

**US Army Corps  
of Engineers**

Huntington District

**WORK AS CONSTRUCTED**

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# **Construction Plans**

**Phase IIB – LOCAL PROTECTION PROJECT  
WEST COLUMBUS, OHIO**

All Drawings In This Folio Have  
Been Reduced To One-Half The  
Original Scale.

**JUNE 1999**

**CC-13035 (REDUCED 50%)**

# I N D E X

SHEET NO.	SHEET REFERENCE NUMBER	TITLE	SHEET NO.	SHEET REFERENCE NUMBER	TITLE	SHEET NO.	SHEET REFERENCE NUMBER	TITLE	SHEET NO.	SHEET REFERENCE NUMBER	TITLE
	016-PWC-7-	GENERAL		016-PWC-7-	P-14, PLAN AND PROFILE	40	51.3/2	REINFORCING AT EL 695.8			
1	0/1	INDEX	20	15/13	8" SANITARY SEWER	41	51.3/3	REINFORCING AT EL 701.4 & EL 706.4			
2	0/2	LEGEND	21	15/14	8" SANITARY SEWER	42	51.3/4	REINFORCING AT EL 708.5 & EL 716.4			
3	0/3	NOTES				43	51.3/5	REINFORCING AT EL 725.0			
4	0/4	LOCATION, VICINITY AND PROJECT MAPS				44	51.3/6	SECTIONS AND DETAILS			
5	0/5	INTERIOR DRAINAGE PLAN				45	51.3/7	REINFORCING DETAILS			
6	6/2	CONTRACTOR WORK LIMITS MONUMENT PLAN		016-PWC-7-	PUMP STATION	46	51.3/8	TRASH RACK DETAILS			
7	6/3	CONTRACTOR WORK LIMITS MONUMENT PLAN	22	15/15	SITE WORK	47	51.3/9	HATCH COVER PLAN			
			23	15/15A	SITE WORK DETAILS	48	51.3/10	HATCH COVER DETAILS			
						49	51.3/11	GRATING DETAILS			
						50	51.3/12	LADDER & RAILING DETAILS			
						51	51.3/13	RIVER GAGE MOUNTS			
	016-PWC-7-	SEWERS									
8	15/1	ALIGNMENT DATA TABLES		016-PWC-7-	UTILITIES						
			24	15.1/1	WATERLINE NOTES	52	51.4/1	HEATING, VENTILATING & PLUMBING			
			25	15.1/2	WATERLINE RELOCATIONS, SKIDMORE ST.	53	51.4/2	PLANS			
						54	51.4/3	PLANS			
	016-PWC-7-	P-1, PLAN AND PROFILE				55	51.4/4	SECTIONS			
9	15/2	EXISTING 72" STORM SEWER				56	51.4/5	FORMED SUCTION INLET			
				016-PWC-7-	SPECIAL STORM MANHOLE #1						
			26	20.1/1	DETAILS	57	51.5/1	ELECTRICAL SITE PLANS			
						58	51.5/2	ELECTRICAL PLANS			
	016-PWC-7-	P-2, PLAN AND PROFILE				59	51.5/3	ELECTRICAL ELEVATIONS			
10	15/3	EXISTING 72" STORM SEWER				60	51.5/4	ELECTRICAL DETAILS & DIAGRAMS			
				016-PWC-7-	SPECIAL STORM MANHOLE #1A	61	51.5/5	ELECTRICAL SCHEDULES			
			27	20.1A/1	DETAILS	62	51.5/6	ELECTRICAL - PUMP CONTROLS			
	016-PWC-7-	P-6, PLAN AND PROFILE									
11	15/4	72" STORM SEWER									
12	15/5	72" STORM SEWER		016-PWC-7-	SPECIAL STORM MANHOLE #2		016-PWC-7-	INFORMATION SERIES			
			28	20.2/1	DETAILS	63	10/1	BORING LOCATION PLAN			
						64	10/2	GEOLOGY AND SOILS LEGEND			
						65	10/3	BORING SECTION A-A'			
						66	10/4	BORING SECTION B-B'			
	016-PWC-7-	P-7, PLAN AND PROFILE		016-PWC-7-	JUNCTION CHAMBER	67	10/5	LOGS OF BORINGS			
13	15/6	54" STORM SEWER	29	20.3/1	DETAILS	68	10/6	LOGS OF BORINGS			
14	15/6A	STORM SEWER LATERAL				69	10/7	LOGS OF BORINGS			
15	15/7	36" STORM SEWER									
16	15/7A	STORM SEWER LATERAL									
	15/8	OMITTED		016-PWC-7-	SPECIAL SANITARY MANHOLE	14/1		HYDROGRAPHS			
			30	20.4/1	DETAILS	14/2		HYDROGRAPHS			
						14/3		HYDROGRAPHS			
						14/4		HYDROGRAPHS			
	016-PWC-7-	P-11A, PLAN AND PROFILE				14/5		HYDROGRAPHS			
17	15/9	8" SANITARY SEWER		016-PWC-7-	SANITARY DIVERSION MANHOLE	14/6		HYDROGRAPHS			
			31	20.5/1	DETAILS	14/7		HYDROGRAPHS			
						14/8		HYDROGRAPHS			
						14/9		HYDROGRAPHS			
	016-PWC-7-	P-11B, PLAN AND PROFILE				14/10		HYDROGRAPHS			
18	15/10	24" SANITARY SEWER		016-PWC-7-	PUMP STATION	14/11		HYDROGRAPHS			
			32	51.1/1	ELEVATIONS	14/12		HYDROGRAPHS			
			33	51.1/2	PLANS - SHEET NO. 1	14/13		HYDROGRAPHS			
			34	51.1/3	PLANS - SHEET NO. 2	14/14		HYDROGRAPHS			
	016-PWC-7-	P-12, PLAN AND PROFILE	35	51.1/4	SECTIONAL ELEVATIONS	14/15		HYDROGRAPHS			
19	15/11	24" SANITARY SEWER				14/16		HYDROGRAPHS			
			36	51.2/1	PLANS, ELEVS., SECTIONS						
			37	51.2/2	DETAILS	Z2-107/1		ENVIRONMENTAL PROTECTION			
			38	51.2/3	PLAQUE	Z2-107/2		ENVIRONMENTAL PROTECTION			
	016-PWC-7-	RELIEF WELL									
	15/12	OMITTED	39	51.3/1	REINFORCING AT EL 685.0						

Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED IN ACCORDANCE WITH AMENDMENT 0003	6/96	

**DODSON-LINDBLOM ASSOC., INC.**  
 CONSULTING ENGINEERS-SURVEYORS  
 COLUMBUS, OHIO

**U.S. ARMY ENGINEER DISTRICT**  
 CORPS OF ENGINEERS  
 HUNTINGTON, WEST VIRGINIA

Designed by: **JN**  
 Drawn by: **JN**  
 Checked by: **LWR**  
 Reviewed by: **PFO**  
 Approved by: **AJS**

Scale: **AS SHOWN**  
 Date: **DECEMBER 1995**  
 Drawing Code: **016-PWC-7-**

SCIO TO RIVER  
 COLUMBUS, OHIO  
 WEST COLUMBUS L.P.P.  
 PHASE IIB (STORM WATER PUMPING STATION)

## GENERAL INDEX

FILENAME: 01gdn01.dgn  
 PEN TABLE: h.gpt  
 L.gpt  
 Sheet **1** of

**SANITARY**  
 S → SANITARY SEWER  
 SST → COMBINATION SEWER

**DRAINAGE**  
 → INTERCEPTOR  
 U → STREET OR ROAD UNDERDRAIN  
 ST → STORM SEWER  
 → SURFACE DRAINAGE FLOW  
 [CB] CATCH BASIN OR CURB INLET  
 ○ SD STORM DRAIN  
 ⊙ MANHOLE  
 [---] CULVERT  
 < CULVERT END  
 ) HEADWALL  
 } DIRECTION OF FLOW  
 FLOW  
 - - - - - PIPE TO BE PLUGGED AND ABANDONED  
 - x - x - x - PIPE TO BE REMOVED

**UTILITIES**  
 W WATER LINE  
 E U.G. POWER  
 P POWER  
 G GAS LINE  
 UF U.G. FIBER OPTIC  
 CT CABLE TV  
 F FIBER OPTIC  
 T TELEPHONE  
 CC CITY COMMUNICATION  
 ⊗ VALVE  
 [H] TELEPHONE MANHOLE  
 (M) UTILITY METER  
 [M] ELECTRIC MANHOLE

**ROADS AND RAILWAYS**  
 CURB  
 ROAD  
 UNIMPROVED ROAD  
 TRAIL  
 RAILROAD  
 RAILROAD  
 52 US HIGHWAY  
 49 STATE HIGHWAY  
 79 INTERSTATE HIGHWAY  
 GUARDRAIL

**SURVEY SYMBOLS**  
 IP IRON PIN AND CAP  
 RR SPIKE RAILROAD SPIKE

△ HORIZONTAL-HORIZONTAL/VERTICAL CONTROL  
 X SPOT ELEVATION LOCATOR  
 ○ LIGHT ON POWER POLE  
 ⊙ GPS MONUMENT  
 △ CONCRETE MONUMENT  
 ○ CONTROL POINT IRON PIN  
 ⊙ CONTROL POINT PLUG & TACK  
 ⊗ CORE DRILL HOLE UNDRILLED  
 ⊙ CORE DRILL HOLE DRILLED

**EARTHWORK**  
 IN SITU ROCK  
 IN SITU EARTH  
 EARTH FILL  
 UNIFORM SLOPE DESIGNATION  
 STONE SLOPE PROTECTION LIMITS (PLAN)  
 CONTAMINATED SOIL

**MAPPING**  
 EDGE OF WATER  
 SWAMP  
 CORPORATE BOUNDARY LIMITS  
 FENCE  
 TREELINE  
 BRUSH LINE  
 TREE / BUSH  
 TREE WITH BASE  
 TANKS  
 POWER POLE  
 POST  
 M.B. MAIL BOX  
 TS TRAFFIC SIGNAL  
 TRANSFORMER  
 LIGHT POLE  
 FIRE HYDRANT  
 SIGN POST  
 CENTERLINE  
 GUY WIRE  
 STREET LIGHT  
 FLOOD GATE  
 TRANSMISSION TOWER  
 WOODEN HUB  
 PHANTOM LINE  
 GROUT

GRAVEL  
 CONCRETE  
 CENTERLINE OF PROJECT  
 R/W RIGHT OF WAY  
 CWL CONTRACTOR WORK LIMITS  
 PL PROPERTY LINE

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: JDY	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)
Drawn by: JDM	
Checked by: LWR	
Reviewed by: PFO	<b>LEGEND</b>
Approved by: AJS	Scale: NONE Date: DECEMBER 1995 Drawing Code: 016-PWC-7-
	Sheet reference number: 02 FILENAME: 00gd1g01.dgn PEN TABLE: 1.gpl Sheet of











CONTROL POINT COORDINATES				
POINT	NORTHING	EASTING	ELEV.	DESCRIPTION
12757	712675.996	1855688.566	706.208	IP 133/28
12758	712692.270	1855398.375	706.923	PLUG & TACK 133/29
12759	712585.074	1855059.339	706.447	IP 133/30
12760	712628.394	1855359.057	706.673	IP 149/9
12761	712106.802	1855486.884	710.745	IP 149/10

CWL COORDINATES		
POINT	NORTHING	EASTING
15	712150.941	1855408.641
16	712194.388	1855399.254
17	712200.161	1855428.091
18	712627.525	1855360.474
19	712592.456	1855132.753
20	712583.367	1855121.544
21	712572.599	1855097.182
22	712586.154	1855083.496
27	712647.794	1855073.991
28	712665.133	1855071.361
29	712671.010	1855118.606
30	712651.012	1855122.271
33	712634.234	1855325.570
34	712698.713	1855425.271
35	712685.623	1855427.205
36	712712.945	1855612.200
37	712727.443	1855609.329
38	712731.072	1855631.703
39	712747.274	1855628.955
40	712737.824	1855710.094
41	712678.041	1855718.557
42	712673.343	1855687.839
43	712668.155	1855653.420
44	712677.569	1855621.659
45	712645.311	1855408.928
46	712209.498	1855474.857
47	712212.773	1855498.141
48	712196.947	1855499.801
49	712211.939	1855580.296
81	712754.648	1855678.041
82	712732.949	1855681.342
84	712698.857	1855508.574
85	712711.443	1855514.712
86	712713.889	1855529.749
87	712701.313	1855539.876
88	712662.021	1855518.701
89	712651.891	1855530.976
90	712655.574	1855550.309
91	712668.467	1855557.368

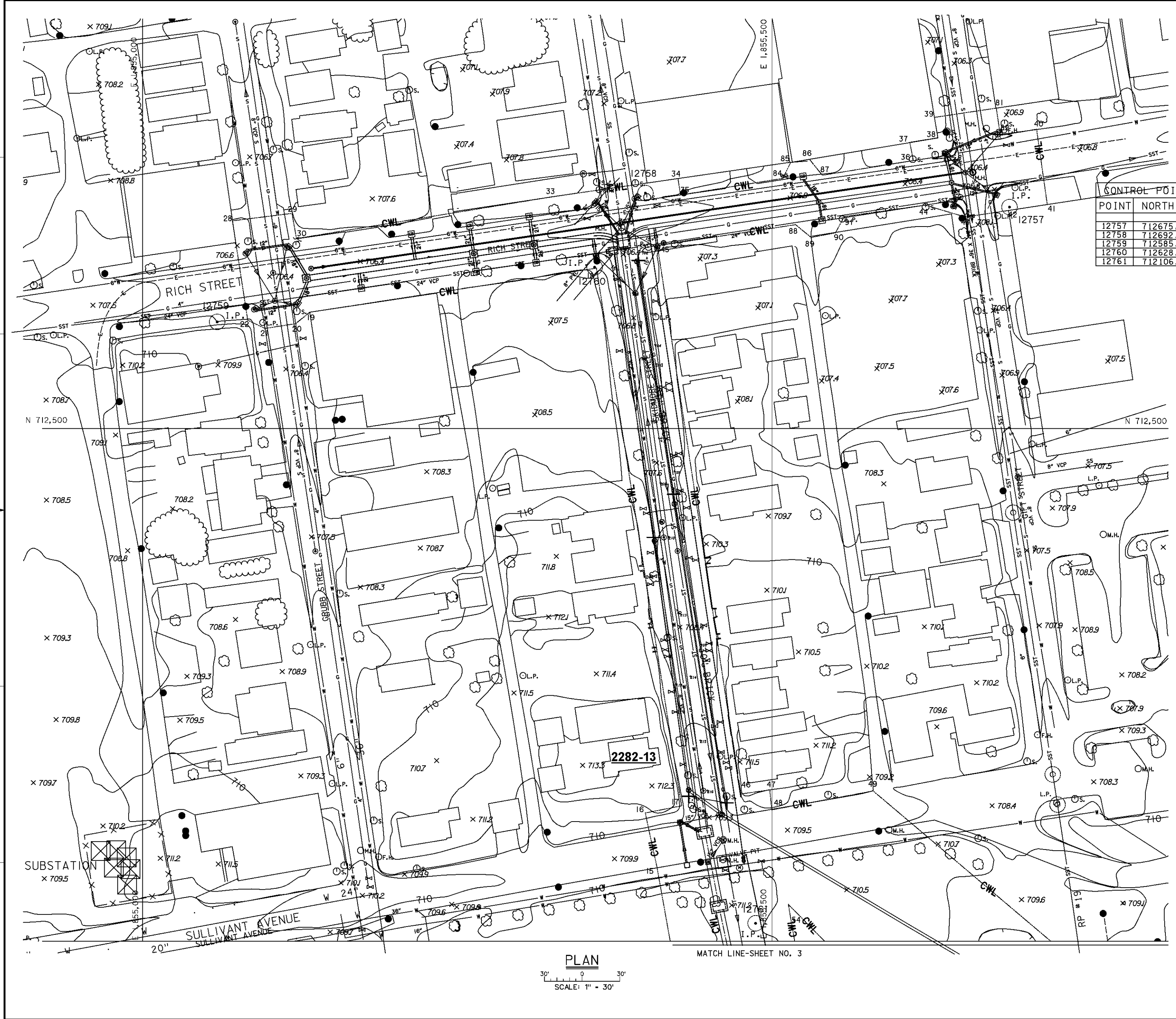
**NOTES**

1. THE CONTRACTOR WORK LIMITS (CWL) REQUIRED FOR CONSTRUCTION COINCIDES WITH THE PERMANENT RIGHT-OF-WAY NECESSARY FOR OPERATION AND MAINTENANCE.

Symbol	Revisions		Date	Approved
	Descriptions			

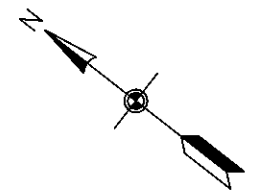
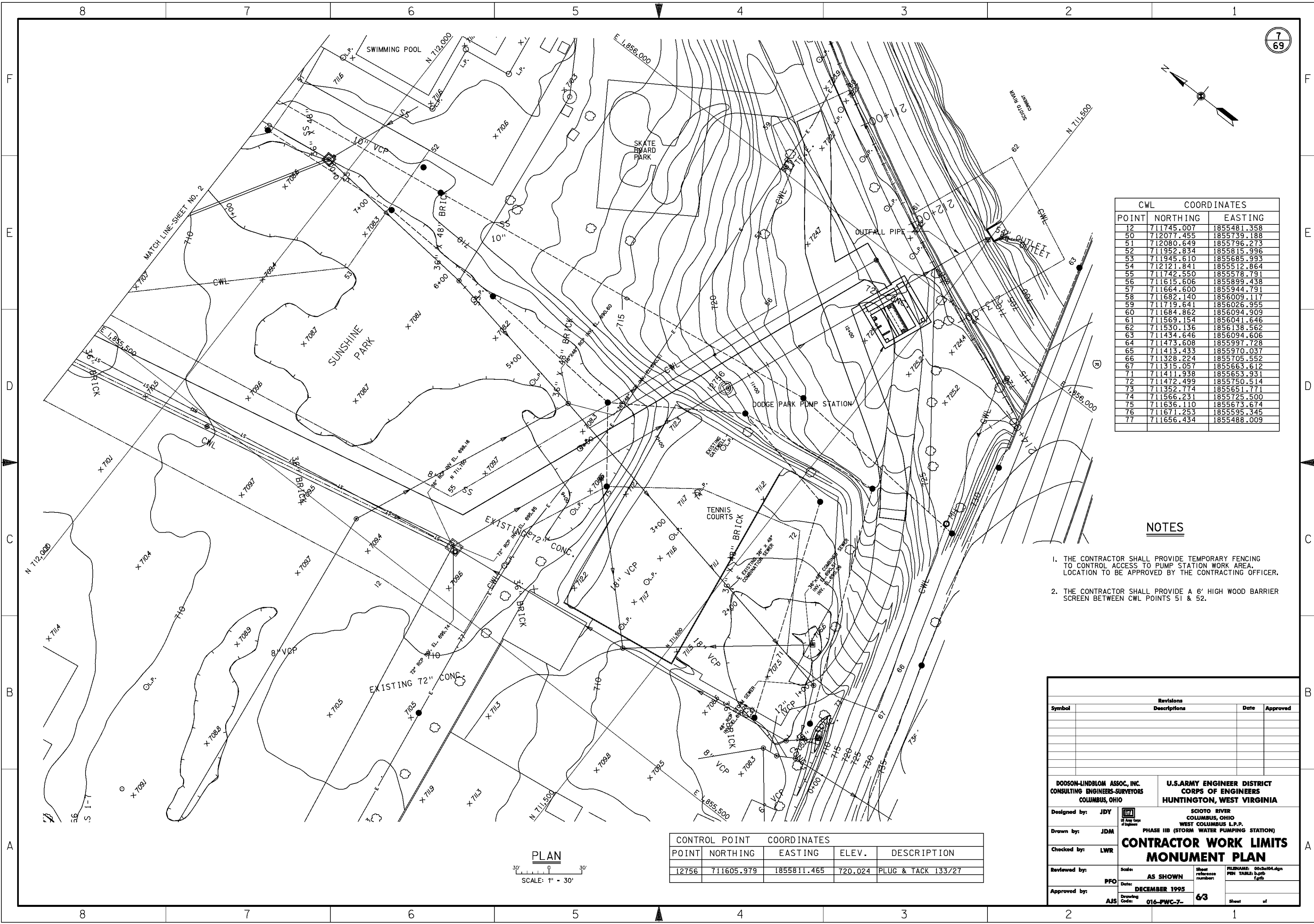
  

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: JDY Drawn by: JDM Checked by: LWR Reviewed by: PFO Approved by: AJS	Scale: AS SHOWN Date: DECEMBER 1995 Drawing Code: 016-PWC-7-
FILENAME: 003402.dgn PLOT TABLE: h.plt Lgth:	62 Sheet of



**PLAN**  
SCALE: 1" = 30'

MATCH LINE-SHEET NO. 3

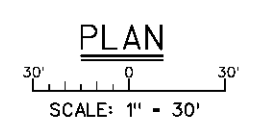


CWL COORDINATES		
POINT	NORTHING	EASTING
12	711745.007	1855481.358
50	712077.455	1855739.188
51	712080.649	1855796.273
52	711952.834	1855815.996
53	711945.610	1855685.993
54	712121.841	1855512.864
55	711742.550	1855578.791
56	711615.606	1855899.438
57	711664.600	1855944.791
58	711682.140	1856009.117
59	711719.641	1856026.955
60	711684.862	1856094.909
61	711569.154	1856041.646
62	711530.136	1856138.562
63	711434.646	1856094.606
64	711473.608	1855997.728
65	711413.433	1855970.037
66	711328.224	1855705.552
67	711315.057	1855663.612
71	711411.938	1855653.931
72	711472.499	1855750.514
73	711352.774	1855651.771
74	711566.231	1855725.500
75	711636.110	1855673.674
76	711671.253	1855595.345
77	711656.434	1855488.009

**NOTES**

1. THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCING TO CONTROL ACCESS TO PUMP STATION WORK AREA. LOCATION TO BE APPROVED BY THE CONTRACTING OFFICER.
2. THE CONTRACTOR SHALL PROVIDE A 6' HIGH WOOD BARRIER SCREEN BETWEEN CWL POINTS 51 & 52.

CONTROL POINT COORDINATES				
POINT	NORTHING	EASTING	ELEV.	DESCRIPTION
12756	711605.979	1855811.465	720.024	PLUG & TACK 133/27



Revisions			
Symbol	Descriptions	Date	Approved

<b>DODSON-LINDBLOM ASSOC., INC.</b> CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		<b>U.S. ARMY ENGINEER DISTRICT</b> CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	<b>SCIO TO RIVER</b> COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	JDM		
Checked by:	LWR	<b>CONTRACTOR WORK LIMITS</b> <b>MONUMENT PLAN</b>	
Reviewed by:	PFO		
Approved by:	AJS	Scale: <b>AS SHOWN</b> Date: <b>DECEMBER 1995</b> Drawing Code: <b>016-PWC-7-</b>	Sheet reference number: <b>63</b> FILENAME: 00c3e104.dgn PEN TABLE: d.gpb E.gtlb

STATION    NORTHING    EASTING    ELEVATION

PIPE P-1 EXISTING 72" RCP

0+00.00	711551.82	1855944.60	695.21
0+49.33	711533.35	1855990.34	695.12
1+35.51	711501.24	1856070.32	694.96

PIPE P-2 EXISTING 72" RCP

0+00.00	711713.05	1855544.03	695.74
2+90.25	711604.00	1855813.00	695.48
4+31.80	711551.82	1855944.60	695.21

PIPE P-6 72" RCP

MH #1	0+00.00	711709.10	1855541.2	695.98
MH #2	2+50.00	711956.1	1855490.9	696.15
MH #3	4+16.08	712121.10	1855457.5	696.49
MH #4	4+75.00	712182.7	1855445.9	696.50
MH #5	7+09.00	712414.5	1855414.00	696.80
MH #6	9+45.00	712649.13	1855383.91	697.21

PIPE P-7 54" RCP / 36" RCP

1+62.00	712619.80	1855139.01	697.87
2+96.00	712637.06	1855264.34	697.61
3+44.50	712644.02	1855383.91	697.59
PC 3+92.87	712653.06	1855358.45	698.55
PI 4+15.00	712625.30	1855362.10	RADIUS = 28.
PT 4+15.00	712649.13	1855383.91	697.59
PI 4+15.00	712649.13	1855383.59	699.86
PI 4+36.12	712636.92	1855404.54	RADIUS = 23.
PC 5+73.50	712660.16	1855401.06	700.07
5+73.50	712678.91	1855538.56	700.41
6+80.00	712696.88	1855643.56	700.76

PIPE P-11A 8" PVC

MH #20	0+00.00	712201.9	1855463.9	694.42
MH #21	2+50.00	712447.8	1855422.1	695.26
MH #22	4+45.00	712633.4	1855393.7	696.14

PIPE P-11B 24" RCP

MH #20	0+00.00	712201.9	1855463.9	691.54
MH #23	0+22.63	712207.1	1855433.9	691.63
MH #24	2+30.00	712413.4	1855405.8	692.33
MH #25	4+63.00	712641.49	1855375.16	693.12

PIPE P-12 24" RCP

MH #26	0+00.00	712019.9	1855756.1	690.38
MH #27	1+70.00	712109.7	1855609.2	690.90
MH #20	3+40.00	712201.9	1855463.9	691.54

PIPE P-14 8" PVC

MH #28	1+71.40	712627.04	1855132.31	695.89
MH #29	4+21.00	712663.69	1855379.20	695.01
MH #30	6+98.30	712703.70	1855653.53	693.64

PUMP STATION ACCESS ROAD

PI 6	711699.000	1856054.000	0+00.000
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PC 12	711696.987	1856052.940	0+02.275
			S 27°45'30.746" W

Radial direction from PC to CC is N 62°14'29.254" W

CC 11	711737.419	1855976.119	
Radius	86.812	Degree	66°00'00.000"
Length	37.784	Delta	24°56'15.040"R
Tangent	19.196	Back	S 27°45'30.746" W
External	2.097	Ahead	S 52°41'45.786" W
Long Chord	37.487		S 40°13'38.266" W
Mid. Ord.	2.048		

PI 7	711680.000	1856044.000	
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PT 13	711668.366	1856028.731	0+40.059
			S 52°41'45.786" W

Radial direction from CC to PT is S 37°18'14.214" E

PC 15	711624.993	1855971.803	1+11.628
			S 52°41'45.786" W

Radial direction from PC to CC is S 37°18'14.214" E

CC 14	711559.886	1856021.408	
Radius	81.851	Degree	70°00'00.000"
Length	29.357	Delta	20°33'00.609"R
Tangent	14.838	Back	S 52°41'45.786" W
External	1.334	Ahead	S 32°08'45.177" W
Long Chord	29.200		S 42°25'15.462" W
Mid. Ord.	1.313		

PI 8	711616.000	1855960.000	
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PT 16	711603.437	1855952.105	1+40.985
			S 32°08'45.177" W

Radial direction from CC to PT is N 57°51'14.823" W

PC 18	711461.994	1855863.220	3+08.038
			S 32°08'45.177" W

Radial direction from PC to CC is N 57°51'14.823" W

CC 17	711538.209	1855741.940	
Radius	143.239	Degree	40°00'00.000"
Length	67.226	Delta	26°53'25.299"R
Tangent	34.244	Back	S 32°08'45.177" W
External	4.036	Ahead	S 59°02'10.476" W
Long Chord	66.611		S 45°35'27.827" W
Mid. Ord.	3.926		

PI 9	711433.000	1855845.000	
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PT 19	711415.382	1855815.636	3+75.263
			S 59°02'10.476" W

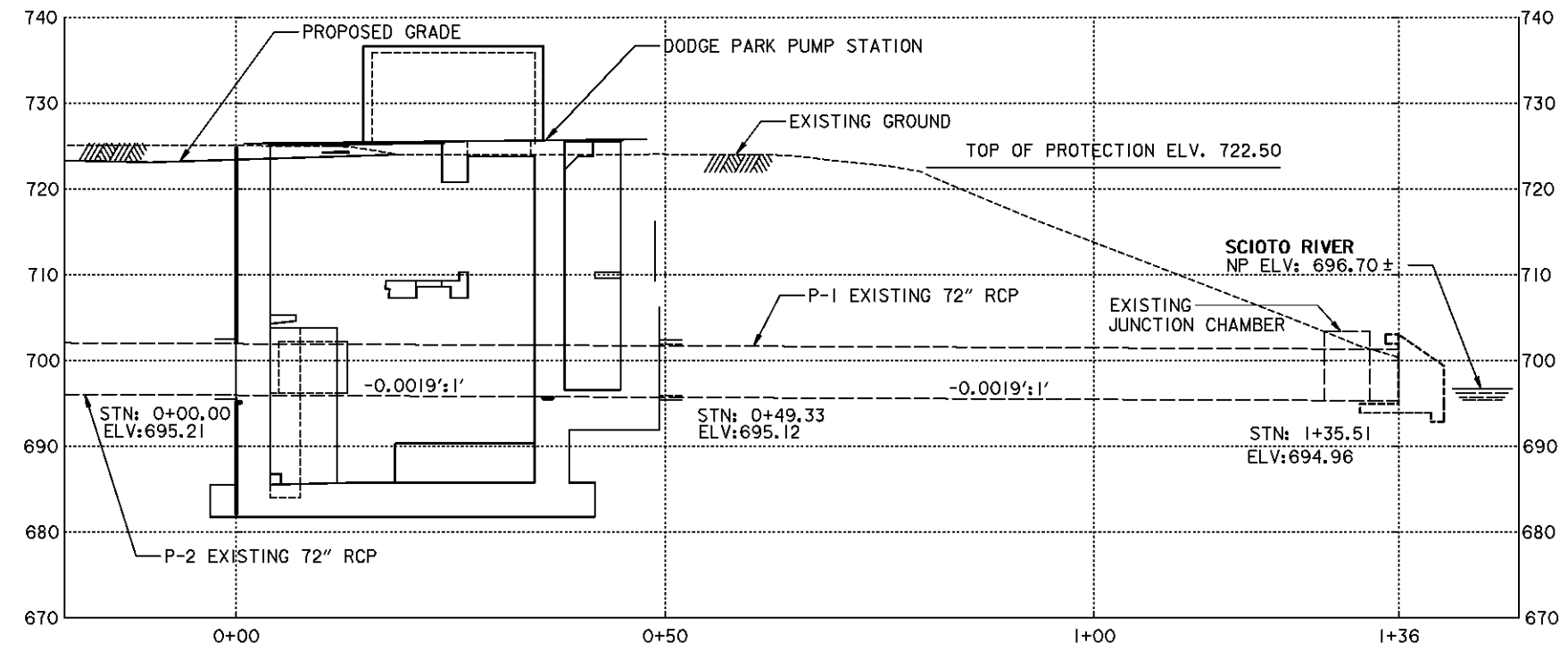
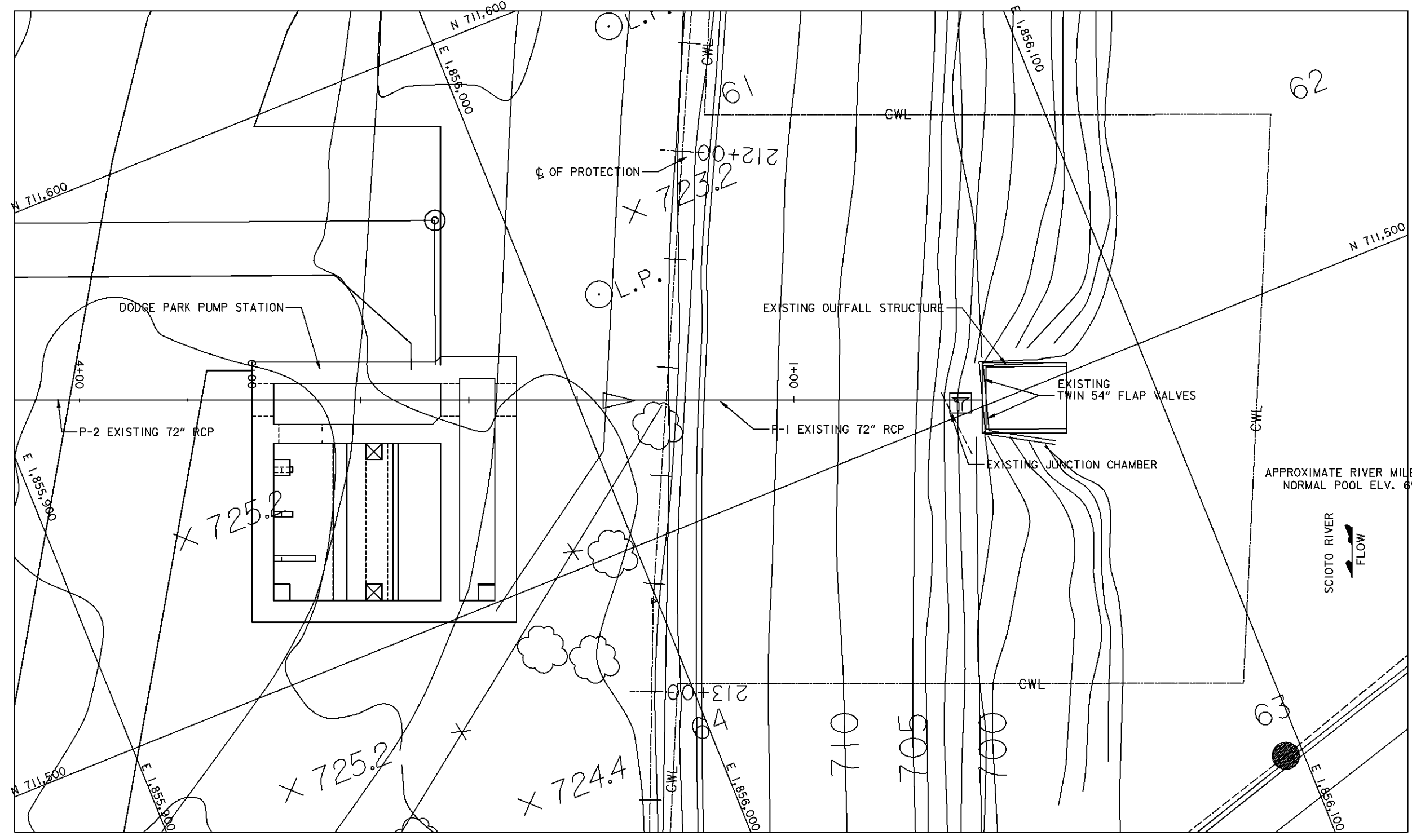
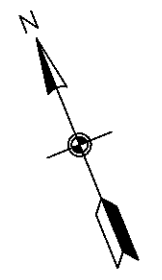
Radial direction from CC to PT is S 30°57'49.524" E

PI 10	711412.000	1855810.000	3+81.836
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Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2-99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	
Drawn by:	JDM	PHASE IIB (STORM WATER PUMPING STATION)	
Checked by:	LWR	<b>ALIGNMENT DATA TABLES</b>	
Reviewed by:	PFO	Scale: AS SHOWN	Sheet reference number: 15/1
Approved by:	AJS	Date: DECEMBER 1995	FILENAME: 00p3ad01.dgn PEN TABLE: 15/1
		Drawing Code: C-111016-PWC-7-	Sheet of

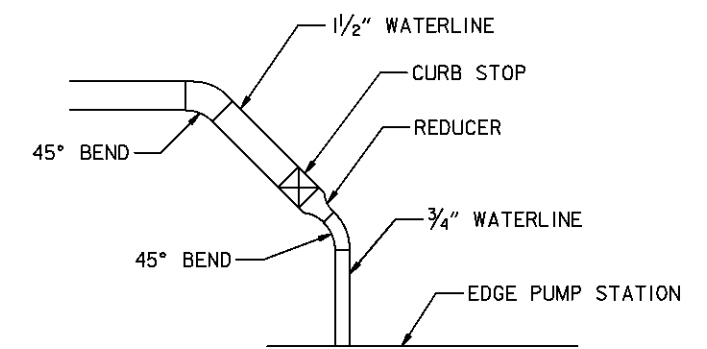
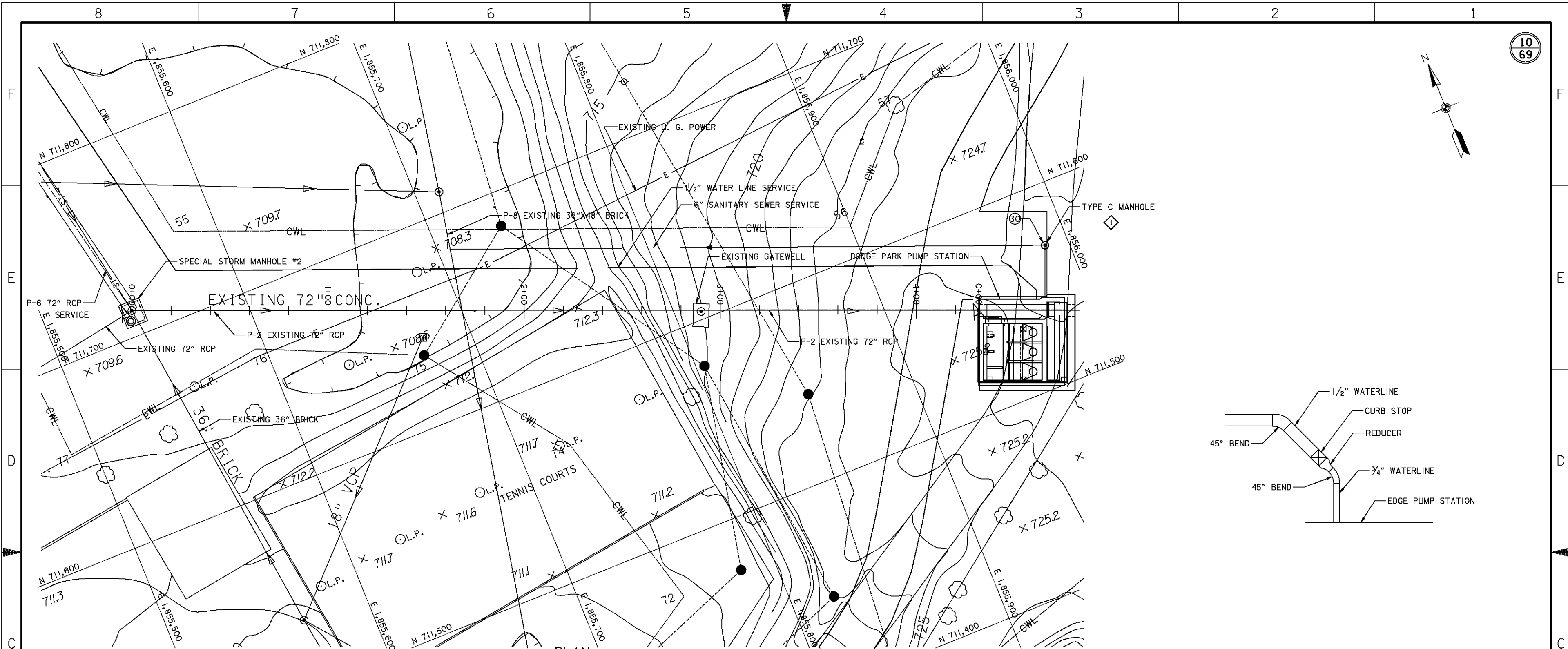


NOTE:  
FOR PUMP STATION SITE PLAN  
SEE SHEET 15/15  
  
FOR PUMP STATION DETAILS  
SEE SHEETS 51.1/1 - 51.1/4

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	
Drawn by:	JDM	PHASE IIB (STORM WATER PUMPING STATION)	
Checked by:	LWR	<b>P-1 PLAN AND PROFILE                  EXISTING 72" STORM SEWER</b>	
Reviewed by:	PFO	Scale:	AS SHOWN
Approved by:	AJS	Date:	DECEMBER 1995
		Drawing Code:	016-PWC-7-
		Sheet reference number:	152
		FILENAME:	06d7pp09.dgn
		PEN TABLE:	1.gpt
			1.gdt
			Sheet of

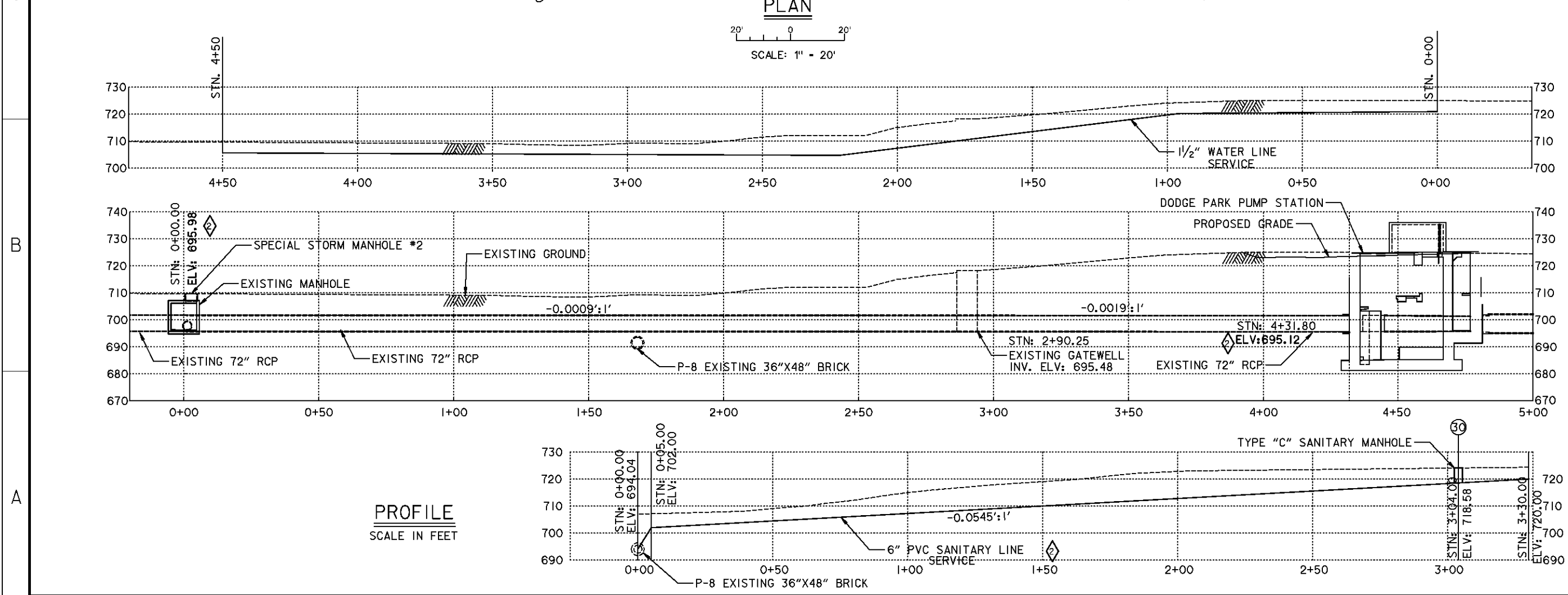


NOTE: WATERLINE WILL HAVE APPROXIMATELY 4.5 FEET OF COVER.

FOR PUMP STATION SITE WORK  
SEE SHEET 15/15.

FOR PUMP STATION DETAILS  
SEE SHEETS 51.1/1 - 51.1/4.

FOR SPECIAL STORM MANHOLE #2 DETAILS  
SEE SHEET 20.2/1.

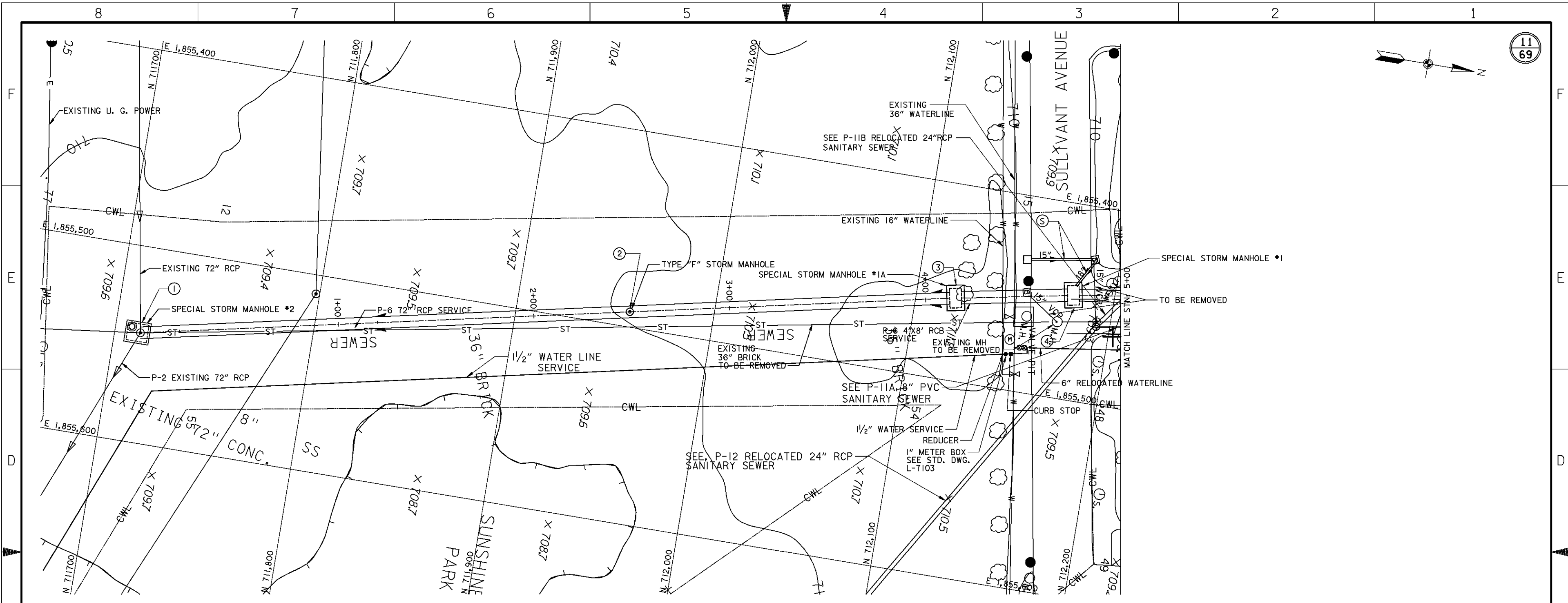


Revisions			
Symbol	Descriptions	Date	Approved
◊	REVISED AS CONSTRUCTED	2-99	
◊	REVISED IN ACCORDANCE WITH AMENDMENT 0002	6/96	

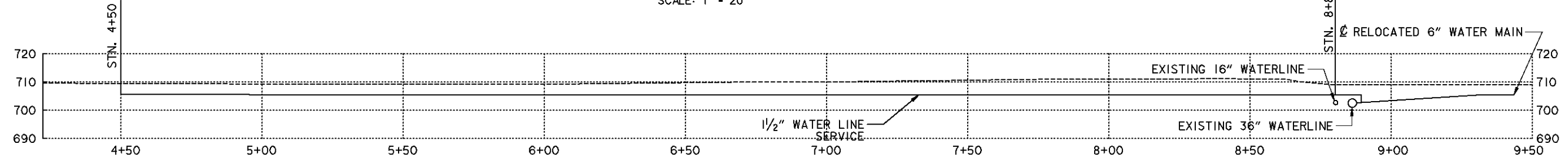
  

DODSON-LINDBLOM ASSOC. INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	
Drawn by:	JDM	PHASE IIB (STORM WATER PUMPING STATION)	
Checked by:	LWR	<b>P-2 PLAN AND PROFILE</b> <b>EXISTING 72" STORM SEWER</b>	
Reviewed by:	PFO	Scale:	AS SHOWN
Approved by:	AJS	Date:	DECEMBER 1995
Drawing Code:	016-PWC-7-	Sheet reference number:	15/3
		FILENAME:	01d7pp01.dg
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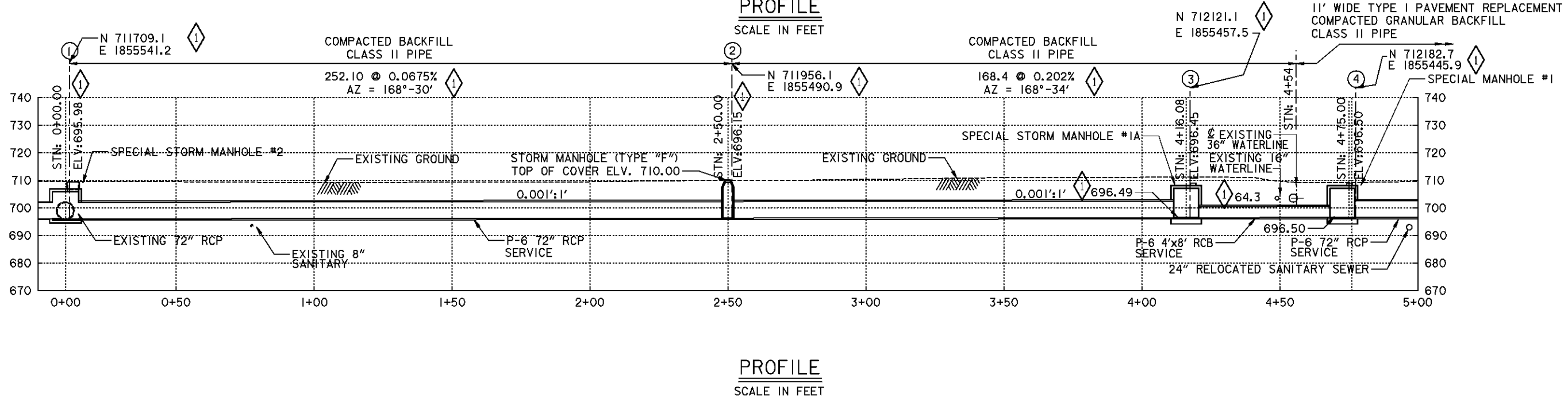




**PLAN**  
SCALE: 1" = 20'



**PROFILE**  
SCALE IN FEET



**PROFILE**  
SCALE IN FEET

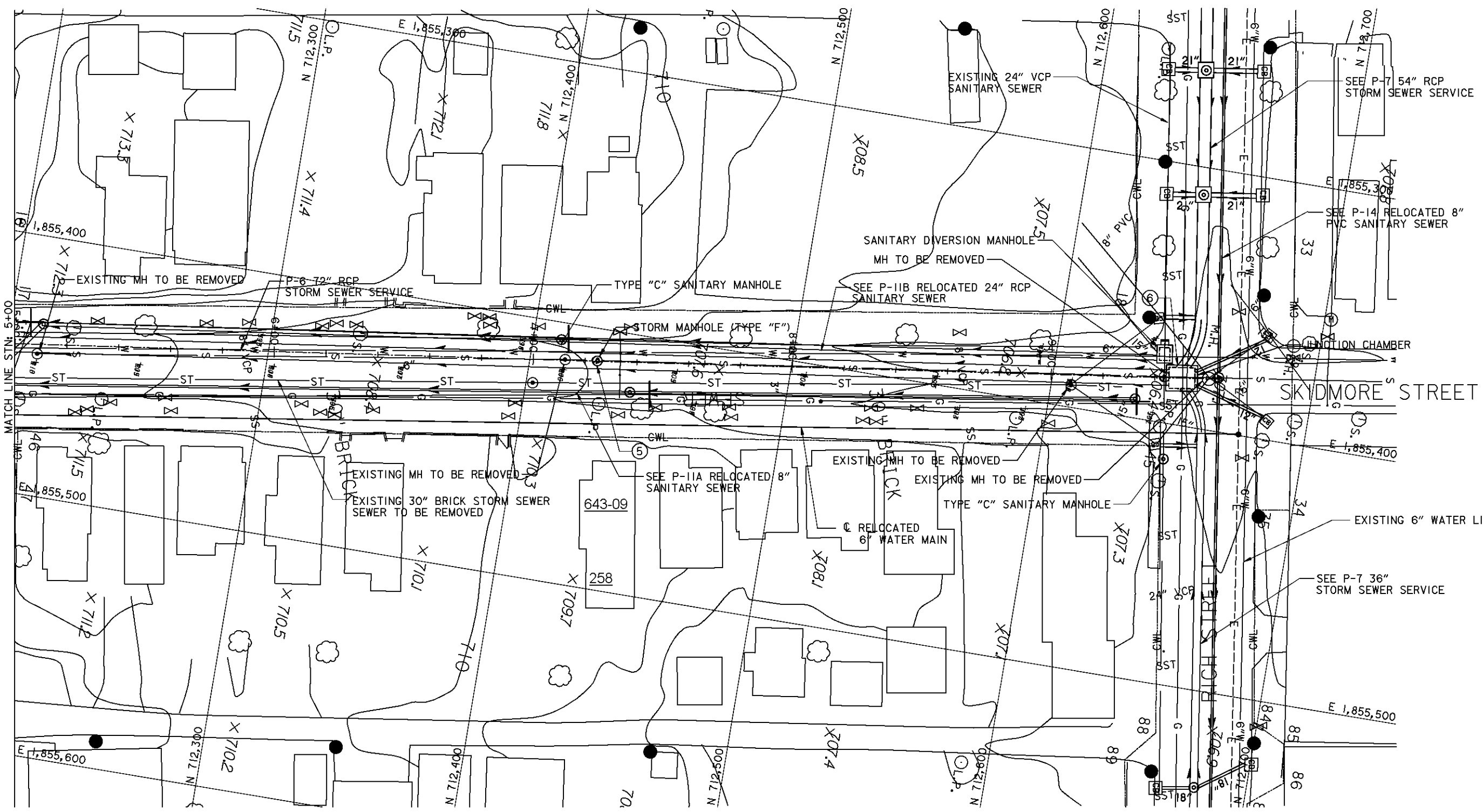
- NOTE: 1. 1/2" WATERLINE WILL HAVE APPROXIMATELY 4.5 FEET OF COVER.  
 2. FOR SPECIAL STORM MANHOLE #2, DETAILS SEE SHEET 20.2/1.  
 3. FOR SPECIAL STORM MANHOLE #1, DETAILS SEE SHEET 20.2/1.  
 4. FOR 24" SANITARY SEWER DETAILS, SEE SHEET 15/10-15/11  
 5. FOR 8" SANITARY SEWER DETAILS SEE SHEET 15/9  
 6. EXISTING 16" AND 36" WATERLINES MUST BE SUPPORTED DURING CONSTRUCTION OF 4'x8" REINFORCED CONCRETE BOX STORM SEWER.  
 7. FOR STORM SEWER LATERAL PROFILE S DETAILS SEE SHEET 15/7A.

Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2-99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	JDM	<b>P-6 PLAN AND PROFILE</b> <b>72" STORM SEWER</b>	
Checked by:	LWR	Scale:	AS SHOWN
Reviewed by:	PFO	Date:	DECEMBER 1995
Approved by:	AJS	Drawing Code:	016-PWC-7-
		Sheet reference number:	15/4
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		Sheet	of

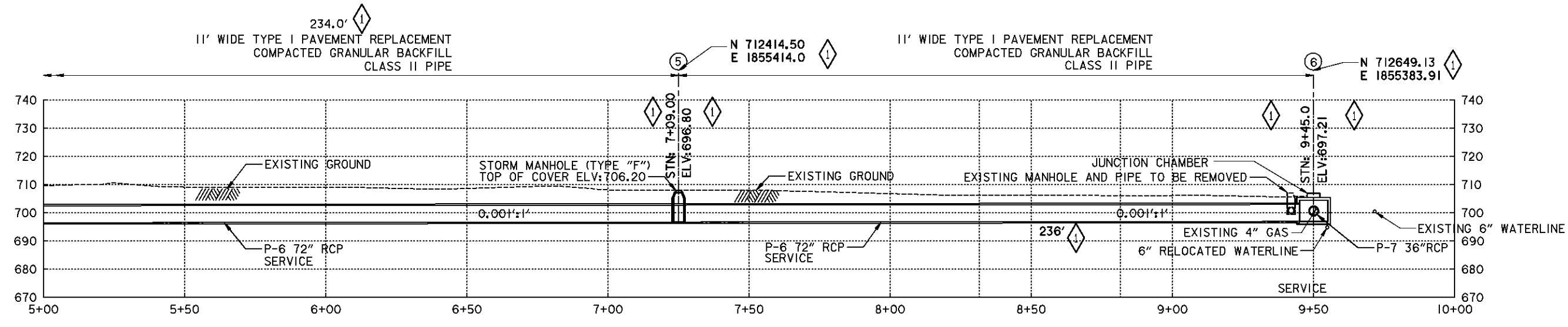




**PLAN**  
SCALE: 1" = 20'

**NOTES:**

1. FOR SANITARY SEWER DETAILS SEE SHEETS 15/9 - 15/10.
2. FOR JUNCTION CHAMBER DETAILS SEE SHEET 20.3/1.
3. FOR WATER MAIN DETAILS, SEE SHEETS 15.1/1 - 15.1/4.



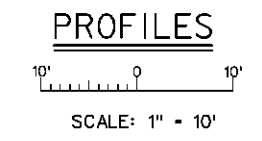
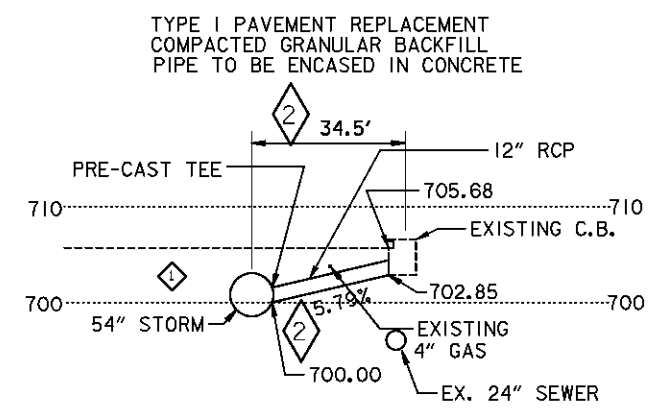
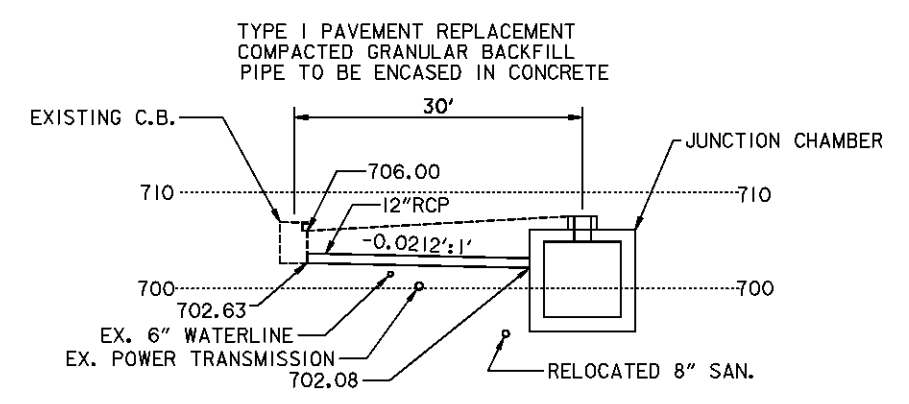
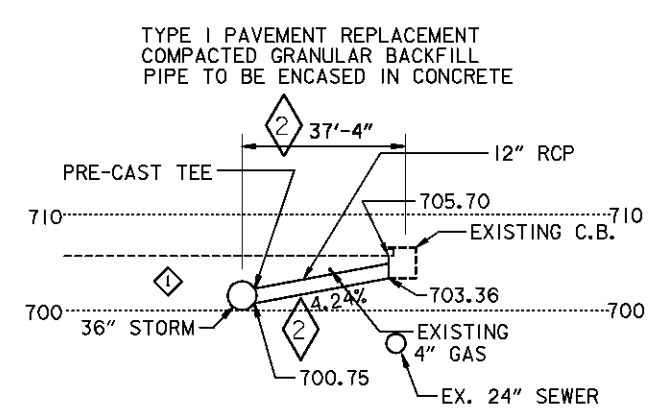
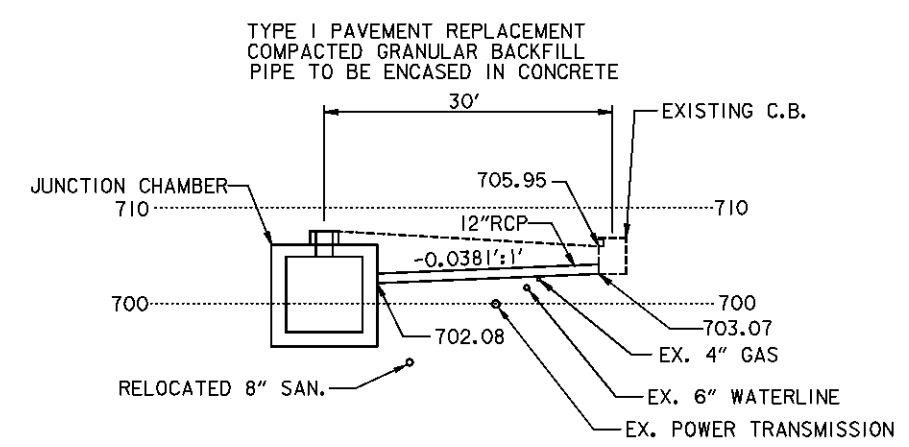
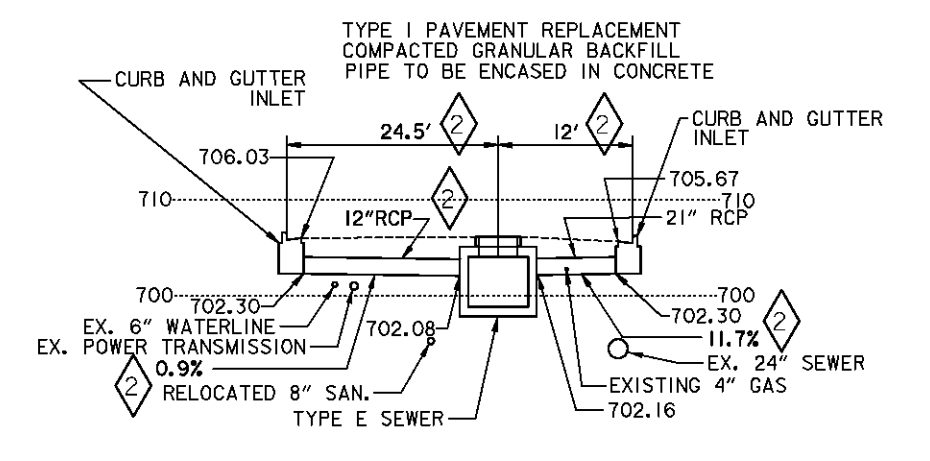
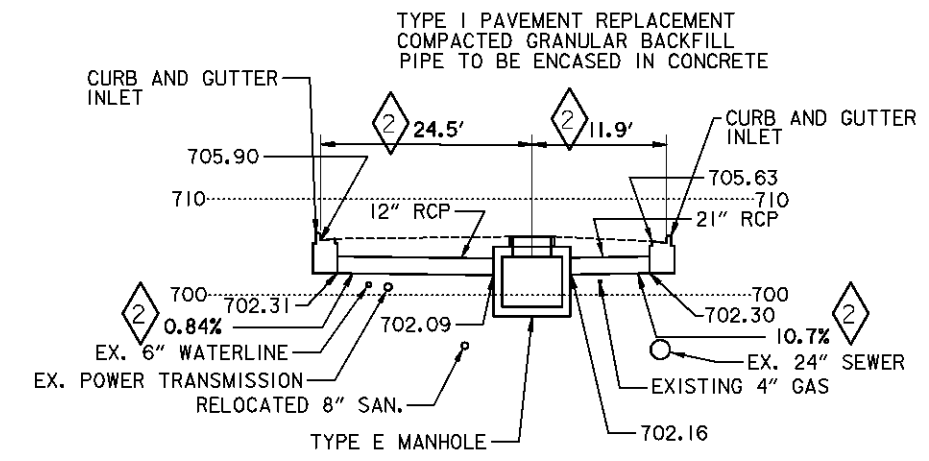
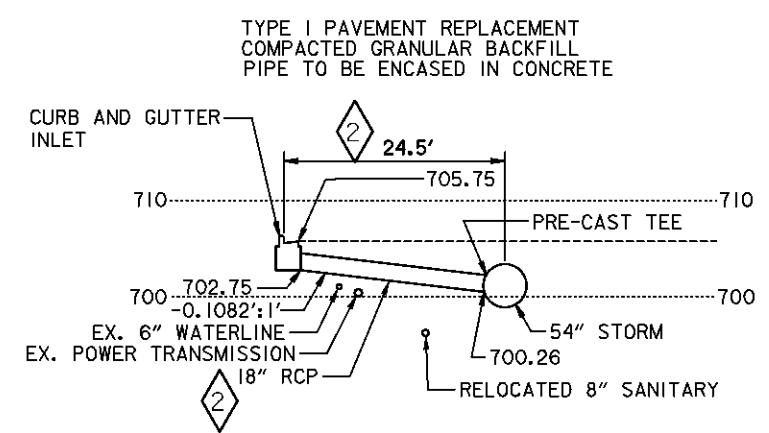
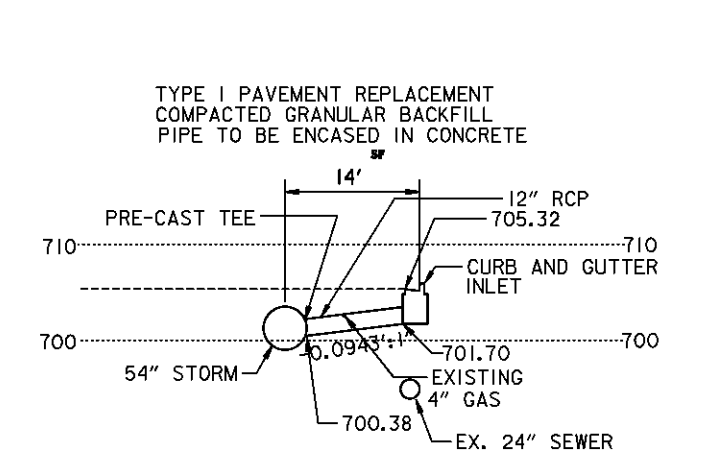
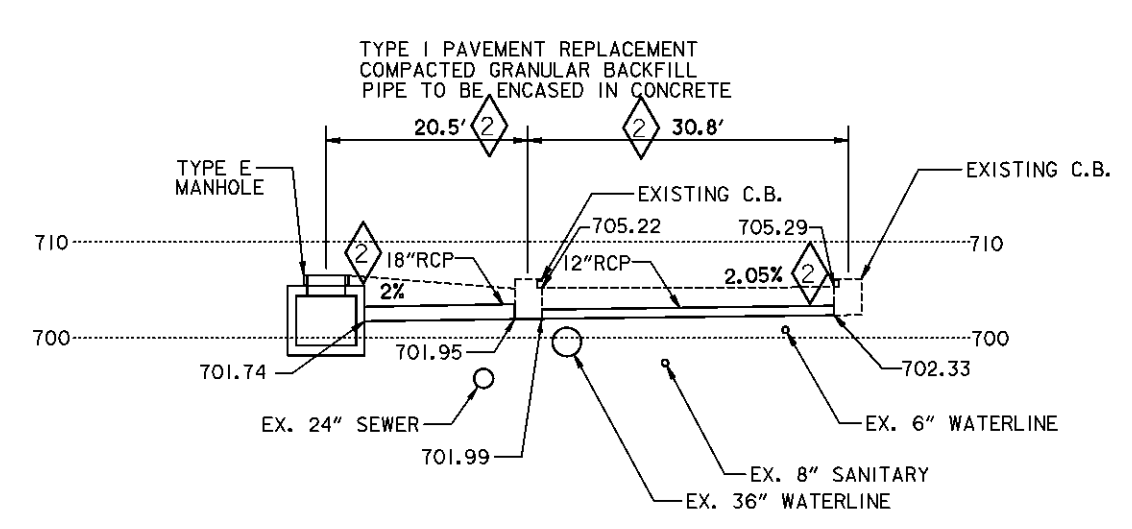
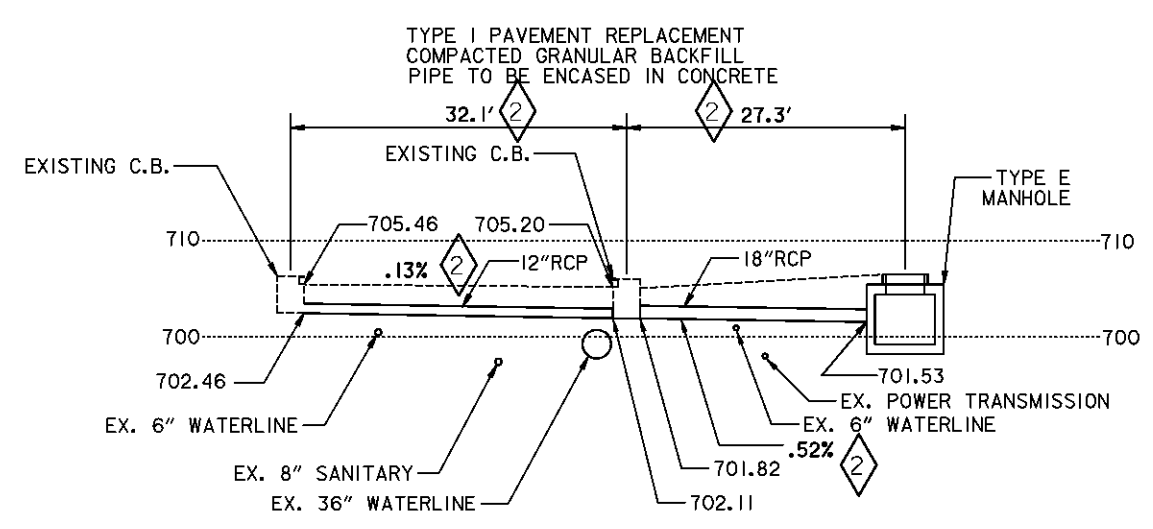
**PROFILE**  
SCALE IN FEET

Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2-99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION) <b>P-6 PLAN AND PROFILE</b> <b>72" STORM SEWER</b>	
Drawn by:	JDM		
Checked by:	LWR		
Reviewed by:	PFO		
Approved by:	AJS		
Scale:	AS SHOWN	Sheet reference number:	15/5
Date:	DECEMBER 1995	FILENAME:	06d7pp04.dgn
Drawing Code:	016-PWC-7-	PIN TABLE:	h.pit L.gib
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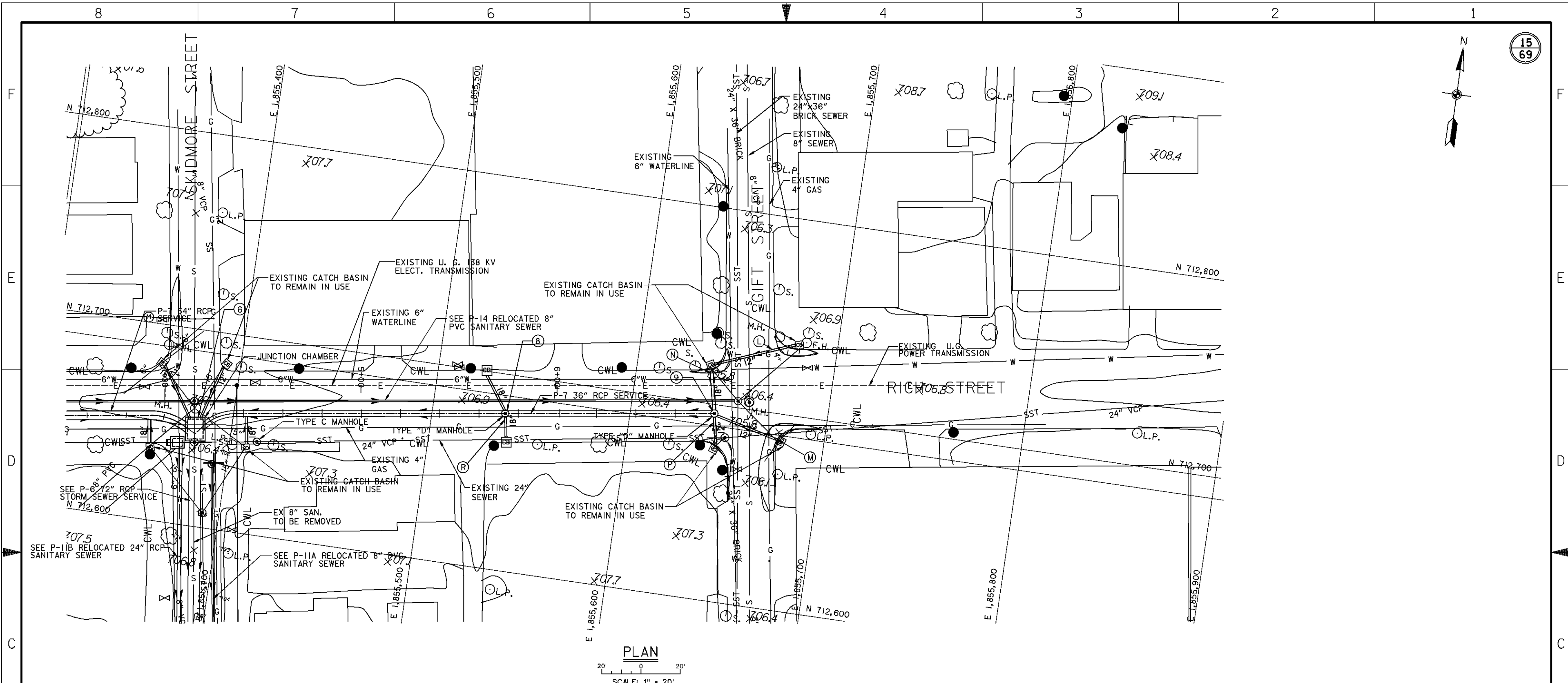




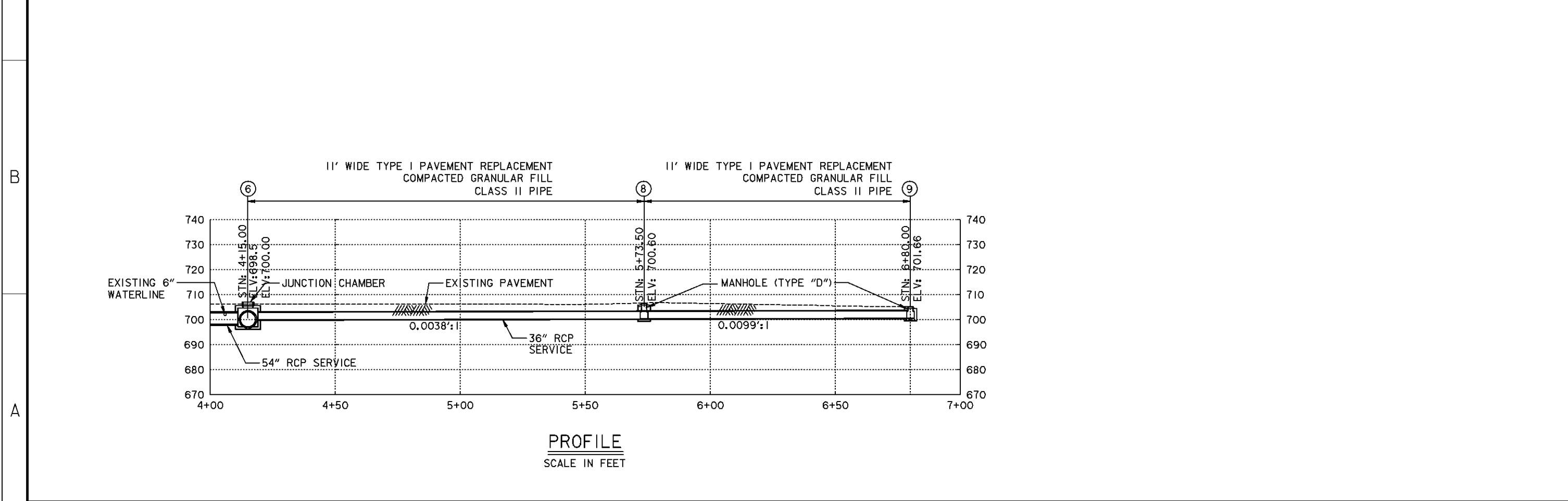
Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2/99	
◇	REVISED IN ACCORDANCE WITH AMENDMENT 0002	6/96	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	LWR	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	RLG	<b>P-7 STORM SEWER                  LATERAL PROFILES</b>	
Checked by:	LWR	Scale:	AS SHOWN
Reviewed by:	PFO	Date:	DECEMBER 1995
Approved by:	AJS	Drawing Code:	016-PWC-7-
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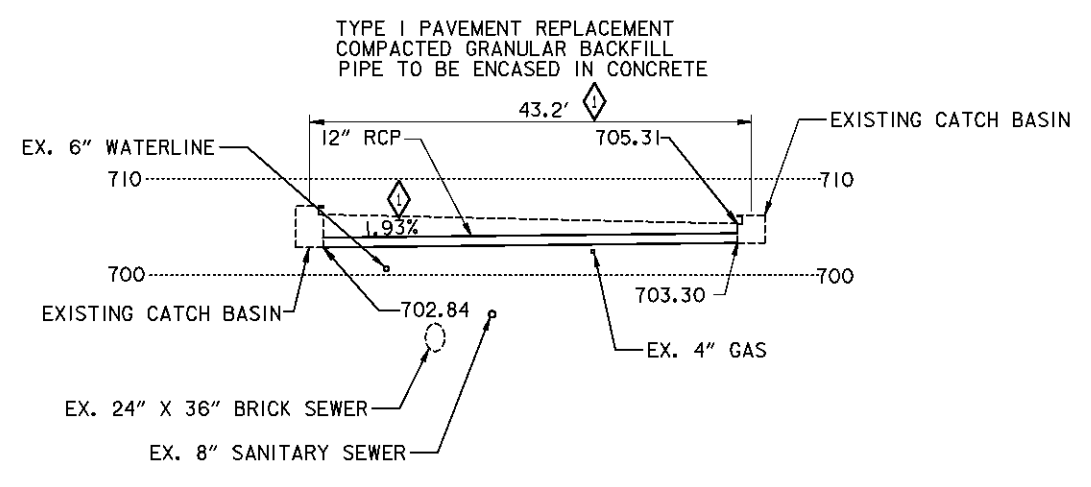
NOTE:  
1. FOR STORM SEWER LATERAL PROFILES L-P DETAILS SEE SHEET 15/7A.



