CITY OF RIDGELAND
MADISON COUNTY, MS

WIDENING OF EAST COUNTY LINE ROAD

STP-7305-00(003)

RIDGELAND CITY OFFICIALS

MAYOR

GENE F. McGEE

BOARD OF ALDERMEN

KEN HEARD, WARD 1
CHUCK GAUTIER, WARD 2
MIKE CROOK, WARD 3
LARRY ROBERTS, WARD 4
SCOTT JONES, WARD 5
LINDA DAVIS TRUNZLER, WARD 6
GERALD STEEN, AT-LARGE

CITY ATTORNEY

JERRY MILLS

DIRECTOR OF PUBLIC WORKS

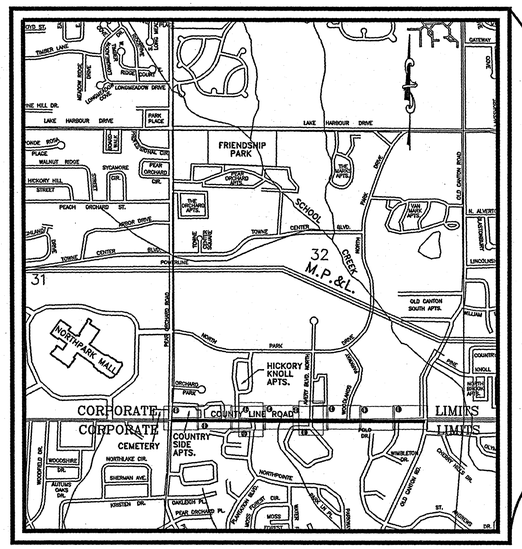
MIKE McCOLLUM

ASST. DIRECTOR OF PUBLIC WORKS

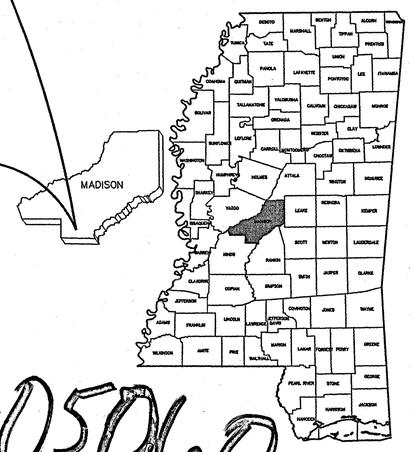
BEN MAYS

CITY ENGINEER

DAVID E. WILLIAMS, P.E.



VICINITY MAP



PWP-05060

LENGTH DATA

LENGTH OF PROJECT	4,600.54	FT	0.871	MI
LENGTH OF BRIDGES	00.00	FT	0.000	MI
LENGTH OF PROJECT (NET)			0.871	MI
LENGTH OF EXCEPTIONS	0.00	FT	0.000	MI
			0.871	MI

MAY 2005
WEI #T94-148A

GARLAND S. WRIGHT JR. REGISTERED PROFESSIONAL ENGINEER PE-11444 MISSISSIPPI 5/6/05

DESIGN SPEED= 45MPH
PROJECTED:
ADT (1996)= 21,000 (MDOT)
ADT (2016)= 38,000 (MDOT)

ENVIRONMENTAL PERMITS

P.E. NO. TYPE	REQUIRED YES	REQUIRED NO	BY
N.W. (WATERS OF U.S.)	☐	☒	
N.W. (WETLANDS)	☐	☒	
G.P.	☐	☒	
404	☐	☒	
STORMWATER	☒	☐	

APPROVED:

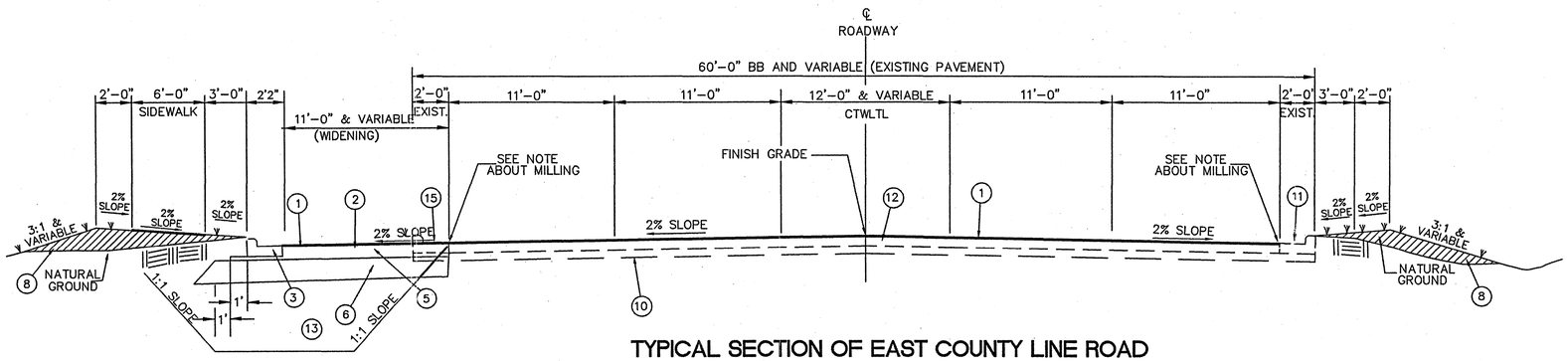
PROJECT ENGINEER — DATE 5/6/05

APPROVED:

MAYOR, CITY OF RIDGELAND — DATE

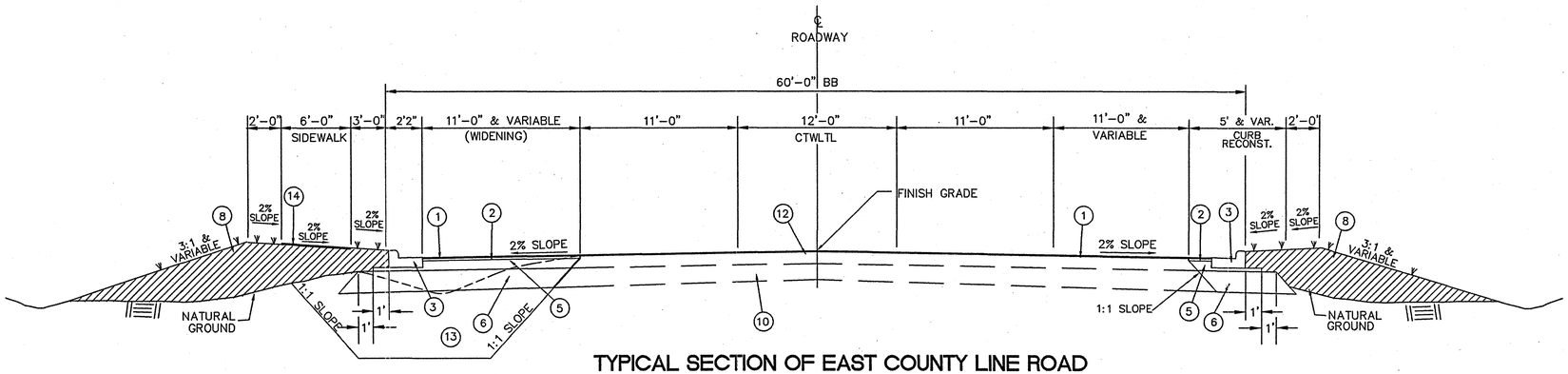
CITY OF RIDGELAND
WIDENING OF EAST
COUNTY LINE ROAD WEI# T94-148A

601-352-3945



TYPICAL SECTION OF EAST COUNTY LINE ROAD

STA. 56+70.25(B.O.P.) – STA. 58+85.24
NOT TO SCALE



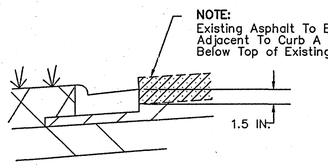
TYPICAL SECTION OF EAST COUNTY LINE ROAD

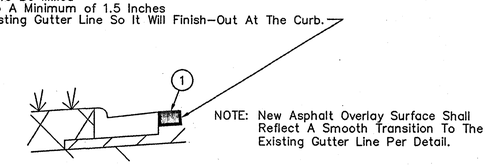
STA. 58+85.24 – STA. 61+00.00
NOT TO SCALE

NOTES:

(1) 2" Hot Mix Asphalt, ST (9.5mm Mixture)
(2) 2" Hot Mix Asphalt, ST (12.5mm Mixture)
(3) Combination Curb and Gutter, Type 1 Required (See Detail Sheet 50)
(5) 7" Hot Mix Asphalt, ST (19mm Mixture)
(6) 6" Soil-Lime-Water mix (Slurry Application)(Subgrade Course) Required
(8) Borrow Excavation Class B-15
(10) Existing Material (To Remain)
(11) Existing Concrete Curb and Gutter (To Remain)
(12) Existing Asphalt To Be Milled As Directed By Engineer (See Note About Milling & Sheet 23)
(13) Undercut (3' And Variable Below Asphalt Subgrade). Backfill With Borrow Excavation Class B-15.
(14) 6' Concrete Sidewalk
(15) Existing Concrete Curb and Gutter To Be Removed

↓↓↓ Solid Sodding





WAGGONER
Engineering, Inc.
Engineers, Scientists, Planners
143-A LeFleurs Square
JACKSON, MS 39211
601-355-9526
FAX 601-352-3945

CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

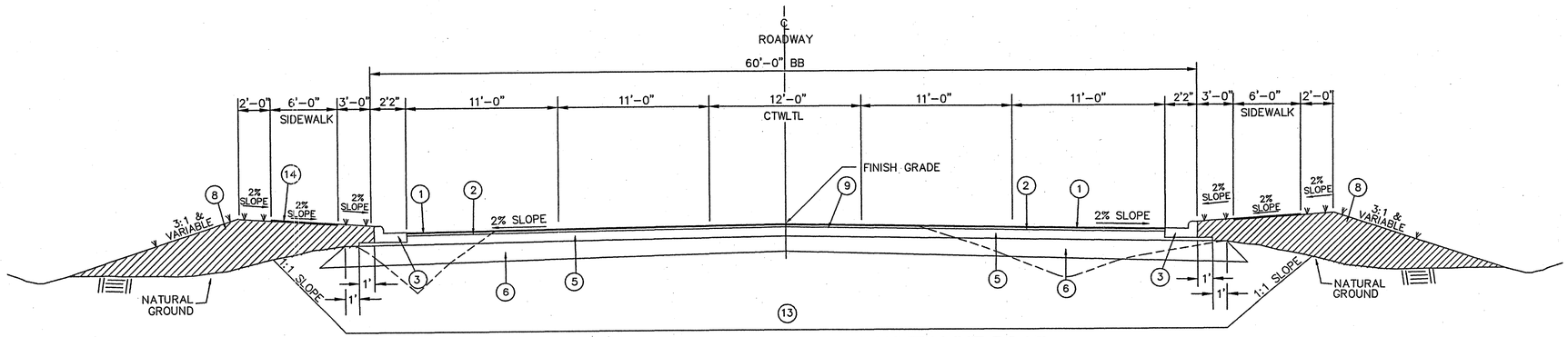
DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

DRAWN BY:		SCALE:	NTS
DESIGNED BY:		DATE:	2-03-05
CHECKED BY:	SW	PROJECT:	794-148

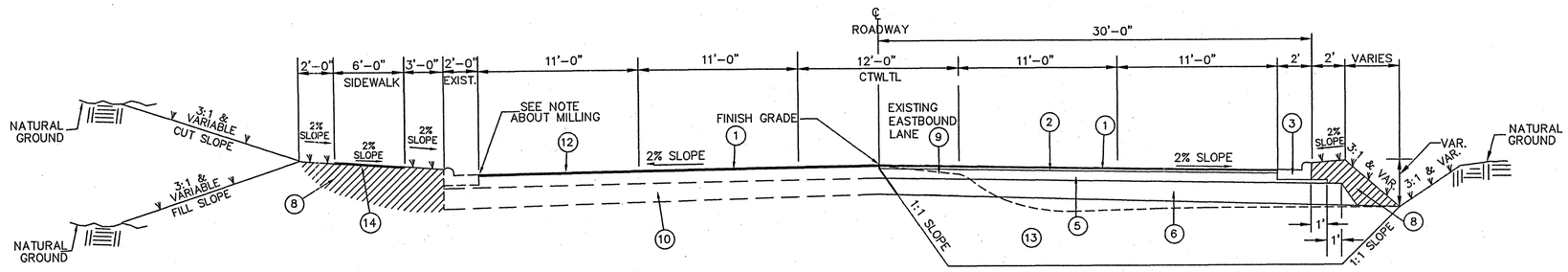
DRAWING TITLE:
TYPICAL SECTION

SHEET NUMBER:
3



TYPICAL SECTION OF EAST COUNTY LINE ROAD

STA. 61+00.00 – STA. 86+20.00
NOT TO SCALE



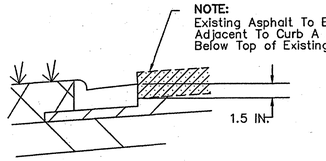
TYPICAL SECTION OF EAST COUNTY LINE ROAD

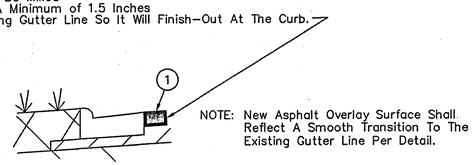
STA. 86+20.00 – STA. 99+60.00
NOT TO SCALE

NOTES:

(1) 2" Hot Mix Asphalt, ST (9.5mm Mixture)
(2) 2" Hot Mix Asphalt, ST (12.5mm Mixture)
(3) Combination Curb and Gutter, Type 1 Required (See Detail Sheet 50)
(5) 7" Hot Mix Asphalt, ST (19mm Mixture)
(6) 6" Soil–Lime–Water mix (Slurry Application)(Subgrade Course) Required
(8) Borrow Excavation Class B–15
(9) Existing Asphalt To Be Removed
(10) Existing Material (To Remain)
(11) Existing Concrete Curb and Gutter (To Remain)
(12) Existing Asphalt To Be Milled As Directed By Engineer (See Note About Milling & Sheet 23)
(13) Undercut (3' And Variable Below Asphalt Subgrade). Backfill With Borrow Excavation Class B–15.
(14) 6' Concrete Sidewalk

⇓⇓⇓ Solid Sodding





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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

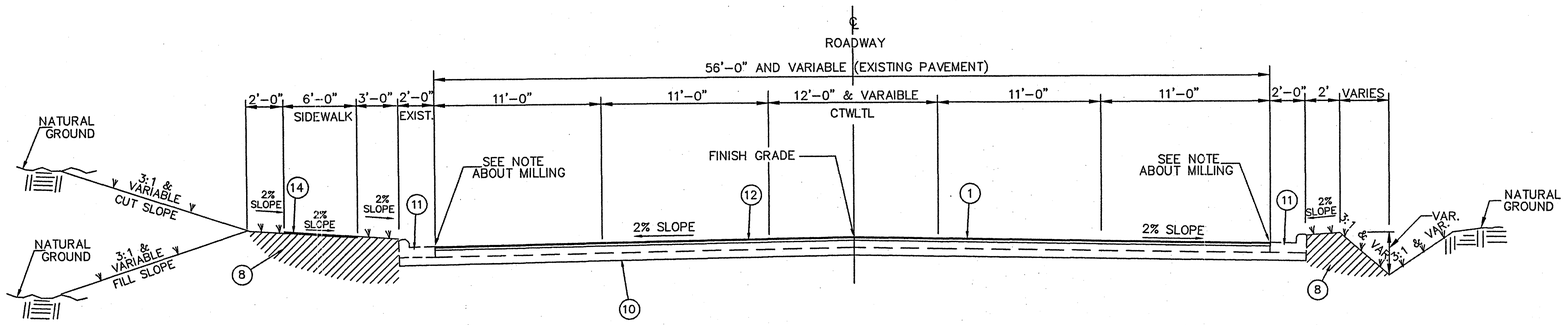
NO.	REMARKS	DATE

SEAL:

DRAWN BY:	SCALE: NTS
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: 194-148

DRAWING TITLE:
TYPICAL SECTION

SHEET NUMBER:
4



TYPICAL SECTION OF EAST COUNTY LINE ROAD

STA. 99+56.30 – STA. 102+10.79(E.O.P.)
NOT TO SCALE

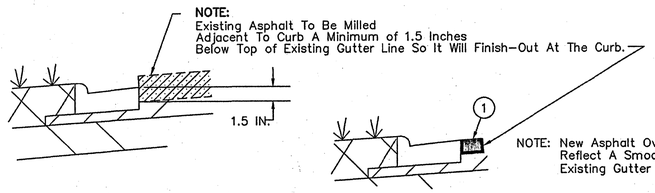
NOTES:

1. 2" Hot Mix Asphalt, ST (9.5mm Mixture)
2. 2" Hot Mix Asphalt, ST (12.5mm Mixture)
3. Combination Curb and Gutter, Type 1 Required (See Detail Sheet 50)
5. 7" Hot Mix Asphalt, ST (19mm Mixture)
6. 6" Soil–Lime–Water mix (Slurry Application)(Subgrade Course) Required
8. Borrow Excavation Class B–15 (Fill Section Only)
9. Existing Asphalt To Be Removed
10. Existing Material (To Remain)
11. Existing Concrete Curb (To Remain)
12. Existing Asphalt To Be Milled As Directed By Engineer (See Note About Milling & Sheet 24)
13. Undercut (3' And Variable Below Asphalt Subgrade). Backfill With Borrow Excavation Class B–15.
14. 6' Concrete Sidewalk

⇓ ⇓ ⇓ Solid Sodding

GENERAL NOTES: (SEE SHEET 3)

DATA FOR PAVEMENT DETERMINATION	
(1991) ADT	= 21000 CURRENT
(2001) ADT	= 24356 n YEAR
(2011) ADT	= 38000 DESIGN
DHV	= 4600
D	= 60% OF DHV
T	= 3% OF DHV
T(TOTAL)	= 3% OF ADT
18K(FLEX)	= 500/1000
18K(RIGID)	= 770/1000
CBR	= 5



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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP–7305–00(003)

DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

DRAWN BY:	SCALE: NTS
DESIGNED BY:	DATE: 2–03–09
CHECKED BY: SW	PROJECT: T94–148

DRAWING TITLE:
TYPICAL SECTION

SHEET NUMBER:
5

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM ROADWAY ITEMS	TOTAL QUANTITIES PLAN	FINAL	UNIT
201–A	Clearing and Grubbing	LS		LS
202–B	Removal of Obstructions	LS		LS
202–B	Removal of Concrete Curb (All Types)	1718.0		LF
202–B	Removal of Drainage Pipe (All Sizes)	2170.0		LF
202–B	Removal of Water Lines, (All Sizes)	5600.0		LF
202–B	Removal of Gas Lines (All Sizes)	4300.0		LF
202–B	Removal of Concrete Pavement (All Thicknesses)	27.0		SY
202–B	Removal of Asphalt Pavement (All Thicknesses)	14659.0		SY
202–B	Removal of Manholes (All Sizes) (All Depths)	2.0		EA
203–A	Unclassified Excavation (AH)(FM)	6000.0		CY
203–EX	Borrow Excavation, (AH) (FME)(CLASS B–15)(CONTRACTOR FURNISHED)	28750.0		CY
203–F	Channel Excavation (FM)	250.0		CY
203–G	Excess Excavation (FM) (AH)	26500.0		CY
216–A	Solid Sodding	23500.0		SY
221–A	Portland Cement Concrete Paved Ditch	14.0		CY
230–A	Shrub Planting (Dwarf Pfitzer Juniper)	475.0		EA
230–A	Shrub Planting (Florida Jasmine)	72.0		EA
230–B	Tree Planting (Pin Oak)	138.0		EA
230–B	Tree Planting (Crepe Myrtle)	64.0		EA
234–A	Temporary Silt Fence	4830.0		LF
235–A	Temporary Erosion Checks	210.0		BALE
304–C	Granular Material, (Class 5) (Group C)(AEA)	800.0		CY
307–C	6" Soil Lime Water Mixing (Class C)(Slurry Application Only)	25683.0		SY
307–D	Lime	534.0		TON
403–A	Hot Mix Asphalt, MT, 19mm	9210.0		TON
403–A	Hot Mix Asphalt, MT, 12.5mm	2970.0		TON
403–A	Hot Mix Asphalt, MT, 9.5mm	3840.0		TON
406–A	Cold Milling of Bituminous Pavement (All Depths)	8977.0		SY
601–B	Class B Structural Concrete, Minor Structures	95.0		CY
602–A	Reinforcing Steel	13300.0		LB
907–603–CA	48" Reinforced Concrete Pipe, Class III	68.0		LF
907–603–PVC	48" Corrugated Poly Vinal Chloride Pipe	320.0		LF
907–603–CA	36" Reinforced Concrete Pipe, Class III	265.0		LF
907–603–CA	30" Reinforced Concrete Pipe, Class III	620.0		LF
907–603–CA	24" Reinforced Concrete Pipe, Class III	320.0		LF
907–603–CA	18" Reinforced Concrete Pipe, Class III	2440.0		LF
907–603–CA	15" Reinforced Concrete Pipe, Class III	736.0		LF
907–603–CB	24" Reinforced Concrete End Section	1.0		EA
907–603–CB	18" Reinforced Concrete End Section	1.0		EA
907–603–CE	65" x 40" Concrete Arch Pipe, Class A–III	336.0		LF
907–603–CE	73" x 45" Concrete Arch Pipe, Class A–III	264.0		LF
907–603–CE	88" x 54" Concrete Arch Pipe, Class A–III	264.0		LF
907–603–CF	65" x 40" Concrete Arch Pipe End Section	1.0		EA
907–603–CF	88" x 54" Concrete Arch Pipe End Section	1.0		EA
907–604–C–PP	Type "A" Single Inlets (Per Plans)	21.0		EA
907–604–D–PP	Type "A" Double Inlets (Per Plans)	17.0		EA
907–604–F–PP	Type "B" Single Inlets (Per Plans)	5.0		EA
907–604–G–PP	Type "B" Double Inlets (Per Plans)	8.0		EA
907–603–H–PP	Type "C" Single Inlets (Per Plans)	6.0		EA
907–604–H–PP	Type "C" Double Inlets, (Per Plans)	2.0		EA
907–604–I–PP	2'x2' Grate Inlets (Per Plans)	10.0		EA
607–H	Pickets, 6' x4", Cypress,Temporary Fence	3365.0		LF
608–B	Concrete Sidewalk (With Reinforcement)	3326.0		SY
907–609–F–PP	Combination Concrete Curb and Gutter (Type 1–A)(Per Plans)	6986.0		LF
907–609–G–PP	Concrete Header Curb (Per Plans)	182.0		LF
613–A	Adjustment of Castings, Gratings, and Utility Appurtenances	1.0		LS
614–B	Concrete Driveway With Reinforcement	443.0		SY
618–A	Maintenance of Traffic	LS		LS
619–A1	Temporary Traffic Stripe (Continuous White)	8700.0		LF
619–A2	Temporary Traffic Stripe (Continuous Yellow)	10750.0		LF
619–A6	Temporary Traffic Stripe (Legend) (White)	1550.0		SF
619–F1	Precast Concrete Median Barrier	3400.0		LF
619–F2	Remove And Reset Precast Concrete Median Barrier	3400.0		LF
619–D1	Standard Roadside Construction Signs (Less than 10 sf)	270.0		SF
619–D2	Standard Roadside Construction Signs (10 sf or more)	860.0		SF
619–G4	Barricades (Type III)	120.0		LF
619–G5	Free Standing Plastic Drums	215.0		EA
620–A	Mobilization	LS		LS
626–A	6" Thermoplastic Traffic Stripe (Skip White)	1.6		MI
626–B	6" Thermoplastic Traffic Stripe (Continuous White)	0.3		MI
626–C	6" Thermoplastic Edge Stripe (Continuous White)	1.5		MI
626–D	6" Thermoplastic Traffic Stripe (Skip Yellow)	0.8		MI
628–E	6" Thermoplastic Traffic Stripe (Continuous Yellow)	1.6		MI
626–G	Thermoplastic Detail Stripe, (6" Equivalent Length)	2000.0		LF
626–H	Thermoplastic Legend (White)	4550.0		SF
627–C	Red–Clear Reflective Rasied Markers	340.0		EA
627–D	Two–Way Yellow Reflective Raised Markers	520.0		EA
630–A	Standard Roadside Signs (Sheet Aluminum) (0.080")	112.0		SF
630–C	Steel U–Section Posts, (3 to 3.5 LB/LF)	300.0		LF

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM ROADWAY ITEMS	TOTAL QUANTITIES PLAN	FINAL	UNIT
631–A	Flowable Fill	320.0		CY
635–A	Vehicle Loop Assemblies	3204.0		LF
636–A	Shielded Cable	5027.0		LF
637–A	Equipment Cabinet	2.0		EA
638–A	Loop Detedtor Amplifier, Card Rack Mounted, 4 Channel	2.0		EA.
639–A	Traffic Signal Equipment Pole, Type II, 30' Shaft, 40' Arm	1.0		EA.
639–A	Traffic Signal Equipment Pole, Type II, 30' Shaft, 45' Arm	2.0		EA.
639–A	Traffic Signal Equipment Pole, Type II, 30' Shaft, 50' Arm	1.0		EA.
639–A	Traffic Signal Equipment Pole, Type II, 30' Shaft, 55' Arm	1.0		EA.
640–A	Traffic Signal Heads (Type 1)	9.0		EA.
640–A	Traffic Signal Heads (Type 6)	6.0		EA.
640–A	Traffic Signal Heads (Type 7)	3.0		EA.
642–A	Solid State Traffic Actuated Controller, Type 3 With TBC	2.0		EA.
644–A	Optical Detector (1 Eye) (1 Channel)	4.0		EA
644–B	Optical Detector Cable	942.0		LF
644–C	Phase Selector (4 Channel)	2.0		EA
647–A	Pullboxes (Type 1)	6.0		EA.
647–A	Pullboxes (Type II)	5.0		EA
647–A	Pullboxes (Type III)	6.0		EA
647–A	Pullboxes (Type V)	9.0		EA
653–A	Traffic Sign (Encapsulated Lens)	12.5		SF
657–A	Fiber Optic Cable (46/12) (Multimode)	5550.0		LF
666–B	Electrial Cable (Underground in Conduit) (ISMAM20–1) (AWG #14) (5 Conductor)	724.0		LF
666–B	Electrial Cable (Underground in Conduit) (ISMAM20–1) (AWG #14) (7 Conductor)	594.0		LF
666–B	Electrial Cable (Underground in Conduit) (ISMAM20–1) (AWG #10) (1 Conductor)	922.0		LF
666–B	Electrial Cable (Underground in Conduit) (ISMAM20–1) (AWG #6) (1 Conductor)	40.0		LF
666–B	Electrial Cable (Aerial Supported) (IMSA 20–1) (AWG #14) (7 Conductor)	330.0		LF
668–A	Traffic Signal Conduit (Underground) (Type I),(3")	170.0		LF
668–A	Traffic Signal Conduit (Underground) (Type IV),(2")	2015.0		LF
668–A	Traffic Signal Conduit (Underground) (Type IV),(4")	400.0		LF
908–668–B	Traffic Signal Conduit (Underground) (Drilled or Jacked), (Type I)(2")	332.0		LF
908–668–B	Traffic Signal Conduit (Underground) (Drilled or Jacked), (Type I)(3")	168.0		LF
908–668–B	Traffic Signal Conduit (Underground) (Drilled or Jacked), (Type I)(4")	202.0		LF
815–B	Grouted Riprap	90.0		SY
815–E	Geotextile Fabric Under Riprap (Type IV), (EOS 70 – 100)	100.0		SY
	Alternate No. 1 Particapating Items			
907–1000–A	12" D.I. Water Main	1620.0		LF
907–1000–A	8" D.I. Water Main	3850.0		LF
907–1000–B	8" D.I. Water Main (Bored)	340.0		LF
907–1001–A	12" Tapping Sleeve and Valve W/Box	2.0		EA
907–1001–A	8" Tapping Sleeve and Valve W/Box	6.0		EA
907–1002–A	Ductile Iron Fittings	15000.0		LB
907–1003–A	12" Gate Valve and Box	2.0		EA
907–1003–A	8" Gate Valve and Box	6.0		EA
907–1005–A	Connect to Existing Mains (LABOR ONLY)	4.0		EA.
907–2000–A	8" Sanitary Sewer 6/8	250.0		LF
907–2000–B	6" Santitary Sewer Service, (All Depths)	100.0		LF
907–2001–A	48" Manholes 6/8	2.0		EA.
	Alternate No. 2 Non-Particapating Items			
907–1000–A	Upgrade 8" D.I. Water Main To 12" D.I. Water Main	3850.0		LF
907–3000–A	Repairs to Existing Sprinkler System	1.0		ALLOWANCE
907–3000–B	Replace Existing Landscaping	1.0		ALLOWANCE
907–3000–C	Replace Existing Wood Fence	1.0		ALLOWANCE

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP–7305–00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

DRAWN BY:
SCALE:
DESIGNED BY:
DATE: 2–03–05
CHECKED BY: SW
PROJECT: 194–148

DRAWING TITLE:

SUMMARY OF QUANTITIES

SHEET NUMBER:

6

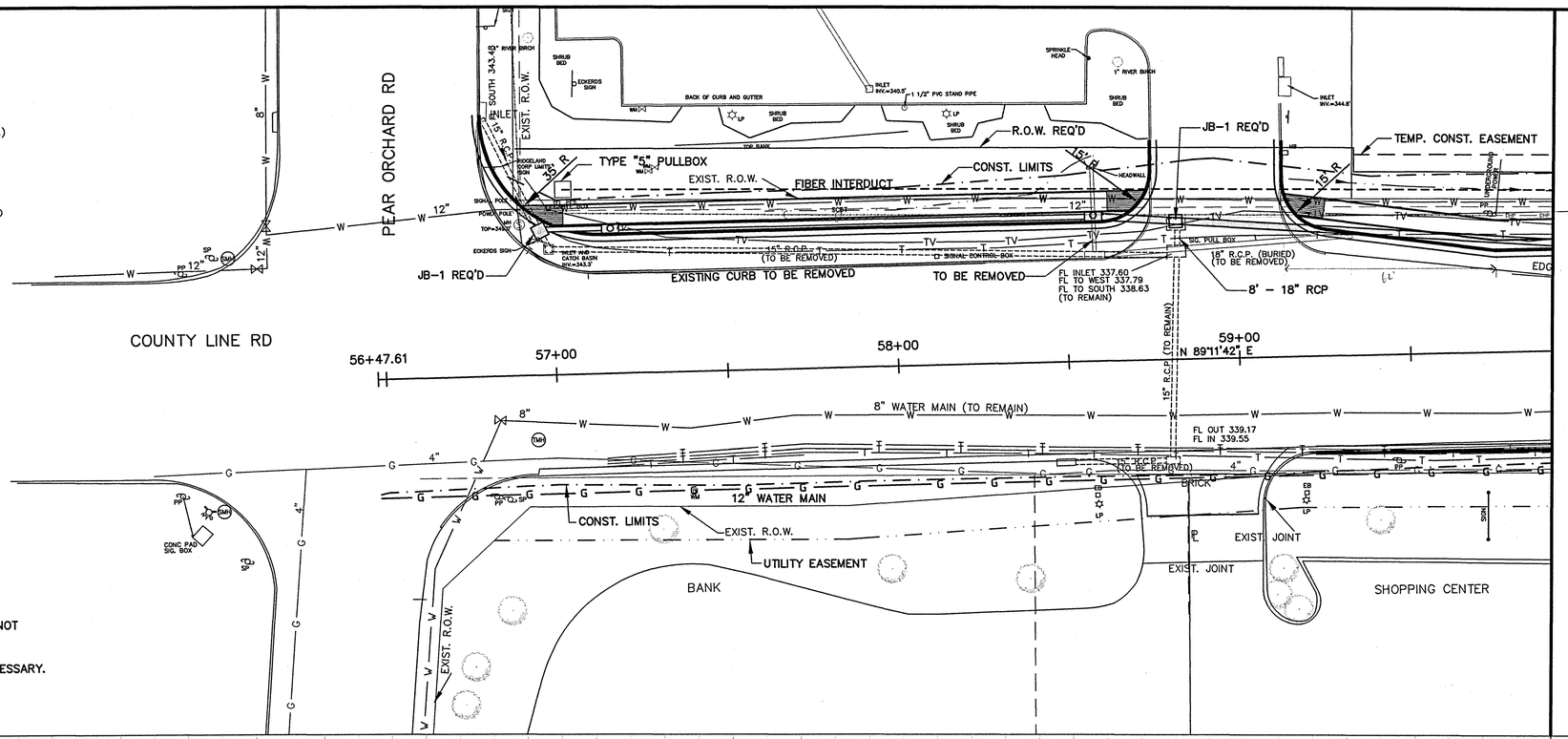
-N-

NOTE:
1. ANY RECONSTRUCTION OF THE DRIVEWAY ENTRANCE @ STA. 58+90 RT. SHALL BE DONE IN-KIND(BRICK/CONC.) (COST ABSORBED)
2. EROSION CONTROL ON PLAN IS MINIMUM CONTROL REQ'D. ADDITIONAL EROSION CONTROL TO BE DETERMINED BY ENGINEER. (SEE SHEET 51 FOR DETAILS)
3. MILLING AND OVERLAY REQ'D. STA. 56+70 TO STA. 61+00. (SEE SHEET 23 FOR DETAILS)
4. SIDEWALK ON SOUTH SIDE TO MATCH EXISTING GROUND LINE WITH 2% SLOPE BEING THE MAXIMUM LEFT OR RIGHT TO FIELD CONDITIONS.

UTILITIES

TELEPHONE	T	BELL SOUTH TELECOMMUNICATIONS, INC. 830 RIDGEWOOD ROAD, RIDGELAND MS., 39157
POWER	P	ENTERGY P.O. BOX 50, MADISON, MS. 39130-0550
GAS	G	MISSISSIPPI VALLEY GAS 2736 BAILEY AVENUE, JACKSON, MS., 39213
TELEVISION	TV	CAPITAL CABLEVISION 415 CEDARS OF LEBNON ROAD, JACKSON, MS., 39206
WATER	W	CITY OF RIDGELAND (NORTH OF PROJECT CENTERLINE) CITY OF JACKSON (SOUTH OF PROJECT CENTERLINE)
SAN. SEWER	S	CITY OF RIDGELAND (NORTH OF PROJECT CENTERLINE) CITY OF JACKSON (SOUTH OF PROJECT CENTERLINE)

NOTE:
THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN ON PLANS ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THESE LOCATIONS ARE ONLY CONSIDERED APPROXIMATE. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY AND THAT ALL UTILITIES ARE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING ANY INDEPENDENT INVESTIGATIONS, INCLUDING ANY SUBSURFACE INVESTIGATIONS, AS MAY BE NECESSARY.



NO.	DATE	REVISIONS	BY

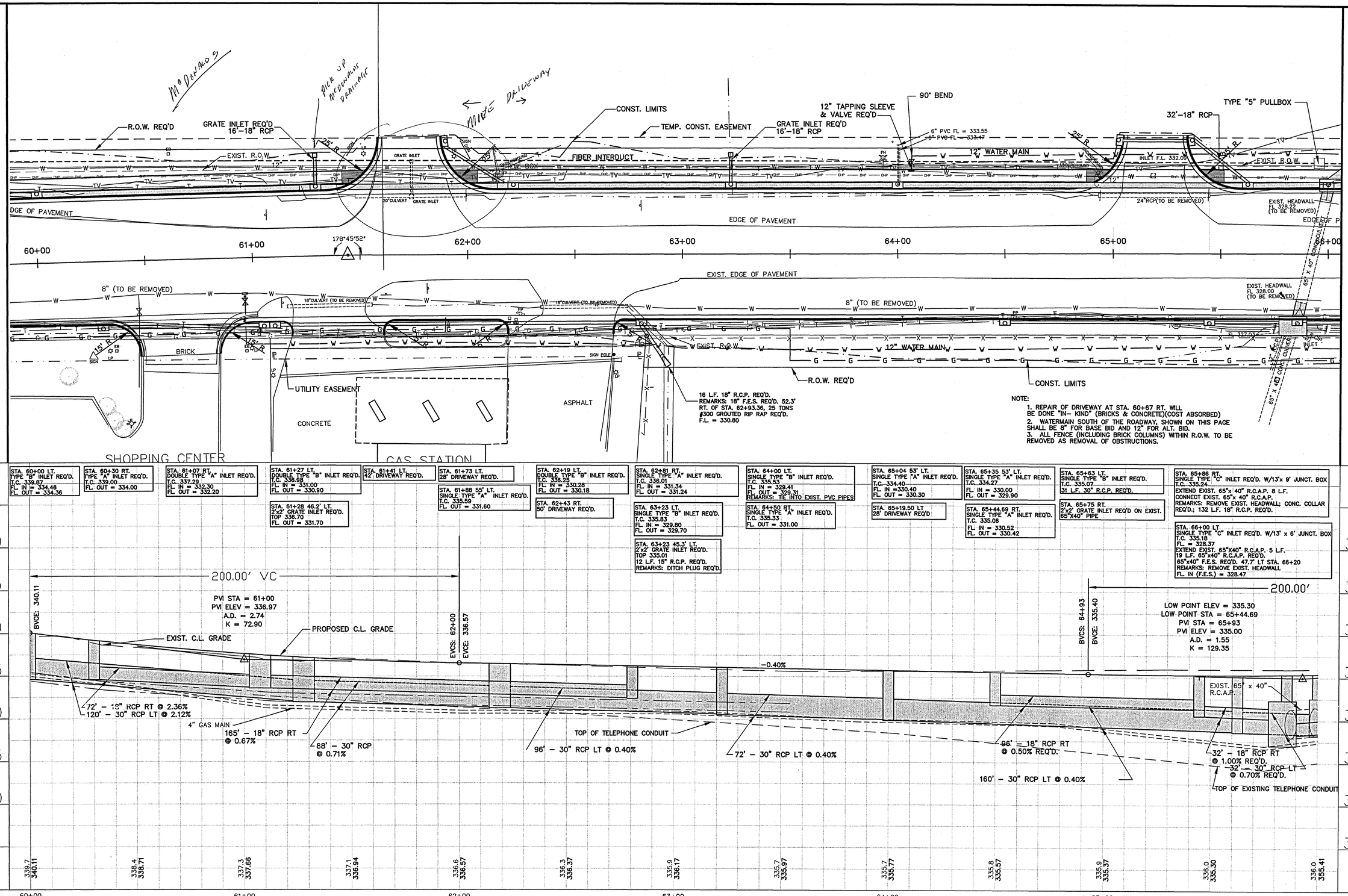
DRAWN BY:
DESIGNED BY:
CHECKED BY: SW
DATE: 2-02-05
PROJECT: T94-148
HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

WAGGONER Engineering, Inc.
Engineers, Scientists, Planners
143-A LEFLEURS SQUARE
JACKSON, MS 39211
601-355-9526
FAX 601-352-3945

CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

EAST COUNTY LINE ROAD
(BOP TO STATION 60+00)

SHEET NUMBER: 7



NO.	DATE	REVISIONS	BY
			SW

DRAWN BY:
DESIGNED BY:
CHECKED BY:
DATE: 2-02-05
PROJECT: T94-148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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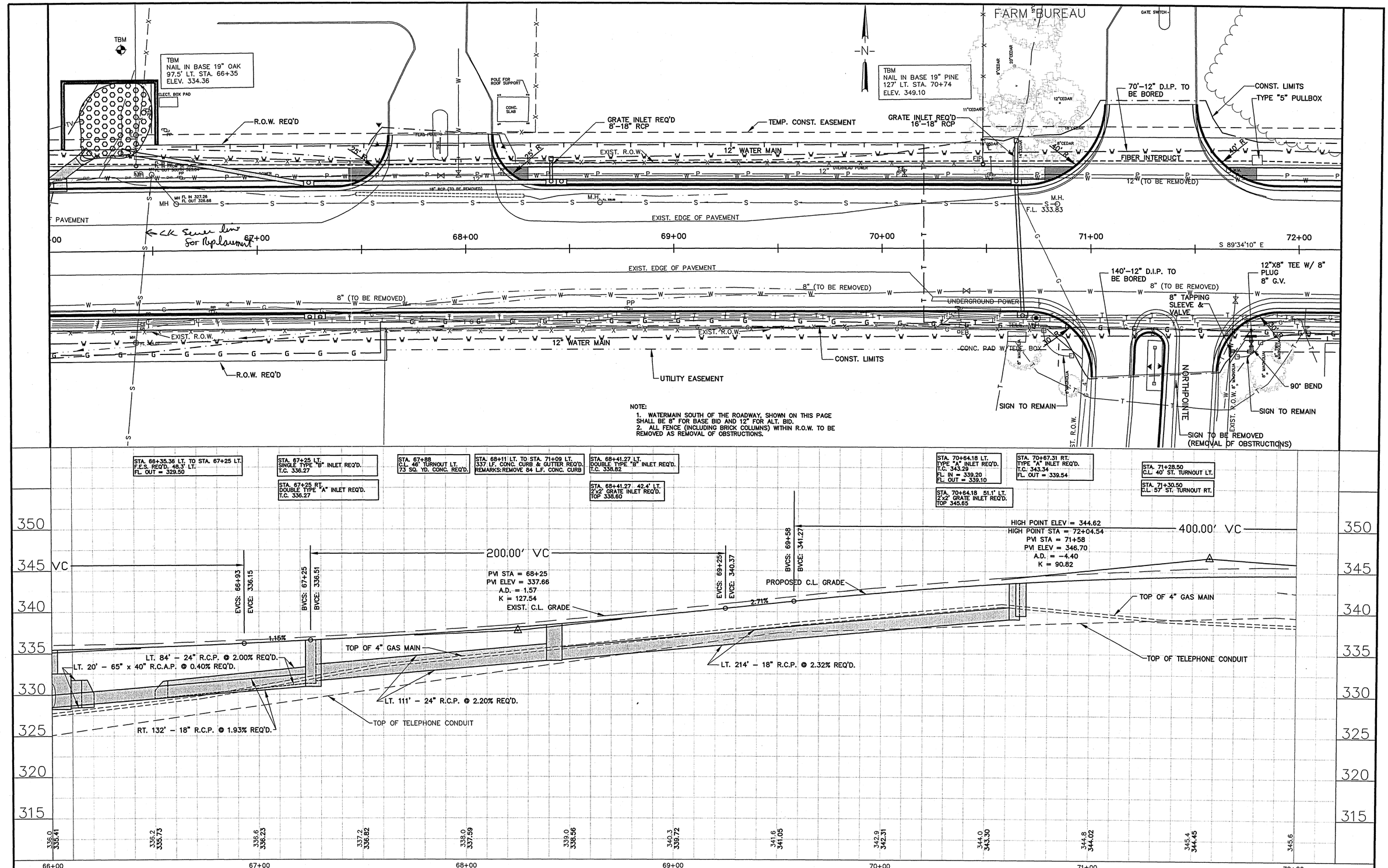
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

EAST COUNTY LINE ROAD
(STATION 60+00 TO 66+00)

SHEET NUMBER: 8



NOTE:
1. WATERMAIN SOUTH OF THE ROADWAY, SHOWN ON THIS PAGE SHALL BE 8" FOR BASE BID AND 12" FOR ALT. BID.
2. ALL FENCE (INCLUDING BRICK COLUMNS) WITHIN R.O.W. TO BE REMOVED AS REMOVAL OF OBSTRUCTIONS.

NO.	DATE	REVISIONS	BY
			SW

DRAWN BY: .
DESIGNED BY: .
CHECKED BY: SW
DATE: 2-02-05
PROJECT: T94-148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00-(003)

EAST COUNTY LINE ROAD
(STATION 66+00 TO 72+00)

SHEET NUMBER: 9

FARM BUREAU

TBM
NAIL IN BASE 20" OAK
106' LT. STA. 74+70
ELEV. 343.35

POND

TEMP. CONST. EASEMENT
R.O.W. REQ'D
CONST. LIMITS
EXIST. R.O.W.
12" WATER MAIN
OVERHEAD POWER
TYPE 7S" PULLBOX
FIBER INTERDUCT
FL INLET 332.31
EXIST. EDGE OF PAVEMENT
24"RCP (TO BE REMOVED)
60'-48" RCP
42" CMP (TO BE REMOVED)
8" (TO BE REMOVED)
CONC. PAD
STORM MH
FL PIPE IN 331.86
FL PIPE OUT 330.93
FIP
CONC.PP
UTILITY EASEMENT
X-TIE RETAIN
FL INLET 328.74

+00 73+00 74+00 75+00 76+00 77+00 78+00

NOTE:
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2. ALL FENCE (INCLUDING BRICK COLUMNS) WITHIN R.O.W. TO BE REMOVED AS REMOVAL OF OBSTRUCTIONS.

STA. 73+02.50 LT.
DOUBLE TYPE "A" INLET REQ'D.
T.C. 343.85
FL. OUT = 339.76

STA. 73+80.50 RT.
DOUBLE TYPE "A" INLET REQ'D.
T.C. 342.70
FL. OUT 338.40

STA. 73+85.50 LT.
DOUBLE TYPE "A" INLET REQ'D.
T.C. 342.62
FL. IN =338.63
FL. OUT =338.53

STA. 74+68.50 LT.
DOUBLE TYPE "A" INLET REQ'D.
T.C. 341.23
FL. IN = 337.24
FL. OUT = 337.14

STA. 75+53.14 RT.
DOUBLE TYPE "C" INLET REQ'D.
T.C. 340.63
EXTEND EXIST. 48" PIPE 7 L.F.
CONC. COLLAR REQ'D.
REMARKS: REMOVE EXIST. M.H.
FL. IN (15") = 332.93
FL. IN (48") = 331.03
FL. OUT (48") = 330.93

STA. 75+54.50 LT.
DOUBLE TYPE "C" INLET REQ'D.
T.C. 340.64
FL. IN (18") = 334.31
FL. IN (36") = 333.11
FL. OUT (48") = 332.31

STA. 76+80 RT.
TYPE "A" INLET REQ'D.
T.C. 342.03
FL. OUT = 337.30

STA. 76+80 LT.
SINGLE TYPE "A" INLET REQ'D.
T.C. 342.03
FL. IN = 338.04
FL. OUT = 337.94

STA. 78+00 LT.
SINGLE TYPE "A" INLET REQ'D.
T.C. 343.97
FL. OUT = 339.88

200.00' VC
LOW POINT ELEV = 340.87
LOW POINT STA = 75+51.05
PVI STA = 75+54.50
PVI ELEV = 340.00
A.D. = 3.50
K = 57.14

EVCS: 73+58
EVCE: 343.32
BVCS: 74+54.50
BVCE: 341.69
EVCS: 76+54.50
EVCE: 341.81
BVCS: 77+35
BVCE: 343.27

-1.69%
1.81%

TOP OF TELEPHONE CONDUIT
TOP OF 4" GAS MAIN
LT. 72' – 18" R.C.P. @ 1.77% REQ'D.
LT. 72' – 18" R.C.P. @ 1.55% REQ'D.
LT. 80' – 18" R.C.P. @ 3.58% REQ'D.
EXIST. 24" R.C.P. TO BE REMOVED
RT. 162' – 15" R.C.P. @ 3.36% REQ'D.
EXIST. INLET LT.
EXIST. 42" C.M.P.
LT. 116' – 18" R.C.P. @ 3.14% REQ'D.
RT. 120' – 15" R.C.P. @ 3.66% REQ'D.
LT. 115' – 18" R.C.P. @ 1.60% REQ'D.

350 345 340 335 330 325 320 315

345.6 344.62 | 345.2 344.50 | 344.5 344.12 | 343.6 343.45 | 342.6 342.61 | 341.8 341.77 | 341.4 341.10 | 341.0 340.87 | 341.0 341.08 | 341.3 341.73 | 342.0 342.63 | 342.9 343.53 | 344.0

72+00 73+00 74+00 75+00 76+00 77+00 78+00

NO.	DATE	REVISIONS	BY

DRAWN BY:
DESIGNED BY:
CHECKED BY: SW
DATE: 2-02-05
PROJECT: T94-148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00-(003)

EAST COUNTY LINE ROAD
(STATION 72+00 TO 78+00)

SHEET NUMBER: 10

TBM
NAIL IN BASE 17" OAK
112' LT. STA. 79+01
ELEV. 343.35

E.P. 345.74

E.P. 345.92

TEMP. CONST. EASEMENT

12"X6" TEE
6" G.V.
F.H.

R.O.W. REQ'D

CONST. LIMITS

30' R/S

12" WATER MAIN

EXIST. R.O.W.

12" (TO BE REMOVED)

TYPE "5" PULLBOX

CONC.PP

EXIST. R.O.W.

AVERY BOULEVARD NORTH

11+00

EXIST. CURB

EXIST. R.O.W.

110'-12" D.I.P. TO BE BORED

90° BEND

FIBER INTERDUCT

12" OVERHEAD POWER

15"RCP (TO BE REMOVED)

GRATE INLET
F.L. 337.16
(TO BE REMOVED)

12" TAPPING SLEEVE & VALVE
12" PLUG

TBM
CHISELED SQUARE
144' LT. STA. 82+29
ELEV. 339.45

SHOPPING CENTER

-N-

INLET EXIST. CURB

EXIST. R.O.W.

18" RCP (TO BE REMOVED)

EXISTING 36" RCP (TO BE REMOVED)

EXIST. EDGE OF PAVEMENT

79°42'41"

S 89°16'51" E

78+00 79+00 80+00 81+00 82+00 83+00 84+00

8" WATER MAIN

12+00

11+80.92

115'-12" D.I.P. TO BE BORED

EXIST. EDGE OF PAVEMENT

CONC. PAD

12"X8" TEE W/ 8" PLUG
8" G.V.

CREPE MYRTLES

12" WATER MAIN

EXIST. R.O.W.

6" G.V.
F.H. REQ'D

90° BEND

8" TAPPING SLEEVE & VALVE

6" TEMPORARY WOOD FENCE

TEMP. CONST. EASEMENT

BRICK RETAINING WALL

CONC. DRIVE

IS BRICK

X-TIE RETAINING WALL

EXIST. SIGN TO REMAIN

SWING

EXIST. SIGN TO REMAIN

AVERY BOULEVARD

EXIST. R.O.W.

SIGN TO BE REMOVED
(REMOVAL OF OBSTRUCTIONS)

NOTE:
1. TEMPORARY FENCING IS TO BE INSTALLED ALONG TEMPORARY CONSTRUCTION EASEMENT WHERE EXISTING FENCE IS REMOVED.
2. SIDEWALK BETWEEN STA. 81+30 TO STATION 84+00 TO BE ADJUSTED WITHIN R.O.W. TO MATCH FIELD CONDITIONS WITH 3:1 SLOPE BEHIND CURB.
3. WATERMAIN SOUTH OF THE ROADWAY, SHOWN ON THIS PAGE SHALL BE 8" FOR BASE BID AND 12" FOR ALT. BID.
4. ALL FENCE (INCLUDING BRICK COLUMNS) WITHIN R.O.W. TO BE REMOVED AS REMOVAL OF OBSTRUCTIONS.

STA. 79+38.50
C.L. 42° ST. TURNOUT LT.

STA. 80+21.59 LT.
DOUBLE TYPE "A" INLET REQ'D.
T.C. 343.58
REMARKS: REMOVE 15" R.C.P.
FL. OUT = 339.40

STA. 80+30.31 37.4' RT.
SINGLE TYPE "A" INLET REQ'D.
T.C. 343.45
FL. OUT = 339.55

STA. 80+53.39 42.1' LT.
TYPE "A" INLET REQ'D.
T.C. 343.07
FL. IN = 339.17
FL. OUT = 339.07

STA. 80+65.12
C.L. 58° ST. TURNOUT RT.

STA. 80+84.57
C.L. 49° ST. TURNOUT LT.

STA. 81+05.58 37.4' RT.
SINGLE TYPE "A" INLET REQ'D.
T.C. 341.95
FL. IN = 337.78
FL. OUT = 337.68

STA. 81+60.94 LT.
DOUBLE TYPE "B" INLET REQ'D.
T.C. 340.50
FL. IN = 335.80
FL. OUT = 335.70

STA. 81+84.83 LT.
JUNCTION BOX REQ'D.
TOP 338.57
EXTEND 15" R.C.P. 2 L.F.
REMOVE GRATE INLET,
REMOVE 18" & 36" R.C.P.,
CONC. COLLAR REQ'D.,
TIE IN TO EXIST. 15" TO BE COST ABSORBED
FL. IN (15") = 337.16
FL. IN (24") = 335.47
FL. OUT = 334.67

STA. 83+25 LT.
DOUBLE TYPE "B" INLET REQ'D.
T.C. 334.06
REMARKS: REMOVE EXIST. 36" R.C.P.
FL. IN = 328.06
FL. OUT = 327.96

STA. 83+40 RT.
DOUBLE TYPE "A" INLET REQ'D.
T.C. 333.33
FL. IN = 329.13
FL. OUT = 328.78

600.00' VC

HIGH POINT ELEV = 344.72
HIGH POINT STA = 78+95.41
PVI STA = 80+35
PVI ELEV = 348.70
A.D. = -6.77
K = 88.59

EXIST. C.L. GRADE

12" WATER MAIN (NORTH SIDE)

4" GAS MAIN

TOP OF TELEPHONE CONDUIT

LT. 28' - 18" R.C.P.
@ 0.76% REQ'D.

RT. 76' - 18" R.C.P.
@ 2.30% REQ'D.

LT. 102' - 18" R.C.P.
@ 3.20% REQ'D.

LT. 16' - 24" R.C.P.
@ 1.35% REQ'D.

LT. 134' - 36" R.C.P. @ 4.95% REQ'D.

PROPOSED C.L. GRADE

TOP OF TELEPHONE CONDUIT

EVCS: 83+35
EVCE: 333.81

BVCS: 83+40.50
BVCE: 333.94

-4.96%

LT. 80' - 36" R.C.P.
@ 4.90% REQ'D.

12" WATER MAIN (NORTH SIDE)

RT. 228' - 18" R.C.P. @ 3.77% REQ'D.

4" GAS MAIN

RT. 142' - 18" R.C.P.
@ 4.59% REQ'D.

