US Army Corps
of Engineers

Huntington District

As-Constructed Plans

Phase IIIA – LOCAL PROTECTION PROJECT
WEST COLUMBUS, OHIO

November 2002

CC-13138

Note: Phase IIIA was constructed under two separate contracts. Project Features between Stations 227+18.00 and 240+38.40 were constructed by Lionel Construction. Project Features between Stations 247+15.38 and 260+92.50 were constructed by Alan Stone Company.

NOTE: REDUCED 50%

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Revisions			
Symbol	Descriptions	Date	Approved
⟨1⟩	ADDED BY MODIFICATION MC009	11/00	P.O.C.

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

GENERAL INDEX

Scale: NONE
Dates:
Drawing Code:
Sheet reference number: 01
FILENAME: 00gd1n01.dgn
PRN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED

DRAINAGE
GUARDRAIL
ESS — EXISTING SANITARY SEWER
EG — EXISTING GAS LINE
EW — EXISTING WATER LINE
ESL — EXISTING SLUDGE LINE
EUF — EXISTING U.G. FIBER OPTIC
EFM — EXISTING FORCE MAIN
EST — EXISTING STORM SEWER
RSS — RELOCATED SANITARY SEWER
RG — RELOCATED GAS LINE
RW — RELOCATED WATER LINE
RST — RELOCATED STORM SEWER
RSL — RELOCATED SLUDGE LINE
RUF — RELOCATED U. G. FIBER OPTIC
RP — RELOCATED POWER
RT — RELOCATED TELEPHONE
RCT — RELOCATED CABLE TV
RCC — RELOCATED CITY COMM.
RF — RELOCATED FIBER OPTIC
EP — EXISTING POWER
ET — EXISTING TELEPHONE
ECT — EXISTING CABLE TV
ECC — EXISTING CITY COMM.
EF — EXISTING FIBER OPTIC
SLM — NEW SANITARY SEWER, SLUDGE MAIN OR FORCE MAIN
NEW INTERCEPTOR
ST — NEW STORM SEWER
NEW DRAINAGE DITCH
W — NEW WATER LINE
EXISTING PIPE TO BE PLUGGED AND ABANDONED
EXISTING PIPE TO BE REMOVED
DIRECTION OF RIVER FLOW
SWAMP
CORPORATE BOUNDARY LIMITS
RAILROAD
RAILROAD

CHAIN-LINK FENCE
TREELINE
BRUSH LINE
TANKS
TREE / BUSH
CWL — CONTRACTOR WORK LIMITS
LWL — LIMITED WORK LIMITS
R/W — RIGHT OF WAY
CURB
ROAD
UNIMPROVED ROAD
TRAIL
STONE SLOPE PROTECTION LIMITS (PLAN)
10+00
11+00
CENTERLINE OF PROJECT
UNIFORM SLOPE DESIGNATON
EXISTING SLOPE
49 — STATE HIGHWAY
79 — INTERSTATE HIGHWAY
59 — U.S. HIGHWAY
IP/C — IRON PIN AND CAP
TREE W/BASE
CULVERT
TS — TRAFFIC SIGNAL
TRANS. TOWER
CB — CATCH BASIN
MH — EXISTING MANHOLE
NMH — NEW MANHOLE
L.P. — LIGHT POLE
FIRE HYDRANT
SIGN POST
V. CONTROL
H.-H./V. CONTROL
POWER POLE
POST
M.B. — MAIL BOX
METER
S. — SIGN
IN SITU ROCK
IN SITU EARTH
EARTH FILL
SURFACE DRAINAGE FLOW
CULVERT END
HEADWALL
CENTERLINE
VALVE
CONTAMINATED SOIL

ABBREVIATIONS

ACI	AMERICAN CONCRETE INSTITUTE
ALT	ALTERNATE
ALUM	ALUMINUM
AWWA	AMERICAN WATER WORKS ASSOC.
@	AT
B	BASE, BEAM OR BOTTOM
BM	BENCH MARK
BOT	BOTTOM
C	CHANNEL, CONDUIT
CC	CENTER TO CENTER
CTRS	CENTERS
℄	CENTERLINE
CJ	CONSTRUCTION JOINT
CL, CLR	CLEAR
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CRS	CORROSION RESISTANCE STEEL
CWL	CONTRACTOR'S WORK LIMITS
CY	CUBIC YARD
DCIP	DUCTILE CAST IRON PIPE
DI	DROP INLET
DIA	DIAMETER
DIM	DIMENSION
DWG	DRAWING
E	EAST
EA	EACH
EF	EACH FACE
EJ	EXPANSION JOINT
EJFS	EXPANSION JOINT FILLER STRIP
EL, ELEV	ELEVATION
EQ	EQUAL
EW	EACH WAY, EDGE OF WATER
EX, EXIST	EXISTING
EXP	EXPANSION
FIN	FINISHED
FT	FEET, FOOT
GA	GAUGE OR GAGE
GALV	GALVANIZED
GRD	GROUND
H, HORIZ	HORIZONTAL
HEX HD	HEXAGONAL HEAD
HS	HIGH STRENGTH, HEADED STUD
IF	INSIDE FACE
IJ	ISOLATION JOINT
INV	INVERT
IP	IRON PIN
JT	JOINT
LB	POUND
Ld	TENSILE DEVELOPMENT LENGTH
LT	LEFT
LLH	LONG LEG HORIZONTAL
MAX	MAXIMUM
MH	MANHOLE
MIN	MINIMUM
MJ	MECHANICAL JOINT, MONOLITH JOINT
MK	MARK
N	NORTH
#, NO	NUMBER
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OPG	OPENING
OPP	OPPOSITE
OZ	OUNCE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
P̄	PLATE OR PROPERTY LINE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
POT	POINT OF TANGENCY
PROJ	PROJECTION
PSI	POUNDS PER SQUARE INCH
PSF	POUNDS PER SQUARE FOOT
QUAN	QUANTITY
R	RADIUS OR RISER
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REINF	REINFORCING
REQ'D	REQUIRED
RGC	RIGID GALVANIZED CONDUIT
RF	ROOF FRAME
RT	RIGHT
S	SOUTH
SECT	SECTION
SF	SQUARE FEET
SHT	SHEET
SIM	SIMILAR
SPC	SPACES
SQ	SQUARE
SS	STAINLESS STEEL
STA	STATION
STD	STANDARD
STIR	STIRRUPS
STL	STEEL
STR	STRAIGHT, STRUCTURAL
SY	SQUARE YARD
SYM	SYMMETRICAL
T	TOP OR TREAD
TOE	TOP OF EXCAVATION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V, VERT	VERTICAL
VAR	VARIES
VC	VERTICAL CURVE
VPT	VERTICAL POINT OF TANGENCY
VPC	VERTICAL POINT OF CURVATURE
VPI	VERTICAL POINT OF INTERSECTION
W	WIDE FLANGE, WEST
W/	WITH
W/O	WITHOUT
WS	WATERSTOP

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GENERAL LEGEND

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 02
FILENAME: 00gdlg01.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED

SURVEY

1. CURVE DATA SHOWN IS BASED ON ARC DEFINITION.

CONSTRUCTION PROCEDURE

2. THE CONTRACTOR SHALL OBTAIN AND PAY FOR A STREET EXCAVATION AND OCCUPANCY PERMIT FROM THE DIVISION OF ENGINEERING AND CONSTRUCTION PRIOR TO OPEN CUT ON ANY PAVEMENT IN THE CITY OF COLUMBUS. (614) 645-7113

3. THE WORD FLOODWALL IN THIS SET OF DRAWINGS IS USED AS A GENERIC TERM TO INDICATE FLOODWALL OR LEVEE.

4. STRIPPED MATERIAL SUITABLE FOR USE AS FILL, BACKFILL OR TOPSOIL SHALL BE STOCKPILED AT A LOCATION PROVIDED BY THE CONTRACTOR AND APPROVED BY THE CONTRACTING OFFICER.

5. THE PROCEDURES FOR THE HANDLING OF SEWERS AND OTHER UTILITIES ENCOUNTERED DURING CONSTRUCTION WHICH ARE NOT SHOWN ON THE DRAWINGS SHALL BE DIRECTED BY THE CONTRACTING OFFICER. ACTIVE SEWERS TO BE ABANDONED SHALL BE ADJUSTED AS NECESSARY TO FACILITATE CONSTRUCTION AND FILLED ALONG THE ENTIRE PIPE LENGTH. SEWERS DETERMINED TO BE ALREADY ABANDONED SHALL BE REMOVED AS NECESSARY. BROKEN PIECES AND PORTIONS OF PIPE OR TILE SHALL BE REMOVED UNTIL A WHOLE LENGTH IS ENCOUNTERED, AND PLUGGED WITH CONCRETE FOR A MINIMUM DISTANCE OF TWO FEET HORIZONTALLY, UNLESS OTHERWISE NOTED.

6. THE CONTRACTOR SHALL REPLACE, AT HIS OWN EXPENSE, ANY ITEM NOT SPECIFICALLY INDICATED FOR REMOVAL THAT IS DAMAGED OR DESTROYED BY HIS OPERATIONS.

7. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL FEES SUCH AS (BUT NOT LIMITED TO) STREET OPENING PERMITS, TAP FEES, PARKING METER FEES, WATER METERS AND CONSTRUCTION MATERIALS TESTING.

8. TO FACILITATE CONSTRUCTION, HORIZONTAL STEM REINFORCEMENT IN FLOODWALL MONOLITHS MAY BE PLACED ON EITHER SIDE OF VERTICAL REINFORCEMENT PROVIDED THE REQUIRED CONCRETE COVER ON THE VERTICAL REINFORCING BARS IS MAINTAINED.

MAINTENANCE OF TRAFFIC

9. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED, MAINTAINED, AND REMOVED BY THE CONTRACTOR IN ACCORDANCE WITH THE OHIO MANUAL OF TRAFFIC CONTROL DEVICES FOR CONSTRUCTION AND MAINTENANCE OPERATIONS, COPIES OF WHICH ARE AVAILABLE FROM THE OHIO DEPARTMENT OF TRANSPORTATION, BUREAU OF TRAFFIC, 1980 WEST BROAD STREET, COLUMBUS, OHIO 43223.

10. THE TRAFFIC ENGINEERING AND PARKING DIVISION CONSTRUCTION MANAGER (645-6269) AND THE COLUMBUS PAVING THE WAY PROGRAM (645-3970) SHALL BE NOTIFIED A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO STARTING WORK AND/OR PRIOR TO EACH PHASE OR MAJOR CHANGE IN TRAFFIC PATTERNS, EITHER PERMANENT OR TEMPORARY, WITHIN THE ROADWAY RIGHT-OF-WAY.

11. STEADY-BURNING, TYPE "C" LIGHTS SHALL BE REQUIRED ON ALL BARRICADES, DRUMS, AND SIMILAR TRAFFIC CONTROL DEVICES IN USE AT NIGHT. CONES ARE NOT APPROVED FOR USE AT NIGHT.

UTILITIES RELOCATION

12. RELOCATION OF UTILITIES FOR THE CONVENIENCE OF THE CONTRACTOR SHALL BE AT THE CONTRACTOR'S EXPENSE.

13. THE CONTRACTOR SHALL NOTIFY THE OHIO UTILITIES PROTECTION SERVICES (TELEPHONE 1-800-362-2764 TOLL FREE) AND THE OWNERS OF UNDERGROUND UTILITY FACILITIES SHOWN ON THE PLANS WHO ARE NOT MEMBERS OF A REGISTERED UNDERGROUND PROTECTION SERVICES IN ACCORDANCE WITH THE OHIO REVISED CODE. THE ABOVE MENTIONED NOTICE SHALL BE GIVEN AT LEAST 2 WORKING DAYS PRIOR TO START OF CONSTRUCTION.

14. THE CONTRACTOR SHALL NOTIFY THE FOLLOWING DIVISIONS AT LEAST 48 HOURS PRIOR TO CONSTRUCTION:

SEWERAGE AND DRAINAGE	645-8156 AND 645-6311
WATER	645-7788
ELECTRICITY	645-7627

15. THE FOLLOWING IS A LIST OF UTILITIES AND OWNERS:

American Electric Power
1 Riverside Plaza
Columbus, Ohio 43215-2373
(614) 223-1515

Columbus Division of Electricity
Utilities Complex
910 Dublin Road
Columbus, Ohio 43215-1116
(614) 645-7627

Columbus Division of
Sewerage & Drainage
Utilities Complex
910 Dublin Road
Columbus, Ohio 43215-1116
(614) 645-7175

Ohio Department of Transportation
District 6
400 East William Street
Delaware, Ohio 43015
(740) 363-1251

MAPPING

16. ELEVATIONS ARE EXPRESSED IN FEET AND REFER TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929.

17. HORIZONTAL COORDINATES ARE EXPRESSED IN FEET AND REFER TO THE OHIO STATE PLANE COORDINATE SYSTEM SOUTH ZONE, BASED ON THE NORTH AMERICAN DATUM OF 1927.

18. TOPOGRAPHY DOES NOT REFLECT RECENT BUILDING REMOVAL, CONSTRUCTION OR GRADING.

19. THE MAPPING OF THE PROJECT SITE WAS COMPILED FROM PHOTOGRAPHY FLOWN MARCH 1997.

RIGHT OF WAY /WORKING LIMITS

20. WORKING AREA AVAILABLE TO THE CONTRACTOR IS INDICATED BY THE CONTRACTOR WORK LIMITS (CWL). ANY ADDITIONAL AREA NEEDED BY THE CONTRACTOR SHALL BE ACQUIRED AT HIS OWN EXPENSE.

21. THE AREA DESIGNATED AS LIMITED WORK LIMITS (LWL) SHALL BE USED AS A CONTRACTOR LAYDOWN AREA. THE CONTRACTOR SHALL PROVIDE ANY SECURITY MEASURES NECESSARY TO PROTECT EQUIPMENT AND MATERIALS.

SPOIL MATERIAL

22. THE CONTRACTOR SHALL DISPOSE OF SPOIL MATERIALS OFF-SITE IN ACCORDANCE WITH PART 3 OF SECTION 02221 EXCAVATION, OF THE SPECIFICATIONS.

GENERAL

23. THE CURRENT CITY OF COLUMBUS CONSTRUCTION AND MATERIAL SPECIFICATIONS AND STANDARD DRAWINGS, INCLUDING ALL SUPPLEMENTS THERETO, SHALL GOVERN ALL CONSTRUCTION ITEMS AND UTILITIES WITHIN PUBLIC RIGHT-OF-WAY WITH RESPECT TO ROADWAY WORK AND UTILITIES.

24. WHERE NEW WORK IS TO BE ACCURATELY JOINED TO EXISTING WORK, THE CONTRACTOR SHALL VERIFY THE DIMENSIONS, GRADES AND ELEVATIONS OF ALL EXISTING CONSTRUCTION. ELEVATIONS FOR TOP AND BOTTOM OF CATCH BASINS AND GATEWELLS SHALL ALSO BE VERIFIED PRIOR TO ORDERING.

25. THE CONTRACTOR SHALL MAKE PROVISIONS TO WORK AROUND THE CITY OF COLUMBUS, DIVISION OF ELECTRICITY FACILITIES THAT EXIST ON THE EAST SIDE OF I-71 (FROM I-70 TO GREENLAWN AVENUE). SERVICE SHALL NOT BE INTERRUPTED AND CIRCUITS SHALL NOT BE DEENERGIZED.

26. THE CONTRACTOR SHALL PROTECT TREES AS NECESSARY WHEN WORKING BETWEEN THE ODOT RIGHT-OF-WAY FENCE AND SCIOTO RIVER'S WATERS EDGE AS OUTLINED IN SPECIFICATION SECTION 02050. ANY TREE DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN KIND.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

US Army Corps of Engineers

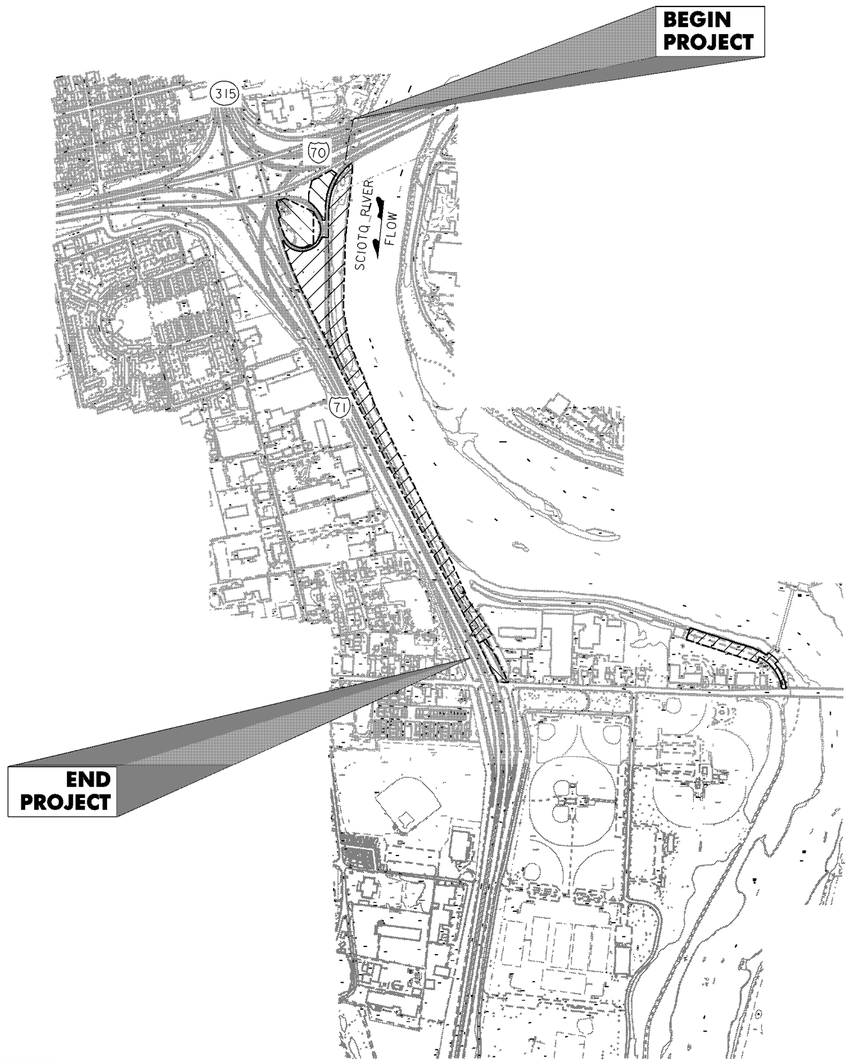
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GENERAL NOTES

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 03
FILENAME: 00gdgn01.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED

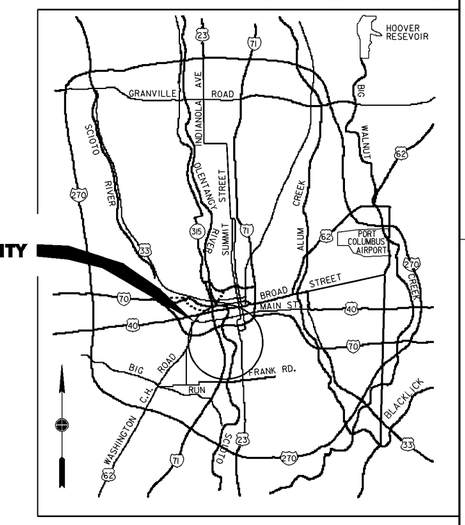
PHASE IIIA SHEET 4 OF 121



PROJECT MAP

SCALE: 1" = 500'

500' 0 500'

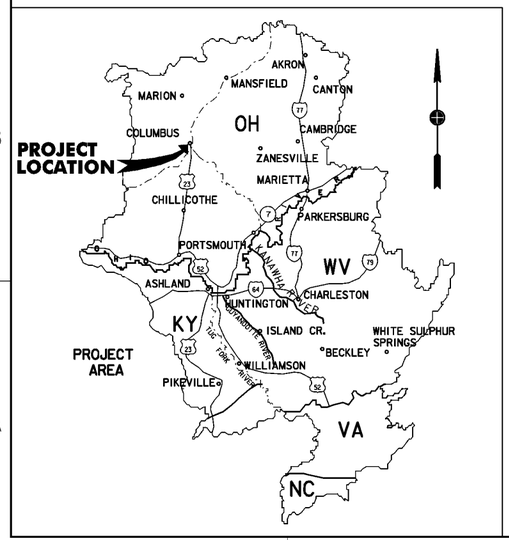


VICINITY MAP

N.T.S.

LOCATION MAP

N.T.S.



LEGEND

PHASE III-A PROJECT AREA

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

U.S.ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
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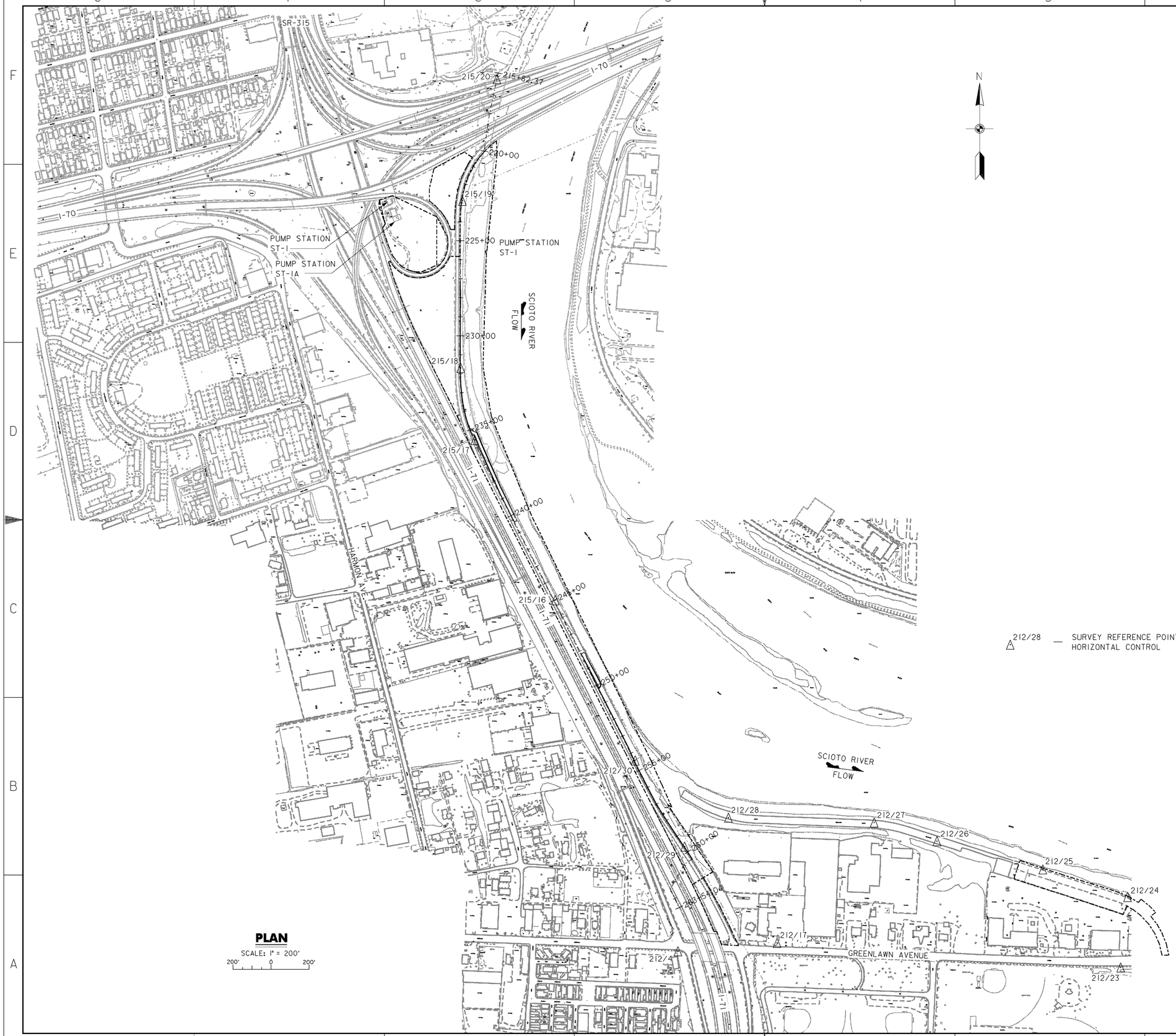
PHASE IIIA

GENERAL PROJECT MAPS

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 0/4
FILENAME: 00axpm01.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



PLAN
SCALE: 1" = 200'
200' 0 200'

212/28 — SURVEY REFERENCE POINT HORIZONTAL CONTROL

NOTES

1. FOR PROJECT LOCATION AND VICINITY MAPS SEE DRAWING NO. 0/4.
2. FOR CONTRACTOR WORK LIMITS MONUMENT PLAN SEE DRAWING NOS. 6/1 THRU 6/6.
3. FOR RIGHT OF WAY MONUMENT PLAN SEE DRAWING NOS. 6/7 THRU 6/11.
4. FOR SURVEY REFERENCE POINT COORDINATES SEE DRAWING NOS. 11/1 THRU 11/3.
5. FOR CENTERLINE OF PROTECTION SEE DRAWING NOS. 11/4 THRU 11/9.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

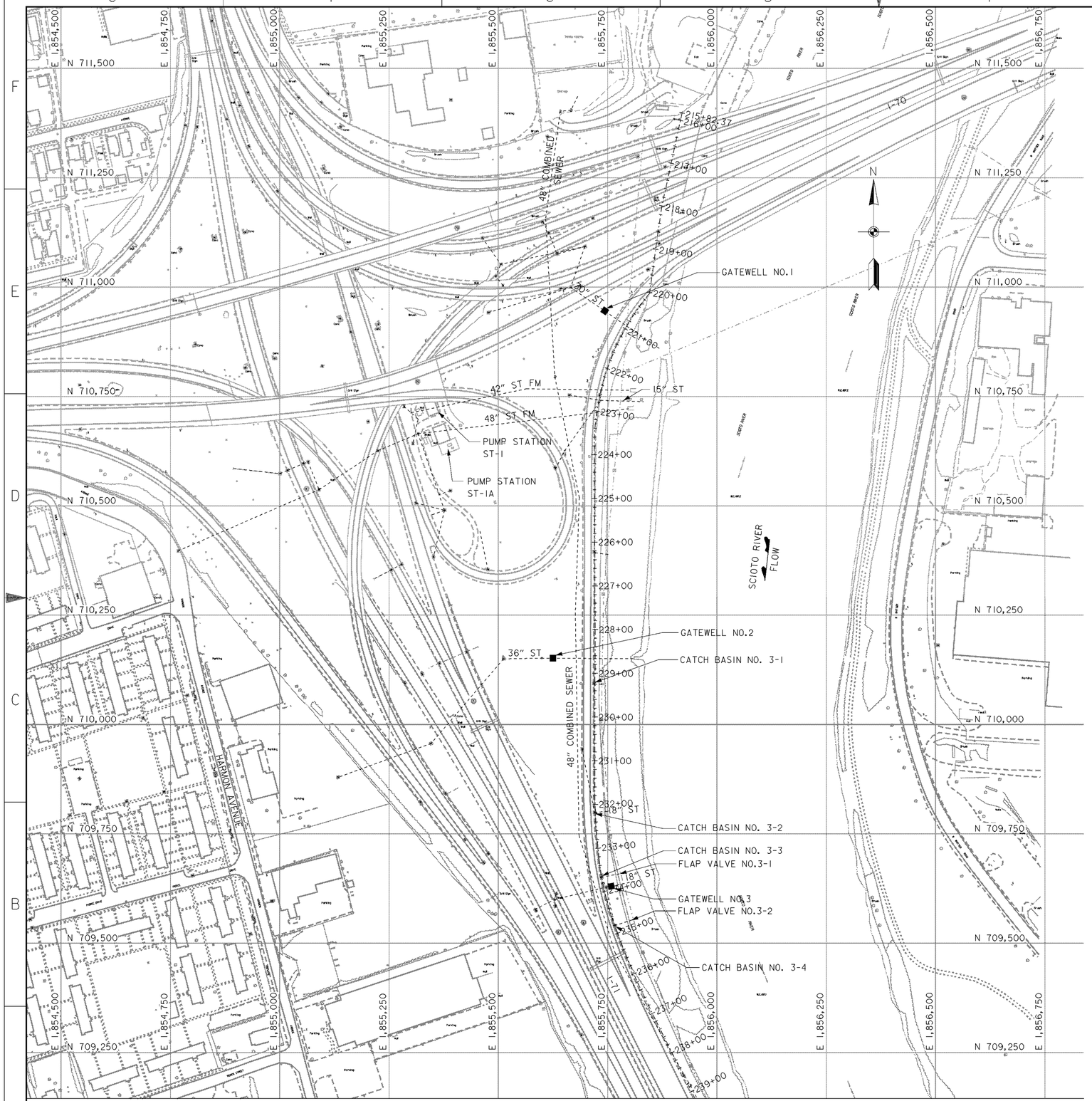
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GENERAL SITE PLAN

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 05
FILENAME: PEN TABLE: 00axpl01.dgn
Sheet 1 of 1

WORK AS CONSTRUCTED



MATCH LINE - SHEET 2

PLAN

SCALE: 1" = 100'

100' 0 100'

NOTES

1. FOR GATEWELL PLAN AND PROFILES SEE DRAWING NOS. 15/1 THRU 15/6.
2. FOR TYPICAL GATEWELL PLAN AND DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
3. FOR CATCH BASIN DETAILS SEE DRAWING NO. 15/11.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

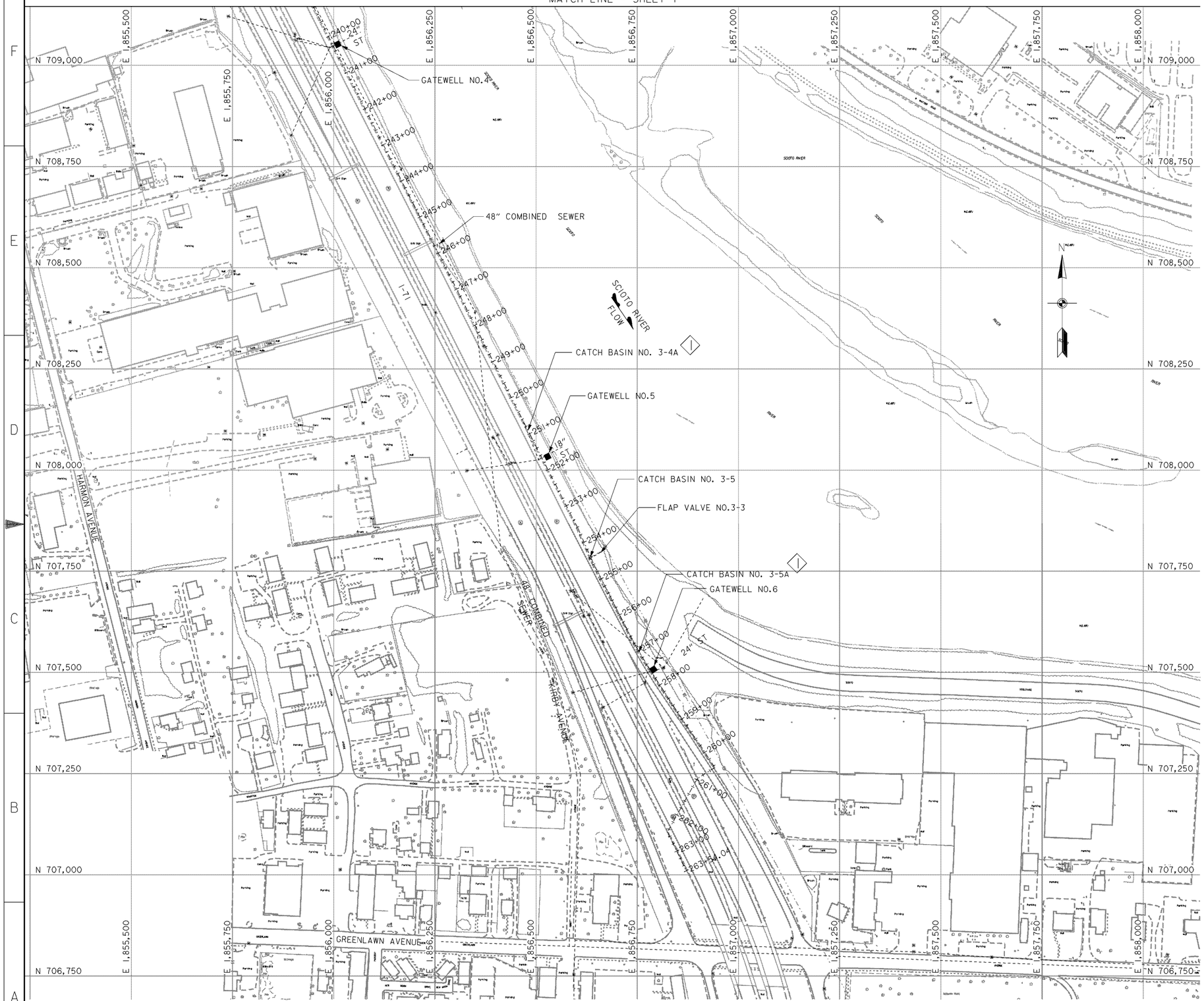
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

UNDERGROUND UTILITIES SITE PLAN (1 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 06
FILENAME: 00u1pl01.dgn
PIN TABLE:
Sheet 1 of 2

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 100'

NOTES

1. FOR GATEWELL PLAN AND PROFILES SEE DRAWING NOS. 15/1 THRU 15/6.
2. FOR TYPICAL GATEWELL PLAN AND DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
3. FOR CATCH BASIN DETAILS SEE DRAWING NO. 15/11.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

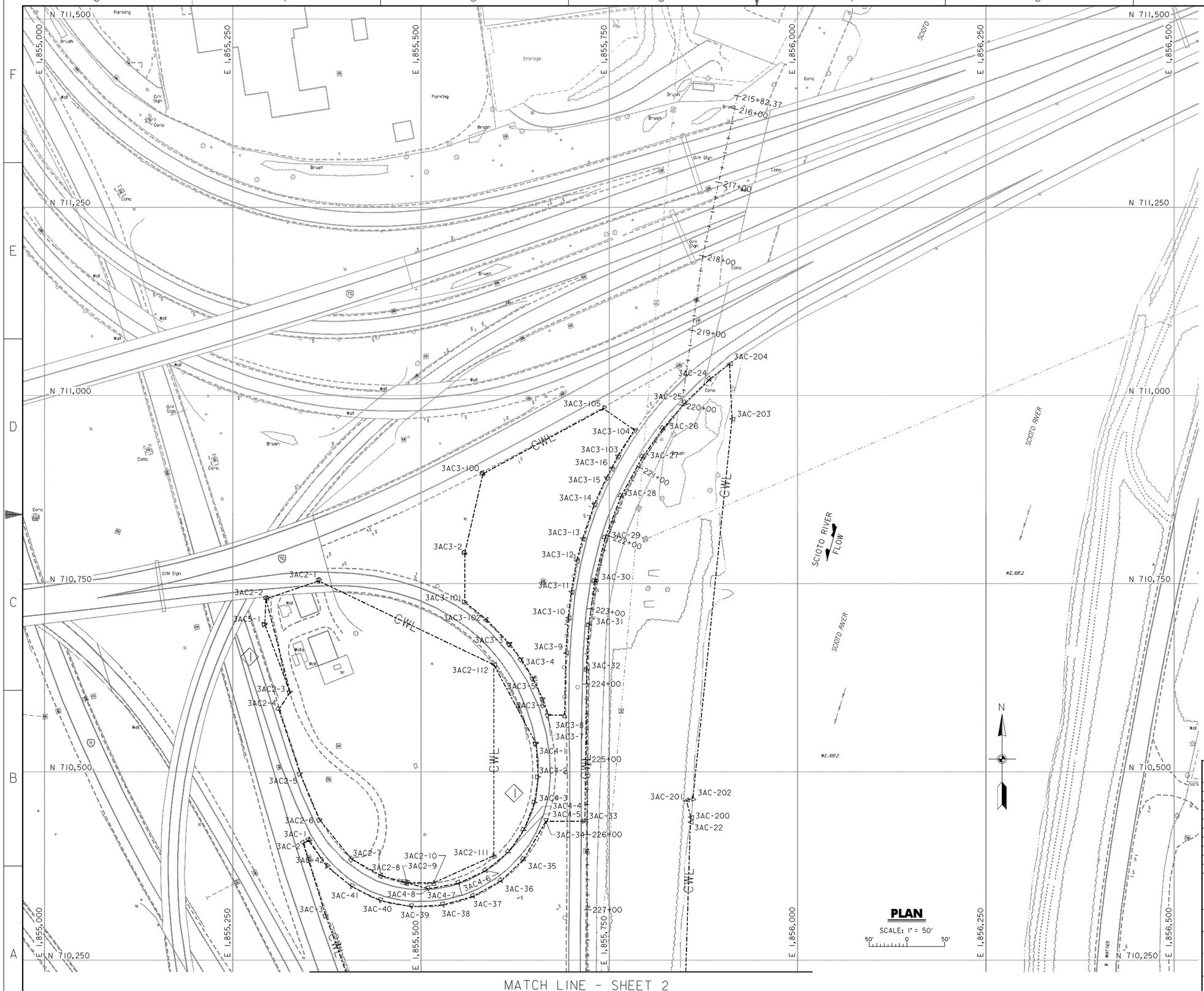
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

UNDERGROUND UTILITIES SITE PLAN (2 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 07
FILENAME: a0u1pl02.dgn
PEN TABLE:
Sheet 2 of 2

WORK AS CONSTRUCTED



NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR RIGHT OF WAY MONUMENT PLANS SEE DRAWING NOS. 6/7 THRU 6/10.

PLAN
SCALE: 1" = 50'
50' 0 50'

Revisions			
Symbol	Description	Date	Approved
1	MODIFIED BY AMENDMENT MC009	11/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

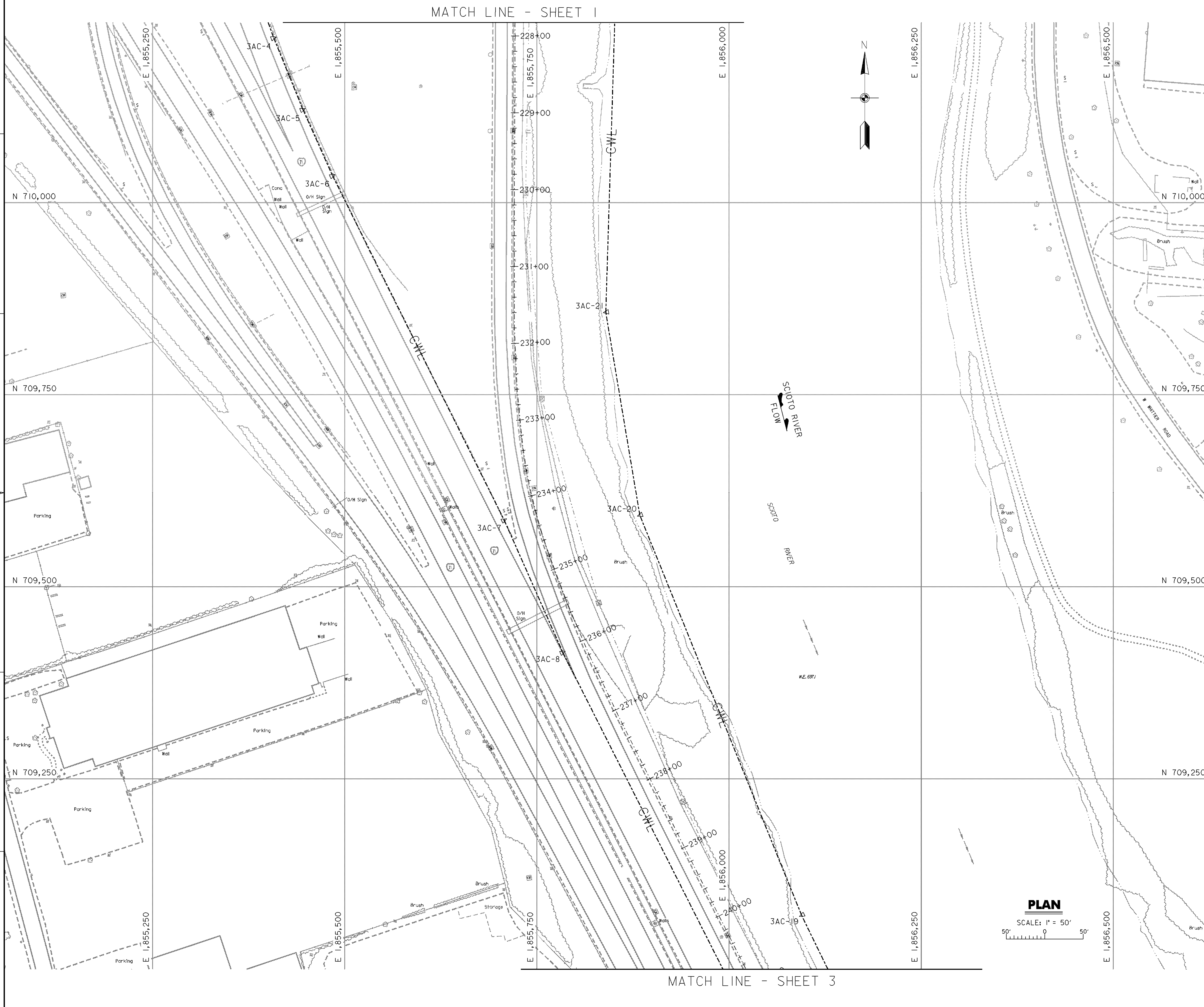
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CWL MONUMENT PLAN (1 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 6/1
FILENAME: PEN TABLE: 00c1mp01.dgn
Sheet 1 of 5

WORK AS CONSTRUCTED



NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR RIGHT OF WAY MONUMENT PLANS SEE DRAWING NOS. 6/7 THRU 6/10.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CWL MONUMENT PLAN (2 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 6/2
FILENAME: 00clmp02.dgn
PEN TABLE:
Sheet 2 of 5

WORK AS CONSTRUCTED

PLAN

SCALE: 1" = 50'

50' 0 50'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR RIGHT OF WAY MONUMENT PLANS SEE DRAWING NOS. 6/7 THRU 6/10.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CWL MONUMENT PLAN (3 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 6/3
FILENAME: 00cimp03.dgn
PEN TABLE:
Sheet 3 of 5

WORK AS CONSTRUCTED

PLAN

SCALE: 1" = 50'

50' 0 50'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR RIGHT OF WAY MONUMENT PLANS SEE DRAWING NOS. 6/7 THRU 6/10.

Symbol	Descriptions	Date	Approved

Revisions

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CWL MONUMENT PLAN (4 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 6/4
FILENAME: 00cImp04.dgn
PEN TABLE:
Sheet 4 of 5

WORK AS CONSTRUCTED

PHASE IIIA SHEET 12 OF 121

MATCH LINE - SHEET 4

E 1,858,000 E 1,858,250 E 1,858,500 E 1,858,750 E 1,859,000 E 1,859,250 E 1,859,500

N 707,500 N 707,250 N 707,000 N 706,750 N 706,500

SCIOTO RIVER FLOW

SCIOTO RIVER

BOULEVARD

GREENLAWN AVENUE

FILLMORE AVENUE

ROAD

3AL-16 3AL-115 3AL2-1 3AL2-2 3AL2-3 3AL2-4 3AL2-5 3AL2-6 3AL2-7 3AL2-8 3AL2-9 3AL2-10 3AL2-11 3AL2-12 3AL2-13 3AL2-14 3AL2-15 3AL2-16 3AL2-17 3AL2-18 3AL2-19 3AL2-120

L-WL

CONTRACTOR LAYDOWN AREA

Parking Wall Brush Billboard Athletic Field Bleachers Athletic Fields Tank Fan Pumping Station Conc

W.E. 697.1 W.E. 697.2 W.E. 688.9

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR RIGHT OF WAY MONUMENT PLANS SEE DRAWING NOS. 6/7 THRU 6/10.

PLAN

SCALE: 1" = 50'

50' 0 50'

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CWL MONUMENT PLAN (5 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 6/5
FILENAME: PEN TABLE: 00c1mp05.dgn
Sheet 5 of 5

WORK AS CONSTRUCTED

CWL MONUMENT TABLES

LEVEE/FLOODWALL NO.1

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AC-1	1855350.49	710409.30	S 61°21'52.77" W	8.27
3AC-2	1855343.24	710405.34	S 17°23'10.16" E	100.74
3AC-3	1855373.34	710309.20	S 19°47'10.18" E	100.74
3AC-4	1855407.44	710214.41	S 22°11'10.97" E	100.74
3AC-5	1855445.48	710121.13	S 24°08'05.75" E	94.29
3AC-6	1855484.03	710035.08	S 26°29'03.56" E	500.86
3AC-7	1855707.39	709586.78	S 23°51'56.14" E	188.40
3AC-8	1855783.62	709414.49	S 26°48'41.05" E	1083.18
3AC-9	1856272.19	708447.76	S 26°51'27.07" E	695.46
3AC-10	1856586.38	707827.32	S 26°56'50.15" E	341.57
3AC-11	1856741.17	707522.83	S 26°57'10.43" E	275.89
3AC-12	1856866.22	707276.91	S 27°05'06.56" E	163.52
3AC-13	1856940.67	707131.32	N 57°54'29.38" E	127.01
3AC-104	1857048.27	707198.80	N 33°57'26.00" W	427.74
3AC-102	1856809.35	707553.59	S 56°50'49.76" E	27.45
3AC-103	1856832.33	707538.58	N 23°59'37.13" W	129.76
3AC-17	1856779.56	707657.13	N 23°59'36.66" W	133.50
3AC-18	1856725.28	707779.09	N 26°00'22.96" W	1438.89
3AC-19	1856094.37	709072.29	N 22°01'39.45" W	561.62
3AC-20	1855883.73	709592.91	N 9°29'13.55" W	268.04
3AC-21	1855839.55	709857.29	N 1°46'20.13" E	576.33
3AC-22	1855857.38	710433.34	N 5°54'40.18" E	6.46
3AC-200	1855858.04	710439.76	N 14°47'57.98" W	23.27
3AC-201	1855852.10	710462.26	N 70°13'23.66" E	9.13
3AC-202	1855860.69	710465.35	N 5°54'40.18" E	506.21
3AC-203	1855912.82	710968.86	N 2°39'06.80" W	73.51
3AC-204	1855909.42	711042.30	S 52°13'24.81" W	33.69
3AC-24	1855882.79	711021.67	S 46°07'05.24" W	45.08
3AC-25	1855850.30	710990.42	S 40°54'11.74" W	45.15
3AC-26	1855820.74	710956.29	S 35°29'23.53" W	46.11
3AC-27	1855793.97	710918.74	S 28°40'17.70" W	59.32
3AC-28	1855765.50	710866.69	S 21°03'07.46" W	59.32
3AC-29	1855744.19	710811.33	S 13°40'56.26" W	59.17
3AC-30	1855730.20	710753.84	S 7°09'34.83" W	59.05
3AC-31	1855722.84	710695.25	S 3°00'43.65" W	59.17
3AC-32	1855719.73	710636.17	S 0°39'14.20" W	201.61
3AC-33	1855717.43	710434.57	N 89°46'23.69" W	51.80
3AC-34	1855665.63	710434.78	S 30°21'04.60" W	58.58
3AC-35	1855636.03	710384.23	S 46°38'04.48" W	41.70
3AC-36	1855605.72	710355.60	S 60°39'56.40" W	41.98
3AC-37	1855569.12	710335.03	S 74°12'29.65" W	41.80
3AC-38	1855528.90	710323.66	S 86°47'34.64" W	41.81
3AC-39	1855487.16	710321.32	N 79°10'34.62" W	42.29
3AC-40	1855445.62	710329.26	N 63°55'15.76" W	42.28
3AC-41	1855407.64	710347.85	N 50°50'56.89" W	42.37
3AC-42	1855374.79	710374.59	N 34°59'35.66" W	42.37
3AC-1	1855350.49	710409.30	S 61°21'52.77" W	8.27

FILL AREA NO.1

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AC2-1	1855363.96	710753.81	S 71°22'34.29" W	74.16
3AC2-2	1855293.68	710730.12	S 14°31'43.40" E	128.25
3AC2-3	1855325.85	710605.98	S 32°53'47.95" W	27.34
3AC2-4	1855311.00	710583.02	S 18°22'11.04" E	90.01
3AC2-5	1855339.37	710497.59	S 22°50'51.89" E	66.45
3AC2-6	1855365.18	710436.35	S 39°04'57.09" E	67.44
3AC2-7	1855407.69	710384.00	S 61°24'37.28" E	44.60
3AC2-8	1855446.85	710362.66	S 74°13'28.21" E	35.58
3AC2-9	1855481.09	710352.99	S 89°48'35.84" E	35.58
3AC2-10	1855516.66	710352.87	N 65°35'56.61" E	87.53
3AC2-111	1855596.38	710389.03	N 0°00'00.00" E	253.59
3AC2-112	1855596.38	710642.63	N 64°26'07.07" W	257.64
3AC2-1	1855363.96	710753.81	S 71°22'34.29" W	74.16

LEVEE/FLOODWALL NO.2

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AL3-1	1856998.24	707167.43	S 29°44'57.09" E	174.78
3AL3-2	1857084.97	707015.68	S 26°09'38.60" E	129.28
3AL3-3	1857141.97	706899.64	S 25°05'54.99" E	97.72
3AL3-4	1857183.42	706811.15	N 86°58'52.99" W	89.93
3AL3-5	1857093.61	706815.89	N 19°37'40.66" W	72.87
3AL3-6	1857069.13	706884.52	N 87°50'36.43" W	15.97
3AL3-7	1857053.17	706885.13	N 23°28'52.09" W	140.64
3AL3-8	1856997.13	707014.12	N 25°43'12.13" W	130.09
3AC-13	1856940.67	707131.32	N 57°54'29.16" E	67.95
3AL3-1	1856998.24	707167.43	S 29°44'57.09" E	174.78

ACCESS NO.1

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AL-115	1858630.73	707162.85	N 18°38'28.52" E	100.12
3AL-16	1858662.73	707257.72	S 71°41'11.17" E	225.24
3AL2-1	1858876.56	707186.94	S 72°41'31.26" E	300.21
3AL2-2	1859163.18	707097.63	S 68°00'16.85" E	71.93
3AL2-3	1859229.88	707070.69	S 59°25'49.61" E	65.13
3AL2-4	1859285.96	707037.56	N 37°34'46.65" E	21.05
3AL2-5	1859298.80	707054.25	S 52°27'08.12" E	51.94
3AL2-6	1859339.98	707022.59	S 45°01'29.85" E	51.94
3AL2-7	1859376.73	706985.88	S 52°26'51.22" W	32.87
3AL2-8	1859350.67	706965.84	S 37°40'39.05" E	51.99
3AL2-9	1859382.45	706924.69	S 30°17'46.25" E	51.99
3AL2-10	1859408.67	706879.80	S 21°50'07.60" E	62.52
3AL2-11	1859431.93	706821.77	S 12°51'11.89" E	62.51
3AL2-12	1859445.83	706760.82	S 88°15'53.88" W	36.13
3AL2-13	1859409.72	706759.73	N 12°49'10.90" W	60.25
3AL2-14	1859396.35	706818.48	N 23°14'30.67" W	60.17
3AL2-15	1859372.61	706873.76	N 33°07'04.72" W	60.06
3AL2-16	1859339.79	706924.06	N 42°59'37.42" W	59.97
3AL2-17	1859298.90	706967.92	N 51°41'15.76" W	46.42
3AL2-18	1859262.47	706996.70	N 59°12'20.33" W	44.43
3AL2-19	1859224.31	707019.45	S 22°52'30.96" W	48.42
3AL2-120	1859205.48	706974.84	N 71°53'09.17" W	604.73
3AL-115	1858630.73	707162.85	N 18°38'28.52" E	100.12

FILL AREA NO.3

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AC3-100	1855581.86	710896.17	S 12°47'55.70" W	108.02
3AC3-2	1855557.93	710790.84	S 0°00'00.00" E	64.91
3AC3-101	1855557.93	710725.93	S 51°10'24.64" E	36.85
3AC3-102	1855586.64	710702.82	S 43°26'36.68" E	44.97
3AC3-3	1855617.56	710670.18	S 37°01'35.85" E	25.37
3AC3-4	1855632.84	710649.92	S 31°41'53.01" E	29.76
3AC3-5	1855648.48	710624.60	S 25°34'08.49" E	30.51
3AC3-6	1855661.64	710597.07	S 18°34'18.66" E	22.63
3AC3-7	1855668.85	710575.62	N 90°00'00.00" E	21.50
3AC3-8	1855690.35	710575.62	N 1°08'43.45" E	82.44
3AC3-9	1855692.00	710658.05	N 3°51'39.04" E	46.69
3AC3-10	1855695.14	710704.63	N 6°45'30.61" E	34.94
3AC3-11	1855699.26	710739.33	N 9°41'42.14" E	41.65
3AC3-12	1855706.27	710780.39	N 15°12'26.59" E	30.43
3AC3-13	1855714.25	710809.75	N 18°33'35.14" E	48.63
3AC3-14	1855729.73	710855.85	N 24°34'25.70" E	38.38
3AC3-15	1855745.69	710890.75	N 29°07'46.51" E	14.47
3AC3-16	1855752.74	710903.40	N 26°25'06.94" E	18.11
3AC3-103	1855760.80	710919.62	N 32°29'35.39" E	41.53
3AC3-104	1855783.11	710954.65	N 55°31'28.92" W	50.00
3AC3-105	1855741.89	710982.95	S 61°31'51.92" W	182.05
3AC3-100	1855581.86	710896.17	S 12°47'55.70" W	108.02

◇1 FILL AREA NO.1/DECELERATION LANE

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AC4-1	1855652.50	710537.97	S 3°32'33.21" E	44.56
3AC4-2	1855655.25	710493.50	S 7°48'17.72" W	34.01
3AC4-3	1855650.63	710459.80	S 21°31'31.58" W	39.24
3AC4-4	1855636.23	710423.30	S 34°39'54.50" W	35.63
3AC4-5	1855615.97	710393.99	S 50°34'45.87" W	39.52
3AC4-6	1855585.44	710368.90	S 65°22'51.00" W	39.54
3AC4-7	1855549.50	710352.43	S 79°27'40.99" W	40.73
3AC4-8	1855509.45	710344.98	N 74°13'22.64" W	29.47
3AC2-9	1855481.09	710352.99	S 89°48'35.84" E	35.58
3AC2-10	1855516.66	710352.87	N 65°35'56.61" E	87.53
3AC2-111	1855596.38	710389.03	N 0°00'00.00" E	253.59
3AC2-112	1855596.38	710642.63	S 28°12'11.45" E	118.75
3AC4-1	1855652.50	710537.97	S 3°32'33.21" E	44.56

◇1 FILL AREA NO.1/PUMP STATION ACCESS ROAD

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AC5-1	1855292.33	710696.17	S 20°23'23.08" E	96.22
3AC2-3	1855325.85	710605.98	N 14°31'43.40" W	128.25
3AC2-2	1855293.68	710730.12	S 2°16'41.76" W	33.98
3AC5-1	1855292.33	710696.17	S 20°23'23.08" E	96.22

NOTES

1. FOR SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CENTERLINE OF PROTECTION PLAN SEE DRAWING NOS. 11/4 THRU 11/9.