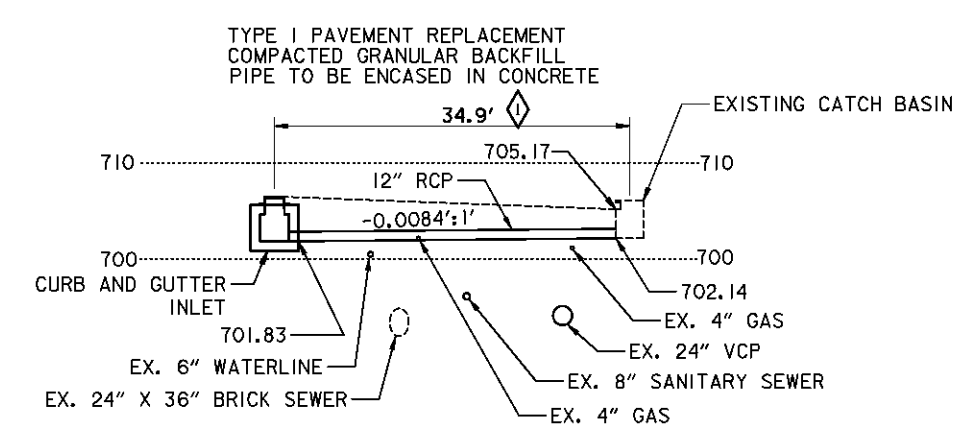
Revisions			
Symbol	Descriptions	Date	Approved

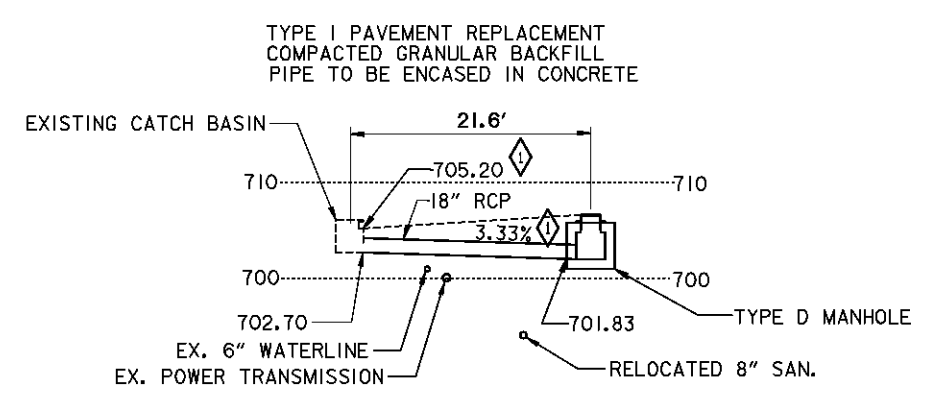
<b>DODSON-LINDBLOM ASSOC., INC.</b> CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		<b>U.S. ARMY ENGINEER DISTRICT</b> CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	<b>SCIO TO RIVER</b> COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	JDM		
Checked by:	LWR	<b>P-7 PLAN AND PROFILE</b> <b>36" STORM SEWER</b>	
Reviewed by:	PFO		
Approved by:	AJS	Scale: <b>AS SHOWN</b> Date: <b>DECEMBER 1995</b> Drawing Code: <b>016-PWC-7-</b>	Sheet reference number: <b>15/7</b>
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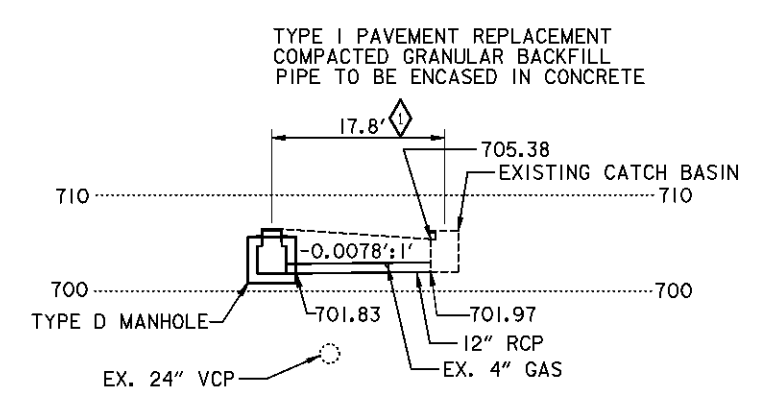
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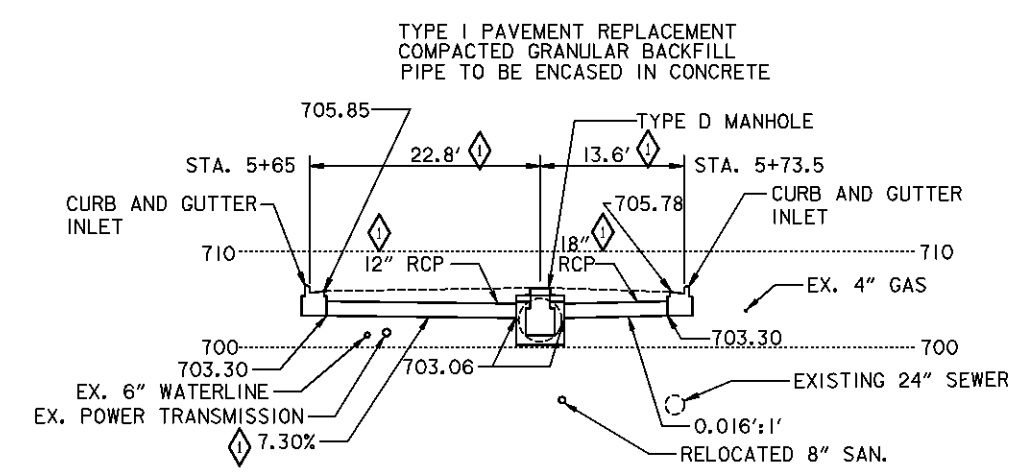
GIFT ST. SE  
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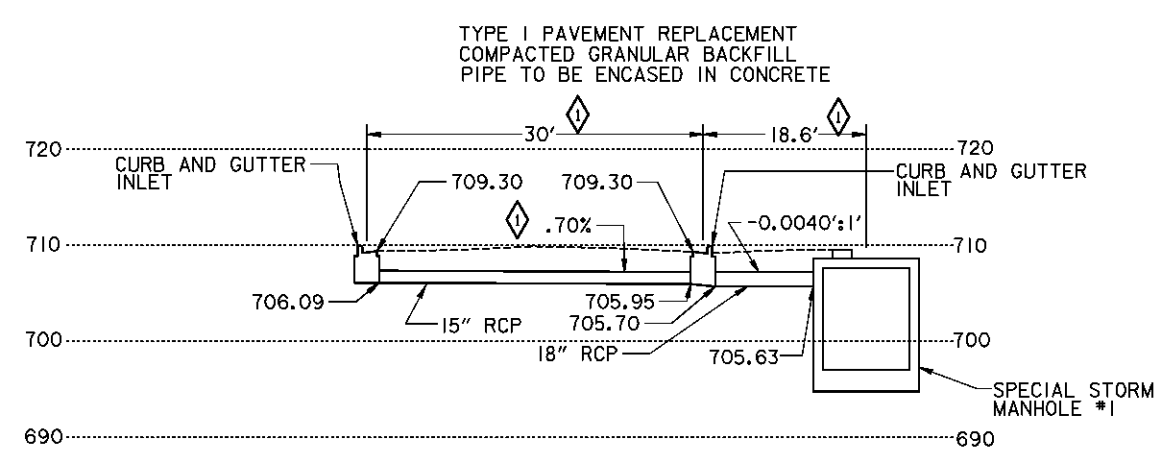
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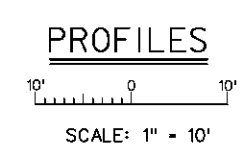
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STN 5+73.5  
Ⓡ



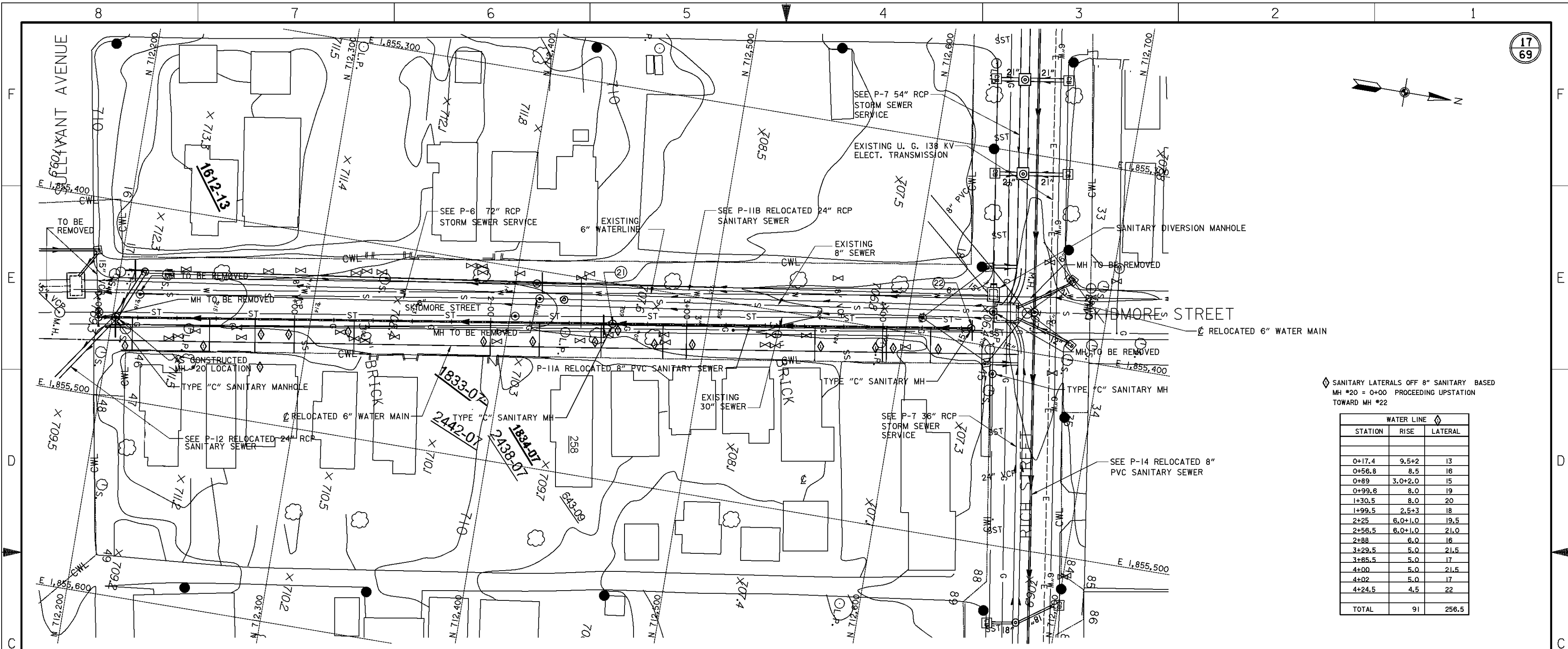
SULLIVANT AVE.  
Ⓢ



Revisions			
Symbol	Descriptions	Date	Approved
◊	REVISED AS CONSTRUCTED	2-99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: LWR Drawn by: RLG Checked by: LWR Reviewed by: PFO Approved by: AJS	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	<b>P-7 STORM SEWER                  LATERAL PROFILES</b>	
Scale: AS SHOWN Date: DECEMBER 1995 Drawing Code: 016-PWC-7-	Sheet reference number: 15/7A	FILENAME: 00d7pp3b.dgn PEN TABLE: s.pfb L.pfb	Sheet of



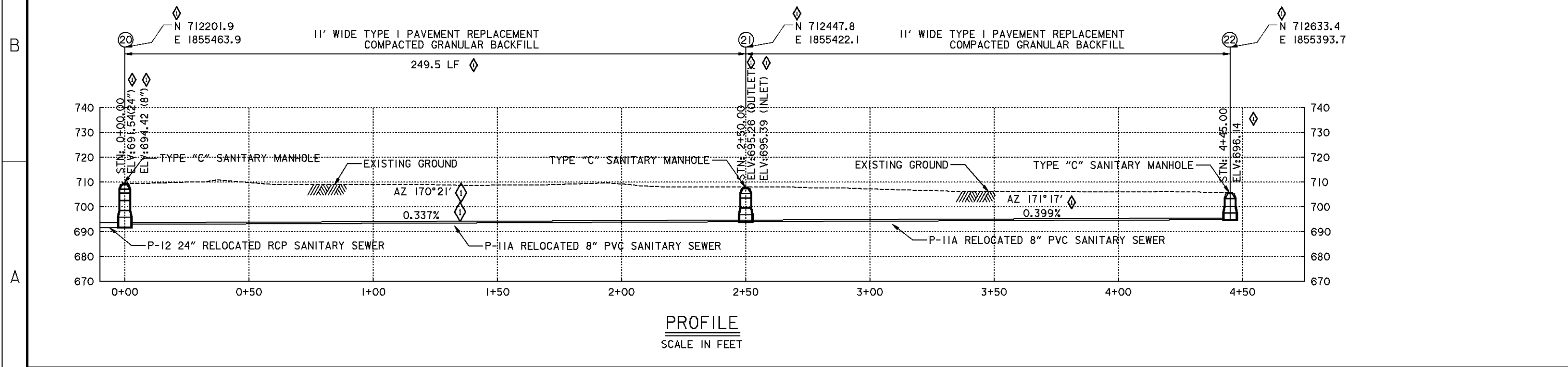
◆ SANITARY LATERALS OFF 8" SANITARY BASED  
MH #20 = 0+00 PROCEEDING UPSTATION  
TOWARD MH #22

STATION	RISE	LATERAL
0+17.4	9.5+2	13
0+56.8	8.5	16
0+89	3.0+2.0	15
0+99.6	8.0	19
1+30.5	8.0	20
1+99.5	2.5+3	18
2+25	6.0+1.0	19.5
2+56.5	6.0+1.0	21.0
2+88	6.0	16
3+29.5	5.0	21.5
3+85.5	5.0	17
4+00	5.0	21.5
4+02	5.0	17
4+24.5	4.5	22
TOTAL	91	256.5

PLAN  
SCALE: 1" = 20'

NOTES

- FOR RELOCATED 6" WATER MAIN DETAILS, SEE SHEETS 15.1/1 - 15.1/4.
- FOR SANITARY DIVERSION MANHOLE, SEE SHEET 20.5/1.

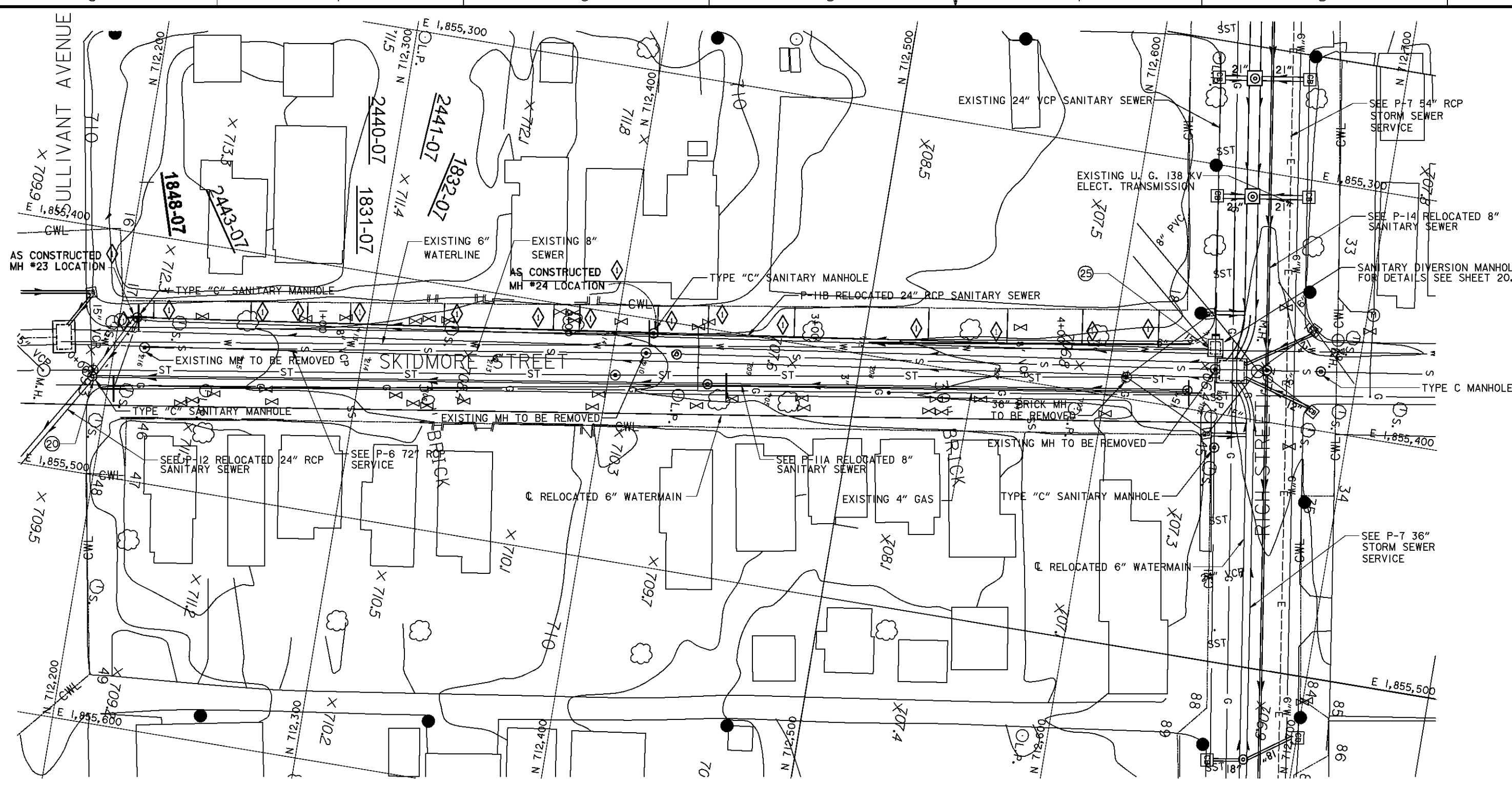
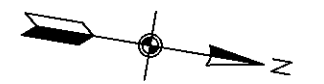


PROFILE  
SCALE IN FEET

Revisions			
Symbol	Descriptions	Date	Approved
◆	REVISED AS CONSTRUCTED	2-99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: JDY	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.
Drawn by: JDM	PHASE IIB (STORM WATER PUMPING STATION)
Checked by: LWR	<b>P-11A PLAN AND PROFILE 8" SANITARY SEWER</b>
Reviewed by: PFO	Scale: AS SHOWN
Approved by: AJS	Date: DECEMBER 1995
Drawing Code: 016-PWC-7-	Sheet number: 159
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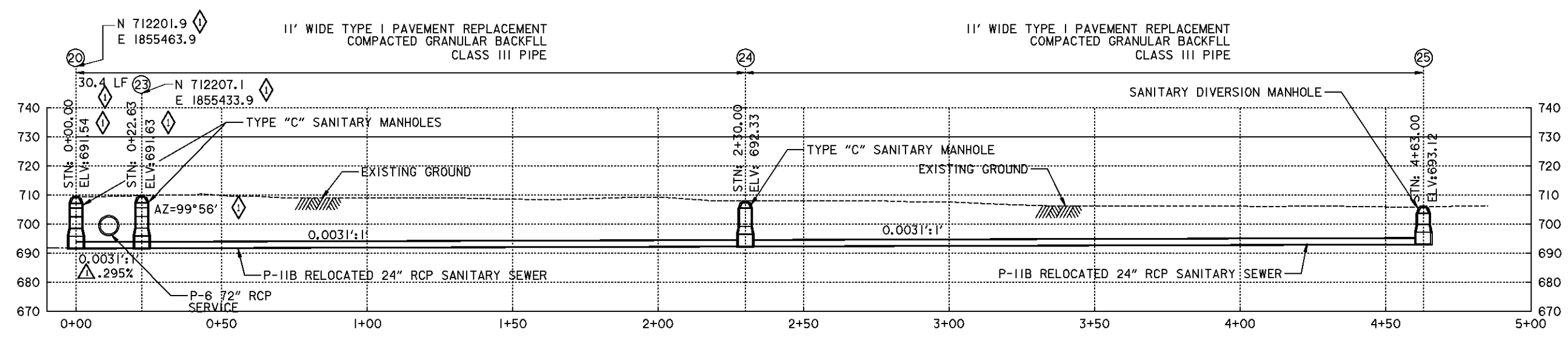


PLAN  
SCALE: 1" = 20'

◆ SANITARY LATERALS OFF 24" SANITARY MH #23 = 0+22.63 PROCEEDING UPSTATION TOWARD MH #25.

WATER LINE ◆		
STATION	RISE	LATERAL
0+31.63	8.5	10.5
0+71.13	6	12.5
1+00.13	8.5	6
1+01.63	9.5	13.5
1+11.58	9	16.5
1+49.63	9	9
0+94.13	10	14
1+65.13	8	13
2+04.63	9.5	12.7
2+36.5	9	9.5
2+57	7.5	12.5
2+92	8.5	9
3+46.5	7.5	11
3+78.5	17.5	17.5
4+09	5.5	6
4+40	6.5	8
TOTAL	140	181.2

NOTE :  
1. FOR RELOCATED WATERMAIN DETAILS, SEE SHEETS 15.1/1 - 15.1/4.



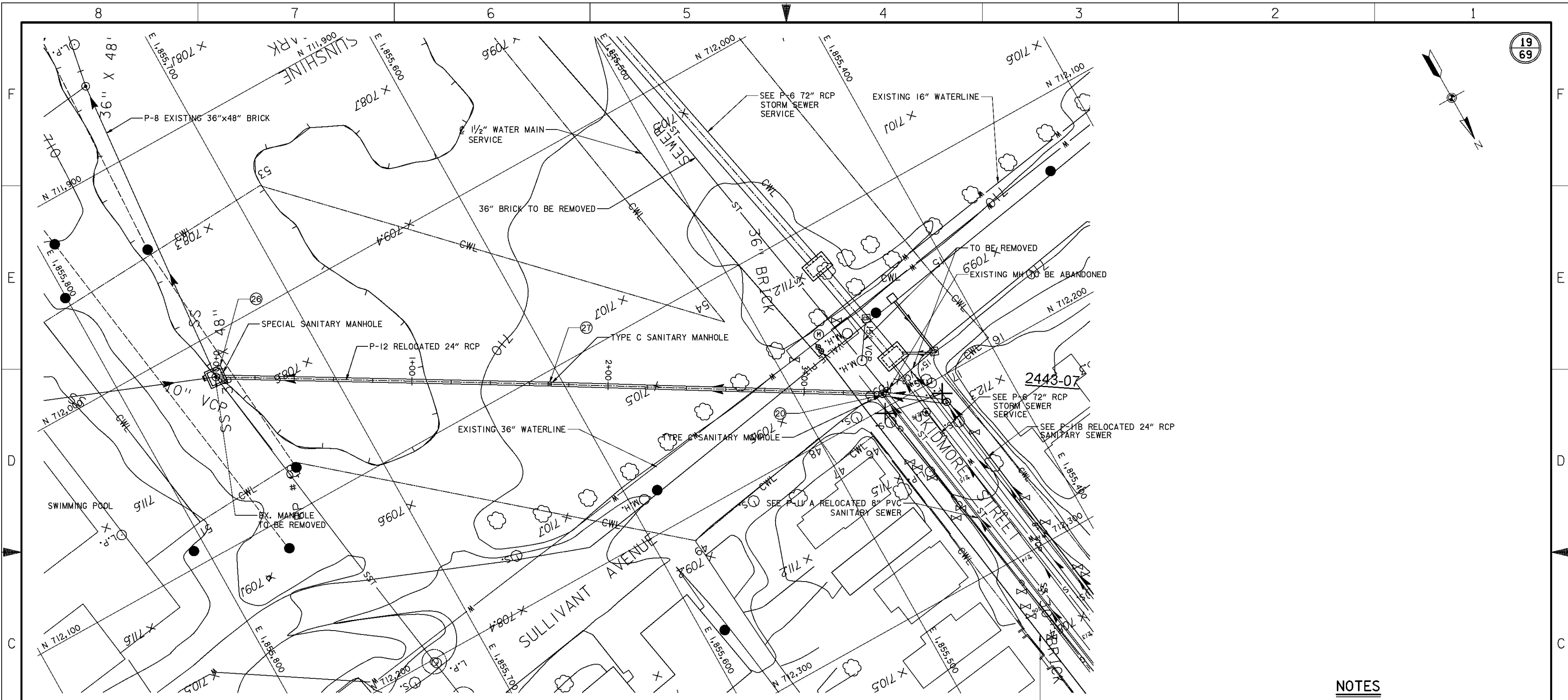
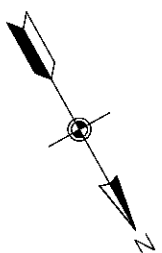
PROFILE  
SCALE IN FEET

Revisions			
Symbol	Descriptions	Date	Approved
◆	REVISED AS CONSTRUCTED	2-99	

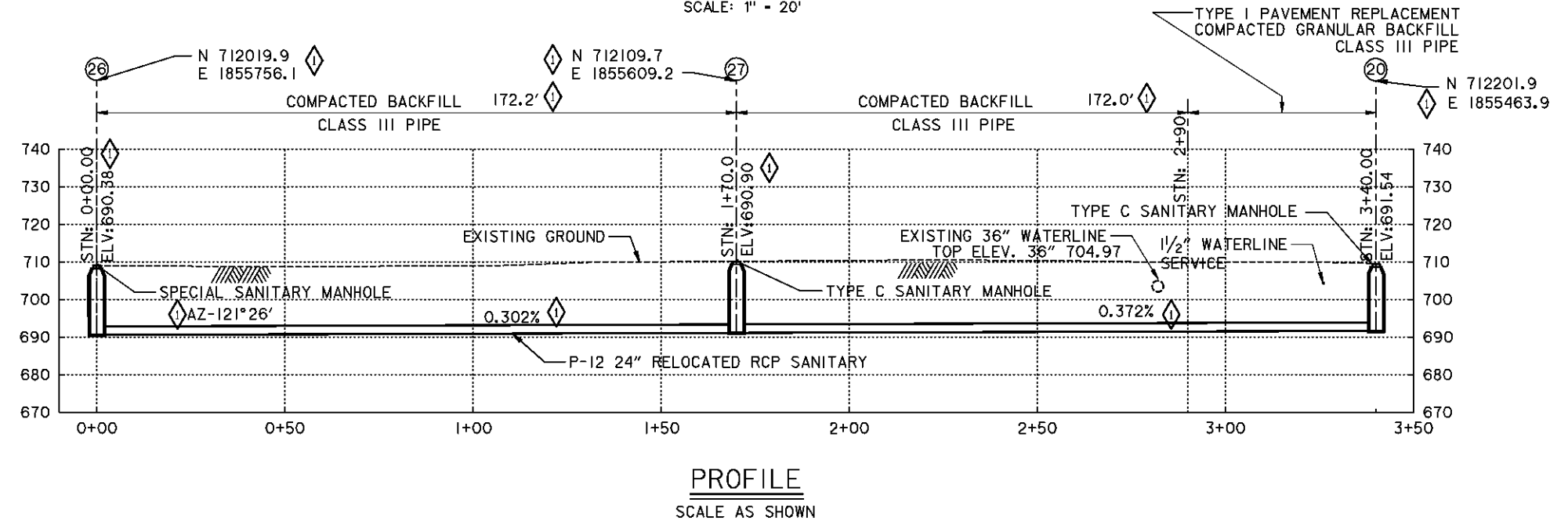
  

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: JDY	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.
Drawn by: JDM	PHASE IIB (STORM WATER PUMPING STATION)
Checked by: LWR	<b>P-11B PLAN AND PROFILE 24" SANITARY SEWER</b>
Reviewed by: PFO	Scale: AS SHOWN
Approved by: AJS	Date: DECEMBER 1995
Drawing Code: 016-PWC-7-	Sheet reference number: 15/10
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**PLAN**  
SCALE: 1" = 20'



**PROFILE**  
SCALE AS SHOWN

**NOTES**

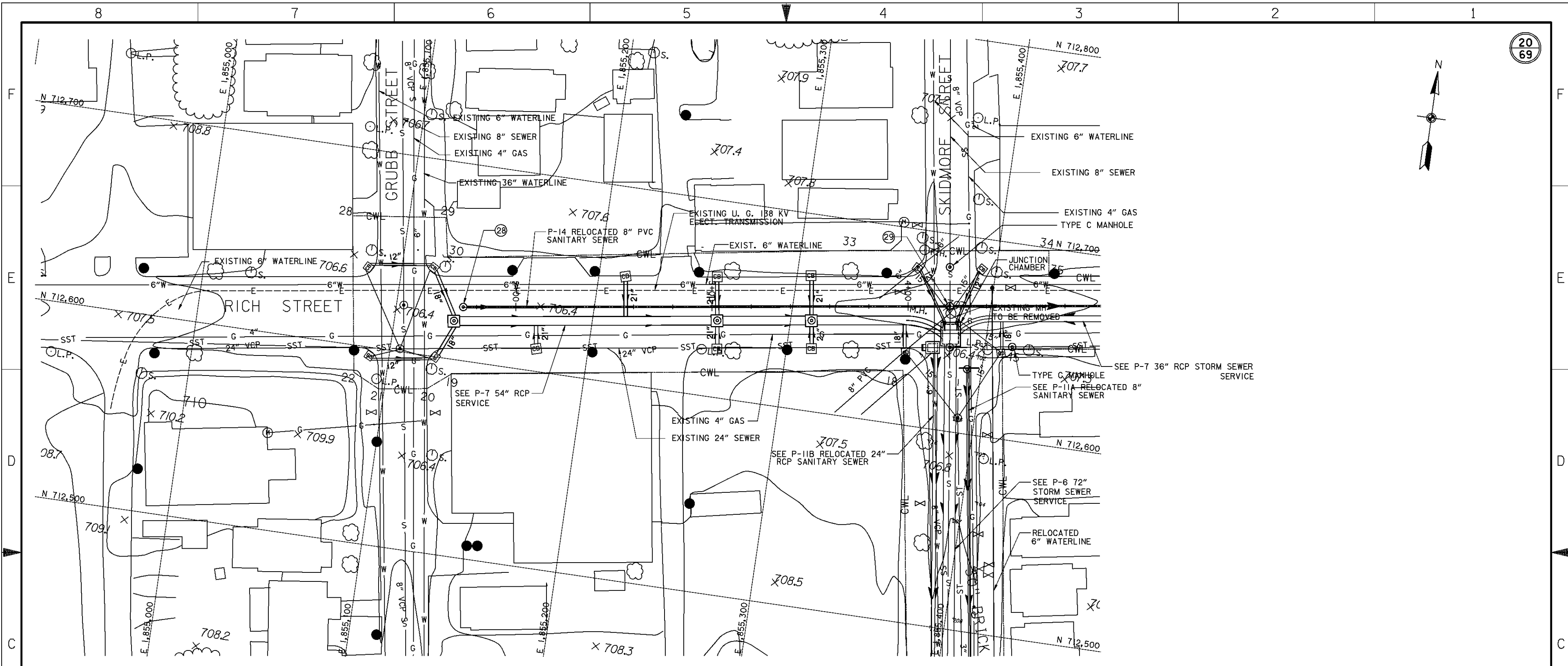
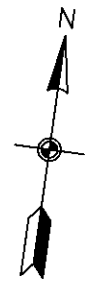
- FOR SPECIAL SANITARY MANHOLE DETAILS SEE SHEET 20.4/1.
- FOR RELOCATED 6" WATER MAIN DETAILS, SEE SHEETS 15.1/1 - 15.1/4.

Revisions			
Symbol	Descriptions	Date	Approved
◊	REVISED AS CONSTRUCTED	2-99	

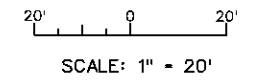
  

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	JDM	<b>P-12 PLAN AND PROFILE                  24" SANITARY SEWER</b>	
Checked by:	LWR	Scale:	AS SHOWN
Reviewed by:	PFO	Date:	DECEMBER 1995
Approved by:	AJS	Drawing Code:	016-PWC-7-
		Sheet reference number:	15/11
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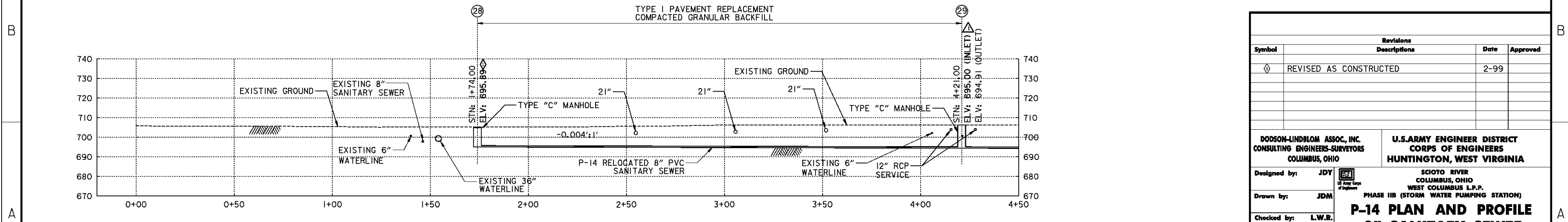




PLAN



- NOTE :**
- FOR RELOCATED WATER MAIN DETAILS, SEE SHEETS 15.1/1 - 15.1/2.
  - DISTURBED OR DAMAGED CURB DURING CONSTRUCTION, SHALL BE REPLACED WITHIN CONTRACTOR WORK LIMITS.



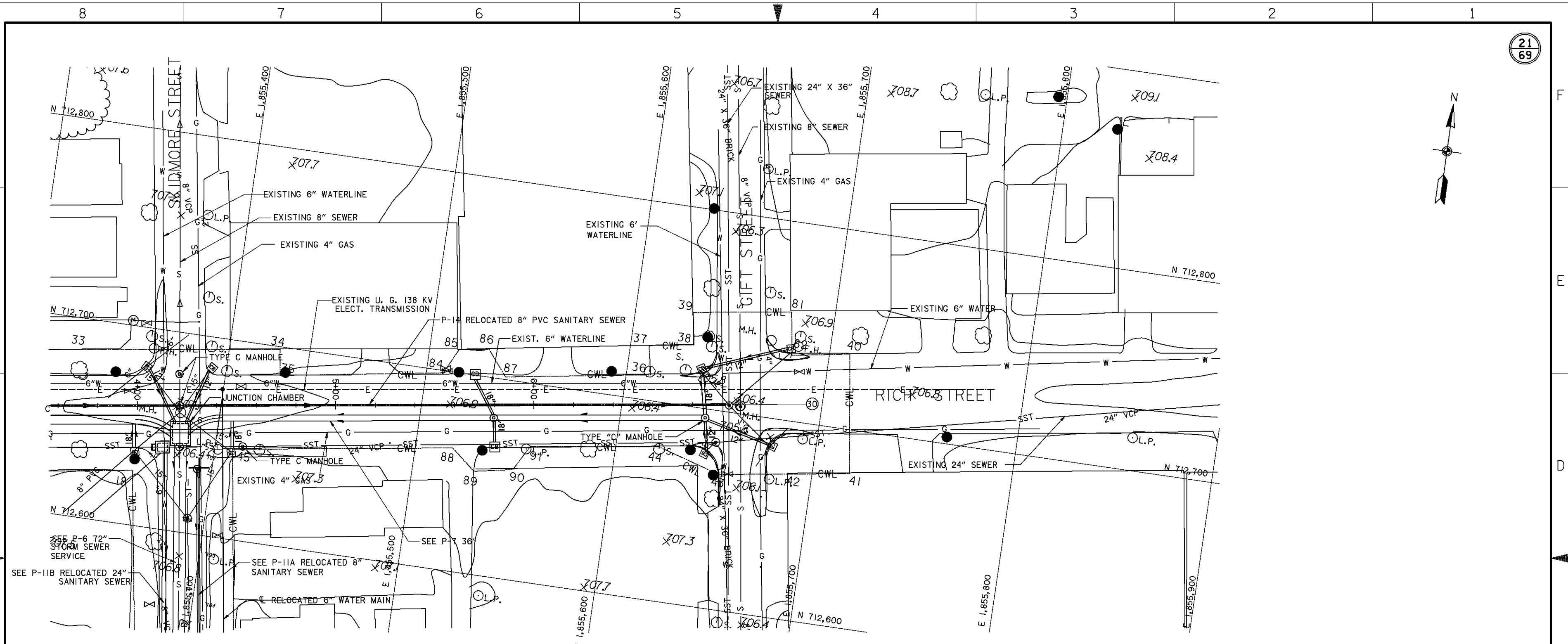
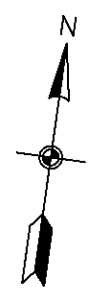
PROFILE

SCALE IN FEET

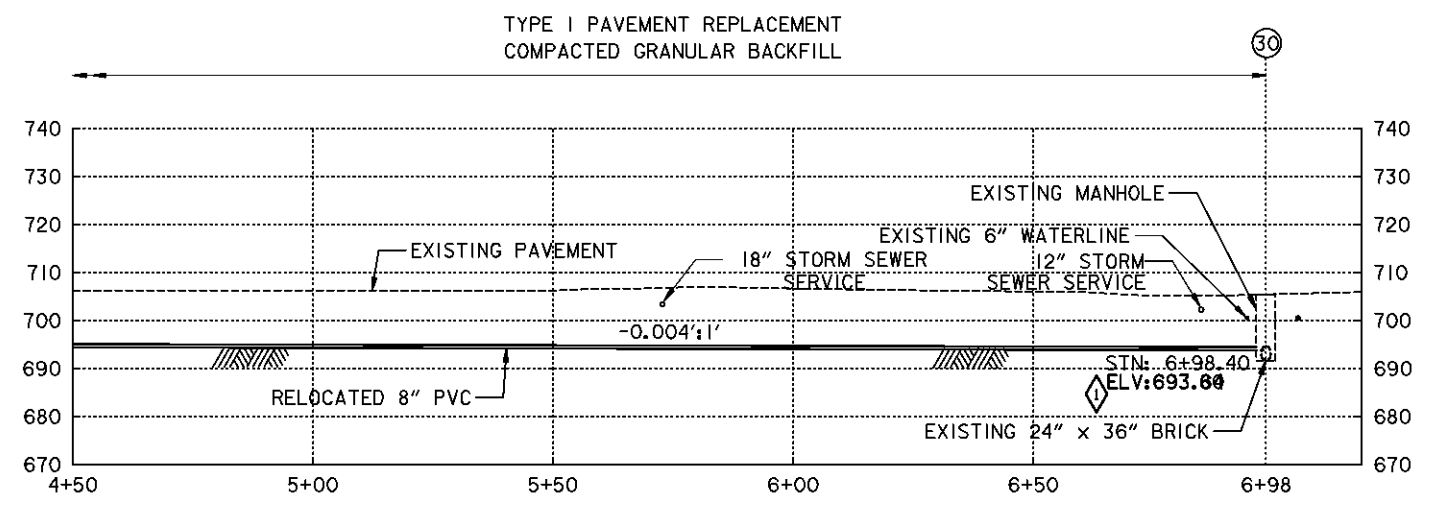
Revisions			
Symbol	Descriptions	Date	Approved
◊	REVISED AS CONSTRUCTED	2-99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	
Drawn by:	JDM	PHASE IIB (STORM WATER PUMPING STATION) <b>P-14 PLAN AND PROFILE</b> <b>8" SANITARY SEWER</b>	
Checked by:	L.W.R.	Scale:	AS SHOWN
Reviewed by:	PFO	Date:	DECEMBER 1995
Approved by:	AJS	Drawing Code:	016-PWC-7-
		Sheet reference number:	15/13
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		Sheet	of



PLAN  
SCALE: 1" = 20'



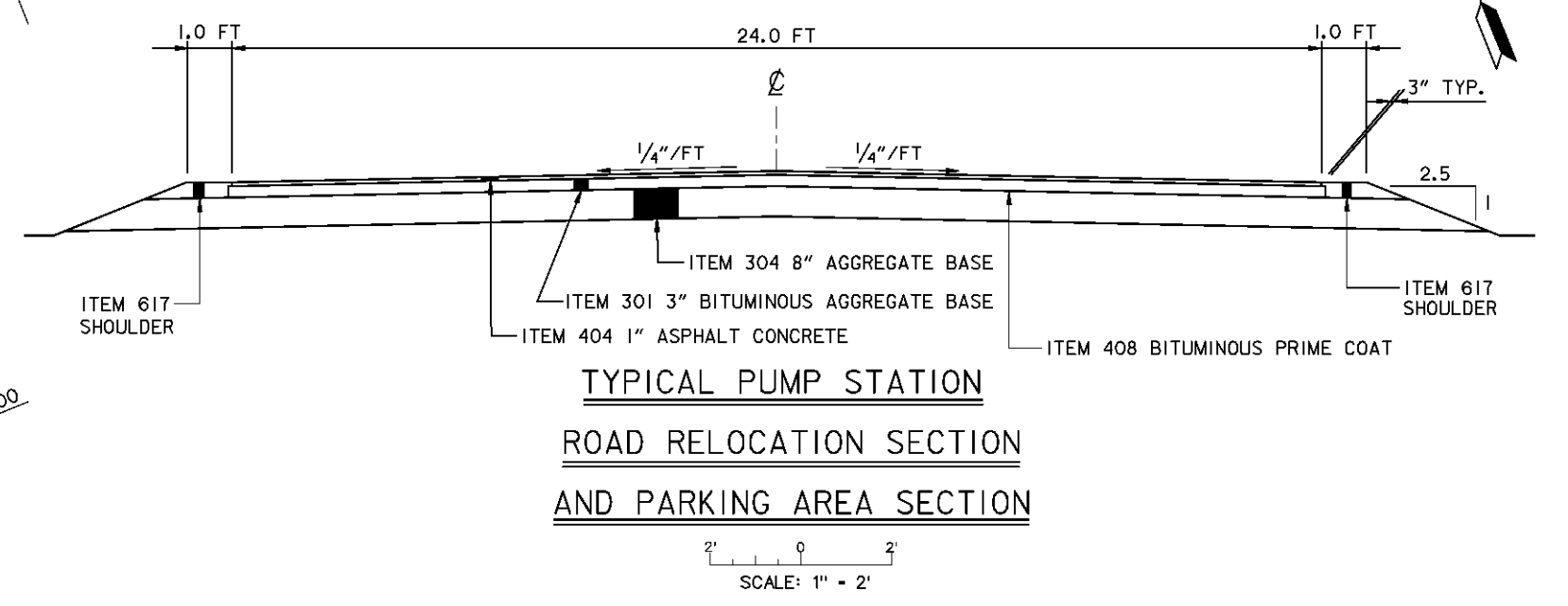
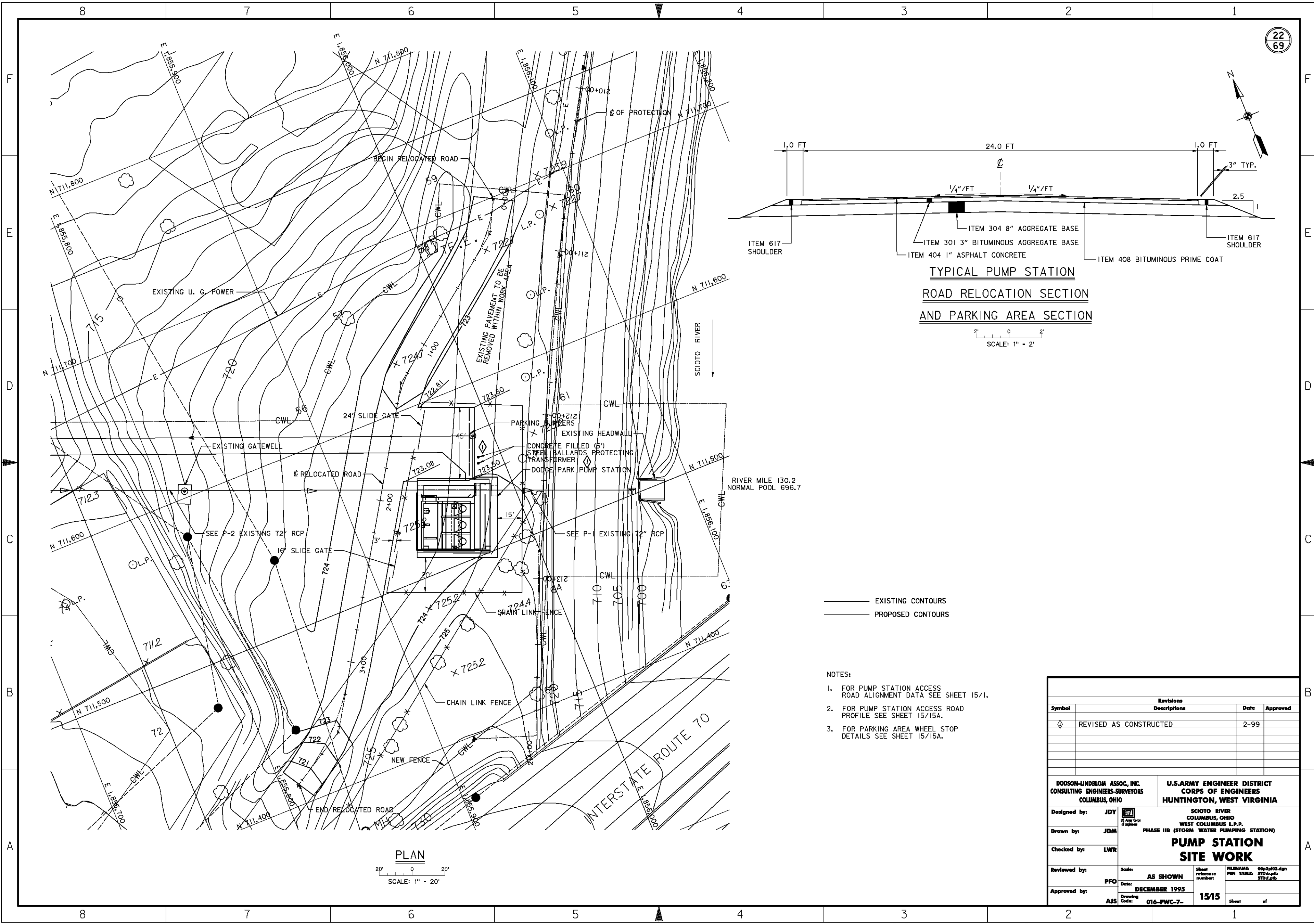
PROFILE  
SCALE IN FEET

- NOTE :
- FOR RELOCATED WATER MAIN SEE SHEETS 15.1/1 - 15.1/2.
  - DISTURBED OR DAMAGED CURB DURING CONSTRUCTION, SHALL BE REPLACED WITHIN CONTRACTOR WORK LIMITS.

Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2-99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	
Drawn by:	JDM	PHASE IIB (STORM WATER PUMPING STATION)	
Checked by:	LWR	<b>P-14 PLAN AND PROFILE 8" SANITARY SEWER</b>	
Reviewed by:	PFO	Scale: AS SHOWN	Sheet reference number: 15/14
Approved by:	AJS	Date: DECEMBER 1995	FILENAME: 00d7ppt0.dgn PEN TABLE: k.gpt L.gpt
	Drawing Code: 016-PWC-7-		Sheet of



— EXISTING CONTOURS  
— PROPOSED CONTOURS

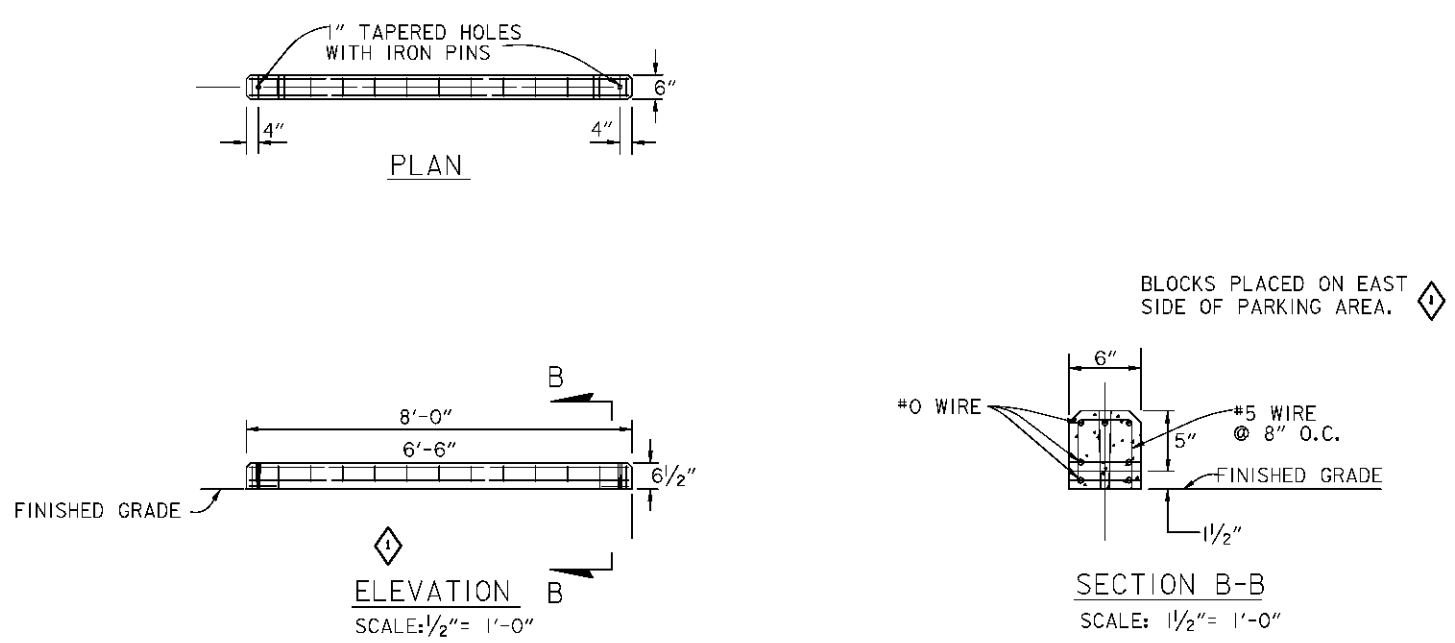
- NOTES:
- FOR PUMP STATION ACCESS ROAD ALIGNMENT DATA SEE SHEET 15/1.
  - FOR PUMP STATION ACCESS ROAD PROFILE SEE SHEET 15/15A.
  - FOR PARKING AREA WHEEL STOP DETAILS SEE SHEET 15/15A.

**PLAN**  
SCALE: 1" = 20'

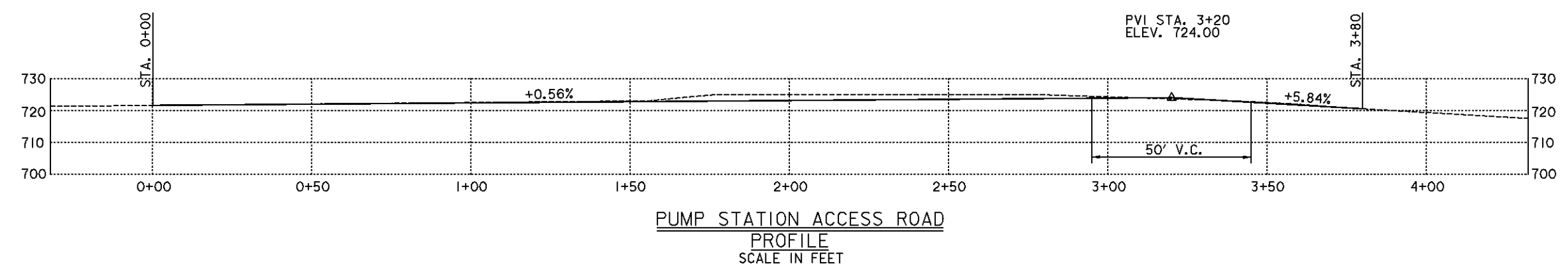
Revisions			
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◊	REVISED AS CONSTRUCTED	2-99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JDY	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	JDM	<b>PUMP STATION SITE WORK</b>	
Checked by:	LWR	Scale:	AS SHOWN
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WHEEL STOP DETAILS  
PRE-CAST UNITS



Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2/99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: LWR	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.
Drawn by: RLG	PHASE IIB (STORM WATER PUMPING STATION)
Checked by: LWR	<b>PUMP STATION SITE WORK DETAILS</b>
Reviewed by: PFO	Scale: AS SHOWN Date: DECEMBER 1995
Approved by: AJS	Drawing Code: 016-PWC-7- Sheet 15/15A of

**GENERAL**

- 1. SPECIFICATIONS: THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS 1993 EDITION, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS THAT ARE A PART OF THE PLAN UNLESS OTHERWISE NOTED.
- 2. MODIFICATIONS: ANY MODIFICATION TO THE SPECIFICATIONS OR CHANGES TO THE WORK AS SHOWN ON THESE DRAWINGS MUST HAVE PRIOR WRITTEN APPROVAL OF THE ENGINEER.
- 3. SAFETY REQUIREMENTS: THE CONTRACTOR AND ALL SUB-CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR COMPLYING WITH THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1972 DURING THE PERFORMANCE OF AND IN CONNECTION WITH THIS PROJECT.
- 4. PERMITS: ALL NECESSARY PERMITS SHALL BE OBTAINED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS.
- 5. NOTIFICATION: THE ENGINEER SHALL BE NOTIFIED IN WRITING AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF CONSTRUCTION IN ORDER THAT INSPECTION MAY BE SCHEDULED.
- 6. OPEN CUTS: THE CONTRACTOR SHALL OBTAIN A STREET OPENING PERMIT FROM THE DIVISION OF ENGINEERING AND CONSTRUCTION PRIOR TO OPEN CUT ON ANY PAVEMENT IN THE CITY OF COLUMBUS. CALL TOM NUTINI, 645-3039, WEEKDAYS BETWEEN 8:00 AM AND 5:00 PM, 48 HOURS PRIOR TO OPEN CUT.
- 7. EMERGENCY PROVISIONS: THE CITY OF COLUMBUS SHALL BE PROVIDED WITH EMERGENCY 24-HOUR TELEPHONE NUMBERS IN WRITING PRIOR TO THE START OF CONSTRUCTION. NUMBERS SHALL BE PROVIDED FOR THE PRIME CONTRACTOR AND THE INDIVIDUAL RESPONSIBLE FOR TRAFFIC CONTROL. IN THE EVENT THAT WORK OF AN IMMEDIATE NATURE MUST BE PERFORMED BY THE CITY, THE CITY WILL BE REIMBURSED FOR 2.5 TIMES THE COST OF LABOR AND MATERIALS.
- 8. CUSTOMER NOTIFICATION: THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 4 DAYS IN ADVANCE OF ALL WATER CUSTOMERS WHOSE WATER IS TO BE TURNED OFF, INCLUDING THE DATE, TIME, AND APPROXIMATE DURATION OF SHUTDOWN.
- 9. EXTRA COMPENSATION: NO EXTRA COMPENSATION WILL BE PAID THE CONTRACTOR BY REASON OF COMPLIANCE WITH ANY OF THE REQUIREMENTS INDICATED ON THE PLANS, BUT PAYMENT SHALL BE DEEMED TO BE INCLUDED AMONG THE PROPOSAL ITEMS, AS BID UPON, UNLESS OTHERWISE SPECIFICALLY PROVIDED.
- 10. CLEANUP: IN ADDITION TO THE PROVISIONS OF ARTICLE 108.14, THE CONTRACTOR SHALL PERFORM DAILY CLEANUP OF THE WORK SITE. ALL TRASH, INCLUDING CANS, BOTTLES, FOOD SCRAPS, CONTAINERS AND WRAPPERS SHALL BE PROPERLY DISPOSED OFF SITE AND SHALL NOT BE THROWN IN THE WATER LINE TRENCH.
- 11. STANDARD DRAWINGS: THE FOLLOWING COLUMBUS-DIVISION OF WATER STANDARD DRAWINGS SHALL BE CONSIDERED A PART OF THIS CONTRACT.

- L-6306 - CONCRETE VALVE SUPPORTS
- L-6309 - TYPICAL TRENCH
- L-6310 - BACKING FOR VERTICAL BENDS
- L-6311 - BACKING FOR BENDS
- L-6312 - BACKING FOR TEES
- L-6316 - COLUMBUS STANDARD HEAVY DUTY VALVE BOX
- L-6320 - C.I. FERRULE VALVE BOX AND COVER
- L-6409 - TYPICAL HYDRANT SETTING TYPE "B"
- L-6473 - TYPICAL AIR RELEASE 3/4" THRU 2"
- L-6637 - TYPICAL HYDRANT SETTING TYPE "A"
- L-6640 - ALLOWABLE LEAKAGE TABLE
- L-7001 - THRUST BLOCK DETAIL END OF PIPE
- L-7002 - DRAIN TILE REPLACEMENT
- L-7401 - TYPICAL WATER LINE LOWERING

DIVISION OF CONSTRUCTION;  
1441 DR. A - PAVEMENT & UTILITY CUT REPAIR STANDARDS

- 12. THIS DRAWING IS FOR FIELD CONSTRUCTION PURPOSES. ANY REFERENCE TO PAYMENT FOR DIRECT OR ASSOCIATED COSTS FOR COMPLETION OF WATERLINE CONSTRUCTION ON THIS DRAWING SHALL BE DISREGARDED. ALL COSTS ASSOCIATED WITH THE PLACING OF WATERLINES COMPLETE IN PLACE WILL BE MADE AT THE APPLICABLE PRICE IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS.

**UTILITIES**

- 1. EXISTING UTILITIES: LOCATION, SUPPORT AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS ITEMS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, PRIOR TO ANY CONSTRUCTION, TO DETERMINE IN THE FIELD THE ACTUAL LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES WHETHER SHOWN ON THE PLAN OR NOT.
- 2. USE OF FIRE HYDRANTS: THE CONTRACTOR SHALL MAKE THE PROPER ARRANGEMENTS WITH THE CITY OF COLUMBUS FOR THE USE OF FIRE HYDRANTS WHEN USED FOR WORK PERFORMED UNDER THIS CONTRACT. BEFORE THE FINAL ESTIMATE IS PAID, THE CONTRACTOR SHALL SUBMIT A LETTER FROM THE CITY OF COLUMBUS STATING THAT HE AND HIS SUB-CONTRACTORS HAVE PAID ALL COSTS ARISING FROM THE USE OF THE FIRE HYDRANTS.
- 3. SEWER REPLACEMENT: ALL DRAIN TILE OR SEWERS BROKEN DURING EXCAVATION SHALL BE REPLACED IN KIND.
- 4. UTILITY CROSSINGS: AT ALL UTILITY CROSSINGS, THE BACKFILL SHALL CONSIST OF COMPACTED GRANULAR MATERIAL BETWEEN THE DEEPER AND SHALLOWER PIPE.

**PRESERVATION**

- 1. NON-RUBBER TIRED VEHICLES: NO NON-RUBBER TIRED VEHICLES SHALL BE MOVED ON PUBLIC STREETS.
- 2. SURVEYOR REGISTRATION: ANY PROPERTY CORNERS, PERMANENT SURVEY MARKERS OR MONUMENTATION DISTURBED DURING CONSTRUCTION SHALL BE RE-ESTABLISHED BY A SURVEYOR REGISTERED BY THE OHIO STATE BOARD OF REGISTRATION FOR PROFESSIONAL ENGINEERS & SURVEYORS.
- 3. TREES: ALL TREES, WHETHER SHOWN OR NOT SHOWN ON THE PLANS, ARE TO BE PRESERVED UNLESS APPROVAL TO REMOVE IS GIVEN IN WRITING BY THE CITY OR THEIR REMOVAL HAS BEEN DESIGNATED ON THE PLANS. THE CONTRACTOR SHALL USE SPECIAL PRECAUTIONS TO AVOID DAMAGE TO ALL OTHER TREES. WHEN REQUIRED, LIMBS SHALL BE CAREFULLY AND NEATLY PRUNED AND PAINTED WITH A SEALING COMPOUND.

**WATER LINE**

- 1. WATER LINE: ALL WATER LINE INSTALLATIONS SHALL BE IN ACCORDANCE WITH THE CURRENT RULES AND REGULATIONS OF THE CITY OF COLUMBUS, DIVISION OF WATER. WATER LINE MATERIALS SHALL BE AS NOTED IN THE SPECIFICATIONS.
- 2. WATER LINE DEFLECTIONS: PROPOSED WATER LINE LOCATIONS SHOWN ON THE PLANS ARE TYPICAL. DEFLECTIONS MAY BE REQUIRED TO AVOID EXISTING SERVICE BOXES OR OTHER ITEMS. ALL MAIN LINE SHALL BE INSTALLED WITHIN THE RIGHT-OF-WAY. DEFLECTIONS FROM PLAN LOCATIONS SHALL REQUIRE APPROVAL OF THE ENGINEER. NO ADDITIONAL COSTS WILL BE PAID FOR SUCH DEFLECTIONS.

- 3. HYDRANT SETTINGS: TYPE A AND B HYDRANT SETTINGS SHALL CONFORM TO STANDARD DRAWINGS L-6637, AND L-6409, RESPECTIVELY. WORK INCLUDES THE HYDRANT, GATE VALVE, ANCHORING ELBOW, TEES, BENDS, CONCRETE BACKING, SUPPORTS AND BACKFILL. BACKFILL SHALL CONFORM TO DWG 809.04. VALVES AND SUPPORTS SHALL BE PAID FOR UNDER ITEM 802. HYDRANTS, TEES, ELBOWS, OTHER FITTINGS, BACKFILL, AND RESTORATION SHALL BE PAID FOR UNDER ITEM 809-HYDRANTS.
- 4. EXPOSE: THE CONTRACTOR SHALL EXPOSE THE UTILITY OR STRUCTURE INDICATED SUFFICIENTLY IN ADVANCE OF LAYING THE PROPOSED WATER MAIN IN ORDER TO VERIFY THE PROPOSED LOCATION, AND ADJUST IF REQUIRED. COSTS SHALL BE INCLUDED IN ITEM 801.
- 5. TESTING PROCEDURE: ALL WATER LINES SHALL BE PRESSURE TESTED IN ACCORDANCE WITH SECTION 801.12 OF THE CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS. EACH VALVED SECTION OF WATER MAIN SHALL BE TESTED INDEPENDENTLY OF ONE ANOTHER UNLESS OTHERWISE APPROVED BY THE ENGINEER. PRESSURE TEST SHALL BE CONDUCTED WITH ALL WATCH VALVES OPEN AND HYDRANT FOOT VALVES CLOSED. ANY TESTING PERFORMED AGAINST EXISTING VALVES SHALL BE AT THE CONTRACTOR'S RISK AND IN STRICT COMPLIANCE WITH THE REQUIREMENTS OF THE ENGINEER. IF SATISFACTORY RESULTS CANNOT BE OBTAINED AGAINST AN EXISTING VALVE, THE NEW LINE SHALL BE DISCONNECTED FROM THE EXISTING, PLUGGED AND RETESTED. DAMAGE CAUSED TO EXISTING LINES, VALVES AND SERVICE CONNECTIONS SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE.
- 6. DISINFECTING WATER LINES: ALL WATER LINES SHALL BE DISINFECTED IN ACCORDANCE WITH SECTION 801.13 OF THE C.M.S.C. SPECIAL ATTENTION IS DIRECTED TO APPLICABLE SECTIONS OF THE A.W.W.A. C-651, PARTICULARLY FOR FLUSHING (SEC. 5) AND FOR CHLORINATING VALVES AND FOR FIRE HYDRANTS (SEC. 7). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE DISINFECTING OF ALL WATER LINES CONSTRUCTED UNDER THIS PLAN.

- 7. HAND SWABBING: THE CONTRACTOR SHALL HAND SWAB ALL PIPES AND FITTINGS THAT ARE NOT OTHERWISE DISINFECTED. THE AMOUNT OF CHLORINE TO BE USED DURING HAND SWABBING OPERATIONS WILL BE DETERMINED BY THE CITY OF COLUMBUS, DIVISION OF WATER.

- 8. EXISTING VALVES: ALL EXISTING VALVES SHALL BE OPERATED BY CITY OF COLUMBUS, DIVISION OF WATER PERSONNEL ONLY, AS STATED IN CHAPTER 1113 OF THE COLUMBUS CITY CODES.

- 9. WATER LINE CONNECTIONS: DURING TESTING AND CHLORINATION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTRAINING ALL WATER LINES ON THE PROPOSED LINE AND GRADE. TEMPORARY RESTRAINTS MUST BE MADE WITH FRICTION CLAMPS APPROVED BY THE DIVISION OF WATER, UNLESS ALTERNATE METHODS ARE APPROVED BY THE CITY OF COLUMBUS, DIVISION OF WATER.

- 10. CORPORATION STOPS, CURB STOPS, CURB BOXES, 3/4" WATER TUBING: NEAR SIDE: IT IS THE INTENT OF THE PROJECT TO CONNECT EXISTING WATER SERVICE LINES FROM THE NEAR SIDE OF THE STREET TO THE NEW MAIN LINE, WHEN THE EXISTING SERVICE LINES ARE COPPER AND IN GOOD CONDITION. IF THE EXISTING LINES ARE GALVANIZED, LEAD, OR IN POOR CONDITION, NEW SERVICE LINES SHALL BE RUN FROM THE NEW MAIN TO THE EXISTING CURB STOP AND PAID FOR UNDER ITEM 816 - 3/4" WATER TUBING. CONNECTION OF THE EXISTING SERVICE LINE TO THE NEW CORP. STOP WILL BE INCLUDED FOR PAYMENT UNDER ITEM 805 - 3/4" CORPORATION STOP. DISCONNECTION OF THE EXISTING LEAD OR GALVANIZED SERVICE LINE FROM THE CURB STOP AND CONNECTION OF THE NEW SERVICE LINE, IF REQUIRED, WILL BE PAID FOR UNDER ITEM 805 - 3/4" WATER TUBING. WHEN CONFLICTS ARISE BETWEEN THE PROPOSED MAIN AND THE EXISTING CURB STOP, AND THE ENGINEER SO ORDERS, A NEW CURB STOP WILL BE SET ON THE EXISTING SERVICE LINE. THE EXISTING CURB BOX WILL BE REUSED UNLESS ORDERED OTHERWISE BY THE ENGINEER. NO ADDITIONAL PAYMENT WILL BE MADE FOR COSTS OF RELOCATING THE EXISTING CURB BOX.

- 11. FAR SIDE: SERVICES TO THE STRUCTURES ON THE FAR SIDE OF THE ROAD SHALL BE MADE WITH NEW MATERIALS FROM THE NEW 6" MAIN LINE TO THE EXISTING CURB STOP. COSTS OF CONNECTION TO THE MAIN WILL BE MADE UNDER ITEM 805 - 3/4" CORPORATION STOP. COSTS OF SERVICE TUBING FROM THE NEW MAIN TO THE CURB STOP, ROADWAY CROSSING, AND DISCONNECTION OF THE OLD SERVICE LINE AND CONNECTION OF THE NEW SERVICE LINE AT THE CURB STOP WILL BE PAID UNDER ITEM 816 - WATER SERVICE TAPS RELOCATED.

NO SERVICES SHALL BE TRANSFERRED TO THE NEW WATER LINE UNTIL SUCH LINE HAS BEEN TESTED, DISINFECTED, AND APPROVED.

- ITEMS 816 - NEW CURB BOXES AND CURB STOPS SHALL BE USED ONLY WHERE ORDERED BY THE ENGINEER AND SHALL BE PAID FOR AT THE UNIT PRICE BID EACH UNDER ITEM 816 - CURB BOX OR CORP STOP.

- 12. ITEM 801 - 6" WATER PIPE & FITTINGS IN PAVEMENT: BACKFILL SHALL BE COMPACTED AGGREGATE BACKFILL AS PER ITEM 912. SIX INCHES OF TRENCH TOPPING, IN ACCORDANCE WITH ITEM 815, OR TEMPORARY PAVEMENT, CONFORMING TO ITEM 615 SHALL BE PLACED AND MAINTAINED TO THE SATISFACTION OF THE ENGINEER, INCLUDING DUST CONTROL, UNTIL PERMANENT PAVEMENT IS PLACED. THE TRENCH TOPPING OR TEMPORARY PAVEMENT SHALL BE REMOVED AND ALL JOINTS SAWCUT AND TACKED IMMEDIATELY PRIOR TO PLACEMENT OF THE PERMANENT PAVEMENT. PERMANENT PAVEMENT SHALL CONFORM TO THE CITY OF COLUMBUS STANDARD DRAWING 1441 DR. A. ALL AREAS EXCAVATED OR DISTURBED WITHIN PAVEMENT LIMITS SHALL BE RESTORED AS DESCRIBED ABOVE. BACKFILL REQUIREMENTS SHALL APPLY TO AREAS WITHIN 4 FEET OF THE PAVEMENT.

ALL COSTS OF THE WATER PIPE, EXCAVATION, BACKFILL, TRENCH TOPPING OR TEMPORARY PAVEMENT AS HEREIN DESCRIBED SHALL BE INCLUDED FOR PAYMENT IN THE LINEAL FOOT PRICE BID FOR ITEM 801 - 6" WATER PIPE & FITTINGS IN PAVEMENT.

- 13. EXCAVATIONS OUTSIDE PAVEMENT BUT INSIDE R/W- BACKFILL AND COMPACTION SHALL CONFORM TO ITEM 801.09. TOPSOIL CONFORMING TO ITEM 653 OR ITEM 608-WALKS SHALL BE PLACED OVER THE COMPACTED BACKFILL, SOIL, CONFORMING TO ITEM 660-SODDING, SHALL BE PLACED, WATERED AND MAINTAINED FOR 30 DAYS. ALL AREAS DISTURBED OR EXCAVATED SHALL BE RESTORED AS OUTLINED ABOVE. COSTS OF THIS WORK, INCLUDING BACKFILL, COMPACTION, TOPSOIL, SOIL AND MAINTENANCE SHALL BE INCLUDED FOR PAYMENT IN THE VARIOUS BID ITEMS AFFECTING THIS WORK.

- 14. ITEM SPECIAL - SERVICE ROADWAY CROSSING BY BORING OR JACKING: THE PRICE BID FOR "SERVICE ROADWAY CROSSING BY BORING OR JACKING" SHALL INCLUDE ALL EQUIPMENT AND LABOR REQUIRED TO PERFORM THE TASK OF ADVANCING A SERVICE UNDER THE ROADWAY PAVEMENT FROM THE NEW MAIN TO THE EXISTING CURB BOX, INCLUDING THE EXCAVATION, BACKFILL AND RESTORATION OF BORING AND RECEIVING PITS OUTSIDE THE CURB OR AT THE NEW WATER MAIN. BACKFILL SHALL CONFORM TO NOTES 11 AND 12, AS APPLICABLE. THE PRICE SHALL INCLUDE THE SERVICE TUBING FROM THE NEW MAIN TO THE EXISTING CURB STOP, DISCONNECTION OF THE EXISTING SERVICE LINE, AND CONNECTION OF THE NEW SERVICE LINE TO THE EXISTING CURB STOP. NO ADJUSTMENT WILL BE MADE FOR LONGER RUNS REQUIRED BY UTILITY CONFLICTS OR OTHER REASONS. SERVICES MAY BE ANGLED ACROSS ROAD TO AVOID CUTTING DRIVES OR OTHER OBJECTS WITH APPROVAL OF THE ENGINEER. PAYMENT WILL BE MADE AT THE UNIT PRICE BID FOR EACH SERVICE ROADWAY CROSSING BY BORING OR JACKING.