350 345 340 335 330 325 320 315

344.0 344.21 | 345.0 344.60 | 345.7 344.72 | 346.0 344.55 | 345.9 344.10 | 345.4 343.37 | 344.4 342.36 | 342.7 341.06 | 340.5 339.48 | 338.1 337.62 | 335.5 335.48 | 333.1 333.08 | 331.1 330.94

78+00 79+00 80+00 81+00 82+00 83+00 84+00

NO.	DATE	REVISIONS	BY

DRAWN BY: -
DESIGNED BY: -
CHECKED BY: SW
DATE: 2-02-05
PROJECT: T94-148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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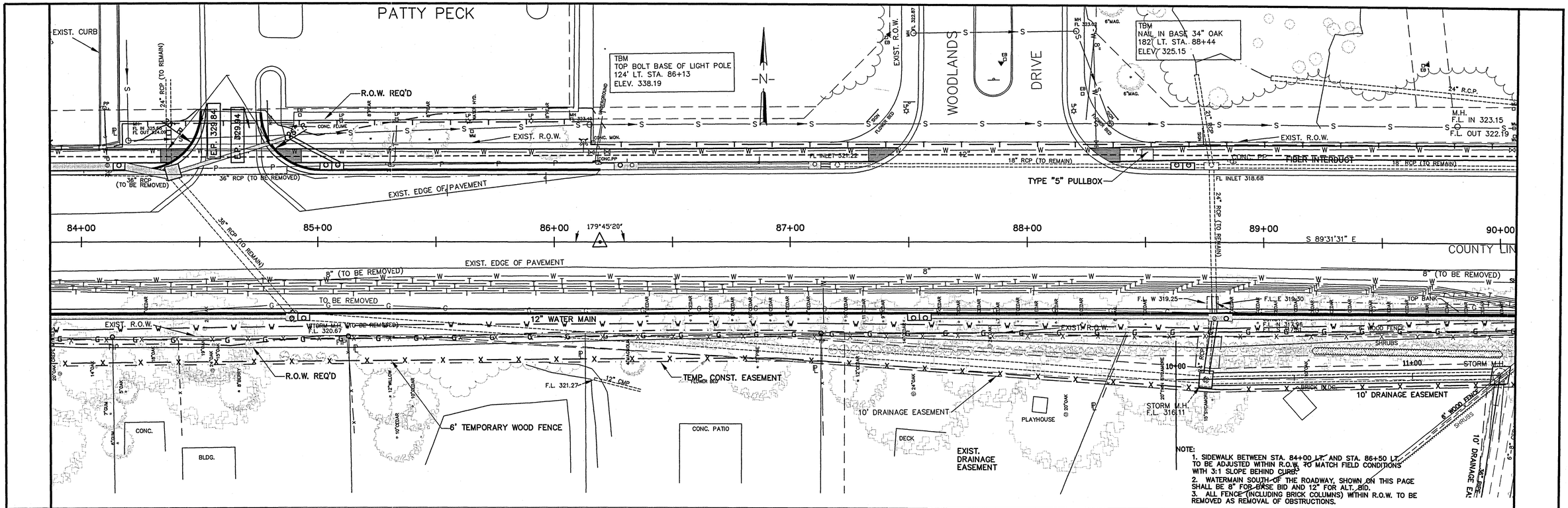
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

EAST COUNTY LINE ROAD
(STATION 78+00 TO 84+00)

SHEET NUMBER: 11



NO.	DATE	REVISIONS	BY

DRAWN BY:
DESIGNED BY:
CHECKED BY: SW
DATE: 2-02-05
PROJECT: T94-148
HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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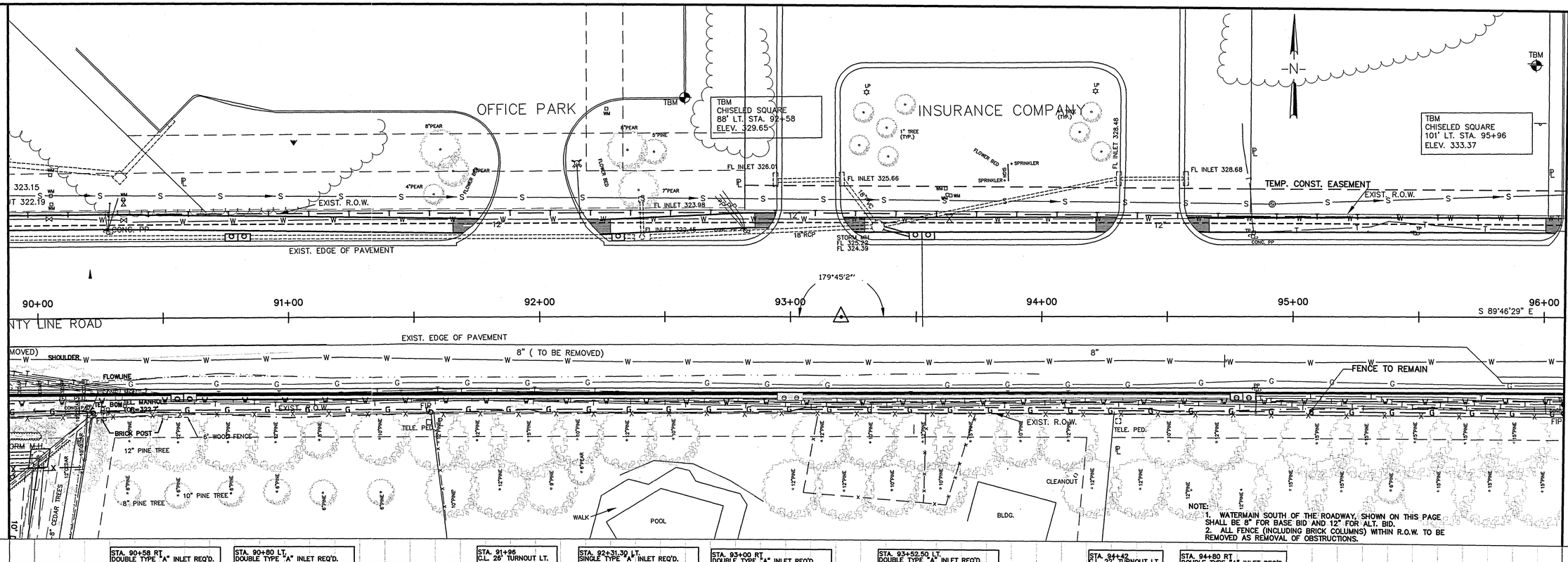
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00-(003)

EAST COUNTY LINE ROAD
(STATION 84+00 TO 90+00)

SHEET NUMBER: 12



NO.	DATE	REVISIONS	BY

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CHECKED BY: SW
DATE: 2-02-05
PROJECT: T94-148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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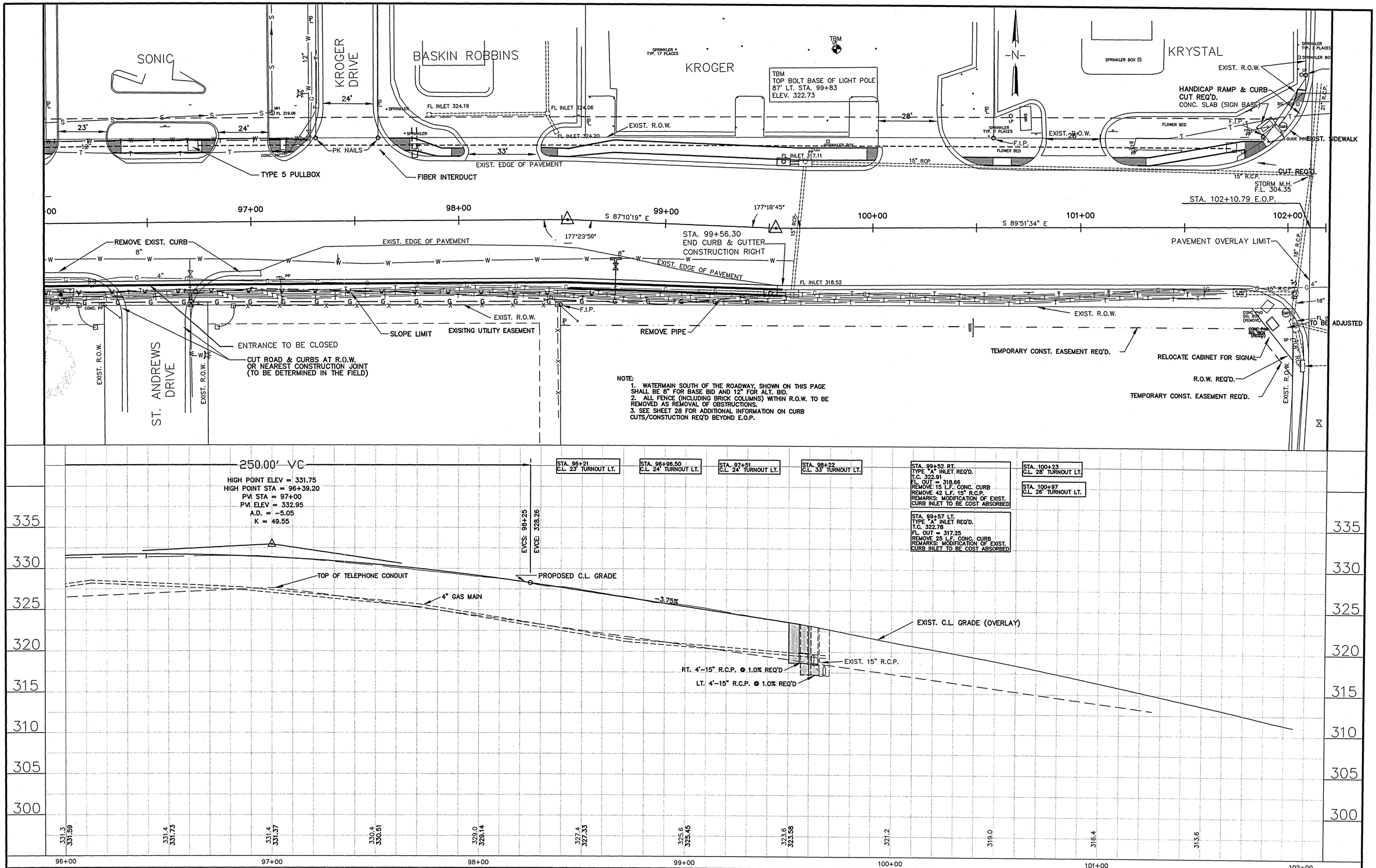
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00-(003)

EAST COUNTY LINE ROAD
(STATION 90+00 TO 96+00)

SHEET NUMBER: 13



NOTE:
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2. ALL FENCE (INCLUDING BRICK COLUMNS) WITHIN R.O.W. TO BE REMOVED AS REMOVAL OF OBSTRUCTIONS.
3. SEE SHEET 28 FOR ADDITIONAL INFORMATION ON CURB CUTS/CONSTUCTION REQ'D BEYOND E.O.P.

NO.	DATE	REVISIONS	BY

DRAWN BY:
DESIGNED BY:
CHECKED BY: SW
DATE: 2-02-05
PROJECT: T94-148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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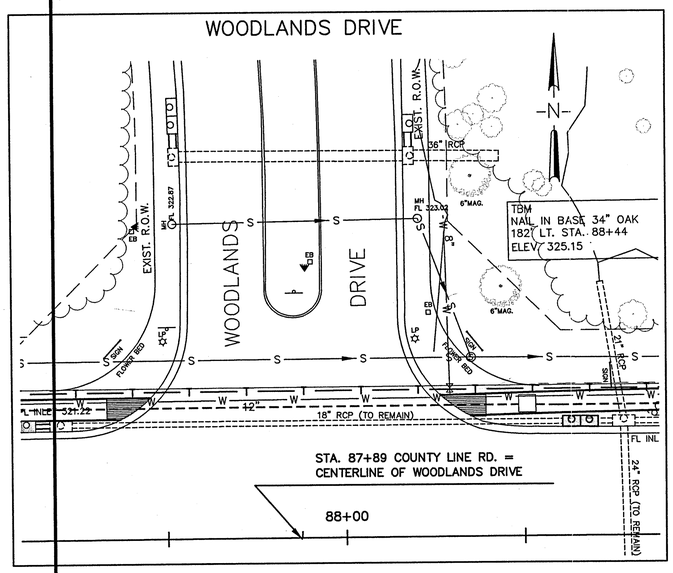
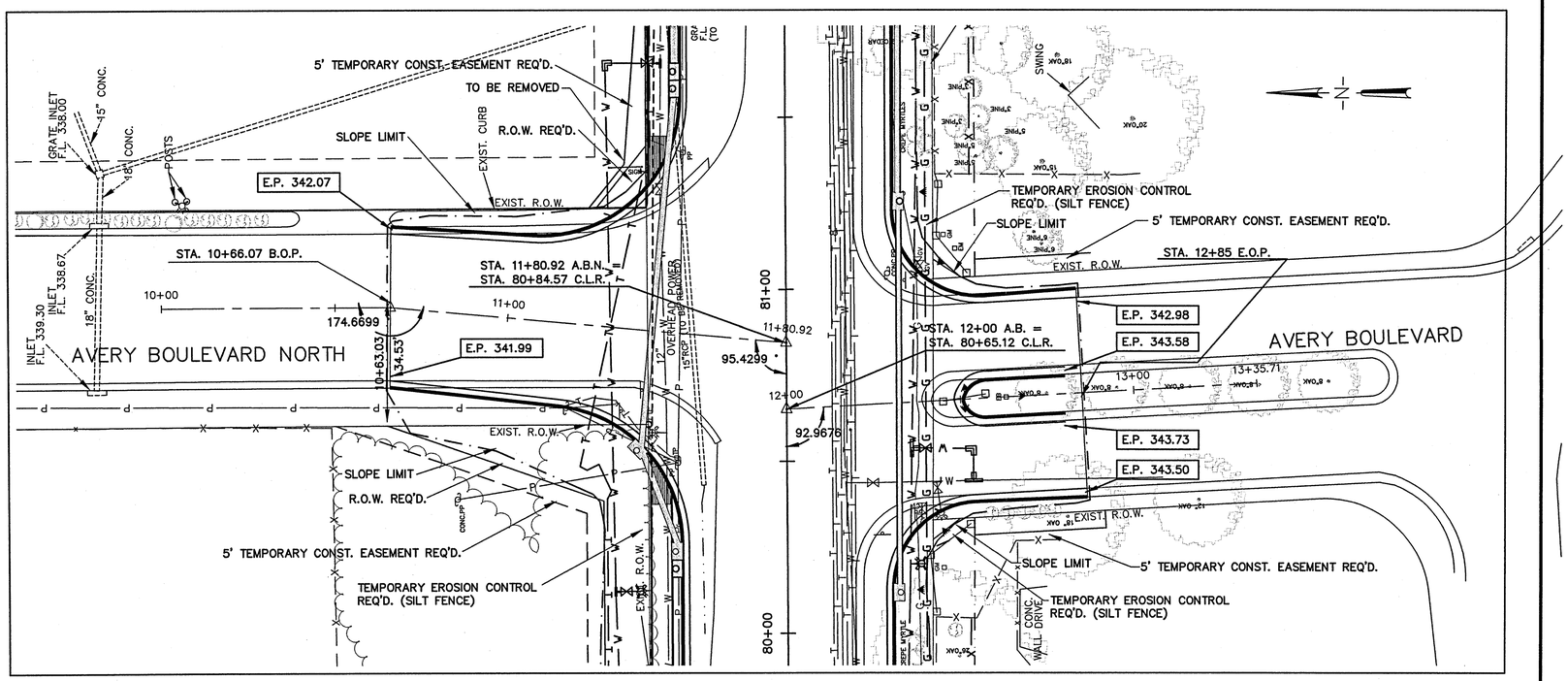
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
WEI# STP-7305-00(003)

EAST COUNTY LINE ROAD
(STATION 96+00 TO EOP)

SHEET NUMBER: 14





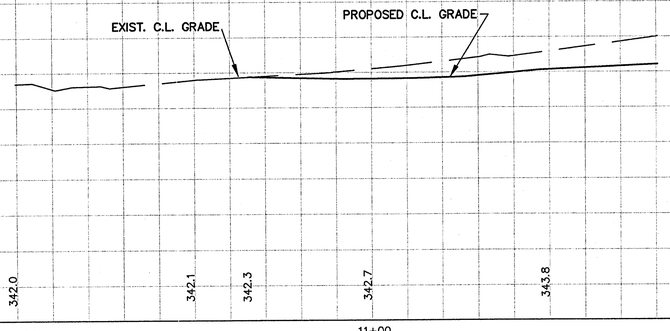
STA. 87+52.62 105' LT.
DOUBLE TYPE "A" INLET REQ'D.
T.C. 325.71
4 L.F. 24" R.C.P. REQ'D.
REMARKS: F.L. IS EXIST. PIPE
REMOVE 10 L.F. CONC. CURB
REMOVE & REPAIR 30 L.F. CONC. CURB
(COST ABSORBED)

STA. 88+18.14 105' LT.
TYPE "A" INLET REQ'D.
T.C. 325.58
4 L.F. 24" R.C.P. REQ'D.
REMARKS: F.L. IS EXIST. PIPE
REMOVE 5 L.F. CONC. CURB
REMOVE & REPAIR 20 L.F. CONC. CURB
(COST ABSORBED)

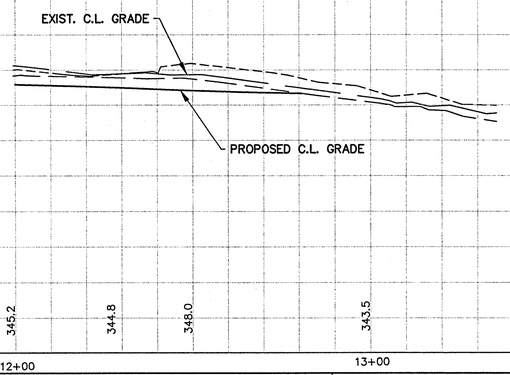
STA. 10+66.07 LT. TO STA. 11+05 LT.
41 LF. CONC. CURB & GUTTER REQ'D.
REMARKS: REMOVE 41 L.F. CONC CURB

STA. 10+66.07 RT. TO STA. 11+17 RT.
56 LF. CONC. CURB & GUTTER REQ'D.
REMARKS: REMOVE 49 L.F. CONC CURB

AVERY BOULEVARD NORTH



AVERY BOULEVARD



NO.	DATE	REVISIONS	BY

DRAWN BY: .
DESIGNED BY: .
CHECKED BY: SW
DATE: 2-02-05
PROJECT: T94-148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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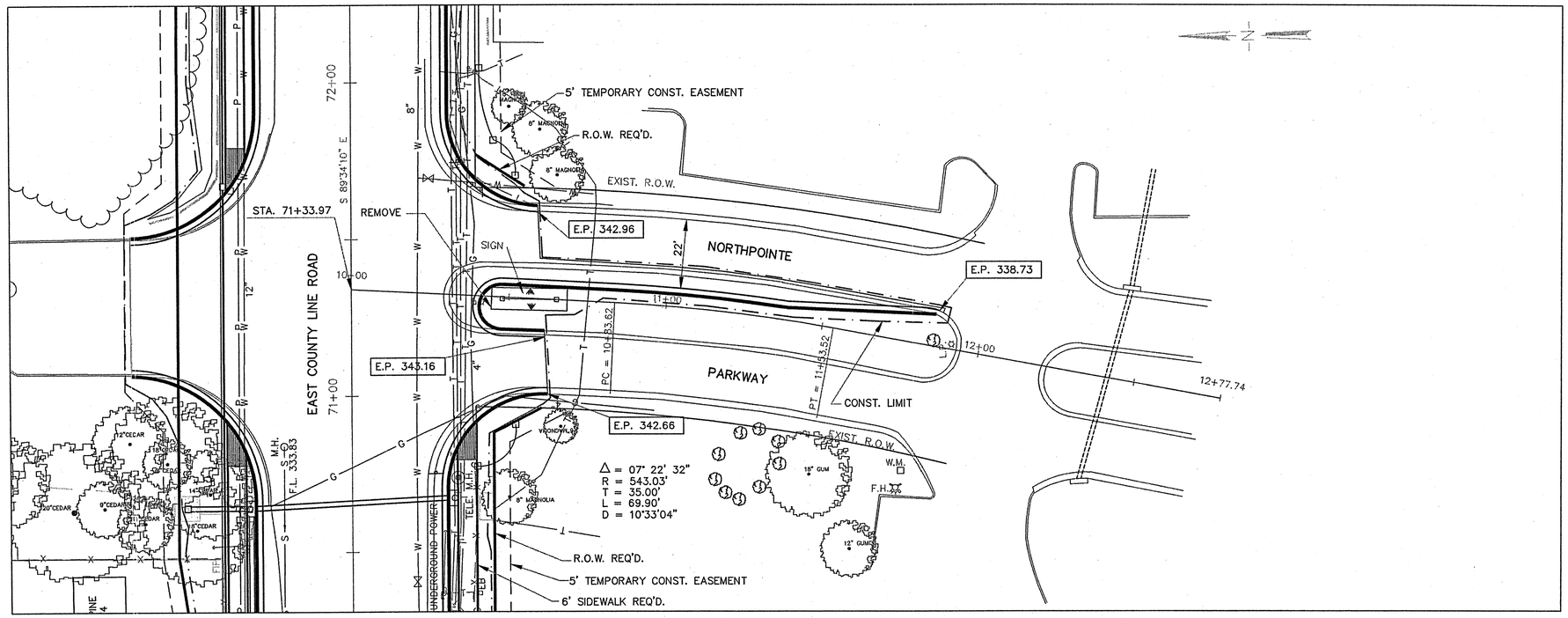
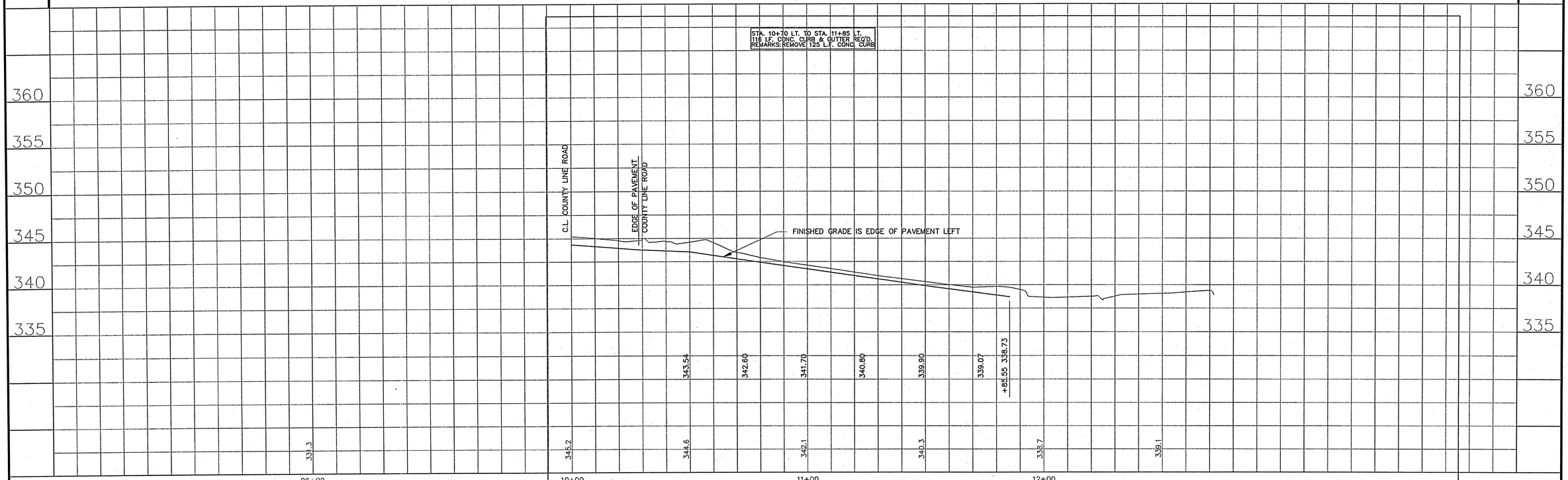
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

EAST COUNTY LINE ROAD
(STATION 19+60 TO 23+00)

SHEET NUMBER: 15





NO.	DATE	REVISIONS	BY
			SW

DRAWN BY:
DESIGNED BY:
CHECKED BY:
DATED: 2-02-05
PROJECT: T94-148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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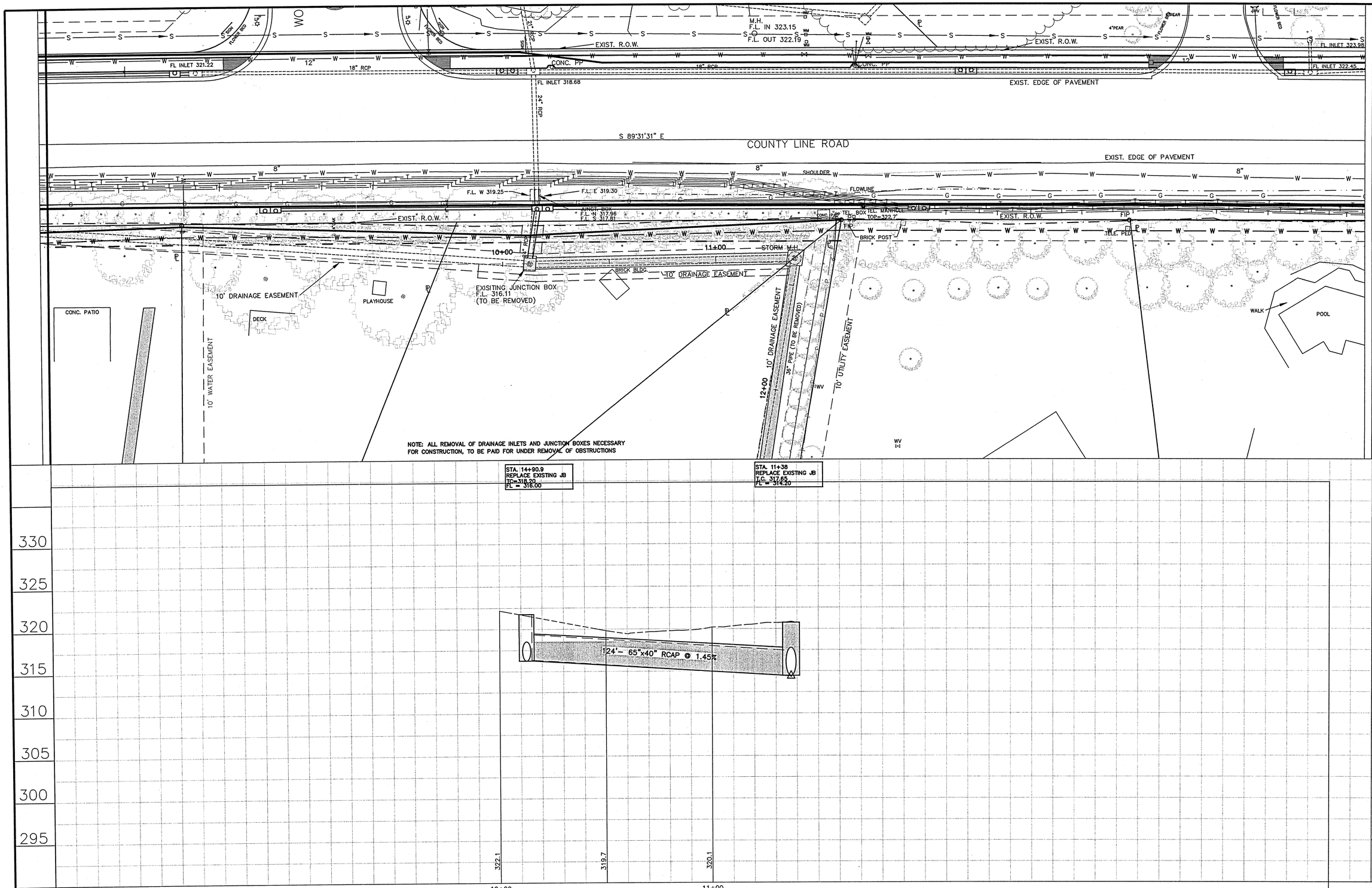
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

NORTHPOINTE PARKWAY
(STATION 10+00 TO 12+00)

SHEET NUMBER: 16



NO.	DATE	REVISIONS	BY

DRAWN BY: .
DESIGNED BY: .
CHECKED BY: .
DATE: 2-02-05
PROJECT: 94148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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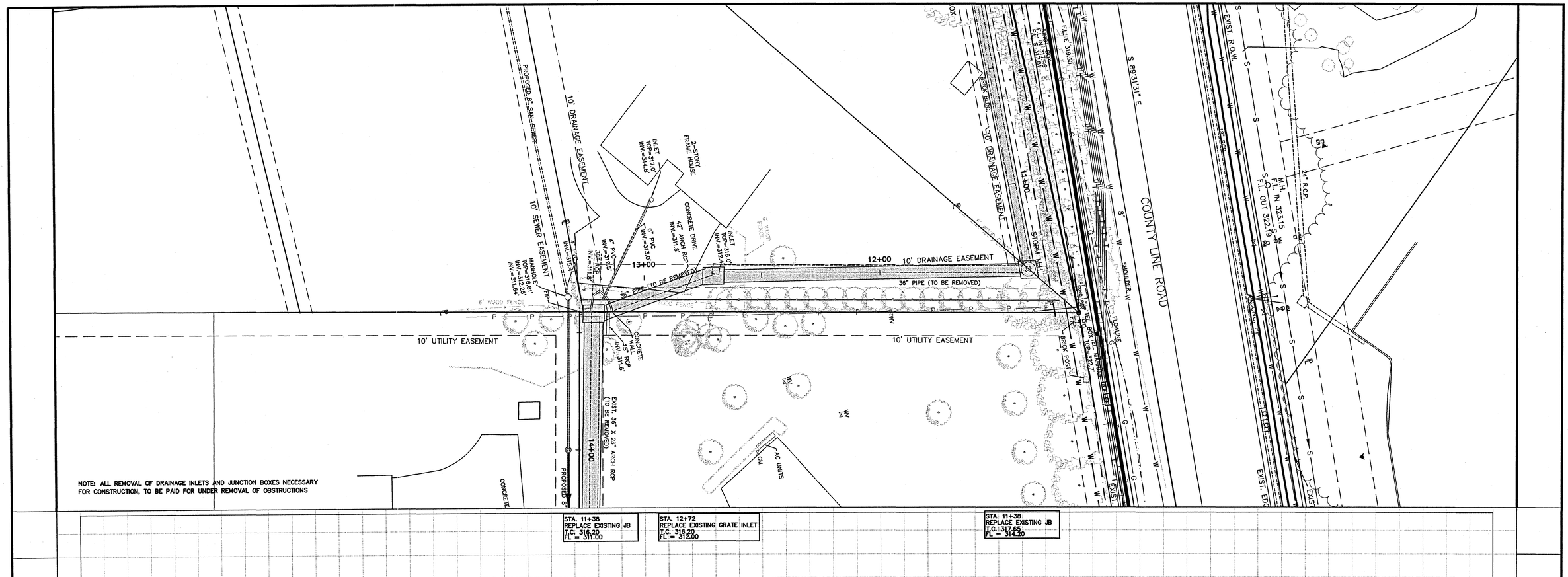
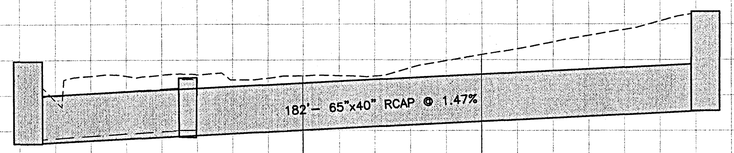
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

EAST COUNTY LINE ROAD
(STATION 10+15 TO 11+41)

SHEET NUMBER: 17



STA. 11+38 REPLACE EXISTING JB T.C.= 316.00 F.L.= 311.00	STA. 12+72 REPLACE EXISTING GRATE INLET T.C.= 316.20 F.L.= 312.00	STA. 11+38 REPLACE EXISTING JB T.C.= 317.65 F.L.= 314.20



325 320 315 310 305 300 295

330 325 320 315 310 305 300 295

NO.	DATE	REVISIONS	BY

DRAWN BY: .
DESIGNED BY: .
CHECKED BY: .
DATE: 2-02-05
PROJECT: 94148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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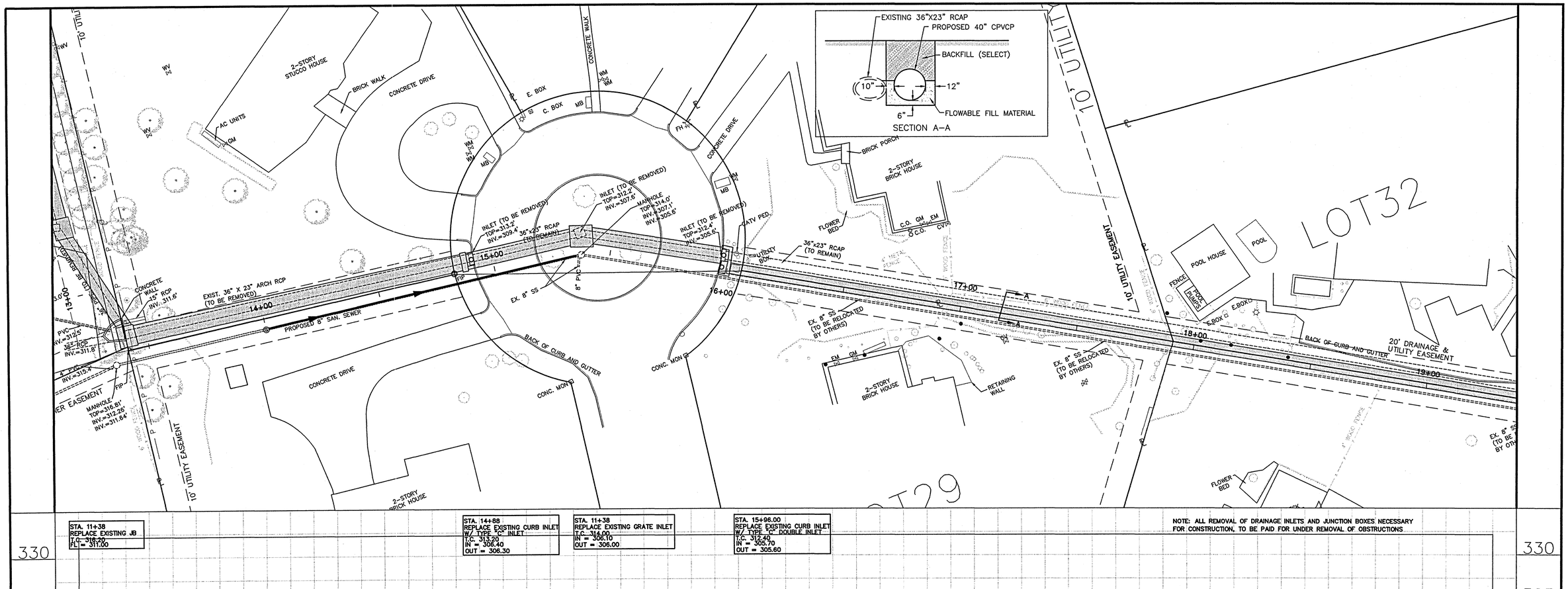
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

EAST COUNTY LINE ROAD
(STATION 11+30 TO 13+50)

SHEET NUMBER: 18



NO.	DATE	REVISIONS	BY

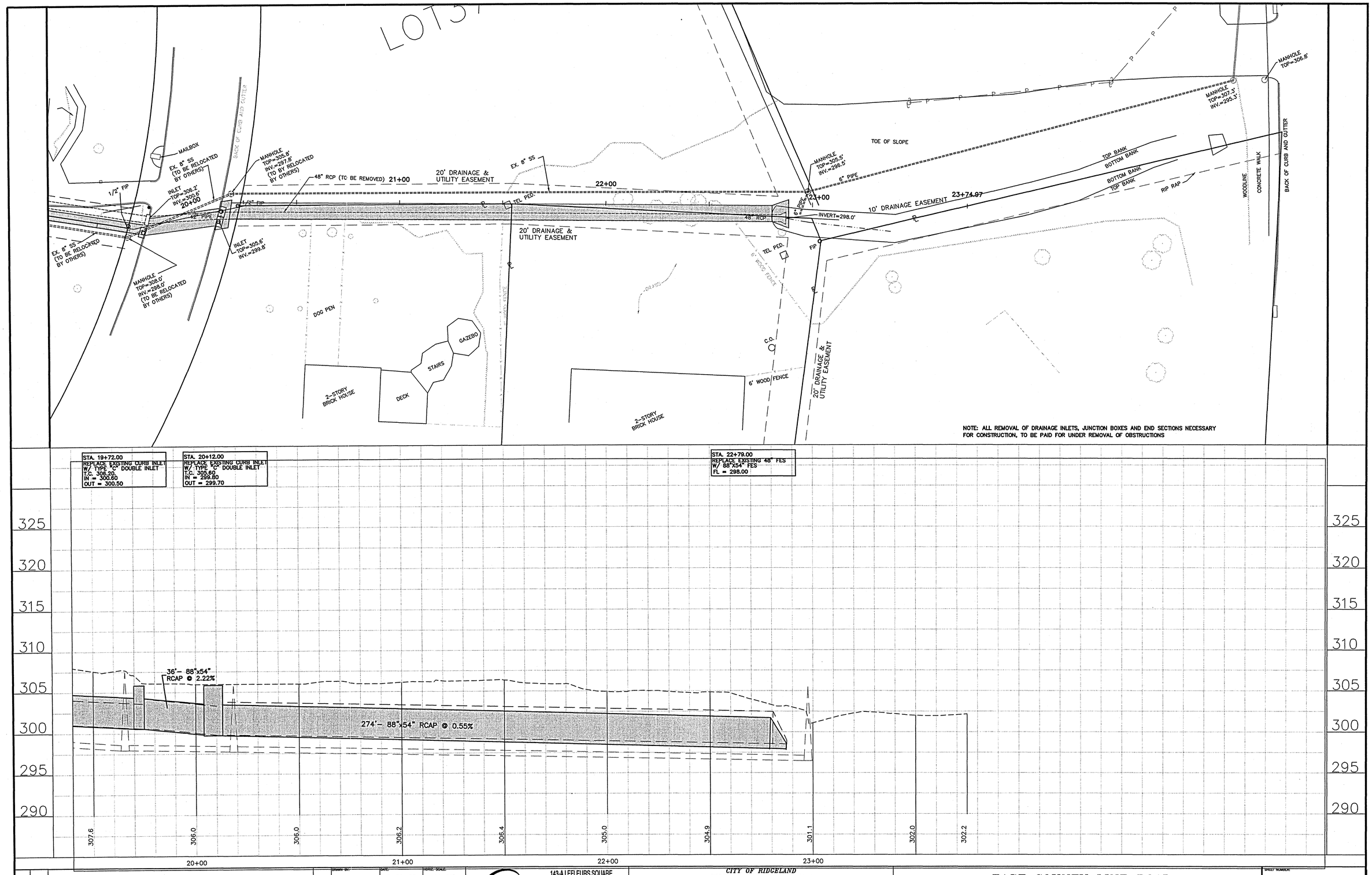
DRAWN BY:
DESIGNED BY:
CHECKED BY:
DATE: 2-02-05
PROJECT: 94148
HORZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

WAGGONER Engineering, Inc. Engineers, Scientists, Planners
143-A LEFLEURS SQUARE
JACKSON, MS 39211
601-355-9526
FAX 601-352-3945

CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

EAST COUNTY LINE ROAD
(STATION 13+10 TO 19+10)

SHEET NUMBER: 19



NO.	DATE	REVISIONS	BY

DRAWN BY:
DESIGNED BY:
CHECKED BY:
DATE: 2-02-05
PROJECT: 94148
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

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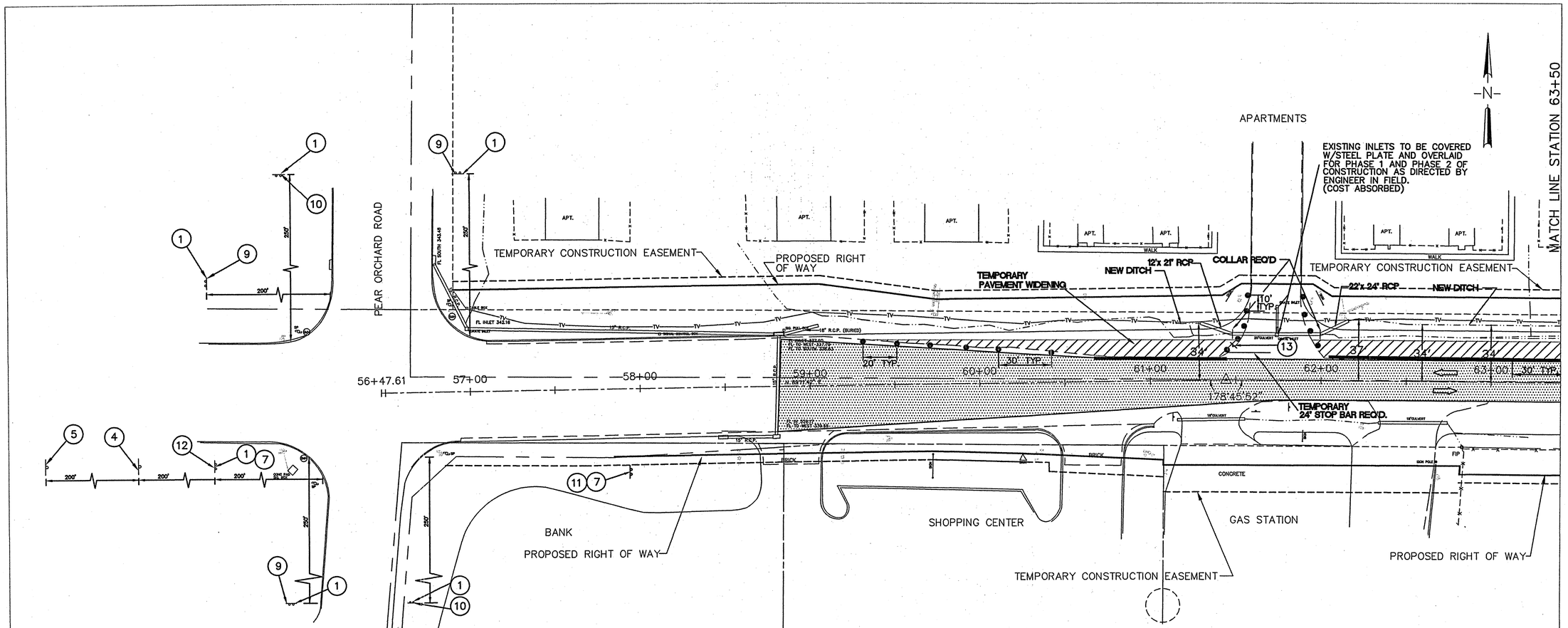
CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

EAST COUNTY LINE ROAD
(STATION 19+60 TO 23+00)

SHEET NUMBER: 20



LEGEND

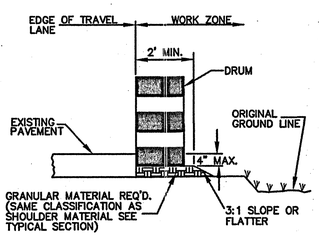
TRAFFIC FLOW

TEMPORARY PAVEMENT WIDENING

TRAFFIC DRUMS

TYPE III BARRICADES

CONSTRUCTION SIGN SCHEDULE		
SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	——	TYPE III BARRICADE
2	M4-10L	DETOUR ARROW LEFT
3	W20-1	ROAD WORK 200 FEET
4	W20-1	ROAD WORK 400 FEET
5	W20-1	ROAD WORK 600 FEET
6	W6-3	TWO WAY TRAFFIC
7	W13-1	ADVISING SPEED PLATE (30 MPH)
8	W4-2(L)	LANE REDUCTION TRANSITION SIGN (RIGHT)
9	G20-2A	END ROAD WORK
10	W20-1	ROAD WORK AHEAD
11	W9-2	LANE ENDS MERGE LEFT
12	G20-1	ROAD WORK NEXT 0.9 MILES
13	R1-1	STOP
14	R1-2	YIELD
15	W20-3	ROAD CLOSED
16	R4-1	DO NOT PASS



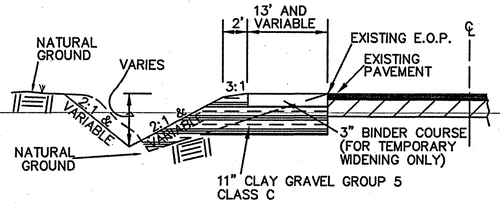
TRAFFIC DRUM PLACEMENT • WIDENING OR LOW SHOULDER

N.T.S.

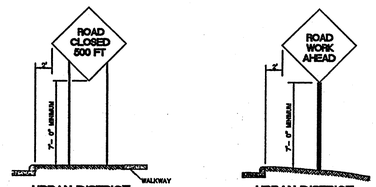
SEE "NOTE 5" THIS SHEET

GENERAL NOTES

1. DRAINAGE STRUCTURES REQUIRED UNDER MAINLINE, LOCAL ROAD TURNOUTS, STREET INTERSECTIONS AND DRIVEWAYS SHALL BE CONSTRUCTED IN HALF WIDTHS. IN ORDER TO MAINTAIN TRAFFIC AT ALL TIMES. COST OF SHEET PILING (IF REQUIRED) TO MAINTAIN EMBANKMENT FOR THIS CONSTRUCTION TO BE ABSORBED IN THE BID PRICE OF OTHER ITEMS (NOT A SEPARATE PAY ITEM).
2. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES; THEREFORE, THE RISK OF A FAILURE OCCURRING DURING THE EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE BRACING, SHORING OR GROUND SUPPORT SYSTEM THAT IS NECESSARY TO PREVENT A FAILURE AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION, THE PUBLIC THAT MAY BE ABOVE THE EXCAVATION, OR ANY STRUCTURE ADJACENT TO THE EXCAVATION. ALL COSTS FOR ANY PROTECTIVE MEASURES, INCLUDING THE MATERIALS AND LABOR FOR DESIGNING, DRAFTING AND CONSTRUCTING THE FACILITY, SHALL BE INCLUDED IN THE PRICE BID FOR CONTRACT ITEMS.
3. SEE STANDARD SHEET 190 FOR LANE CLOSURE DETAILS.
4. IN AREAS OF WIDENING OF LOW SHOULDERS, THE CONTRACTOR SHALL PLACE PLASTIC DRUMS ADJACENT TO THE DROP-OFF WHERE THE DROP-OFF EXCEEDS TWO INCHES BUT IS NO MORE THAN 4" AND WHEN WORK IS SUSPENDED OR FOR NIGHT OPERATION. DRUMS ARE ALSO REQUIRED WHERE THE WORK ZONE INCLUDES UNDERCUTTING THE SHOULDER.
5. PAVEMENT EDGE DROP-OFF:
   a. IF LESS THAN 2", THEN NO DELINEATION DEVICES REQUIRED. PLACE "SHOULDER WORK"SIGN (W21-5) 300 FEET IN ADVANCE OF THE WORK ZONE SHOULDER, AND A "LOW SHOULDER" SIGN (W8-9) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE AT MAXIMUM SPACES OF 750' O.C. OR AS DIRECTED BY ENGINEER IN FIELD.
   b. IF GREATER THEN 4" THEN POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE IS NEEDED. IF THE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND THE DROP-OFF IS 8' OR MORE, DRUMS MAY BE USED.
   c. FOR TEMPORARY CONDITIONS WHERE DROP-OFFS ARE GREATER THAN 4", DRUMS MAY BE USED TO IDENTIFY PROBLEM AREAS FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.
6. REMOVE AND SALVAGE EXISTING SIGNS WITHIN WORK AREA, TO CITY. (NOT NEEDED SIGNS).
7. ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO CONFORM TO THE MANUAL ON TRAFFIC CONTROL DEVICES (1988 EDITION AND SUBSEQUENT REVISIONS)
8. THE LOCATION AND SPACING OF SIGNS, SHOWN ON THE TRAFFIC CONTROL PLANS, ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.



TEMPORARY PAVEMENT WIDENING TYPICAL SECTION



TYPICAL ROAD WORK SIGNAGE

NTS

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FAX 601-352-3945

CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

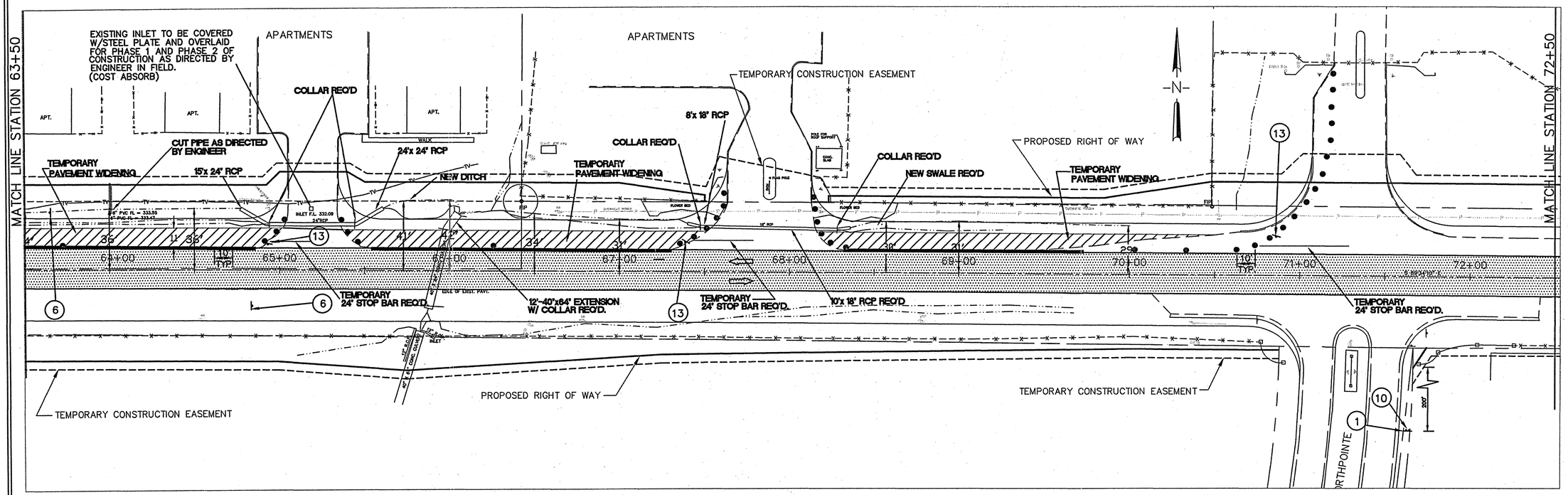
DRAWN BY:		SCALE:	1" = 30'
DESIGNED BY:		DATE:	2-03-05
CHECKED BY:	SW.	PROJECT:	T04-148

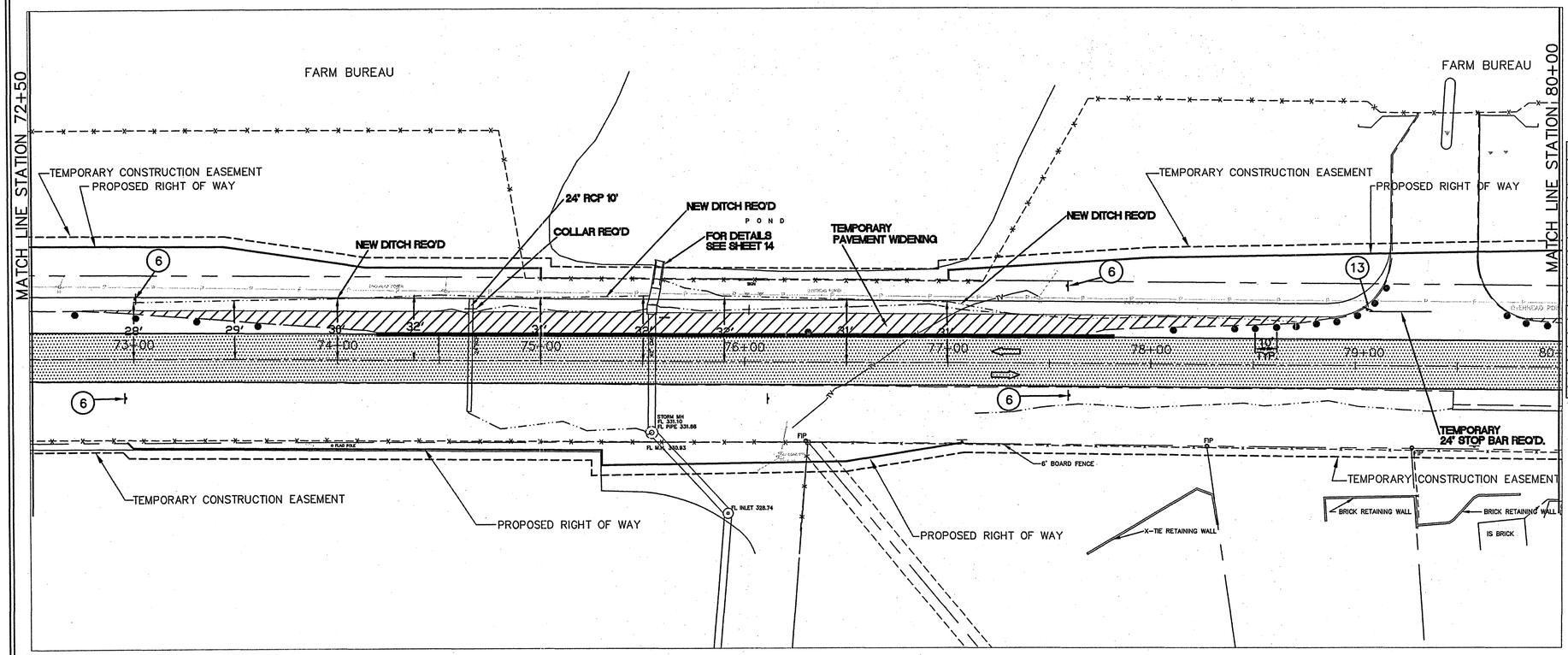
DRAWING TITLE:

TRAFFIC CONTROL PHASE 1

SHEET NUMBER:

21





CONSTRUCTION SIGN SCHEDULE		
SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	———	TYPE III BARRICADE
2	M4-10L	DETOUR ARROW LEFT
3	W20-1	ROAD WORK 200 FEET
4	W20-1	ROAD WORK 400 FEET
5	W20-1	ROAD WORK 600 FEET
6	W6-3	TWO WAY TRAFFIC
7	W13-1	ADVISING SPEED PLATE (30 MPH)
8	W4-2(L)	LANE REDUCTION TRANSITION SIGN (RIGHT)
9	G20-2A	END ROAD WORK
10	W20-1	ROAD WORK AHEAD
11	W9-2	LANE ENDS MERGE LEFT
12	G20-1	ROAD WORK NEXT 0.9 MILES
13	R1-1	STOP
14	R1-2	YIELD
15	W20-3	ROAD CLOSED
16	R4-1	DO NOT PASS

NOTE:
1. FOR DETAILS AND GENERAL NOTES SEE SHEET
2. EXISTING STRIPING TO REMAIN DURING THIS PHASE

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS		
NO.	REMARKS	DATE

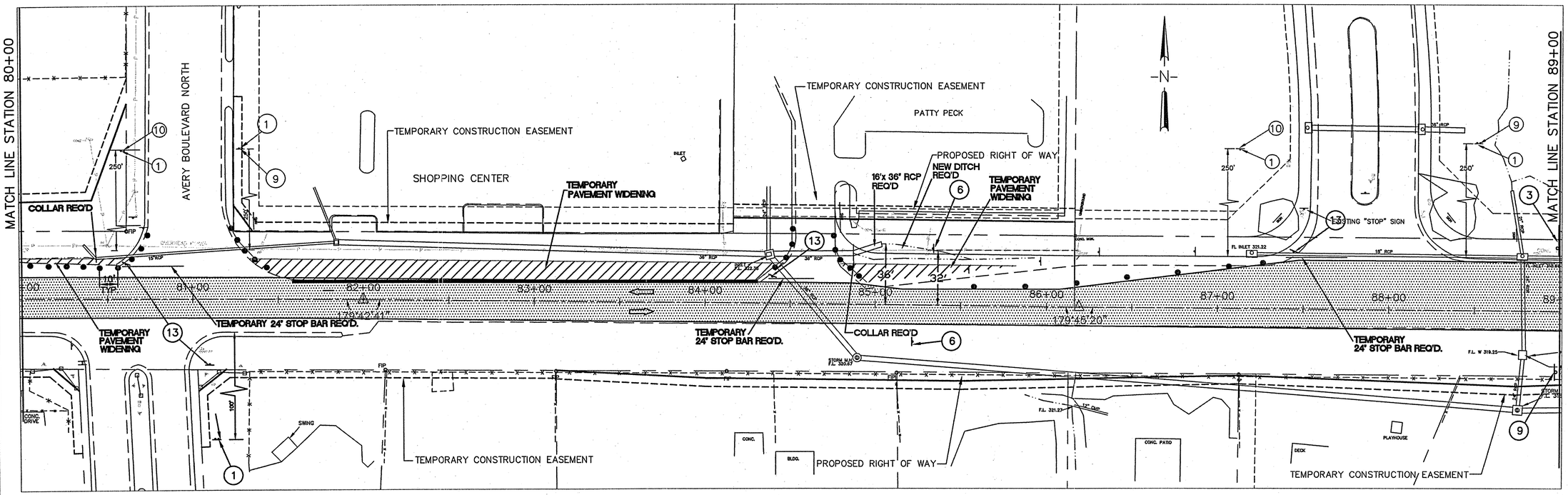
DRAWN BY:	SCALE:	1" = 30'
DESIGNED BY:	DATE:	2-03-05
CHECKED BY: SW	PROJECT:	784-148

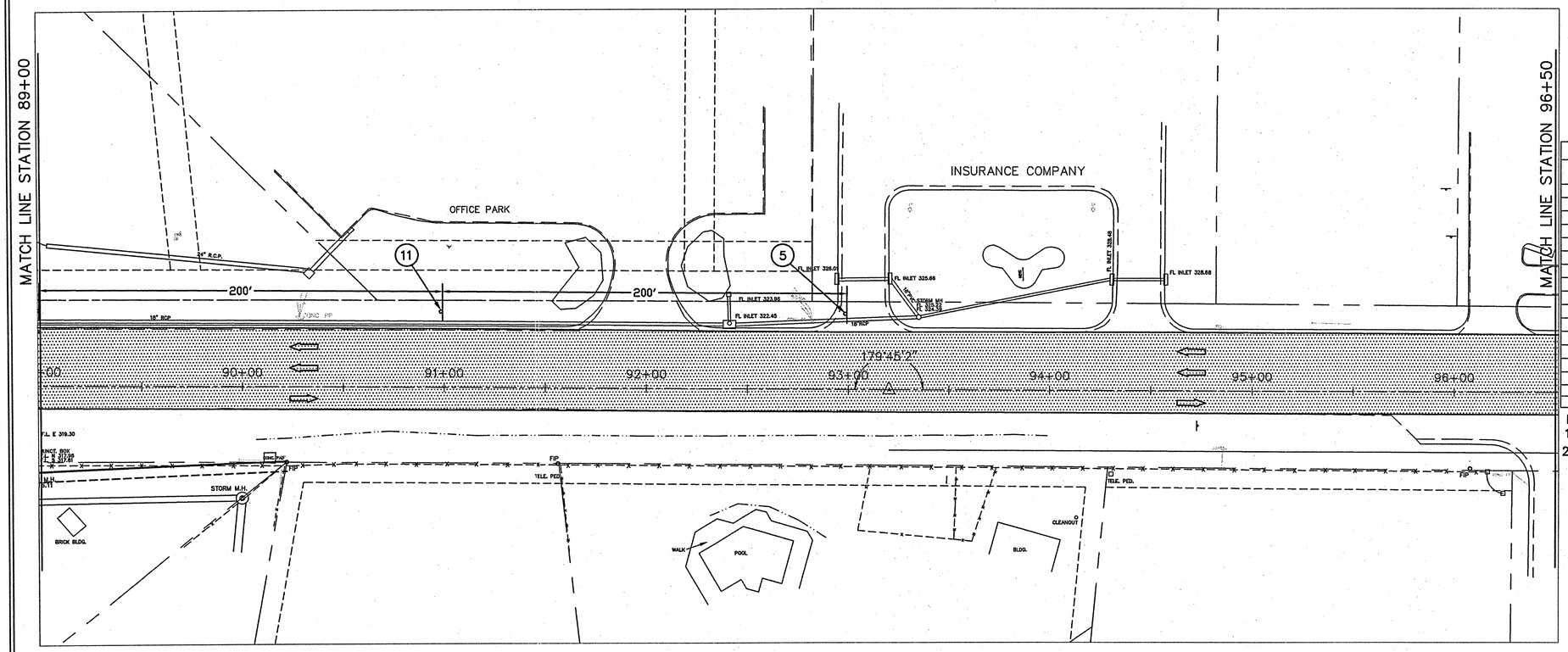
DRAWING TITLE:

