

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PLANS FOR PROPOSED
FEDERAL AID URBAN SYSTEM

CITY OF HARRISBURG

F.A.U. ROUTE 9550 (SLOAN STREET)
SECTION 07-00083-00-RP
PROJ M-5027(11)
C-99-528-07

CITY OF HARRISBURG
SLOAN STREET

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	1
CITY OF HARRISBURG		SLOAN STREET		

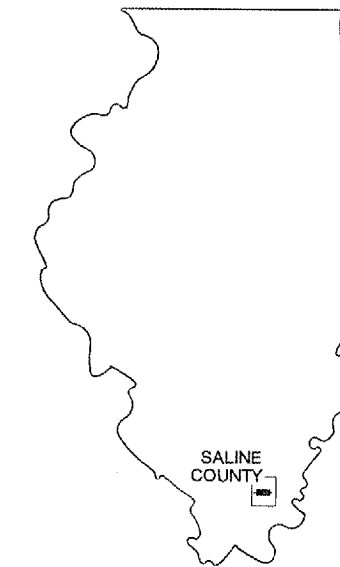
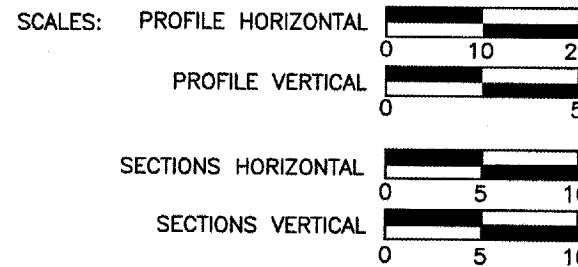
CONTRACT NO. 99300

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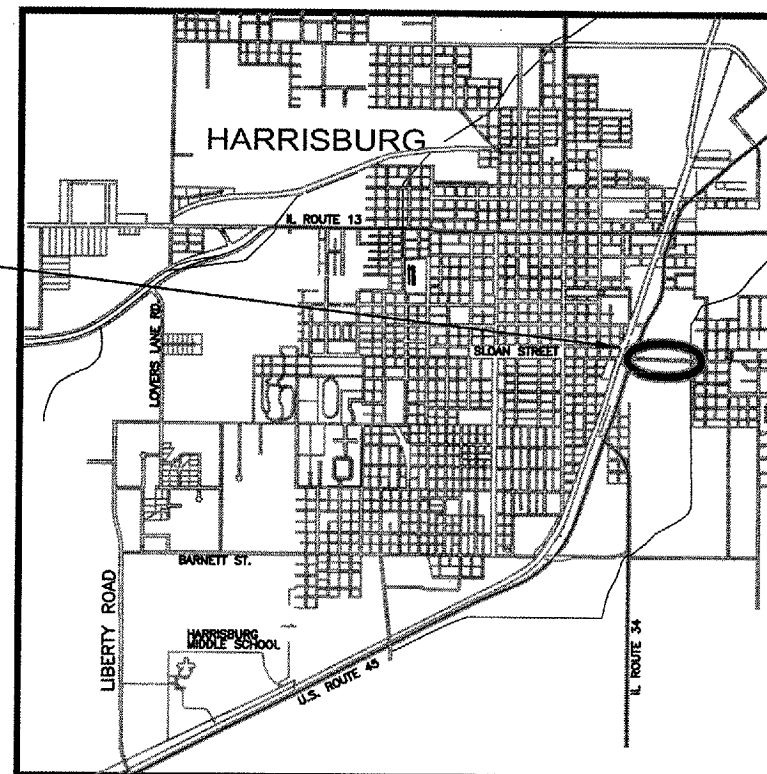
STANDARDS

- 280001-03 TEMPORARY EROSION CONTROL
- 420001-06 PAVEMENT JOINTS
- 424001-04 CURB RAMPS
- 542301-01 PRC FLARED END SECTION
- 602701-01 CAST IRON STEPS
- 604001-02 FRAME AND LID, TYPE 1
- 701501-03 TRAFFIC CONTROL
- 702001-06 TRAFFIC CONTROL DEVICES
- 720001 SIGN PANEL MOUNTING
- 720006-01 SIGN PANEL ERECTION
- 780001-01 PAVEMENT MARKINGS
- BLR 10-5 PCC PAVEMENT SPECIAL
- BLR 21-6 TRAFFIC CONTROL
- BLR 22-4 TRAFFIC CONTROL

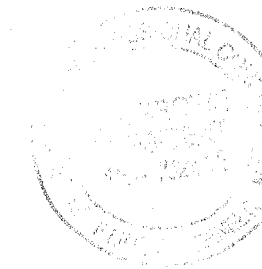


LOCATION OF SECTION INDICATED THUS -

PROPOSED IMPROVEMENTS



LOCATION MAP APPROXIMATE SCALE: 1"=4,000'
LENGTH OF IMPROVEMENT = 745 FEET (0.14 MILES)



Jim W. Brown
JIM W. BROWN, PRESIDENT APRIL 11, 2007
ILLINOIS PROFESSIONAL DESIGN FIRM
LAND SURVEY & PROF. ENG. CORP
NUMBER 184-002518
EXPIRES APRIL 30, 2009

CITY OF HARRISBURG

APPROVED *April 12, 2007*
Ron Morse
MAYOR, CITY OF HARRISBURG

PASSED *April 12, 2007*
Dem. W. Hiller
DISTRICT 9 ENGINEER OF LOCAL ROADS & STREETS

RELEASING FOR BID
BASED ON LIMITED
REVIEW *April 12, 2007*
Mary C. Lamie
MARY C. LAMIE, P.E.
DEPUTY DIRECTOR OF HIGHWAYS
REGION FIVE ENGINEER

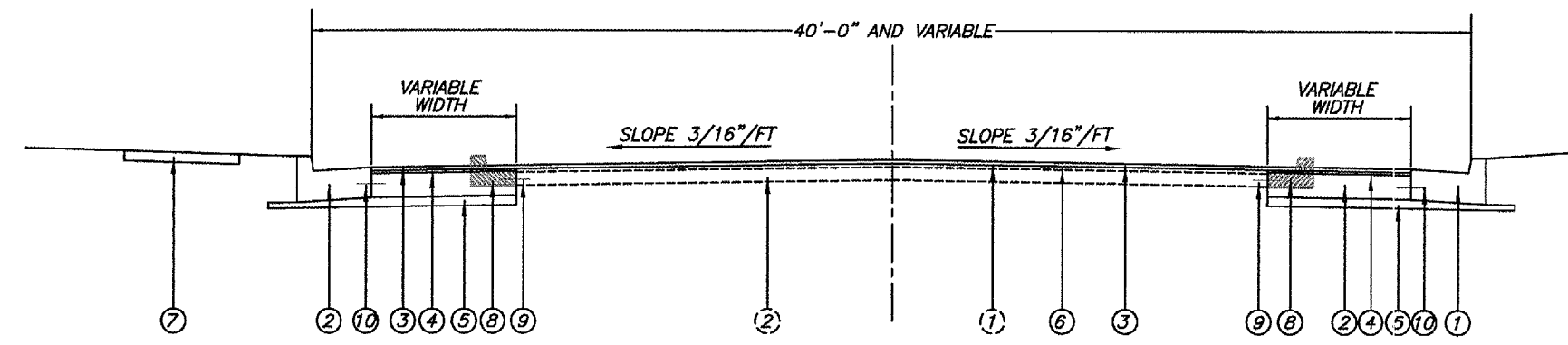
ALL EXISTING UTILITIES AND LOCATIONS TO BE
CONFIRMED BY J.U.L.I.E. 800-892-0123

BROWN & ROBERTS, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
1 WEST RIDGE ROAD HARRISBURG, IL 62946 (618) 252-8111

JOB NO. 07-016 CONTRACT NO. 99300

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	2
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CONTRACT NO. 99300



TYPICAL ROADWAY SECTION

STA. 17+30 TO STA. 22+50
NO SCALE

EXISTING

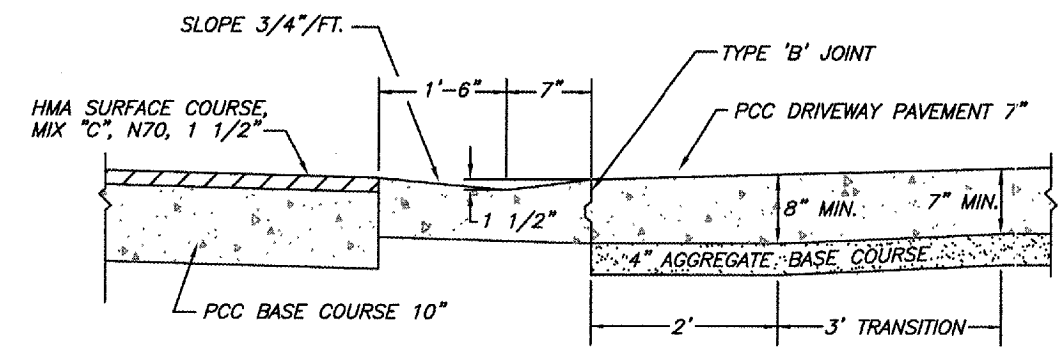
- ① EXISTING BITUMINOUS CONCRETE BINDER COURSE TO REMAIN
- ② EXISTING PCC PAVEMENT TO REMAIN

PROPOSED

- ① PROPOSED COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24
- ② PROPOSED PCC BASE COURSE, 10"
- ③ PROPOSED HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70, 1 1/2"
- ④ PROPOSED LEVELING BINDER (MACHINE METHOD), N70, 1"
- ⑤ PROPOSED SUBBASE GRANULAR MATERIAL, TYPE A, 4"
- ⑥ EXISTING BITUMINOUS CONCRETE SURFACE COURSE (TO BE REMOVED)
- ⑦ PROPOSED PCC SIDEWALK, 4"
- ⑧ COMBINATION CURB AND GUTTER REMOVAL
- ⑨ PROPOSED #5 EPOXY-COATED REBAR, 30" LONG ON 24" CENTERS, DRILLED AND ANCHORED WITH EPOXY CEMENT (INCLUDED AS PART OF PROPOSED PCC BASE COURSE 10")
- ⑩ PROPOSED #5 EPOXY-COATED REBAR, 30" LONG ON 24" CENTERS, DRILLED AND ANCHORED WITH EPOXY CEMENT OR CAST IN PLACE (INCLUDED AS PART OF PROPOSED PCC BASE COURSE 10")

LEGEND

- EDGE OF EXISTING ROADWAY
- EXISTING TELEPHONE PEDESTAL
- EXISTING UTILITY POLE
- EXISTING WATER METER
- EXISTING CULVERT TO BE REMOVED
- PROPOSED INLET, TYPE 3, 5'
- PROPOSED INLET SPECIAL, TYPE A WITH TYPE 3V FRAME & GRATE
- PROPOSED STORM SEWER
- EXISTING ELECTRIC LINE
- EXISTING UNDERGROUND TELEPHONE
- EXISTING GAS LINE
- EXISTING CABLE TV LINE
- EXISTING WATERMAIN
- EXISTING HYDRANT
- CONSTRUCTION LIMITS
- PROPOSED DEPRESSED CURB
- EXISTING CONCRETE TO BE REMOVED
- PROPOSED DITCH CHECK
- PROPOSED PERIMETER EROSION CONTROL



