER	BACKGROUND	BACKGROUND	BACKGROUND				
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	2	1				
NUMBER OF HOLES TO BE PUNCHED (3/8" DIA.)	2	4	2	2	4	4	2	2	4	6				
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	12" (VERT. CENTER)	5"	12" (VERT. CENTER)	15" (VERT. CENTER)	8"	8"	18" (VERT. CENTER)	9" (VERT. CENTER)	10"	10"				
PUNCHING DISTANCE FROM TOP EDGE	3"; 27"	4"; 44"	3"; 27"	3"; 27"	4"; 38"	3"; 33"	1/2"; 10/2"	3"; 21"	6"; 30"	4"; 30"; 56"				

GENERAL NOTES:

1. THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.
2. THE SPEED LIMITS REQUIRED ON SIGNS R2-1 AND R2-101 WILL BE SHOWN ON INDIVIDUAL PLAN SHEETS.


REVISION	BY	DATE	ISSUE DATE: OCTOBER 1, 1998
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN			
STANDARD ROADSIDE SIGNS			
WORKING NUMBER SN-3A			SHEET NUMBER 223

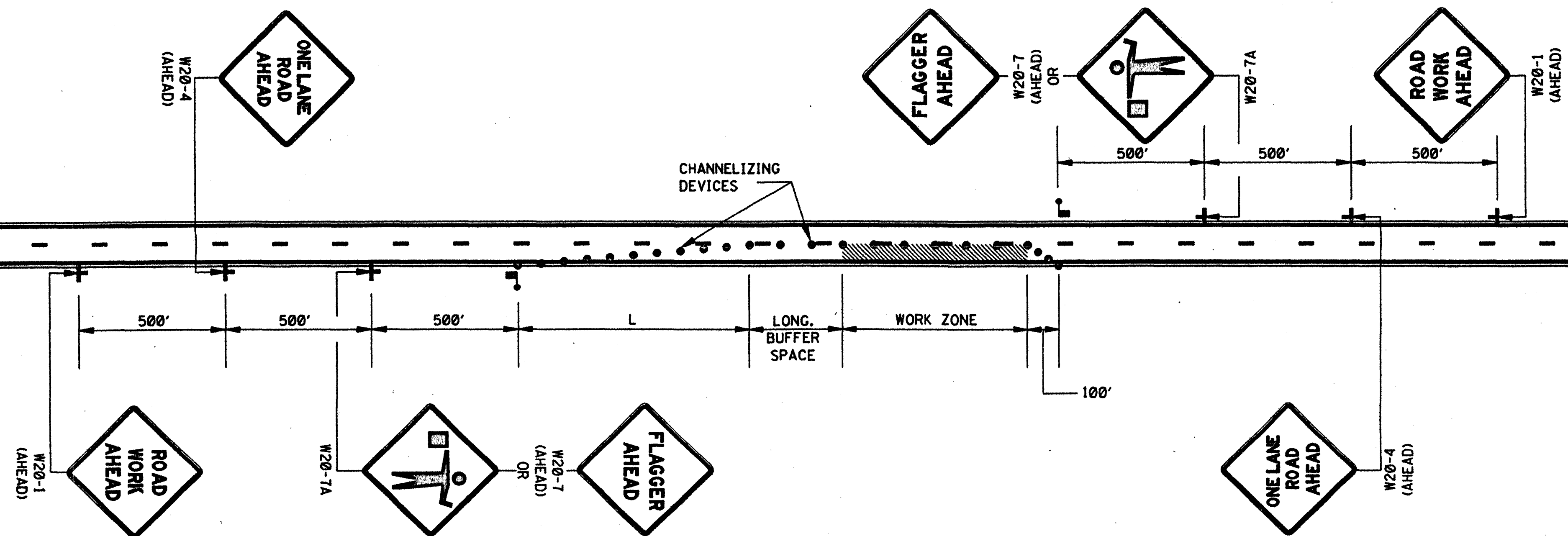


											STATE	PROJECT NO.
											MISS.	
SIGN NUMBER	W1-1L W1-1R	W1-2L W1-2R	W1-3L W1-3R	W1-4L W1-4R	W1-6L W1-6R	W1-7	W3-1a	W3-2a	W3-3	W4-1L W4-1R	W4-101L W4-101R	
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	
LEGEND	 R=1 1/8"	 R=1 1/8"	 R=1 1/8"	 R=1 1/8"	 R=1 1/8"	 R=1 1/8"	 R=2 1/4"	 R=2 1/4"	 R=2 1/4"	 R=1 1/8" R=3"		
LETTER & NUMERAL SERIES												
WIDTH OF BORDER INSIDE OUTSIDE	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	5/8" BLACK 5/8" YELLOW	5/8" BLACK 5/8" YELLOW	5/8" BLACK 5/8" YELLOW	3/4" BLACK 1/2" YELLOW	1/4" BLACK 3/4" YELLOW	
SIZE (WIDTH X HEIGHT)	30" X 30"	30" X 30"	30" X 30"	30" X 30"	48" X 24"	48" X 24"	36" X 36"	36" X 36"	36" X 36"	30" X 30"	48" X 48"	
COLORS COPY BACKGROUND	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW BACKGROUND & SYMBOL	BLACK YELLOW BACKGROUND & SYMBOL	BLACK YELLOW BACKGROUND & 'LIGHTS'	BLACK YELLOW	BLACK YELLOW	
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	2	2	1	1	1	1	1	
NUMBER OF HOLES TO BE PUNCHED (3/8" DIA.)	2	2	2	2	4	4	2	2	2	2	4	
PUNCHING DISTANCE FROM EACH VERT. EDGE	VERT. CENTER	VERT. CENTER	VERT. CENTER	VERT. CENTER	6"	6"	VERT. CENTER 18" FROM HORIZ. CENTER	VERT. CENTER 18" FROM HORIZ. CENTER	VERT. CENTER	VERT. CENTER 15" FROM HORIZ. CENTER	14 1/2" FROM VERT. CENTER 14 1/2" FROM HORIZ. CENTER	
PUNCHING DISTANCE FROM TOP EDGE	15" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	3'; 21"	3'; 21"			18" FROM HORIZ. CENTER			
SIGN NUMBER	W4-2	W5-1	W6-1	W6-2	W6-3	W13-1	W13-2	W13-3	W10-1	W10-101		
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.125"	0.125"	0.125"	0.125"	0.125"	0.080"	0.125"	0.125"	0.125"	0.125"		
LEGEND	 R=2 1/4"	 R=2 1/4"	 R=2 1/4"	 R=2 1/4"	 R=1 1/8"	 R=1 1/2"	 R=3"	 R=3"				
LETTER & NUMERAL SERIES		6" SERIES "D"				8" SERIES "E" 3" SERIES "E"	8" SERIES "E" 16" SERIES "E" 6" SERIES "E" (SEE NOTE)	8" SERIES "E" 16" SERIES "E" 6" SERIES "E" (SEE NOTE)	8" SERIES "E"	10" SERIES "E"		
WIDTH OF BORDER INSIDE OUTSIDE	1/8" BLACK 5/8" YELLOW	1/8" BLACK 5/8" YELLOW	1/8" BLACK 5/8" YELLOW	1/8" BLACK 5/8" YELLOW	3/4" BLACK 1/2" YELLOW	5/8" BLACK 3/8" YELLOW	1/4" BLACK 3/4" YELLOW	1/4" BLACK 3/4" YELLOW	3/4" BLACK 1/2" YELLOW	1/4" BLACK 3/4" YELLOW		
SIZE (WIDTH X HEIGHT)	36" X 36"	36" X 36"	36" X 36"	36" X 36"	30" X 30"	18" X 18"	48" X 60"	48" X 60"	36" DIAMETER	48" DIAMETER		
COLORS COPY BACKGROUND	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW		
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND		
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	11	1	1	1	1	1		
NUMBER OF HOLES TO BE PUNCHED (3/8" DIA.)	2	2	2	2	2	2	6	6	2	4		
PUNCHING DISTANCE FROM EACH VERT. EDGE	VERT. CENTER	VERT. CENTER	VERT. CENTER	VERT. CENTER	VERT. CENTER	9" (VERT. CENTER)	10"	10"	15"	15" (VERT. CENTER)		
PUNCHING DISTANCE FROM TOP EDGE	18" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	3'; 15"	4'; 30'; 56"	4'; 30'; 56"	3'; 33"	5'; 43"		

GENERAL NOTES:

1. THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.
2. SIGNS W13-2 AND W13-3- THE STROKE WIDTH OF THE LETTER AND NUMERALS SHALL BE WIDENED TO 20% OF THE LETTER OR NUMERAL HEIGHT.
3. THE SPEEDS REQUIRED ON SIGNS W13-1, W13-2 AND W13-3 WILL BE SHOWN ON INDIVIDUAL PLAN SHEETS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
STANDARD ROADSIDE SIGNS	
	
WORKING NUMBER SN-3B	
SHEET NUMBER 224	
DATE	ISSUE DATE: OCTOBER 1, 1998
REVISION	
BY	



- LEGEND**
- FLAGGER
 - CHANNELIZING DEVICES

GENERAL NOTES:

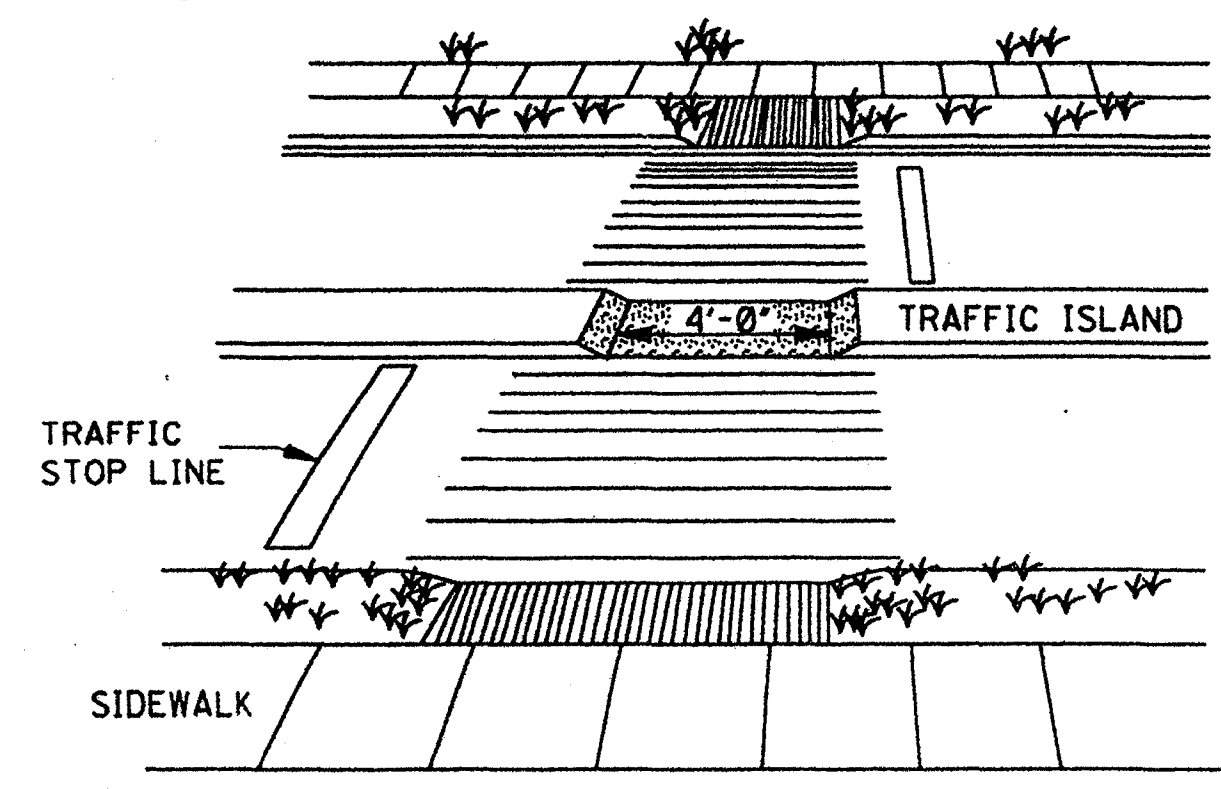
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		MINIMUM LONGITUDINAL BUFFER SPACE (ft)	TAPER † RATES
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	70:1

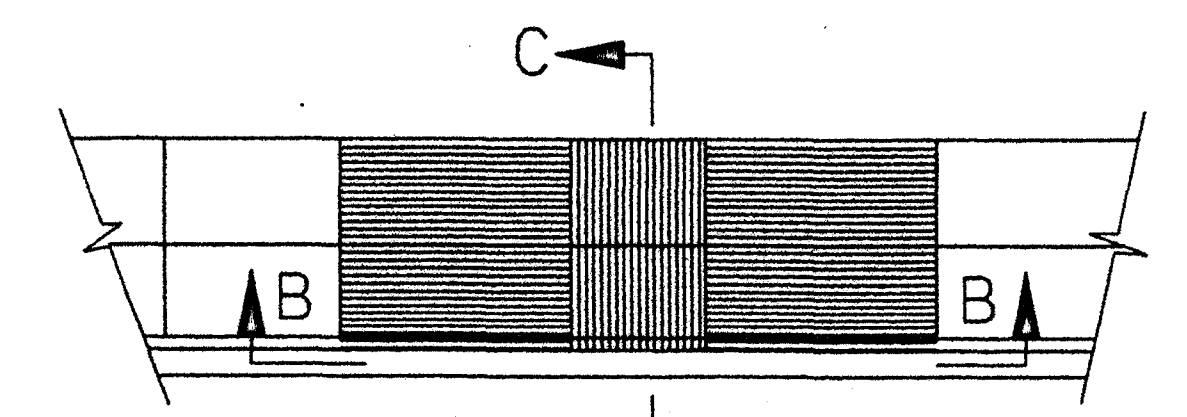
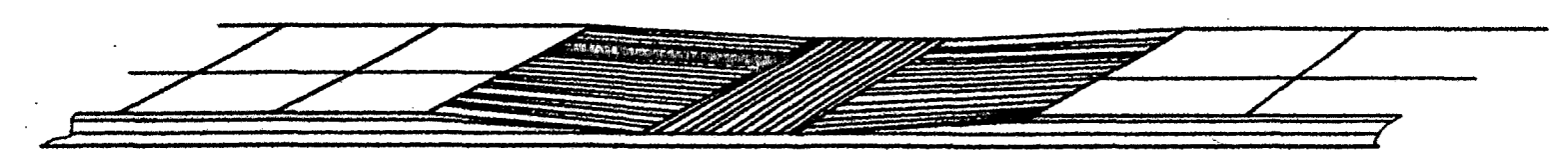
† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
 $L = WS$ FOR SPEEDS OF 45 mph OR GREATER
 $L = WS^2/60$ FOR SPEEDS OF 40 mph OR LESS
 WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
 W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
 S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 24" IN HEIGHT.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" x 48".
5. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
6. WHERE THE WORK ZONE IS STATIONARY, THE W20-7 (500 FT.) SIGN OR THE W20-7A SIGN TOGETHER WITH THE W20-7 (500 FT.) SUPPLEMENTAL PLATE SHOULD BE USED TO INDICATE THE DISTANCE TO THE FLAGGER.