- 15. VALVE SUPPORTS: CONCRETE SUPPORTS SHALL BE PROVIDED AT ALL VALVES AS SHOWN ON THE STANDARD DRAWINGS. COSTS SHALL BE INCLUDED IN ITEM 802-VALVES.
- 16. SERVICE CONNECTIONS: CONTRACTOR SHALL CAUSE WATER TO BE TURNED ON AT A HOUSE SPIGOT, AFTER CONNECTION AT CURB STOP IS MADE, AND LET WATER FLOW OUT FOR A MINIMUM OF 3 MINUTES TO BE CERTAIN THAT SERVICE LINE IS FLOWING FREELY.
- 17. CONNECTIONS TO EXISTING LINES: COSTS OF LINE SHUTDOWN, EXCAVATION AND RESTORATION, INCLUDING BACKFILL AND PAVEMENT REPLACEMENT OR LAWN REPLACEMENT SHALL BE INCLUDED IN COSTS BID FOR ITEM 801 - 6" WATER PIPE AND FITTINGS.
- 18. LINE BREAKAGE AND TEMPORARY SERVICE: THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY LINE BREAKS WHICH ARE DIRECTLY OR INDIRECTLY A RESULT OF HIS OPERATIONS, AND NOTIFYING THE CITY OF COLUMBUS, DIVISION OF WATER OF ANY SUCH OCCURRENCES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR PROVIDING TEMPORARY SERVICE TO ANY CUSTOMER WHOSE SERVICE IS DISCONTINUED FOR A PERIOD OF FOUR HOURS OR LONGER. REPAIRS SHALL BE MADE AS QUICKLY AS POSSIBLE AND TEMPORARY SERVICE SHALL BE MAINTAINED UNTIL PERMANENT SERVICE IS RESTORED. COSTS OF THIS WORK SHALL BE INCLUDED IN THE VARIOUS 801 ITEMS.
- 19. SEWER CROSSINGS: END JOINTS OF NEW WATERMAIN SHALL BE OF EQUAL DISTANCE FROM CENTERLINE OF STORM OR SANITARY SEWER CROSSINGS.
- 20. PROFILE ELEVATIONS: ELEVATIONS CALLED OUT IN PROFILE ARE CENTERLINE OF PROPOSED WATERLINE.
- 21. HEAVY DUTY VALVE BOX: ANY VALVE LOCATED WITHIN FOUR FEET OF EXISTING OR PROPOSED PAVEMENT, DRIVEWAYS OR OTHER TRAVELED AREAS WHICH DOES NOT CURRENTLY HAVE A HEAVY DUTY VALVE BOX SHALL BE PROVIDED WITH SUCH.
- 22. ITEM 808 - CUT AND PLUG: BACKFILL AND SURFACE RESTORATION AT CUT AND PLUG LOCATIONS SHALL CONFORM TO NOTES 11 AND 12. COSTS SHALL BE INCLUDED IN ITEM 808.
- 23. BACKFILL AT DRIVEWAYS: BACKFILL AT DRIVEWAY CROSSINGS SHALL CONFORM TO NOTE 11 WITHIN FOUR FEET OF THE PAVEMENT. COSTS SHALL BE INCLUDED IN ITEM 252 - CONCRETE OR ASPHALT DRIVEWAY REPLACEMENT.
- 24. ITEM 809 - FIRE HYDRANT ABANDONED: ALL EXISTING HYDRANTS WITHIN THE LIMITS OF NEW WATERLINE CONSTRUCTION SHALL BE ABANDONED AFTER THE NEW LINE AND HYDRANTS ARE IN SERVICE. HYDRANTS AND WATCH VALVE BOXES SHALL BE REMOVED. HYDRANTS SHALL BE DELIVERED TO THE CITY SERVICE BUILDING. RESTORATION SHALL CONFORM TO SPECIFICATIONS UNDER WATERLINE IN PAVEMENT OR OUTSIDE PAVEMENT. ALL COSTS SHALL BE INCLUDED UNDER ITEM 809-FIRE HYDRANTS, ABANDONED.
- 25. ITEM SPECIAL - VALVE BOXES, ABANDONED: AFTER THE NEW LINE IS IN SERVICE, EXISTING MAIN LINE VALVES AND HYDRANT WATCH VALVES SHALL BE ABANDONED AS HEREIN DESCRIBED. VALVE BOXES SHALL BE REMOVED TO A POINT SIX INCHES BELOW THE SURFACE. BOXES SHALL BE FILLED WITH COMPACTED BACKFILL. SURFACE RESTORATION SHALL CONFORM TO PAVEMENT OR YARD REQUIREMENTS DESCRIBED IN WATERLINE, IN OR OUTSIDE PAVEMENT. ALL COSTS SHALL BE INCLUDED IN ITEM SPECIAL - WATER VALVES, ABANDONED.

**VALUE OF WORK PERFORMED:**

ITEM 801

- A) WHEN THE WATERLINE HAS BEEN SATISFACTORILY INSTALLED AND THE TRENCH BACKFILLED; RESTORATION COMPLETED TO THE EXTENT OF ROUGH GRADING AND TEMPORARY DRAINAGE RESTORED THROUGHOUT; THE VALUE SHALL BE 75% OF THE CONTRACT UNIT PRICE BID.
- B) WHEN THE WATERLINE HAS BEEN HYDROSTATICALLY TESTED AND APPROVED BY THE ENGINEER, AND ALL CONDITIONS OF ITEM A) ABOVE HAVE BEEN MET, THE VALUE SHALL BE 90% OF THE CONTRACT UNIT PRICE BID.
- C) WHEN THE WATERLINE HAS BEEN CHLORINATED, AND ALL SURFACE RESTORATION IS COMPLETE, INCLUDING PAVEMENT AND LAWN RESTORATION, AND ALL CONDITIONS OF ITEMS A) AND B) HAVE BEEN MET, THE VALUE SHALL BE 100% OF THE CONTRACT UNIT PRICE BID.

**RESTORATION**

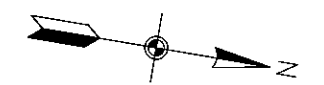
- 1. SIGNS, FENCES, DRAINAGE STRUCTURES, ETC.: ALL SIGNS, FENCES, GUARDRAIL, SHRUBS, DRAINAGE STRUCTURES, ROOF DRAIN OUTLETS AT CURB, LANDSCAPED AREAS, OR OTHER PHYSICAL FEATURES DISTURBED OR DAMAGED DURING WORK UNDER THIS CONTRACT SHALL BE RESTORED OR REPLACED TO THEIR ORIGINAL CONDITION BY THE CONTRACTOR, UNLESS OTHERWISE PROVIDED IN THE CONTRACT. THE COST OF ALL SUCH WORK SHALL BE INCLUDED IN THE PRICE BID FOR THE VARIOUS WATER MAIN ITEMS.
- 2. PAVEMENT REPLACEMENT: ALL STREETS AND DRIVEWAYS CUT BY THE CONTRACTOR SHALL BE PROVIDED WITH COMPACTED GRANULAR BACKFILL AND TRENCH TOPPING ON THE SAME DAY THAT THE ORIGINAL PAVEMENT IS CUT. PRIVATE DRIVEWAYS SHALL BE TEMPORARILY REPLACED WITH A MINIMUM OF 4" OF CRUSHED STONE OR GRAVEL AS PER ITEM 615. CONCRETE DRIVEWAY REPLACEMENT SHALL BE MADE TO AN EXISTING JOINT.
- 3. SAWING PAVEMENT: WHERE NECESSARY TO DISTURB PAVEMENTS OR DRIVES, THE PAVEMENT SHALL BE SAW CUT IN NEAT, STRAIGHT LINES. THE DEPTH OF SAW CUT SHALL BE AT LEAST 2 INCHES. THE SAW CUT SHALL BE MADE IMMEDIATELY PRIOR TO PAVEMENT REPLACEMENT. COST FOR SAW CUTTING SHALL BE INCLUDED IN THE PRICE BID FOR DRIVEWAY REPLACEMENT OR WATER PIPE, IN PAVEMENT.
- 4. DRIVEWAY CLOSINGS: DRIVEWAY CLOSINGS FOR THE PURPOSE OF CONSTRUCTING CONCRETE APPROACHES SHALL BE LIMITED TO FOUR DAYS.
- 5. ITEM 609 - CURBS: IT IS INTENDED THAT SERVICE CONNECTIONS WILL BE MADE WITHOUT DISTURBING EXISTING CURBS. WHEN ORDERED BY THE ENGINEER, CURB OR CURB AND GUTTER REPLACEMENT SHALL CONFORM TO ITEM 609. IF DAMAGED CURB FALLS WITHIN 5 FEET OF AN EXISTING CURB JOINT, REPLACEMENT SHALL EXTEND TO THE JOINT. CURB AND GUTTER REPLACEMENT SHALL MATCH EXISTING ADJACENT SECTIONS. COSTS OF CURB OR CURB AND GUTTER REPLACEMENT SHALL BE INCLUDED IN THE UNIT COSTS OF THE VARIOUS WATERLINE ITEMS.

**MAINTENANCE OF TRAFFIC NOTES**

- 1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED AND REMOVED IN ACCORDANCE WITH THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CONSTRUCTION AND MAINTENANCE OPERATIONS" (OMUTCD).
- 2. TYPE C STEADY BURN LIGHTS SHALL BE USED ON ALL BARRICADES, DRUMS AND SIMILAR TRAFFIC CONTROL DEVICES IN USE AT NIGHT.
- 3. TRAFFIC SHALL BE MAINTAINED FOR LOCAL RESIDENTS AND EMERGENCY VEHICLES AT ALL TIMES.
- 4. A MINIMUM OF ONE-LANE, TWO-WAY TRAFFIC SHALL BE MAINTAINED DURING WORKING HOURS. THE STREET SHALL BE FULLY OPENED DURING NON-WORKING HOURS.
- 5. ALL TRENCHES SHALL BE BACKFILLED OR SECURELY PLATED DURING NON-WORKING HOURS. STREET PLATES SHALL BE ADEQUATELY SECURED AT ALL TIMES TO PREVENT MOVEMENT AND OBJECTIONABLE NOISE. PLATES SHALL BE REMOVED FROM THE RIGHT-OF-WAYS AS SOON AS POSSIBLE.
- 6. ANY MUD TRACKED OR DEPOSITS OF BUILDING MATERIALS OR DEBRIS UPON PUBLIC RIGHT-OF-WAYS SHALL BE CLEANED OFF IMMEDIATELY.
- 7. COSTS OF ALL WORK ASSOCIATED WITH MAINTAINING TRAFFIC SHALL BE PAID UNDER ITEM 614-MAINTAINING TRAFFIC.

Revisions			
Symbol	Descriptions	Date	Approved
<p>◇ REVISED IN ACCORDANCE WITH AMENDMENT 0004 6 / 96</p>			
<p>DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO</p>		<p>U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA</p>	
Designed by:	JDY	<p>SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)</p>	
Drawn by:	JDM	<p><b>WATERLINE NOTES</b></p>	
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Approved by:	AJS	Date: DECEMBER 1995	FILENAME: wmg01a.dgn PEN TABLE: b.gpt L.gpt
		Drawing Code: 016-PWC-7-	Sheet of

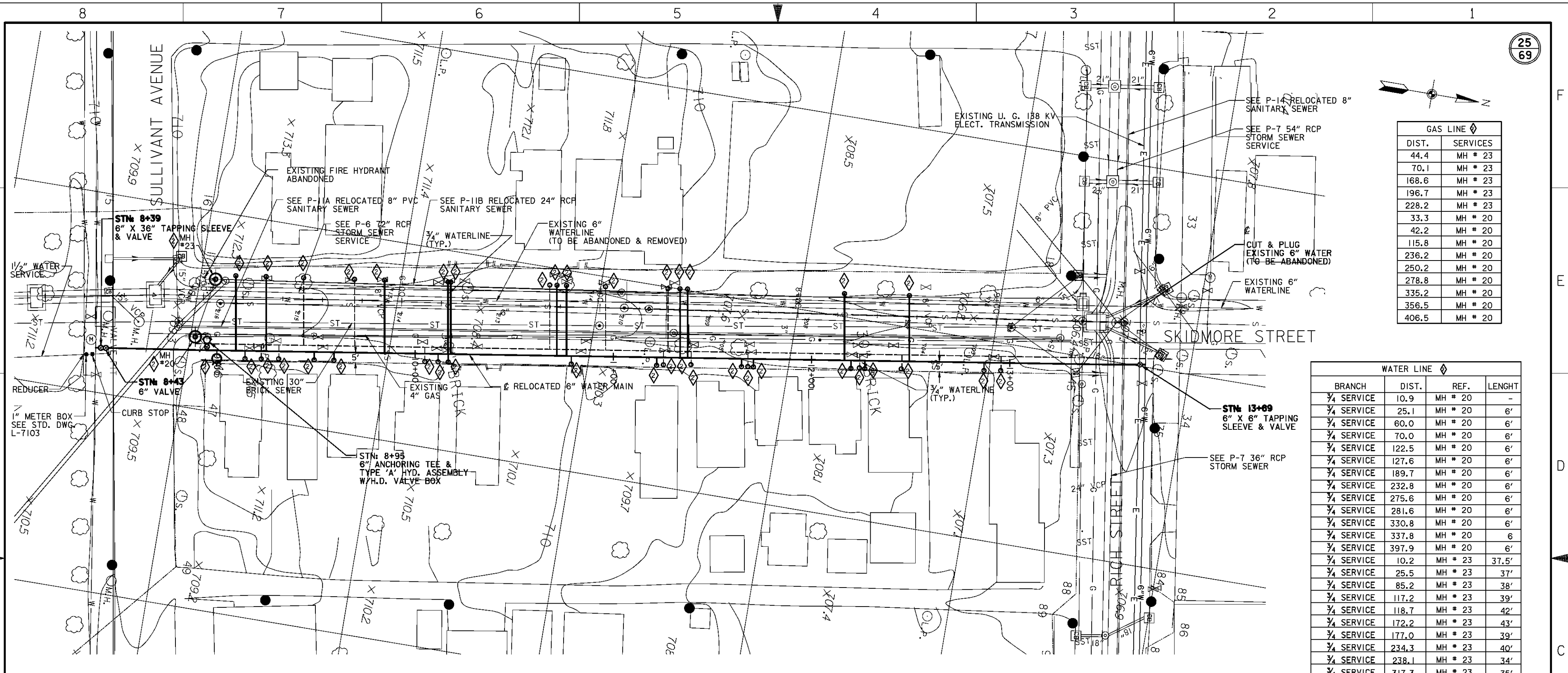




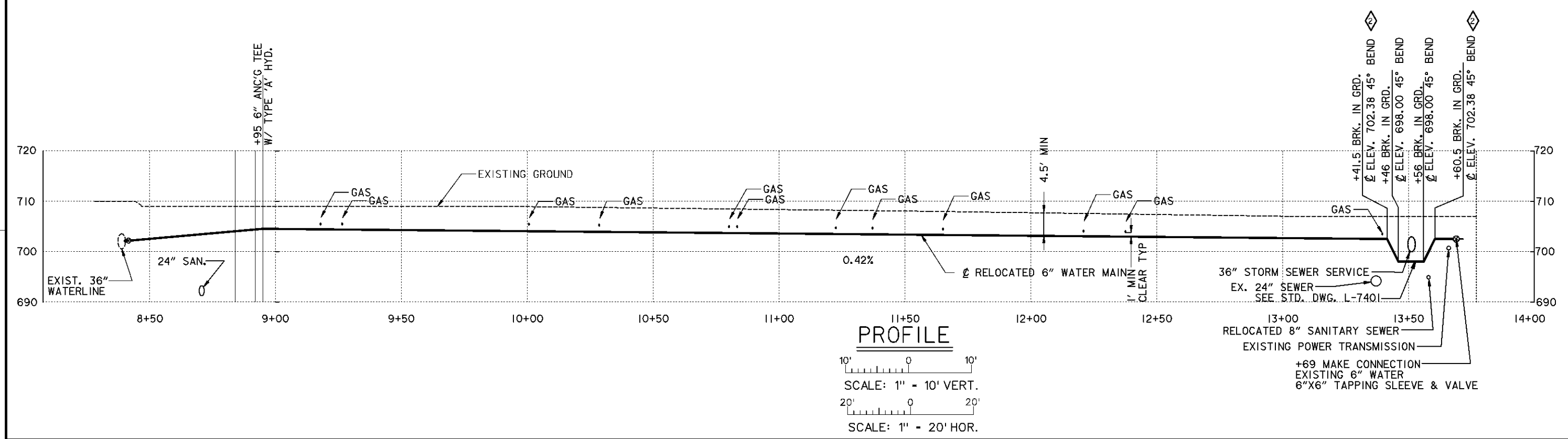
GAS LINE	
DIST.	SERVICES
44.4	MH # 23
70.1	MH # 23
168.6	MH # 23
196.7	MH # 23
228.2	MH # 23
33.3	MH # 20
42.2	MH # 20
115.8	MH # 20
236.2	MH # 20
250.2	MH # 20
278.8	MH # 20
335.2	MH # 20
356.5	MH # 20
406.5	MH # 20

WATER LINE			
BRANCH	DIST.	REF.	LENGHT
3/4 SERVICE	10.9	MH # 20	-
3/4 SERVICE	25.1	MH # 20	6'
3/4 SERVICE	60.0	MH # 20	6'
3/4 SERVICE	70.0	MH # 20	6'
3/4 SERVICE	122.5	MH # 20	6'
3/4 SERVICE	127.6	MH # 20	6'
3/4 SERVICE	189.7	MH # 20	6'
3/4 SERVICE	232.8	MH # 20	6'
3/4 SERVICE	275.6	MH # 20	6'
3/4 SERVICE	281.6	MH # 20	6'
3/4 SERVICE	330.8	MH # 20	6'
3/4 SERVICE	337.8	MH # 20	6'
3/4 SERVICE	397.9	MH # 20	6'
3/4 SERVICE	10.2	MH # 23	37.5'
3/4 SERVICE	25.5	MH # 23	37'
3/4 SERVICE	85.2	MH # 23	38'
3/4 SERVICE	117.2	MH # 23	39'
3/4 SERVICE	118.7	MH # 23	42'
3/4 SERVICE	172.2	MH # 23	43'
3/4 SERVICE	177.0	MH # 23	39'
3/4 SERVICE	234.3	MH # 23	40'
3/4 SERVICE	238.1	MH # 23	34'
3/4 SERVICE	317.3	MH # 23	35'
3/4 SERVICE	350.0	MH # 23	38'

NOTE:  
THE RELOCATED 6" WATERLINE SHALL  
BE TESTED AND DISINFECTED BEFORE  
ANY SERVICE CONNECTIONS ARE  
MADE.



PLAN  
SCALE: 1" = 20'



PROFILE  
SCALE: 1" = 10' VERT.  
SCALE: 1" = 20' HOR.

Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2-99	
◇	REVISED IN ACCORDANCE WITH AMENDMENT 0002	6/96	

**DODSON-LINDBLOM ASSOC., INC.**  
 CONSULTING ENGINEERS-SURVEYORS  
 COLUMBUS, OHIO

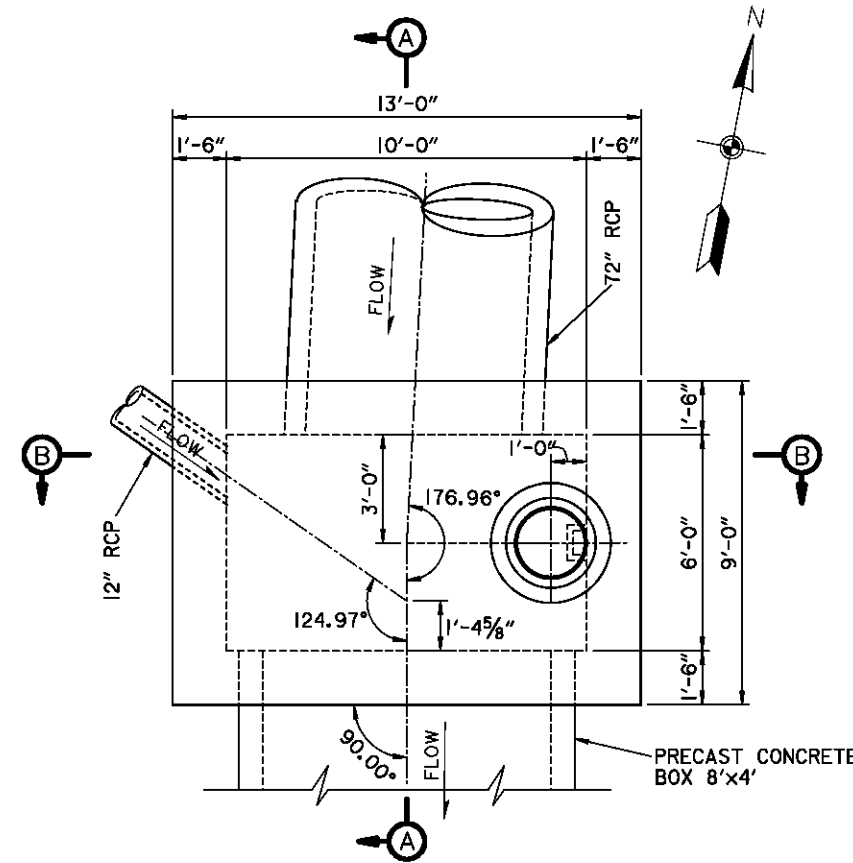
**U.S. ARMY ENGINEER DISTRICT**  
 CORPS OF ENGINEERS  
 HUNTINGTON, WEST VIRGINIA

Designed by: **JDY**  
 Drawn by: **GJG**  
 Checked by: **LWR**  
 Reviewed by: **PFO**  
 Approved by: **AJS**

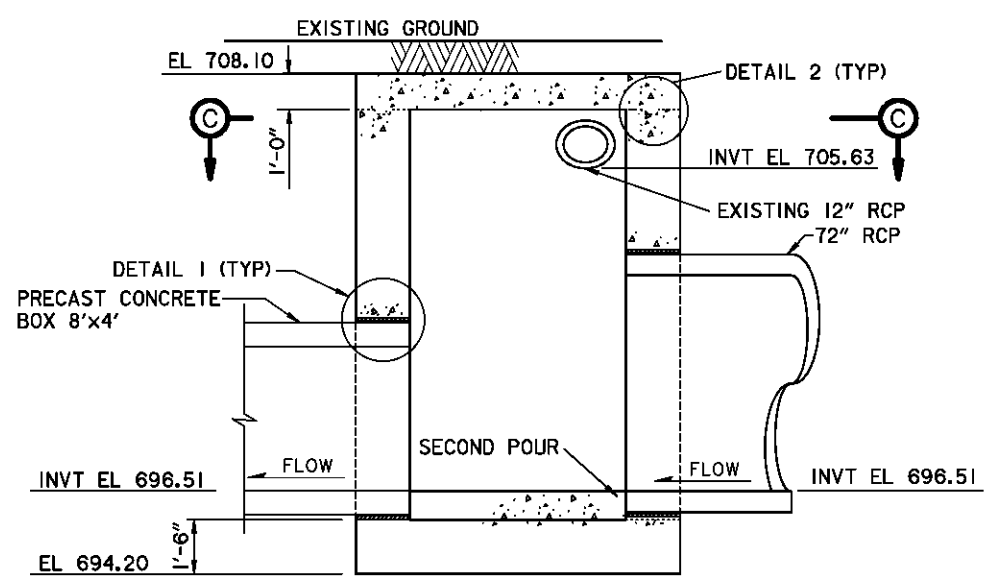
**SCIO TO RIVER**  
 COLUMBUS, OHIO  
 WEST COLUMBUS L.P.P.  
 PHASE IIB (STORM WATER PUMPING STATION)  
**WATERLINE RELOCATIONS**  
**SKIDMORE STREET**

Scale: **AS SHOWN**  
 Date: **DECEMBER 1995**  
 Drawing Code: **016-PWC-7-**

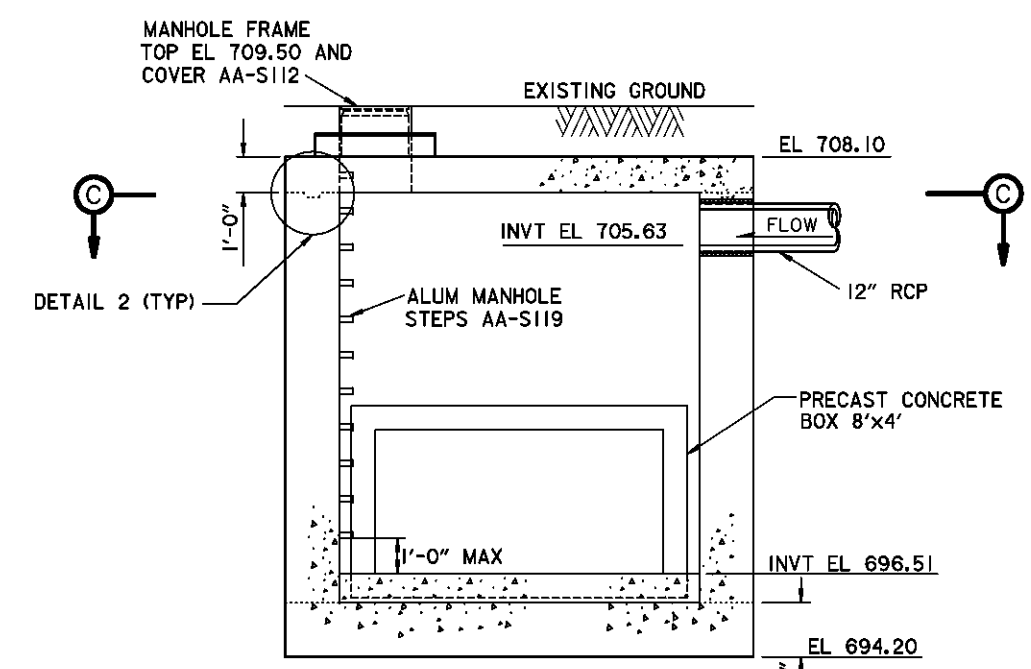
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 L.gpt  
 15.12  
 Sheet of



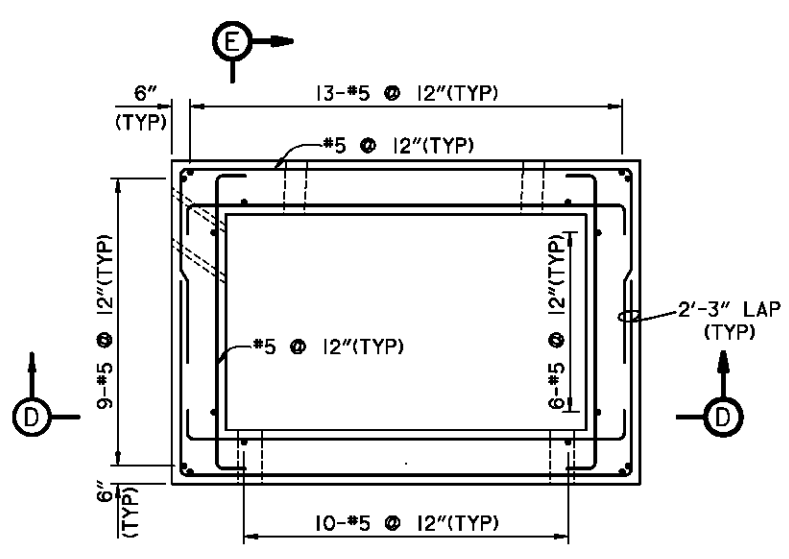
**MANHOLE PLAN**  
SCALE: 3/8" = 1'-0"



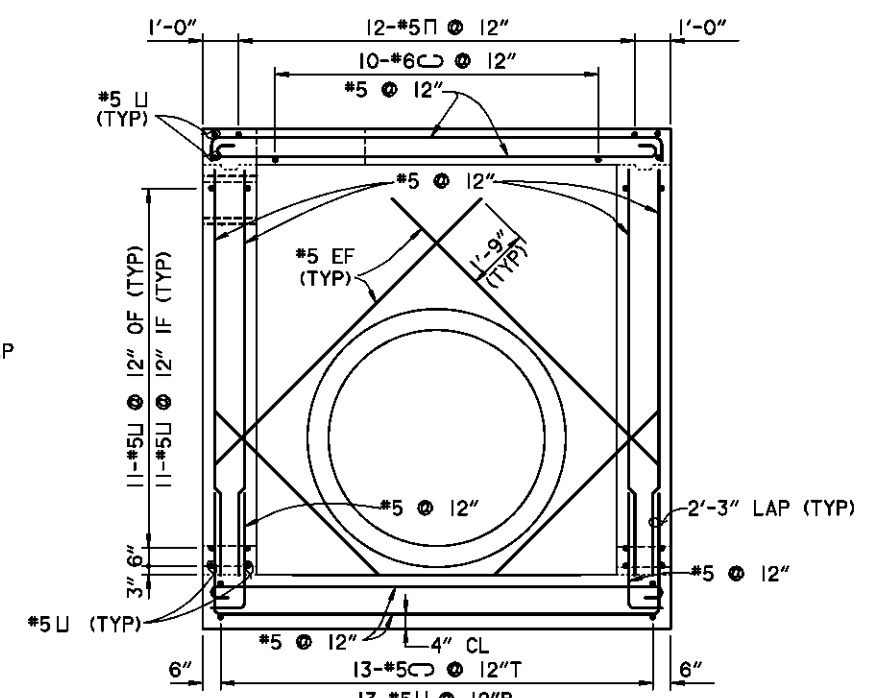
**SECTION A-A**  
SCALE: 3/8" = 1'-0"



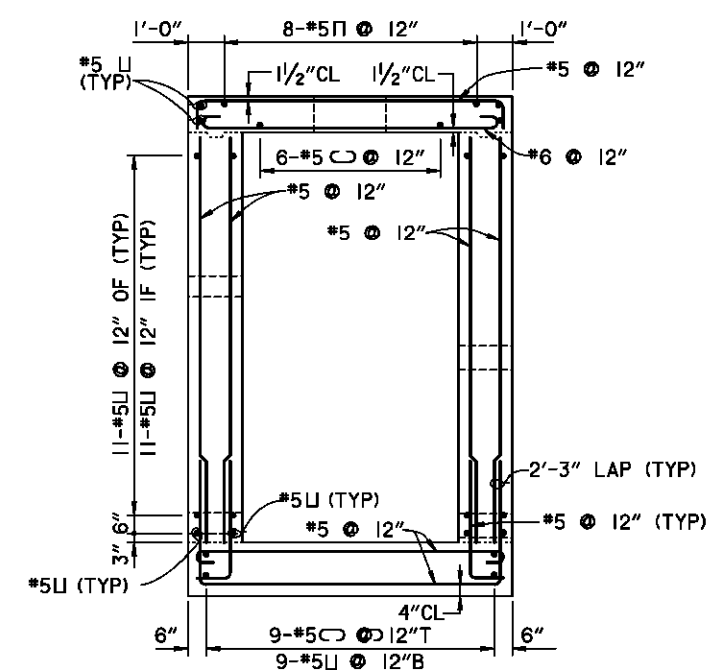
**SECTION B-B**  
SCALE: 3/8" = 1'-0"



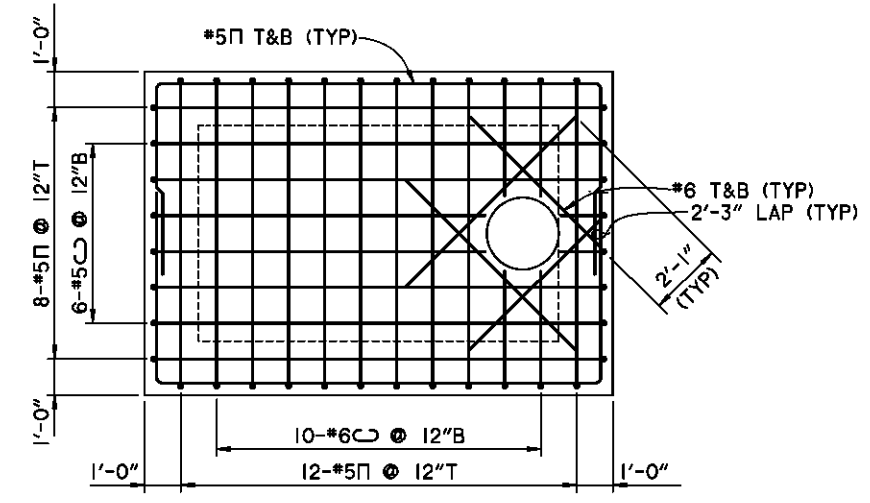
**SECTION C-C**  
SCALE: 3/8" = 1'-0"



**SECTION D-D**  
SCALE: 3/8" = 1'-0"



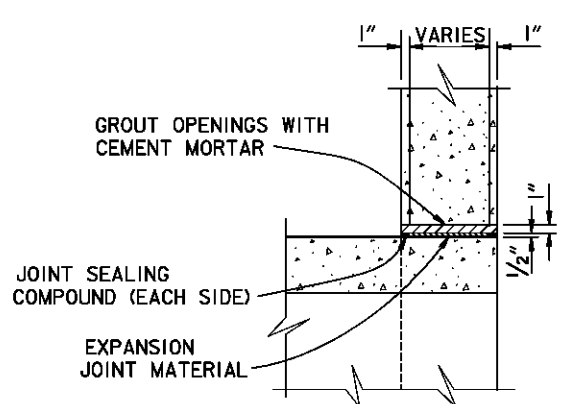
**SECTION E-E**  
SCALE: 3/8" = 1'-0"



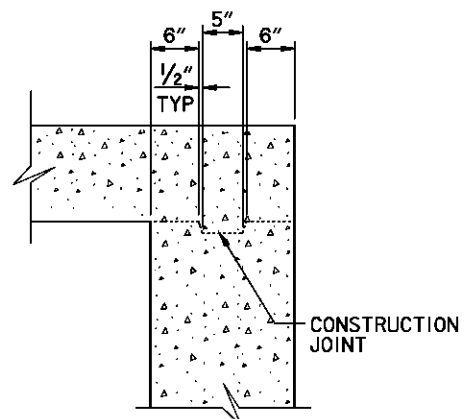
**TOP SLAB REINFORCING PLAN**  
SCALE: 3/8" = 1'-0"

**NOTES**

1. FOR GENERAL NOTES, SEE SHEET 0/3.
2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
3. THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 3" UNLESS OTHERWISE SHOWN.



**DETAIL 1**  
SCALE: 1" = 1"

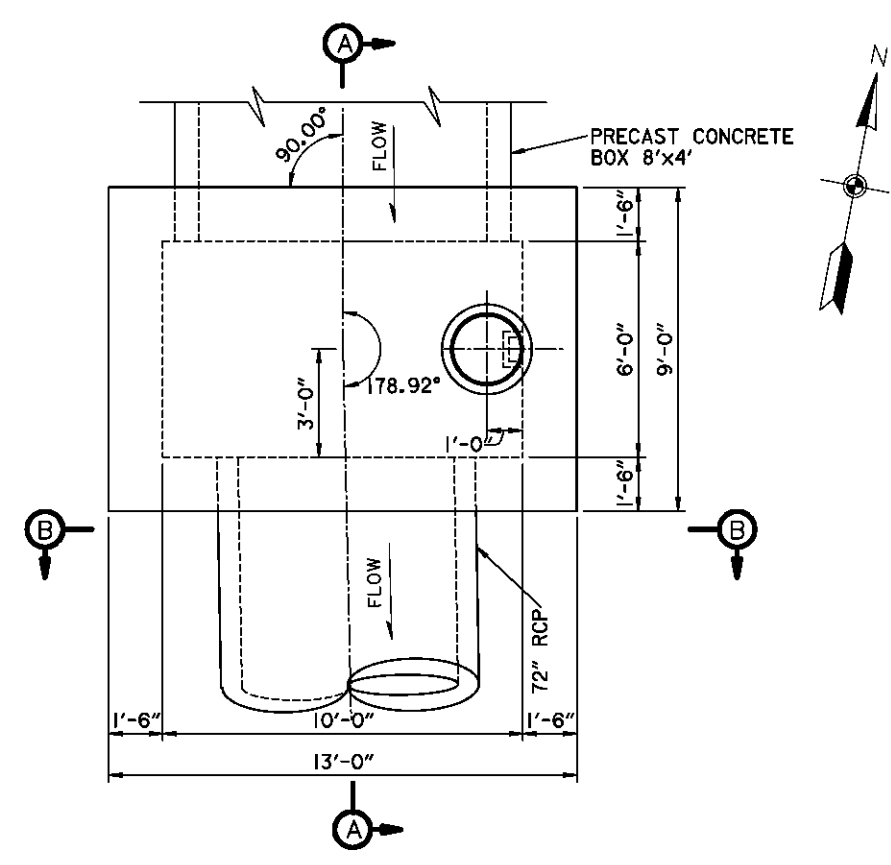


**DETAIL 2**  
SCALE: 1" = 1"

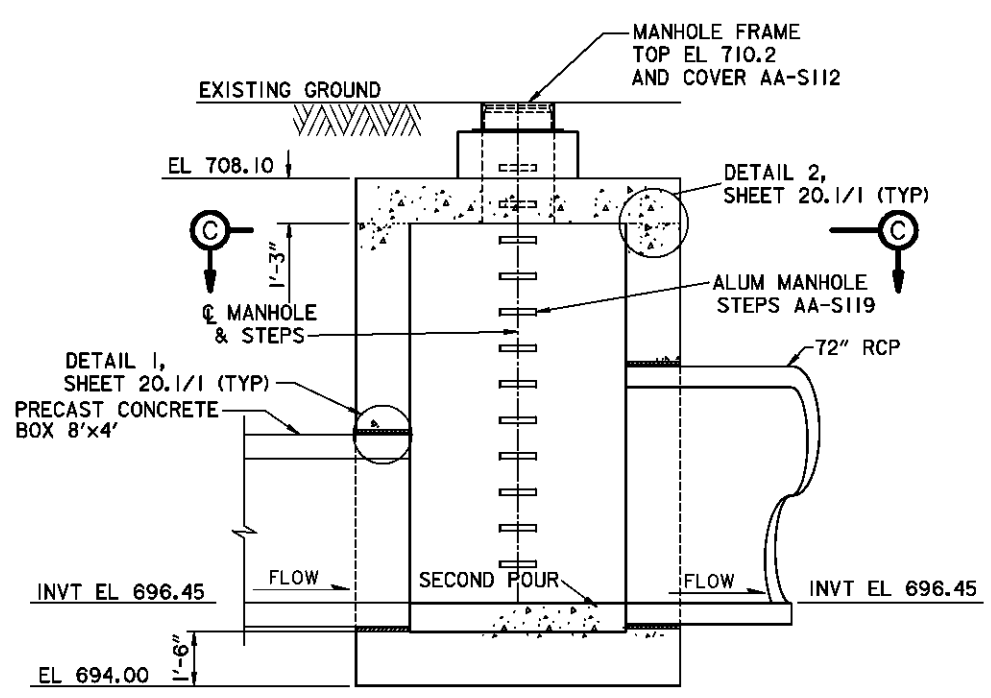
Revisions			
Symbol	Descriptions	Date	Approved

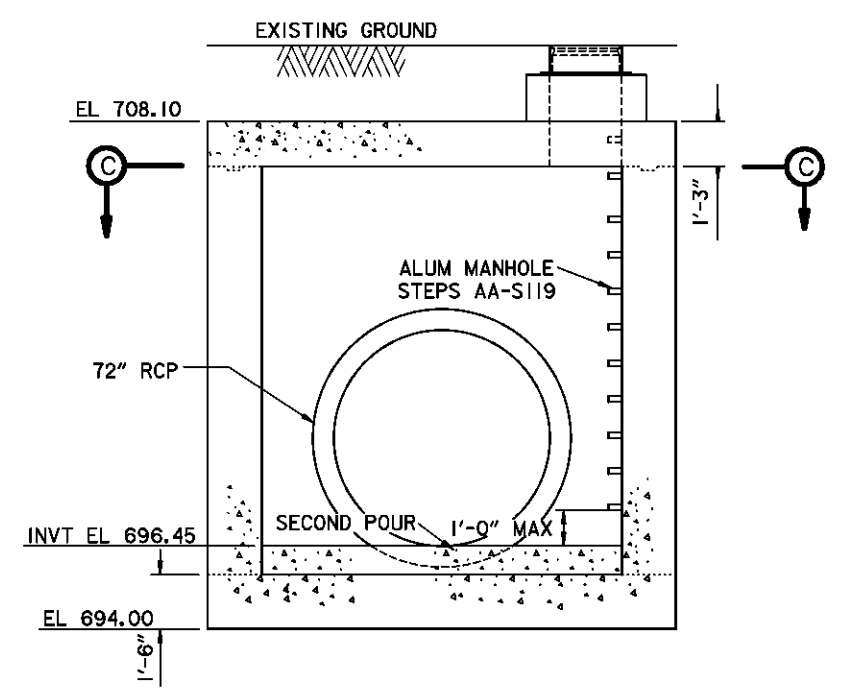
DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	SKBB	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	
Drawn by:	AIS	PHASE IIB (STORM WATER PUMPING STATION)	
Checked by:	JN	<b>SPECIAL STORM MANHOLE # 1</b> <b>DETAILS</b>	
Reviewed by:	PFO	Scale:	AS SHOWN
Approved by:	AJS	Date:	DECEMBER 1995
		Drawing Code:	016-PWC-7-
		Sheet reference number:	20.1/1
		FILENAME:	201501.DGN
		PEN TABLE:	
		Sheet	of



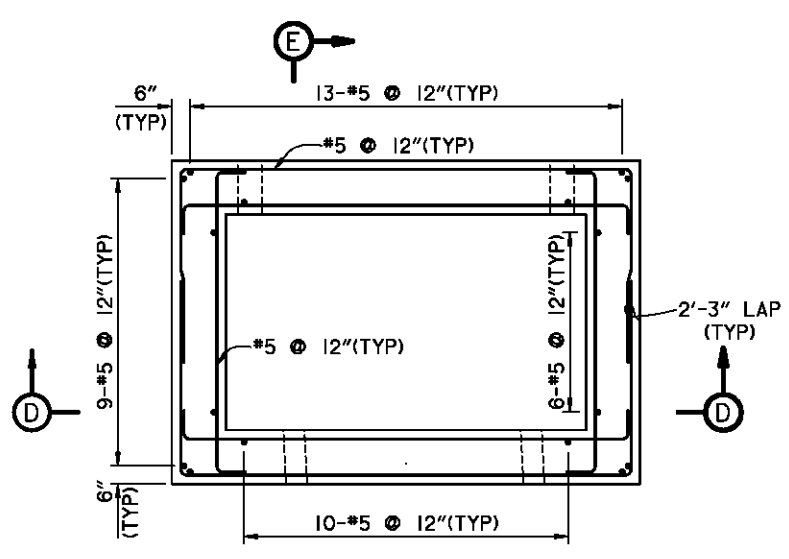
**MANHOLE PLAN**  
SCALE: 3/8" = 1'-0"



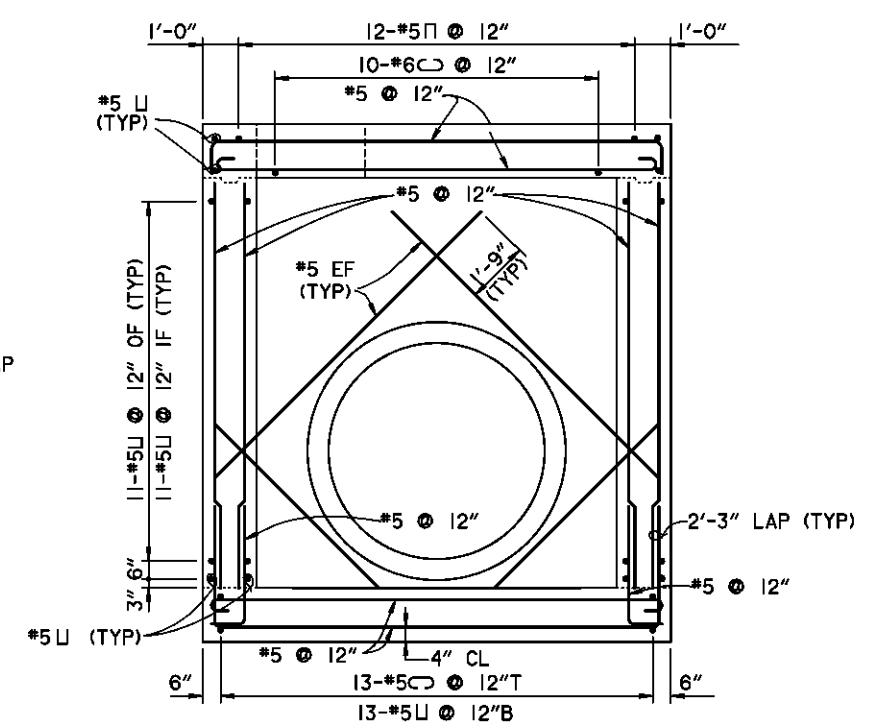
**SECTION A-A**  
SCALE: 3/8" = 1'-0"



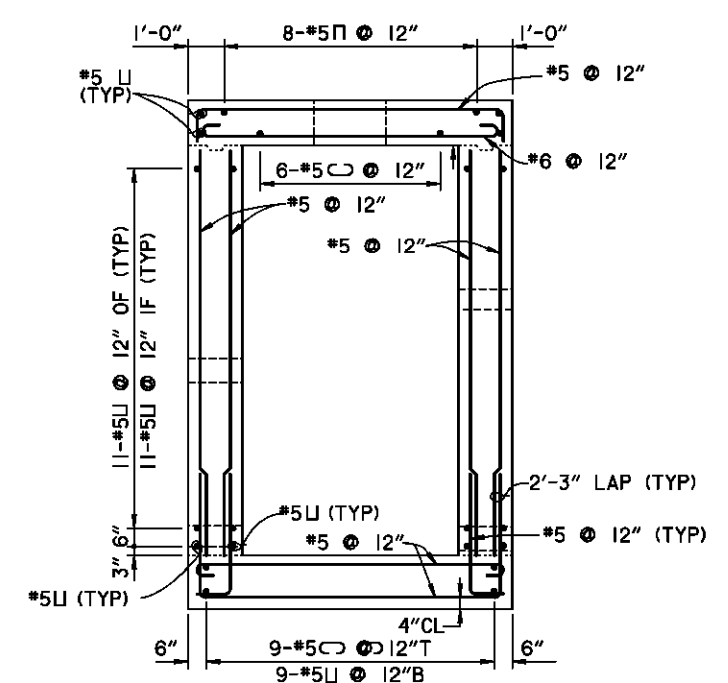
**SECTION B-B**  
SCALE: 3/8" = 1'-0"



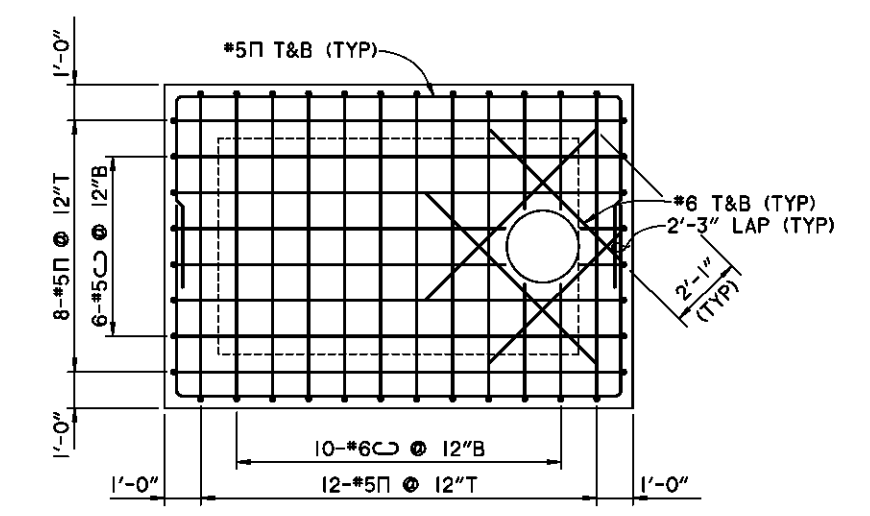
**SECTION C-C**  
SCALE: 3/8" = 1'-0"



**SECTION D-D**  
SCALE: 3/8" = 1'-0"



**SECTION E-E**  
SCALE: 3/8" = 1'-0"



**TOP SLAB REINFORCING PLAN**  
SCALE: 3/8" = 1'-0"

**NOTES**

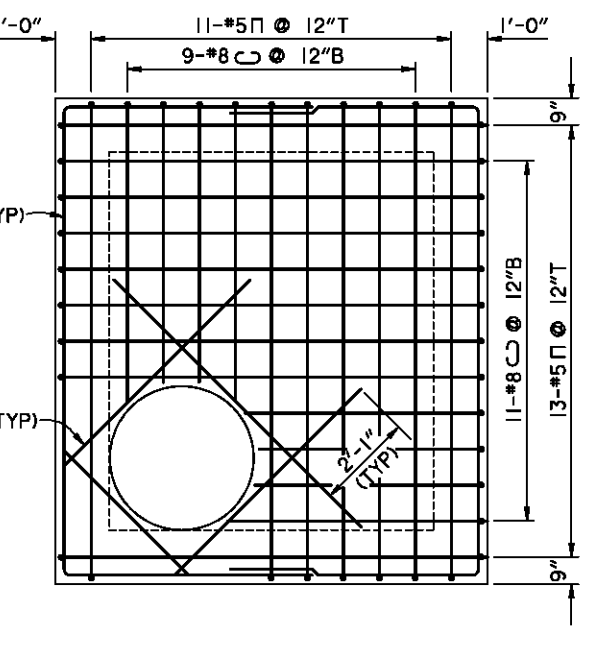
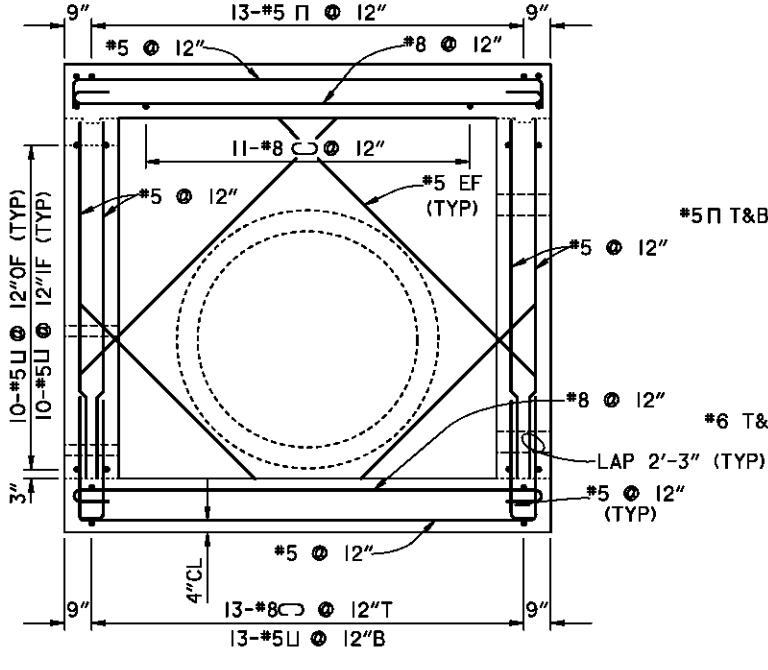
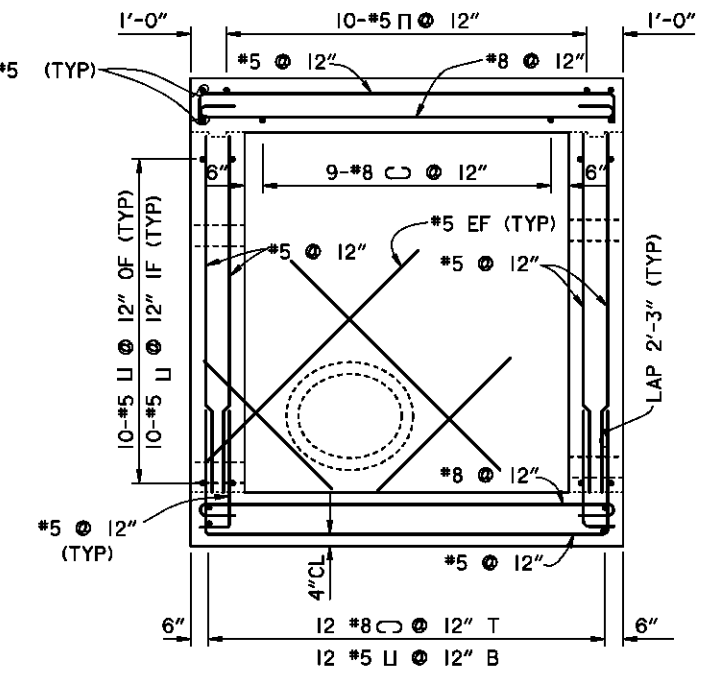
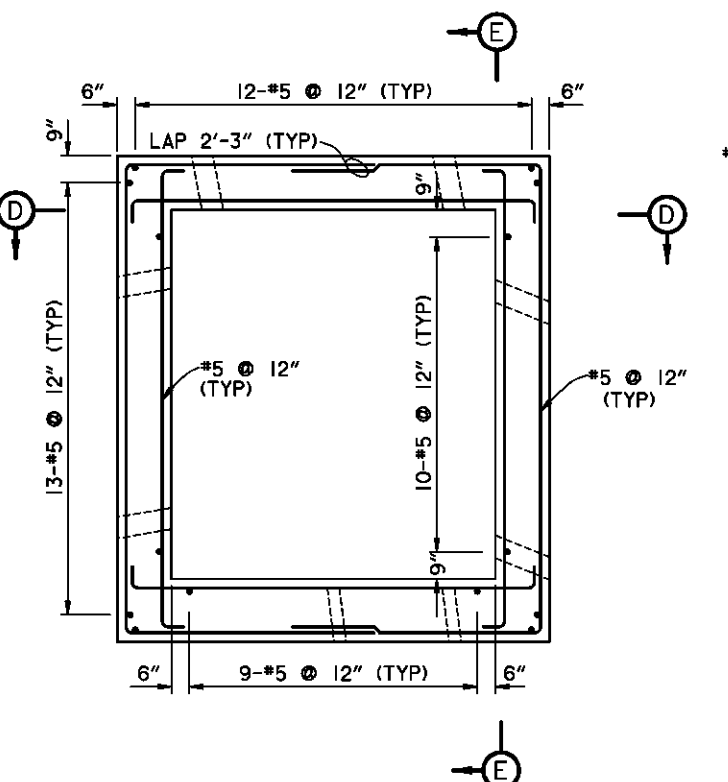
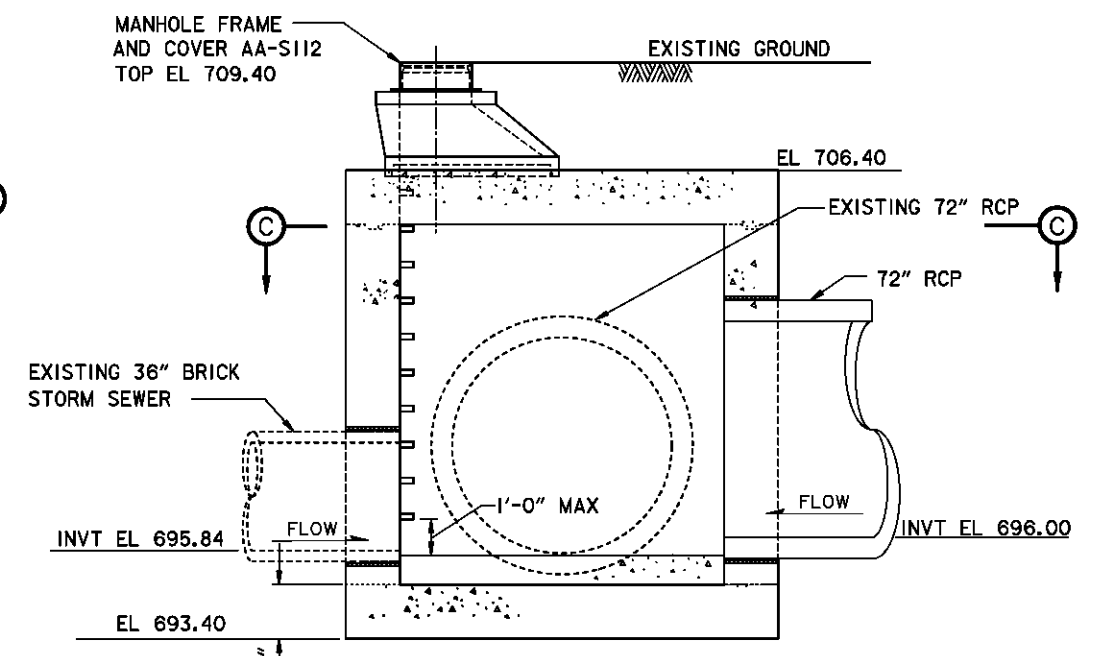
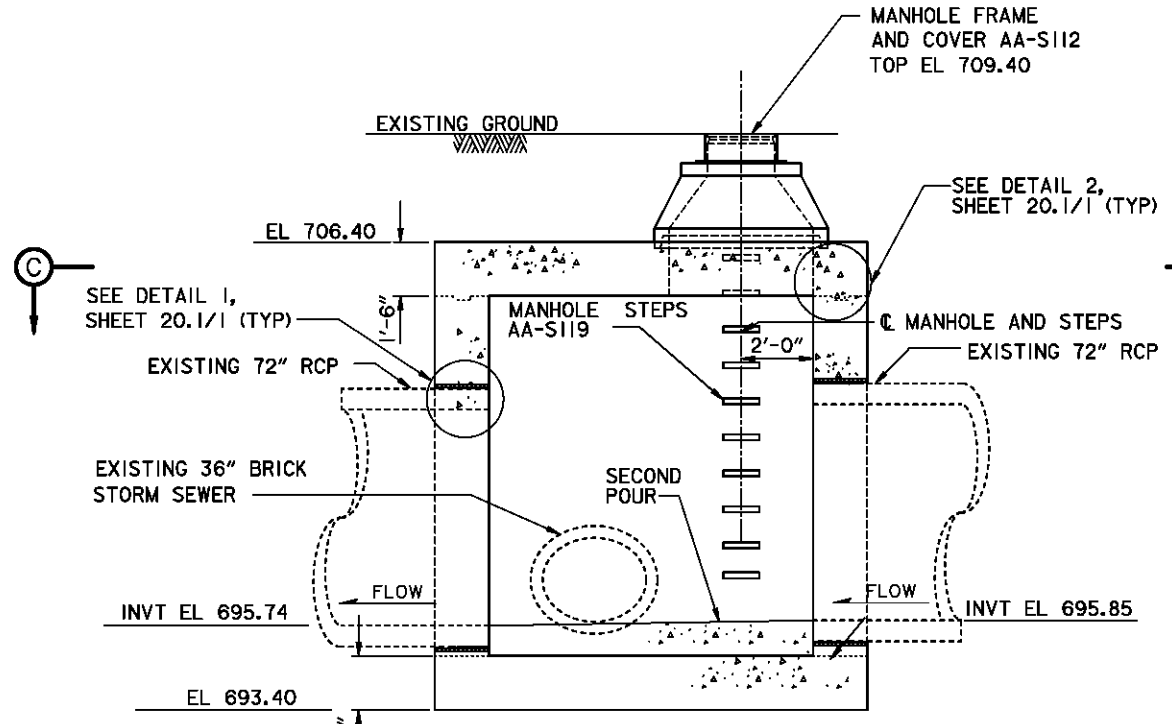
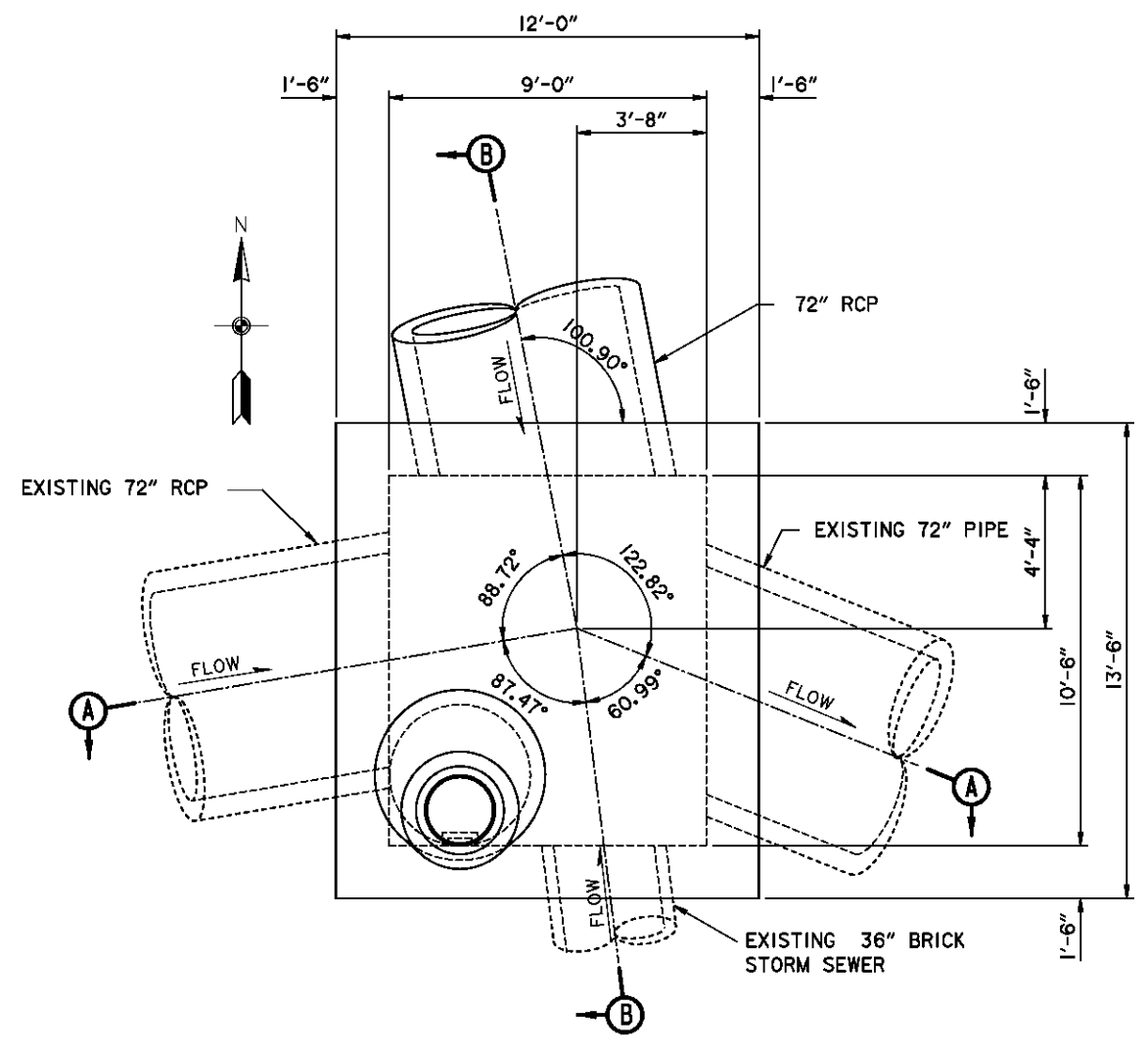
1. FOR GENERAL NOTES, SEE SHEET 0/3.
2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
3. THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 3" UNLESS OTHERWISE SHOWN.

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: SKBB	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.		
Drawn by: AIS	PHASE IIB (STORM WATER PUMPING STATION)		
Checked by: JN	<b>SPECIAL STORM MANHOLE #1A DETAILS</b>		
Reviewed by: PFO	Scale: AS SHOWN	Sheet reference number: 20.1A / 1	FILENAME: 201A01.DGN
Approved by: AJS	Date: DECEMBER 1995	Drawing Code: 016-PWC-7-	Sheet of



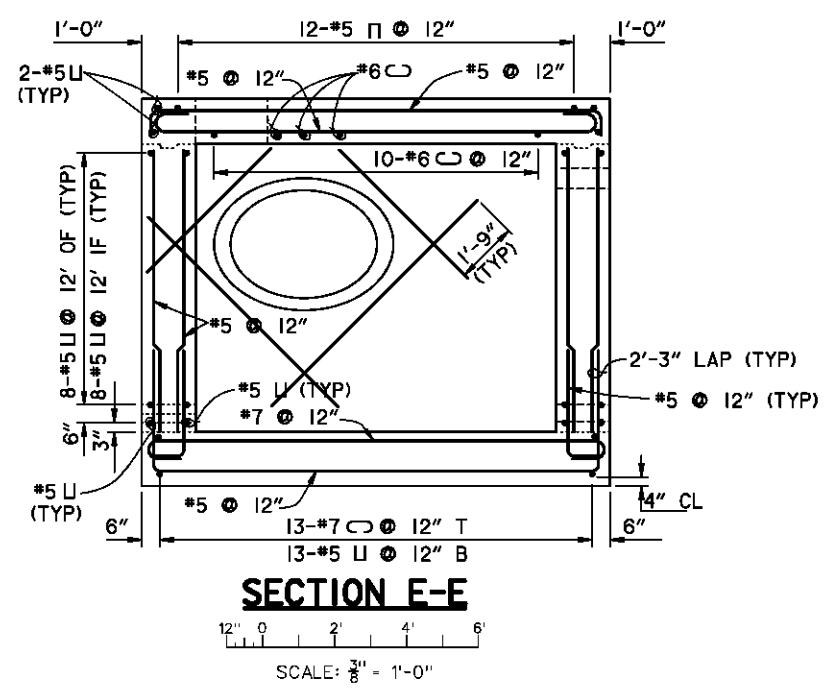
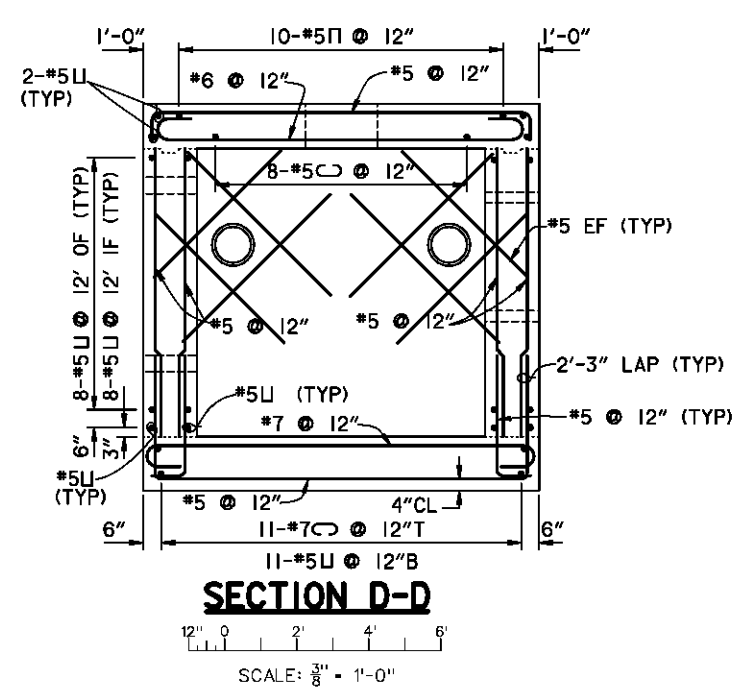
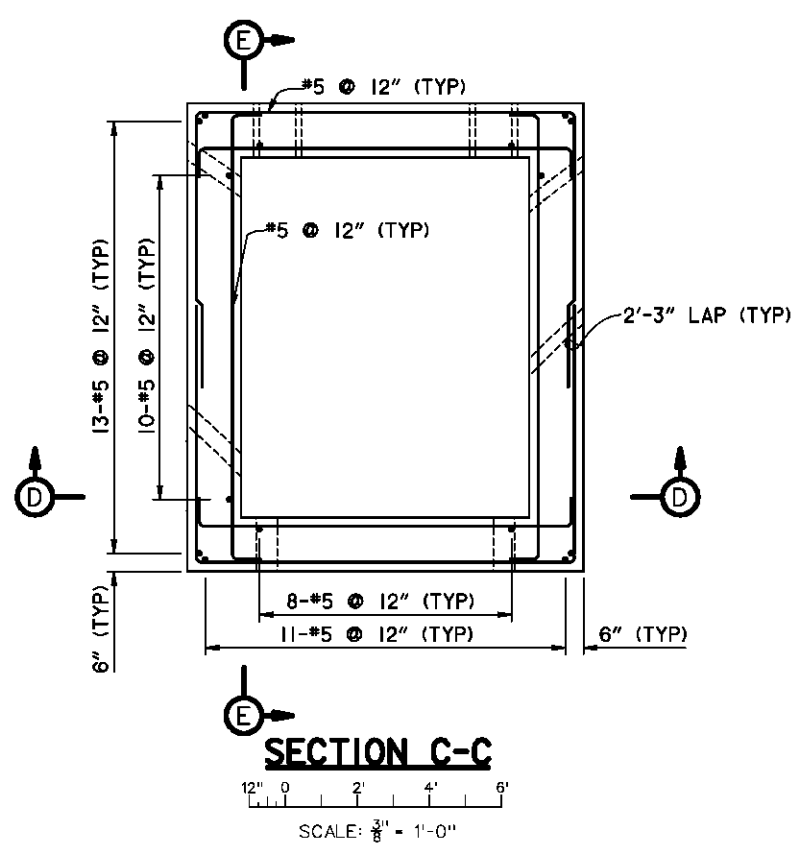
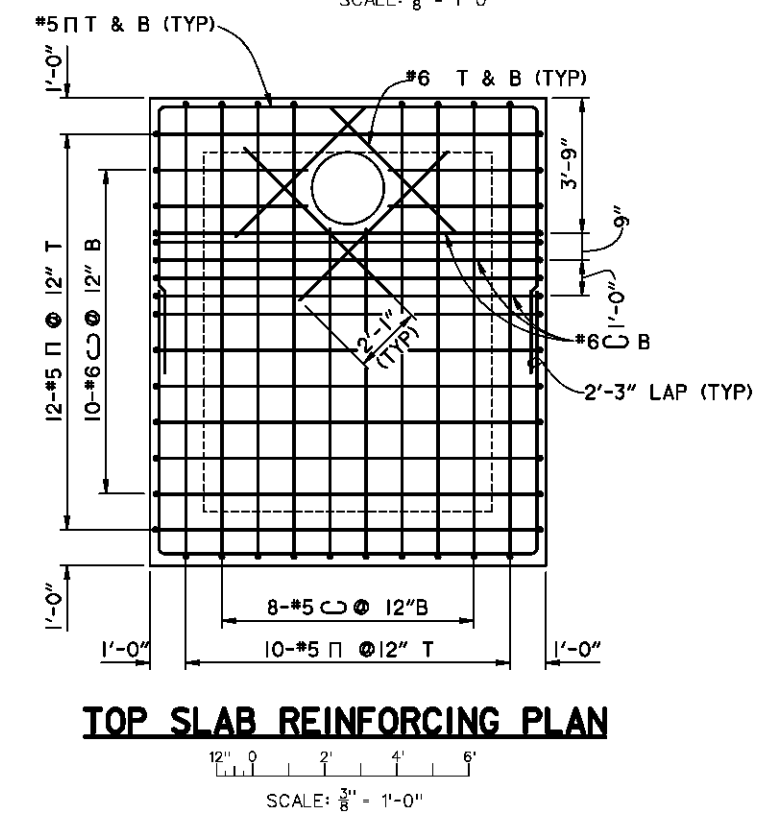
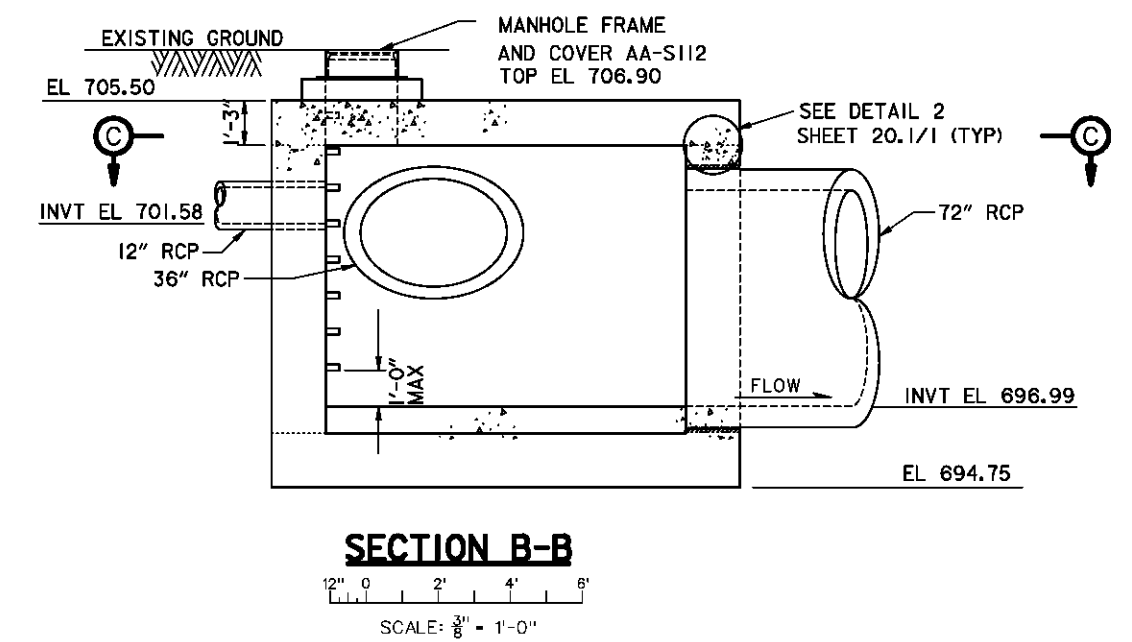
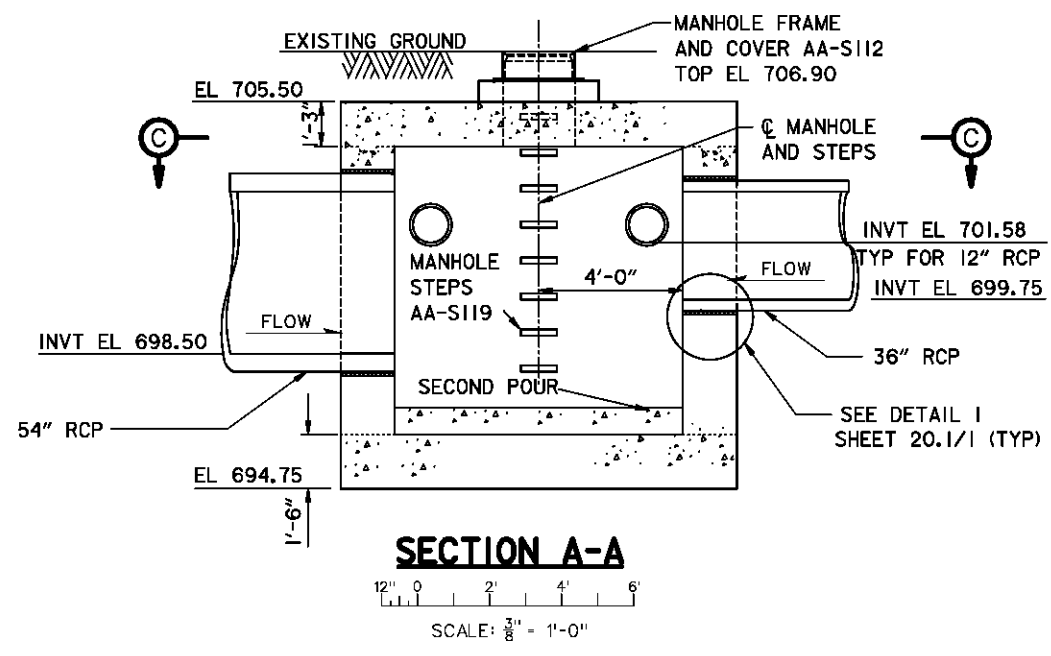
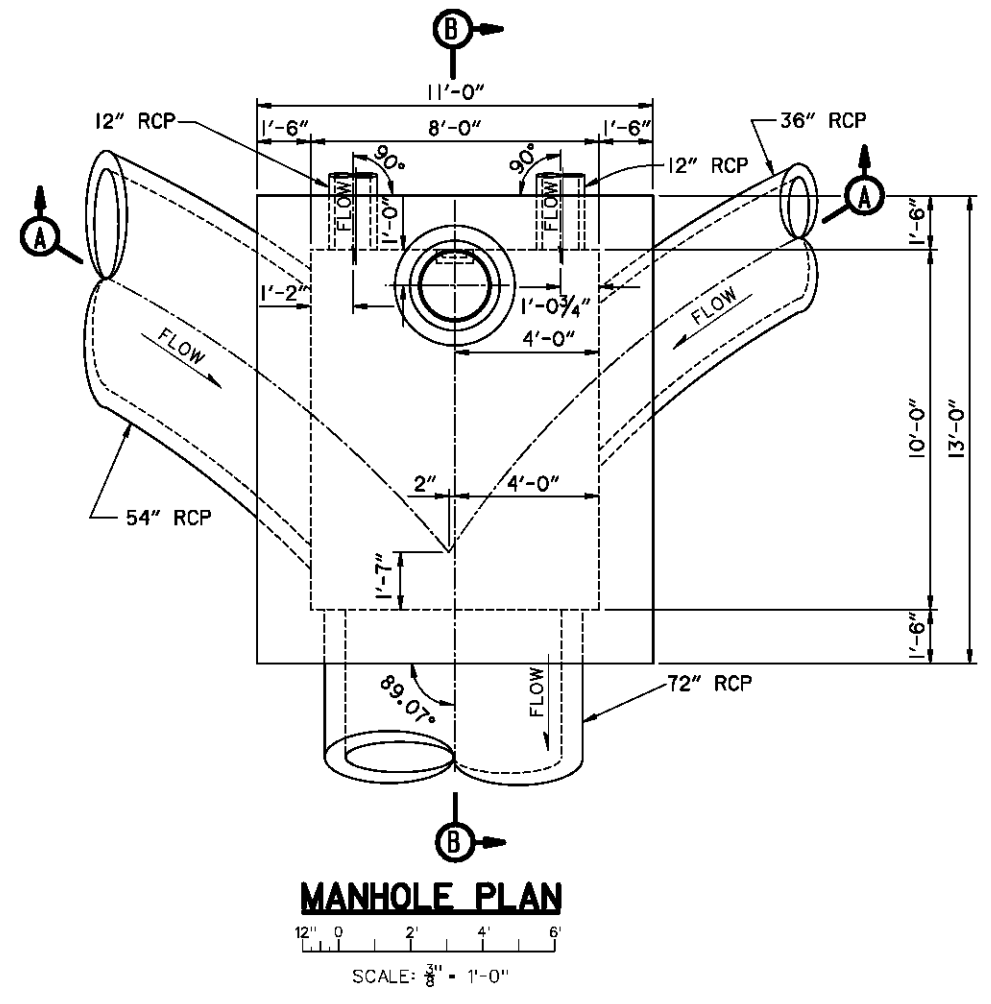


- NOTES**
- FOR GENERAL NOTES, SEE SHEET 0/3.
  - FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
  - THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 3" UNLESS OTHERWISE SHOWN.