DEPRESSED CURB

NO SCALE

TO BE USED ADJACENT TO CITY STREETS & PRIVATE ENTRANCES
FOR JOINT 'B' DETAILS, SEE STANDARD BLR 10-3

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SUMMARY OF QUANTITIES

CONTRACT NO. 99300				
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	3
CITY OF HARRISBURG			SLOAN STREET	

CODE NO.	PAY ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	700
20800150	TRENCH BACKFILL	CU YD	65
*25000900	SEEDING, CLASS 1 (SPECIAL)	ACRE	0.6
25100630	EROSION CONTROL BLANKET	SQ YD	2900
*28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	150
28000300	TEMPORARY DITCH CHECKS	EACH	3
28000400	PERIMETER EROSION BARRIER	FOOT	300
28000500	INLET AND PIPE PROTECTION	EACH	13
28100807	STONE DUMPED RIPRAP, CLASS A4	TON	125
31100100	SUB-BASE GRANULAR MATERIAL, TYPE A	TON	400
35300500	PORTLAND CEMENT CONCRETE BASE COURSE 10"	SQ YD	910
40600635	LEVELING BINDER (MACHINE METHOD), N70	TON	200
40603315	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N70	TON	300
40800010	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	300
42300300	PORTLAND CEMENT CONCRETE DRIVEWAY PAVEMENT, 7 INCH	SQ YD	232
42400100	PORTLAND CEMENT CONCRETE SIDEWALK 4 INCH	SQ FT	2980
*44000080	HOT-MIX ASPHALT SURFACE REMOVAL (COLD MILLING)	SQ YD	2050
44000200	DRIVEWAY PAVEMENT REMOVAL	SQ YD	85
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	1540
44000600	SIDEWALK REMOVAL	SQ FT	2980
54001000	BOX CULVERT END SECTIONS	EACH	2
54010805	PRECAST CONCRETE BOX CULVERT 8'X5'	FOOT	34
54213657	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 12"	EACH	1
54213660	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 15"	EACH	1
54213669	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 24"	EACH	2
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	2
54244405	FLUSH INLET BOX FOR MEDIAN, STANDARD 542546	EACH	2
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	115
550A0070	STORM SEWERS, CLASS A, TYPE 1 15"	FOOT	25
550A0120	STORM SEWERS, CLASS A, TYPE 1 24"	FOOT	78
550A0160	STORM SEWERS, CLASS A, TYPE 1 36"	FOOT	26
55100500	STORM SEWER REMOVAL 12"	FOOT	35
55101200	STORM SEWER REMOVAL 24"	FOOT	63
*56108710 Δ	TAPPING VALVES AND SLEEVES 4"	EACH	1
*56108800 Δ	TAPPING VALVES AND SLEEVES 6"	EACH	1
*56108900 Δ	TAPPING VALVES AND SLEEVES 8"	EACH	2
*56200200 Δ	WATER SERVICE LINE 3/4"	FOOT	240
*56400820 Δ	FIRE HYDRANT WITH AUXILIARY VALVE AND VALVE BOX	EACH	1
*60240200	INLETS, TYPE A, SPECIAL	EACH	1
*60243300	INLETS, SPECIAL, TYPE 3, 5'	EACH	1
60603800	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12	FOOT	164
60605000	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24	FOOT	1387
67100100	MOBILIZATION	L SUM	1
72000100	SIGN PANEL - TYPE 1	SQ FT	6

CODE NO.	PAY ITEM	UNIT	QUANTITY
72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	26
78000100 Δ	THERMOPLASTIC PAVEMENT MARKING - LETTERS & SYMBOLS	SQ FT	1600
78000200 Δ	THERMOPLASTIC PAVEMENT MARKING LINE - 4"	FOOT	1900
78000600 Δ	THERMOPLASTIC PAVEMENT MARKING LINE - 12"	FOOT	140
*XX000679 Δ	CUT AND CAP EXISTING WATERMAIN	EACH	4
*XX002809 Δ	WATERMAIN, 8" PVC	FOOT	1170
*XX005890 Δ	DETECTION WIRE	FOOT	1210
*XX006035 Δ	CASING PIPE 16"	FOOT	30
*XX006960 Δ	WATER MAIN, 8" YELOMINE PVC DIRECTIONAL BORING	FOOT	40

Δ SPECIALTY ITEMS

SURVEY CONTROL

POINT DESCRIPTION	NORTHING	EASTING	ELEV
STA 13+10.12 CL	387,623.301	925,799.935	
STA 17+92.02 CL POT	387,609.148	926,281.622	
STA 25+00.00 CL	387,587.575	926,989.273	
STL PIN W/IDOT CAP	387,671.084	925,869.873	362.14
STA 25+00.00 CL	387,591.190	926,074.682	362.08
STA 25+00.00 CL	387,722.218	926,544.015	362.86

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ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	4
CITY OF HARRISBURG		SLOAN STREET		

CONTRACT NO. 99300

PC DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT

* LOCATION	EXIST. SURFACE	DRIVEWAY PAVT. REMOVAL			PCC DRIVEWAY PAVT. 7"		
		LENGTH	WIDTH	SQ. YD.	LENGTH	WIDTH	SQ. YD.
18+10 RT	CONCRETE	15.0'	24'	41.9	13.4'	24'	32.6
18+94 RT	CONCRETE	15.0'	24'	41.9	-	-	-
19+75.6 LT	NONE	-	-	-	64.9'	24'	199.4

TOTAL DRIVEWAY PAVEMENT REMOVAL AND REPLACEMENT 83.8 232.0

* EXACT LOCATION TO BE DESIGNATED BY THE ENGINEER

PCC BASE COURSE, 10"

STATION	LOCATION	OFFSET	AREA SQ YD
17+30 TO 24+14	18.0'LT TO 12.4'LT		389.0
17+30 TO 18+90	12.2'RT TO 18.0'RT		101.0
18+90 TO 20+70	12.2'RT TO 26.8'RT		251.0
20+70 TO 24+14	18.0'RT TO 12.2'RT		165.0

TOTAL PCC BASE COURSE, 10" 906.0

COMBINATION CURB AND GUTTER REMOVAL

STATION	LOCATION	OFFSET	LENGTH FOOT
17+30 TO 24+60	14.1'LT TO 13.3'LT		730.0
17+30 TO 24+60	13.9'RT TO 13.1'RT		730.0
17+88 TO 17+98	13.2'RT TO 28.8'RT		20.0
18+22 TO 18+31	28.7'RT TO 13.3'RT		19.1
18+74 TO 18+83	13.2'RT TO 28.7'RT		19.1
19+06 TO 19+15	28.7'RT TO 13.2'RT		19.6

TOTAL COMBINATION CURB AND GUTTER REMOVAL 1537.8

PC SIDEWALK REMOVAL AND REPLACEMENT

STATION	LOCATION	OFFSET	PC SIDEWALK REMOVAL 4"			PC SIDEWALK 4"		
			LENGTH	WIDTH	SQ FT	LENGTH	WIDTH	SQ FT
17+30 TO 24+75	18.7'LT TO 13.8'LT		745'	4.0'	2980.0	-	-	-
17+30 TO 24+75	26.6' LT TO 13.8'LT		-	-	-	745'	4.0'	2980.0

TOTAL SIDEWALK REMOVAL AND REPLACEMENT 2980.0 2980.0

COMBINATION CURB AND GUTTER TYPE B6.12

STATION	LOCATION	OFFSET	LENGTH FOOT
19+33.5 TO 19+63.5	20.1'RT TO 85'RT		82.0
19+87.6 TO 20+17.6	85'RT TO 20.1'RT		82.0

TOTAL COMBINATION CURB AND GUTTER TYPE B6.12 164.0

COMBINATION CURB AND GUTTER TYPE B-6.24

STATION	LOCATION	OFFSET	LENGTH FOOT
17+30 TO 24+60	20'LT TO 13.3'LT		730.0
17+30 TO 19+18.4	20'RT TO 28.5'RT		190.0
17+86.8 TO 17+98.2	20'RT TO 34'RT		21.0
18+21.7 TO 18+31.5	34'RT TO 20'RT		21.0
20+35.9 TO 24+60	28.5'RT TO 20'RT		425.5

TOTAL COMBINATION CURB AND GUTTER TYPE B-6.24 1387.0

DRAINAGE STRUCTURE SCHEDULE

	STATION	OFFSET	SIDE	STRUCTURE TYPE	TOP OF CASTING ELEVATION	FLOWLINE ELEVATION	RIPRAP (TONS)
1	17+77	28.0	RT	FLUSH INLET FOR MEDIAN	359.40	357.90	
2	18+70	28.0	RT	FLUSH INLET FOR MEDIAN	359.62	357.53	
3	18+71	39.3	RT	PRC FLARED END SECTION, 12"	-	359.00	
4	19+00	41.0	RT	PRC FLARED END SECTION, 15"	-	357.40	
5	19+53	56.8	LT	PCBC END SECTION 8X5	-	353.12	25
6	19+99	56.8	LT	PCBC END SECTION 8X5	-	352.75	30
7	20+25	47.3	LT	PRC FLARED END SECTION, 12"	-	355.48	10
8	20+25	20.0	LT	INLETS, TYPE A, SPECIAL	360.92	357.92	
9	20+48	46.0	RT	PRC FLARED END SECTION, 24"	-	356.90	
10	20+48	24.1	RT	INLET SPECIAL, TYPE 3, 5'	XXX.XX	356.68	
11	20+48	44.0	LT	PRC FLARED END SECTION, 24"	-	356.00	30
12	22+31	44.0	RT	PRC FLARED END SECTION, 36"	-	431.76	
13	22+35	52.0	LT	PRC FLARED END SECTION, 36"	-	431.33	30

TOTAL STONE DUMPED RIPRAP CLASS A4 (TON) 125

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ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	5
CITY OF HARRISBURG		SLOAN STREET		

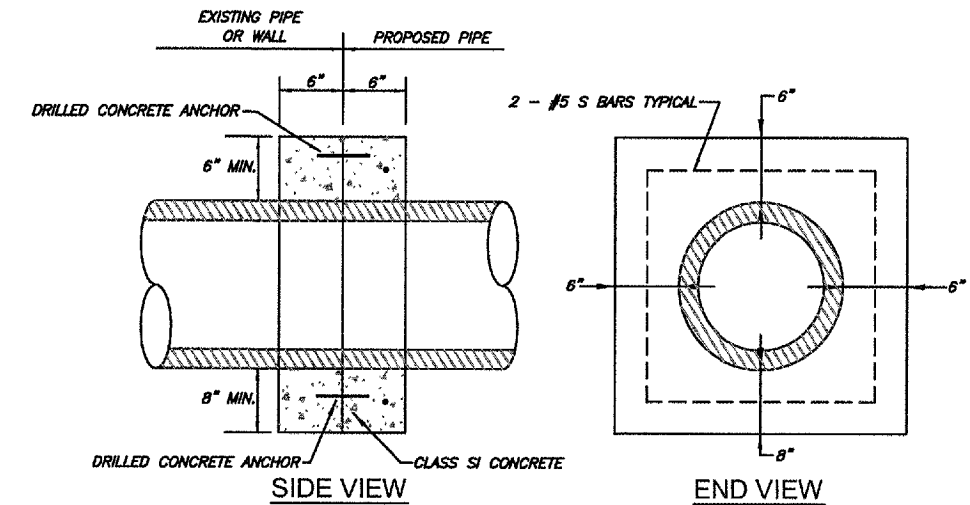
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CULVERT REMOVAL

STATION	LOCATION OFFSET	LENGTH (FEET)		TRENCH BACKFILL (C.Y.)
		12" DIA.	24" DIA.	
17+89 TO 18+29	23.3'RT	40		3.7
18+74 TO 19+24	22.0'RT TO 21.8'RT	40		2.4
20+27	12'RT TO 19'RT	7		0.6
20+27 TO 20+31	12'LT TO 47.4'LT	35		3.7
20+47	44'LT TO 19'RT		63	0
TOTAL CULVERT REMOVAL		35	63	10.4

STORM SEWER SCHEDULE

POINT TO POINT	STORM SEWERS, CLASS A, TYPE 1 (FOOT)				PCBC 8'X5' (FOOT)	TRENCH BACKFILL (CU. YD.)	CONCRETE COLLAR (EACH)
	12"	15"	24"	36"			
1-2	90				1.9	0	
2-3	4				0	0	
3-4		25			0	0	
5-6					34	37.6	
7-8	21				2.2	0	
9-10			14		0	0	
10-11			64		12.2	0	
12-12A				13	0	1	
13-13A				13	0	1	
115	25	78	26	34	53.9		



NOTES:

1. ALL CONCRETE SHALL CONSIDERED INCLUDED WITH THE UNIT PRICE PER FOOT FOR STORM SEWER. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
2. ALL REINFORCEMENT SHALL BE CONSIDERED INCLUDED WITH THE UNIT PRICE PER FOOT FOR STORM SEWER.