Revisions			
Symbol	Descriptions	Date	Approved
◇1	MODIFIED BY AMENDMENT MC009	11/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

US Army Corps of Engineers

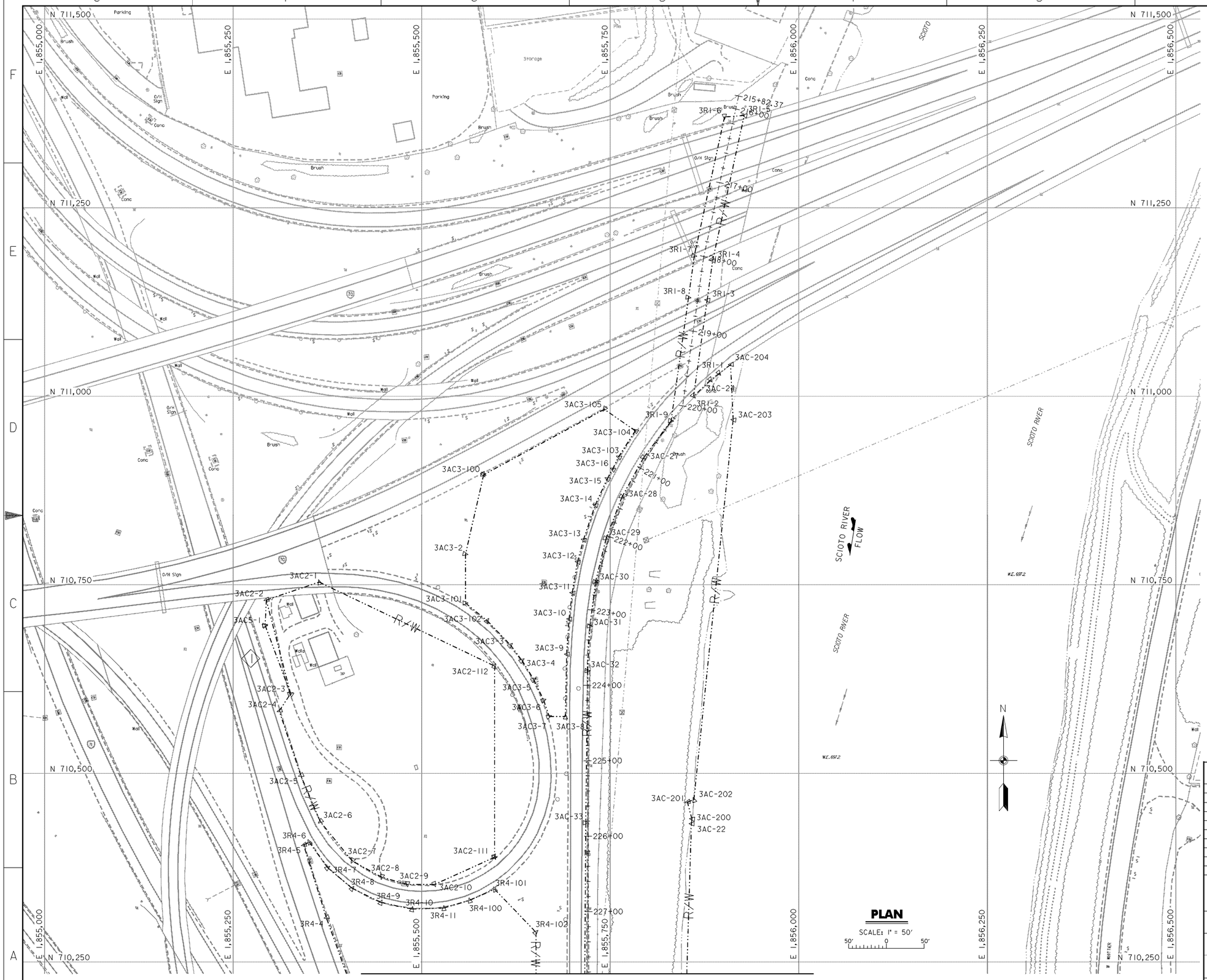
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CWL MONUMENT TABLES

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 6/6
FILENAME: 00c1mt01.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED

PHASE IIIA SHEET 14 OF 121



MATCH LINE - SHEET 2

PLAN

SCALE: 1" = 50'

50' 0 50'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CONTRACTOR WORK LIMITS MONUMENT PLANS SEE DRAWING NOS. 6/1 THRU 6/5.

Revisions			
Symbol	Descriptions	Date	Approved
1	MODIFIED BY AMENDMENT MC009	11/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

R/W MONUMENT PLAN (1 OF 4)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 6/7
FILENAME: 00r1mp01.dgn
PRN TABLE:
Sheet 1 of 4

WORK AS CONSTRUCTED

MATCH LINE - SHEET 1

MATCH LINE - SHEET 3

E 1,855,250 | E 1,855,500 | E 1,855,750 | E 1,856,000 | E 1,856,250 | E 1,856,500

N 710,000 | N 709,750 | N 709,500 | N 709,250

3R4-3 | 3R4-2 | 3R4-1 | 3R4-12 | 3R4-103 | 3R1-10 | 3R1-11 | 3R1-12 | 3R1-13 | 3R1-14 | 3R1-15 | 3R1-16 | 3R1-17

228+00 | 229+00 | 230+00 | 231+00 | 232+00 | 233+00 | 234+00 | 235+00 | 236+00 | 237+00 | 238+00 | 239+00 | 240+00

3AC-21 | 3AC-20 | 3AC-19

R/W | SCIOTO RIVER FLOW | SCIOTO RIVER | W.E. 697.1

Parking | Wall | Concr Wall | O/H Sign | Brush | Storage | Walls | W. WINTER ROAD

N

PLAN
SCALE: 1" = 50'
50' 0 50'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CONTRACTOR WORK LIMITS MONUMENT PLANS SEE DRAWING NOS. 6/1 THRU 6/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

R/W MONUMENT PLAN (2 OF 4)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 68
FILENAME: 00r1mp02.dgn
PEN TABLE:
Sheet 2 of 4

WORK AS CONSTRUCTED

MATCH LINE - SHEET 2

MATCH LINE - SHEET 4

PLAN

SCALE: 1" = 50'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CONTRACTOR WORK LIMITS MONUMENT PLANS SEE DRAWING NOS. 6/1 THRU 6/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

R/W MONUMENT PLAN (3 OF 4)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 6/9
FILENAME: 00rlmp03.dgn
PEN TABLE:
Sheet 3 of 4

WORK AS CONSTRUCTED

MATCH LINE - SHEET 3

PLAN

SCALE: 1" = 50'

50' 0 50'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CONTRACTOR WORK LIMITS MONUMENT PLANS SEE DRAWING NOS. 6/1 THRU 6/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P. CONROY
Drawn by: T. MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

R/W MONUMENT PLAN (4 OF 4)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 6/10
FILENAME: 00r1mp04.dgn
PEN TABLE:
Sheet 4 of 4

WORK AS CONSTRUCTED

RIGHT OF WAY MONUMENT TABLES

LEVEE/FLOODWALL NO.1

POINT	EASTING	NORTHING	BEARING	DISTANCE
3R1-1	1855894.15	711030.47	S 52°13'23.85" W	14.37
3AC-24	1855882.79	711021.67	S 46°07'04.67" W	31.24
3R1-2	1855860.28	711000.01	N 8°01'47.49" E	128.84
3R1-3	1855878.28	711127.59	N 8°01'44.89" E	52.89
3R1-4	1855885.66	711179.96	N 12°13'35.73" E	196.88
3R1-5	1855927.36	711372.37	S 85°48'08.18" W	26.22
3R1-6	1855901.21	711370.45	S 12°13'35.99" W	188.37
3R1-7	1855861.32	711186.36	S 8°01'45.19" W	55.82
3R1-8	1855853.52	711131.08	S 8°01'46.58" W	165.21
3R1-9	1855830.45	710967.49	S 36°48'23.31" W	60.89
3AC-27	1855793.97	710918.74	S 28°40'17.70" W	59.32
3AC-28	1855765.50	710866.69	S 21°03'07.46" W	59.32
3AC-29	1855744.19	710811.33	S 13°40'56.26" W	59.17
3AC-30	1855730.20	710753.84	S 7°09'34.83" W	59.05
3AC-31	1855722.84	710695.25	S 3°00'43.65" W	59.17
3AC-32	1855719.73	710636.17	S 0°39'14.20" W	201.61
3AC-33	1855717.43	710434.57	S 0°21'42.06" W	240.00
3R1-10	1855715.91	710194.58	S 0°12'34.46" W	260.00
3R1-11	1855714.96	709934.58	S 0°43'27.98" E	125.44
3R1-12	1855716.55	709809.15	S 4°30'52.69" E	111.63
3R1-13	1855725.34	709697.86	S 11°44'17.07" E	111.46
3R1-14	1855748.01	709588.73	S 18°50'50.34" E	111.16
3R1-15	1855783.92	709483.53	S 22°57'49.44" E	111.00
3R1-16	1855827.23	709381.33	S 26°53'36.24" E	350.00
3R1-17	1855985.54	709069.18	S 26°36'23.14" E	270.00
3R1-18	1856106.47	708827.77	S 27°03'18.71" E	350.00
3R1-19	1856265.66	708516.07	S 26°40'11.28" E	500.00
3R1-20	1856490.09	708069.27	S 26°32'43.57" E	290.00
3R1-21	1856619.69	707809.84	S 26°51'46.69" E	225.00
3R1-22	1856721.36	707609.12	S 29°07'01.96" E	100.00
3R1-23	1856770.02	707521.76	S 33°15'13.20" E	210.00
3R1-24	1856885.17	707346.14	S 32°13'50.18" E	73.59
3R1-25	1856924.42	707283.89	S 57°54'26.40" W	44.12
3R1-26	1856887.04	707260.46	S 35°45'00.64" W	126.88
3BC-2	1856812.92	707157.48	S 64°28'32.91" W	52.27
3BC-1	1856765.75	707134.96	S 22°28'38.49" E	174.09
3BC-81	1856832.31	706974.10	S 67°30'01.14" E	93.59
3BC-4	1856918.77	706938.28	N 25°09'35.79" W	157.50
3BC-3	1856851.81	707080.84	N 23°17'10.62" E	146.88
3R1-90	1856909.88	707215.75	N 57°54'26.87" E	105.64
3R1-109	1856999.38	707271.88	N 34°00'04.80" W	339.81
3AC-102	1856809.35	707553.59	S 56°50'49.76" E	27.45
3AC-103	1856832.33	707538.58	N 23°59'37.13" W	129.76
3AC-17	1856779.56	707657.13	N 23°59'36.66" W	133.50
3AC-18	1856725.28	707779.09	N 26°00'22.96" W	1438.89
3AC-19	1856094.37	709072.29	N 22°01'39.45" W	561.62
3AC-20	1855883.73	709592.91	N 9°29'13.55" W	268.04
3AC-21	1855839.55	709857.29	N 1°46'20.13" E	576.33
3AC-22	1855857.38	710433.34	N 5°54'40.18" E	6.46
3AC-200	1855858.04	710439.76	N 14°47'57.98" W	23.27
3AC-201	1855852.10	710462.26	N 70°13'23.66" E	9.13
3AC-202	1855860.69	710465.35	N 5°54'40.18" E	506.21
3AC-203	1855912.82	710968.86	N 2°39'06.80" W	73.51
3AC-204	1855909.42	711042.30	S 52°13'25.53" W	19.32
3R1-1	1855894.15	711030.47	S 52°13'23.85" W	14.37

FILL AREA NO.1

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AC2-111	1855596.38	710389.03	S 65°35'56.61" W	87.53
3AC2-10	1855516.66	710352.87	N 89°48'35.84" W	35.58
3AC2-9	1855481.09	710352.99	N 74°13'28.21" W	35.58
3AC2-8	1855446.85	710362.66	N 61°24'37.28" W	44.60
3AC2-7	1855407.69	710384.00	N 39°04'57.09" W	67.44
3AC2-6	1855365.18	710436.35	N 22°50'51.89" W	66.45
3AC2-5	1855339.37	710497.59	N 18°22'11.04" W	90.01
3AC2-4	1855311.00	710583.02	N 32°53'47.95" E	27.34
3AC2-3	1855325.85	710605.98	N 14°31'43.40" W	128.25
3AC2-2	1855293.68	710730.12	N 71°22'34.29" E	74.16
3AC2-1	1855363.96	710753.81	S 64°26'07.07" E	257.64
3AC2-112	1855596.38	710642.63	S 0°00'00.00" E	253.59
3AC2-111	1855596.38	710389.03	S 65°35'56.61" W	87.53

FILL AREA NO.2

POINT	EASTING	NORTHING	BEARING	DISTANCE
3R4-1	1855484.03	710035.08	N 24°08'05.75" W	94.29
3R4-2	1855445.48	710121.13	N 22°11'10.97" W	100.74
3R4-3	1855407.44	710214.41	N 19°47'10.18" W	100.74
3R4-4	1855373.34	710309.20	N 17°23'10.16" W	100.74
3R4-5	1855343.24	710405.34	N 61°21'52.77" E	8.27
3R4-6	1855350.49	710409.30	S 35°55'13.29" E	42.28
3R4-7	1855375.29	710375.06	S 49°55'19.82" E	42.28
3R4-8	1855407.64	710347.85	S 63°55'15.76" E	42.28
3R4-9	1855445.62	710329.26	S 77°55'19.87" E	42.28
3R4-10	1855486.96	710320.42	N 88°04'40.40" E	42.28
3R4-11	1855529.21	710321.83	N 73°22'45.44" E	35.78
3R4-100	1855563.49	710332.07	N 65°57'48.13" E	36.00
3R4-101	1855596.38	710346.73	S 43°56'42.60" E	79.28
3R4-102	1855651.39	710289.65	S 0°00'00.00" E	254.57
3R4-103	1855651.39	710035.08	S 90°00'00.00" W	77.17
3R4-12	1855574.22	710035.08	S 90°00'00.00" W	90.19
3R4-1	1855484.03	710035.08	N 24°08'05.75" W	94.29

FILL AREA NO.3

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AC3-100	1855581.86	710896.17	S 12°47'55.70" W	108.02
3AC3-2	1855557.93	710790.84	S 0°00'00.00" E	64.91
3AC3-101	1855557.93	710725.93	S 51°10'24.64" E	36.85
3AC3-102	1855586.64	710702.82	S 43°26'36.68" E	44.97
3AC3-3	1855617.56	710670.18	S 37°01'35.85" E	25.37
3AC3-4	1855632.84	710649.92	S 31°41'53.01" E	29.76
3AC3-5	1855648.48	710624.60	S 25°34'08.49" E	30.51
3AC3-6	1855661.64	710597.07	S 18°34'18.66" E	22.63
3AC3-7	1855668.85	710575.62	N 90°00'00.00" E	21.50
3AC3-8	1855690.35	710575.62	N 1°08'43.45" E	82.44
3AC3-9	1855692.00	710658.05	N 3°51'39.04" E	46.69
3AC3-10	1855695.14	710704.63	N 6°45'30.61" E	34.94
3AC3-11	1855699.26	710739.33	N 9°41'42.14" E	41.65
3AC3-12	1855706.27	710780.39	N 15°12'26.59" E	30.43
3AC3-13	1855714.25	710809.75	N 18°33'35.14" E	48.63
3AC3-14	1855729.73	710855.85	N 24°34'25.70" E	38.38
3AC3-15	1855745.69	710890.75	N 29°07'46.51" E	14.47
3AC3-16	1855752.74	710903.40	N 26°25'06.94" E	18.11
3AC3-103	1855760.80	710919.62	N 32°29'35.39" E	41.53
3AC3-104	1855783.11	710954.65	N 55°31'28.92" W	50.00
3AC3-105	1855741.89	710982.95	S 61°31'51.92" W	182.05
3AC3-100	1855581.86	710896.17	S 12°47'55.70" W	108.02

<1>

FILL AREA NO.1/PUMP STATION ACCESS ROAD

POINT	EASTING	NORTHING	BEARING	DISTANCE
3AC5-1	1855292.33	710696.17	S 20°23'23.08" E	96.22
3AC2-3	1855325.85	710605.98	N 14°31'43.40" W	128.25
3AC2-2	1855293.68	710730.12	S 2°16'41.76" W	33.98
3AC5-1	1855292.33	710696.17	S 20°23'23.08" E	96.22

NOTES

1. FOR SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CENTERLINE OF PROTECTION PLAN SEE DRAWING NOS. 11/4 THRU 11/9.

Revisions			
Symbol	Descriptions	Date	Approved
<1>	MODIFIED BY AMENDMENT MC009	11/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

R/W MONUMENT TABLES

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 6/11
FILENAME: 00r1mt01.dgn
PRN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED

COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	212/24
LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)
FRANKLIN COUNTY	212/24	
LATITUDE	LONGITUDE	DATUM
		NAD 27
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE
706780.955	1856864.353	OHIO/SOUTH
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE

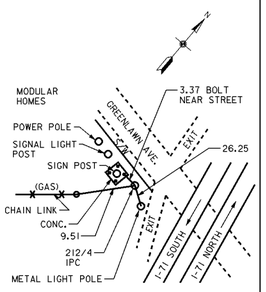
ELEVATION (FT) (M)	ESTABLISHED BY (AGENCY)
706.914	C.O.E.
DATE	ORDER
9/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD(+)SUB(-)) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC+GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/17	85°14′04.4″	° ′ ″		522.937
	° ′ ″	° ′ ″		
212/15	161°16′22.6″	° ′ ″		627.773
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO
PHASE IIIB, UTILITIES
HORIZ CONTROL PT.
212/4 IP&C

SEPT. 11, 1997 JOB 41/7 — CEN-S 212 — G.JONES PC, G.HUNDLEY III, E.ROMANS ø



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	212/15
LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)
FRANKLIN COUNTY	212/15	
LATITUDE	LONGITUDE	DATUM
		NAD 27
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE
706186.417	1857065.906	OHIO/SOUTH
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE

ELEVATION (FT) (M)	ESTABLISHED BY (AGENCY)
710.399	C.O.E.
DATE	ORDER
9/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD(+)SUB(-)) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC+GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/4	341°16′22.6″	° ′ ″		627.773
	° ′ ″	° ′ ″		
212/11	191°13′29.5″	° ′ ″		1013.114
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

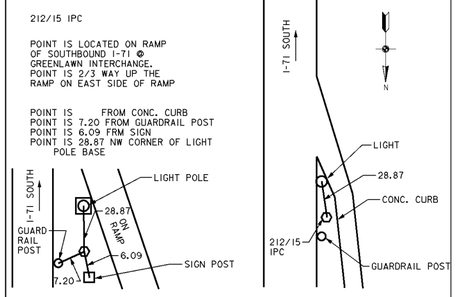
W. COLUMBUS OHIO
PHASE IIIB, UTILITIES
HORIZ CONTROL PT.
212/15 IP&C

SEPT. 23, 1997 JOB 41/7 — CEN-S 212 — JONES & CREW

212/15 IPC

POINT IS LOCATED ON RAMP OF SOUTHBOUND I-71 @ GREENLAWN INTERCHANGE.
POINT IS 2/3 WAY UP THE RAMP ON EAST SIDE OF RAMP

POINT IS FROM CONC. CURB
POINT IS 7.20 FROM GUARDRAIL POST
POINT IS 6.09 FRM SIGN
POINT IS 28.87 NW CORNER OF LIGHT POLE BASE



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	212/17
LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)
FRANKLIN COUNTY	212/17	
LATITUDE	LONGITUDE	DATUM
		NAD 27
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE
706824.400	1857385.482	OHIO/SOUTH
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE

ELEVATION (FT) (M)	ESTABLISHED BY (AGENCY)
N/A	C.O.E.
DATE	ORDER
9/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD(+)SUB(-)) ° ′ ″ TO THE GEODETIC AZIMUTH

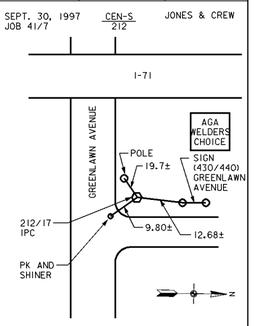
OBJECT	AZIMUTH OR DIRECTION (GEODETIC+GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/23	94°04′45.4″	° ′ ″		1811.179
	° ′ ″	° ′ ″		
212/4	265°14′04.4″	° ′ ″		522.937
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO
PHASE IIIB, UTILITIES
HORIZ CONTROL PT.
212/17 IP&C

SEPT. 30, 1997 JOB 41/7 — CEN-S 212 — JONES & CREW

212/17 IPC

POINT IS LOCATED ON GREENLAWN AVE. AT THE ENTRANCE TO AGA WELDERS CHOICE



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	212/23
LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)
FRANKLIN COUNTY	212/23	
LATITUDE	LONGITUDE	DATUM
		NAD 27
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE
706895.559	1859192.073	OHIO/SOUTH
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE

ELEVATION (FT) (M)	ESTABLISHED BY (AGENCY)
N/A	C.O.E.
DATE	ORDER
9/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD(+)SUB(-)) ° ′ ″ TO THE GEODETIC AZIMUTH

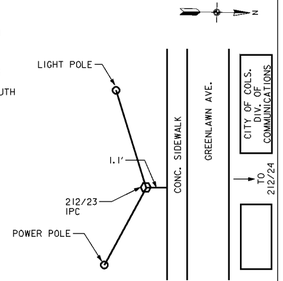
OBJECT	AZIMUTH OR DIRECTION (GEODETIC+GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/24	05°36′29.5″	° ′ ″		372.084
	° ′ ″	° ′ ″		
212/17	274°04′45.4″	° ′ ″		1811.179
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO
LPP REFERENCES TO
HORIZ CONTROL PT.
212/23 IP&C

OCT. 7, 1997 JOB 41/7 — CEN-S 212 — JONES & CREW

212/23 IPC

POINT IS LOCATED ON SOUTH SIDE OF GREENLAWN AVE. ACROSS THE STREET FROM THE CITY OF COLUMBUS DIVISION OF COMMUNICATIONS BUILDING.
212/23 IS 1.1± FEET OFF SOUTH EDGE OF SIDEWALK



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	212/24
LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)
FRANKLIN COUNTY	212/24	
LATITUDE	LONGITUDE	DATUM
		NAD 27
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE
707065.862	1859228.435	OHIO/SOUTH
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE

ELEVATION (FT) (M)	ESTABLISHED BY (AGENCY)
N/A	C.O.E.
DATE	ORDER
9/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD(+)SUB(-)) ° ′ ″ TO THE GEODETIC AZIMUTH

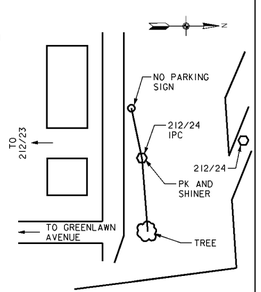
OBJECT	AZIMUTH OR DIRECTION (GEODETIC+GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/25	288°02′17.1″	° ′ ″		468.091
	° ′ ″	° ′ ″		
212/23	185°36′29.5″	° ′ ″		372.084
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO
LPP REFERENCE TO
HORIZ CONTROL PT.
212/24 IP&C

OCT. 7, 1997 JOB 41/7 — CEN-S 212 — JONES & CREW

212/24 IPC

POINT IS LOCATED ON THE NORTH SIDE OF THE COMMUNICATIONS BUILDING. AREA IS ALSO USED FOR FIREFIGHTER TRAINING.
POINT IS ON NORTH SIDE OF ACCESS ROAD.



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	212/25
LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)
FRANKLIN COUNTY	212/25	
LATITUDE	LONGITUDE	DATUM
		NAD 27
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE
707210.806	1858783.350	OHIO/SOUTH
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE

ELEVATION (FT) (M)	ESTABLISHED BY (AGENCY)
N/A	C.O.E.
DATE	ORDER
9/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD(+)SUB(-)) ° ′ ″ TO THE GEODETIC AZIMUTH

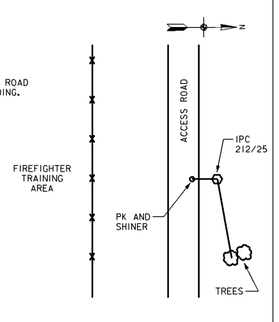
OBJECT	AZIMUTH OR DIRECTION (GEODETIC+GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/26	284°55′54.0″	° ′ ″		576.706
	° ′ ″	° ′ ″		
212/24	108°02′17.1″	° ′ ″		468.091
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO
LPP REFERENCE TO
HORIZ CONTROL PT.
212/25 IP&C

OCT. 7, 1997 JOB 41/7 — CEN-S 212 — JONES & CREW

212/25 IPC

POINT IS LOCATED ON ACCESS ROAD BEHIND COMMUNICATIONS BUILDING.
POINT IS WEST OF 212/24.



COUNTRY	TYPE OF MARK	STATION
U.S.A.	MINE SPIKE	212/26
LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)
FRANKLIN COUNTY	212/26	
LATITUDE	LONGITUDE	DATUM
		NAD 27
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE
707359.404	1858226.117	OHIO/SOUTH
(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE

ELEVATION (FT) (M)	ESTABLISHED BY (AGENCY)
N/A	C.O.E.
DATE	ORDER
9/97	

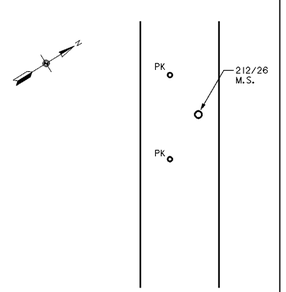
TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD(+)SUB(-)) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC+GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/27	286°33′59.3″	° ′ ″		344.197
	° ′ ″	° ′ ″		
212/25	104°55′54.0″	° ′ ″		576.706
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO
LPP REFERENCE TO
HORIZ CONTROL PT.

OCT. 7, 1997 JOB 41/7 — CEN-S 212 — JONES & CREW

212/26 MINE SPIKE



NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: COE
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

SURVEY REFERENCES (1 OF 3)

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 1/1
FILENAME: 00usar01.dgn
PEN TABLE:
Sheet 1 of 3

WORK AS CONSTRUCTED

COUNTRY	TYPE OF MARK	STATION
U.S.A.	MINE SPIKE	212/27

LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
FRANKLIN COUNTY	212/27		N/A

LATITUDE	LONGITUDE	DATUM	DATUM
		NAD 27	

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
707457.544	1857896.208	OHIO/SOUTH	C.O.E.

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	DATE	ORDER
			10/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD/SUB) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/28	271°54′03.0″	° ′ ″		766.872
	° ′ ″	° ′ ″		
212/26	106°33′59.3″	° ′ ″		344.197
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO LPP REFERENCE TO HORIZ CONTROL PT.

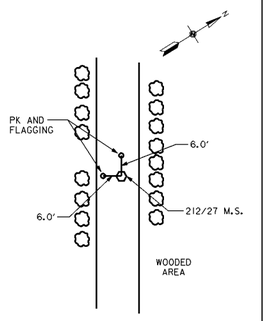
OCT. 7, 1997 JOB 41/7

CEN-S 212

JONES & CREW

212/27 MINE SPIKE

POINT IS LOCATED ON ACCESS ROAD WEST OF M.S. 212/26. POINT IS EAST OF ON-RAMP TO I-71.



COUNTRY	TYPE OF MARK	STATION
U.S.A.	MINE SPIKE	212/28

LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
FRANKLIN COUNTY	212/28		N/A

LATITUDE	LONGITUDE	DATUM	DATUM
		NAD 27	

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
707482.981	1857129.758	OHIO/SOUTH	C.O.E.

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	DATE	ORDER
			10/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD/SUB) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/29	236°37′11.4″	° ′ ″		275.117
	° ′ ″	° ′ ″		
212/27	91°54′03.0″	° ′ ″		766.872
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO LPP REFERENCE TO HORIZ CONTROL PT.

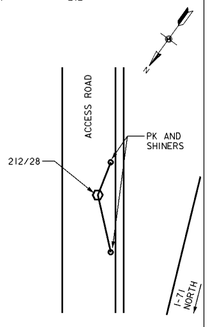
OCT. 7, 1997 JOB 41/7

CEN-S 212

JONES & CREW

212/28 MINE SPIKE

MINE SPIKE LOCATED FARTHER ALONG ACCESS ROAD



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	212/29

LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
FRANKLIN COUNTY	212/29		N/A

LATITUDE	LONGITUDE	DATUM	DATUM
		NAD 27	

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
707331.614	1856900.025	OHIO/SOUTH	C.O.E.

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	DATE	ORDER
			10/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD/SUB) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
212/30	330°03′10.8″	° ′ ″		522.099
	° ′ ″	° ′ ″		
212/28	56°37′11.4″	° ′ ″		275.117
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO LPP REFERENCE TO HORIZ CONTROL PT.

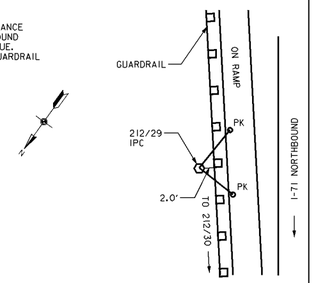
OCT. 8, 1997 JOB 41/7

CEN-S 212

JONES & CREW

212/29 IPC

POINT IS SET ON ENTRANCE RAMP TO I-71 NORTHBOUND FROM GREENLAWN AVENUE. POINT IS 2.0′ FROM GUARDRAIL POST.



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	212/30

LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
FRANKLIN COUNTY	212/30		N/A

LATITUDE	LONGITUDE	DATUM	DATUM
		NAD 27	

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
707784.006	1856839.394	OHIO/SOUTH	C.O.E.

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	DATE	ORDER
			10/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD/SUB) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
215/16	333°29′02.6″	° ′ ″		941.613
	° ′ ″	° ′ ″		
212/29	150°03′10.8″	° ′ ″		522.099
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO LPP REFERENCE TO HORIZ CONTROL PT.

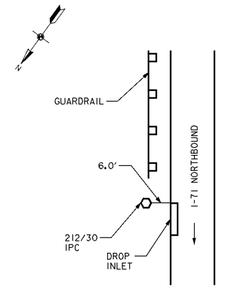
OCT. 8, 1997 JOB 41/7

CEN-S 212

JONES & CREW

212/30 IPC

POINT IS NEAR THE END OF THE ENTRANCE RAMP OF I-71 NORTH AT GREENLAWN AVENUE



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	215/16

LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
FRANKLIN COUNTY	215/16		N/A

LATITUDE	LONGITUDE	DATUM	DATUM
		NAD 27	

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
708626.571	1856219.014	OHIO/SOUTH	C.O.E.

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	DATE	ORDER
			10/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD/SUB) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
215/17	333°21′36.6″	° ′ ″		942.684
	° ′ ″	° ′ ″		
212/30	153°29′02.6″	° ′ ″		941.613
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO LPP REFERENCE TO HORIZ CONTROL PT.

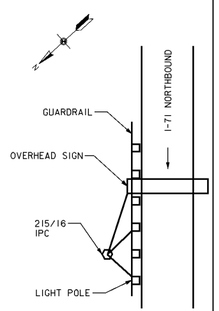
OCT. 7, 1997 JOB 41/7

CEN-S 215

JONES & CREW

215/16 IPC

POINT IS LOCATED ON I-71 NORTH AT SIGN SHOWING EXIT 106A 270 WEST, EXIT 106B AND THE I-70 AND I-71 SIGNS FOR CLEVELAND AND WHEELING



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	215/17

LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
FRANKLIN COUNTY	215/17		N/A

LATITUDE	LONGITUDE	DATUM	DATUM
		NAD 27	

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
709469.182	1855796.333	OHIO/SOUTH	C.O.E.

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	DATE	ORDER
			10/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD/SUB) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
215/18	348°56′06.6″	° ′ ″		385.787
	° ′ ″	° ′ ″		
215/16	153°21′36.6″	° ′ ″		942.684
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO LPP REFERENCE TO HORIZ CONTROL PT.

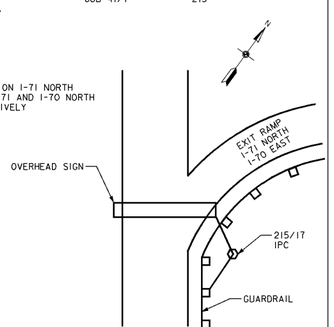
OCT. 8, 1997 JOB 41/7

CEN-S 215

JONES & CREW

215/17 IPC

POINT IS LOCATED ON I-71 NORTH AT THE EXIT OF I-71 AND I-70 NORTH AND EAST RESPECTIVELY



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	215/18

LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
FRANKLIN COUNTY	215/18		N/A

LATITUDE	LONGITUDE	DATUM	DATUM
		NAD 27	

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
709847.797	1855722.293	OHIO/SOUTH	C.O.E.

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	DATE	ORDER
			10/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD/SUB) ° ′ ″ TO THE GEODETIC AZIMUTH

OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
215/19	00°34′15.4″	° ′ ″		878.821
	° ′ ″	° ′ ″		
215/17	168°56′06.6″	° ′ ″		385.787
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO LPP REFERENCE TO HORIZ CONTROL PT.

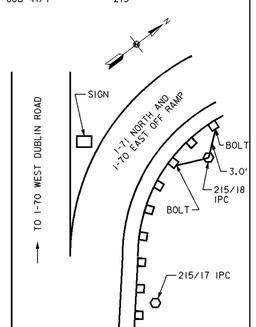
OCT. 8, 1997 JOB 41/7

CEN-S 215

JONES & CREW

215/18 IPC

POINT IS LOCATED 380′± FARTHER DOWN THE OFF RAMP TO I-70 EAST AND I-71 NORTH



NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: COE
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

SURVEY REFERENCES (2 OF 3)

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 11/2
FILENAME: 00asur02.dgn
PEN TABLE:
Sheet 2 of 3

WORK AS CONSTRUCTED

COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	215/19

LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
FRANKLIN COUNTY	215/19		N/A

LATITUDE	LONGITUDE	DATUM	ELEVATION
		NAD 27	N/A

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
710726.574	1855731.050	OHIO/SOUTH	C.O.E.

(NORTHING) (EASTING) (FT) 66	(EASTING) (NORTHING) (FT) 66	GRID AND ZONE	DATE	ORDER
			10/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD/SUB) ° ′ ″ TO THE GEODETIC AZIMUTH

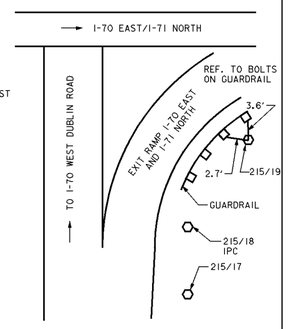
OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
215/20	15°48′56.9″	° ′ ″		665.045
	° ′ ″	° ′ ″		
215/18	180°34′15.4″	° ′ ″		878.821
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO LPP REFERENCE TO HORIZ CONTROL PT.

OCT. 8, 1997 JOB 41/7

CEN-S 215

JONES & CREW



COUNTRY	TYPE OF MARK	STATION
U.S.A.	IP&C	215/20

LOCALITY	STAMPING ON MARK	AGENCY (CAST IN MARKS)	ELEVATION (FT) (M)
FRANKLIN COUNTY	215/20		N/A

LATITUDE	LONGITUDE	DATUM	ELEVATION
		NAD 27	N/A

(NORTHING) (EASTING) (FT) (M)	(EASTING) (NORTHING) (FT) (M)	GRID AND ZONE	ESTABLISHED BY (AGENCY)
711366.442	1855912.305	OHIO/SOUTH	C.O.E.

(NORTHING) (EASTING) (FT) 66	(EASTING) (NORTHING) (FT) 66	GRID AND ZONE	DATE	ORDER
			10/97	

TO OBTAIN GRID AZIMUTH ADD ° ′ ″ TO THE GEODETIC AZIMUTH
TO OBTAIN GRID AZ. (ADD/SUB) ° ′ ″ TO THE GEODETIC AZIMUTH

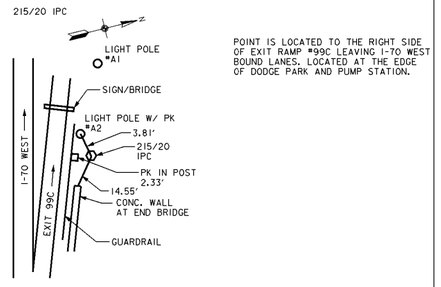
OBJECT	AZIMUTH OR DIRECTION (GEODETIC/GRID) (MAGNETIC)	BACK AZIMUTH	GEOD DISTANCE (METERS) (FEET)	GRID DISTANCE (METERS) (FEET)
215/19	195°48′56.9″	° ′ ″		665.045
	° ′ ″	° ′ ″		
17/12	32°08′06.4″	° ′ ″		735.471
	° ′ ″	° ′ ″		
	° ′ ″	° ′ ″		

W. COLUMBUS OHIO LPP REFERENCE TO HORIZ CONTROL PT.

OCT. 8, 1997 JOB 41/7

CEN-S 215

JONES & CREW



POINT IS LOCATED TO THE RIGHT SIDE OF EXIT RAMP #99C LEAVING I-70 WEST BOUND LANES. LOCATED AT THE EDGE OF DODGE PARK AND PUMP STATION.

LEVELMAN : PETRUCCI/STROLL (KENCO) DATE : OCT.-NOV. 1989 BOOK NO. : CEN-S/AS SHOWN COMPUTED BY : CORNWELL CHECKED BY : POPLIN	PROJECT NO. 59/9 MOD-1 DESC. WEST COLUMBUS, OHIO - L.P.P. SOUNDING/SECTIONS (VERTICAL BASE-FOR FLOOD SURVEYS) VERTICAL DATUM : 1929 NGS
T.B.M. : 11/19-1 ELEV. : 702.955 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN N. END OF GAS PUMP ISLAND OF CERTIFIED GAS STATION. AT POINT OF HARMON AVE. & ENIG ST. 400± S. OF STIMMEL ROAD TOPO SHEET NO. :
T.B.M. : 11/19-2 ELEV. : 701.575 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN N.E.CORNER OF CONC. PAD OF STEEL LIGHT POLE 90± S. OF CENTER LINE OF STIMMEL RD. 35± W. OF DECKEBACH RD. EXTENDED 6'± W. OF W. EDGE PAVED PARKING LOT. TOPO SHEET NO. :
T.B.M. : 11/20-1 ELEV. : 720.482 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN CONC. WALK ON WEST SIDE OF FLAGPOLE. 100± W. OF SCIOTO BLVD. & 12± N. OF GREENLAWN AVE. AT BLDG. FOR CITY OF COLUMBUS RECREATION AND PARKS DEPT. TOPO SHEET NO. : 12
T.B.M. : 11/20-2 ELEV. : 709.128 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN S.W. CORNER OF CONC. PAD OF "UPPER DECK SPORTSBAR AND GRILL" SIGN 60'± OF CENTERLINE OF DECKEBACH AVE. 12'± N. OF GREENLAWN AVE. TOPO SHEET NO. :
T.B.M. : 11/22-1 ELEV. : 702.313 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN CONC. PAD OF MANHOLE 12'± N. OF EDGE OF STIMMEL RD. 80'± W. OF "G" ST. TOPO SHEET NO. :

LEVELMAN : PETRUCCI/STROLL (KENCO) DATE : OCT.-NOV. 1989 BOOK NO. : CEN-S/AS SHOWN COMPUTED BY : CORNWELL CHECKED BY : POPLIN	PROJECT NO. 59/9 MOD-1 DESC. WEST COLUMBUS, OHIO - L.P.P. SOUNDING/SECTIONS (VERTICAL BASE-FOR FLOOD SURVEYS) VERTICAL DATUM : 1929 NGS
T.B.M. : 86/11 ELEV. : 705.961 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET AT NORTHWEST CORNER W. MOUND ST. & CYPRESS ST. AT ENT. TO 1082 MOUND ST. IN CONC. SIDEWALK AND S. OF BUILDING TOPO SHEET NO. :
T.B.M. : 86/12 ELEV. : 705.571 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN CONC. SIDEWALK AT S.E. CORNER W. MOUND ST. AND MT. CALVARY AVE. 7'± S. OF S. CURB OF MOUND ST. & 1'± E. OF E. CURB OF MT. CALVARY AVE. TOPO SHEET NO. :
T.B.M. : 86/12-1 ELEV. : 710.783 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET ON TOP OF N.E. CORNER OF CONC. PAD OF STEEL LIGHT POLE ON S.W. CORNER OF BUCHMAN DR. AND VAN BUREN DR. TOPO SHEET NO. :
T.B.M. : 86/12-2 ELEV. : 711.687 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET ON TOP OF S.W. CORNER OF CONC. PAD OF STEEL LIGHT POLE. 50±' E. OF INTERSECTION OF PIERCE DR. AND VAN BUREN DR. ON N. SIDE OF VAN BUREN DR. TOPO SHEET NO. :
T.B.M. : 86/13 ELEV. : 706.636 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET ON TOP OF S.W. CORNER OF CONC. PAD OF STEEL LIGHT POLE ON S.W. CORNER OF HARMON AVE. AND BUCHANAN DR. TOPO SHEET NO. :

LEVELMAN : PETRUCCI/STROLL (KENCO) DATE : OCT.-NOV. 1989 BOOK NO. : CEN-S/AS SHOWN COMPUTED BY : CORNWELL CHECKED BY : POPLIN	PROJECT NO. 59/9 MOD-1 DESC. WEST COLUMBUS, OHIO - L.P.P. SOUNDING/SECTIONS (VERTICAL BASE-FOR FLOOD SURVEYS) VERTICAL DATUM : 1929 NGS
T.B.M. : 86/14 ELEV. : 714.266 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN S. SIDE CONC. DR. 100'± S. OF CENTERLINE OF GRIGGS AVE. 10'± E. OF E. EDGE OF HARMON AVE. NEAR 754 HARMON AVE. TOPO SHEET NO. :
T.B.M. : 86/14-1 ELEV. : 716.129 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN TOP OF S.W. CORNER OF CONC. VALVE PIT BOX 20'± E. OF HARMON AVE. 6'± S. OF EDGE OF PAVED DR. ENT. TO "CLARK FORKLIFT OF COLUMBUS" ACROSS FROM 849 HARMON AVE. TOPO SHEET NO. :
T.B.M. : 86/14-2 ELEV. : 708.916 DESC. : DISK QUAD. : COOR. : N. = E. =	LOCATION : DISK SET IN N. EDGE CONC. DR. AT 938 HARMON AVE. AT S. END CONC. BLOCK WALL 12'± E. OF EDGE OF HARMON AVE. AND 115'± N. OF CENTERLINE OF WHARTON AVE. TOPO SHEET NO. :
T.B.M. : 86/17 ELEV. : 704.188 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN E. END OF CONC. CURB AT N.E. CORNER OF GREENLAWN AVE. AND GREENFIELD DR. 30'± E. OF CENTERLINE OF GREENFIELD DR. NEAR ST. RITA'S HOME AT 880 GREENLAWN AVE. TOPO SHEET NO. :
T.B.M. : 86/19 ELEV. : 713.831 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN TOP OF CONC. CURB INLET PAD ON N.W. CORNER OF GREENFIELD DR. AND PAVED DR. TO PARKING LOT FOR APTS. 200'± S. OF CANNON BX PLACE TOPO SHEET NO. :

LEVELMAN : PETRUCCI/STROLL (KENCO) DATE : OCT.-NOV. 1989 BOOK NO. : CEN-S/AS SHOWN COMPUTED BY : CORNWELL CHECKED BY : POPLIN	PROJECT NO. 59/9 MOD-1 DESC. WEST COLUMBUS, OHIO - L.P.P. SOUNDING/SECTIONS (VERTICAL BASE-FOR FLOOD SURVEYS) VERTICAL DATUM : 1929 NGS
T.B.M. : 11/22-2 ELEV. : 713.098 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN TOP OF N.W. CORNER OF CONC. CURB AT "RAW" BUSINESS AT 1191 STIMMEL RD. 33'± S. OF STIMMEL RD. TOPO SHEET NO. :
T.B.M. : 11/23 ELEV. : 706.125 DESC. : DISK QUAD. : S.W. COLUMBUS COOR. : N. = E. =	LOCATION : DISK SET IN N.E. CORNER OF CONC. BASE OF FLAGPOLE IN N. EDGE OF PARKING LOT TO "DALE CONTRACTING, INC." 1247 STIMMEL RD. 35'± S. OF STIMMEL RD. TOPO SHEET NO. :
T.B.M. : ELEV. : DESC. : QUAD. : COOR. : N. = E. =	LOCATION : TOPO SHEET NO. : 12
T.B.M. : ELEV. : DESC. : QUAD. : COOR. : N. = E. =	LOCATION : TOPO SHEET NO. : 12
T.B.M. : ELEV. : DESC. : QUAD. : COOR. : N. = E. =	LOCATION : TOPO SHEET NO. : 12

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: COE
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

US Army Corps of Engineers

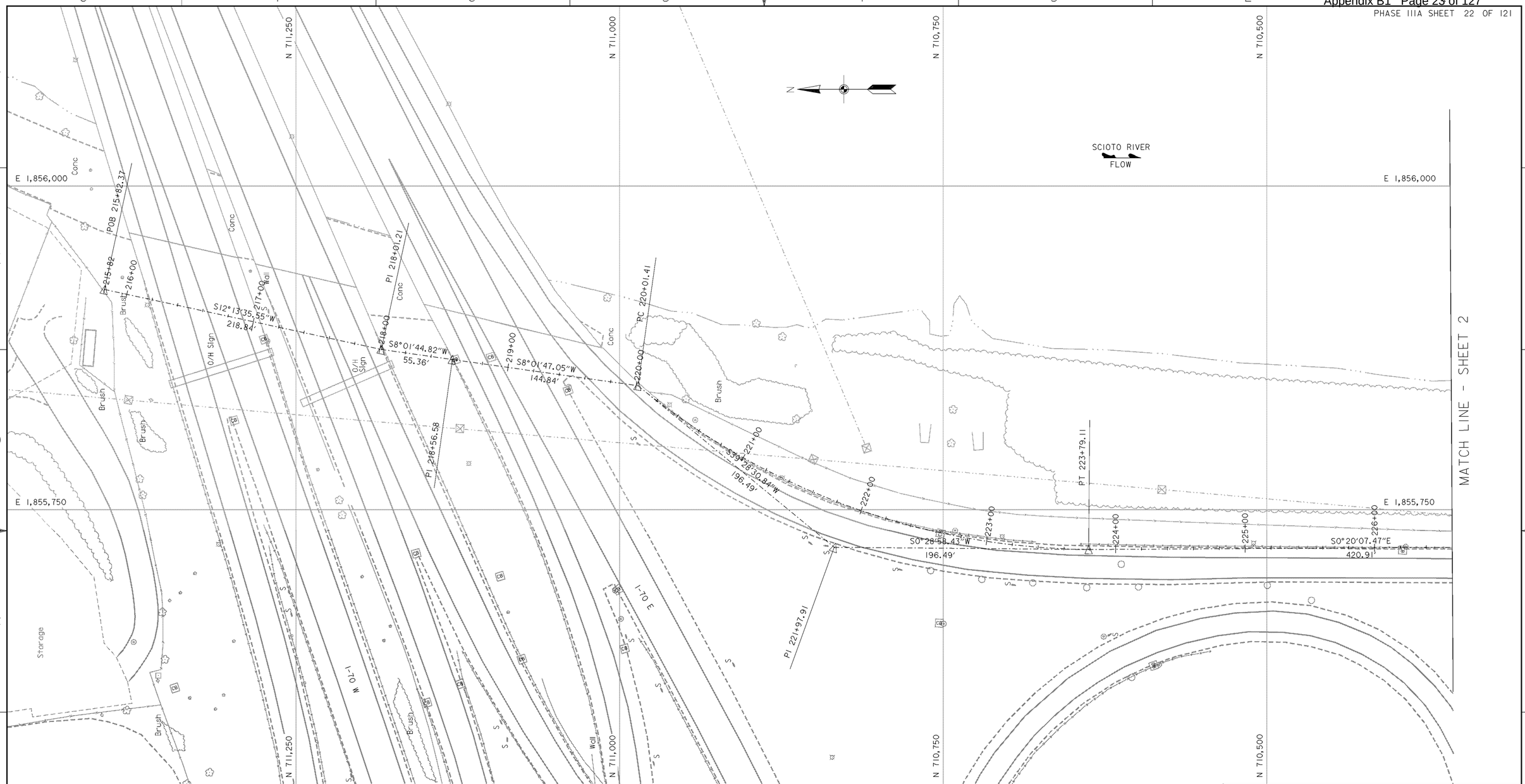
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

SURVEY
REFERENCES (3 OF 3)

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 11/3
FILENAME: 00susr03.dgn
PEN TABLE:
Sheet 3 of 3

WORK AS CONSTRUCTED

PHASE IIIA SHEET 22 OF 121



PLAN

SCALE: 1" = 30'

30' 0 30'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CENTERLINE OF PROTECTION ALIGNMENT DATA SEE DRAWING NO. 11/9.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

US Army Corps of Engineers

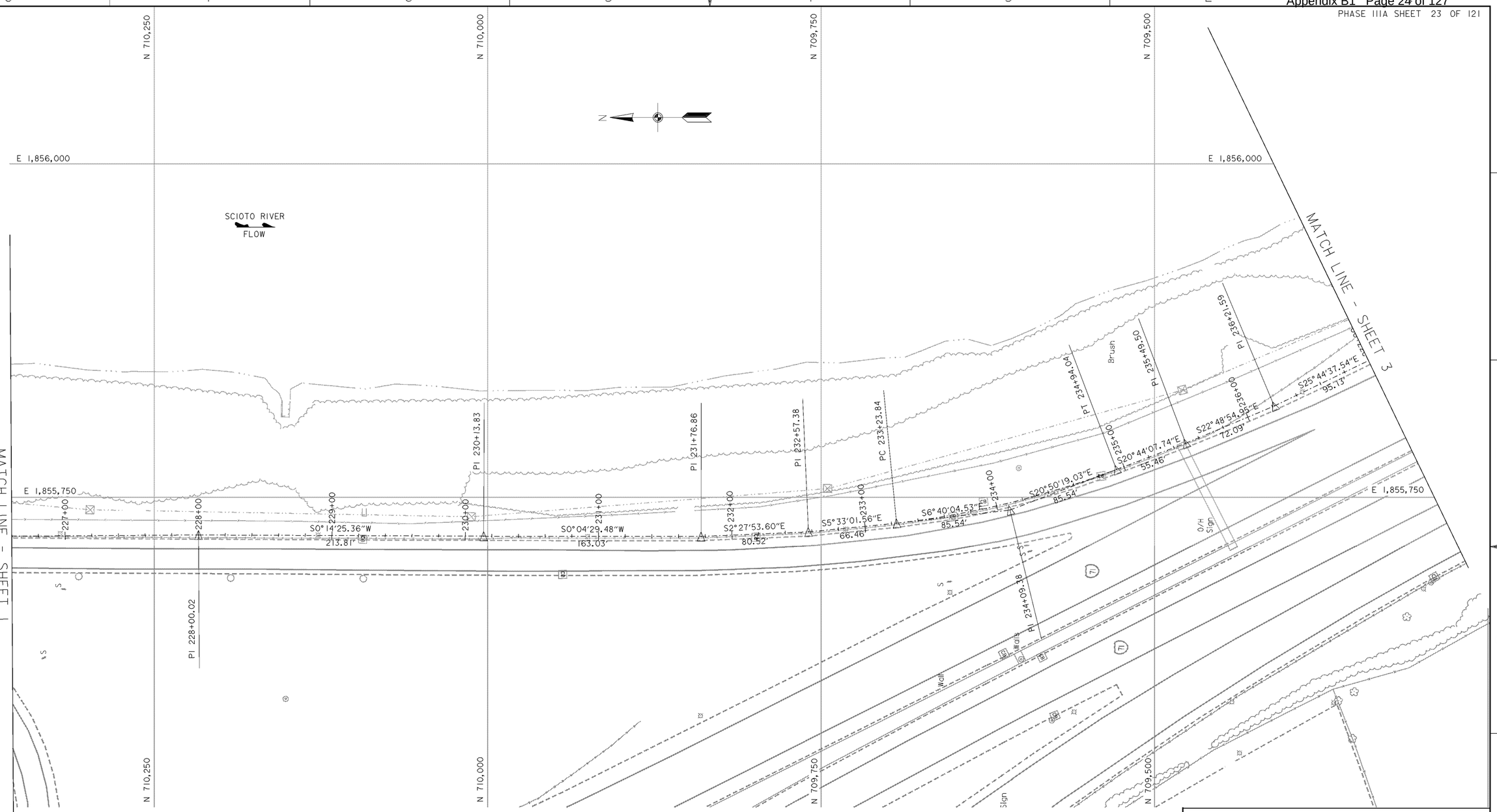
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CENTERLINE OF PROTECTION (1 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 11/4
FILENAME: 00azcl01.dgn
PRN TABLE:
Sheet 1 of 5

WORK AS CONSTRUCTED

PHASE IIIA SHEET 23 OF 121



PLAN

SCALE: 1" = 30'

30' 0 30'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 01/5.
2. FOR CENTERLINE OF PROTECTION ALIGNMENT DATA SEE DRAWING NO. 11/9.