TRAFFIC CONTROL PHASE 1

SHEET NUMBER:

22





CONSTRUCTION SIGN SCHEDULE		
SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	——	TYPE III BARRICADE
2	M4–10L	DETOUR ARROW LEFT
3	W20–1	ROAD WORK 200 FEET
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10	W20–1	ROAD WORK AHEAD
11	W9–2	LANE ENDS MERGE LEFT
12	G20–1	ROAD WORK NEXT 0.9 MILES
13	R1–1	STOP
14	R1–2	YIELD
15	W20–3	ROAD CLOSED
16	R4–1	DO NOT PASS
17	——	TYPICAL END OF ROAD MARKER

NOTE:
1. FOR DETAILS AND GENERAL NOTES SEE SHEET
2. EXISTING STRIPING TO REMAIN DURING THIS PHASE

WAGGONER Engineering, Inc.
Engineers, Scientists, Planners
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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP–7305–00(003)

DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

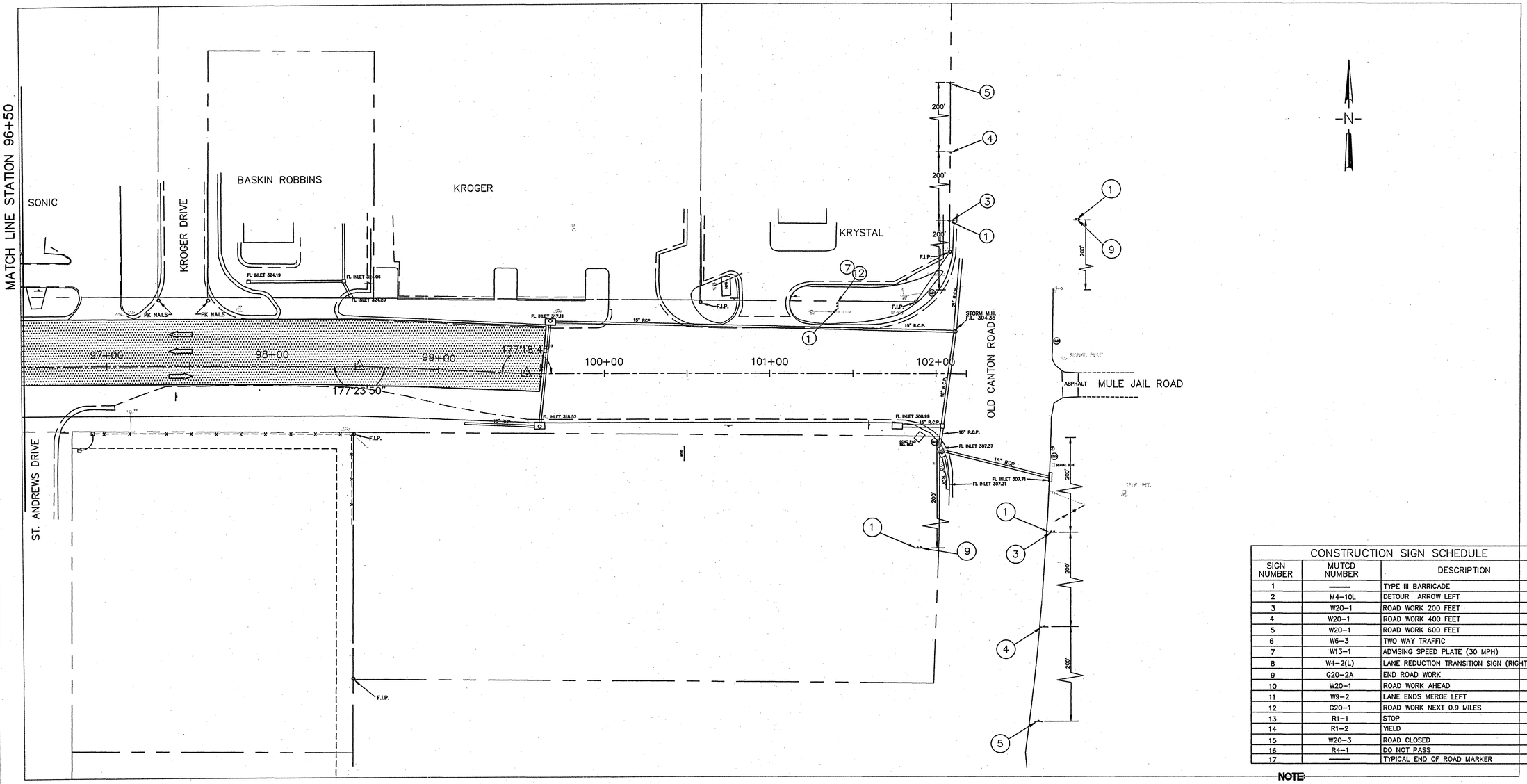
DRAWN BY:	SCALE: 1" = 20'
DESIGNED BY:	DATE: 2–03–05
CHECKED BY: SW	PROJECT: 194–148

DRAWING TITLE:

TRAFFIC CONTROL PHASE 1

SHEET NUMBER:

23



CONSTRUCTION SIGN SCHEDULE		
SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	———	TYPE III BARRICADE
2	M4–10L	DETOUR ARROW LEFT
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14	R1–2	YIELD
15	W20–3	ROAD CLOSED
16	R4–1	DO NOT PASS
17	———	TYPICAL END OF ROAD MARKER

NOTE:

1. FOR DETAILS AND GENERAL NOTES SEE SHEET
2. EXISTING STRIPING TO REMAIN DURING THIS PHASE

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP–7305–00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

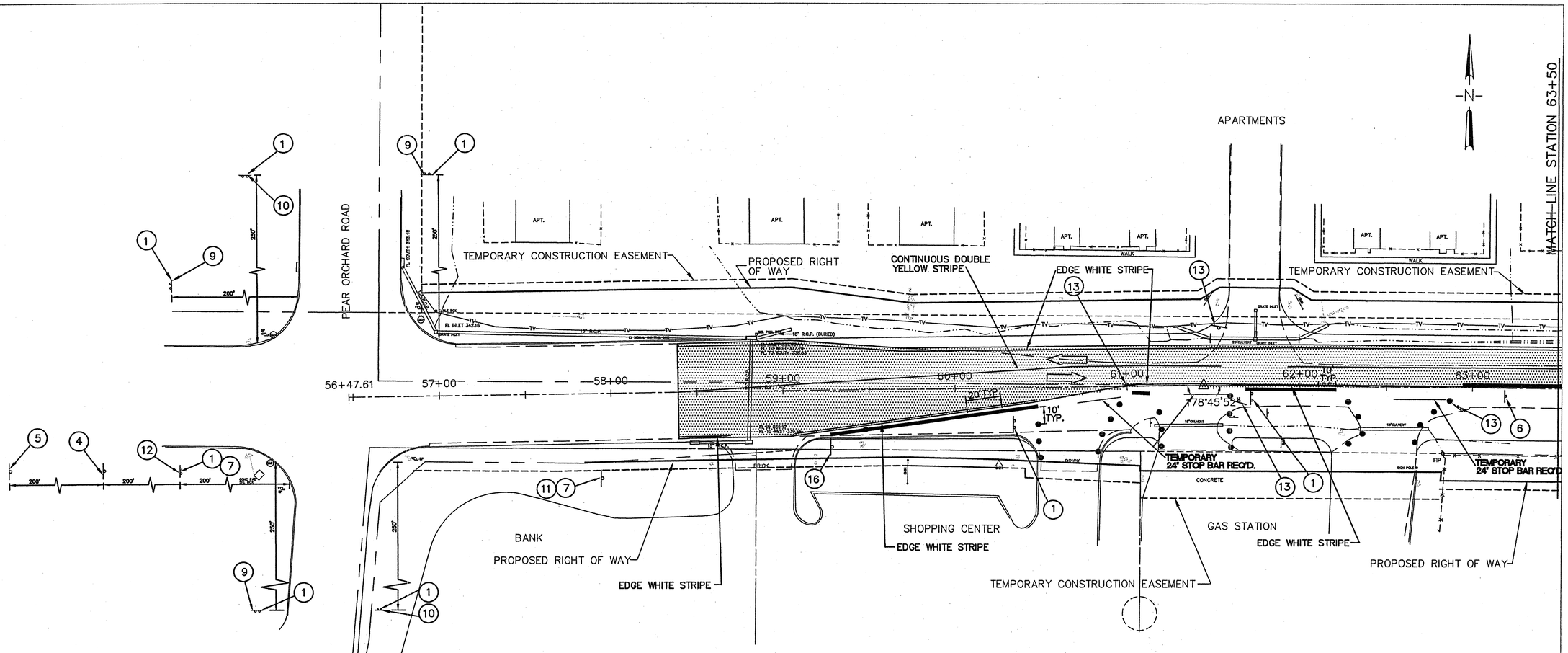
DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2–03–06
CHECKED BY: SW	PROJECT: TP4–148

DRAWING TITLE:

TRAFFIC CONTROL PHASE 1

SHEET NUMBER:

24



LEGEND

TRAFFIC FLOW

TEMPORARY PAVEMENT WIDENING

TRAFFIC DRUMS

TYPE III BARRICADES

CONSTRUCTION SIGN SCHEDULE

SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	———	TYPE III BARRICADE
2	M4-10L	DETOUR ARROW LEFT
3	W20-1	ROAD WORK 200 FEET
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6	W6-3	TWO WAY TRAFFIC
7	W13-1	ADVISING SPEED PLATE (30 MPH)
8	W4-2(L)	LANE REDUCTION TRANSITION SIGN (RIGHT)
9	G20-2A	END ROAD WORK
10	W20-1	ROAD WORK AHEAD
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12	G20-1	ROAD WORK NEXT 0.9 MILES
13	R1-1	STOP
14	R1-2	YIELD
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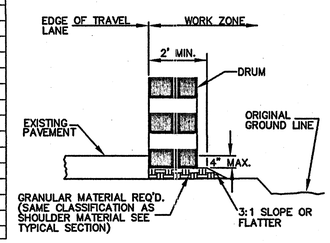

TRAFFIC DRUM PLACEMENT • WIDENING OR LOW SHOULDER

N.T.S.

SEE "NOTE 5" THIS SHEET

GENERAL NOTES

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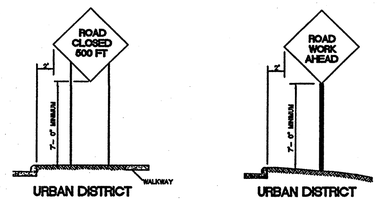

TYPICAL ROAD WORK SIGNAGE

N.T.S.

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

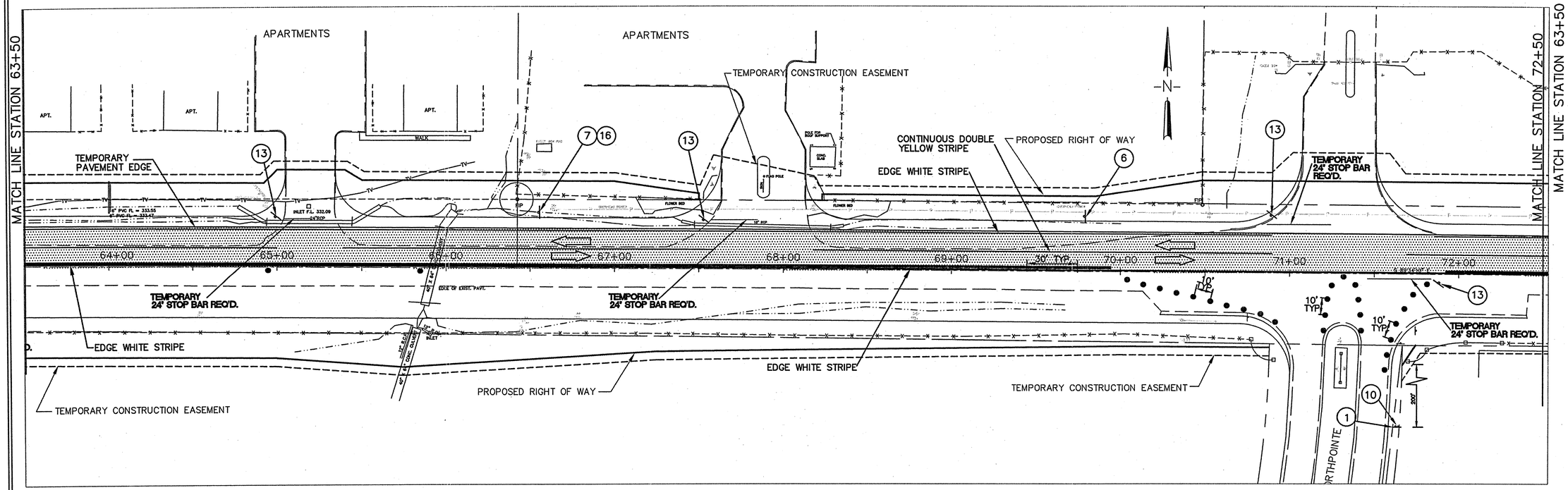
DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW.	PROJECT: T94-148

DRAWING TITLE:

TRAFFIC CONTROL PHASE 2

SHEET NUMBER:

25



CONSTRUCTION SIGN SCHEDULE		
SIGN NUMBER	MUTCD NUMBER	
1	———	TYPE III BARRICADE
2	M4-10L	DETOUR ARROW LEFT
3	W20-1	ROAD WORK 200 FEET
4	W20-1	ROAD WORK 400 FEET
5	W20-1	ROAD WORK 600 FEET
6	W6-3	TWO WAY TRAFFIC
	W13-1	ADVISING SPEED PLATE (30 MPH)
	W4-2(L)	LANE REDUCTION TRANSITION SIGN (RIGHT)
	G20-2A	END ROAD WORK
	W20-1	ROAD WORK AHEAD
	W9-2	LANE ENDS MERGE LEFT
	G20-1	ROAD WORK NEXT 0.9 MILES
	R1-1	STOP
	R1-2	YIELD
	W20-3	ROAD CLOSED
	R4-1	DO NOT PASS

1. FOR DETAILS AND GENERAL NOTES SEE SHEET

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

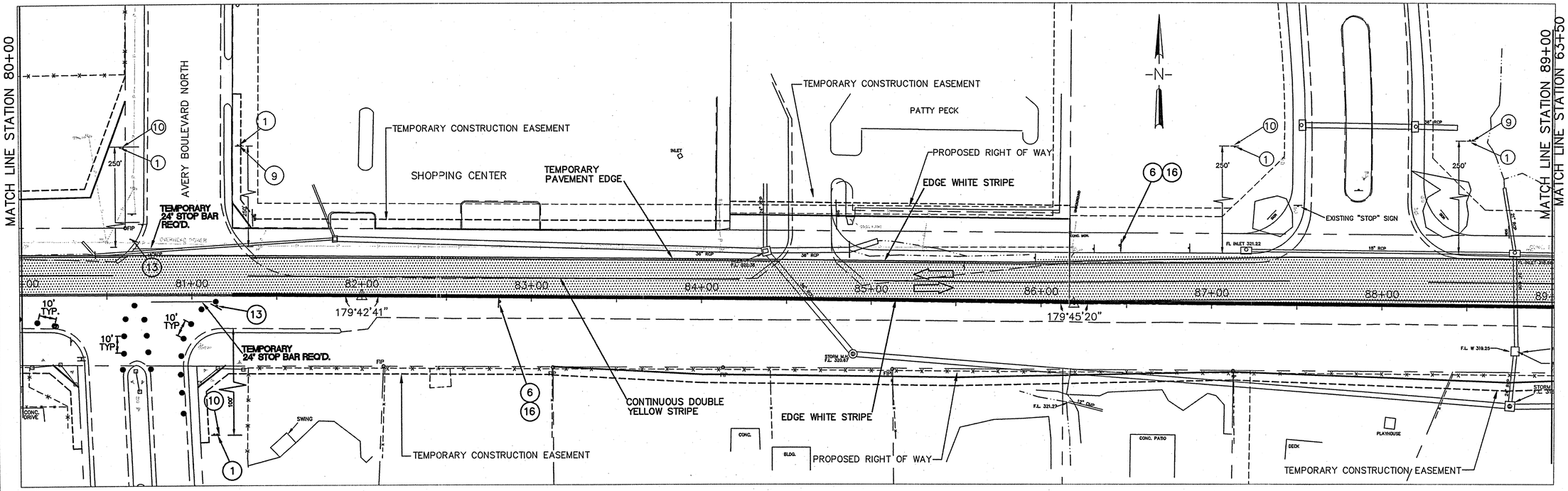
DRAWING REVISIONS		
NO.	REMARKS	DATE

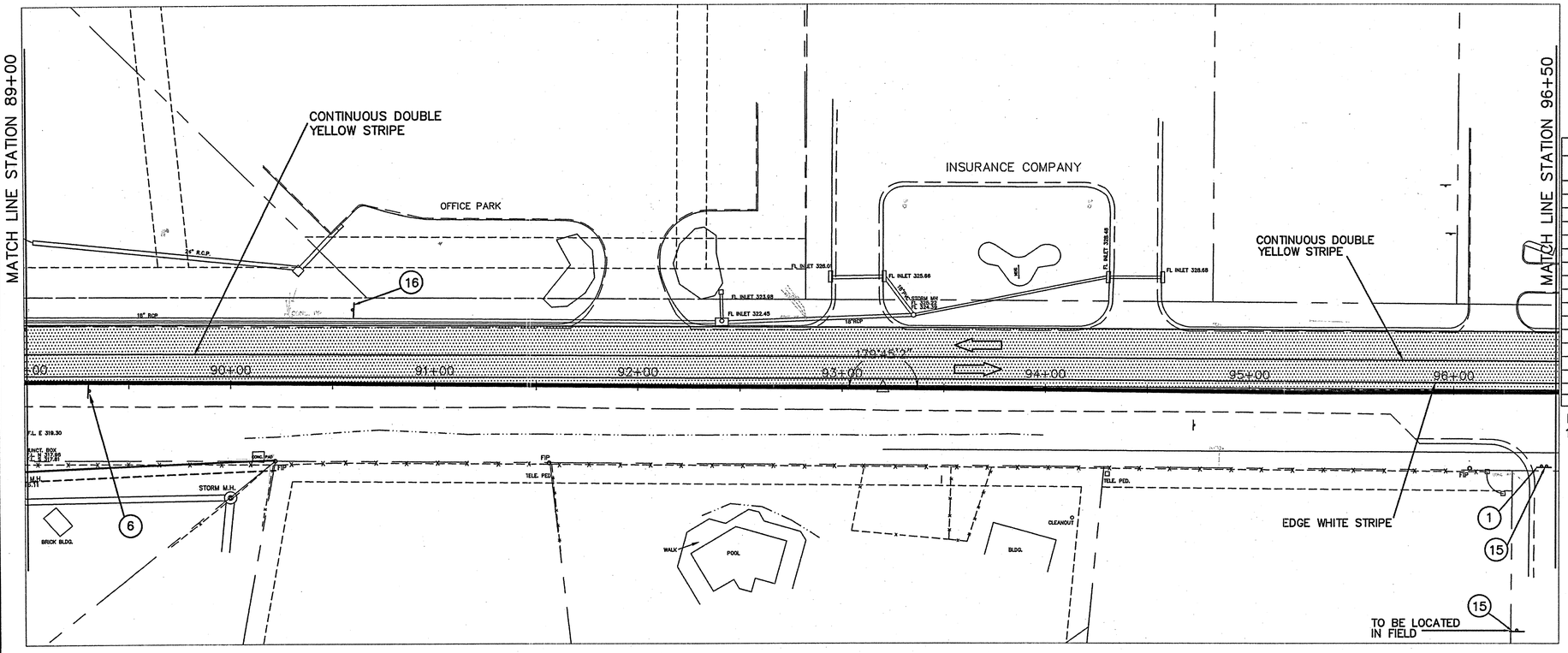
SEAL

DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: T94-148

DRAWING TITLE:
TRAFFIC CONTROL PHASE 2

SHEET NUMBER:
26





CONSTRUCTION SIGN SCHEDULE		
SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	———	TYPE III BARRICADE
2	M4–10L	DETOUR ARROW LEFT
3	W20–1	ROAD WORK 200 FEET
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12	G20–1	ROAD WORK NEXT 0.9 MILES
13	R1–1	STOP
14	R1–2	YIELD
15	W20–3	ROAD CLOSED
16	R4–1	DO NOT PASS
17	———	TYPICAL END OF ROAD MARKER

NOTE:
1. FOR DETAILS AND GENERAL NOTES SEE SHEET

WAGGONER Engineering, Inc.
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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

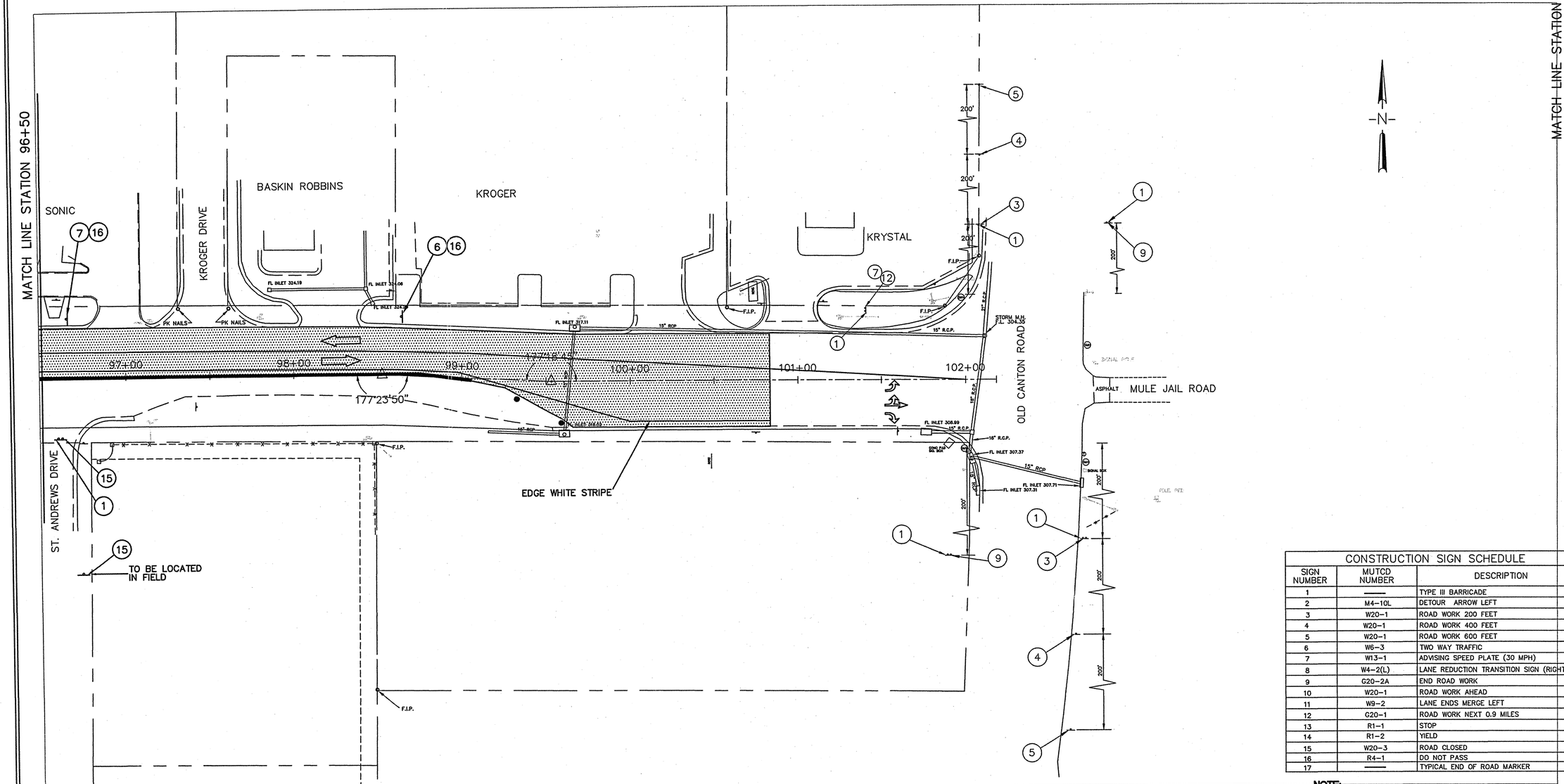
DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: 784-148

DRAWING TITLE:
TRAFFIC CONTROL PHASE 2

SHEET NUMBER:
27



CONSTRUCTION SIGN SCHEDULE

SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	——	TYPE III BARRICADE
2	M4-10L	DETOUR ARROW LEFT
3	W20-1	ROAD WORK 200 FEET
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5	W20-1	ROAD WORK 600 FEET
6	W6-3	TWO WAY TRAFFIC
7	W13-1	ADVISING SPEED PLATE (30 MPH)
8	W4-2(L)	LANE REDUCTION TRANSITION SIGN (RIGHT)
9	G20-2A	END ROAD WORK
10	W20-1	ROAD WORK AHEAD
11	W9-2	LANE ENDS MERGE LEFT
12	G20-1	ROAD WORK NEXT 0.9 MILES
13	R1-1	STOP
14	R1-2	YIELD
15	W20-3	ROAD CLOSED
16	R4-1	DO NOT PASS
17	——	TYPICAL END OF ROAD MARKER

NOTE:

1. FOR DETAILS AND GENERAL NOTES SEE SHEET

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

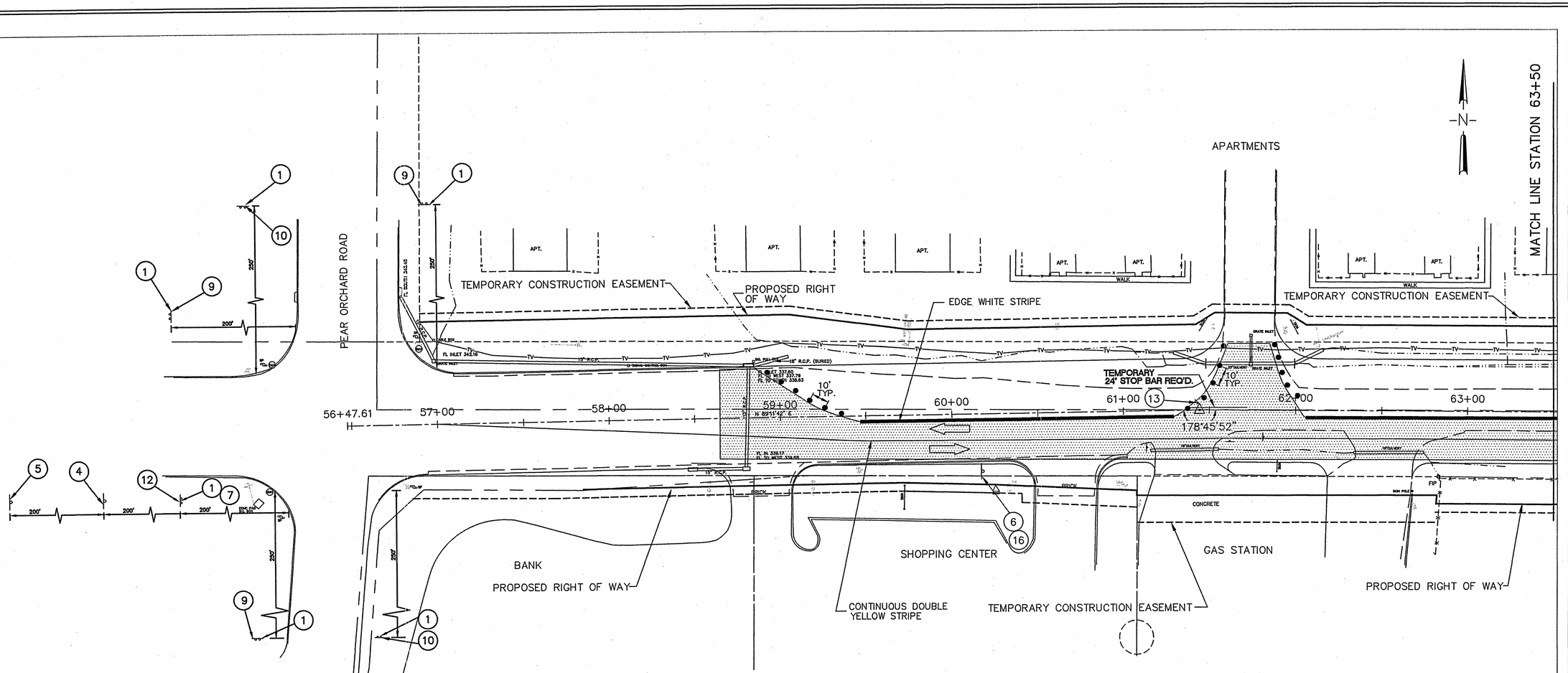
DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: BW	PROJECT: 784-148

DRAWING TITLE:

TRAFFIC CONTROL PHASE 2

SHEET NUMBER:

28



LEGEND

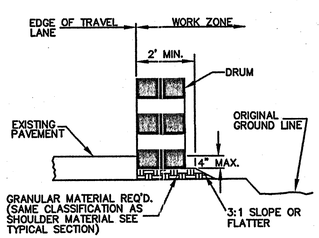
TRAFFIC FLOW

TEMPORARY PAVEMENT WIDENING

TRAFFIC DRUMS

TYPE III BARRICADES

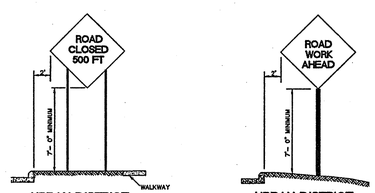
CONSTRUCTION SIGN SCHEDULE		
SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	———	TYPE III BARRICADE
2	M4-10L	DETOUR ARROW LEFT
3	W20-1	ROAD WORK 200 FEET
4	W20-1	ROAD WORK 400 FEET
5	W20-1	ROAD WORK 600 FEET
6	W6-3	TWO WAY TRAFFIC
7	W13-1	ADVISING SPEED PLATE (30 MPH)
8	W4-2(L)	LANE REDUCTION TRANSITION SIGN (RIGHT)
9	G20-2A	END ROAD WORK
10	W20-1	ROAD WORK AHEAD
11	W9-2	LANE ENDS MERGE LEFT
12	G20-1	ROAD WORK NEXT 0.9 MILES
13	R1-1	STOP
14	R1-2	YIELD
15	W20-3	ROAD CLOSED
16	R4-1	DO NOT PASS



TRAFFIC DRUM PLACEMENT • WIDENING OR LOW SHOULDER
N.T.S.
SEE "NOTE 5" THIS SHEET

GENERAL NOTES

1. DRAINAGE STRUCTURES REQUIRED UNDER MAINLINE, LOCAL ROAD TURNOUTS, STREET INTERSECTIONS AND DRIVEWAYS SHALL BE CONSTRUCTED IN HALF WIDTHS. IN ORDER TO MAINTAIN TRAFFIC AT ALL TIMES. COST OF SHEET PILING (IF REQUIRED) TO MAINTAIN EMBANKMENT FOR THIS CONSTRUCTION TO BE ABSORBED IN THE BID PRICE OF OTHER ITEMS (NOT A SEPARATE PAY ITEM).
2. WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE IMMEDIATE VICINITY OF TRAFFIC AND ADJACENT PROPERTIES; THEREFORE, THE RISK OF A FAILURE OCCURRING DURING THE EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE BRACING, SHORING OR GROUND SUPPORT SYSTEM THAT IS NECESSARY TO PREVENT A FAILURE AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION, THE PUBLIC THAT MAY BE ABOVE THE EXCAVATION, OR ANY STRUCTURE ADJACENT TO THE EXCAVATION. ALL COSTS FOR ANY PROTECTIVE MEASURES, INCLUDING THE MATERIALS AND LABOR FOR DESIGNING, DRAFTING AND CONSTRUCTING THE FACILITY, SHALL BE INCLUDED IN THE PRICE BID FOR CONTRACT ITEMS.
3. SEE STANDARD SHEET 190 FOR LANE CLOSURE DETAILS.
4. IN AREAS OF WIDENING OF LOW SHOULDERS, THE CONTRACTOR SHALL PLACE PLASTIC DRUMS ADJACENT TO THE DROP-OFF WHERE THE DROP-OFF EXCEEDS TWO INCHES BUT IS NO MORE THAN 4" AND WHEN WORK IS SUSPENDED OR FOR NIGHT OPERATION. DRUMS ARE ALSO REQUIRED WHERE THE WORK ZONE INCLUDES UNDERCUTTING THE SHOULDER.
5. PAVEMENT EDGE DROP-OFF:
   a. IF LESS THAN 2", THEN NO DELINEATION DEVICES REQUIRED. PLACE "SHOULDER WORK"SIGN (W21-5) 300 FEET IN ADVANCE OF THE WORK ZONE SHOULDER, AND A "LOW SHOULDER" SIGN (W8-9) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE AT MAXIMUM SPACES OF 750' O.C. OR AS DIRECTED BY ENGINEER IN FIELD.
   b. IF GREATER THEN 4" THEN POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE IS NEEDED. IF THE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND THE DROP-OFF IS 8' OR MORE, DRUMS MAY BE USED.
   c. FOR TEMPORARY CONDITIONS WHERE DROP-OFFS ARE GREATER THAN 4", DRUMS MAY BE USED TO IDENTIFY PROBLEM AREAS FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.
6. REMOVE AND SALVAGE EXISTING SIGNS WITHIN WORK AREA, TO CITY. (NOT NEEDED SIGNS).
7. ALL TEMPORARY TRAFFIC CONTROL DEVICES ARE TO CONFORM TO THE MANUAL ON TRAFFIC CONTROL DEVICES (1988 EDITION AND SUBSEQUENT REVISIONS)
8. THE LOCATION AND SPACING OF SIGNS, SHOWN ON THE TRAFFIC CONTROL PLANS, ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS.



TYPICAL ROAD WORK SIGNAGE
N.T.S.

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

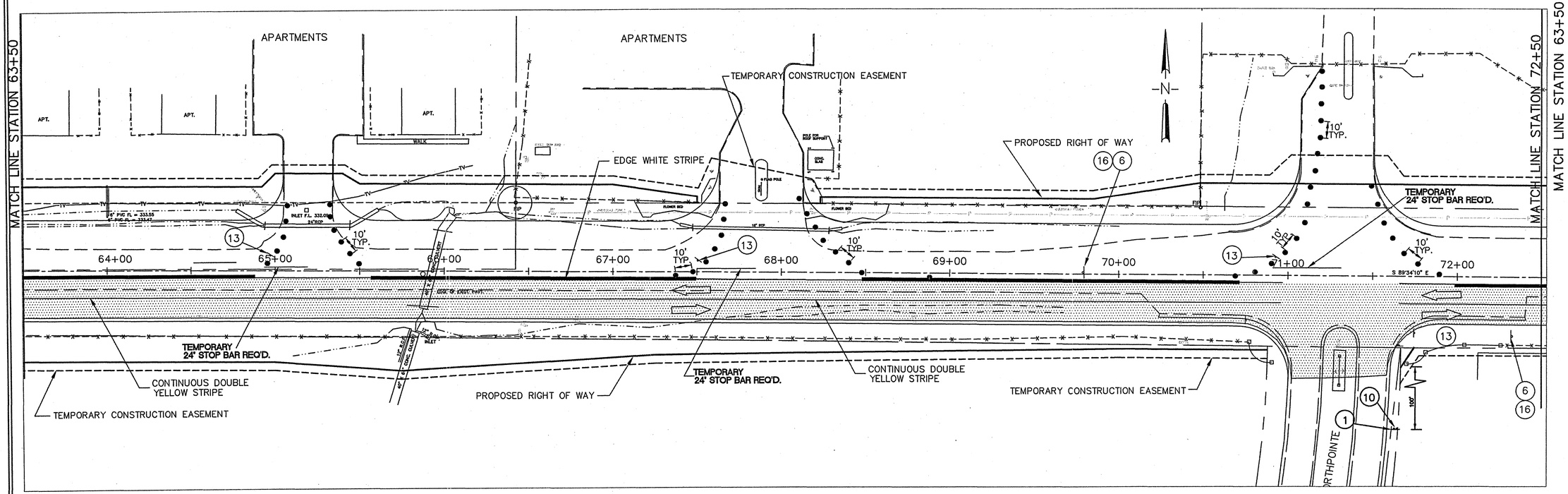
NO.	REMARKS	DATE

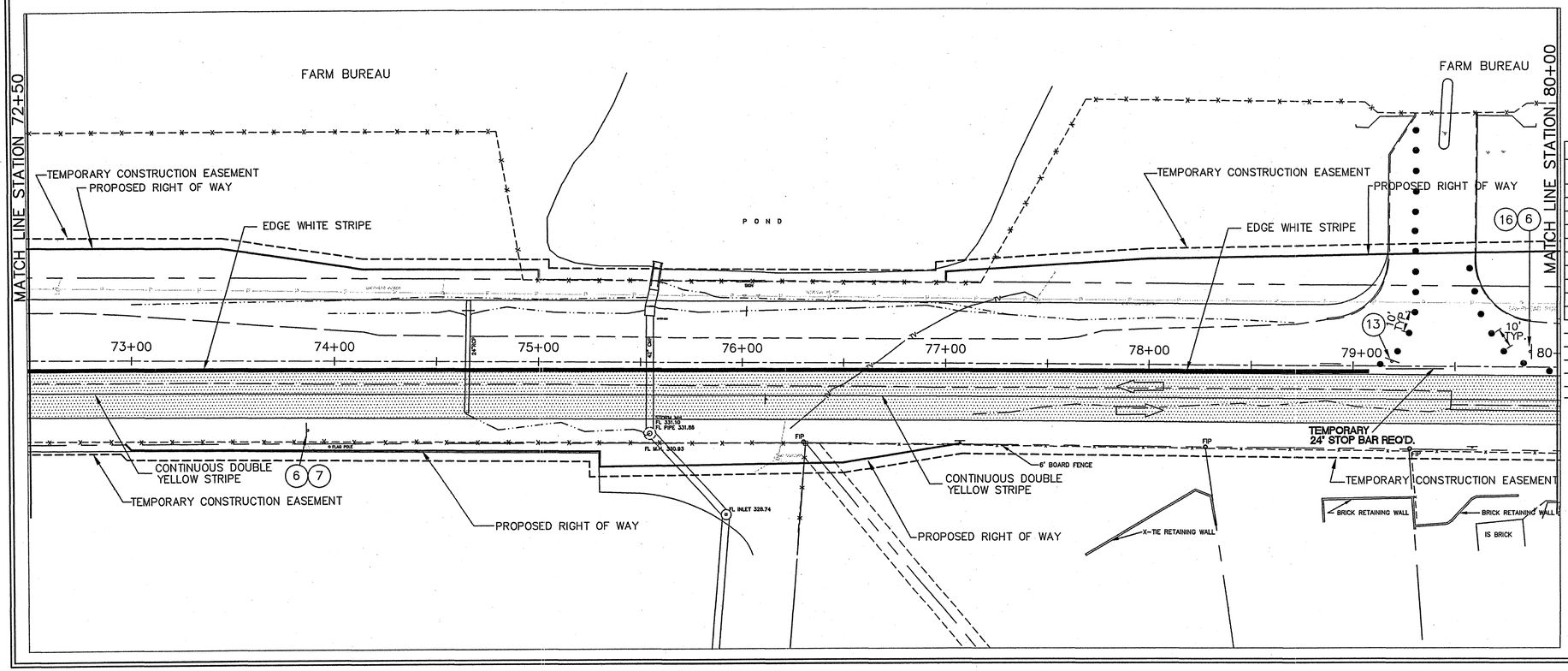
SEAL:

DRAWN BY:
SCALE: 1" = 30'
DESIGNED BY:
DATE: 3-03-05
CHECKED BY: BW.
PROJECT: TP4-148

DRAWING TITLE:
TRAFFIC CONTROL PHASE 3

SHEET NUMBER:
29





CONSTRUCTION SIGN SCHEDULE		
SIGN NUMBER	MUTCD NUMBER	
1	———	TYPE III BARRICADE
2	M4-10L	DETOUR ARROW LEFT
3	W20-1	ROAD WORK 200 FEET
4	W20-1	ROAD WORK 400 FEET
5	W20-1	ROAD WORK 600 FEET
6	W6-3	TWO WAY TRAFFIC
	W13-1	ADVISING SPEED PLATE (30 MPH)
	W4-2(L)	LANE REDUCTION TRANSITION SIGN (RIGHT)
	G20-2A	END ROAD WORK
	W20-1	ROAD WORK AHEAD
	W9-2	LANE ENDS MERGE LEFT
	G20-1	ROAD WORK NEXT 0.9 MILES
	R1-1	STOP
	R1-2	YIELD
	W20-3	ROAD CLOSED
	R4-1	DO NOT PASS

1. FOR DETAILS AND GENERAL NOTES SEE SHEET

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

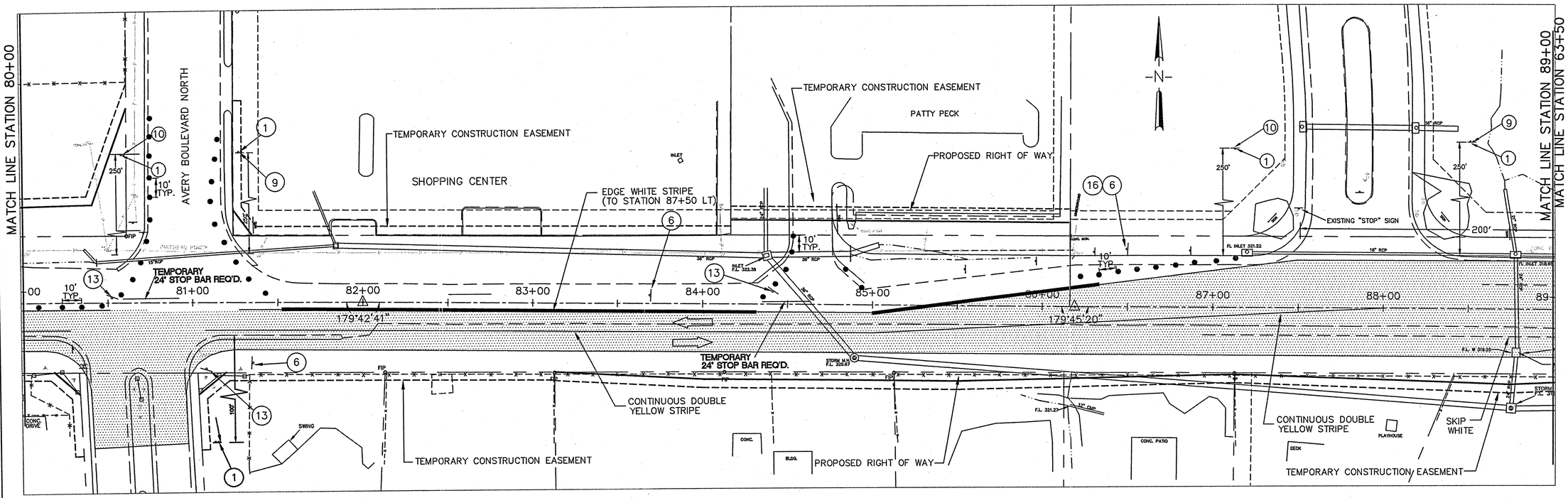
DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SM	PROJECT: 194-148

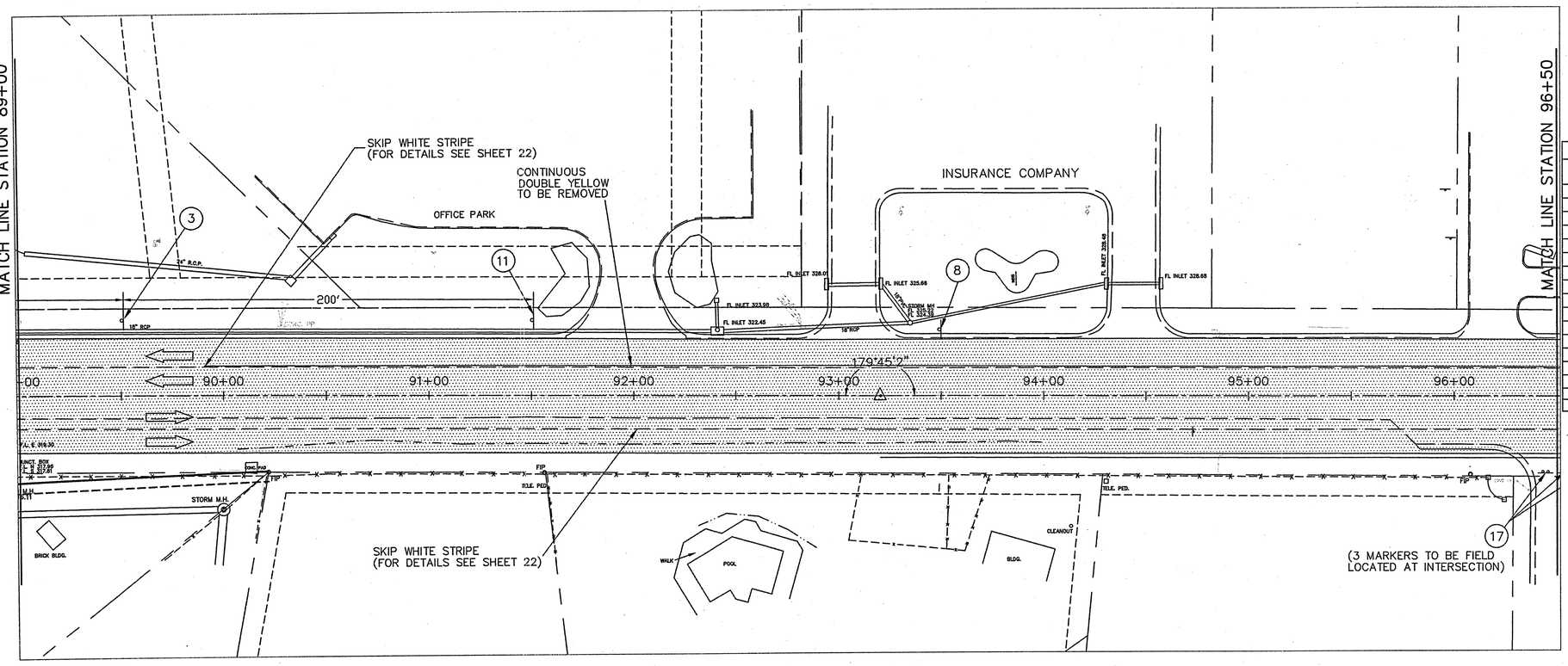
DRAWING TITLE:

TRAFFIC CONTROL PHASE 3

SHEET NUMBER:

30





CONSTRUCTION SIGN SCHEDULE		
SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	——	TYPE III BARRICADE
2	M4–10L	DETOUR ARROW LEFT
3	W20–1	ROAD WORK 200 FEET
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7	W13–1	ADVISING SPEED PLATE (30 MPH)
8	W4–2(L)	LANE REDUCTION TRANSITION SIGN (RIGHT)
9	G20–2A	END ROAD WORK
10	W20–1	ROAD WORK AHEAD
11	W9–2	LANE ENDS MERGE LEFT
12	G20–1	ROAD WORK NEXT 0.9 MILES
13	R1–1	STOP
14	R1–2	YIELD
15	W20–3	ROAD CLOSED
16	R4–1	DO NOT PASS
17	——	TYPICAL END OF ROAD MARKER

NOTE:
1. FOR DETAILS AND GENERAL NOTES SEE SHEET

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CITY OF RIDGELAND
WIDENING OF EAST
COUNTY LINE ROAD
STP–7305–00(003)

DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

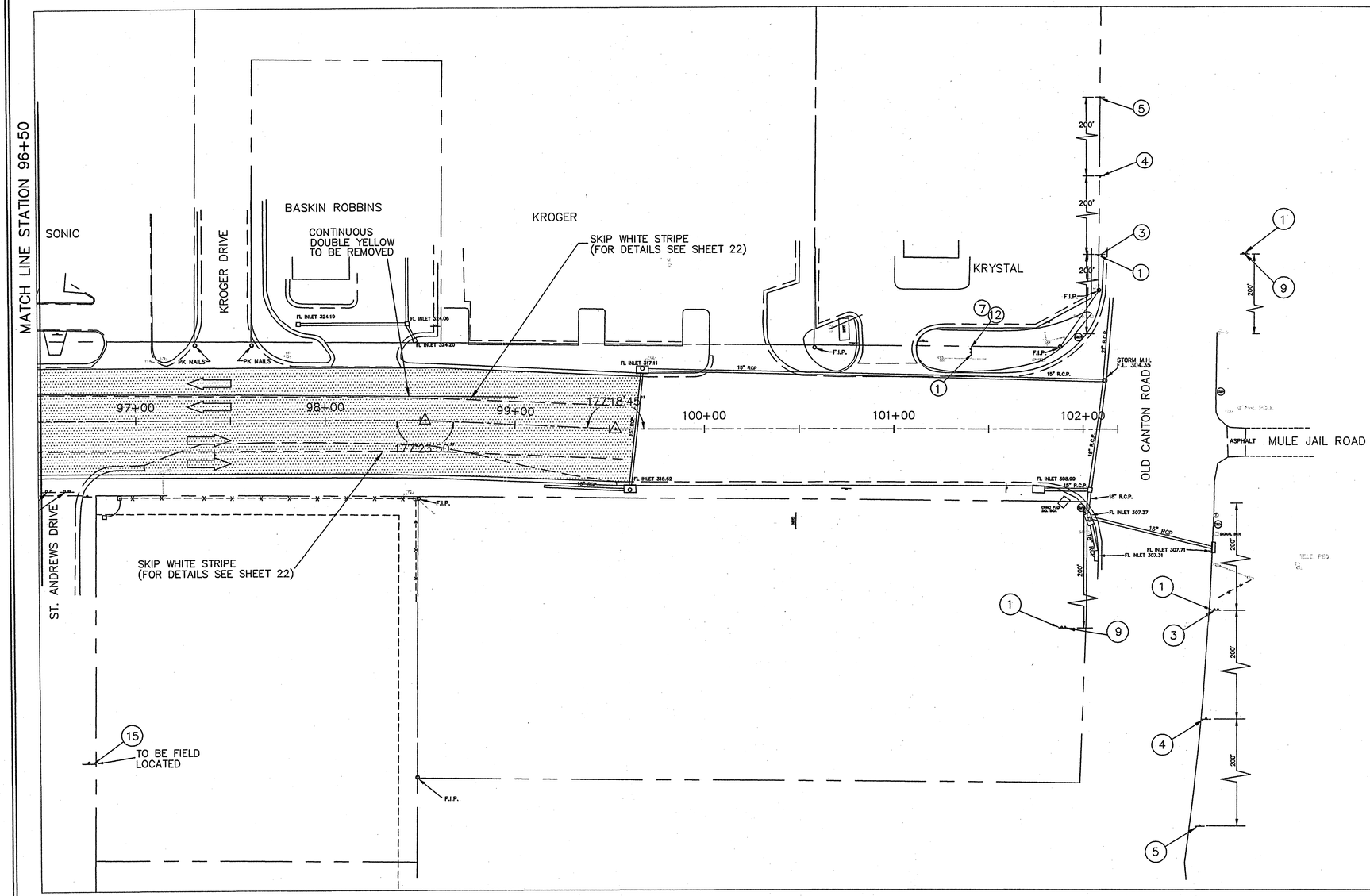
DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2–03–06
CHECKED BY: SM	PROJECT: T94–148

DRAWING TITLE:

TRAFFIC CONTROL PHASE 3

SHEET NUMBER:

31



CONSTRUCTION SIGN SCHEDULE

SIGN NUMBER	MUTCD NUMBER	DESCRIPTION
1	——	TYPE III BARRICADE
2	M4-10L	DETOUR ARROW LEFT
3	W20-1	ROAD WORK 200 FEET
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12	G20-1	ROAD WORK NEXT 0.9 MILES
13	R1-1	STOP
14	R1-2	YIELD
15	W20-3	ROAD CLOSED
16	R4-1	DO NOT PASS
17	——	TYPICAL END OF ROAD MARKER

NOTE:

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

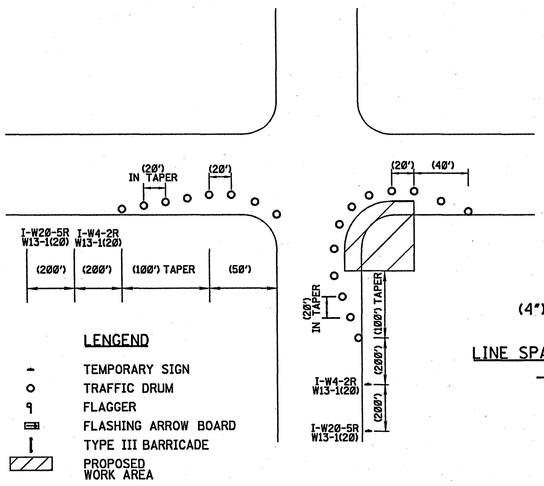
DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-09
CHECKED BY: SW	PROJECT: 194-146

DRAWING TITLE:

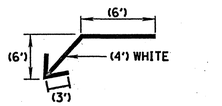
TRAFFIC CONTROL PHASE 3

SHEET NUMBER:

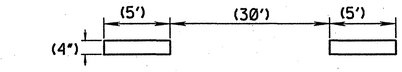
32



TYPICAL TRAFFIC CONTROL FOR RIGHT-LANE CLOSURE AT INTERSECTION

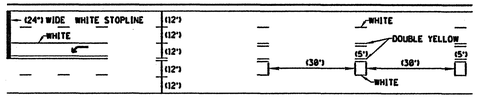


TEMPORARY LEFT TURN ARROW DETAIL

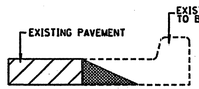


LINE SPACING TEMPORARY SKIP YELLOW CENTERLINE STRIPE OR WHITE LANE LINE STRIPE

TEMPORARY SOLID DOUBLE YELLOW CENTERLINE STRIPE

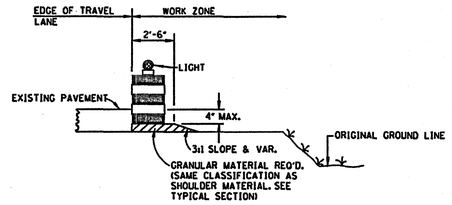


TYPICAL TEMPORARY PAVEMENT MARKINGS
(SEE NOTE 2 & 3)



TEMPORARY EDGE OF PAVEMENT RAMP (COMPACTED RED SAND, COLD MIX ASPHALT, ETC.) ON APPROXIMATE. 2:1 SLOPE. TO BE INSTALLED AT THE END OF EACH WORK DAY TO PROTECT NEWLY EXPOSED EDGE OF PAVEMENT DROP-OFF

PAVEMENT RAMP DETAIL



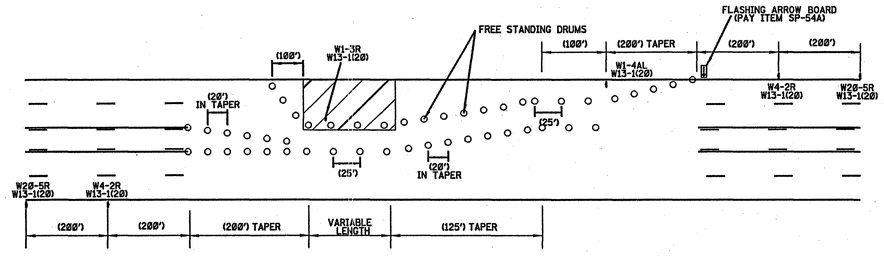
DRUM PLACEMENT ON LOW SHOULDERS OR WIDENING

DRUMS REQUIRED WHERE WORK ZONE INCLUDES UNDERCUT SHOULDER AND REMOVAL OF CURB & BUTTER. DRUMS TO BE PLACED AS SHOWN IN DETAIL, LEFT FOR NIGHT TIME OPERATION OR SUSPENSIONS OF WORK. COST TO BE ABSORBED (PAY ITEM SP 54-A)

GENERAL NOTES

1. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TEMPORARY RIDING SURFACE IN SATISFACTORY CONDITION AND REMOVING ALL MATERIALS REQUIRED FRO TEMPORARY LANE ASSIGNMENTS, UNLESS OTHERWISE NOTED.
2. TEMPORARY PAVEMENT MARKINGS AS REQUIRED FOLLOWING APPLICATION OF THE BASE COURSE IN NEW CONSTRUCTION OR RECONSTRUCTION AREAS SHALL COMPLIMENT THE PAVEMENT MARKING PLANS. TEMPORARY MARKINGS DO NOT INCLUDE LEGENDS AND CROSSWALKS. THEY DO INCLUDE LANE LINES, STOP-LINES, TEMPORARY ARROWS AND GORES.
3. TEMPORARY PAVEMENT STRIPING (SEMI-PERMANENT FILM OR TAPE) SHALL BE EASY TO REMOVE WITHOUT DAMAGING THE FINAL SURFACE COURSE.
4. TAPER LENGTHS SHOWN ARE FOR A 20 MPH SPEED.
5. CONTRACTOR SHALL COORDINATE RELOCATION AND ADJUSTMENTS TO TRAFFIC SIGNAL SYSTEMS WITH CITY TRAFFIC ENGINEERING DIVISION. CITY WILL ADJUST AL TRAFFIC SIGNALS.
6. SIGNS SHOWN ON PLANS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS OTHERWISE NOTED.
7. TEMPORARY STRIPING SHALL BE PROVIDED IN ACCORDANCE WITH THE FINAL PAVEMENT STRIPING PLAN FOLLOWING APPLICATION OF EACH 300 FT OF ASPHALT BASE.
8. IN ORDER TO MINIMIZE LANE CLOSURES, WORK WILL E SCHEDULED IN ORDER TO CLOSE ONLY A SINGLE LANE OF TRAFFIC, BUT AS A MINIMUM, ONE LANE OF TRAFFIC WILL ALWAYS BE OPEN IN EACH DIRECTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 72 HOURS PRIOR TO CLOSURE OF MORE THAN ONE TRAFFIC LANE.
9. THE CONTRACTOR SHALL USE CONTRACT BARRIERS TO SEPARATE ADJACENT TRAFFIC FROM CONSTRUCTION AREAS WHERE THE UNDERCUT IS 2 FT OR GREATER IN DEPTH, OR SHALLOWER AREAS THE CONTRACTOR MAY USE THE DRUM PLACEMENT ON LOW SHOULDERS OR WIDENING DETAIL (SHOWN AT RIGHT) TO PROTECT THE EDGE OF PAVEMENT DROP-OFF. THE DRUM PLACEMENT IS REQUIRED UNTIL THE NEW CONSTRUCTION IS WITHIN 4" OF EXISTING PAVEMENT.
10. CONTRACTOR SHALL INSTALL TRAFFIC CONTROL DEVICES SUCH AS CONES, DRUMS, FLASHERS, BARRICADES, SIGNS, ETC., TO SAFELY CHANNEL TRAFFIC. WHEN NECESSARY, FLAGGERS SHALL BE USED IN CONJUNCTION WITH TRAFFIC CONTROL DEVICES. (FLAGGER AHEAD SIGN REQUIRED EXCEPT DURING BRIEF PERIODS OR EMERGENCY SITUATIONS.)
11. TRAFFIC CONTROL DEVICES SHALL BE INSTALLED WHENEVER NECESSARY, REMAIN IN PLACE ONLY AS LONG AS THEY ARE NEEDED, AND BE REMOVED IMMEDIATELY THEREAFTER.
12. TRAFFIC CONTROL DEVICES SHALL CONFORM TO APPLICABLE SPECIFICATIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL", LATEST EDITION.
13. THESE ARE THE MINIMUM REQUIREMENTS AND IN NO WAY RELIEVE THE CONTRACTOR OF HIS OBLIGATION TO MAINTAIN TRAFFIC IN A SAFE MANNER.