CONCRETE COLLAR DETAILS

STORM WATER POLLUTION PREVENTION PLAN

The following Plan is established and incorporated in the project to direct the Contractor in the placement of temporary erosion control systems and to provide a storm water pollution prevention plan for compliance under NPDES.

The purpose of this plan is to minimize erosion within the construction site and to limit sediments leaving the construction site by utilizing proper temporary erosion control systems and providing ground cover within a reasonable amount of time.

Certain erosion control facilities shall be installed by the Contractor at the beginning of construction. Other items shall be installed as directed by the Engineer on a case by case situation depending on the Contractor's sequence of activities, time of year and expected weather conditions.

The Contractor shall construct permanent erosion control systems and seeding within a time frame specified herein and as directed by the Engineer, therefore minimizing the amount of area susceptible to erosion and reducing the amount of temporary seeding. The engineer will determine if any temporary erosion control systems shown in the plans can be deleted and if any additional temporary erosion control systems, which are not included in the plans, shall be added. The contractor shall perform all work as directed by the Engineer and as shown in STANDARD 280001.

Section 280, Temporary Erosion Control, of the Standard Specifications additionally supplements this plan.

DESCRIPTION OF CONSTRUCTION ACTIVITIES

1. Temporary ditch checks shall be located at every 1.5 feet of fall/rise in ditch grade.

INTENDED SEQUENCE OF MAJOR CONSTRUCTION ACTIVITIES

1. Isolated tree removal. Trees to remain will be protected against damage.
2. Watermain, Sanitary Sewers, Storm Sewers, and Drainage Structures.
3. Excavation and grading.
4. Placement of Aggregate Base Course.
5. Placement on PCC Pavement.
6. Seeding and permanent erosion control systems.

AREA OF CONSTRUCTION SITE

1. The total area of the construction site is estimated to be 1.1 Acres of which approximately 1.1 Acres will be disturbed.

OTHER REPORTS, STUDIES AND PLANS WHICH AID IN THE DEVELOPMENT OF THE SWPPP AS REFERENCED DOCUMENTS.

1. Information of the terrain was obtained from topographic maps.
2. Project plan documents, specifications and special provisions and plan drawings indicating the drainage patterns and location of existing drainage features were utilized in the preparation of the proposed placement of temporary erosion control systems.

DRAINAGE TRIBUTARIES AND SENSITIVE AREAS RECEIVING RUNOFF

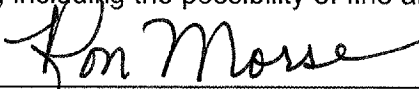
1. Proposed storm sewer outlets are tributary to existing roadside ditches. No new discharge points will be constructed.

CONTROLS - EROSION CONTROLS AND SEDIMENT CONTROLS

1. Existing vegetation will be preserved where attainable and disturbed portions of the site will be stabilized. Stabilization practices will include temporary seeding, permanent seeding, mulching, protection of trees, preservation of mature vegetation and other appropriate measures as directed by the Engineer. Stabilization measures shall be initiated as soon as practical in those areas of the site where construction activities have ceased, but in no case more than 7 days after the construction activity for an area has temporarily or permanently ceased.
2. Areas outside the construction limits shall be protected from construction activities.
3. Dead, diseased or unsuitable vegetation within the site shall be removed as directed by the Engineer.
4. As soon as is reasonable, the temporary erosion control system shall be installed as indicated in the plans or as directed by the engineer.

This plan has been prepared with the intent to comply with the provisions of the NPDES Permit Number ILR10, issued by the Illinois Environmental Protection Agency for storm water discharges from construction site activities.

I certify under penalty of law that this plan was prepared at my direction in accordance with a system that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.


Ron Morse, City of Harrisburg

April 12, 2007

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	6
CITY OF HARRISBURG		SLOAN STREET		

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DESCRIPTION OF STABILIZATION PRACTICES
DURING CONSTRUCTION

1. During construction, areas outside the construction limits shall be protected.
2. Within the construction limits, areas which may be susceptible to erosion as determined by the Engineer shall remain undisturbed until full scale construction is underway.
3. Earth stockpiles shall be temporary seeded if they are to remain unused for more than 14 days.
4. As soon as construction proceeds, the contractor shall institute the following as directed by the Engineer:
 - A) Place temporary erosion control facilities at locations shown in the plans.
 - B) Temporarily seed erodable bare earth on a weekly basis to minimize the amount of erodable surface area within the contract limits.
 - C) Construct roadside ditches and provide temporary erosion control systems.
 - D) Temporarily divert water around proposed culvert locations.
5. Excavated areas shall be permanently seeded immediately after final grading. If not, they shall be temporarily seeded if no construction in the area is planned for 7 days.
6. All necessary measures shall be taken by the contractor to contain any fuel or pollutant in accordance with EPA water quality regulations. Leaking equipment or supplies shall be immediately repaired or removed from the site.
7. The Resident Engineer shall inspect the project daily during construction activities. Inspection shall also be done weekly and after rains of 0.5 inches or greater or equivalent snowfall and during any winter shutdown period.
8. Sediment collected during the construction by the various temporary erosion control systems shall be disposed of on site on a regular basis as directed by the Resident Engineer. The cost of this maintenance shall be considered incidental to the erosion control system.
9. The temporary erosion control systems shall be removed as directed by the Engineer after use is no longer needed or no longer functioning. The cost of removal shall be included in the unit bid price for various temporary erosion control pay items.

DESCRIPTION OF STRUCTURAL PRACTICES
AFTER FINAL GRADING

1. Temporary seeding shall be left in place with proper maintenance until permanent erosion control and all proposed turf areas seeded and established.
2. Once permanent erosion control systems as proposed in the plans are functional and established, temporary items shall be removed, cleaned up and disturbed turf areas reseeded.

MAINTENANCE AFTER CONSTRUCTION

1. Construction is complete after FINAL acceptance by I.D.O.T. final inspection. Maintenance up to this date will be by the contractor.

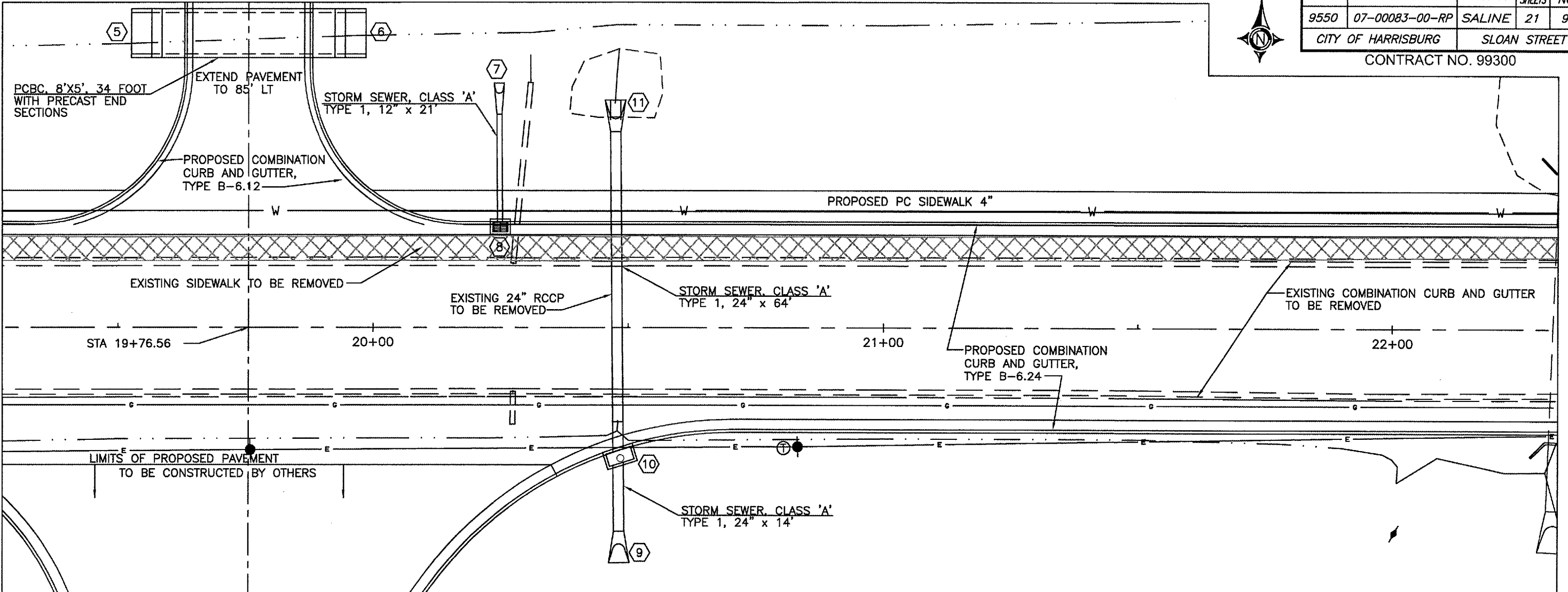
MISCELLANEOUS

1. Temporary ditch checks shall be located at every 1.5 feet of fall/rise in ditch grade.
2. Temporary erosion control seeding shall be applied at the rate of 100 lbs/acre.
3. Straw bales, hay bales, perimeter erosion control barrier and silt fences will not be permitted for temporary or permanent ditch checks. Ditch checks shall be composed of aggregate, silt panels, rolled excelsior, urethane foam geotextile (silt wedges) and/or other material approved by the erosion and sediment control coordinator.
4. All erosion control products furnished shall be specifically recommended by the manufacturer for the use specified in the erosion control plan. Prior to the approval and use of the product, the contractor shall submit to the Engineer a notarized certification by the producer stating the intended use of the product and the physical properties required for this application are met or exceeded. The contractor shall provide manufacturer installation procedures to facilitate the Engineer in construction inspection.
5. All items shall be constructed as shown on STANDARD 280001 and as directed by the Engineer. Maintenance and cleaning of erosion control items shall be considered part of the respective erosion control pay item.