Revisions			
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BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

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Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

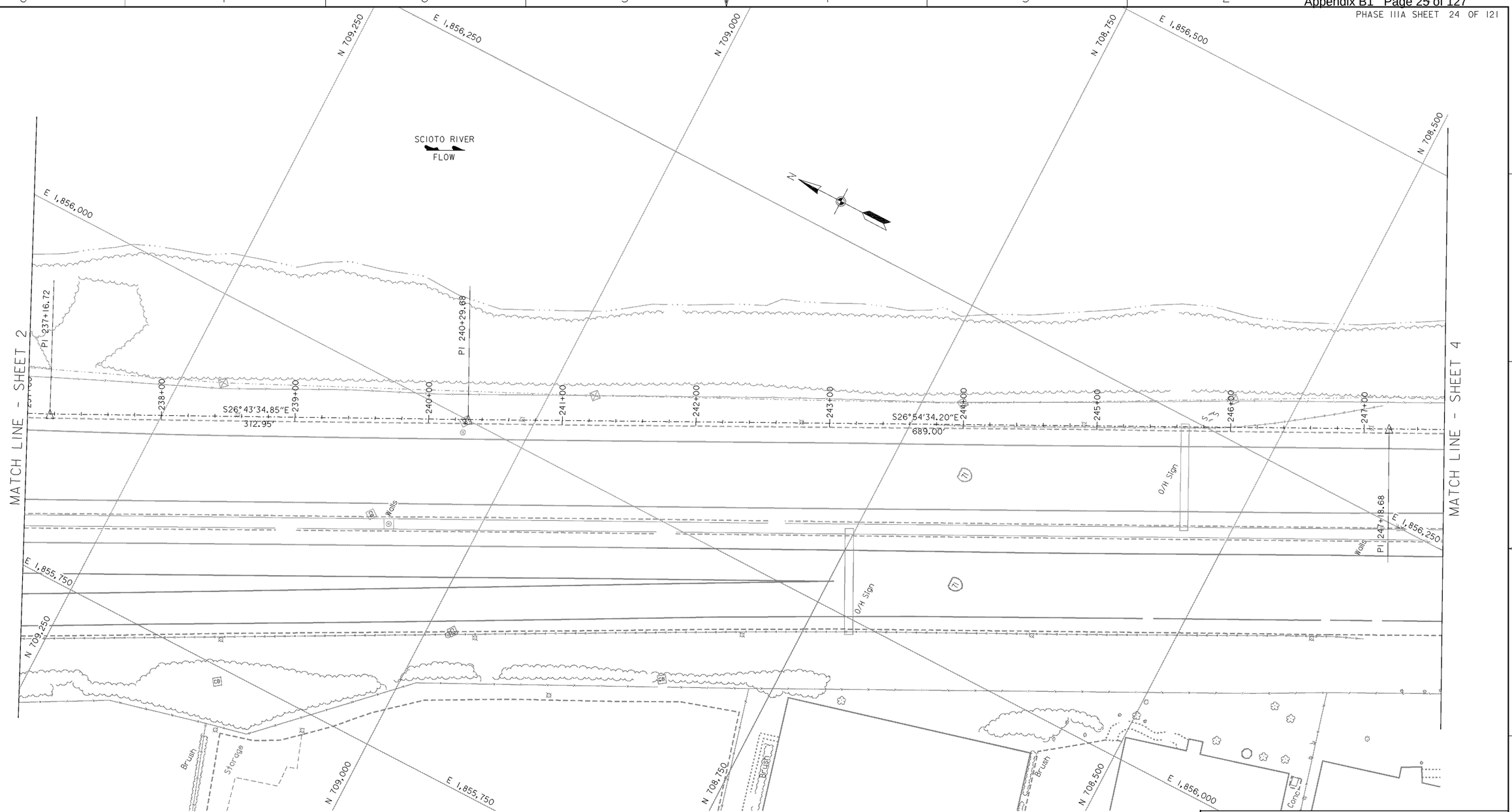
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CENTERLINE OF PROTECTION (2 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 11/5
FILENAME: PRN TABLE: 00azcl02.dgn
Sheet 2 of 5

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 30'

30' 0 30'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CENTERLINE OF PROTECTION ALIGNMENT DATA SEE DRAWING NO. 11/9.

Revisions			
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Checked by: P.CONROY
Reviewed by:
Approved by:

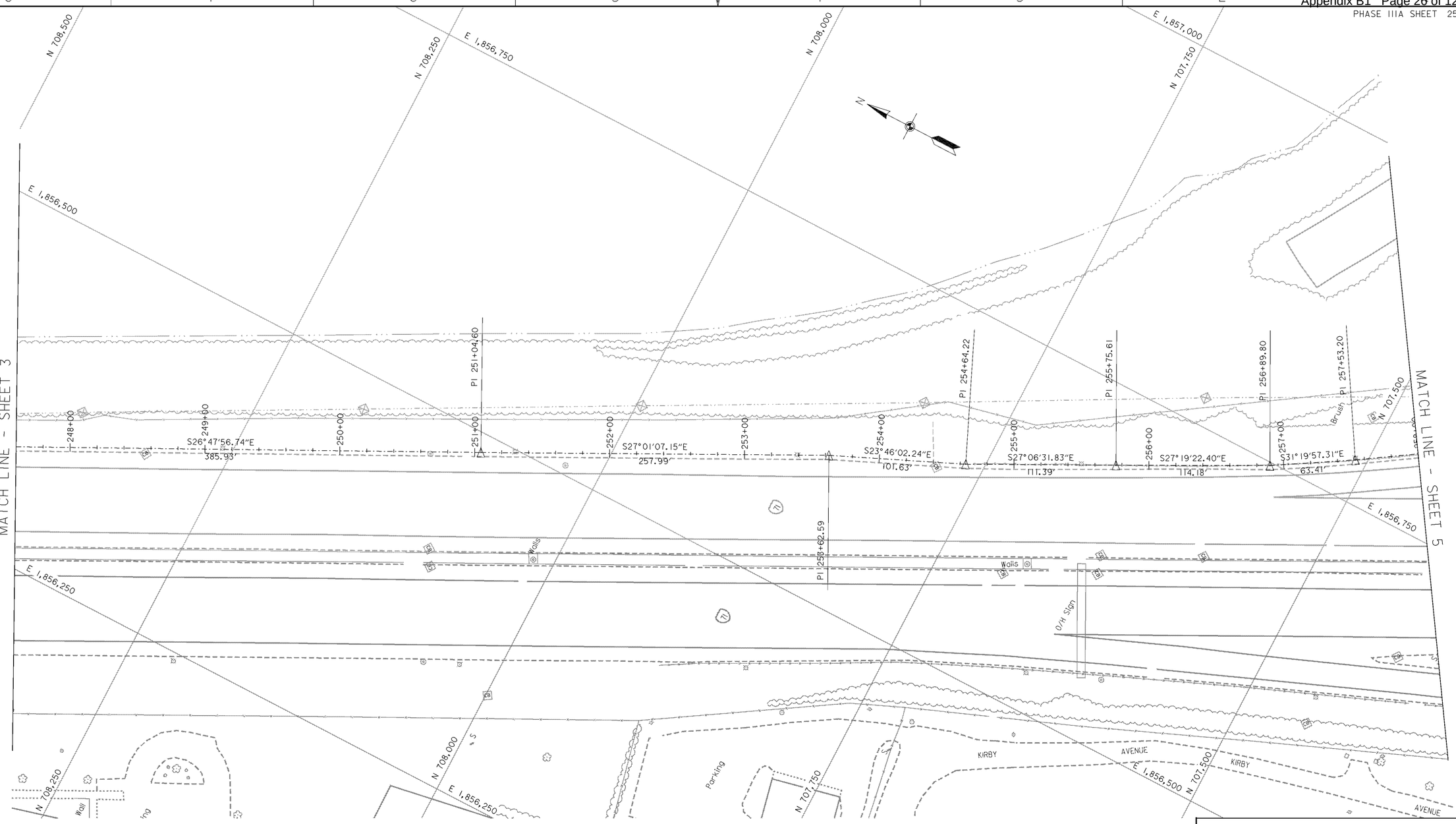
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CENTERLINE OF PROTECTION (3 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 11/6
FILENAME: 00azcl03.dgn
PRN TABLE:
Sheet 3 of 5

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 30'
30' 0 30'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 01/5.
2. FOR CENTERLINE OF PROTECTION ALIGNMENT DATA SEE DRAWING NO. 11/9.

Revisions			
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COLUMBUS, OHIO

U.S.ARMY ENGINEER DISTRICT
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HUNTINGTON, WEST VIRGINIA

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Checked by: P.CONROY
Reviewed by:
Approved by:

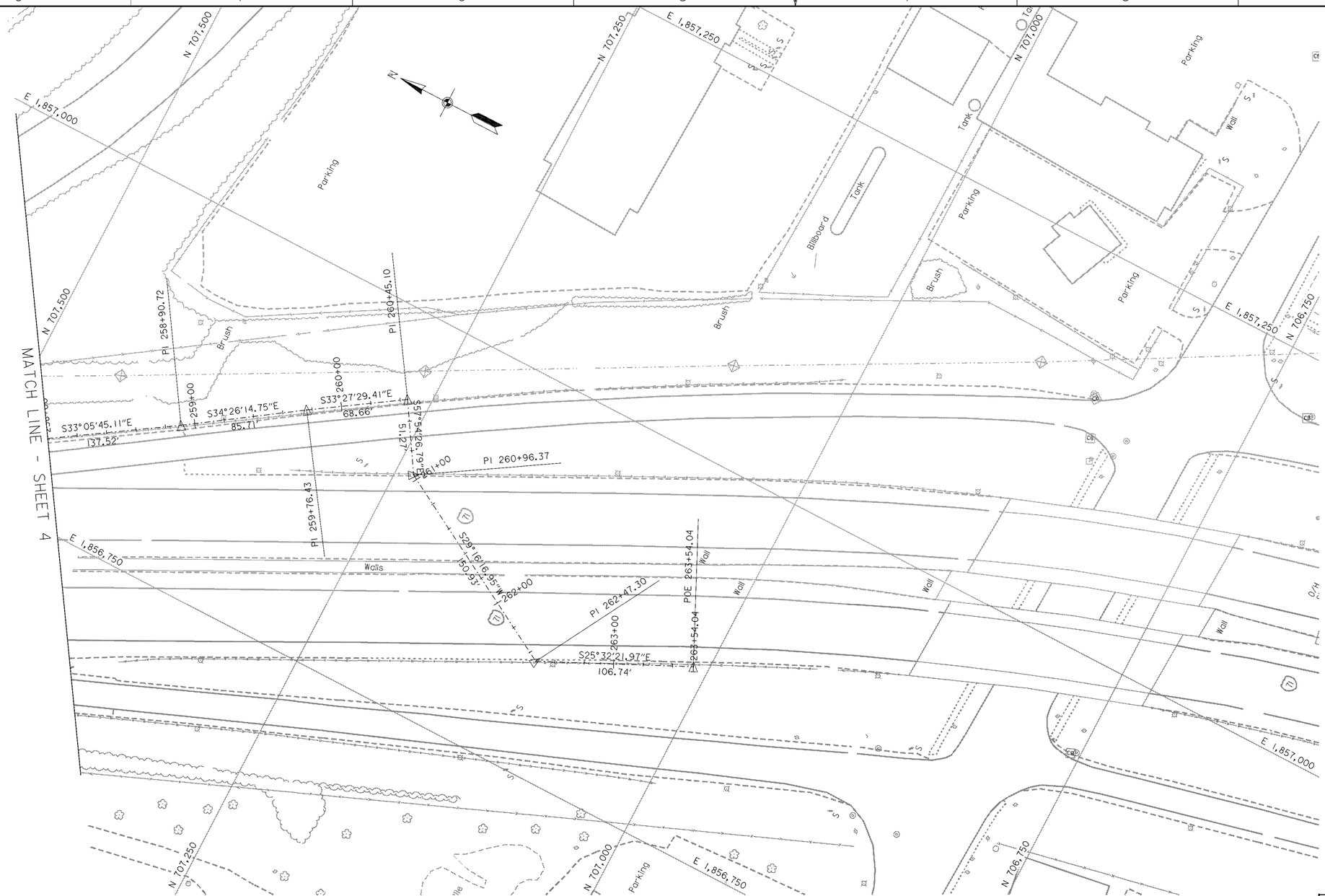
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CENTERLINE OF PROTECTION (4 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 11/7
FILENAME: PRN TABLE: 00azcl04.dgn
Sheet 4 of 5

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 30'

30' 0 30'

NOTES

1. FOR GENERAL SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CENTERLINE OF PROTECTION ALIGNMENT DATA SEE DRAWING NO. 11/9.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

U.S.ARMY ENGINEER DISTRICT
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Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CENTERLINE OF PROTECTION (5 OF 5)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 11/8
FILENAME: 00azcl05.dgn
PEN TABLE:
Sheet 5 of 5

WORK AS CONSTRUCTED

HORIZONTAL ALIGNMENT DATA FOR CENTERLINE OF PROTECTION

		STATION	NORTH(Y)	EAST(X)
Element: LINEAR				
	POB	215+82.37	711398.036	1855919.978
	PI	218+01.21	711184.157	1855873.632
Tangent Direction:		S 12°13'35.55" W		
Tangent Length:		218.843		
Element: LINEAR				
	PI	218+01.21	711184.157	1855873.632
	PI	218+56.58	711129.336	1855865.899
Tangent Direction:		S 8°01'44.82" W		
Tangent Length:		55.364		
Element: LINEAR				
	PI	218+56.58	711129.336	1855865.899
	PC	220+01.41	710985.918	1855845.667
Tangent Direction:		S 8°01'47.05" W		
Tangent Length:		144.838		
Element: CIRCULAR CURVE				
	PC	220+01.41	710985.918	1855845.667
	PI	221+97.91	710834.247	1855720.749
	CC		710633.086	1856274.064
	PT	223+79.11	710637.763	1855719.093
Curve Radius:		-554.991		
Curve Length:		377.696		
Total Central Angle:		38°59'32.41"		
1st Subtangent Distance:		196.491		
2nd Subtangent Distance:		196.491		
Element: LINEAR				
	PT	223+79.11	710637.763	1855719.093
	PI	228+00.02	710216.857	1855721.557
Tangent Direction:		S 0°20'07.47" E		
Tangent Length:		420.913		
Element: LINEAR				
	PI	228+00.02	710216.857	1855721.557
	PI	230+13.83	710003.053	1855720.660
Tangent Direction:		S 0°14'25.36" W		
Tangent Length:		213.806		
Element: LINEAR				
	PI	230+13.83	710003.053	1855720.660
	PI	231+76.86	709840.022	1855720.447
Tangent Direction:		S 0°04'29.48" W		
Tangent Length:		163.031		
Element: LINEAR				
	PI	231+76.86	709840.022	1855720.447
	PI	232+57.38	709759.575	1855723.910
Tangent Direction:		S 2°27'53.60" E		
Tangent Length:		80.522		
Element: LINEAR				
	PI	232+57.38	709759.575	1855723.910
	PC	233+23.84	709693.428	1855730.338
Tangent Direction:		S 5°33'01.56" E		
Tangent Length:		66.459		
Element: CIRCULAR CURVE				
	PC	233+23.84	709693.428	1855730.338
	PI	234+09.38	709608.469	1855740.270
	CC		709773.335	1856413.854
	PT	234+94.04	709528.527	1855770.699
Curve Radius:		-688.171		
Curve Length:		170.202		
Total Central Angle:		14°10'14.50"		
1st Subtangent Distance:		85.537		
2nd Subtangent Distance:		85.537		
Element: LINEAR				
	PT	234+94.04	709528.527	1855770.699
	PI	235+49.50	709476.659	1855790.335
Tangent Direction:		S 20°44'07.74" E		
Tangent Length:		55.460		
Element: LINEAR				
	PI	235+49.50	709476.659	1855790.335
	PI	236+21.59	709410.211	1855818.288
Tangent Direction:		S 22°48'54.95" E		
Tangent Length:		72.088		
Element: LINEAR				
	PI	236+21.59	709410.211	1855818.288
	PI	237+16.72	709324.524	1855859.607
Tangent Direction:		S 25°44'37.54" E		
Tangent Length:		95.129		
Element: LINEAR				
	PI	237+16.72	709324.524	1855859.607
	PI	240+29.68	709045.004	1856000.352
Tangent Direction:		S 26°43'34.85" E		
Tangent Length:		312.955		
Element: LINEAR				
	PI	240+29.68	709045.004	1856000.352
	PI	247+18.68	708430.604	1856312.183
Tangent Direction:		S 26°54'34.20" E		
Tangent Length:		689.004		
Element: LINEAR				
	PI	247+18.68	708430.604	1856312.183
	PI	251+04.60	708086.129	1856486.183
Tangent Direction:		S 26°47'56.74" E		
Tangent Length:		385.926		
Element: LINEAR				
	PI	251+04.60	708086.129	1856486.183
	PI	253+62.59	707856.298	1856603.382
Tangent Direction:		S 27°01'07.15" E		
Tangent Length:		257.988		
Element: LINEAR				
	PI	253+62.59	707856.298	1856603.382
	PI	254+64.22	707763.290	1856644.340
Tangent Direction:		S 23°46'02.24" E		
Tangent Length:		101.627		
Element: LINEAR				
	PI	254+64.22	707763.290	1856644.340
	PI	255+75.61	707664.134	1856695.100
Tangent Direction:		S 27°06'31.83" E		
Tangent Length:		111.393		
Element: LINEAR				
	PI	255+75.61	707664.134	1856695.100
	PI	256+89.80	707562.689	1856747.511
Tangent Direction:		S 27°19'22.40" E		
Tangent Length:		114.184		
Element: LINEAR				
	PI	256+89.80	707562.689	1856747.511
	PI	257+53.20	707508.529	1856780.483
Tangent Direction:		S 31°19'57.31" E		
Tangent Length:		63.407		
Element: LINEAR				
	PI	257+53.20	707508.529	1856780.483
	PI	258+90.72	707393.323	1856855.573
Tangent Direction:		S 33°05'45.11" E		
Tangent Length:		137.517		
Element: LINEAR				
	PI	258+90.72	707393.323	1856855.573
	PI	259+76.43	707322.632	1856904.044
Tangent Direction:		S 34°26'14.75" E		
Tangent Length:		85.713		
Element: LINEAR				
	PI	259+76.43	707322.632	1856904.044
	PI	260+45.10	707265.347	1856941.900
Tangent Direction:		S 33°27'29.41" E		
Tangent Length:		68.663		
Element: LINEAR				
	PI	260+45.10	707265.347	1856941.900
	PI	260+96.37	707238.105	1856898.460
Tangent Direction:		S 57°54'26.79" W		
Tangent Length:		51.275		
Element: LINEAR				
	PI	260+96.37	707238.105	1856898.460
	PI	262+47.30	707106.448	1856824.664
Tangent Direction:		S 29°16'16.95" W		
Tangent Length:		150.929		
Element: LINEAR				
	PI	262+47.30	707106.448	1856824.664
	POE	263+54.04	707010.142	1856870.681
Tangent Direction:		S 25°32'21.97" E		
Tangent Length:		106.735		

NOTES

1. FOR SITE PLAN SEE DRAWING NO. 0/5.
2. FOR CENTERLINE OF PROTECTION PLAN SEE DRAWING NOS. 11/4 THRU 11/8.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

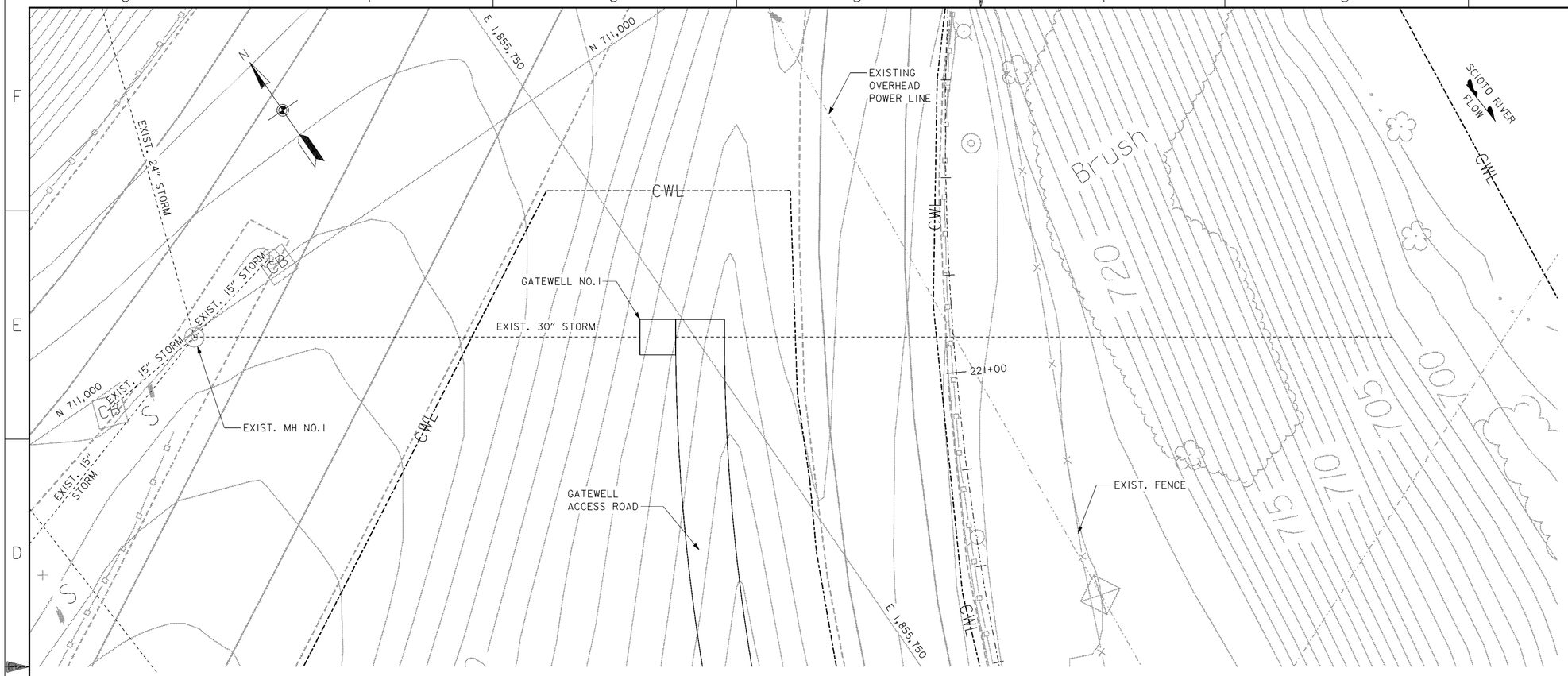
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HORIZONTAL ALIGNMENT

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 11/9
FILENAME: 00axmt01.dgn
PRN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED

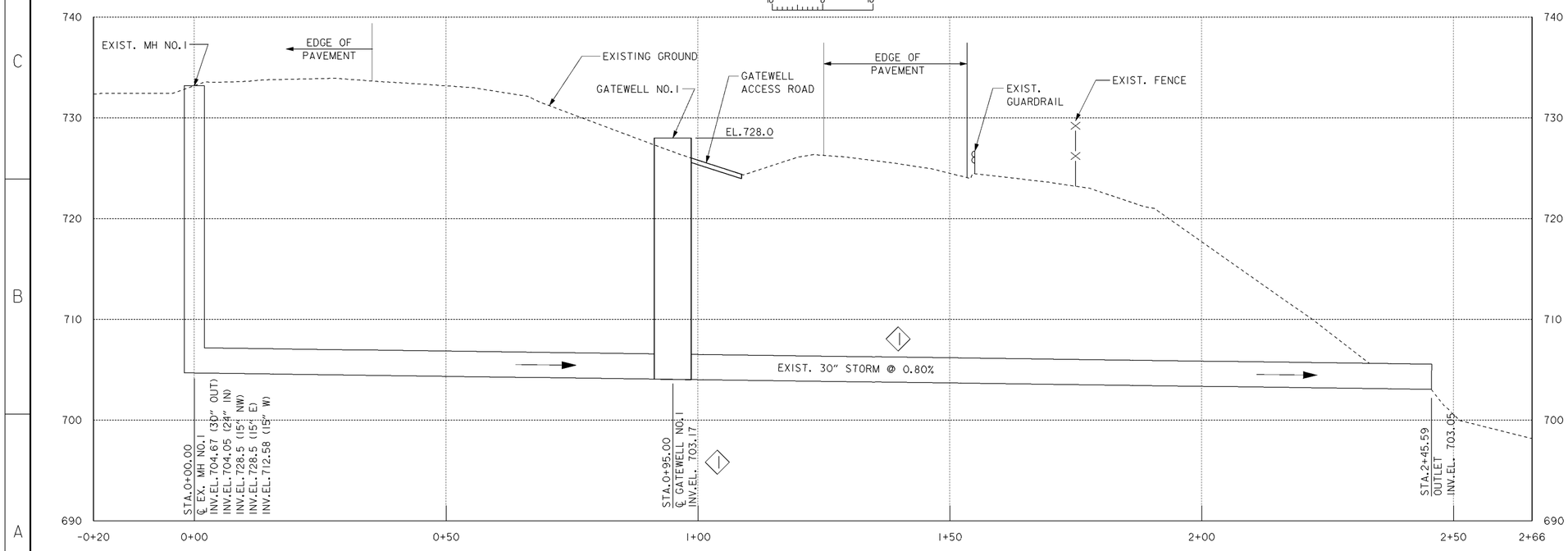


PLAN

SCALE: 1" = 10'

GATEWELL	EASTING	NORTHING
1	1,855,743.730	710,945.295
2	1,855,625.112	710,151.360
3	1,855,768.415	709,632.709
4	1,856,011.321	709,054.662
5	1,856,531.724	708,041.310
6	1,856,788.329	707,503.203

THE LOCATION OF THE GATEWELLS IN THE TABLE ABOVE ARE APPROXIMATE AND BASED UPON THE LOCATION WHERE THE GATEWELL INTERCEPTS THE STORM SEWER. THE CONTRACTOR SHALL UNCOVER THE STORM SEWER AND CENTER THE GATEWELL ON THE STORM SEWER INLET/OUTLET.



PROFILE

SCALE IN FEET

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL GATEWELL PLAN AND DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
3. FOR GATEWELL REINFORCING STEEL SEE DRAWING NO. 15/9.
4. REMOVE DISTURBED STORM SEWER PIPE TO NEAREST JOINT AND PROVIDE NEW CONNECTIONS TO THE GATEWELL.
5. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.
6. FOR GATEWELL NO.1 SHORING SEE DRAWING NO.20.3/4.
7. FOR ACCESS ROAD SEE DRAWING NO.20.2/2.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA NORTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

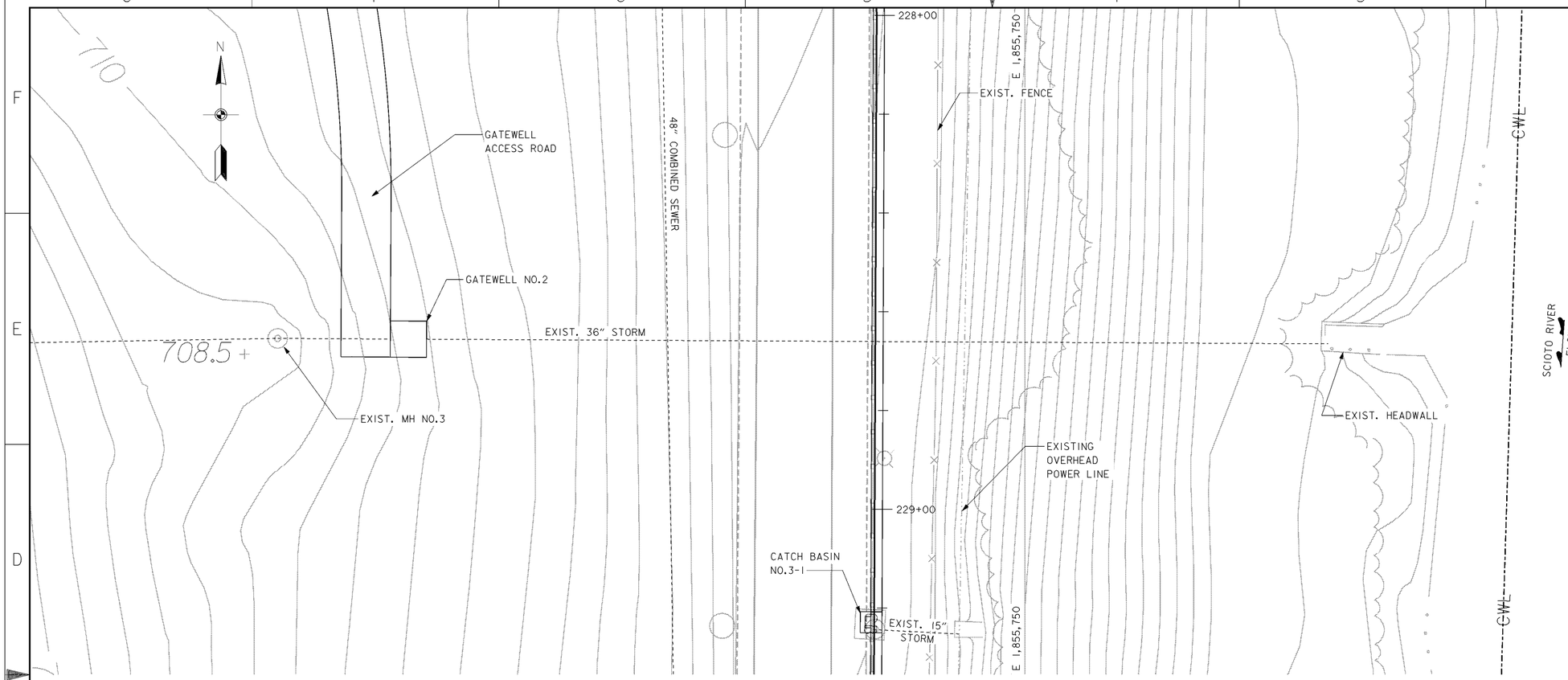
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GATEWELL NO.1
PLAN AND PROFILE

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 15/1
FILENAME: a0d6pp01.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



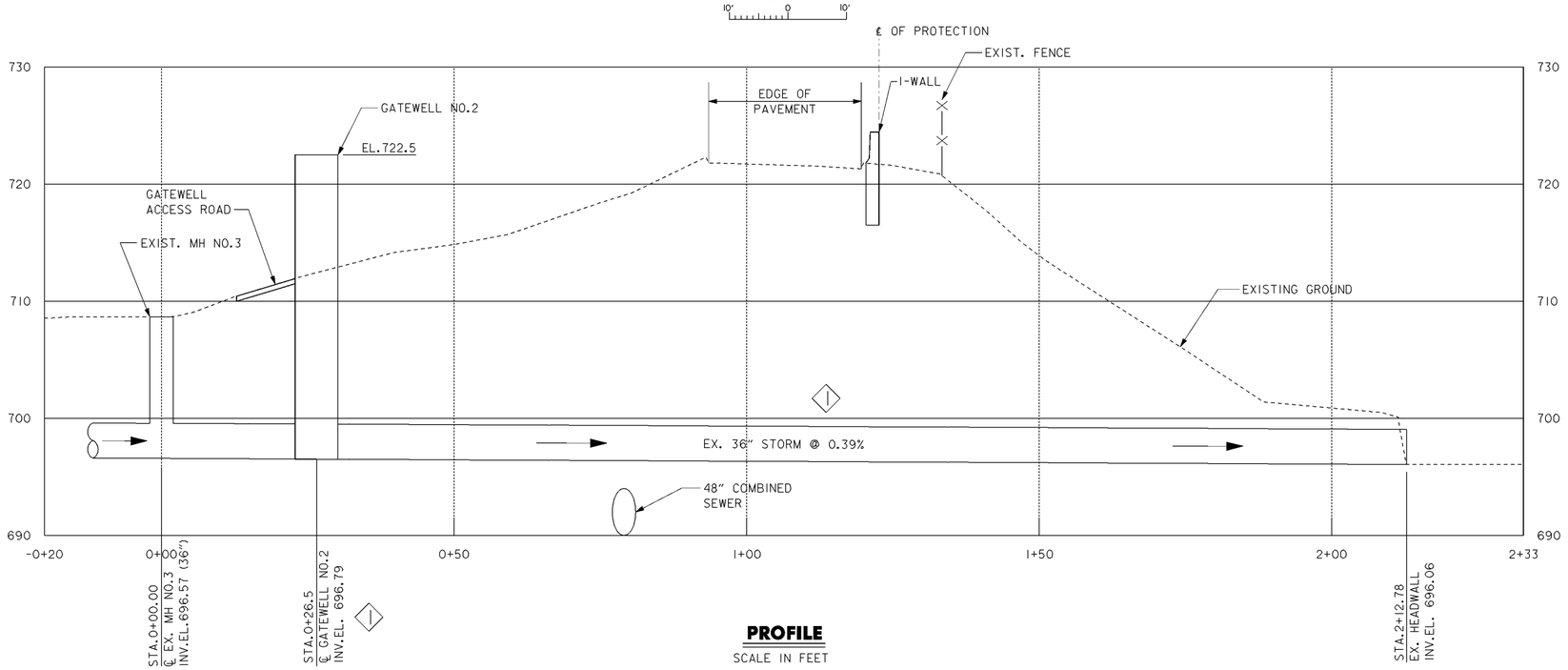
GATEWELL	EASTING	NORTHING
1	1,855,743.730	710,945.295
2	1,855,625.112	710,151.360
3	1,855,768.415	709,632.709
4	1,856,011.321	709,054.662
5	1,856,531.724	708,041.310
6	1,856,788.329	707,503.203

<1>

THE LOCATION OF THE GATEWELLS IN THE TABLE ABOVE ARE APPROXIMATE AND BASED UPON THE LOCATION WHERE THE GATEWELL INTERCEPTS THE STORM SEWER. THE CONTRACTOR SHALL UNCOVER THE STORM SEWER AND CENTER THE GATEWELL ON THE STORM SEWER INLET/OUTLET.

PLAN

SCALE: 1" = 10'



PROFILE

SCALE IN FEET

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL GATEWELL PLAN AND DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
3. FOR GATEWELL REINFORCING STEEL SEE DRAWING NO. 15/9.
4. REMOVE DISTURBED STORM SEWER PIPE TO NEAREST JOINT AND PROVIDE NEW CONNECTIONS TO THE GATEWELL.
5. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.
6. FOR GATEWELL ACCESS ROAD SEE DRAWING NO.20.2/2.

Revisions			
Symbol	Descriptions	Date	Approved
<1>	REVISED AS CONSTRUCTED - PHASE IIIA NORTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

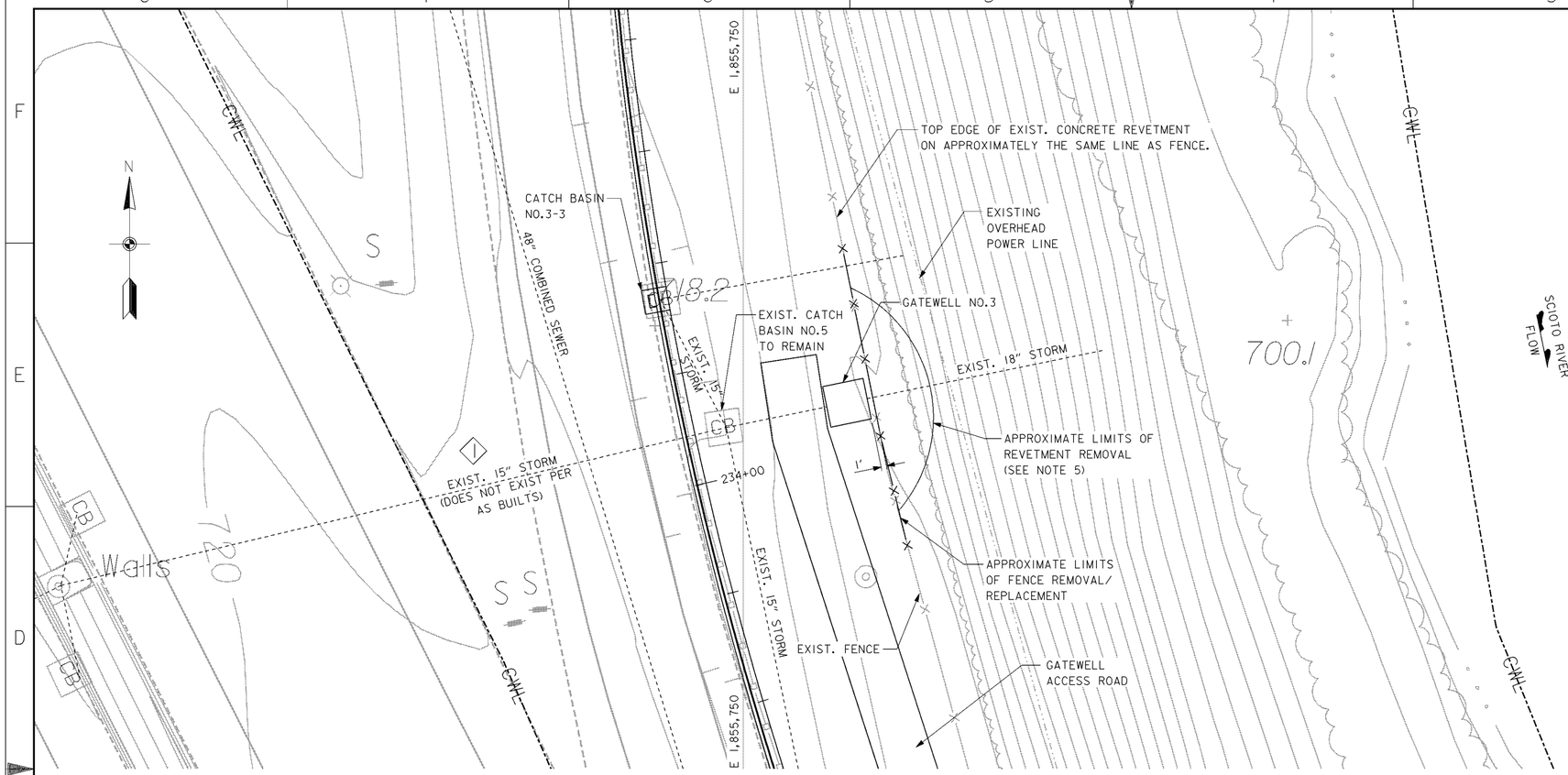
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GATEWELL NO.2 PLAN AND PROFILE

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 152
FILENAME: a0d6pp02.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



GATEWELL	EASTING	NORTHING
1	1,855,743.730	710,945.295
2	1,855,625.112	710,151.360
3	1,855,768.415	709,632.709
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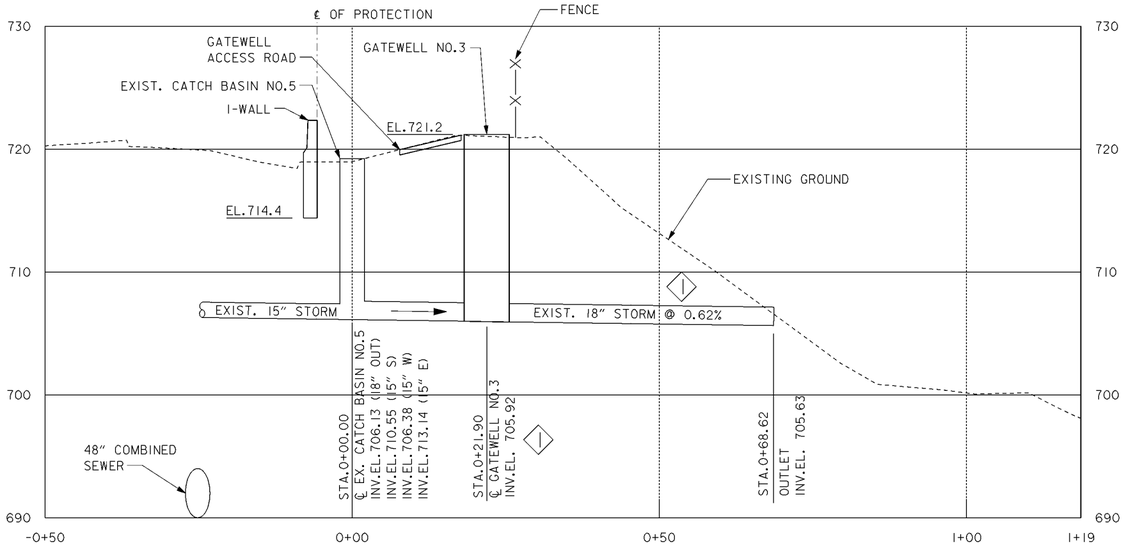
5	1,856,531.724	708,041.310
6	1,856,788.329	707,503.203

THE LOCATION OF THE GATEWELLS IN THE TABLE ABOVE ARE APPROXIMATE AND BASED UPON THE LOCATION WHERE THE GATEWELL INTERCEPTS THE STORM SEWER. THE CONTRACTOR SHALL UNCOVER THE STORM SEWER AND CENTER THE GATEWELL ON THE STORM SEWER INLET/OUTLET.

PLAN

SCALE: 1" = 10'



PROFILE

SCALE IN FEET

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL GATEWELL PLAN AND DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
3. FOR GATEWELL REINFORCING STEEL SEE DRAWING NO. 15/9.
4. REMOVE DISTURBED STORM SEWER PIPE TO NEAREST JOINT AND PROVIDE NEW CONNECTIONS TO THE GATEWELL.
5. SAWCUT AND REMOVE EXISTING REVETMENT TO ALLOW FOR CONSTRUCTION OF GATEWELL. REGRADE AND SEED DISTURBED AREAS.
6. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA NORTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

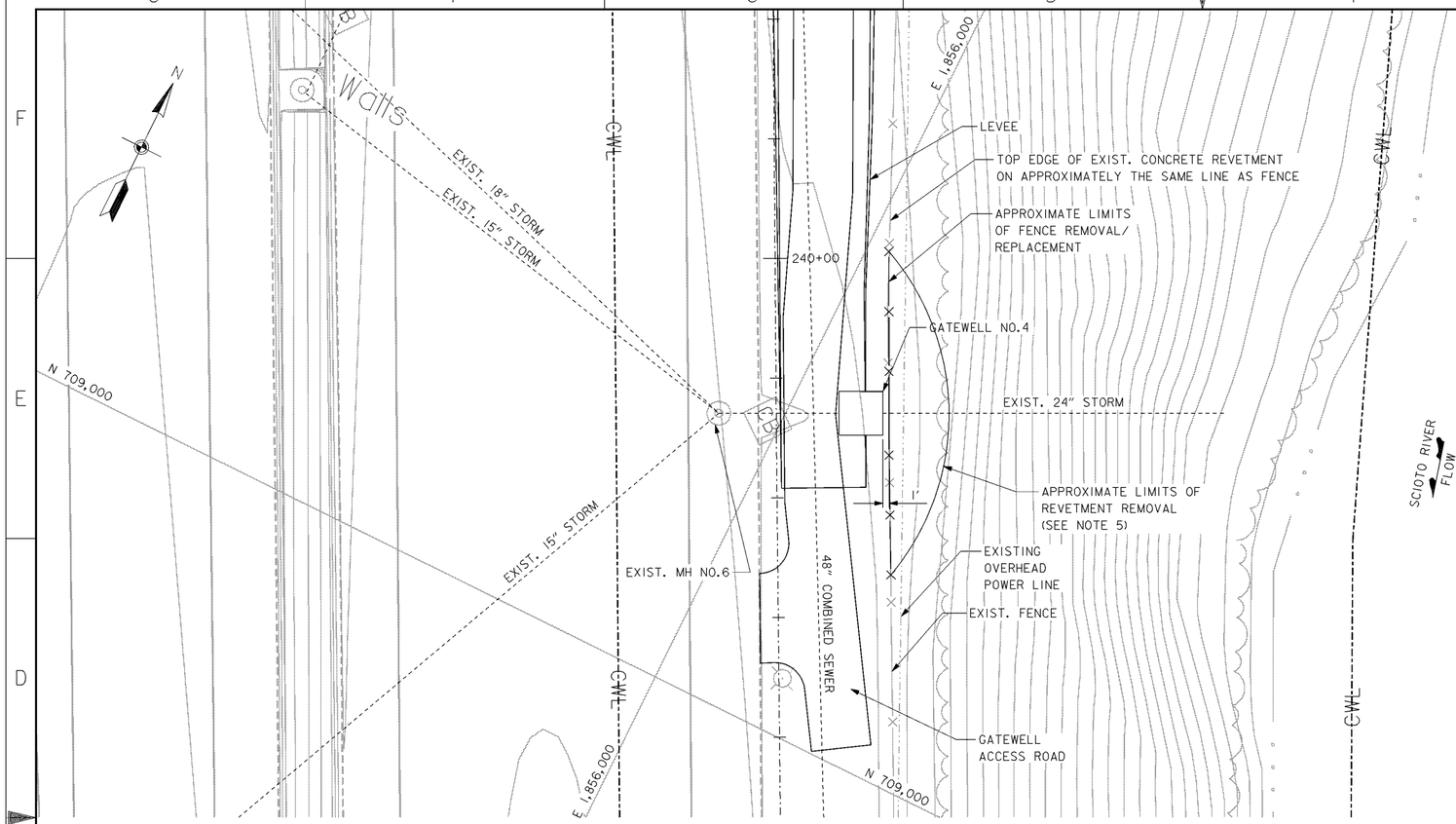
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GATEWELL NO.3
PLAN AND PROFILE

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 153
FILENAME: a0d6pp03.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



GATEWELL	EASTING	NORTHING
1	1,855,743.730	710,945.295
2	1,855,625.112	710,151.360
3	1,855,768.415	709,632.709
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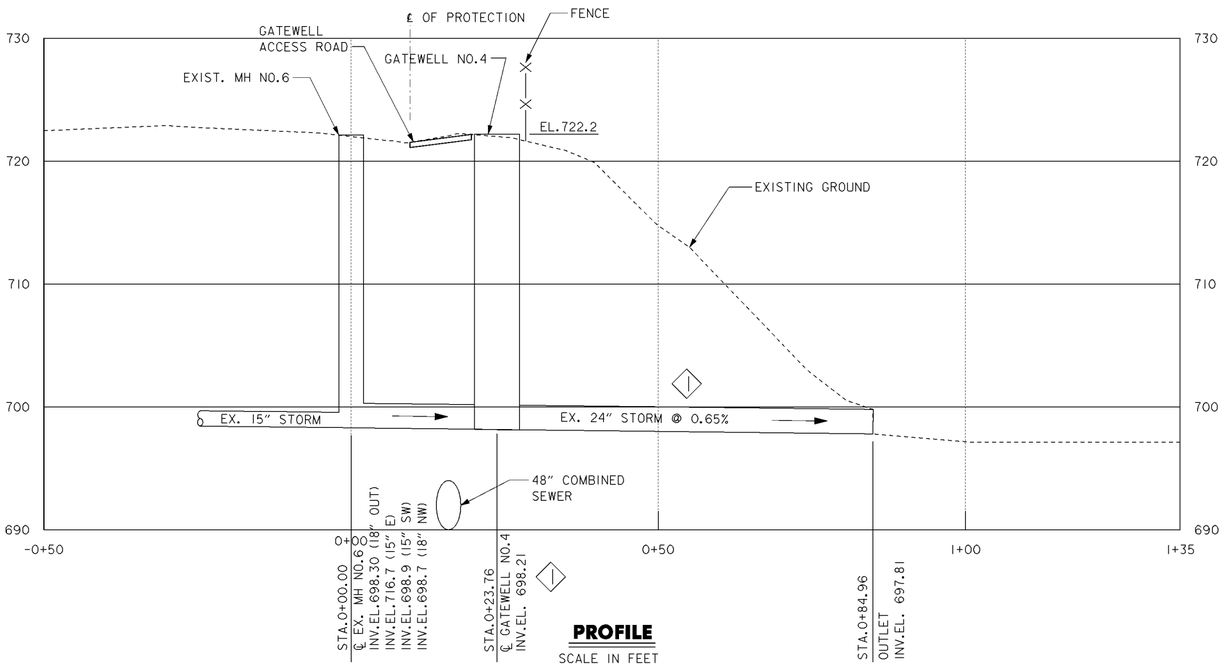
NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL GATEWELL PLAN AND DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
3. FOR GATEWELL REINFORCING STEEL SEE DRAWING NO. 15/9.
4. REMOVE DISTURBED STORM SEWER PIPE TO NEAREST JOINT AND PROVIDE NEW CONNECTIONS TO THE GATEWELL.
5. SAWCUT AND REMOVE EXISTING REVETMENT TO ALLOW FOR CONSTRUCTION OF GATEWELL. REGRADE AND SEED DISTURBED AREAS.
6. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.
7. FOR GATEWELL NO.4 SHORING SEE DRAWING NO.20.3/5.