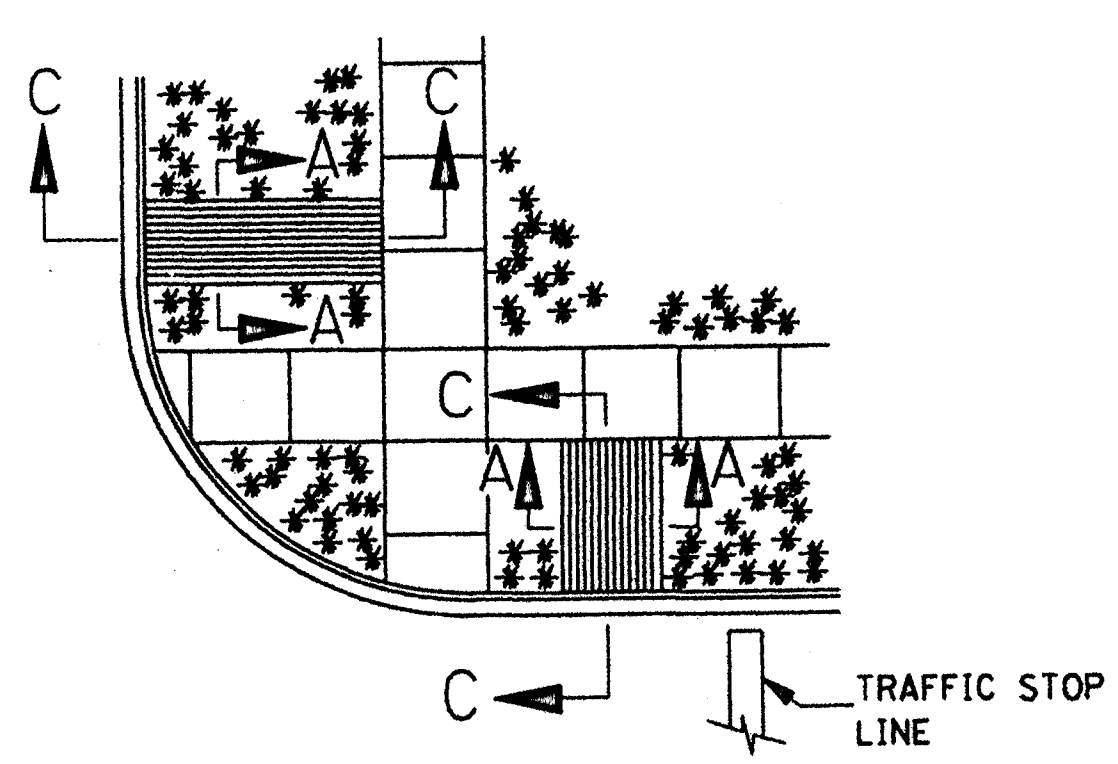
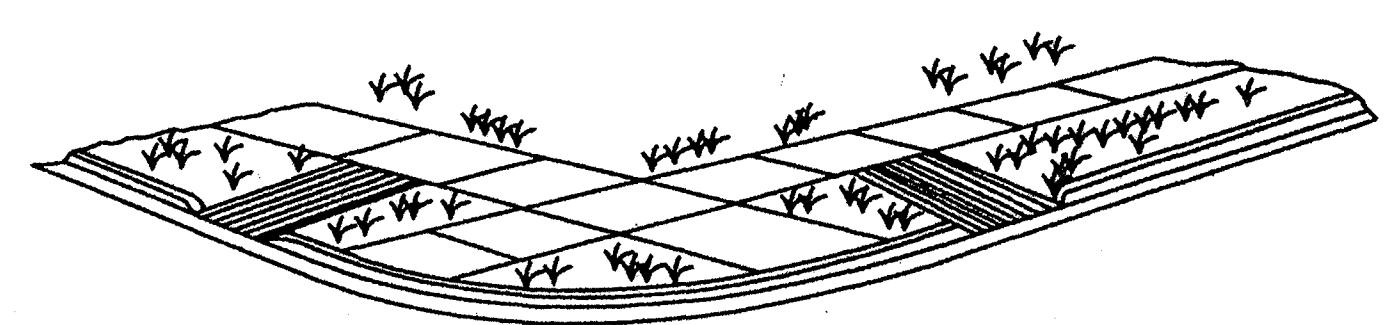
		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
		TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)	
		WORKING NUMBER TCP-1	
		SHEET NUMBER 250	
DATE	ISSUE DATE:	OCTOBER 1, 1998	



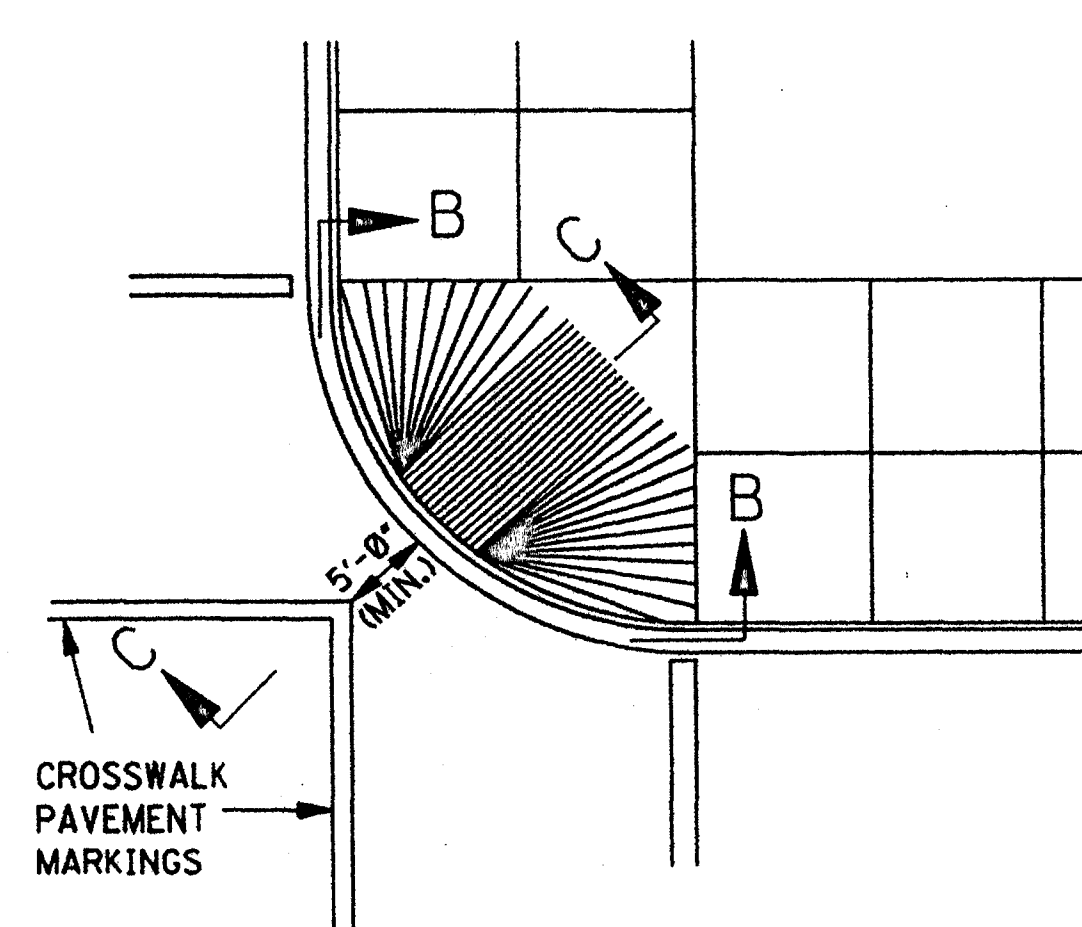
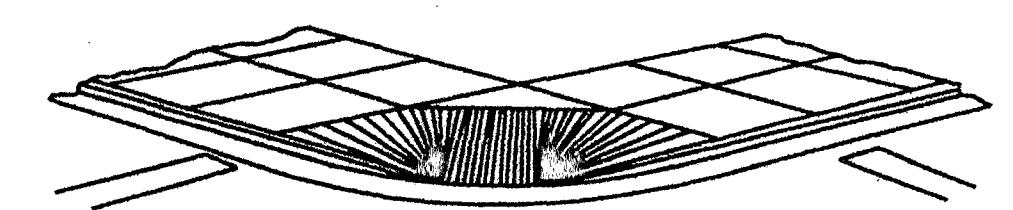
TRAFFIC ISLAND CUTAWAY
 NOTE: PASSAGE THROUGH TRAFFIC ISLAND SHALL BE FLUSH WITH ROADWAY.



TYPE IV (TANGENT)

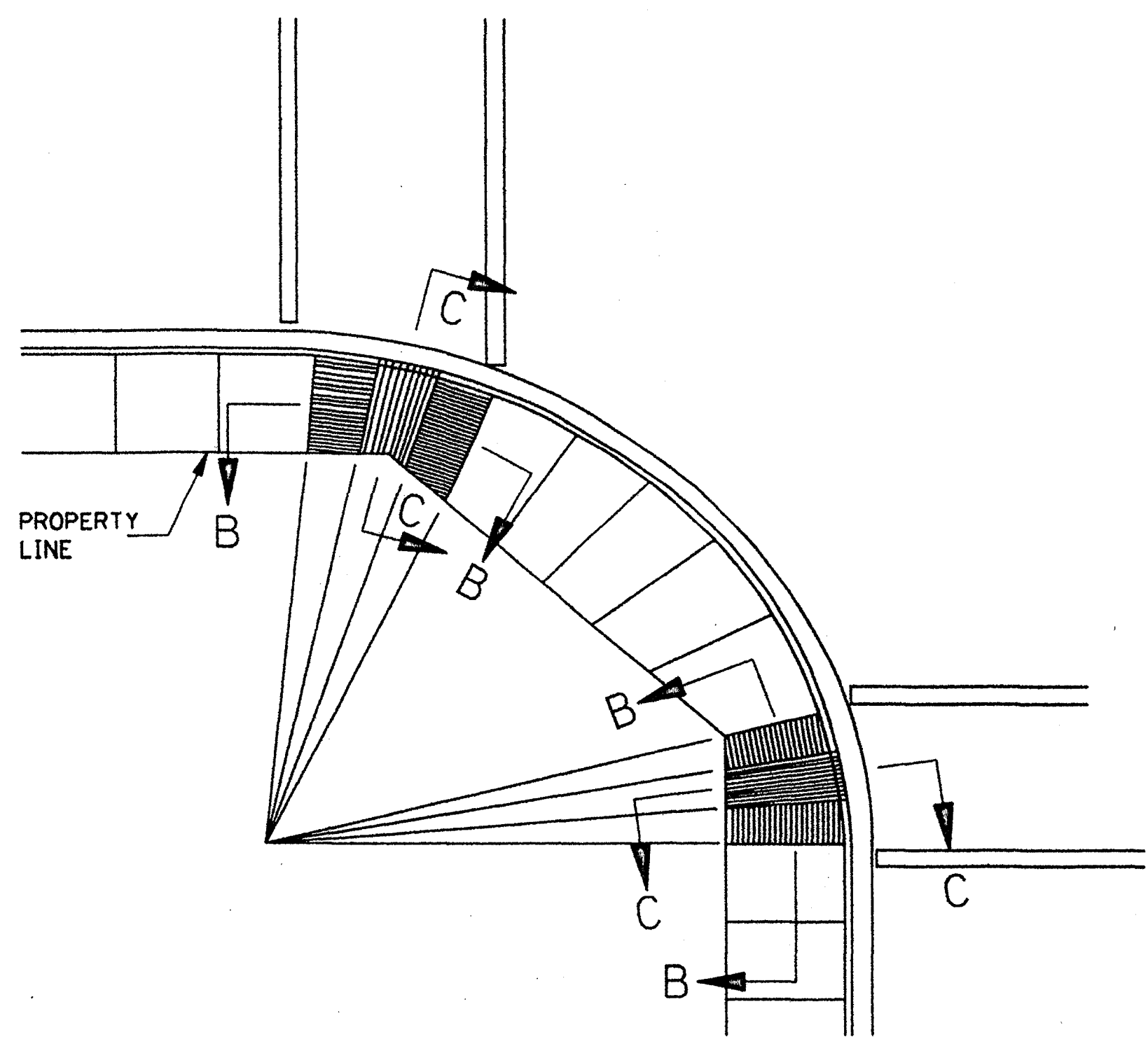


TYPE I



TYPE II

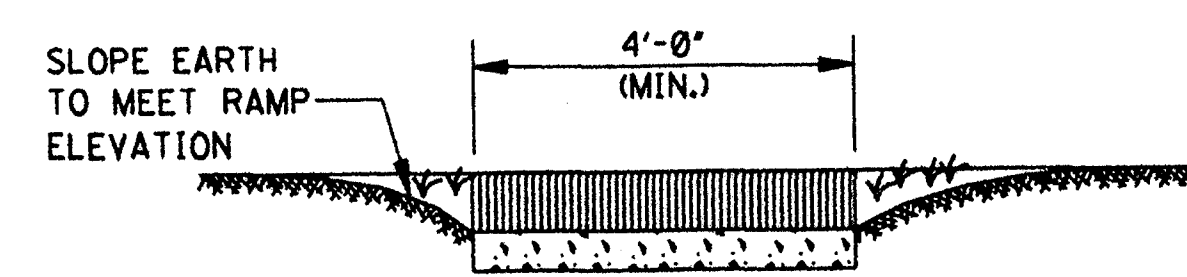
NOTE: IN NEW CONSTRUCTION, THE TYPE II DIAGONAL CURB RAMP SHALL ONLY BE USED IF OTHER CURB RAMP TYPES AS SHOWN ON THIS SHEET ARE NOT PRACTICAL FOR THE LOCATION.