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	7
CITY OF HARRISBURG		SLOAN STREET		

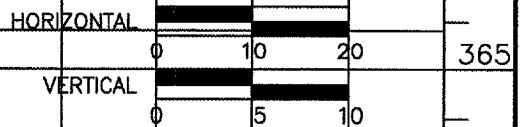
CONTRACT NO. 99300

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	9
CITY OF HARRISBURG		SLOAN STREET		
CONTRACT NO. 99300				



Station	Elevation	Notes	Station	Elevation	Notes	Station	Elevation	Notes
19+50	360.90 360.92		20+00	360.85 360.84		20+50	360.89 360.84	EXISTING 24" CULVERT TO BE REMOVED PROPOSED 24" STORM SEWER
		PVC STA. 19+70.00 ELEVATION 360.88						
						21+00	361.01 360.92	
						21+50	361.12 361.10	PVI STA. 21+45.00 ELEVATION 360.55
						22+00	361.34 361.35	

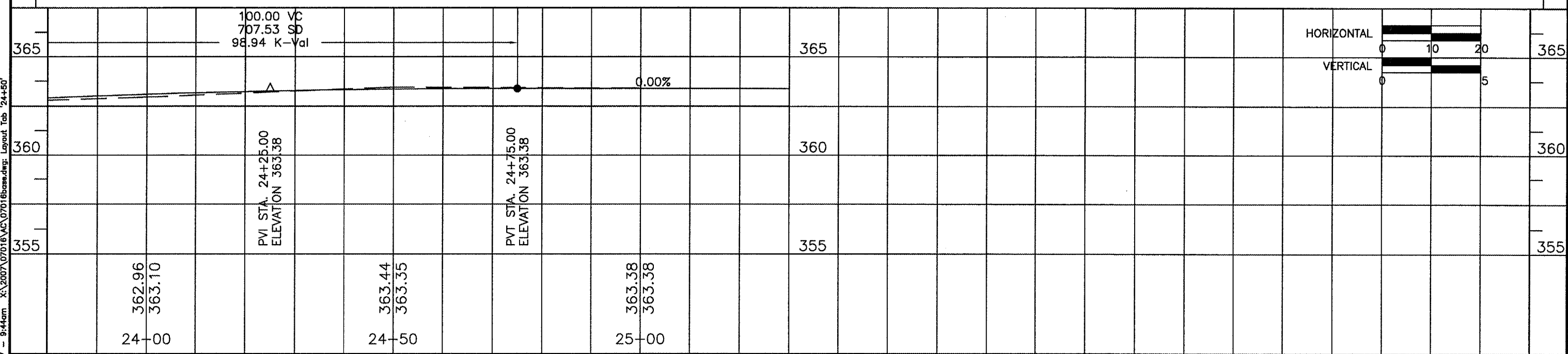
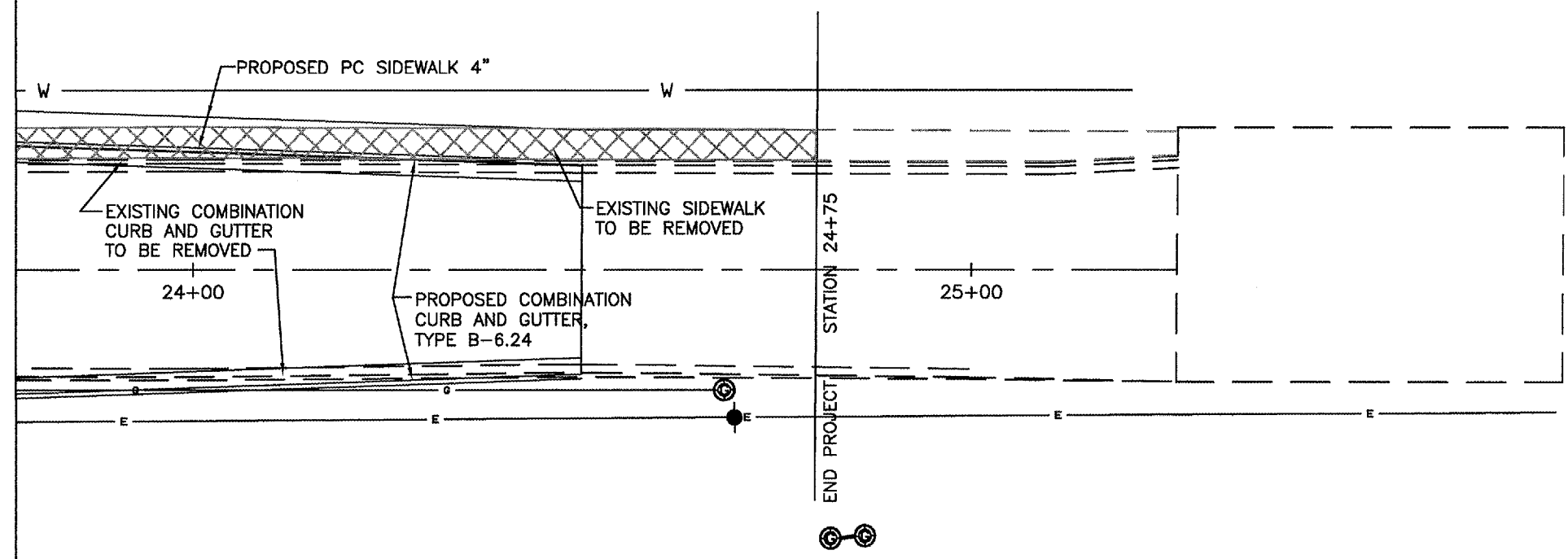
350.00 VC
1000.00 \$D
291.79 K-Val



12 Apr 2007 - 9:39am X:\2007\07018\AC\07018base.dwg: Layout Tab '19+50'

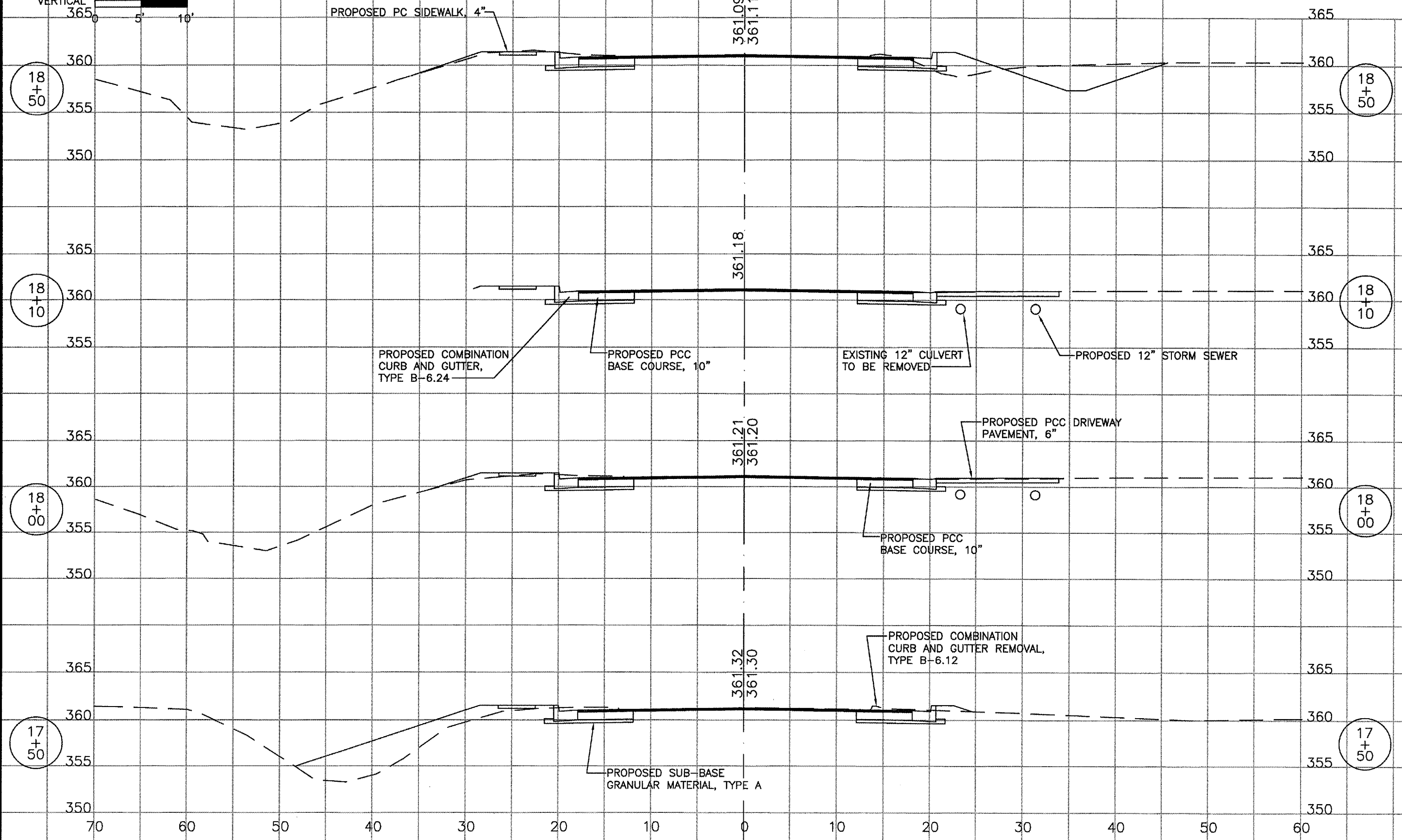
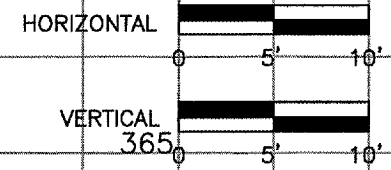
ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	11
CITY OF HARRISBURG		SLOAN STREET		

CONTRACT NO. 99300

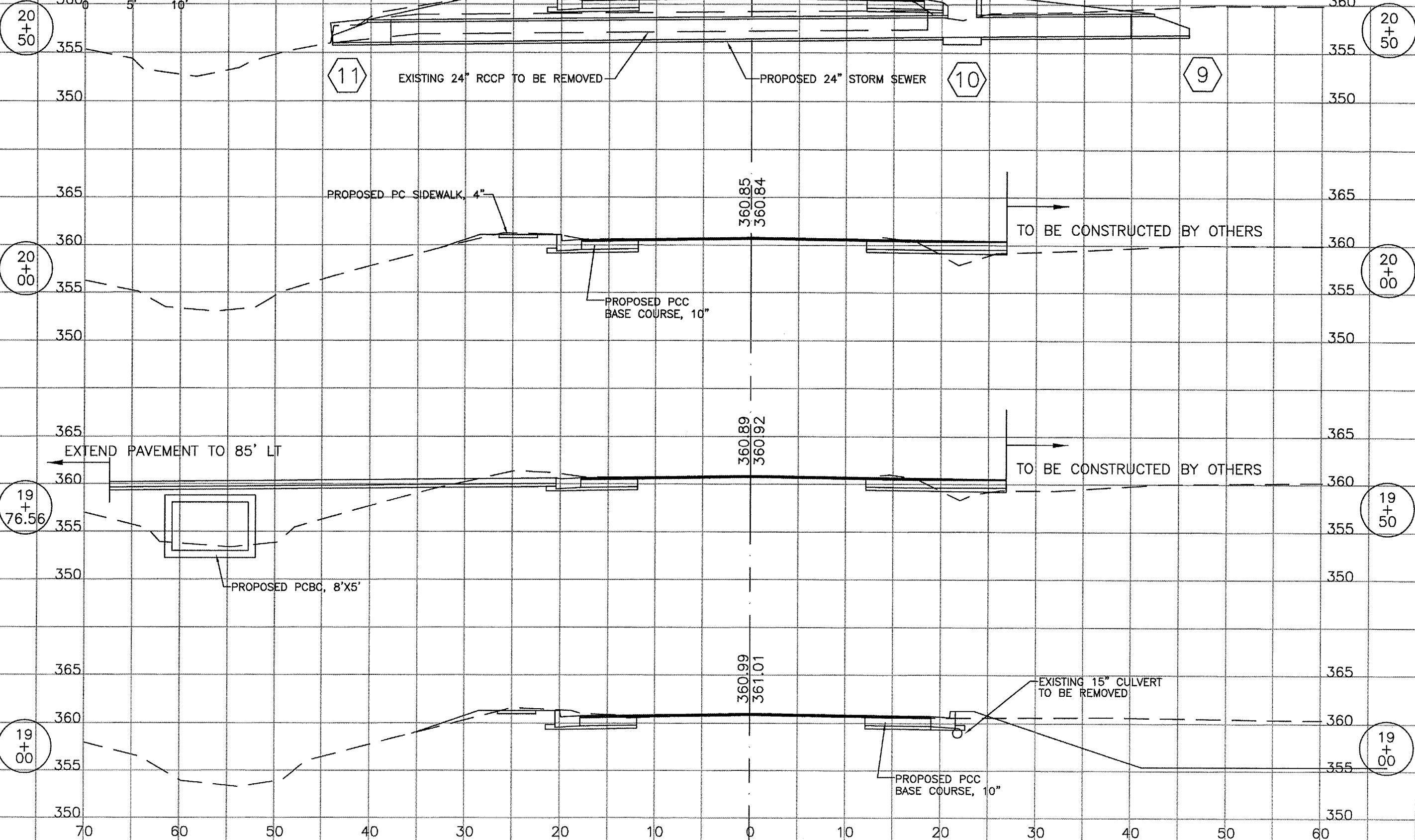


12 Apr 2007 - 9:44am X:\2007\07016\AC\07016\bus.dwg Layout Tab '24+50'

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	12
HARRISBURG		SLOAN STREET		