PLAN

SCALE: 1" = 10'



PROFILE

SCALE IN FEET

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA NORTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

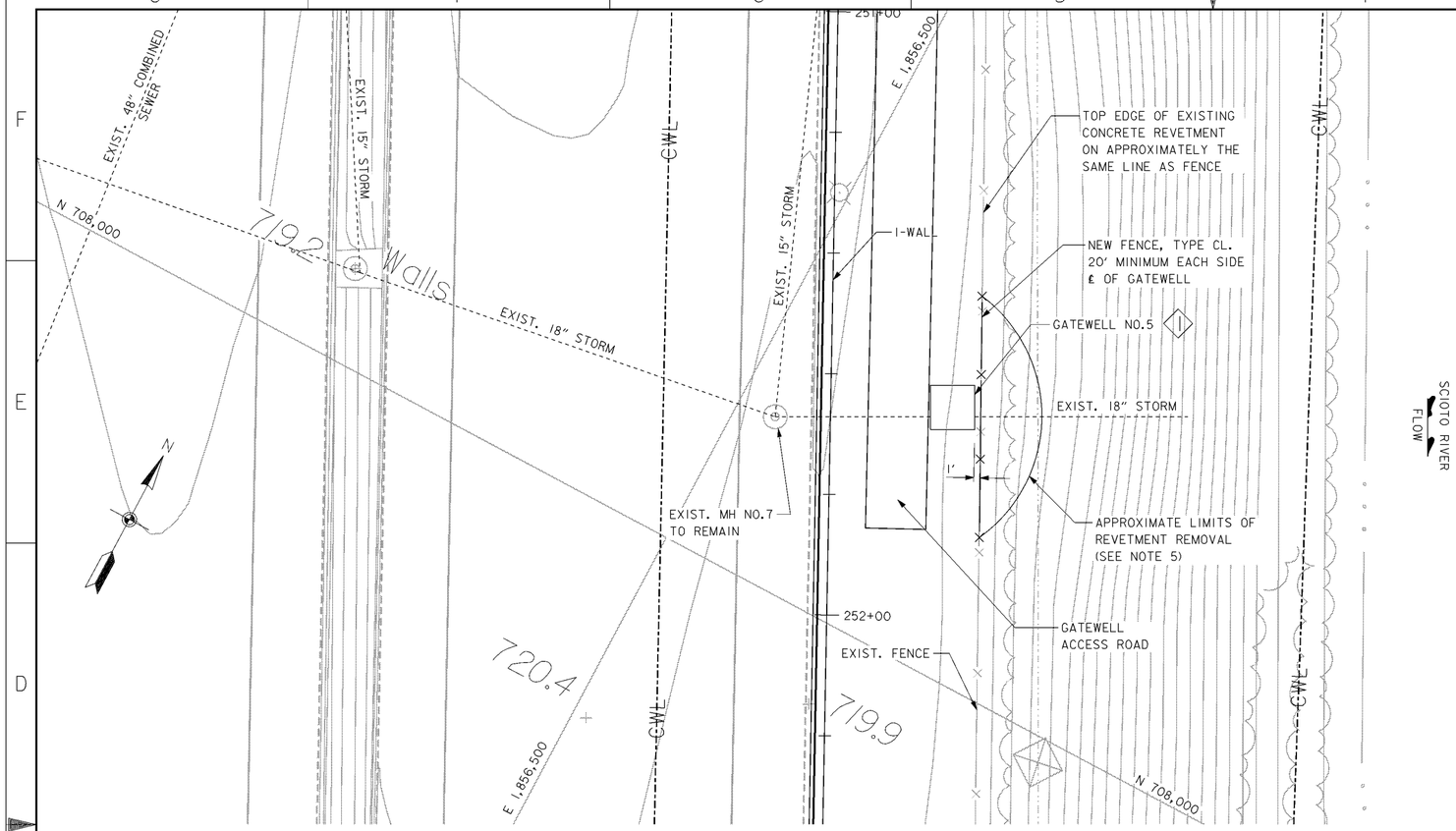
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GATEWELL NO.4
PLAN AND PROFILE

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 15/4
FILENAME: a0d6pp04.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



GATEWELL	EASTING	NORTHING
1	1,855,743.730	710,945.295
2	1,855,625.112	710,151.360
3	1,855,768.415	709,632.709
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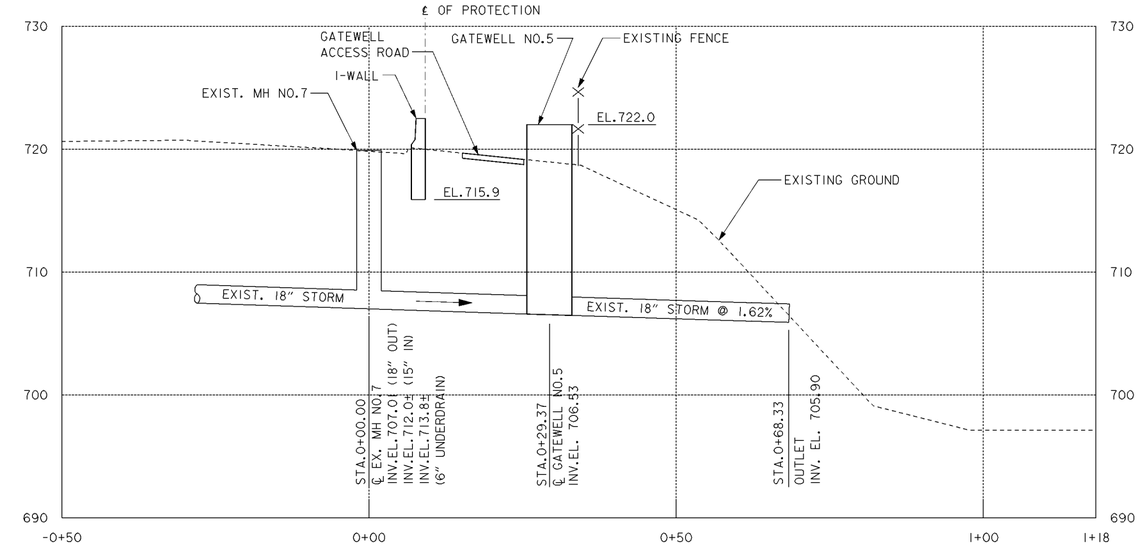
PLAN

SCALE: 1" = 10'



PROFILE

SCALE IN FEET

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL GATEWELL PLAN AND DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
3. FOR GATEWELL REINFORCING STEEL SEE DRAWING NO. 15/9.
4. REMOVE DISTURBED STORM SEWER PIPE TO NEAREST JOINT AND PROVIDE NEW CONNECTIONS TO THE GATEWELL.
5. SAWCUT AND REMOVE EXISTING REVETMENT TO ALLOW FOR CONSTRUCTION OF GATEWELL. REGRADE AND SEED DISTURBED AREAS.
6. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

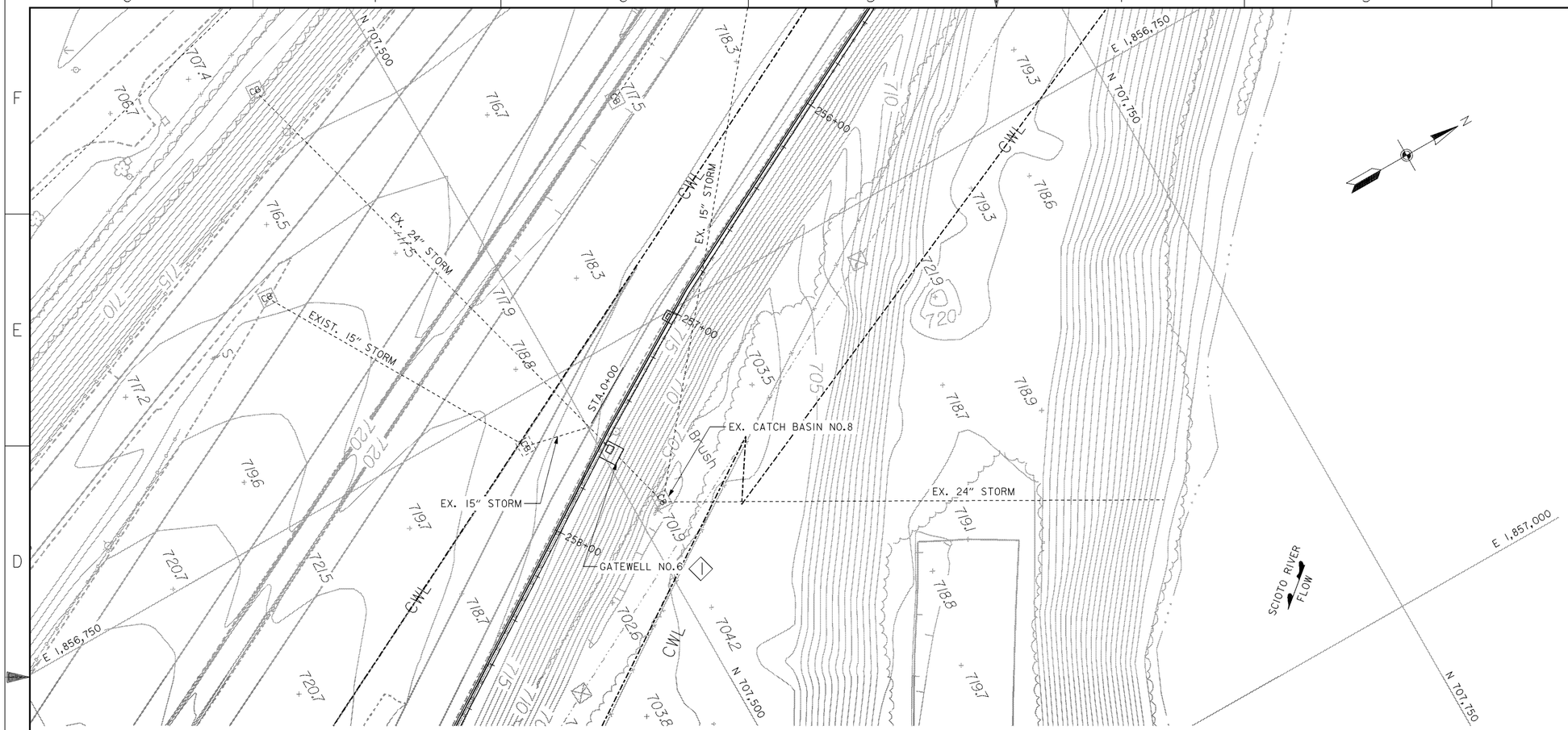
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GATEWELL NO.5
PLAN AND PROFILE

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 15/5
FILENAME: a0d6pp05.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 20'

GATEWELL	EASTING	NORTHING
1	1,855,743.730	710,945.295
2	1,855,625.112	710,151.360
3	1,855,768.415	709,632.709
4	1,856,011.321	709,054.662
5	1,856,531.724	708,041.310
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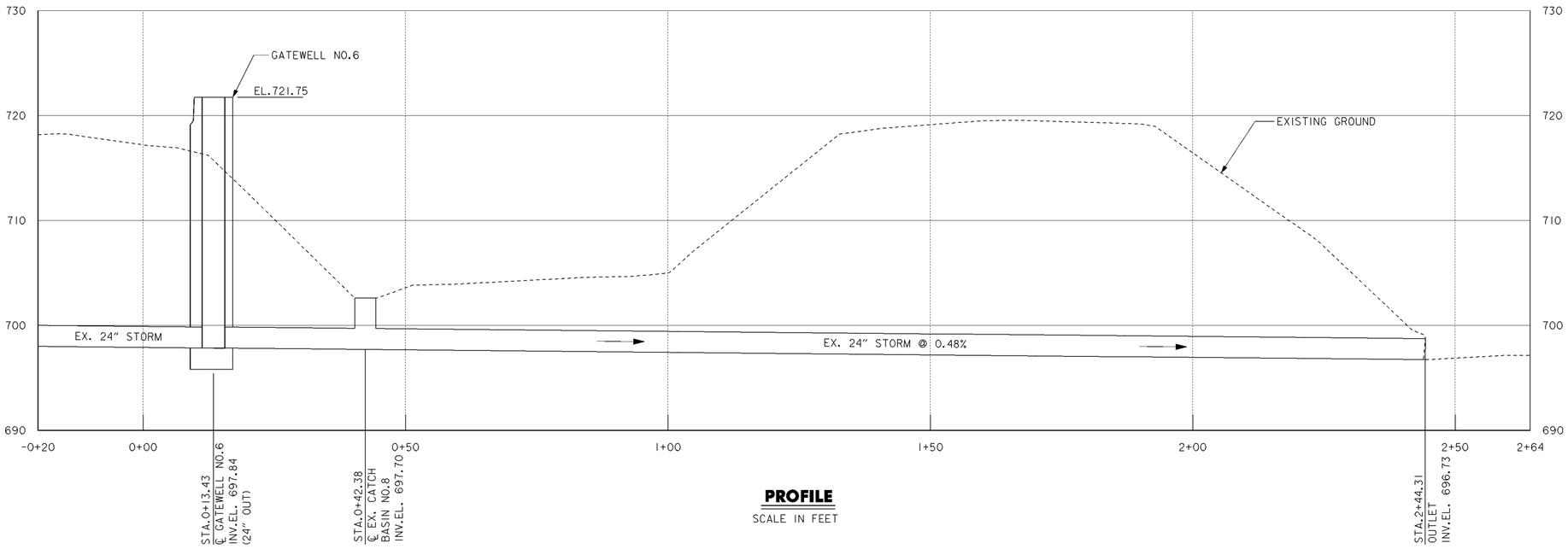


PROFILE

SCALE IN FEET

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL GATEWELL PLAN AND DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
3. FOR GATEWELL REINFORCING STEEL SEE DRAWING NO. 15/10.
4. REMOVE DISTURBED STORM SEWER PIPE TO NEAREST JOINT AND PROVIDE NEW CONNECTIONS TO THE GATEWELL.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

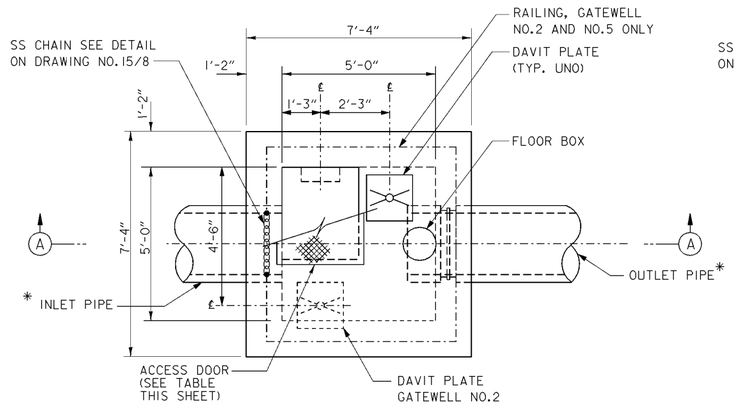
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

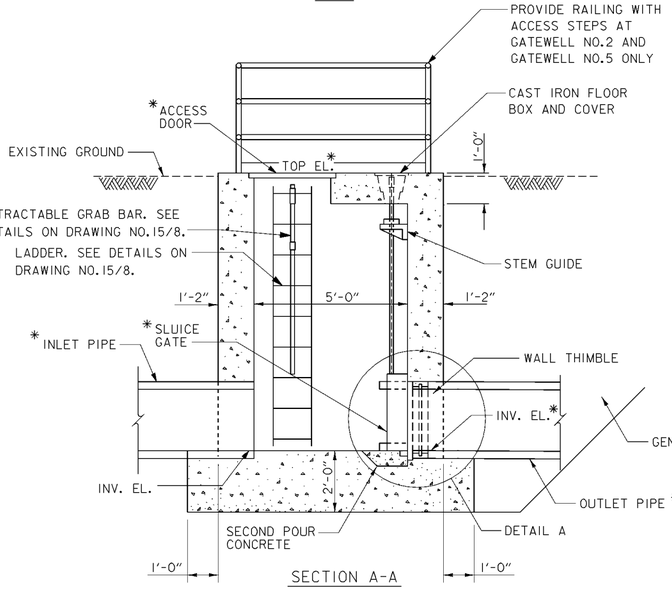
GATEWELL NO.6
PLAN AND PROFILE

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 15/6
FILENAME: a0d6pp06.dgn
PRN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



PLAN



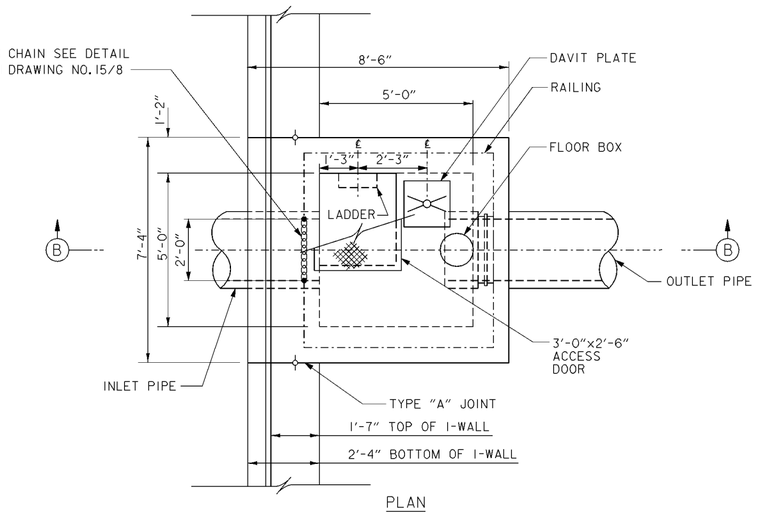
SECTION A-A

GATEWELL NOS. 1 THRU 5

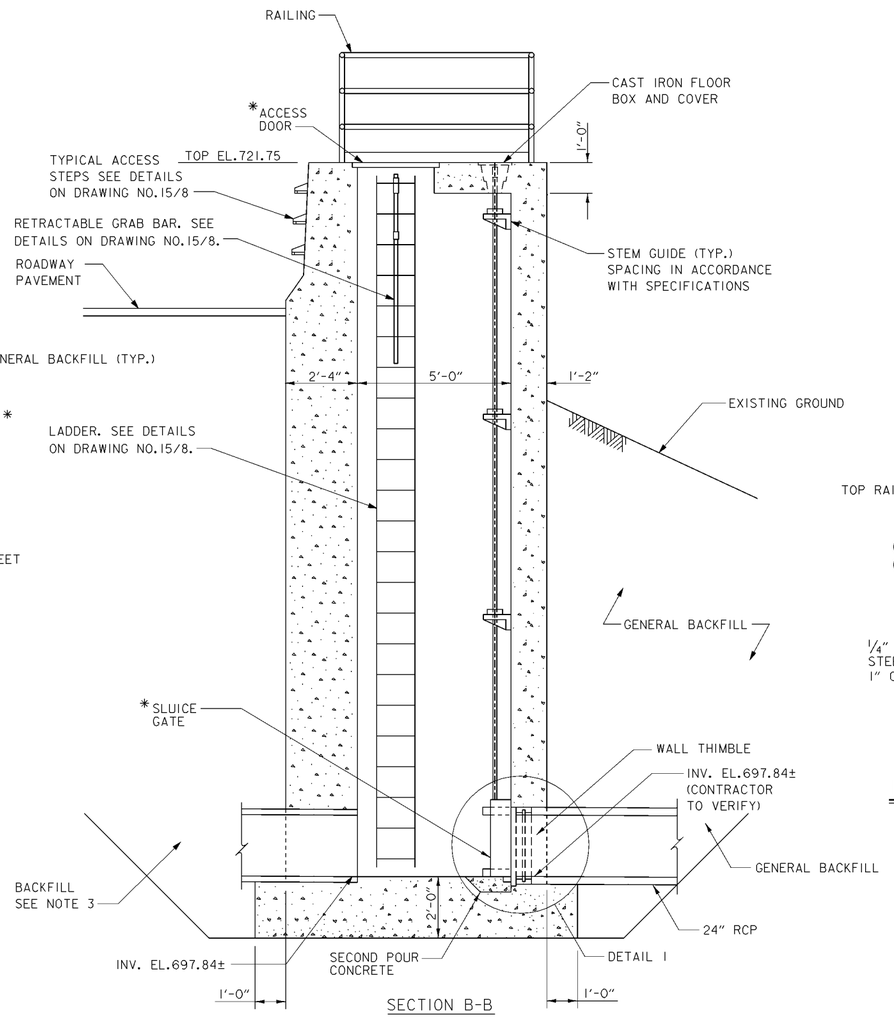
* SEE TABLE THIS SHEET

2' 1' 0 2' 4'

SCALE IN FEET



PLAN



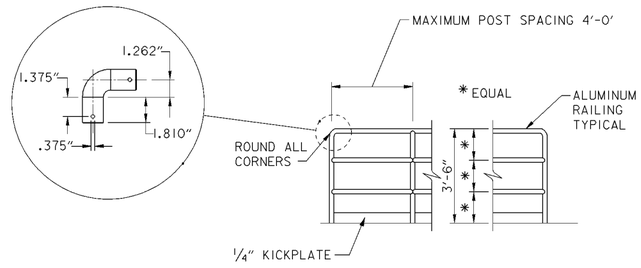
SECTION B-B

GATEWELL NO.6

* SEE TABLE THIS SHEET

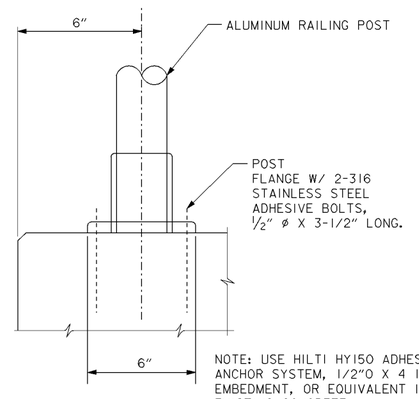
2' 1' 0 2' 4'

SCALE IN FEET



TYPICAL RAILING DETAIL

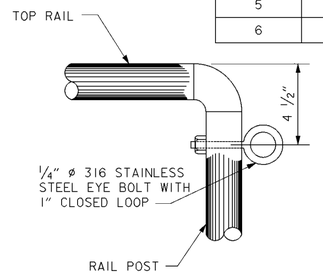
SCALE: NONE



RAILING POST SURFACE MOUNTING DETAIL

SCALE: NONE

◇1 GATEWELL NO.	INLET/OUTLET PIPE SIZE	TOP EL.	INVERT EL.	SLUICE GATE	ACCESS DOOR
1	30"	728.00	703.17±	30"x30"	3'-0"x2'-6"
2	36"	722.5	696.79±	36"x36"	3'-6"x3'-6"
3	18"	721.2	705.92±	18"x18"	3'-0"x2'-6"
4	24"	722.2	698.21±	24"x24"	3'-0"x2'-6"
5	18"	722.0	706.53±	18"x18"	3'-0"x2'-6"
6	24"	721.75	697.84±	24"x24"	3'-0"x2'-6"

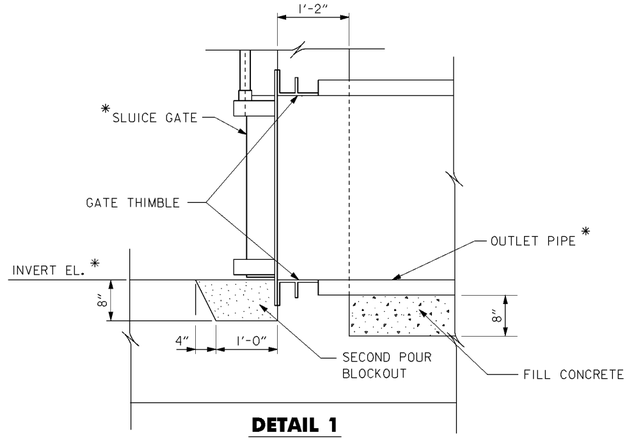


POST AND CHAIN

SCALE: NONE

NOTES

1. FOR GATEWELL DETAILS SEE DRAWING NO. 15/8.
2. FOR TYPICAL CHAIN AND DAVIT PLATE DETAILS SEE DRAWING NO. 15/8.
3. WHERE BACKFILL SUPPORTS PAVEMENT, BACKFILL SHALL CONSIST OF MATERIALS MEETING THE REQUIREMENTS OF GRANULAR EMBANKMENT MATERIALS INSTALLED IN ACCORDANCE WITH THE REQUIREMENTS FOR STRUCTURE BACKFILL.



DETAIL 1

SCALE: 1" = 1'-0"

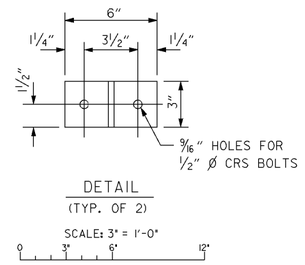
1' 0 1'

Revisions			
Symbol	Descriptions	Date	Approved
◇1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED COLUMBUS, OHIO	U.S.ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA

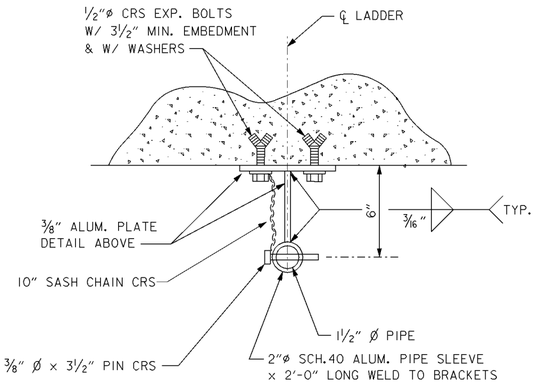
Designed by: P.CONROY	US Army Corps of Engineers	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS, L.P.P. PHASE IIIA
Drawn by: A.PUMMELL		**TYPICAL GATEWELL PLAN AND SECTIONS**
Checked by: R.OMAN		
Reviewed by:	Scale: AS SHOWN	Sheet reference number: 15/7
Approved by:	Date: OCTOBER 1999	FILENAME: a0dddi01.dgn PEN TABLE:
	Drawing Code: 16-PWC-12-	Sheet 1 of 1

WORK AS CONSTRUCTED



DETAIL
(TYP. OF 2)

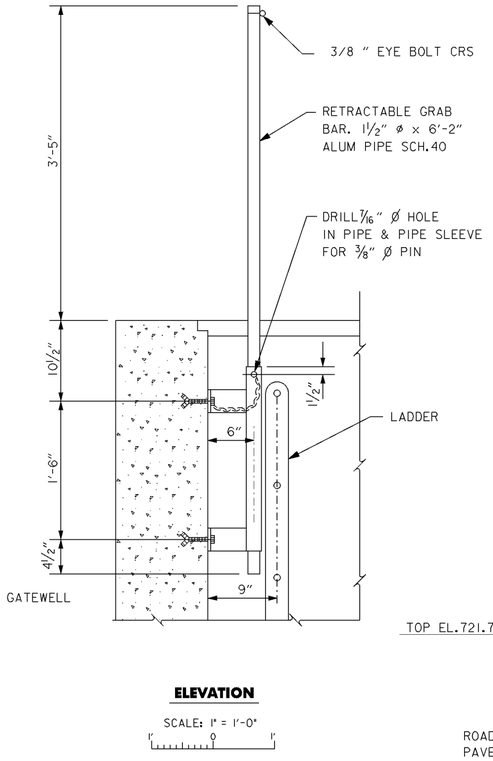
SCALE: 3" = 1'-0"



PLAN

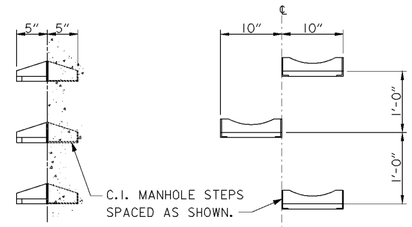
SCALE: 3" = 1'-0"

NOTE:
ALL MATERIAL TO BE ALUMINUM
ALLOY 6061-T6 UNLESS NOTED.



ELEVATION

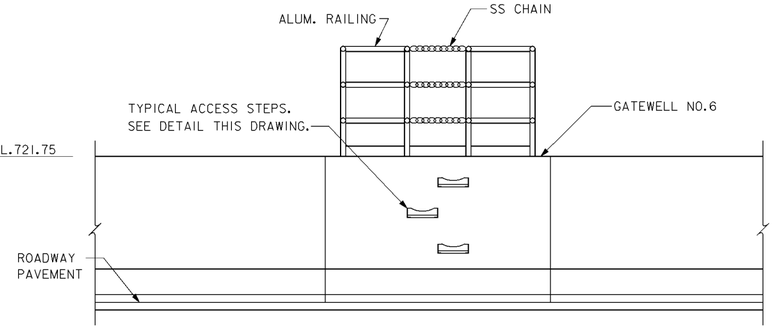
SCALE: 1" = 1'-0"

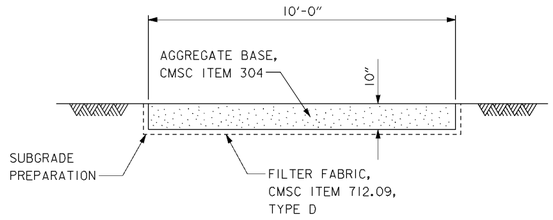


SECTION **ELEVATION**

TYPICAL ACCESS STEPS

SCALE: 1" = 1'-0"

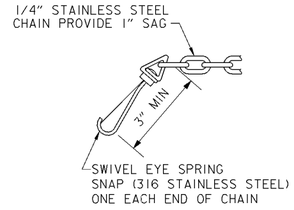




GATEWELL ACCESS ROAD TYPICAL SECTION

2' 1' Ø 2' 4'

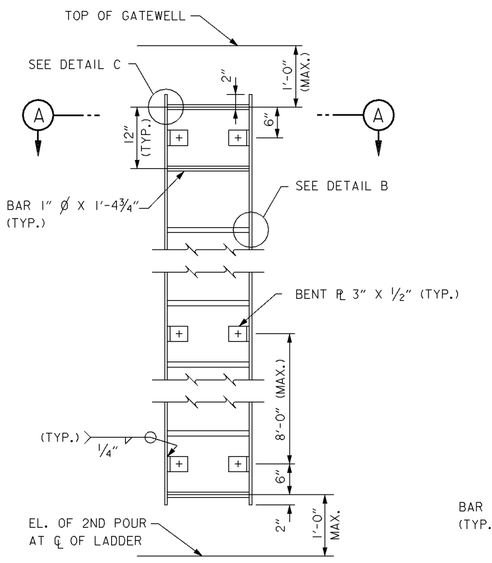
SCALE IN FEET



TYPICAL CHAIN

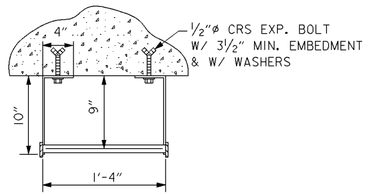
SCALE: NONE

RETRACTABLE GRAB BAR



ELEVATION

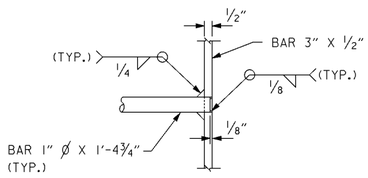
SCALE: 1" = 1'



SECTION A-A

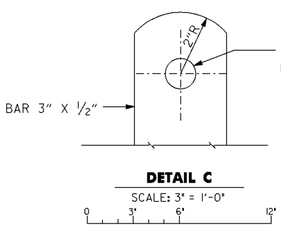
SCALE: 1½" = 1'-0"

NOTE:
ALL MATERIAL TO BE ALUMINUM
ALLOY 6061-T6 UNLESS NOTED.



DETAIL B

SCALE: 3" = 1'-0"



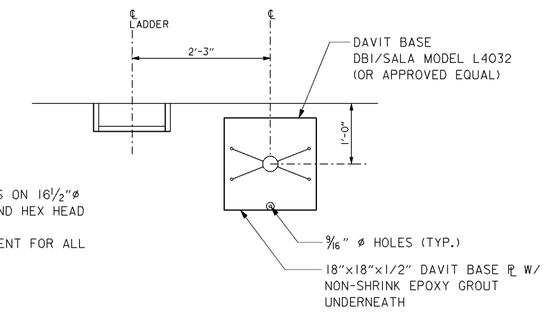
DETAIL C

SCALE: 3" = 1'-0"

LADDER DETAILS

ACCESS STEPS ELEVATION

SCALE: NONE



INSTALLATION NOTES:
1. PROVIDE 8-½"ø SS ADHESIVE ANCHORS ON 16½"ø BOLT CIRCLE W/ SS LOCK WASHERS AND HEX HEAD NUTS FOR EACH BASE.
2. PROVIDE 6⅜" MIN. CONCRETE EMBEDMENT FOR ALL ANCHORS.

TYPICAL LADDER PLAN WITH DAVIT BASE

SCALE: 1" = 1'-0"

NOTES

1. EXPANSION BOLTS SHALL BE ½"ø TYPE 316 STAINLESS STEEL WITH 6" MIN. EMBEDMENT "KWICK BOLT II" BY HILTI OR EQUAL.
2. EYE BOLTS SHALL BE ⅜" SHANK DIA. SHOULDER EYE BOLT TYPE 316 STAINLESS STEEL.
3. ALL ALUMINUM SURFACES WHICH COMES IN CONTACT WITH CONCRETE AND/OR STEEL SHALL BE PAINTED WITH A HEAVY COAT OF BITUMINOUS PAINT.
4. WELD ⅜" FLANGE PL TO LADDER AND RAILING. ATTACH FLANGE PL TO CONC. W/2 - ⅝" SS EXPANSION BOLTS W/ 4" MIN. EMBEDMENT.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

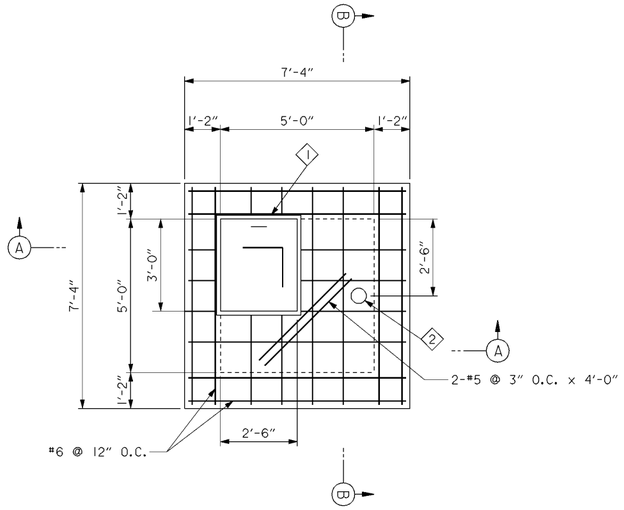
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GATEWELL DETAILS

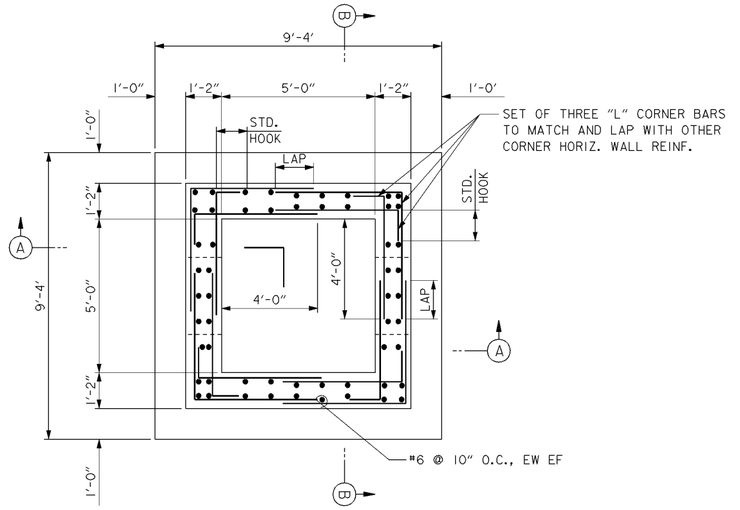
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 158
FILENAME: 00d6d102.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



UPPER PLAN

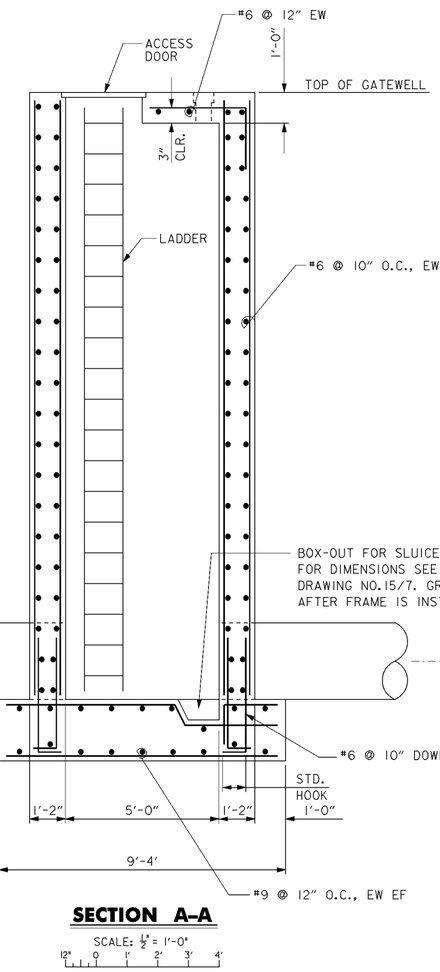
SCALE: 1/2" = 1'-0"



LOWER PLAN

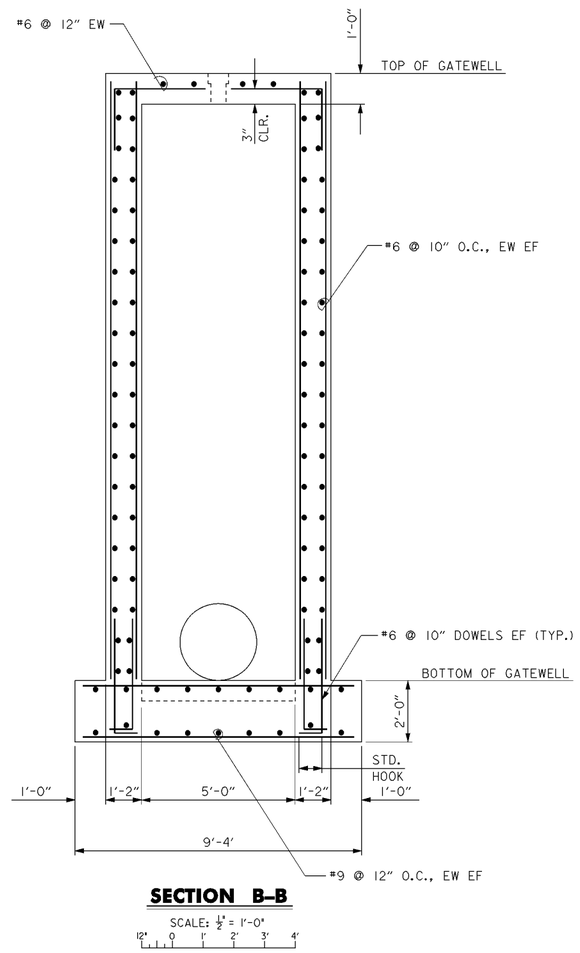
SCALE: 1/2" = 1'-0"

1	GATEWELL NO.	INLET/OUTLET PIPE SIZE	TOP OF GATEWELL EL.	BOTTOM OF GATEWELL EL.	SLUICE GATE
	1	30"	728.0	703.17±	30"x30"
	2	36"	722.5	696.79±	36"x36"
	3	18"	721.2	705.92±	18"x18"
	4	24"	722.2	698.21±	24"x24"
	5	18"	722.0	706.53±	18"x18"
	6	24"	721.75	697.84±	24"x24"



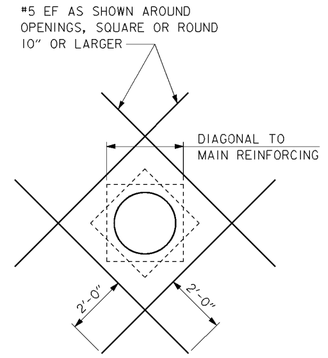
SECTION A-A

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



SECTION B-B

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



TYPICAL OPENING DETAIL

SCALE: NONE

CODED NOTES

1. 3'-0"x2'-6" ACCESS DOOR
2. 6" FLOOR BOX

NOTES

1. FOR GATEWELL DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
2. FOR STRUCTURAL GENERAL NOTES, SEE DRAWING NO. 20.1/2

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.VARGISH
Drawn by: T.MULLINS
Checked by: D.TRAINA
Reviewed by:
Approved by:

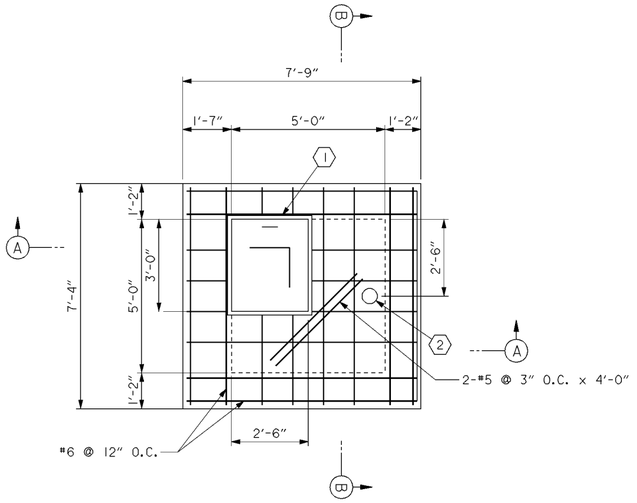
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

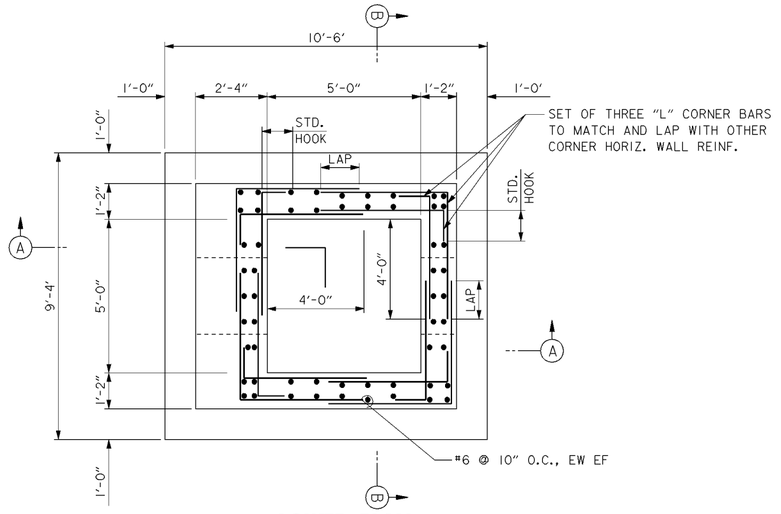
GATEWELL NOS.1 THRU 5 REINFORCING STEEL

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 159
FILENAME: a0d6d103.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED

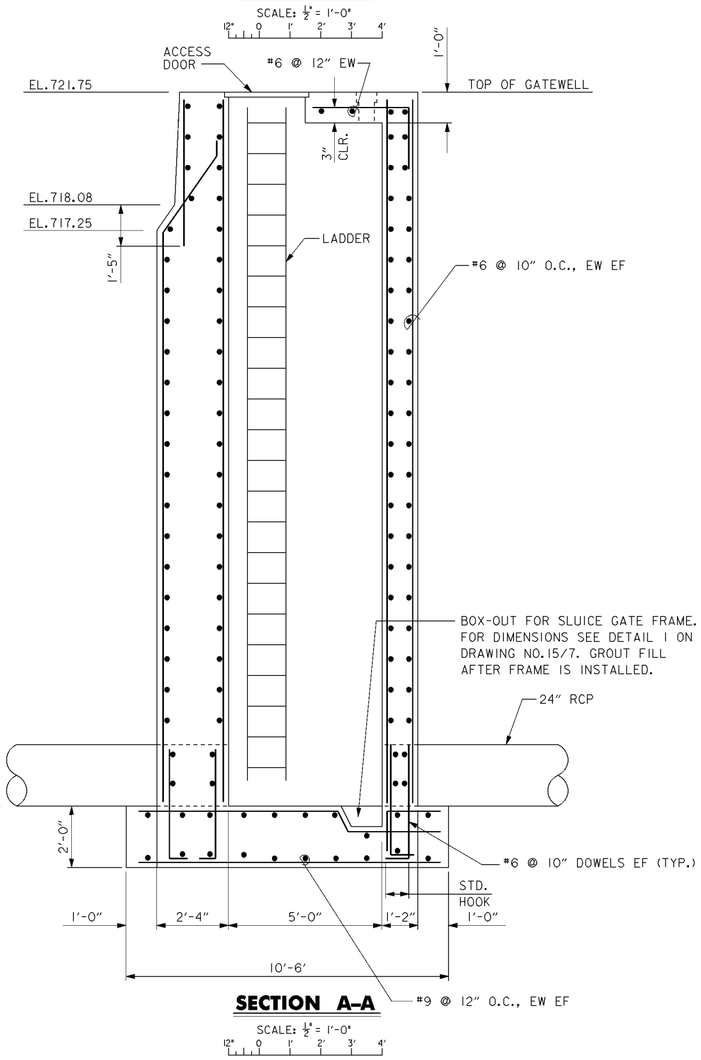


UPPER PLAN

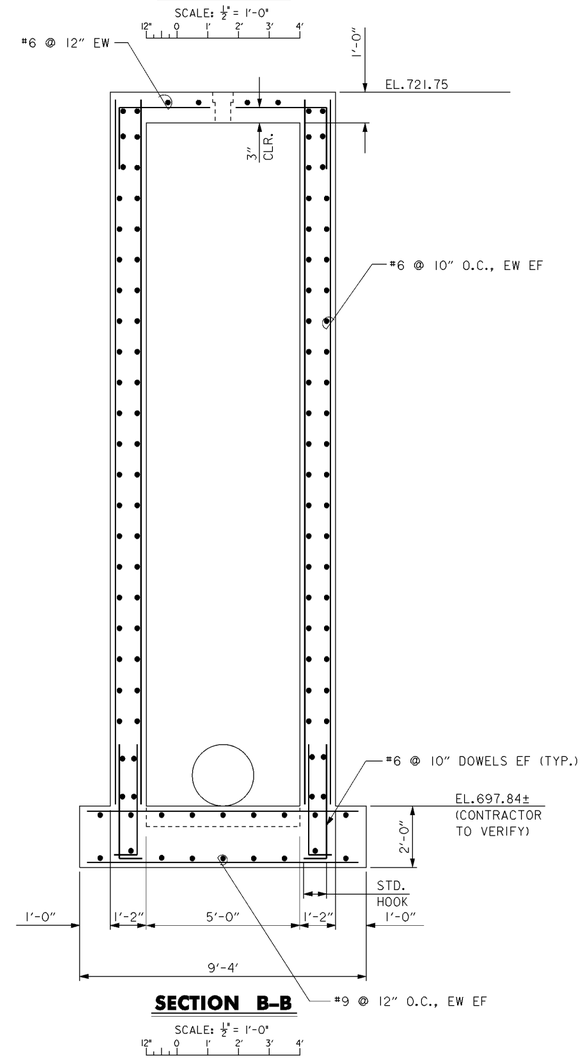


LOWER PLAN

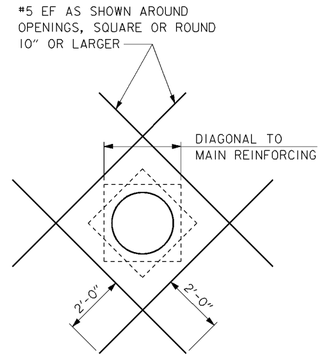
GATEWELL NO.	INLET/OUTLET PIPE SIZE	TOP OF GATEWELL EL.	BOTTOM OF GATEWELL EL.	SLUICE GATE
1	30"	728.0	703.17±	30"x30"
2	36"	722.5	696.79±	36"x36"
3	18"	721.2	705.92±	18"x18"
4	24"	722.2	698.21±	24"x24"
5	18"	722.0	706.53±	18"x18"
6	24"	721.75	697.84±	24"x24"



SECTION A-A



SECTION B-B



TYPICAL OPENING DETAIL

SCALE: NONE

CODED NOTES

1. 3'-0"x2'-6" ACCESS DOOR
2. 6" FLOOR BOX

NOTES

1. FOR GATEWELL DETAILS SEE DRAWING NOS. 15/7 AND 15/8.
2. FOR STRUCTURAL GENERAL NOTES, SEE DRAWING NO. 20.1/2.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

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Drawn by: T.MULLINS
Checked by: D.TRAINA
Reviewed by:
Approved by:

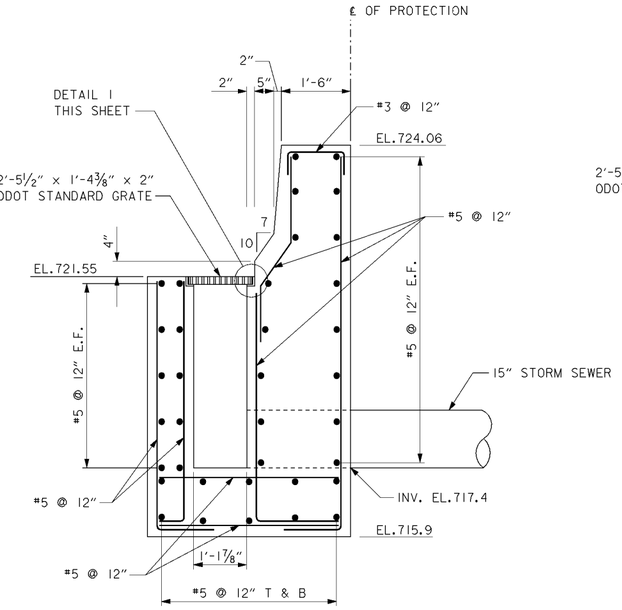
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

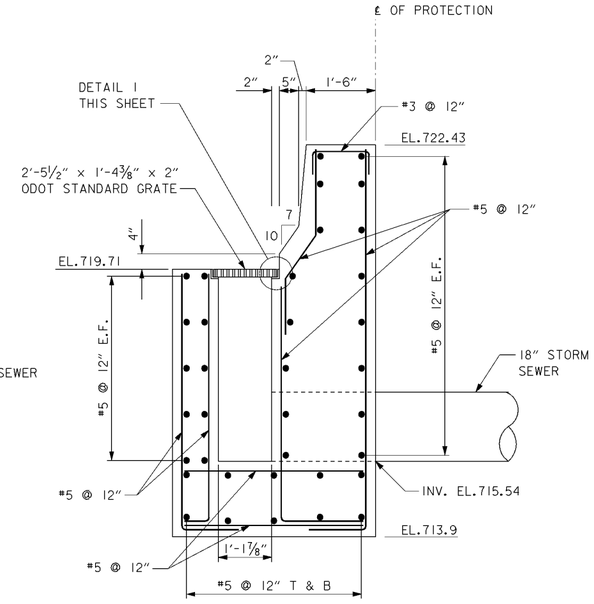
GATEWELL NO.6 REINFORCING STEEL

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 15/10
FILENAME: PRN TABLE: a0d6d104.dgn
Sheet 1 of 1

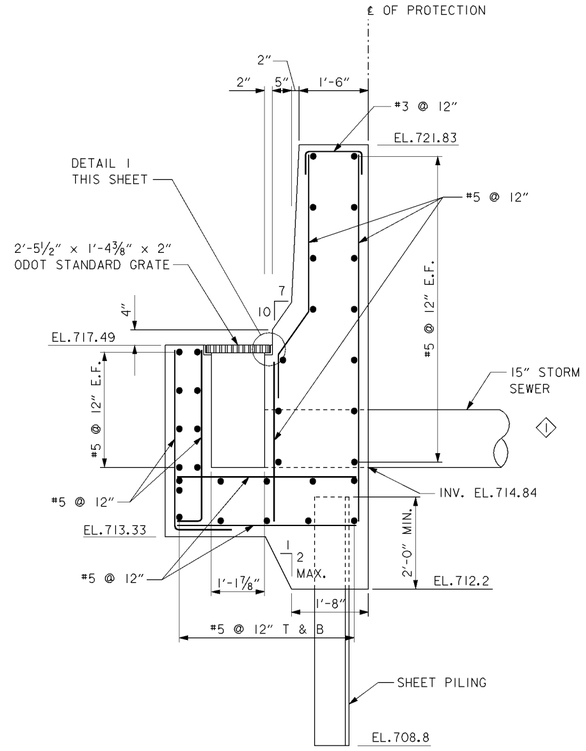
WORK AS CONSTRUCTED



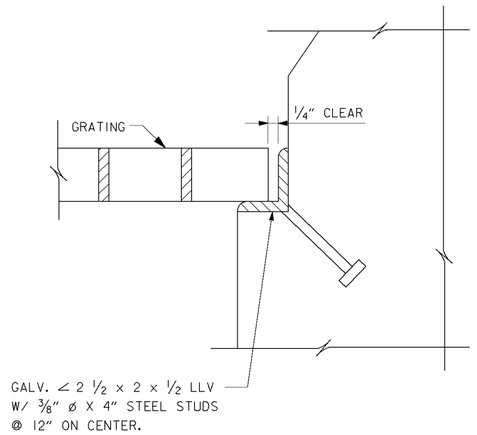
SECTION A–A
CATCH BASIN NO. 3–1
STA. 229+23.15
SCALE: ¾" = 1'-0"



SECTION A–A
CATCH BASIN NO. 3–2
STA. 232+17.94
SCALE: ¾" = 1'-0"



SECTION A–A
CATCH BASIN NO. 3–5
STA. 254+42.54
SCALE: ¾" = 1'-0"

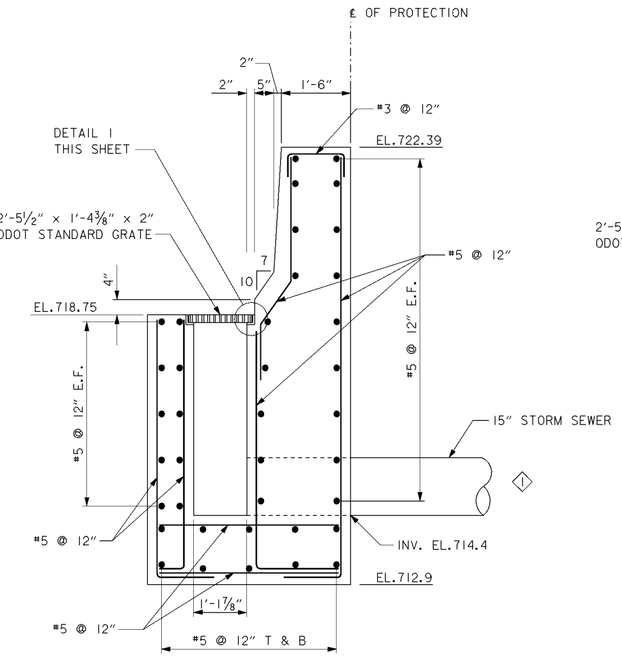


DETAIL 1
NO SCALE

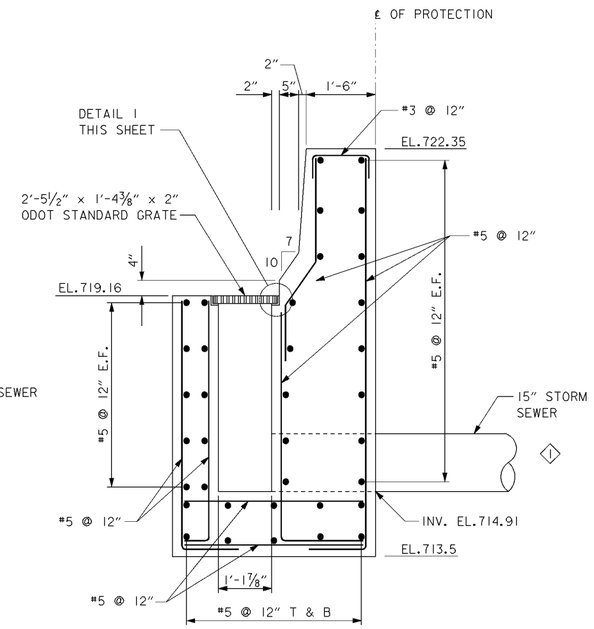
NOTE: ANGLE AND STEEL STUDS ANCHOR SIMILAR ALL 4 SIDES.