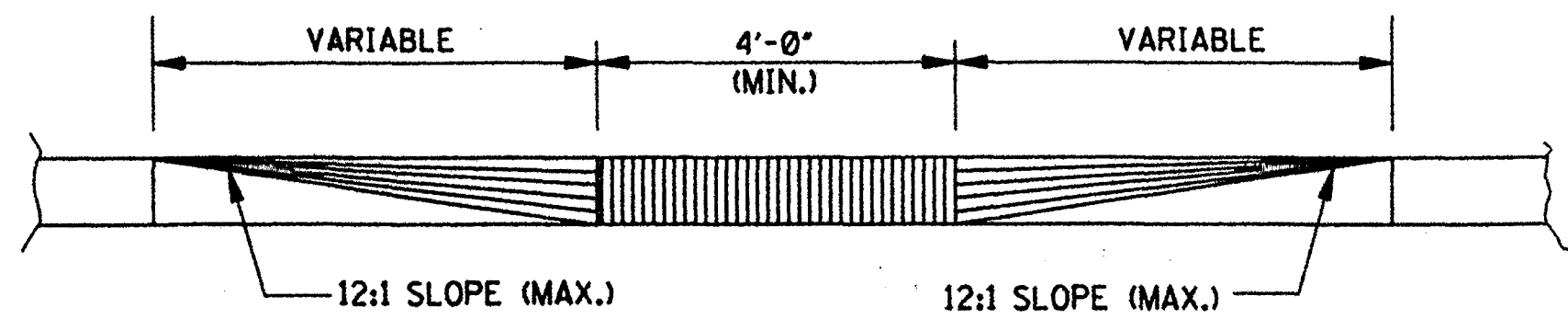
TYPE III

GENERAL NOTES:

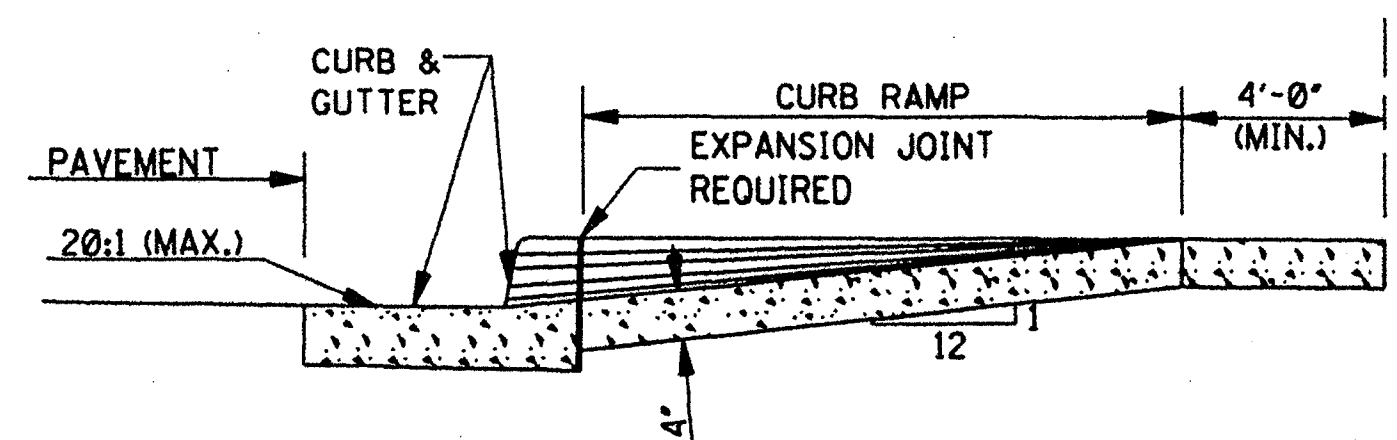
1. LOCATION AND TYPE OF CURB RAMP SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED.
2. THE CURB RAMP SHALL BE PAID FOR AS SIDEWALK.
3. THE THICKNESS OF THE CURB RAMP SHALL BE A MINIMUM OF 4" .
4. ALL RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1.




SECTION A-A



SECTION B-B

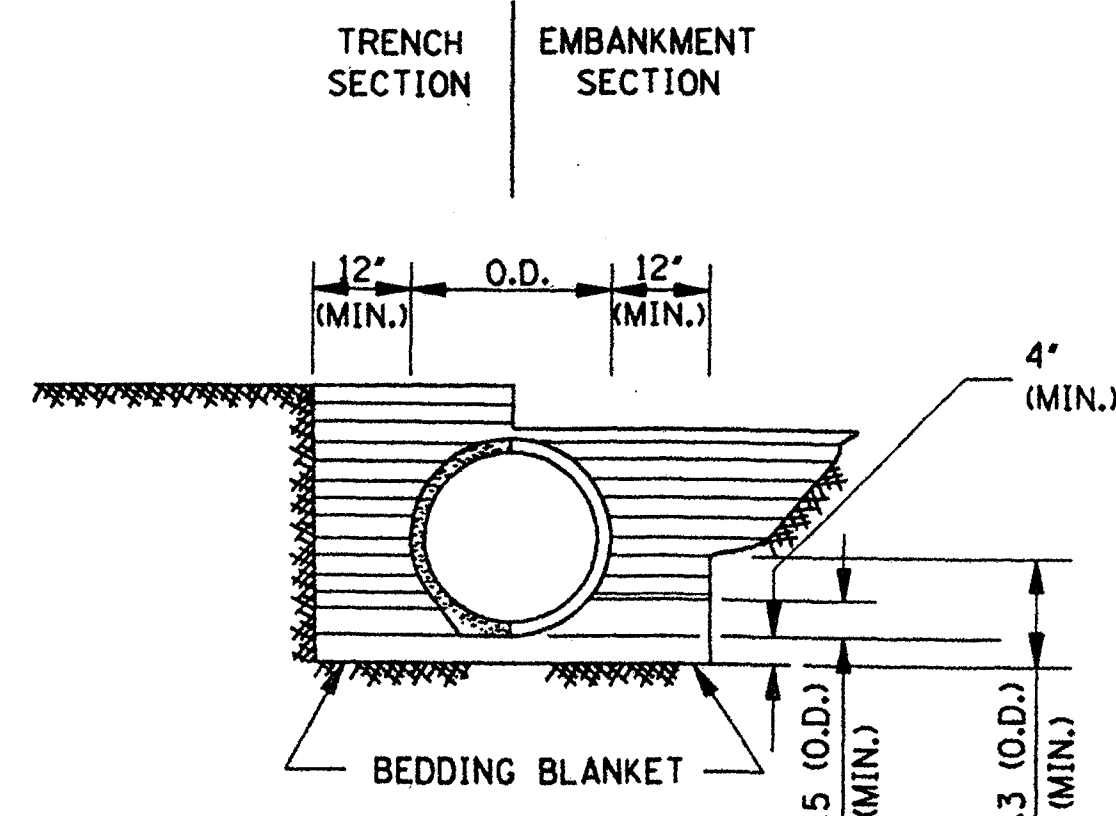


SECTION C-C

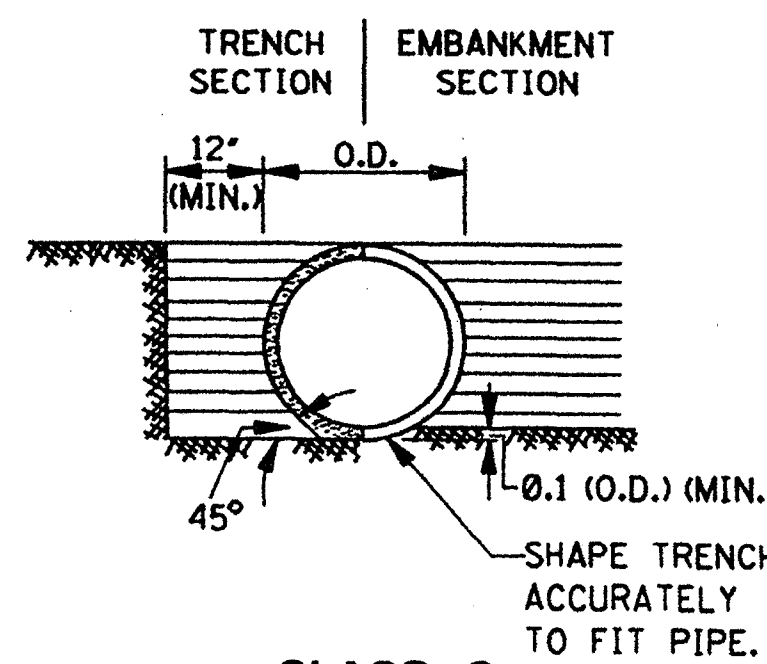
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
REVISION		ROADWAY DESIGN DIVISION	
DATE		STANDARD PLAN	
		CURB - CUT RAMP	
			
		WORKING NUMBER CCR-1	
		SHEET NUMBER 289	
		ISSUE DATE: OCTOBER 1, 1998	

CORRUGATED STEEL AND ALUMINUM PIPE (ROUND) H-20 LOADING						
PIPE DIAMETER (in)	MINIMUM COVER FROM TOP OF PIPE TO TOP OF SUBGRADE (in)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft)				
		SHEET THICKNESS (in)				
		0.064 STEEL 0.060 ALUM. 16 GAGE	0.079 STEEL 0.075 ALUM. 14 GAGE	0.109 STEEL 0.105 ALUM. 12 GAGE	0.138 STEEL 0.135 ALUM. 10 GAGE	0.168 STEEL 0.164 ALUM. 8 GAGE
		2 7/8" x 1/2" CORRUGATED STEEL / RIVETED, WELDED OR HELICAL		3" x 1" OR 5" x 1" CORRUGATED STEEL / RIVETED, WELDED, HELICAL OR BOLTED		2 7/8" x 1/2" CORRUGATED ALUMINUM / RIVETED OR HELICAL
12"	12"	84' / - / 45'	91' / - / 45'	- / - / 78'	- / - / 81'	- / - / 84'
15"	12"	67' / - / -	73' / - / -	- / - / -	- / - / -	- / - / -
18"	12"	56' / - / 30'	61' / - / 30'	- / - / 52'	- / - / 54'	- / - / 56'
24"	12"	42' / - / 22'	46' / - / 22'	59' / - / 39'	- / - / 41'	- / - / 42'
30"	12"	34' / - / 18'	36' / - / 18'	47' / - / 31'	- / - / 32'	- / - / 34'
36"	12"	28' / 48' / 15'	30' / 60' / 15'	39' / 78' / 26'	41' / 89' / 27'	- / 101' / 28'
42"	12"	31' / 41' / -	43' / 51' / 26'	46' / 64' / 43'	48' / 71' / 43'	50' / 79' / 44'
48"	12"	27' / 36' / -	37' / 45' / -	45' / 57' / 40'	46' / 61' / 41'	47' / 66' / 43'
54"	12"	- / 32' / -	33' / 40' / -	43' / 52' / 35'	44' / 55' / 37'	45' / 59' / 38'
60"	12"	- / 29' / -	- / 36' / -	43' / 49' / -	43' / 51' / 33'	44' / 54' / 34'
66"	12"	- / 26' / -	- / 33' / -	42' / 47' / -	43' / 49' / 30'	43' / 51' / 31'
72"	12"	- / 24' / -	- / 30' / -	- / 44' / -	41' / 47' / -	43' / 49' / 29'
78"	12"	- / 22' / -	- / 28' / -	- / 41' / -	- / 46' / -	39' / 47' / -
84"	12"	- / 21' / -	- / 26' / -	- / 38' / -	- / 45' / -	35' / 46' / -
90"	12"	- / 19' / -	- / 24' / -	- / 35' / -	- / 43' / -	- / 45' / -
96"	12"	- / 18' / -	- / 22' / -	- / 33' / -	- / 40' / -	- / 44' / -
102"	24"	- / 17' / -	- / 21' / -	- / 31' / -	- / 38' / -	- / 42' / -
108"	24"	- / - / -	- / 20' / -	- / 30' / -	- / 35' / -	- / 39' / -
114"	24"	- / - / -	- / 19' / -	- / 28' / -	- / 34' / -	- / 37' / -
120"	24"	- / - / -	- / - / -	- / 27' / -	- / 32' / -	- / 35' / -

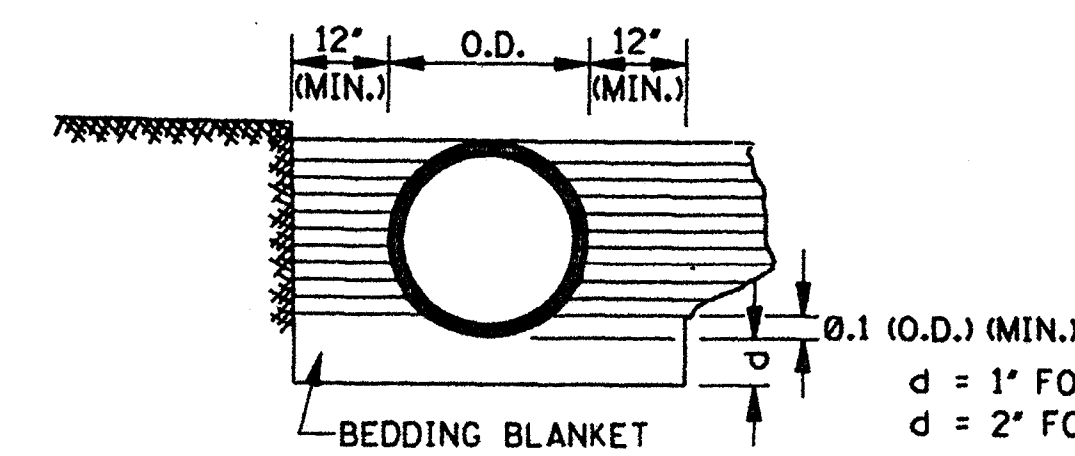
NOTE: THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR 1/2", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS (AASHTO M 36/M 36 & AASHTO M 196/M 196).