SIGNS



TRAFFIC CONTROL DURING OVERLAY OPERATIONS AND INSTALLATION OF STORM SEWER

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

DRAWN BY:	SCALE:
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: 794-148

DRAWING TITLE:

TRAFFIC CONTROL STANDARD

SHEET NUMBER:

33

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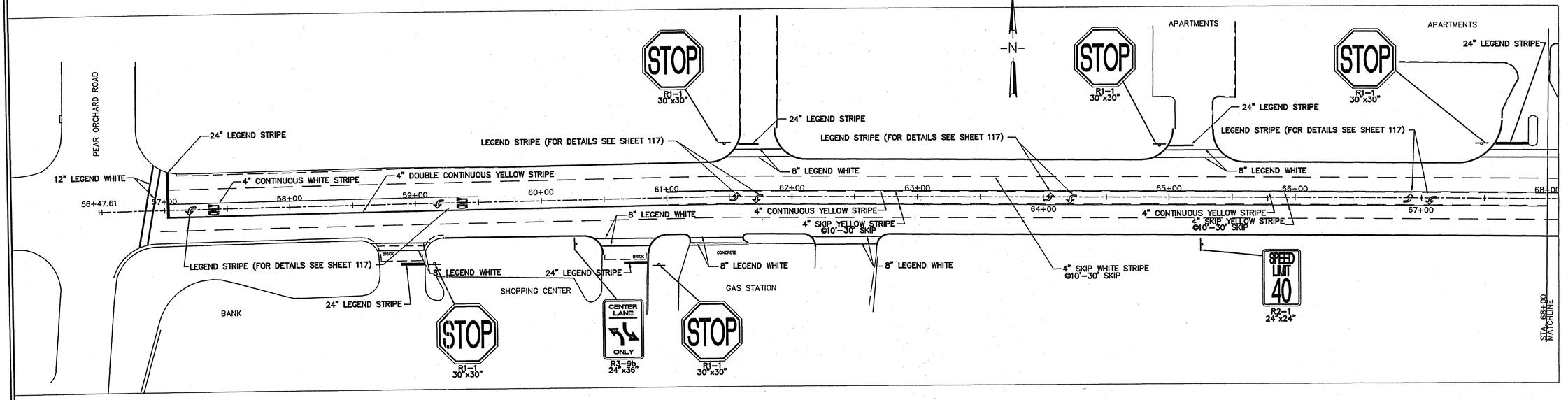
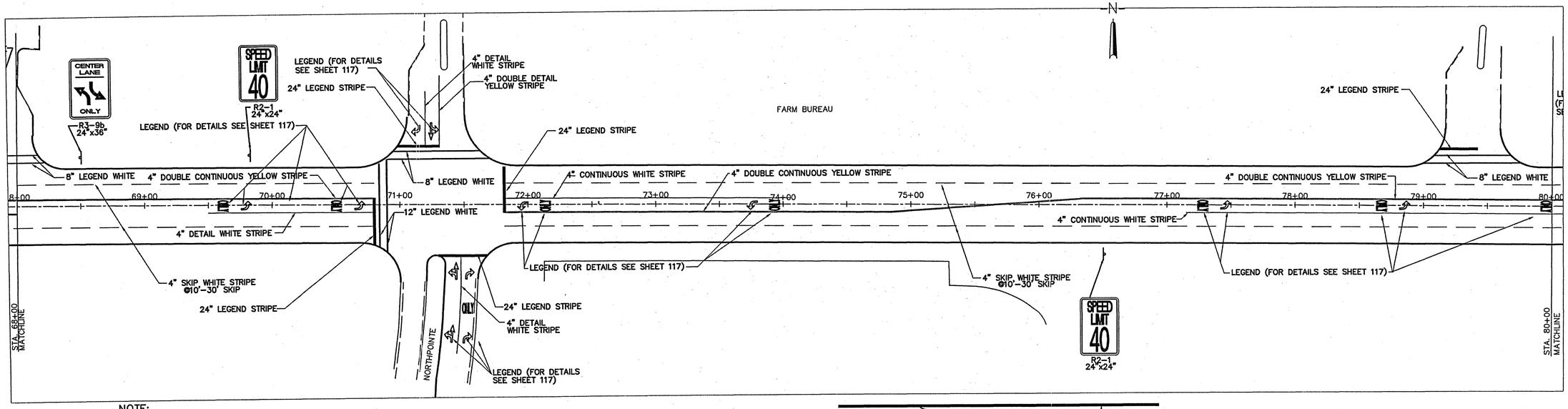
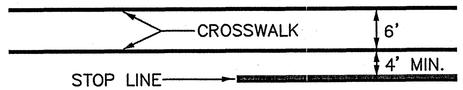




NOTE:

1. ALL SIGNS AND PAVEMENT MARKINGS ARE TO CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), (1988 EDITION AND ALL SUBSEQUENT REVISIONS).
2. SEE SHEET 113 FOR ADDITIONAL DETAILS ON PAVEMENT MARKINGS AND REFLECTIVE PAVEMENT MARKERS.
3. MINIMUM HEIGHT FOR SIGNS IS 7FT.
4. STOP SIGNS SHALL BE LOCATED FOR MAXIMUM VISIBILITY AND SHALL BE PLACED SO THAT, AT LEAST, MINIMUM STOPPING SIGHT DISTANCE IS PROVIDED. STOP SIGNS SHOULD BE ERECTED AT THE POINT WHERE THE VEHICLE IS TO STOP OR AS NEAR THERE TO AS POSSIBLE WITHIN THE LIMITS OF 6FT. MINIMUM AND 50FT. MAXIMUM FROM THE INTERSECTING PAVEMENT EDGES.
5. STOP LINES SHALL BE LOCATED AT THE DESIRED STOPPING POINT WITHIN THE LIMITS OF 4FT. MINIMUM AND 30FT. MAXIMUM FROM THE INTERSECTING PAVEMENT EDGES.



CROSSWALK/STOP LINE DETAIL

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FAX 601-352-3945

WIDENING OF EAST COUNTY LINE ROAD

CITY OF RIDGELAND

STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

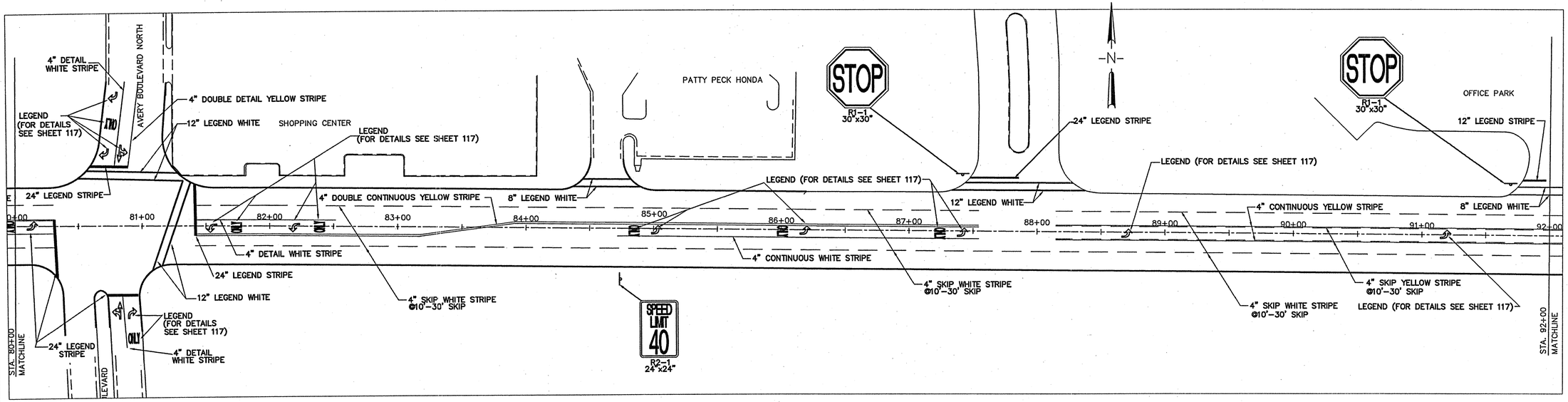
DRAWN BY:	SCALE: 1" = 40'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: BW	PROJECT: 704-148

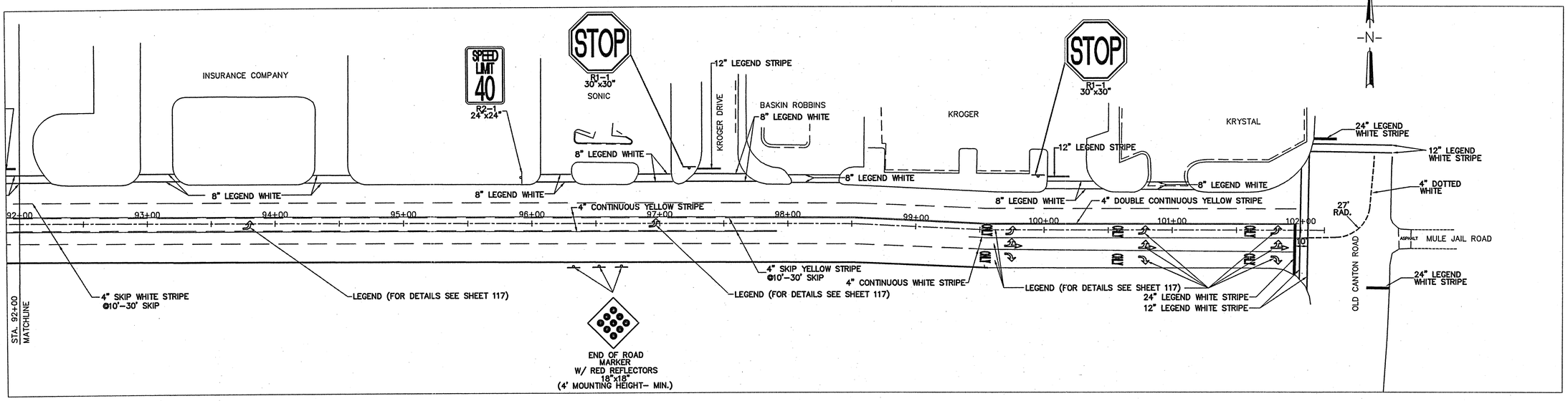
DRAWING TITLE:

STRIPING AND SIGNAGE

SHEET NUMBER:

34





NOTE:

1. ALL SIGNS AND PAVEMENT MARKINGS ARE TO CONFORM TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), (1988 EDITION AND ALL SUBSEQUENT REVISIONS).
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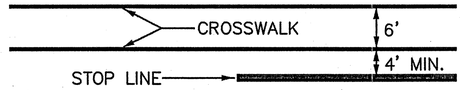

CROSSWALK/STOP LINE DETAIL

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

DRAWN BY:	SCALE: 1" = 40'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: T94-148

DRAWING TITLE:

STRIPING AND SIGNAGE

SHEET NUMBER:

35

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FAX 601-352-3945

CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DWARF PFITZER JUNIPER
PIN OAK 40' O.C.
DWARF PFITZER JUNIPER
PIN OAK 40' O.C.
CATCH BASIN
INLET
EXIST. R.O.W.
EDGE OF PAVEMENT
GRATE INLET
56+47.61
57+00
58+00
59+00
60+00
61+00
62+00
63+00
64+00
65+00
BRICK
EXIST. JOINT
SHOPPING CENTER
BANK
CONCRETE
ASPHALT
GAS STATION
DWARF PFITZER JUNIPER
EXIST. EDGE OF PAVEMENT
FLORIDA JASMINE
CRAPE MYRTLE 12' O.C.
PIN OAK 20' O.C.
FARM BUREAU
DWARF PFITZER JUNIPER
PIN OAK 40' O.C.
FARM BUREAU
66+00
67+00
68+00
69+00
70+00
71+00
72+00
73+00
74+00
CRAPE MYRTLE 12' O.C.
PIN OAK 20' O.C.
DWARF PFITZER JUNIPER
NORTHPOINTE
DWARF PFITZER JUNIPER
PIN OAK 40' O.C.

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

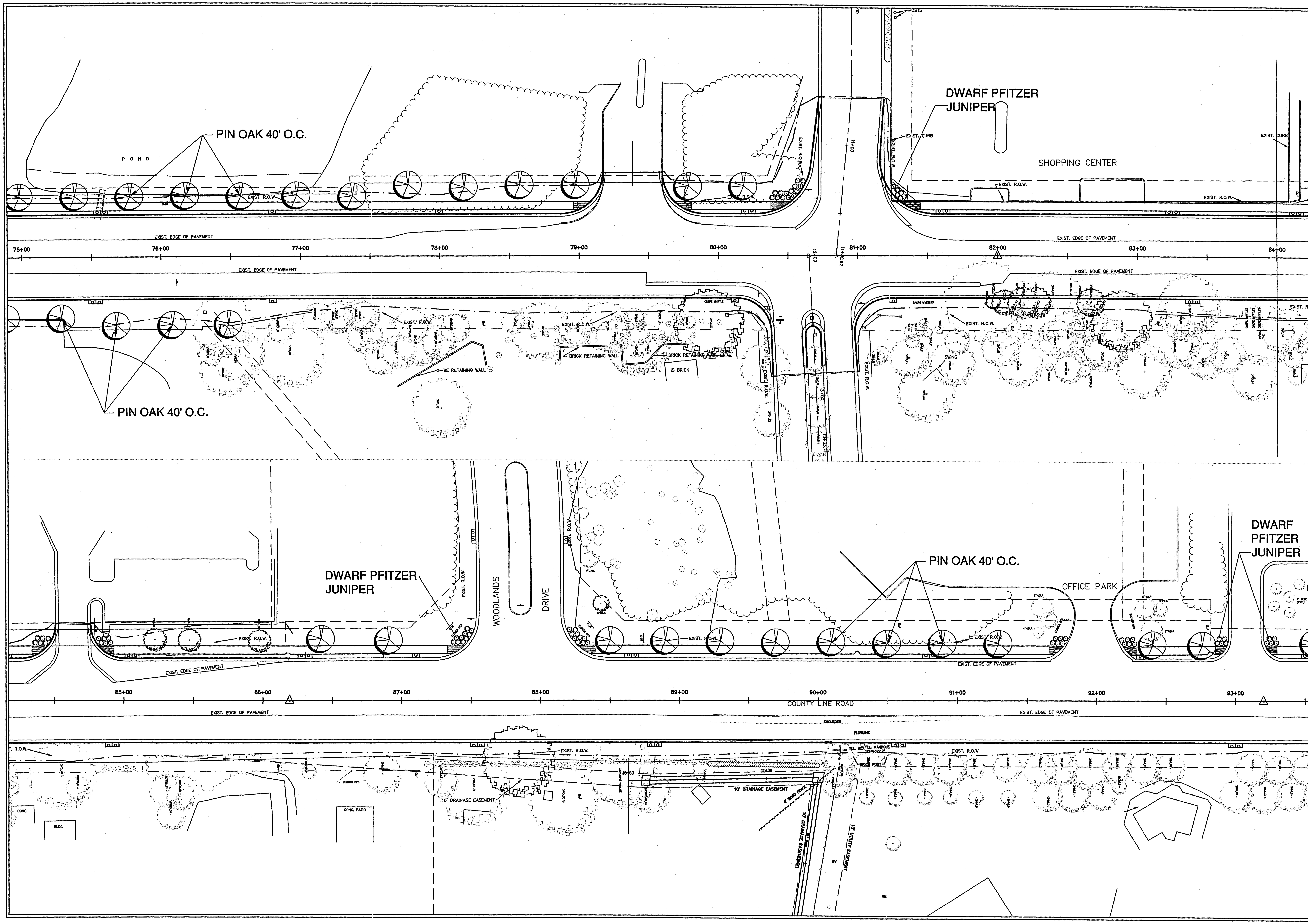
DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: T04-148

DRAWING TITLE:

PLANTING PLAN

SHEET NUMBER:

36



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CITY OF RIDGELAND

WIDENING OF EAST COUNTY LINE ROAD

STP-7305-00(003)

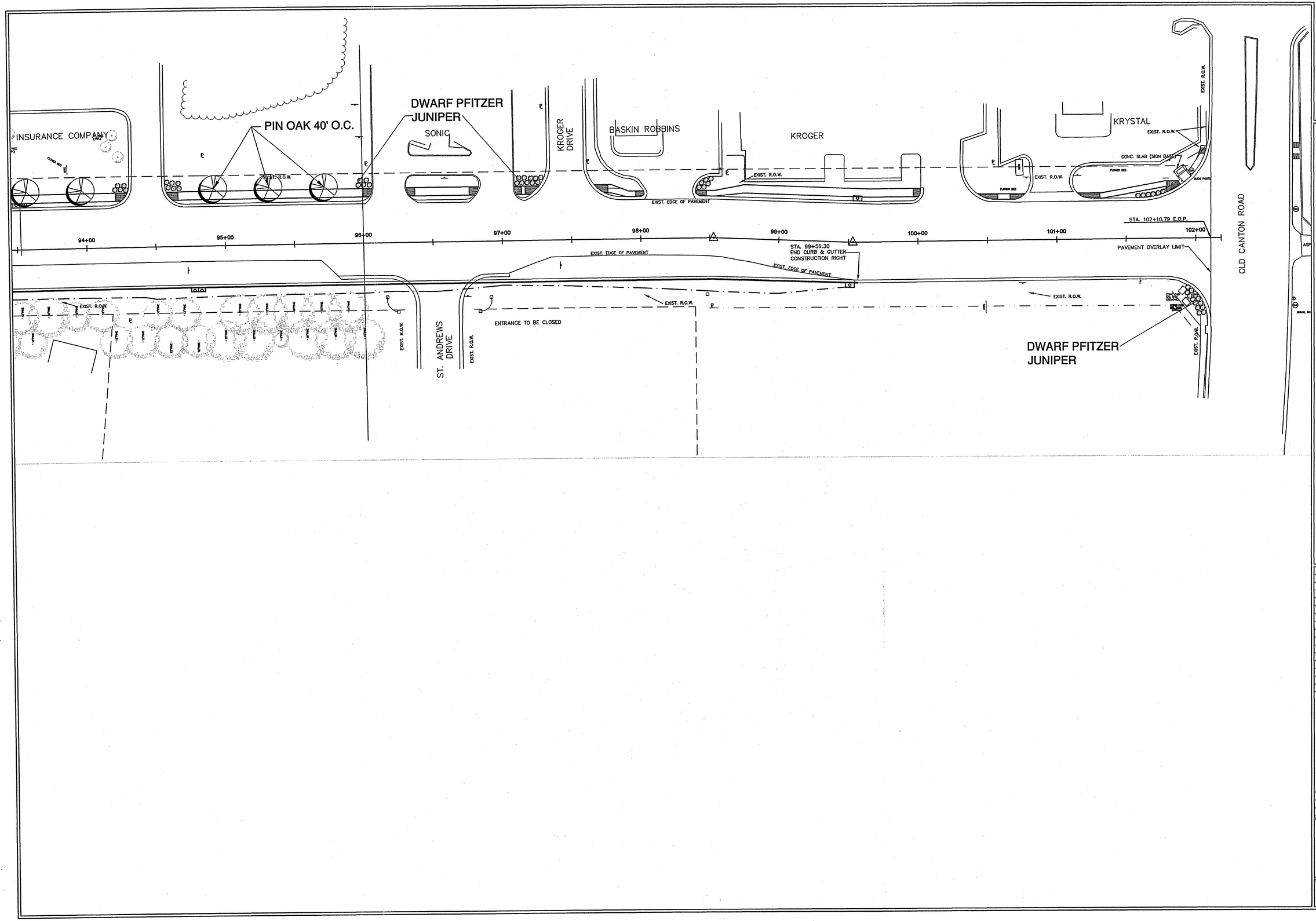
DRAWING REVISIONS		
NO.	REMARKS	DATE

PLANTING PLAN

DRAWN BY: | SCALE: 1" = 30'
DESIGNED BY: | DATE: 2-03-05
CHECKED BY: SW | PROJECT: T04-148

DRAWING TITLE: PLANTING PLAN

SHEET NUMBER: 37



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CITY OF RIDGELAND

WIDENING OF EAST COUNTY LINE ROAD

STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

PLANTING PLAN

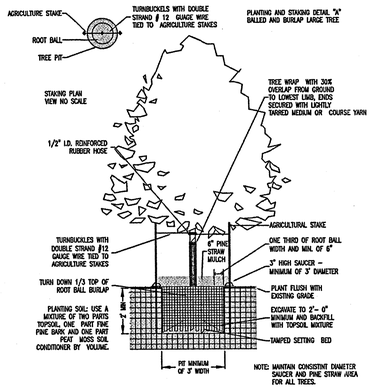
DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: 784-148

DRAWING TITLE:

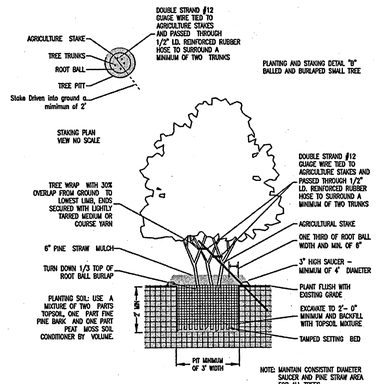
PLANTING PLAN

SHEET NUMBER:

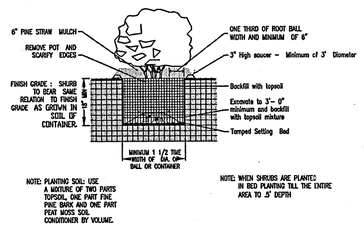
38



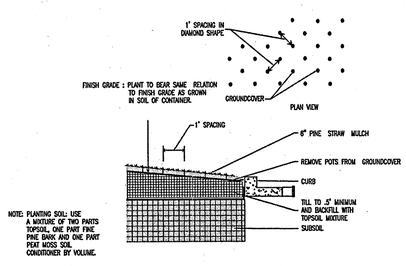
PLANTING METHOD "A"
N.T.S.



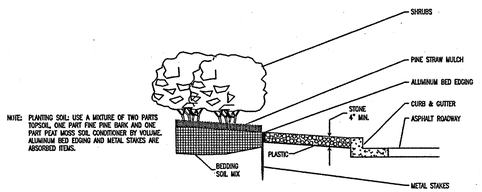
PLANTING METHOD "B"
N.T.S.



PLANTING METHOD "C"
N.T.S.



PLANTING METHOD "D"
N.T.S.



PLANTING METHOD "E"
N.T.S.

PLANT MATERIALS LIST

TITLE		TOTALS NUMBER	COMMON NAME	SCIENTIFIC NAME	PLANTING DETAIL	SPACING	SIZE
TREES		138	PIN OAK	GUERCUS PALUSTRIS	A	AS NOTED ON PLAN	10 TO 12' HEIGHT, 1 1/2'" TO 2" CALIPER
		64	CREPE MYRTLE	LARGERSTROEMIA INDICA	A	AS NOTED ON PLAN	8'-10'
SHRUBS		475	DWARF PFITZER JUNIPER	JUNIPERUS CHINENSIS' PFITZERANA'	C	5 GALLON 18" HEIGHT & SPREAD	
		72	FLORIDA JASMINE		C		

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

DRAWN BY:
SCALE:
DESIGNED BY:
DATE: 2-03-05
CHECKED BY: SW
PROJECT: 194-148

DRAWING TITLE:

LANDSCAPE DETAIL

SHEET NUMBER:

39

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WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: 194-148

DRAWING TITLE:

STORMWATER POLLUTION PREVENTION PLAN

SHEET NUMBER:

40

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CITY OF RIDGELAND

WIDENING OF EAST COUNTY LINE ROAD

STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

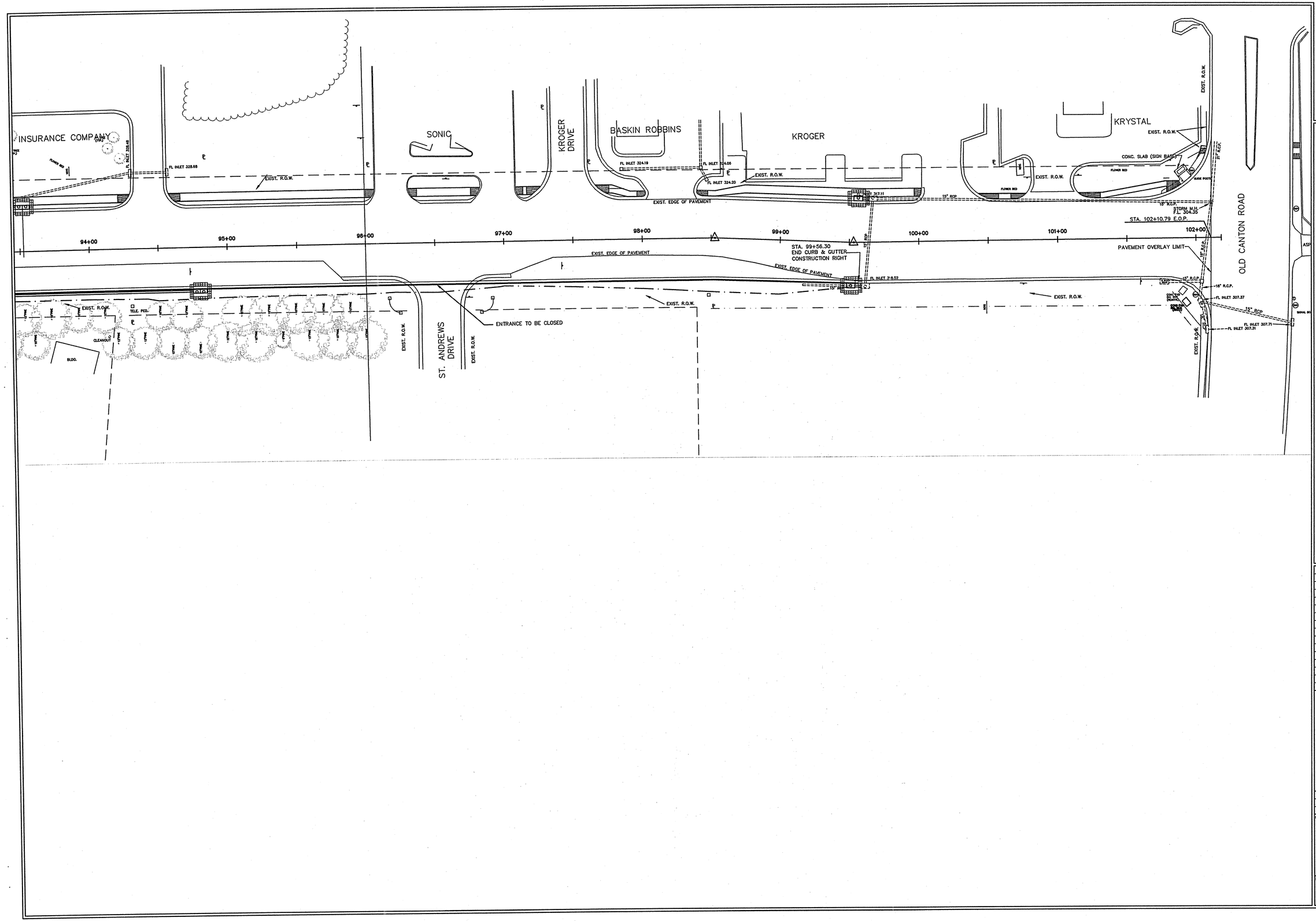
DRAWN BY:	SCALE: 1" = 30'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: 94148

DRAWING TITLE:

STORMWATER POLLUTION PREVENTION PLAN

SHEET NUMBER:

41



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CITY OF RIDGELAND

WIDENING OF EAST COUNTY LINE ROAD

STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

DRAWN BY:		SCALE:	1" = 30'
DESIGNED BY:		DATE:	2-03-05
CHECKED BY:	SW	PROJECT:	84148

DRAWING TITLE:

STORMWATER POLLUTION PREVENTION PLAN

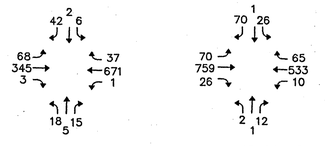
SHEET NUMBER:

42

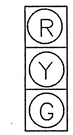
LEGEND

- TYPE 1 PULLBOX
- TYPE 2 PULLBOX
- TYPE 3 PULLBOX
- VEHICLE LOOP DETECTOR
- CONDUIT RUN
- 6A — TYPE 6 HEAD
- P.B. — PEDESTRIAN PUSH BUTTON
- S.C. — SHIELDED CABLE
- 5/c — 5 CONDUCTOR SIGNAL CABLE – AWG #14
- TRAFFIC SIGNAL HEAD w/BACKPLATE
- OR — OVERHEAD SIGN / STREET NAME SIGN
- NEW MAST ARM POLE
- LUM — STREET LIGHT CABLE
- LUMINAIRE

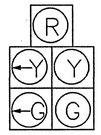
TURNING MOVEMENT COUNTS 1996



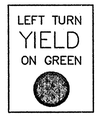
SIGNAL HEADS & SIGNS



3 SECT. HEAD W/ BACKPLATES TYPE 1 12" ①



5 SECT. HEAD W/ BACKPLATES TYPE 7 12" ⑦



R10–12 (30" X 36") Ⓐ

TBM
SW COR. CONC. SIDEWALK
81.5' LT. STA. 57+20
ELEV. 349.278

TBM
NAIL IN BASE 22" PINE
129' LT. STA. 60+27
ELEV. 341.56

-N-

PEAR ORCHARD ROAD

EXISTING SIGNAL POLE

2" PVC REQ'D. 1–7/c 1–LUM

TYPE 3 PULLBOX REQ'D

2" PVC REQ'D. 1–SC

SIDEWALK REQ'D.

EXIST. R.O.W.

TYPE 1 PULLBOX

FUTURE TURN LANE

GRATE INLET

SIGNAL PULL BOX (REMOVE)

SIG. PULL BOX (REMOVE)

EXIST. EDGE OF PAVEMENT

1 5/c 3 S.C. REQ'D. 1 S.C.(PULLWIRE) 1–LUM

NEW LOOPS REQ'D

56+47.61

57+00

58+00

59+00

N 89°11'42" E

60+00

61+00

REMOVE

178°45'52"

3" STEEL CASING (JACKED)

2 5/c 3 S.C. REQ'D. 2–4" P.V.C. REQ'D. 1–LUM

CONC. PAD SIG. BOX

2 5/c 3 S.C. REQ'D. 1 S.C.(PULLWIRE) 1–LUM

EXISTING SIGNAL POLE

EXISTING SIGNAL POLE P.B. REQ'D.

2" P.V.C. 1 5/c REQ'D.

TYPE 3 PULLBOX REQ'D

BANK

SHOPPING CENTER

SIDEWALK REQ'D.

SHOPPING CENTER

18"CULVERT

CONCRETE

GAS

DETECTOR ASSIGNMENT SUMMARY					
DETECTOR NUMBER	LOOP SIZE	NUMBER OF TURNS	PHASE CALLED	PRESENCE MODE	PULSE MODE
1	6'x 50'	2–4–2	1	X	
6A, 6B	6'x 50'	2	2	X	
6C, 6D	6'x 6'	3	2		X

SIGNAL POLE CHART		LOCATION (FROM POLE – FT)	
LOCATION	MAST ARM LENGTH	SIGNAL HEADS	SIGNS
NE QUADRANT	45'	33', 45'	42'

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP–7305–00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

DRAWN BY:
SCALE: 1"=20'
DESIGNED BY:
DATE: 2–03–05
CHECKED BY: SW
PROJECT: TB4–148

DRAWING TITLE:

PEAR ORCHARD ROAD TRAFFIC SIGNAL PLAN

SHEET NUMBER:

43

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

LEGEND

- TYPE 1 PULLBOX
- TYPE 2 PULLBOX
- TYPE 3 PULLBOX
- VEHICLE LOOP DETECTOR
- CONDUIT RUN
- S.C. SHIELDED CABLE

-N-

FARM BUREAU

FARM B

CABLE BOX

GATE BOX

GATE SWITCH

2-4" PVC REQ'D.
8-SC

NEW LOOPS REQ'D

TEMPORARY CONSTRUCTION EASEMENT

PROPOSED RIGHT OF WAY

TYPE 2 PULLBOX REQ'D

SIGNAL POLE (BY OTHERS)

330' FROM INTERSECTION

CONTROLLER AND CABINET (BY OTHERS)

SIDEWALK REQ'D.

EXIST. R.O.W.

TYPE 1 PULLBOX

FLOWER BED

12" OVERHEAD POWER

FIP

M.H. F.L. 330.58

M.H. F.L. 333.83

12"
1-SC (PULLWIRE)
2-SC
2" STEEL
CONDUIT REQ'D. (JACKED)

TYPE 3 PULLBOX

2" PVC
1- S.C.

EXIST. EDGE OF PAVEMENT

SIGNAL POLE (BY OTHERS)

68+00 69+00 70+00 71+00 72+00 73+00 74+00

S 89°34'10" E

3" STEEL
CONDUIT REQ'D.
4-SC
1-SC (PULLWIRE)

1-SC (PULLWIRE)
2-SC
2" STEEL
CONDUIT REQ'D. (JACKED)

8"

UNDERGROUND POWER

PP

O FLAG POLE

EWALK REQ'D.

TYPE 1 PULLBOX

PROPOSED RIGHT OF WAY

TEMPORARY CONSTRUCTION EASEMENT

330' FROM INTERSECTION

2" PVC REQ'D.
1-SC

TYPE 2 PULLBOX

SIGNAL POLE (BY OTHERS)

EXIST. R.O.W.

NORTHPOINTE PARKWAY

NEW LOOP REQ'D

TEMPORARY CONSTRUCTION EASEMENT

PROPOSED RIGHT OF WAY

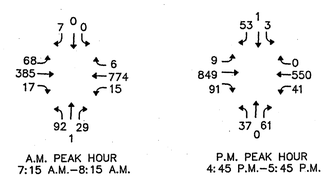
SIGNAL POLE (BY OTHERS)

TYPE 2 PULLBOX

NEW LOOPS REQ'D

DETECTOR ASSIGNMENT SUMMARY					
DETECTOR NUMBER	LOOP SIZE	NUMBER OF TURNS	PHASE CALLED	PRESENCE MODE	PULSE MODE
1	6'x 50'	2-4-2	1	X	
2A, 2B	6'x 6'	3	2		X
4A, 4B	6'x 22'	2	4	X	
5	6'x 50'	2-4-2	5	X	
6A, 6B	6'x 6'	3	6		X
8A, 8B	6'x 50'	2	8	X	

NOTE: THE CITY OF JACKSON IS TO CONSTRUCT A SIGNALIZED INTERSECTION UPON THE COMPLETION OF THIS PROJECT.



A.M. PEAK HOUR
7:15 A.M.-8:15 A.M.

P.M. PEAK HOUR
4:45 P.M.-5:45 P.M.

TURNING MOVEMENT COUNTS
1997

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

DRAWN BY:	SCALE: 1"= 20'
DESIGNED BY:	DATE: 2-03-05
CHECKED BY: SW	PROJECT: T04-148

DRAWING TITLE:

NORTHPOINTE PARKWAY TRAFFIC SIGNAL PLAN

SHEET NUMBER:

44

LEGEND

- TYPE 1 PULLBOX
- TYPE 2 PULLBOX
- TYPE 3 PULLBOX
- VEHICLE LOOP DETECTOR
- CONDUIT RUN
- S.C. SHIELDED CABLE
- TRAFFIC SIGNAL HEAD w/BACKPLATE
- CONTROLLER AND CABINET
- NEW MAST ARM POLE
- OVERHEAD SIGN / STREET NAME SIGN
- EMERGENCY VEHICLE DETECTOR
- TYPE 6 HEAD
- P.B. PEDESTRIAN PUSH BUTTON
- LUM STREET LIGHT CABLE AWG

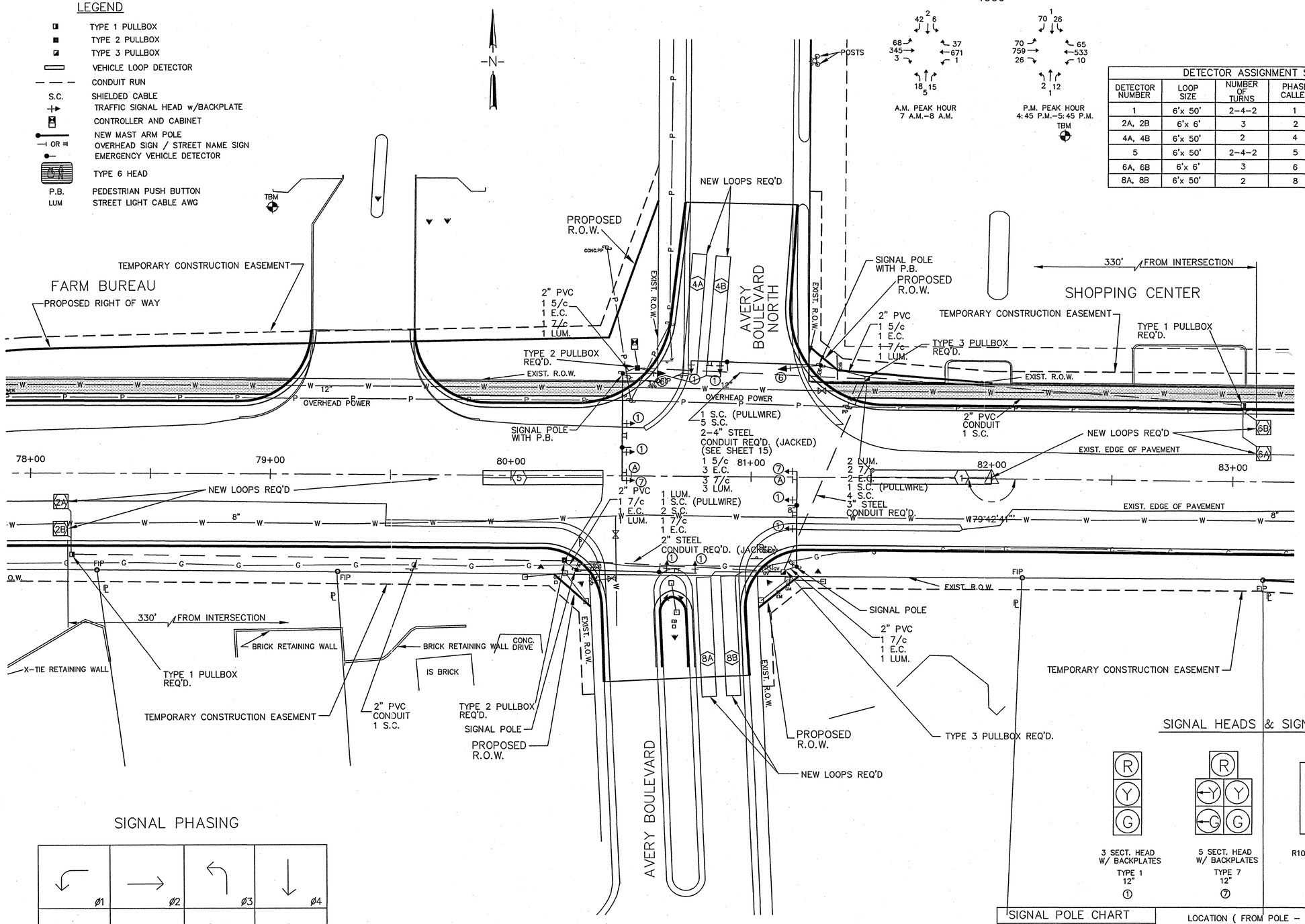
TURNING MOVEMENT COUNTS 1996

A.M. PEAK HOUR 7 A.M.–8 A.M.

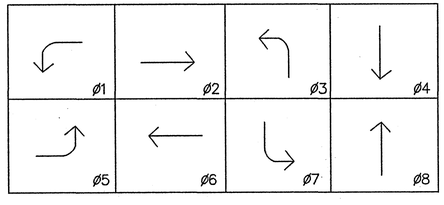
P.M. PEAK HOUR 4:45 P.M.–5:45 P.M.

TBM

DETECTOR ASSIGNMENT SUMMARY					
DETECTOR NUMBER	LOOP SIZE	NUMBER OF TURNS	PHASE CALLED	PRESENCE MODE	PULSE MODE
1	6'x 50'	2–4–2	1	X	
2A, 2B	6'x 6'	3	2		X
4A, 4B	6'x 50'	2	4	X	
5	6'x 50'	2–4–2	5	X	
6A, 6B	6'x 6'	3	6		X
8A, 8B	6'x 50'	2	8	X	



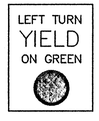
SIGNAL PHASING



SIGNAL HEADS & SIGNS

3 SECT. HEAD W/ BACKPLATES TYPE 1 12" ①

5 SECT. HEAD W/ BACKPLATES TYPE 7 12" ⑦



R10–12 (30" X 36") Ⓐ

SIGNAL POLE CHART		LOCATION (FROM POLE – FT)		
LOCATION	MAST ARM LENGTH	SIGNAL HEADS	EMERGENCY VEHICLE DETECTOR	SIGNS
SW QUADRANT	50'	37', 49'	34'	42'
NW QUADRANT	45'	21', 33', 45'	31'	26', 43'
SE QUADRANT	40'	16', 28', 40'	26'	22', 38'
NE QUADRANT	55'	42', 54'	39'	46'

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CITY OF RIDGELAND

WIDENING OF EAST COUNTY LINE ROAD

WEI# 94148

DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

DRAWN BY:	SCALE: 1" = 20'
DESIGNED BY:	DATE: 2–03–05
CHECKED BY: SW	PROJECT: 194–148

DRAWING TITLE:

AVERY BOULEVARD TRAFFIC SIGNAL PLAN

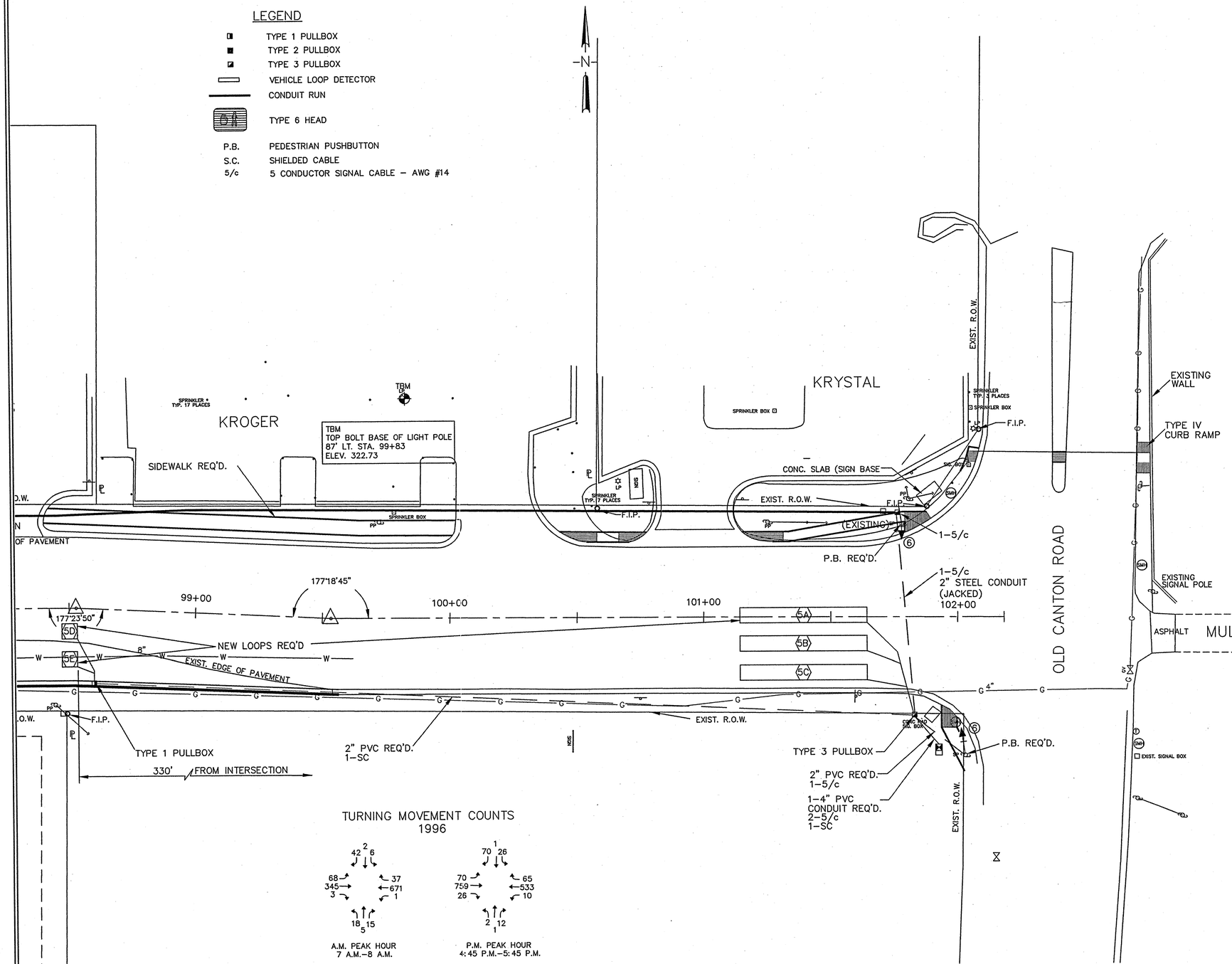
SHEET NUMBER:

45

LEGEND

- TYPE 1 PULLBOX
- TYPE 2 PULLBOX
- TYPE 3 PULLBOX
- VEHICLE LOOP DETECTOR
- CONDUIT RUN
- TYPE 6 HEAD
- P.B. PEDESTRIAN PUSHBUTTON
- S.C. SHIELDED CABLE
- 5/c 5 CONDUCTOR SIGNAL CABLE – AWG #14

DETECTOR ASSIGNMENT SUMMARY					
DETECTOR NUMBER	LOOP SIZE	NUMBER OF TURNS	PHASE CALLED	PRESENCE MODE	PULSE MODE
5A, 5B, 5C	6'x 50'	2	5	X	
5D, 5E	6'x 6'	3	6		X



TURNING MOVEMENT COUNTS
1996

A.M. PEAK HOUR
7 A.M.–8 A.M.

P.M. PEAK HOUR
4:45 P.M.–5:45 P.M.

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
WEI# 94148

DRAWING REVISIONS		
NO.	REMARKS	DATE

SEAL:

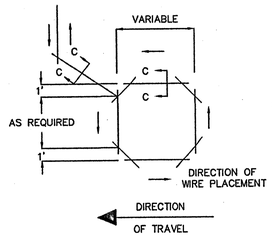
DRAWN BY:	SCALE: 1" = 20'
DESIGNED BY:	DATE: 2-03-06
CHECKED BY: SW	PROJECT: T94-148

DRAWING TITLE:

OLD CANTON ROAD TRAFFIC SIGNAL PLAN

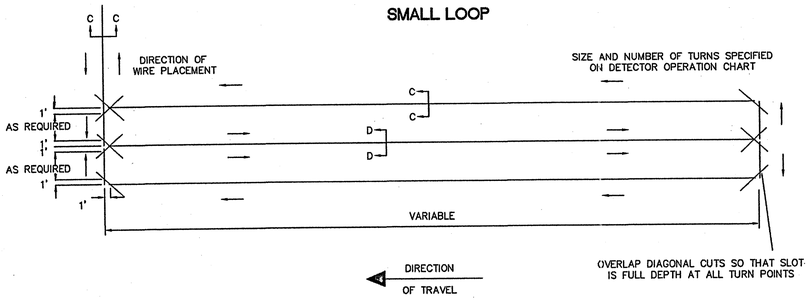
SHEET NUMBER:

46

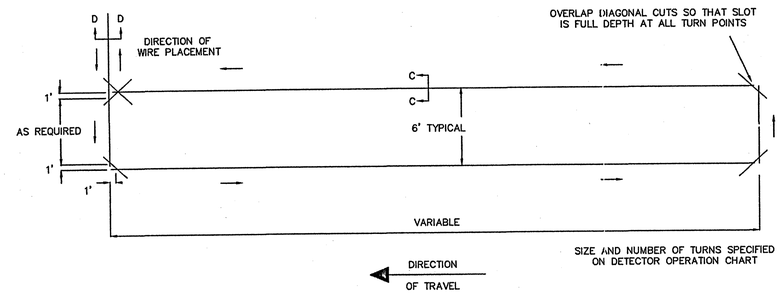


SIZE AND NUMBER OF TURNS SPECIFIED ON DETECTOR OPERATION CHART

SMALL LOOP



QUADRAPOLE LOOP

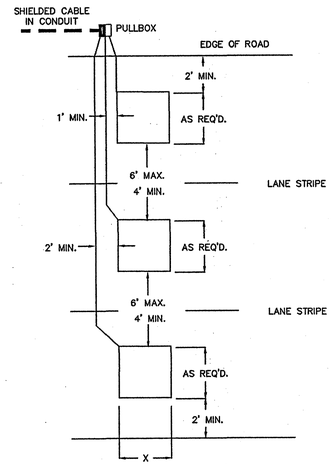


RECTANGULAR LOOP

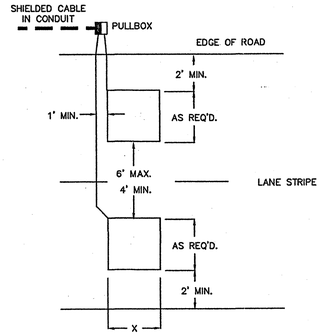
SAW CUT DIAGRAM

SAW SLOT AND LOOP WIRE INSTALLATION PROCEDURES

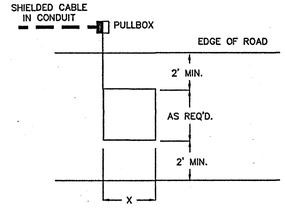
1. CONCRETE PAVEMENT JOINTS SHALL NOT BE USED FOR EITHER LOOP OR FEEDER WIRE. NO LOOPS ARE TO BE INSTALLED THROUGH, OVER, OR UNDER TRANSVERSE CONCRETE JOINTS IN CONCRETE PAVEMENT. NO MANHOLES, INLETS, VALVES, ETC. MAY BE LOCATED WITHIN A LOOP. IF JOINTS OR MANHOLES ARE ENCOUNTERED, THE LOCATION OF THE LOOP MAY BE VARIED SLIGHTLY AS DIRECTED BY THE ENGINEER. IF THE JOINTS OR MANHOLES ARE UNAVOIDABLE, SMALLER LOOPS, THE SIZE TO BE DETERMINED BY THE ENGINEER, MAY BE USED INSTEAD OF ONE LARGER LOOP AND SHALL PROVIDE THE SAME AREA OF COVERAGE AS THE LARGE LOOP. THE SMALLER LOOPS USED TO REPLACE THE ONE LARGE LOOP MAY BE CONNECTED TO ONE DETECTOR AMPLIFIER.
2. WHEN A BEND OR CORNER IS REQUIRED THE SLOTS PRODUCING THE "WOULD-BE" RIGHT ANGLE SHALL NOT OVERLAP.
3. WHEN A BEND OR CORNER IS REQUIRED THE SLOTS PRODUCING THE ANGLES APPROXIMATELY 45° SHALL OVERLAP THE SLOTS IT CONNECTS. THIS IS TO INSURE FULL DEPTH OF SLOTS AT BENDS OR CORNERS.
4. ALL CORNERS OF THE LOOP SHALL BE CUT AT A 45° ANGLE AND HAVE A MINIMUM DIAGONAL LENGTH OF 16".
5. SAW CUTS IN THE PAVEMENT SHALL BE FLUSHED WITH CLEAN WATER UNDER SUFFICIENT PRESSURE TO REMOVE MUD AND SMALL DEBRIS. SAW CUTS SHALL THEN BE DRIED AND CLEANED OF ALL DEBRIS BEFORE INSTALLING THE LOOP WIRE.
6. ONE CONTINUOUS, UNBROKEN LENGTH OF WIRE SHALL BE USED TO FORM A LOOP OF THE NUMBER OF TURNS AS SPECIFIED IN THE PLANS. THE CONTINUOUS RUN SHALL BE FROM THE PULLBOX/CONDULET INCLUDING THE LOOP AND RETURN.
7. ALL WIRE SHALL BE PUSHED INTO THE SAW CUT WITH WOOD STICKS TO INSURE THE INSULATION IS NOT DAMAGED. THE USE OF METAL TOOLS IS NOT PERMITTED.
8. SPLICE BETWEEN LEAD-IN AND SHIELDED CABLE REQUIRED IN PULLBOX OR CONDULET. ALL SPLICES IN THE LEAD-IN WIRE SHALL BE MADE ONLY IN THE PULLBOX OR CONDULET. ALL SPLICES MUST BE CAREFULLY MADE TO INSURE CONSTANT LOW RESISTANCE AND MUST BE INSULATED IN SUCH A MANNER THAT UNDER THE LOCAL PREVAILING CONDITIONS THE INSTALLATION MAINTAINS A RESISTANCE TO GROUND OF NOT LESS THAN 5 MEGOHMS. TO INSURE CONSISTENT LOW RESISTANCE CONNECTIONS, THE SPLICES SHALL BE SOLDERED WITH RESIN FILLED SOLDER AND WATERPROOFED BY SHRINK WRAP OR BY OTHER METHOD APPROVED BY THE ENGINEER. OPEN FLAME SOLDER SHALL NOT BE PERMITTED.
9. WHERE THE WIRES LEAVE THE LOOP, EACH PAIR OF LEAD-IN WIRES MUST BE TWISTED TOGETHER WITH A MINIMUM OF THREE TWISTS PER FOOT.
10. IF THE LEAD-IN IS TAKEN OVERHEAD THE WIRE MUST BE PROTECTED BY CONDUIT (TYPE I) FROM UNDERGROUND TO SPAN.
11. WHEN A PULLBOX IS NOT USED IN THE LEAD-IN (THE WIRE WHICH CONNECTS THE SENSING LOOP TO THE DETECTOR AMPLIFIER), THE LOOP WIRE SHALL BE TWISTED A MINIMUM OF THREE TURNS PER FOOT FROM THE LOOP TO THE DETECTOR AMPLIFIER.