CODED NOTES

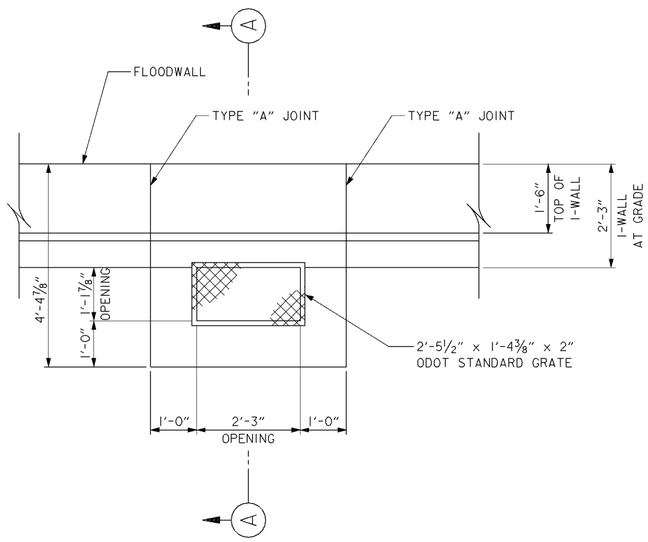
◇1 NEW FLAP VALVE ON OUTLET PIPE REQUIRED SEE SPECIFICATIONS



SECTION A–A
CATCH BASIN NO. 3–3
STA. 233+66.45
SCALE: ¾" = 1'-0"



SECTION A–A
CATCH BASIN NO. 3–4
STA. 234+81.44
SCALE: ¾" = 1'-0"



TYPICAL PLAN
SCALE: ¾" = 1'-0"

NOTES

1. FOR STRUCTURAL GENERAL NOTES SEE DRAWING NO. 20.1/2.
2. PROVIDE 3" CLEAR COVER ON ALL REINFORCING.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

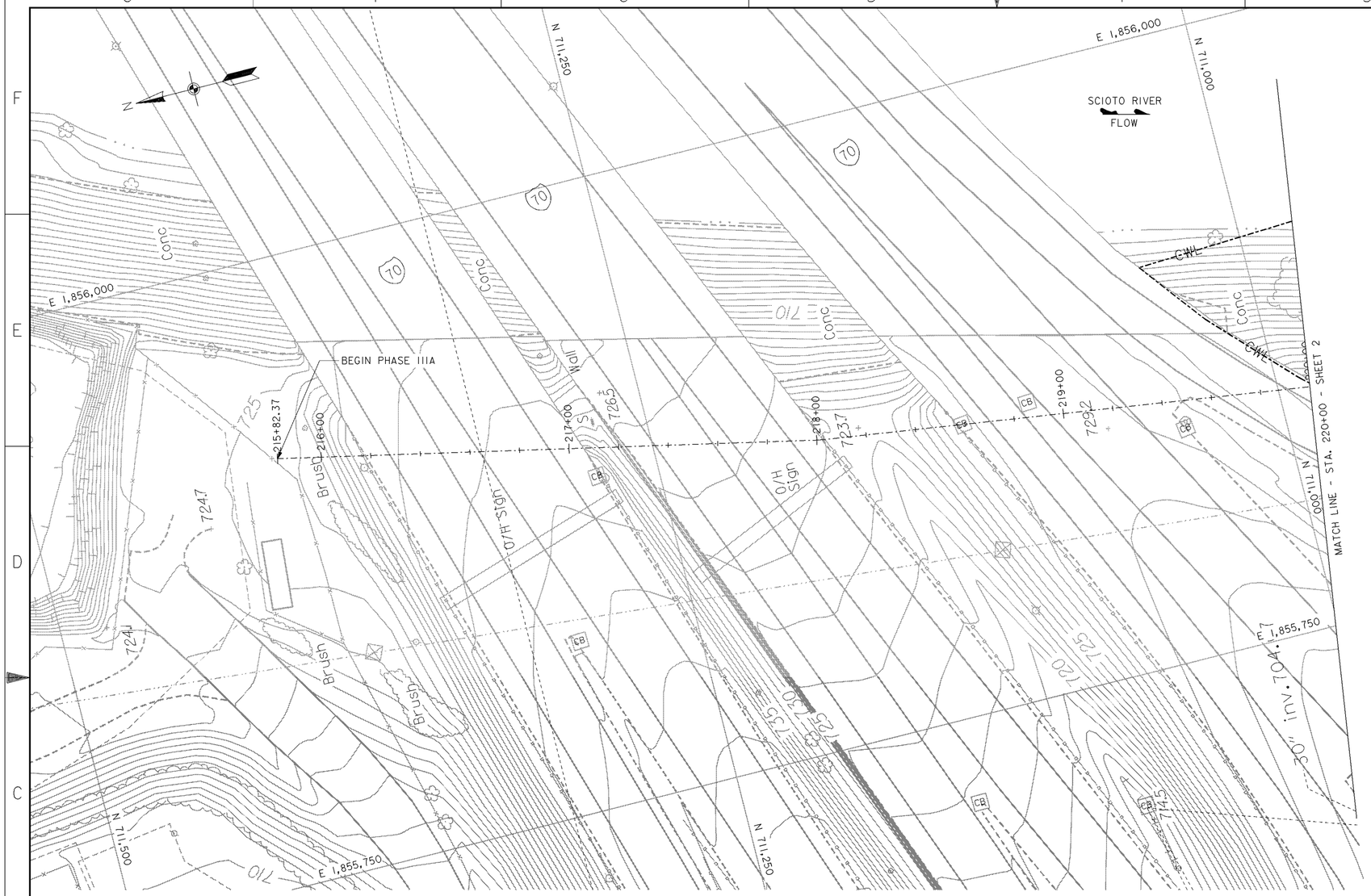
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CATCH BASINS PLAN AND SECTIONS

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 15/11
FILENAME: 00d2ps01.dgn
PRN TABLE:
Sheet 1 of 1

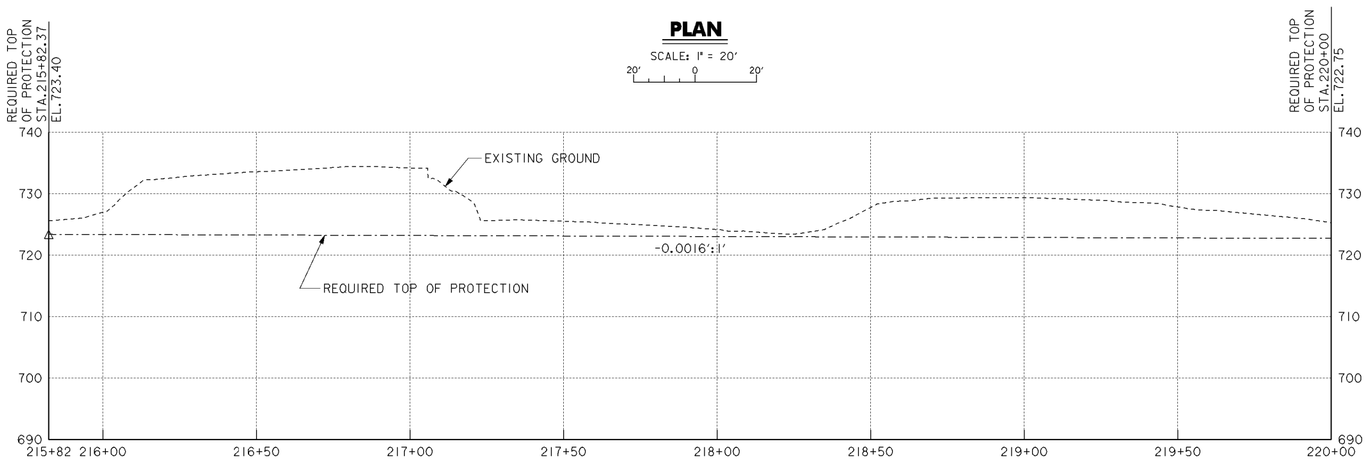
WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 20'

20' 0 20'



PROFILE

SCALE IN FEET

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS.6/1 THRU 6/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

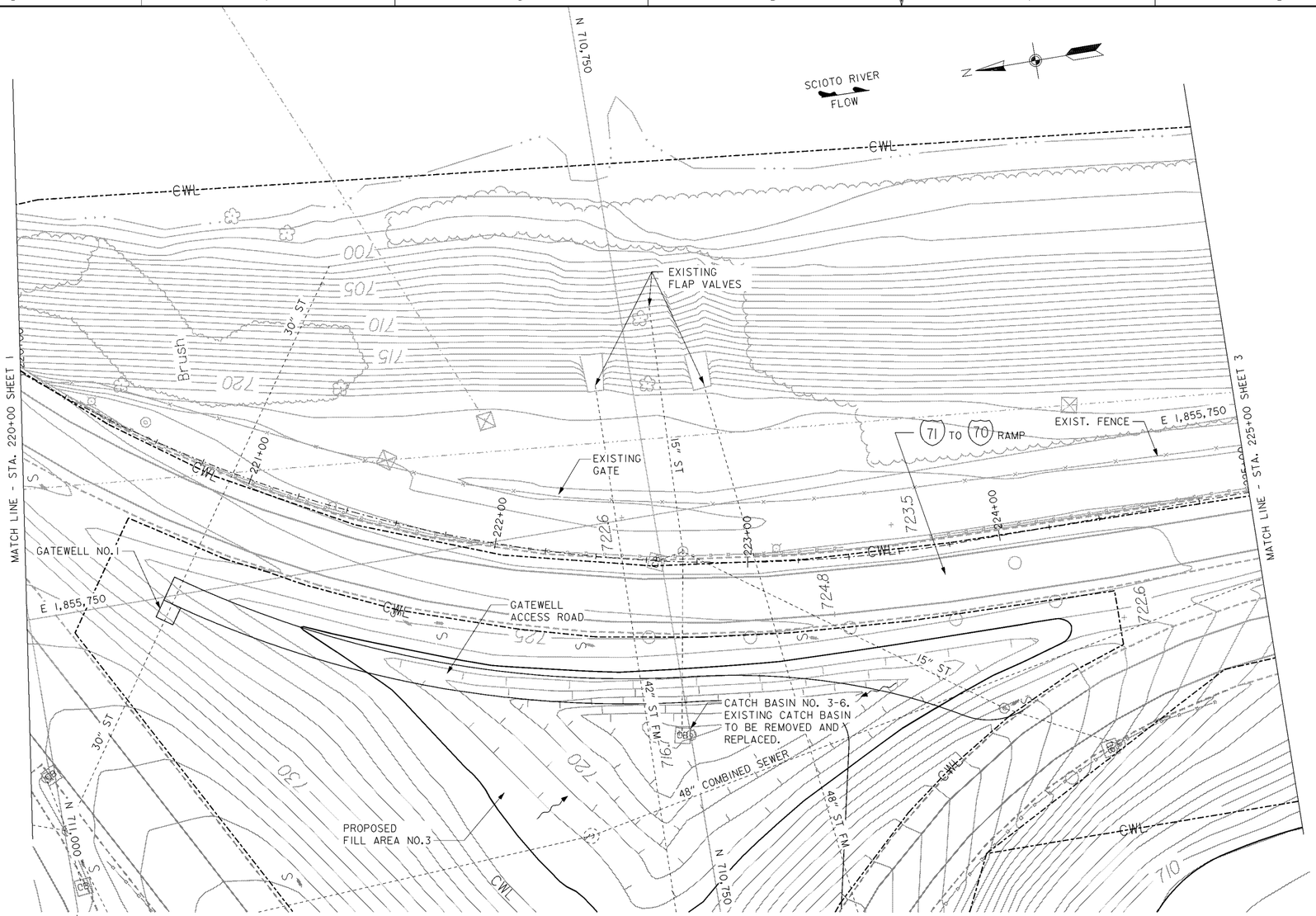
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

PLAN AND PROFILE
STA215+82.37 TO 220+00

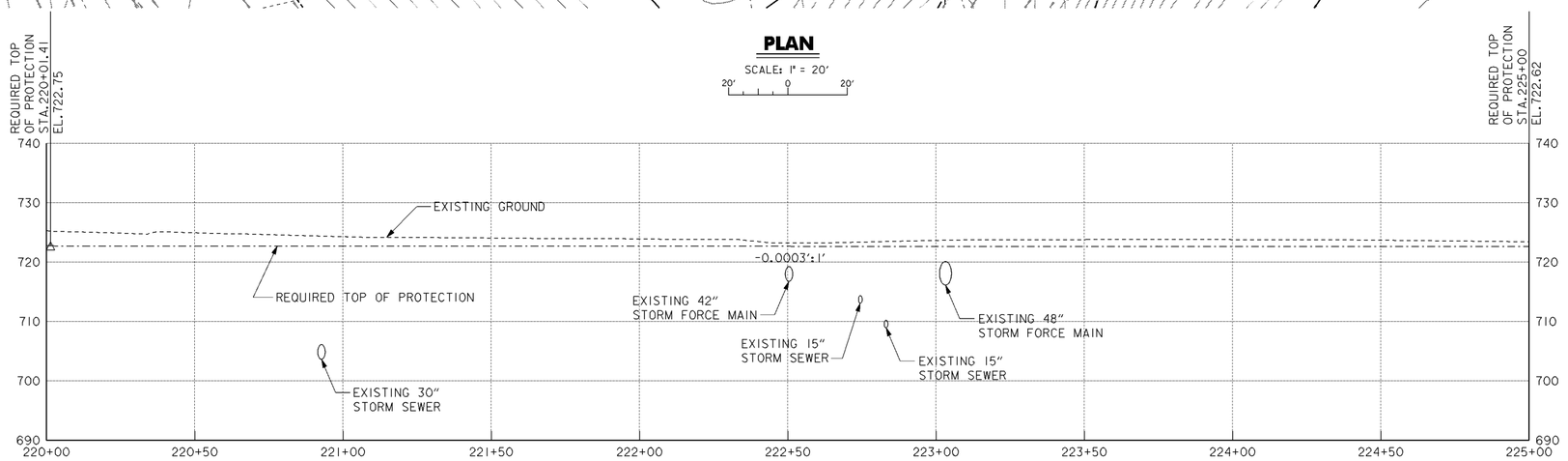
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 161
FILENAME: PRN TABLE: 00azpp01.dgn
Sheet 1 of 10

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 20'



PROFILE

SCALE IN FEET

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS.6/1 THRU 6/5.
2. FOR FILL AREA NO.3 SITE PLAN SEE DRAWING NO.20.2/2.
3. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.
4. FOR GATEWELL NO.1 SEE DRAWING NO.15/1.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

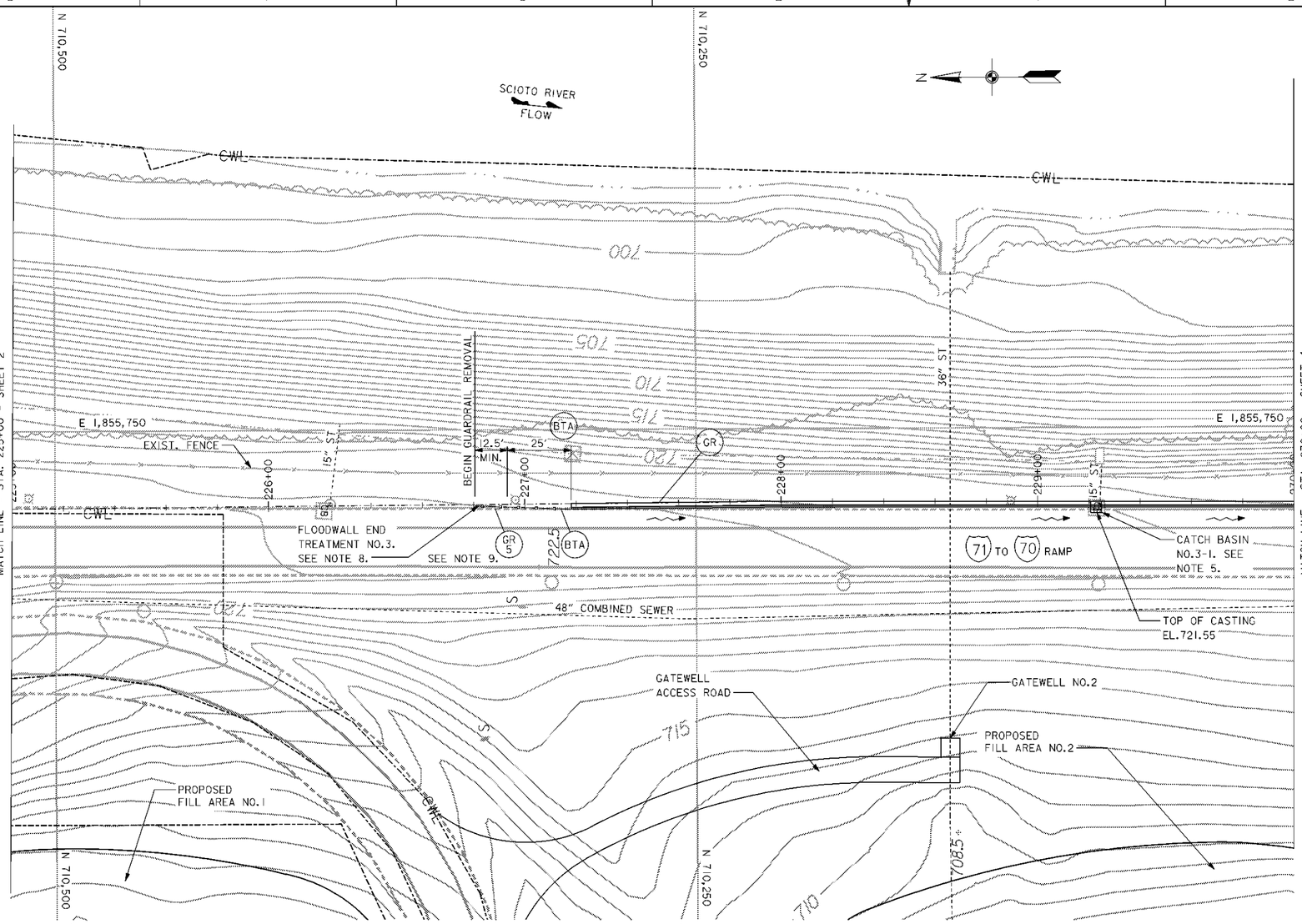
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

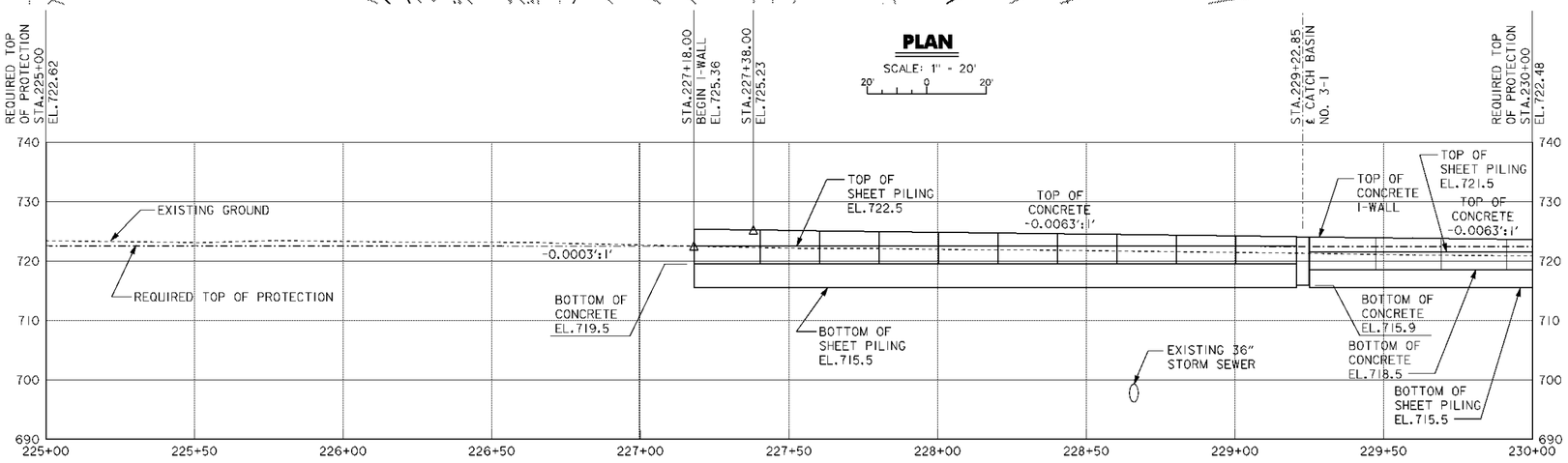
PLAN AND PROFILE
STA.220+00 TO 225+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 162
FILENAME: 00azpp02.dgn
PEN TABLE:
Sheet 2 of 10

WORK AS CONSTRUCTED



PLAN
SCALE: 1" = 20'



PROFILE ◇
SCALE IN FEET

LEGEND

- (BTA) BRIDGE TERMINAL ASSEMBLY, TYPE I
- (GR 5) GUARDRAIL, TYPE 5
- (GR) GUARDRAIL REMOVAL

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR CATCH BASIN DETAILS SEE DRAWING NO. 15/11.
3. FOR TAPERED END SECTION DETAILS SEE DRAWING NO. 20.1/3.
4. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO. 20.3/1.
5. EXISTING CATCH BASIN REMOVED FOR CONSTRUCTION OF I-WALL AND REPLACED WITH CATCH BASIN NO.3-I.
6. FOR PAVEMENT SECTIONS AND PAVEMENT GRADING SEE DRAWING NO. 20.3/2.
7. I-WALL JOINTS DEPICTED AS DARK ON THE PROFILE ARE TYPE "A" ALL OTHERS ARE TYPE "B". FOR JOINT STATIONS SEE DRAWING NOS. 20.1/5 AND 20.1/6.
8. FLOODWALL END TREATMENT NO.3 INCLUDES BRIDGE TERMINAL ASSEMBLY (TYPE I) AND GUARDRAIL (TYPE 5).
9. PROVIDE A MINIMUM OF 12.5' SECTION OF NEW GUARDRAIL TO TRANSITION TO EXISTING GUARDRAIL.
10. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.
11. FOR GATEWELL NO.2 SEE DRAWING NO.15/2.

Revisions			
Symbol	Descriptions	Date	Approved
◇	REV. IN ACCORDANCE WITH MODIFICATION MC003	5/17/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

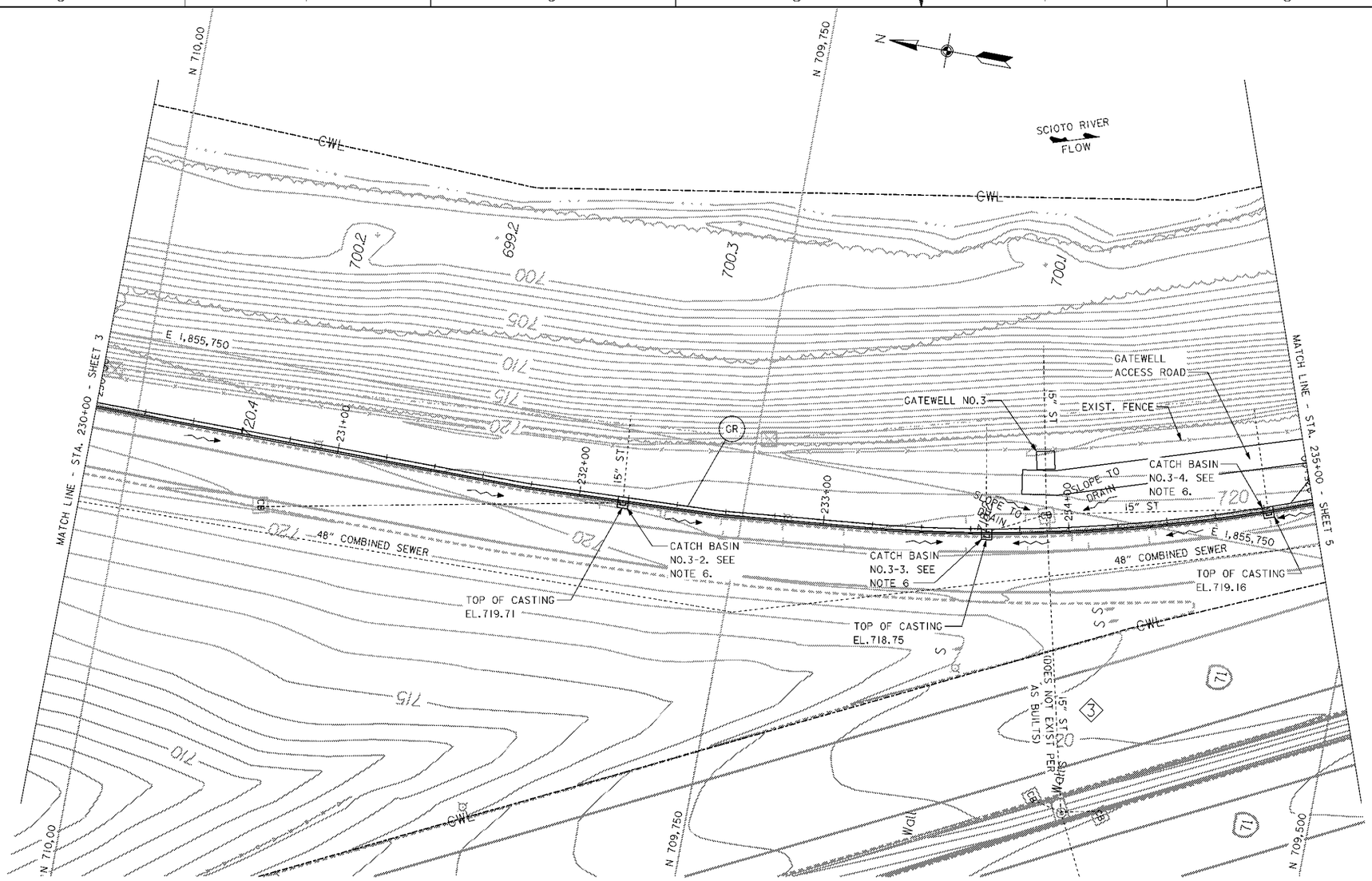
Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

PLAN AND PROFILE
STA.225+00 TO 230+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 163
FILENAME: PRM TABLE: 00mppp03.dgn
Sheet 3 of 10

WORK AS CONSTRUCTED



LEGEND

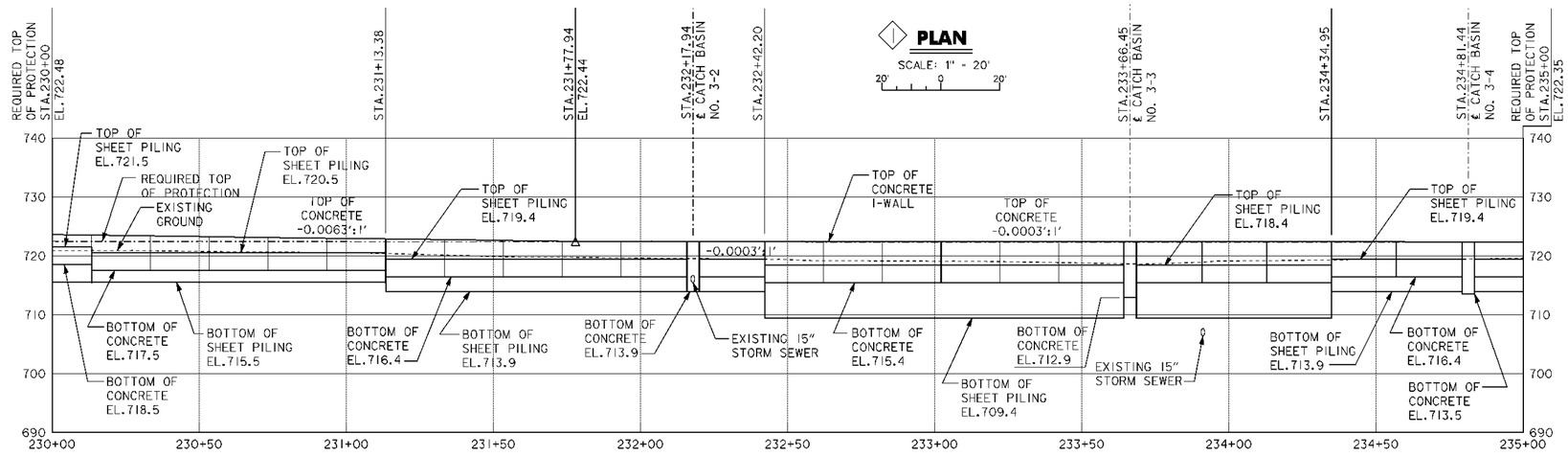
(GR) GUARDRAIL REMOVAL

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR CATCH BASIN DETAILS SEE DRAWING NO. 15/11.
3. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO. 20.3/1.
4. FOR PAVEMENT SECTIONS AND PAVEMENT GRADING SEE DRAWING NO. 20.3/2.
5. I-WALL JOINTS DEPICTED AS DARK ON THE PROFILE ARE TYPE "A" ALL OTHERS ARE TYPE "B". FOR JOINT STATIONS SEE DRAWING NOS. 20.1/5 AND 20.1/6.
6. EXISTING CATCH BASINS REMOVED FOR CONSTRUCTION OF I-WALL AND REPLACED WITH CATCH BASIN NOS. 3-2 THRU 3-4.
7. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.
8. FOR GATEWELL NO.3 SEE DRAWING NO.15/3.

PLAN (1)

SCALE: 1" - 20'



PROFILE (2)

SCALE IN FEET

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA NORTH	4/01	P.O.C.
2	REV. IN ACCORDANCE WITH MODIFICATION MC003	5/17/00	P.O.C.
3	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

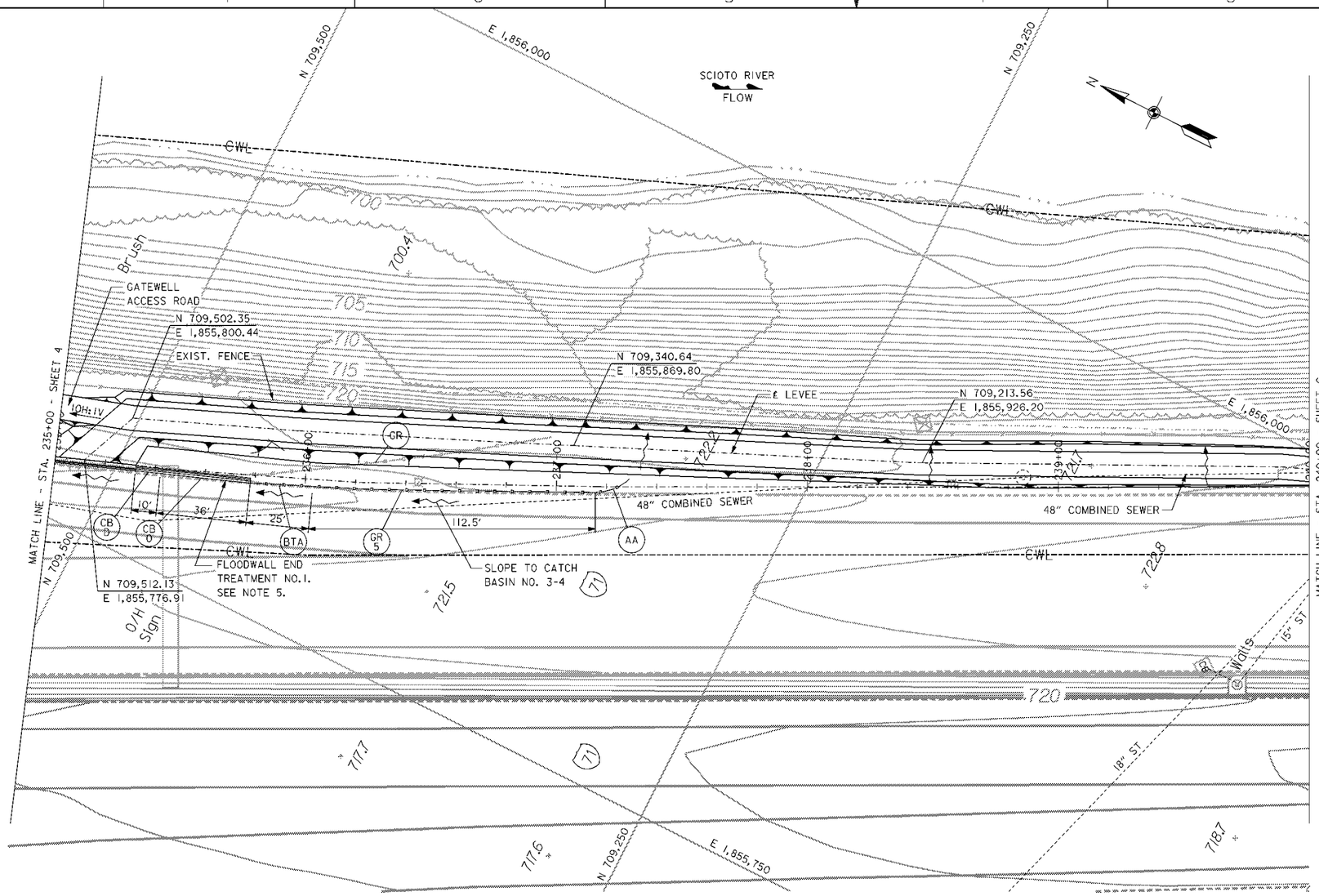
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

PLAN AND PROFILE
STA.230+00 TO 235+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/4
FILENAME: a0axpp04.dgn
PRN TABLE:
Sheet 4 of 10

WORK AS CONSTRUCTED



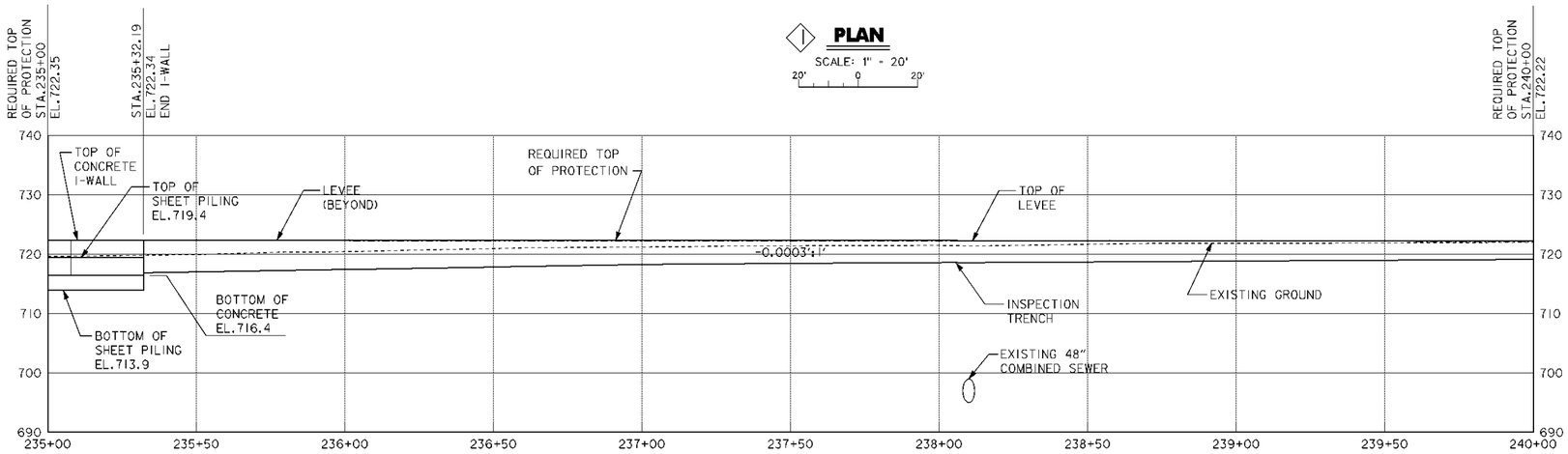
LEGEND

- (GR) GUARDRAIL REMOVAL
- (CB D) CONCRETE BARRIER, TYPE D. ODOT STANDARD DRAWING RM-4.3M
- (CB O) CONCRETE BARRIER, AT OBSTRUCTION, TYPE D. ODOT STANDARD DRAWING RM-4.5M
- (BTA) BRIDGE TERMINAL ASSEMBLY, TYPE I. ODOT STANDARD DRAWING GR-3.1M
- (GR 5) GUARDRAIL, TYPE 5. ODOT STANDARD DRAWING GR-2.1M
- (AA) ANCHOR ASSEMBLY, TYPE B. ODOT STANDARD DRAWING GR-4.3M

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS.6/1 THRU 6/5.
2. FOR TYPICAL I-WALL AND LEVEE SECTIONS SEE DRAWING NO.20.3/1.
3. FOR PAVEMENT SECTIONS AND PAVEMENT GRADING SEE DRAWING NO. 20.3/2.
4. I-WALL JOINTS DEPICTED AS DARK ON THE PROFILE ARE TYPE "A" ALL OTHERS ARE TYPE "B". FOR JOINT STATIONS SEE DRAWING NOS. 20.1/5 AND 20.1/6.
5. FLOODWALL END TREATMENT NO.1 INCLUDES CONCRETE BARRIER, TYPE D, BRIDGE TERMINAL ASSEMBLY (TYPE I), GUARDRAIL (TYPE 5) AND ANCHOR ASSEMBLY (TYPE B).
6. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.

① **PLAN**
SCALE: 1" - 20'
20' 0 20'



② **PROFILE**
SCALE IN FEET

Revisions			
Symbol	Descriptions	Date	Approved
◇2	REV. IN ACCORDANCE WITH MODIFICATION MC003	5/17/00	P.O.C.
◇1	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

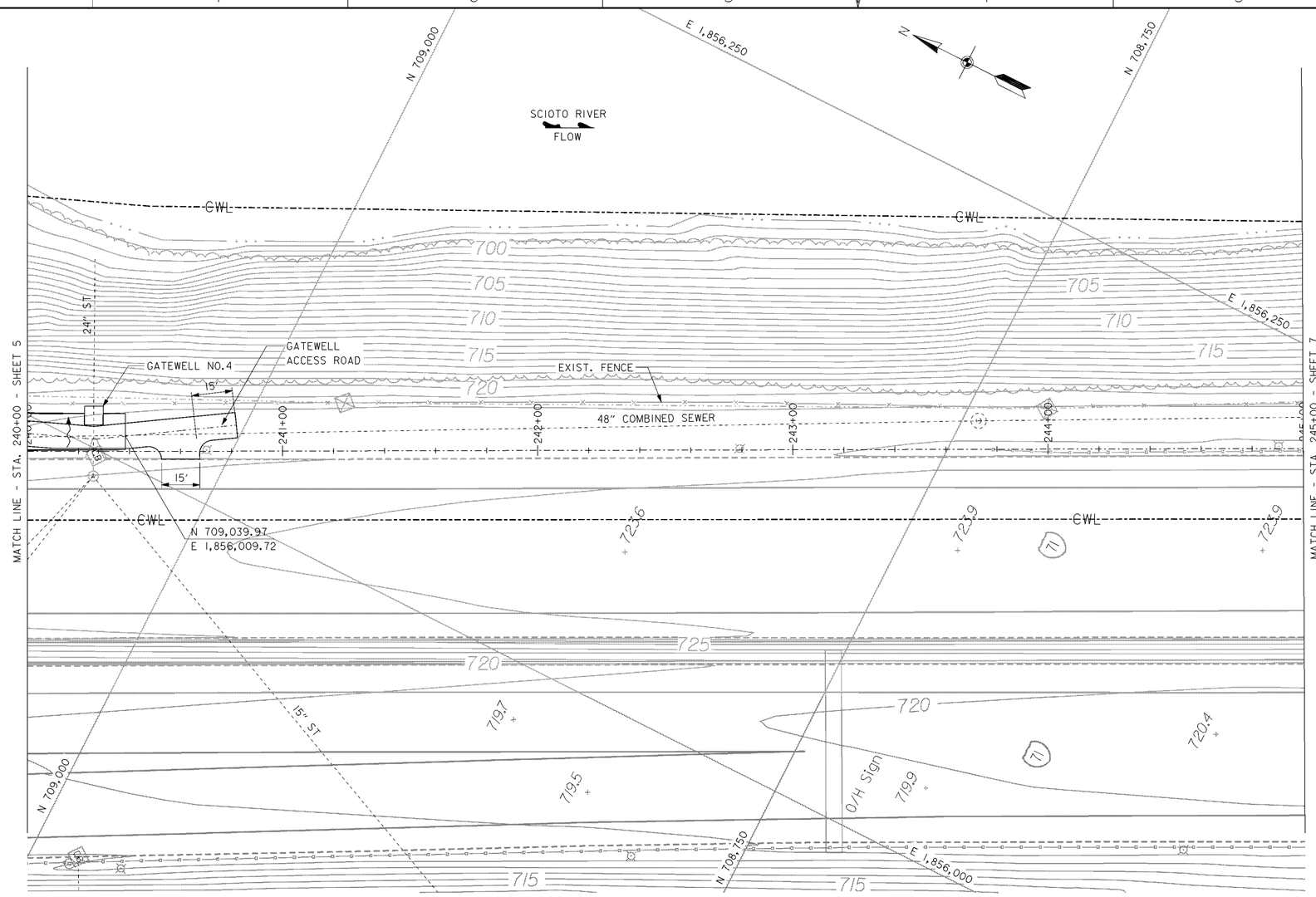
Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

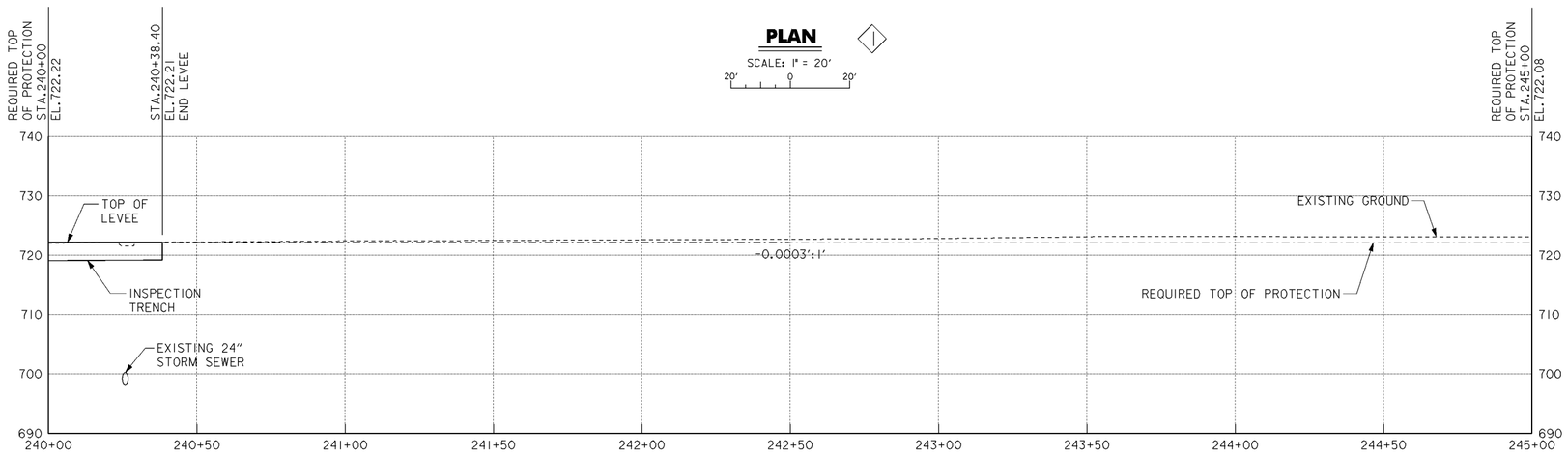
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

PLAN AND PROFILE
STA.235+00 TO 240+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference numbers: 165
FILENAME: 00cspp03.dgn
PEN TABLE:
Sheet 5 of 10

WORK AS CONSTRUCTED





NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS.6/1 THRU 6/5.
2. FOR TYPICAL LEVEE SECTION SEE DRAWING NO.20.3/1.
3. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.
4. FOR GATEWELL NO.4 SEE DRAWING NO.15/4.

Revisions			
Symbol	Descriptions	Date	Approved
1	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

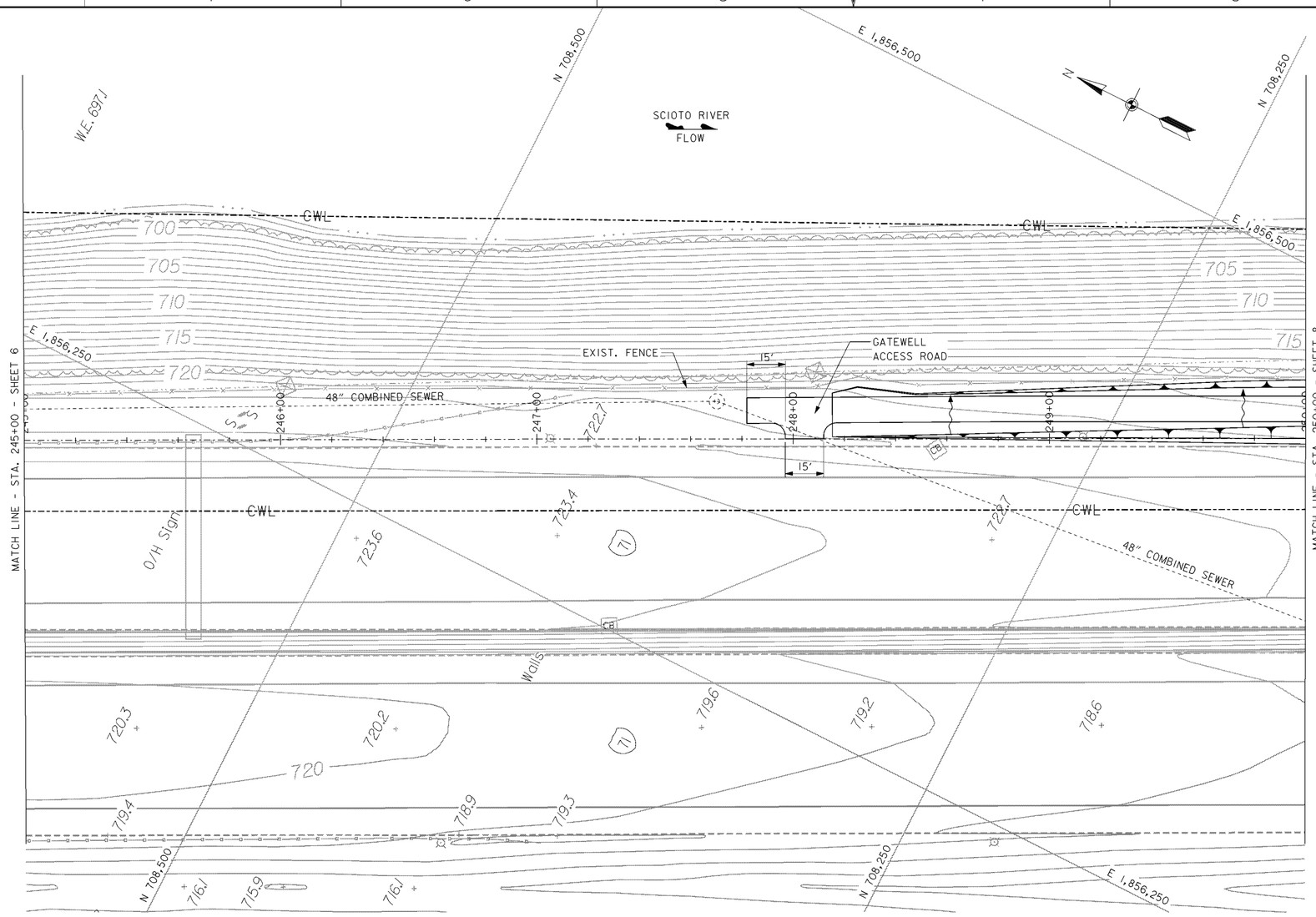
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

PLAN AND PROFILE
STA.240+00 TO 245+00

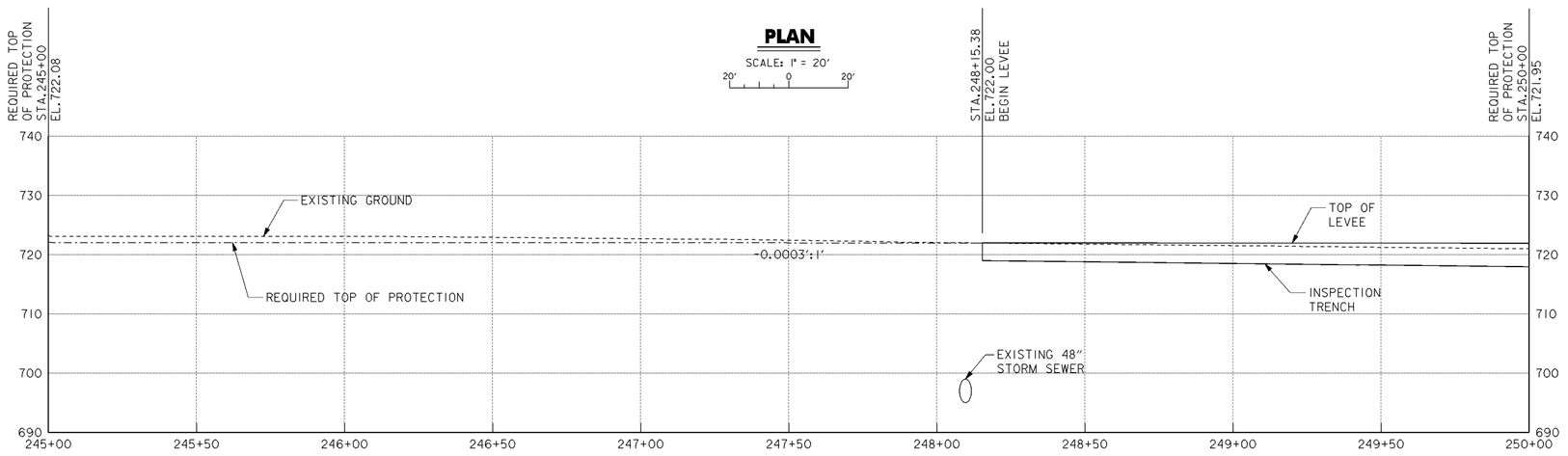
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/6
FILENAME: 00axpp06.dgn
PRN TABLE:
Sheet 6 of 10

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 20'



PROFILE

SCALE IN FEET

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS.6/1 THRU 6/5.
2. FOR TYPICAL LEVEE SECTIONS SEE DRAWING NO.20.3/1.
3. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

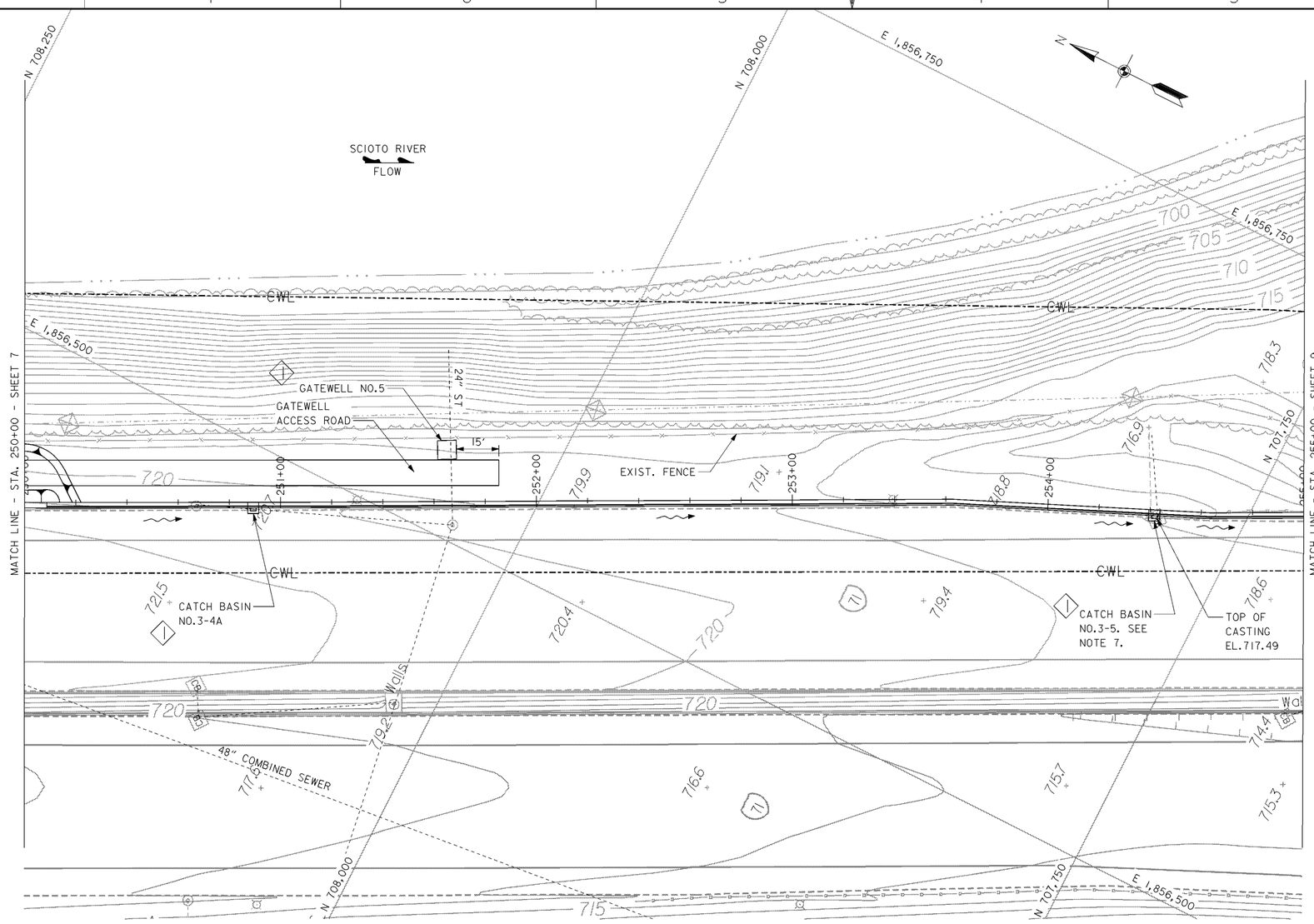
US Army Corps of Engineers

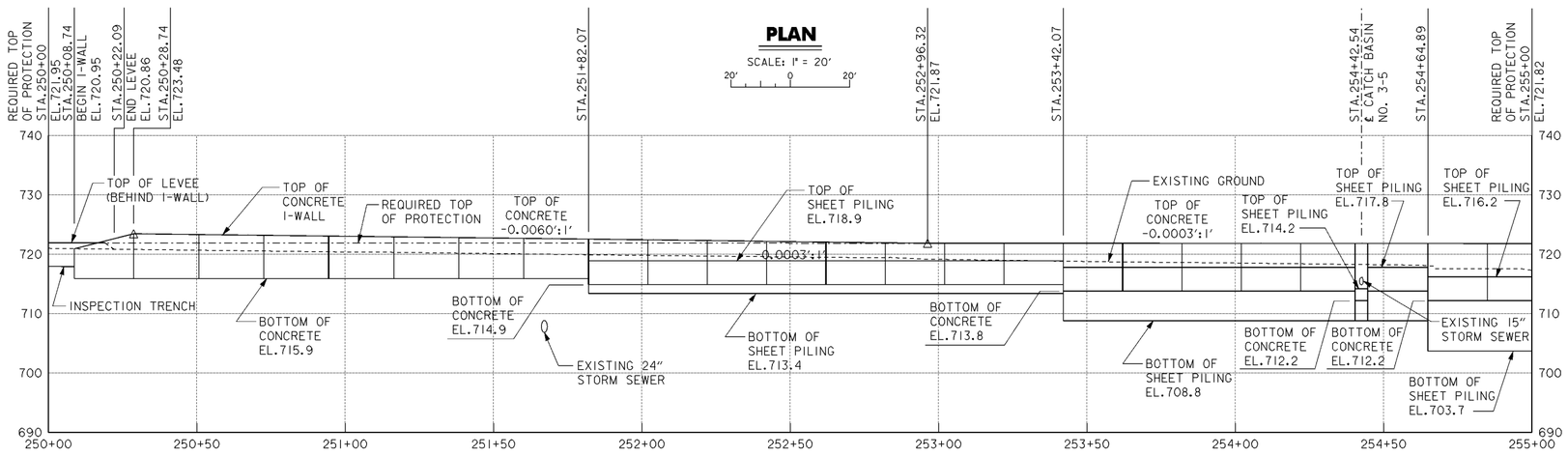
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

PLAN AND PROFILE
STA.245+00 TO 250+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/7
FILENAME: 00axpp07.dgn
PRN TABLE:
Sheet 7 of 10