CLASS B



CLASS C



CLASS C MODIFIED

MAXIMUM HEIGHT OF FILL OVER REINFORCED CONCRETE PIPE			
CLASS OF PIPE	TYPE OF BACKFILL	MAXIMUM COVER (ft)	
		CLASS 'C' BEDDING	CLASS 'B' BEDDING
III	NORMAL	16'	-
IV	NORMAL	23'	28'
V	NORMAL	30'	36'
IV	IMPERFECT	-	90'
V	IMPERFECT	-	115'

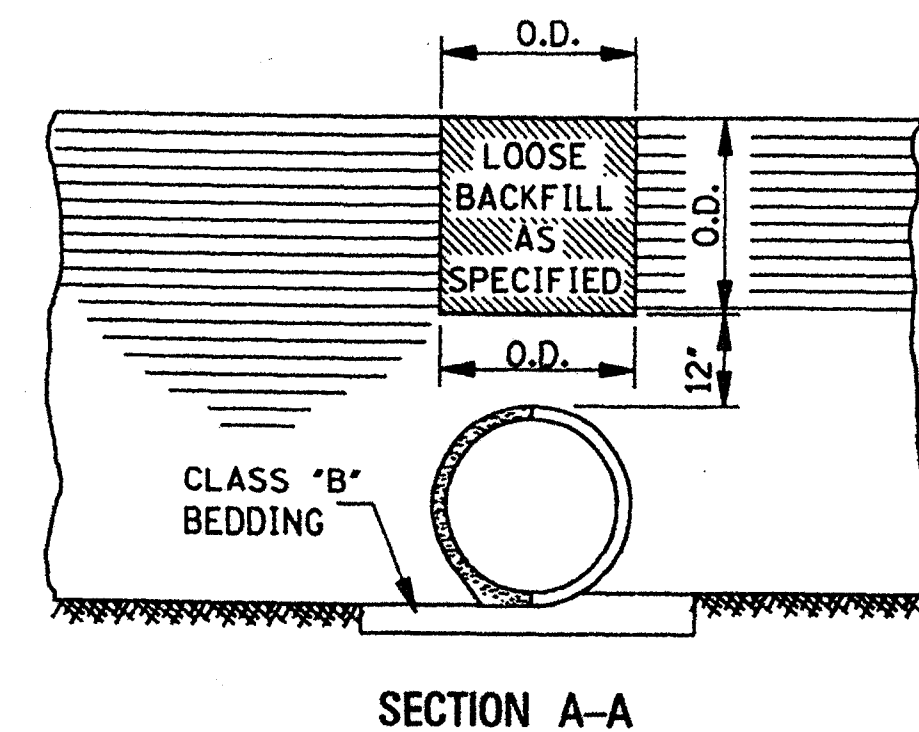
NOTE: CLASS OF PIPE AND BEDDING TO BE CONSISTENT THROUGHOUT THE PIPE LENGTH.

MAXIMUM HEIGHT OF FILL OVER CLASS 2 NONREINFORCED CONCRETE PIPE, PERFORATED AND/OR PLAIN, FOR UNDERDRAINS				
PIPE SIZE (in)	MAXIMUM COVER (ft)			
	BEDDING CLASS 'C'/CLASS 'B'			
	TRENCH	PROJECTING		
	B _d (in)	SAND & GRAVEL	DAMP CLAY	POSITIVE
				p = 0.7; R _{sd} = 0.7
4"	2.00'	*	*	34'/42'
6"	2.00'	*	*	25'/30'
8"	2.25'	*	16'/*	19'/24'
10"	2.50'	*	12'/20'	16'/19'
12"	2.75'	*	12'/18'	14'/17'

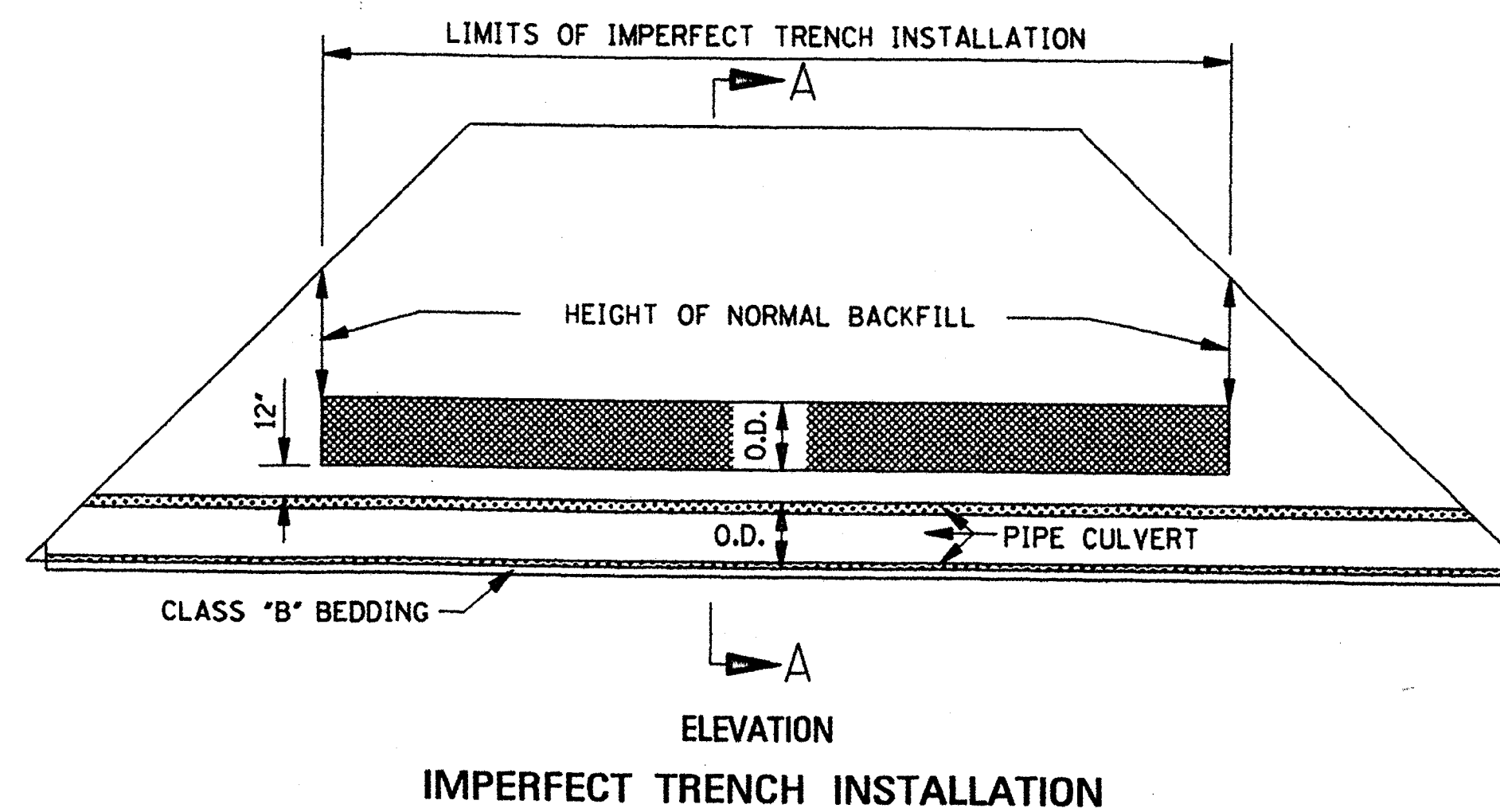
- NOTES:
- * 1. INDICATES NO LIMIT OF FILL HEIGHT (130 lbs/ft³).
 2. TRENCH WIDTH (B_d) NO GREATER THAN 16' PLUS O.D.
 3. FACTOR OF SAFETY IS 1.25 ON MINIMUM ULTIMATE STRENGTH.
 4. MINIMUM COVER FOR HIGHWAY LOADS IS 18".
 5. PERFORATED PIPE SHALL BE TYPE 1.

CORRUGATED METAL PIPE ARCHES H-20 LOADING									
EQUIV. DIAMETER (in)	PIPE DIMENSION (SPAN X RISE) (in)	MINIMUM CORNER RADIUS (in)	MINIMUM COVER FROM TOP OF PIPE TO TOP OF SUBGRADE FOR 2 tons/ft ² (in)	STEEL			ALUMINUM		
				MINIMUM THICKNESS REQUIRED (in)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft ²)		MINIMUM THICKNESS REQUIRED (in)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft ²)	
					2 tons/ft ²	† 3 tons/ft ²		2 tons/ft ²	† 3 tons/ft ²
				2 7/8" x 1/2" CORRUGATION RIVETED, WELDED OR HELICAL			2 7/8" x 1/2" CORRUGATION RIVETED OR HELICAL		
15"	17" X 13"	3"	18"	0.064"	13'	15'+	0.060"	15'	-
18"	21" X 15"	3"	18"	0.064"	12'	15'+	0.060"	14'	-
24"	28" X 20"	3"	18"	0.064"	10'	15'	0.060"	10'	15'+
30"	35" X 24"	3"	18"	0.079"	9'	14'	0.060"	9'	14'
36"	42" X 29"	3 1/2"	18"	0.079"	9'	13'	0.075"	9'	13'
42"	49" X 33"	4"	18"	0.079"	8'	12'	0.105"	8'	12'
48"	57" X 38"	5"	18"	0.109"	8'	12'	0.135"	8'	12'
54"	64" X 43"	6"	18"	0.109"	8'	12'	0.135"	8'	12'
60"	71" X 47"	7"	18"	0.138"	8'	12'	0.164"	8'	12'
66"	77" X 52"	8"	18"	0.168"	8'	12'			
72"	83" X 57"	9"	18"	0.168"	9'	13'			
				5" X 1" OR 3" X 1" CORRUGATION RIVETED, WELDED OR HELICAL					
36"	40" X 31"	5"	18"	0.079"	12'	15'+			
42"	46" X 36"	6"	18"	0.079"	12'	15'+			
48"	53" X 41"	7"	18"	0.079"	12'	15'+			
54"	60" X 46"	8"	18"	0.079"	12'	15'+			
60"	66" X 51"	9"	18"	0.079"	12'	15'+			
66"	73" X 55"	12"	18"	0.079"	15'+	-			
72"	81" X 59"	14"	18"	0.079"	15'	-			
78"	87" X 63"	14"	18"	0.079"	14'	15'+			
84"	95" X 67"	16"	18"	0.109"	13'	15'+			
90"	103" X 71"	16"	24"	0.109"	12'	15'+			
96"	112" X 75"	18"	24"	0.109"	11'	15'+			

- NOTES:
1. THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR 1/2", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS. (AASHTO M 36/M 36 & AASHTO M 196/M 196).
 - † 2. BEARING PRESSURES EXCEEDING 2 tons/ft² REQUIRED FOR GIVEN FILL HEIGHT SHALL HAVE FOUNDATION MATERIALS INVESTIGATED TO DETERMINE BEARING CAPACITY.



SECTION A-A



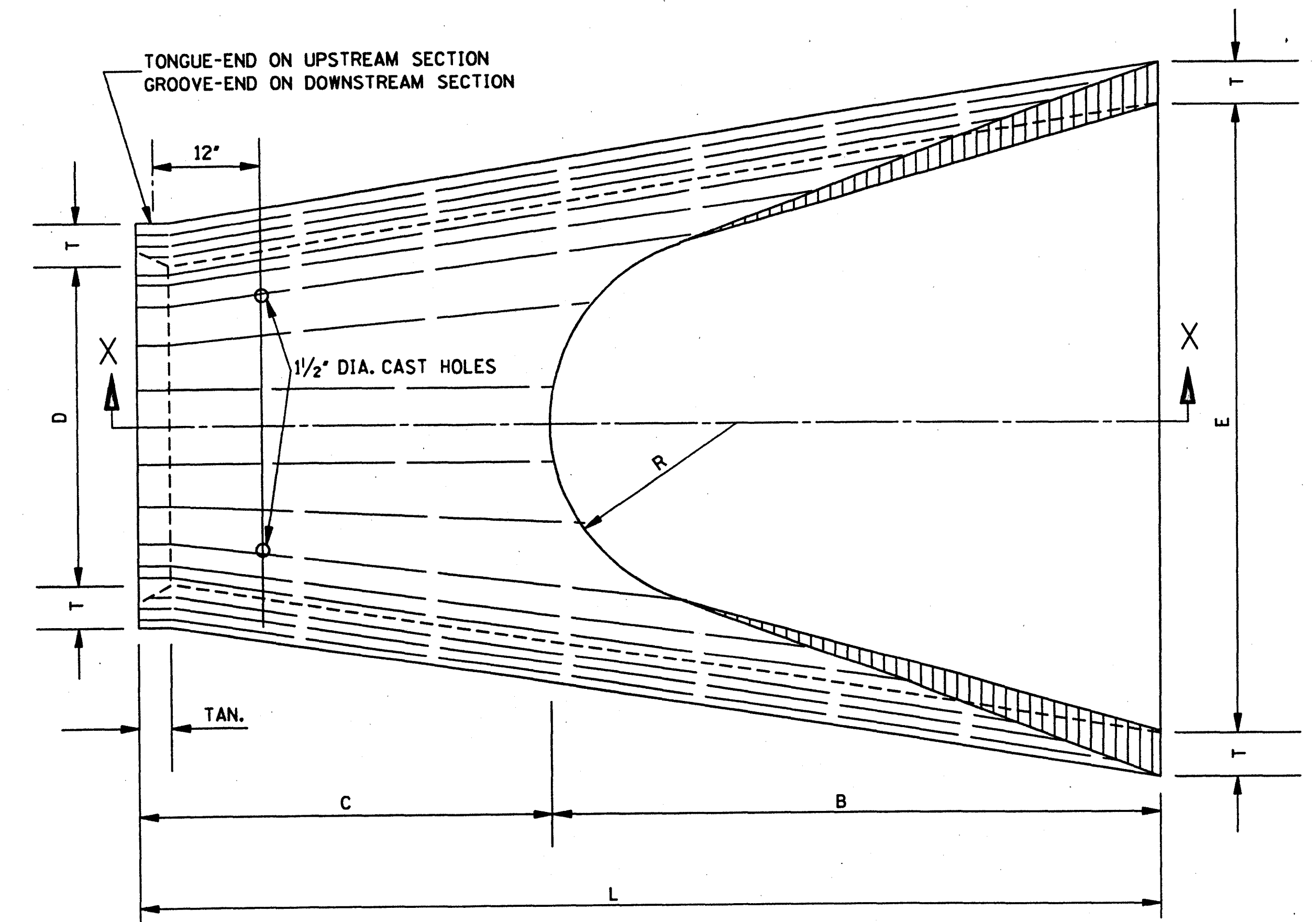
ELEVATION IMPERFECT TRENCH INSTALLATION

- GENERAL NOTES:
1. MINIMUM SPACING BETWEEN MULTIPLE LINES OF PARALLEL PIPE SHALL BE THE DISTANCE REQUIRED FOR INSTALLING THE ADJACENT FLARED END SECTIONS OR AS SHOWN ON THE HEADWALL DRAWINGS FOR CONDUITS REQUIRING HEADWALLS.
 2. UNLESS OTHERWISE INDICATED, THE TOP OF THE PIPE SHALL BE BELOW THE TOP OF THE SUBGRADE, AND A MINIMUM OF 12" OF COVER OVER THE TOP OF THE PIPE SHALL BE MAINTAINED BETWEEN THE SHOULDER LINES.
 3. WHERE PRE-BED PIPE IS INSTALLED, FLARED END SECTIONS FROM OTHER MANUFACTURERS MAY BE JOINED TO PRE-BED PIPE PROVIDED A CONCRETE COLLAR IS PLACED AT THE CONTRACTOR'S EXPENSE AND A DEFORMATION TO THE PIPE'S FLOWLINE IS NOT EVIDENT ON FINAL PLACEMENT.

BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<p style="text-align: center;">PIPE CULVERT INSTALLATION</p>	
DATE			
ISSUE DATE:		OCTOBER 1, 1998	
		WORKING NUMBER PI-1	
		SHEET NUMBER 300	

BELL AND SPIGOT END OPTION

NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

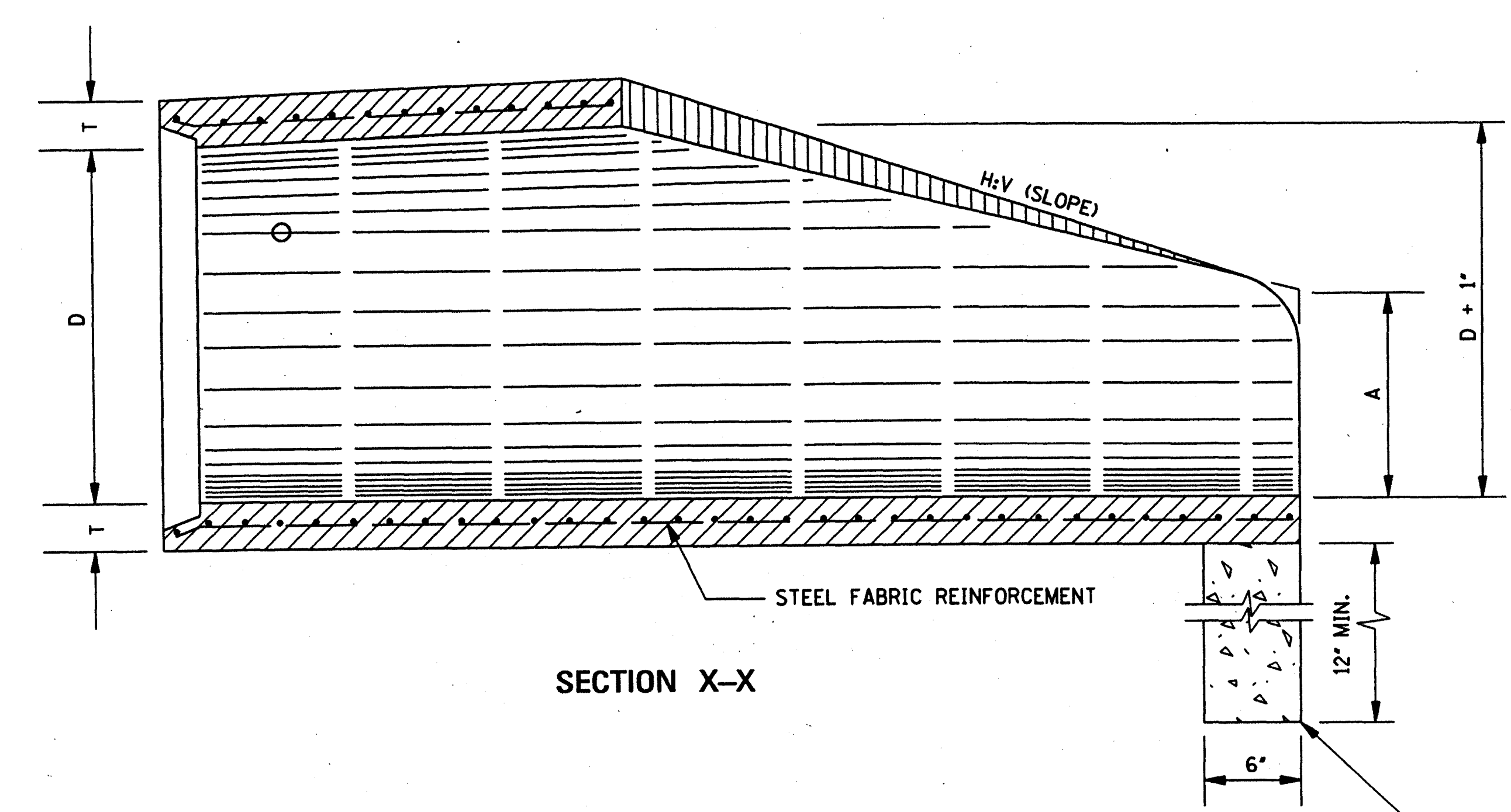


PLAN OF DOWNSTREAM END

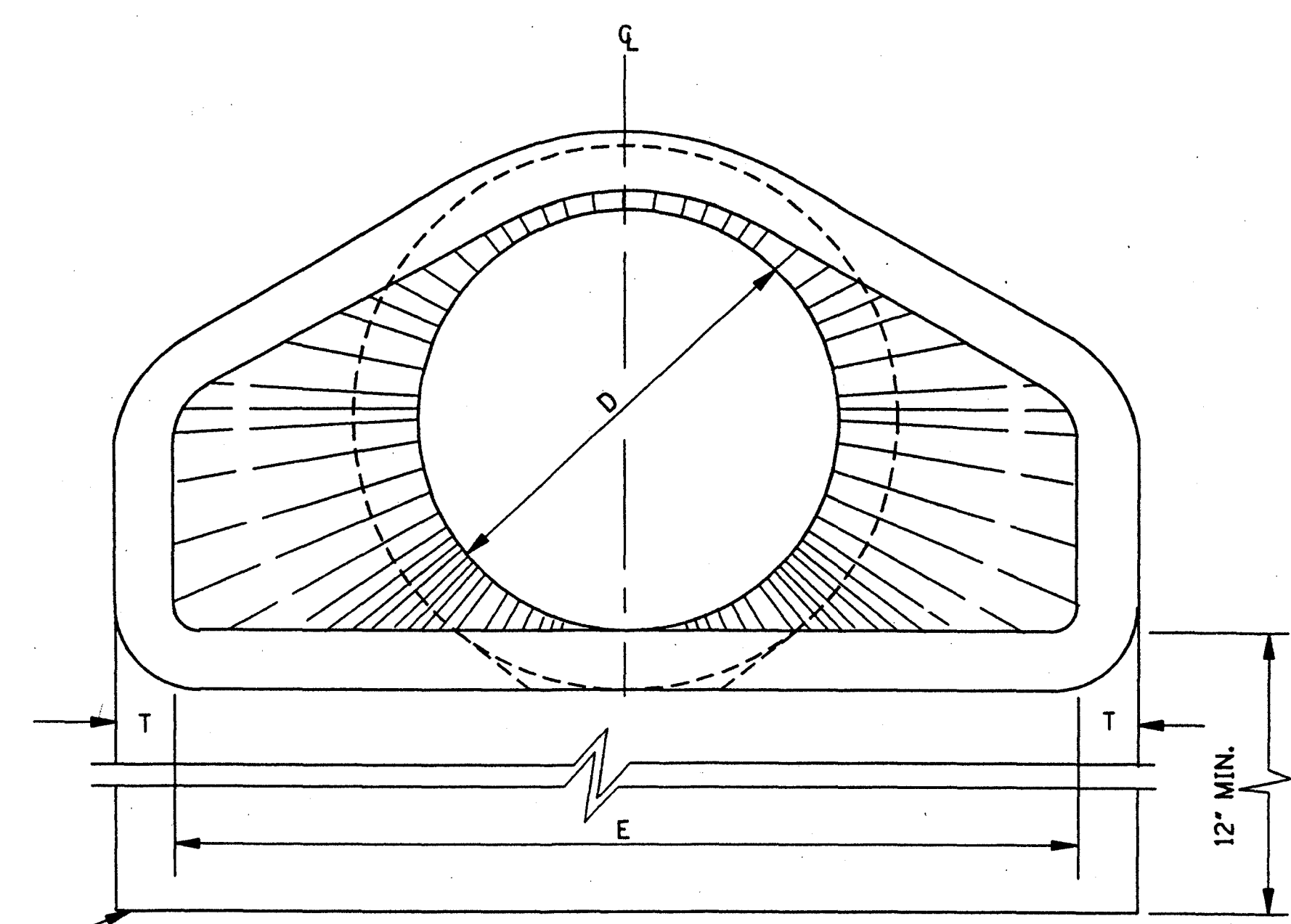
TABLE OF DIMENSIONS							
D	T	H:V	A	B	C	E	L
15'	2 1/4"	3:1	6'	2'-3"	4'-1"	2'-8"	6'-1"
18'	2 1/2"	3:1	9'	2'-3"	3'-10"	3'-0"	6'-1"
24'	3"	3:1	10'	3'-8"	2'-6"	4'-0"	6'-2"
30'	3 1/2"	3:1	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"
36'	4"	3:1	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"
42'	4 1/2"	3:1	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"
48'	5"	3:1	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"
54'	5 1/2"	3:1	2'-4"	6'-6"	1'-10"	7'-6"	8'-4"
* 60'	6"	3:1	2'-10"	6'-6"	1'-10"	8'-0"	8'-4"
* 66'	6 1/2"	3:1	3'-4"	6'-6"	1'-10"	8'-6"	8'-4"
* 72'	7"	3:1	3'-10"	6'-6"	1'-10"	9'-0"	8'-4"

* NOTE: SEE GENERAL NOTE 2.

TOE WALL CONC. QUANTITY (yd ³)
0.056
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167
0.177
0.188



SECTION X-X




END ELEVATION

TOE WALL REQUIRED ON ALL DOWNSTREAM
FLARED END SECTIONS. TOE WALL AT UPSTREAM
END WILL BE CONSTRUCTED WHERE DIRECTED BY THE
ENGINEER. TO BE PAID FOR AS CLASS 'B' STRUCTURAL
CONCRETE - MINOR STRUCTURES.

GENERAL NOTES:

1. REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M 170, TABLE 2, WALL B.
2. 2 - 1/2" DIA. CAST HOLES REQUIRED AS SHOWN TO ACCOMMODATE 2 - 1" DIA. TIE BOLTS, USED IN TIEING SECTION TO PIPE CULVERT.
3. LENGTH (L) OF A BELL-END OPTION MAY VARY BY A NOMINAL EXTENSION ON THE BELL END.
4. FLARED END SECTIONS ARE NOT TO BE USED INSIDE THE CLEAR ZONE.
5. ALL SIZES OF FLARED END SECTIONS FOR CIRCULAR CONCRETE PIPE MAY BE FURNISHED WITH EITHER BELL AND SPIGOT OR TONGUE AND GROOVE ENDS.

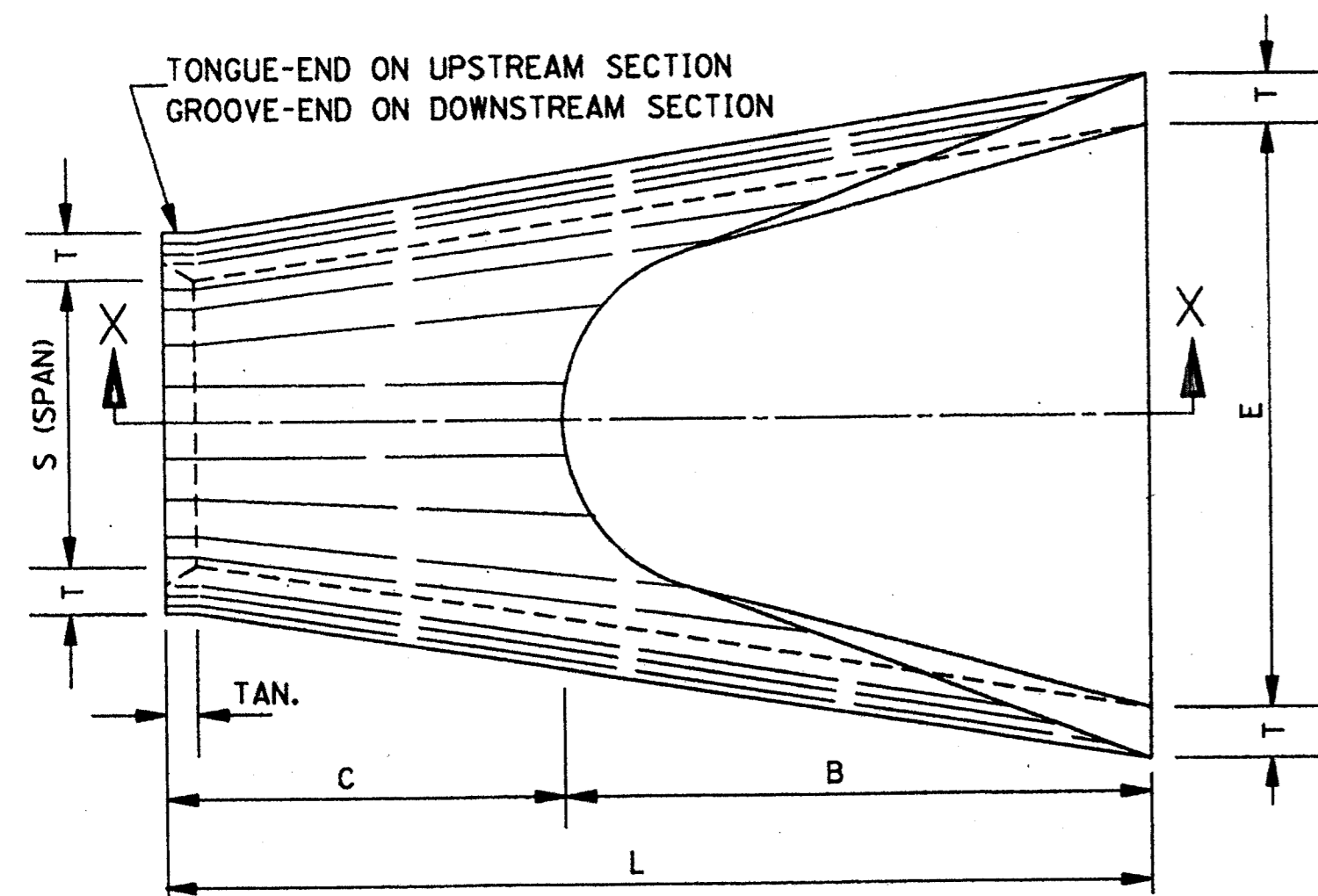
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN		 WORKING NUMBER FE-1 SHEET NUMBER 328
REVISION BY DATE	FLARED END SECTION FOR CONCRETE PIPE ISSUE DATE: <u>OCTOBER 1, 1998</u>	