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: SKBB Drawn by: AIS Checked by: JN Reviewed by: PFO Approved by: AJS	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION) <b>SPECIAL STORM MANHOLE #2</b> <b>DETAILS</b>		
Scale: AS SHOWN Date: DECEMBER 1995 Drawing Code: 016-PWC-7-	Sheet reference number: 20.2/1	FILENAME: 202501.DGN PEN TABLE	Sheet of

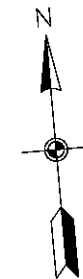


- NOTES**
1. FOR GENERAL NOTES, SEE SHEET 0/3.
  2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
  3. THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 3" UNLESS OTHERWISE SHOWN.

Revisions			
Symbol	Descriptions	Date	Approved

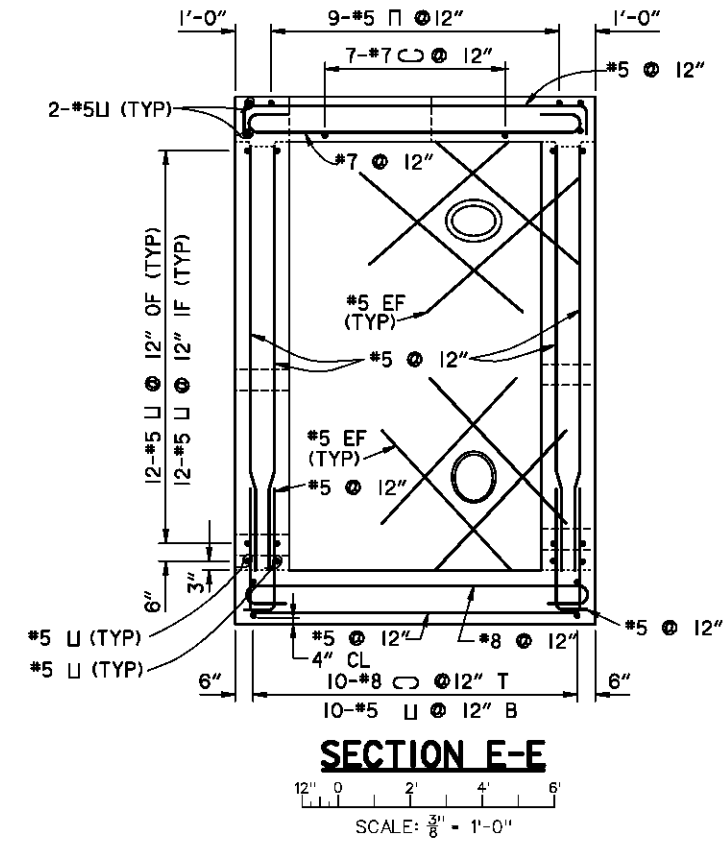
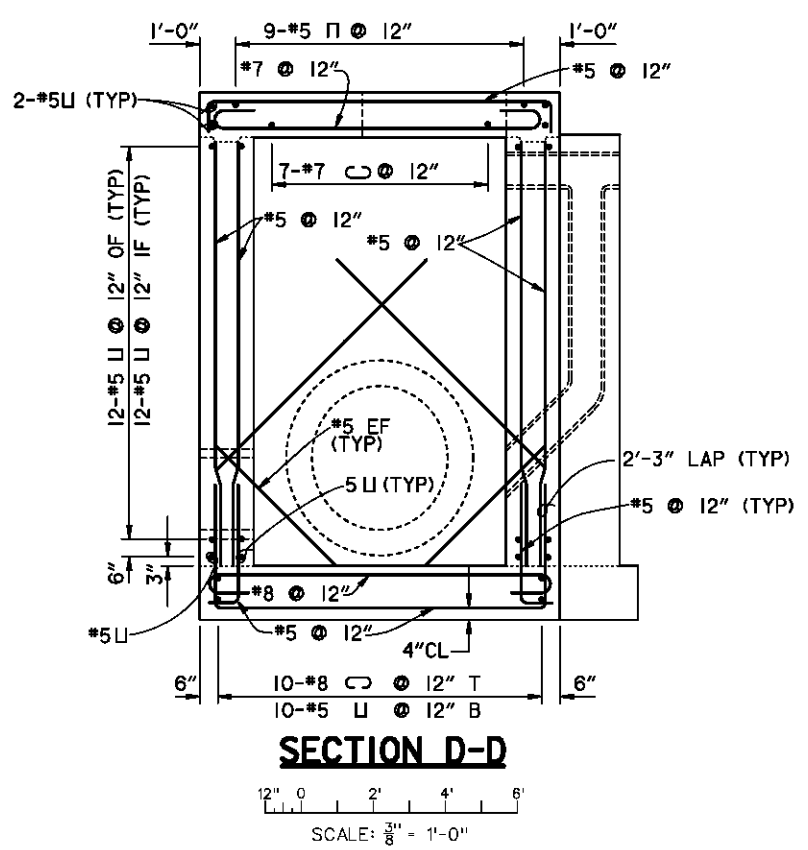
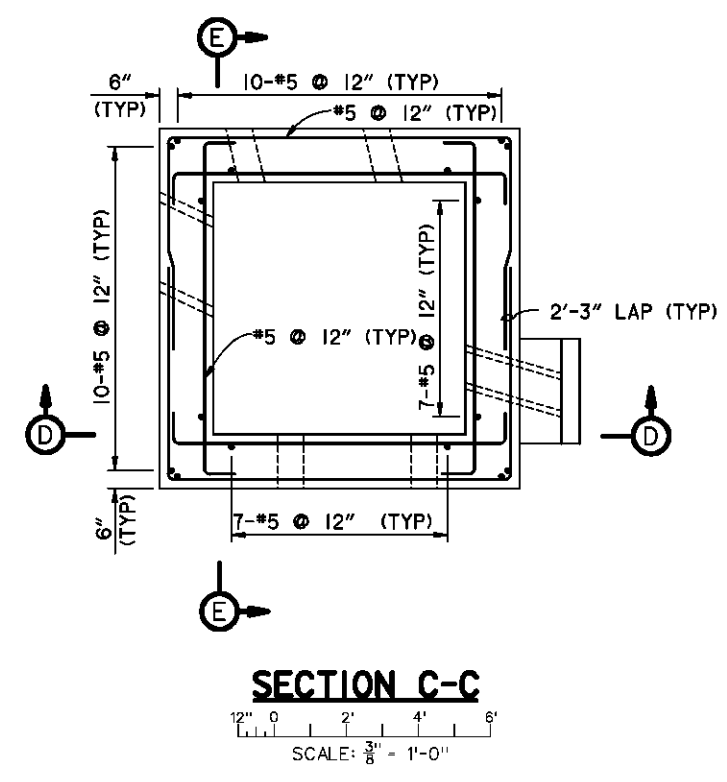
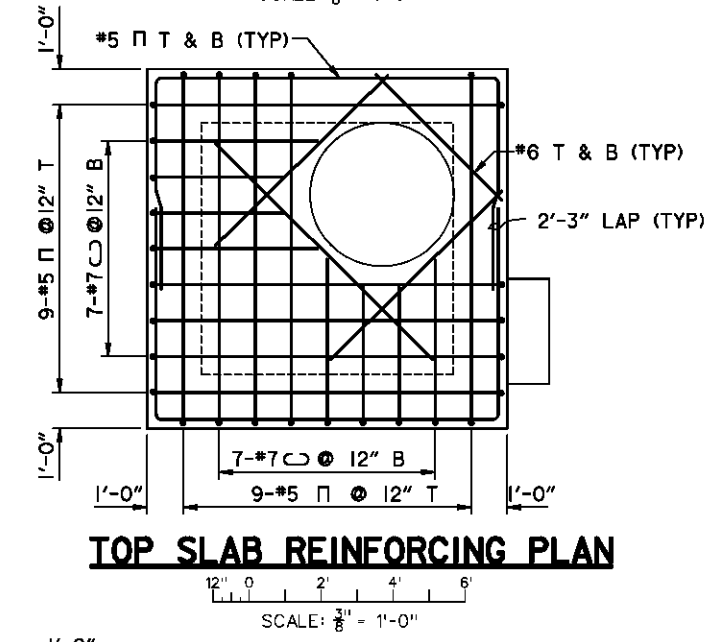
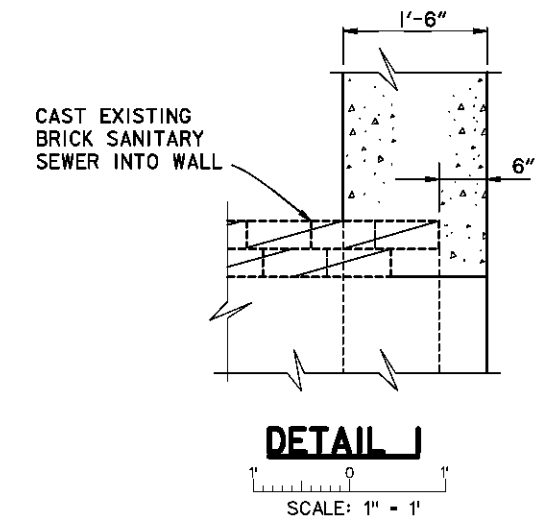
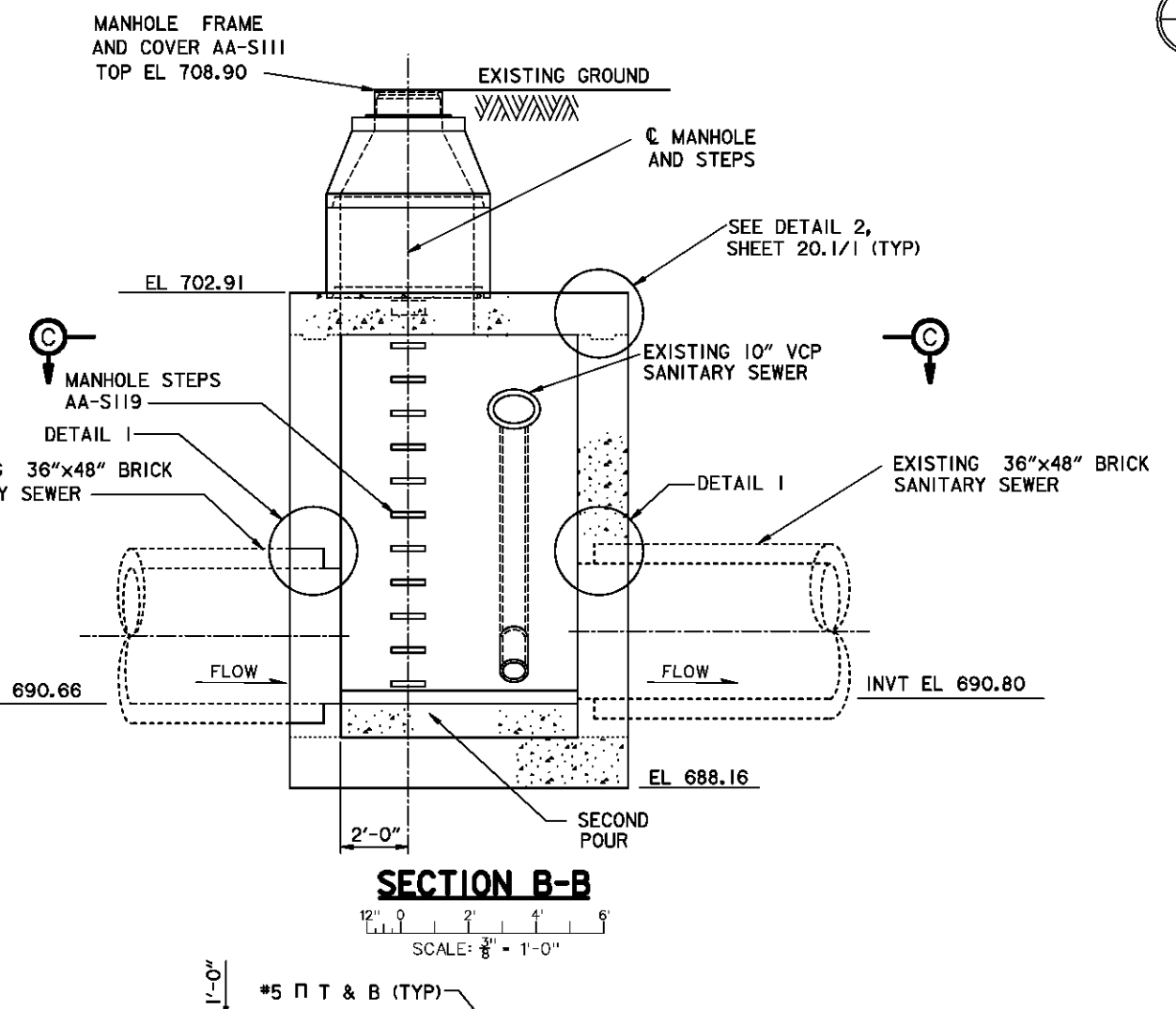
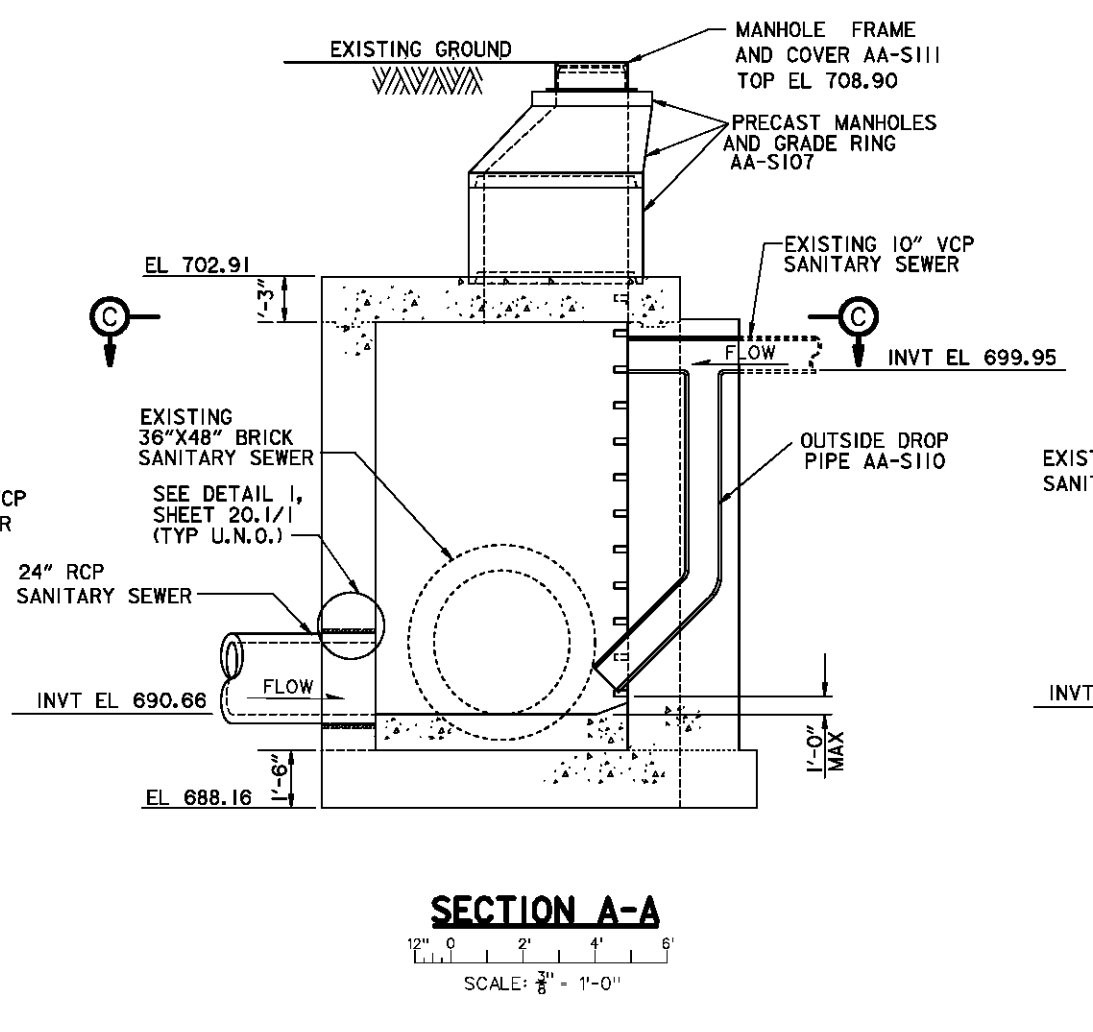
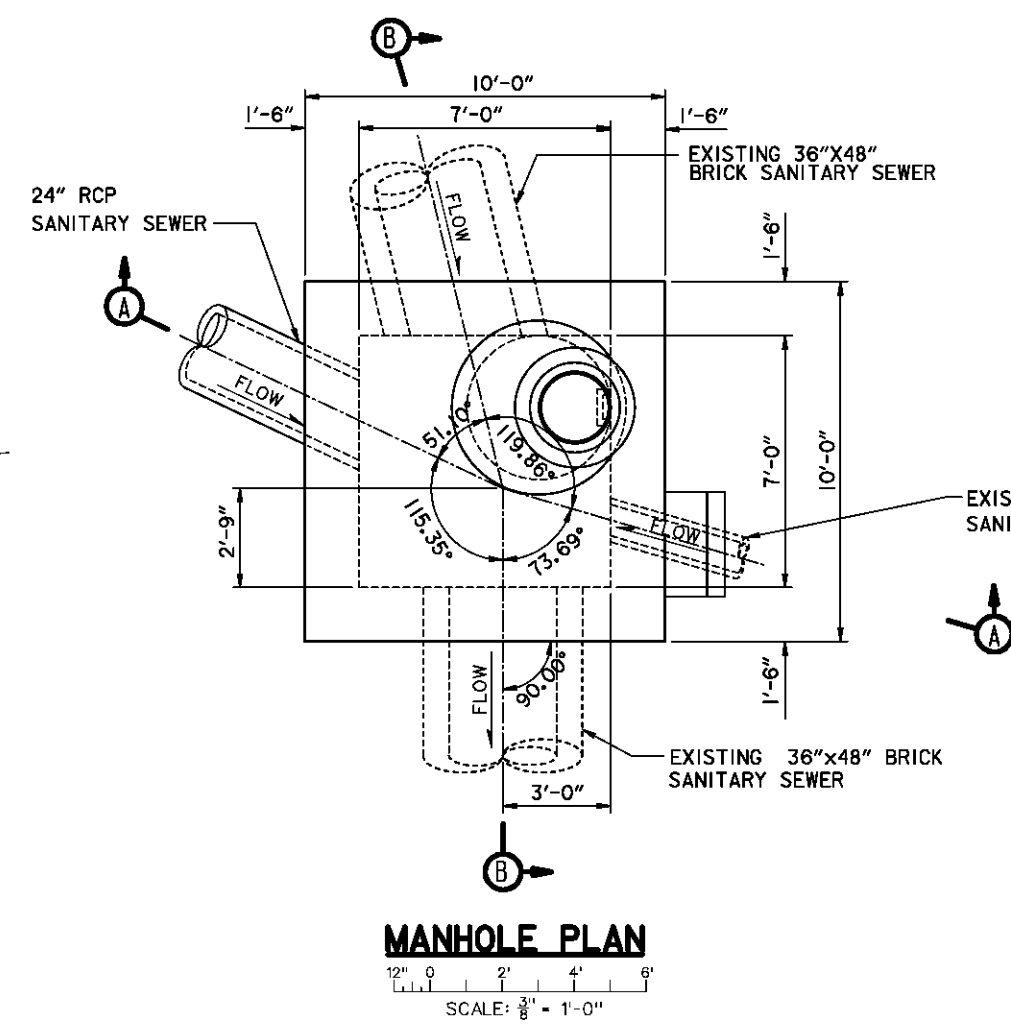
  

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: SKBB	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)		
Drawn by: AIS	<b>JUNCTION CHAMBER                  DETAILS</b>		
Checked by: JN	Scale: AS SHOWN	Sheet reference number: 20.3 / 1	FILENAME: PEN TABLE 203501.DGN
Reviewed by: PFO	Date: DECEMBER 1995	Drawing Code: 016-PWC-7-	
Approved by: AJS	Sheet of		



8 7 6 5 4 3 2 1

F  
E  
D  
C  
B  
A



- NOTES**
1. FOR GENERAL NOTES, SEE SHEET 0/3.
  2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
  3. THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 3" UNLESS OTHERWISE SHOWN.

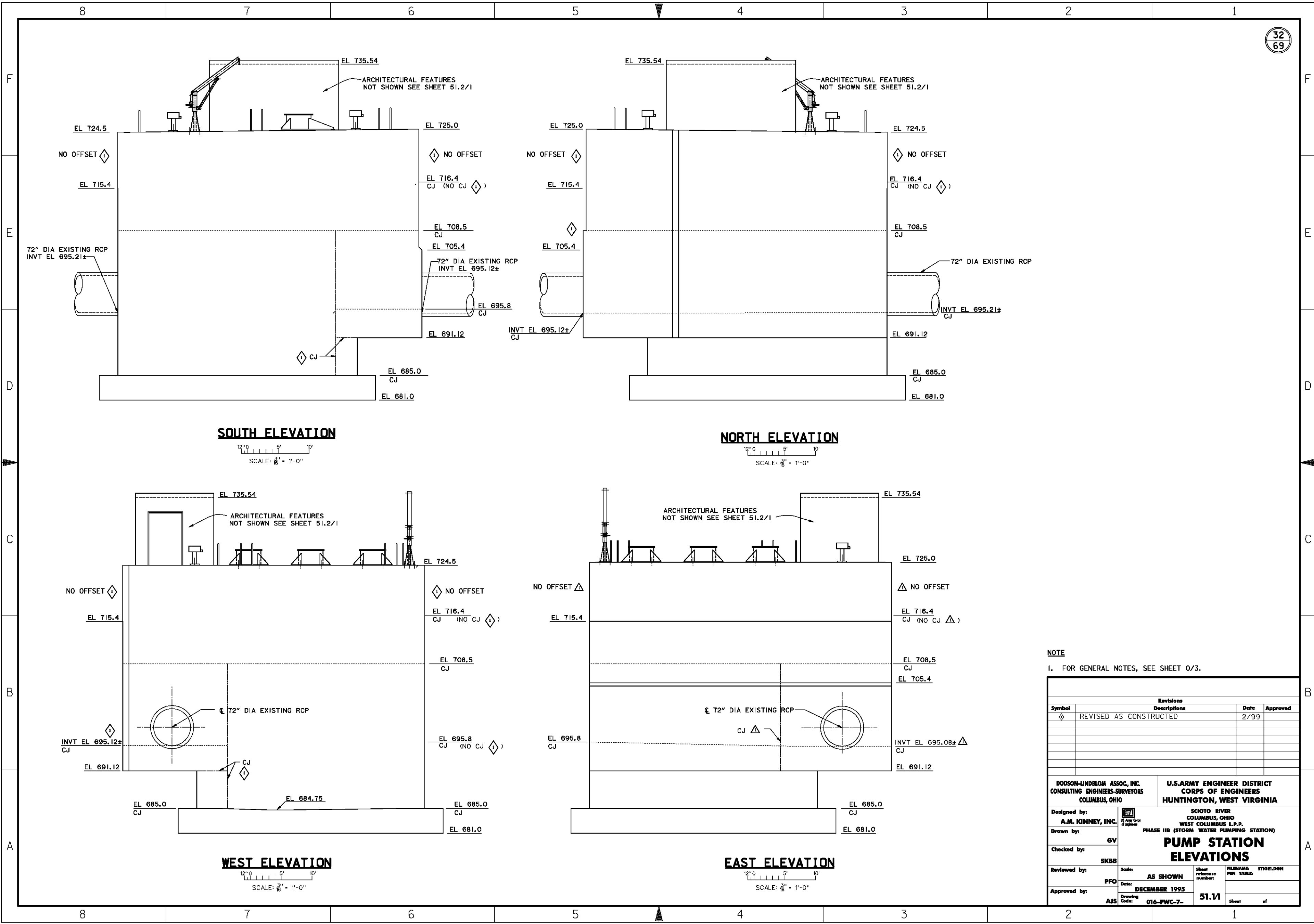
Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: CMS Drawn by: AIS Checked by: JN Reviewed by: PFO Approved by: AIS	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION) <b>SPECIAL SANITARY MANHOLE                  DETAILS</b>	Scale: AS SHOWN Date: DECEMBER 1995 Drawing Code: 016-PWC-7-	FILENAME: 204-01.DGN SHEET NUMBER: 20.41 Sheet of

8 7 6 5 4 3 2 1





**SOUTH ELEVATION**

12'-0" 5' 10'  
SCALE: 3/8" = 1'-0"

**NORTH ELEVATION**

12'-0" 5' 10'  
SCALE: 3/8" = 1'-0"

**WEST ELEVATION**

12'-0" 5' 10'  
SCALE: 3/8" = 1'-0"

**EAST ELEVATION**

12'-0" 5' 10'  
SCALE: 3/8" = 1'-0"

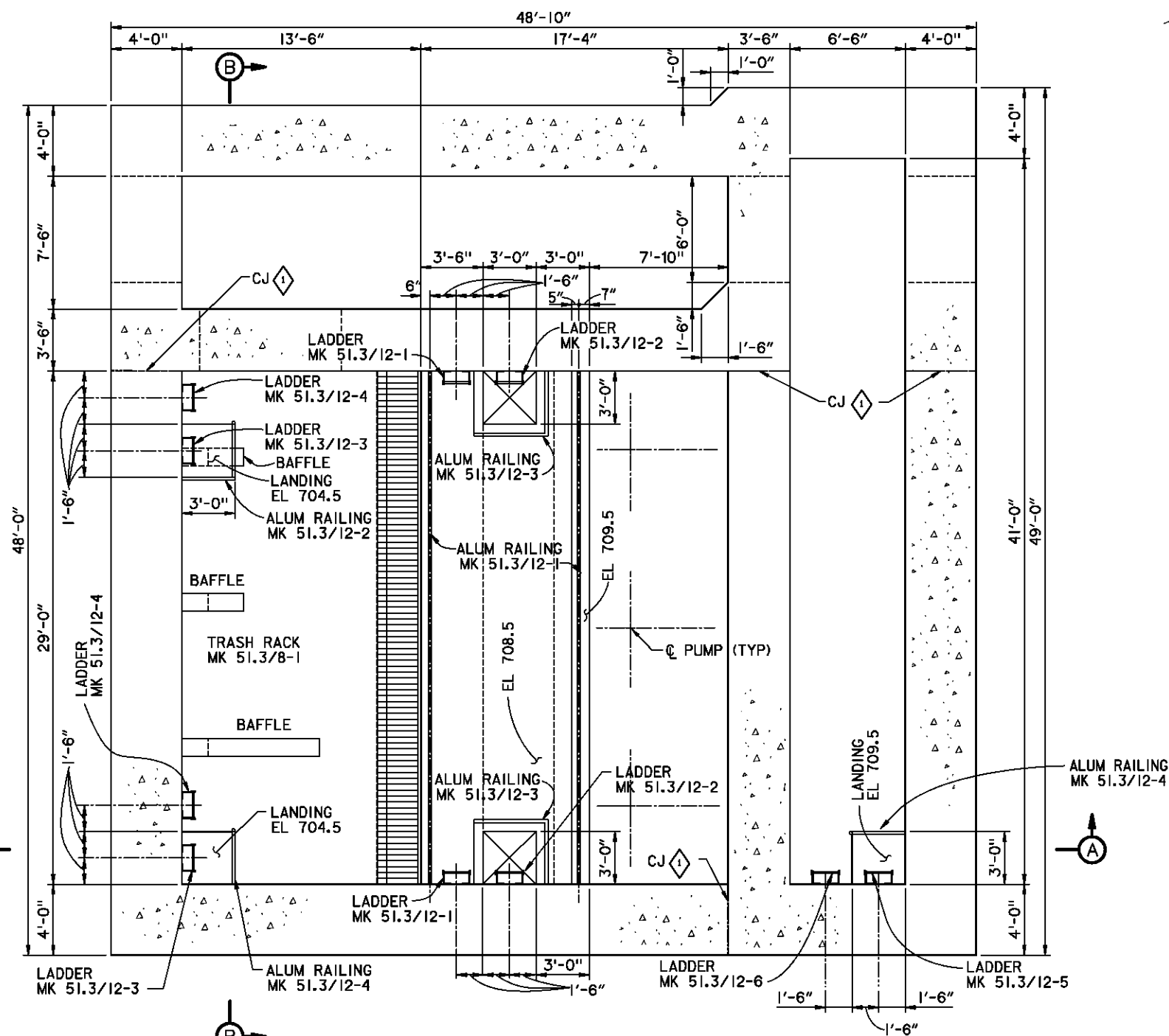
**NOTE**  
1. FOR GENERAL NOTES, SEE SHEET 0/3.

Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2/99	

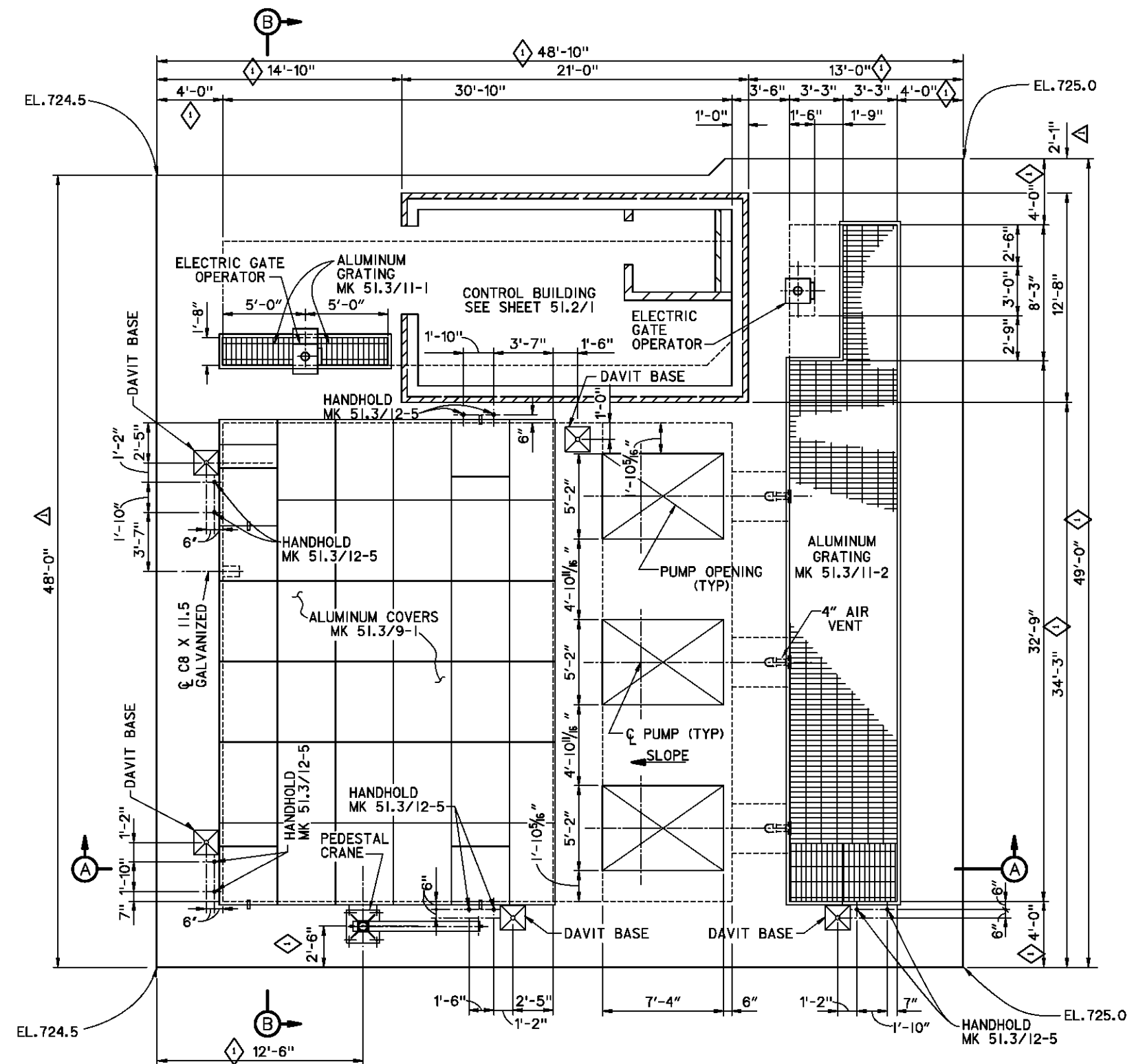
DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: <b>A.M. KINNEY, INC.</b>	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)
Drawn by: GV	<b>PUMP STATION ELEVATIONS</b>
Checked by: SKBB	Scale: <b>AS SHOWN</b>
Reviewed by: PFO	Date: <b>DECEMBER 1995</b>
Approved by: AJS	Drawing Code: <b>016-PWC-7-</b>
	Sheet reference number: <b>51.1/1</b>
	FILENAME: 51001.DGN PEN TABLE: Sheet of





**PLAN AT EL 711.0**

12" 0 5'  
SCALE: 1/4" = 1'-0"



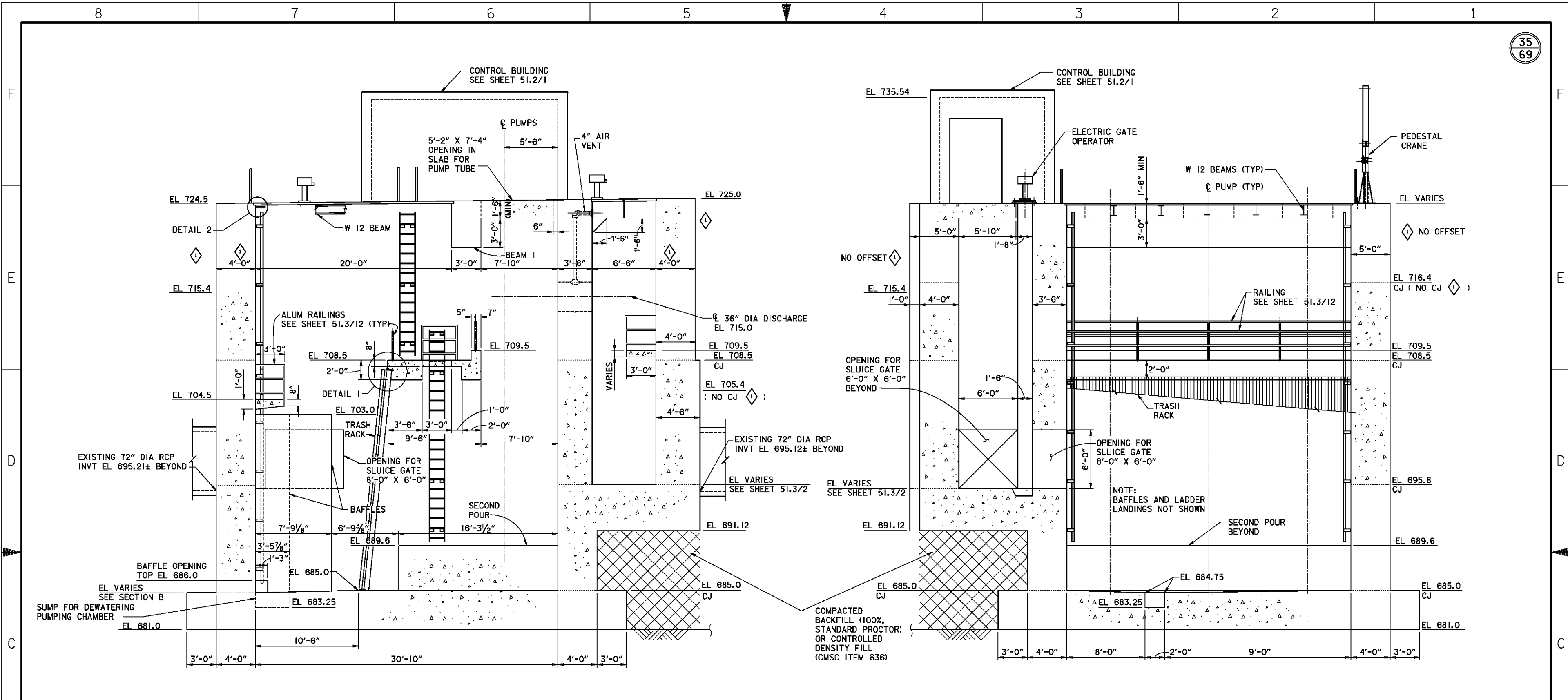
**PLAN AT EL 725.0**

12" 0 5'  
SCALE: 1/4" = 1'-0"

**NOTES**

1. FOR GENERAL NOTES, SEE SHEET 0/3.
2. SEE SHEET 51.1/4 FOR SECTIONS A AND B.

Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2/99	
DODSON-LINDBLOM ASSOC. INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: A.M. KINNEY, INC.	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by: GV	<b>PUMP STATION PLANS - SHEET NO. 2</b>		
Checked by: SKBB			
Reviewed by: PFO	Scale: AS SHOWN	Sheet reference number:	FILENAME: 510P2.DGN PEN TABLE:
Approved by: AJS	Date: DECEMBER 1995	Drawing Code: 016-PWC-7-	51.1/3 Sheet of

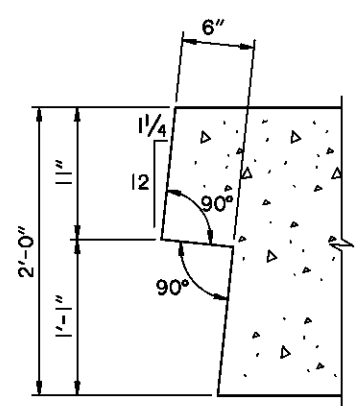


**SECTION A-A**

12" 0 5"  
SCALE: 3/4" = 1'-0"

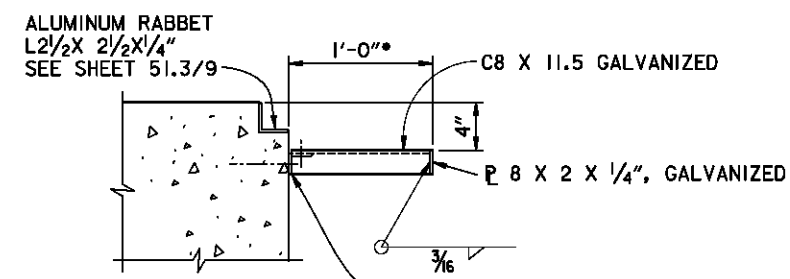
**SECTION B-B**

12" 0 5"  
SCALE: 3/4" = 1'-0"



**DETAIL 1**

12" 9" 8" 3" 0"  
SCALE: 1/2" = 1'-0"



**DETAIL 2**

12" 9" 8" 3" 0"  
SCALE: 1/2" = 1'-0"

\* CONTRACTOR TO COORDINATE DIMENSION WITH PUMP MANUFACTURER.

CLIP L 3X3X1/4", GALVANIZED  
W/2-3/4"DIA C.R.S. BOLTS THRU BEAM WEB. ATTACH TO WALL W/2-3/4"DIA S.S. KWIK BOLT II ANCHORS W/3/2" EMBED OR EQUAL.

**NOTES**  
1. FOR GENERAL NOTES, SEE SHEET 0/3.

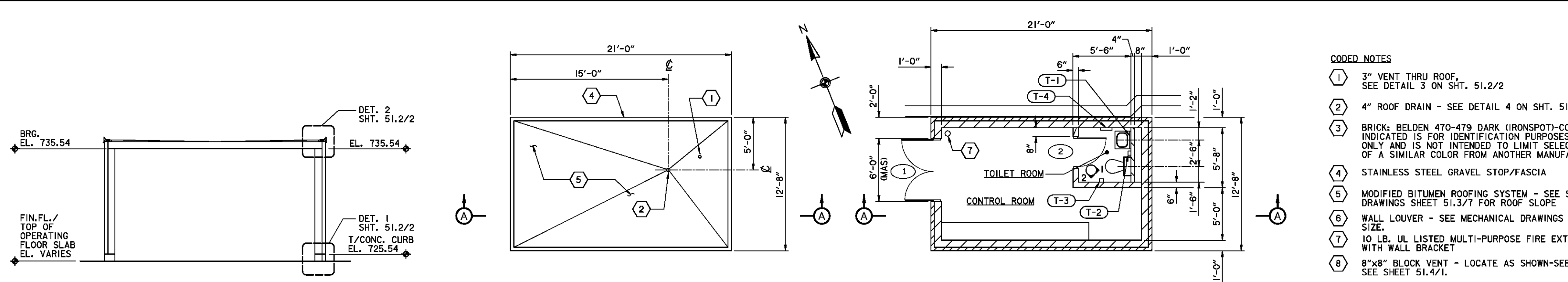
Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2/99	

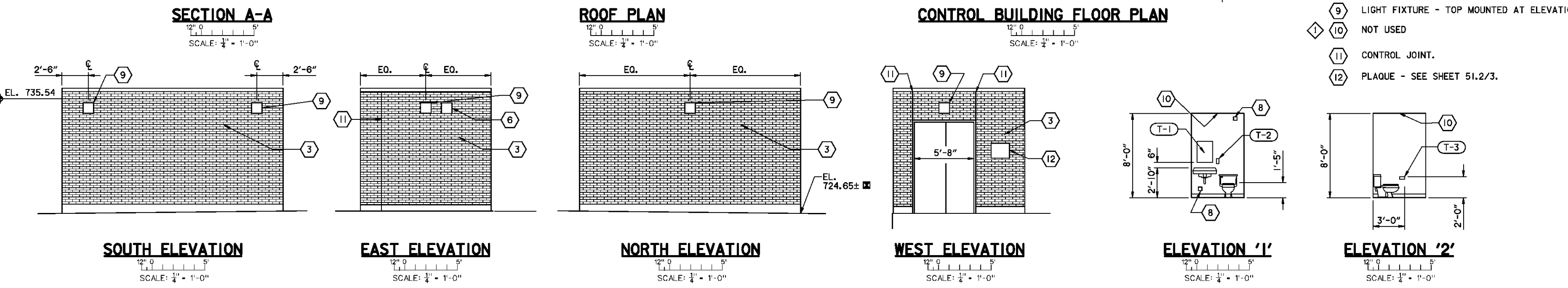
DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: A.M. KINNEY, INC.		SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by: GV		<b>PUMP STATION SECTIONAL ELEVATIONS</b>	
Checked by: SKBB	Scale: AS SHOWN	Sheet reference number: 51.1/4	FILENAME: 511051.DGN
Reviewed by: PFO	Date: DECEMBER 1995		
Approved by: AJS	Drawing Code: 016-PWC-7-		



8 7 6 5 4 3 2 1



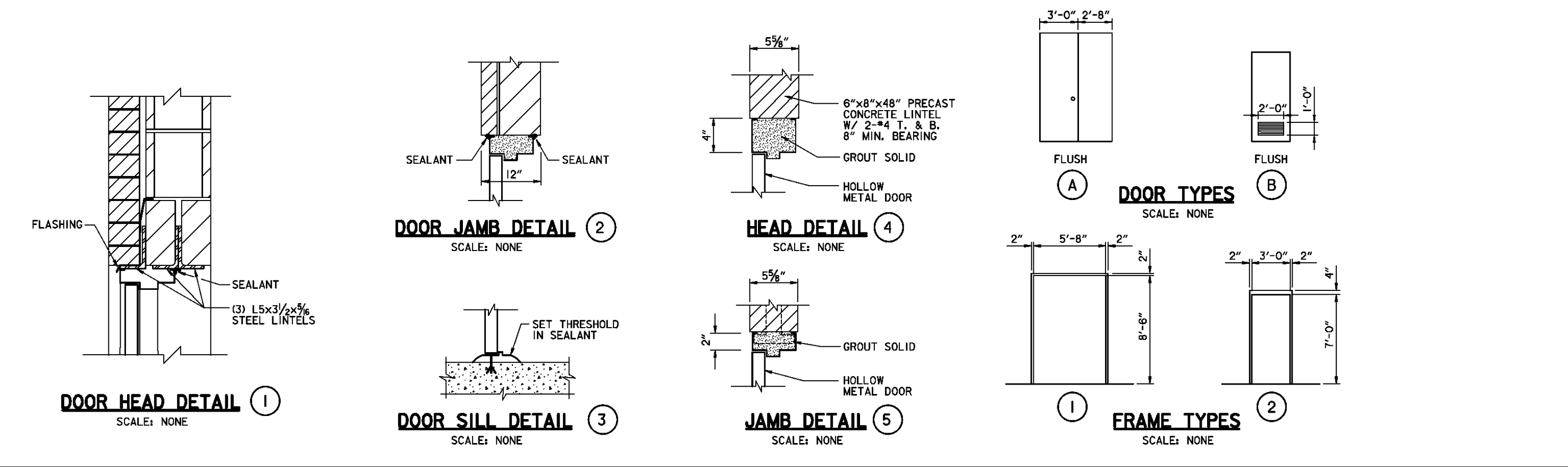
- CODED NOTES**
- 1 3" VENT THRU ROOF. SEE DETAIL 3 ON SHT. 51.2/2
  - 2 4" ROOF DRAIN - SEE DETAIL 4 ON SHT. 51.2/2
  - 3 BRICK: BELDEN 470-479 DARK (IRONSPOOT)-COLOR INDICATED IS FOR IDENTIFICATION PURPOSES ONLY AND IS NOT INTENDED TO LIMIT SELECTION OF A SIMILAR COLOR FROM ANOTHER MANUFACTURER.
  - 4 STAINLESS STEEL GRAVEL STOP/FASCIA
  - 5 MODIFIED BITUMEN ROOFING SYSTEM - SEE STRUCT. DRAWINGS SHEET 51.3/7 FOR ROOF SLOPE
  - 6 WALL LOUVER - SEE MECHANICAL DRAWINGS FOR SIZE.
  - 7 10 LB. UL LISTED MULTI-PURPOSE FIRE EXTINGUISHER WITH WALL BRACKET
  - 8 8"x8" BLOCK VENT - LOCATE AS SHOWN-SEE MECHANICAL SEE SHEET 51.4/1.
  - 9 LIGHT FIXTURE - TOP MOUNTED AT ELEVATION 734.65'.
  - 10 NOT USED
  - 11 CONTROL JOINT.
  - 12 PLAQUE - SEE SHEET 51.2/3.



DOOR SCHEDULE															
MARK	DOOR						FRAME						LABEL	HDWR. GROUP	REMARKS
	W	H	T	MAT'L.	FINISH	TYPE	MAT'L.	FINISH	TYPE	HEAD	JAMB	SILL			
1	(1) 3'-0" (1) 2'-8"	8'-6"	1-3/4"	HM.	PAINT	A	HM.	PAINT	1	1	2	3	-	1	INSULATED
2	3'-0"	7'-0"	1-3/4"	HM.	PAINT	B	HM.	PAINT	2	4	5	-	-	2	PROVIDE LOUVER

TOILET ACCESSORY SCHEDULE				
MARK	IDENTIFYING ABBREVIATION	DESCRIPTION	MOUNTING HEIGHT	REMARKS
T-1	MG	18"x30" MIRROR	40" A.F.F.	TO BOTTOM OF UNIT
T-2	SD	SOAP DISPENSER	40" A.F.F.	TO BOTTOM OF UNIT
T-3	TTD	TOILET TISSUE DISPENSER	24" A.F.F.	TO CENTERLINE OF UNIT
T-4	PTD	PAPER TOWEL DISPENSER	40" A.F.F.	TO BOTTOM OF UNIT

- GENERAL NOTES**
- A. ALL DIMENSIONS ARE TO FACE OF MASONRY.
  - B. PAINT ALL INTERIOR EXPOSED MASONRY WALLS AND CONCRETE CEILING.
  - C. INSTALL VINYL COMPOSITION TILE AND 4" VINYL BASE IN TOILET ROOM.
  - D. APPLY SEALING AND CURING COMPOUND TO CONCRETE FLOOR IN CONTROL ROOM
  - E. APPLY ANTI-GRAFFITI COATING TO FACE BRICK



Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED IN ACCORDANCE WITH AMENDMENT 0004	6 / 96	

**DODSON-LINDBLOM ASSOC., INC.**  
 CONSULTING ENGINEERS-SURVEYORS  
 COLUMBUS, OHIO

**U.S. ARMY ENGINEER DISTRICT**  
 CORPS OF ENGINEERS  
 HUNTINGTON, WEST VIRGINIA

Designed by: **AJS**  
 Drawn by: **RTP**  
 Checked by: **MA**  
 Reviewed by: **PFO**  
 Approved by: **AJS**

**SCIO TO RIVER**  
 COLUMBUS, OHIO  
 WEST COLUMBUS L.P.P.  
 PHASE IIB (STORM WATER PUMPING STATION)

**PUMP STATION**  
**PLANS, ELEV., SECTION**

Scale: **AS SHOWN**  
 Date: **DECEMBER 1995**  
 Drawing Code: **016-PWC-7-**

FILENAME: 512a01a.dgn  
 PEN TABLE: PLT: 14"-1"  
 51.2/1





**STRUCTURAL GENERAL NOTES**

1. PROVIDE 1" CHAMFER ON ALL EXPOSED EDGES OR CORNERS AND CONSTRUCTION JOINTS UNLESS OTHERWISE SHOWN.
2. UNLESS OTHERWISE SHOWN OR DIRECTED, BAR BENDING DETAILS SHALL CONFORM TO THE REQUIREMENT OF THE AMERICAN CONCRETE INSTITUTE.
3. REINFORCING STEEL MAY BE SPLICED IN PLACES OTHER THAN SHOWN FOR CONSTRUCTION PURPOSES, SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER.
4. ABBREVIATIONS; SEE LIST THIS SHEET.
5. CUT AND HOOK HORIZONTAL AND VERTICAL BARS AT OPENINGS.
6. ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60.
7. ALL SPLICES SHALL BE CLASS B UNLESS OTHERWISE SHOWN.
8. DEVELOPMENT LENGTHS AND LAP SPLICES, UNLESS OTHERWISE SHOWN OR DIRECTED SHALL BE AS FOLLOWS:

BAR SIZE	DEVELOPMENT LENGTH INCHES	
	TOP BARS	OTHERS
3	16	13
4	22	17
5	27	21
6	32	25
7	38	29
8	45	35
9	57	44
10	73	56
11	89	69

THE LENGTH OF CLASS B TENSION LAP SPLICE SHALL BE 1.3 X DEVELOPMENT LENGTH.

9. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3,000 P.S.I. AT 28 DAYS, UNLESS OTHERWISE NOTED.
10. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE D1.1 OR D1.2.
11. THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 4" UNLESS OTHERWISE SHOWN.

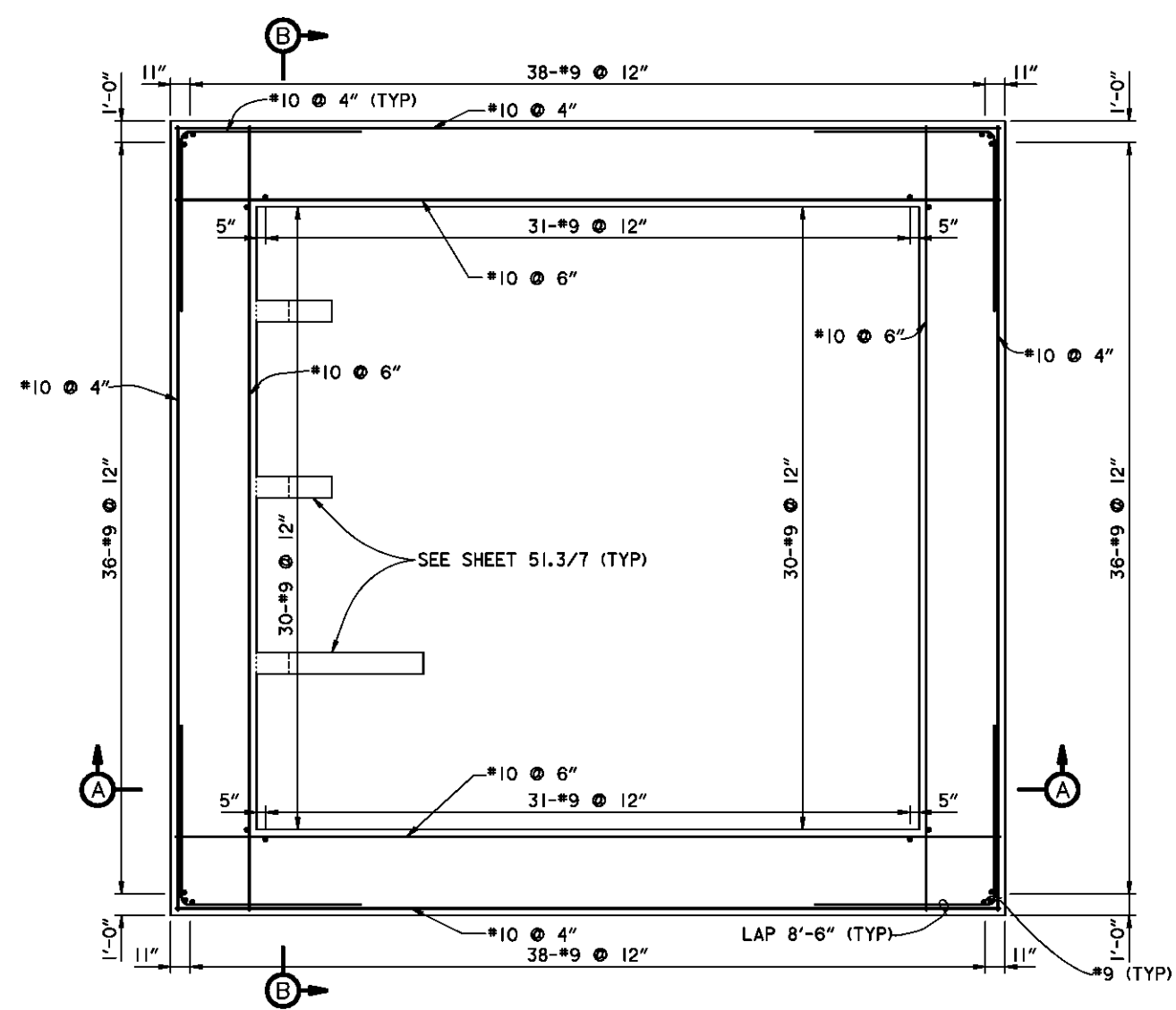
ABBREVIATIONS	
ALUM	= ALUMINUM
B	= BOTTOM
CJ	= CONSTRUCTION JOINT
CL	= CLEAR
CRS	= CORROSION RESISTANT STEEL
CTSK	= COUNTERSUNK
DIA	= DIAMETER
EF	= EACH FACE
EMBED	= EMBEDMENT
ES	= EACH SIDE
FF	= FAR FACE
FS	= FAR SIDE
GALV	= GALVANIZE
HK	= HOOK
IF	= INSIDE FACE
NF	= NEAR FACE
NS	= NEAR SIDE
OC	= ON CENTER
OF	= OUTSIDE FACE
OPP	= OPPOSITE
SIM	= SIMILAR
SPA	= SPACES
SS	= STAINLESS STEEL
STD	= STANDARD
SYM	= SYMMETRICAL
T	= TOP
TYP	= TYPICAL
UNO	= UNLESS NOTED OTHERWISE

**NOTES**

1. FOR GENERAL NOTES, SEE SHEET 0/3.
2. FOR PUMP STATION LAYOUT, SEE SHEET 15/15 AND SHEETS 51.1/1 THRU 51.1/4.
3. SEE SHEET 51.3/6 FOR SECTIONS A AND B.

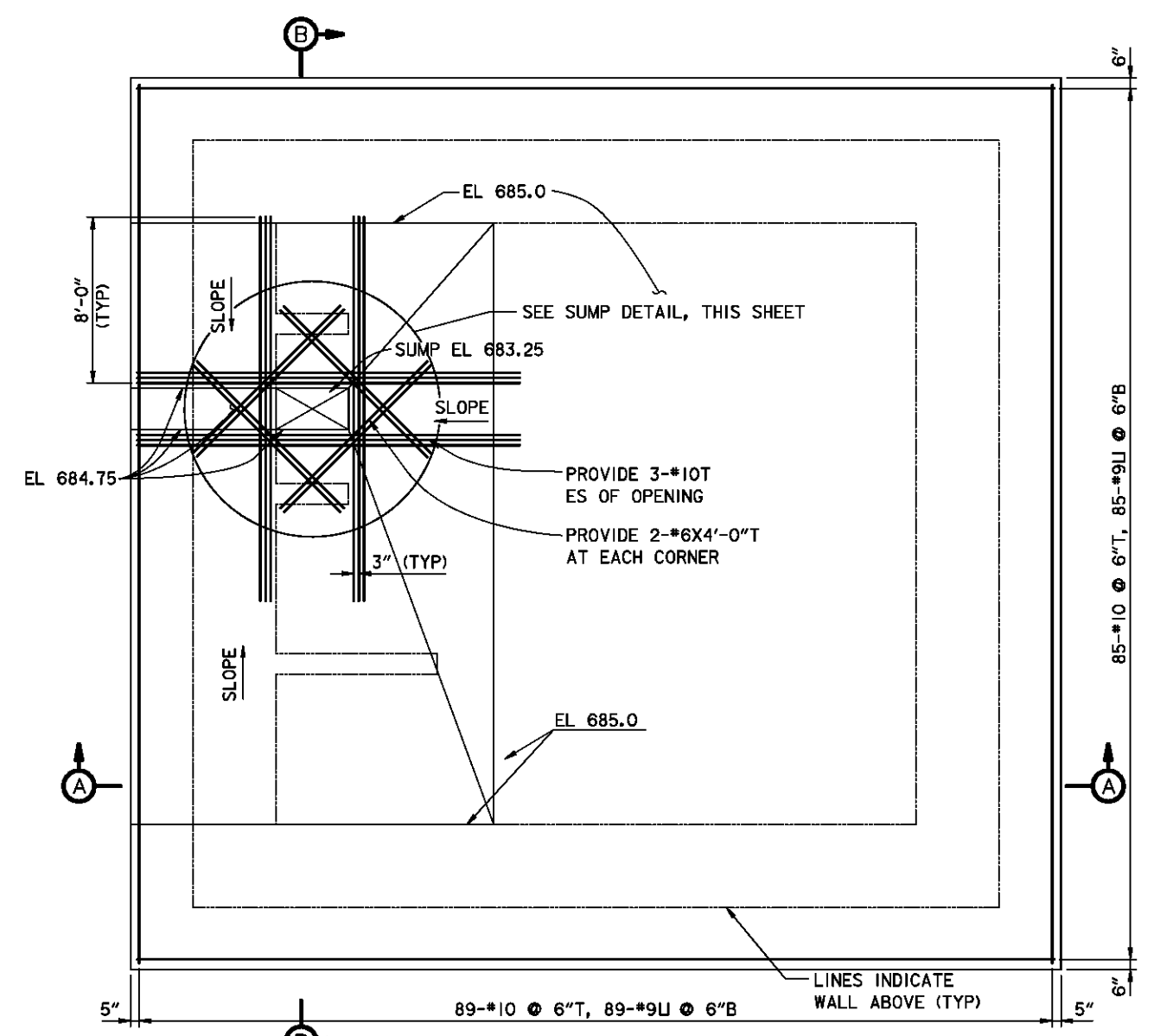
Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: A.M. KINNEY, INC.	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	<b>PUMP STATION REINFORCING AT EL 685.0</b>	
Drawn by: GV			
Checked by: SKBB	Scale: AS SHOWN	Sheet reference number: 51.3/1	FILENAME: 513501.DGN PEN TABLE
Reviewed by: PFO	Date: DECEMBER 1995	Drawing Code: 016-PWC-7-	
Approved by: AJS	Sheet of		



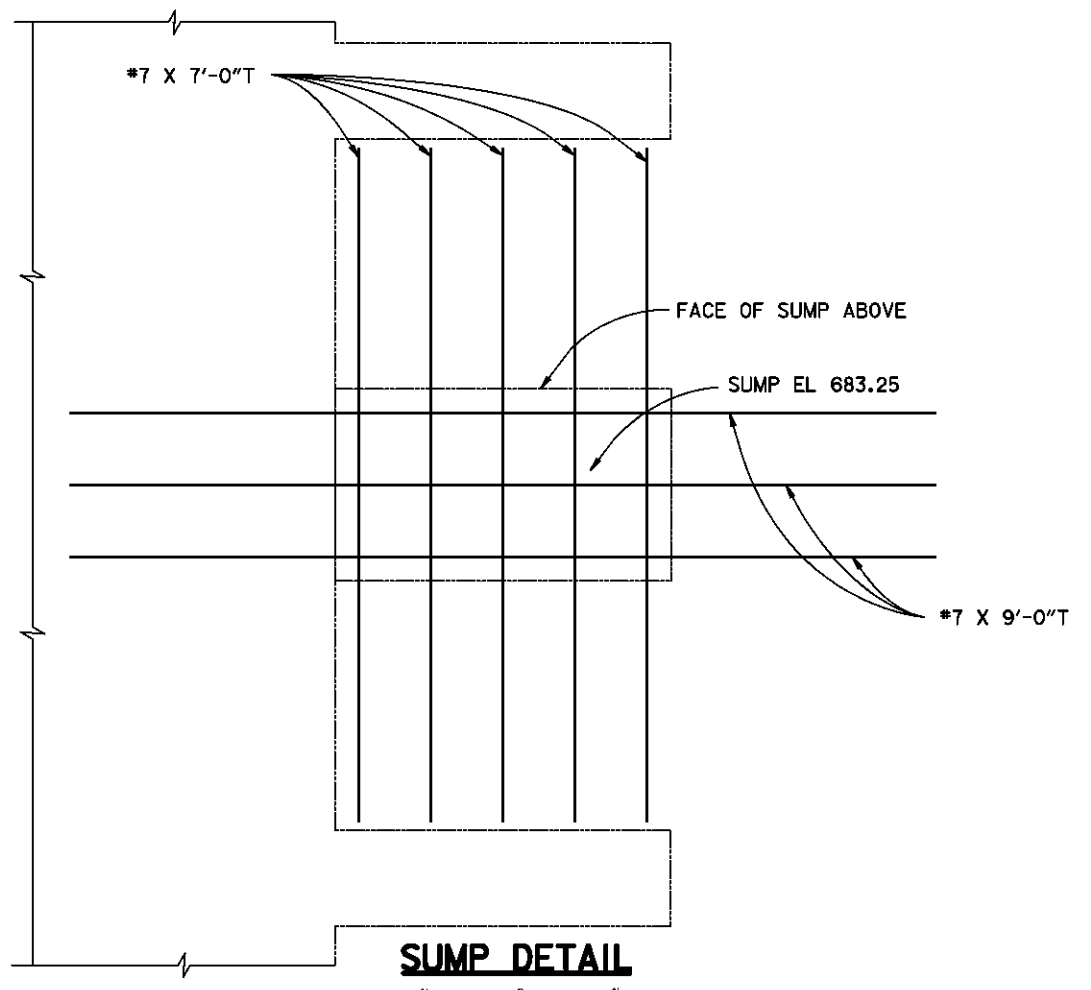
**REINFORCING ABOVE EL 685.0**

SCALE: 1/4" = 1'-0"



**SLAB REINFORCING PLAN AT EL 685.0**

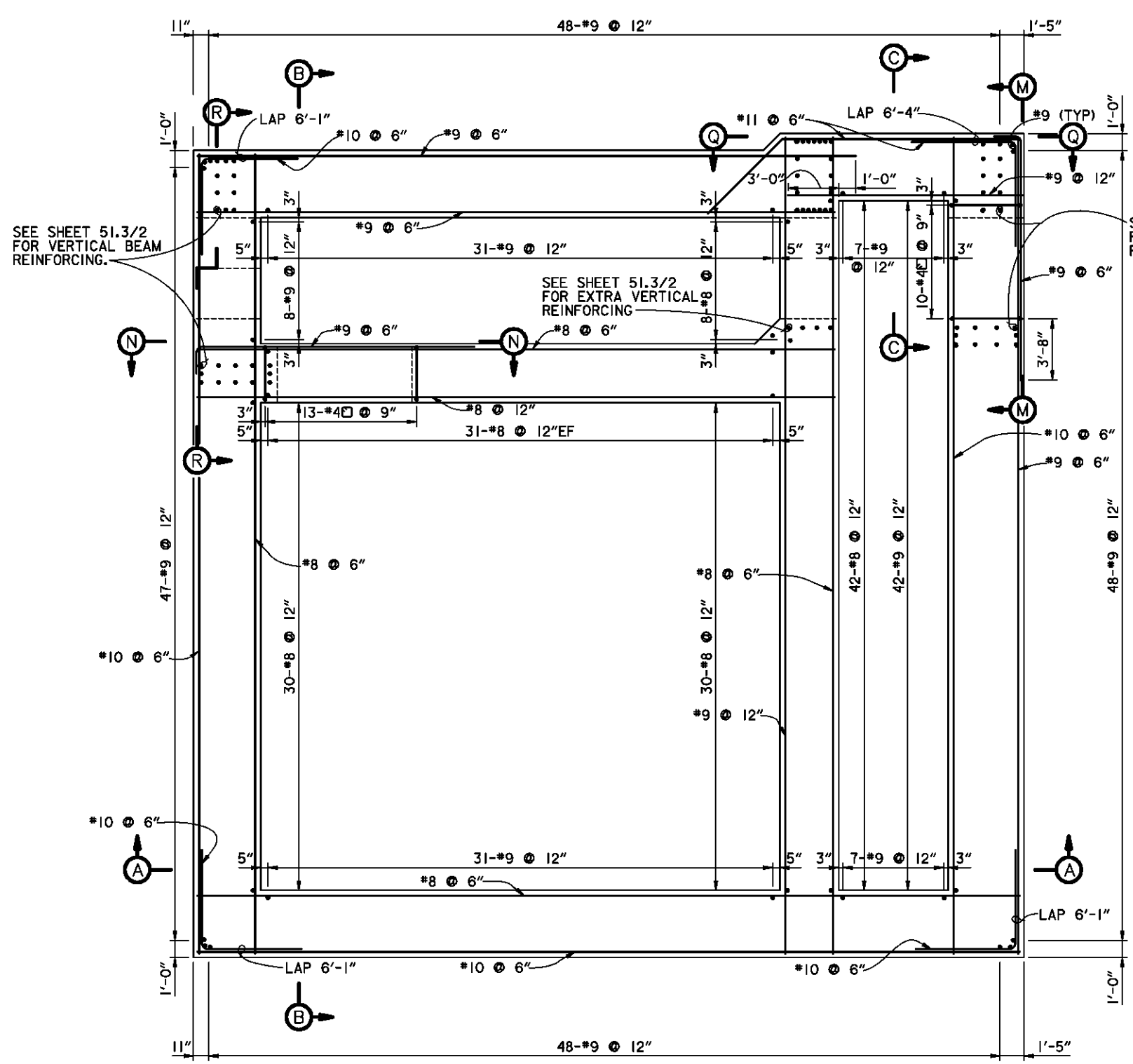
SCALE: 1/4" = 1'-0"



**SUMP DETAIL**

SCALE: 1" = 1'

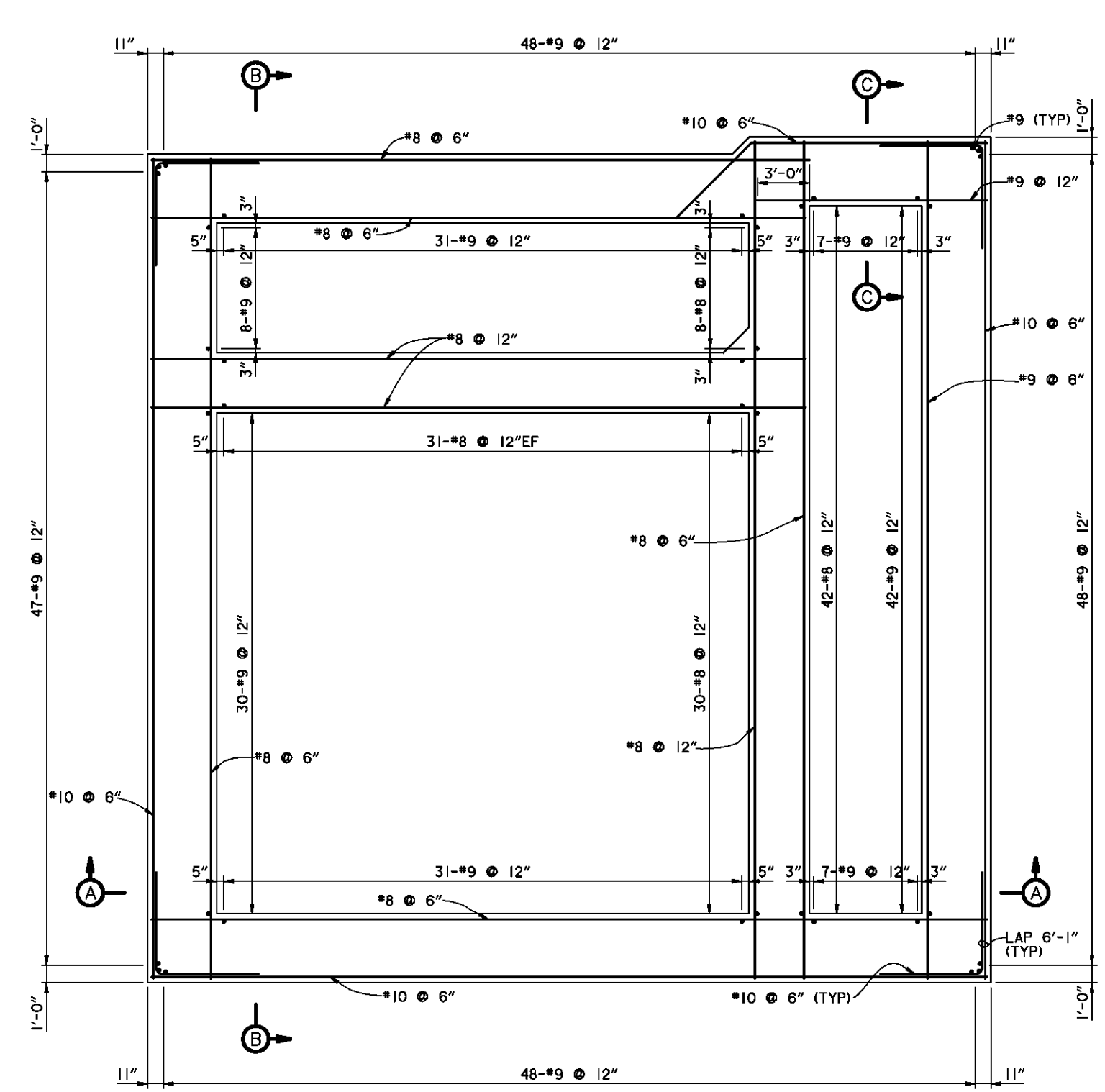




**REINFORCING ABOVE EL 701.4**

12" 0 5"  
SCALE: 1/4" = 1'-0"

NOTE: BAFFLES AND LANDING PLATFORMS NOT SHOWN FOR CLARITY.



**REINFORCING ABOVE EL 706.4**

12" 0 5"  
SCALE: 1/4" = 1'-0"

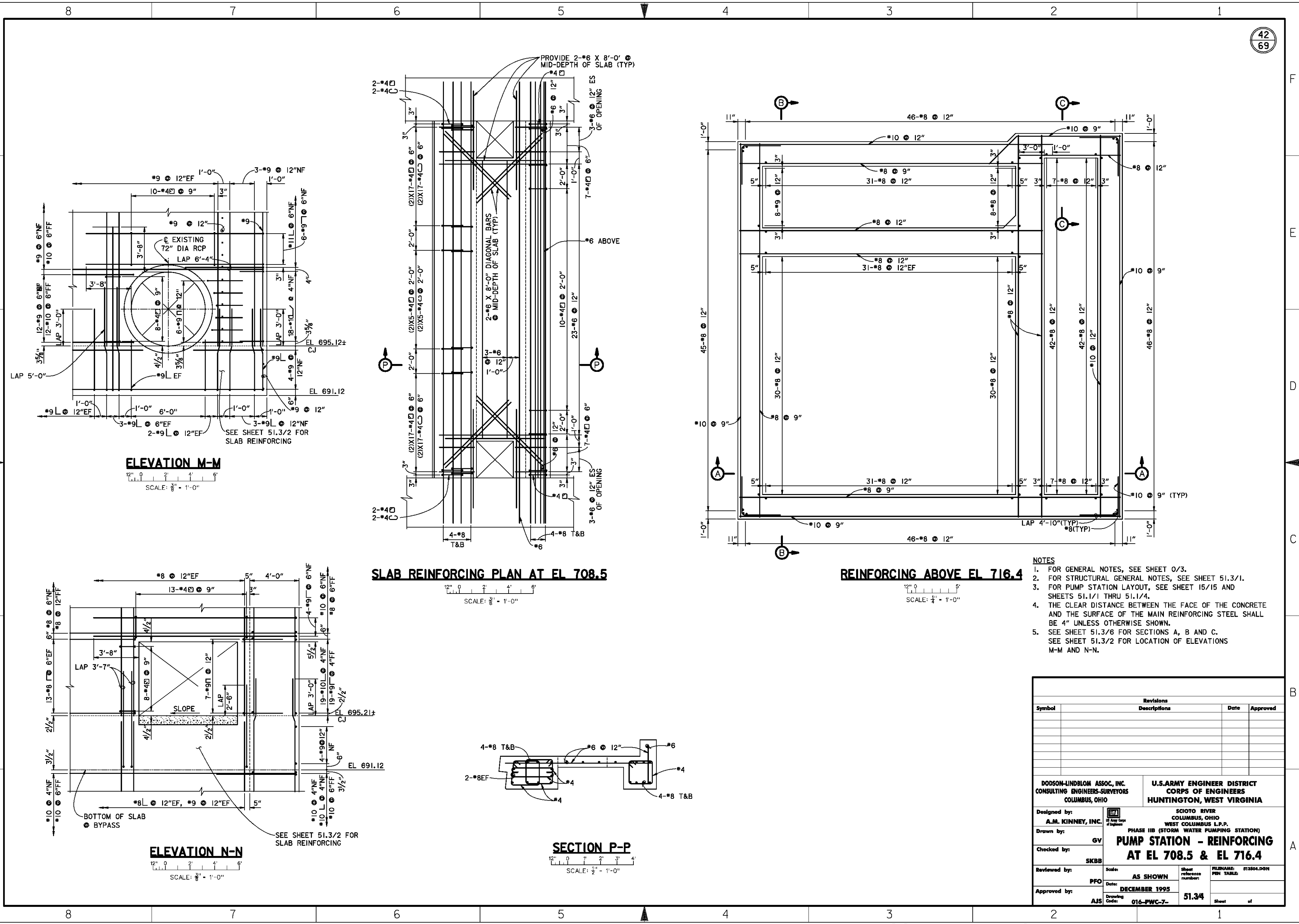
**NOTES**

1. FOR GENERAL NOTES, SEE SHEET 0/3.
2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
3. FOR PUMP STATION LAYOUT, SEE SHEET 15/15 AND SHEETS 51.1/1 THRU 51.1/4.
4. THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 4" UNLESS OTHERWISE SHOWN.
5. SEE SHEET 51.3/6 FOR SECTIONS A, B AND C. SEE SHEET 51.3/4 FOR ELEVATIONS M AND N. SEE SHEET 51.3/6 FOR ELEVATIONS R AND Q.