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	13
HARRISBURG		SLOAN STREET		



19
+
76.56

19
+
00

20
+
50

20
+
00

19
+
50

19
+
00

EXTEND PAVEMENT TO 85' LT

PROPOSED PCBC, 8'X5'

PROPOSED PC SIDEWALK, 4"

PROPOSED PCC
BASE COURSE, 10"

PROPOSED PCC
BASE COURSE, 10"

EXISTING 15" CULVERT
TO BE REMOVED

EXISTING 24" RCCP TO BE REMOVED

PROPOSED 24" STORM SEWER

TO BE CONSTRUCTED BY OTHERS

TO BE CONSTRUCTED BY OTHERS

70 60 50 40 30 20 10 0 10 20 30 40 50 60

365 5' 10'

360 5' 10'

355

350

365

360

355

350

365

360

355

350

365

360

355

350

360.90
360.84

360.85
360.84

360.89
360.92

360.99
361.01

360

355

350

365

360

355

350

365

360

355

350

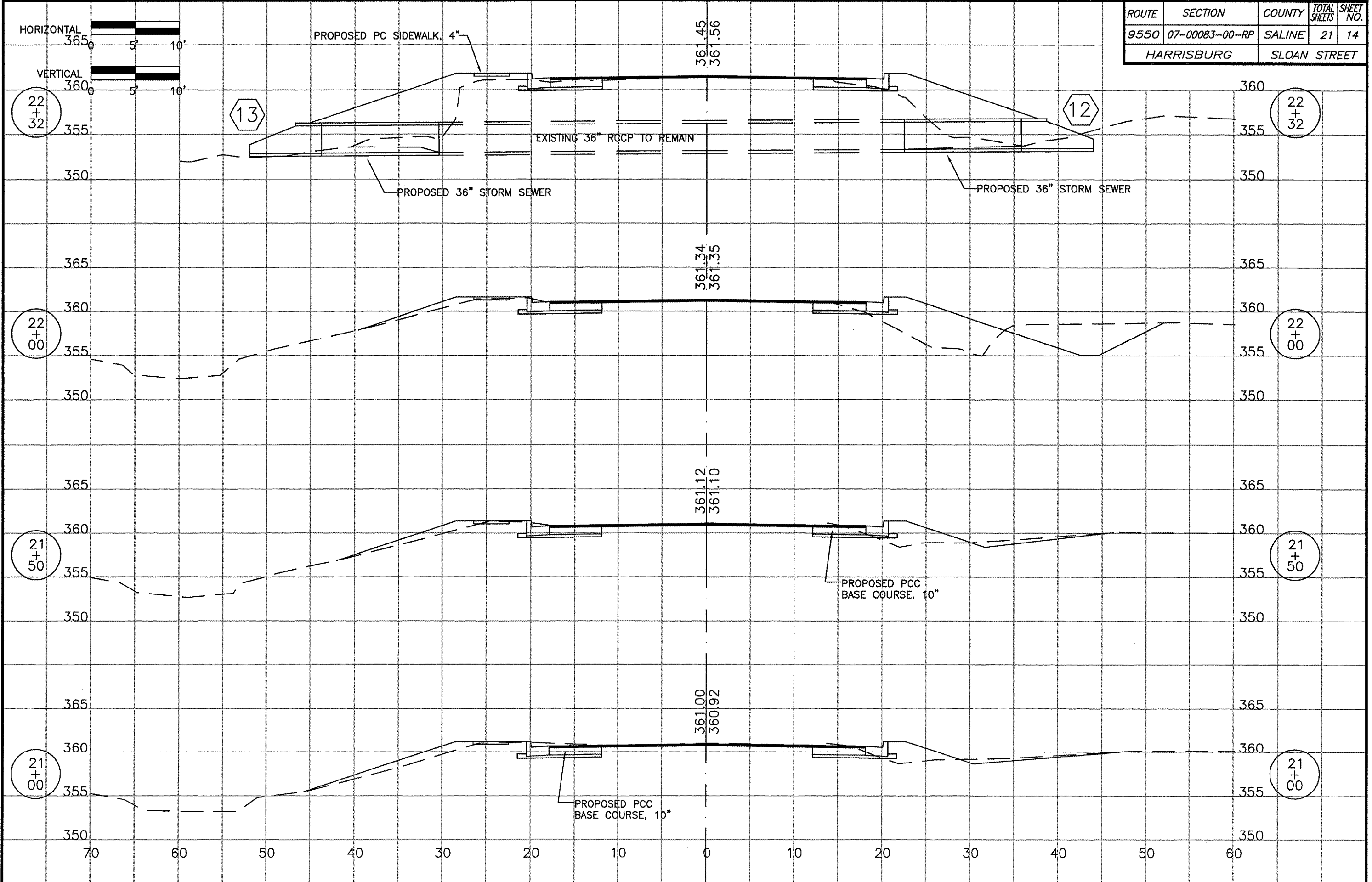
365

360

355

350

ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	14
HARRISBURG		SLOAN STREET		



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	15
HARRISBURG		SLOAN STREET		

HORIZONTAL
365
5' 10'

VERTICAL
360
5' 10'

24
+
00

24
+
00

23
+
50

23
+
50

23
+
00

23
+
00

22
+
50

22
+
50

362.96
363.10

362.57
362.62

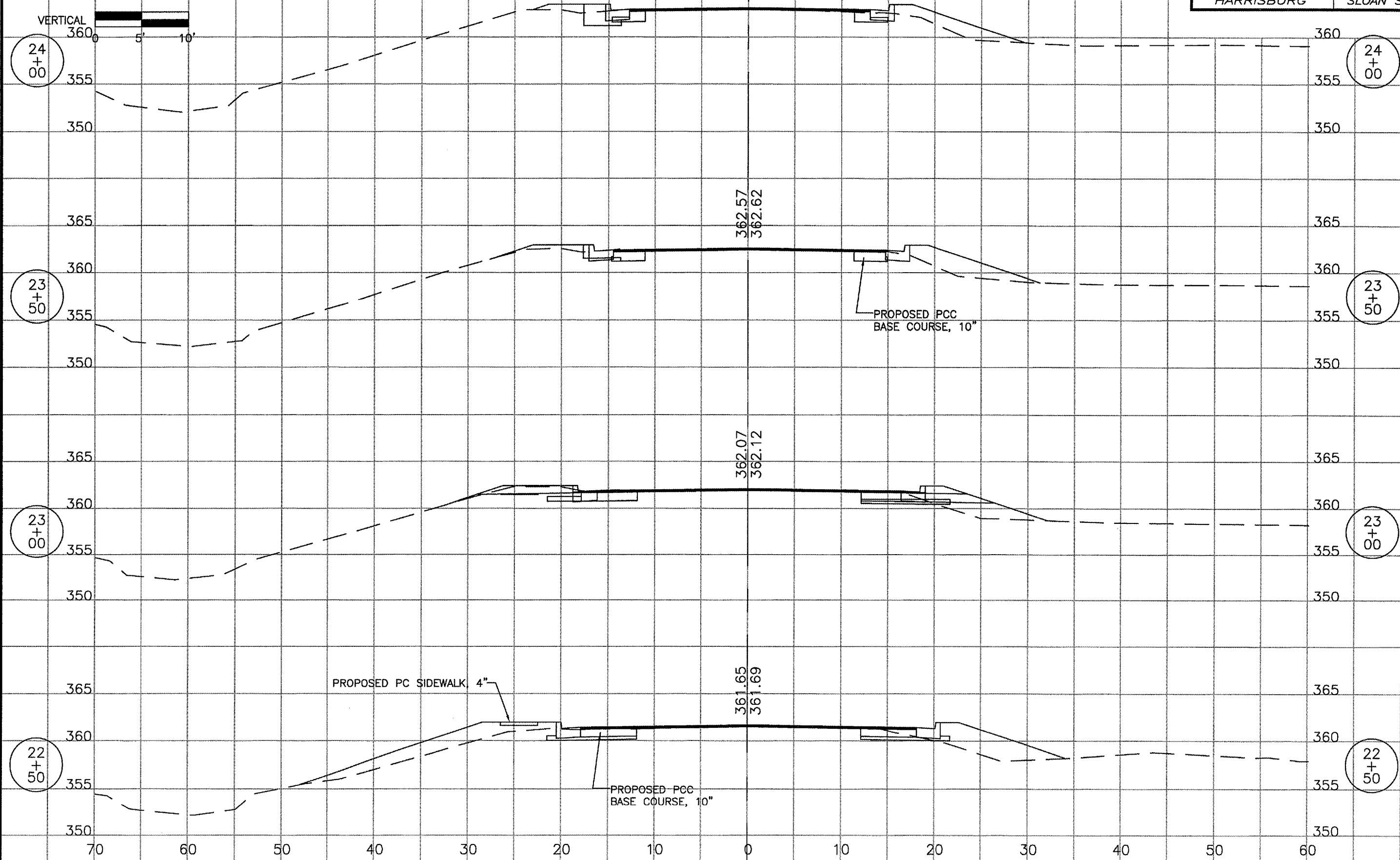
362.07
362.12

361.65
361.69

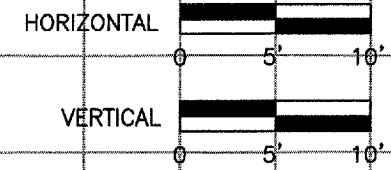
PROPOSED PCC
BASE COURSE, 10"

PROPOSED PC SIDEWALK, 4"

PROPOSED PCC
BASE COURSE, 10"



ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
9550	07-00083-00-RP	SALINE	21	16
HARRISBURG		SLOAN STREET		