BELL AND SPIGOT END OPTION TYPE I

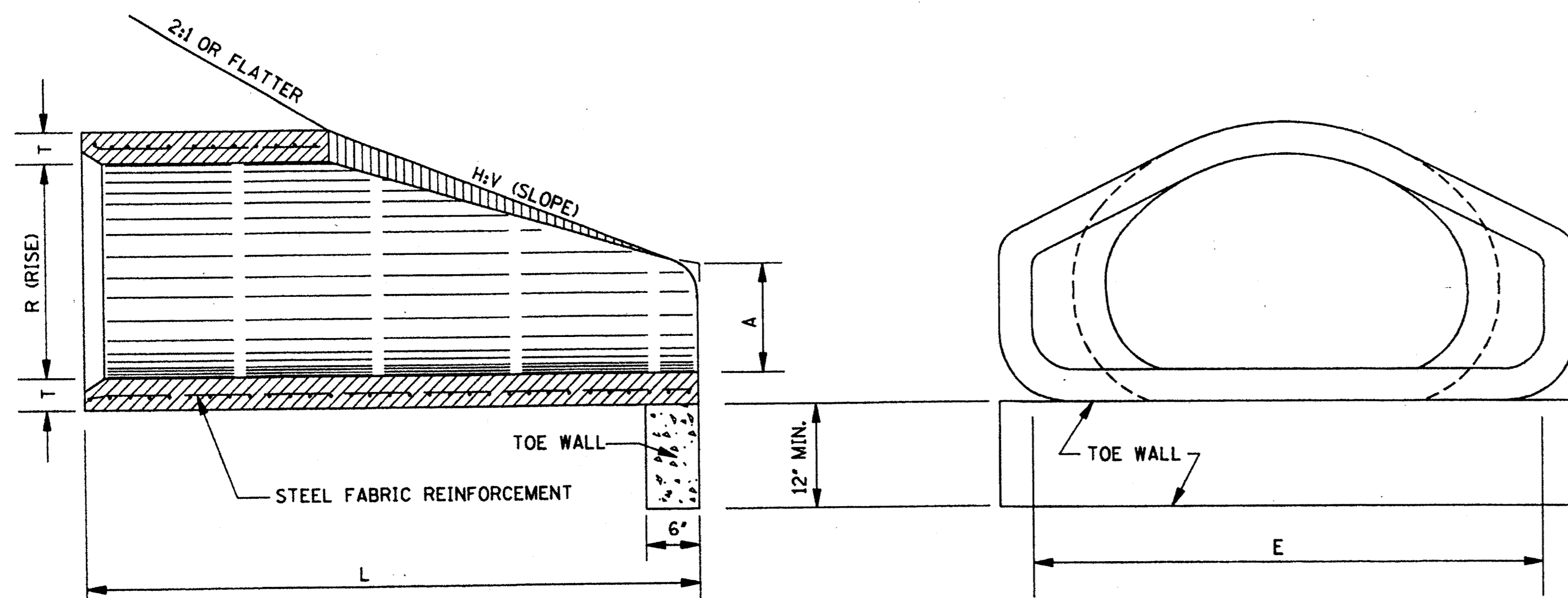
NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

FLARED END SECTION FOR CONCRETE ARCH PIPE									
EQUIV. SIZE	R	S	T	H:V	A	B	C	E	L
18"	13 1/2"	22"	2 1/2"	3:1	7'	2'-3"	3'-9"	3'-0"	6'-0"
24"	18"	28 1/2"	3"	3:1	8'	3'-3"	2'-9"	4'-0"	6'-0"
30"	22 1/2"	36 1/4"	3 1/2"	3:1	10'	4'-0"	2'-0"	5'-0"	6'-0"
36"	26 3/8"	43 3/4"	4"	3:1	10 3/8"	5'-0"	3'-0"	6'-0"	8'-0"
42"	31 1/8"	51 1/8"	4 1/2"	3:1	1'-3 3/8"	5'-0"	3'-0"	6'-6"	8'-0"
48"	36"	58 1/2"	5"	3:1	1'-9"	5'-0"	3'-0"	7'-0"	8'-0"
54"	40"	65"	5 1/2"	3:1	2'-1 1/2"	5'-0"	3'-0"	7'-6"	8'-0"
60"	45"	73"	6"	3:1	2'-2"	6'-3"	1'-9"	8'-0"	8'-0"
72"	54"	88"	7"	3:1	2'-11"	6'-6"	1'-10"	10'-0"	8'-4"

TOE WALL CONC. QUANTITY (yd ³)
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167
0.207



PLAN OF DOWNSTREAM END



SECTION X-X

FRONT ELEVATION

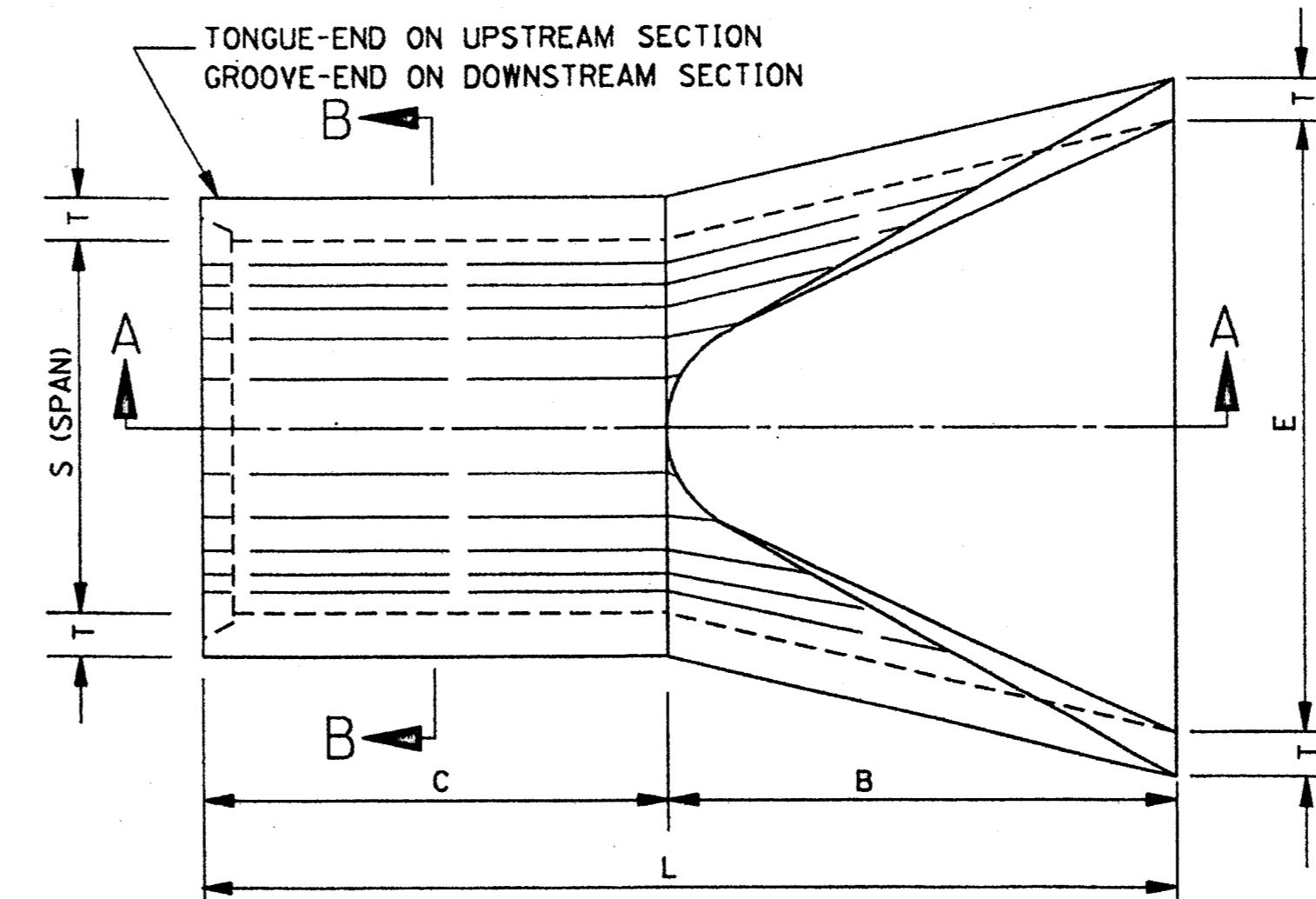
BELL AND SPIGOT END OPTION TYPE II

NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

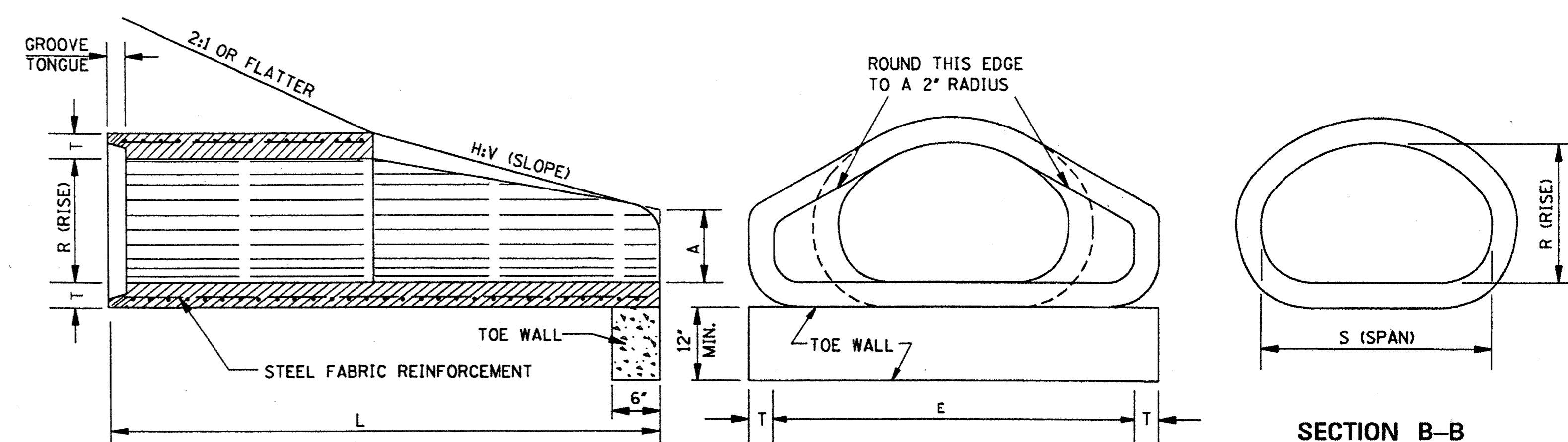
FLARED END SECTION FOR CONC. ARCH PIPE-SHORT FLARE										
EQUIV. SIZE	R	S	T	H:V	A	B	C	E	L	GROOVE TONGUE
18"	13 1/2"	22"	2 1/2"	3:1	7'	2'-3"	3'-9"	3'-0"	6'-0"	2 1/4"
24"	18"	28 1/2"	3"	3:1	9'	3'-3"	2'-9 1/2"	4'-0"	6'-0 1/2"	3"
30"	22 1/2"	36 1/4"	4"	2.94:1	9 1/2"	4'-2"	3'-10 1/2"	5'-0"	8'-0 1/2"	3 1/2"
36"	26 3/8"	43 3/4"	4 1/2"	3.08:1	11 5/8"	5'-0"	3'-0 1/2"	6'-0"	8'-0 1/2"	4"
42"	31 1/8"	51 1/8"	4 1/2"	3.08:1	1'-4 3/8"	5'-0"	3'-0 1/2"	6'-6"	8'-0 1/2"	4"
48"	36"	58 1/2"	5"	3.16:1	1'-10"	5'-0"	3'-0 1/2"	7'-0"	8'-0 1/2"	5"
54"	40"	65"	5 1/2"	3.24:1	2'-3"	5'-0"	3'-0 3/8"	7'-6"	8'-0 3/8"	5"
60"	45"	73"	6"	3.33:1	2'-9"	5'-0"	3'-0 3/8"	8'-0"	8'-0 3/8"	5"

TOE WALL CONC. QUANTITY (yd ³)
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167

NOTES: *1. EQUIVALENT 18" FLARED END SECTION SIMILAR TO TYPE I.
2. DIMENSIONS A, B, C, E AND L MAY VARY 1"±.



PLAN OF DOWNSTREAM END



SECTION A-A

FRONT ELEVATION

SECTION B-B

GENERAL NOTES:

- FLARED END SECTIONS ARE NOT TO BE USED INSIDE THE CLEAR ZONE.
- UNLESS OTHERWISE DESIGNATED, EITHER TYPE I OR TYPE II MAY BE USED, PROVIDED THE SELECTED TYPE IS COMPATIBLE WITH THE CONFIGURATION OF THE PIPE TO WHICH IT IS TO BE ATTACHED.
- ALL SIZES OF TYPE I AND TYPE II FLARED END SECTIONS FOR CONCRETE ARCH PIPE MAY BE FURNISHED WITH EITHER BELL AND SPIGOT OR TONGUE AND GROOVE ENDS.