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: A.M. KINNEY, INC.	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	<b>PUMP STATION-REINFORCING AT EL 701.4 &amp; EL 706.4</b>	
Drawn by: GV			
Checked by: SKBB	Scale: AS SHOWN	Sheet reference number: 51.3/3	FILENAME: PEN TABLE: 513803.DGN
Reviewed by: PFO	Date: DECEMBER 1995		
Approved by: AJS	Drawing Code: 016-PWC-7-		



**SLAB REINFORCING PLAN AT EL 708.5**

**REINFORCING ABOVE EL 716.4**

**ELEVATION M-M**

SCALE: 3/8" = 1'-0"

**ELEVATION N-N**

SCALE: 3/8" = 1'-0"

**SECTION P-P**

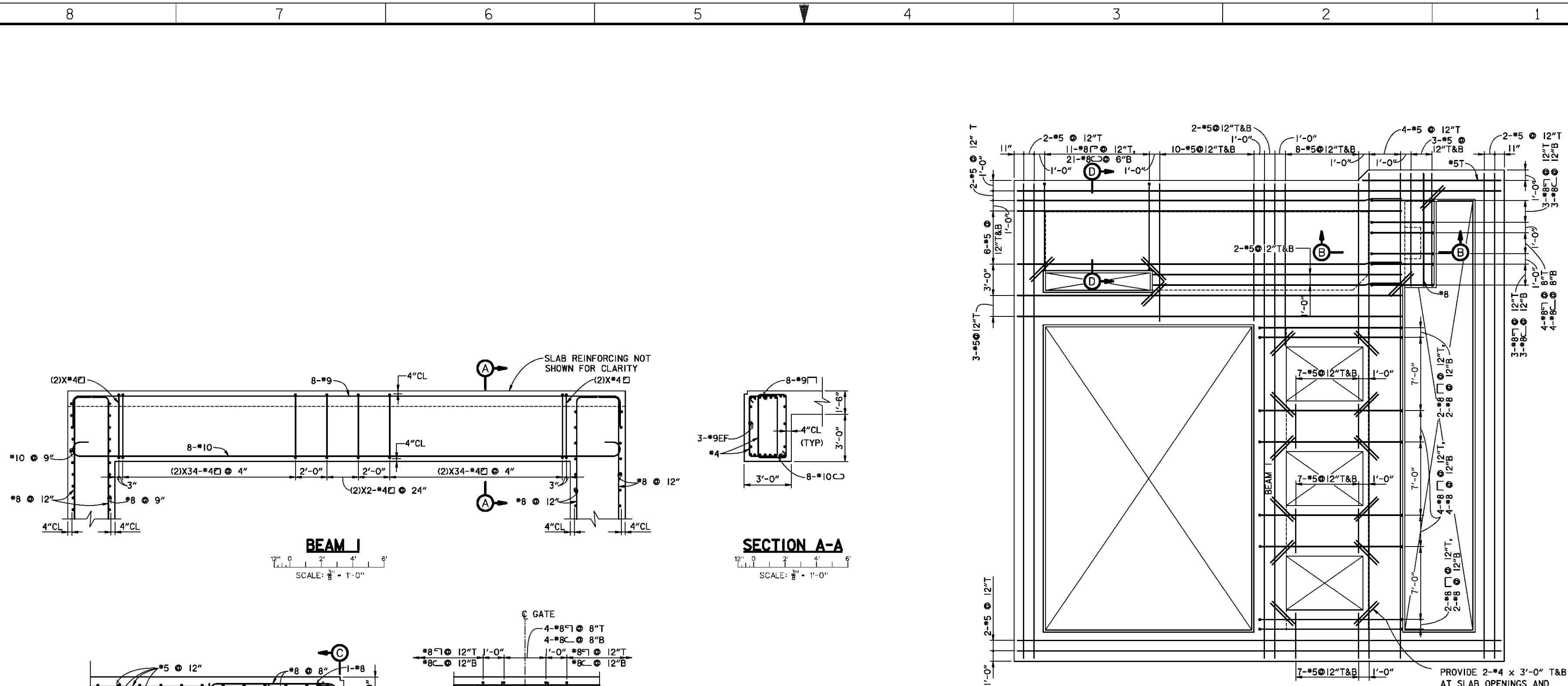
SCALE: 1/2" = 1'-0"

- NOTES**
1. FOR GENERAL NOTES, SEE SHEET 0/3.
  2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
  3. FOR PUMP STATION LAYOUT, SEE SHEET 15/15 AND SHEETS 51.1/1 THRU 51.1/4.
  4. THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 4" UNLESS OTHERWISE SHOWN.
  5. SEE SHEET 51.3/6 FOR SECTIONS A, B AND C. SEE SHEET 51.3/2 FOR LOCATION OF ELEVATIONS M-M AND N-N.

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: <b>A.M. KINNEY, INC.</b>	Drawn by: GV	Checked by: SKBB	Reviewed by: PFO
Approved by: AJS		Scale: <b>AS SHOWN</b>	Date: <b>DECEMBER 1995</b>
Drawing Code: 016-PWC-7-		Sheet reference number: <b>51.3/4</b>	FILENAME: 013304.DGN PEN TABLE

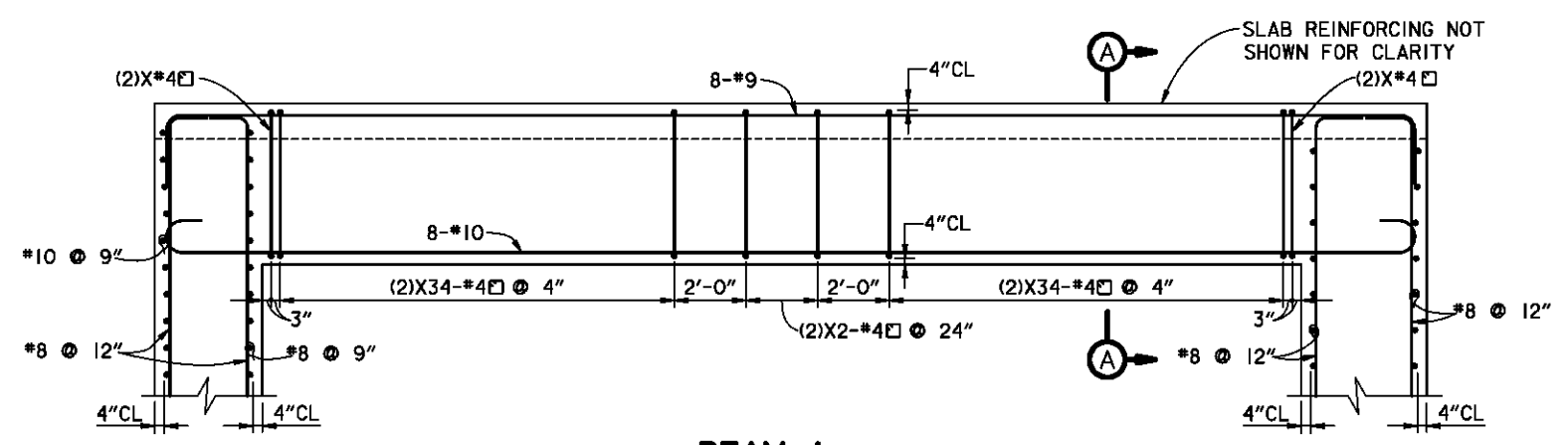


**SLAB REINFORCING PLAN AT EL 725.0**

SCALE: 1/4" = 1'-0"

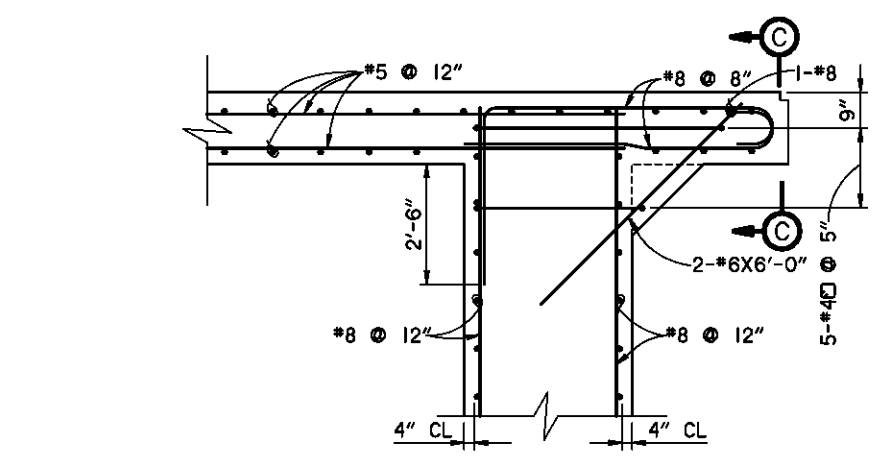
**NOTES**

1. FOR GENERAL NOTES, SEE SHEET 0/3.
2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
3. FOR PUMP STATION LAYOUT, SEE SHEET 15/15 AND SHEETS 51.1/1 THRU 51.1/4.
4. THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 3" UNLESS OTHERWISE SHOWN.



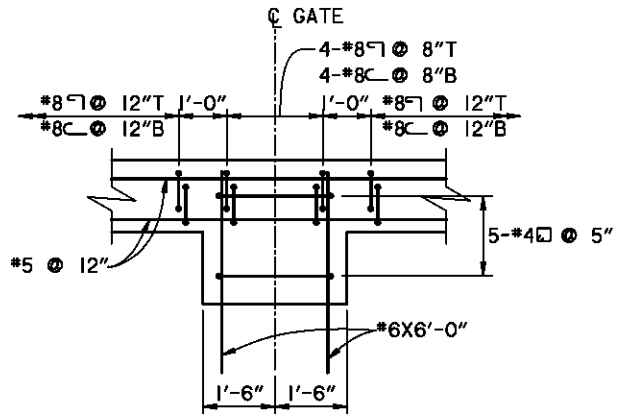
**SECTION A-A**

SCALE: 3/8" = 1'-0"



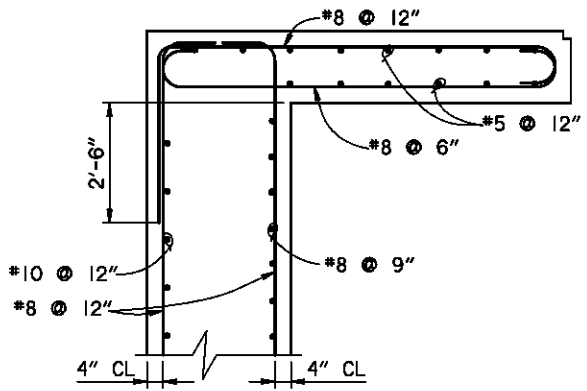
**SECTION B-B**

SCALE: 1/2" = 1'-0"



**SECTION C-C**

SCALE: 1/2" = 1'-0"



**SECTION D-D**

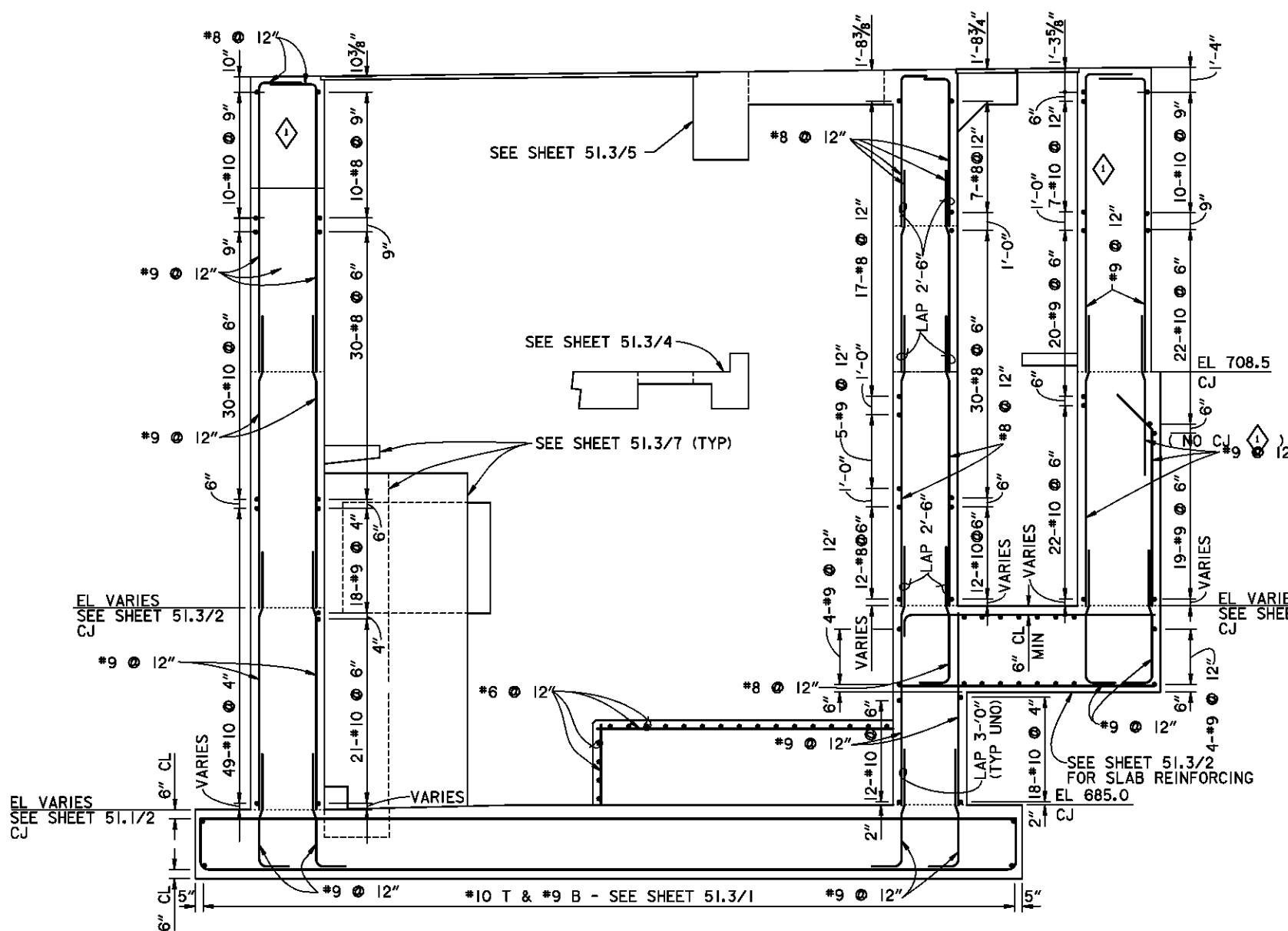
SCALE: 1/2" = 1'-0"

Revisions			
Symbol	Descriptions	Date	Approved

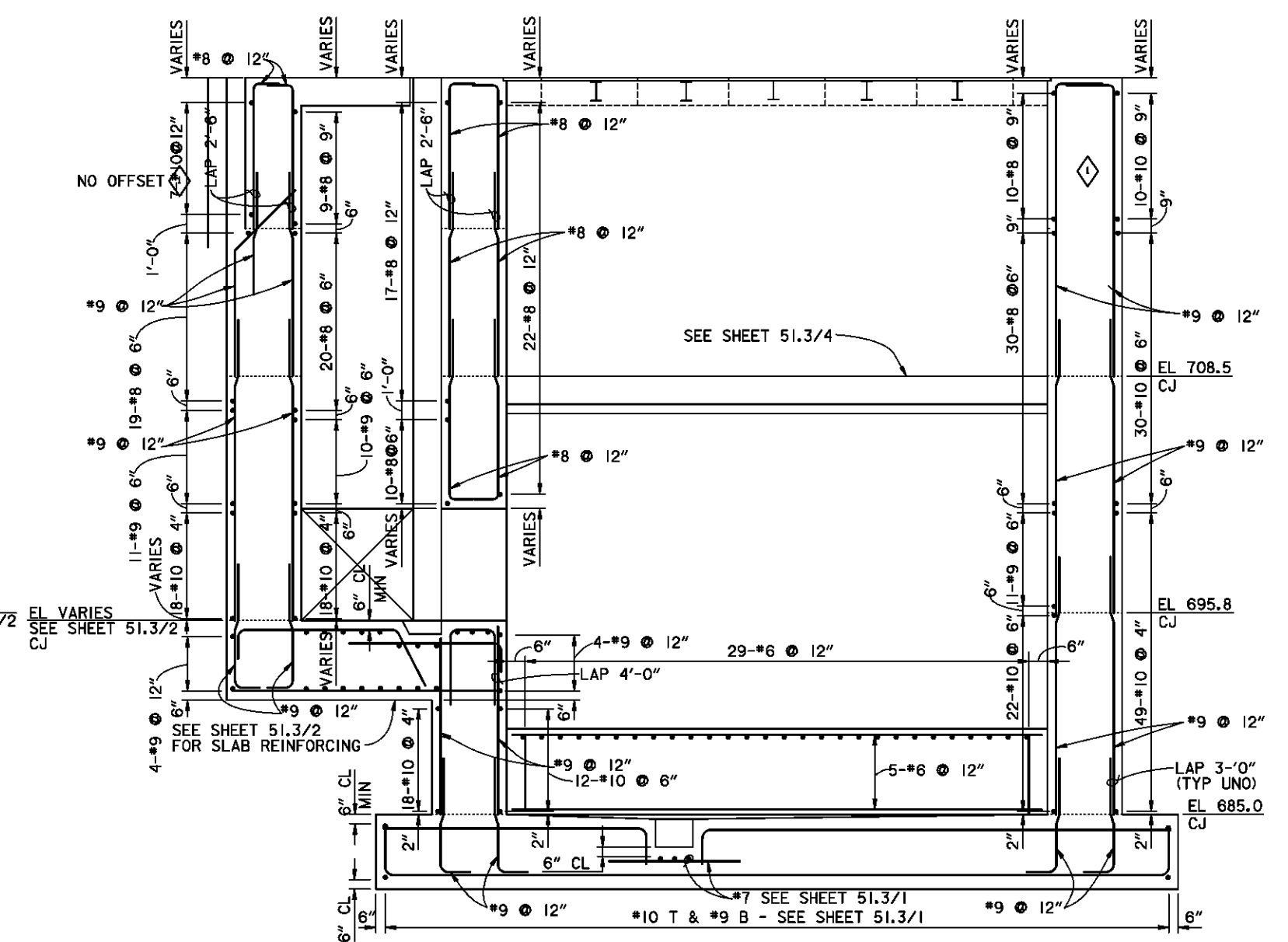
DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: A.M. KINNEY, INC.	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	<b>PUMP STATION-REINFORCING AT EL 725.0</b>	
Drawn by: GV			
Checked by: SKBB	Scale: AS SHOWN	Sheet reference number: 51.3/5	FILENAME: 013305.DGN PEN TABLE
Reviewed by: PFO	Date: DECEMBER 1995	Drawing Code: 016-PWC-7-	
Approved by: AJS	Sheet of		





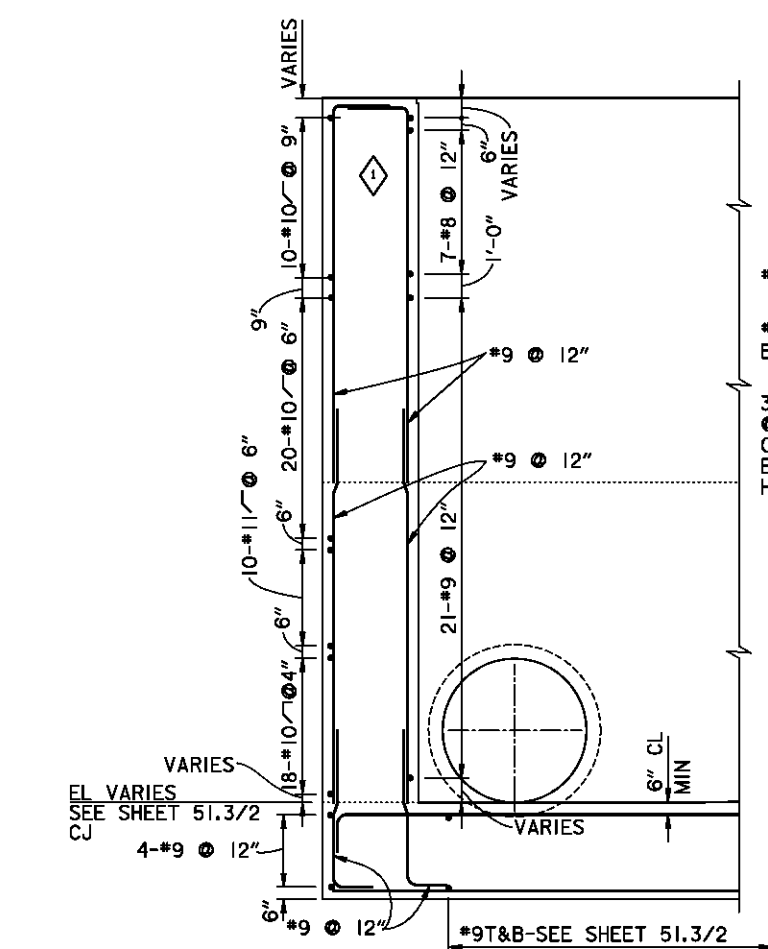
**SECTION A-A**

SCALE: 1/4" = 1'-0"



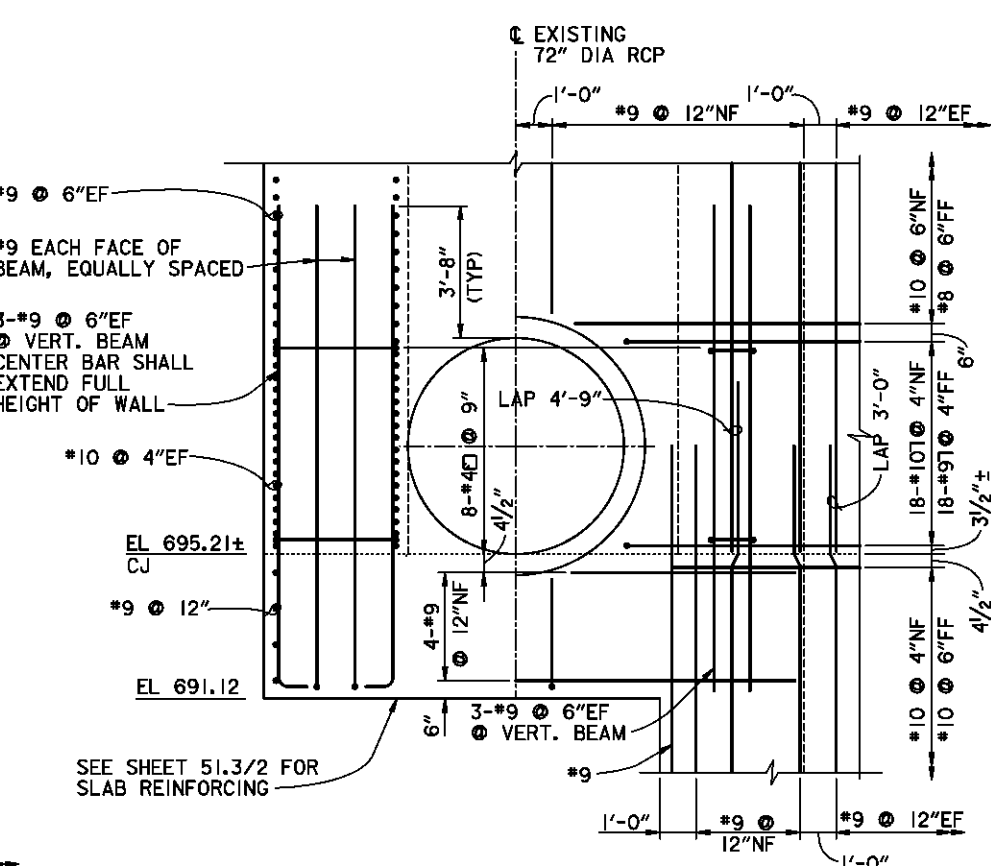
**SECTION B-B**

SCALE: 1/4" = 1'-0"



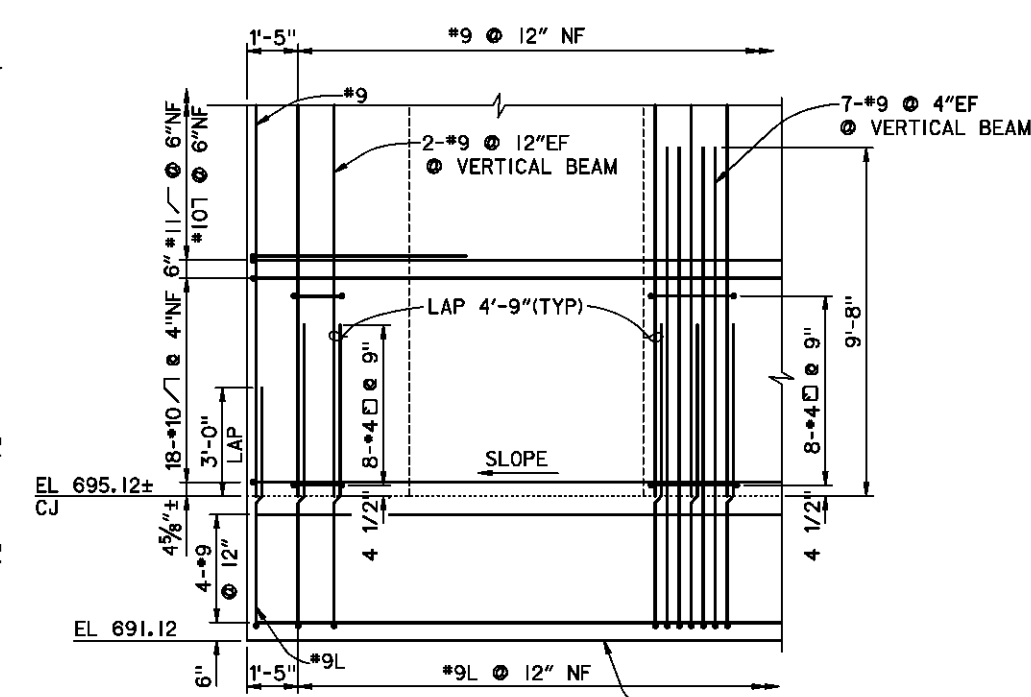
**SECTION C-C**

SCALE: 1/4" = 1'-0"



**ELEVATION R-R**

SCALE: 3/8" = 1'-0"



**ELEVATION Q-Q**

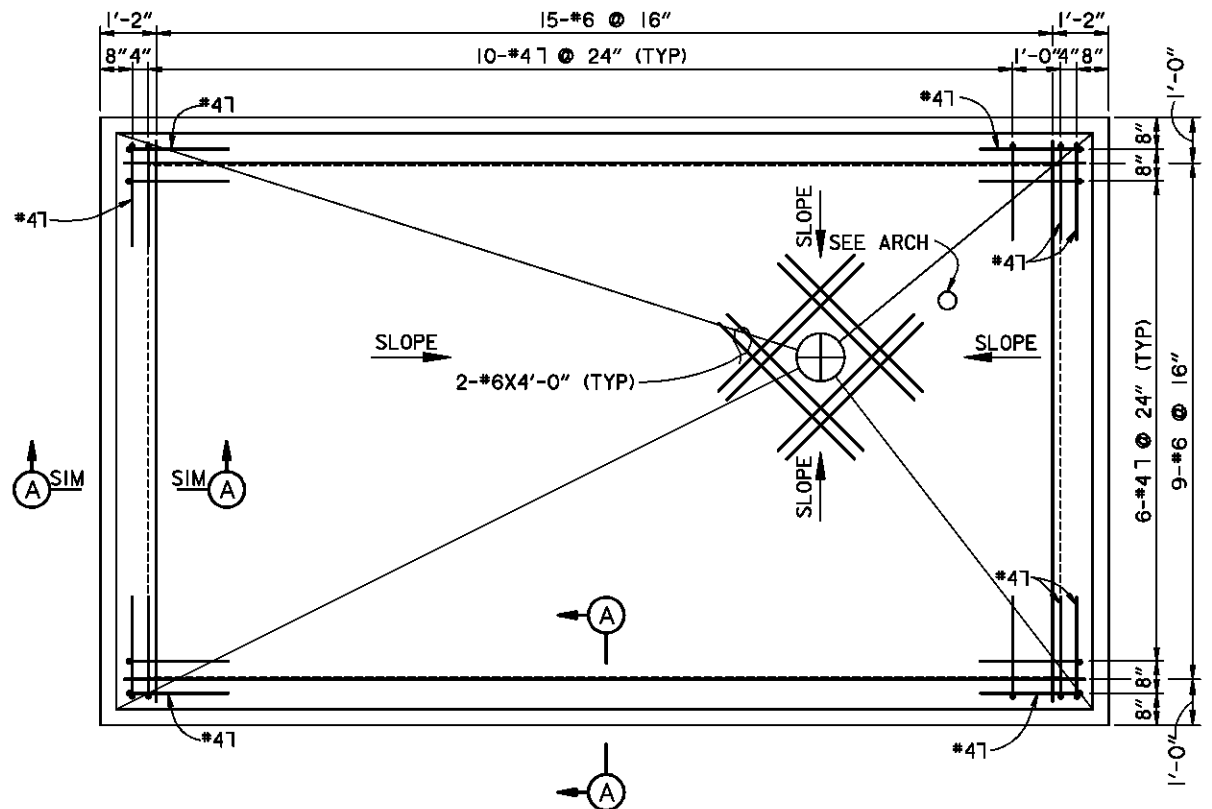
SCALE: 3/8" = 1'-0"

- NOTES**
1. FOR GENERAL NOTES, SEE SHEET 0/3.
  2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
  3. FOR PUMP STATION LAYOUT, SEE SHEET 15/15 AND SHEETS 51.1/1 THRU 51.1/4.
  4. THE CLEAR DISTANCES BETWEEN THE FACE OF THE CONCRETE AND THE SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 4" UNLESS OTHERWISE SHOWN.
  5. SEE SHEET 51.3/2 FOR LOCATION OF SECTION A-A, B-B AND C-C AND ELEVATIONS Q-Q AND R-R.

Revisions			
Symbol	Descriptions	Date	Approved

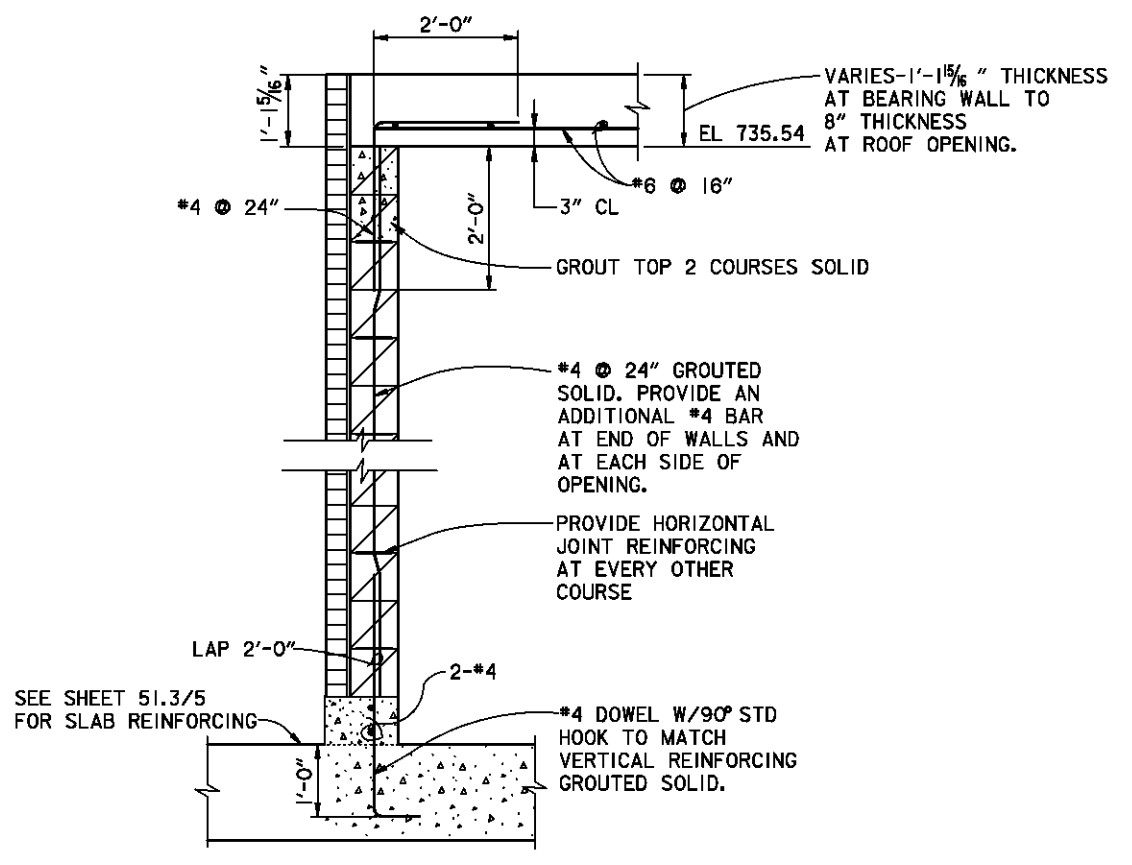
  

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: <b>A. M. KINNEY, INC.</b>	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by: <b>GV</b>	<b>PUMP STATION SECTIONS AND DETAILS</b>		
Checked by: <b>SKBB</b>	Scale: <b>AS SHOWN</b>	Sheet reference number: <b>51.3/6</b>	FILENAME: 013306.DGN PEN TABLE
Reviewed by: <b>PFO</b>	Date: <b>DECEMBER 1995</b>	Drawing Code: <b>016-PWC-7-</b>	
Approved by: <b>AJS</b>	Sheet of		



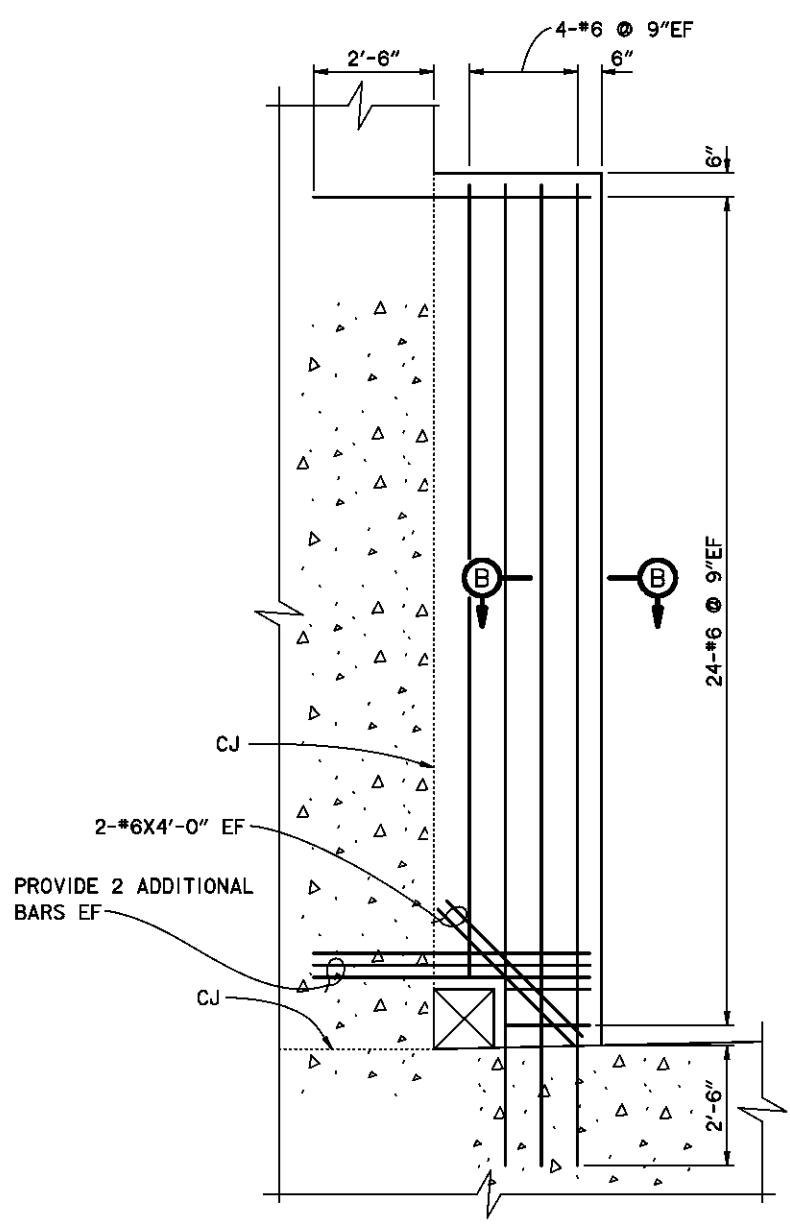
**CONTROL BUILDING-ROOF PLAN**

SCALE: 1/2" = 1'-0"



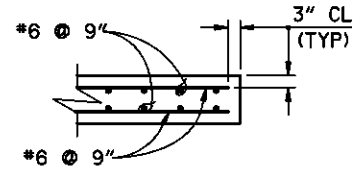
**SECTION A-A**

SCALE: 3/4" = 1'-0"



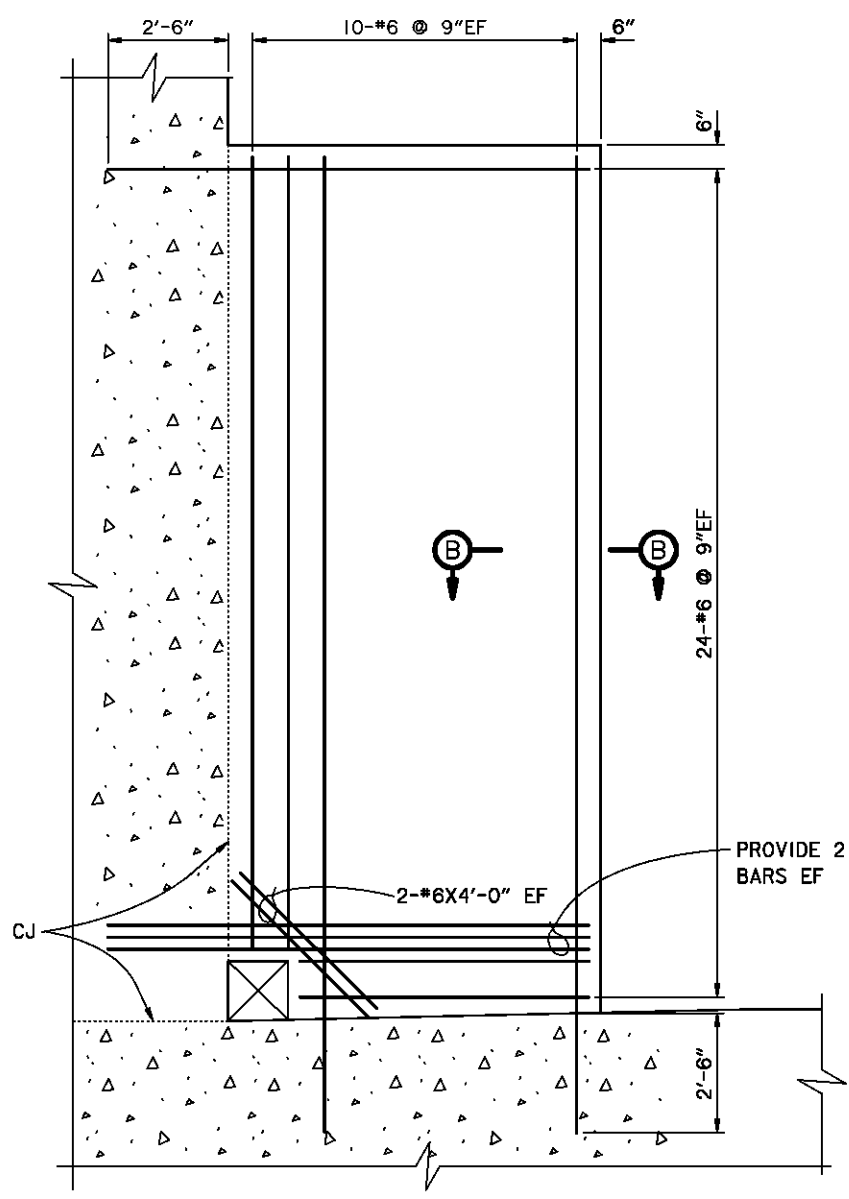
**BAFFLE ELEVATION**

SCALE: 1/2" = 1'-0"



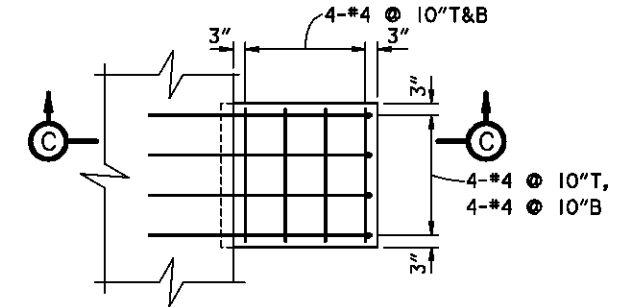
**SECTION B-B**

SCALE: 1/2" = 1'-0"



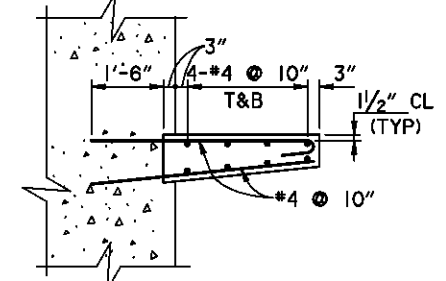
**BAFFLE ELEVATION**

SCALE: 1/2" = 1'-0"



**TYPICAL LADDER PLATFORM PLAN**

SCALE: 1/2" = 1'-0"



**SECTION C-C**

SCALE: 1/2" = 1'-0"

**NOTES**

1. FOR GENERAL NOTES, SEE SHEET 0/3.
2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
3. FOR PUMP STATION LAYOUT, SEE SHEET 15/15 AND SHEETS 51.1/1 THRU 51.1/4.

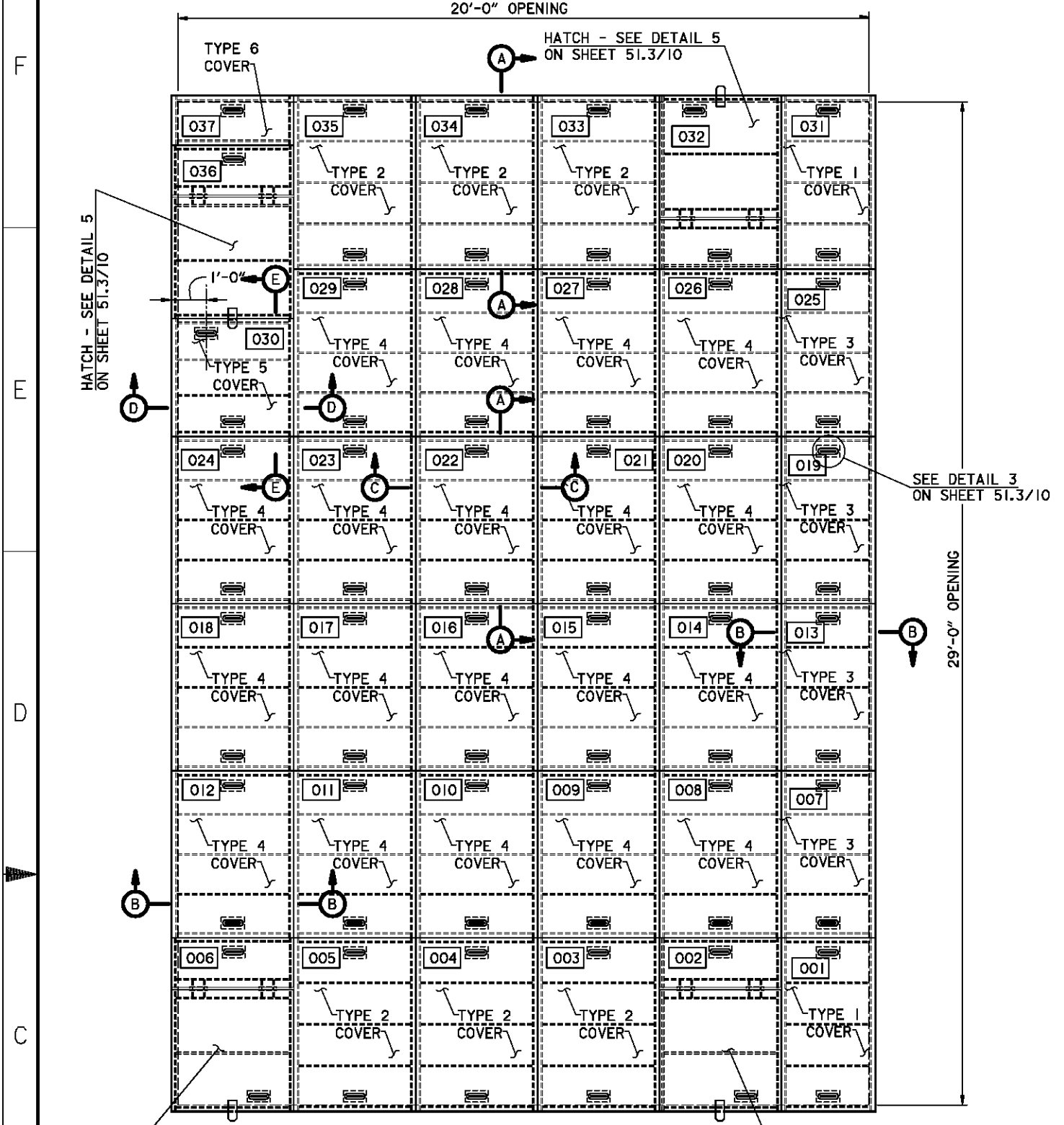
Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: A.M. KINNEY, INC.	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)
Drawn by: GV	<b>PUMP STATION REINFORCING DETAILS</b>
Checked by: SKBB	Scale: AS SHOWN Date: DECEMBER 1995 Drawing Code: 016-PWC-7-
Reviewed by: PFO	Sheet reference number: 51.3/7
Approved by: AJS	FILENAME: 513507.DGN PEN TABLE



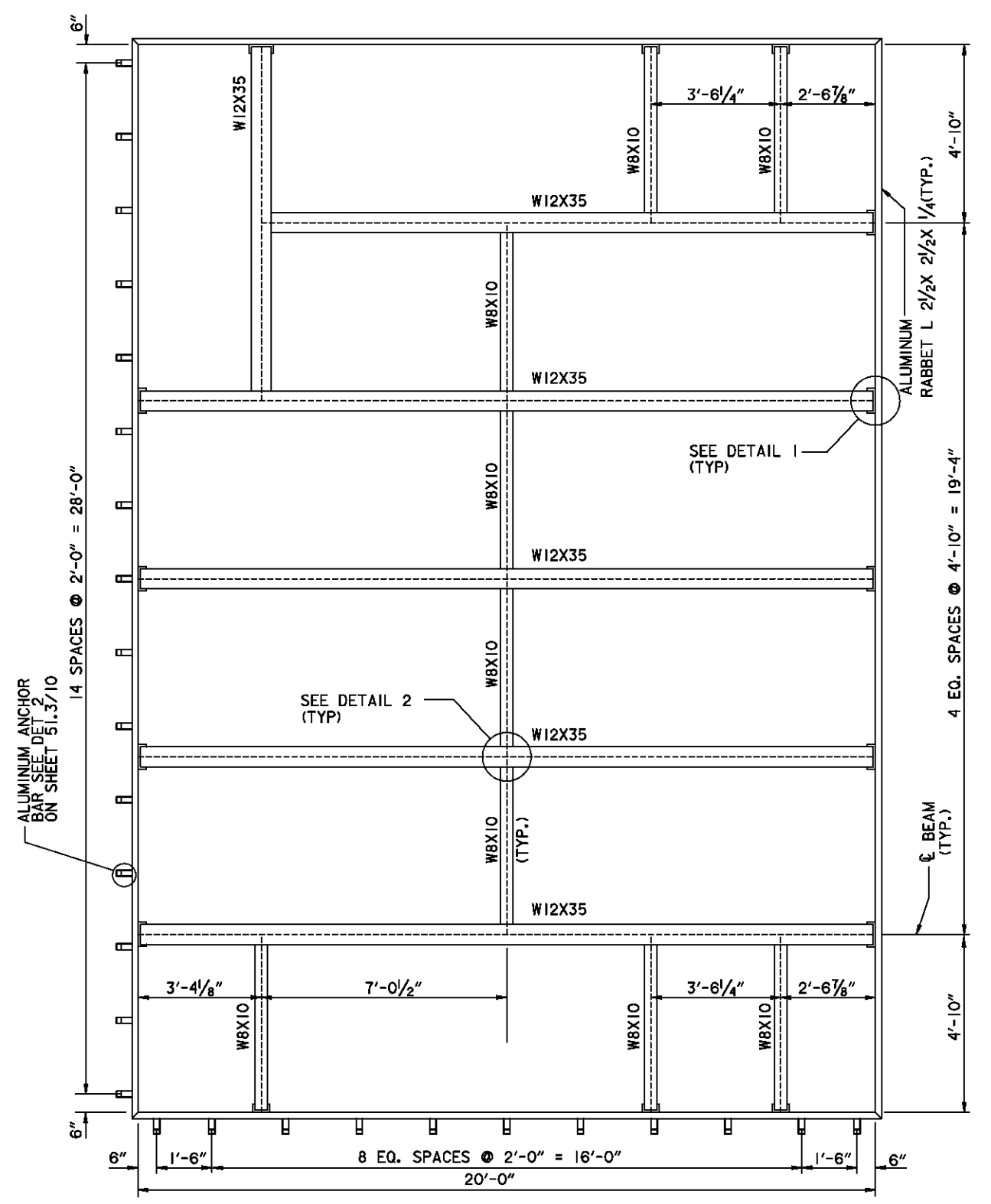
8 7 6 5 4 3 2 1



**COVER PLATES - PLAN**

MK 51.3/9-1 MAKE 1  
SCALE: 1/2" = 1'-0"

1 000 = PLATE DESIGNATION

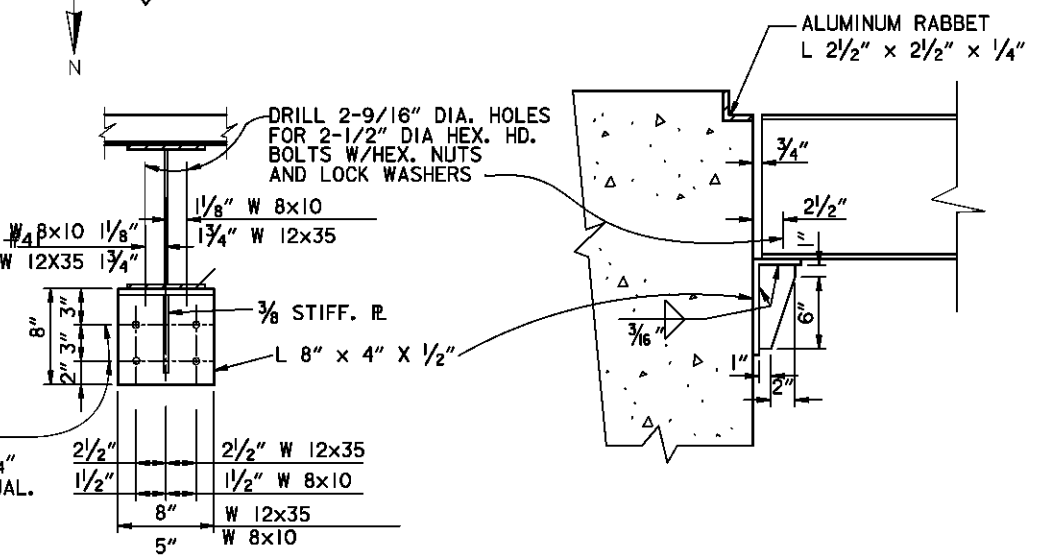


**COVER PLATES - SUPPORT BEAM PLAN**

SCALE: 1/2" = 1'-0"

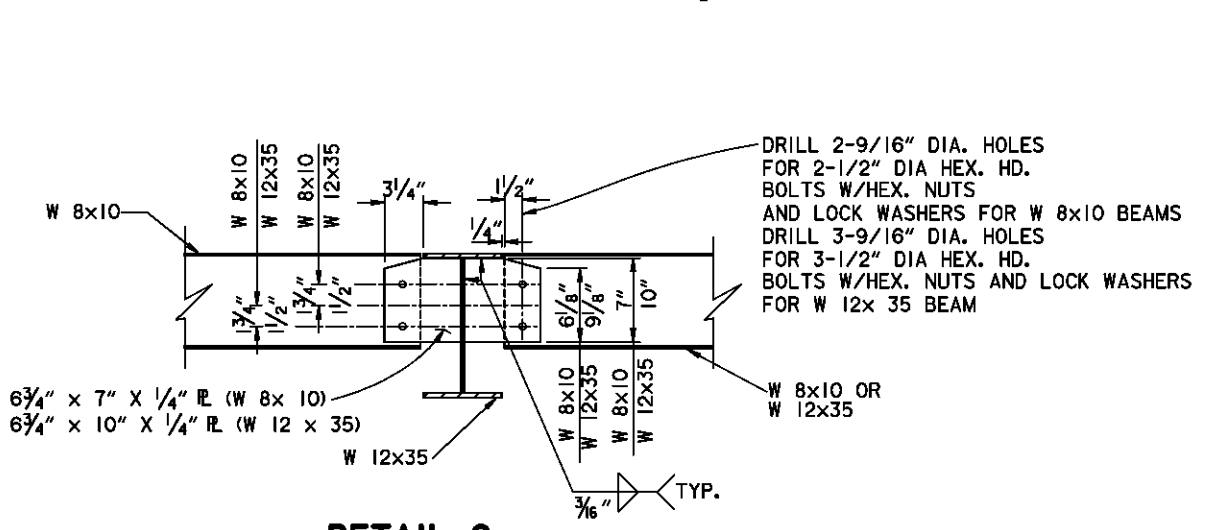
**NOTES**

- FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1
- FOR PUMP STATION LAYOUT, SEE SHEET 15/15 AND SHEETS 51.1/1 THRU 51.1/4
- FOR ALUMINUM COVER PLATE DETAILS SEE SHEET 51.3/10
- ALL MATERIAL ON THIS DRAWING SHALL BE STRUCTURAL STEEL ASTM A36 UNLESS OTHERWISE NOTED.
- ALUMINUM THAT COMES IN CONTACT WITH STEEL AND/OR CONCRETE SHALL RECEIVE A HEAVY COAT OF BITUMINOUS PAINT.



**DETAIL 1**

SCALE: 3/4" = 1'-0"



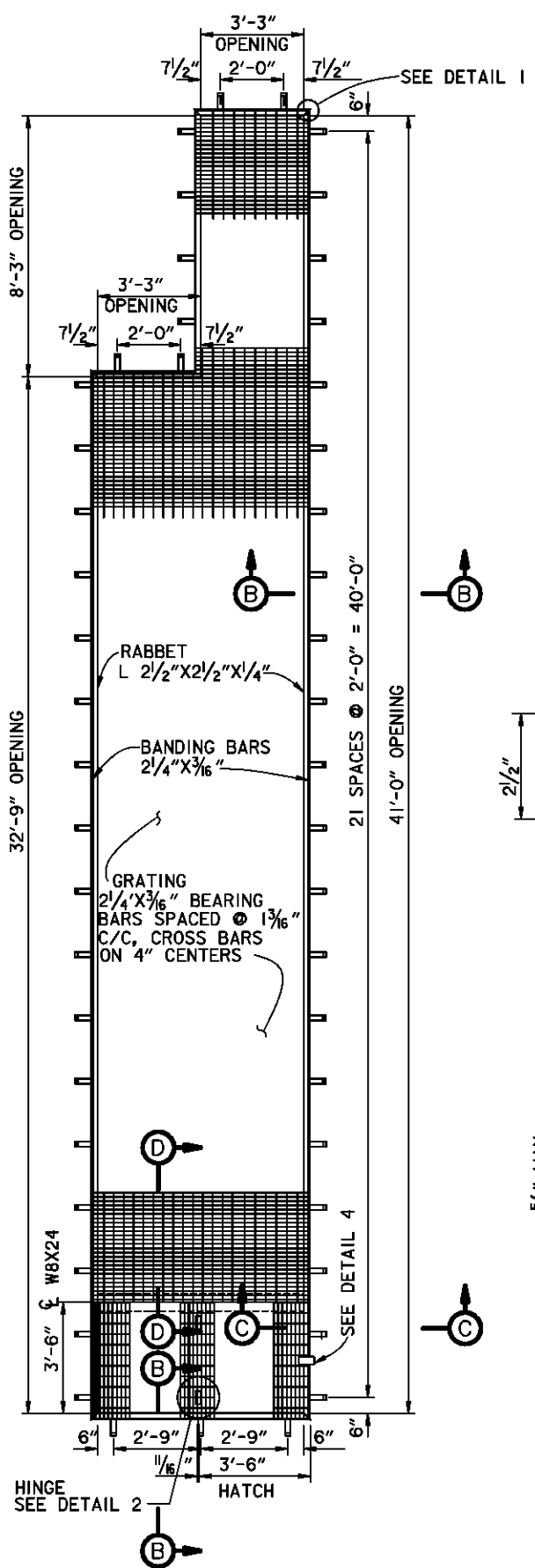
**DETAIL 2**

SCALE: 3/4" = 1'-0"

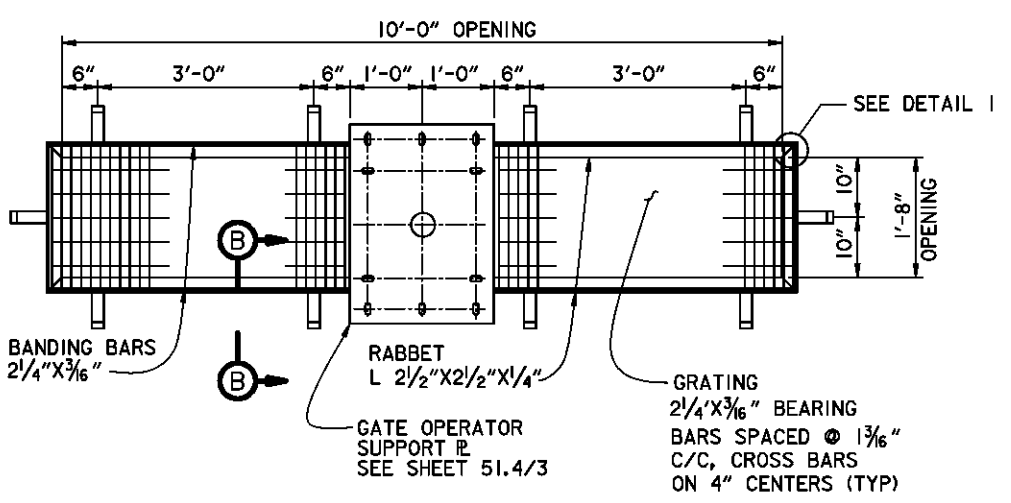
Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2/99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: <b>A.M. KINNY, INC.</b>	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)		
<b>PUMP STATION HATCH COVER PLAN</b>			
Drawn by: RLG	Scale: <b>AS SHOWN</b>	Sheet reference number: <b>51.39</b>	FILENAME: 513509.DGN- PEN TABLE
Checked by: SKBB	Date: <b>DECEMBER 1995</b>	Drawing Code: <b>016-PWC-7-</b>	
Reviewed by: PFO	Approved by: AJS		

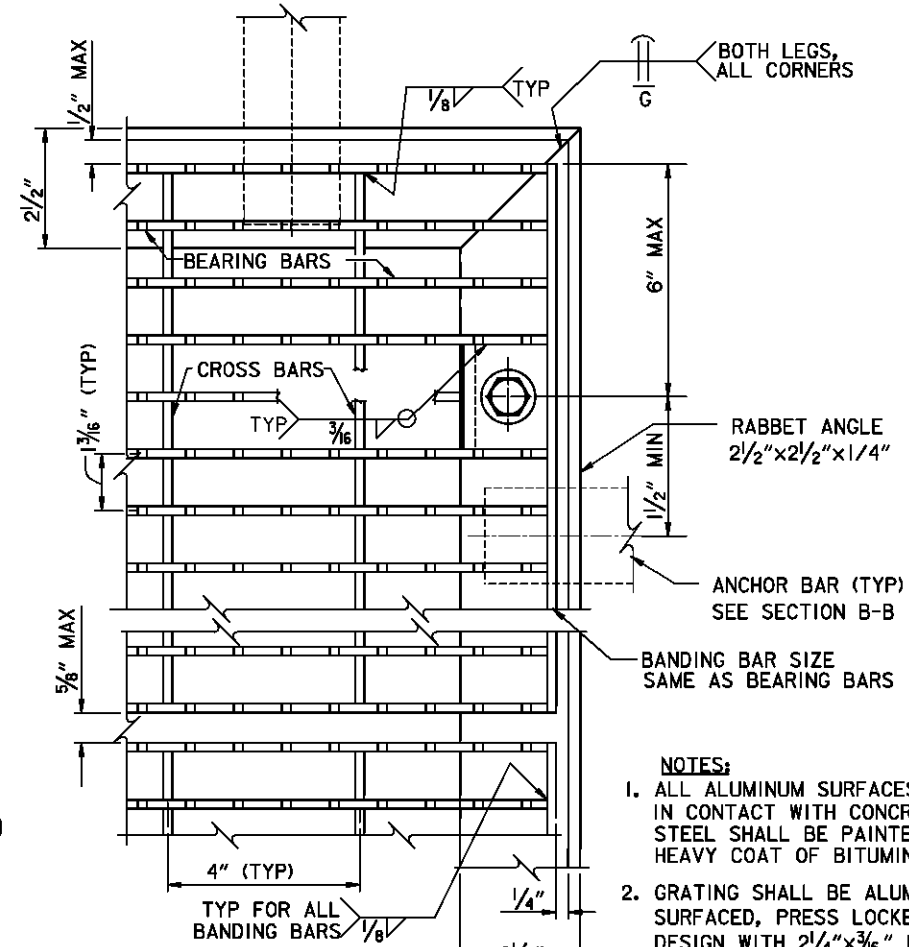




**GRATING PLAN**  
MK 51.3/10-2 MAKE 1  
SCALE: 3/8" = 1'-0"



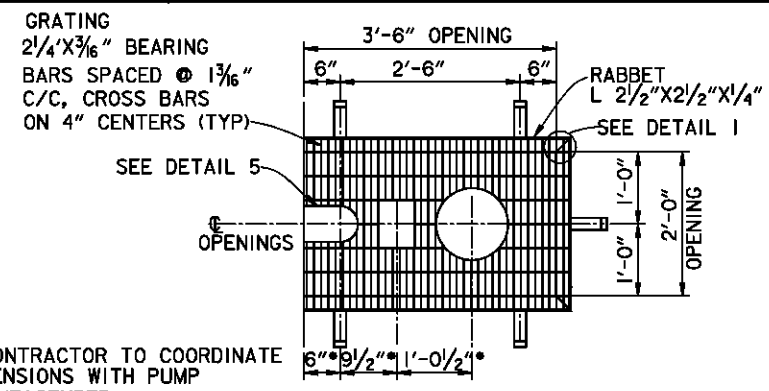
**GRATING PLAN**  
MK 51.3/10-1 MAKE 1  
SCALE: 3/8" = 1'-0"



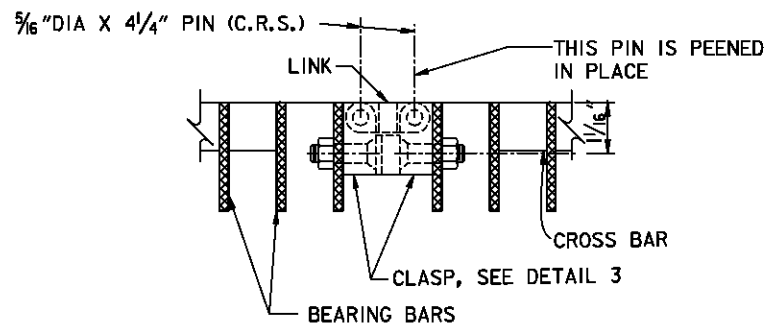
**DETAIL 1**

SCALE: 6" = 1'-0"

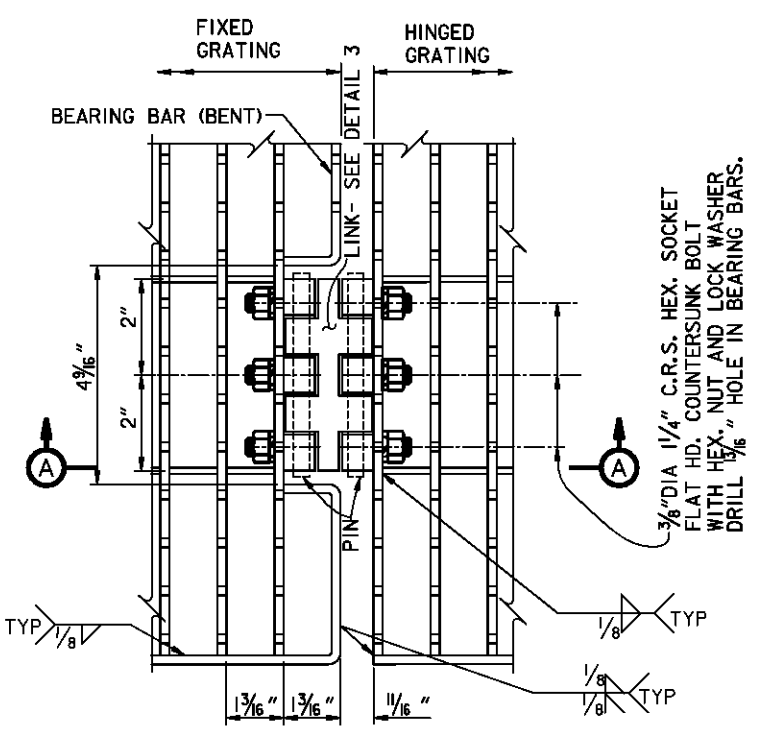
- NOTES:**
1. ALL ALUMINUM SURFACES WHICH COME IN CONTACT WITH CONCRETE AND/OR STEEL SHALL BE PAINTED WITH A HEAVY COAT OF BITUMINUS PAINT.
  2. GRATING SHALL BE ALUMINUM, SERRATED SURFACED, PRESS LOCKED RECTANGULAR DESIGN WITH 2 1/4" X 3/8" BEARING BAR SPACED AT 1 3/8" C/C AND 1" CROSS BARS SPACED AT 4" C/C. BANDING BARS SHALL BE WELDED.
  3. PROVIDE A TOTAL OF 4 FASTENERS FOR PANEL WIDTHS OF 2'-0" OR LESS AND A TOTAL OF 6 FASTENERS FOR PANEL WIDTHS GREATER THAN 2'-0".



**GRATING PLAN**  
MK 51.3/10-3 MAKE 1  
SCALE: 3/8" = 1'-0"

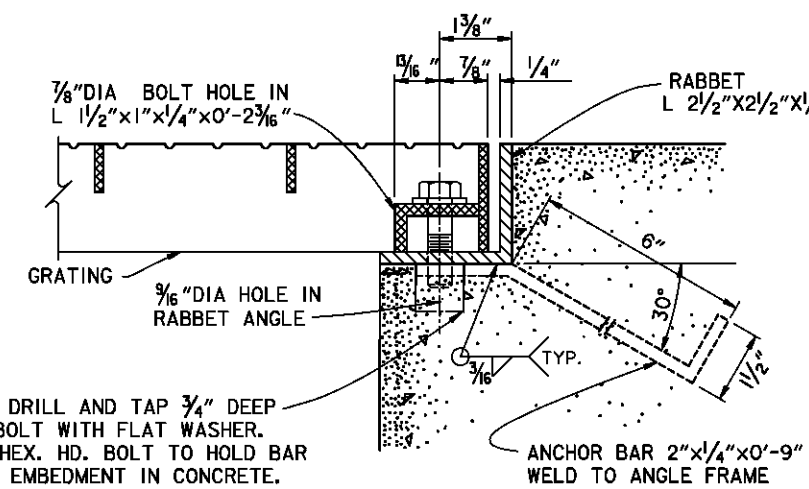


**SECTION A-A**



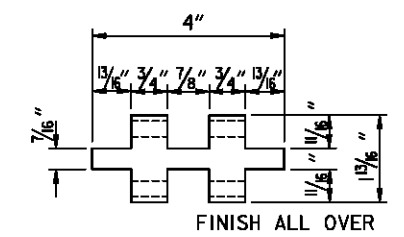
**DETAIL 2**  
**HINGE ASSEMBLY AND GRATING DETAILS**

SCALE: 6" = 1'-0"

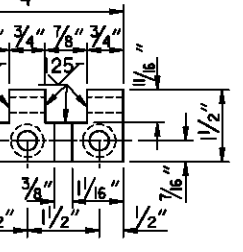


**SECTION B-B**

SCALE: 6" = 1'-0"



**LINK**



**CLASP**

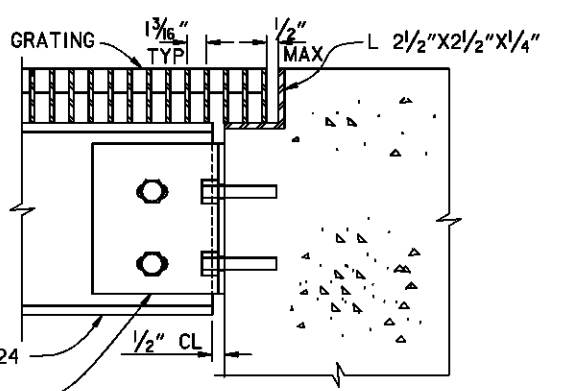
**HINGE DETAIL 3**

SCALE: 6" = 1'-0"

**NOTE:**  
HINGE DETAILS MAY BE FABRICATED FROM ALUM. BARS 6061-T6 OR FROM CAST ALUM. ALCOA 195-76 OR EQUAL.

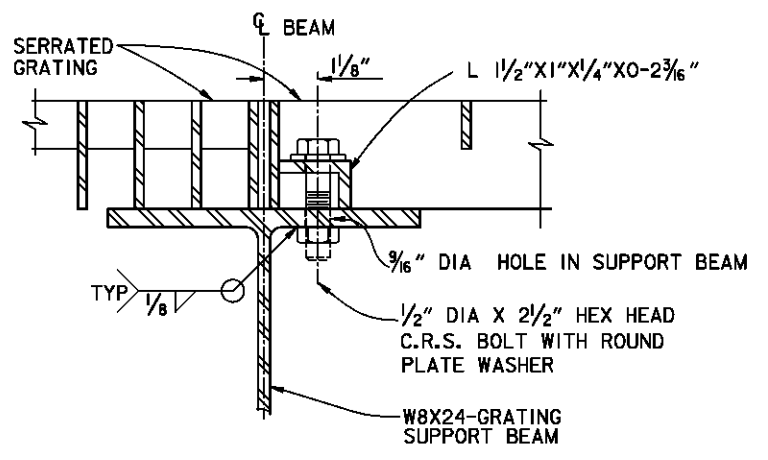
**NOTES**

1. FOR GENERAL NOTES, SEE SHEET 0/3.
2. FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
3. FOR PUMP STATION LAYOUT, SEE SHEET 15/15 AND SHEETS 51.1/1 THRU 51.1/4.
4. ALL MATERIAL ON THIS DRAWING SHALL BE ALUMINUM 6061-T6 UNLESS OTHERWISE NOTED.
5. C.R.S. INDICATES 300 SERIES STAINLESS STEEL.
6. GRATING SUPPORT BEAM SHALL BE ASTM A36 STEEL.
7. ALL NUTS AND BOLTS SHALL BE ASTM A325 STEEL UNLESS OTHERWISE NOTED.