THREE LANE COVERAGE

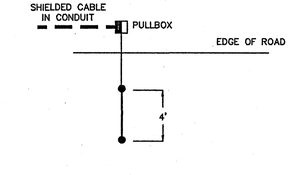


TWO LANE COVERAGE



ONE LANE COVERAGE

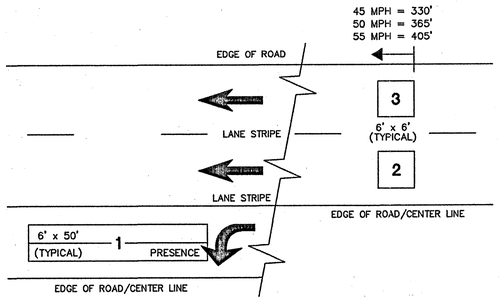
"X" DIMENSION SPECIFIED ON PLANS



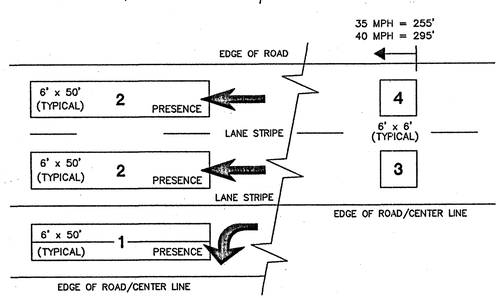
PROBE DETECTOR

TYPICAL LOOP DETECTOR LANE COVERAGE DIAGRAM

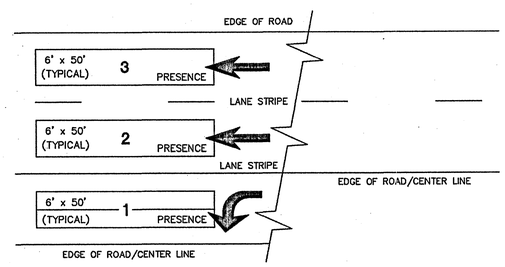
45 MPH or GREATER



35 - 40 MPH



30 MPH or LESS

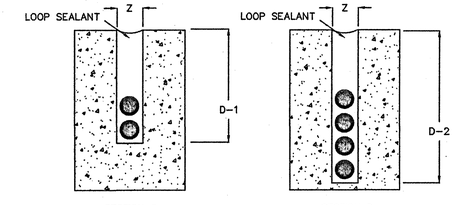


TYPICAL LOOP DETECTOR PLACEMENT DIAGRAM

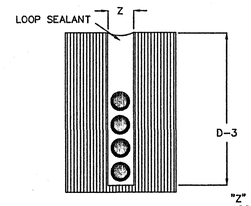
3 = CHANNEL NUMBER

AMP 1-Ø2, AMP 2-Ø4, AMP 3-Ø6, AMP 4-Ø8

MPH IS BASED ON SPEED LIMIT
ALL DISTANCES FROM STOPLINE



LOOP IN CONCRETE



LOOP IN ASPHALT

DEPTH	NUMBER OF WIRES				
	1	2	3	4	6
D-1	1.5"	2.0"	2.0"	2.5"	3.0"
D-2	–	2.0"	2.0"	2.5"	3.0"
D-3	2.0"	2.0"	2.5"	3.0"	3.0"

"Z" DIMENSION SHALL BE WIDE ENOUGH TO ACCOMMODATE LOOP WIRE WITHOUT CHAFING THE INSULATION (5/16" NOMINAL).

SAW SLOT DETAIL

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

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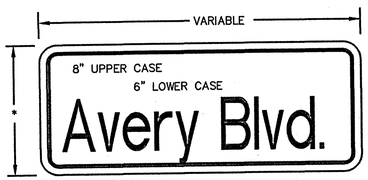
PROJECT: 794-148
DRAWING TITLE:

VEHICLE LOOP/ DETECTOR ASSEMBLY

SHEET NUMBER:

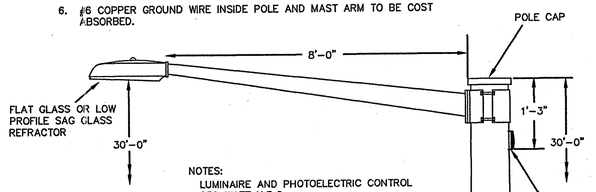
47



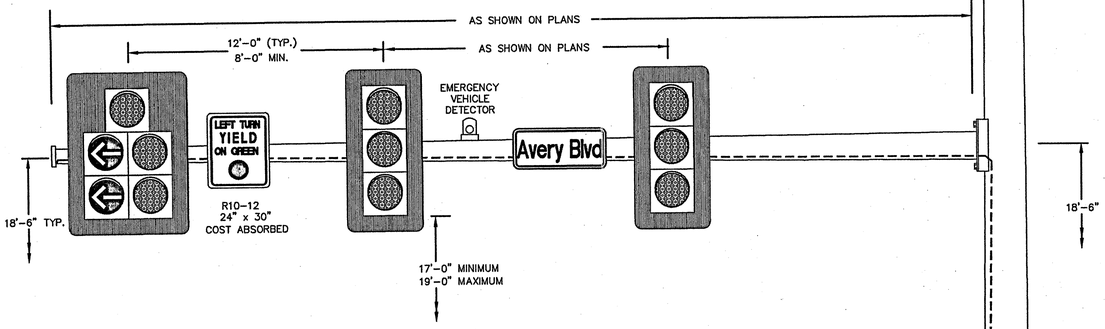
STREET NAME SIGNS (TYPICAL)

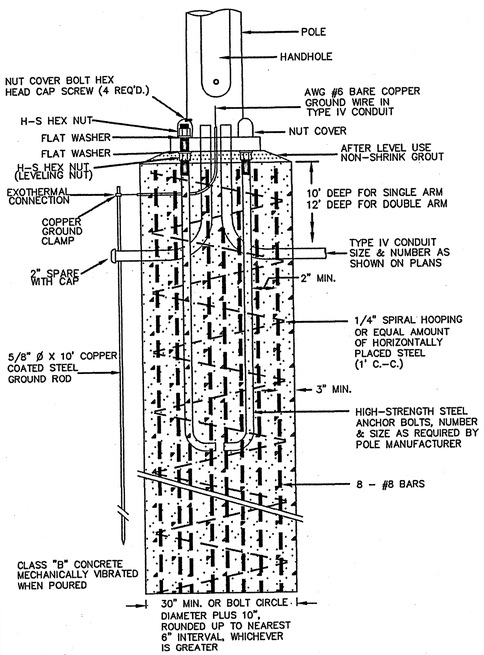
THICKNESS = 0.1"
WHITE ON GREEN SHEETING
8" UPPER CASE, 6" LOWER CASE LETTERS; SERIES "C"
STREET NAME SIGNS REQUIRE A MINIMUM OF 2 MOUNTING BRACKETS (30" MAXIMUM SPACING BETWEEN BRACKETS)

NOTES:
1. WIRE ENTRANCE TO MAST ARM WILL BE FIELD DRILLED TO CORRESPOND TO THE LOCATION OF THE SIGNAL HEADS WHEN ALIGNED IN THE FIELD.
2. ALL SIGNAL HEADS TO BE YELLOW 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.

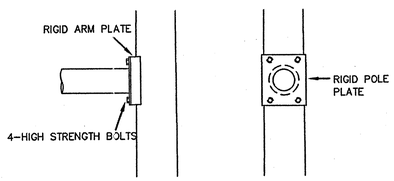


NOTES:
LUMINAIRE AND PHOTOELECTRIC CONTROL 250 WATT H.P.S. LIGHT FIXTURE WITH 250 WATT LAMPS AND PHOTO CELL TO BE PROVIDED BY THE CONTRACTOR. (COST ABSORBED)

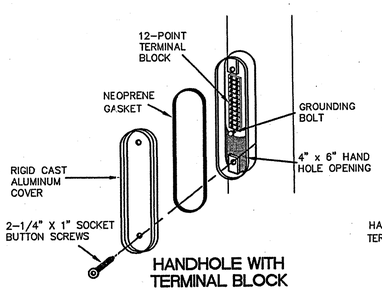




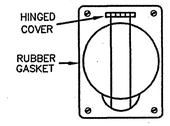
STEEL MAST ARM POLE FOUNDATION DETAIL



MAST ARM ATTACHMENT

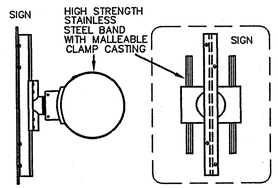


HANDHOLE WITH TERMINAL BLOCK

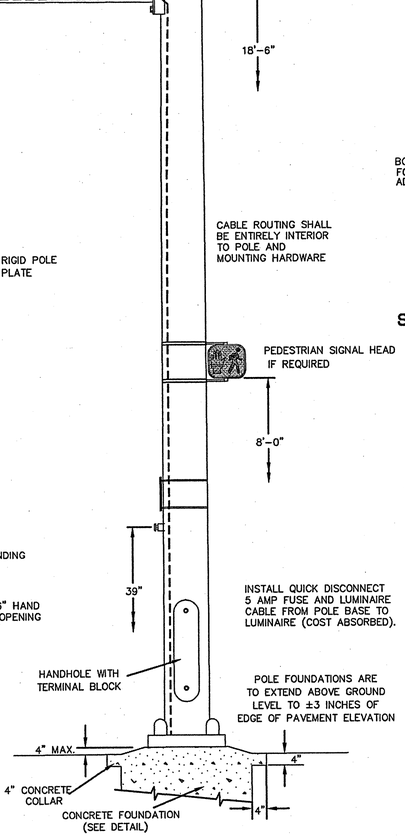


OUTLET BOX WITH SINGLE 15 AMP - 125 VOLT POLARIZED RECEPTACLE (GROUNDING TYPE)

OUTLET

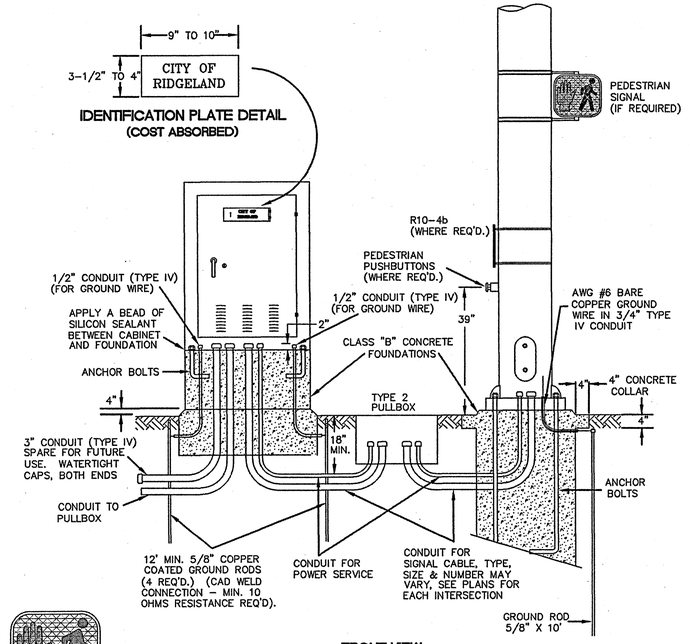


MAST ARM SIGN BRACKET (TYPICAL)



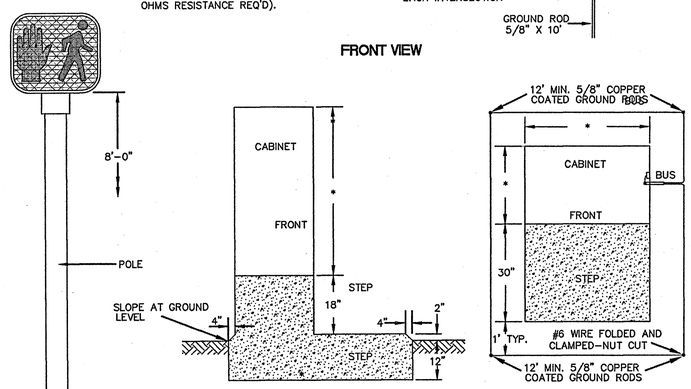
SIGNAL MOUNTING BRACKET (TYPICAL)

STEEL MAST ARM POLE DETAIL



IDENTIFICATION PLATE DETAIL (COST ABSORBED)

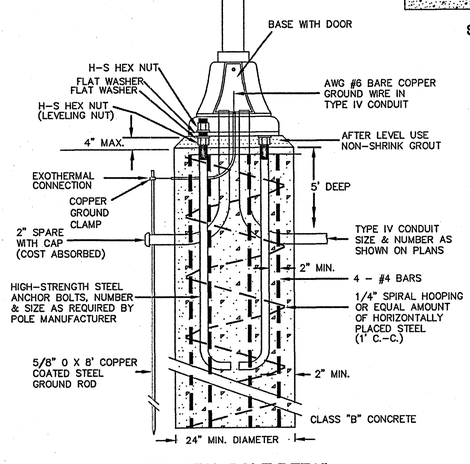
FRONT VIEW



SIDE VIEW TOP VIEW

CONTROLLER BASE DETAIL

* CABINET DIMENSIONS TO MEET SIGNAL CABINET MANUFACTURER'S SPECIFICATIONS.
NOMINAL DIMENSIONS: 8-PHASE - D=26", W=44", H=55"
4-PHASE - D=17", W=30", H=52"



PEDESTAL POLE DETAIL

GENERAL FOUNDATION NOTES

1. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE MANUFACTURER. ANY FOUNDATION FAILING TO MEET THESE DIMENSIONS WILL BE REJECTED.
2. TYPE IV CONDUIT TO BE RUN INTERNALLY FOR CONCRETE AND STEEL POLES; TYPE I CONDUIT RISERS REQUIRED FOR WOOD POLES.
3. DESIGN WIND LOAD FOR POLES SHALL BE 70 MPH.
4. FOUNDATIONS TO BE CLASS "B" CONCRETE, MECHANICALLY VIBRATED WHEN POURING.
5. MINIMUM STEEL POLE FOUNDATION SHALL BE 30" DIA. X 10' DEEP.
6. #6 COPPER GROUND WIRE AND 5/8" DIA. COPPER GROUND ROD REQ'D. FOR ALL POLE FOUNDATIONS. (COST ABSORBED).

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STP-7305-00(003)

DRAWING REVISIONS

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SEAL:

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DESIGNED BY:	DATE: 2-03-05
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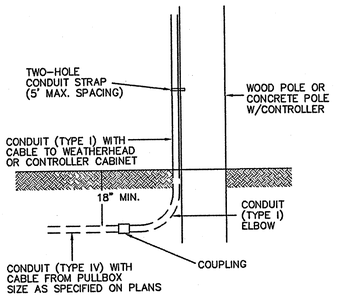
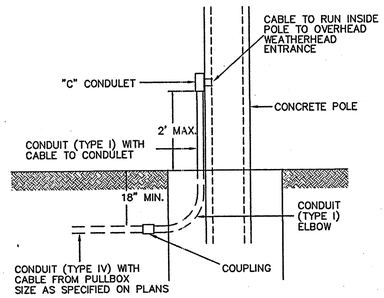
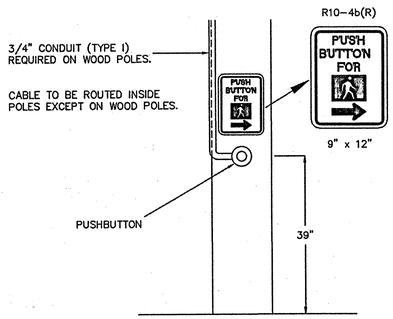
DRAWING TITLE:
SIGNAL POLES AND/ CONTROLLER CABINET

SHEET NUMBER:
48



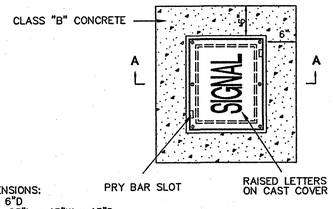


CONDUIT DETAIL AT POLES

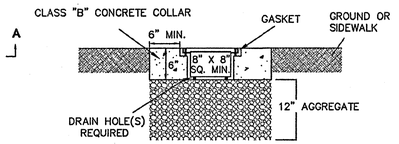


PEDESTRIAN PUSH BUTTON AND SIGN INSTALLATION DETAIL

PULLBOX NOTES:
1. NOMINAL PULLBOX DIMENSIONS:
   TYPE 1 – 8"L x 8"W x 6"D
   TYPE 2 – TOP BODY – 25"L x 15"W x 15"D
   BOTTOM BODY (INSIDE) – 29"L x 18"W
   TYPE 3 – 8"L x 8"W x 6"D
2. GRAVEL, 12" DEEP, IS REQUIRED UNDER PULLBOXES FOR DRAINAGE.
3. CONCRETE COLLAR, 6"W x 6"D, IS REQUIRED FOR PULLBOXES PLACED IN SOIL.
4. TRAFFIC SIGNAL, TRAFFIC OR SIGNAL LEGEND REQUIRED.
5. COVERS SHALL BOLT DOWN.



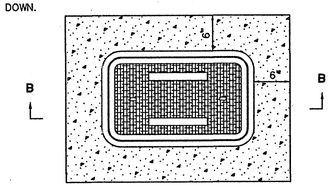
PLAN



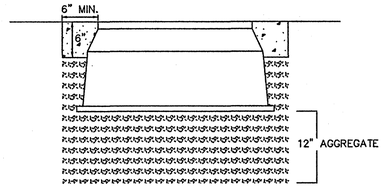
SECTION A-A

TWO-PIECE PULLBOX (TYPE 1)

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



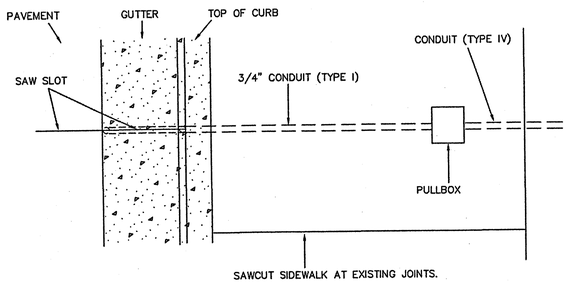
PLAN

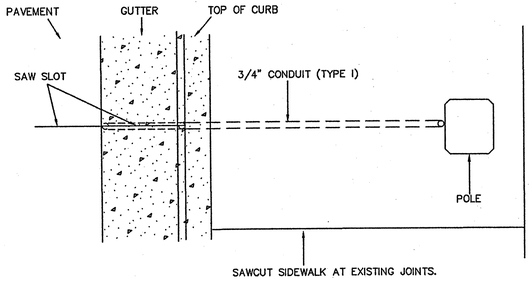


SECTION B-B

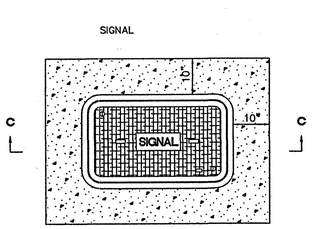
TWO-PIECE PULLBOX (TYPE 2)

PRECAST CLASS "B" CONCRETE, HIGH DENSITY POLYETHYLENE, COMPOSOLITE, OR APPROVED EQUAL

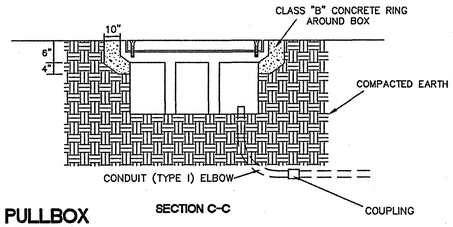




PLAN VIEW - LOOP LEAD-IN CONDUIT



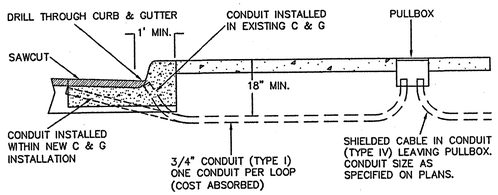
PLAN

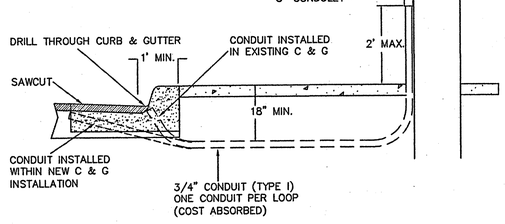


SECTION C-C

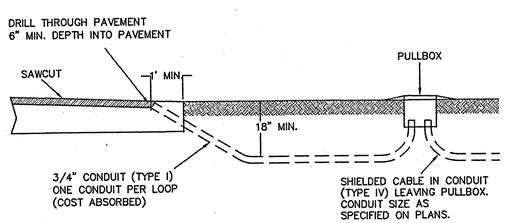
TWO-PIECE PULLBOX (TYPE 3 MODIFIED)

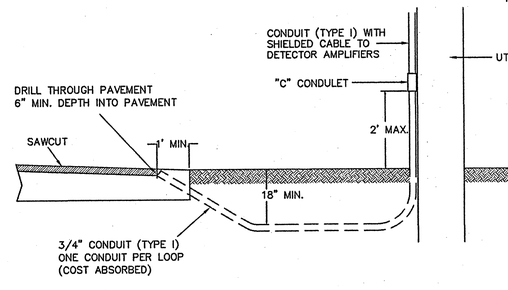
COMPOSOLITE OR APPROVED EQUAL



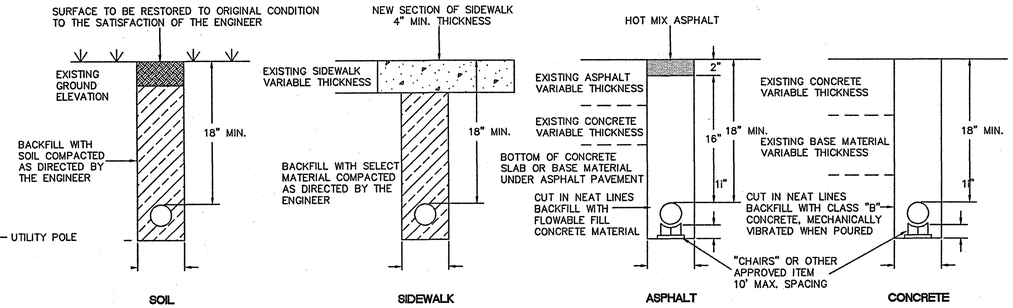


TYPICAL SECTION IN GUTTER AND SIDEWALK





TYPICAL SECTION IN EARTH



CONDUIT TRENCHING DETAIL

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.

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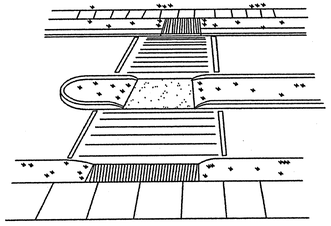
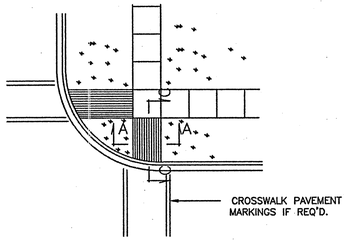
DRAWING TITLE:
CONDUIT, PULLBOX, AND PEDESTRIAN PUSHBUTTON

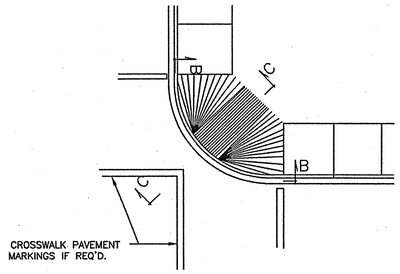
SHEET NUMBER:
49



TRAFFIC ISLAND CUTAWAY



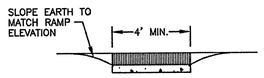
TYPE 1



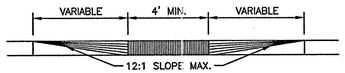
TYPE II

LEGEND

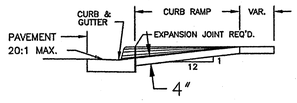
① 1/2" PREMOLDED EXPANSION JOINT
② 1/2" TOOLED CONTRACTION JOINT
③ 4" DEPTH CLASS "C" STRUCTURAL CEMENT (FOR MEDIAN & ISLAND PAVEMENT)
④ 10" DEPTH CLASS "C" STRUCTURAL CEMENT (FOR MEDIAN & ISLAND PAVEMENT)



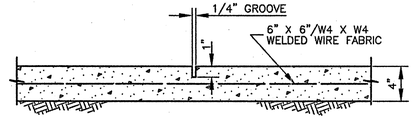
SECTION A–A



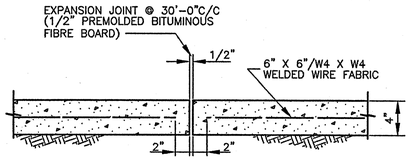
SECTION B–B



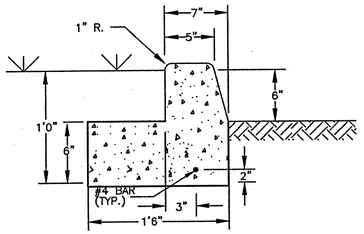
SECTION C–C



SIDEWALK CONTRACTION JOINT DETAIL
N.T.S.



SIDEWALK EXPANSION JOINT DETAIL
N.T.S.

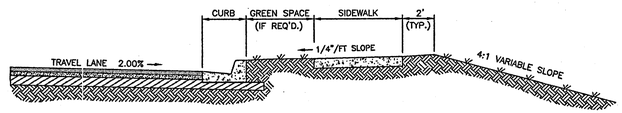


HEADER CURB (MODIFIED) DETAIL
N.T.S.

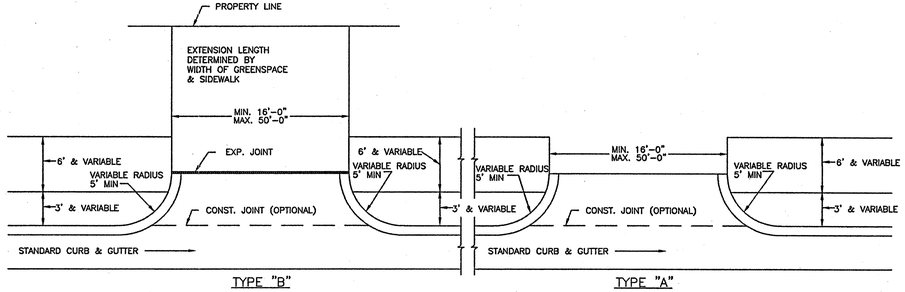
NOTES:
1/2" Expansion Joints Required @ 60' c.c.
2-3/4" Dowel Bars, 15" Long Req'd At All Expansion Joints. They Shall Be Held In Place By Approved Chairs Or Supports, & 1/2" Expansion Materials. 1/4" Contraction Joint Req'd @ 20' c.c..

HANDICAP RAMP DETAILS

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 INCHES.
4. ALL RAMP SLOPES SHALL NOT BE STEEPER THAN 12:1

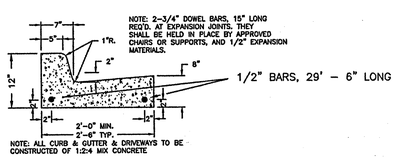


SECTION OF CURB & SIDEWALK

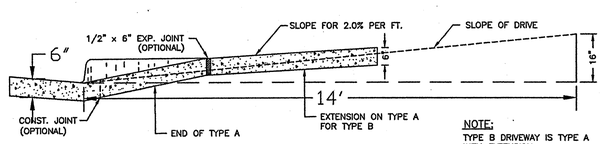


STANDARD DRIVEWAYS

NOTE:
SLOPED HANDICAP RAMPS REQUIRED FOR ALL DRIVEWAYS IF SIDEWALKS ARE PRESENT.



STANDARD CURB AND GUTTER



SECTION ALONG ℄

NOTE:
TYPE B DRIVEWAY IS TYPE A WITH EXTENSION.

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CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

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SCALE:
DATE: 2-03-05
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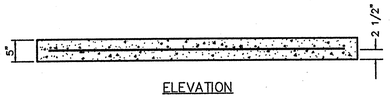
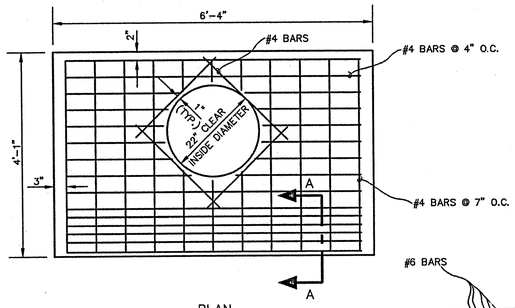
DRAWING TITLE:
STANDARD DETAILS FOR SIDEWALKS AND DRIVEWAYS

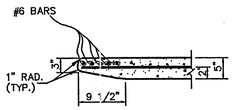
SHEET NUMBER:
50



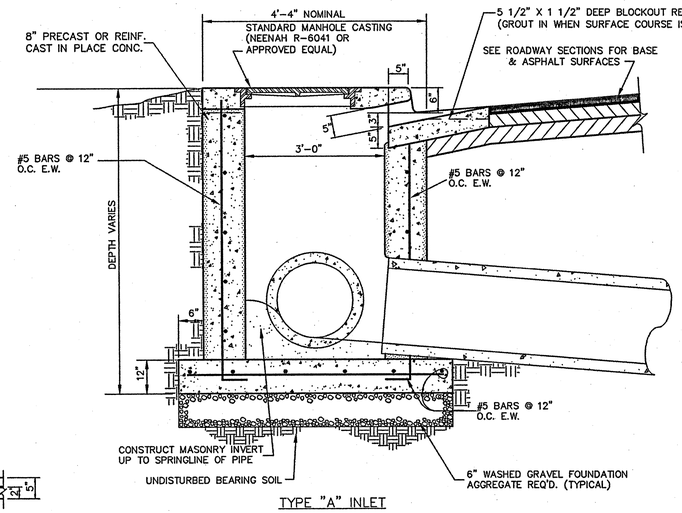
ELEVATION
INLET TOP



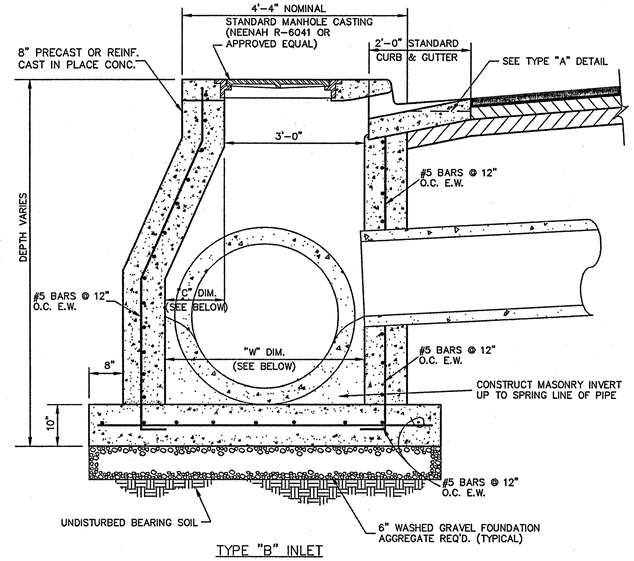
PLAN



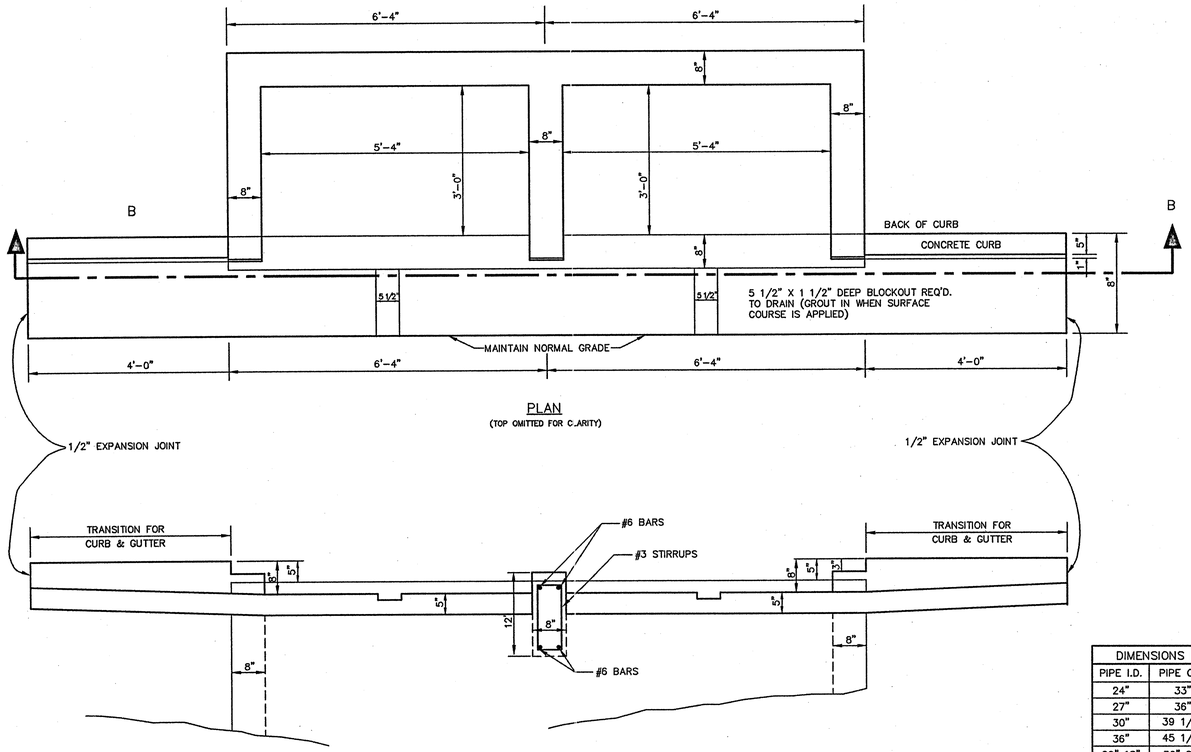
SECTION A-A



TYPE "A" INLET

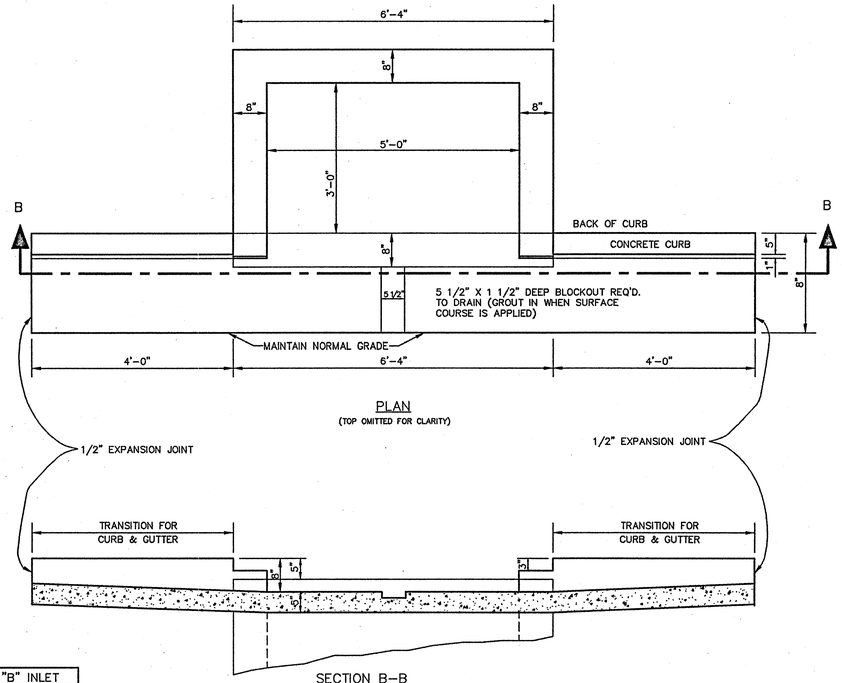


TYPE "B" INLET



PLAN
(TOP OMITTED FOR CLARITY)

SECTION B-B
TYPE "A" AND "B" DOUBLE CURB INLET



PLAN
(TOP OMITTED FOR CLARITY)

SECTION B-B
CURB INLET

DIMENSIONS FOR TYPE "B" INLET			
PIPE I.D.	PIPE O.D.	DIM. "W"	DIM. "C"
24"	33"	37"	1"
27"	36"	40"	4"
30"	39 1/2"	44"	8"
36"	45 1/2"	50"	14"
29"x18"	36"x25"	40"	4"
36"x23"	43"x30"	47"	11"
28"x20"	34"x 26"	38"	2"

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WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

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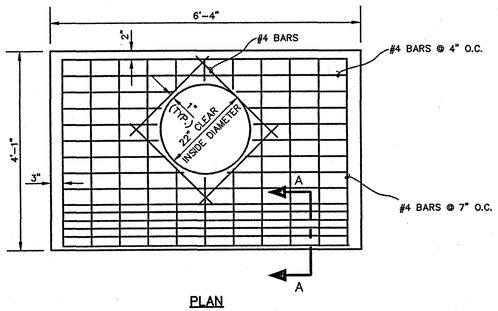
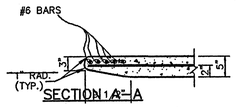
SINGLE & DOUBLE INLET DETAIL

SHEET NUMBER:

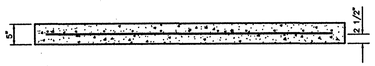
51



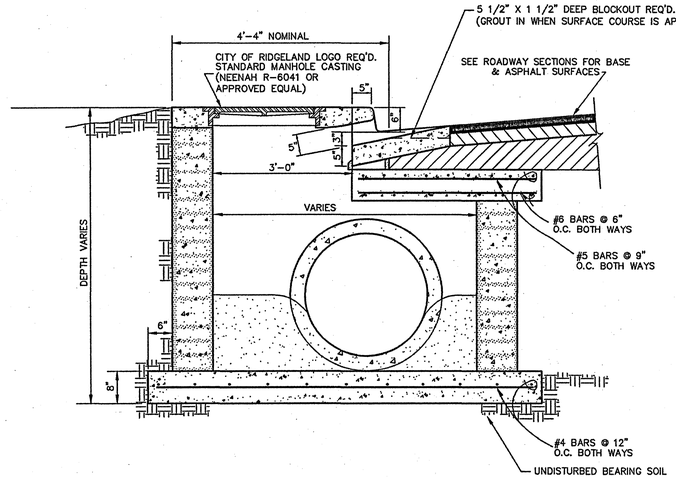
PLAN



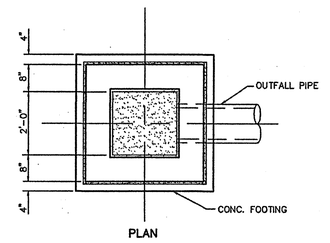
SECTION A-A



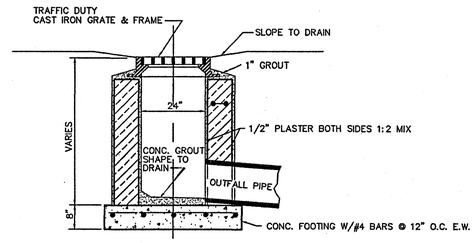
ELEVATION
INLET TOP



TYPE "A" MODIFIED INLET



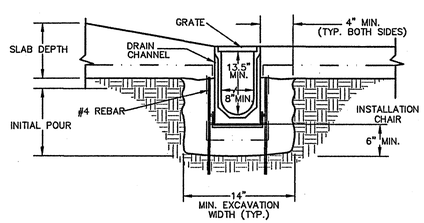
PLAN



ELEVATION

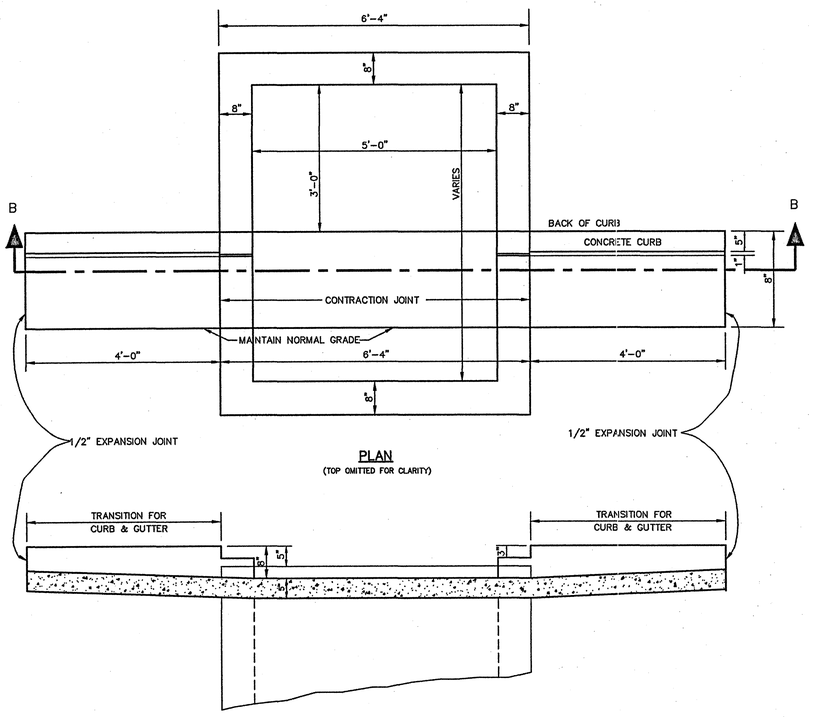
GRATE INLET DETAIL
N.T.S.

DETAIL DRAWING OF UNDERDRAIN AT STA. 61+11 RT.
(SEE SHEET 12)
N.T.S.



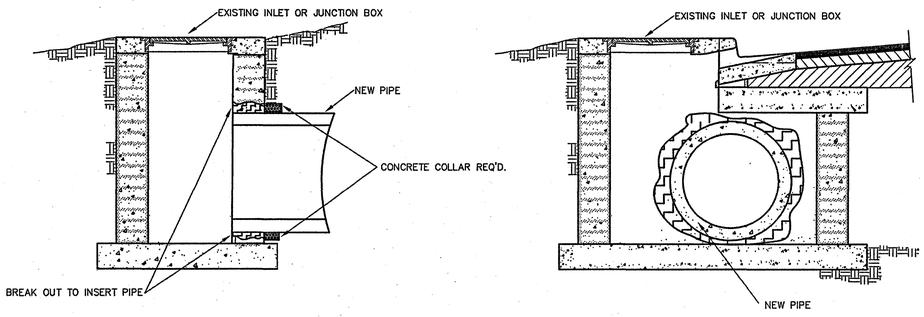
STANDARD INSTALLATION

NOTE: PARALLEL EXPANSION JOINTS SHOULD BE NO CLOSER THAN 6" FROM SIDE OF DRAIN CHANNEL



PLAN
(TOP OMITTED FOR CLARITY)

SECTION B-B
CURB INLET



NEW PIPE ADDITION TO AN EXISTING INLET OR JUNCTION BOX

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STP-7305-00(003)

DRAWING REVISIONS

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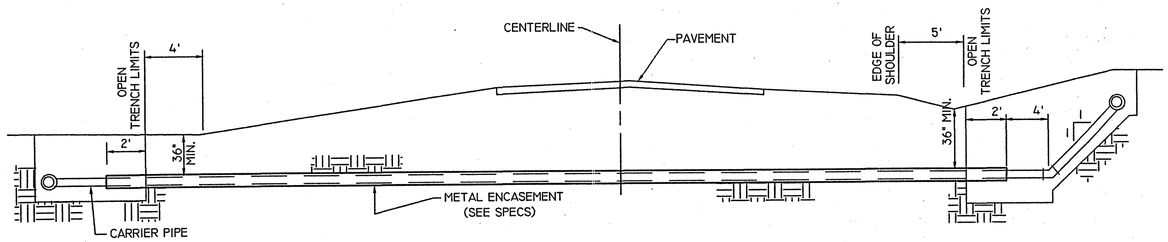
MODIFIED AND GRATE INLET DETAIL

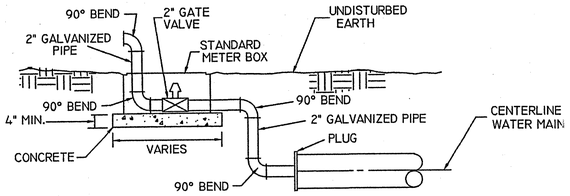
SHEET NUMBER:

52

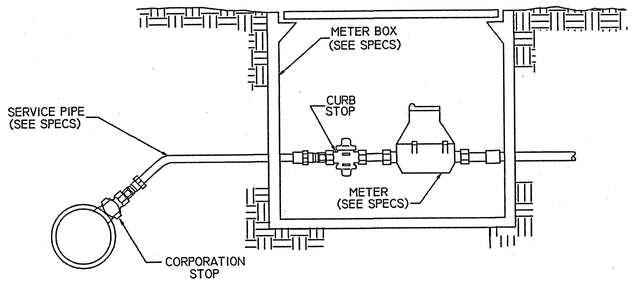


TYPICAL CASED CROSSING

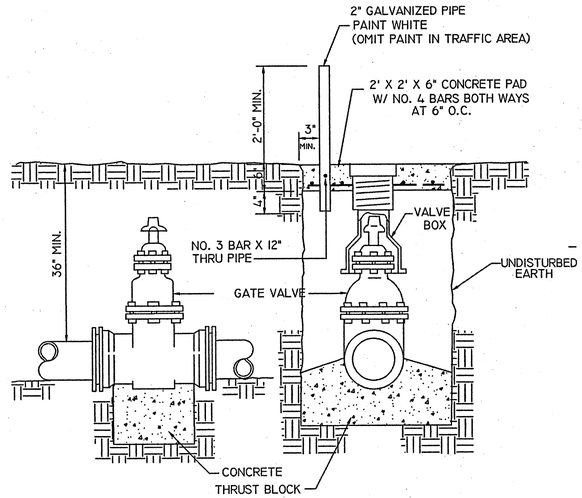
NOTE: COMPENSATION FOR CONCRETE THRUST BLOCKS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR VALVES, FIRE HYDRANTS AND FITTINGS.



TYPICAL 2" BLOW-OFF DETAIL

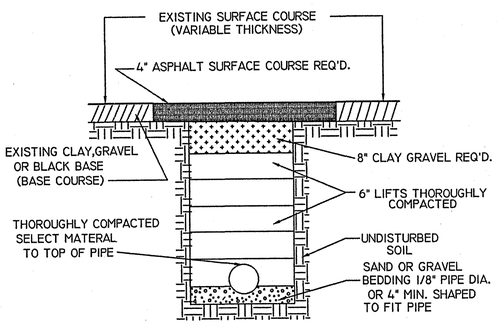


TYPICAL SERVICE ASSEMBLY

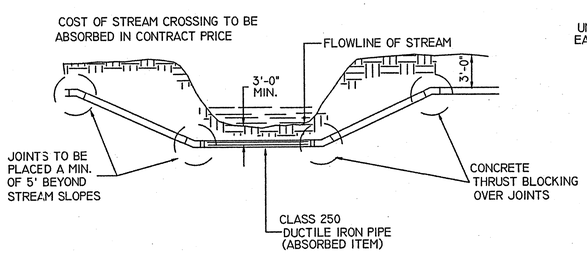


ELEVATION SECTION

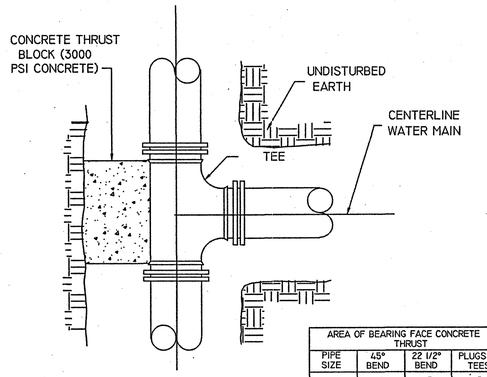
TYPICAL VALVE & BOX



TRENCH DETAIL



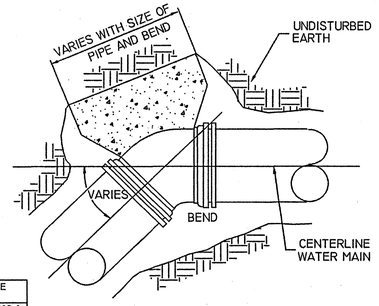
TYPICAL STREAM CROSSING



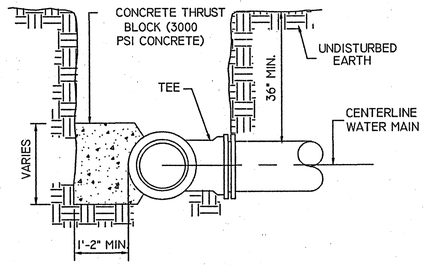
PLAN

AREA OF BEARING FACE CONCRETE THRUST			
PIPE SIZE	45° BEND	22 1/2° BEND	PLUGS & TEES
4-6	3	3	3
8	3	3	3
10	4	3	3
12	6	3	4
16	11	4	7

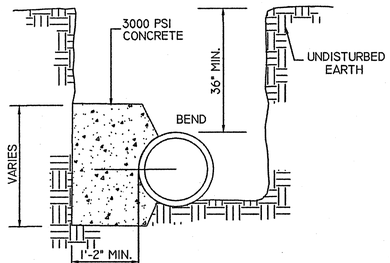
NOTE: AREA OF BEARING FACE IN SQUARE FEET



PLAN

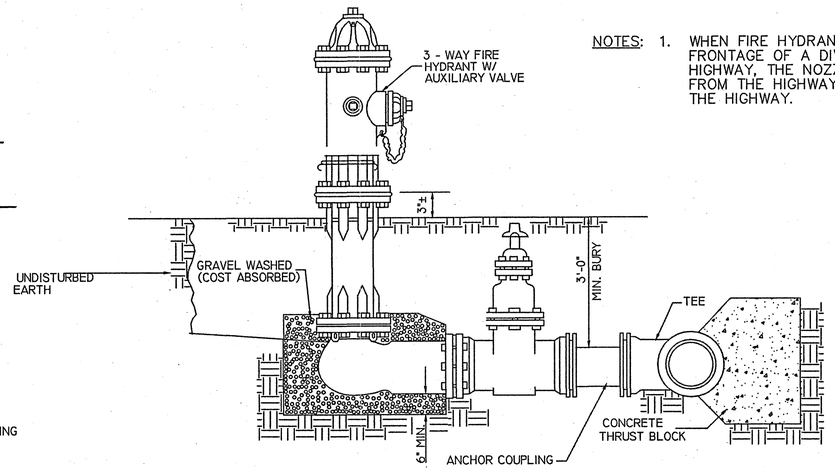


SECTION



SECTION

BLOCKING DETAILS FOR TEES & BENDS



NOTES: 1. WHEN FIRE HYDRANTS ARE PLACED ON THE FRONTAGE OF A DIVIDED OR MULTI-LANE HIGHWAY, THE NOZZLES SHALL FACE AWAY FROM THE HIGHWAY RATHER THAN TOWARD THE HIGHWAY.

TYPICAL FIRE HYDRANT

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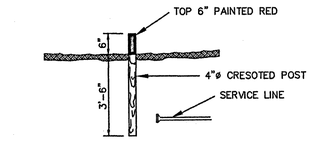
DRAWING TITLE:

STANDARD WATER DETAILS

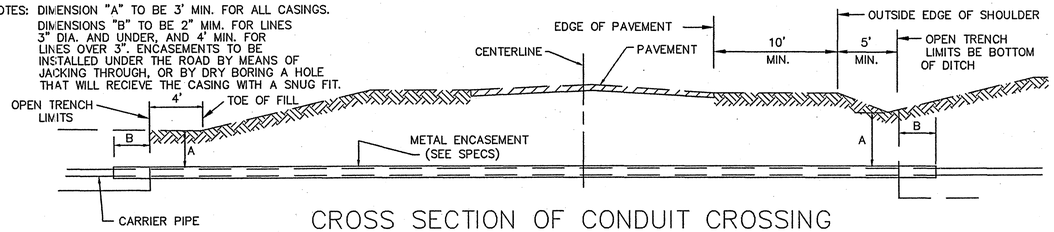
SHEET NUMBER:

53

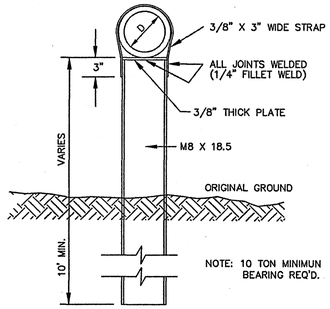


SEWER SERVICE MARKER

NOTES: DIMENSION "A" TO BE 3' MIN. FOR ALL CASINGS.
DIMENSIONS "B" TO BE 2" MIM. FOR LINES 3" DIA. AND UNDER, AND 4' MIN. FOR LINES OVER 3". ENCASEMENTS TO BE INSTALLED UNDER THE ROAD BY MEANS OF JACKING THROUGH, OR BY DRY BORING A HOLE THAT WILL RECIEVE THE CASING WITH A SNUG FIT.

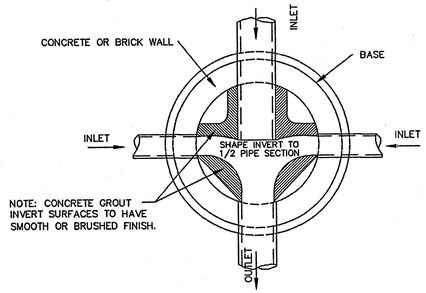


CROSS SECTION OF CONDUIT CROSSING



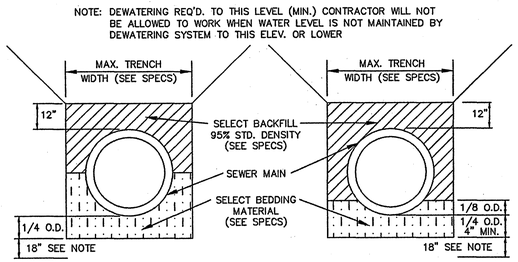
DETAIL

TYPE "A" PIER



PLAN OF MANHOLE

FLOW CHANNELS

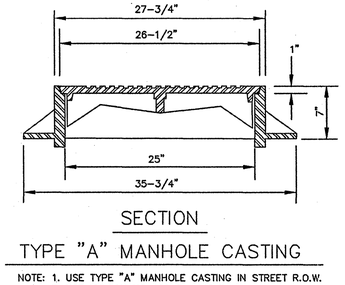


TYPICAL SECTION

CLASS "B" BEDDING

TYPICAL SECTION

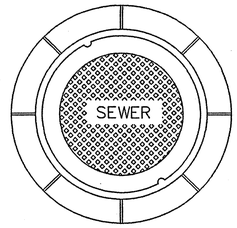
CLASS "C" BEDDING



SECTION

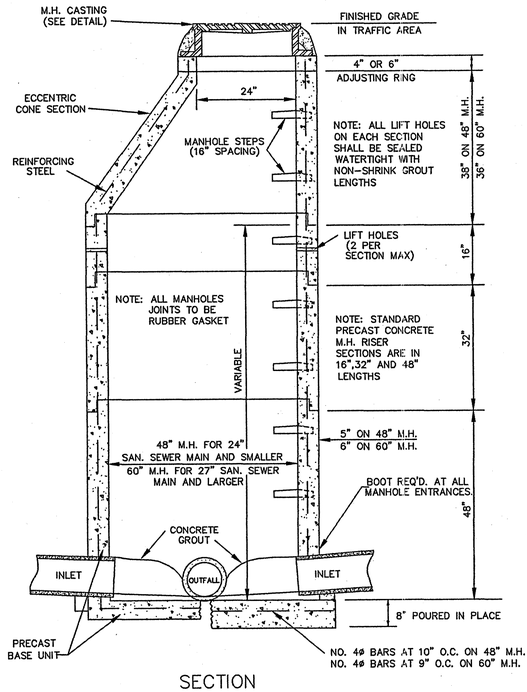
TYPE "A" MANHOLE CASTING

NOTE: 1. USE TYPE "A" MANHOLE CASTING IN STREET R.O.W.
2. USE VULCAN NO. VM-8, (440 lbs.)