- REINFORCEMENT (SINGLE LINE) FOR FLARED END SECTION SHALL CONFORM TO REQUIREMENTS OF AASHTO M 206 FOR CLASS II ARCH PIPE.
- TOE WALL REQUIRED ON ALL DOWNSTREAM FLARED END SECTIONS. TOE WALL AT UPSTREAM END WILL BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER, TO BE PAID FOR AS CLASS "B" STRUCTURAL CONCRETE-MINOR STRUCTURES.
- FLARED END SECTIONS MUST MEET THE REQUIREMENTS FOR ARCH PIPE OF EITHER AASHTO M 206 OR ASTM C 506.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

FLARED END SECTION FOR CONCRETE ARCH PIPE



WORKING NUMBER
FE-1A

SHEET NUMBER
329

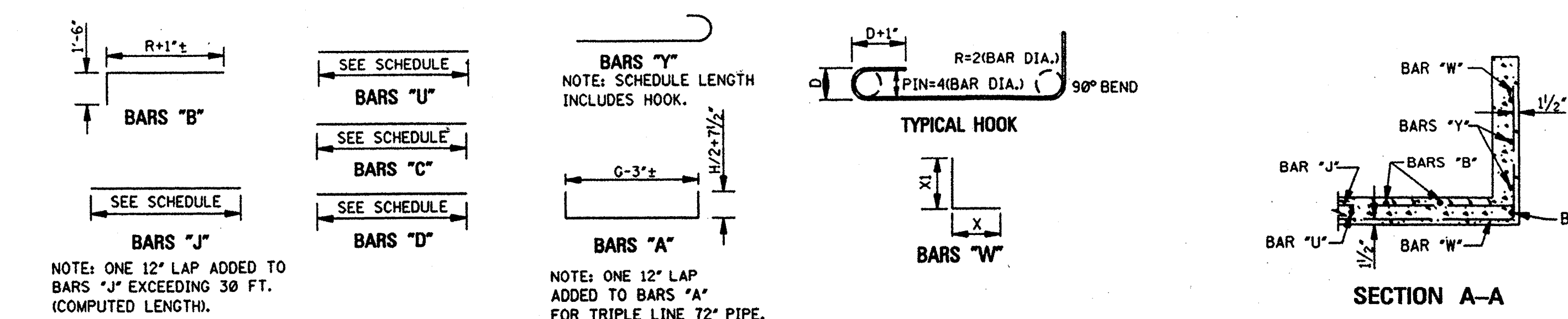
ISSUE DATE: OCTOBER 1, 1998

EQUAL PIPE SIZE	DIMENSIONS AND REINFORCING FOR FLARED HEADWALL FOR SINGLE LINE PIPE CULVERT																											PAY QUANTITIES FOR ONE HEADWALL							
	DIMENSIONS			REINFORCING STEEL																								CONCRETE (CU. YDS.)	STEEL (LBS.)						
	G	X	Y	A	B	C	D	J1	J2	J3	J4	J5	J6	J7	J8	U	W1	W2	W3	W4	W5	W6	W7	W8	W9	Y1	Y2			Y3	Y4	Y5	Y6		
18	3-10 1/2	5-9 1/2	2-11	4	7-3	5	4-1	2	2-6	2	2-3	1	4-1	1	5-3	1	6-1																	0.62	72.0
24	4-7 1/4	7-2 1/2	3-7 1/4	4	8-6	6	4-8	2	3-0	2	2-6	1	4-10	1	6-0	1	7-2																0.86	98.0	
30	5-2 1/4	8-5 1/2	4-2 1/4	4	9-6	6	5-3	2	3-6	2	2-9	1	5-5	1	6-7	1	7-9																1.11	119.0	
36	5-11 1/4	9-10 1/4	5-0	4	10-8 1/2	7	5-10	2	3-11	2	3-0	1	6-2	1	7-4	1	8-6																1.41	146.0	
42	6-7 1/4	11-2	5-8 1/4	4	11-10	8	6-4	2	4-4	2	3-5	1	6-10	1	8-0	1	9-2																1.71	169.0	
48	7-4	12-7 1/2	6-4 1/4	4	13-0	9	7-0	2	4-10	2	3-10	1	7-6	1	8-8	1	9-10																2.10	215.0	
54	7-11 1/2	13-10	7-0	4	14-0 1/2	9	7-6	2	5-3	2	4-3	1	8-2	1	9-4	1	10-6																2.45	234.0	
60	8-8 1/2	15-4 1/4	7-9	4	15-3 1/2	10	8-2	2	6-2	2	4-8	1	8-11	1	10-1	1	11-3																2.93	286.0	
72	10-1 1/2	18-0 1/4	9-2	4	17-7 1/2	11	9-3	2	6-8	2	5-3	1	10-4	1	11-6	1	12-8																3.86	378.0	

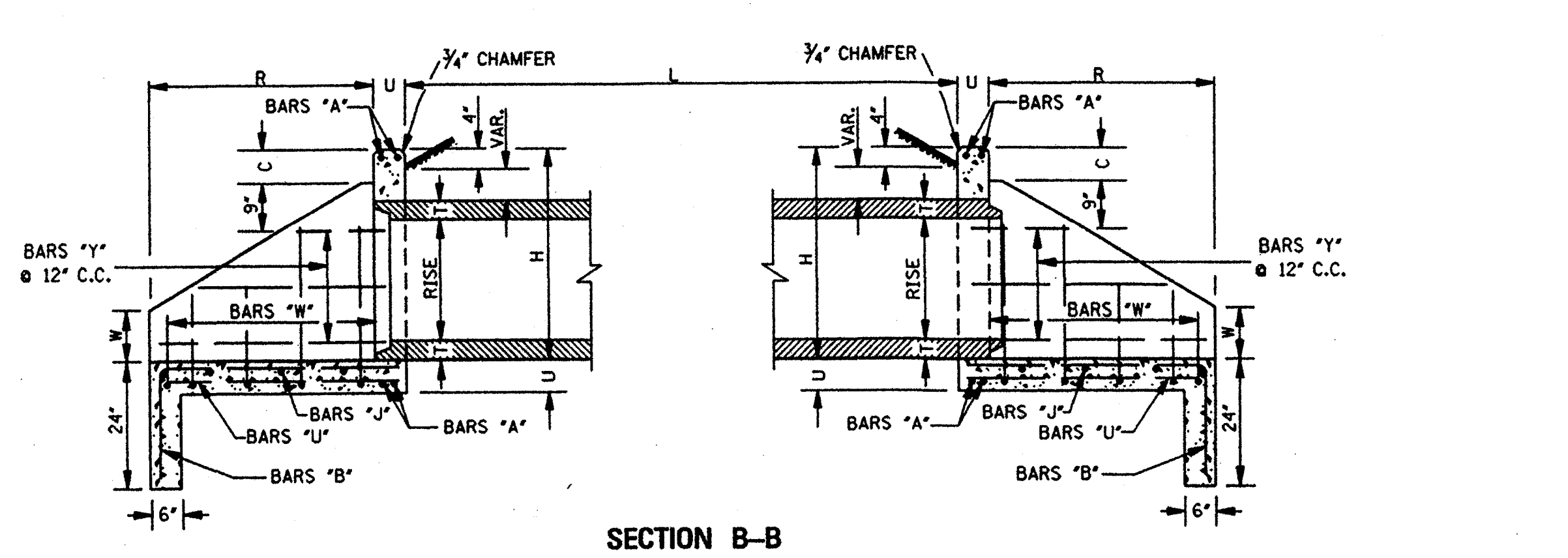
EQUAL PIPE SIZE	DIMENSIONS AND REINFORCING FOR FLARED HEADWALL FOR DOUBLE LINE PIPE CULVERT																											PAY QUANTITIES FOR ONE HEADWALL							
	DIMENSIONS				REINFORCING STEEL																								CONCRETE (CU. YDS.)	STEEL (LBS.)					
	G	X	Y	Z	A	B	C	D	J1	J2	J3	J4	J5	J6	J7	J8	U	W1	W2	W3	W4	W5	W6	W7	W8	W9	Y1	Y2			Y3	Y4	Y5	Y6	
18	7-1 1/2	9-0 1/2	6-2	12	4	10-6	9	4-1	3	2-6	4	2-3	1	7-4	1	8-6	1	9-4																0.94	103.0
24	8-7 1/4	11-2 1/2	7-7 1/4	12	4	12-6	10	4-8	3	3-0	4	2-6	1	8-10	1	10-0	1	11-2																1.30	127.0
30	9-9	13-0 1/2	8-9 1/2	12	4	14-1	11	5-3	3	3-6	4	2-9	1	10-0	1	11-2	1	12-4																1.66	167.0
36	11-6 1/2	15-5 1/2	10-7	15	4	16-3 1/2	13	5-10	4	3-11	4	3-0	1	11-9	1	12-11	1	14-1																2.14	212.0
42	12-10 1/2	17-5 1/2	11-11 1/2	15	4	18-1 1/2	14	6-4	4	4-4	4	3-5	1	13-1	1	14-3	1	15-5																2.60	243.0
48	14-6 1/2	19-10	13-7	18	4	20-2 1/2	15	7-0	4	4-10	4	3-10	1	14-8	1	15-10	1	17-0																3.21	302.0
54	16-0 1/2	21-11	15-1	21	4	22-1 1/2	17	7-6	4	5-3	4	4-3	1	16-3	1	17-5	1	18-7																3.78	340.0
60	17-9 1/2	24-5 1/4	16-10	24	4	24-4 1/2	19	8-2	4	5-7	4	4-8	1	18-0	1	19-2	1	20-4																4.55	416.0
72	20-10 1/2	28-9 1/4	19-11	27	4	28-4 1/2	22	9-3	5	6-8	4	5-3	1	21-1	1	22-3	1	23-5																6.01	544.0

EQUAL PIPE SIZE	DIMENSIONS AND REINFORCING FOR FLARED HEADWALL FOR TRIPLE LINE PIPE CULVERT																											PAY QUANTITIES FOR ONE HEADWALL							
	DIMENSIONS				REINFORCING STEEL																								CONCRETE (CU. YDS.)	STEEL (LBS.)					
	G	X	Y	Z	A	B	C	D	J1	J2	J3	J4	J5	J6	J7	J8	U	W1	W2	W3	W4	W5	W6	W7	W8	W9	Y1	Y2			Y3	Y4	Y5	Y6	
18	10-4 1/2	12-3 1/2	9-5	12	4	13-9	12	4-1	4	2-6	6	2-3	1	10-7	1	11-9	1	12-7																1.26	131.0
24	12-7 1/4	15-2 1/2	11-7 1/4	12	4	16-5 1/2	14	4-8	4	3-0	6	2-6	1	12-10	1	14-0	1	15-2																1.73	163.0
30	14-3 1/4	17-7 1/4	13-4 1/4	12	4	18-8	15	5-3	4	3-6	6	2-9	1	14-7	1	15-9	1	16-11																2.21	212.0
36	17-1 1/2	21-0 1/2	16-2	15	4	21-10 1/2	18	5-10	6	3-11	6	3-0	1	17-4	1	18-6	1	19-8																2.88	274.0
42	19-1 1/4	23-8 1/4	18-2 1/4	15	4	24-4 1/2	20	6-4	6	4-4	6	3-5	1	19-4	1	20-6	1	21-8																3.48	316.0
48	21-9	27-0 1/2	20-9 1/2	18	4	27-5 1/2	23	7-0	6	4-10	6	3-10	1	21-11	1	22-13	1	23-5																4.33	399.0
54	24-1 1/2	30-0	23-2	21	4	30-2 1/2	25	7-6	6	5-3	6	4-3	1	24-4	1	25-6	1	26-8																5.12	448.0
60	26-10 1/2	33-6 1/4	25-11	24	4	33-5 1/2	28	8-2	6	5-7	6	4-8	1	27-1	1	28-3	1	29-5																6.17	548.0
72	31-7 1/2	39-6 1/4	30-8	27	4	39-1 1/2	33	9-3	8	6-8	6	5-3	1	32-10	1	34-0	1	35-2																8.16	724.0