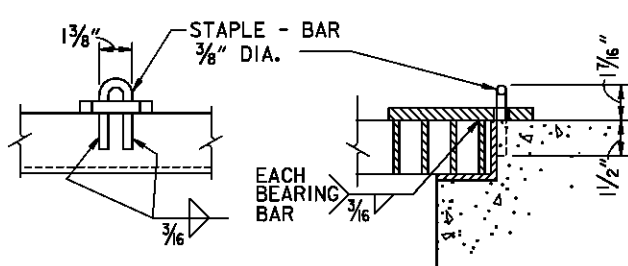
**SECTION C-C**

SCALE: 3" = 1'-0"



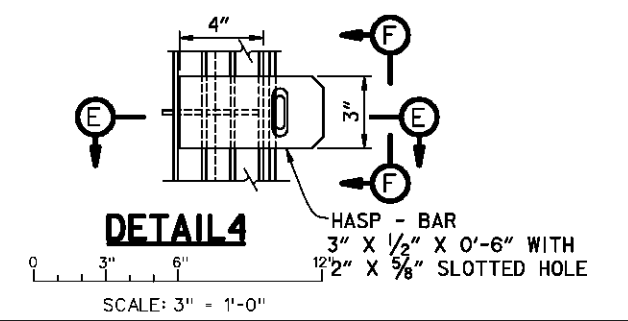
**SECTION D-D**

SCALE: 6" = 1'-0"



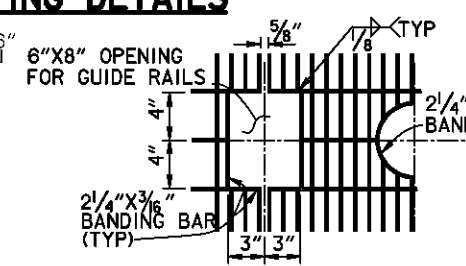
**SECTION F-F**

**SECTION E-E**



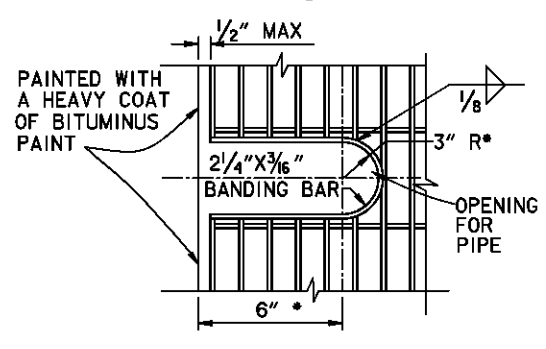
**DETAIL 4**

SCALE: 3" = 1'-0"



**DETAIL 6**

SCALE: 1 1/2" = 1'-0"



**DETAILS 5**

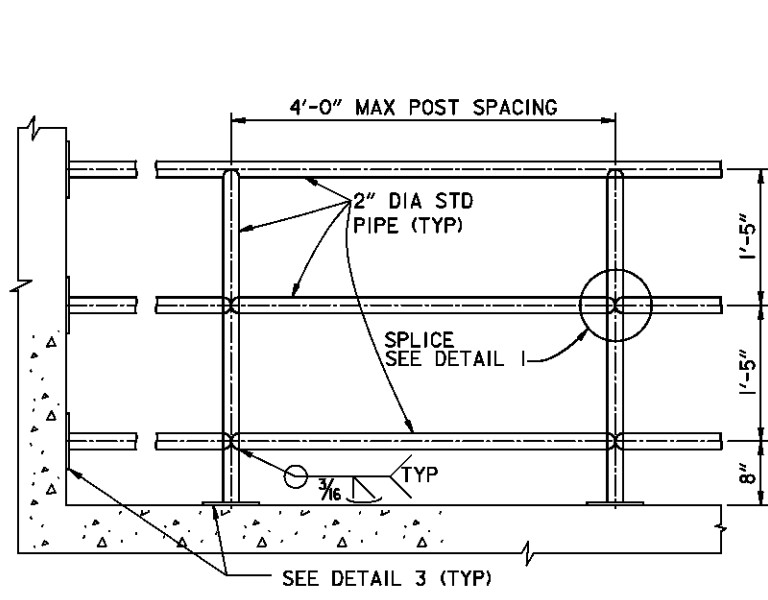
SCALE: 3" = 1'-0"

CLIP L'S 3X3X1/4 W/2-1/2" DIA BOLTS THRU LONG SLOTTED HOLES. ATTACH TO CONCRETE WITH 4-1/2" DIA SS KWIK BOLT II ANCHORS W/3/2" EMBED OR EQUAL

Revisions			
Symbol	Descriptions	Date	Approved

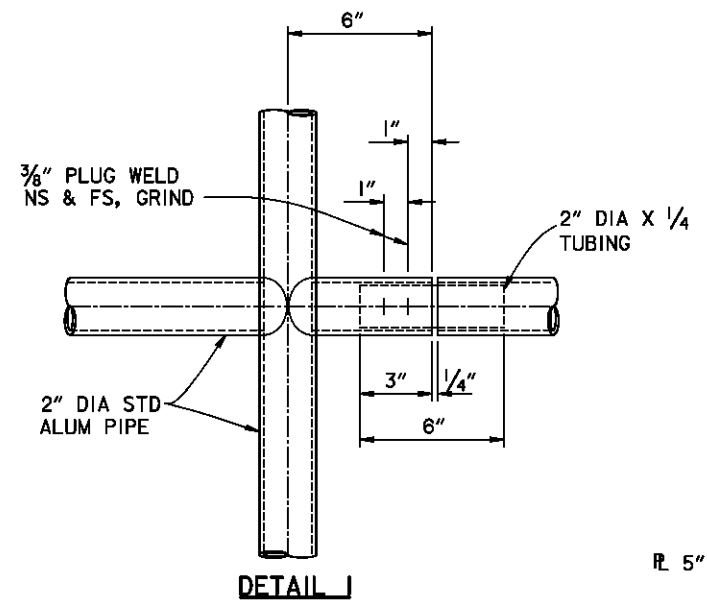
  

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: <b>A.M. KINNEY, INC.</b>	Checked by: <b>GV</b>	Reviewed by: <b>PFO</b>	Approved by: <b>AJS</b>
SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)		<b>PUMP STATION GRATING DETAILS</b>	
Scale: <b>AS SHOWN</b>	Sheet reference number: <b>DECEMBER 1995</b>	FILENAME: <b>51351.DGN</b>	PIN TABLE
Drawing Code: <b>016-PWC-7-</b>	Date: <b>51.3/11</b>	Sheet	of

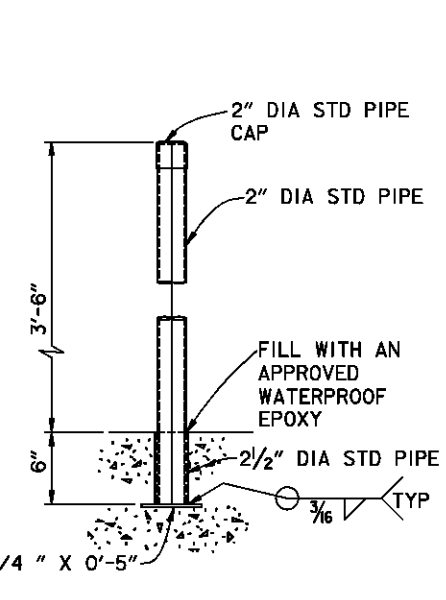


**ELEVATION**  
SCALE: 1" = 1'-0"

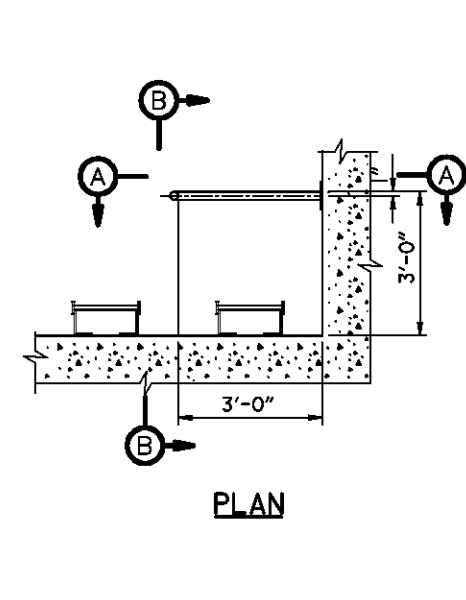
**TRASH RACK PLATFORM TYPICAL RAILING**  
MK 51.3/12-1 MAKE 2



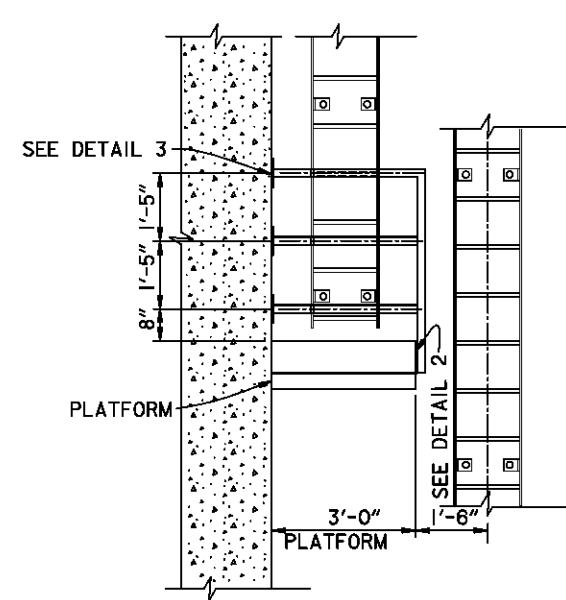
**DETAIL 1**  
SCALE: 3" = 1'-0"



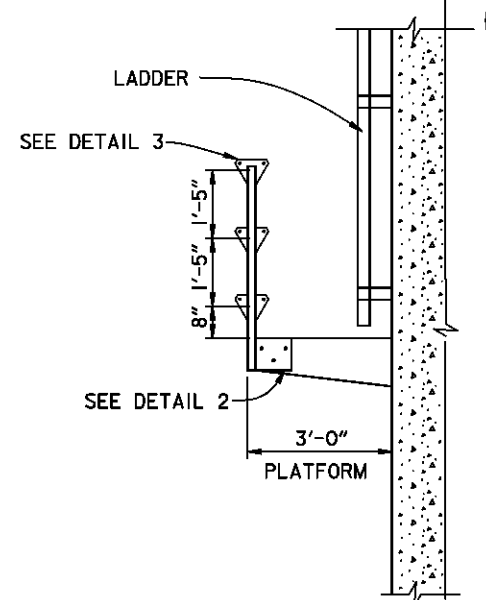
**HANDHOLD**  
MK 51.3/12-5 MAKE 10  
SCALE: 1/2" = 1'-0"



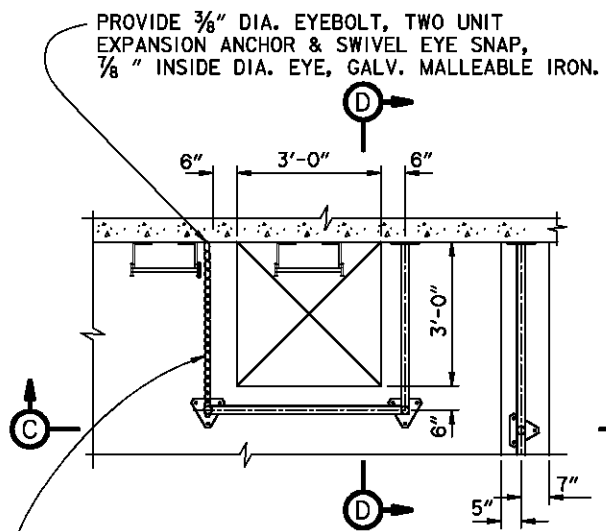
**PLAN**



**SECTION A-A**

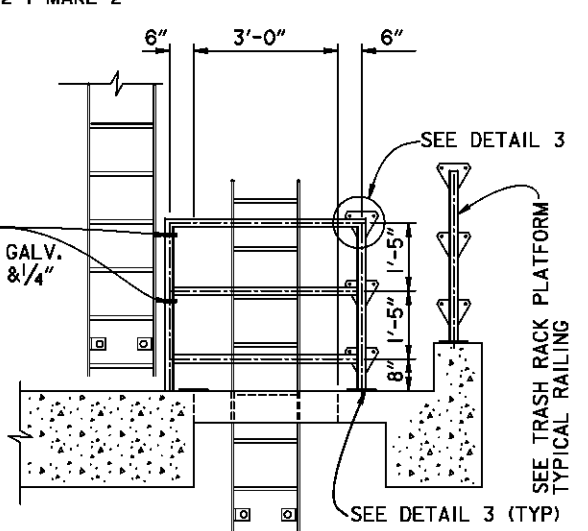


**SECTION B-B**

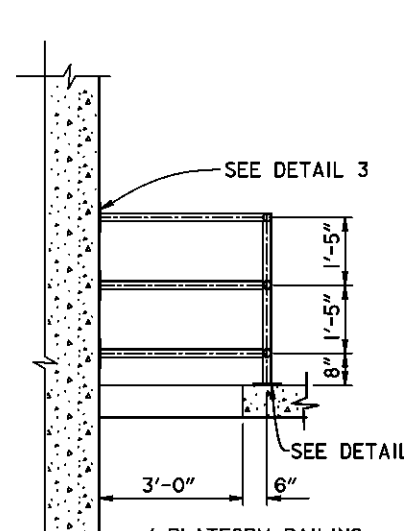


**PLAN**

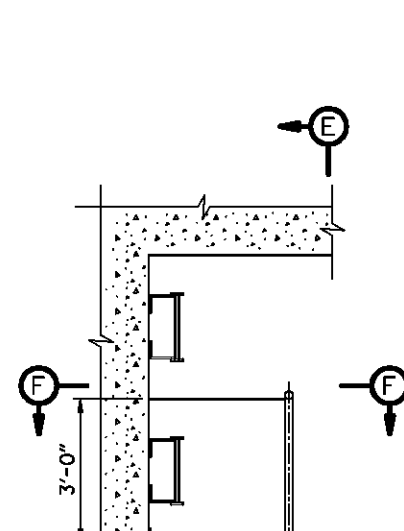
**TRASH RACK PLATFORM**  
MK 51.3/12-3 MAKE 2



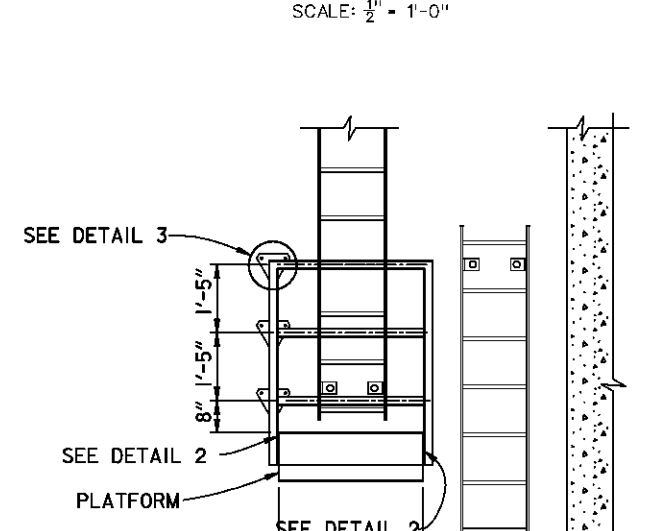
**SECTION C-C**



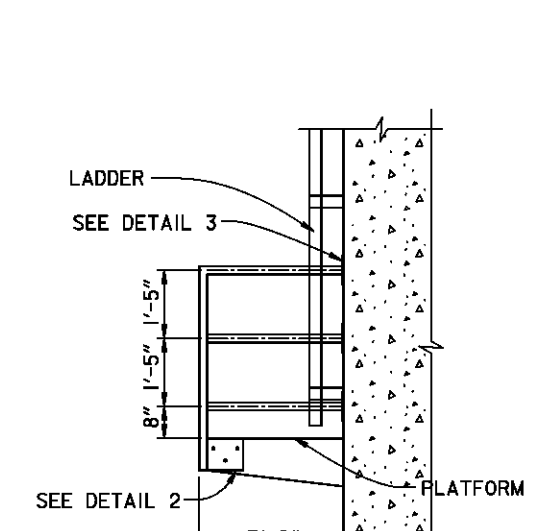
**SECTION D-D**



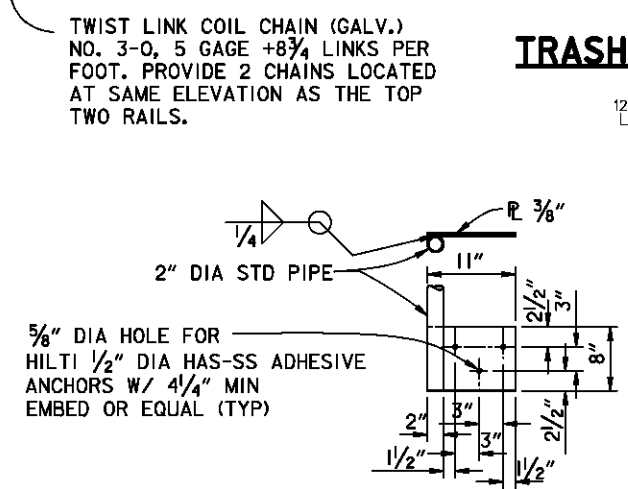
**PLAN**



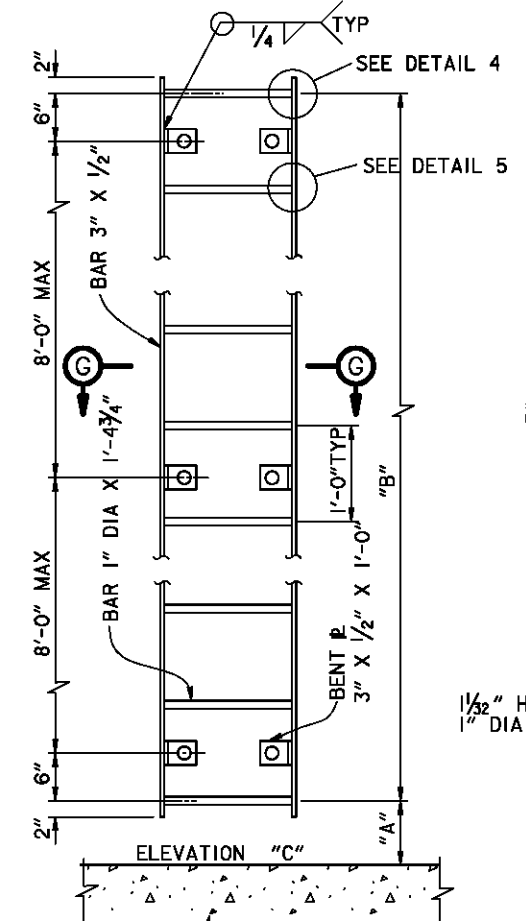
**SECTION E-E**  
**LADDER PLATFORM**  
MK 51.3/12-2 MAKE 1



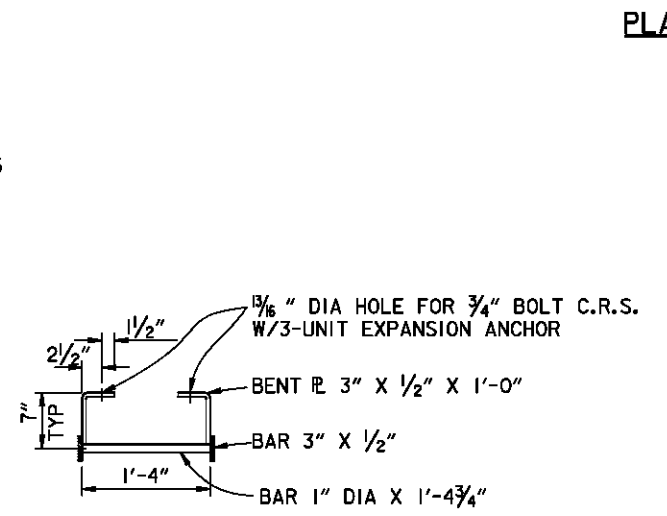
**SECTION F-F**



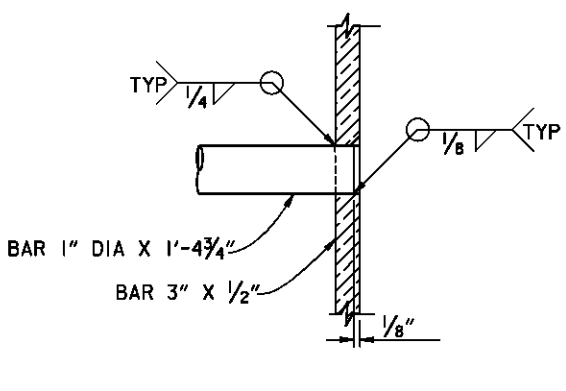
**DETAIL 2**  
SCALE: 1" = 1'-0"



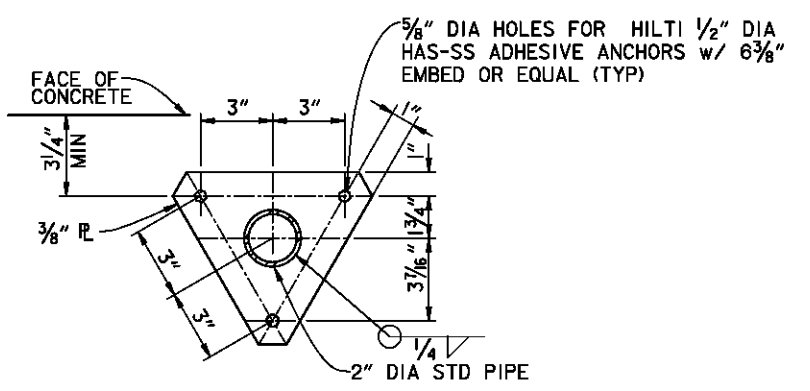
**TYPICAL LADDER DETAIL**  
SCALE: 1" = 1'-0"



**SECTION G-G**  
SCALE: 1" = 1'-0"



**DETAIL 5**  
SCALE: 6" = 1'-0"



**WALL AND FLOOR FLANGE**

**DETAIL 3**  
SCALE: 3" = 1'-0"

**LADDER DIMENSIONS & ELEVATIONS**

MK NO.'S	QTY	"A"	"B"	EL "C"
51.3/12-1	2	6"	15'-0"	708.50
51.3/12-2	2	10 3/4"	22'-0"	689.60
51.3/12-3	2	6"	19'-0"	704.50
51.3/12-4	2	6 1/2"±	23'-0"	684.95±
51.3/12-5	1	6"	14'-0"	709.50
51.3/12-6	1	9 3/8"±	17'-0"	695.72±

**NOTES**

- FOR GENERAL NOTES, SEE SHEET 0/3.
- FOR STRUCTURAL GENERAL NOTES, SEE SHEET 51.3/1.
- FOR PUMP STATION LAYOUT, SEE SHEET 15/15 AND SHEETS 51.1/1 THRU 51.1/4.
- ALL MATERIAL ON THIS DRAWING SHALL BE ALUMINUM 6061-T6 UNLESS OTHERWISE NOTED.
- ALL POSTS AND RAILINGS SHALL BE 2" DIA STD ALUM PIPE.

Symbol	Revisions Descriptions	Date	Approved

**DODSON-LINDBLM ASSOC., INC.**  
 CONSULTING ENGINEERS-SURVEYORS  
 COLUMBUS, OHIO

**U.S. ARMY ENGINEER DISTRICT**  
 CORPS OF ENGINEERS  
 HUNTINGTON, WEST VIRGINIA

Designed by: **A.M. KINNEY, INC.**  
 Drawn by: **AJS**  
 Checked by: **SKBB**  
 Reviewed by: **PFO**  
 Approved by: **AJS**

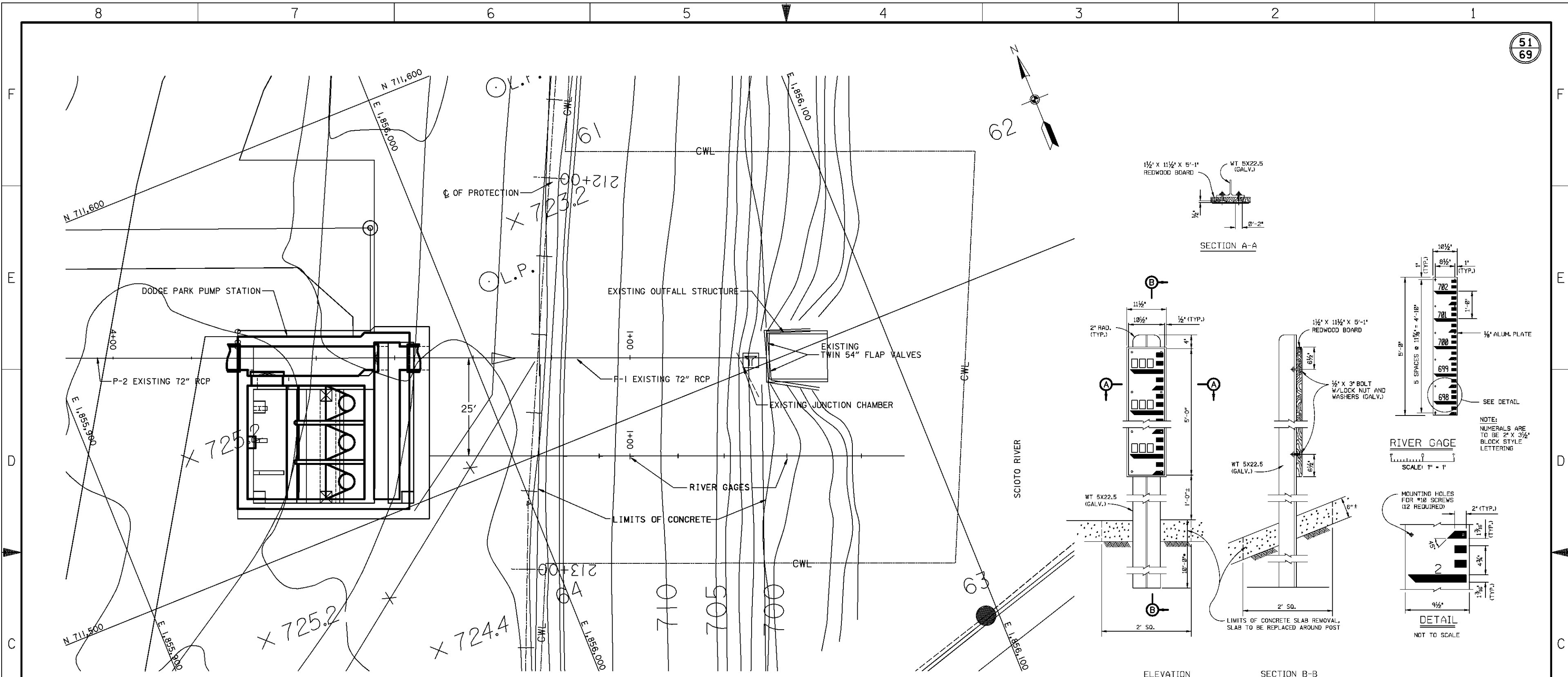
SCIO TO RIVER  
 COLUMBUS, OHIO  
 WEST COLUMBUS L.P.P.  
 PHASE IIB (STORM WATER PUMPING STATION)

**PUMP STATION**  
**LADDER & RAILING DETAILS**

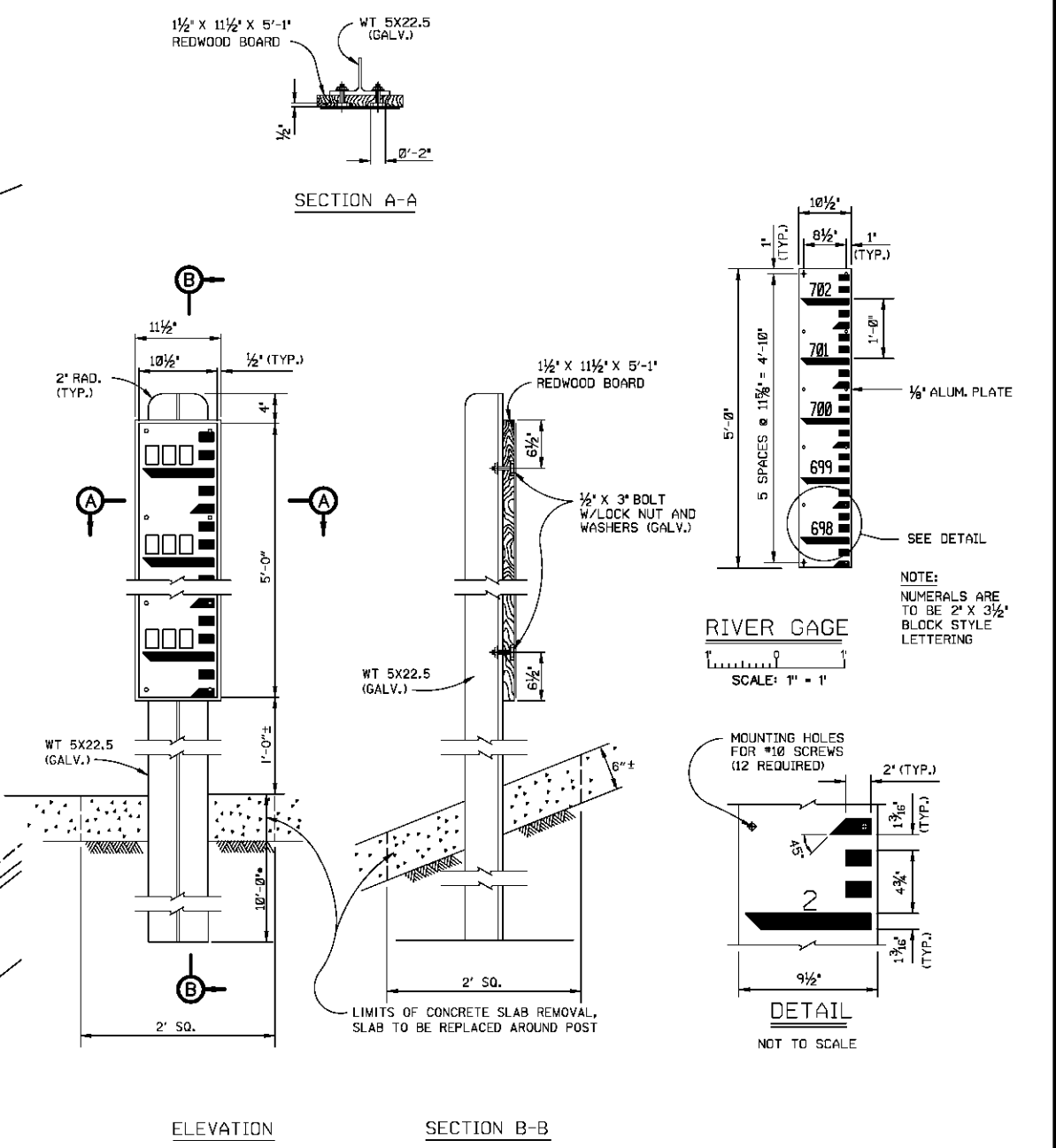
Scale: **AS SHOWN**  
 Date: **DECEMBER 1995**  
 Drawing Code: **016-PWC-7-**

Sheet reference number: **51.3/12**  
 FILENAME: 51312.DGN  
 PEN TABLE

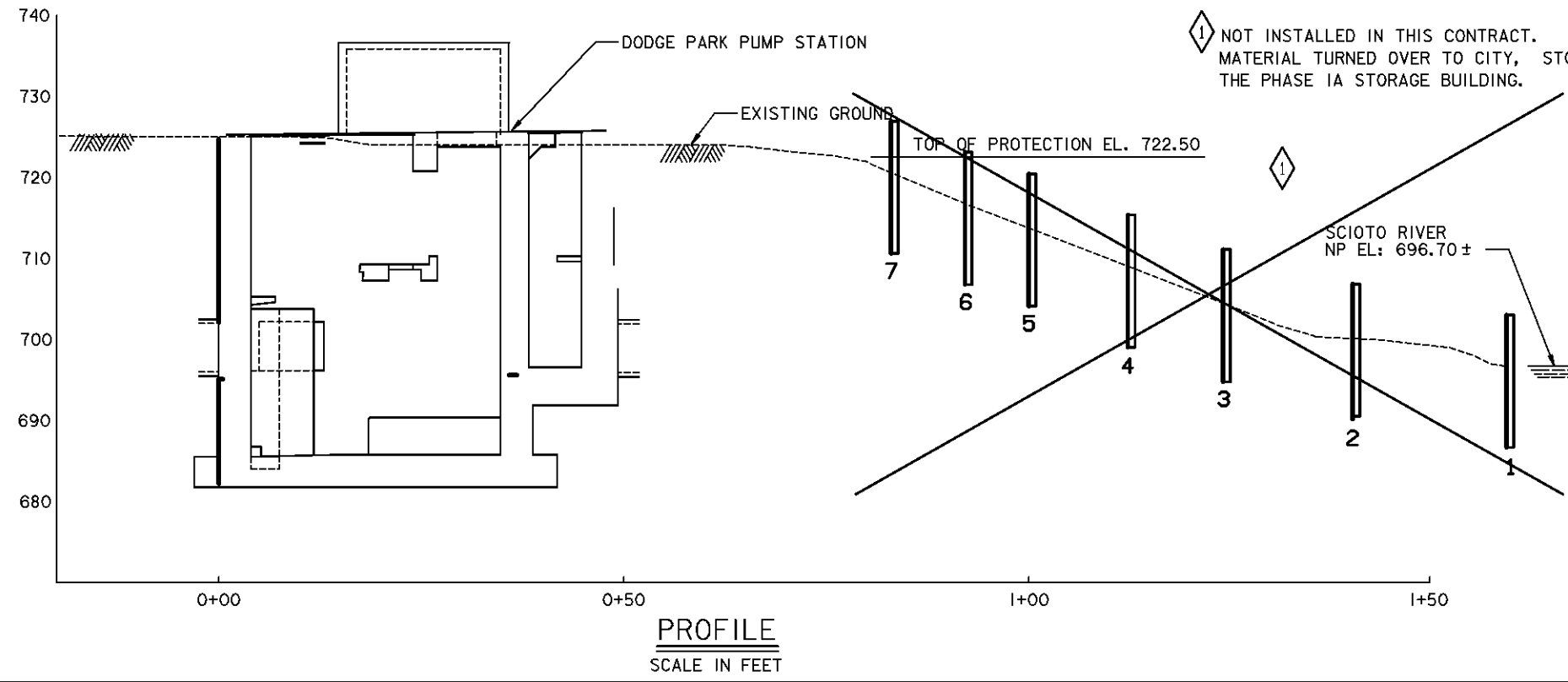




**PLAN**  
SCALE: 1" = 10'



**RIVER GAGE MOUNTS**  
NOT TO SCALE



**PROFILE**  
SCALE IN FEET

NOT INSTALLED IN THIS CONTRACT.  
MATERIAL TURNED OVER TO CITY, STORED IN  
THE PHASE 1A STORAGE BUILDING.

NO.	TABLE OF GAGE MOUNTS DODGE PARK PUMP STATION		GAGE READING		POST IN CONCRETE SLAB
	GROUND EL. @ GAGE	EL. @ TOP OF WT5x22.5	BOTTOM	TOP	
1	696.5	702.83	698.0	702.0	NO
2	700.5	706.83	702.0	706.0	NO
3	704.5	710.83	706.0	710.0	YES
4	708.5	714.83	710.0	714.0	YES
5	712.5	718.83	714.0	718.0	YES
6	716.5	722.83	718.0	722.0	YES
7	720.5	726.83	722.0	726.0	YES

Revisions			
Symbol	Descriptions	Date	Approved
◊	REVISED AS CONSTRUCTED	2-99	

**DODSON-LINDBLOM ASSOC., INC.**  
 CONSULTING ENGINEERS-SURVEYORS  
 COLUMBUS, OHIO

**U.S. ARMY ENGINEER DISTRICT**  
 CORPS OF ENGINEERS  
 HUNTINGTON, WEST VIRGINIA

Designed by: **JDY**  
 Drawn by: **GJG**  
 Checked by: **LWR**  
 Reviewed by: **PFO**  
 Approved by: **AJS**

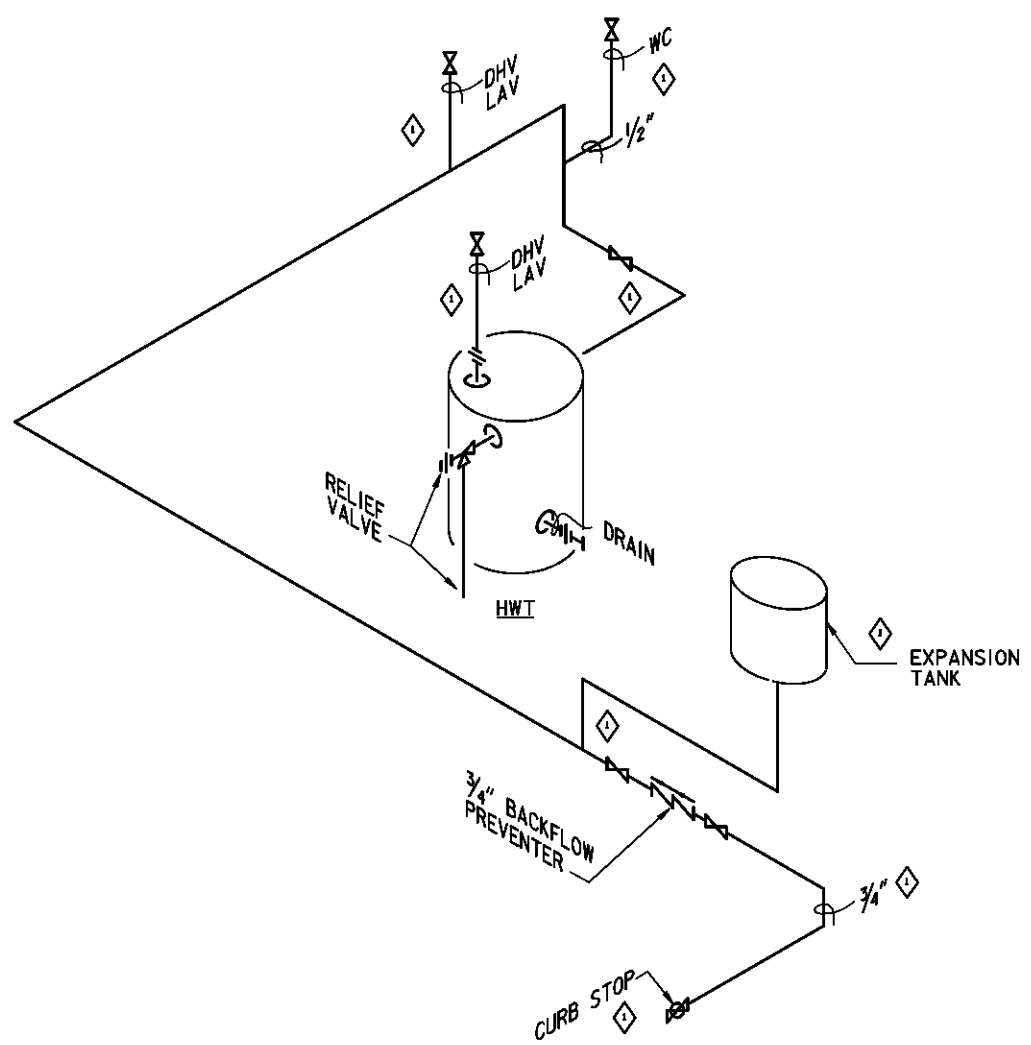
**SCIO TO RIVER**  
 COLUMBUS, OHIO  
 WEST COLUMBUS L.P.P.  
 PHASE IIB (STORM WATER PUMPING STATION)

**RIVER GAGE MOUNTS**

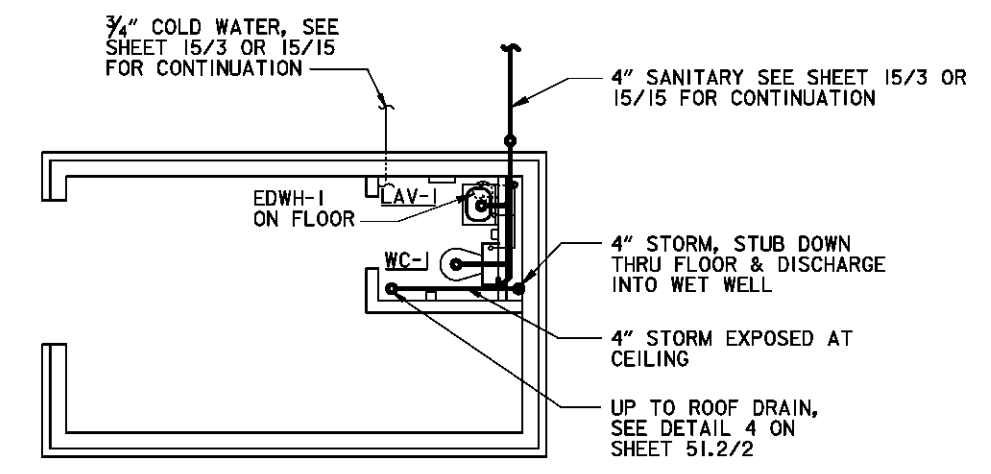
Scale: **AS SHOWN**  
 Date: **DECEMBER 1995**  
 Drawing Code: **016-PWC-7-**

FILENAME: 013013.dgn  
 SHEET NUMBER: 1 of 1  
 SHEET: **51.313**



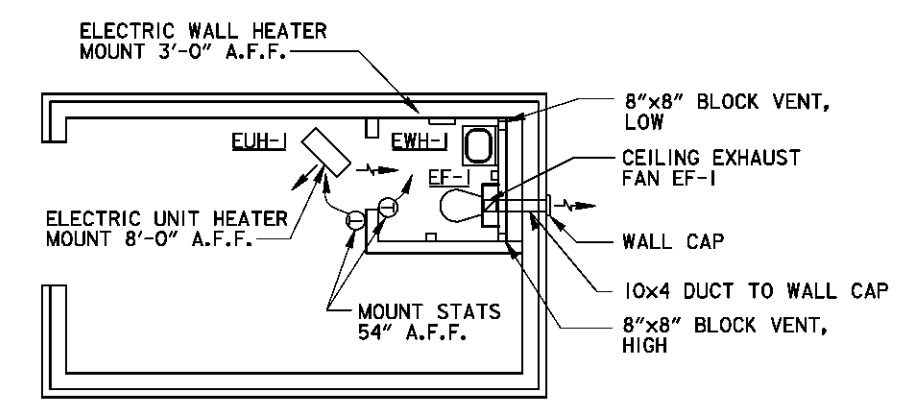


**AS-BUILT  
H & C RISER DIAGRAM**  
N.T.S.



**CONTROL BUILDING  
PLUMBING PLAN**

SCALE: 1/4" = 1'-0"



**CONTROL BUILDING  
HEATING & VENTILATING PLAN**

SCALE: 1/4" = 1'-0"

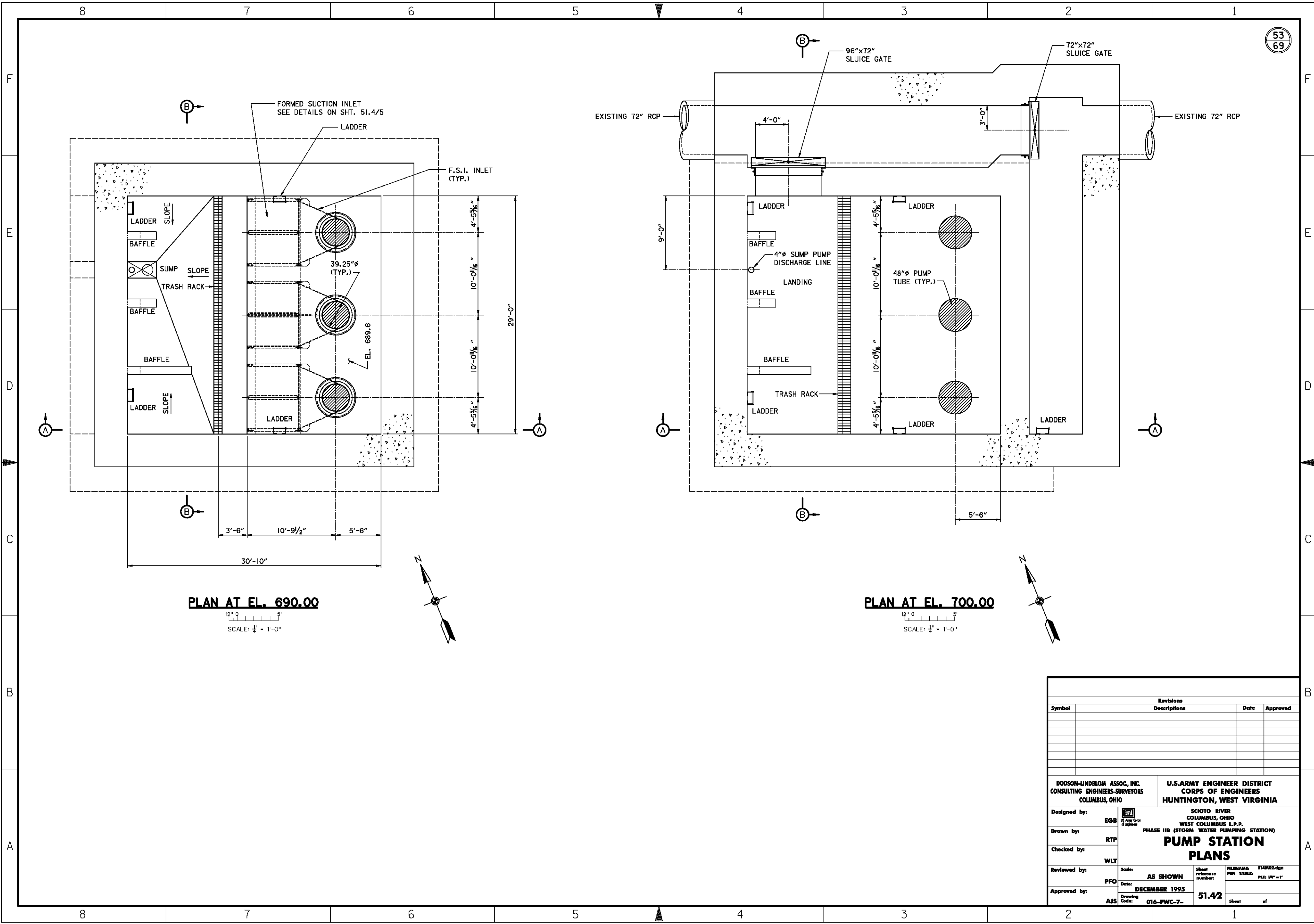
EQUIPMENT SCHEDULE					
MARK	DESCRIPTION	DESIGN BASED ON	CAPACITY	VOLTAGE	REMARKS
EUH-1	ELECTRIC UNIT HEATER IN CONTROL ROOM	CHROMALOX MODEL LUH-20-43	20 KW 68,500 BTU/HR	480v/60Hz/3ph	FURNISH WITH WR-80 THERMOSTAT. MOUNT FROM CEILING.
EWH-1	ELECTRIC WALL HEATER IN TOILET ROOM	CHROMALOX MODEL H-2405	1.5 KW 5100 BTU/HR	120v/60Hz/1ph	FURNISH WITH RTC-90 THERMOSTAT. MOUNT ON WALL, 36" ABOVE FLOOR.
EF-1	TOILET EXHAUST FAN	PENN ZEPHYR MODEL * Z-6	90 CFM @ 0.125" S. P.	120v/60Hz/1ph	FURNISH WITH WC-10 WALL CAP
EDWH-1	ELECTRIC DOMESTIC WATER HEATER IN TOILET ROOM	RUUD ENERGY MISER POINT-OF-USE TYPE MODEL * PEP6-1	6 GALLON TANK 2000 WATTS	120v/60Hz/1ph	HEATER SHALL BE U.L. LISTED & MEET ASHRAE 90 ENERGY REQUIREMENTS.

PLUMBING FIXTURES				
MARK	DESCRIPTION	DESIGN BASED ON	COLOR	ACCESSORIES
LAV-1	LAVATORY, WALL HUNG BOWL SIZE: 14 1/4" WIDE x 10 3/4" x 6" DEEP	AMERICAN STANDARD DECLYN #0321.075	WHITE	1. FAUCET #2000.101, 4" CENTERS, SINGLE LEVER. 2. CONCEALED ARM SUPPORT BRACKETS. 3. ANGLE STOPS 4. POP-UP DRAIN 5. 1 1/4" P-TRAP
WC-1	WATER CLOSET, TANK TYPE FLOOR MOUNTED, ELONGATED BOWL, SIPHON JET, VITREOUS CHINA, HANDICAPPED.	AMERICAN STANDARD WATER SAVER CADET 2108.408 18" RIM HEIGHT	WHITE	1. OLSONITE #95 OPEN FRONT SEAT, NO COVER. 2. BOLT CAPS #481310-100

Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2-99	

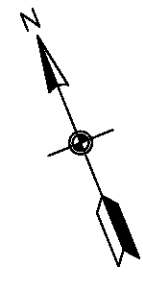
  

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: WLT	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.
Drawn by: BLM	PHASE IIB (STORM WATER PUMPING STATION)
Checked by: WLT	<b>PUMP STATION HEATING, VENTILATING &amp; PLUMBING</b>
Reviewed by: PFO	Scale: AS SHOWN
Approved by: AJS	Date: DECEMBER 1995
Drawing Code: 016-PWC-7-	Sheet reference number: 51.41
	FILENAME: 514m01.dgn
	PEN TABLE:
	Sheet of



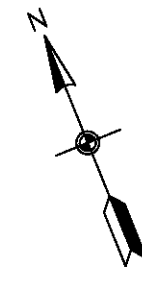
**PLAN AT EL. 690.00**

12" 0 5'  
SCALE: 1/4" = 1'-0"



**PLAN AT EL. 700.00**

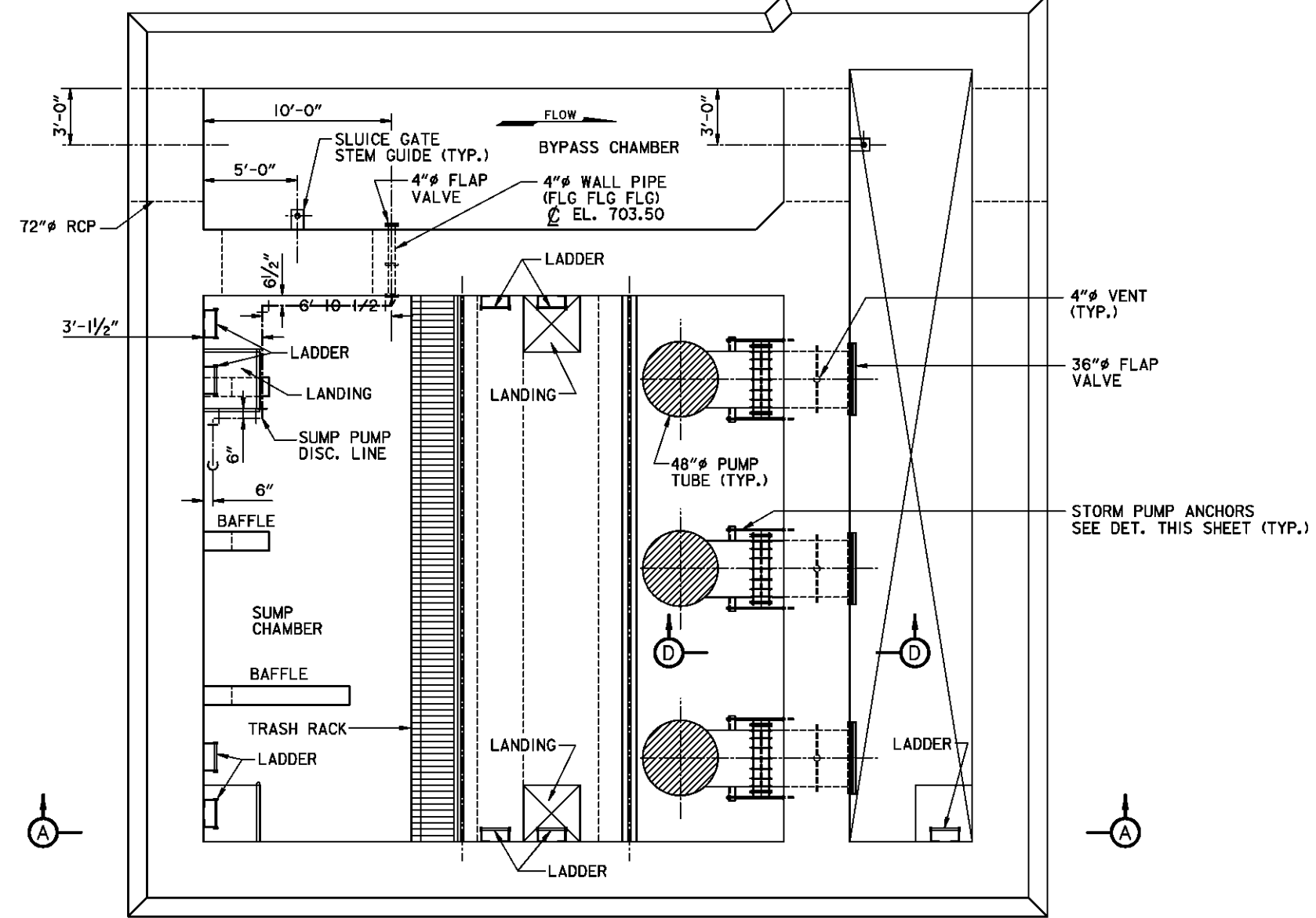
12" 0 5'  
SCALE: 1/4" = 1'-0"



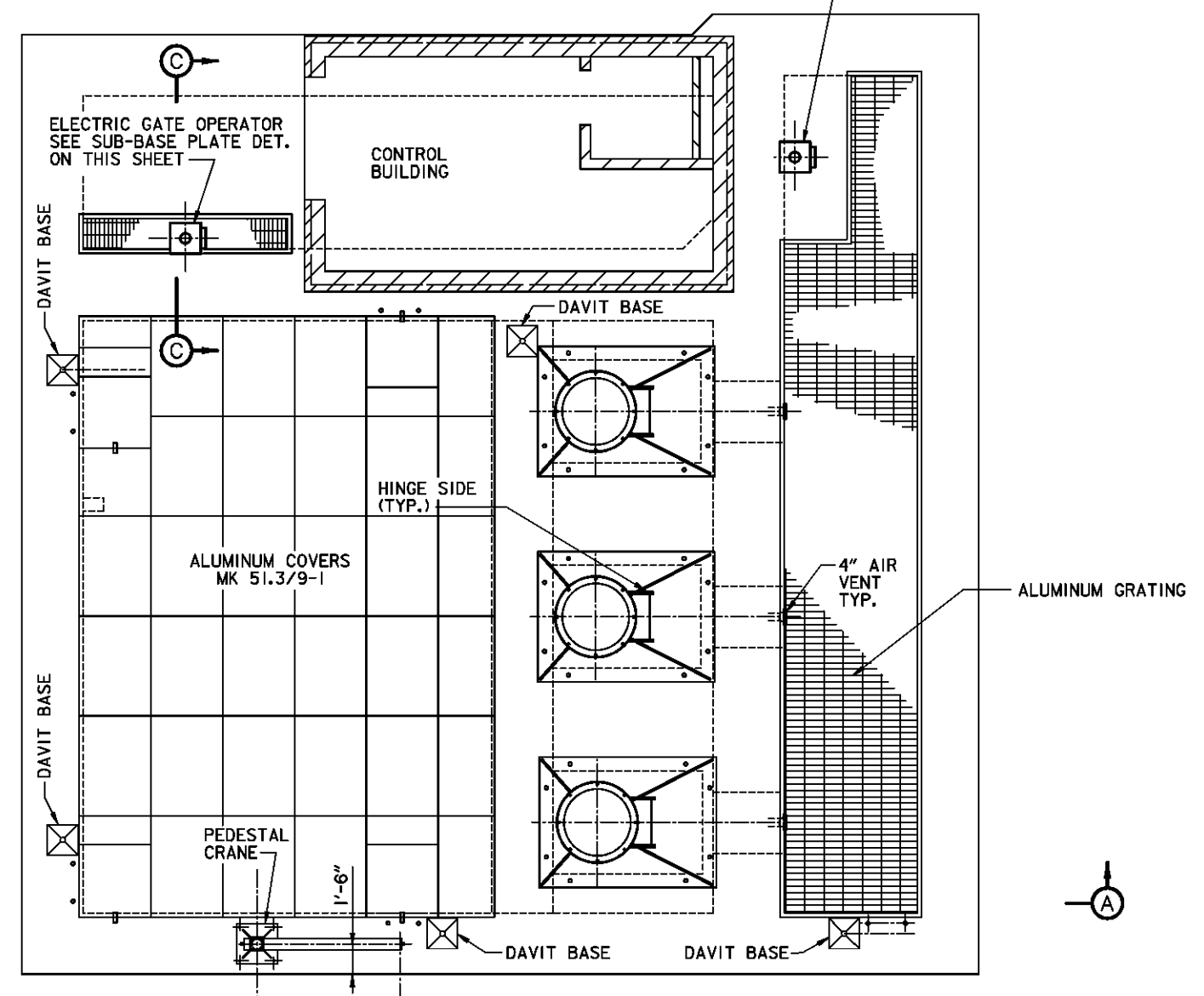
Revisions			
Symbol	Descriptions	Date	Approved

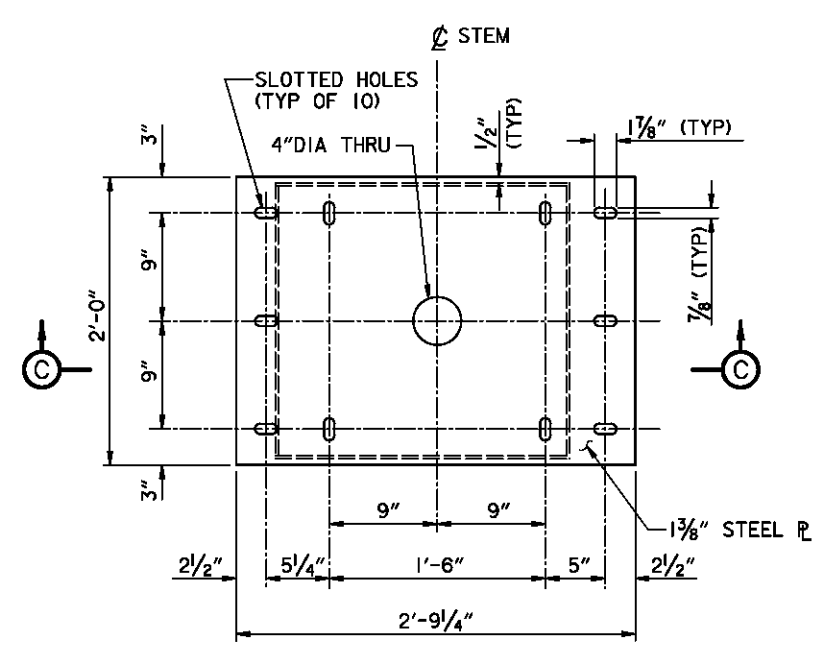
DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: EGB	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.
Drawn by: RTP	PHASE IIB (STORM WATER PUMPING STATION)
Checked by: WLT	<b>PUMP STATION PLANS</b>
Reviewed by: PFO	Scale: AS SHOWN
Approved by: AJS	Date: DECEMBER 1995
Drawing Code: 016-PWC-7-	Sheet reference number: 51.42
	FILENAME: 014M02.dgn PEN TABLE: PLOT 1/4" = 1" Sheet of



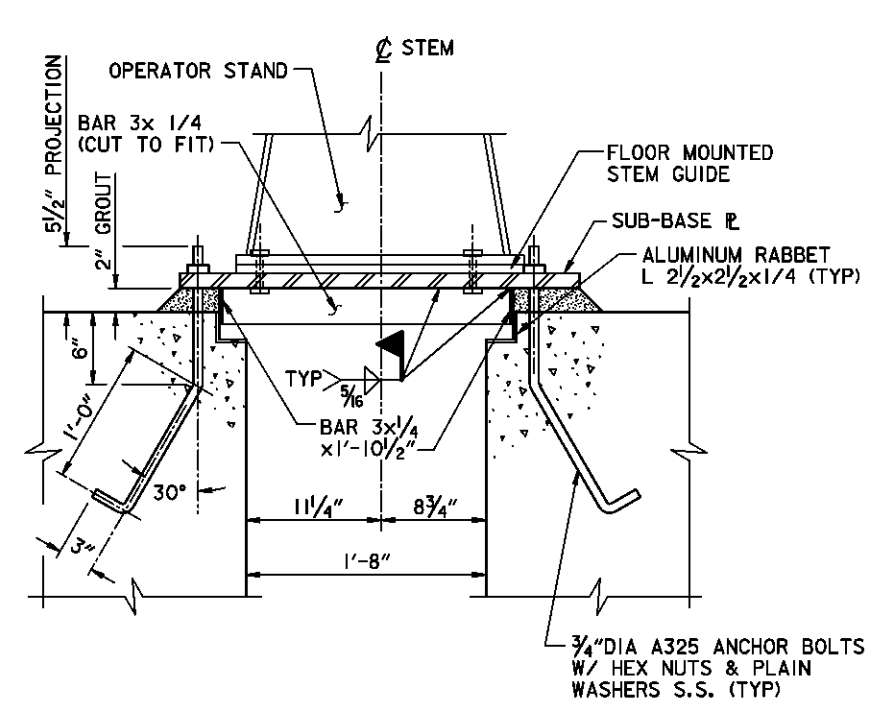
**PLAN AT EL. 716.50**  
SCALE: 1/4" = 1'-0"



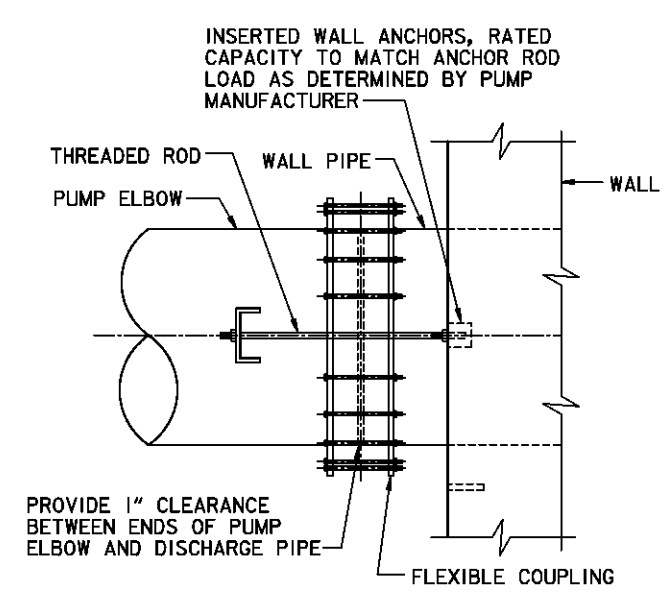
**OPERATING FLOOR PLAN AT EL. 725.00**  
SCALE: 1/4" = 1'-0"



**MOTOR OPERATED FLOOR STAND  
SUB-BASE PLATE PLAN**  
NOTE: COORDINATE DIMENSIONS WITH MANUFACTURER



**SECTION C-C**  
SCALE: 1/2" = 1'-0"

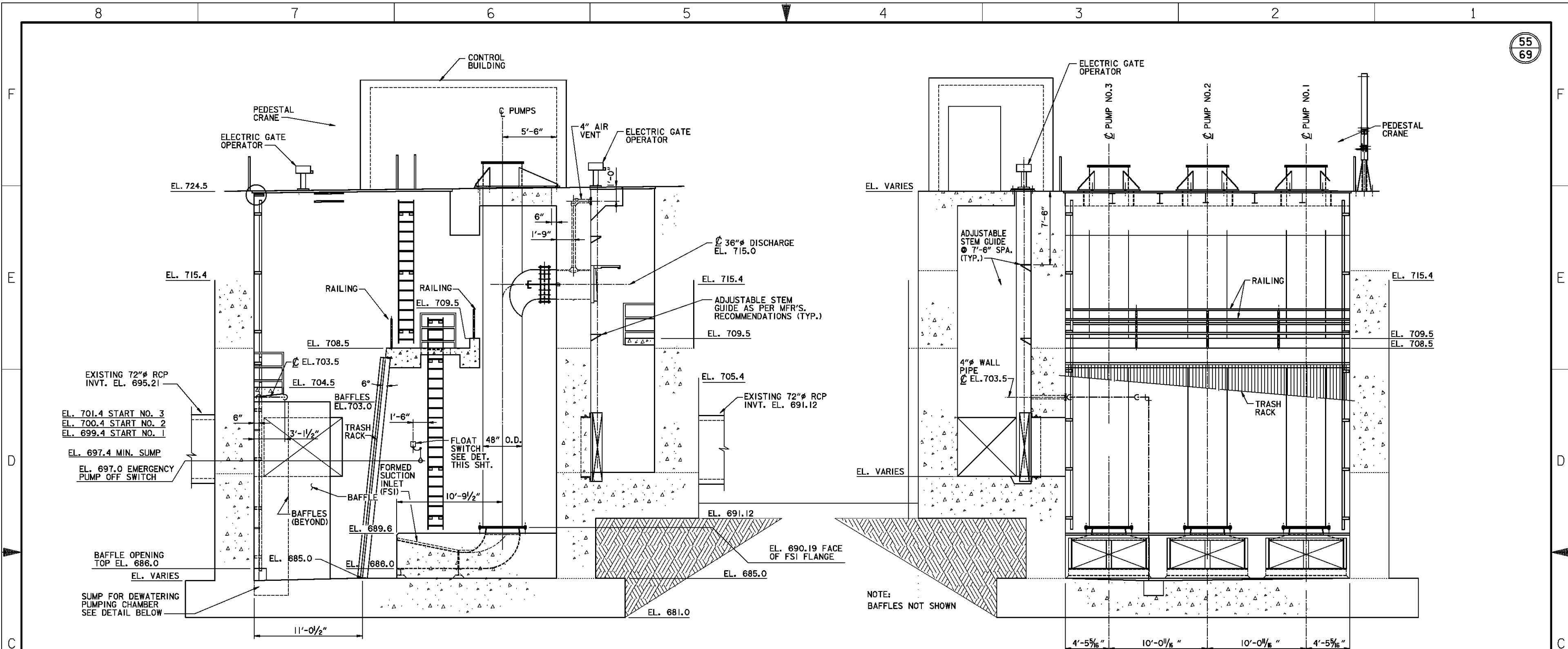


**SECTION D-D**  
NOT TO SCALE

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: EGB Drawn by: RTP Checked by: WLT Reviewed by: PFO Approved by: AJS	SCIO TO RIVER WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	<b>PUMP STATION PLANS</b>	
Scale: AS SHOWN Date: DECEMBER 1995 Drawing Code: 016-PWC-7-	Sheet reference number: 51.4/3	FILENAME: 514M03.dgn PEN TABLE: PLY, 1/8" - 1"	Sheet of



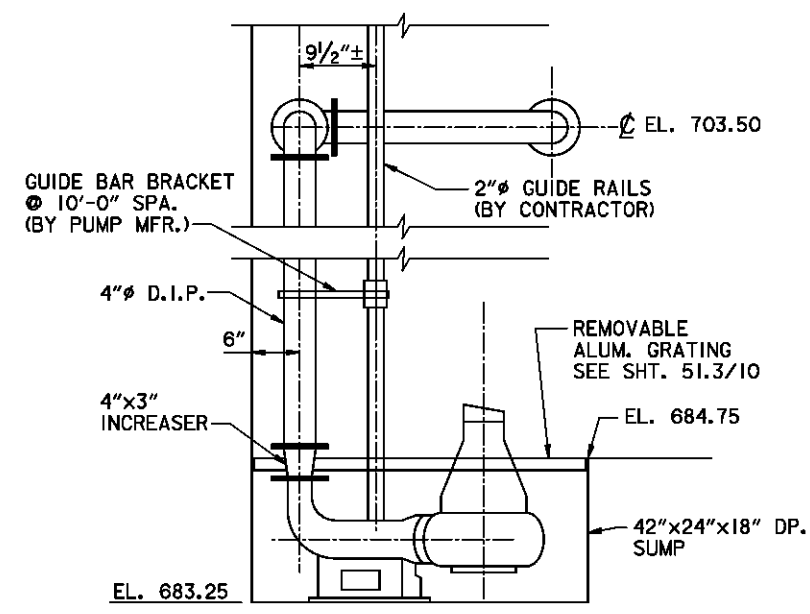
**SECTION A-A**

12" 0 5'  
SCALE: 1/4" = 1'-0"

NOTE:  
FOR SECTION REFERENCE DRAWING  
SEE SHEET 51.4/2 & 3.