WORK AS CONSTRUCTED





PROFILE
SCALE IN FEET

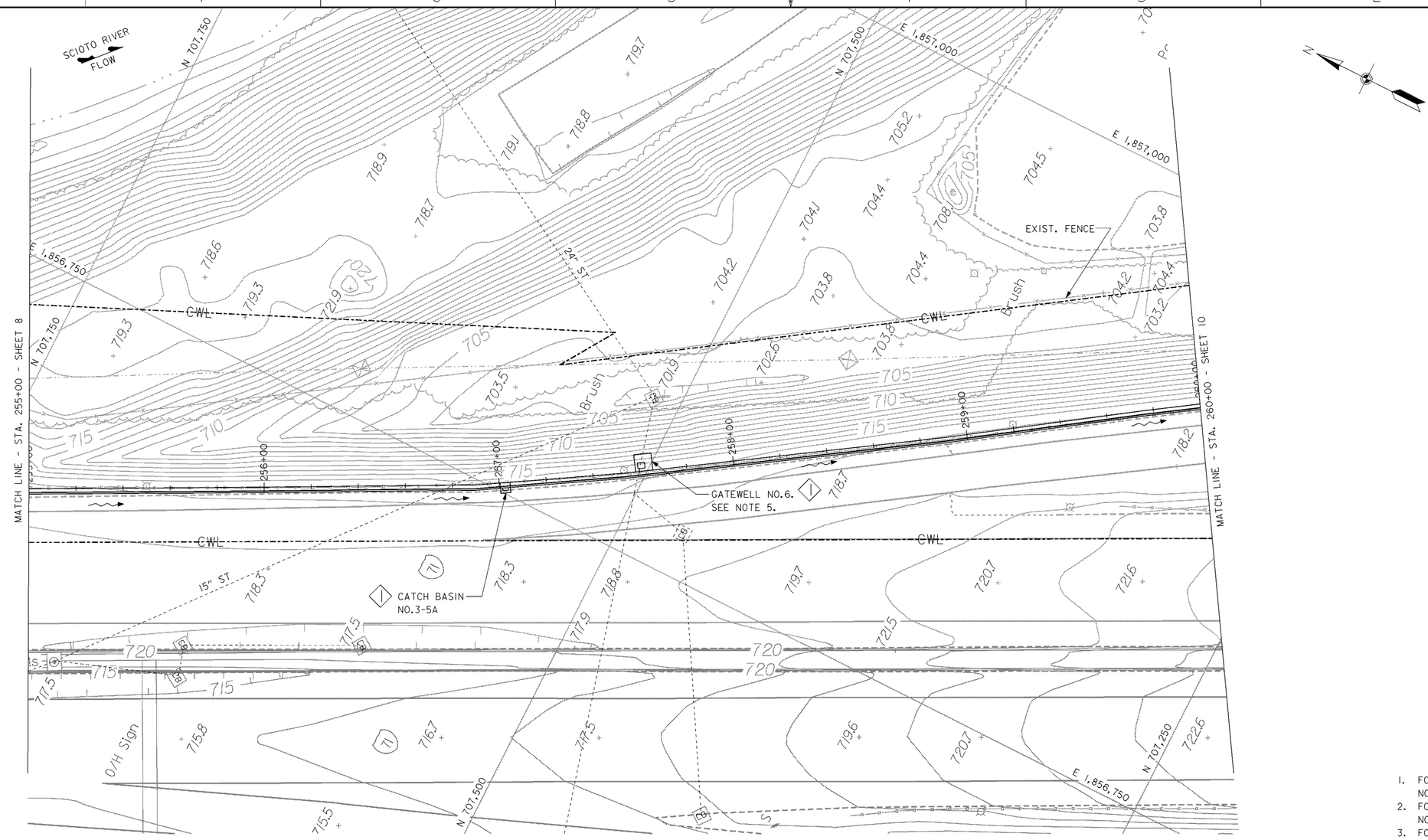
NOTES

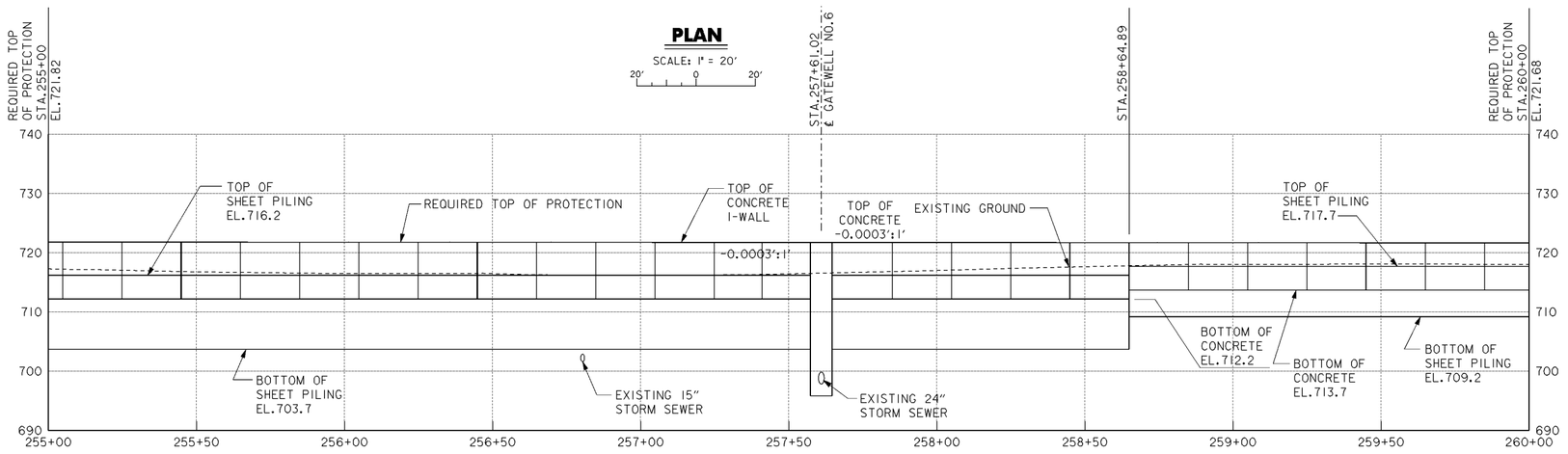
1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR CATCH BASIN DETAILS SEE DRAWING NO. 15/11.
3. FOR TAPERED END SECTION DETAILS SEE DRAWING NO. 20.1/3.
4. FOR TYPICAL I-WALL AND LEVEE SECTIONS SEE DRAWING NO. 20.3/1.
5. FOR PAVEMENT SECTIONS AND PAVEMENT GRADING SEE DRAWING NO. 20.3/2.
6. I-WALL JOINTS DEPICTED AS DARK ON THE PROFILE ARE TYPE "A" ALL OTHERS ARE TYPE "B". FOR JOINT STATIONS SEE DRAWING NOS. 20.1/7 AND 20.1/8.
7. EXISTING CATCH BASIN REMOVED FOR CONSTRUCTION OF I-WALL AND REPLACED WITH CATCH BASIN NO. 3-5.
8. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.
9. FOR GATEWELL NO.5 SEE DRAWING NO.15/5.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED COLUMBUS, OHIO	U.S.ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: J.HALL	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS, L.P.P. PHASE IIIA
Drawn by: T.MULLINS	**PLAN AND PROFILE STA.250+00 TO 255+00**
Checked by: P.CONROY	
Reviewed by:	Scale: AS SHOWN; Date: OCTOBER 1999; Drawing Code: 16-PWC-12--
Approved by:	Sheet reference number: 16/8
	FILENAME: a0axpp08.dgn PEN TABLE:
	Sheet 8 of 10

WORK AS CONSTRUCTED





PROFILE
SCALE IN FEET

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS.6/1 THRU 6/5.
2. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO.20.3/1.
3. FOR PAVEMENT SECTIONS AND PAVEMENT GRADING SEE DRAWING NO. 20.3/2.
4. I-WALL JOINTS DEPICTED AS DARK ON THE PROFILE ARE TYPE "A" ALL OTHERS ARE TYPE "B". FOR JOINT STATIONS SEE DRAWING NOS. 20.1/7 AND 20.1/8.
5. FOR GATEWELL NO.6 DETAILS SEE DRAWING NOS. 15/7 AND 15/10.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

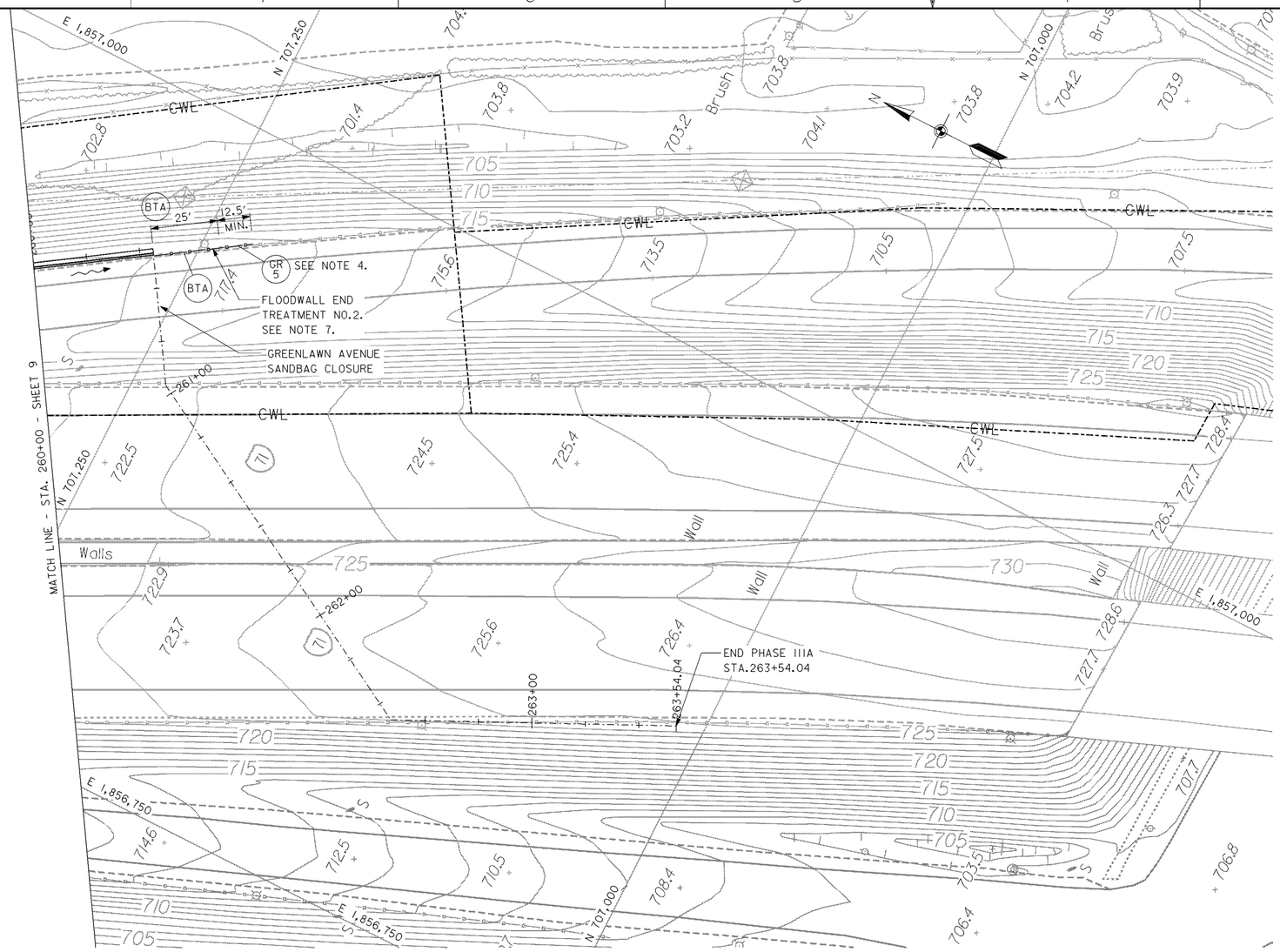
US Army Corps of Engineers

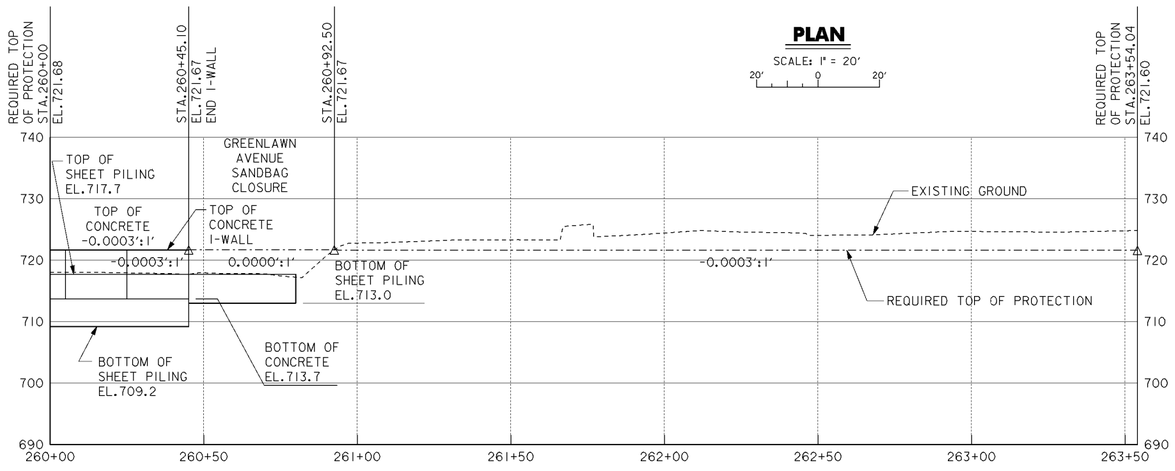
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

PLAN AND PROFILE
STA.255+00 TO 260+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/9
FILENAME: a0axpp09.dgn
PIN TABLE:
Sheet 9 of 10

WORK AS CONSTRUCTED





PROFILE
SCALE IN FEET

LEGEND

(BTA) BRIDGE TERMINAL ASSEMBLY, TYPE I

(GR 5) GUARDRAIL, TYPE 5

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS.6/1 THRU 6/5.
2. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO.20.3/1.
3. FOR GREENLAWN AVENUE SANDBAG CLOSURE SEE DRAWING NO.20.2/1.
4. PROVIDE A MINIMUM OF 12.5' SECTION OF NEW GUARDRAIL TO TRANSITION TO EXISTING GUARDRAIL.
5. FOR PAVEMENT SECTIONS AND PAVEMENT GRADING SEE DRAWING NO. 20.3/2.
6. I-WALL JOINTS DEPICTED AS DARK ON THE PROFILE ARE TYPE "A" ALL OTHERS ARE TYPE "B". FOR JOINT STATIONS SEE DRAWING NOS. 20.1/7 AND 20.1/8.
7. FLOODWALL END TREATMENT NO.2 INCLUDES BRIDGE TERMINAL ASSEMBLY (TYPE I) AND GUARDRAIL (TYPE 5).

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

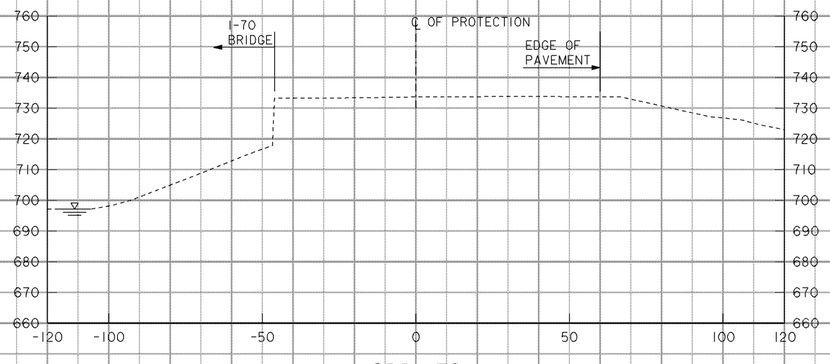
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

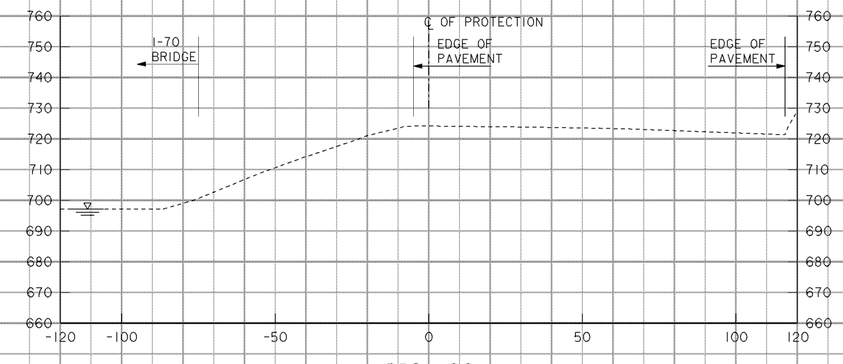
PLAN AND PROFILE
STA260+00 TO 263+54.04

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 16/10
FILENAME: 00axpp10.dgn
PEN TABLE:
Sheet 10 of 10

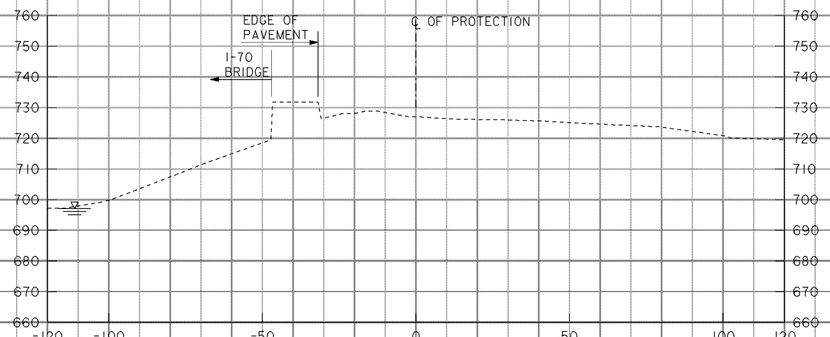
WORK AS CONSTRUCTED



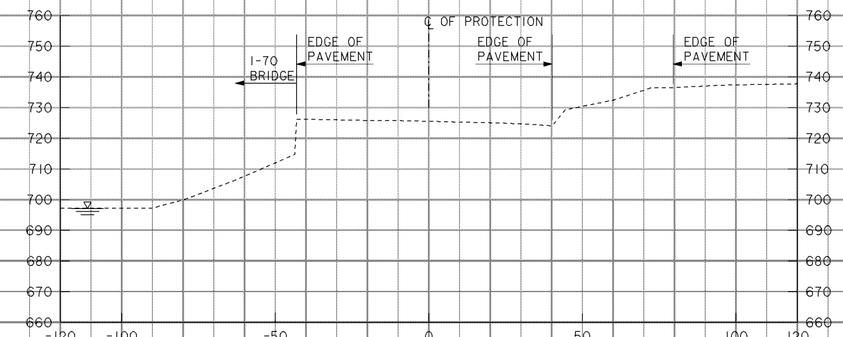
216+50



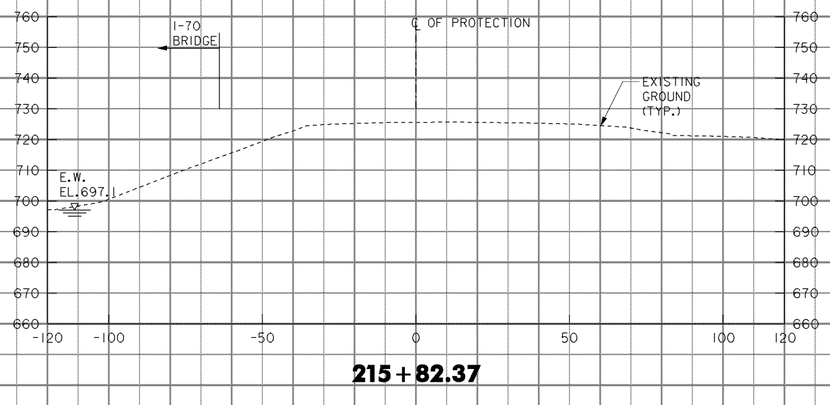
218+00



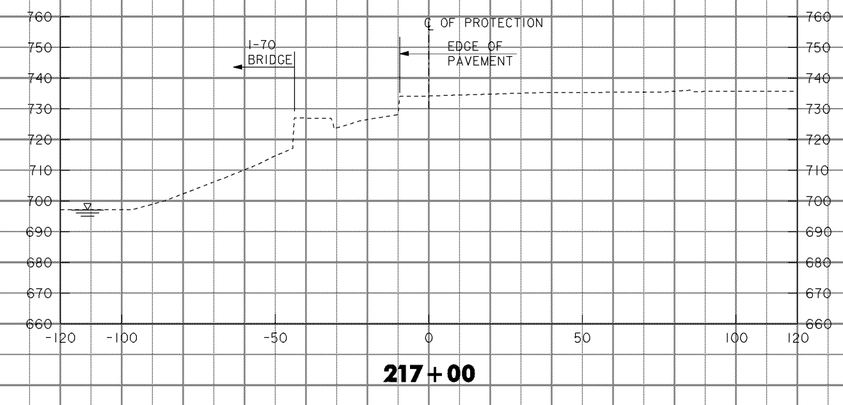
216+00



217+50



215+82.37



217+00

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

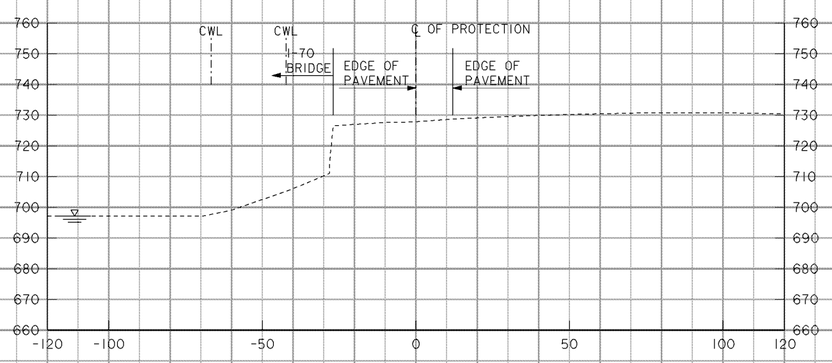
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

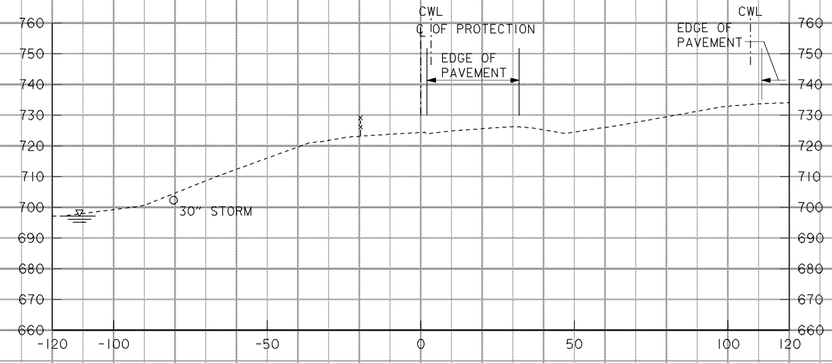
CROSS SECTIONS
215+82.37 TO 218+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/11
FILENAME: 00axxx01.dgn
PRN TABLE:
Sheet 1 of 17

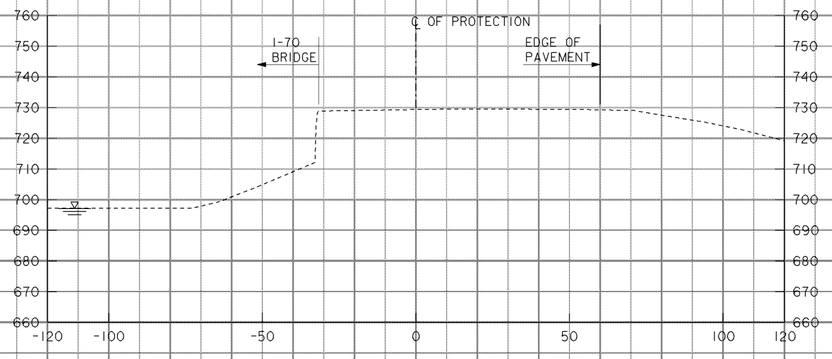
WORK AS CONSTRUCTED



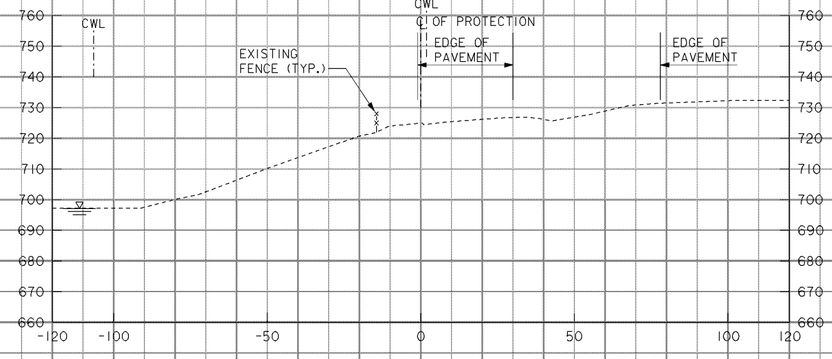
219+50



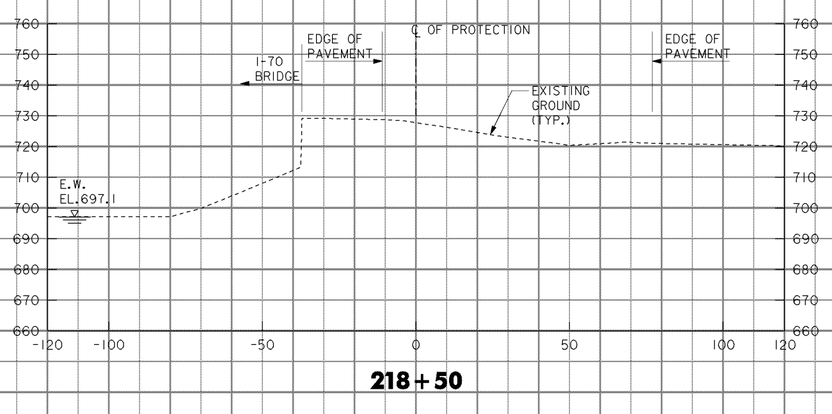
221+00



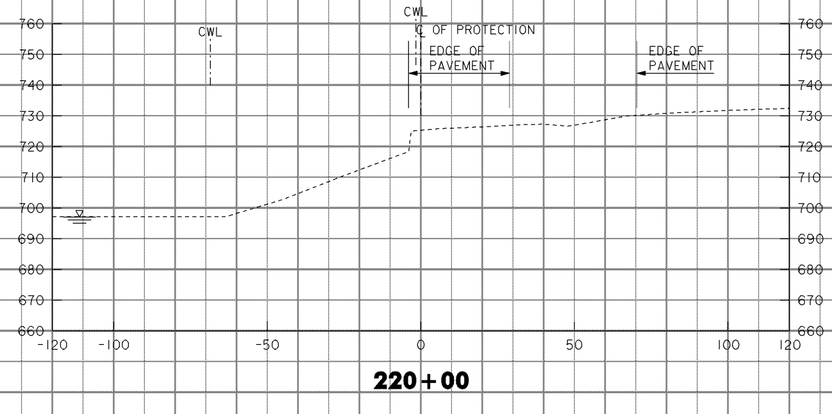
219+00



220+50



218+50



220+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

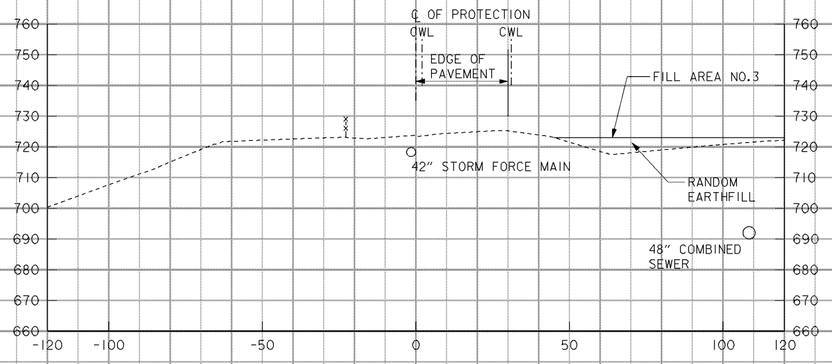
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

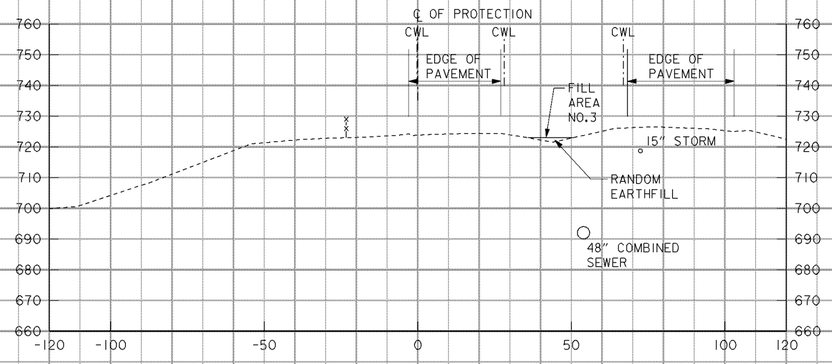
CROSS SECTIONS
218+50 TO 221+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/12
FILENAME: 00axxx02.dgn
PEN TABLE:
Sheet 2 of 17

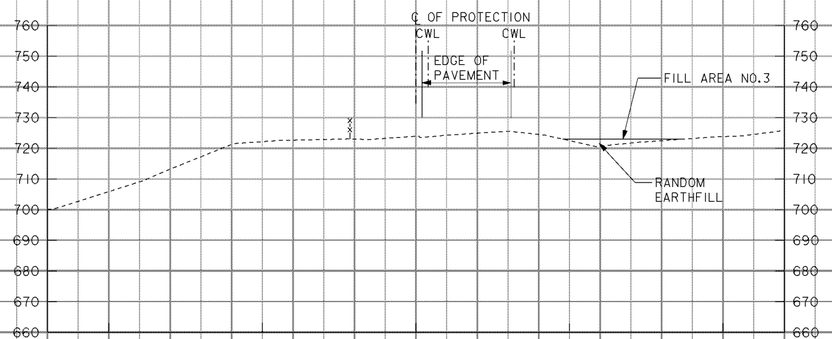
WORK AS CONSTRUCTED



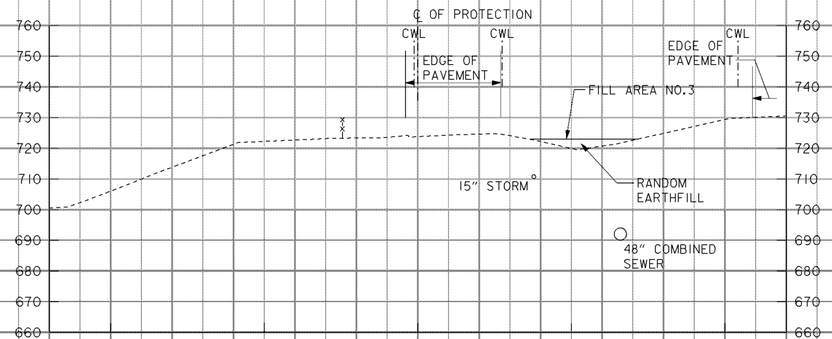
222+50



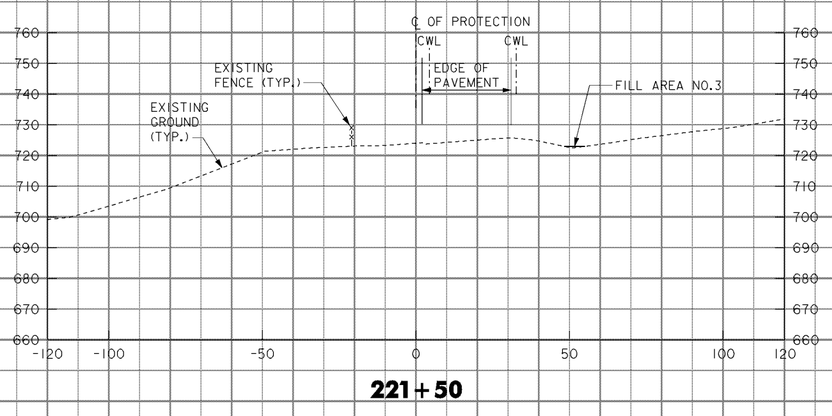
224+00



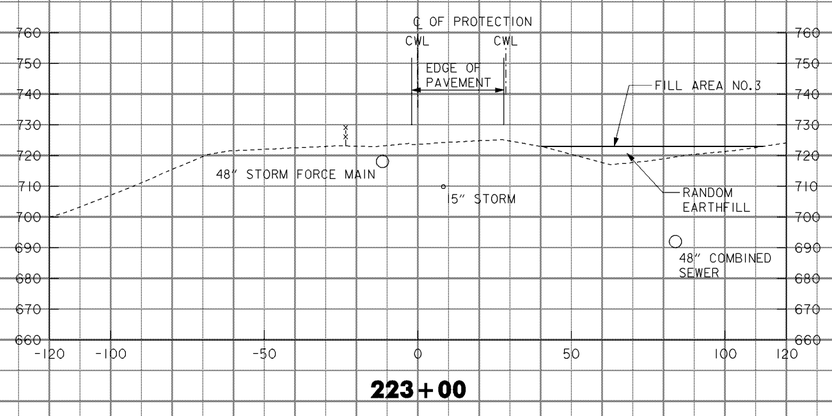
222+00



223+50



221+50



223+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR FILL AREA SITE PLAN SEE DRAWING NO. 20.2/2.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

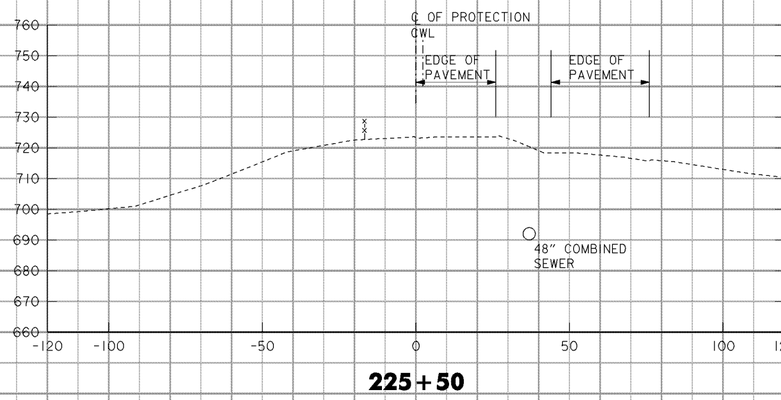
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

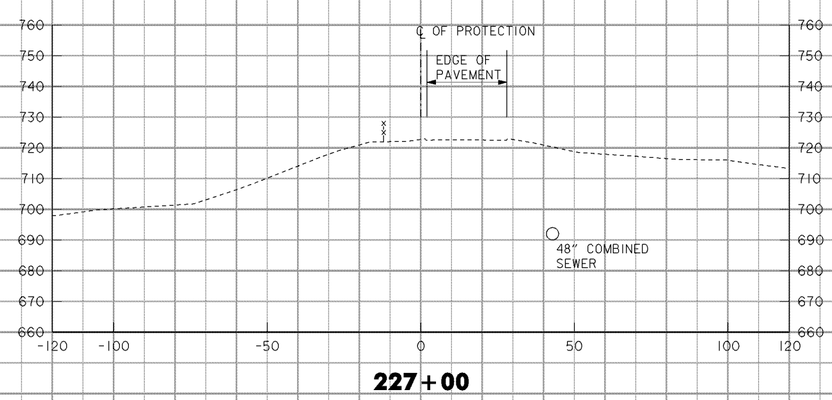
CROSS SECTIONS 221+50 TO 224+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/13
FILENAME: 00axxx03.dgn
PEN TABLE:
Sheet 3 of 17

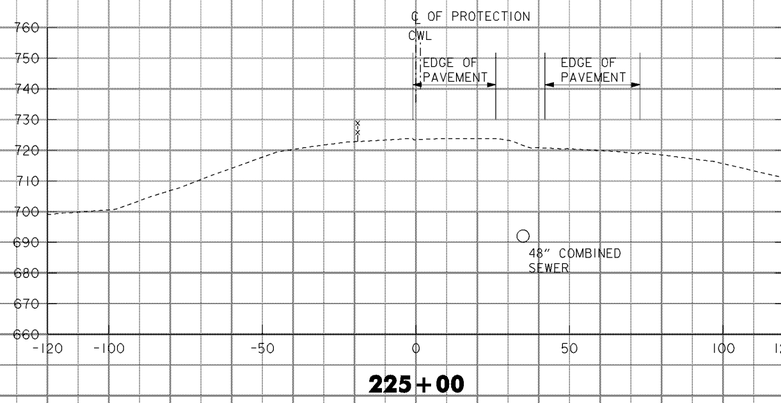
WORK AS CONSTRUCTED



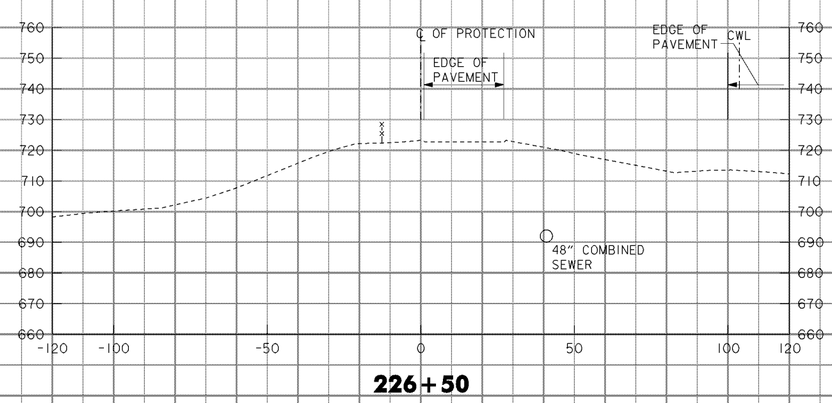
225+50



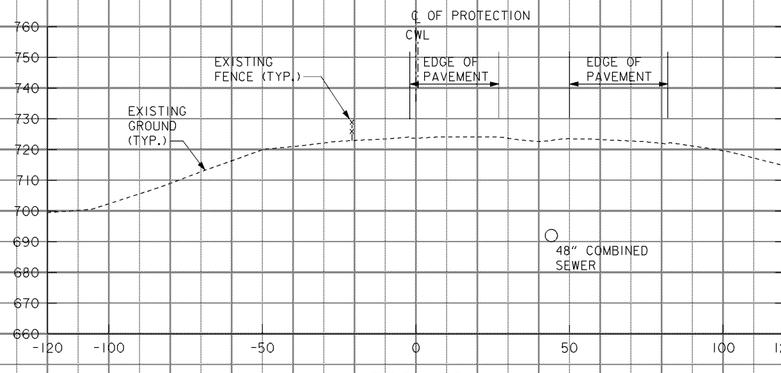
227+00



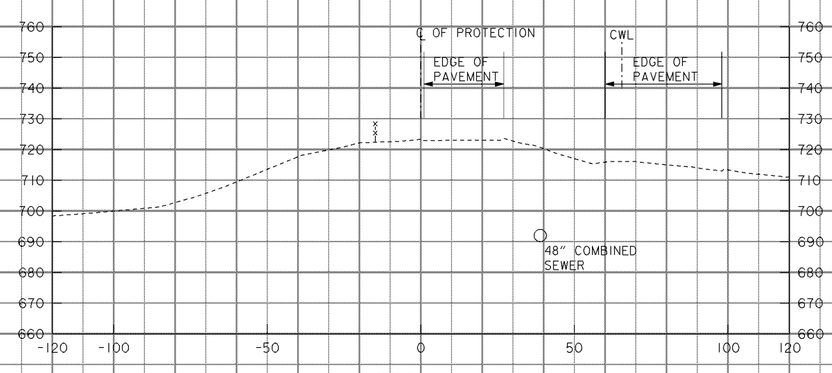
225+00



226+50



224+50



226+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

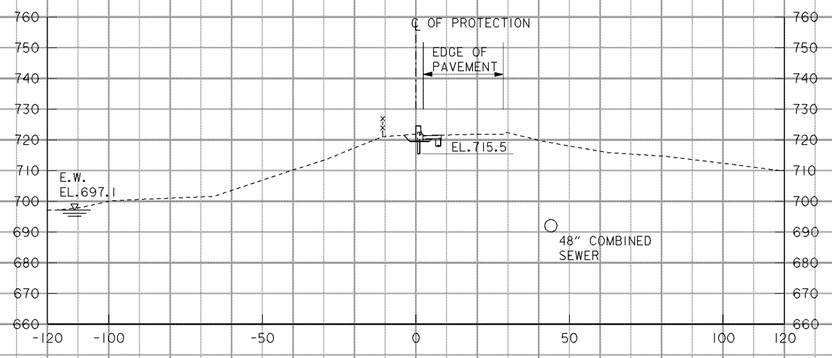
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

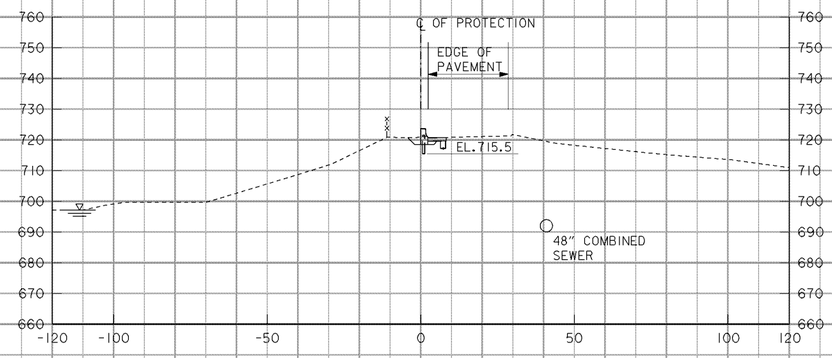
CROSS SECTIONS 224+50 TO 227+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/14
FILENAME: PEN TABLE: 00axxs04.dgn
Sheet 4 of 17

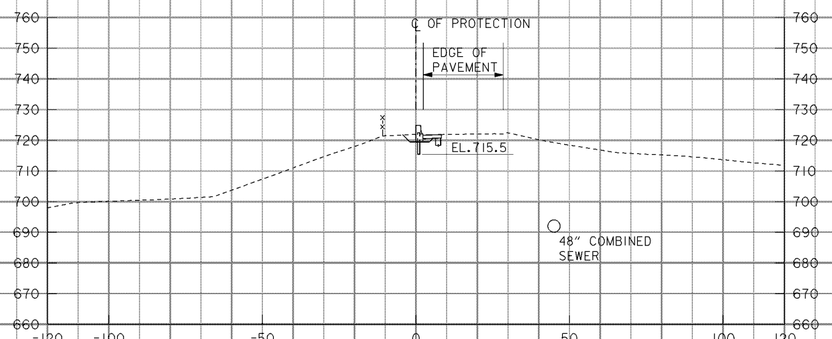
WORK AS CONSTRUCTED



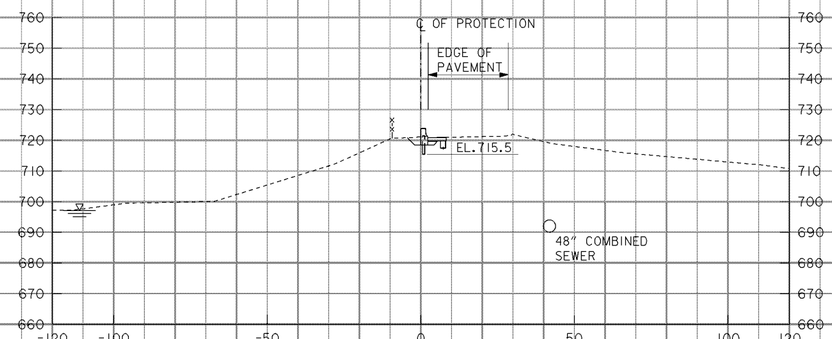
228+50



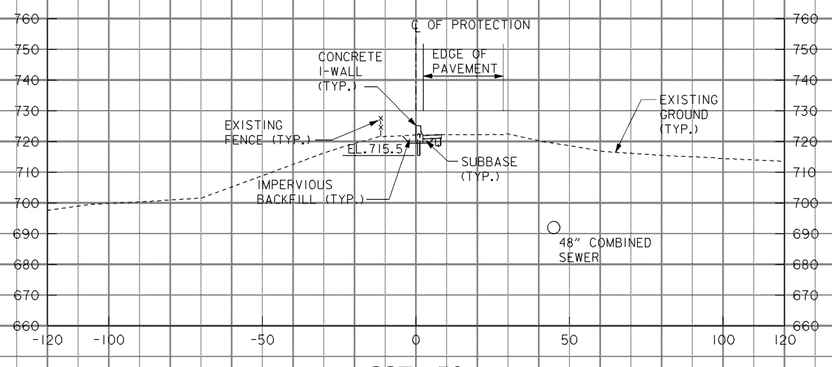
230+00



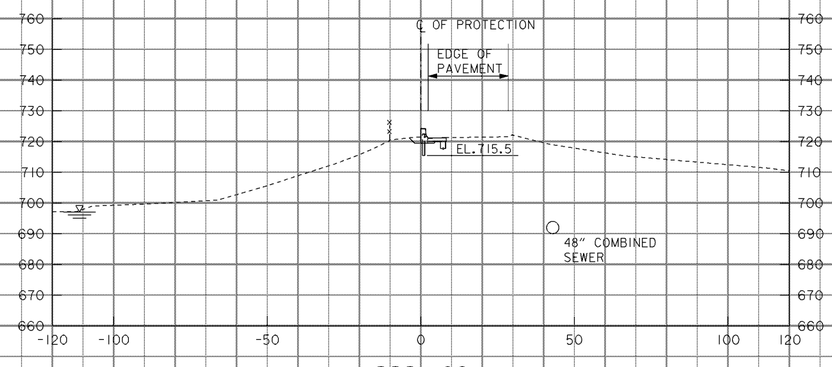
228+00



229+50



227+50



229+00

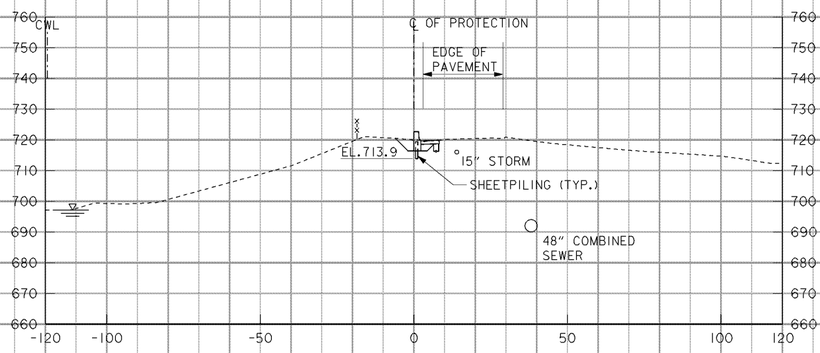
NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NO. 6/1 THRU 6/5.
2. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO. 20.3/1.

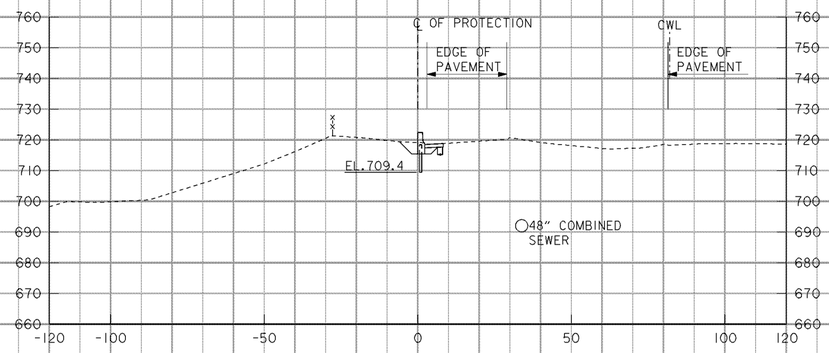
Revisions			
Symbol	Description	Date	Approved

BURGESS & NIPLE, LIMITED COLUMBUS, OHIO	U.S.ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: J.HALL	US Army Corps of Engineers
Drawn by: T.MULLINS	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS, L.P.P. PHASE IIIA
Checked by: P.CONROY	**CROSS SECTIONS 227+50 TO 230+00**
Reviewed by:	Scale: AS SHOWN
Approved by:	Date: OCTOBER 1999
	Drawing Code: 16-PWC-12-
	Sheet reference number: 1615
	FILENAME: 00axxx05.dgn PEN TABLE:
	Sheet 5 of 17

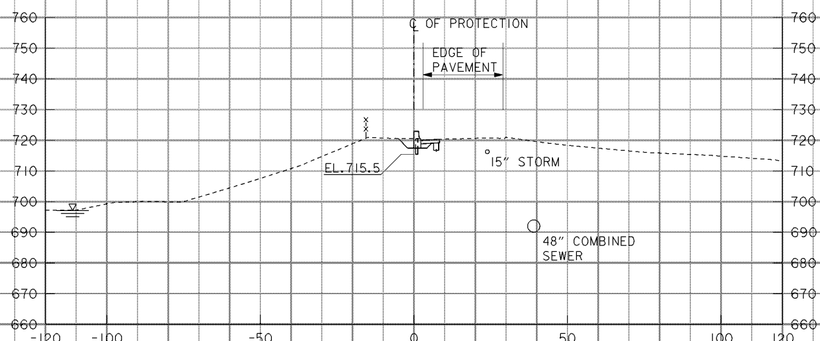
WORK AS CONSTRUCTED



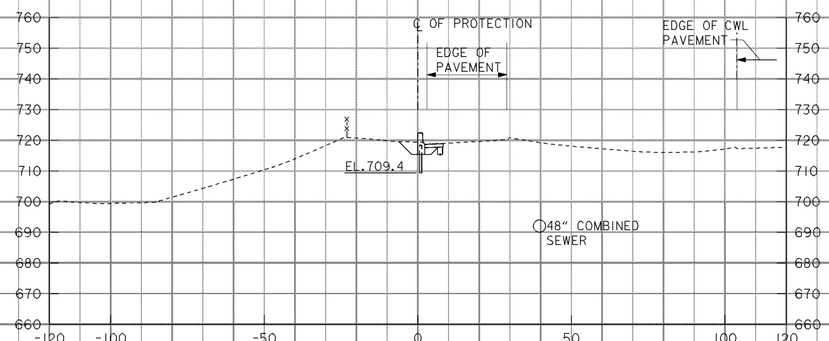
231+50



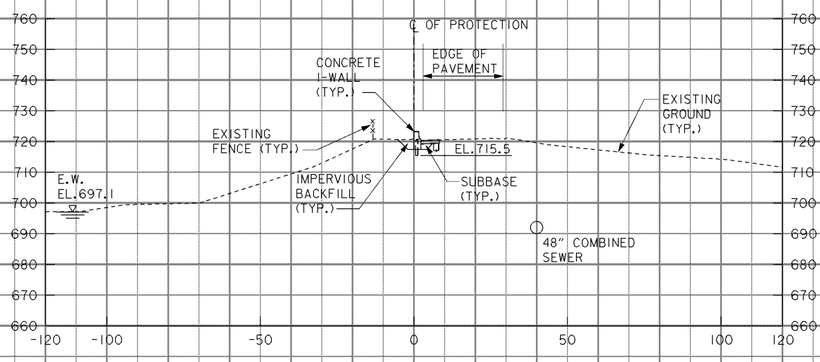
233+00



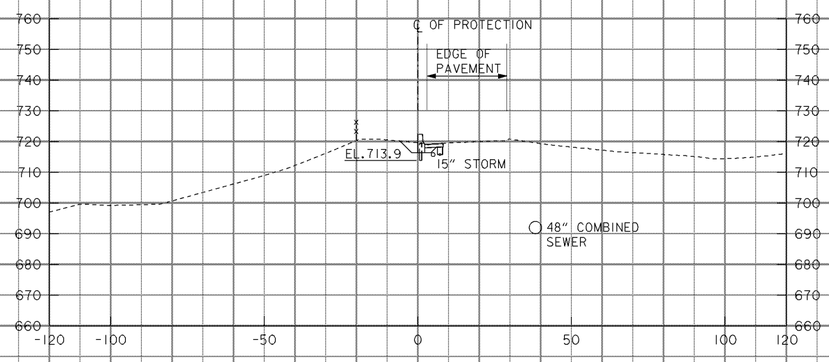
231+00



232+50



230+50



232+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO. 20.3/1.

Revisions			
Symbol	Description	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

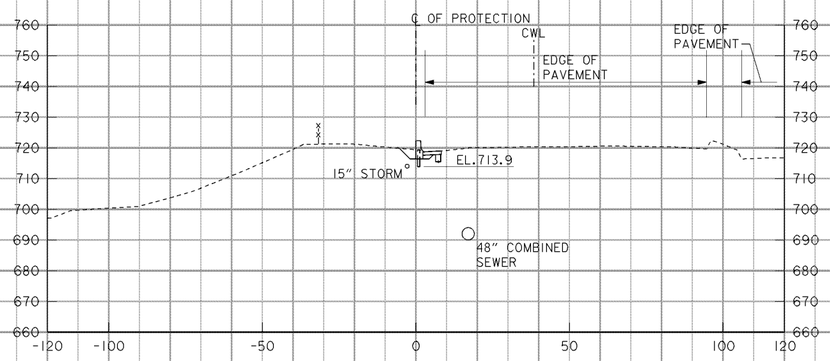
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

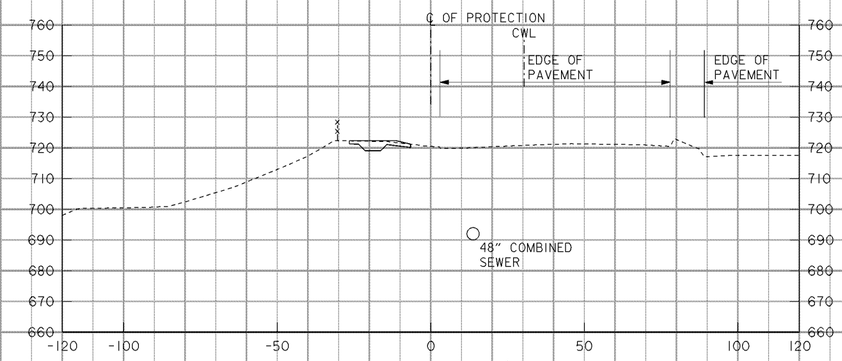
CROSS SECTIONS 230+50 TO 233+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/16
FILENAME: 00axxx06.dgn
PEN TABLE:
Sheet 6 of 17

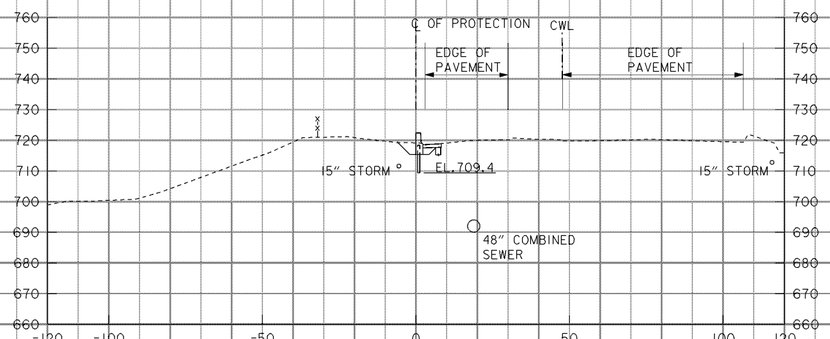
WORK AS CONSTRUCTED



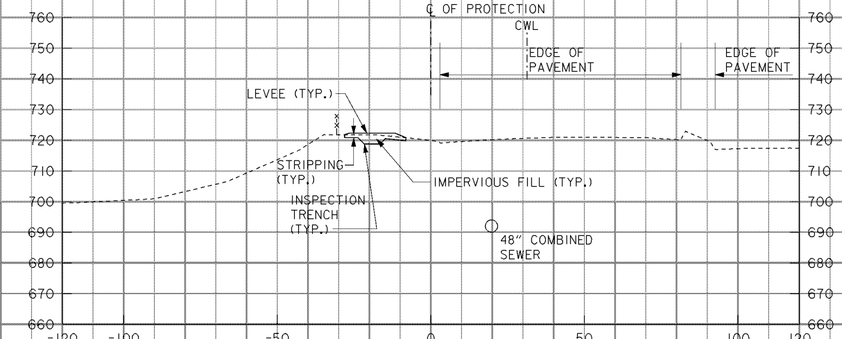
234+50



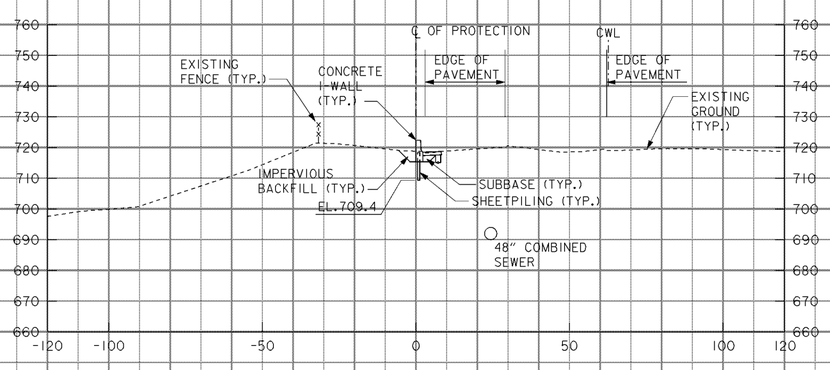
236+00 ⟨1⟩



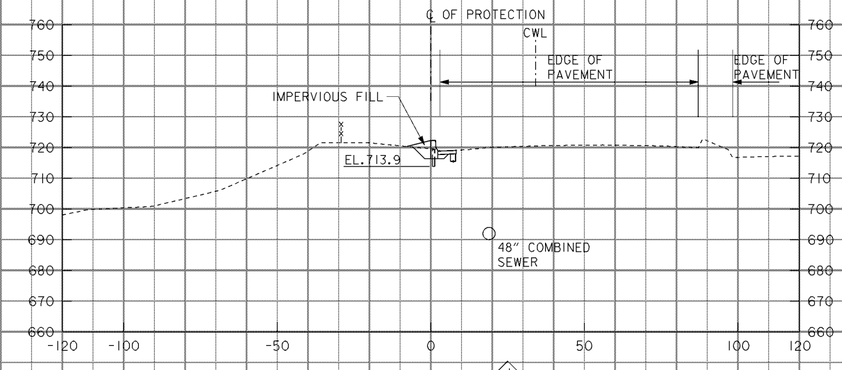
234+00



235+50 ⟨1⟩



233+50



235+00 ⟨1⟩

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO. 20.3/1.