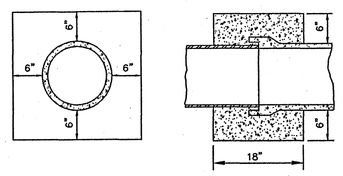
PLAN

MANHOLE CASTING



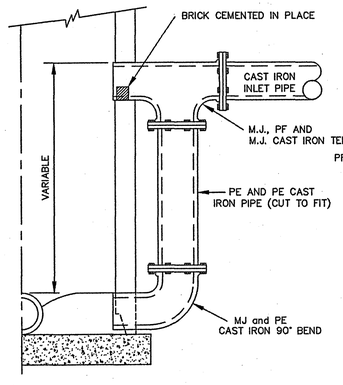
SECTION

PRECAST CONCRETE MANHOLE



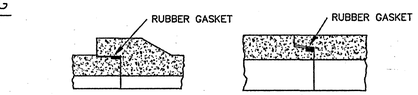
ELEVATION SECTION

CONCRETE COLLAR DETAILS



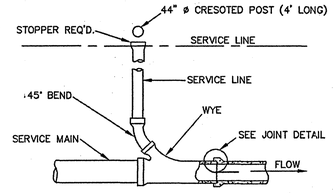
HALF SECTION

MANHOLE WITH DROP SECTION



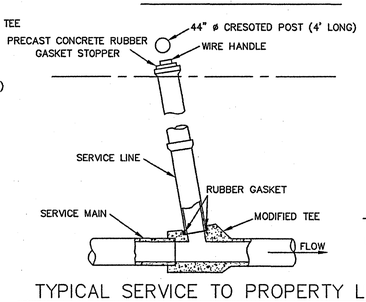
BELL & SPIGOT TONGUE & GROOVE

JOINT DETAILS



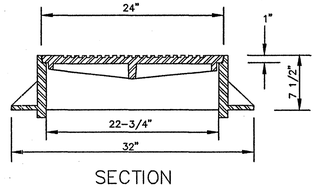
TYPICAL SERVICE TO PROPERTY LINE

WITH WYE JOINT



TYPICAL SERVICE TO PROPERTY LINE

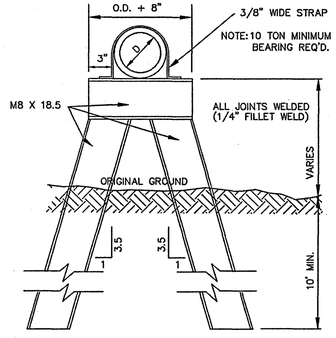
WITH MODIFIED TEE JOINT



SECTION

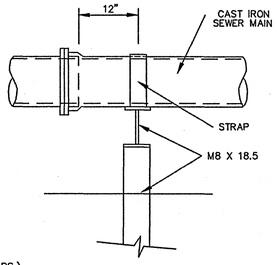
TYPE "B" MANHOLE CASTING

NOTE: 1. USE TYPE "B" MANHOLE CASTING FOR ANY MANHOLE NOT IN A STREET R.O.W.
2. VULCAN NO. VM-7 (300 LBS.) OR NEENAH NO. R-1779 (300 LBS.)



DETAIL

TYPE "B" PIER



SIDE ELEVATION

TYPE "B" PIER

WAGGONER Engineering, Inc.
Engineers, Scientists, Planners
143-A LeFleurs Square
JACKSON, MS 39211
601-355-9526
FAX 601-352-3945

CITY OF RIDGELAND
WIDENING OF EAST COUNTY LINE ROAD
STP-7305-00(003)

DRAWING REVISIONS

NO.	REMARKS	DATE

SEAL:

DRAWN BY:
DESIGNED BY:
CHECKED BY: SW
SCALE:
DATE: 2-03-05
PROJECT: T94-145

DRAWING TITLE:

STANDARD SEWER DETAILS

SHEET NUMBER:

54

STATE	PROJECT NO.
MISS.	

VEGETATION SCHEDULE

	EROSION CONTROL ITEMS		SEASONAL APPLICATIONS-DATES & RATES				REQUIREMENTS
			SPRING & SUMMER		FALL & WINTER		
	PAY ITEM NO.	ITEMS	RATES	DATES	RATES	DATES	
⑦	211-B	TOPSOIL FOR SLOPE TREATMENT (LVM)	4" THICK	MARCH 1 TO SEPTEMBER 1	4" THICK	SEPTEMBER 1 TO MARCH 1	TOPSOIL REQUIRED ON SLOPES DETERMINED BY THE ENGINEER DURING CONSTRUCTION.
	212-B	STANDARD GROUND PREPARATION	PER SQ.YD.	MARCH 1 TO SEPTEMBER 1	PER SQ.YD.	SEPTEMBER 1 TO MARCH 1	GROUND PREPARATION REQUIRED ON AREAS TO RECEIVE SOLID SODDING OR SEEDING, AS APPLICABLE.
	213-A	AGRICULTURAL LIMESTONE	3 TONS/ACRE	MARCH 1 TO SEPTEMBER 1	3 TONS/ACRE	SEPTEMBER 1 TO MARCH 1	LIMESTONE SHALL BE MECHANICALLY SPREAD UNIFORMLY AND INCORPORATED INTO THE SOIL PRIOR TO PLANTING.
	213-B	COMBINATION FERTILIZER (13-13-13)	1000 LBS./ACRE	MARCH 1 TO SEPTEMBER 1	1000 LBS./ACRE	SEPTEMBER 1 TO MARCH 1	FERTILIZER SHALL BE MECHANICALLY SPREAD UNIFORMLY AND INCORPORATED INTO THE SOIL PRIOR TO PLANTING.
①	213-C	SUPERPHOSPHATE	0.5 TONS/ACRE (EST.)	MARCH 1 TO DECEMBER 1			SUPERPHOSPHATE (FOR BID ITEM PURPOSES).
②	214-A	SEEDING (BERMUDAGRASS)	20 LBS./ACRE	MARCH 1 TO SEPTEMBER 1	20 LBS./ACRE	SEPTEMBER 1 TO MARCH 1	SEED REQUIRED ON DISTURBED AREAS. UNHULLED SEED MAY BE REQUIRED DURING THE DORMANT SEASON AS DIRECTED.
③⑤	214-A	SEEDING (TALL FESCUE)			20 LBS./ACRE	AUGUST 1 TO APRIL 1	SEED REQUIRED ON DISTURBED AREAS.
③⑤	214-A	SEEDING (CRIMSON CLOVER)			20 LBS./ACRE	AUGUST 1 TO APRIL 1	SEED REQUIRED ON DISTURBED AREAS.
⑥	215-A	VEGETATIVE MATERIAL FOR MULCH	2 TONS ACRE (EST.)	MARCH 1 TO SEPTEMBER 1	2 TONS/ACRE (EST.)	SEPTEMBER 1 TO MARCH 1	THE ENGINEER WILL DESIGNATE THE RATES OF APPLICATION (SEE SUBSECTION 215.03.3).
	216-A	SOLID SODDING	PER SQ.YD.	MARCH 1 TO SEPTEMBER 1	PER SQ. YD.	SEPTEMBER 1 TO MARCH 1	SOLID SOD REQUIRED ON AREAS SPECIFIED IN THE CONTRACT OR BY THE ENGINEER.
	219-A	WATERING	20 GALS./S.Y. (EST.)	MARCH 1 TO SEPTEMBER 1	20 GALS. S.Y. (EST.)	SEPTEMBER 1 TO MARCH 1	TO BE USED AS DIRECTED IN THE PLANTING AND ESTABLISHING SOLID SOD.
④	220-A	INSECT PEST CONTROL	PER ACRE		PER ACRE		SEE SECTION 220.

① ALL AREAS THAT HAVE BEEN VEGETATED, UNDER THIS CONTRACT FOR AT LEAST (60) SIXTY DAYS, SHALL RECEIVE ADDITIONAL APPLICATION(S) OF FERTILIZER(S) OF THE TYPE(S) AND RATE(S) OF APPLICATIONS AS DETERMINED BY SOIL TESTS OR AS DIRECTED DURING THE GROWING SEASONS THE CONTRACT IS IN FORCE. GROUND PREPARATION WILL NOT BE REQUIRED FOR THE ADDITIONAL APPLICATIONS. PAYMENT FOR ALL FERTILIZERS ACCEPTABLY APPLIED AS AN ADDITIONAL APPLICATION(S) WILL BE MADE IN ACCORDANCE WITH SUPERPHOSPHATE BID ITEM 213-C.

② PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 100% OF THE ACREAGE WILL BE SEEDED.

③ PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 50% OF THE ACREAGE WILL BE SEEDED.

④ QUANTITY ESTIMATED ON THE BASIS 50% OF THE ACREAGE VEGETATED MAY REQUIRE TREATMENT.

⑤ THIS ITEM TO BE OMITTED ON AREAS SELECTED BY THE ENGINEER.

⑥ BAHIAGRASS WILL NOT BE PERMITTED AS A MULCH MATERIAL.

⑦ PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 75% OF THE ACREAGE SEEDED MAY REQUIRE TOPSOIL.

REVISION	BY	DATE

VEGETATION SCHEDULE

WIDENING OF EAST COUNTY LINE ROAD

CITY OF RIDGELAND, MISSISSIPPI

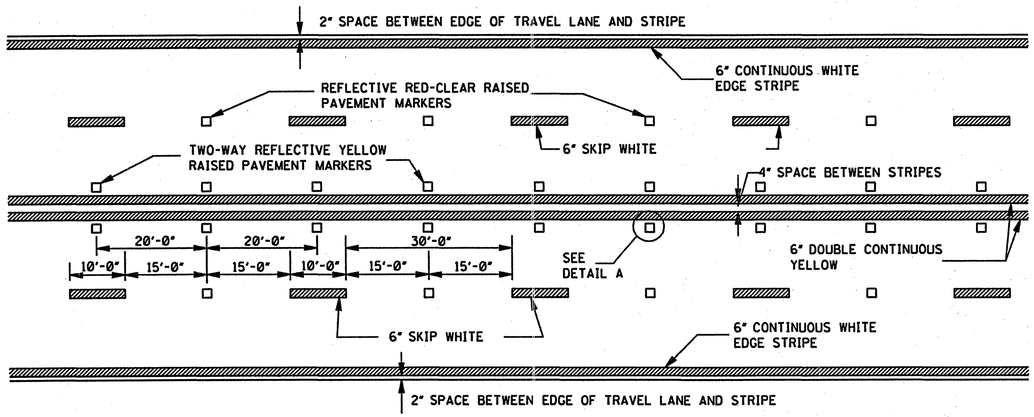
WAGGONER ENGINEERING, INC.
Consulting Engineers – Jackson, Mississippi

DRAWN BY: I.T. DATE 5-25-05
REVIEWED BY: S.W. SCALE 1"=30'

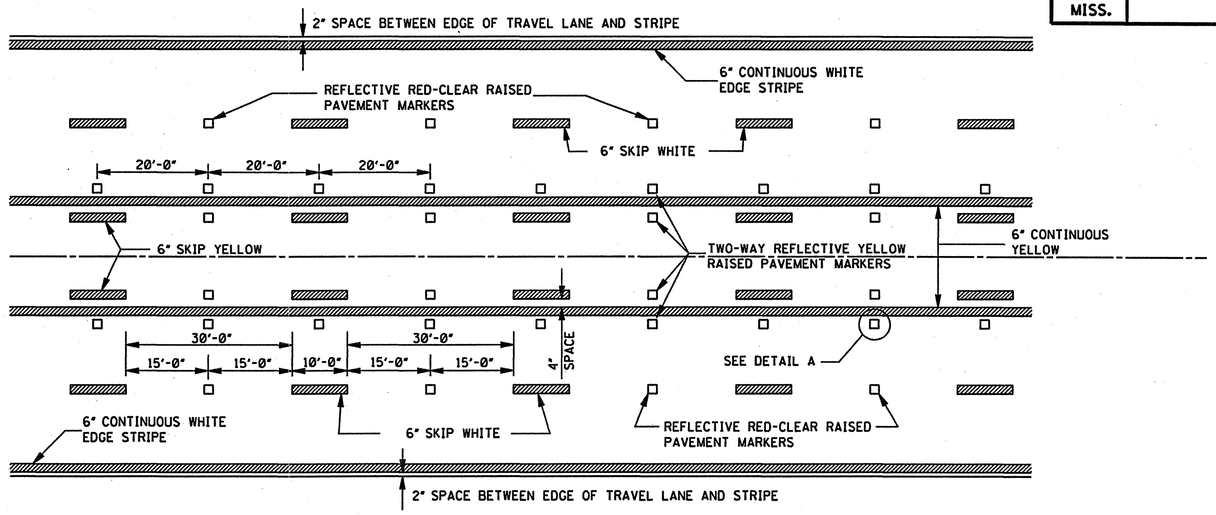
WORKING NUMBER

SHEET NUMBER 55

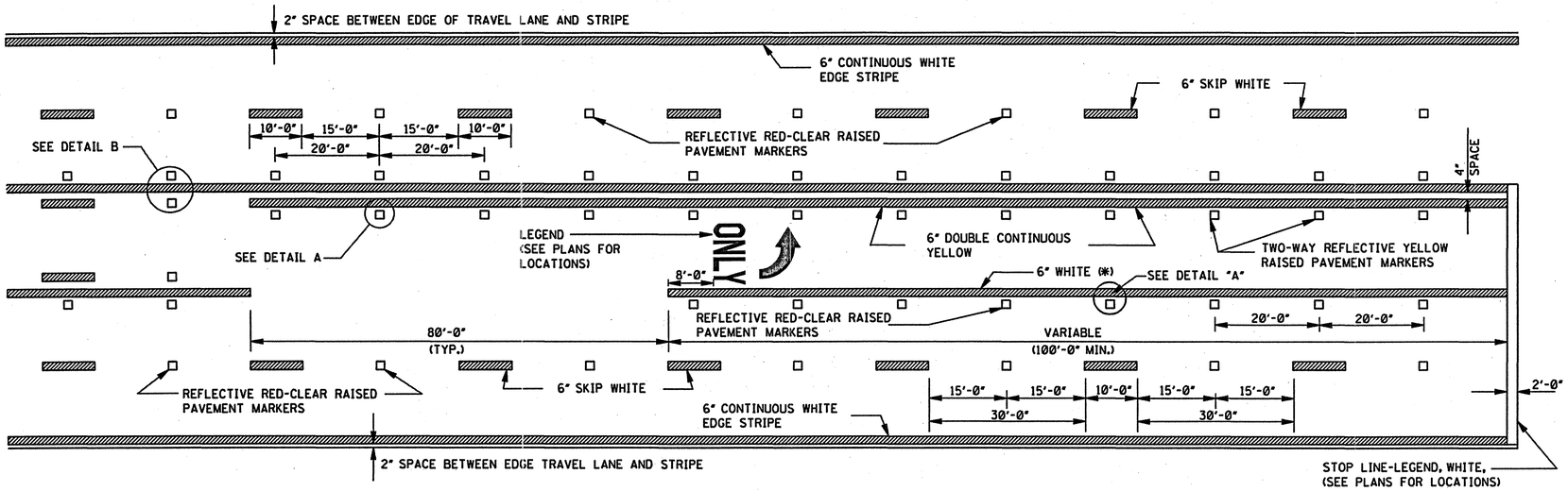
STATE	PROJECT NO.
MISS.	



TYPICAL STRIPING AND RAISED
PAVEMENT MARKERS FOR 4–LANE SECTION

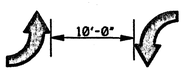


TYPICAL STRIPING AND RAISED
PAVEMENT MARKERS FOR 5–LANE SECTION



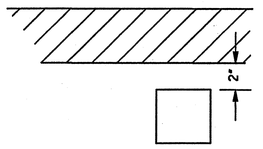
TYPICAL STRIPING AND RAISED
PAVEMENT MARKERS AT LEFT TURN LANES

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

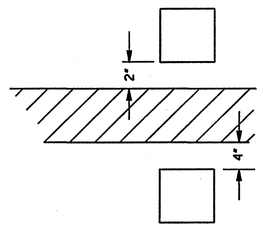


TYPICAL TWO–WAY ARROW INSTALLATION

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.).



DETAIL A
LATERAL PLACEMENT OF
PAVEMENT MARKERS



DETAIL B
LATERAL PLACEMENT OF
PAVEMENT MARKERS

GENERAL NOTE:

1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS".

DATE	BY	REVISION
2-1-99	S.W.R.	REVISE STRIPE WIDTH

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING DETAILS FOR 4–LANE AND 5–LANE UNDIVIDED ROADWAYS

ENGLISH

WORKING NUMBER PM-2

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 121

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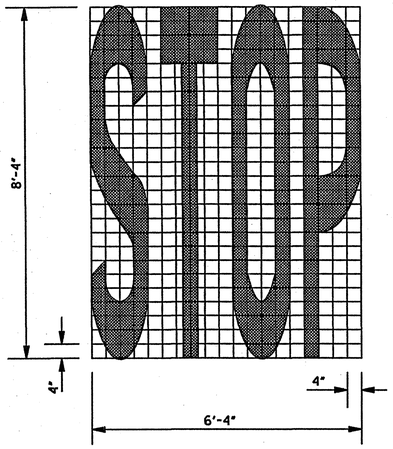
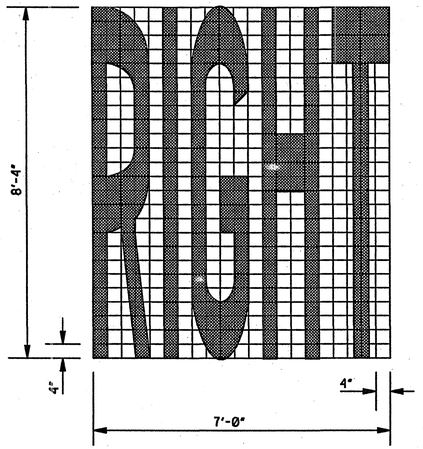
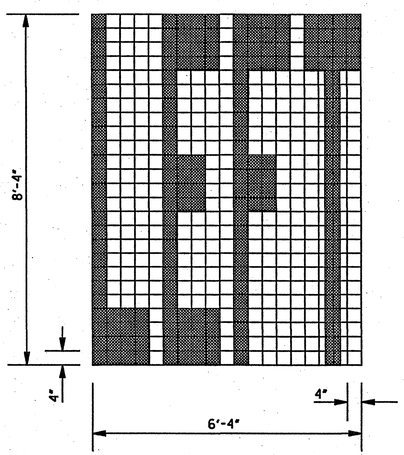
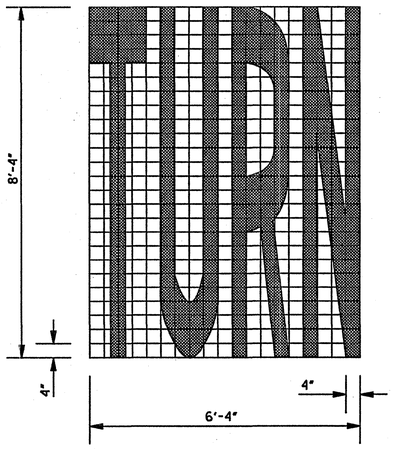
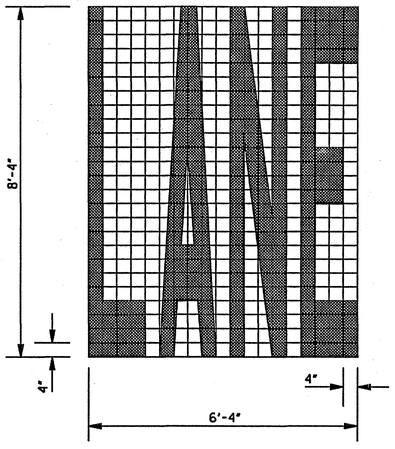
STATE	PROJECT NO.
MISS.	

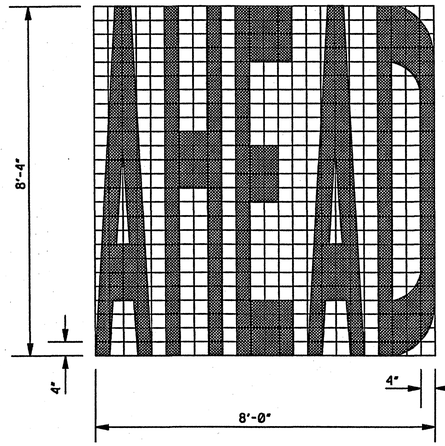


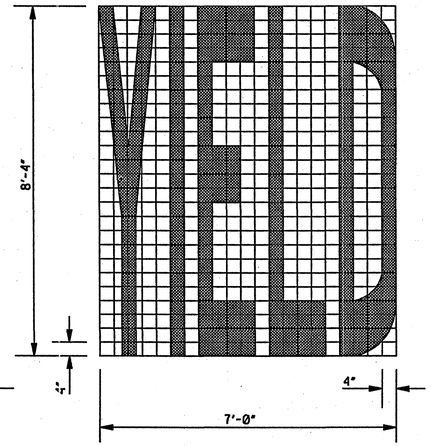


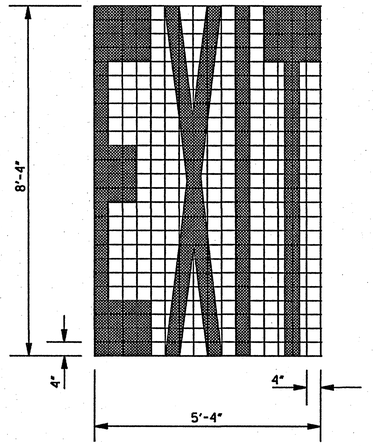


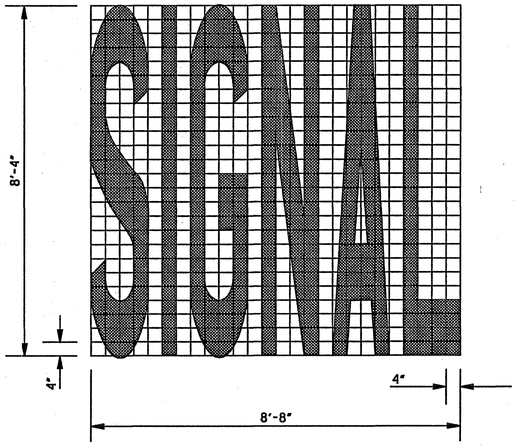


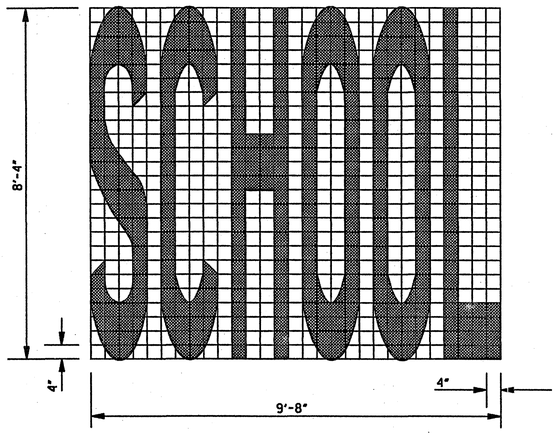












GENERAL NOTES:

1. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL PAVEMENT MARKING LEGENDS SHALL BE APPLIED USING HIGH PERFORMANCE MATERIALS.
2. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1½" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
3. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

PAY QUANTITIES	
LEGEND	AREA (ft^2)
STOP	24.6
RIGHT	28.6
LEFT	19.5
TURN	27.3
LANE	22.7
AHEAD	32.3
YIELD	26.8
EXIT	18.5
SIGNAL	32.5
SCHOOL	35.5

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING LEGEND DETAILS

ENGLISH

WORKING NUMBER
PM-5

SHEET NUMBER
124

ISSUE DATE: OCTOBER 1, 1998

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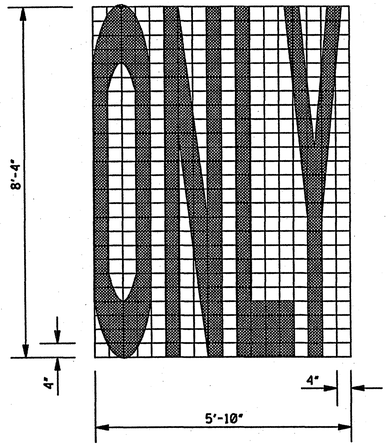
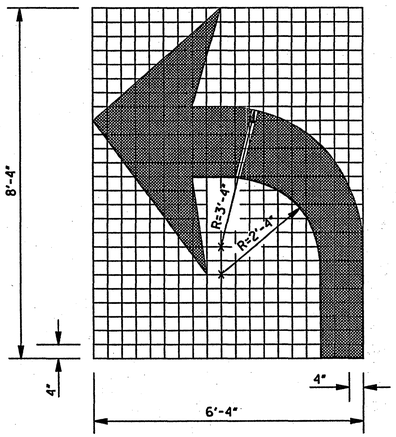
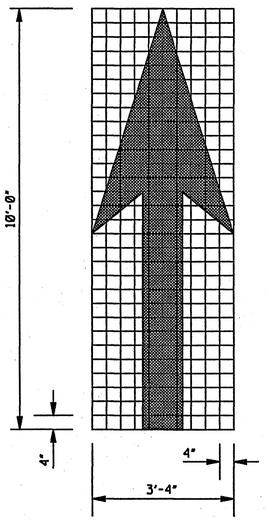
STATE	PROJECT NO.
MISS.	

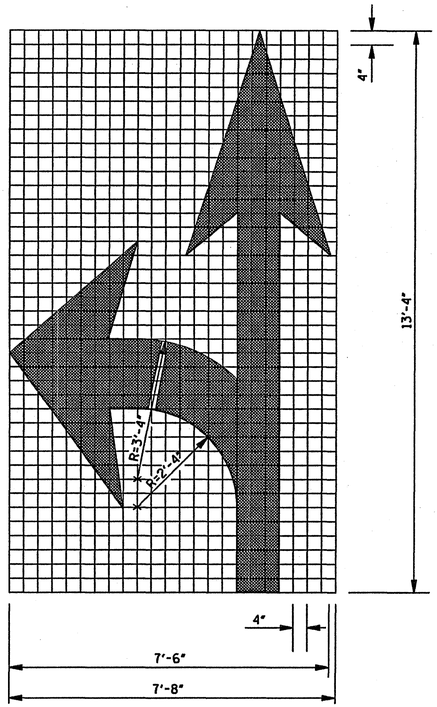




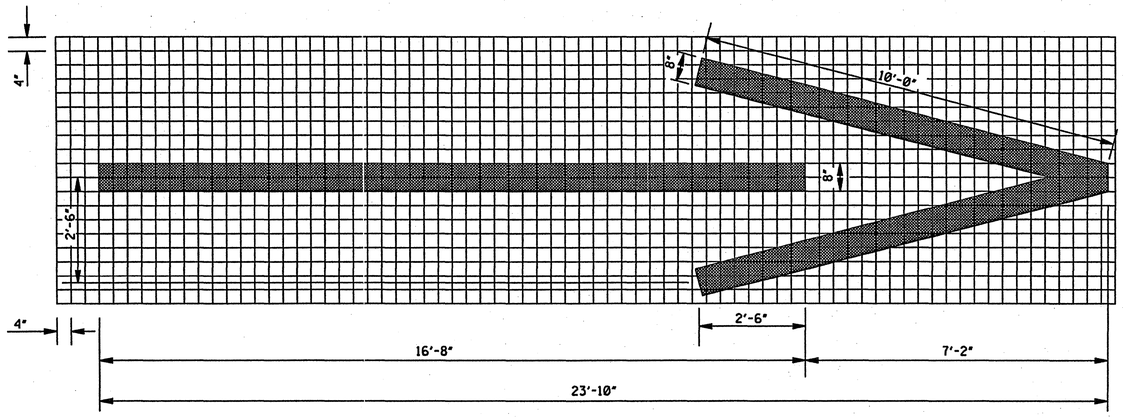
TURN ARROW



THRU ARROW



COMBINATION ARROW



1–WAY ARROW

GENERAL NOTES:

1. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL PAVEMENT MARKING LEGENDS, INCLUDING TURN ARROWS, SHALL BE APPLIED USING HIGH PERFORMANCE MATERIALS.
2. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1½" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
3. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

PAY QUANTITIES	
LEGEND/SYMBOL	AREA (ft^2)
ONLY	22.0
TURN ARROW	16.4
THRU ARROW	12.3
COMB. ARROW	27.5
1-WAY ARROW	24.3

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING LEGEND DETAILS

ENGLISH

WORKING NUMBER
PM-6

SHEET NUMBER
125

ISSUE DATE: OCTOBER 1, 1998

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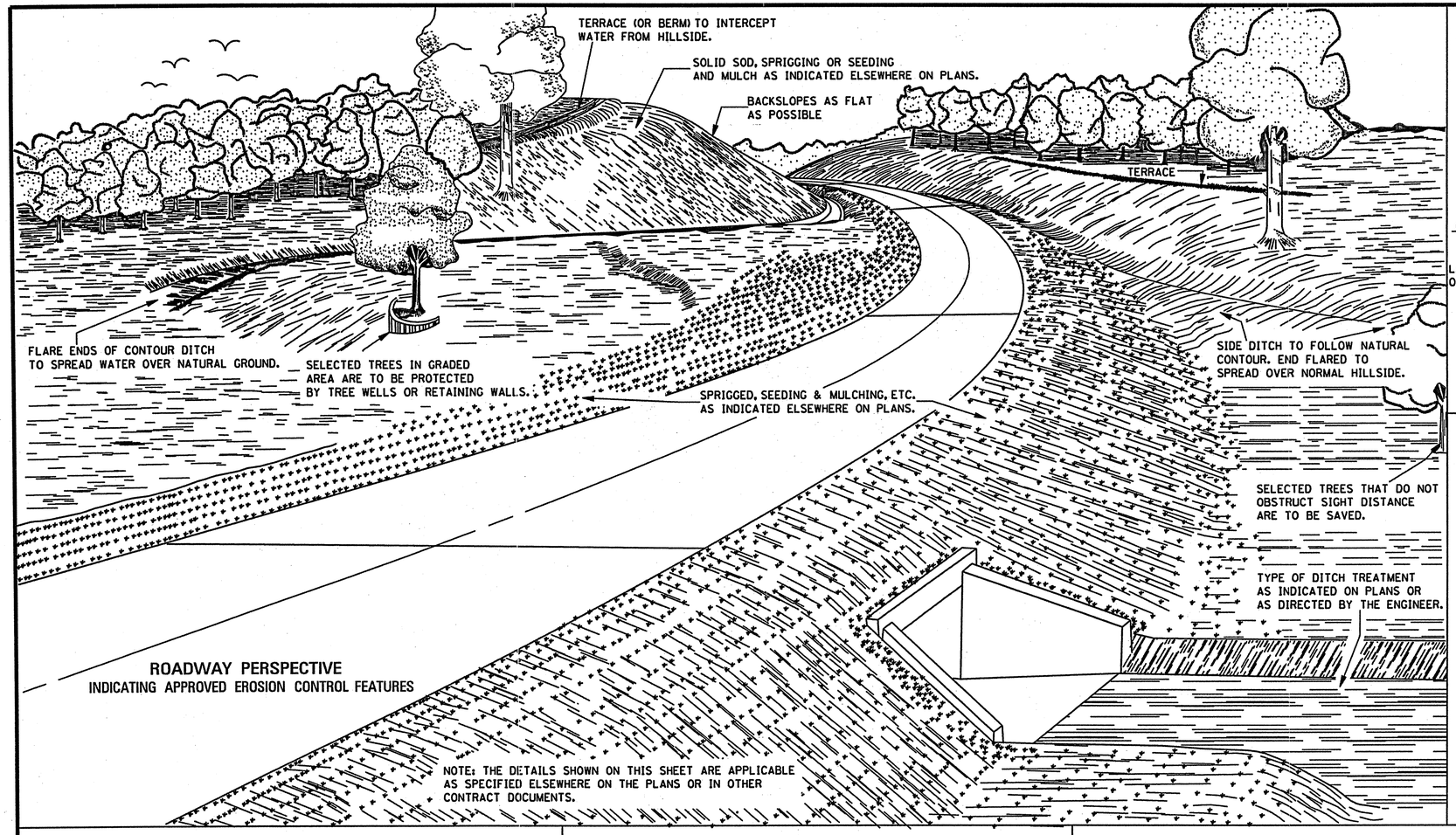
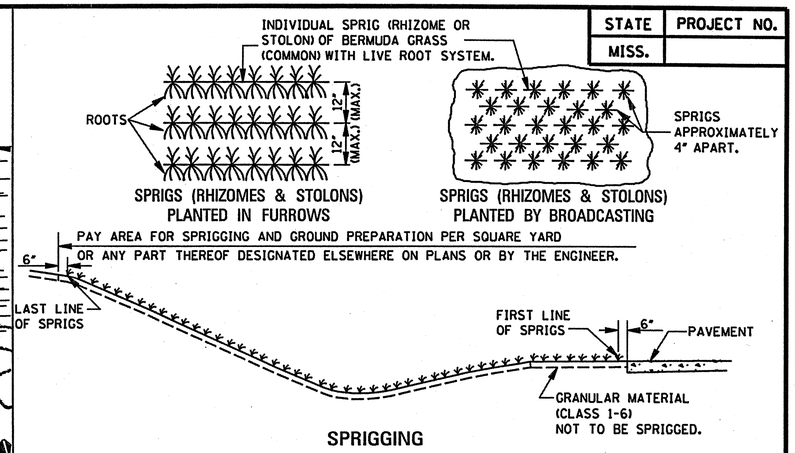
STATE	PROJECT NO.
MISS.	

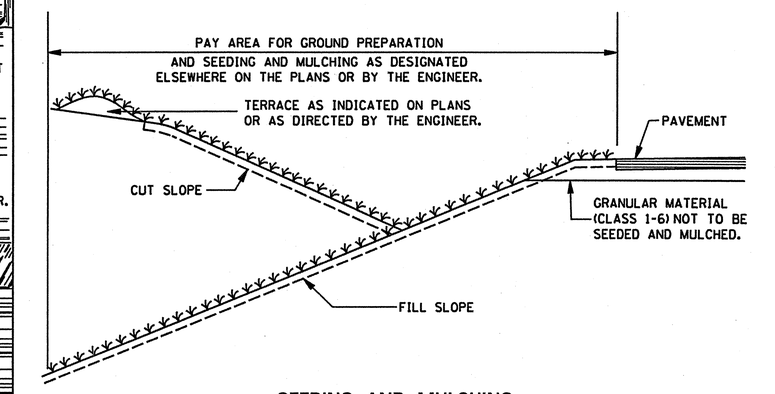


ROADWAY PERSPECTIVE
INDICATING APPROVED EROSION CONTROL FEATURES

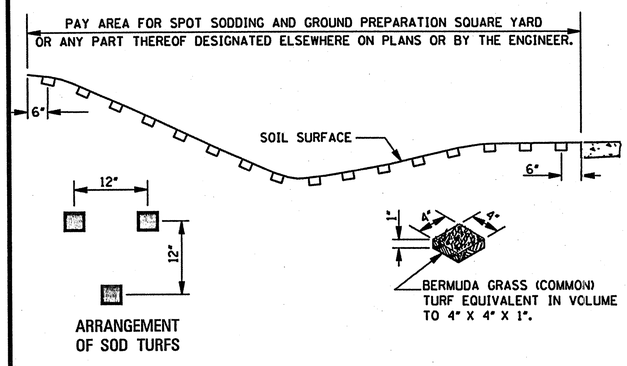
NOTE: THE DETAILS SHOWN ON THIS SHEET ARE APPLICABLE AS SPECIFIED ELSEWHERE ON THE PLANS OR IN OTHER CONTRACT DOCUMENTS.



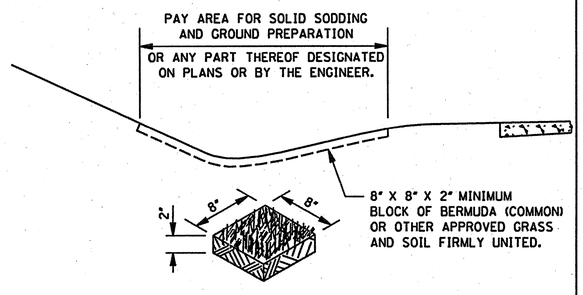
SPRIGGING



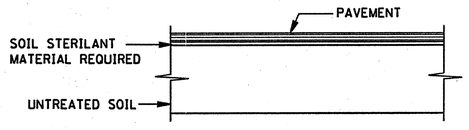
SEEDING AND MULCHING



SPOT SODDING



SOLID SODDING



SOIL STERILIZATION UNDER PAVED AREAS
(ISLANDS, MEDIANS OR SLOPE PAVEMENT)

GENERAL NOTE:

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

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

EROSION CONTROL

ENGLISH

WORKING NUMBER EC-1

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 140

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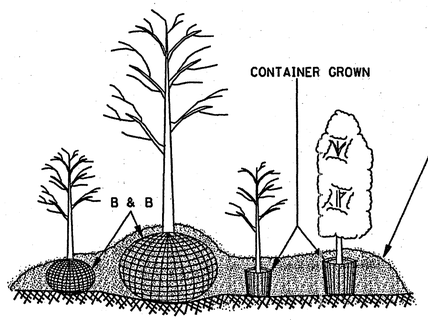
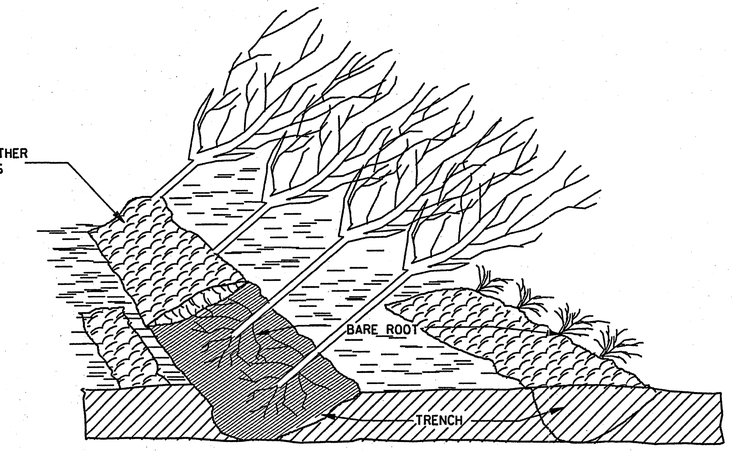
STATE	PROJECT NO.
MISS.	



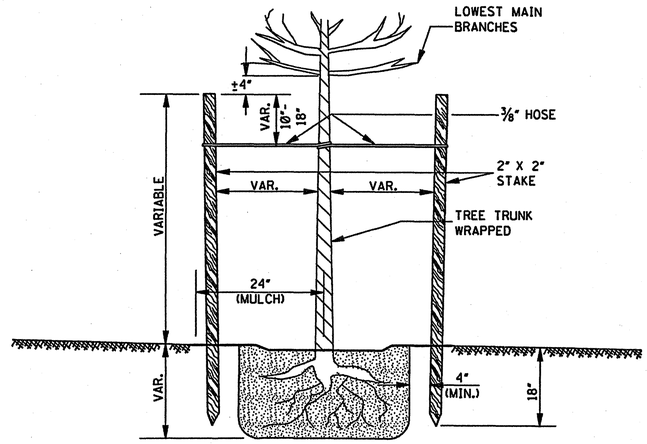
B & B AND CONTAINER GROWN PLANTS



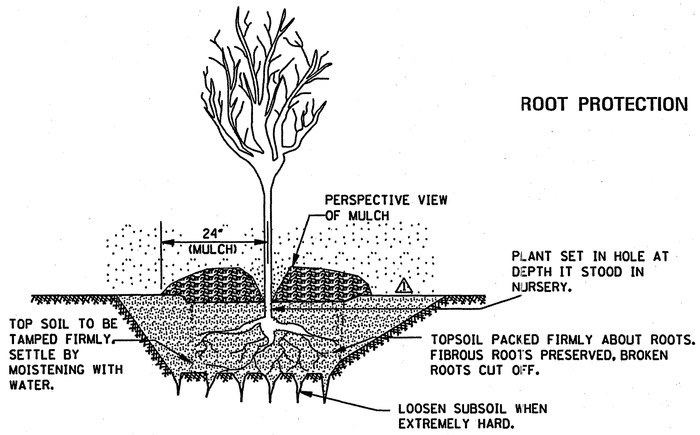
BARE ROOT PLANTS

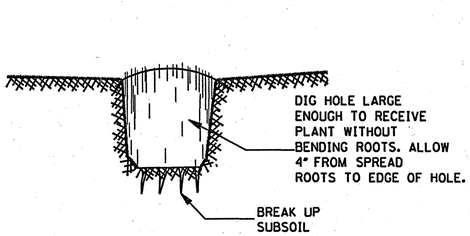
NOTE: METHOD OF "HEELING IN" BEFORE PLANTING CONSISTS OF PLACING THE PLANTS IN A TRENCH AND COVERING THE ROOTS WITH DIRT. THIS MAY BE DONE ON TRUCK FOR EASE OF MOVEMENT. SAW DUST OR OTHER APPROVED MATERIAL MAY BE USED. ROOTS MUST BE KEPT MOIST AT ALL TIMES.

ROOT PROTECTION ("HEELING–IN") DURING STORAGE

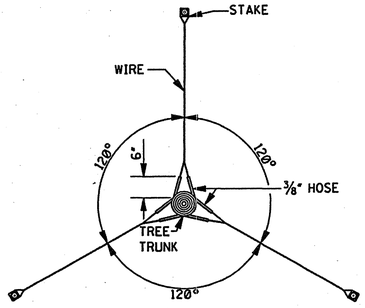


ELEVATION

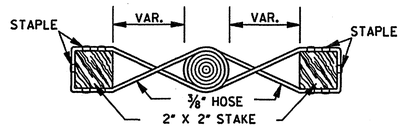




TREE AND SHRUB PLANTING (BARE ROOT)



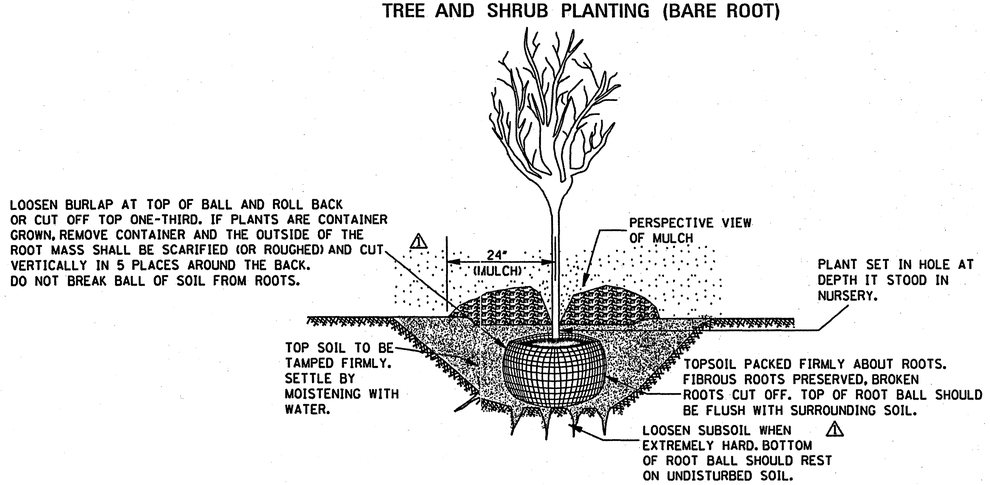
PLAN



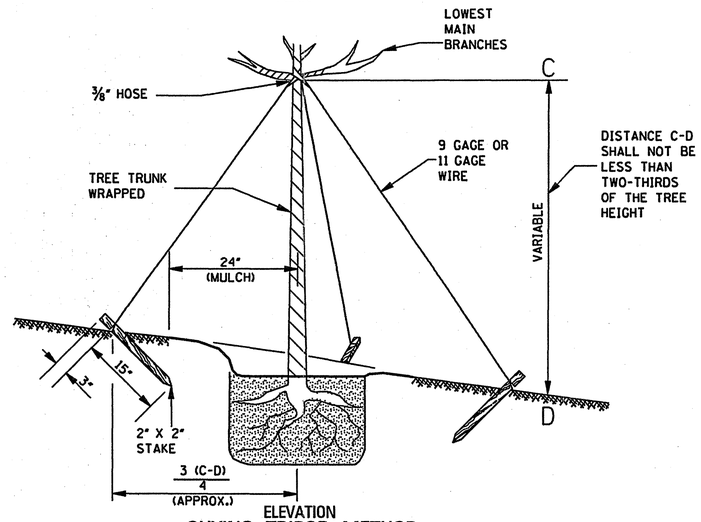
PLAN

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.



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.

⚠ 2. TENSION IN GUY WIRES WILL BE SUCH AS TO ALLOW SOME SWAYING MOTION IN TREE.

DATE	REVISION	BY
3-01-02	REVISE NOTE & DRAWING	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL PLANTING DETAILS FOR TREES & SHRUBS

ENGLISH

WORKING NUMBER PD-1

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 141

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STATE	PROJECT NO.
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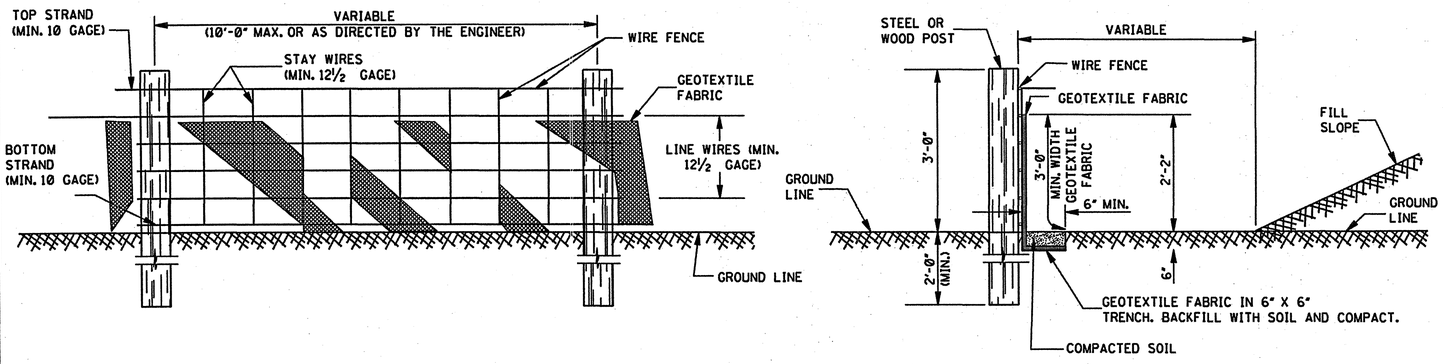


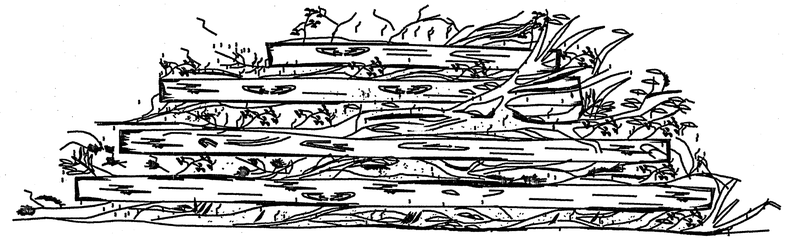
FRONT ELEVATION

SIDE ELEVATION

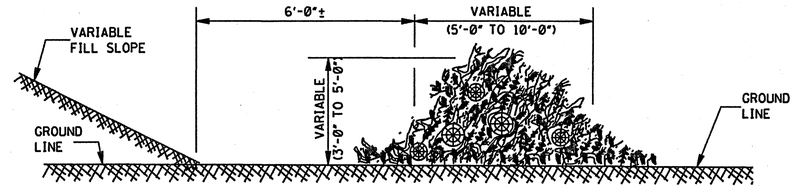
TEMPORARY SILT FENCE

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

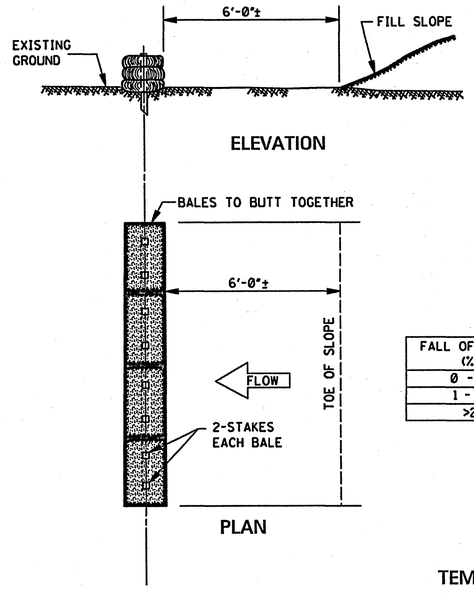


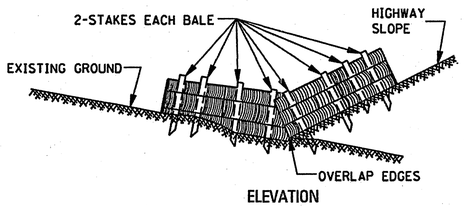
SIDE ELEVATION

TEMPORARY BRUSH BARRIER

NOTES:

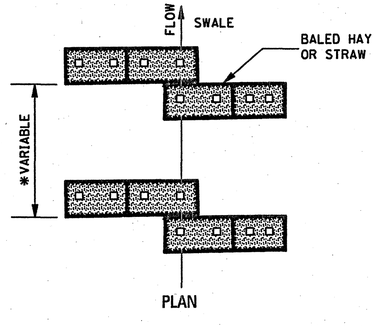
1. BRUSH BARRIER TO BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TOP TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED 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.



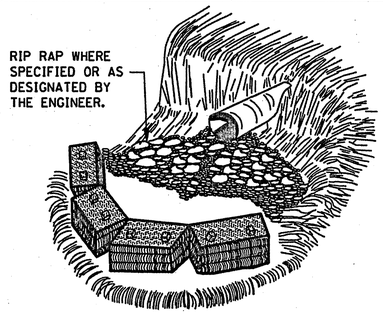


ELEVATION
NOTE: SIMILAR TREATMENT TO BE USED IN DITCHES.

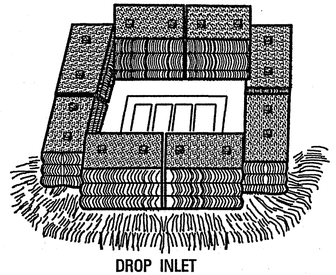
FALL OF DITCH (%)	DISTANCE* (ft)
0 - 1	100'
1 - 2	50'
>2	25'



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.

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.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL TEMPORARY EROSION CONTROL MEASURES
(SILT FENCE, HAY BALES & BRUSH BARRIER)

ISSUE DATE: OCTOBER 1, 1998

ENGLISH

WORKING NUMBER
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SHEET NUMBER
142

STATE	PROJECT NO.
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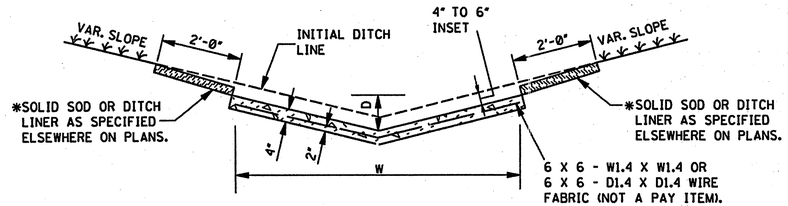
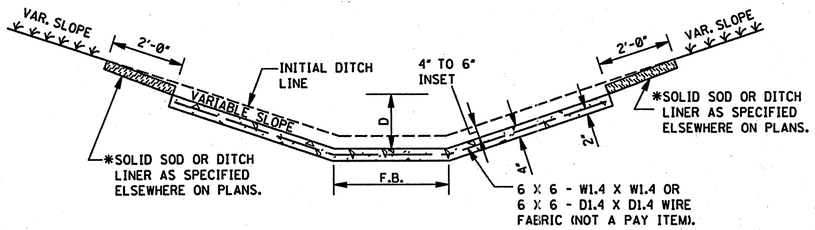
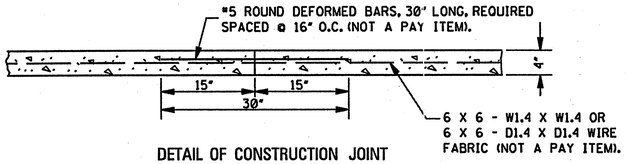


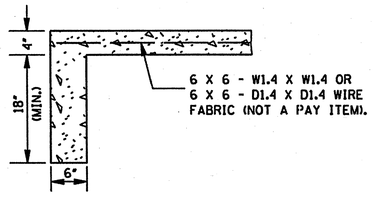
"V" TYPE SECTION



FLAT BOTTOM SECTION



DETAIL OF CONSTRUCTION JOINT



DETAIL OF TOE WALL

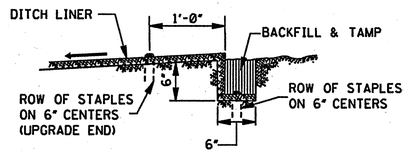
NOTE: TOE WALL REQUIRED UPSTREAM AND DOWNSTREAM.

CONCRETE PAVED DITCH

NOTES:

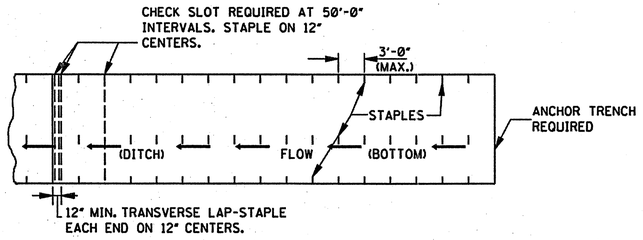
1. CONCRETE PAVED DITCHES SHALL BE GROOVED AT 20'-0" INTERVALS. THE GROOVES SHALL BE CUT TO A DEPTH OF NOT LESS THAN 1".
2. DIMENSIONS D & W ARE AS FOLLOWS:
   D(MINIMUM) = 6"
   D(NOMINAL) = 9"
   W(MINIMUM) = 24"
3. CHAIR SUPPORTS FOR THE WIRE MESH WILL NOT BE REQUIRED. HOWEVER, THE CONTRACTOR SHALL PLACE THE WIRE MESH IN A SATISFACTORY AND WORKMANLIKE MANNER TO ENSURE THAT THE FINAL POSITION IS REASONABLY NEAR THE POSITION INDICATED.

*4. CENTER ROW OF STAPLES MAY BE OMITTED ON DITCH LINER.

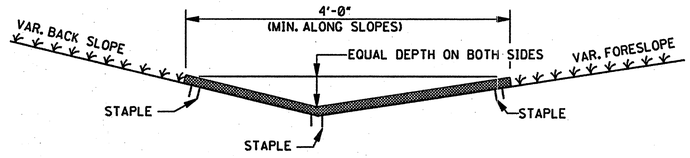


ANCHOR TRENCH DETAIL

NOTE: ANCHOR TRENCH REQUIRED AT THE BEGINNING AND ENDING OF EACH AREA TO BE COVERED, EXCEPT DOWNSTREAM END ADJOINING A STRUCTURE.



PLAN

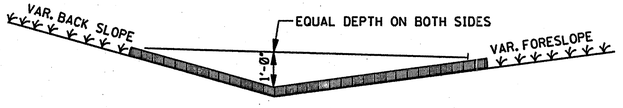


SECTION

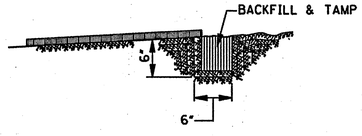
DITCH LINER TREATMENT

(EXCELSIOR BLANKET, JUTE MESH OR EROSION CONTROL FABRIC)

NOTE: DITCHES TREATED WITH DITCH LINER WILL BE VEGETATED PRIOR TO TREATMENT, UNLESS OTHERWISE INDICATED.



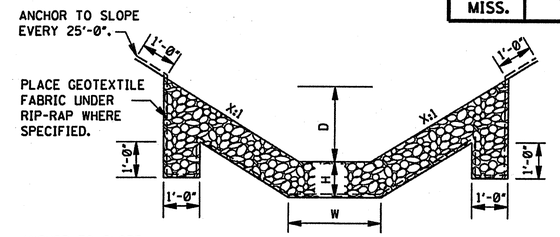
SECTION



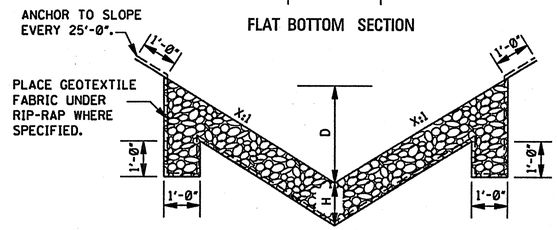
SLOT DETAIL

BITUMINOUS TREATED ROVING

NOTE: UPGRADE AND DOWNGRADE ENDS OF THE BITUMINOUS TREATED ROVING SHALL BE BURIED IN A 6" MINIMUM VERTICAL SLOT AND THE SOIL TAMPED FIRMLY AGAINST IT.



FLAT BOTTOM SECTION



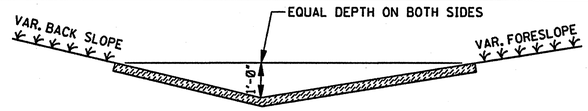
"V" TYPE SECTION

RIP-RAP TREATMENT

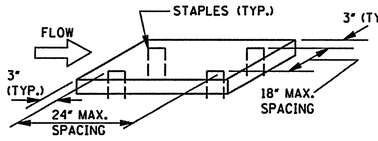
NOTES:

1. DIMENSIONS D, W AND X ARE VARIABLE AND ARE SHOWN ELSEWHERE ON THE PLANS.
2. THE RIP-RAP SIZE AND MINIMUM DEPTH "H" FOR RIP-RAP TREATMENT ARE AS FOLLOWS.

RIP-RAP SIZE & MINIMUM DEPTH "H"	
H (in)	RIP-RAP SIZE (lbs)
12"	100
18"	300



SOLID SOD TREATMENT



NOTE: SOLID SOD (STRIPS OR BLOCKS) ARE TO BE STAPLED, PINNED, PEGGED OR STAKED AT THE FOUR CORNERS OR AT THE MAXIMUM SPECIFIED SPACING.