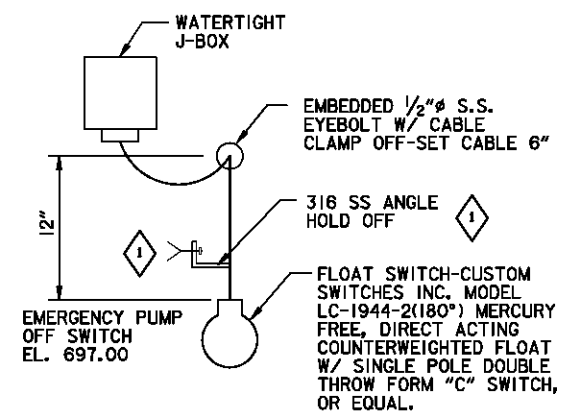
**SECTION B-B**

12" 0 5'  
SCALE: 1/4" = 1'-0"



**SUMP DETAIL**

SCALE: 1" = 1'



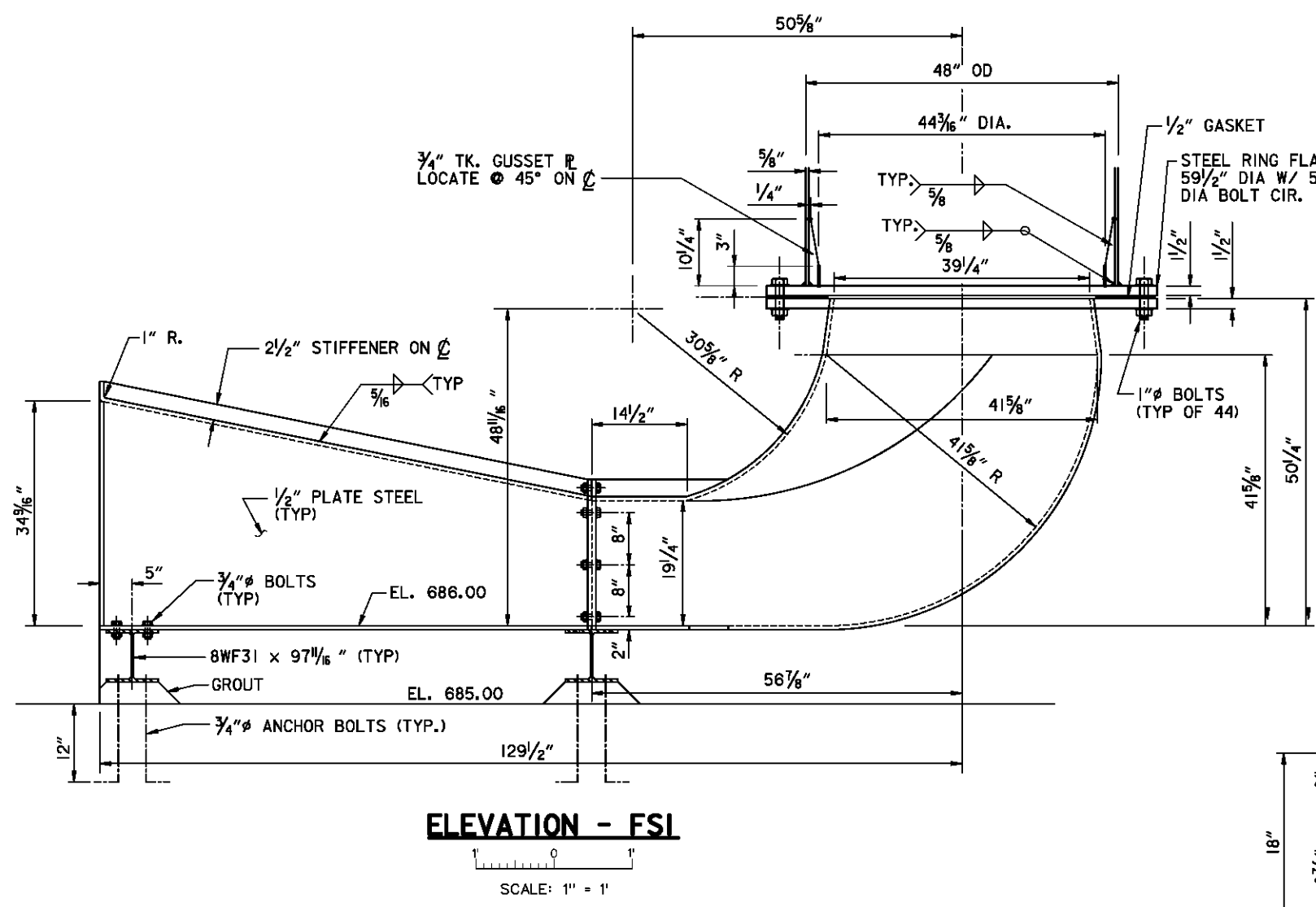
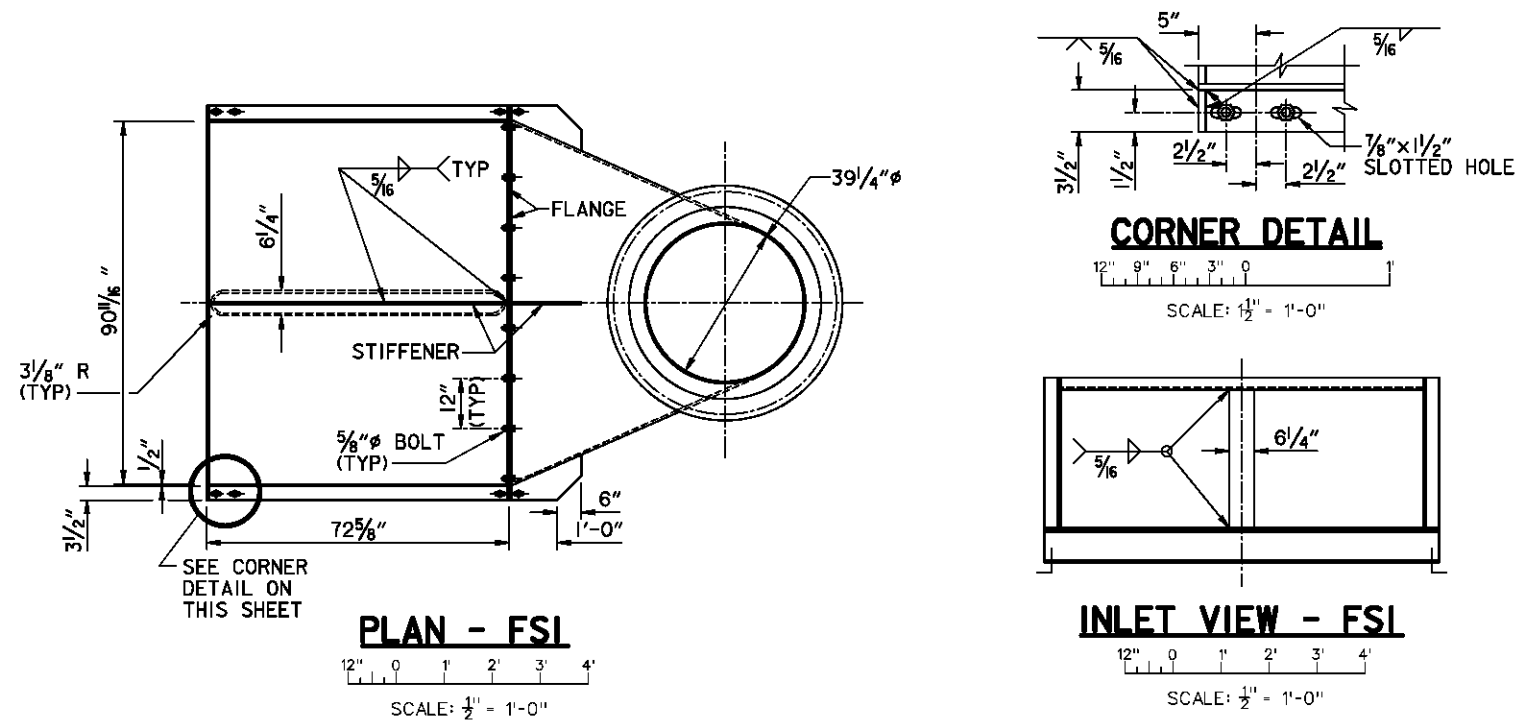
**FLOAT SWITCH DETAIL**

NO SCALE

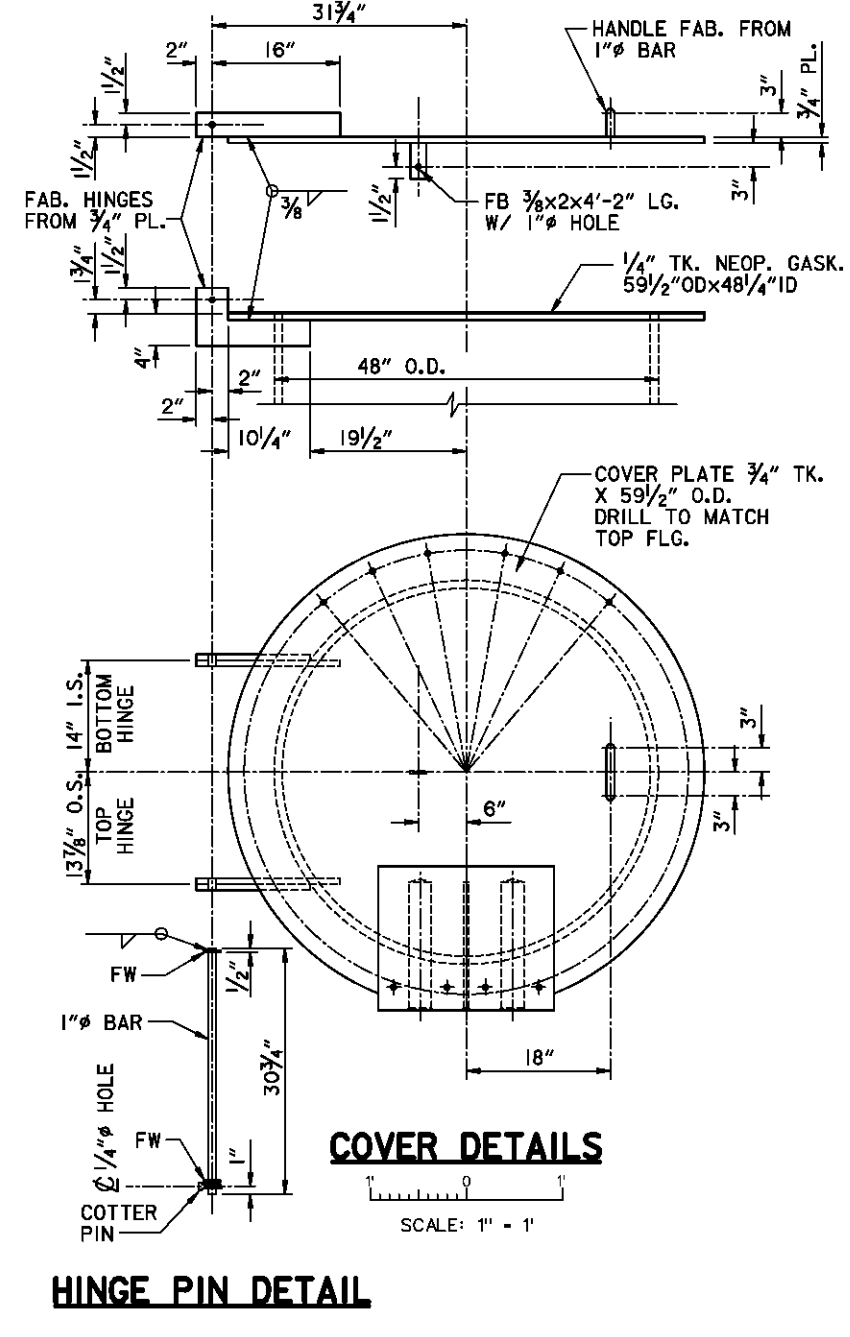
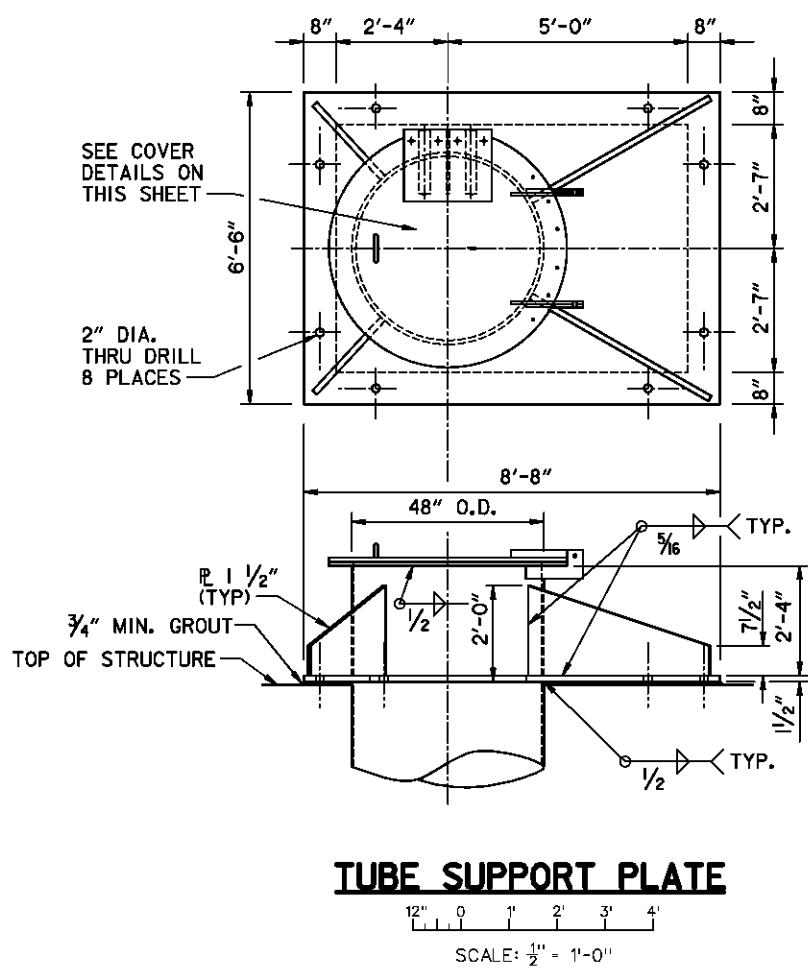
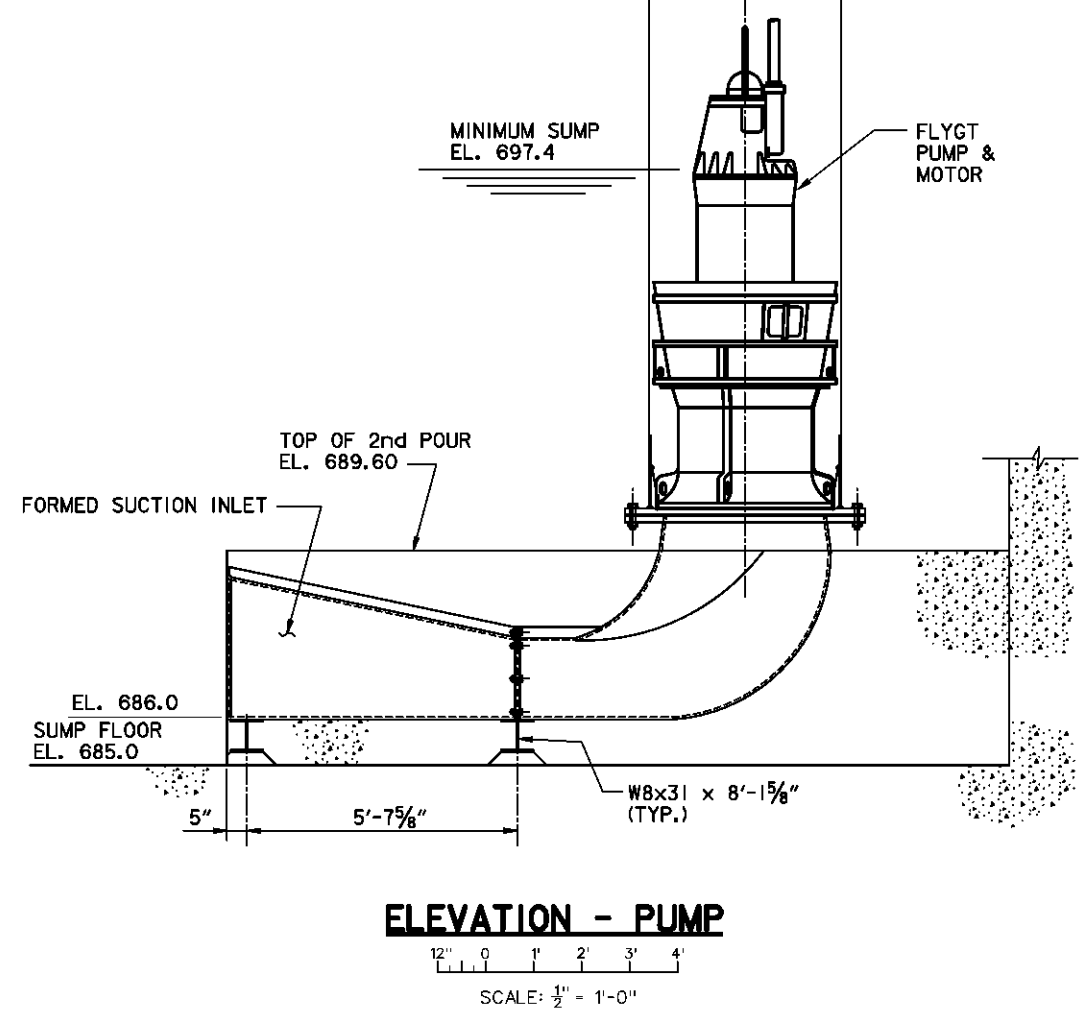
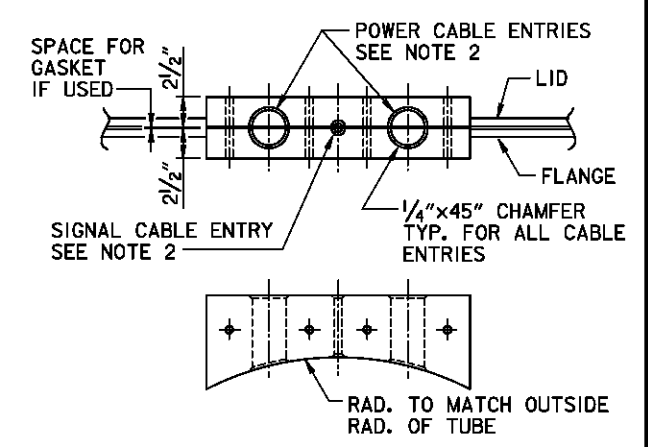
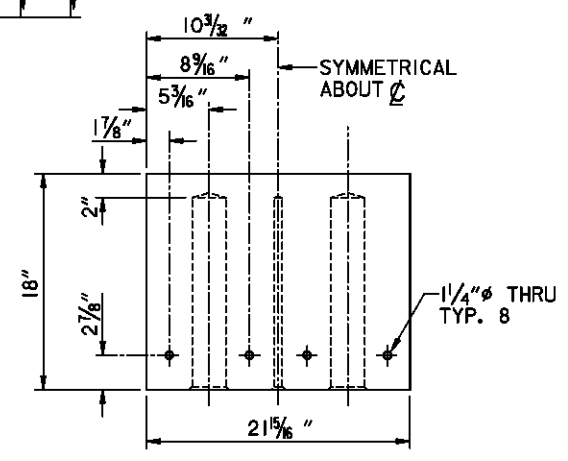
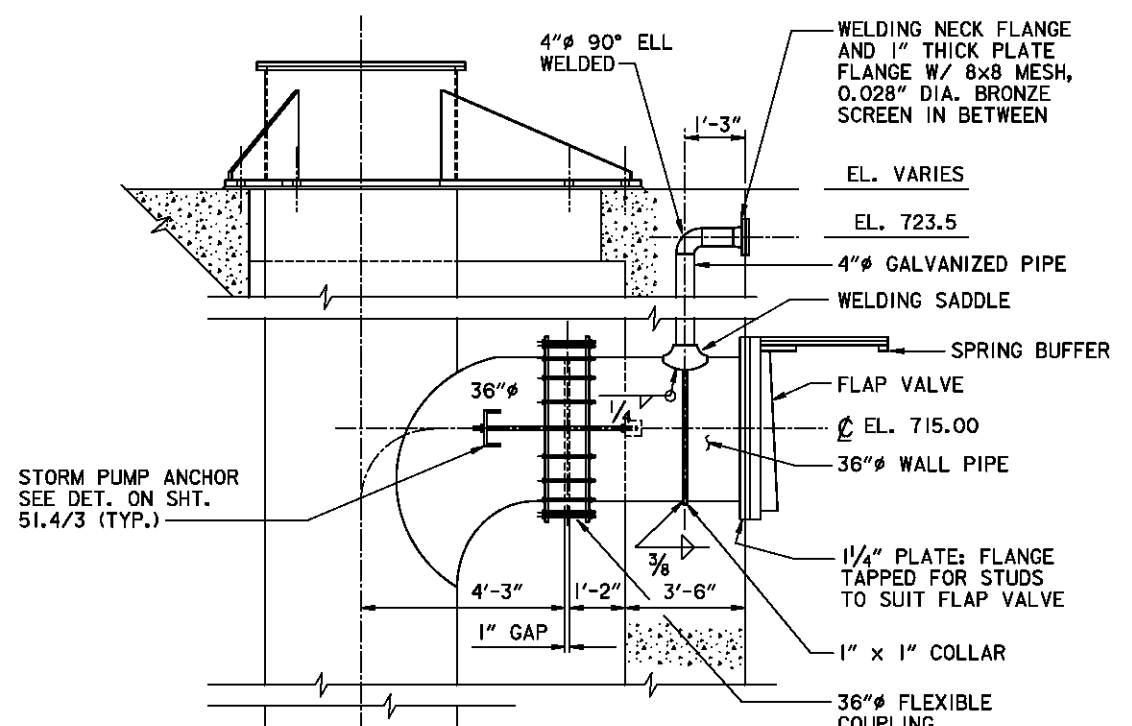
Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2/99	

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	EGB	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	RTP	<b>PUMP STATION SECTIONS</b>	
Checked by:	WLT	Scale:	AS SHOWN
Reviewed by:	PFO	Date:	DECEMBER 1995
Approved by:	AJS	Drawing Code:	016-PWC-7-
		Sheet reference number:	51.44



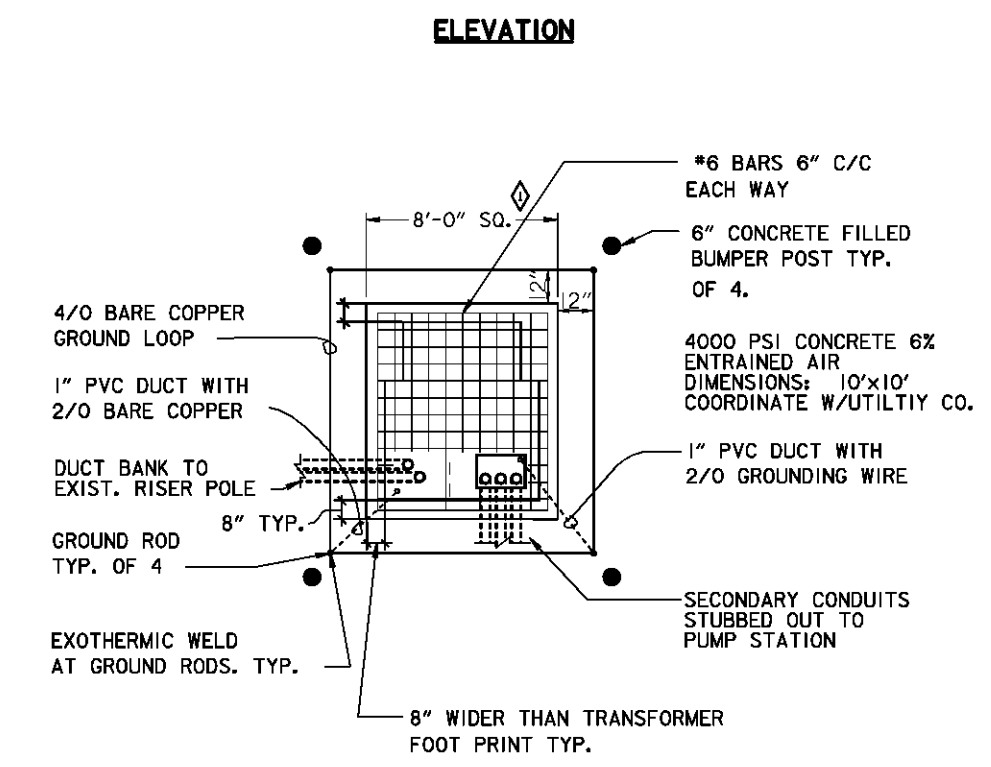
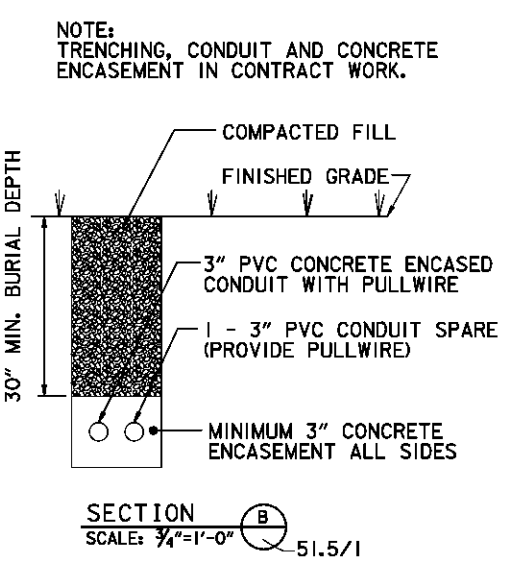
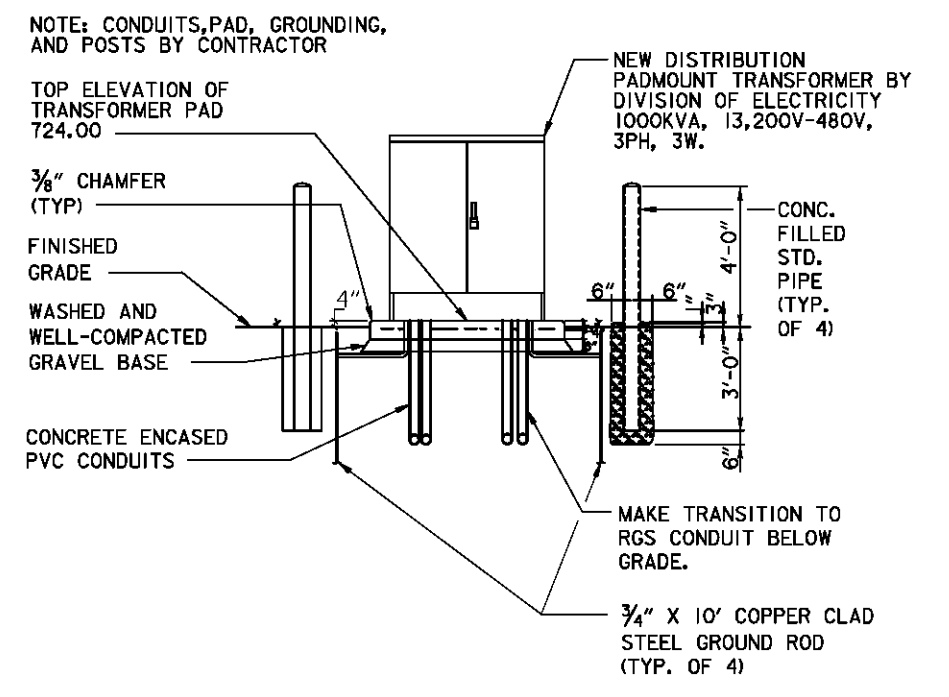
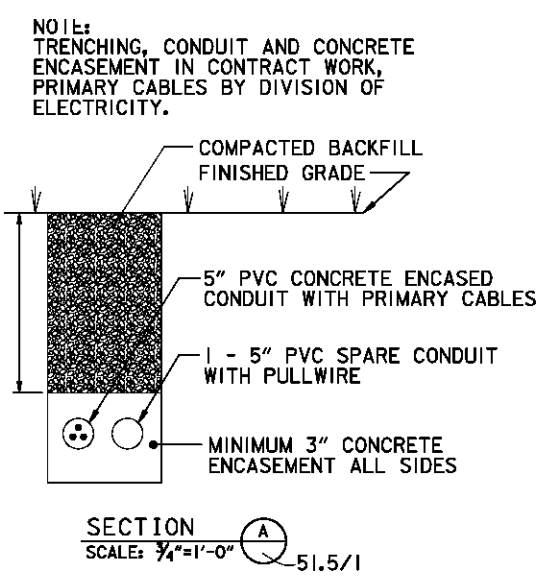
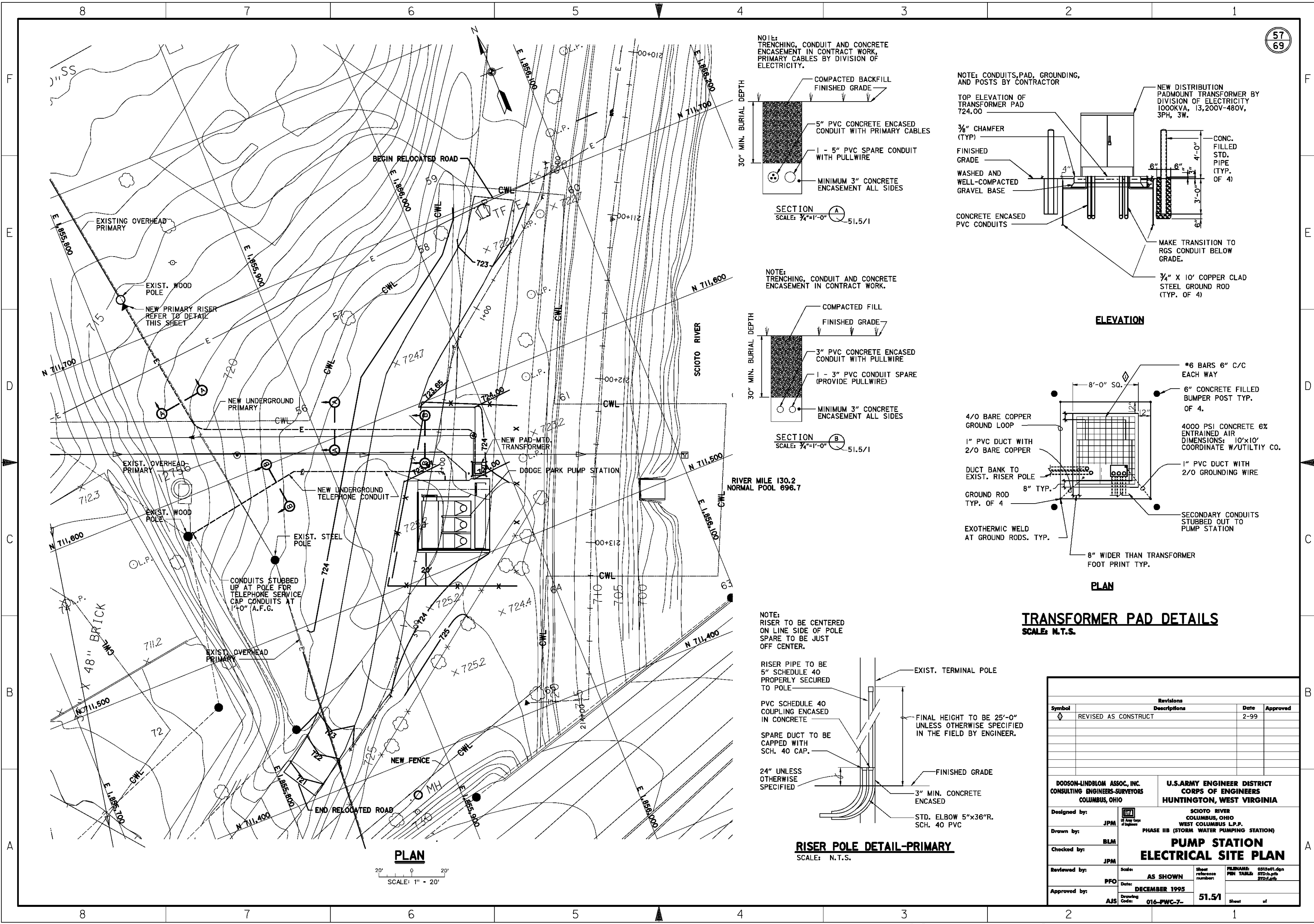
- NOTES:**
1. ALL STEEL TO BE ASTM A36 AND SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A123.
  2. BREAK ALL SHARP EDGES.
  3. DRILL CABLE ENTRY HOLE DIAMETERS BASED ON CABLE SIZE (FROM PUMP MFR.).



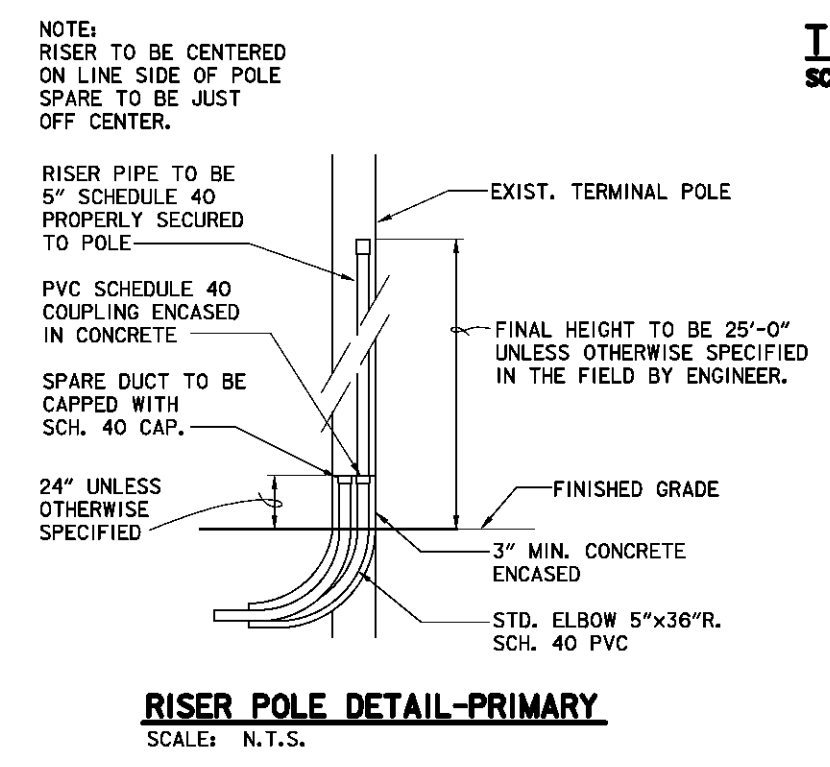
Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	EGB	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	
Drawn by:	RTP	PHASE IIB (STORM WATER PUMPING STATION)	
Checked by:	WLT	<b>PUMP STATION FORMED SUCTION INLET</b>	
Reviewed by:	PFO	Scale: AS SHOWN	Sheet reference number: 51.45
Approved by:	AJS	Date: DECEMBER 1995	FILENAME: 514M05.dgn PEN TABLE: PLT; 12" x 1"
		Drawing Code: 016-PWC-7-	Sheet of



**TRANSFORMER PAD DETAILS**  
SCALE: N.T.S.

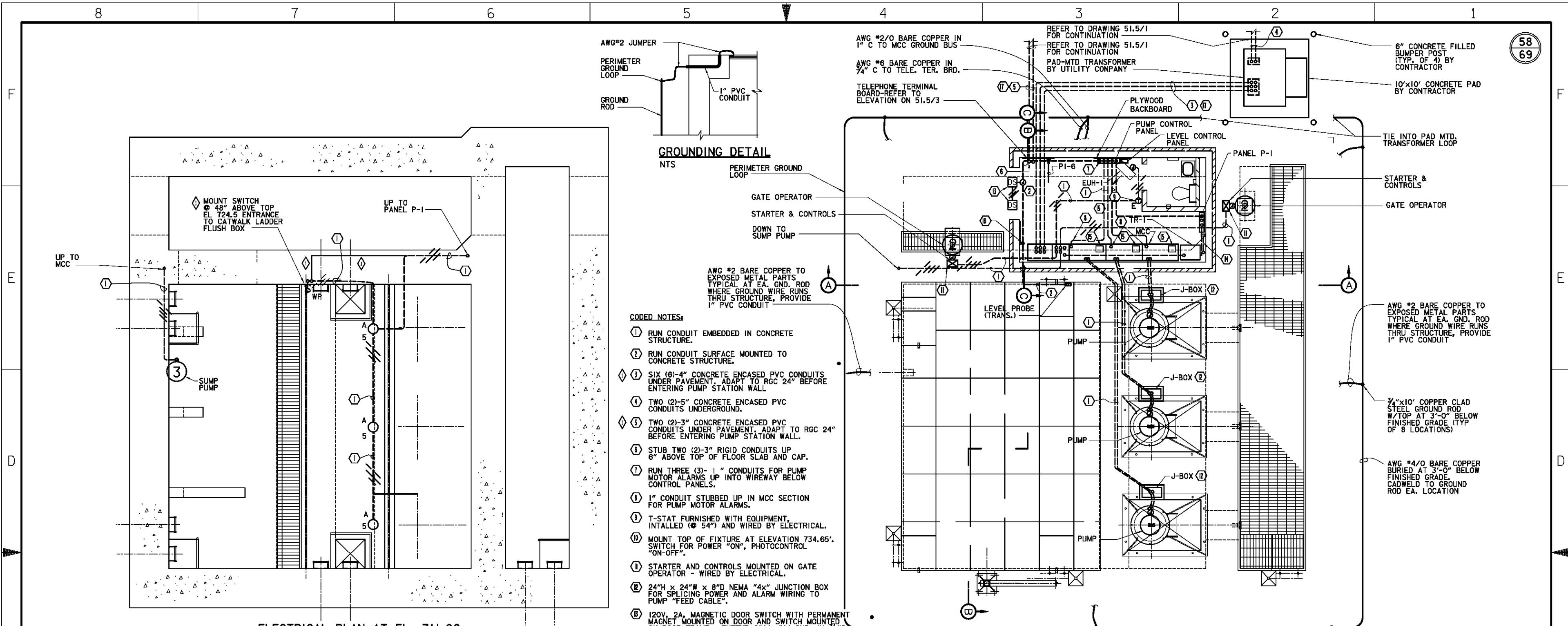


**PLAN**  
SCALE: 1" = 20'

Revisions			
Symbol	Descriptions	Date	Approved
◊	REVISED AS CONSTRUCT	2-99	

DODSON-LINDBLOM ASSOC. INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JPM	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.	
Drawn by:	BLM	PHASE IIB (STORM WATER PUMPING STATION)	
Checked by:	JPM	<b>PUMP STATION ELECTRICAL SITE PLAN</b>	
Reviewed by:	PFO	Scale: AS SHOWN	Sheet reference number: 51.5/1
Approved by:	AJS	Date: DECEMBER 1995	FILENAME: 0319a01.dgn PIN TABLE: STD-b.tbl PLOT: 016-PWC-7-



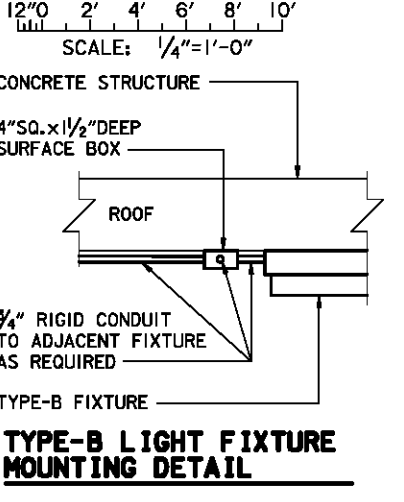
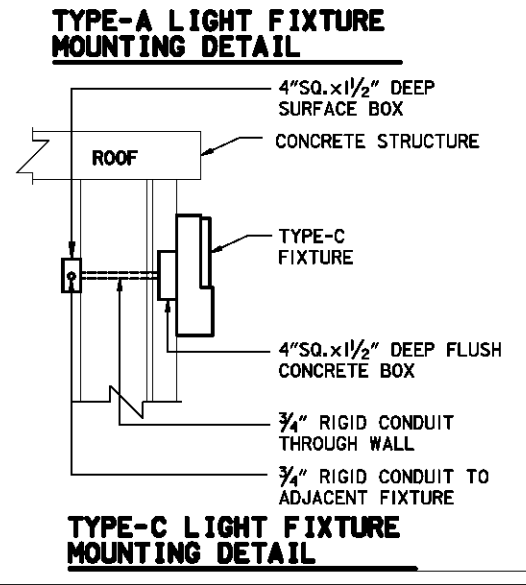
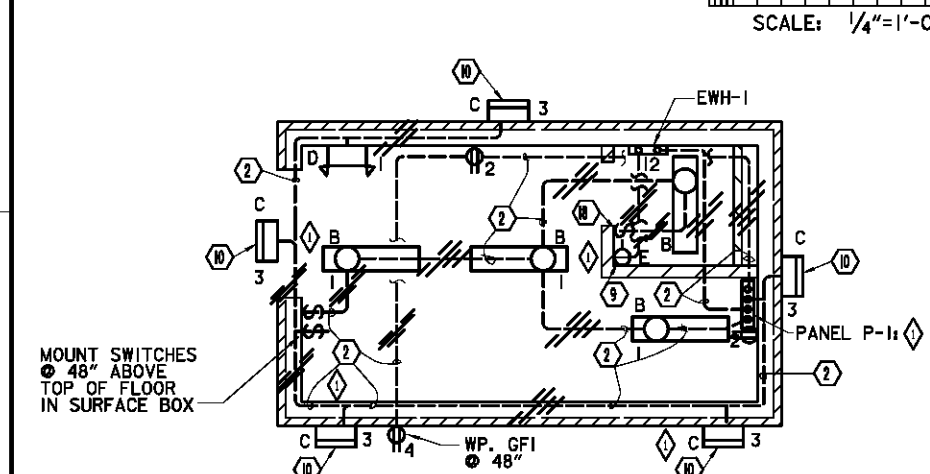
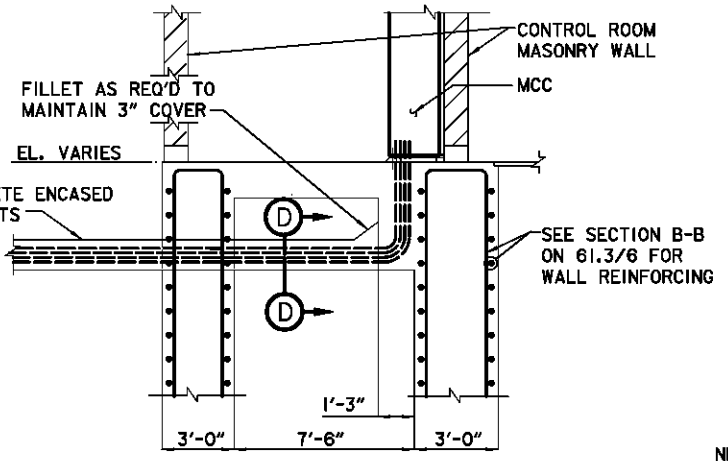
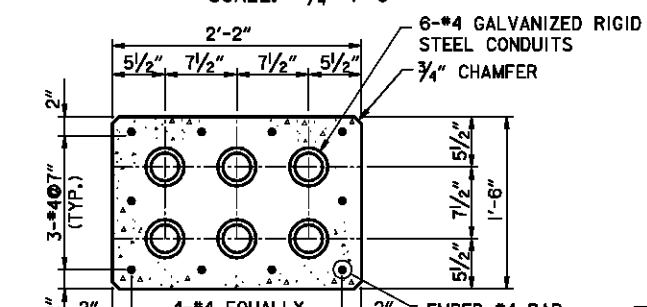
- CODED NOTES:**
- ① RUN CONDUIT EMBEDDED IN CONCRETE STRUCTURE.
  - ② RUN CONDUIT SURFACE MOUNTED TO CONCRETE STRUCTURE.
  - ③ SIX (6)-4" CONCRETE ENCASED PVC CONDUITS UNDER PAVEMENT. ADAPT TO RGC 24" BEFORE ENTERING PUMP STATION WALL
  - ④ TWO (2)-5" CONCRETE ENCASED PVC CONDUITS UNDERGROUND.
  - ⑤ TWO (2)-3" CONCRETE ENCASED PVC CONDUITS UNDER PAVEMENT. ADAPT TO RGC 24" BEFORE ENTERING PUMP STATION WALL.
  - ⑥ STUB TWO (2)-3" RIGID CONDUITS UP 6" ABOVE TOP OF FLOOR SLAB AND CAP.
  - ⑦ RUN THREE (3)-1" CONDUITS FOR PUMP MOTOR ALARMS UP INTO WIREWAY BELOW CONTROL PANELS.
  - ⑧ 1" CONDUIT STUBBED UP IN MCC SECTION FOR PUMP MOTOR ALARMS.
  - ⑨ T-STAT FURNISHED WITH EQUIPMENT. INSTALLED @ 54" AND WIRED BY ELECTRICAL.
  - ⑩ MOUNT TOP OF FIXTURE AT ELEVATION 734.65'. SWITCH FOR POWER "ON", PHOTOCONTROL "ON-OFF".
  - ⑪ STARTER AND CONTROLS MOUNTED ON GATE OPERATOR - WIRED BY ELECTRICAL.
  - ⑫ 24"H x 24"W x 8"D NEMA "4x" JUNCTION BOX FOR SPLICING POWER AND ALARM WIRING TO PUMP "FEED CABLE".
  - ⑬ 120V, 2A, MAGNETIC DOOR SWITCH WITH PERMANENT MAGNET MOUNTED ON DOOR AND SWITCH MOUNTED ON DOOR FRAME. EXTEND 2"14, #14 GND. IN 3/4" C TO PUMP CONTROL PANEL.
  - ⑭ 4" RIGID CONDUIT W/PULLWIRE FROM BYPASS CHAMBER TO CONTROL ROOM. PROVIDE THREADED CONDUIT CAP EACH END.
  - ⑮ CAPACITOR MOUNTED ON TOP OF WALL.
  - ⑯ TO PUMP CONTROL PANEL.

**ELECTRICAL PLAN AT EL. 711.00**

SCALE: 1/4"=1'-0"

**ELECTRICAL OPERATING FLOOR PLAN**

SCALE: 1/4"=1'-0"



Revisions			
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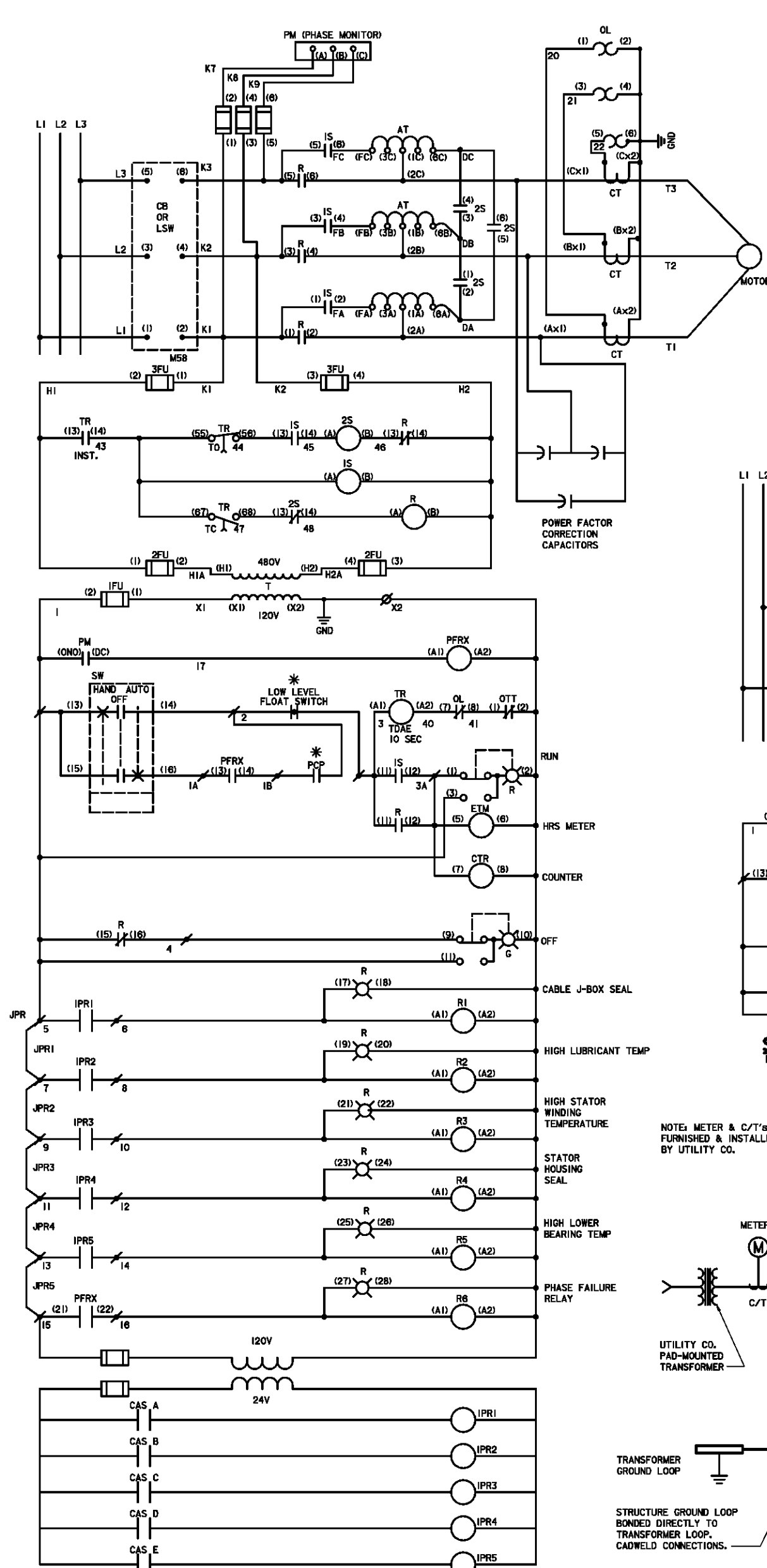
  

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JPM	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	BLM	<b>PUMP STATION ELECTRICAL PLANS</b>	
Checked by:	JPM	Scale:	AS SHOWN
Reviewed by:	PFO	Date:	DECEMBER 1995
Approved by:	AJS	Drawing Code:	016-PWC-7-
		Sheet reference number:	51.5/2
		FILENAME:	51.5e02.dgn
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		Sheet	of

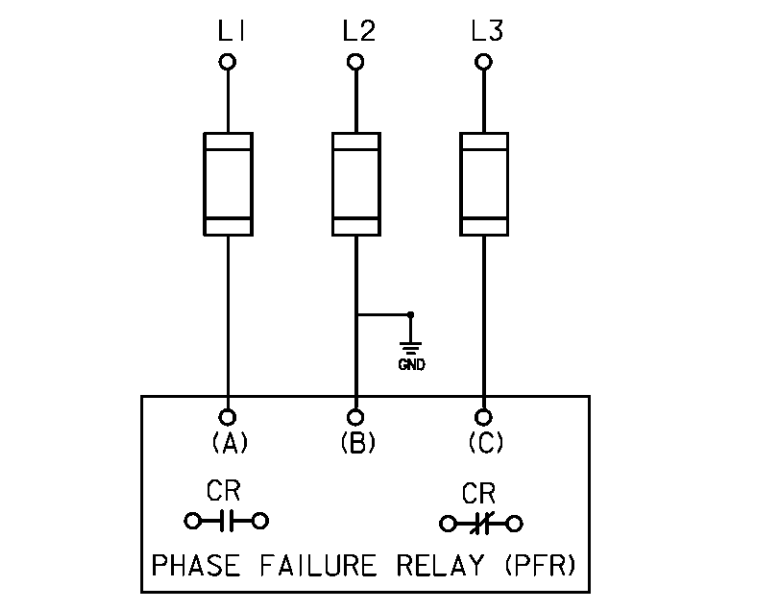




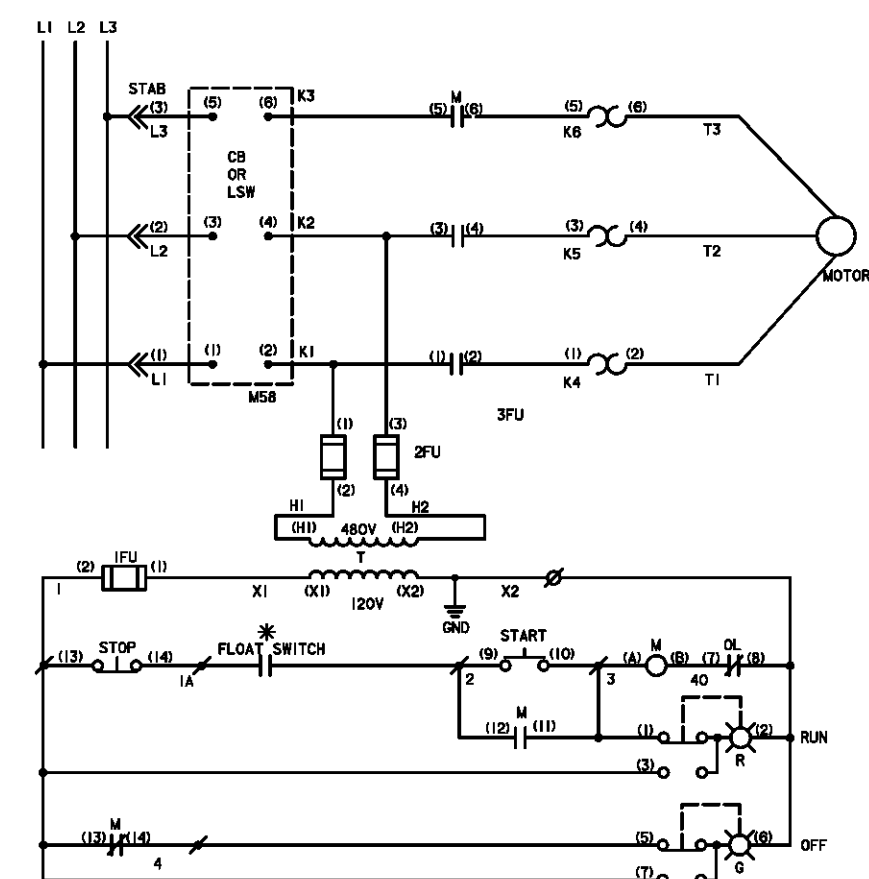




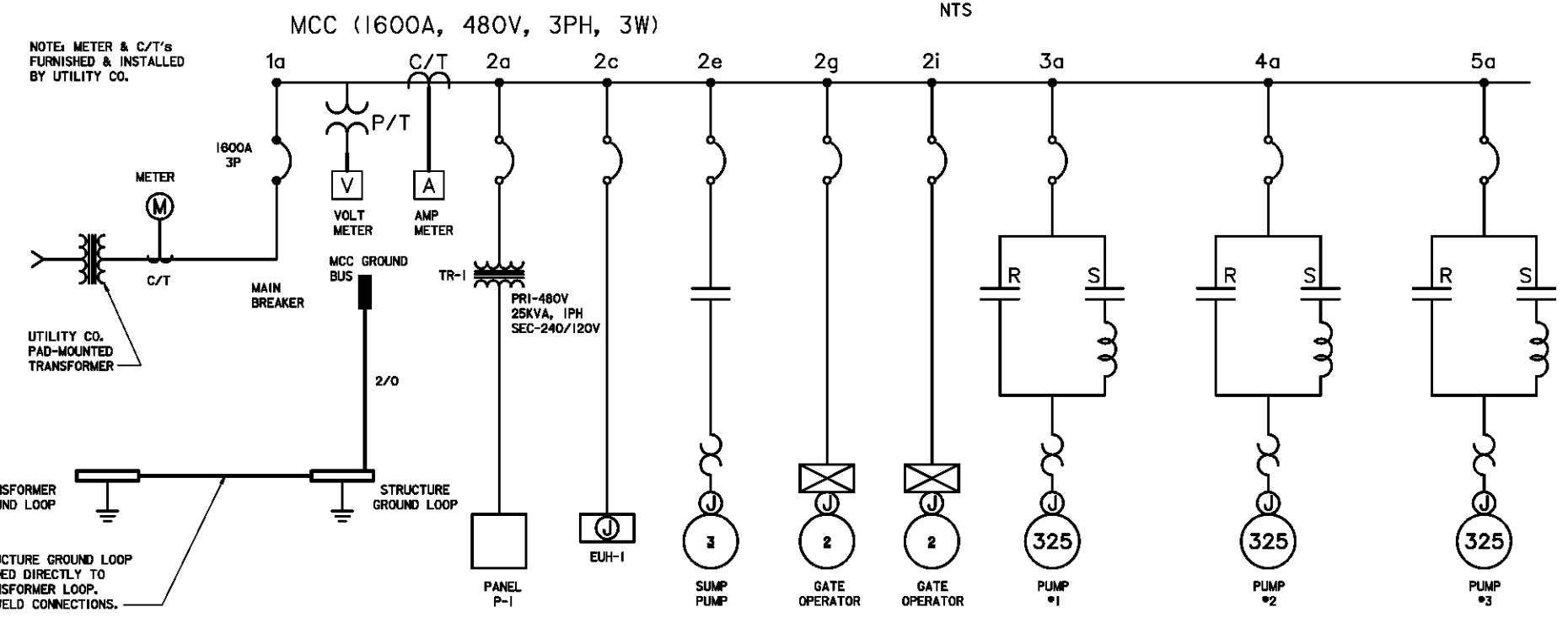
STORM WATER PUMP MOTOR STARTER WIRING DIAGRAM  
NTS



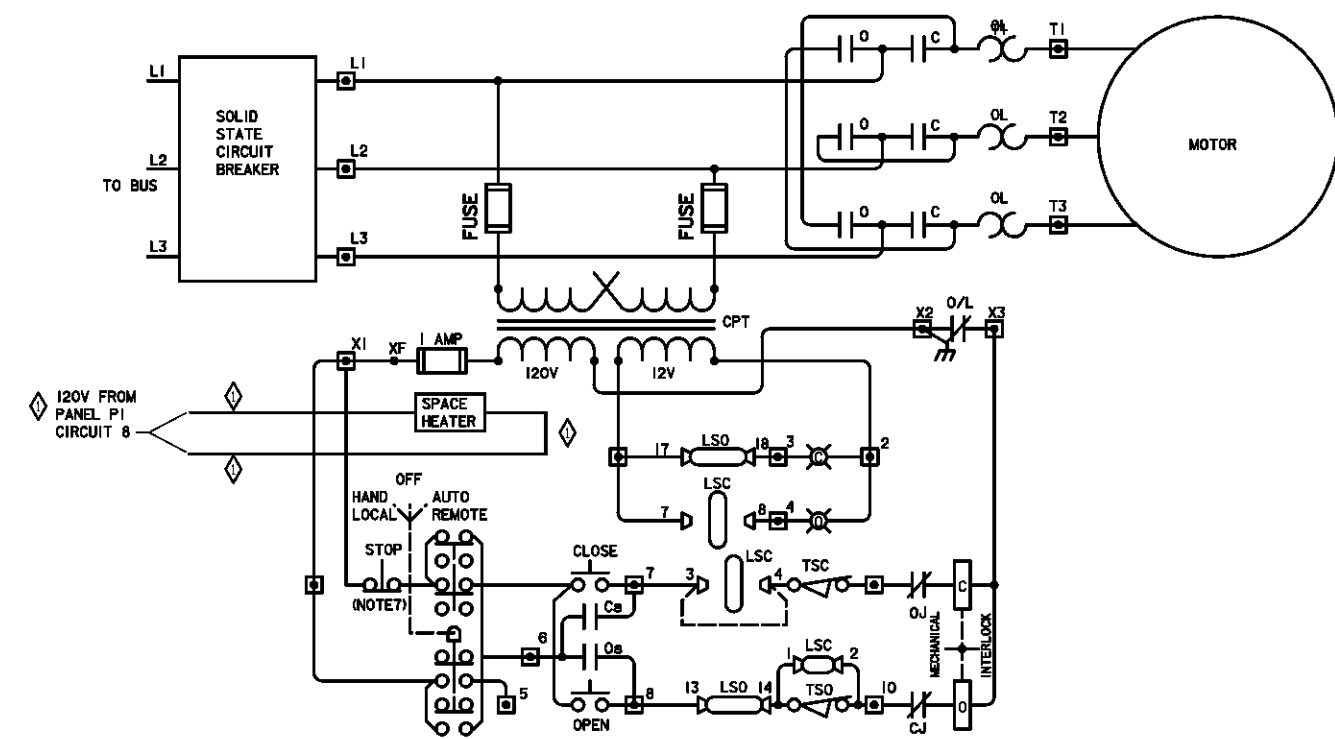
PHASE FAILURE RELAY (PFR) WIRING DIAGRAM  
NTS



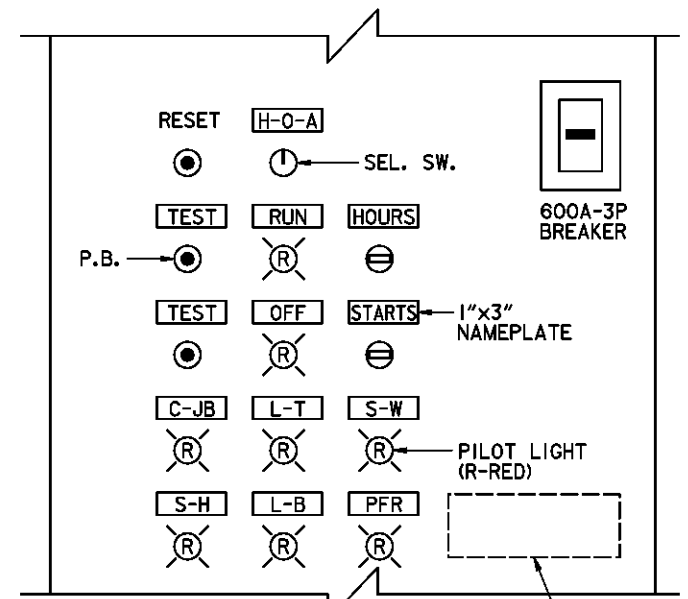
SUMP PUMP MOTOR STARTER WIRING DIAGRAM  
NTS



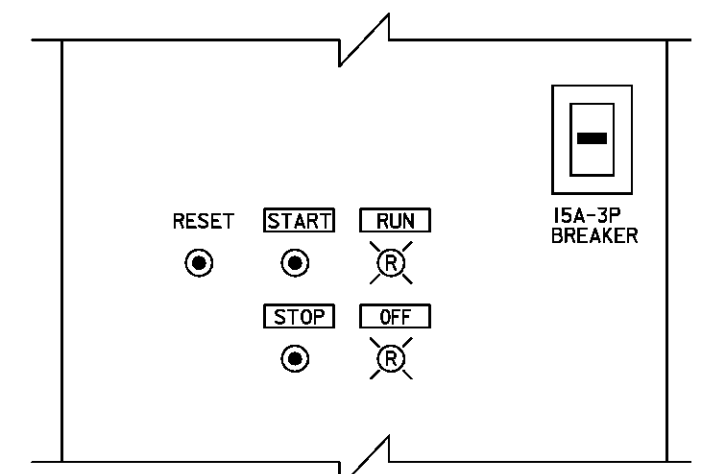
ONE-LINE DIAGRAM  
NTS



GATE OPERATOR MOTOR STARTER WIRING DIAGRAM  
NTS



STORMWATER PUMP STARTER CONTROL LAYOUT  
NTS



SUMP PUMP STARTER CONTROL LAYOUT  
NTS

- NOTES:
1. CIRCUITS SHOWN VALVE CLOSED, POWER AND CONTROL VOLTAGE OFF.
  2. [Symbol] FACTORY WIRED TERMINALS.
  3. [Symbol] FIELD WIRING BY OTHERS.
  4. [Symbol] TSC TSO TORQUE SWITCHES.
  5. C1 C2 PUSHBUTTON MAINTAINED SEAL-IN CONTACTS.
  6. [Symbol] REVERSING CONTRACTOR COIL.
  7. STOP BUTTON IS DEPRESSED WHEN SELECTOR SWITCH IS IN THE OFF POSITION.
  8. JUMPER LSC 3 TO 4 FOR TORQUE SEATING.
  9. LSC-CLOSE LIMIT SWITCH.
  10. LSO-OPEN LIMIT SWITCH.
  11. TSC-CLOSE TORQUE SWITCH.
  12. TSO-OPEN TORQUE SWITCH.

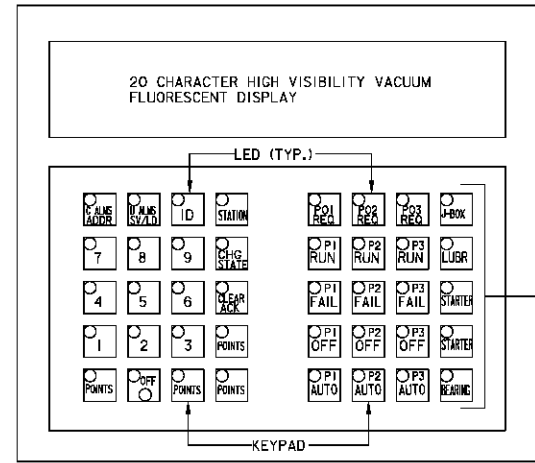
- C-JB: CABLE J-BOX SEAL.  
L-T: HIGH LUBRICANT TEMP.  
S-W: HIGH STATOR WINDING TEMP.  
S-H: STATOR HOUSING SEAL.  
L-B: HIGH LOWER BEARING TEMP.  
PFR: PHASE FAILURE RELAY.

Revisions			
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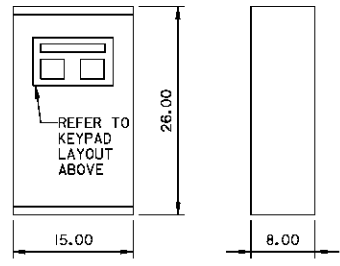
  

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Designed by:	JPM	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	BLM	<b>PUMP STATION</b> <b>ELECTRICAL DETAILS &amp; DIAGRAMS</b>	
Checked by:	JPM	Scale:	AS SHOWN
Reviewed by:	PFO	Date:	DECEMBER 1995
Approved by:	AJS	Drawing Code:	016-PWC-7-
		Sheet reference number:	51.5/4
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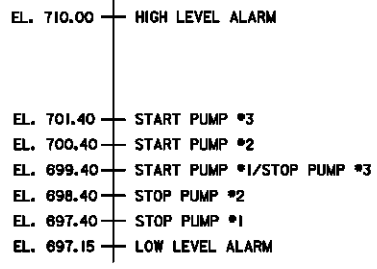


**PUMP CONTROL PANEL - KEYPAD & ANNUNCIATOR**  
NTS



**PUMP CONTROL PANEL LAYOUT**  
NTS

- C ALMS-CURRENT ALARMS
- ADDR-ADDRESS ERRORS
- U ALMS-UNACKNOWLEDGED ALARMS
- ID-IDENT. NO FOR MESSAGES
- STATION-DISPLAY MESSAGES
- CHG STATE-FOR CHANGES
- CLEAR ACK-ACKNOWLEDGE ALRM
- NEXT-NEXT INSTRUCTION
- ENTER-ENTRY
- ANLGS-VIEW ANALOG INPUTS
- OFF-OFF LINE
- POINTS-VIEW ANALOG INPUTS
- ALARM BUZZER IN PUMP CONTROL PANEL ENCLOSURE



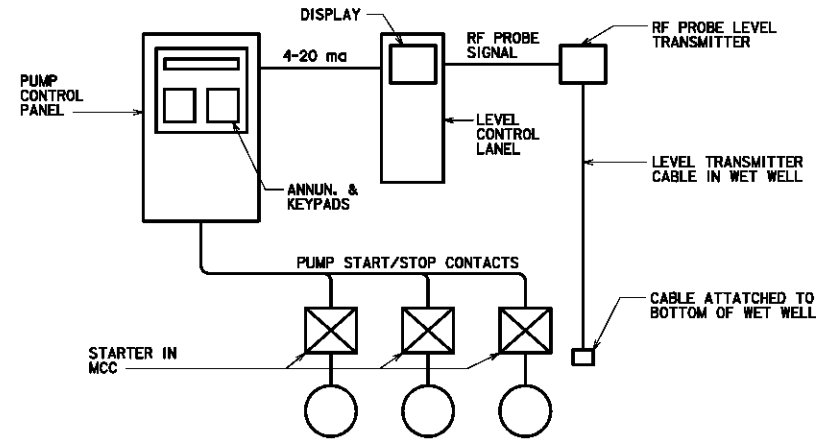
**KEYPAD ABBREVIATIONS**  
NTS

**WET WELL LEVEL-CONTROL**  
NTS

**CONTROL SCHEME**

1. REQ KEY ENTERS PUMP INTO ALTERNATION SEQUENCE.
2. RUN KEY STARTS PUMP MANUALLY - 5 SEC. TIME DELAY.
3. FAIL KEY INDICATES PUMP FAILURE MODE. TYPE OF ALARM INDICATED BY ONE OF FIVE LED'S AT RIGHT. PUMP NUMBER KEY MUST BE ENTERED TO VIEW ALARM.
4. QEE KEY TAKES PUMP OUT OF AUTO SEQUENCE.
5. AUTO KEY ENTERS PUMP IN AUTO SEQUENCE.

**PUMP CONTROL PANEL-KEYPAD OPERATION**  
NTS



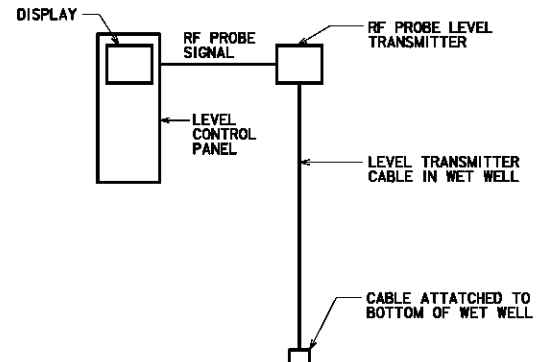
**PUMP CONTROL SYSTEM DIAGRAM**  
NTS

- PUMP #1 CABLE J-BOX FLOAT SW.
- PUMP #1 LUB. TEMP. THERMAL SW.
- PUMP #1 STATOR WIND. THERMAL SW.
- PUMP #1 STATOR HOUSING FLOAT SW.
- PUMP #1 LOWER BEARING THERMAL SW.
- PUMP #1 RUN AUX. CONTACT
- PUMP #1 PHASE FAILURE RELAY
- SUMP PUMP RUN AUX. CONTACT

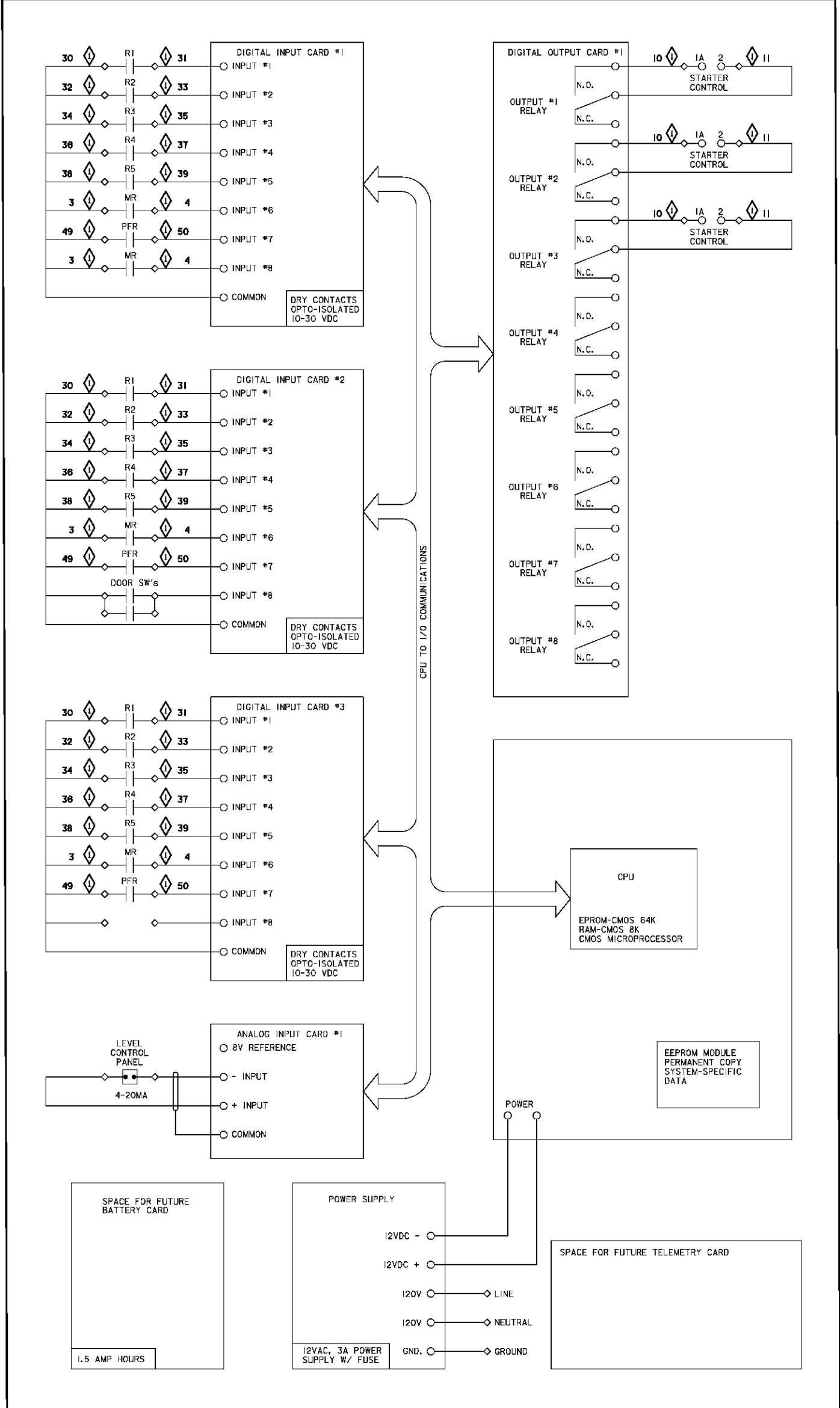
- PUMP #2 CABLE J-BOX FLOAT SW.
- PUMP #2 LUB. TEMP. THERMAL SW.
- PUMP #2 STATOR WIND. THERMAL SW.
- PUMP #2 STATOR HOUSING FLOAT SW.
- PUMP #2 LOWER BEARING THERMAL SW.
- PUMP #2 RUN AUX. CONTACT
- PUMP #2 PHASE FAILURE RELAY
- DOOR ENTRY SWITCH CONTACTS

- PUMP #3 CABLE J-BOX FLOAT SW.
- PUMP #3 LUB. TEMP. THERMAL SW.
- PUMP #3 STATOR WIND. THERMAL SW.
- PUMP #3 STATOR HOUSING FLOAT SW.
- PUMP #3 LOWER BEARING THERMAL SW.
- PUMP #3 RUN AUX. CONTACT
- PUMP #3 PHASE FAILURE RELAY
- SPARE

**WET WELL LEVEL**



**MANUAL LEVEL DISPLAY**  
NTS



**PUMP CONTROL PANEL-DIAGRAM**  
NTS

- PUMP #1-AUTO RUN CONTACTS
- PUMP #2-AUTO RUN CONTACTS
- PUMP #3-AUTO RUN CONTACTS
- SPARE
- SPARE
- SPARE
- SPARE
- SPARE

SEE O & M MANUAL

Revisions			
Symbol	Descriptions	Date	Approved
◇	REVISED AS CONSTRUCTED	2-99	

DODSON-LINDBLOM ASSOC. INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by:	JPM	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Drawn by:	MAH		
Checked by:	JPM		
Reviewed by:	PFO	Scale: AS SHOWN	Sheet reference number: PEN TABLE
Approved by:	AJS	Date: DECEMBER 1995	FILENAME: 513e06.dgn
		Drawing Code: 016-PWC-7-	51.5/6

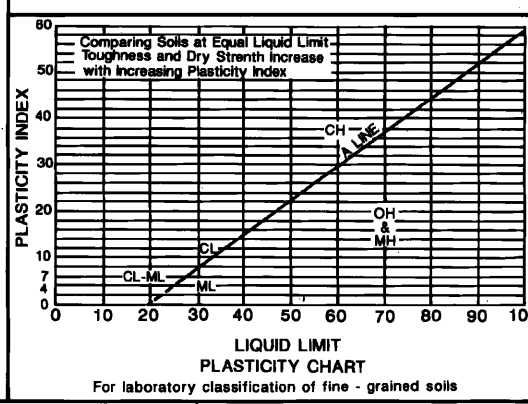




### UNIFIED SOIL CLASSIFICATION

Including Identification and Description

MAJOR DIVISIONS		GROUP SYMBOLS	TYPICAL NAMES	FIELD IDENTIFICATION PROCEDURES Excluding particles larger than 3 inches and basalt fractions of estimated weights	INFORMATION REQUIRED FOR DESCRIBING SOILS	LABORATORY CLASSIFICATION CRITERIA	
1	2	3	4	5	6	7	
<b>COARSE - GRAINED SOILS</b> More than half of material is larger than No. 200 sieve size	<b>GRAVELS</b> More than half of coarse fraction is smaller than No. 4 sieve size.  Clean Gravels (Little or no fines)  Gravels with Fines (Appreciable amount of fines)	GW	Well - graded gravels, gravel - sand mixtures, little or no fines.	Wide range in grain size and substantial amounts of all intermediate particle sizes.	For undisturbed soils add information on stratification, degree of compactness, cementation, moisture conditions and drainage characteristics.	$C_u = \frac{D_{60}}{D_{10}}$ Greater than 4  $C_c = \frac{(D_{30})^2}{D_{10} D_{60}}$ Between one and 3  Not meeting all gradation requirements for GW  Atterberg limits below 'A' line or PI less than 4  Atterberg limits above 'A' line with PI greater than 7  $C_u = \frac{D_{60}}{D_{10}}$ Greater than 6  $C_c = \frac{(D_{30})^2}{D_{10} D_{60}}$ Between one and 3  Not meeting all gradation requirements for SW  Atterberg limits below 'A' line or PI less than 4  Atterberg limits above 'A' line with PI greater than 7	
		GP	Poorly - graded gravels, gravel - sand mixtures, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.			
		GM	Silty gravels, gravel - sand - silt mixtures.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below).	Give typical name; indicate approximate percentage sand and gravel, max. size; angularity, surface condition, and hardness of the coarse grains; local or geologic name and other pertinent descriptive information; and symbol in parentheses.		
		GC	Clayey gravels, gravel - sand - clay mixtures.	Plastic fines (for identification procedures see CL below).			
		SW	Well - graded sands, gravelly sands, little or no fines.	Wide range in grain size and substantial amounts of all intermediate particle sizes.			
	<b>SANDS</b> More than half of coarse fraction is smaller than No. 4 sieve size.  Clean Sands (Little or no fines)  Sands with Fines (Appreciable amount of fines)	SP	Poorly - graded sands, gravelly sands, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.			
		SM	Silty sands, sand - silt mixtures.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below).	EXAMPLE Silty sand, gravelly; about 20% hard, angular gravel particles 1/2-in. max. size; rounded and subangular sand grains coarse to fine; about 15% nonplastic fines with low dry strength; well compacted and moist in place; alluvial sand (SM).		
		SC	Clayey sands, sand - clay mixtures.	Plastic fines (for identification procedures see CL below).			
		On Fraction Smaller than No. 40 Sieve Size					
					DILATANCY (reaction to shaking) TOUGHNESS (consistency near PL)		
<b>FINE - GRAINED SOILS</b> More than half of material is smaller than No. 200 sieve size  The No. 200 sieve size is about the smallest particle visible to the naked eye.	<b>Silts and Clays</b> Liquid Limit Less than 50	ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.	None to slight	Quick to slow	None	Give typical name, indicate degree and character of plasticity, amount and maximum size of coarse grains, color in wet condition, odor if any, local or geologic name, and other pertinent descriptive information, and symbol in parentheses.  For undisturbed soils add information on structure, stratification, consistency in undisturbed and remolded states, moisture and drainage conditions.  EXAMPLE Clayey silt, brown, slightly plastic, small percentage of fine sand, numerous vertical root holes, firm and dry in place/loess (ML)
		CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.	Medium to high	None to slow	Medium	
		OL	Organic silts and organic silty clays of low plasticity.	Slight to medium	Slow	Slight	
	<b>Silts and Clays</b> Liquid Limit Greater than 50	MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	Slight to medium	Slow to none	Slight	
		CH	Inorganic clays of high plasticity, fat clays.	High to very high	None	High	
		OH	Organic clays of medium to high plasticity, organic silts.	Medium to high	None to very slow	Slight to medium	
Highly Organic Soils		PI	Peat and other highly organic soils.	Readily identified by color, odor, spongy feel and frequently by fibrous texture.			



(1) Boundary classifications: Soils possessing characteristics of two groups are designated by combinations of group symbols. For example GW-GC, well-graded gravel-sand mixture with clay binder (2) All sieve sizes on this chart are U.S. standard.

**FIELD IDENTIFICATION PROCEDURES FOR FINE - GRAINED SOILS OR FRACTIONS**

These procedures are to be performed on the minus No. 40 sieve size particles, approximately 1/64 in. for field classification purposes, screening is not intended - simply remove by hand the coarse particles that interfere with the tests.

**DILATANCY (reaction to shaking)**  
After removing particles larger than No. 40 sieve size, prepare a pat of moist soil with a volume of about one-half cubic inch. Add enough water if necessary to make the soil soft but not sticky. Place the pat in the open palm of one hand and shake horizontally, striking vigorously against the other hand several times. A positive reaction consists of the appearance of water on the surface of the pat which changes to a livery consistency and becomes glossy. When the sample is squeezed between the fingers, the water and gloss disappear from the surface, the pat stiffens, and finally cracks or crumbles. The rapidity of appearance of water during shaking and of its disappearance during squeezing assist in identifying the character of the fines in a soil. Very fine clean sands give the quickest and most distinct reaction whereas a plastic clay has no reaction. Inorganic silts, such as a typical rock flour show a moderately quick reaction.  
Adopted by the Corps of Engineers and Bureau of Reclamation, January 1952.

**DRY STRENGTH (crushing characteristics)**  
After removing particles larger than No. 40 sieve size, mold a pat of soil to the consistency of putty, adding water, if necessary. Allow the pat to dry completely by oven, sun, or air drying, and then test its strength by breaking and crumbling between the fingers. This strength is a measure of the character and quantity of the colloidal fraction contained in the soil. The dry strength increases with increasing plasticity. High dry strength is characteristic for clays of the CH group. A typical inorganic silt possesses only very slight dry strength. Silty fine sands and silts have about the same slight dry strength, but can be distinguished by the feel when powdering the dried specimen. Fine sand feels gritty whereas a typical silt has the smooth feel of flour.

**TOUGHNESS (consistency near plastic limit)**  
After removing particles larger than the No. 40 sieve size, a specimen of soil about one-half inch cube in size, is molded to the consistency of putty. If too dry, water must be added and if sticky, the specimen should be spread out in a thin layer and allowed to lose some moisture by evaporation. Then the specimen is rolled out by hand on a smooth surface or between the palms into a thread about one-eighth inch in diameter. The thread is then folded and re-rolled repeatedly. During this manipulation the moisture content is gradually reduced and the specimen stiffens, finally loses its plasticity, and crumbles, when the plastic limit is reached. After the thread crumbles, the pieces should be lumped together and a slight kneading action continued until the lump crumbles. The tougher the thread near the plastic limit and the stiffer the lump when it finally crumbles, the more potent is the colloidal clay fraction in the soil. Weakness of the thread at the plastic limit and quick loss of coherence of the lump below the plastic limit indicate either inorganic clay of low plasticity, or materials such as kaolin-type clays and organic clays which occur below the A-line. Highly organic clays have a very weak and spongy feel at the plastic limit.

### ABBREVIATIONS

a. angle alt. alternate(ly)(ing) amt. amount ang. angular approx. approximate(ly) ar. argillaceous aren. arenaceous asp. asphaltic  b. bone ba. banded(ing) bd. bed(ded)(ing) bdr. bedrock bf. buff bk. black bky. blocky brn. broken bl. blue bot. bottom boul. boulder(s) bre. breccia(ted) br. brown(ish)  c. coarse ca. calcareous carb. carbonaceous cav. cavern, cavity cbl. cobble(ly) ch. chert cl. clay(ly) cib. claybands cle. clean coa. coat(ed)(ing) comp. composite con. contains conc. concretion cong. conglomerate(c) cont. continuous cr. crushed cru. crumbly cst. crystal(ine) cem. cement(ed)  dc. decayed dl. dry dia. diameter diag. diagonal dis. discontinuous dis. disseminated dk. dark dn. dense dmp. damp ext. extremely elem. elements	f. fine fer. ferruginous fis. fissile fil. fill(ed)(ing) fm. firm fos. fossil(iferous) frac. fracture(d) frags. fragment(s)(al) fri. friable fr. fixed-piston FW free water  g. grain(ed) gen. generally gn. green(ish) gr. gray grv. gravelly grad. grading(ed) GW groundwater  h. hard ha. high angle hl. higher(ly) hor. horizontal(ly)  IC initial contact inc. included, inclusions incr. increasing(ly) inla. interlamated int. intercalations intbed. interbedded irr. irregular jt. joint(ed) l. little la. low angle lam. laminate(ed)(ions) lay. layer(s) lea. lean lea. leached lens. lens(es) lg. large LL. liquid limit los. loose it. light  m. medium ma. many mas. massively mat. material mic. micaceous min. mineralized mod. moderate(ly) mos. mostly	mot. mottled mst. moist mix. mix.  n. near nod. nodule(s) num. numerous  o. open od. odor occ. occasional(ly) occu. occurring org. organic  pa. parting(s) part. part. % percent(age) pi. piece pl. plastic pl. plastic limit peb. pebble(s) pk. pink pocket. pocket(s) pit. pit(ted)(ing) plan. plan(e)s por. porous part. part(ly) pyr. pyrite(c)  q. quartz(tic) r. red(dish) ro. rock(s) rot. rotten(an) rou. round(ed) root. root(s)(let)  s. soft ss. split spoon sa. sandy sat. saturated scat. scattered se. seams sev. severe(ly) sevr. several sh. shaly shs. shells sil. siliceous sl. silty slic. slickensided sm. small so. some sol. solution stain. stain(ed) stf. stiff stks. streak(s)	str. stringer(s) sty. stylolite(c)  t. thin tho. throughout tk. thick tr. trace  v. variably var. variegated ve. very veg. vegetation ver. vertical(ly) vug. vuggy  w. water w/ with w/o without wc. water content wd. weathered WH weight of hammer WL water level wo. wood  x-bd. cross-bedded(ing)  y. yellow(ish)  z. zone
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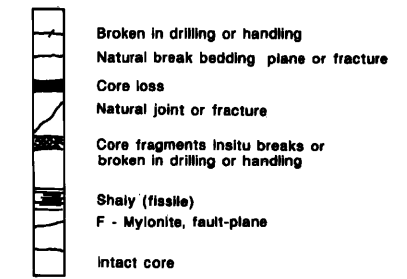
### NUMBER AND TYPE OF EXPLORATIONS

CODE	YEAR	HOLE NO.	DESIGNATION
C	91	39	Core hole in bedrock
D	91	39	Disturbed sample boring
CD	91	39	Disturbed sample boring (Percussion Drill/Cable Tool Drill)
UD	91	39	Undisturbed sample boring
A	91	39	Auger hole hand or power auger, 2" to 24" diameter
			Core hole in bedrock, hydraulic pressure tested
			Indicates angle boring shows direction
			Boring with Piezometer
			Boring with inclinometer
TP	91	42	Test Pit in overburden
TT	91	7 - 135	Test Trench in overburden (TT-91-7), soils classified at stationing as shown (135 feet)
UD	91	39	Undisturbed sample boring with Piezometer

### ROCK

NAME	ABBREVIATION
SANDSTONE	SS.
CONGLOMERATE	CONG.
SHALE	SH.
SILTSTONE	SLS.
CLAYSTONE	CLS.
LIMESTONE	LS.
COAL	C.
INDURATED CLAY	ICL.
DOLOMITE	DO.