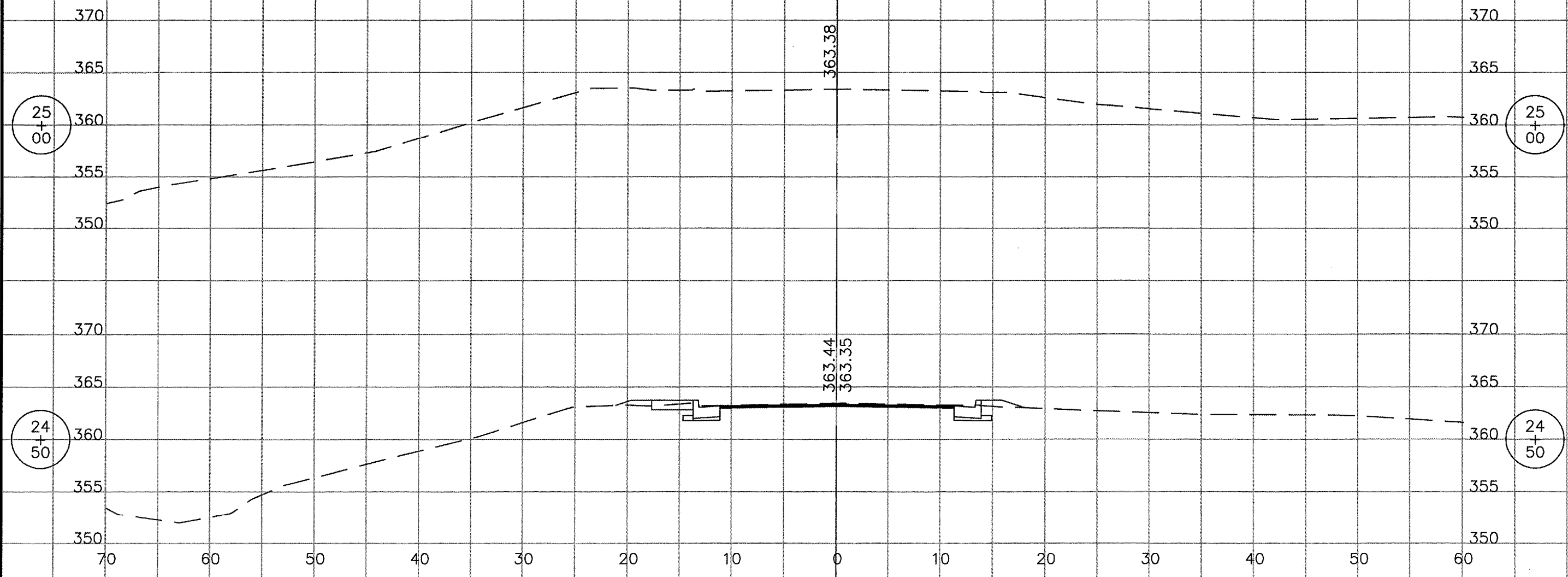
Proposed Watermain 8" SDR 26 PVC - Use mechanical joint fittings and elbows, ductile iron, restrained with Ebba Iron Series 2000PV MegaLug glands (See Special Provisions) at two ditch crossings.

New Box Culvert
8' x 5'

New Ground Surface Profile

Watermain Ditch Crossing

4' Min.



DETAIL OF PRECAST CONCRETE BOX CULVERT SECTION

(WITH LESS THAN 2 FEET OF COVER
AASHTO DESIGNATION M273)
DESIGN LOADING: HS-20-44

SHEET NO.	SECTION	QUANTITY	TOTAL SHEETS	SHEET NO.
			21	17
STA.		TO STA.		
FILE NO. OR PROJ. NO.		DATE	FILE NO. OR PROJECT	

GENERAL NOTES

SHOP PLANS FOR THE REINFORCEMENT SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 504.04 OF THE STANDARD SPECIFICATIONS.

MINIMUM CONCRETE STRENGTH SHALL BE 5000 PSI AFTER 28 DAYS.

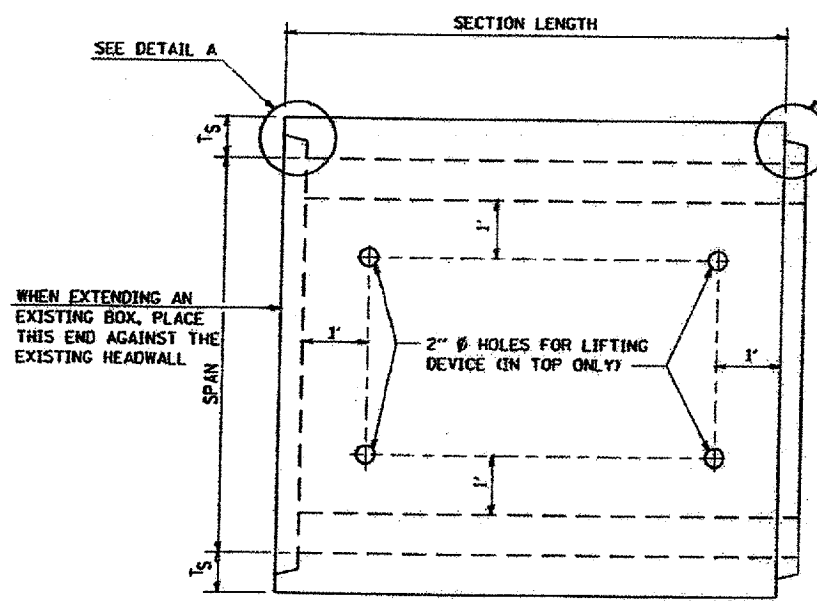
THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED WITH MASTIC IN ACCORDANCE WITH ARTICLE 755 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

LIFTING HOLES SHALL BE FILLED WITH CONCRETE PLUGS AND MASTIC AFTER THE BOX SECTIONS ARE IN PLACE.

THE TERMS A_{S1} , A_{S2} , ETC. DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN AASHTO M273.

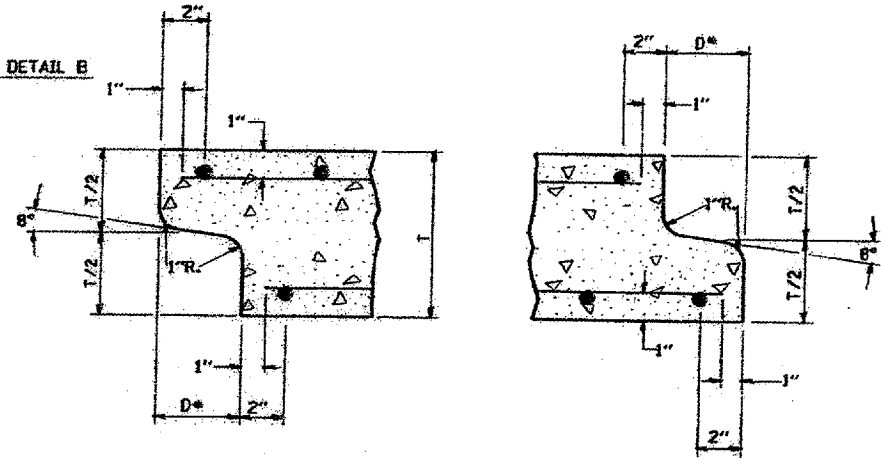
REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO ASTM SPECIFICATIONS A 185 OR A 497. LONGITUDINAL DISTRIBUTION REINFORCEMENT MAY CONSIST OF WELDED WIRE FABRIC OR DEFORMED BILLET-STEEL BARS CONFORMING TO AASHTO M-31, M-42, GRADE 60.

DRAINAGE OPENINGS SHALL BE PROVIDED IN ACCORDANCE WITH ARTICLE 503.12 OF THE STANDARD SPECIFICATIONS. LOCATION AND SPACING OF THE OPENINGS SHALL BE SHOWN ON THE SHOP DRAWINGS.



PLAN

LOCATION OF LIFTING HOLES MAY BE VARIED AS NEEDED TO CLEAR REINFORCEMENT.



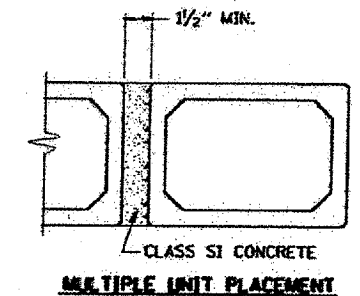
DETAIL A

(TYP. INLET END)

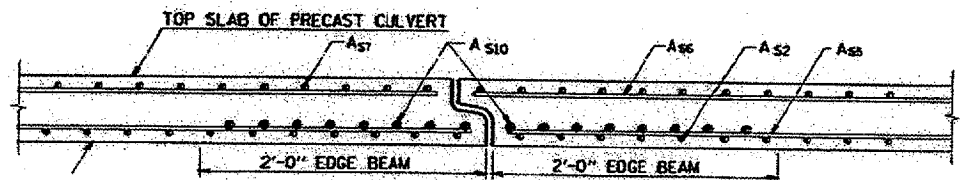
DETAIL B

(TYP. OUTLET END)

NOTE: INLET AND OUTLET ENDS SHALL BE COMPATIBLE.
* THE D DIMENSION SHALL CONFORM TO THE MANUFACTURER'S STANDARDS.

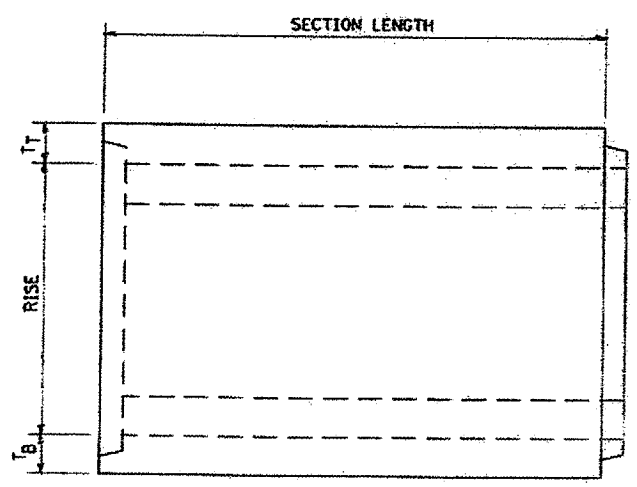


MULTIPLE UNIT PLACEMENT

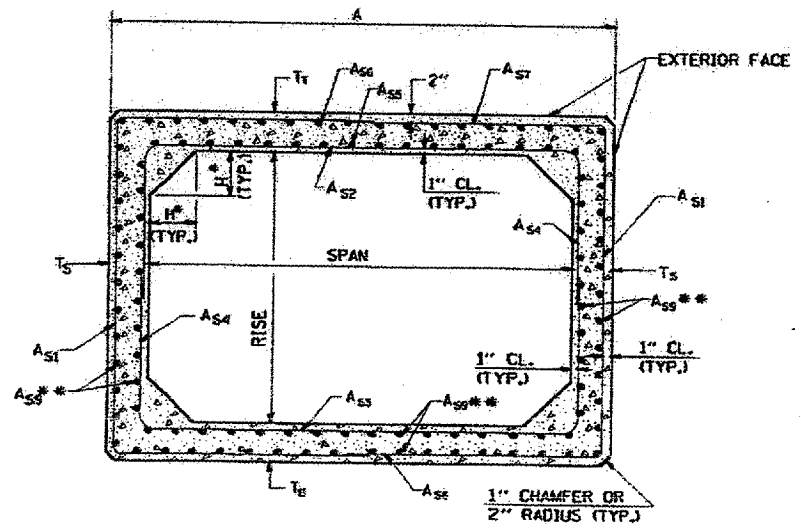


DETAIL OF EDGE BEAM

NOTE: THE A_{S10} REINFORCEMENT SHALL BE THE SAME LENGTH AS THE A_{S2} .



ELEVATION



CROSS SECTION

* THE HUNCH DIMENSION, H, IS EQUAL TO THE WALL THICKNESS, T_S .
** THE AREA OF A_{S9} REINFORCEMENT SHALL BE A MINIMUM OF 0.12 SQ. IN./FT.