GENERAL NOTE:

1. FOR LOCATION OF APPROPRIATE DITCH TREATMENTS, SEE PLAN SHEETS AS DENOTED BY THE FOLLOWING LEGEND OR AS DIRECTED BY THE ENGINEER:

- DITCH LINER
- BITUMINOUS TREATED ROVING
- SOLID SOD
- CONCRETE PAVED DITCH
- RIP-RAP

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

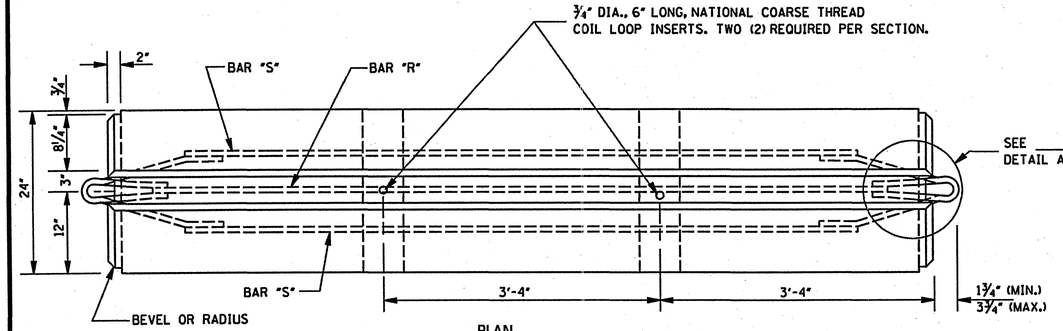
DETAILS OF TYPICAL DITCH TREATMENTS

ENGLISH

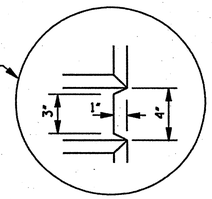
WORKING NUMBER DT-1

ISSUE DATE: OCTOBER 1, 1998

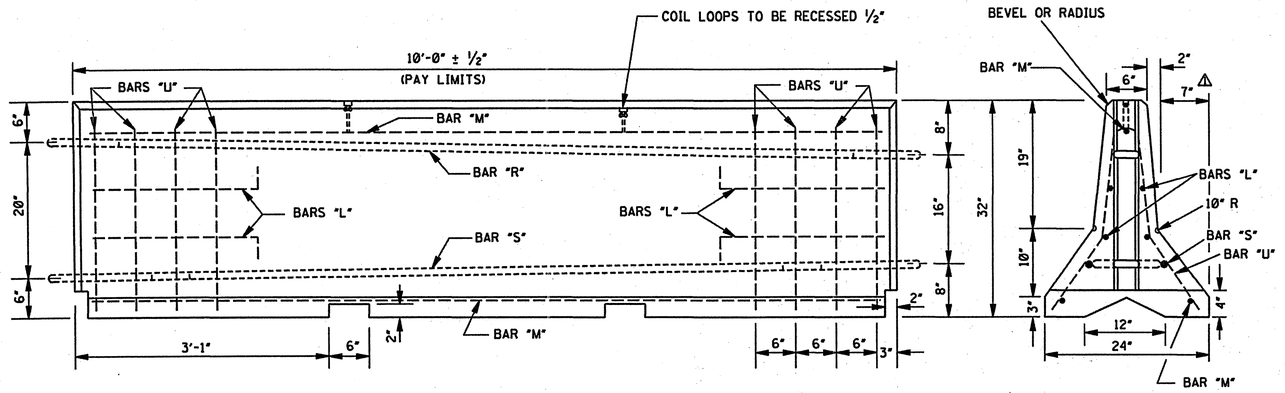
SHEET NUMBER 145



PLAN

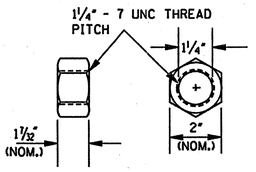


DETAIL A

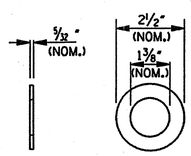


ELEVATION END

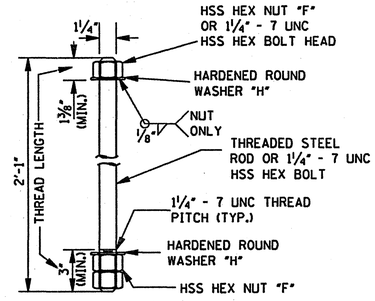
PRECAST CONCRETE MEDIAN BARRIER



HIGH-STRENGTH
STRUCTURAL HEX NUT "F"

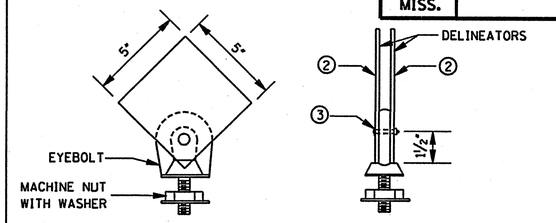


HARDENED ROUND
WASHER "H"



ANCHOR STUD CONNECTOR DETAILS

NOTE: ALTERNATE METHODS OF CONNECTING PRECAST BARRIERS, SUCH AS J-HOOKS, MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



DELINEATOR, CONCRETE
PRECAST MEDIAN BARRIER, TYPE 1

① DELINEATORS SHALL BE REQUIRED UNLESS INDICATED OTHERWISE ON THE PLANS. THIS ITEM WILL NOT BE MEASURED SEPARATELY, BUT WILL BE INCLUDED UNDER PAYMENT FOR PRECAST CONCRETE BARRIER.

② DELINEATORS SHALL BE ENCAPSULATED LENS REFLECTIVE SHEETING ON ALUMINUM SHEET, 0.080" THICK, OR SHEET STEEL, 14 GAGE, WHICH IS GALVANIZED.

③ ALUMINUM OR STAINLESS STEEL SLOTTED ROUND HEAD MACHINE SCREW, NO. 10, 1½" LONG, 2-WASHERS AND 1-HEX HEAD NUT (COMMERCIAL QUALITY)

④ THE DELINEATORS SHALL BE INSTALLED FACING TRAFFIC WITH YELLOW ON THE LEFT AND WHITE ON THE RIGHT, UNLESS OTHERWISE SPECIFIED.

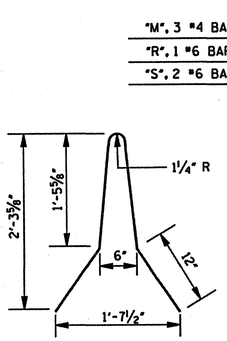
⑤ SPACINGS OF DELINEATORS:
TANGENT SECTION - 20'-0".
CURVED SECTION - 10'-0".

⑥ OPTIONAL DELINEATORS, WHICH ARE ON THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION "LIST OF APPROVED MATERIALS", WILL BE ACCEPTED.

GENERAL NOTES:

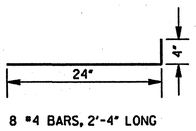
1. LIFTING DEVICES AND ATTACHMENTS TO BARRIER SECTIONS SHALL BE AS APPROVED BY THE ENGINEER.
2. PLACE ALL STEEL REINFORCEMENT 2" MINIMUM FROM OUTSIDE FACE OF WALL, EXCEPT AS OTHERWISE SHOWN.
3. THE ANCHOR STUD CONNECTOR SHALL CONFORM TO AASHTO M 314, GRADE 55. THE HSS HEX NUTS AND THE HARDENED ROUND WASHERS SHALL MEET THE REQUIREMENTS OF ASTM A 325.
4. CONCRETE SHALL BE CLASS "B" (CLASS 1 FINISH). REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF AASHTO M 31.
5. STEEL RODS SHALL MEET THE REQUIREMENTS OF ASTM A 36.
6. CONNECTOR RODS, CONNECTOR PINS, NUTS AND WASHERS SHALL BE GALVANIZED MEETING THE REQUIREMENTS OF AASHTO M 111.

APPROXIMATE QUANTITIES FOR 10' BARRIER			
WEIGHT (lbs.)	REINF. STEEL (lbs.)	STEEL RODS (lbs.)	CONCRETE (yd^3)
3875	104	18	0.931

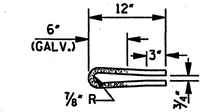


BARS "M", "R" & "S"

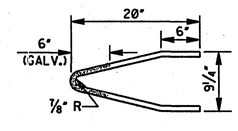
8 #4 BARS, 5'-1" LONG
BARS "U"



8 #4 BARS, 2'-4" LONG
BARS "L"



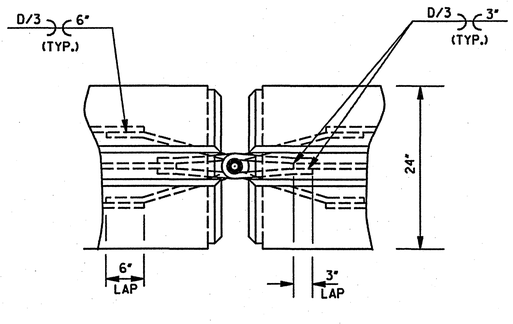
2 ¾"-STEEL RODS, 25" LONG
TOP CONNECTOR



2 ¾"-STEEL RODS, 3'-6" LONG
BOTTOM CONNECTOR

BAR AND ROD DETAILS

NOTE: WHERE STEEL ROD GALVANIZATION IS SHOWN ABOVE, GALVANIZE AFTER BENDING.



PLAN ELEVATION

BARRIER CONNECTION DETAIL

STATE	PROJECT NO.
MISS.	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

MEDIAN BARRIER: CONCRETE (PRECAST)

ENGLISH

WORKING NUMBER MB-2A

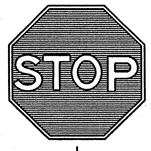
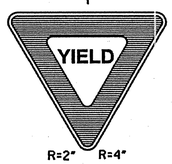
SHEET NUMBER 205

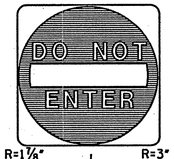
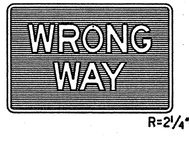
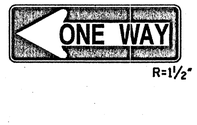
DATE	REVISION	DIMENSION	BY
5-01-02	REVISED	S.W.R.	

ISSUE DATE: OCTOBER 1, 1998

...\DGN FORMAT\MB-2A.DGN 05/26/2005 10:30:58 AM

STATE	PROJECT NO.
MISS.	

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			 R=2" R=4"		 R=1½" R=3"		 R=3"	 R=3"	 R=1⅞"	 R=1⅞"	 R=1½"	 R=1⅞"	 R=1⅞"	 R=3"
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	⅞" WHITE	1¼" WHITE	5" RED ¾" WHITE	8" RED 1½" WHITE	⅝" BLACK ⅜" WHITE	1¼" BLACK ¾" WHITE	1¼" BLACK ¾" WHITE	⅛" BLACK ¾" WHITE	¾" BLACK ½" WHITE	¾" BLACK ½" WHITE	⅝" BLACK ⅜" WHITE	¾" BLACK ½" WHITE	¾" BLACK ½" WHITE	1¼" BLACK ¾" 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"
COLORS COPY	WHITE	WHITE	RED	RED	BLACK	BLACK	BLACK	BLACK	BLACK & RED	BLACK & RED	BLACK	BLACK & RED	BLACK	BLACK
COLORS BACKGROUND	RED	RED	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
REFLECTORIZATION	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 (⅜" 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	R5-1a	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	 R=1½" R=2¼"		 R=1½"	 R=1⅞" R=3"		 R=2¼"	 R=1½"	 R=1½"	 R=2¼"	 R=3"	
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	⅝" BLACK ⅜" WHITE	⅞" BLACK ⅝" WHITE	⅝" BLACK ⅜" WHITE	WHITE OUT-SIDE BORDER	WHITE OUT-SIDE BORDER	1" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	⅞" BLACK ⅝" WHITE	1¼" BLACK ¾" 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"	
COLORS COPY	BLACK	BLACK	BLACK	WHITE	WHITE	WHITE	BLACK (WHITE ARROW)	BLACK	BLACK	BLACK	
COLORS BACKGROUND	WHITE	WHITE	WHITE	RED	RED	RED	BLACK	WHITE	WHITE	WHITE	
REFLECTORIZATION	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 (⅜" 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"	1½"; 10½"	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.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGNS

ENGLISH

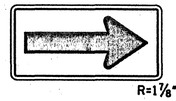
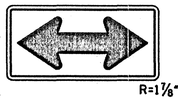
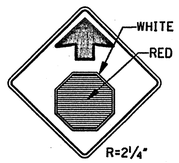
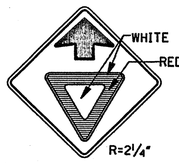
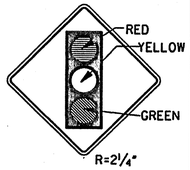
WORKING NUMBER SN-3A

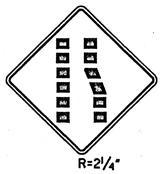
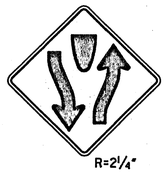
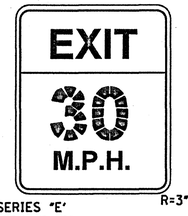
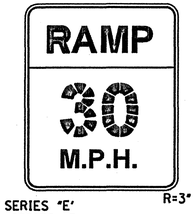
SHEET NUMBER 223

ISSUE DATE: OCTOBER 1, 1998

...\DGN FORMAT\SN-3A.DGN 05/26/2005 10:31:30 AM

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 LETTER & NUMERAL SERIES											
WIDTH OF BORDER INSIDE OUTSIDE	¾" BLACK ½" YELLOW	¾" BLACK ½" YELLOW	¾" BLACK ½" YELLOW	¾" BLACK ½" YELLOW	¾" BLACK ½" YELLOW	¾" BLACK ½" YELLOW	⅛" BLACK ⅝" YELLOW	⅛" BLACK ⅝" YELLOW	⅛" BLACK ⅝" YELLOW	¾" BLACK ½" YELLOW	1¼" BLACK ¾" 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	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND & SYMBOL	BACKGROUND & SYMBOL	BACKGROUND & "LIGHTS"	BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	2	2	1	1	1	1	1
NUMBER OF HOLES TO BE PUNCHED (⅜" 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	VERT. CENTER	VERT. CENTER	VERT. CENTER	14½" FROM VERT. 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	18" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	14½" 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 LETTER & NUMERAL SERIES	NOTE: SEE PLAN SHEETS FOR IDEOGRAM REQUIRED ON INDIVIDUAL SIGNS. 	 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	⅛" BLACK ⅝" YELLOW	⅛" BLACK ⅝" YELLOW	⅛" BLACK ⅝" YELLOW	⅛" BLACK ⅝" YELLOW	¾" BLACK ½" YELLOW	⅝" BLACK ⅜" YELLOW	1¼" BLACK ¾" YELLOW	1¼" BLACK ¾" YELLOW	¾" BLACK ½" YELLOW	1¼" BLACK ¾" 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	⚠ 1	1	1	1	1	1
NUMBER OF HOLES TO BE PUNCHED (⅜" 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.

DATE	REVISED NO. OF POSTS	BY
3-01-02	REVISION	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGNS

ENGLISH

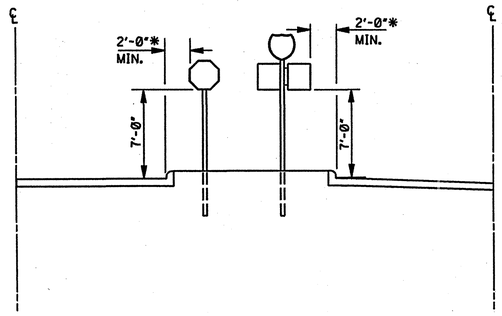
WORKING NUMBER SN-3B

SHEET NUMBER 224

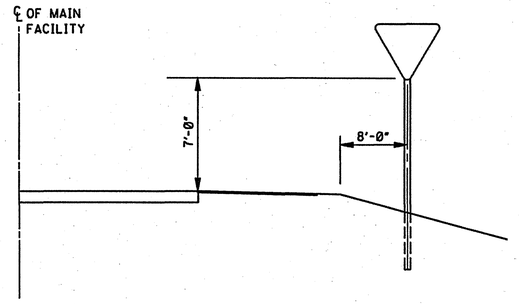
ISSUE DATE: OCTOBER 1, 1998

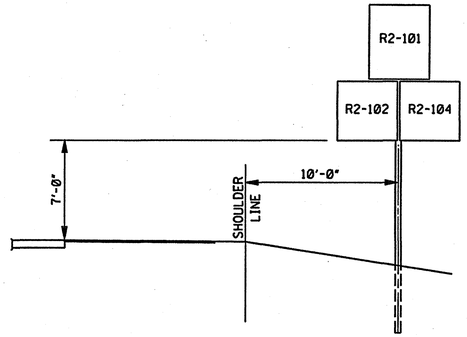
...\DGN FORMAT\SN-3B.DGN 05/26/2005 10:31:54 AM

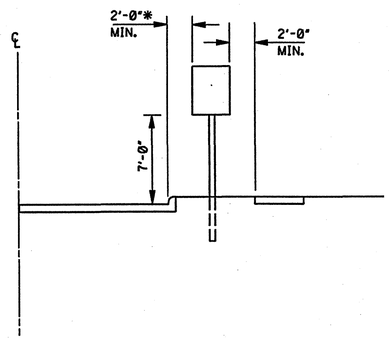
STATE	PROJECT NO.
MISS.	



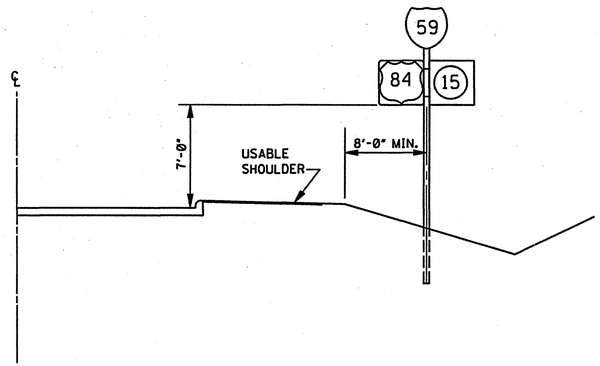
TYPICAL INSTALLATION IN ISLANDS OFF
OF (OR ADJACENT TO) INTERSTATE MAIN FACILITY

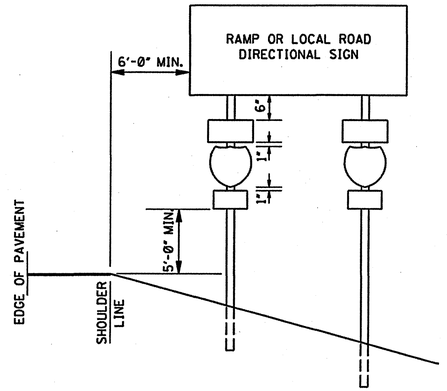






TYPICAL INSTALLATION ALONG FRONTAGE ROAD, RAMP
OR STREET WHERE THERE IS NOT A USABLE SHOULDER





TYPICAL INSTALLATION ALONG THE INTERSTATE MAIN
FACILITY AND ALONG RAMPS, FRONTAGE ROADS AND
HIGHWAYS

* NOTE: THE 2'-0" MINIMUM OFFSET APPLIES ONLY TO STANDARD SIGNS MOUNTED ON U-SECTION POSTS. ALL STANDARD SIGNS MOUNTED ON PIPE WILL BE OFFSET A MINIMUM OF 4'-0". RAMP DESTINATION SIGNS WILL BE OFFSET 4'-0" FROM SHOULDERS.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION

ENGLISH

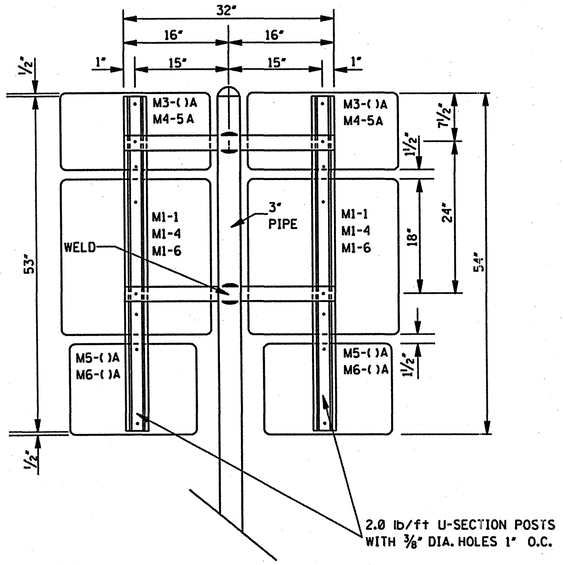
WORKING NUMBER
SN-4

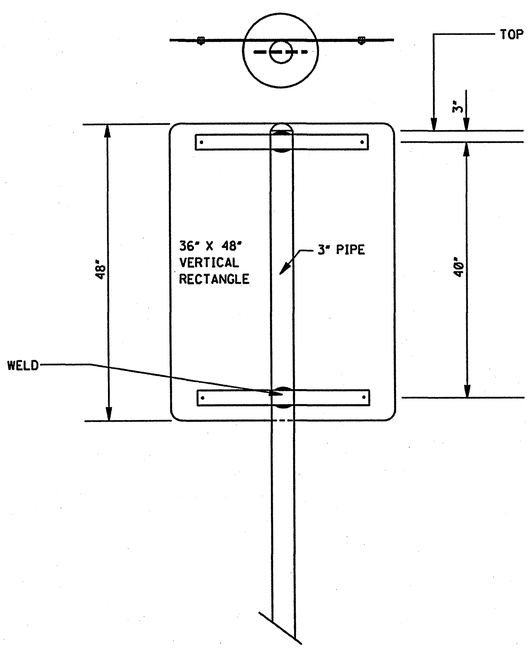
ISSUE DATE: OCTOBER 1, 1998

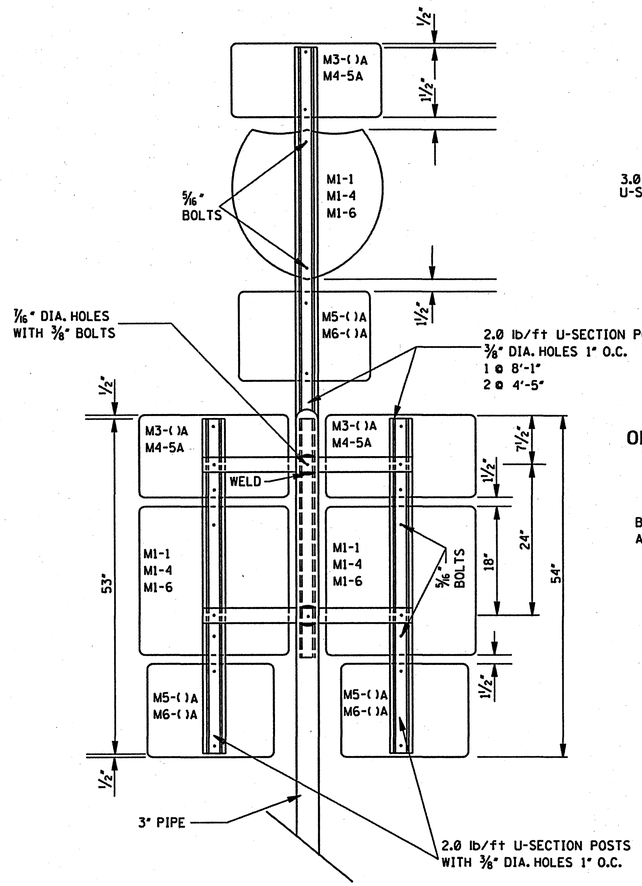
SHEET NUMBER
225

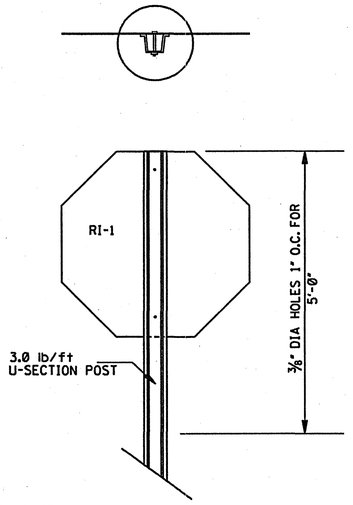
...\DGN FORMATS\SN-4.DGN 05/26/2005 10:32:18 AM

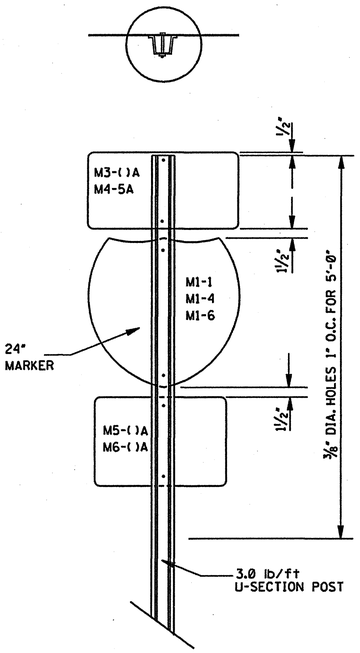
STATE	PROJECT NO.
MISS.	

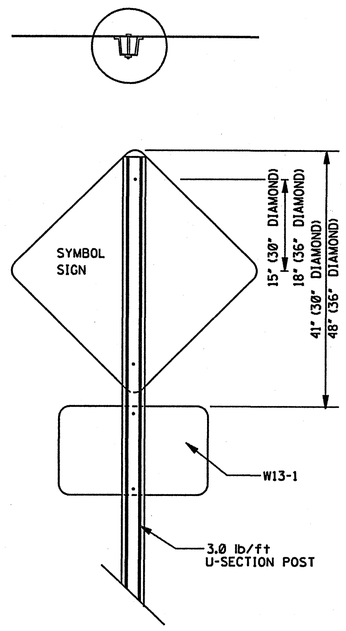




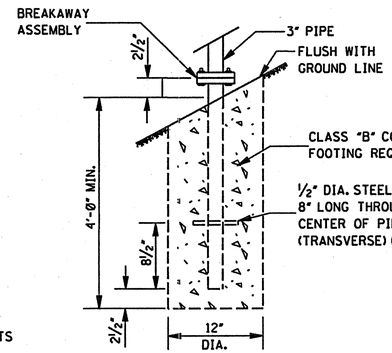




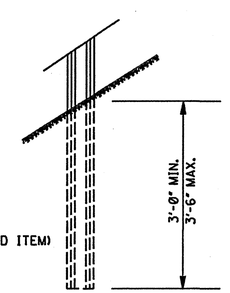




TYPICAL ASSEMBLY OF
"FLAT TOPPED" REGULATORY
OR WARNING SIGN MOUNTED ON
A SINGLE U-SECTION POST



FOOTING DETAIL FOR
3" PIPE



FOOTING DETAIL FOR
U-SECTION POSTS

GENERAL NOTES:

1. UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE 7/16" X 2½" X VARIABLE LENGTH FLAT STEEL BARS. BARS ARE WELDED TO PIPE AS SHOWN. WHEN FABRICATION IS COMPLETE, POST SHALL BE GALVANIZED AS PER SECTION 630 OF THE STANDARD SPECIFICATION.
2. HOLES IN FLAT BARS ARE ⅜" DIAMETER.
3. SIGNS ARE FASTENED TO FLAT BARS AND U-SECTION POST WITH ⅝" BOLTS, WITH FLAT WASHER AND LOCK-NUTS.
4. GROUND PLATE NOT REQURIED ON U-SECTION POST.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION

ENGLISH

WORKING NUMBER
SN-4A

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
226

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STATE	PROJECT NO.
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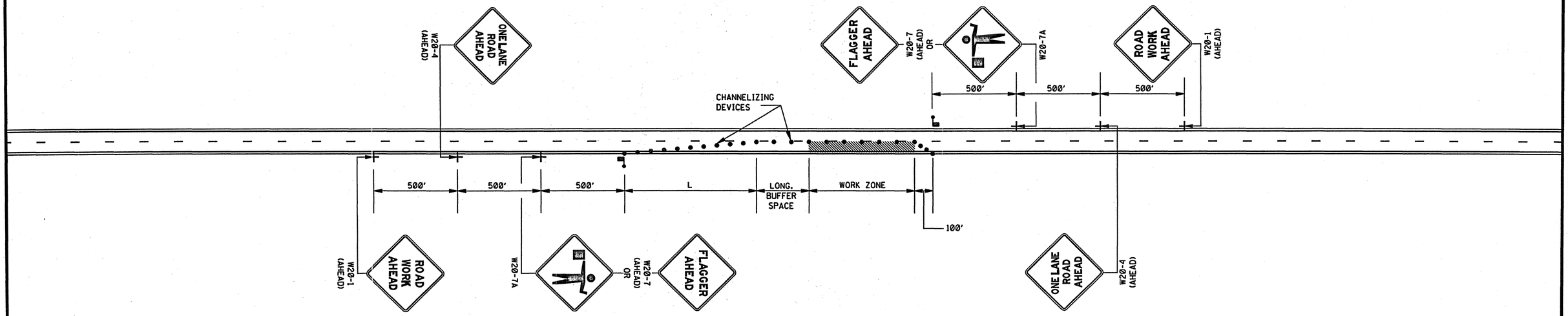

LEGEND

- 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.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL PLAN WITH FLAGGER
(ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)

ENGLISH

WORKING NUMBER: TCP-1

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STATE	PROJECT NO.
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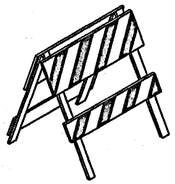
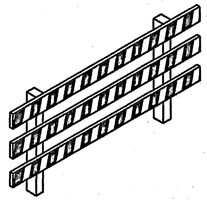
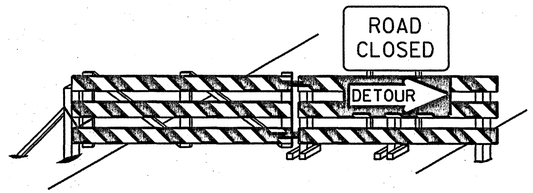
TYPE I



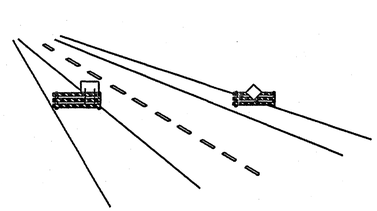
TYPE II

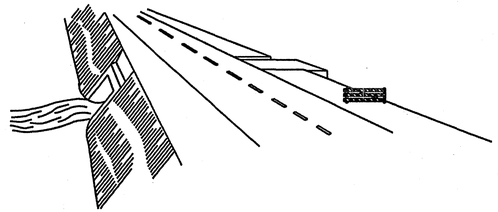


TYPE III



BARRICADE CLOSING A ROAD





STANDARD BARRICADES

1. A TYPE I BARRICADE CONSISTS OF ONE (1) HORIZONTAL RAIL SUPPORTED BY A DEMOUNTABLE FRAME OR A LIGHT "A" FRAME. A TYPE I BARRICADE NORMALLY WOULD BE USED ON CONVENTIONAL ROADS OR URBAN STREETS AND ARTERIALS.
2. A TYPE II BARRICADE CONSISTS OF TWO (2) HORIZONTAL RAILS ON A LIGHT "A" FRAME. TYPE II BARRICADES ARE INTENDED FOR USE ON EXPRESSWAYS AND FREEWAYS AND OTHER HIGH-SPEED ROADWAYS.
3. TYPE I AND TYPE II BARRICADES ARE INTENDED FOR USE WHERE THE HAZARD IS RELATIVELY SMALL AS, FOR EXAMPLE, ON CITY STREETS, OR FOR THE MORE OR LESS CONTINUOUS DELIMITING OF A RESTRICTED ROADWAY, OR FOR TEMPORARY DAYTIME USE.
4. A TYPE III BARRICADE CONSISTS OF THREE (3) HORIZONTAL RAILS SUPPORTED BY FIXED POSTS, A RIGID SKID, A HEAVY DEMOUNTABLE FRAME OR A HEAVY, HINGED "A" FRAME.
5. TYPE III BARRICADES ARE INTENDED FOR USE ON CONSTRUCTION AND MAINTENANCE PROJECTS AS WING BARRICADES AND AT ROAD CLOSURES, WHERE THEY MUST REMAIN IN PLACE FOR EXTENDED PERIODS.
6. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
7. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
8. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.

BARRICADE CHARACTERISTICS

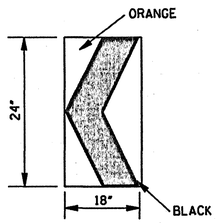
	I	II	III
WIDTH OF RAIL * *	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL**	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF REFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS
TYPE OF FRAME	LIGHT	LIGHT "A" FRAME	POST OR SKID

* 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in^2 OF REFLECTIVE AREA FACING TRAFFIC.

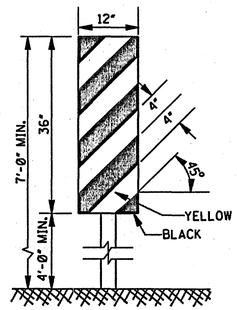
WING BARRICADES

1. WING BARRICADES ARE TYPE III BARRICADES ERECTED ON THE SHOULDER ON ONE OR BOTH SIDES OF THE PAVEMENT TO GIVE THE SENSATION OF A NARROWING OR RESTRICTED ROADWAY. WING BARRICADES MAY BE USED AS A MOUNTING FOR THE ADVANCE WARNING SIGNS OR FLASHERS.
2. WING BARRICADES SHOULD BE USED:
   A. IN ADVANCE OF A CONSTRUCTION PROJECT EVEN WHEN NO PART OF THE ROADWAY IS ACTUALLY CLOSED.
   B. IN ADVANCE OF ALL BRIDGE OR CULVERT WIDENING OPERATIONS.



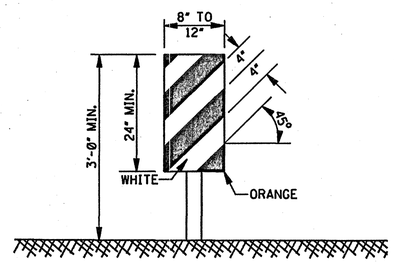
CHEVRON SIGN DETAIL

1. A CHEVRON SIGN CONSISTS OF A BLACK CHEVRON TYPE MARKING ON AN ORANGE BACKGROUND AND SHALL POINT IN THE DIRECTION OF TRAFFIC FLOW.
2. THE CHEVRON SIGN SHALL BE MOUNTED ON FIXED POST OR RIGID SKID.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHALL BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.



TYPE 3 OBJECT MARKER
(OM-3R)

1. TYPE 3 OBJECT MARKERS SHALL BE USED AT ALL EXPOSED BRIDGE ABUTMENTS AND AT OTHER LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.
2. THE OM-3R IS SHOWN. THE OM-3L IS SIMILAR EXCEPT THE STRIPES SLOPE DOWNWARD FROM THE UPPER LEFT SIDE TO THE LOWER RIGHT SIDE AND SHALL BE PLACED ON THE LEFT SIDE OF THE OBJECT.
3. THE INSIDE EDGE OF THE MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION.

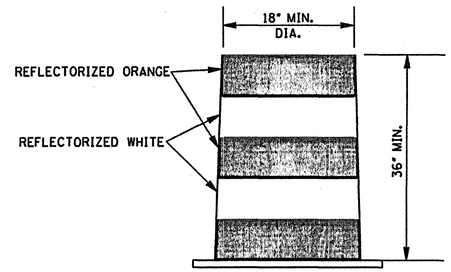


VERTICAL PANEL

1. VERTICAL PANELS CONSIST OF AT LEAST ONE PANEL 8" TO 12" IN WIDTH AND A MINIMUM OF 24" IN HEIGHT.
2. THE DIAGONAL STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION THAT TRAFFIC IS TO PASS THE PANEL. THE PANELS SHALL BE MOUNTED WITH THE TOP A MINIMUM OF 36" ABOVE THE ROADWAY ON A SINGLE LIGHTMASS POST.
3. VERTICAL PANELS USED ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH-SPEED ROADWAYS SHALL HAVE A MINIMUM OF 270 in^2 OF RETROREFLECTIVE AREA FACING TRAFFIC.
4. FOR TWO-WAY TRAFFIC OPERATIONS, BACK-TO-BACK PANELS SHALL BE USED.

GENERAL NOTES:

1. MARKINGS ON ALL DEVICES SHOWN ON THIS SHEET SHALL BE HIGH INTENSITY REFLECTIVE SHEETING.
2. THE TRAFFIC CONTROL PLAN WILL LIST THE VARIOUS TRAFFIC CONTROL DEVICES REQUIRED FOR EACH PROJECT.



PLASTIC DRUM STRIPING DETAIL

1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) REFLECTORIZED, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 2 WHITE) 6" WIDE.
2. DRUMS SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS SHALL BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

ENGLISH

WORKING NUMBER
TCP-10

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
259

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STATE	PROJECT NO.
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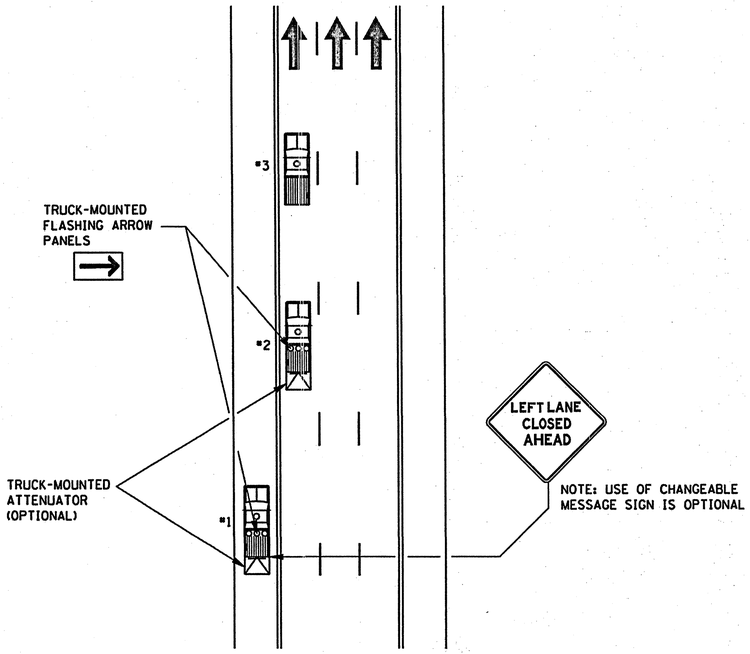
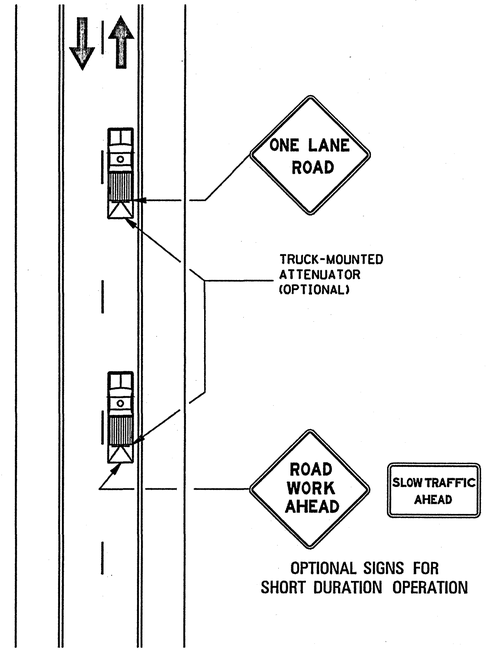
MOBILE OPERATIONS ON MULTILANE ROAD ⚠



MOBILE OPERATIONS ON MULTILANE ROAD

MOBILE OPERATIONS ON TWO–LANE ROAD



OPTIONAL SIGNS FOR SHORT DURATION OPERATION

MOBILE OPERATIONS ON TWO–LANE ROAD

MOBILE OPERATIONS ON MULTILANE ROAD

NOTES:

1. VEHICLES USED FOR THESE OPERATIONS SHOULD BE MADE HIGHLY VISIBLE WITH APPROPRIATE EQUIPMENT, SUCH AS FLASHING LIGHTS, ROTATING BEACONS, FLAGS, SIGNS, OR ARROW PANELS.
2. PROTECTION VEHICLE #1 SHOULD BE EQUIPPED WITH AN ARROW PANEL. AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON PROTECTION VEHICLE #1 SO AS NOT TO OBSCURE THE ARROW PANEL.
3. PROTECTION VEHICLE #2 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK-MOUNTED ATTENUATOR (TMA).
4. PROTECTION VEHICLE #1 SHOULD TRAVEL AT A VARYING DISTANCE FROM THE WORK OPERATION SO AS TO PROVIDE ADEQUATE SIGHT DISTANCE FOR TRAFFIC APPROACHING FROM THE REAR.
5. WHEN ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, PROTECTION VEHICLE #1 SHOULD BE ELIMINATED.
6. ON HIGH-SPEED ROADWAYS, A THIRD PROTECTION VEHICLE SHOULD BE USED (i.e., VEHICLE #1 ON THE SHOULDER (IF PRACTICAL), VEHICLE #2 IN THE CLOSED LANE, AND VEHICLE #3 IN THE CLOSED LANE).
7. ARROW PANELS SHALL BE AS A MINIMUM TYPE B, 60" X 30" IN ACCORDANCE WITH THE CRITERIA PRESENTED IN THE MUTCD.
8. WORK SHOULD NORMALLY BE DONE DURING OFF-PEAK HOURS.
9. 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.

MOBILE OPERATIONS ON TWO–LANE ROAD

NOTES:

1. WHERE PRACTICAL AND WHEN NEEDED, THE WORK AND PROTECTION VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS. IF THIS CAN NOT BE DONE FREQUENTLY, AS AN ALTERNATIVE, A "DO NOT PASS" SIGN MAY BE PLACED ON THE REAR OF THE VEHICLE BLOCKING THE LANE.
2. THE DISTANCE BETWEEN THE WORK AND PROTECTION VEHICLES MAY VARY ACCORDING TO TERRAIN, PAINT DRYING TIME, AND OTHER FACTORS. PROTECTION VEHICLES ARE USED TO WARN TRAFFIC OF THE OPERATION AHEAD. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, THE PROTECTION VEHICLE SHOULD MAINTAIN THE MINIMUM DISTANCE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. THE PROTECTION VEHICLE SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
3. ADDITIONAL PROTECTION VEHICLES TO WARN AND REDUCE THE SPEED OF ONCOMING OR OPPOSING TRAFFIC MAY BE USED. POLICE PATROL CARS MAY BE USED FOR THIS PURPOSE.
4. A TRUCK-MOUNTED ATTENUATOR (TMA) SHOULD BE USED ON THE PROTECTION VEHICLE AND MAY BE USED ON THE WORK VEHICLE.
5. THE WORK VEHICLE SHALL BE EQUIPPED WITH BEACONS, AND THE PROTECTION VEHICLES SHALL BE EQUIPPED WITH TWO HIGH-INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR, ADJACENT TO THE SIGN. PROTECTION AND WORK VEHICLES SHOULD DISPLAY FLASHING OR ROTATING BEACONS BOTH FORWARD AND TO THE REAR.
6. VEHICLE-MOUNTED SIGNS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
7. 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.

DATE	REVISED CAPTION REVISION	BY
2-1-99		S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL PLAN MOBILE OPERATIONS MULTILANE ROADS AND TWO–LANE ROADS

ENGLISH

WORKING NUMBER TCP-11

SHEET NUMBER 260

ISSUE DATE: OCTOBER 1, 1998

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STATE	PROJECT NO.
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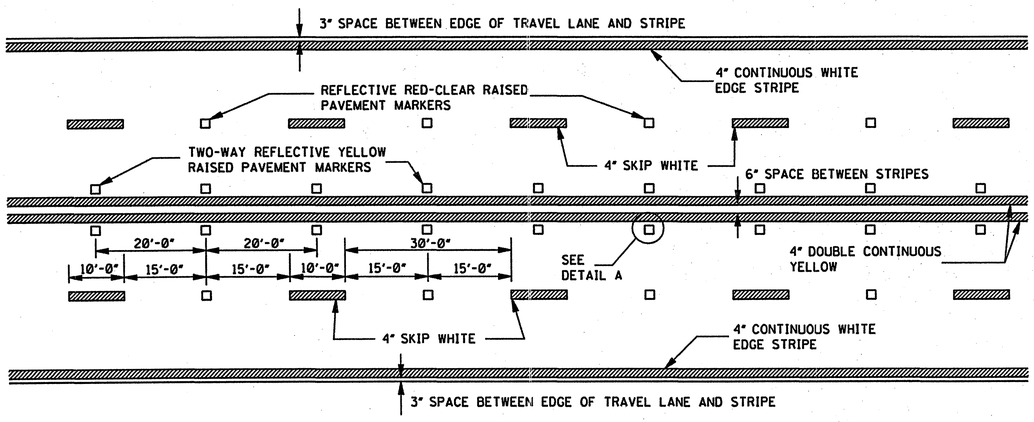
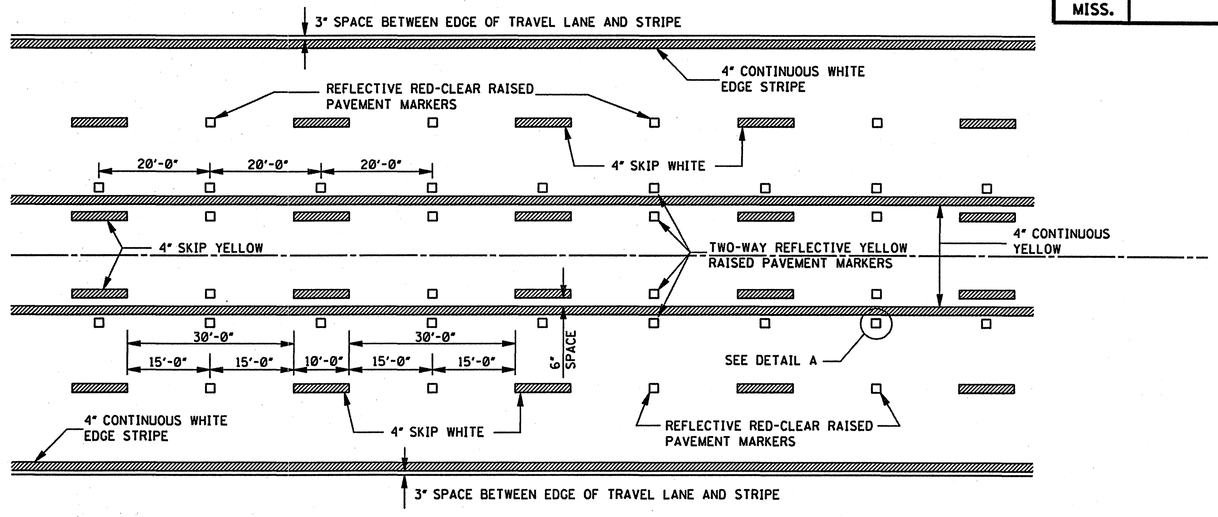
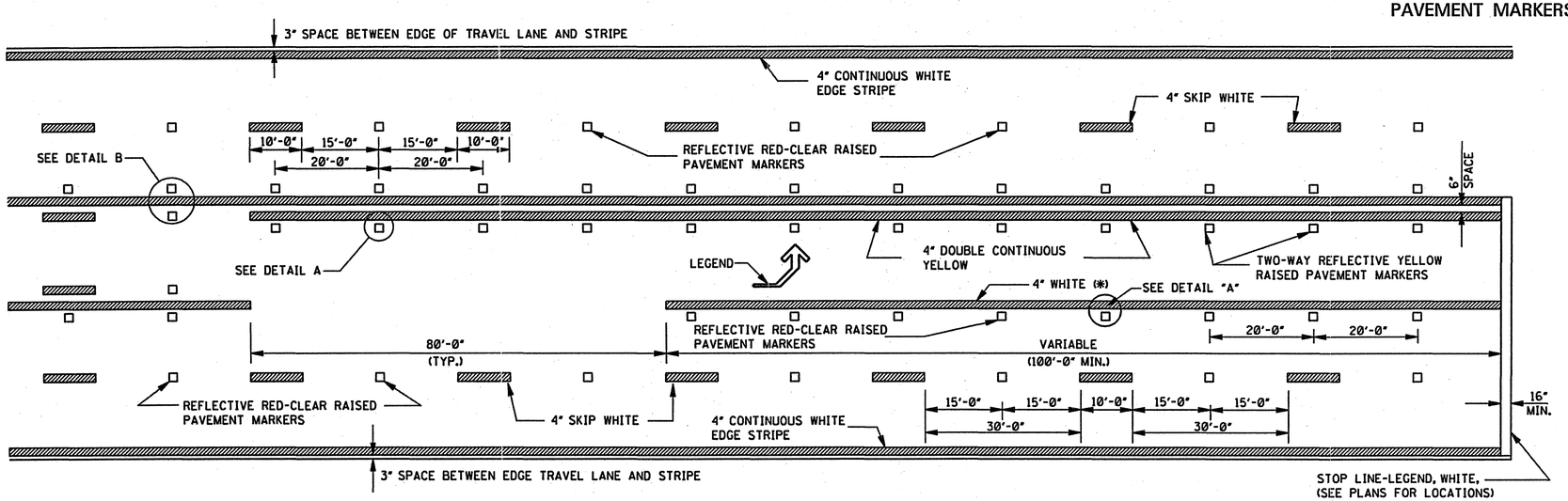
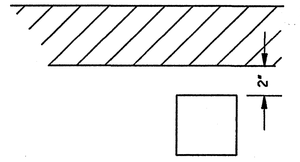


TYPICAL STRIPING AND RAISED
PAVEMENT MARKERS FOR 4–LANE SECTION



TYPICAL STRIPING AND RAISED
PAVEMENT MARKERS FOR 5–LANE SECTION

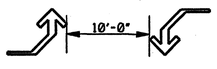




DETAIL A
LATERAL PLACEMENT OF
PAVEMENT MARKERS

GENERAL NOTE:

1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS".
2. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
3. TEMPORARY TURN ARROW TO BE PAID FOR AS TEMPORARY TRAFFIC STRIPE (LEGEND), ESTIMATED AT 10.9 SQ. FT. PER ARROW

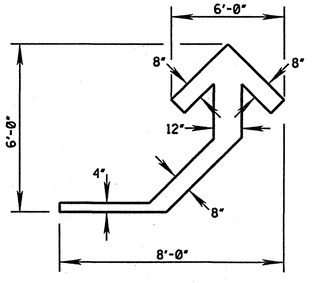


TYPICAL TWO–WAY ARROW INSTALLATION

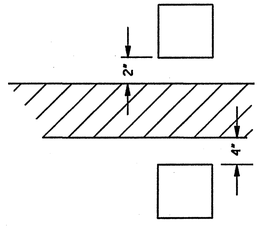
NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.
3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100'. FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF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

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 OF TEMPORARY
TURN ARROW



DETAIL B
LATERAL PLACEMENT OF
PAVEMENT MARKERS

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TEMPORARY STRIPING FOR TRAFFIC CONTROL 4–LANE AND 5–LANE UNDIVIDED ROADWAYS

ENGLISH

WORKING NUMBER TCP-16

ISSUE DATE: DECEMBER 1, 1999

SHEET NUMBER 265

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STATE	PROJECT NO.
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4" CAST IRON DRAIN PIPE PLACED WHERE DESIGNATED ELSEWHERE ON PLANS OR BY THE ENGINEER. PAYMENT FOR THE PIPE SHALL BE MADE ON A SEPARATE BASIS.

½" EXPANSION JOINTS 25'-0" ON CENTER

5'-0" 5'-0" 5'-0" 5'-0" 5'-0"

A A

SIDEWALK

CURB OMITTED FOR FUTURE DRIVEWAY CONSTRUCTION

CURB & GUTTER CURB & GUTTER

TYPE "3"

PRIVATE DRIVEWAY OR ALLEY

½" EXPANSION JOINTS

PAVED DRIVEWAY

TYPE "2"

PRIVATE SIDEWALK

SIDEWALK

½" EXPANSION JOINTS

4'-0" (MIN.)

CURB CUT RAMP

CURB CUT RAMP

4'-0" (MIN.)

TRANSITION

STREET

TRANSITION IN GRADE SHALL BE MADE BACK OF THE END OF CURB RETURN.

"A"

"B"

TOP OF CURB AT POINT "A" (END OF CURB RETURN) SHALL BE NOT MORE THAN 2% ABOVE OR 4% BELOW POINT "B" (TOP OF CURB PROJECTED ALONG TANGENT OF RETURN).

VAR. RADIUS

RADIUS RADIUS

PAVED DRIVEWAY

CURB & GUTTER CURB & GUTTER

TYPE "1"

6'-0" MIN. 10'-0" MAX.

½" EXPANSION JOINT REQUIRED AT THE ENDS OF ALL RADIUS RETURNS, BOTH SIDES OF STRUCTURES, AND AT 60' NOMINAL SPACING ON STRAIGHT RUNS. WHEN CURB AND GUTTER IS USED WITH PANEL CONCRETE PAVEMENT, SPACING OF EXPANSION JOINTS SHALL BE ADJUSTED TO MATCH JOINTS IN THE PAVEMENT. THE JOINTS SHALL BE FORMED OF PREMOLDED JOINT FILLER CUT TO FULL CROSS-SECTION AND SHALL EXTEND THE FULL DEPTH, WIDTH AND LENGTH OF THE CONSTRUCTION. ½" DEEP SCORING REQUIRED AT 20' SPACING AND ON BOTH SIDES OF DRIVEWAYS.

CURB CUT RAMP

ROADWAY PAVEMENT

1" EXPANSION JOINT SPACED AS SHOWN ELSEWHERE ON PLANS

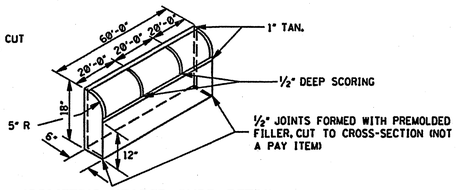
℄ ROADWAY

ROADWAY JOINTS. SEE JOINT LAYOUT ELSEWHERE IN PLANS.

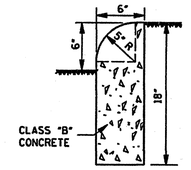
SECTIONS OF CURB & GUTTER SHORTER THAN 10'-0" WILL BE PERMITTED WHERE NECESSARY FOR CLOSURE, BUT NO SECTION LESS THAN 6'-0" IN LENGTH WILL BE PERMITTED.

PLAN SHOWING ARRANGEMENT OF CURB & GUTTER, DRIVEWAYS AND SIDEWALK

NOTE: DRIVEWAY REINFORCEMENT SHALL BE 6 X 6 - W1.4 X W1.4 OR 6 X 6 - D1.4 X D1.4 WIRE MESH WHERE REQUIRED.

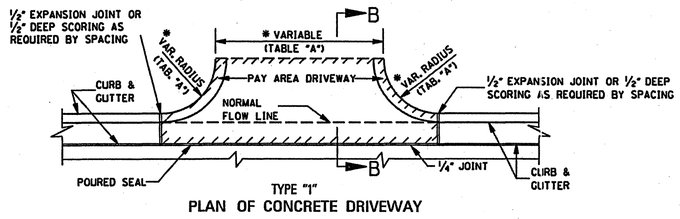


ISOMETRIC HEADER CURB DETAIL SHOWING JOINTS



DETAIL OF HEADER CURB

CONTRACTION JOINTS REQUIRED AT 20' O.C.
EXPANSION JOINTS REQUIRED AT 60' O.C.
UNLESS OTHERWISE DIRECTED BY ENGINEER.

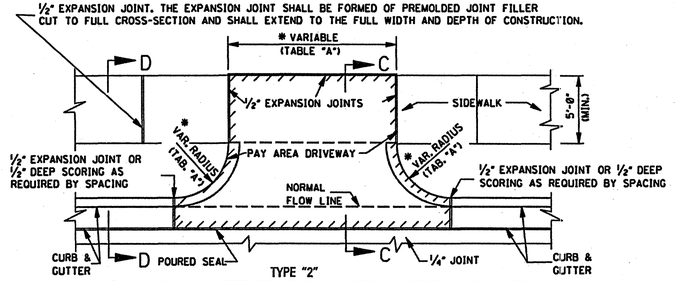


TYPE "1"

PLAN OF CONCRETE DRIVEWAY

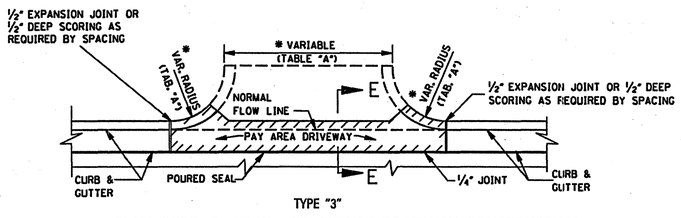
*TABLE "A"		
DRIVEWAY TYPE	DRIVEWAY WIDTH (ft)	CURB RETURN RADIUS (ft)
RESIDENTIAL	16'	3' - 10'
COMMERCIAL/ INDUSTRIAL	30' - 50'	5' - 30'

11.058 yd² FOR DRIVEWAY 16'-0" IN WIDTH.
0.574 yd² FOR EACH ADDED OR SUBTRACTED FOOT OF WIDTH.
NOTE: THIS DRIVEWAY AREA EXAMPLE IS COMPUTED ON THE BASIS OF 3'-0" RADIUS. PAYMENT FOR CURB RADIUS SHALL BE INCLUDED IN COMPENSATION FOR DRIVEWAY.