Revisions			
Symbol	Descriptions	Date	Approved
⟨1⟩	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

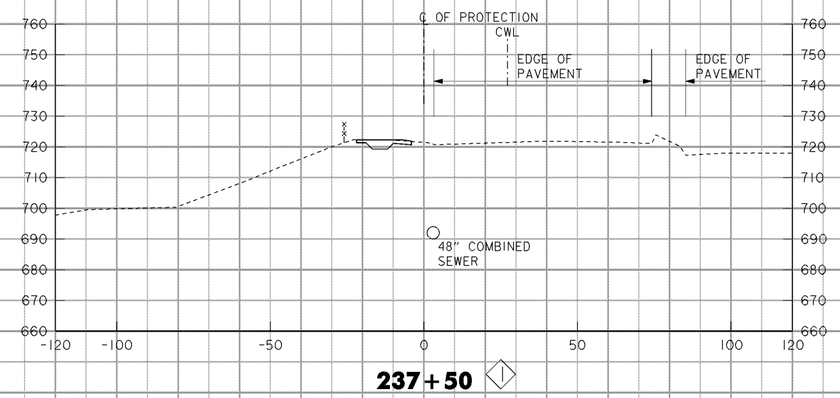
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

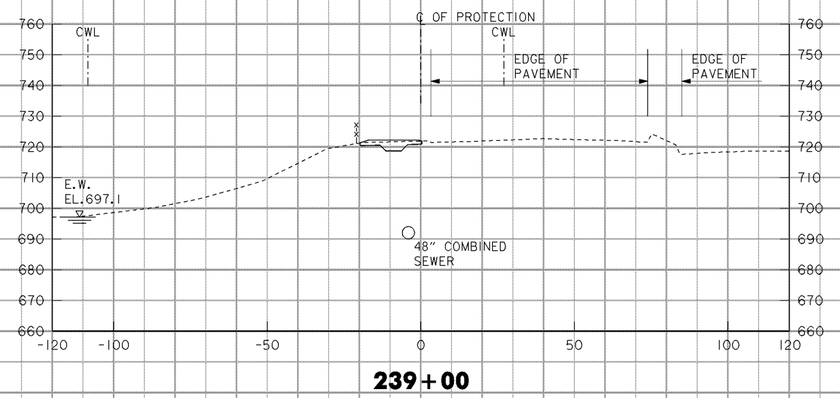
CROSS SECTIONS
233+50 TO 236+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 1617
FILENAME: 00axxs07.dgn
PEN TABLE:
Sheet 7 of 17

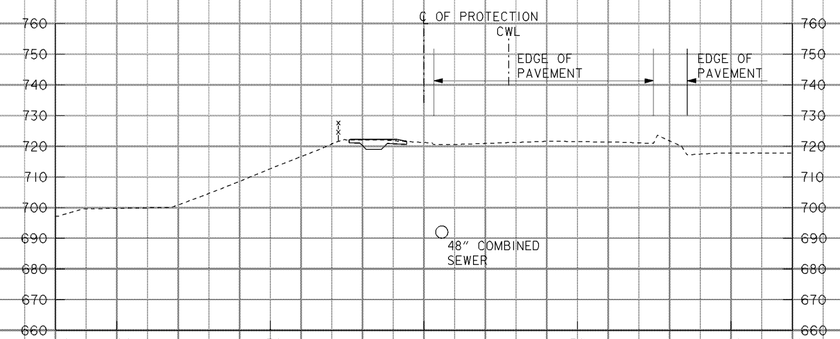
WORK AS CONSTRUCTED



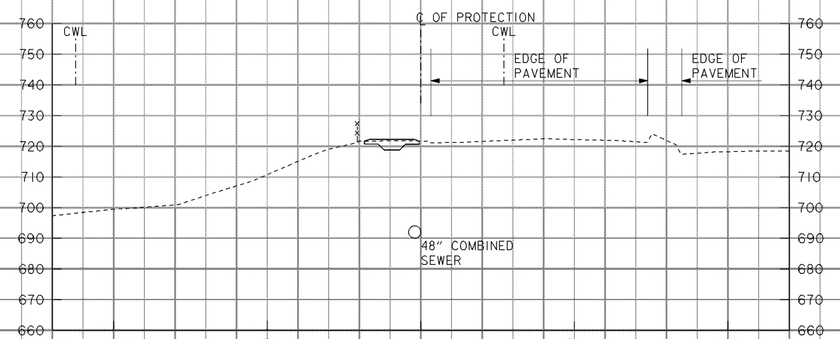
237+50 ◇1



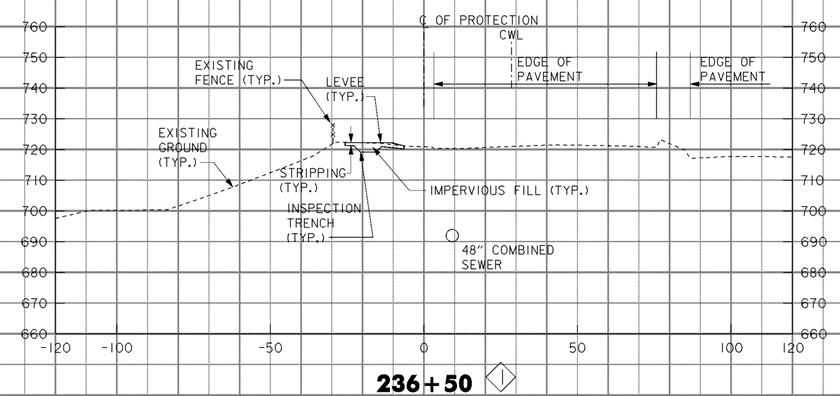
239+00



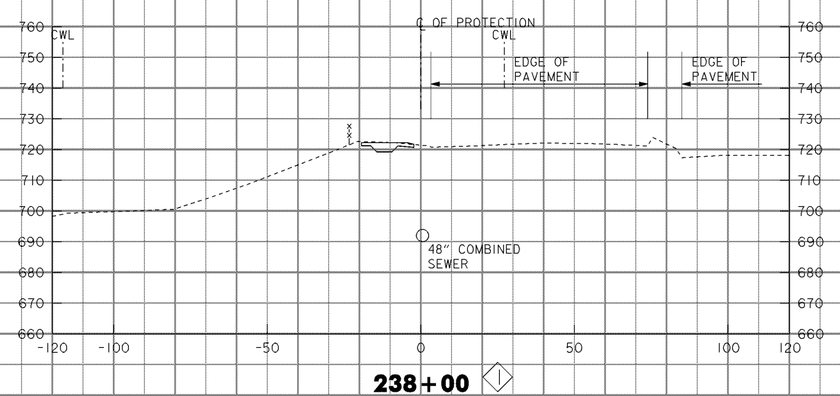
237+00 ◇1



238+50 ◇1



236+50 ◇1



238+00 ◇1

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL I-WALL AND LEVEE SECTIONS SEE DRAWING NO. 20.3/1.

Revisions			
Symbol	Descriptions	Date	Approved
◇1	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

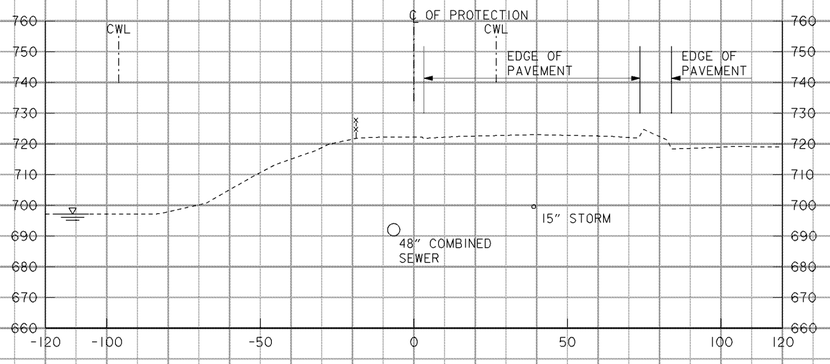
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

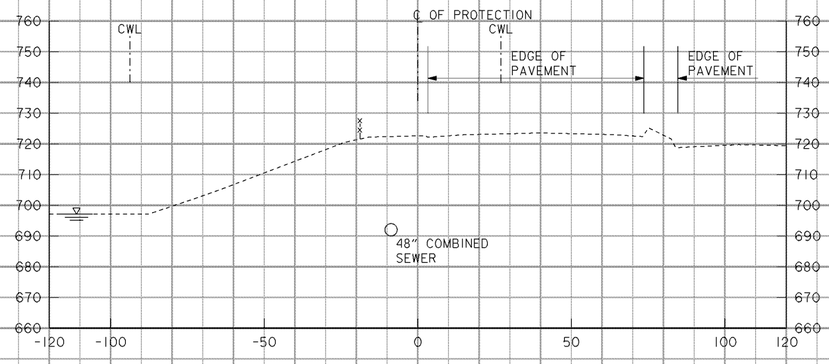
CROSS SECTIONS
236+50 TO 239+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/18
FILENAME: 00axxx08.dgn
PEN TABLE:
Sheet 8 of 17

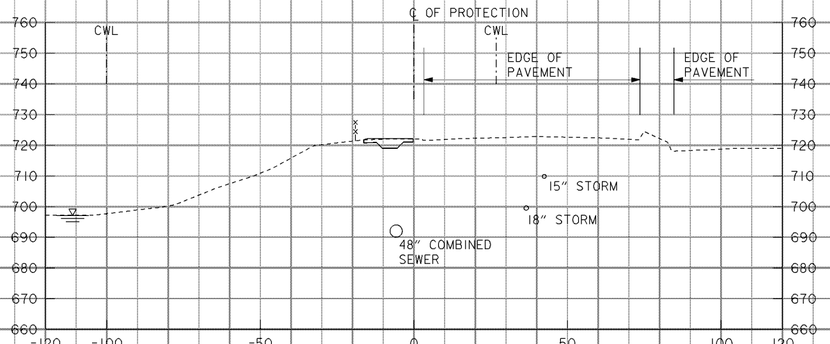
WORK AS CONSTRUCTED



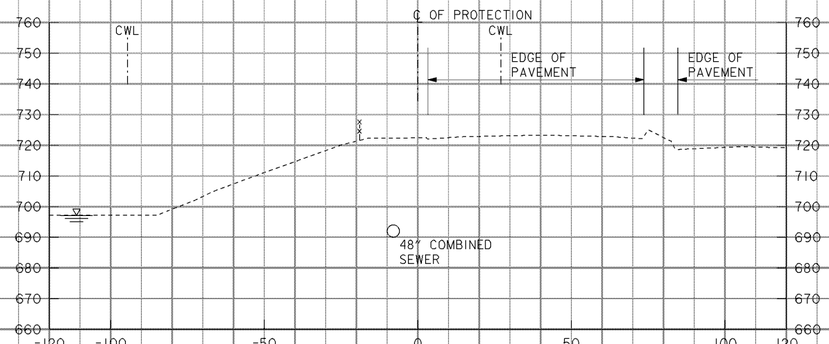
240+50



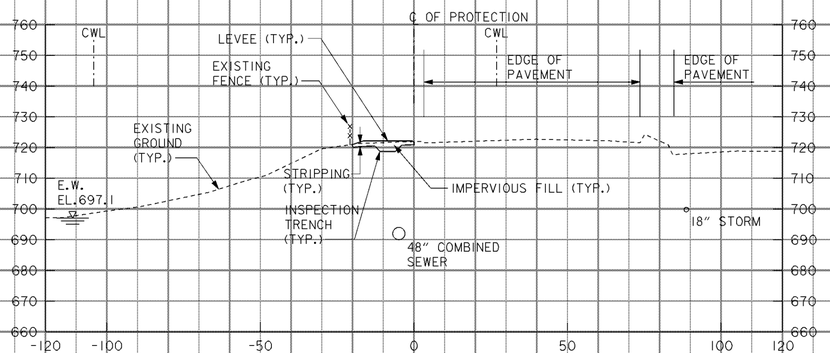
242+00



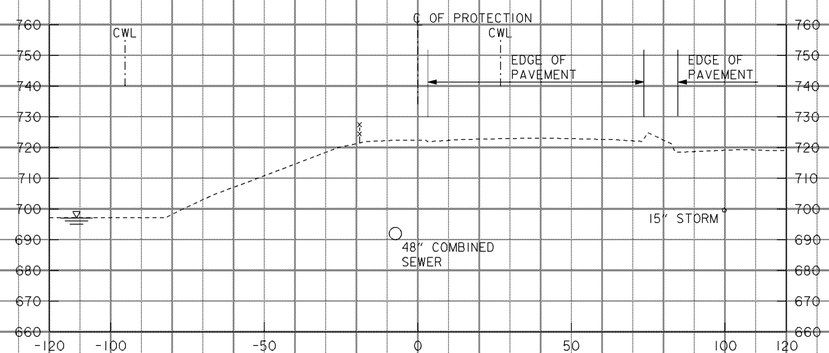
240+00



241+50



239+50



241+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL LEVEE SECTION SEE DRAWING NO. 20.3/1.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

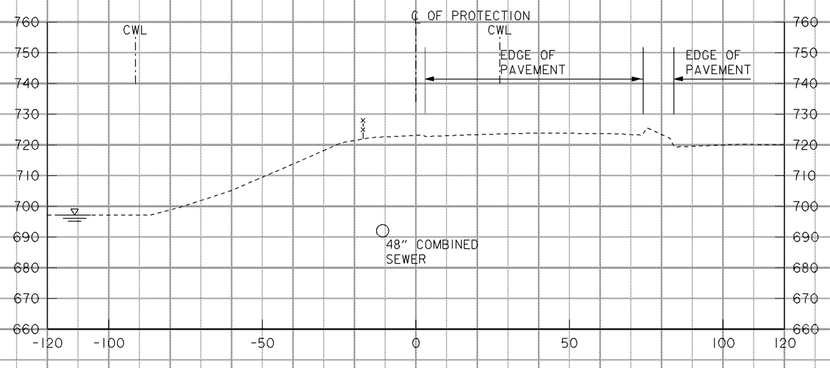
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

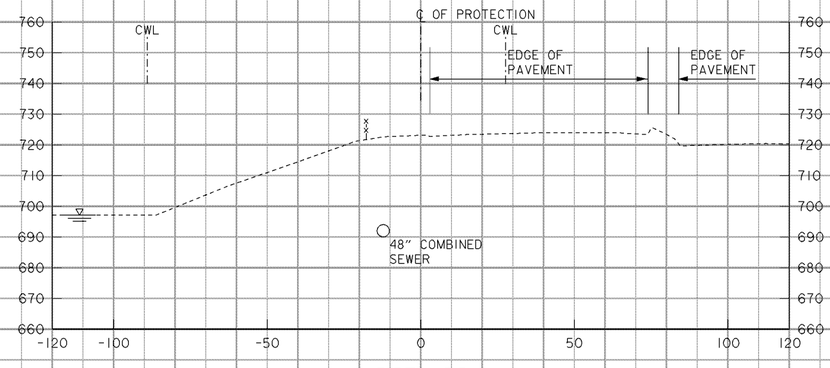
CROSS SECTIONS 239+50 TO 242+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/19
FILENAME: 00axxs09.dgn
PRN TABLE:
Sheet 9 of 17

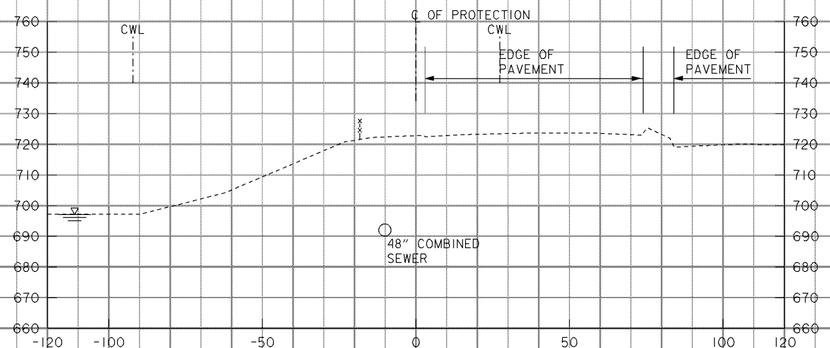
WORK AS CONSTRUCTED



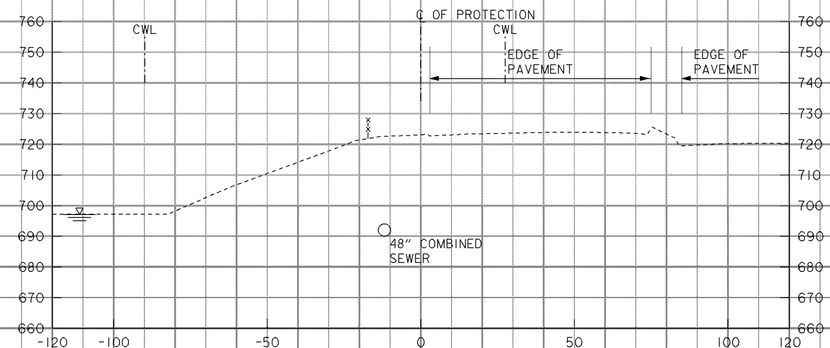
243+50



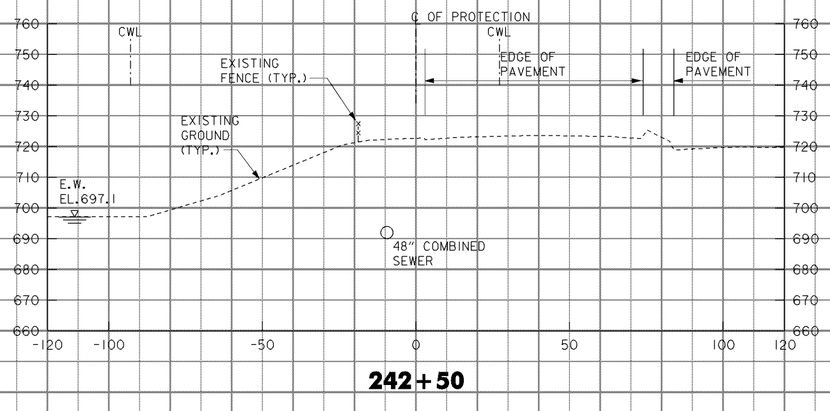
245+00



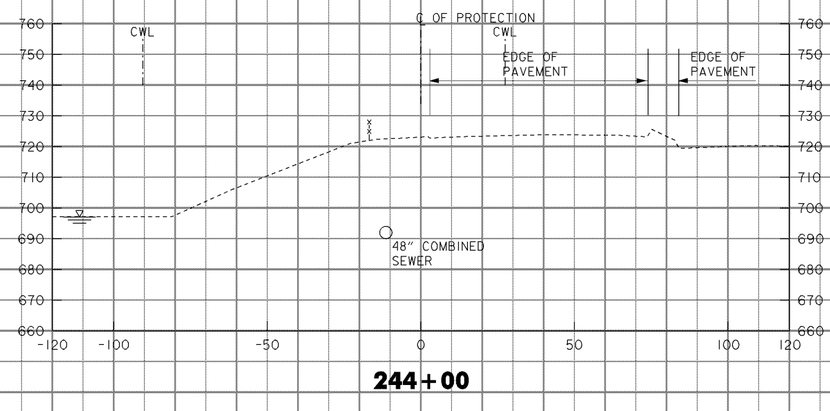
243+00



244+50



242+50



244+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

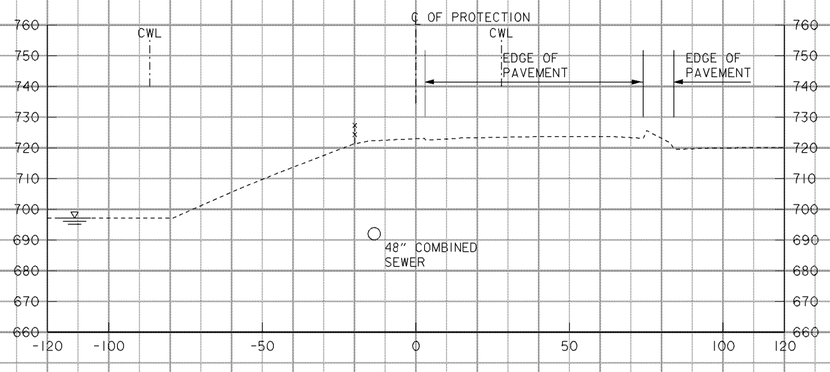
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

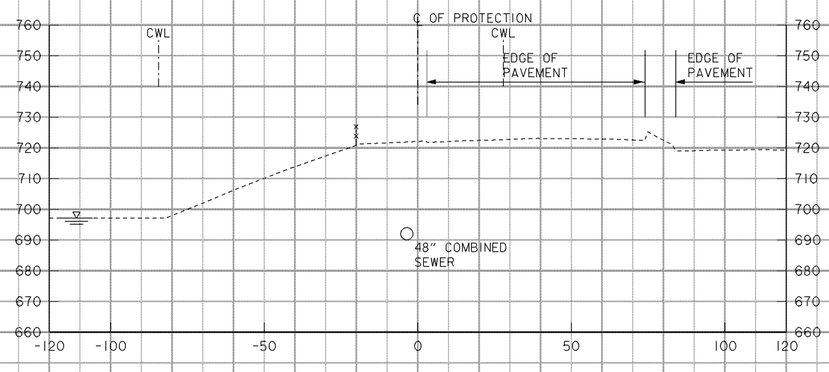
CROSS SECTIONS
242+50 TO 245+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/20
FILENAME: 00axxx10.dgn
PEN TABLE:
Sheet 10 of 17

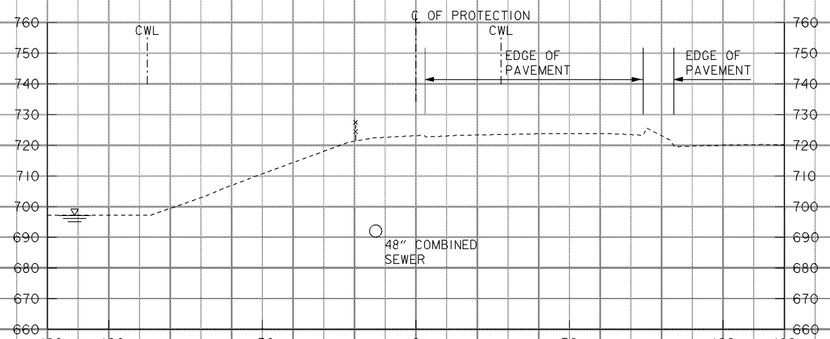
WORK AS CONSTRUCTED



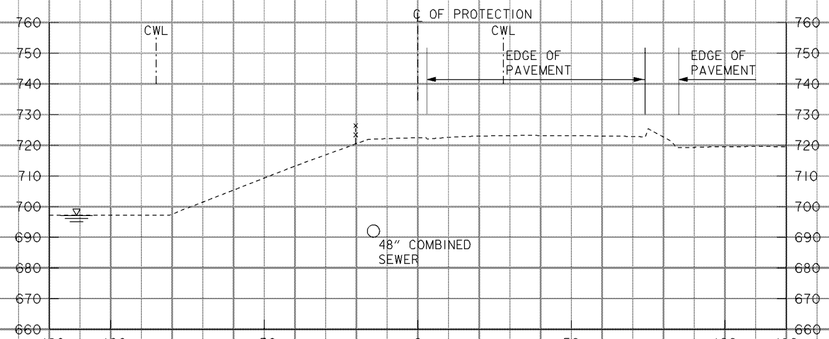
246+50



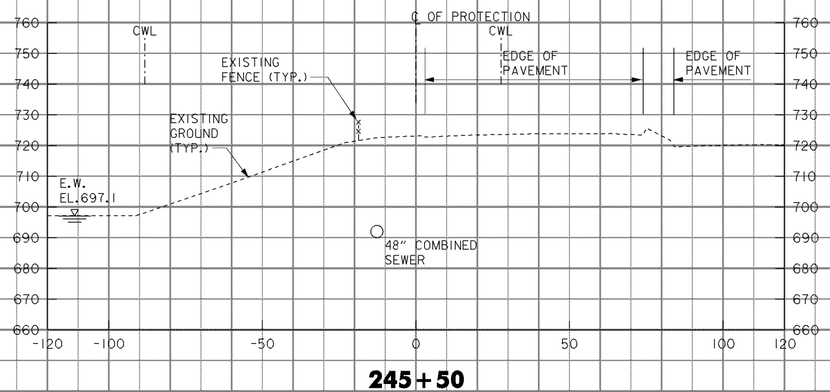
248+00



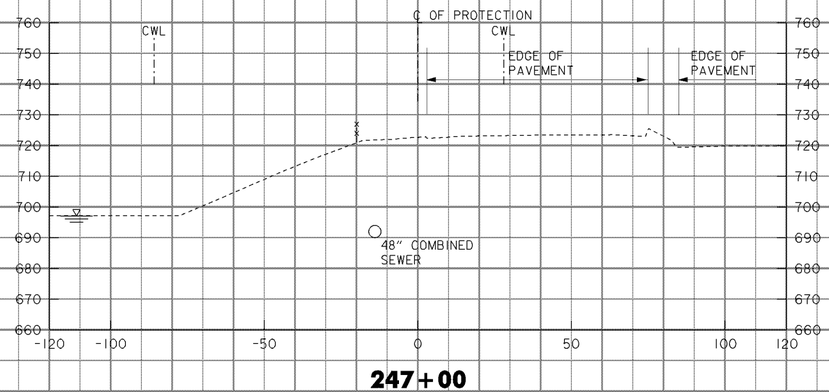
246+00



247+50



245+50



247+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

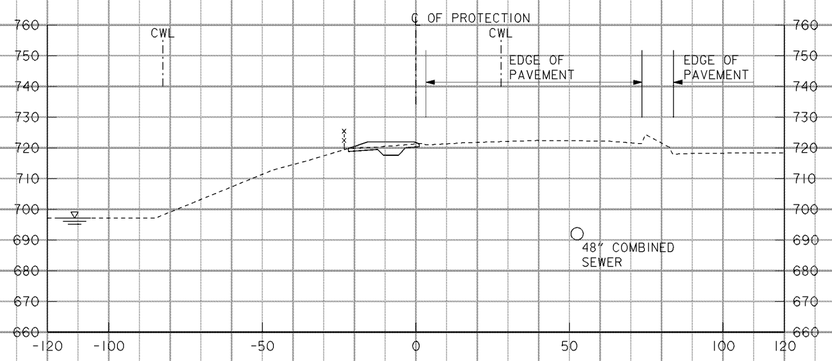
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

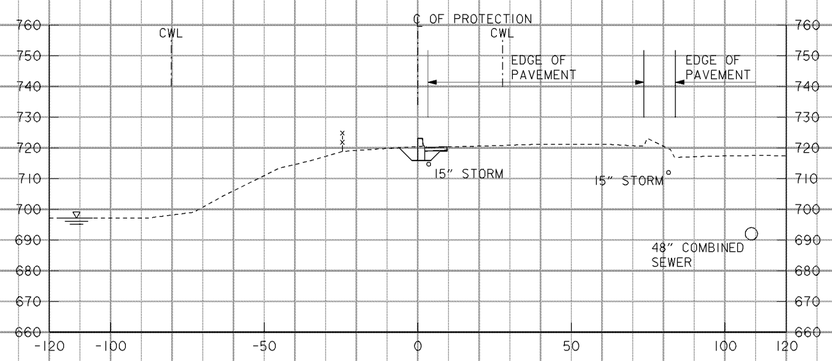
CROSS SECTIONS 245+50 TO 248+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/21
FILENAME: 00axxx11.dgn
PEN TABLE:
Sheet 11 of 17

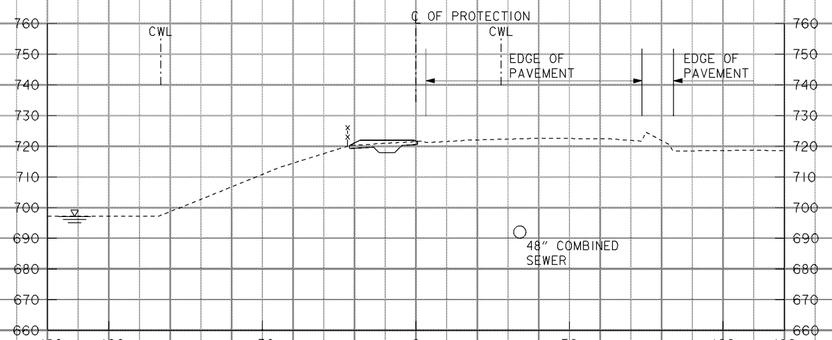
WORK AS CONSTRUCTED



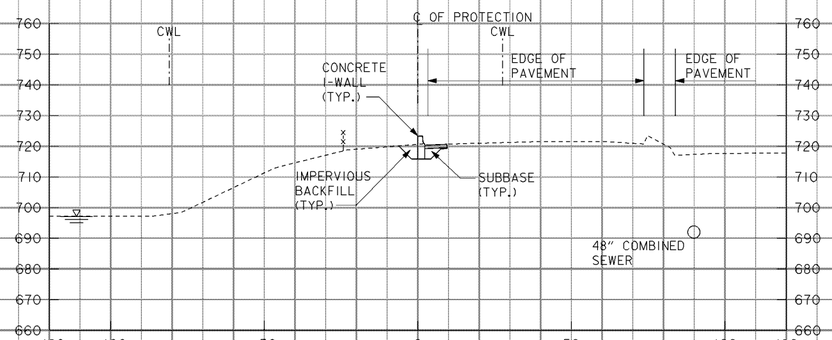
249+50



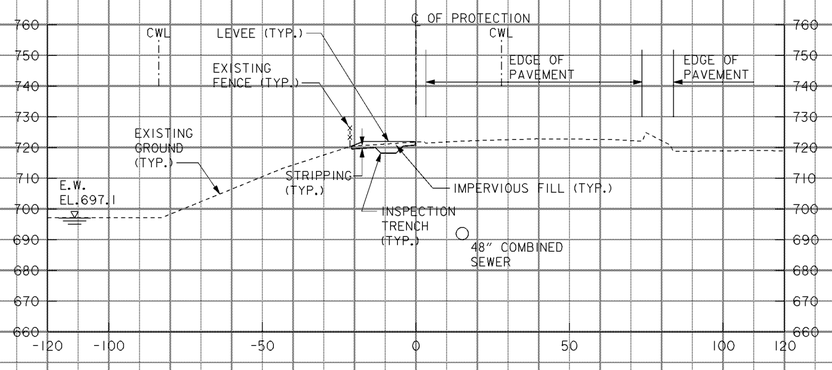
251+00



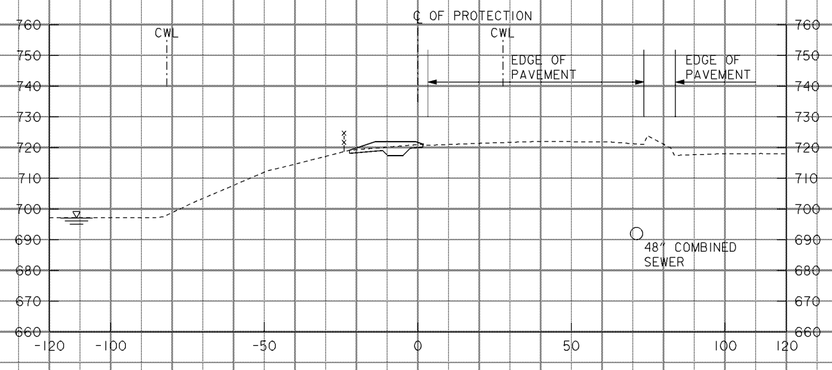
249+00



250+50



248+50



250+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL I-WALL AND LEVEE SECTIONS SEE DRAWING NO. 20.3/1.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

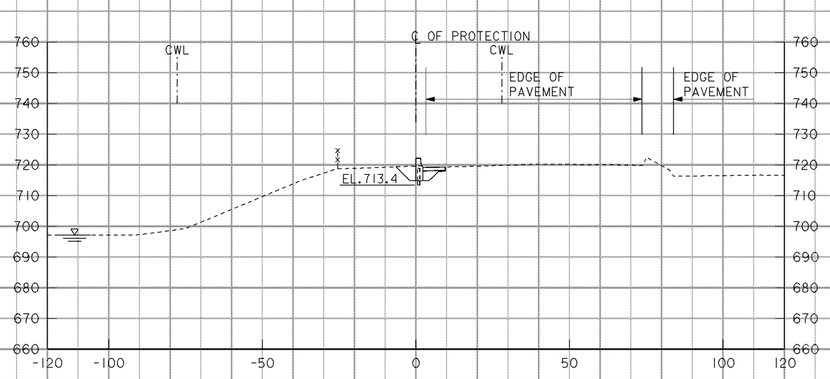
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

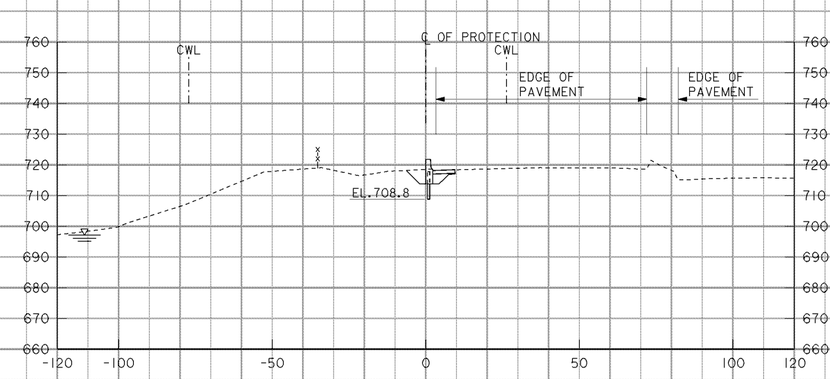
CROSS SECTIONS 248+50 TO 251+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/22
FILENAME: 00axxx12.dgn
PEN TABLE:
Sheet 12 of 17

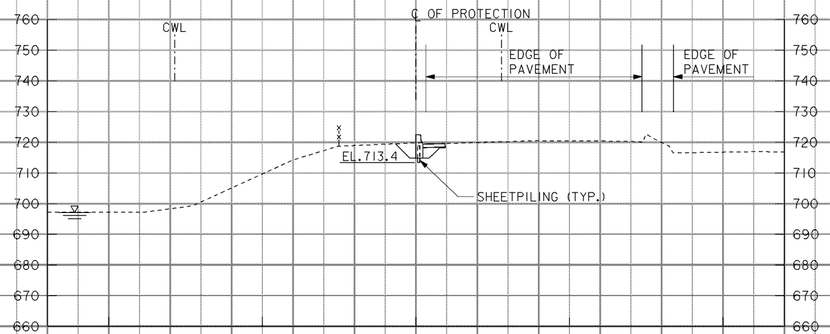
WORK AS CONSTRUCTED



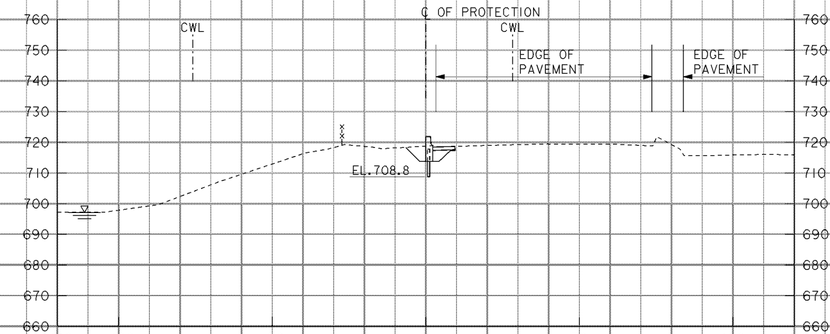
252+50



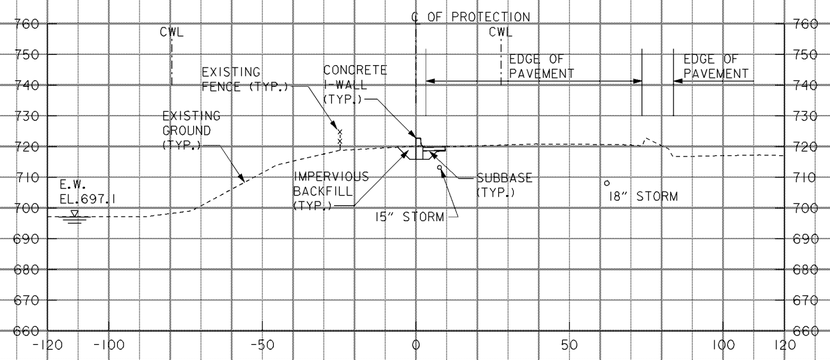
254+00



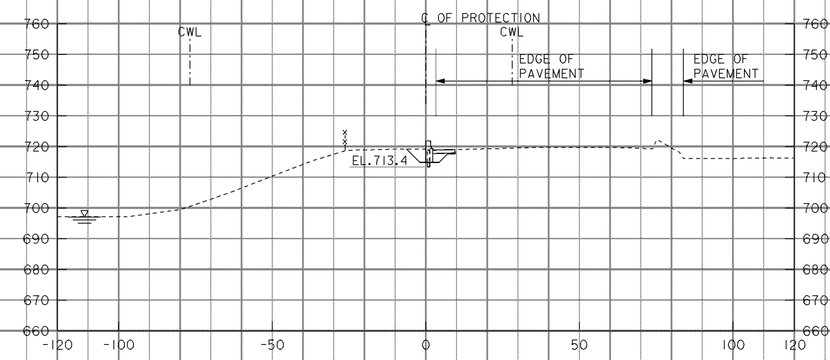
252+00



253+50



251+50



253+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO. 20.3/1.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

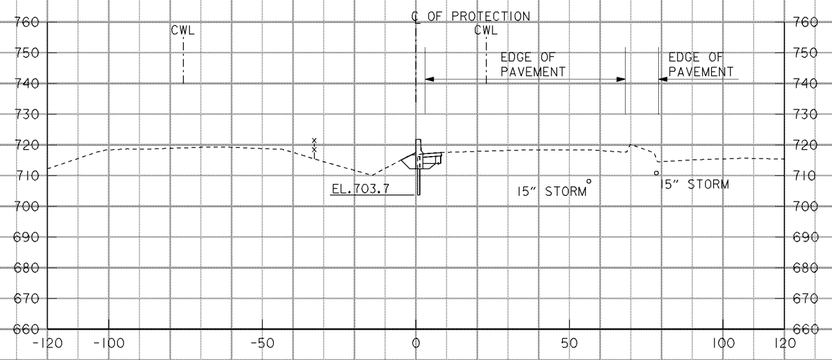
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

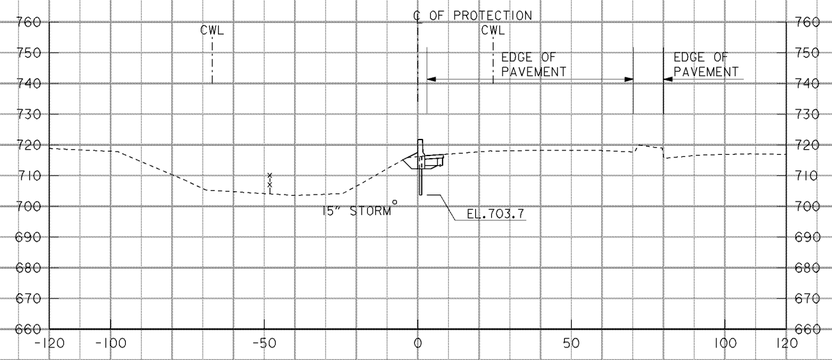
CROSS SECTIONS 251+50 TO 254+00

Designed by: J.HALL	Scale: AS SHOWN	Sheet reference number: 1623	FILENAME: 00axxx13.dgn
Drawn by: T.MULLINS	Date: OCTOBER 1999		PEN TABLE:
Checked by: P.CONROY	Drawing Code: 16-PWC-12-		Sheet 13 of 17
Reviewed by:			
Approved by:			

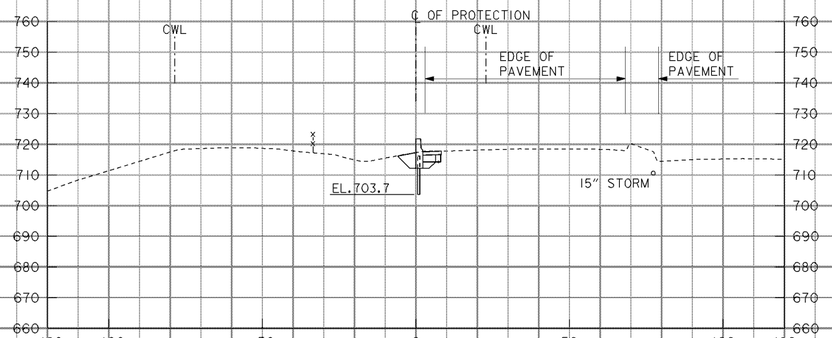
WORK AS CONSTRUCTED



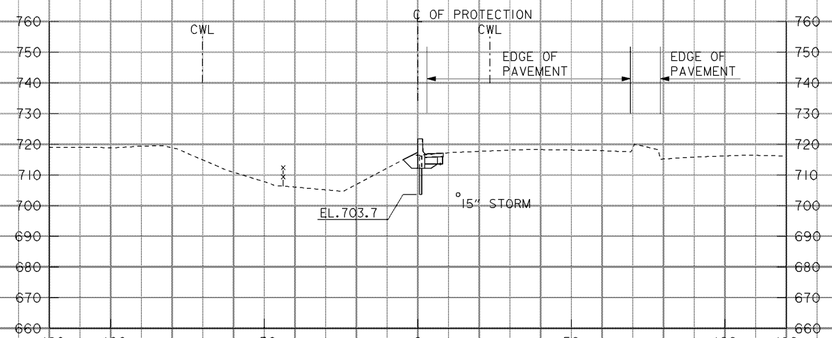
255+50



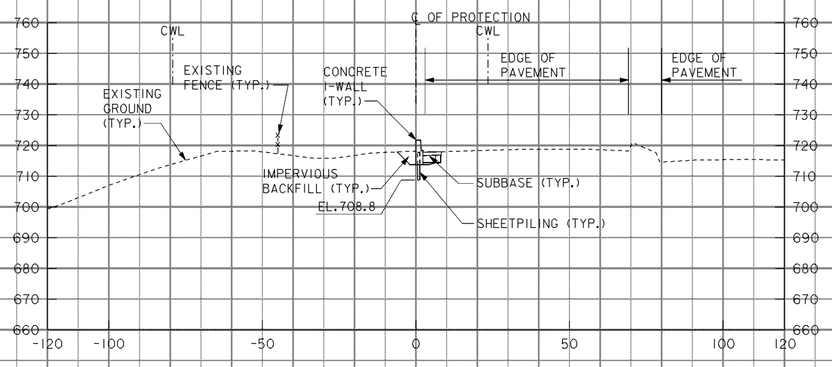
257+00



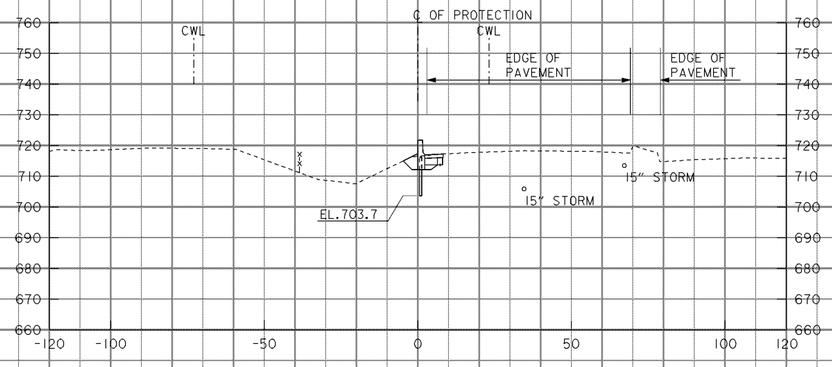
255+00



256+50



254+50



256+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO. 20.3/1.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

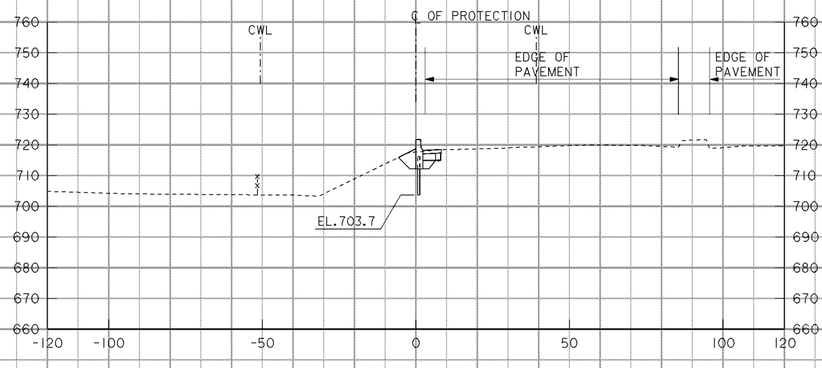
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

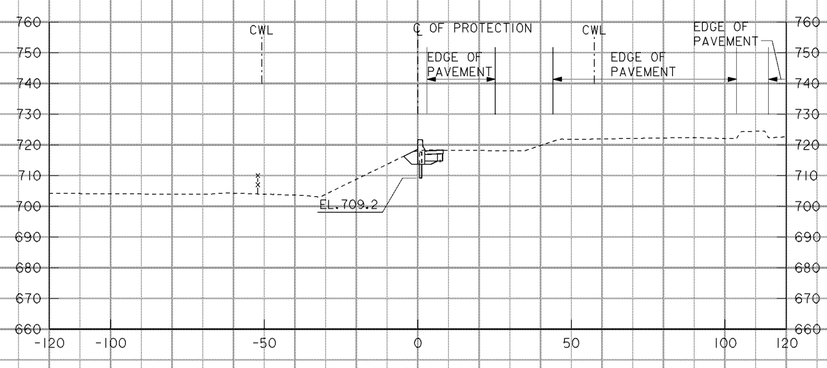
CROSS SECTIONS 254+50 TO 257+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 1624
FILENAME: 00axsx14.dgn
PEN TABLE:
Sheet 14 of 17

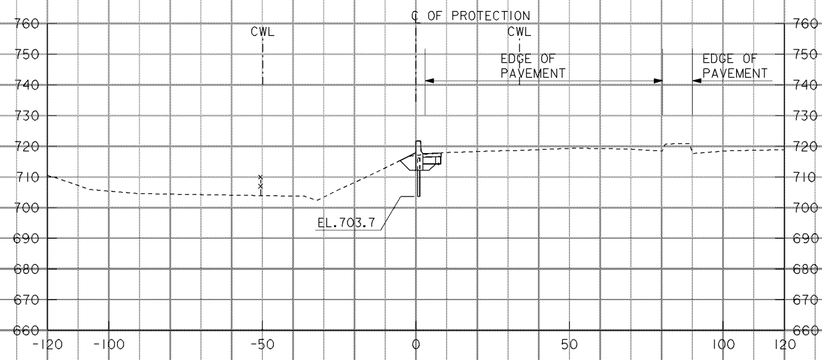
WORK AS CONSTRUCTED



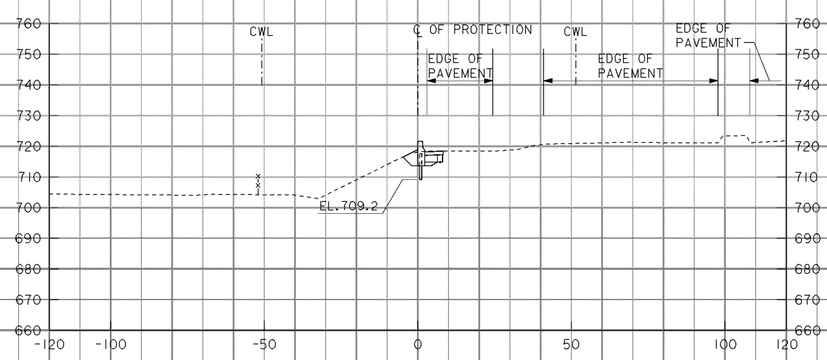
258+50



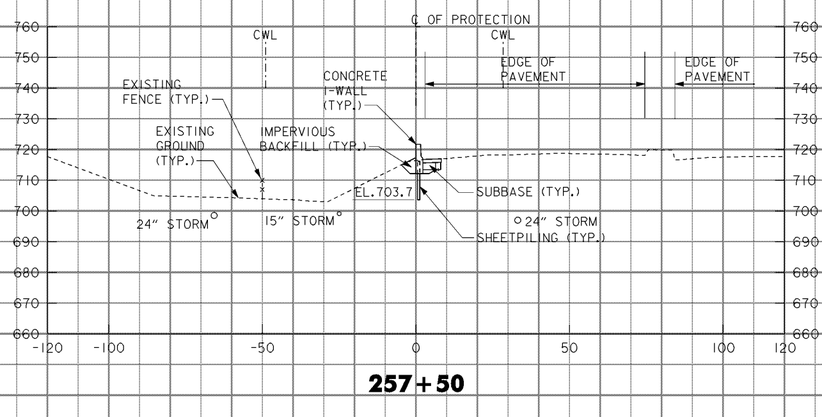
260+00



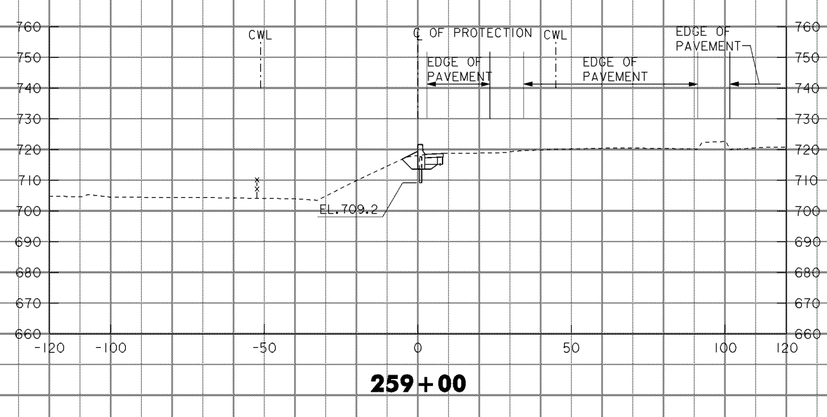
258+00



259+50



257+50



259+00

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO. 20.3/1.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

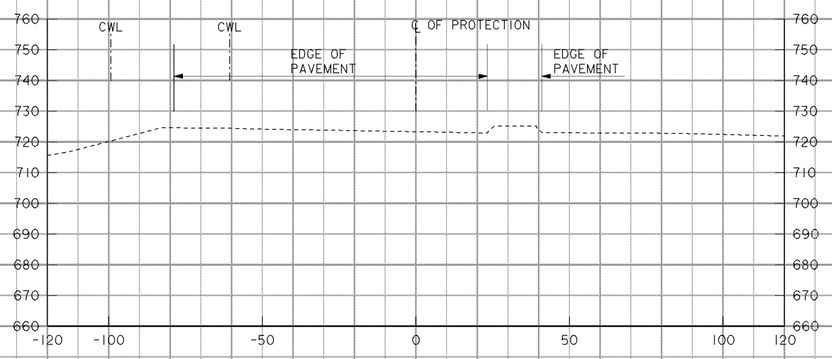
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

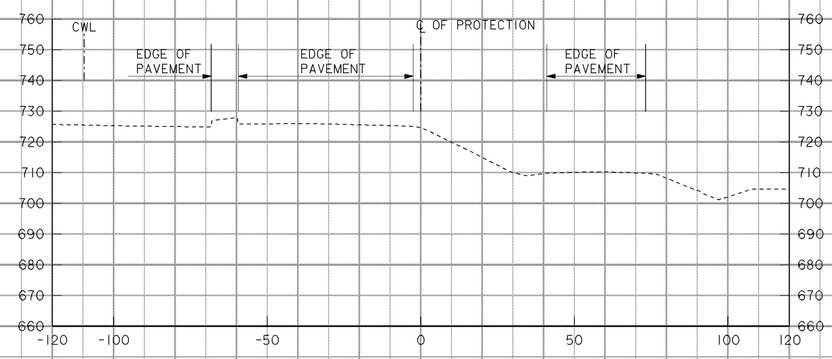
CROSS SECTIONS 257+50 TO 260+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 16/25
FILENAME: 00axxx15.dgn
PEN TABLE:
Sheet 15 of 17

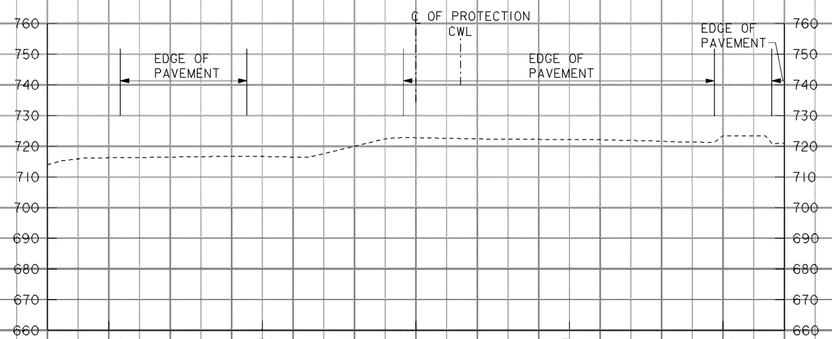
WORK AS CONSTRUCTED



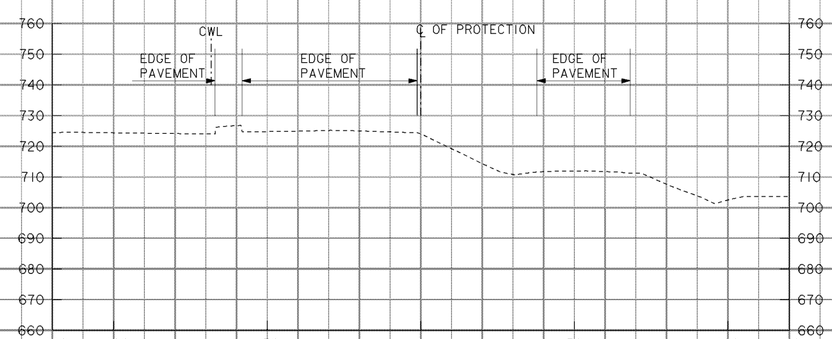
261+50



263+00



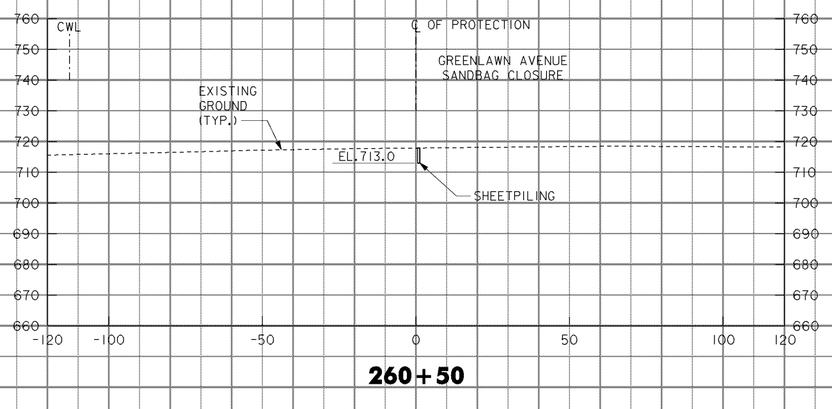
261+00



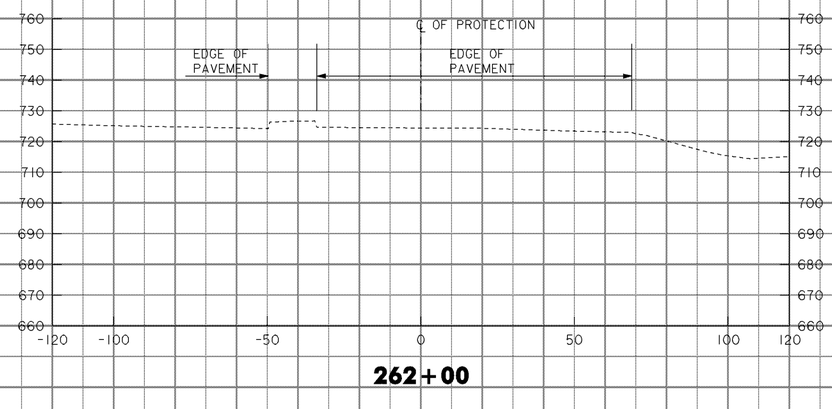
262+50

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS. 6/1 THRU 6/5.
2. FOR TYPICAL I-WALL SECTIONS SEE DRAWING NO. 20.3/1.