DIMENSIONS & EDGE BEAM REINFORCEMENT

SPAN X RISE	DIMENSIONS (INCHES)			EDGE BEAM REINF. AREA (IN. ² /FT.)
	T_T	T_B	T_S	A_{S10}
3' X 2'	7	6	4	0.42
3' X 3'	7	6	4	0.42
4' X 2'	7 1/2	6	5	0.59
4' X 3'	7 1/2	6	5	0.59
4' X 4'	7 1/2	6	5	0.59
5' X 3'	8	7	6	0.59
5' X 4'	8	7	6	0.59
5' X 5'	8	7	6	0.59
6' X 3'	8	7	7	0.73
6' X 4'	8	7	7	0.73
6' X 5'	8	7	7	0.73
6' X 6'	8	7	7	0.73
7' X 4'	8	8	8	0.85
7' X 5'	8	8	8	0.85
7' X 6'	8	8	8	0.85
7' X 7'	8	8	8	0.85
8' X 4'	8	8	8	1.00
8' X 5'	8	8	8	1.00
8' X 6'	8	8	8	1.00
8' X 7'	8	8	8	1.00
8' X 8'	8	8	8	1.00

SPAN X RISE	DIMENSIONS (INCHES)			EDGE BEAM REINF. AREA (IN. ² /FT.)
	T_T	T_B	T_S	A_{S10}
9' X 5'	9	9	9	1.00
9' X 6'	9	9	9	1.00
9' X 7'	9	9	9	1.00
9' X 8'	9	9	9	1.00
9' X 9'	9	9	9	1.00
10' X 5'	10	10	10	0.89
10' X 6'	10	10	10	0.89
10' X 7'	10	10	10	0.89
10' X 8'	10	10	10	0.89
10' X 9'	10	10	10	0.89
10' X 10'	10	10	10	0.89
11' X 4'	11	11	11	0.89
11' X 6'	11	11	11	0.89
11' X 8'	11	11	11	0.89
11' X 10'	11	11	11	0.89
11' X 11'	11	11	11	0.89
12' X 4'	12	12	12	0.89
12' X 6'	12	12	12	0.89
12' X 8'	12	12	12	0.89
12' X 10'	12	12	12	0.89
12' X 12'	12	12	12	0.89

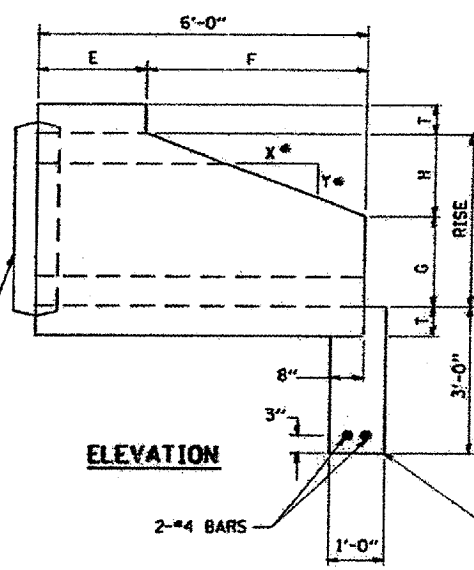
REVISIONS

DRAWN	9-8-89
REVISED	3-27-90
REVISED	3-11-92
REVISED	8-16-94

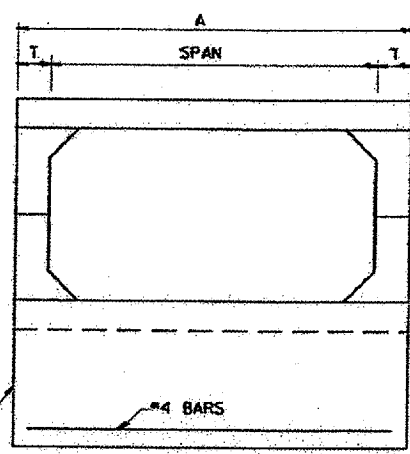
DETAIL OF PRECAST CONCRETE BOX CULVERT END SECTION

DIMENSIONS**

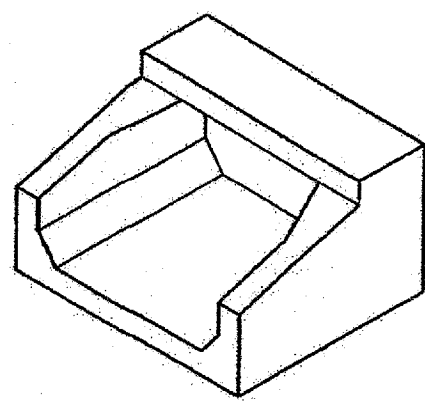
SPAN X RISE	T (INCHES)	A (FT.-IN.)	B (FT.-IN.)	C (INCHES)	E (FT.-IN.)	F (FT.-IN.)	G (FT.-IN.)	H (FT.-IN.)	SLOPE (X:Y)
2' X 2'	4	2-8	2-8	4	3-0	3-0	1-0	1-0	3:1
3' X 2'	4	3-8	2-8	4	3-0	3-0	1-0	1-0	3:1
3' X 3'	4	3-8	3-8	4	2-0	4-0	1-8	1-4	3:1
4' X 2'	5	4-10	2-10	5	3-0	3-0	1-0	1-0	3:1
4' X 3'	5	4-10	3-10	5	2-0	4-0	1-8	1-4	3:1
4' X 4'	5	4-10	4-10	5	2-0	4-0	2-0	2-0	2:1
5' X 2'	6	6-0	3-0	6	3-0	3-0	1-0	1-0	3:1
5' X 3'	6	6-0	4-0	6	2-0	4-0	1-8	1-4	3:1
5' X 4'	6	6-0	5-0	6	2-0	4-0	2-0	2-0	2:1
5' X 5'	6	6-0	6-0	6					
6' X 2'	7	7-2	3-2	7	3-0	3-0	1-0	1-0	3:1
6' X 3'	7	7-2	4-2	7	2-0	4-0	1-8	1-4	3:1
6' X 4'	7	7-2	5-2	7	2-0	4-0	2-0	2-0	2:1
6' X 5'	7	7-2	6-2	7	2-0	4-0	3-0	2-0	2:1
6' X 6'	7	7-2	7-2	7	2-0	4-0	4-0	2-0	2:1
7' X 4'	8	8-4	5-4	8	2-0	4-0	2-0	2-0	2:1
7' X 5'	8	8-4	6-4	8					
7' X 6'	8	8-4	7-4	8					
7' X 7'	8	8-4	8-4	8					
8' X 4'	8	9-4	5-4	8	2-0	4-0	2-0	2-0	2:1
8' X 5'	8	9-4	6-4	8					
8' X 6'	8	9-4	7-4	8					
8' X 7'	8	9-4	8-4	8					
8' X 8'	8	9-4	9-4	8					
9' X 5'	9	10-6	6-6	9					
9' X 6'	9	10-6	7-6	9					
9' X 7'	9	10-6	8-6	9					
9' X 8'	9	10-6	9-6	9					
9' X 9'	9	10-6	10-6	9					
10' X 5'	10	11-8	6-8	10					
10' X 6'	10	11-8	7-8	10					
10' X 7'	10	11-8	8-8	10					
10' X 8'	10	11-8	9-8	10					
10' X 9'	10	11-8	10-8	10					
10' X 10'	10	11-8	11-8	10					
11' X 4'	11	12-10	5-10	11					
11' X 6'	11	12-10	7-10	11					
11' X 8'	11	12-10	9-10	11					
11' X 10'	11	12-10	11-10	11					
11' X 11'	11	12-10	12-10	11					
12' X 4'	12	14-0	6-0	12					
12' X 6'	12	14-0	8-0	12					
12' X 8'	12	14-0	10-0	12					
12' X 10'	12	14-0	12-0	12					
12' X 12'	12	14-0	14-0	12					



ELEVATION

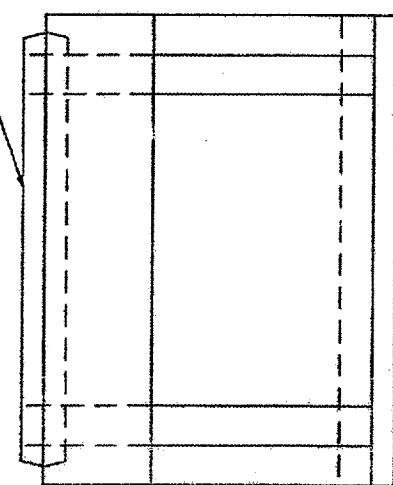


END VIEW

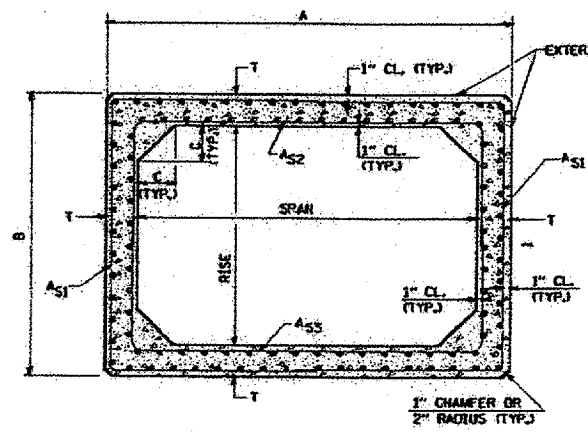


ISOMETRIC

END CONNECTION TO FIT PRECAST BOX CULVERT (BELL OR SPIGOT MAY BE OMITTED WHEN COLLARING TO AN EXISTING BOX OR HEADWALL.)



PLAN



CROSS SECTION

** NOTE: THE DIMENSIONS INDICATED ARE FOR END SECTIONS THAT ARE TO BE USED WITH PRECAST BOX CULVERT SECTIONS DESIGNED FOR 2' OR MORE OF FILL. THE DIMENSIONS MUST BE MODIFIED FOR THE END SECTION TO BE COMPATIBLE WITH PRECAST CULVERT SECTIONS DESIGNED FOR LESS THAN 2' OF FILL.

GENERAL NOTES

SHOP PLANS FOR THE REINFORCEMENT SHALL BE SUBMITTED IN ACCORDANCE WITH THE REQUIREMENTS OF ARTICLE 504.04(a) OF THE STANDARD SPECIFICATIONS.

MINIMUM CONCRETE STRENGTH SHALL BE 5000 PSI AFTER 28 DAYS.