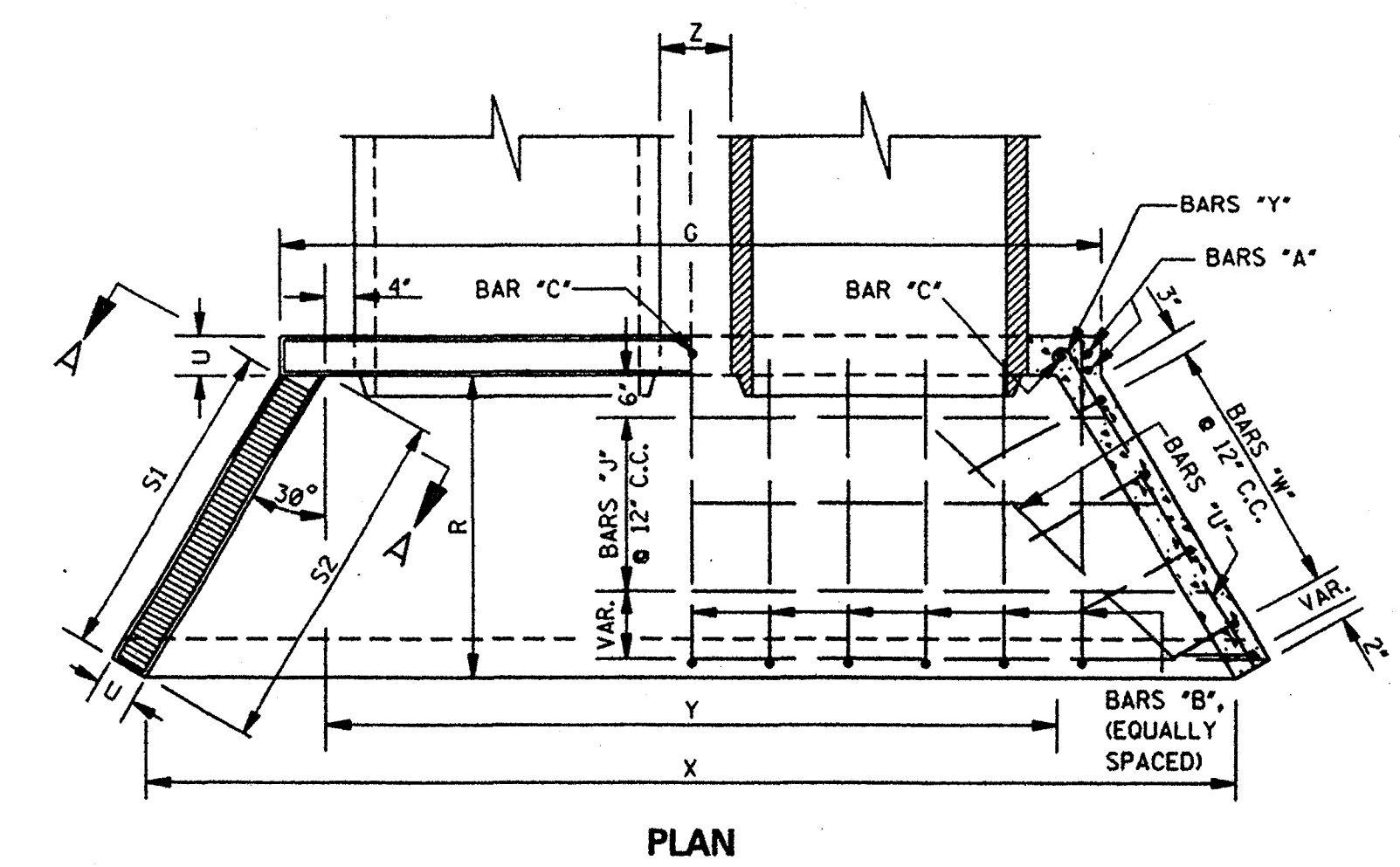
EQUAL PIPE SIZE	DIMENSIONS AND REINFORCING COMMON TO FLARED HEADWALLS FOR SINGLE, DOUBLE AND TRIPLE LINE PIPE CULVERTS																																
	DIMENSIONS				REINFORCING STEEL																												
	MIN THICK *T*	INSIDE SPAN	INSIDE RISE	C	H	R	S1	S2	U	W	W1	W2	W3	W4	W5	W6	W7	W8	W9	X	X1	X	X1	X	X1	X	X1	X	X1	X	X1		
18	2 1/2	22	13 1/2	7	2-4 1/2	2-6	2-7 1/4	2-10 3/4	5	0-8	1-1	1-4	1-1	1-4	0-10	0-10																	
24	3	28 1/2	18	7	2-10 1/2	3-1	3-3 3/4	3-6 3/4	5	0-10	1-6	1-10	1-6	1-10	0-10	0-10	0-10	1-1															
30	3 1/2	36 1/4	22 1/2	7	3-4	3-8	4-0	4-2 1/2	5	1-0	1-10	2-3	1-10	2-3	1-2	1-5	1-2	1-5	0-10	1-1													
36	4	43 3/4	26 3/4	7	3-9	4-3	4-8	4-10 3/4	5	1-2	2-2	2-8	2-2	2-8	1-6	1-10	1-6	1-10	1-6	1-3													
42	4 1/2	51 1/2	31 3/4	7	4-2 1/2	4-9	5-3	5-5 3/4	5	1-4	2-6	3-2	2-6	3-2	1-10	2-3	1-2	1-5	1-2	1-5	1-3	1-7											
48	5	58 1/2	36	7	4-8	5-5	6-0 3/4	6-10	5	1-8	3-2	4-0	3-2	4-0	2-6	3-2	2-6	3-2	1-10	2-3	1-3	1-9											
54	5 1/2	65	40	7	5-1	5-11	6-7 1/4	6-10	5	1-10	3-7	4-6	3-7	4-6	2-11	3-8	2-11	3-8	2-2	2-9	1-6	1-11	1-6	1-11									
60	6	73	45	7	5-7	6-7	7-4 3/4	7-11 1/4	5	2-2	4-4	5-5	4-4	5-5	3-8	4-7	3-8	4-7	2-11	3-8	2-11	3-8	2-3	2-10	1-10	1-10	2-3						
72	7	88	54	7	6-6	7-8	8-7 3/4	8-10 1/4	5	2-2	4-4	5-5	4-4	5-5	3-8	4-7	3-8	4-7	2-11	3-8	2-11	3-8	2-3	2-10	1-10	1-10	2-3						



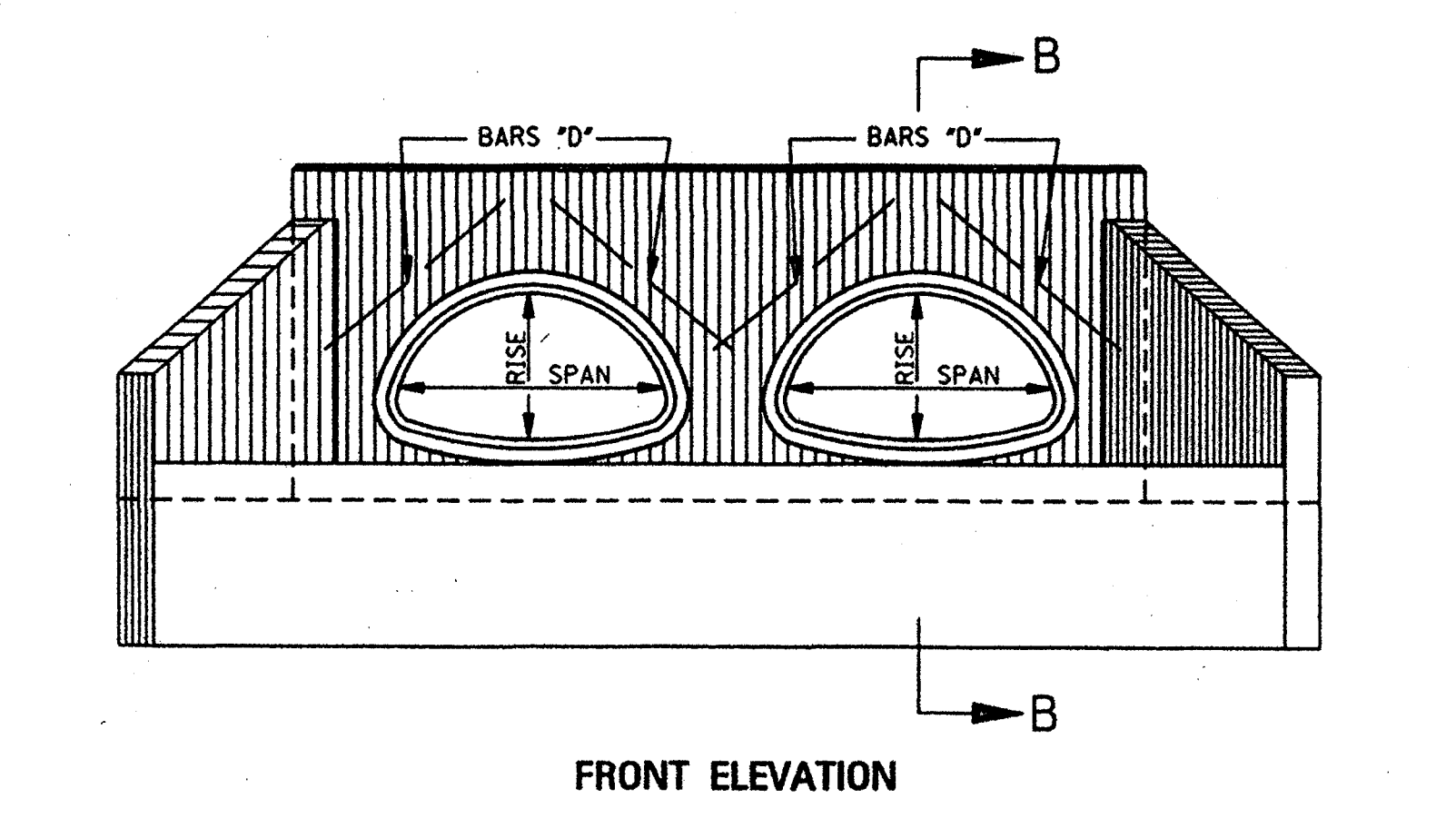
BAR BENDING DETAILS
NOTE: ALL BARS ARE #4.



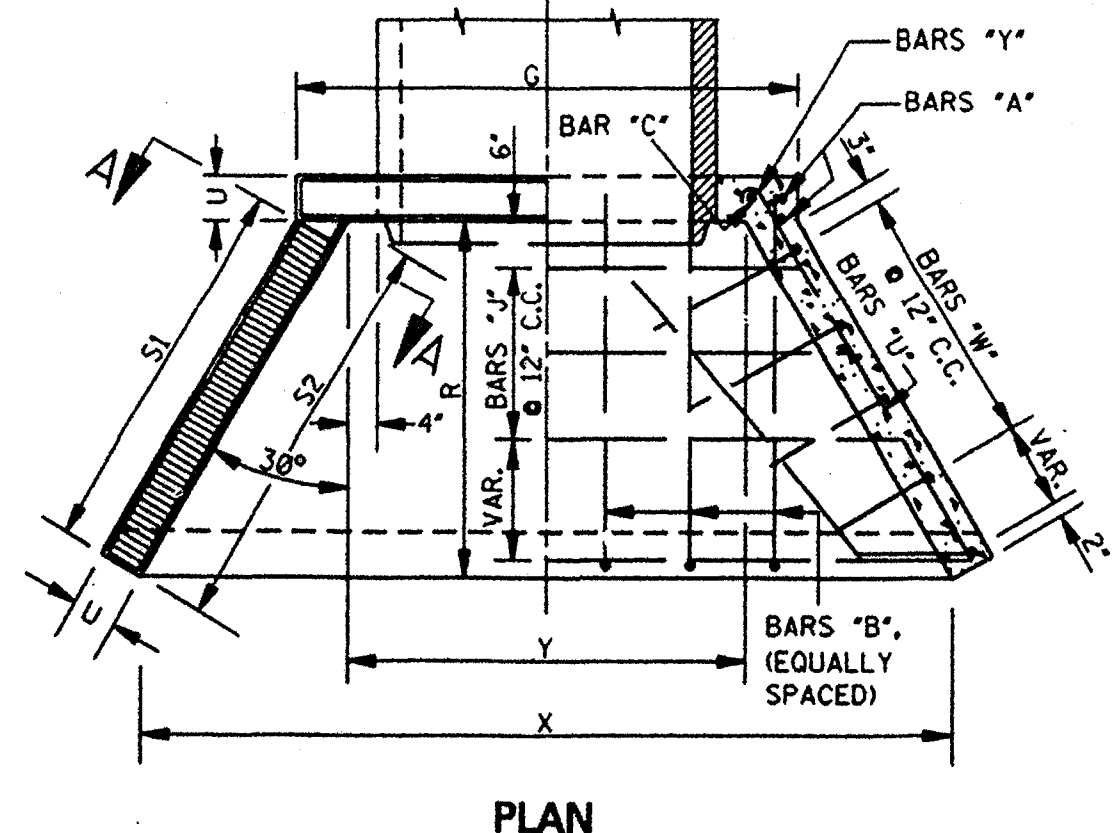
SECTION B-B



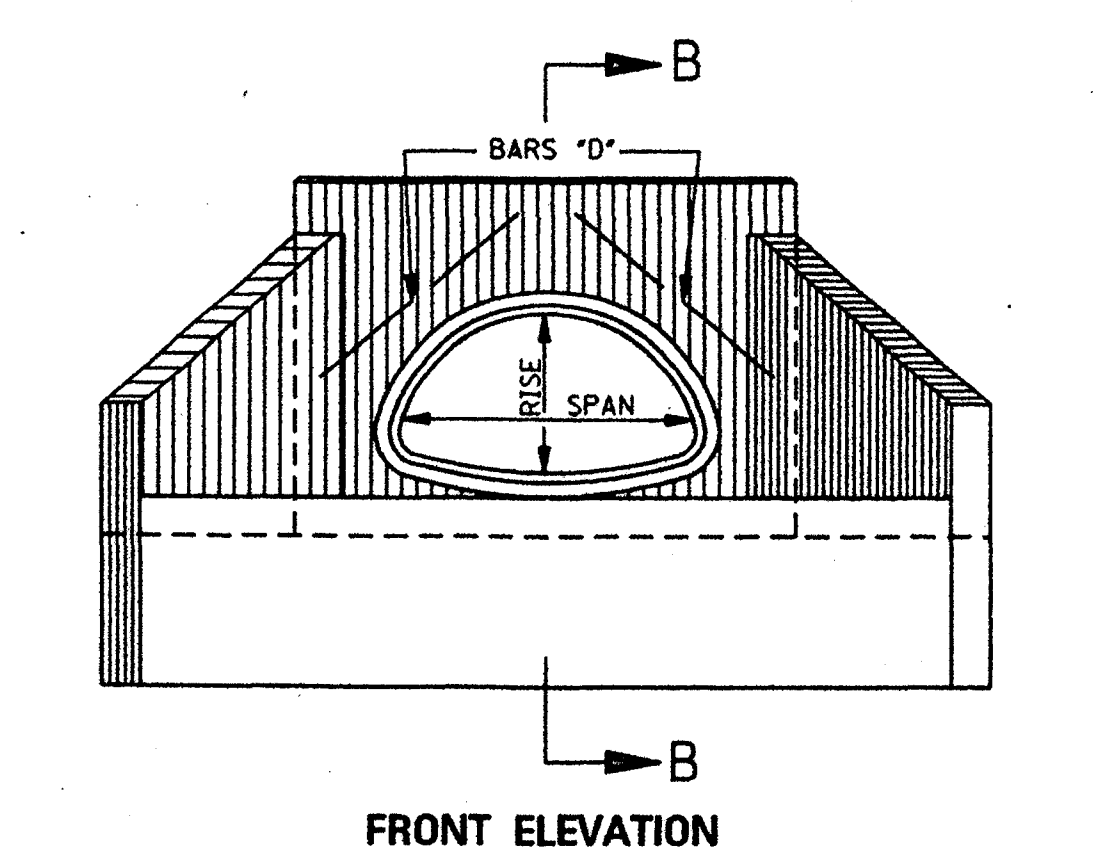
PLAN



FRONT ELEVATION



PLAN



FRONT ELEVATION

- GENERAL NOTES:
- SPECIFICATIONS: MISSISSIPPI