TYPE "2"

PLAN OF CONCRETE DRIVEWAY ACROSS SIDEWALK AREA

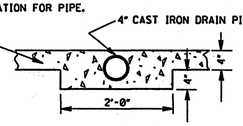


TYPE "3"

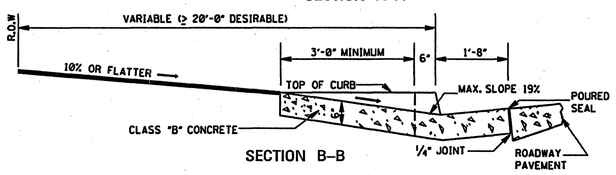
PLAN–CURB OMITTED FOR FUTURE DRIVEWAY CONSTRUCTION

NOTE: THIS TYPE CONSTRUCTION SHALL BE USED WHERE DESIGNATED ELSEWHERE ON PLANS OR BY THE ENGINEER.

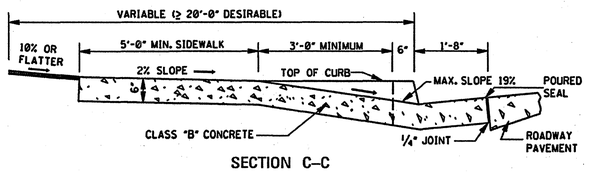
4" EXTRA DEPTH SHALL BE PLACED FULL WIDTH OF SIDEWALK, WHERE DRAIN PIPE PASSES THROUGH SIDEWALK. PAYMENT SHALL BE INCLUDED IN COMPENSATION FOR PIPE.



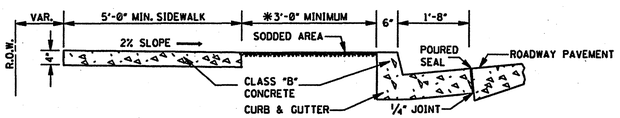
SECTION A–A



SECTION B–B

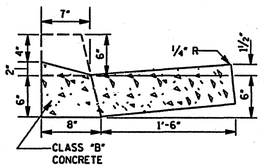


SECTION C–C

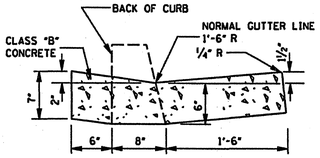


SECTION D–D

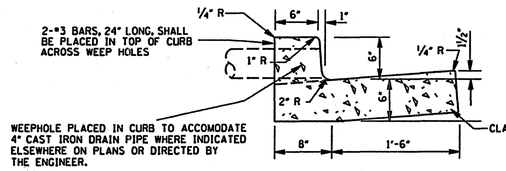
* NOTE: THE 3'-0" BUFFER SHOWN IS FOR A BUFFER ZONE. BUFFER ZONE IS NOT REQUIRED UNLESS INDICATED ELSEWHERE ON PLANS.



SECTION E–E

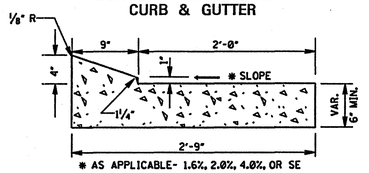


DETAIL OF VALLEY GUTTER



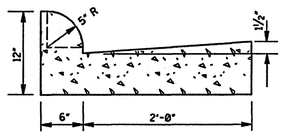
TYPE "1"

DETAIL OF COMBINATION CURB & GUTTER



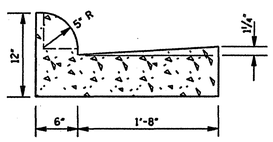
TYPE "2"

DETAIL OF COMBINATION CURB & GUTTER



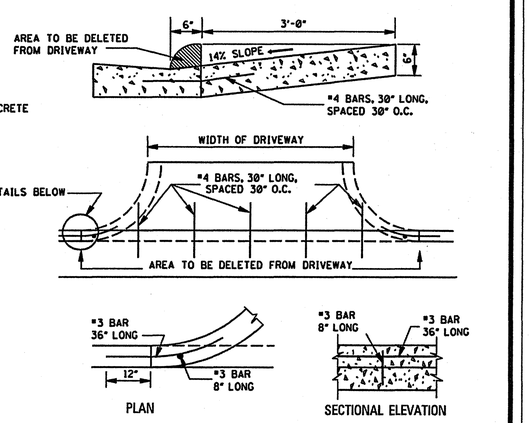
TYPE "3A"

DETAIL OF COMBINATION CURB & GUTTER



TYPE "3B"

DETAIL OF COMBINATION CURB & GUTTER



PERMISSIBLE DRIVEWAY CONSTRUCTION METHOD FOR SLIP–FORM PLACEMENT OF CURB & GUTTER

GENERAL NOTES:

1. THE STANDARD SPECIFICATIONS ADOPTED BY THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION SHALL, UNLESS OTHERWISE SPECIFIED HEREIN, APPLY TO ALL ITEMS INCLUDED ON THIS DRAWING.
2. TRAVERSE CONTRACTION JOINTS ARE REQUIRED AT 20' ON CENTER FOR ALL CONCRETE DRIVEWAYS THAT EXTEND PAST THE END OF THE CURB RETURN. A ½" WIDE EXPANSION JOINT IS REQUIRED AT THE END OF THE CURB RETURN AND AT 60' ON CENTER THROUGHOUT THE LENGTH OF THE DRIVEWAY. A LONGITUDINAL CONTRACTION JOINT IS REQUIRED FOR ALL DRIVEWAYS EXCEEDING 20' IN WIDTH.
3. SEE SHEET CCR-1 FOR DETAILS OF CURB-CUT RAMPS.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DRIVEWAYS, CURB & GUTTER & SIDEWALK

ENGLISH

WORKING NUMBER SD-1

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 287

METRIC PLAN SHEET

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STATE	PROJECT NO.
MISS.	

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
		$2\frac{2}{3}$" X ½" CORRUGATED STEEL / RIVETED, WELDED OR HELICAL		3" X 1" OR 5" X 1" CORRUGATED STEEL / RIVETED, WELDED, HELICAL OR BOLTED		$2\frac{2}{3}$" X ½" 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' / -

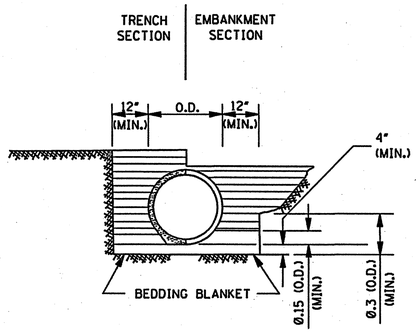
NOTE: THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR ½", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS (AASHTO M 36M/M 36 & AASHTO M 196M/M 196).

CORRUGATED METAL PIPE ARCHES H-20 LOADING

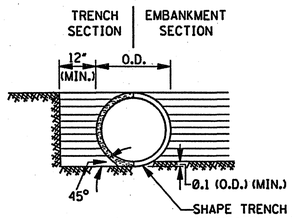
EQUIV. DIAMETER (In)	PIPE DIMENSION (SPAN X RISE) (In)	MINIMUM CORNER RADIUS (In)	MINIMUM COVER FROM TOP OF PIPE TO TOP OF SUBGRADE FOR 2 tons/ft² (In)	STEEL MINIMUM THICKNESS REQUIRED (In)	STEEL MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft²) 2 tons/ft²	STEEL † 3 tons/ft²	ALUMINUM MINIMUM THICKNESS REQUIRED (In)	ALUMINUM MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft²) 2 tons/ft²	ALUMINUM † 3 tons/ft²
				$2\frac{2}{3}$" X ½" CORRUGATION RIVETED, WELDED OR HELICAL			$2\frac{2}{3}$" X ½" 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"	3½"	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 ½", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS. (AASHTO M 36M/M 36 & AASHTO M 196M/M 196).

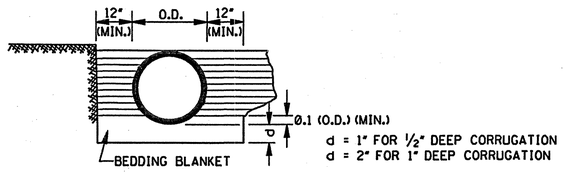
† 2. BEARING PRESSURES EXCEEDING 2 tons/ft² REQUIRED FOR GIVEN FILL HEIGHT SHALL HAVE FOUNDATION MATERIALS INVESTIGATED TO DETERMINE BEARING CAPACITY.



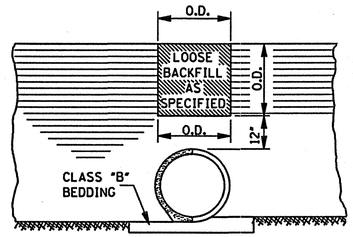
CLASS B



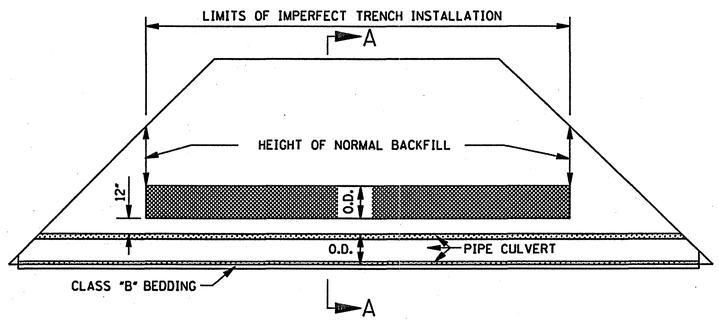
CLASS C



CLASS C MODIFIED



SECTION A–A



ELEVATION

IMPERFECT TRENCH INSTALLATION

MAXIMUM HEIGHT OF FILL OVER REINFORCED CONCRETE PIPE

CLASS OF PIPE	TYPE OF BACKFILL	MAXIMUM COVER (ft) CLASS "C" BEDDING	MAXIMUM COVER (ft) 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 B_d (In)	TRENCH SAND & GRAVEL	TRENCH DAMP CLAY	PROJECTING 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.

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 CONTRACTORS EXPENSE AND A DEFORMATION TO THE PIPE'S FLOWLINE IS NOT EVIDENT ON FINAL PLACEMENT.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PIPE CULVERT INSTALLATION

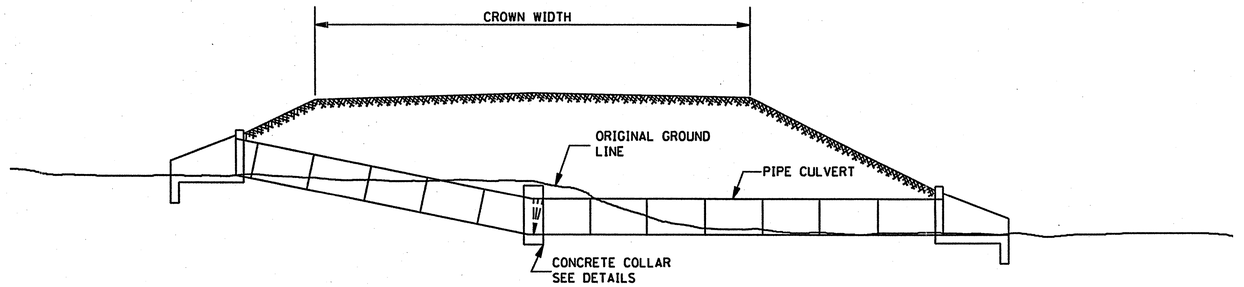
ENGLISH

WORKING NUMBER PI-1

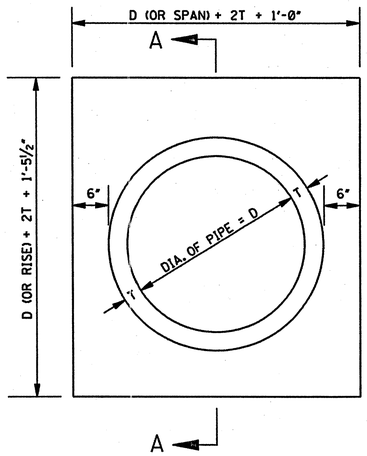
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 300

STATE	PROJECT NO.
MISS.	

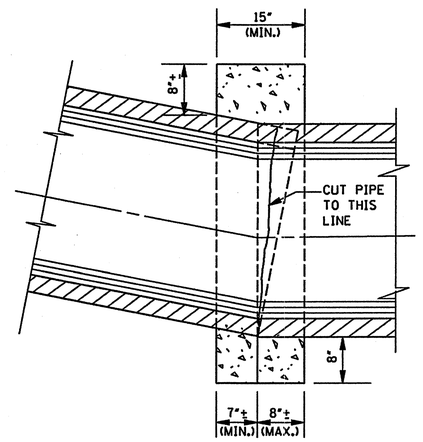


TYPICAL INSTALLATION FOR PIPE CULVERT WITH BROKEN FLOW LINE



ELEVATION OF CONCRETE COLLAR

NOTE: CIRCULAR PIPE IS SHOWN, ARCH PIPE IS SIMILAR.



SECTION A–A

GENERAL NOTE:

1. THE FOLLOWING QUANTITIES SHALL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE:

QUANTITIES FOR
CONCRETE COLLAR FOR PIPE CULVERTS

CIRCULAR PIPE		ARCH PIPE	
DIA. OF PIPE	CLASS "B" CONCRETE (yd^3)	SIZE OF PIPE	CLASS "B" CONCRETE (yd^3)
12"	0.240		
15"	0.260	18 x 11	0.280
18"	0.320	22 x 13	0.310
24"	0.410	29 x 18	0.410
30"	0.510	36 x 23	0.490
36"	0.620	44 x 27	0.600
42"	0.730	51 x 31	0.690
48"	0.850	58 x 36	0.820
54"	0.980	65 x 40	0.920
60"	1.110	73 x 45	1.070
66"	1.248	88 x 54	1.366
72"	1.393		

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

CONCRETE PIPE COLLAR

ENGLISH

WORKING NUMBER
PC-1

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
301

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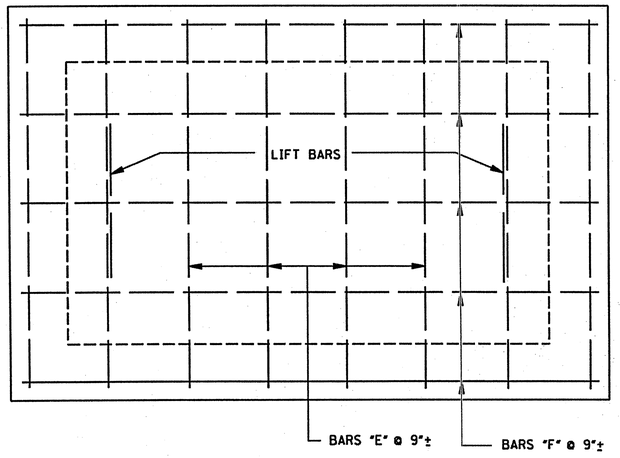
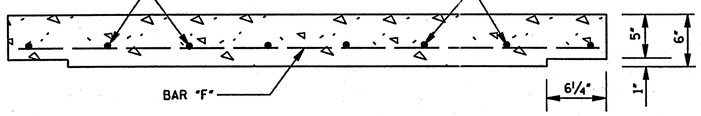
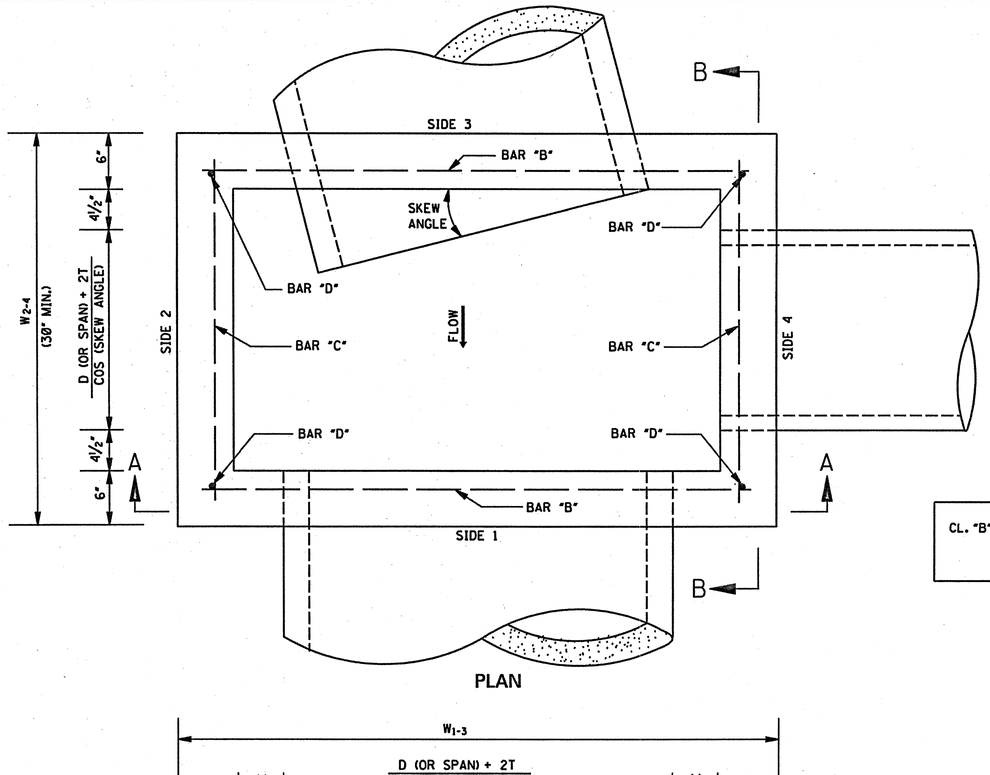
STATE	PROJECT NO.
MISS.	



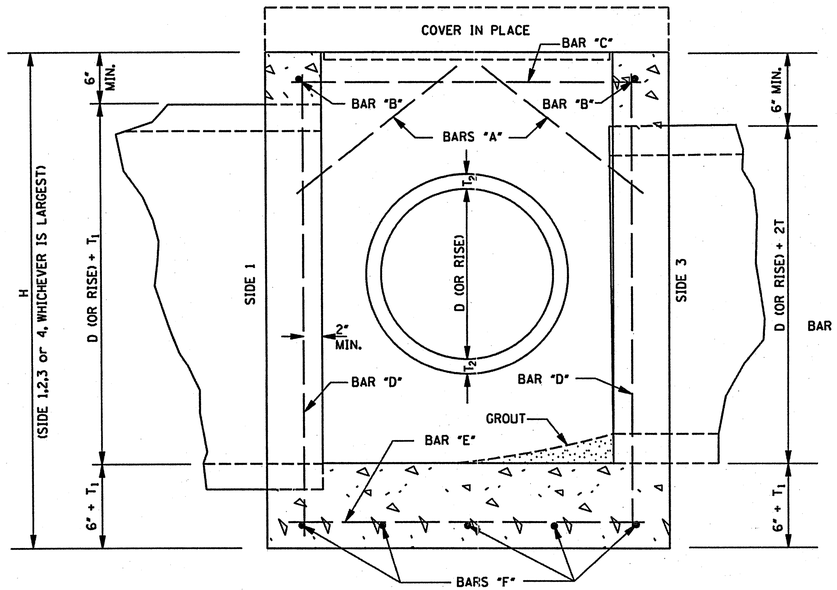
PLAN OF COVER



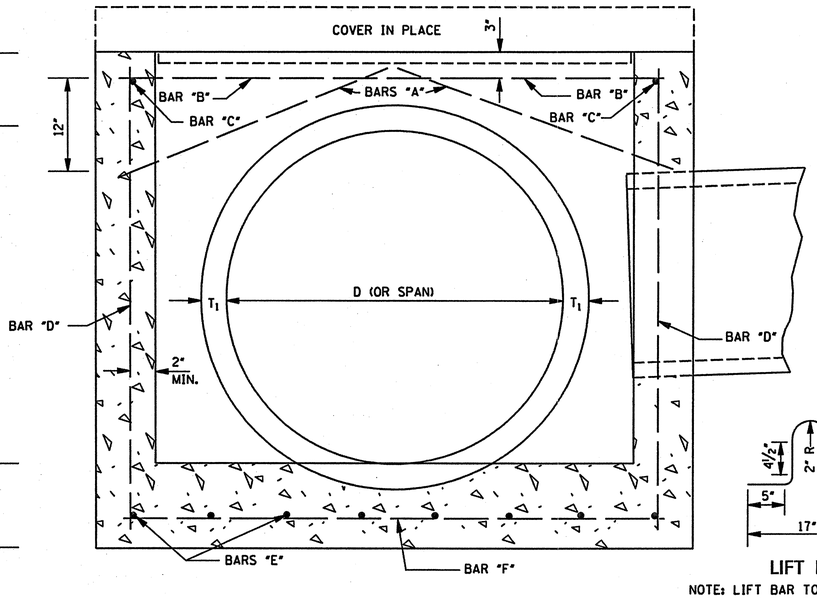
ELEVATION OF COVER



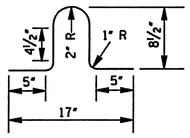
PLAN



SECTION B–B



SECTION A–A



LIFT BAR

NOTE: LIFT BAR TO BE FABRICATED FROM A #4 BAR 30" LONG. TWO LIFT BARS ARE REQUIRED. REINFORCING STEEL FOR 2 LIFT BARS = 3.3 lbs.

REINFORCING BAR LIST

BAR	SIZE	NUMBER REQUIRED	LENGTH
A	#4	2 PER PIPE OPENING	$\sqrt{196" + \left(\frac{W^*}{2} + 2"\right)^2}$
B	#4	2	W_{1-3} - 6"
C	#4	2	W_{2-4} - 6"
D	#4	4	H - 6"
E	#4	$2\left[\left(\frac{W_{1-3}}{9"}\right)^{**} + 1\right]$	W_{2-4} - 4"
F	#4	$2\left[\left(\frac{W_{2-4}}{9"}\right)^{**} + 1\right]$	W_{1-3} - 4"

NOTE: VARIABLES AND DESIGNATIONS ARE AS FOLLOWS:
D (OR SPAN) = PIPE DIAMETER (OR SPAN)
W_{1-3} = WIDTH OF SIDE 1 & SIDE 3
W_{2-4} = WIDTH OF SIDE 2 & SIDE 4
W* = W_{1-3} OR W_{2-4} (SIDE OF ENTERING PIPE)
** = ROUND TO NEAREST WHOLE NUMBER

CL. "B" CONC. (yd^3) = [Q1 + Q2) / 46,656] - Σ PIPE OPENING DEDUCTIONS
WHERE: Q1 = [5"$W_{1-3}W_{2-4}$] + [1"(W_{1-3} - 12.5")x(W_{2-4} - 12.5")] + [(T_1 + 6")$W_{1-3}W_{2-4}$]
Q2 = 12"[H - (T_1 + 6")] [(W_{1-3} - 12") + W_{2-4}]

COMMON PIPE SIZE

CIRCULAR PIPE			ARCH PIPE		
PIPE SIZE	T	PIPE OPENING DEDUCTION (yd^3)	PIPE SIZE	T	PIPE OPENING DEDUCTION (yd^3)
18"	2½"	0.053	22" x 13"	2½"	0.053
24"	3"	0.091	29" x 18"	3"	0.087
30"	3½"	0.138	36" x 23"	3½"	0.129
36"	4"	0.196	44" x 27"	4"	0.185
42"	4½"	0.263	51" x 31"	4½"	0.245
48"	5"	0.340	58" x 36"	5"	0.318
54"	5½"	0.427	65" x 40"	5½"	0.394
60"	6"	0.524	73" x 45"	6"	0.489
66"	6½"	0.630			
72"	7"	0.747			

GENERAL NOTES:

1. REINFORCING STEEL QUANTITIES TO BE COMPUTED FROM BAR LIST AND SHOWN ELSEWHERE ON THE PLANS.
2. QUANTITIES FOR JUNCTION BOXES SHOWN ON THE PLANS WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
3. CONCRETE SHALL BE CLASS "B" AND REINFORCING STEEL SHALL BE DEFORMED BARS.
4. SIDE 1 OF THE JUNCTION BOX WILL ALWAYS BE THE OUTFLOW SIDE.
5. IF PIPES ARE SKEWED MORE THAN 15° OR IF SKEWED PIPES PRODUCE CONFLICTS WITH ANOTHER OPENING, THE PIPE SHALL BE BROKEN BACK TO THE WALL OF THE JUNCTION BOX.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

JUNCTION BOX FOR PIPE CULVERTS

ENGLISH

WORKING NUMBER JB-1

SHEET NUMBER 302

ISSUE DATE: OCTOBER 1, 1998

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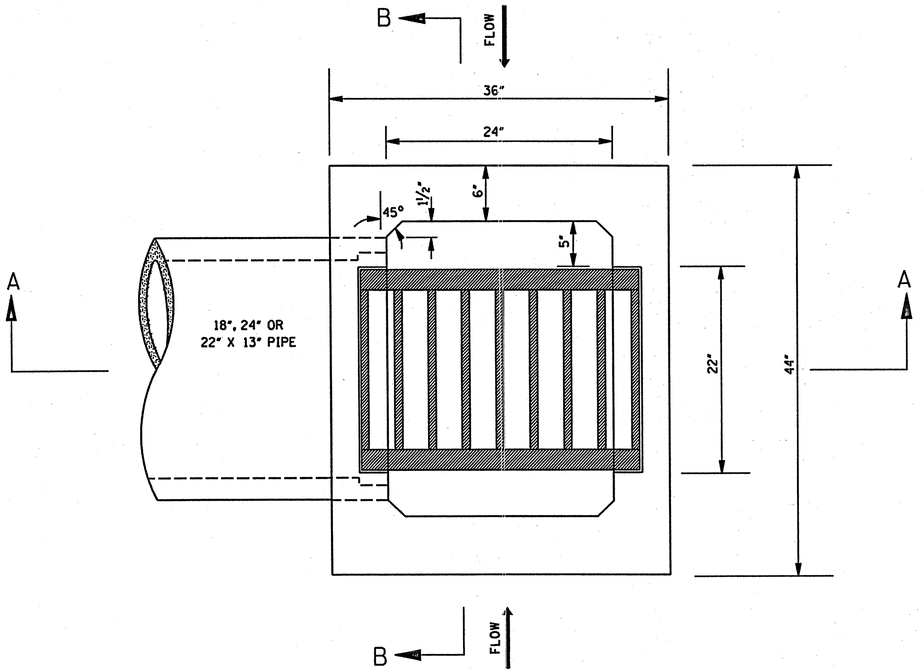
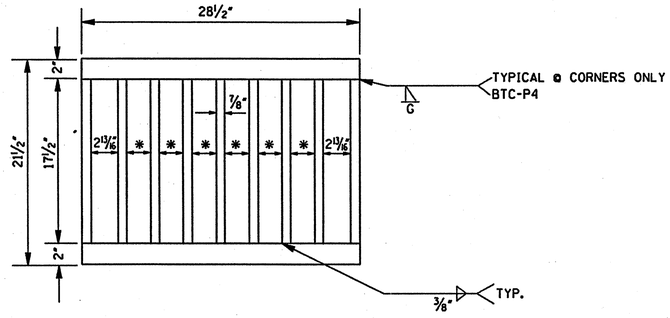
STATE	PROJECT NO.
MISS.	



PLAN OF CONCRETE DIMENSIONS



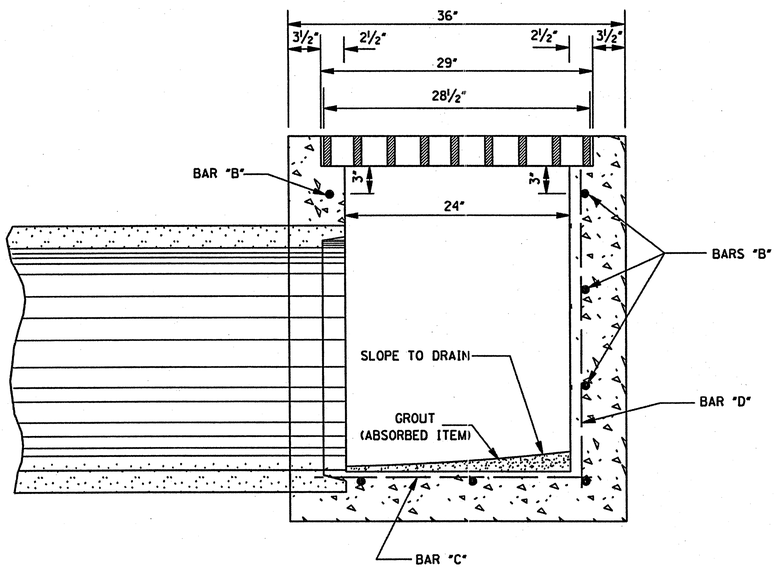
PLAN OF GRATE NO.1

* NOTE: TYPICAL SPACING 2½"

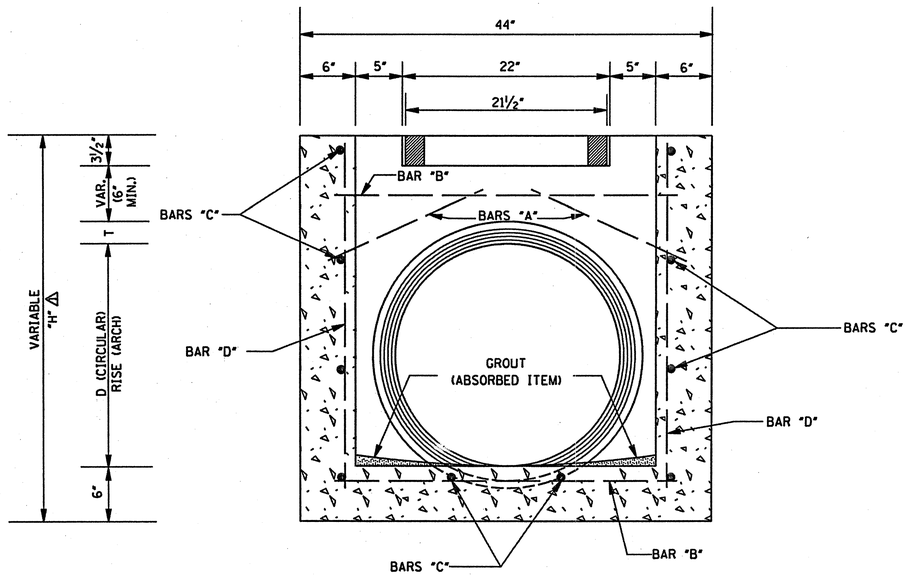
PIPE SIZE	MIN. DEPTH TO F.L.	QUANTITIES				T	PIPE OPENING DEDUCTION (yd^3)
		MIN. DEPTH INLET		EACH ADDED FOOT			
		CONC. (yd^3)	STEEL (lbs)	CONC. (yd^3)	STEEL (lbs)		
18"	2.500'	0.670	48	0.211	10	2½"	0.053
24"	3.042'	0.747	54	0.211	10	3"	0.091
22" X 13"	2.125'	0.591	46	0.211	10	2½"	0.053

NOTE: ONE (1) PIPE OPENING DEDUCTED FROM INLET.

BAR LIST FOR MINIMUM DEPTH INLET				
PIPE SIZE	BARS/SIZES			
	"A" / #4	"B" / #4	"C" / #4	"D" / #4
	NO. @ LGTH.	NO. @ LGTH.	NO. @ LGTH.	NO. @ LGTH.
18"	2 @ 1'-6"	6 @ 3'-2"	10 @ 2'-5"	10 @ 2'-6"
24"	2 @ 1'-6"	7 @ 3'-2"	10 @ 2'-5"	10 @ 3'-1"
22" X 13"	2 @ 1'-6"	6 @ 3'-2"	10 @ 2'-5"	10 @ 2'-4"



SECTION A–A



SECTION B–B

GENERAL NOTES:

1. QUANTITIES SHOWN WILL BE THE BASIS OF PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
2. INLET:
   - A. THE INLET ON THIS DRAWING IS SHOWN AS THE ENTRANCE TO A PIPE CULVERT BUT MAY ALSO BE USED ON A CROSSDRAIN.
   - B. THE CONCRETE SHALL BE CLASS "B".
   - C. THE REINFORCEMENT SHALL BE SPACED A MAXIMUM OF 12" ON CENTER BOTH WAYS WITH A MINIMUM CLEARANCE OF 1" TO THE INSIDE OF THE INLET WALLS.
3. GRATE:
   - A. THE CONTRACTOR HAS THE OPTION TO PROVIDE GRATE NO. 1 OR GRATE NO. 2 AS SHOWN ON SHEET IG-1.

DATE	REVISION	BY
5-01-02	ADDED "H"	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPE I MEDIAN INLET
(24" PIPE AND UNDER)

ENGLISH

WORKING NUMBER
MI-1

SHEET NUMBER
306

ISSUE DATE: OCTOBER 1, 1998

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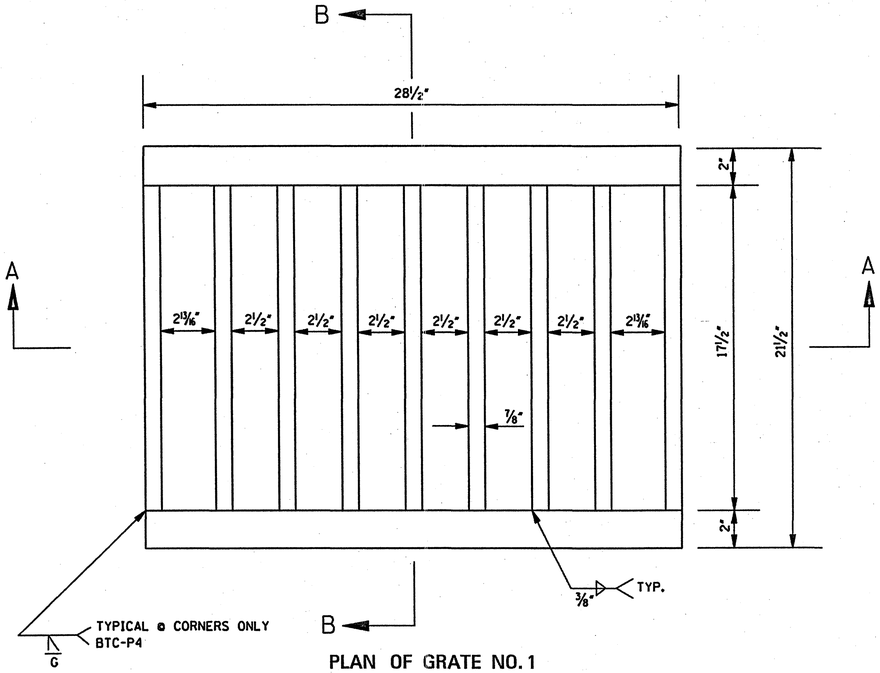
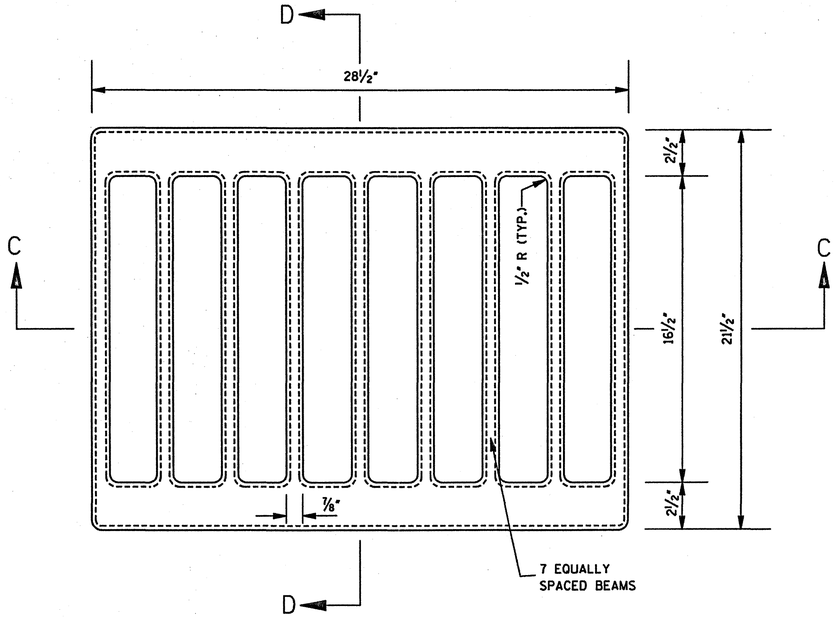
STATE	PROJECT NO.
MISS.	

GRATE NO. 1

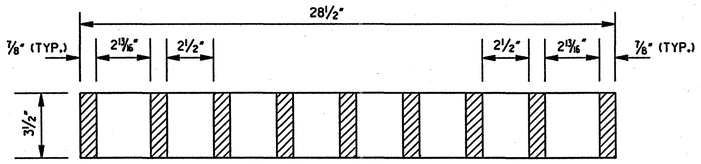


PLAN OF GRATE NO. 1

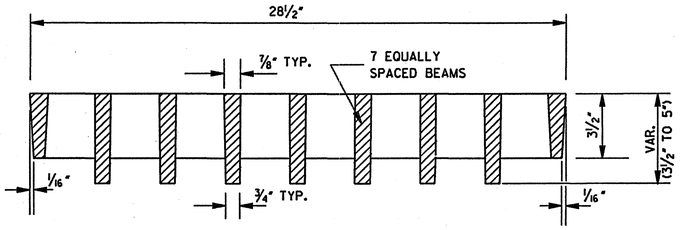
GRATE NO. 2



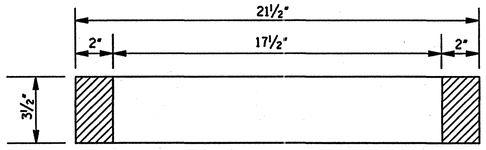
PLAN OF GRATE NO. 2



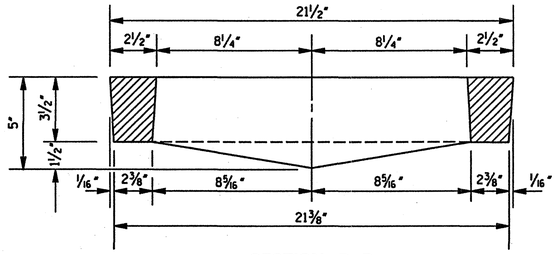
SECTION A–A



SECTION C–C



SECTION B–B



SECTION D–D

GENERAL NOTES:

1. BASIS OF PAYMENT WILL BE 250 lbs OF GRATING FOR EITHER GRATE.
2. GRATE NO.1

   THE GRATE MAY BE WELDED STEEL (ASTM A 588) OR STEEL CASTING (AASHTO M 192, CLASS 90). STEEL CASTING SHALL BE GALVANIZED (AASHTO M 111).
3. GRATE NO.2

   THE GRATE SHALL BE DUCTILE IRON (ASTM A 536, GRADE 80-55-06).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF GRATES FOR MEDIAN INLETS

BY	REVISION	DATE

WORKING NUMBER: IG-1

SHEET NUMBER: 314

ISSUE DATE: OCTOBER 1, 1998

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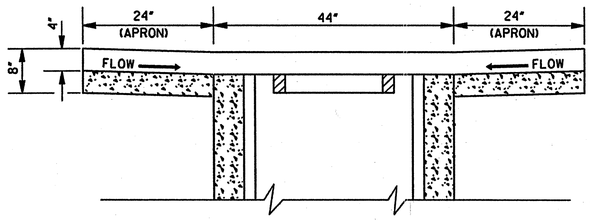
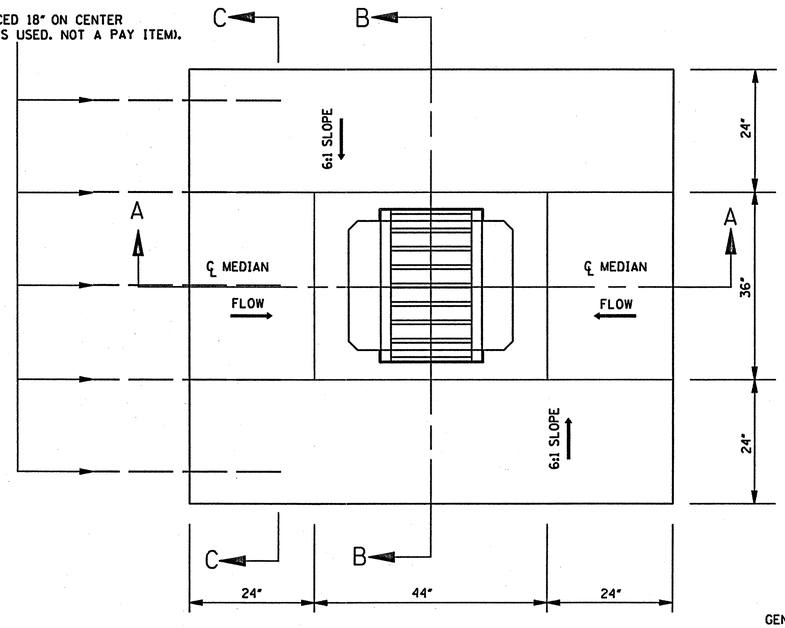
STATE	PROJECT NO.
MISS.	



SECTION A–A

NOTE: APRON REINFORCEMENT & SOLID SOD NOT SHOWN (SEE SECTION C-C).

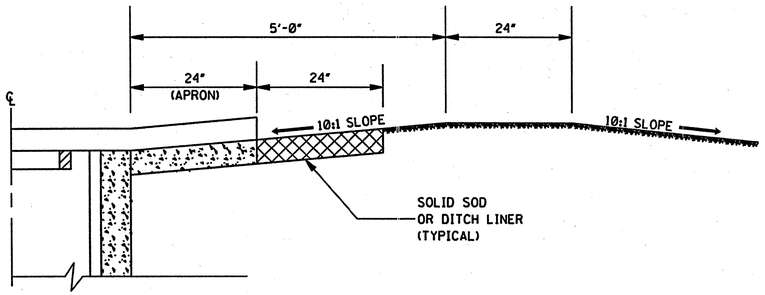
TYPICAL #4 BARS, 30" LONG, SPACED 18" ON CENTER (REQUIRED WHERE PAVED DITCH IS USED. NOT A PAY ITEM).



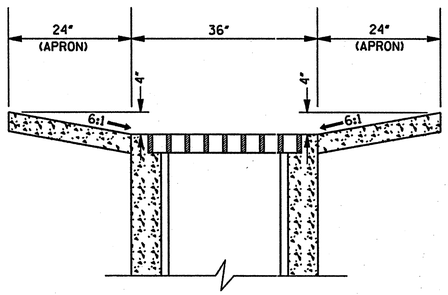
PLAN OF INLET & PAVED APRON

GENERAL NOTES:

1. CONSTRUCTION JOINTS TO BE TIED WITH 5 #4 BARS, 30" LONG, SPACED 18" ON CENTER. EXPANSION JOINT WILL NOT BE USED. CHAIR SUPPORTS FOR THE WIRE MESH WILL NOT BE REQUIRED. HOWEVER, THE CONTRACTOR SHALL PLACE THE WIRE MESH IN A SATISFACTORY AND WORKMANLIKE MANNER TO ENSURE THAT THE FINAL POSITION IS REASONABLY NEAR THE POSITION INDICATED.
2. PAVED APRON TO BE CONSTRUCTED AND PAID FOR IN ACCORDANCE WITH THE REQUIREMENTS FOR PAVED DITCHES.
3. 0.532 yd^3 CLASS "C" CONCRETE REQUIRED.
4. QUANTITY SHOWN WILL BE USED AS THE BASIS FOR FINAL PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.

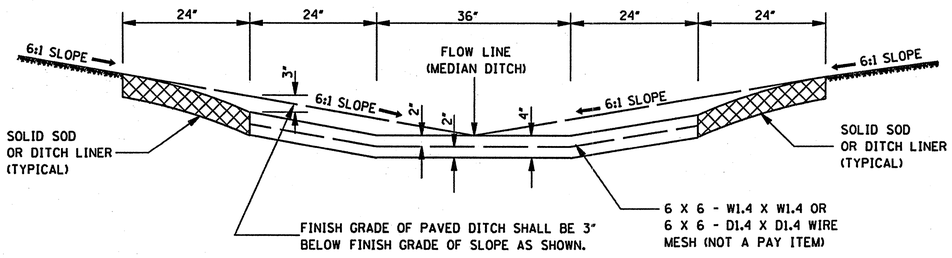


HALF SECTION A–A SHOWING DITCH PLUG



SECTION B–B

NOTE: APRON REINFORCEMENT & SOLID SOD NOT SHOWN (SEE SECTION C-C).



SECTION C–C

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVED INLET APRON AND MEDIAN DITCH PLUG

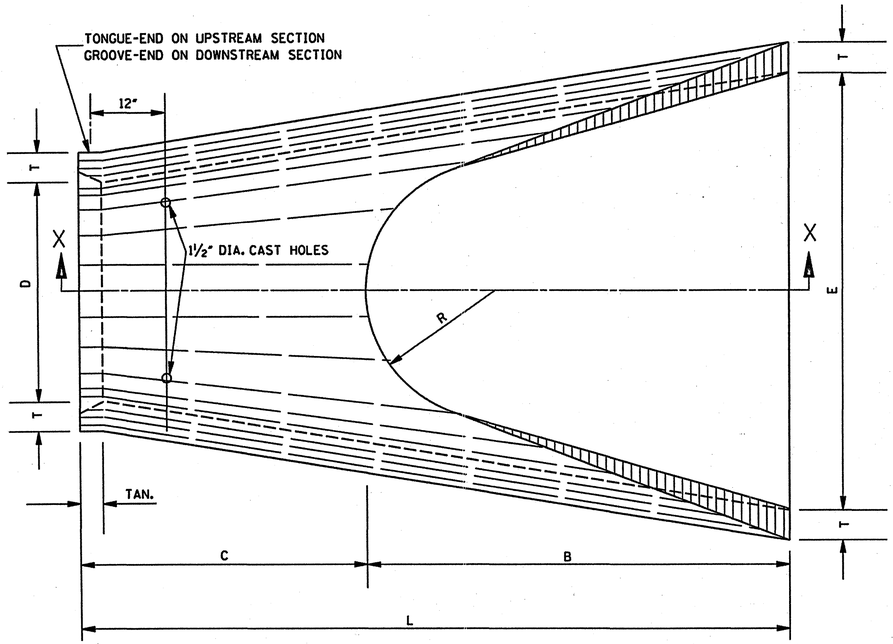
ENGLISH

WORKING NUMBER
PA-1

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
318

STATE	PROJECT NO.
MISS.	



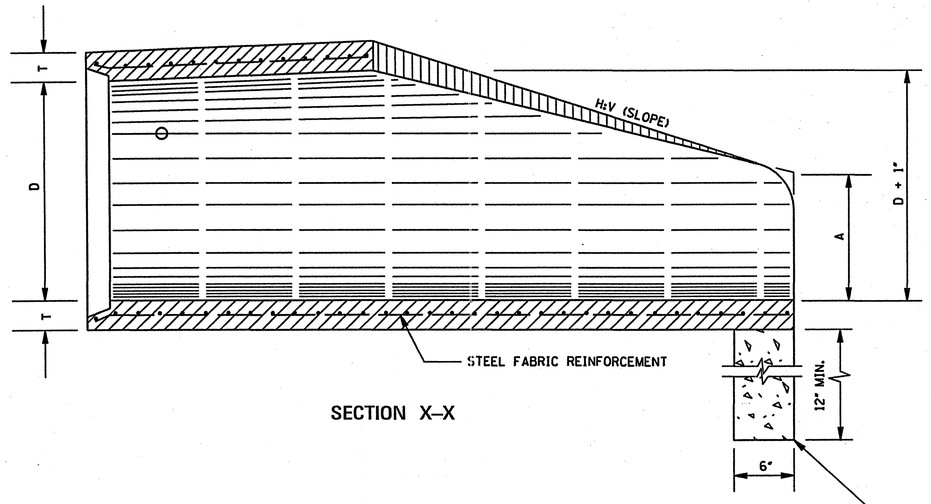
PLAN OF DOWNSTREAM END

BELL AND SPIGOT END OPTION

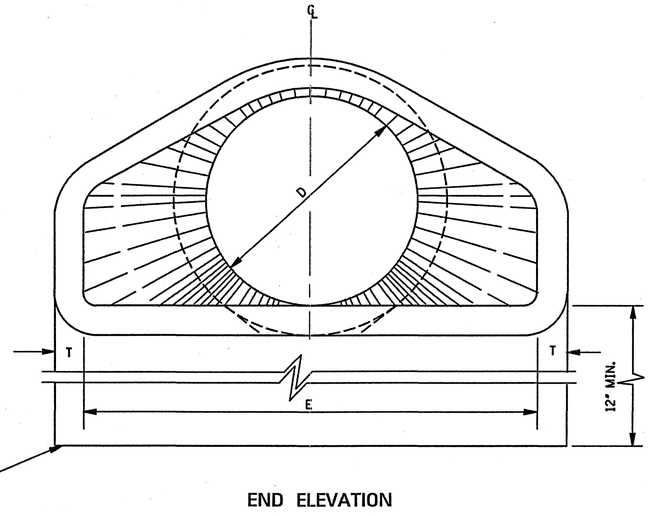
NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

	TABLE OF DIMENSIONS								TOE WALL CONC. QUANTITY (yd^3)
	D	T	H:V	A	B	C	E	L	
	15"	2¼"	3:1	6"	2'-3"	4'-1"	2'-8"	6'-1"	0.056
	18"	2½"	3:1	9"	2'-3"	3'-10"	3'-0"	6'-1"	0.063
	24"	3"	3:1	10"	3'-8"	2'-6"	4'-0"	6'-2"	0.083
	30"	3½"	3:1	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"	0.102
	36"	4"	3:1	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"	0.123
	42"	4½"	3:1	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"	0.134
	48"	5"	3:1	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"	0.145
	54"	5½"	3:1	2'-4"	6'-6"	1'-10"	7'-6"	8'-4"	0.156
*	60"	6"	3:1	2'-10"	6'-6"	1'-10"	8'-0"	8'-4"	0.167
*	66"	6½"	3:1	3'-4"	6'-6"	1'-10"	8'-6"	8'-4"	0.177
*	72"	7"	3:1	3'-10"	6'-6"	1'-10"	9'-0"	8'-4"	0.188

* NOTE: SEE GENERAL NOTE 2.



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 - 1½" 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.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

FLARED END SECTION FOR CONCRETE PIPE

ENGLISH

WORKING NUMBER
FE-1

SHEET NUMBER
328

ISSUE DATE: OCTOBER 1, 1998

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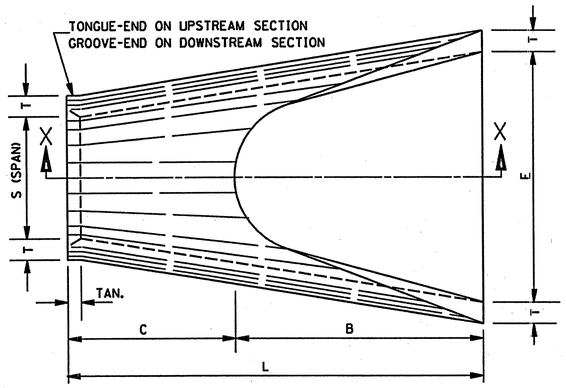
STATE	PROJECT NO.
MISS.	

BELL AND SPIGOT END OPTION TYPE I

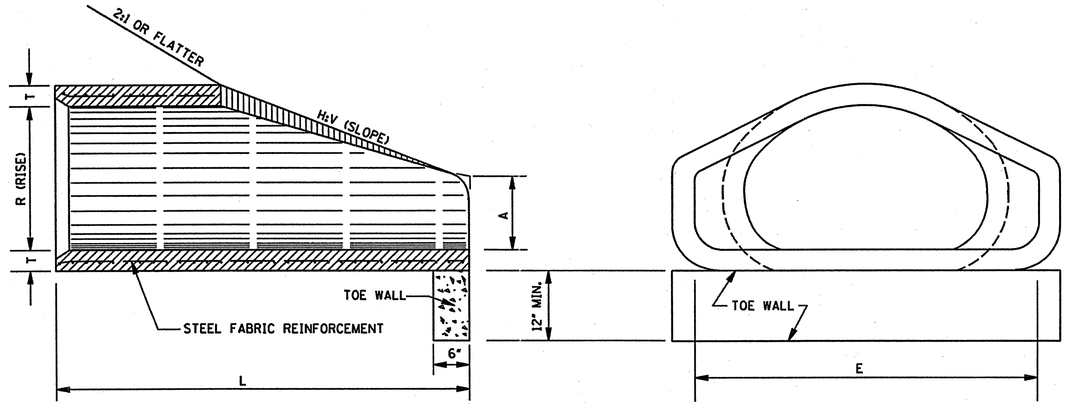
NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

FLARED END SECTION FOR CONCRETE ARCH PIPE									
EQUIV. SIZE	R	S	T	H:V	A	B	C	E	L
18"	13½"	22"	2½"	3:1	7"	2'-3"	3'-9"	3'-0"	6'-0"
24"	18"	28½"	3"	3:1	8"	3'-3"	2'-9"	4'-0"	6'-0"
30"	22½"	36¼"	3½"	3:1	10"	4'-0"	2'-0"	5'-0"	6'-0"
36"	26⅝"	43¾"	4"	3:1	10⅝"	5'-0"	3'-0"	6'-0"	8'-0"
42"	31⅝"	51⅛"	4½"	3:1	1'-3⅜"	5'-0"	3'-0"	6'-6"	8'-0"
48"	36"	58½"	5"	3:1	1'-9"	5'-0"	3'-0"	7'-0"	8'-0"
54"	40"	65"	5½"	3:1	2'-1½"	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 (yd³)
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

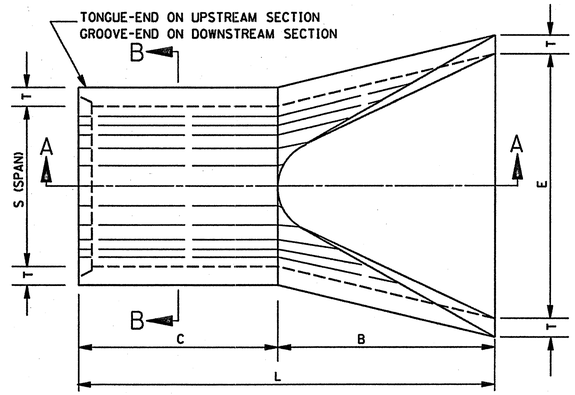
BELL AND SPIGOT END OPTION TYPE II

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

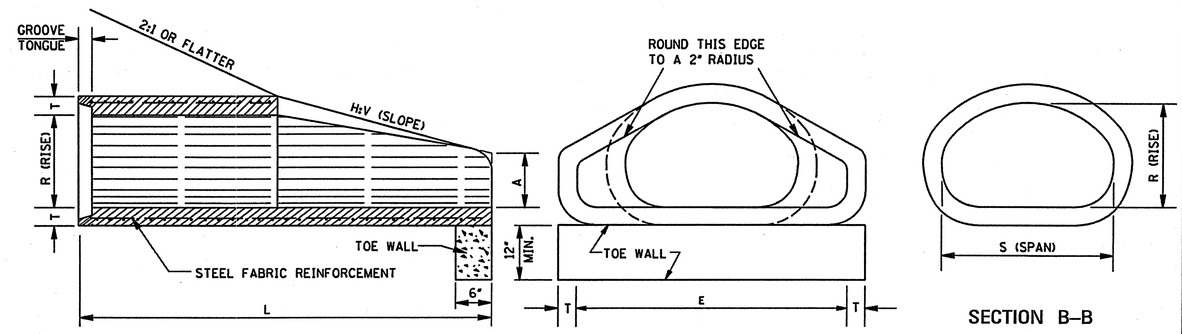
FLARED END SECTION FOR CONC. ARCH PIPE-SHORT FLARE										
EQUIV. SIZE	R	S	T	H:V	A	B	C	E	L	GROOVE TONGUE
* 18"	13½"	22"	2½"	3:1	7"	2'-3"	3'-9"	3'-0"	6'-0"	2¼"
24"	18"	28½"	3½"	3.12:1	9"	3'-3"	2'-9½"	4'-0"	6'-0½"	3"
30"	22½"	36¼"	4"	2.94:1	9½"	4'-2"	3'-10½"	5'-0"	8'-0½"	3½"
36"	26⅝"	43¾"	4½"	3.08:1	11⅝"	5'-0"	3'-0½"	6'-0"	8'-0½"	4"
42"	31⅝"	51⅛"	4½"	3.08:1	1'-4⅝"	5'-0"	3'-0½"	6'-6"	8'-0½"	4"
48"	36"	58½"	5"	3.16:1	1'-10"	5'-0"	3'-0½"	7'-0"	8'-0½"	5"
54"	40"	65"	5½"	3.24:1	2'-3"	5'-0"	3'-0⅝"	7'-6"	8'-0⅝"	5"
60"	45"	73"	6"	3.33:1	2'-9"	5'-0"	3'-0⅝"	8'-0"	8'-0⅝"	5"

TOE WALL CONC. QUANTITY (yd³)
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:

1. FLARED END SECTIONS ARE NOT TO BE USED INSIDE THE CLEAR ZONE.
2. 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.
3. 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.
4. REINFORCEMENT (SINGLE LINE) FOR FLARED END SECTION SHALL CONFORM TO REQUIREMENTS OF AASHTO M 206 FOR CLASS II ARCH PIPE.
5. 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.
6. FLARED END SECTIONS MUST MEET THE REQUIREMENTS FOR ARCH PIPE OF EITHER AASHTO M 206 OR ASTM C 506.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

FLARED END SECTION FOR CONCRETE ARCH PIPE

ENGLISH

WORKING NUMBER
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