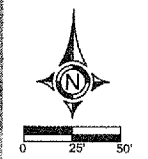
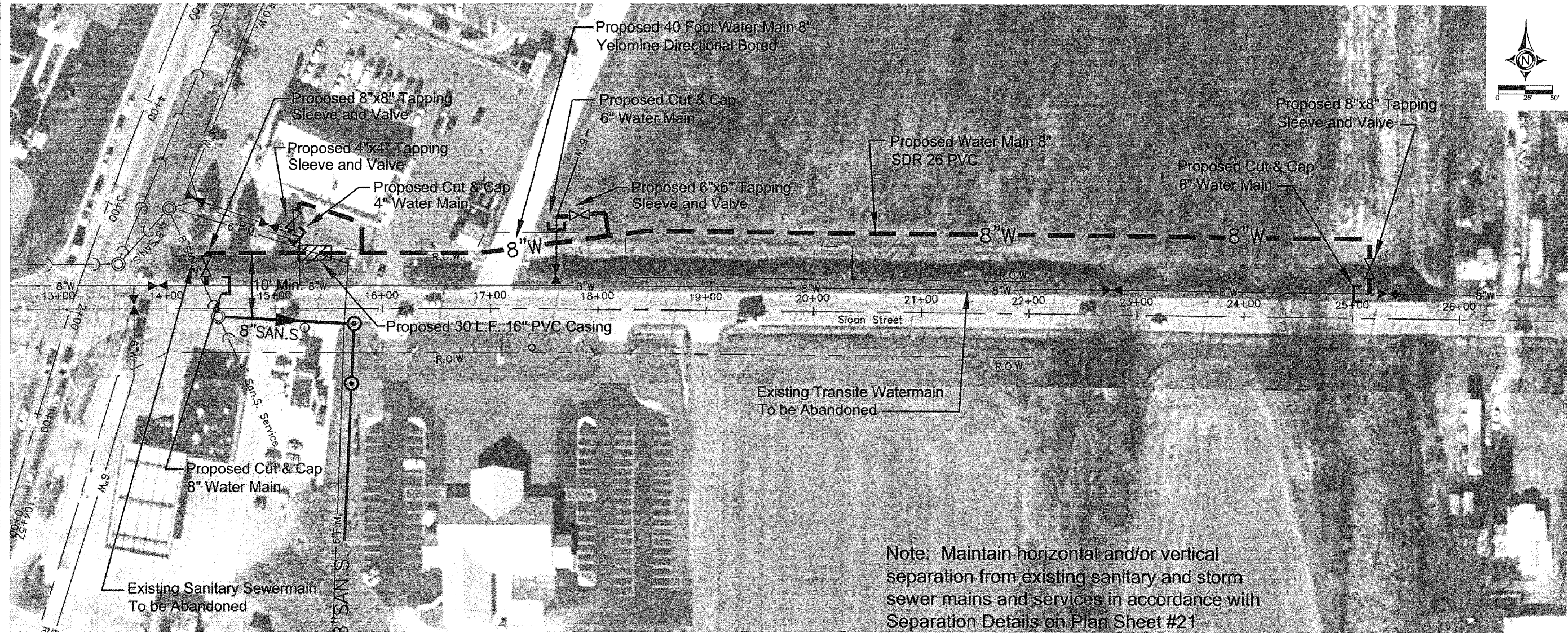
THE JOINTS OF THE PRECAST BOX SECTIONS SHALL BE SEALED WITH MASTIC IN ACCORDANCE WITH ARTICLE 1055.01 OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION.

THE TERMS AS1, AS2, & AS3 DENOTE THE REQUIRED STEEL AREAS FOR REINFORCEMENT AS SPECIFIED IN AASHTO M259. REINFORCEMENT SHALL BE WELDED WIRE FABRIC CONFORMING TO AASHTO M55-81.

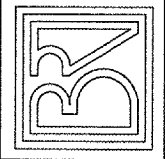
REVISIONS

DRAWN	9-8-89
REVISED	3-27-90
REVISED	6-14-90
REVISED	8-16-94

STD 9-50



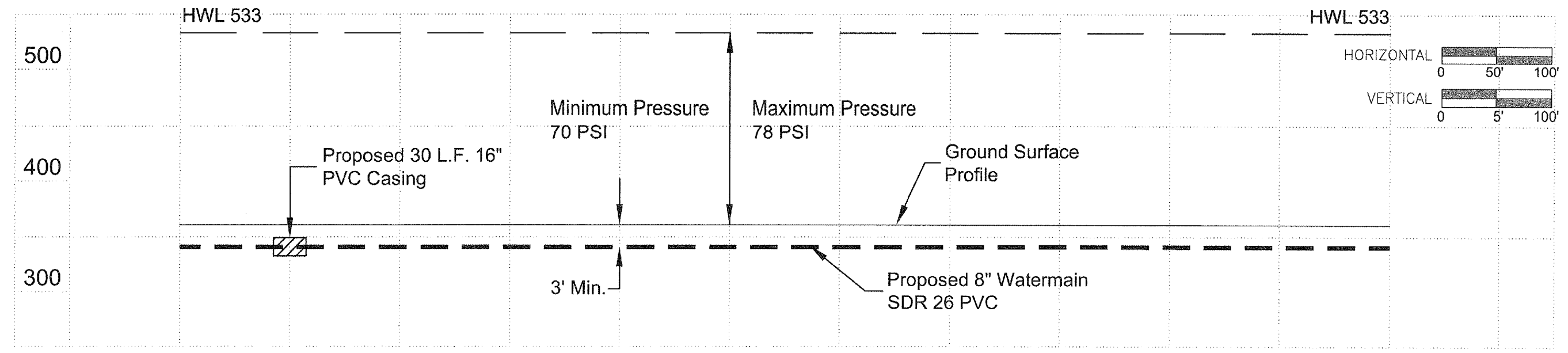
BROWN AND ROBERTS, INC.
 CONSULTING ENGINEERS & LAND SURVEYORS
 1 WESTRIDGE ROAD HARRISBURG, IL. 62946 (618) 252-8111



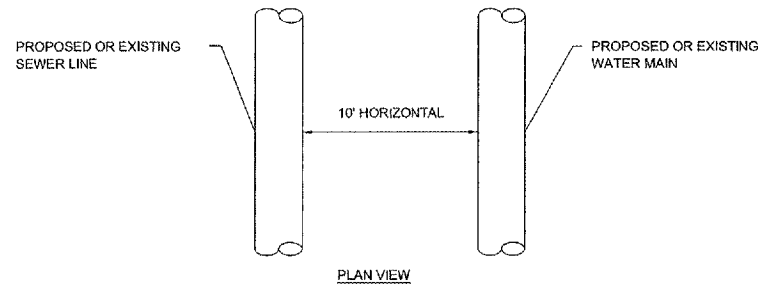
CITY OF HARRISBURG
 SEC. 07-00083-00-RP
WATERMAIN P&P

Drawn By: VJW	Checked By: JWB
Revisions	
Item	Date Name
Scale: AS SHOWN	Field Bk:
Job Number: 07-016	Date: 04/07
Sheet	

19
of 21

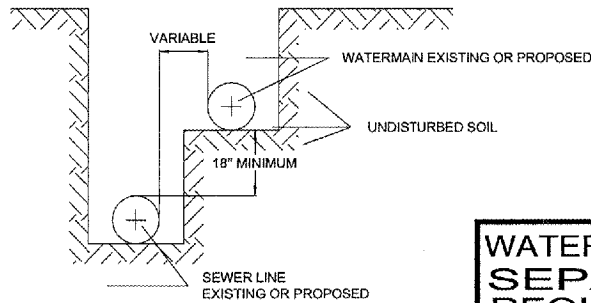


WHEN PROPOSED SEWER (OR WATER) IS LOCATED 10 FEET OR MORE FROM EXISTING WATER (OR SEWER), NO SPECIAL CONSTRUCTION REQUIRED. SEE SECTION 41-2.01B (1)



PLAN VIEW

WHEN PROPOSED SEWER (OR WATER) IS LOCATED LESS THAN 10 FEET FROM EXISTING WATER (OR SEWER), DETAILS BELOW SHALL APPLY. SEE SECTION 41-2.01B (2)

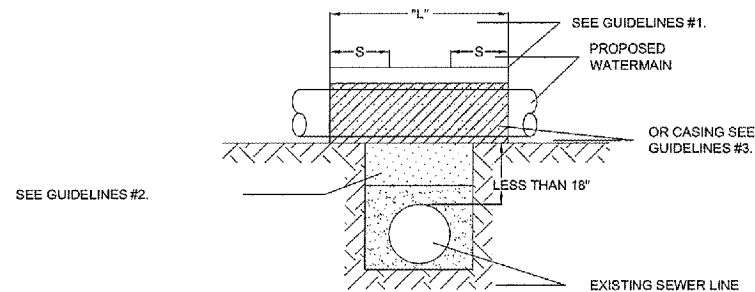


WATER AND SEWER SEPARATION REQUIREMENTS HORIZONTAL SEPARATION

NO SCALE

PROPOSED WATERMAIN ABOVE EXISTING SEWER LINE WITH LESS THAN 18" VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B



GUIDELINES

1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATERMAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATERMAIN AND SEAL ENDS OF CASING.
4. POINT LOADS SHALL NOT BE ALLOWED BETWEEN MAIN CASING AND SEWER.

NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO EXISTING SEWER LINE.

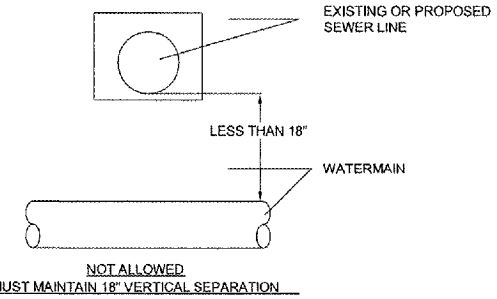
WATER AND SEWER SEPARATION REQUIREMENTS VERTICAL SEPARATION

NO SCALE

NOTE:

THE CONSTRUCTION OF THE SEWER MAINS AND WATERMANS ON THIS PROJECT SHALL BE PERFORMED ACCORDING TO THE "STANDARD SPECIFICATIONS FOR WATER AND SEWER MAIN CONSTRUCTION IN ILLINOIS", 5TH EDITION, MAY 1996, AS REQUIRED BY 35 IL. ADM CODE 652.102(a).

PLACEMENT OF WATERMAIN BELOW EXISTING OR PROPOSED SEWER LINE WITH LESS THAN 18" MINIMUM VERTICAL SEPARATION. NOT ALLOWED.



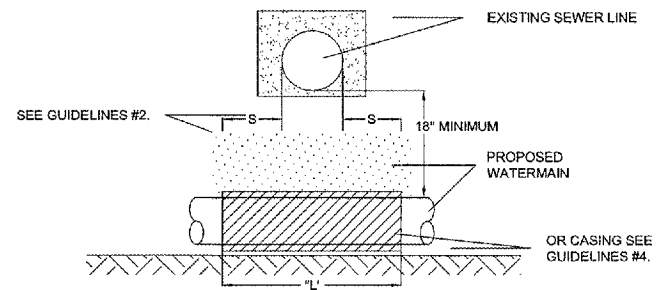
NOT ALLOWED
MUST MAINTAIN 18" VERTICAL SEPARATION

WATER AND SEWER SEPARATION REQUIREMENTS VERTICAL SEPARATION

NO SCALE

PROPOSED WATERMAIN BELOW EXISTING SEWER LINE WITH 18" MINIMUM VERTICAL SEPARATION.

NOTE: COMPACTION REQUIREMENTS REFER TO 20-2.20B



NOTE: "S" THE LENGTH NECESSARY TO PROVIDE 10 FEET OF SEPARATION AS MEASURED PERPENDICULAR TO EXISTING SEWER LINE.

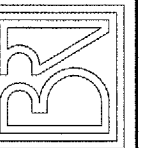
GUIDELINES

1. OMIT SELECT GRANULAR EMBEDMENT AND GRANULAR BACKFILL TO ONE (1) FOOT OVER TOP OF WATERMAIN AND USE SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT THE LENGTH OF "L".
2. IF SELECT GRANULAR BACKFILL EXISTS, REMOVE WITHIN WIDTH OF EXISTING SEWER LINE TRENCH AND REPLACE WITH SELECT EXCAVATED MATERIAL (CLASS IV) AND COMPACT.
3. PROVIDE ADEQUATE SUPPORT FOR EXISTING SEWER LINE TO PREVENT DAMAGE DUE TO SETTLEMENT.
4. USE "L" FEET OF WATER MAIN MATERIAL FOR CASING OF PROPOSED WATERMAIN AND SEAL ENDS OF CASING.

WATER AND SEWER SEPARATION REQUIREMENTS VERTICAL SEPARATION

NO SCALE

BROWN AND ROBERTS, INC.
CONSULTING ENGINEERS & LAND SURVEYORS
1 WESTRIDGE ROAD HARRISBURG, IL. 62946 (618) 252-8111



CITY OF HARRISBURG
SEC. 07-00083-00-RP
SEPARATION DETAILS

Drawn By: VJW Checked By: JWB

Revisions

Item	Date	Name

Scale: AS SHOWN Field Bk:

Job Number: 07-016 Date: 04/07

Sheet

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