### ROCK & GRAPHIC LOG OF BORING LEGEND



### GRAPHIC LOG OF BORING

Vertical or Degrees From: **Vertical**

Drill Hole Compass Direction: **Vertical**

Core Size: 4-inch

Sampler: 2" S.S.

Drop: 30"

Direction: **Vertical**

Date Started: 26 Oct. 1979

Date Completed: 1 Nov. 1979

Coordinates: N 557,930.2 E 1,738,407.9

**PROJECT SAMPLE LOG**

**HOLE NO. C-87-39**

Hammer: 140#

Location: N 557,930.2 E 1,738,407.9

ELEVATION (Feet)	SYMBOL	DESCRIPTION OF MATERIALS	REMARKS	
			W.C.	LL
548.1	CL	CLAY (CL), br., pl. mst., w/ f.g.-c.g. SAND, ro. frags. to 1"	19	4.5
541.8	GM	SILTY SANDY GRAVEL (GM), or, non pl. drmp., f.g.-c.g. ang. to subangular GRAVEL, f.g.-c.g. SAND	42	33 25
535.1	NS	DRILLING W/O SAMPLING		
529.1	NS	SAMPLED - NO RECOVERY		
525.2	SH	Shale, silty, soft to mod. hard, gray, poorly fissile with clayey zones.		
518.9	SS	0.5' partially broken along fracture from 521.2 to 520.7 Unweathered, vertical fracture from 518.3 to 517.1		
	SS	SANDSTONE, hard, fine to medium grained, gray, micaceous, thick bedded with micaceous laminations.		
	SS	Very fine grained and silty to 513.2 1.6' zone with numerous micaceous laminations from 512.9 to 511.3		
	SS	0.3' broken, very friable zone & unweathered fracture from 509.2 to 508.9		

Top of Hole Elevation: 548.1

Main Classification: CL

Soil Component with Less Than 5% Mentioned only as w/ Unified Soils Classification: GM

Elevation at change of Material: 541.8

Material Change: CL to GM

Soil Components when greater than 5% are mentioned in their order of increasing percentages: CL, GM

Drilling Without Sampling: 529.1 - 535.1

Sampling With No Recovery: 525.2

Rock Symbol: SH, SS

Rock Structural Element: SH, SS

Blow Count per Half Foot: 19

Plastic Limit (P.L.): 4.5

Liquid Limit (LL): 33

Water Content (W.C.): 42

Gradation: 25

Perceived Moisture as Determined in the Field by Inspector: e.g. dry, damp, mst., or wet.

Initial Ground Water Contact or last reading (month-day-year) include I.C. for Initial-Contact: I.C.

Pressure Test Data: 14, 1.1

Gage Pressure (Pounds per Square Inch): 14

Water Table (Cubic Feet per Minute): 1.1

Lost Drill Water % Loss: 31.0

Rock Quality Designation (% per Run): 18, 0.3

Core Loss (Feet per Run): 19

Bottom of Pressure Test (Increment Feet): 19

Regained Drill Water: 0.0

Symbol	Revisions	Descriptions	Date	Approved

**U.S. ARMY ENGINEER DISTRICT**  
**CORPS OF ENGINEERS**  
**HUNTINGTON, WEST VIRGINIA**

Designed by: MDL L BRA

Drawn by: GH

Checked by: AEN

Reviewed by: PFO

Approved by: AJS

SCIO TO RIVER  
COLUMBUS, OHIO  
WEST COLUMBUS, L.P.P.  
PHASE IIB

**GEOLOGY AND SOILS' LEGEND**

Scale: 1" = 20'

Date: SEPT 1995

Drawing Code: 102

Legend.dgn

Sheet reference numbers: 102

Sheet of







# DRAWING PLACEHOLDER

WCLPP Phase 2B Dodge Park Pump Station index sheet (page two) indicates that page 67 is the LOG OF BORING. This information is actually on other sheets because there is no page 67 in the original drawing set.

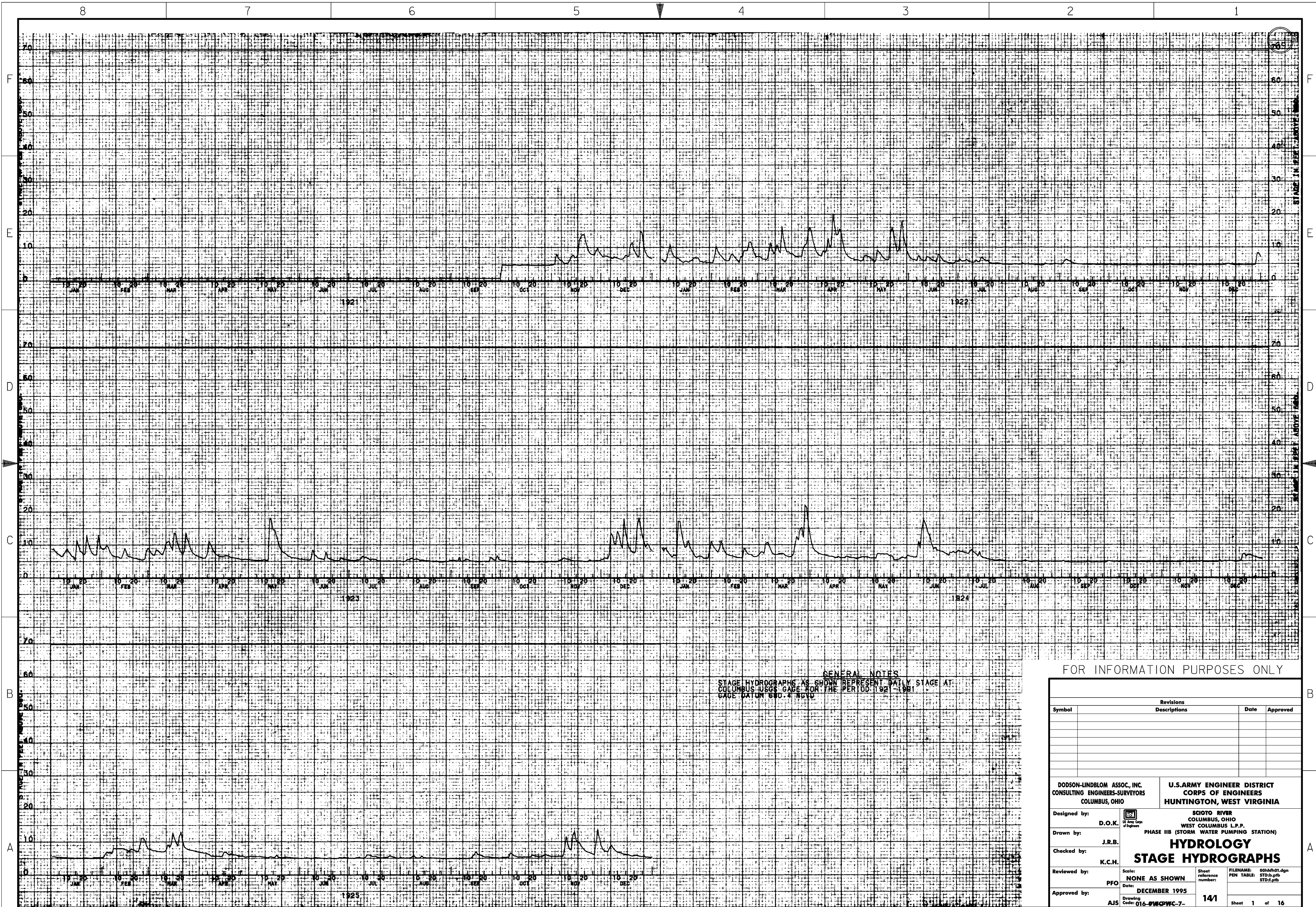












**GENERAL NOTES**  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
 COLUMBUS USGS GAGE FOR THE PERIOD 1921-1991  
 GAGE DATUM 670.4 NGVD

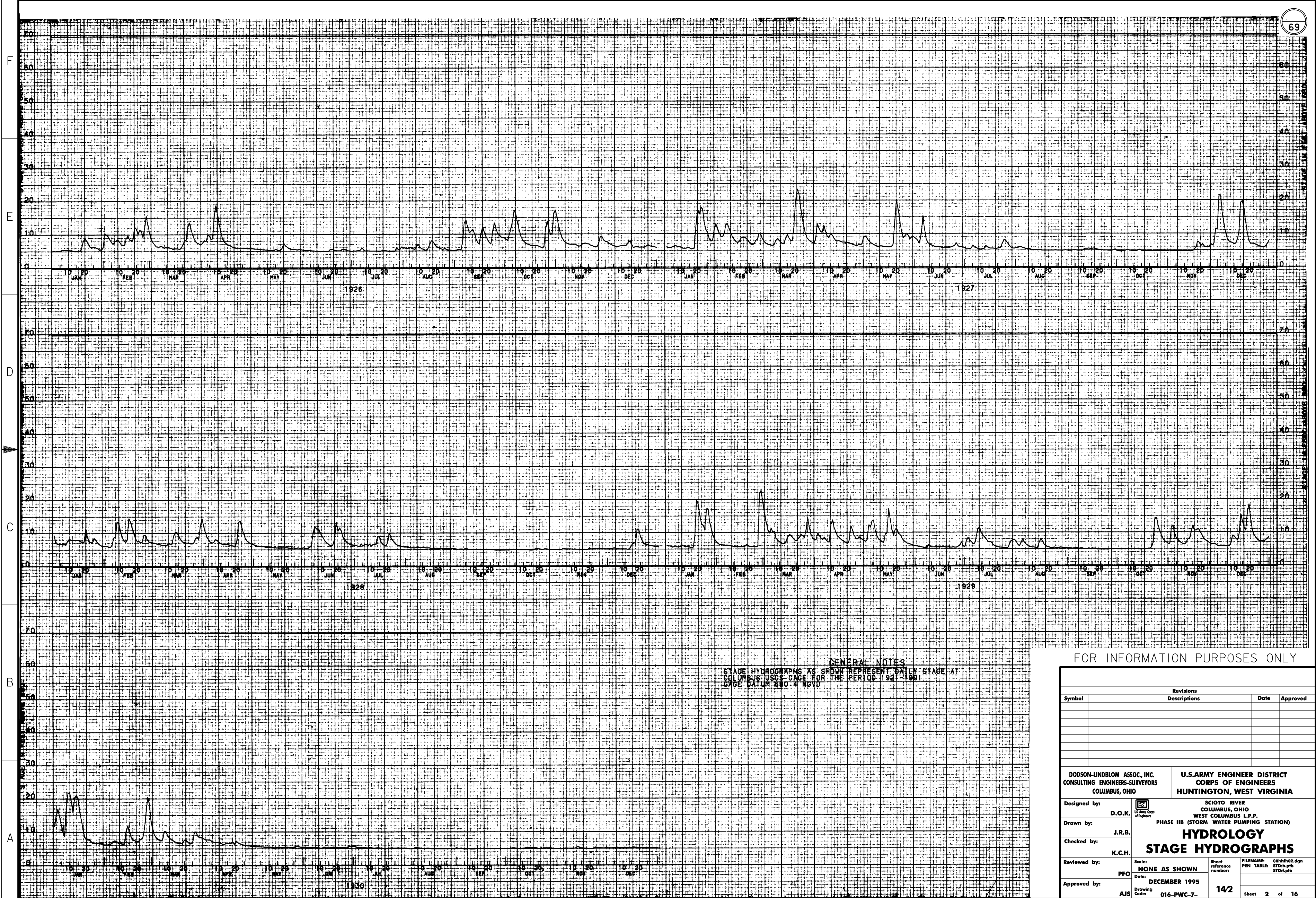
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Drawn by: J.R.B.	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>		
Checked by: K.C.H.			
Reviewed by: PFO	Scale: NONE AS SHOWN	Sheet reference number: 14/1	FILENAME: 00hh7h01.dgn PEN TABLE: STD.dpb STD.dpb
Approved by: AJS	Date: DECEMBER 1995	Drawing Code: 016- <del>PH</del> WC-7-	Sheet 1 of 16





GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
 COLUMBUS USGS GAGE FOR THE PERIOD 1926-1930  
 GAGE DATUM 580.4 NGVD

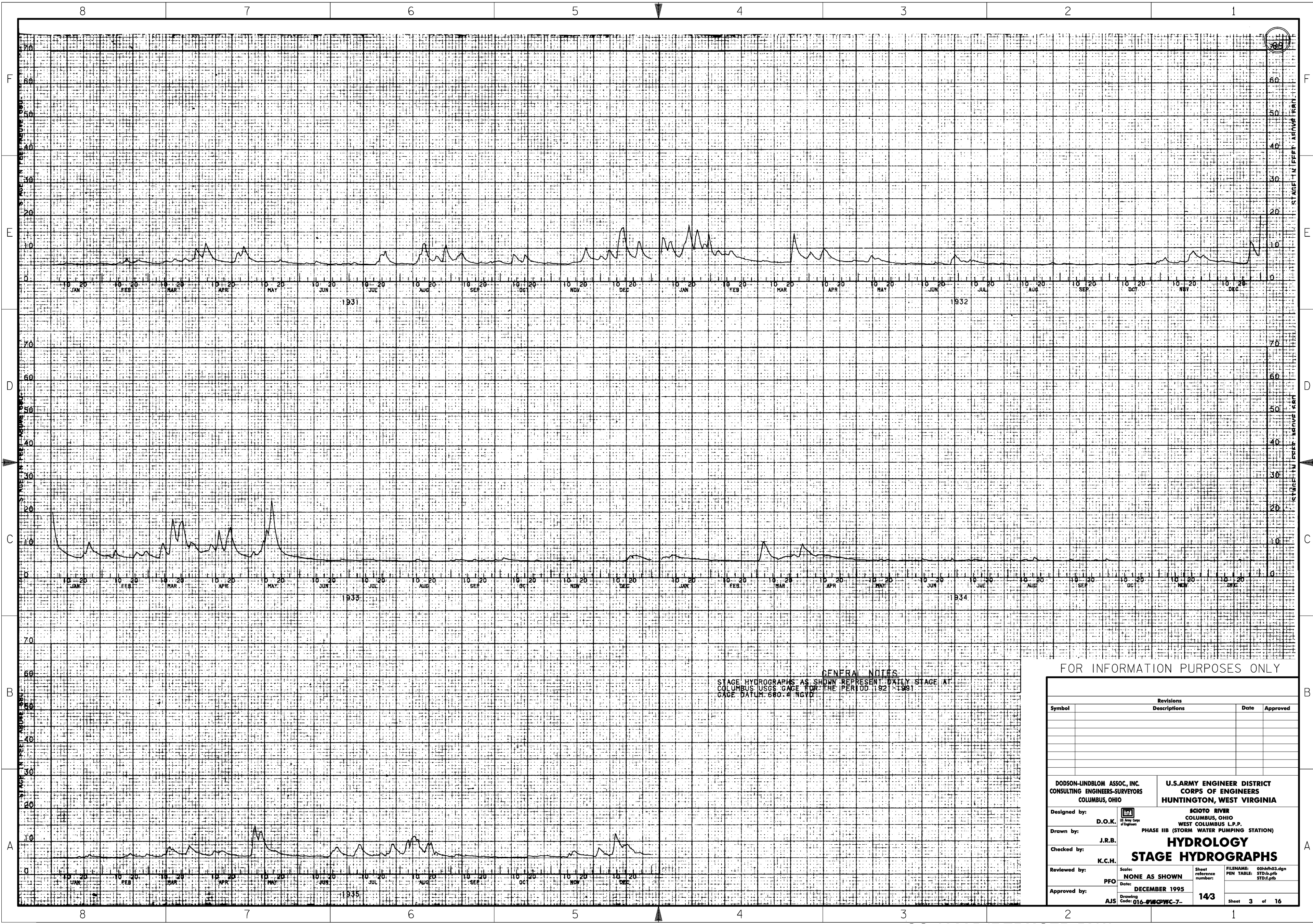
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		Drawn by: J.R.B.	
Checked by: K.C.H.	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>	Scale: NONE AS SHOWN Date: DECEMBER 1995	FILENAME: 00hfh02.dgn PEN TABLE: STD.pnt STD.plt
Reviewed by: PFO	Drawing Code: 016-PWC-7-	Sheet reference number: 14/2	Sheet 2 of 16
Approved by: AJS	Date: DECEMBER 1995	Drawing Code: 016-PWC-7-	Sheet 2 of 16





GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
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 GAGE DATUM 680.4 NGVD

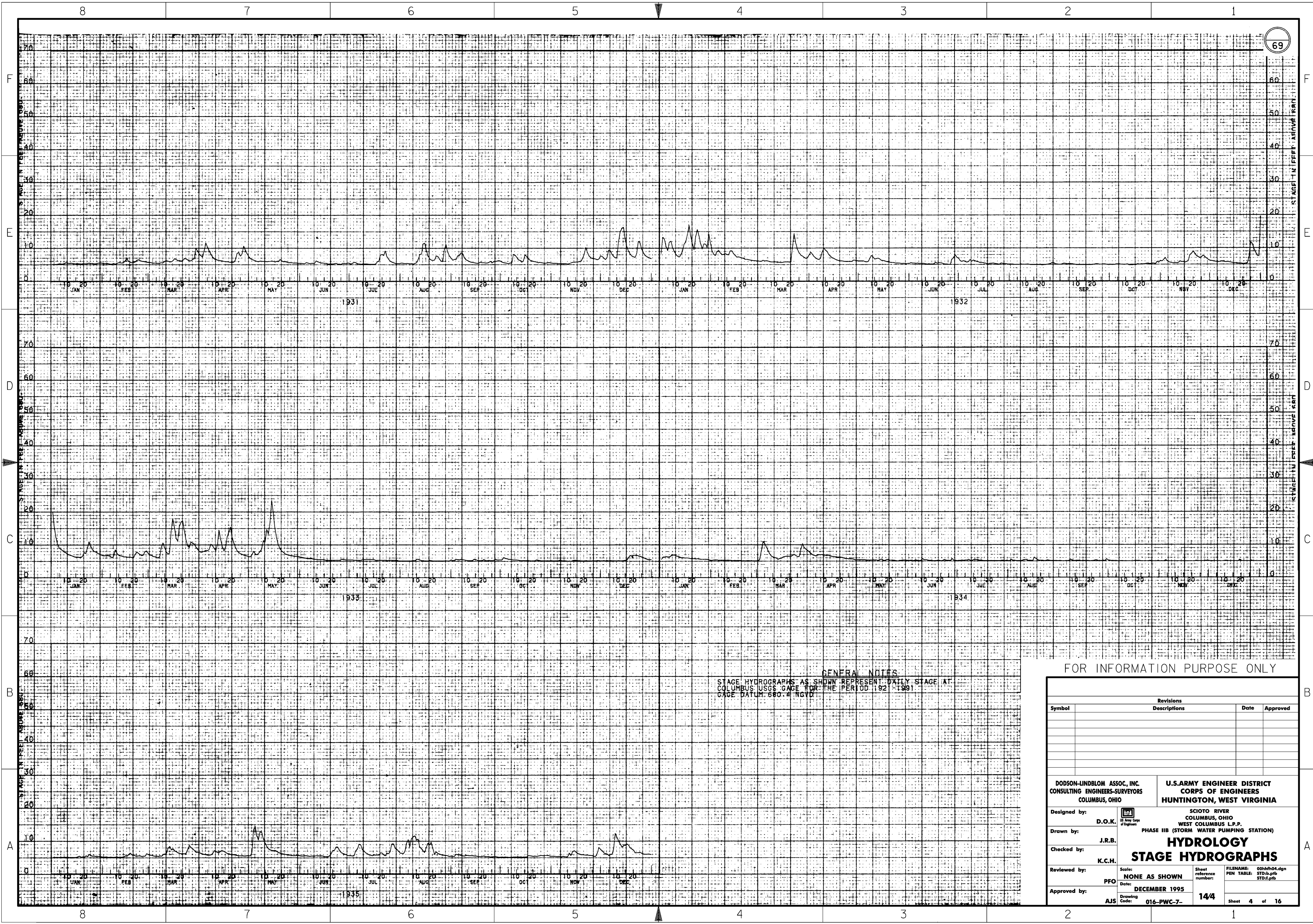
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Checked by: K.C.H.	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>		
Reviewed by: PFO	Scale: NONE AS SHOWN	Sheet reference number: 143	FILENAME: 00hfh03.dgn PEN TABLE: STD-L.pfb STD-L.pfb
Approved by: AJS	Date: DECEMBER 1995	Drawing Code: 016- <del>PHO</del> WC-7-	
Sheet 3 of 16		Sheet 3 of 16	





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**GENERAL NOTES**  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
 COLUMBUS USGS GAGE FOR THE PERIOD 1921-1991  
 GAGE DATUM 680.4 NGVD

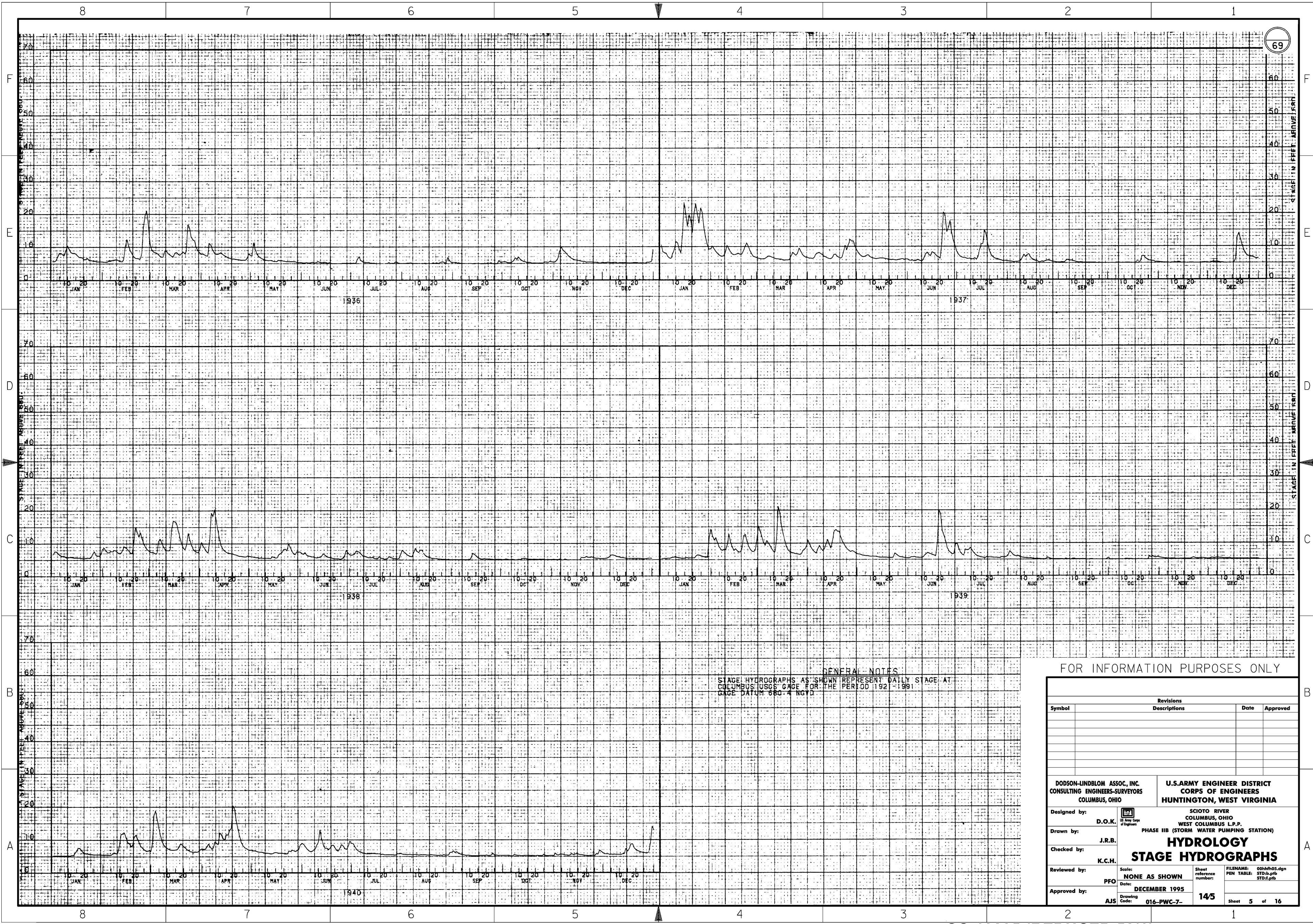
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		Drawn by: <b>J.R.B.</b>	PHASE IIB (STORM WATER PUMPING STATION)
Checked by: <b>K.C.H.</b>	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>	Reviewed by: <b>PFO</b> Scale: <b>NONE AS SHOWN</b> Date: <b>DECEMBER 1995</b>	Sheet reference number: <b>14/4</b>
Approved by: <b>AJS</b>	Drawing Code: <b>016-PWC-7-</b>	FILENAME: 00h7h04.dgn PEN TABLE: STD-p1b STD-p1b	Sheet 4 of 16





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GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
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 GAGE DATUM 680.4 NGVD

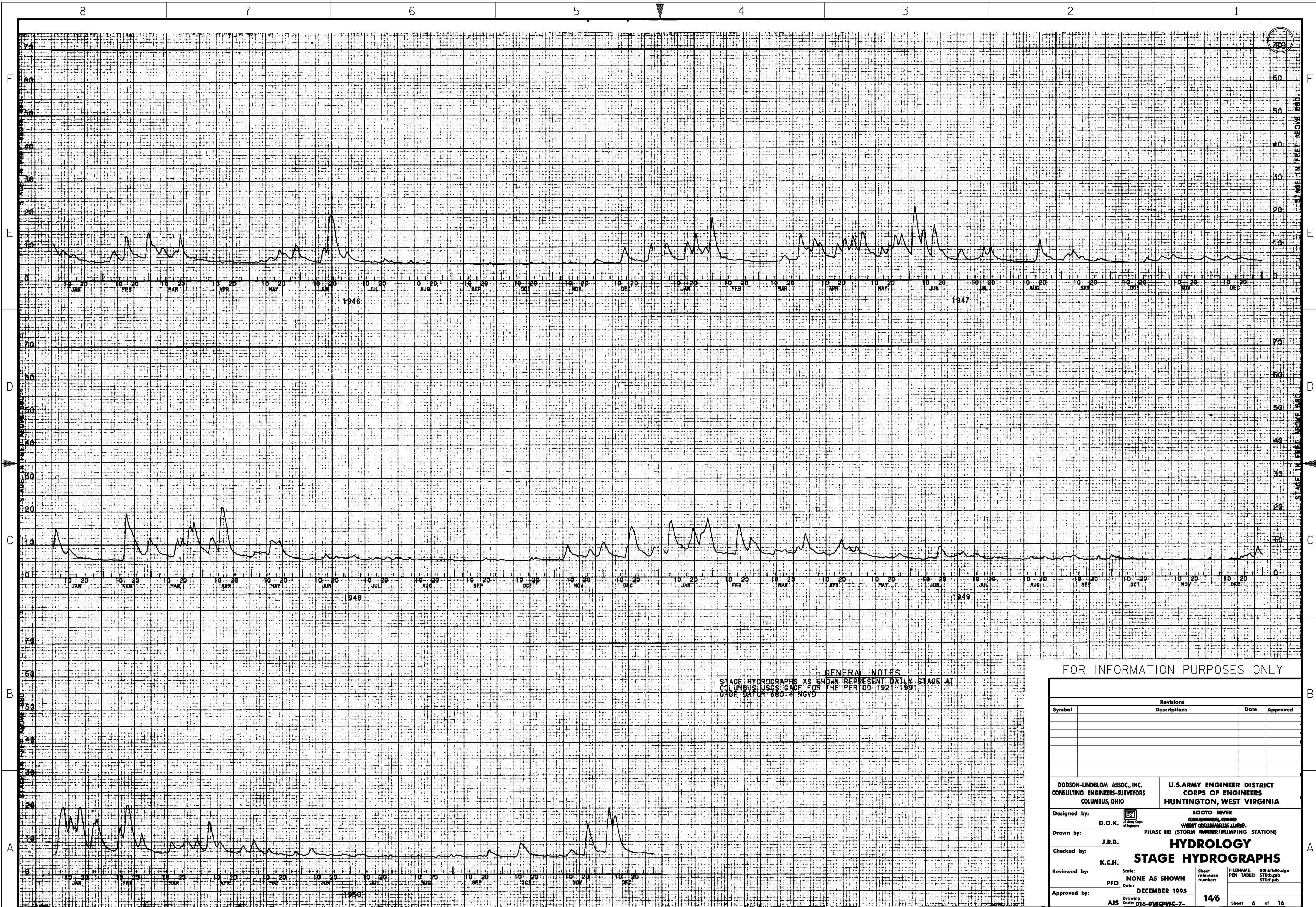
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Drawn by: J.R.B.	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>		
Checked by: K.C.H.			
Reviewed by: PFO	Scale: NONE AS SHOWN	Sheet reference number: 145	FILENAME: 00hfh02.dgn PEN TABLE: STD.dpb STD.dpb
Approved by: AJS	Date: DECEMBER 1995	Drawing Code: 016-PWC-7-	Sheet 5 of 16





**GENERAL NOTES**  
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 GAGE DATUM 680.4 NGVD

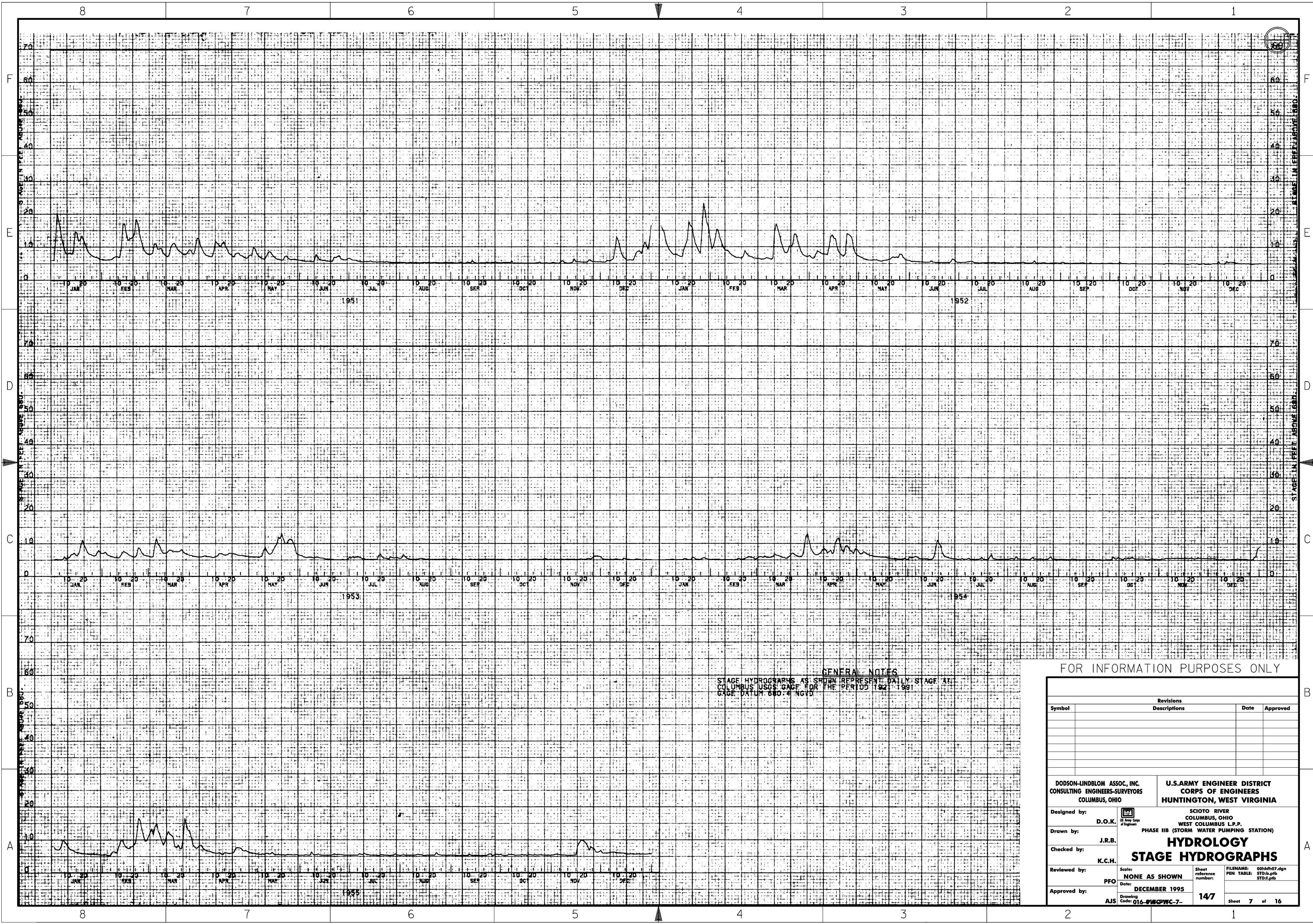
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Approved by: AJS		Scale: NONE AS SHOWN	Date: DECEMBER 1995
Drawing Code: 016- <del>PH</del> WC-7-		Sheet reference number: 14/6	FILENAME: 00hfh06.dgn PEN TABLE: STD.pjt STD.pjt





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 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
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 GAGE DATUM 680.4 NGVD

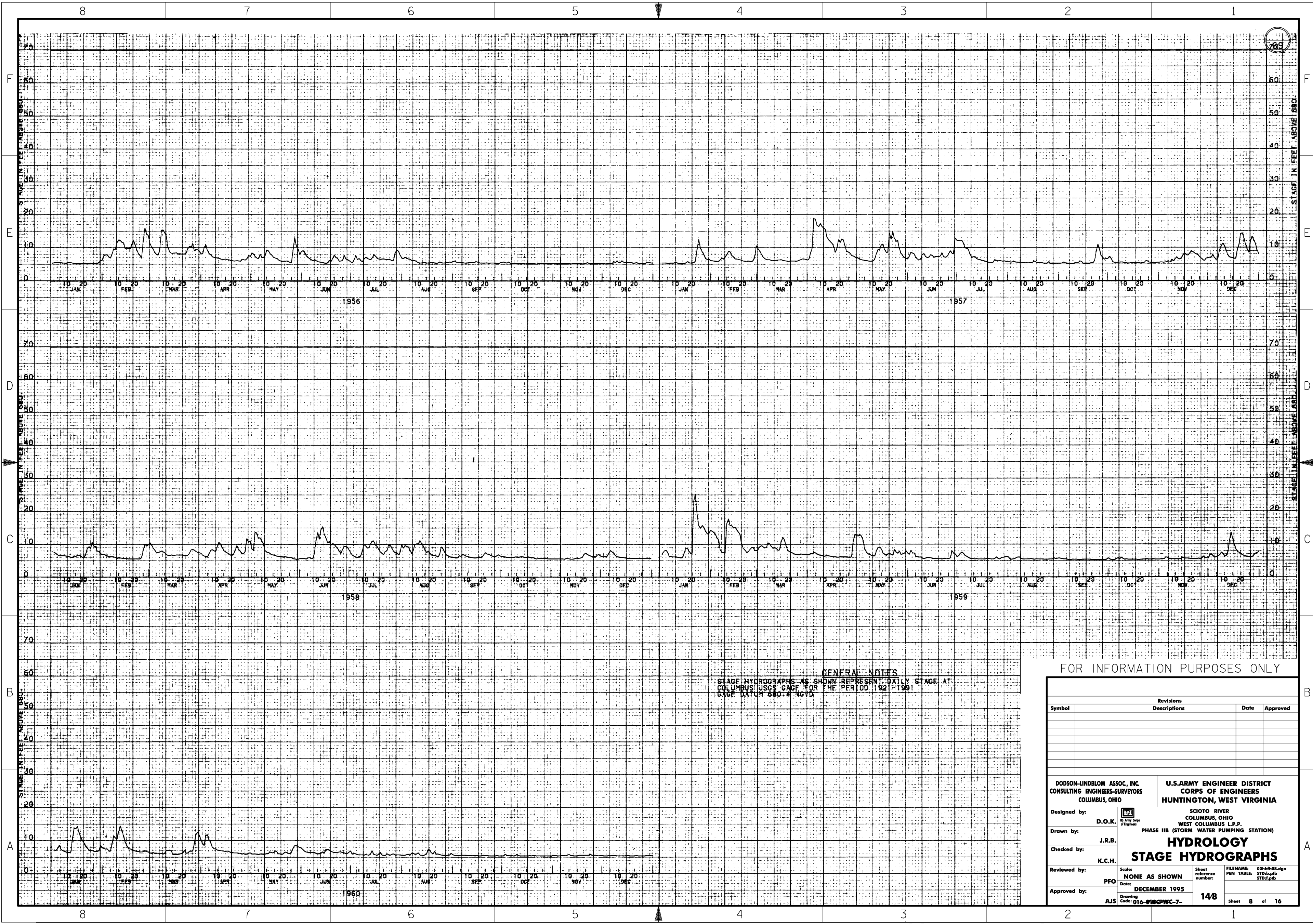
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Drawn by: J.R.B.	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>		
Checked by: K.C.H.			
Reviewed by: PFO	Scale: NONE AS SHOWN	Sheet reference number: 147	FILENAME: 00hh07.dgn PEN TABLE: STD.dpb STD.dpb
Approved by: AJS	Date: DECEMBER 1995	Drawing Code: 016- <del>SW</del> WC-7-	





GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
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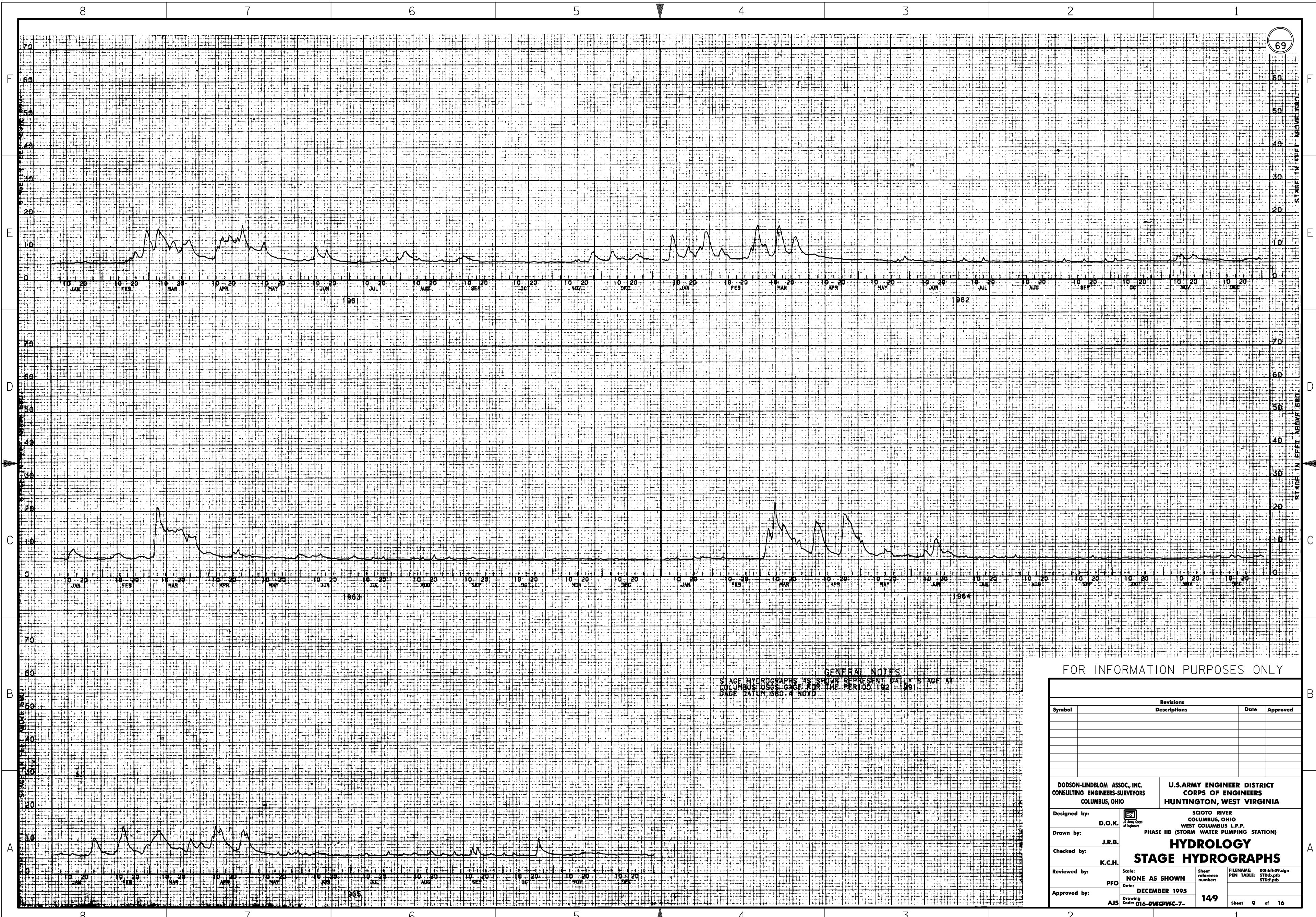
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		Drawn by: <b>J.R.B.</b>	PHASE IIB (STORM WATER PUMPING STATION)
Checked by: <b>K.C.H.</b>	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>	Reviewed by: <b>PFO</b>	Scale: <b>NONE AS SHOWN</b> Date: <b>DECEMBER 1995</b>
Approved by: <b>AJS</b>	Drawing Code: <b>016-5180WC-7-</b>	Sheet reference number: <b>14/8</b>	FILENAME: 00hfh08.dgn PEN TABLE: STD.tbl STD.plt





GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
 COLUMBUS USGS GAGE FOR THE PERIOD 1961-1965  
 GAGE DATUM 580.4 NGVD

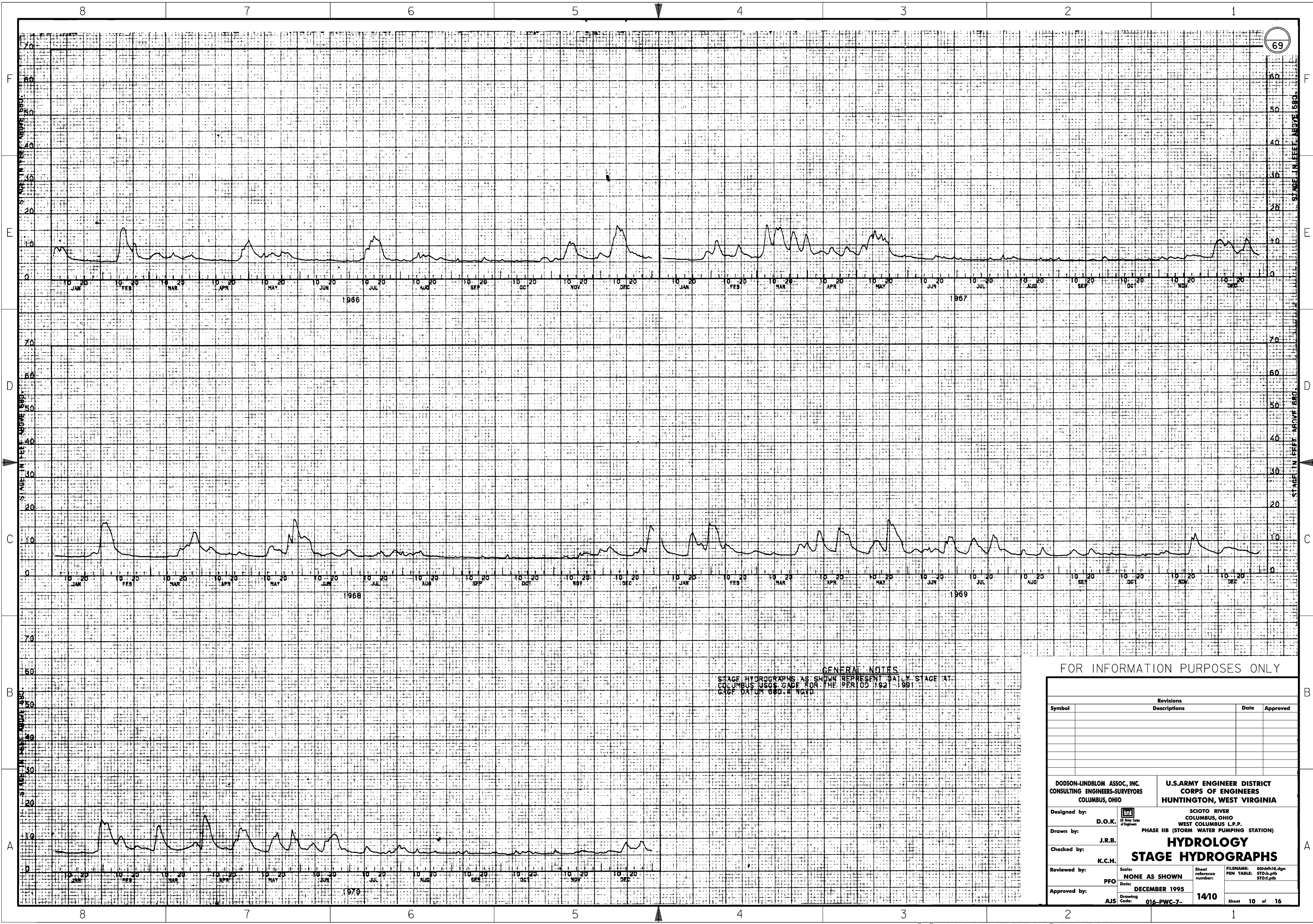
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Drawn by: J.R.B.	<b>HYDROLOGY</b>
Checked by: K.C.H.	<b>STAGE HYDROGRAPHS</b>
Reviewed by: PFO	Scale: NONE AS SHOWN
Approved by: AJS	Date: DECEMBER 1995
	Sheet reference number: 149
	FILENAME: 00hh09.dgn PEN TABLE: STD.tbl STD.plt
	Drawing Code: 016- <del>PH</del> WC-7-
	Sheet 9 of 16





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GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
 COLUMBUS USGS GAGE FOR THE PERIOD 1961-1991  
 GAGE DATUM 680.4 NGVD

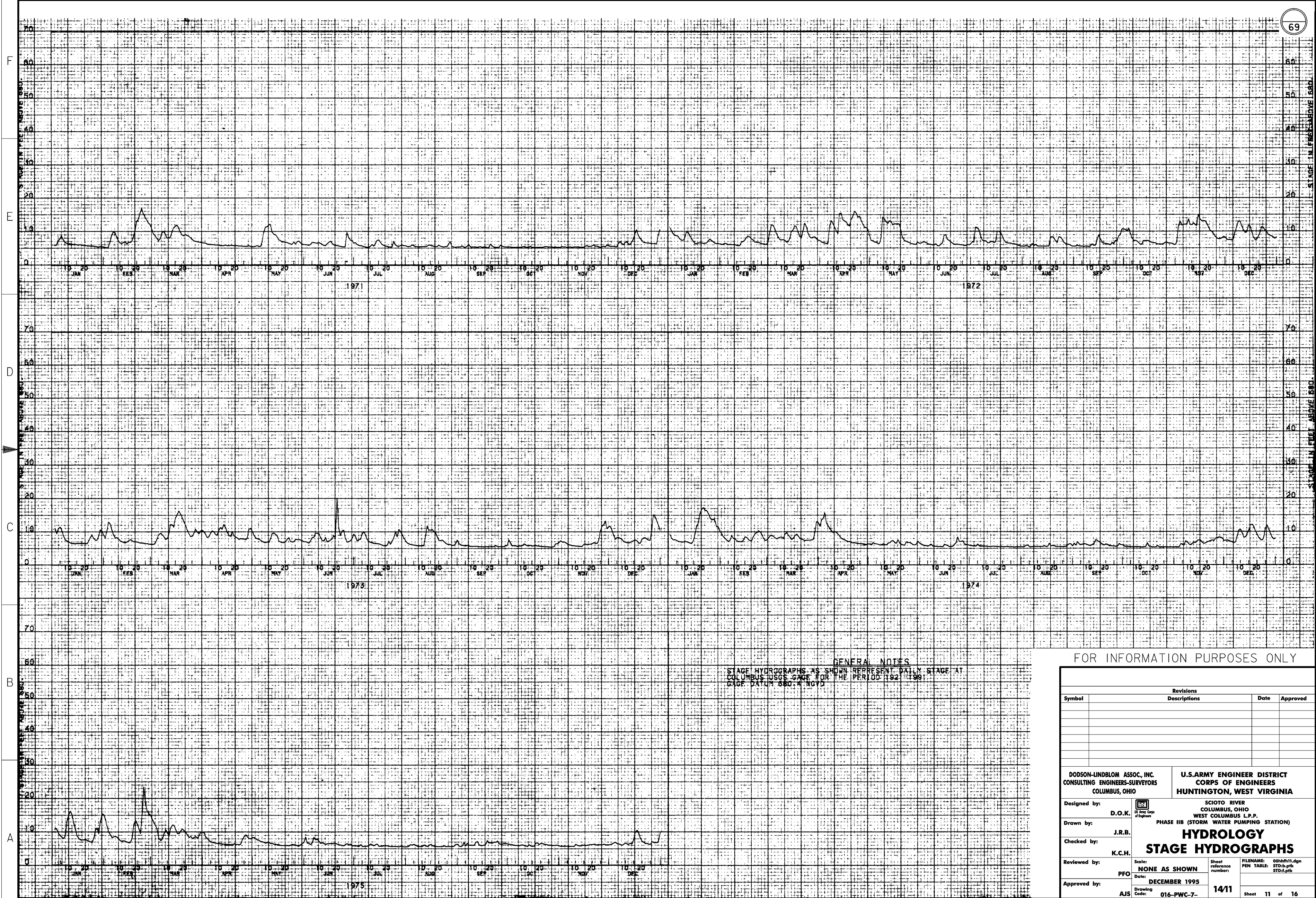
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Drawn by: J.R.B.	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>
Checked by: K.C.H.	Scale: NONE AS SHOWN Date: DECEMBER 1995
Reviewed by: PFO	Sheet reference number: 14/10
Approved by: AJS	Drawing Code: 016-PWC-7- Sheet 10 of 16





GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
 COLUMBUS USGS GAGE FOR THE PERIOD 1921-1991  
 GAGE DATUM 880.4 NGVD

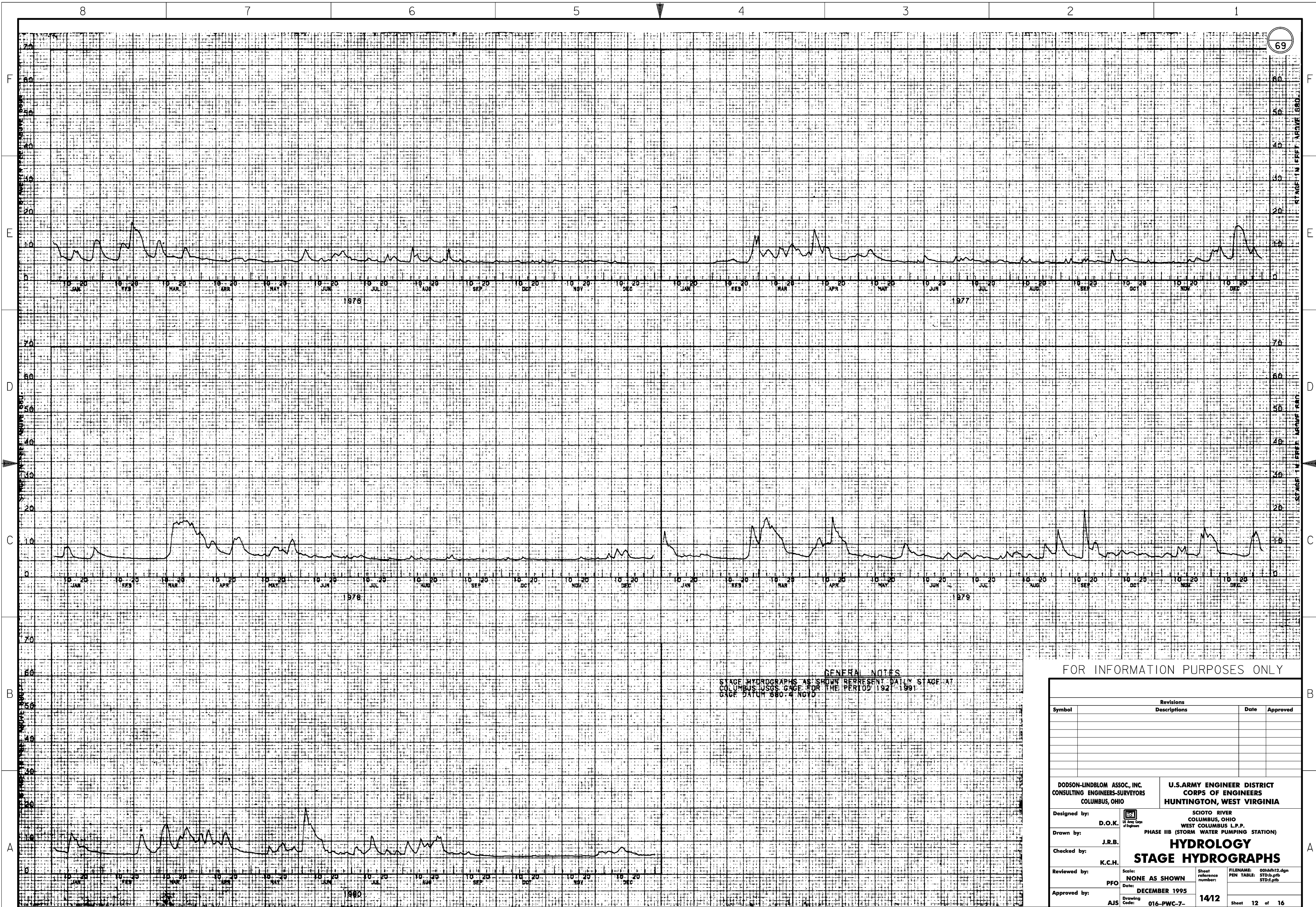
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Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	Designed by: <b>D.O.K.</b>	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)
		Drawn by: <b>J.R.B.</b>	
Checked by: <b>K.C.H.</b>	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>	Scale: <b>NONE AS SHOWN</b> Date: <b>DECEMBER 1995</b>	FILENAME: 00hrt11.dgn PEN TABLE: STD.dpb STD.dpb
Reviewed by: <b>PFO</b>	Drawing Code: <b>016-PWC-7-</b>	Sheet reference number: <b>14/11</b>	Sheet 11 of 16
Approved by: <b>AJS</b>			





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GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
 COLUMBUS USGS GAGE FOR THE PERIOD 1921-1991  
 GAGE DATUM 580.4 NGVD

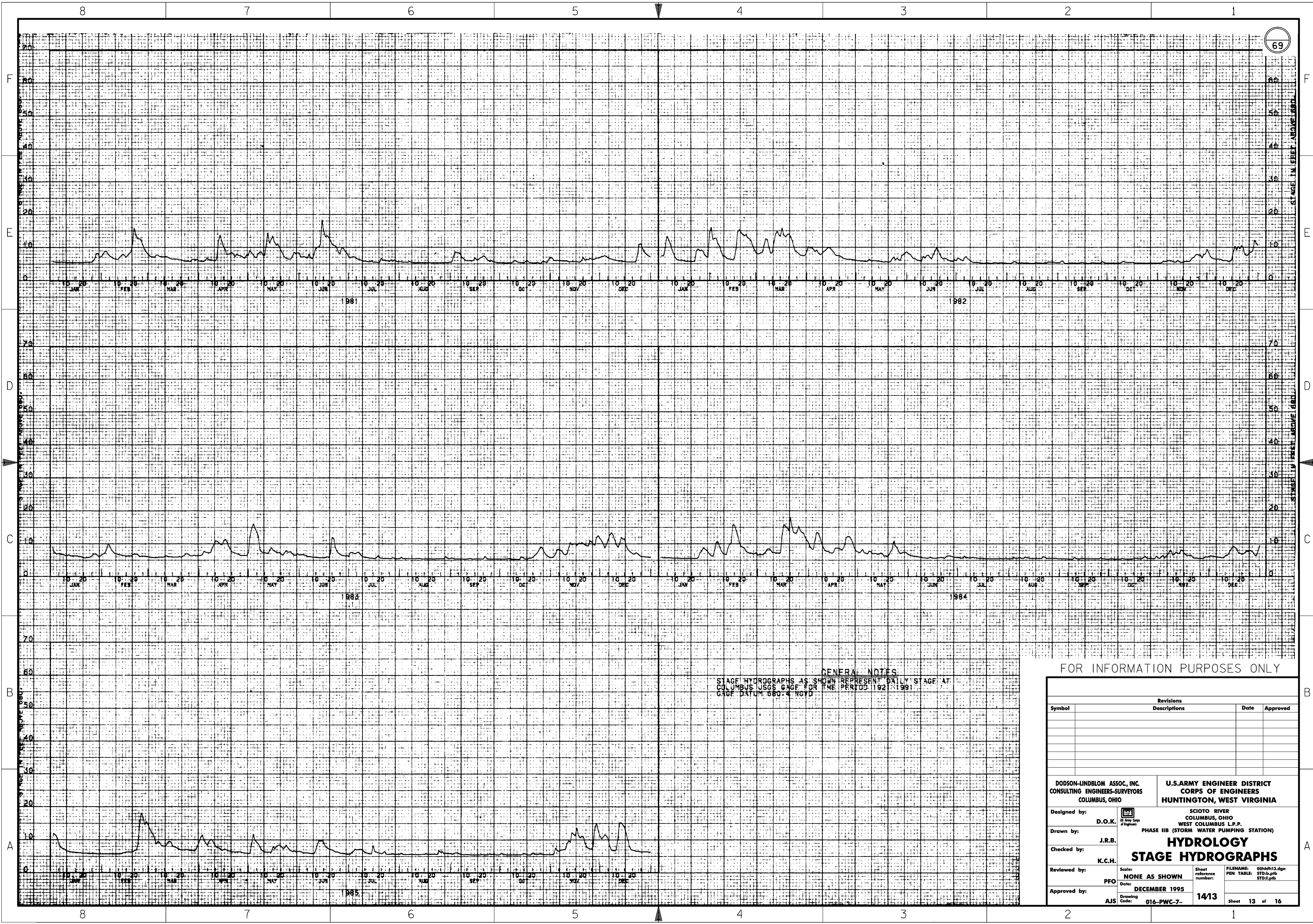
FOR INFORMATION PURPOSES ONLY

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: D.O.K.	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)		
Drawn by: J.R.B.	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>		
Checked by: K.C.H.			
Reviewed by: PFO	Scale: NONE AS SHOWN	Sheet reference number: 14/12	FILENAME: 00hfm12.dgn PEN TABLE: STD.pnt STD.plt
Approved by: AJS	Date: DECEMBER 1995	Drawing Code: 016-PWC-7-	Sheet 12 of 16





GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
 COLUMBUS USGS GAGE FOR THE PERIOD 1981-1991  
 GAGE DATUM 680.4 NGVD

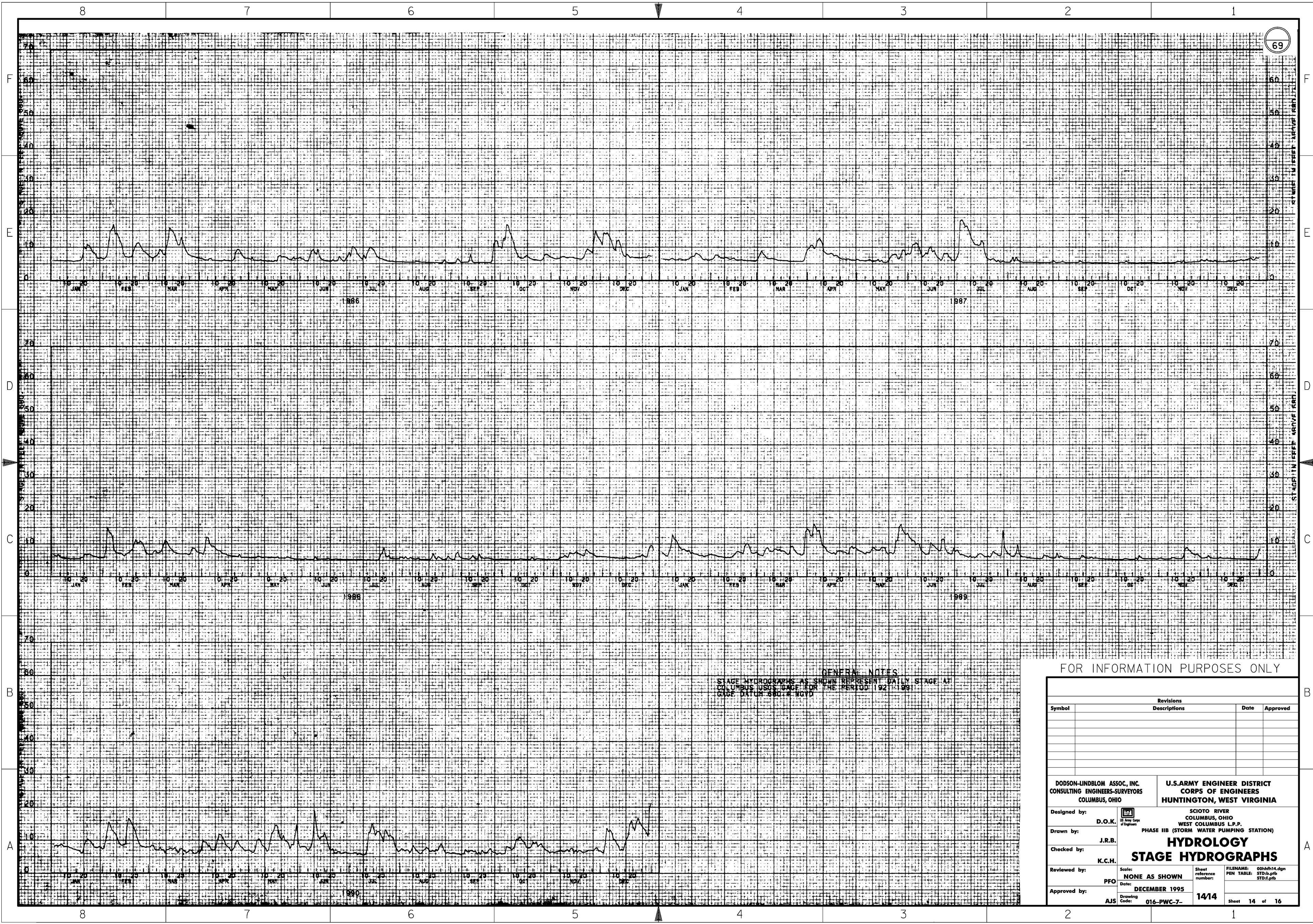
FOR INFORMATION PURPOSES ONLY

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO	U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	Designed by: <b>D.O.K.</b>	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.
		Drawn by: <b>J.R.B.</b>	PHASE IIB (STORM WATER PUMPING STATION)
Checked by: <b>K.C.H.</b>	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>	Reviewed by: <b>PFO</b>	Scale: <b>NONE AS SHOWN</b> Date: <b>DECEMBER 1995</b>
Approved by: <b>AJS</b>	Drawing Code: <b>016-PWC-7-</b>	Sheet reference number: <b>14/13</b>	FILENAME: 00hfh13.dgn PEN TABLE: STD.pfb STD.pfb





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GENERAL NOTES  
 STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT  
 COLUMBUS USGS GAGE FOR THE PERIOD 1921-1991  
 GAGE DATUM 680.1# NGVD

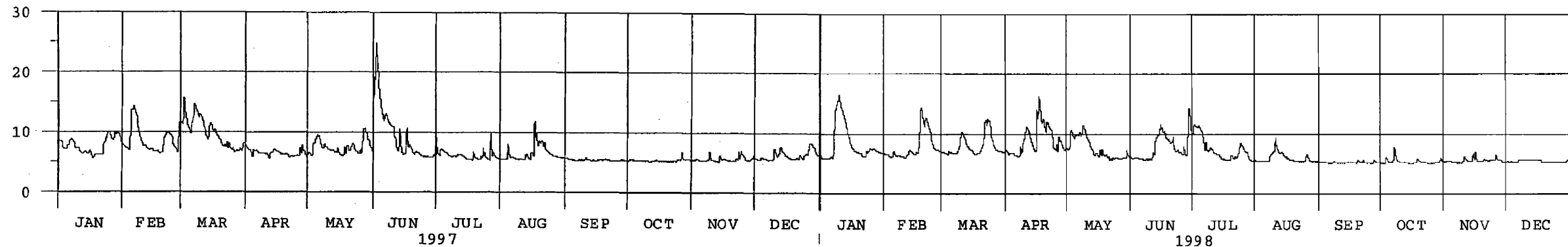
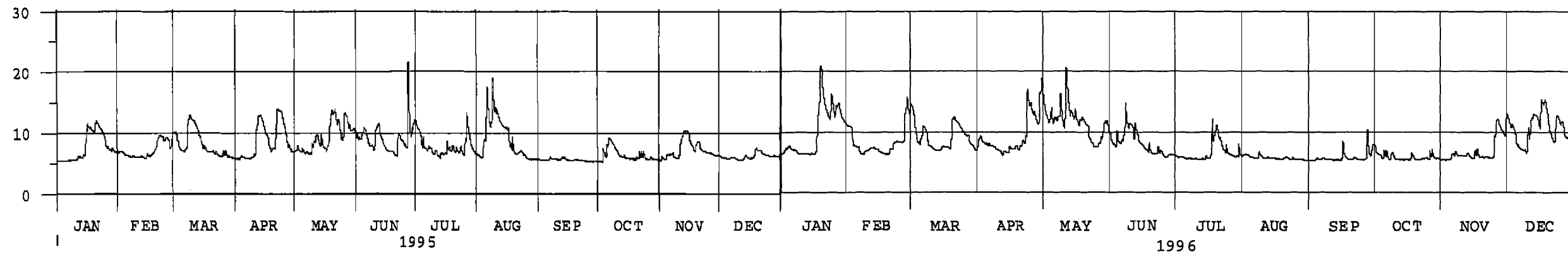
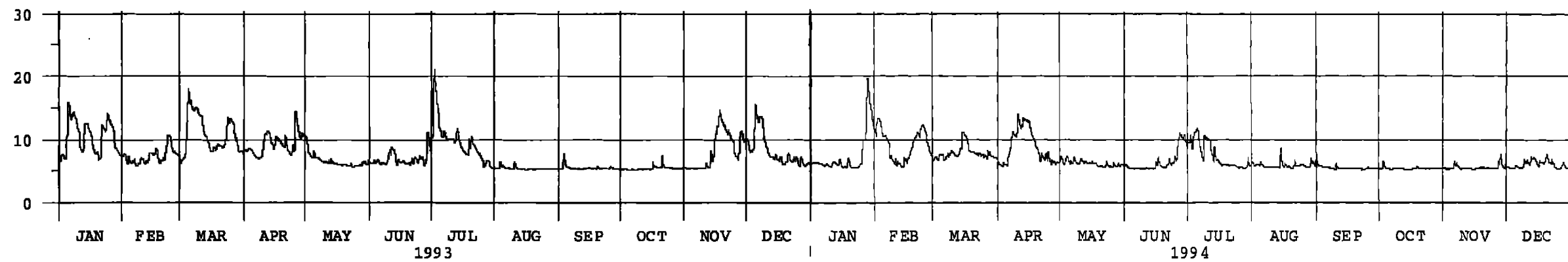
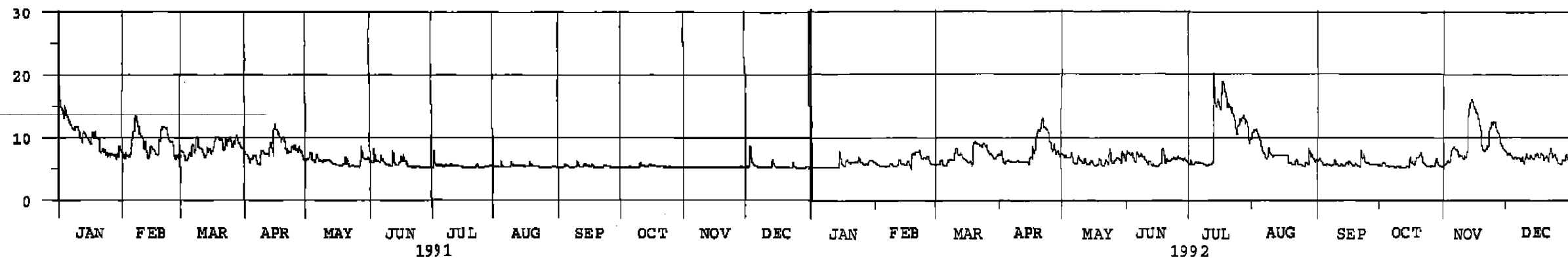
FOR INFORMATION PURPOSES ONLY

Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: D.O.K.	SCIO TO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P.		
Drawn by: J.R.B.	PHASE IIB (STORM WATER PUMPING STATION)		
Checked by: K.C.H.	<b>HYDROLOGY</b> <b>STAGE HYDROGRAPHS</b>		
Reviewed by: PFO	Scale: NONE AS SHOWN	Sheet reference number: 14/14	FILENAME: 00hfh14.dgn PEN TABLE: STD.dpb STD.dpb
Approved by: AJS	Date: DECEMBER 1995	Drawing Code: 016-PWC-7-	Sheet 14 of 16

STAGE IN FEET ABOVE 680.4



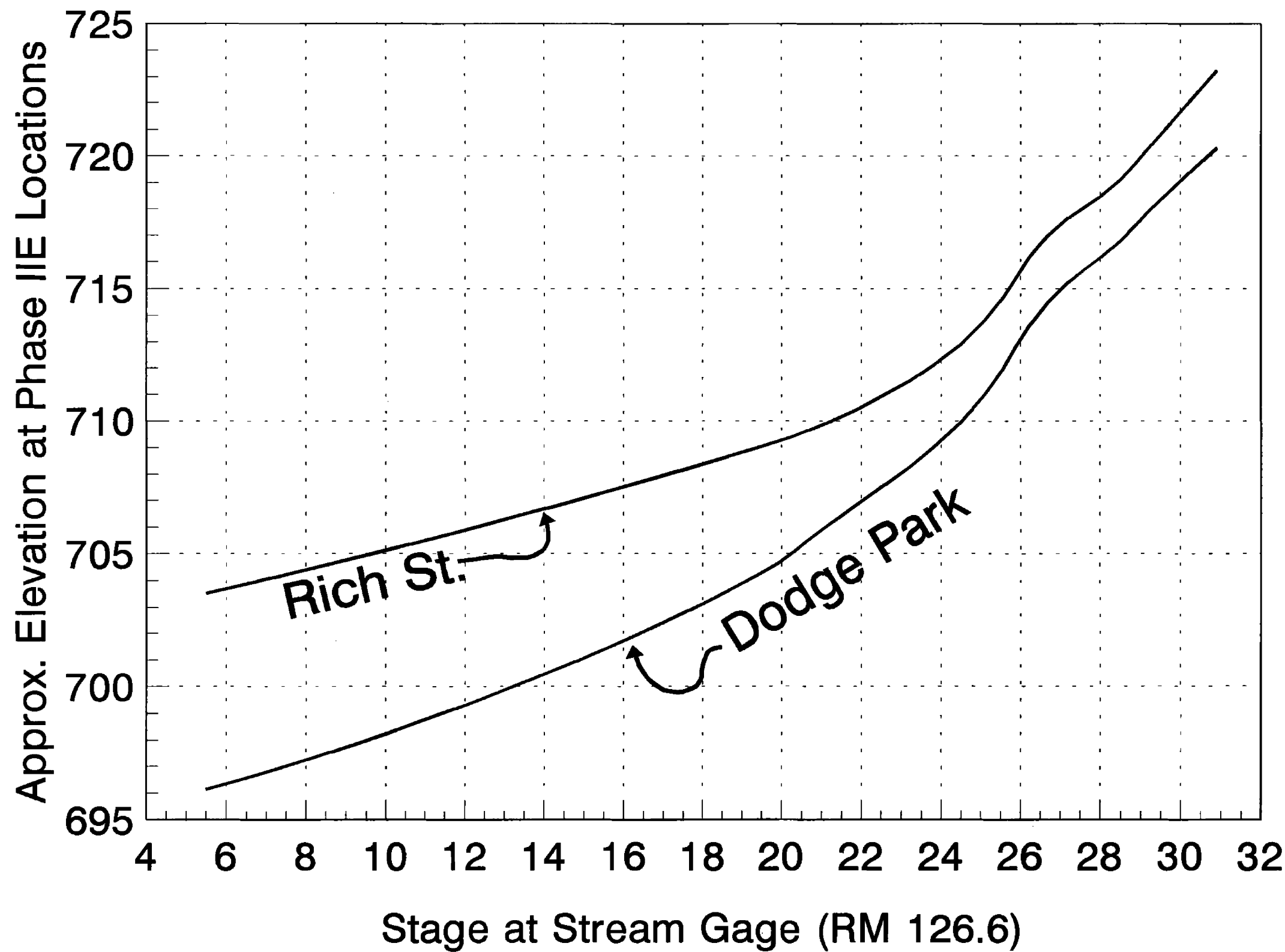
**NOTES**

STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT COLUMBUS USGS GAGE FOR THE PERIOD 1921-1998 GAGE DATUM 680.4 NGVD.  
 PLOTS OBTAINED FROM SCANNED IMAGES OF CELRH-EC-WW SATELLITE DATA W/VERTICAL SCALE RANGE 0-100.

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Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: V.L.P.	Drawn by: J.R.B.	Checked by: K.C.H.	Reviewed by: PFO
Approved by: AJS		Scale: NONE AS SHOWN	Date: DECEMBER 1995
Drawing Code: 016- <del>PHG</del> WC-7-		Sheet reference number: 1415	FILENAME: 00hfh15.dgn STD: 4.plt STD: 1.plt Sheet 15 of 16



Correlation Curve from Stream Gage to IIE Locations

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Revisions			
Symbol	Descriptions	Date	Approved

DODSON-LINDBLOM ASSOC., INC. CONSULTING ENGINEERS-SURVEYORS COLUMBUS, OHIO		U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA	
Designed by: K.C.H.	Drawn by: J.R.B.	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS L.P.P. PHASE IIB (STORM WATER PUMPING STATION)	
Checked by: C.W.M.	Reviewed by: PFO	<b>HYDROLOGY CORRELATION CURVE</b>	
Approved by: AJS	Scale: NONE AS SHOWN Date: DECEMBER 1995 Drawing Code: 016-PWC-7-	Sheet reference number: 14/16	FILENAME: 00hh7h16.dgn PEN TABLE: STD.pfb STD.pfb Sheet 16 of 16