260+50



262+00

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

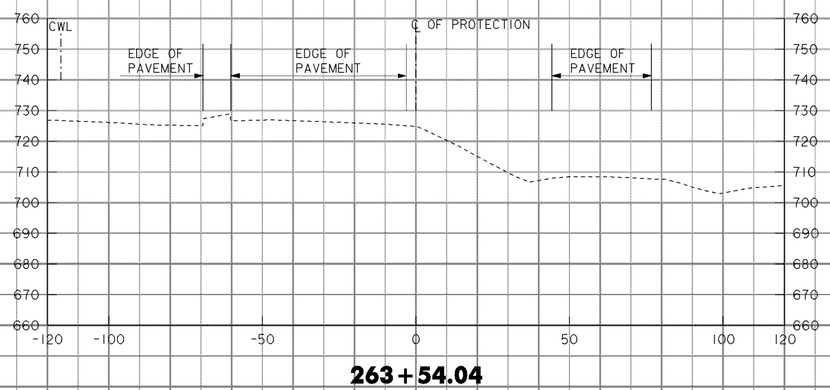
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

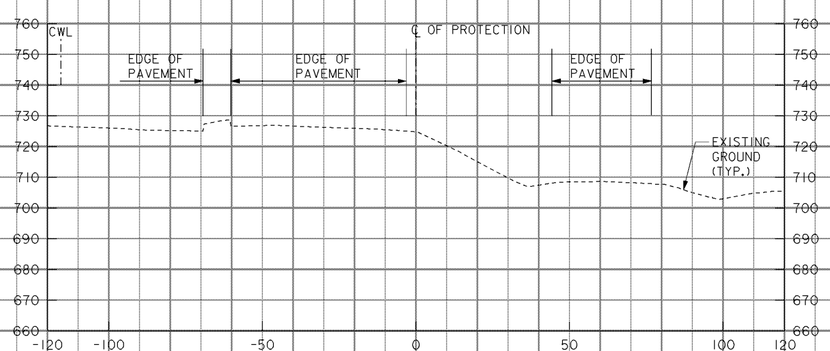
CROSS SECTIONS
260+50 TO 263+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 1626
FILENAME: 00axxx16.dgn
PEN TABLE:
Sheet 16 of 17

WORK AS CONSTRUCTED



263+54.04



263+50

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

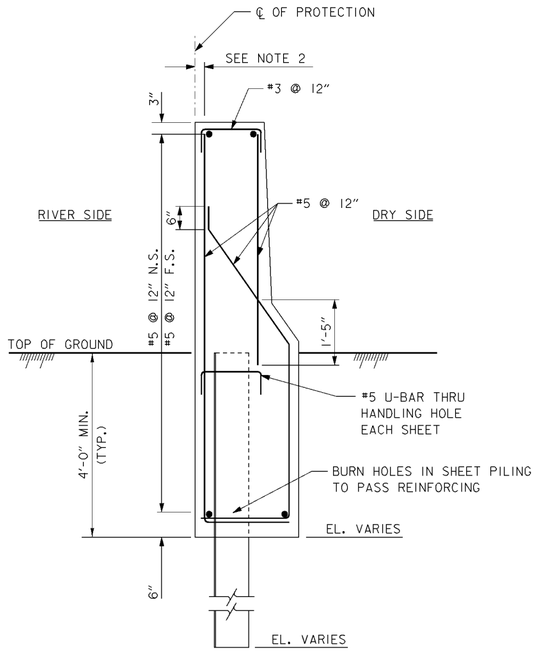
US Army Corps of Engineers

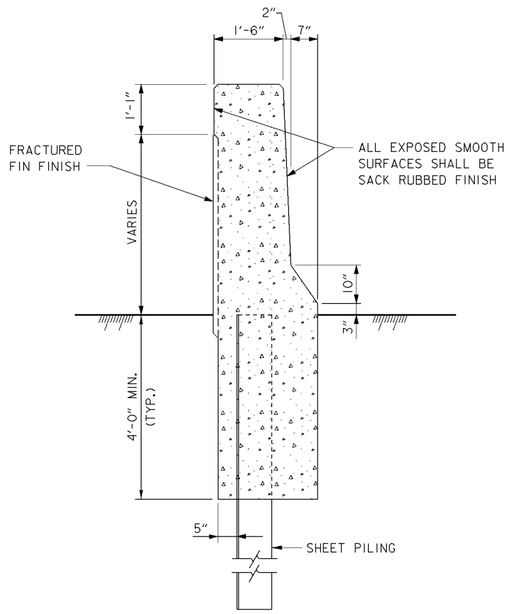
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

CROSS SECTIONS 263+50 TO 263+54.04

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 1627
FILENAME: 00axxx17.dgn
PEN TABLE:
Sheet 17 of 17

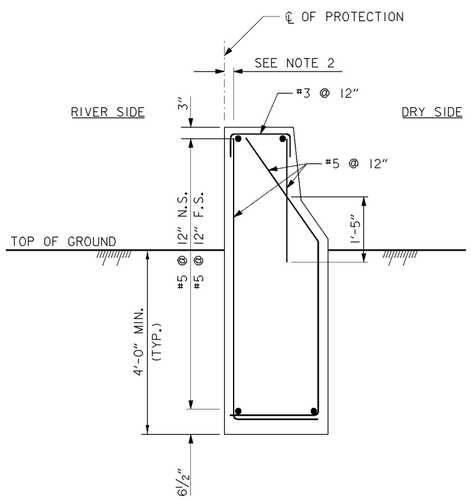
WORK AS CONSTRUCTED

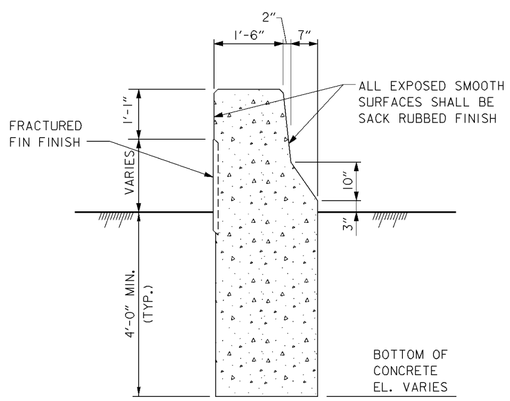




TYPICAL I-WALL WITH SHEET PILING

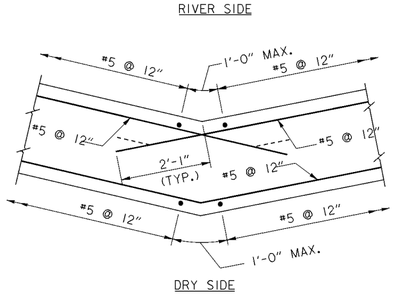
SCALE: 3/4" = 1'-0"
12" 6" 0 1' 2'





TYPICAL I-WALL WITHOUT SHEET PILING

SCALE: 3/4" = 1'-0"
12" 6" 0 1' 2'



NOTE:
INSIDE CORNER BARS ABOVE SHEET PILING EXTEND STRAIGHT. BAR BELOW TOP OF SHEET PILING HOOK AS SHOWN BY DASHED LINES, HOOK 1" CLR OF SHEETS.

TYPICAL CORNER MONOLITH

SCALE: 1 1/2" = 1'-0"
12" 9" 6" 3" 0 1'

NOTES

1. FOR STRUCTURAL GENERAL NOTES AND ADDITIONAL I-WALL DETAILS SEE DRAWING NO. 20.1/2.
2. PROVIDE 3-INCH COVER OVER "RIVER SIDE" RE-STEEL AS MEASURED FROM THE BACKSIDE OF THE VALLEY BETWEEN FRACTURED FINS.
3. FOR I-WALL TEXTURE DETAILS SEE DRAWING NO. 20.1/4.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: L.LINZELL
Drawn by: T.MULLINS
Checked by: D.TRAINA
Reviewed by:
Approved by:

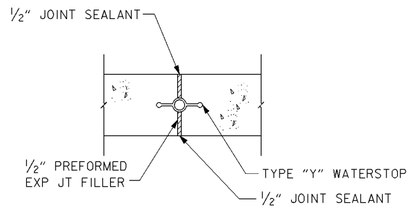
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

TYPICAL I-WALL DETAILS (1 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.1/1
FILENAME: PRN TABLE: 00addt01.dgn
Sheet 1 of 2

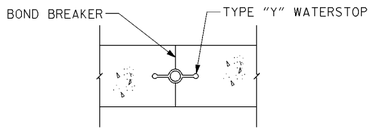
WORK AS CONSTRUCTED



TYPICAL TYPE "A" JOINT

W/O SHEET PILING

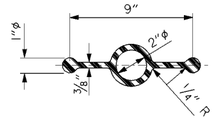
SCALE: 1" = 1'-0"



TYPICAL TYPE "B" JOINT

W/O SHEET PILING

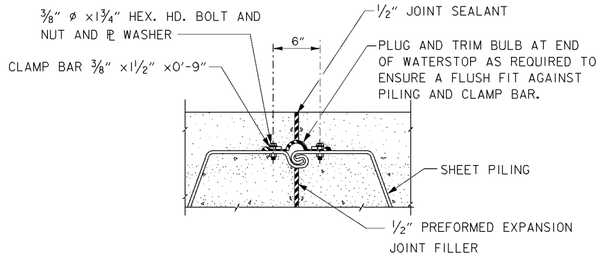
SCALE: 1" = 1'-0"



TYPE "Y" WATERSTOP (WS)

SCALE: 3" = 1'-0"

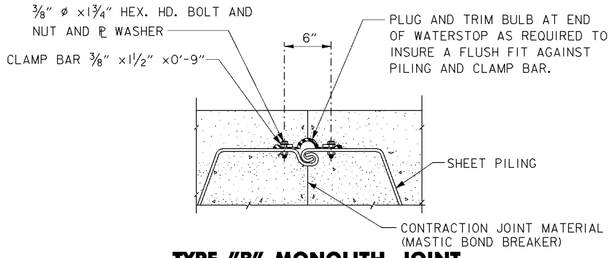
NOTE:
OPENINGS IN TOP OF ALL TYPE "Y" WATERSTOPS AND WHERE WATERSTOPS ARE CLAMPED TO SHEET PILING SHALL BE PLUGGED WITH SOFT RUBBER FOR A 2" MIN. DEPTH



TYPE "A" MONOLITH JOINT

W/ SHEET PILING

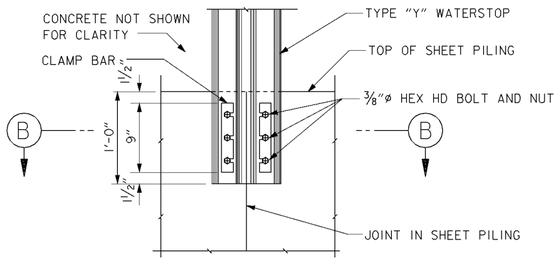
SCALE: 1 ½" = 1'-0"



TYPE "B" MONOLITH JOINT

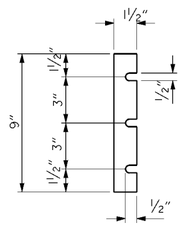
W/ SHEET PILING

SCALE: 1 ½" = 1'-0"



PILING WATERSTOP CONNECTION

SCALE: 1 ½" = 1'-0"



CLAMP BAR

SCALE: 3" = 1'-0"

STRUCTURAL GENERAL NOTES

1. PROVIDE 1" CHAMFER ON ALL EXPOSED EDGES OR CORNERS UNLESS OTHERWISE SHOWN.
2. UNLESS OTHERWISE SHOWN OR DIRECTED, BAR BENDING DETAILS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICAN CONCRETE INSTITUTE.
3. THE CLEAR DISTANCE BETWEEN THE FACE OF THE CONCRETE AND THE (BOTTOM OF TEXTURED FINISH) SURFACE OF THE MAIN REINFORCING STEEL SHALL BE 4" UNLESS OTHERWISE SHOWN.
4. REINFORCING STEEL MAY BE SPLICED IN PLACES OTHER THAN SHOWN FOR CONSTRUCTION PURPOSES, SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER.
5. ABBREVIATIONS:

B - BOTTOM	CLR. - CLEAR
T - TOP	C.J. - CONSTRUCTION JOINT
E.F. - EACH FACE	CONTR. JT. - CONTRACTION JOINT
E.W. - EACH WAY	CL. - CLEARANCE
EA. - EACH	TYP. - TYPICAL
EJFS - PREFORMED EXPANSION JOINT FILLER	MK. - MARK
	WS. - WATERSTOP
LLH - LONG LEG HORIZONTAL	H - HORIZONTAL
LLV - LONG LEG VERTICAL	V - VERTICAL

6. CUT AND HOOK HORIZONTAL AND VERTICAL BARS AT OPENINGS.
7. ALL REINFORCING STEEL SHALL BE ASTM A615 GRADE 60.
8. ALL SPLICES SHALL BE CLASS B UNLESS OTHERWISE SHOWN. CLASS B SPLICE LENGTH SHALL BE 1.3 TIMES THE DEVELOPMENT LENGTH GIVEN IN THE TABLE BELOW.
9. DEVELOPMENT LENGTHS UNLESS OTHERWISE SHOWN OR DIRECTED SHALL BE AS FOLLOWS:

BAR SIZE	DEVELOPMENT LENGTH (L_d) INCHES *	
	TOP BARS **	OTHERS
3	13	12
4	18	14
5	22	17
6	26	20
7	38	29
8	43	33
9	49	38
10	55	42
11	61	47

* PLUS CLEARANCE

** TOP HORIZONTAL SLAB AND FOUNDATION BARS WITH MORE THAN 12" OF FRESH CONCRETE BELOW THE BARS.

10. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (f'c) OF 3,000 P.S.I. AT 28 DAYS, UNLESS OTHERWISE NOTED.
11. TO FACILITATE CONSTRUCTION, HORIZONTAL STEM REINFORCEMENT IN FLOODWALL MONOLITHS MAY BE PLACED ON EITHER SIDE OF VERTICAL REINFORCEMENT PROVIDED THE REQUIRED CONCRETE COVER ON THE VERTICAL REINFORCING BARS IS MAINTAINED.
12. ALL WELDING SHALL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE D1.1 OR D1.2.
13. UNLESS OTHERWISE NOTED, ALL ITEMS NOTED C.R.S. SHALL BE CORROSION RESISTANT STEEL.
14. ALL DOWEL BAR SUBSTITUTES SHALL BE LENTON FORM SAVER BY ERICO OR EQUAL.
15. ALL GROUT SHALL BE NONSHRINK, NON-METALLIC, NONSTAINING, CAPABLE OF DEVELOPING A MINIMUM COMPRESSIVE STRENGTH OF 6000 PSI AT 28 DAYS. THE GROUT SHALL CONFORM TO ASTM C1107 OR CRD-C621 AND INSTALLED AS PER THE MANUFACTURER'S RECOMMENDATIONS. ALL DRILLED HOLES SHALL BE DONE USING A ROTARY PERCUSSION DRILL.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: L.LINZELL
Drawn by: T.MULLINS
Checked by: D.TRAINA
Reviewed by:
Approved by:

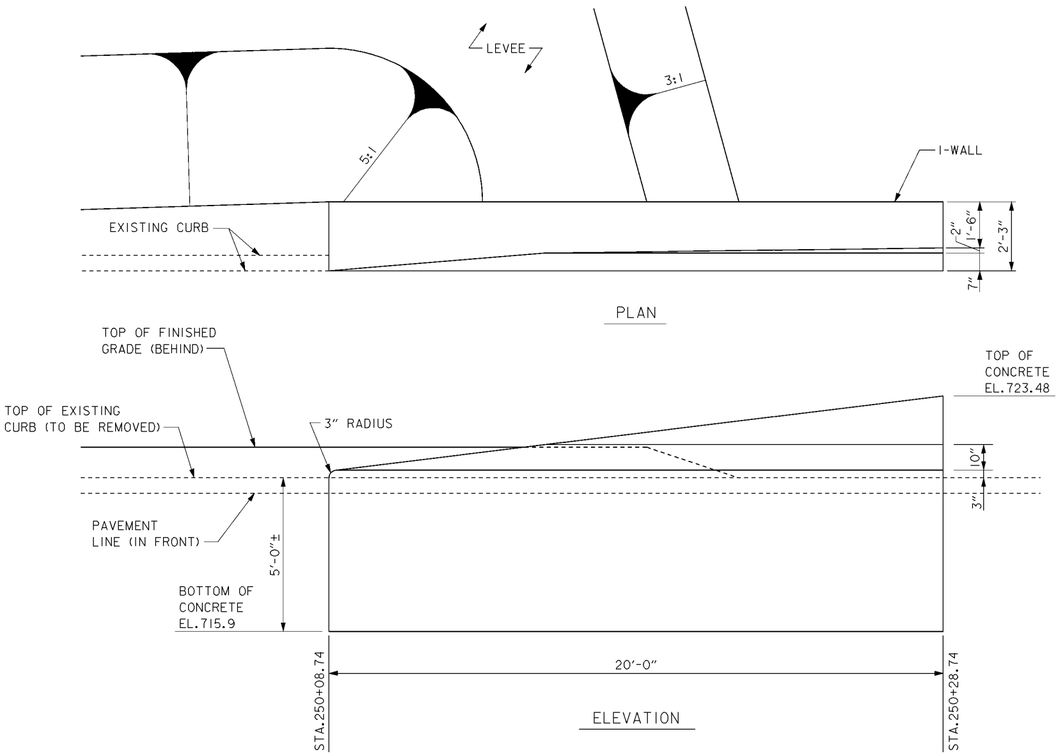
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

TYPICAL I-WALL DETAILS (2 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.1/2
FILENAME: 00add02.dgn
PEN TABLE:
Sheet 2 of 2

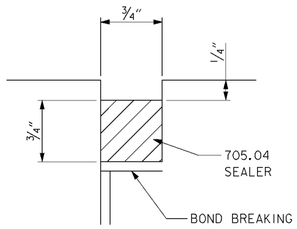
WORK AS CONSTRUCTED



TAPERED END

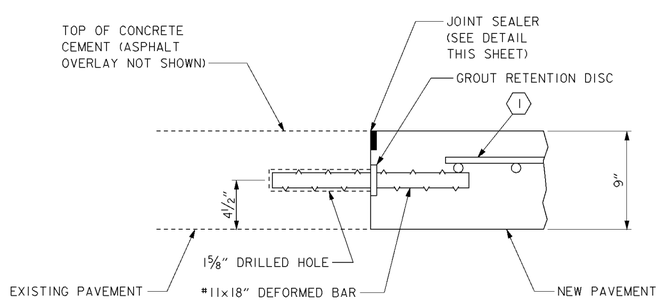
STA. 250+08.74 TO 250+28.74

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



JOINT SEALER DETAIL

SCALE: NONE

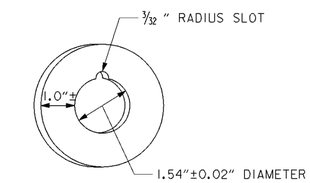


NOTE: TYPE "Y" JOINT SIMILAR WITH SMOOTH 1 1/2"ø x 18" DOWEL. SMOOTH DOWEL TO BE COATED WITH "BOND BREAKING" MATERIAL AFTER INSTALLED IN EXISTING PAVEMENT JUST PRIOR TO PLACING PATCH.

SECTION - TYPE T

(TIED)

SCALE: NONE

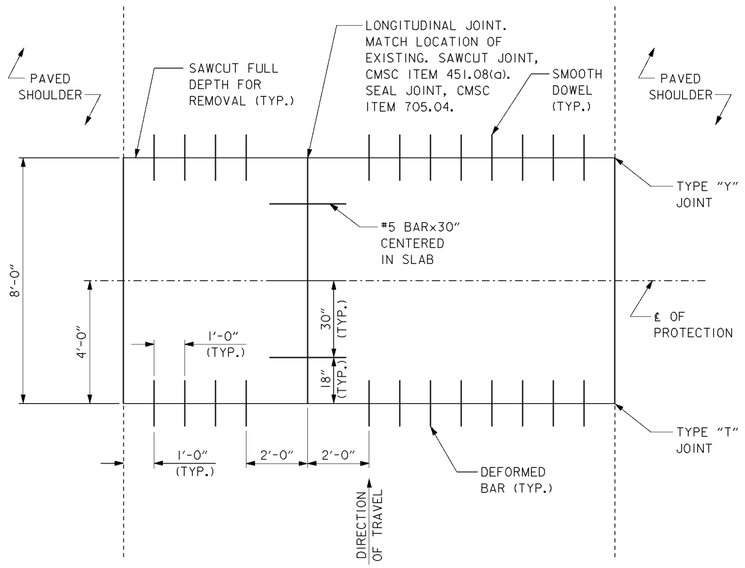


NYLON OR PLASTIC GROUT RETENTION DISCS FOR DOWEL/TIE BARS

(1/16" MIN. THICKNESS, CLEAR IN COLOR)

SCALE: NONE

(1) WELDED WIRE FABRIC FABRIC SHALL CONSIST OF W8.5 OR D8.5 LONGITUDINAL WIRES SPACED 6" C/C AND W4 OR D4 TRANSVERSE WIRES SPACED 12" C/C, FLAT SHEETS. THE CLEARANCE FROM THE END OF THE WIRE FABRIC TO THE EDGE OF PAVEMENT, NEW LONGITUDINAL JOINT, OR EDGES OF REPLACEMENT SHALL BE 4"±2".



DOWEL BAR PLACEMENT DETAIL PORTLAND CEMENT CONCRETE PAVEMENT REPLACEMENT

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

NOTES

1. SEE DRAWING NO. 20.2/1 FOR LOCATION OF PAVEMENT REPLACEMENT AT GREENLAWN AVENUE SANDBAG CLOSURE.

GREENLAWN AVENUE ON-RAMP PAVEMENT REPLACEMENT DETAILS

Revisions			
Symbol	Description	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

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Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

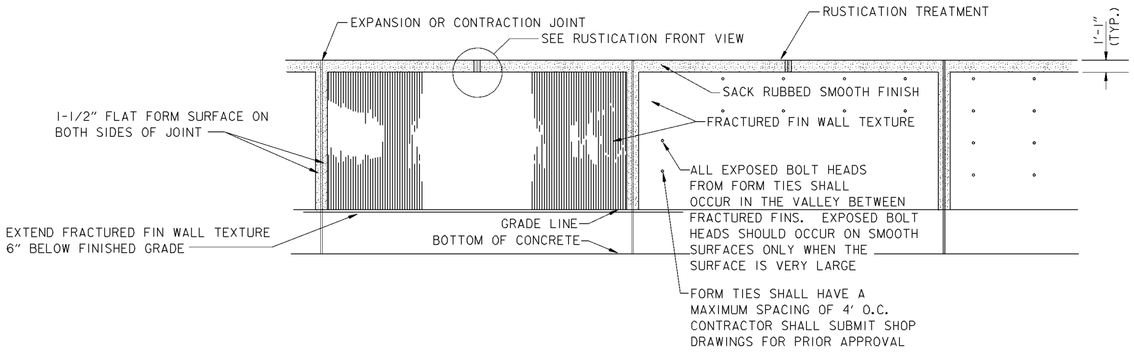
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

MISCELLANEOUS DETAILS

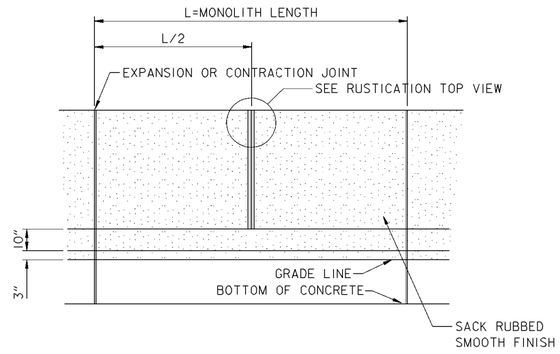
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.1/3
FILENAME: PEN TABLE: 00sddt03.dgn
Sheet 1 of 1

WORK AS CONSTRUCTED



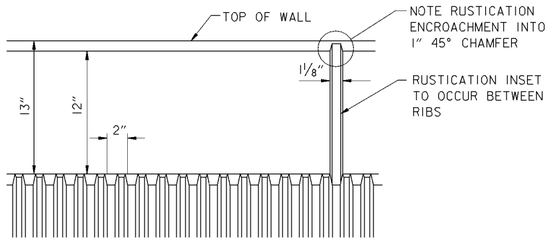
TYPICAL WALL TEXTURE (RIVER SIDE)

SCALE: NONE



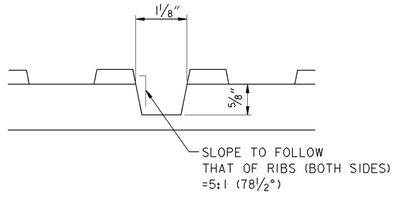
TYPICAL WALL TEXTURE (DRY SIDE)

SCALE: NONE



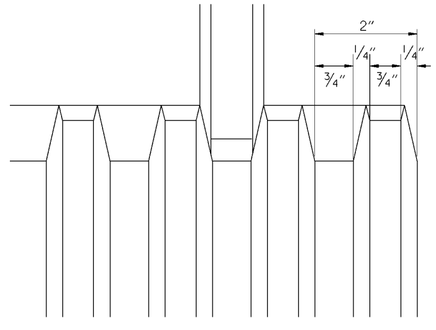
RUSTICATION TREATMENT–FRONT VIEW

SCALE: NONE



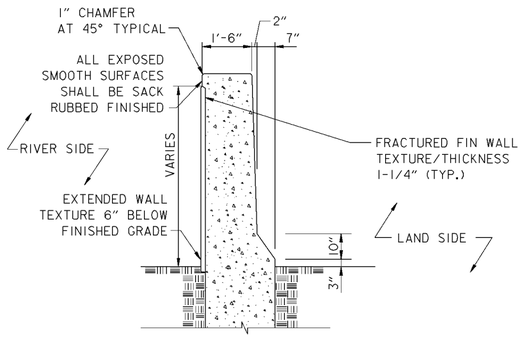
RUSTICATION TREATMENT–TOP VIEW

SCALE: NONE



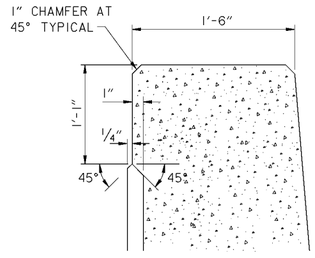
FIN/CAP JUNCTION DETAIL

SCALE: NONE



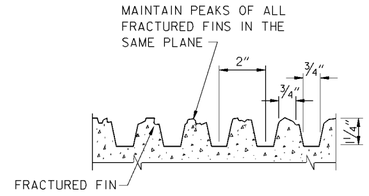
TYPICAL FLOODWALL SECTION

SCALE: NONE



TYPICAL CAP DETAIL

SCALE: NONE



TYPICAL FRACTURED FIN WALL TEXTURE

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

12" 0 2' 4' 6'

NOTES

1. WALL TEXTURE SHALL NOT ENCROACH ON CONCRETE COVER OF REINFORCEMENT.
2. RUSTICATION TREATMENTS SHOULD OCCUR AT THE CENTER POINTS OF EVERY WALL MONOLITH.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: A.PUMMELL
Checked by: R.OMAN
Reviewed by:
Approved by:

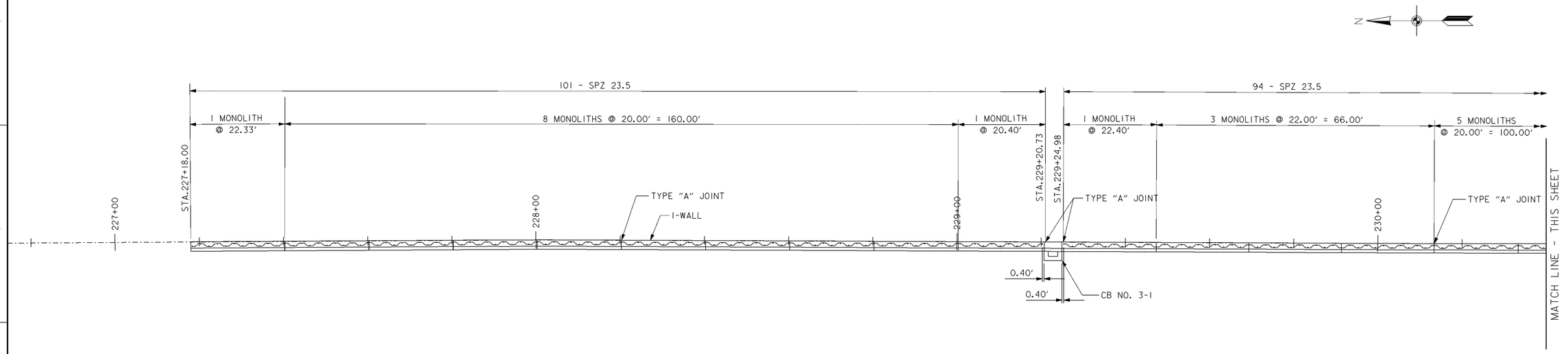
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

FLOODWALL TEXTURE DETAILS

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.1/4
FILENAME: 00wld101.dgn
PEN TABLE:
Sheet 1 of 1

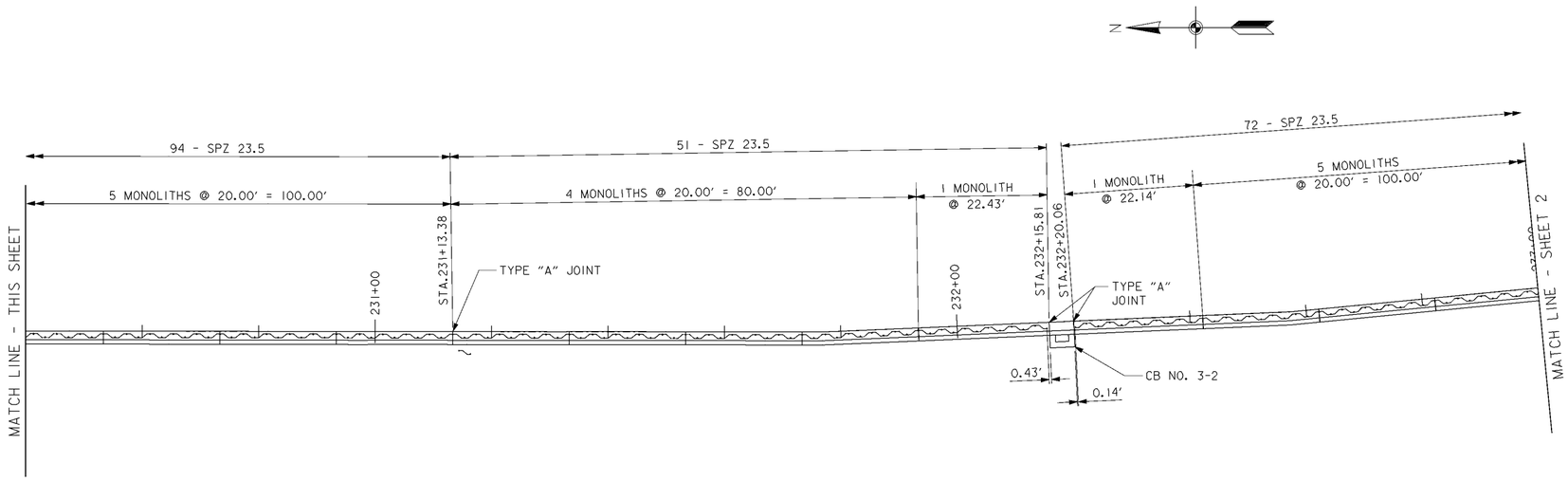
WORK AS CONSTRUCTED



PLAN (2)
SCALE: 1" = 10'
10' 0 10'

NOTES

1. TYPE "A" JOINTS ARE REQUIRED AT CATCH BASINS AND WHERE SHOWN.
2. FOR TYPE AND LOCATIONS OF MONOLITH JOINTS SEE TABLE ON DRAWING NO. 20.1/6.
3. FOR TYPE "A" AND TYPE "B" MONOLITH JOINT DETAILS SEE DRAWING NO. 20.1/2.
4. ALL CONCRETE MONOLITH JOINTS SHALL ALIGN WITH SHEET PILING JOINTS.
5. FOR WATERSTOP SHEET PILING CONNECTION AND CLAMP BAR DETAILS SEE DRAWING NO. 20.1/2.
6. FOR CORNER MONOLITH REINFORCING SEE DRAWING NO. 20.1/1.
7. SHEET PILING LAYOUT WAS BASED UPON THE PROPERTIES FOR SPZ-23.5 COLD-ROLLED STEEL SHEET PILING BY SYRO, INC. OTHER MANUFACTURERS OF STEEL SHEET PILING ARE ACCEPTABLE IF THEY MEET THE MINIMUM SECTION PROPERTIES OF Z-TYPE SHEET PILING GIVEN IN SPECIFICATION 02411. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL REVISED WALL MONOLITH JOINT SPACING THAT IS MODULAR WITH WIDTH OF THE PILES PROVIDED.
8. WALL MONOLITHS SHALL NOT EXCEED 22 FEET UNLESS NOTED OR APPROVED BY THE CONTRACTING OFFICER. THE DISTANCE BETWEEN TYPE "A" JOINTS SHALL NOT EXCEED 111 FEET.



PLAN (2)
SCALE: 1" = 10'
10' 0 10'

Revisions			
Symbol	Descriptions	Date	Approved
2	REV. IN ACCORDANCE WITH MODIFICATION MC003	5/17/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: L.LINZELL
Reviewed by:
Approved by:

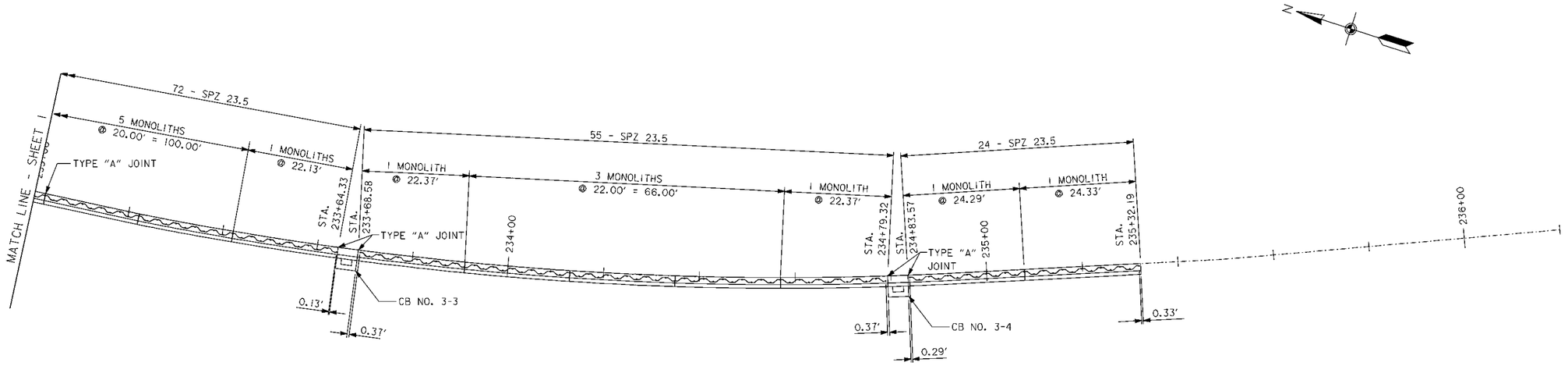
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

FLOODWALL PLAN
STA.227+00 TO 233+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.1/5
FILENAME: 00eppa01.dgn
PEN TABLE:
Sheet 1 of 4

WORK AS CONSTRUCTED



PLAN
SCALE: 1" = 10'

WALL JOINTS

STATION	TYPE	STATION	TYPE
227+40.33	B	232+20.06	A
227+60.33	B	232+42.20	B
227+80.33	B	232+62.20	B
227+00.33	B	232+82.20	B
228+20.33	A	233+02.20	A
228+40.33	B	233+22.20	B
228+60.33	B	233+42.20	B
228+80.33	B	233+64.33	A
229+00.33	B	233+68.58	A
229+20.73	A	233+90.95	B
229+24.98	A	234+12.95	B
229+47.38	B	234+34.95	B
229+69.38	B	234+56.95	B
229+91.38	B	234+79.32	A
230+13.38	A	234+83.57	A
230+33.38	B	235+07.86	B
230+53.38	B		
230+73.38	B		
230+93.38	B		
231+13.38	A		
231+33.38	B		
231+53.38	B		
231+73.38	B		
231+93.38	B		
232+15.81	A		

NOTES

1. TYPE "A" JOINTS ARE REQUIRED AT CATCH BASINS AND WHERE SHOWN.
2. FOR TYPE AND LOCATIONS OF MONOLITH JOINTS SEE TABLE ON THIS DRAWING.
3. FOR TYPE "A" AND TYPE "B" MONOLITH JOINT DETAILS SEE DRAWING NO. 20.1/2.
4. ALL CONCRETE MONOLITH JOINTS SHALL ALIGN WITH SHEET PILING JOINTS.
5. FOR WATERSTOP SHEET PILING CONNECTION AND CLAMP BAR DETAILS SEE DRAWING NO. 20.1/2.
6. FOR CORNER MONOLITH REINFORCING SEE DRAWING NO. 20.1/1.
7. SHEET PILING LAYOUT WAS BASED UPON THE PROPERTIES FOR SPZ-23.5 COLD-ROLLED STEEL SHEET PILING BY SYRO, INC. OTHER MANUFACTURERS OF STEEL SHEET PILING ARE ACCEPTABLE IF THEY MEET THE MINIMUM SECTION PROPERTIES OF Z-TYPE SHEET PILING GIVEN IN SPECIFICATION 02411. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL REVISED WALL MONOLITH JOINT SPACING THAT IS MODULAR WITH WIDTH OF THE PILES PROVIDED.
8. WALL MONOLITHS SHALL NOT EXCEED 22 FEET UNLESS NOTED OR APPROVED BY THE CONTRACTING OFFICER. THE DISTANCE BETWEEN TYPE "A" JOINTS SHALL NOT EXCEED 111 FEET.

Revisions			
Symbol	Descriptions	Date	Approved
2	REV. IN ACCORDANCE WITH MODIFICATION MC003	5/17/00	P.O.C.
1	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: L.LINZELL
Reviewed by:
Approved by:

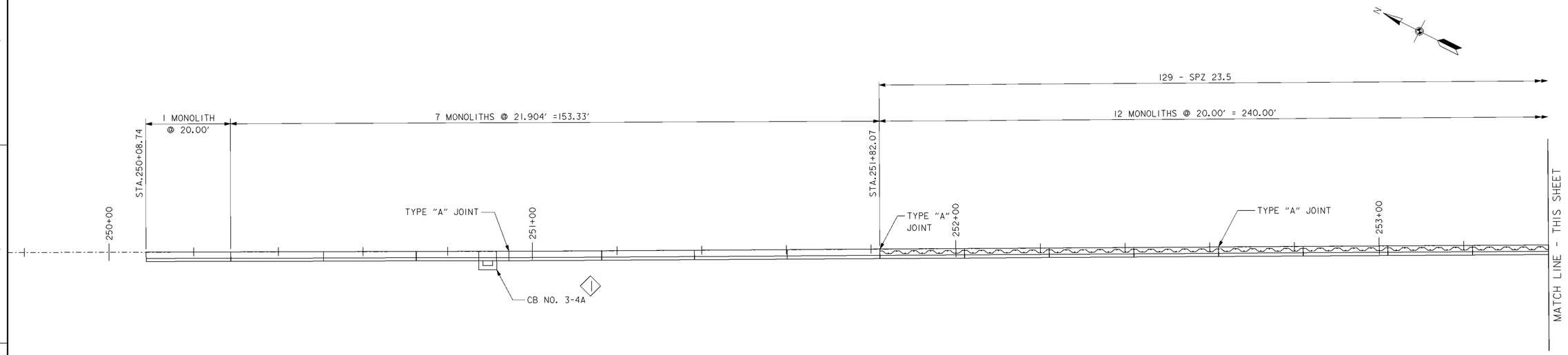
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

FLOODWALL PLAN
STA.233+00 TO 237+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.1/6
FILENAME: 00appa02.dgn
PEN TABLE:
Sheet 2 of 4

WORK AS CONSTRUCTED



PLAN
SCALE: 1" = 10'
10' 0 10'

NOTES

1. TYPE "A" JOINTS ARE REQUIRED AT CATCH BASINS AND WHERE SHOWN.
2. FOR TYPE AND LOCATIONS OF MONOLITH JOINTS SEE TABLE ON DRAWING NO. 20.1/8.
3. FOR TYPE "A" AND TYPE "B" MONOLITH JOINT DETAILS SEE DRAWING NO. 20.1/2.
4. ALL CONCRETE MONOLITH JOINTS SHALL ALIGN WITH SHEET PILING JOINTS.
5. FOR WATERSTOP SHEET PILING CONNECTION AND CLAMP BAR DETAILS SEE DRAWING NO. 20.1/2.
6. FOR CORNER MONOLITH REINFORCING SEE DRAWING NO. 20.1/1.
7. SHEET PILING LAYOUT WAS BASED UPON THE PROPERTIES FOR SPZ-23.5 COLD-ROLLED STEEL SHEET PILING BY SYRO, INC. OTHER MANUFACTURERS OF STEEL SHEET PILING ARE ACCEPTABLE IF THEY MEET THE MINIMUM SECTION PROPERTIES OF Z-TYPE SHEET PILING GIVEN IN SPECIFICATION 02411. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL REVISED WALL MONOLITH JOINT SPACING THAT IS MODULAR WITH WIDTH OF THE PILES PROVIDED.
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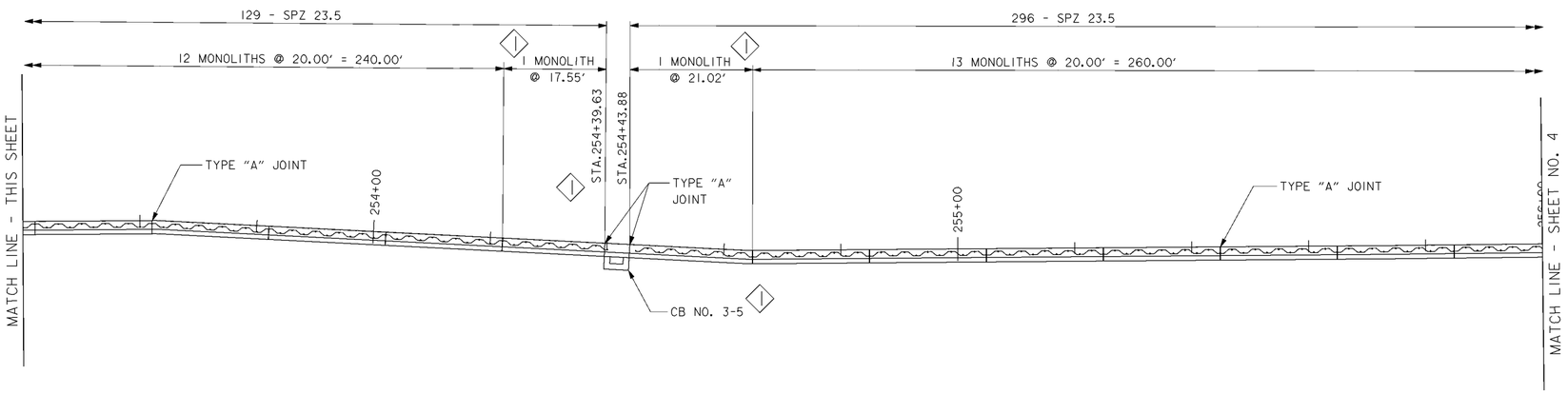


PLAN
SCALE: 1" = 10'
10' 0 10'

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: L.LINZELL
Reviewed by:
Approved by:

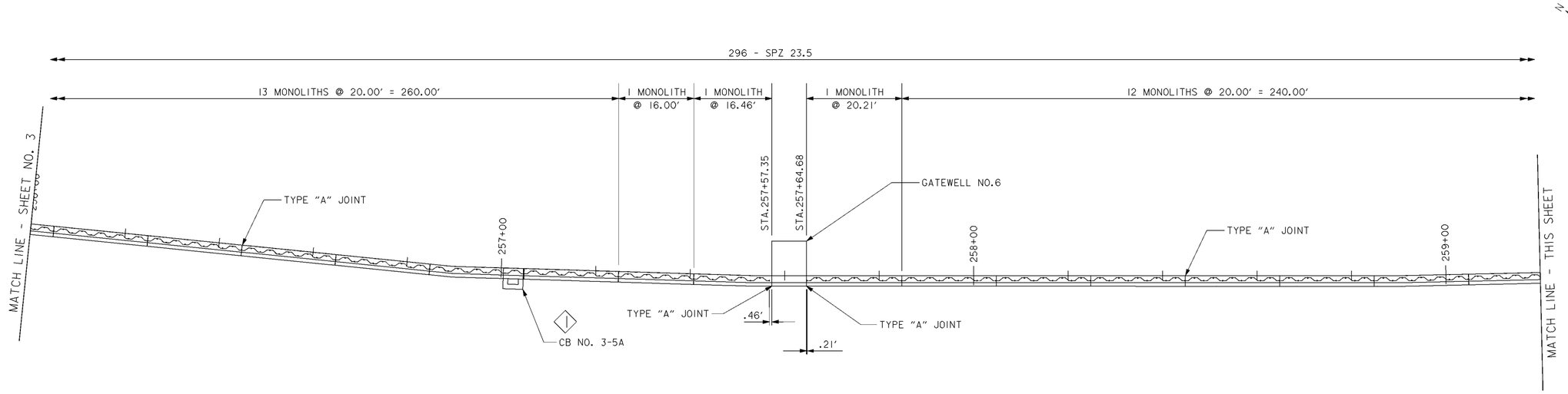
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

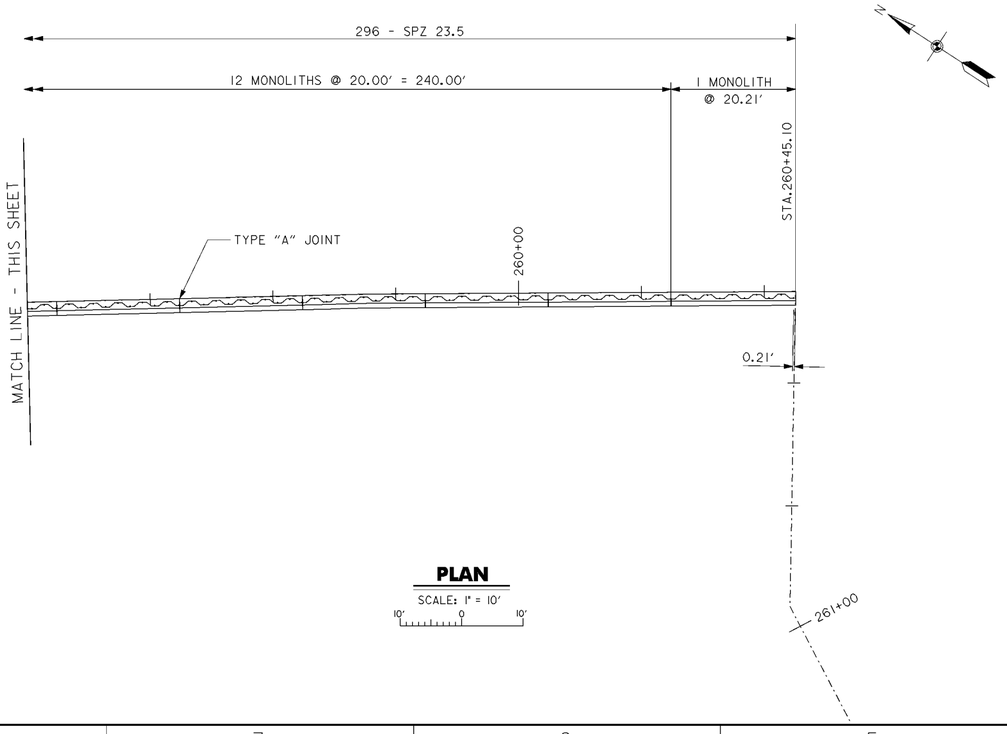
FLOODWALL PLAN
STA.250+00 TO 256+00

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.1/7
FILENAME: PRN TABLE: a0appa03.dgn
Sheet 3 of 4

WORK AS CONSTRUCTED



PLAN
SCALE: 1" = 10'
10' 0 10'



PLAN
SCALE: 1" = 10'
10' 0 10'

WALL JOINTS

STATION	TYPE	STATION	TYPE
250+28.74	B	255+44.89	A
250+50.64	B	255+64.89	B
250+72.55	B	255+84.89	B
250+94.45	A	256+04.89	B
251+16.36	B	256+24.89	B
251+38.26	B	256+44.89	A
251+60.17	B	256+64.89	B
251+82.07	A	256+84.89	B
252+02.07	B	257+04.89	B
252+22.07	B	257+24.89	B
252+42.07	B	257+40.89	B
252+62.07	A	257+57.35	A
252+82.07	B	257+64.68	A
253+02.07	B	257+84.89	B
253+22.07	B	258+04.89	B
253+42.07	B	258+24.89	B
253+62.07	A	258+44.89	A
253+82.07	B	258+64.89	B
254+02.07	B	258+84.89	B
254+22.07	B	259+04.89	B
254+40.42	A	259+24.89	B
254+44.67	A	259+44.89	A
254+64.89	B	259+64.89	B
254+84.89	B	259+84.89	B
255+04.89	B	260+04.89	B
255+24.89	B	260+24.89	B

NOTES

1. TYPE "A" JOINTS ARE REQUIRED AT CATCH BASINS AND WHERE SHOWN.
2. FOR TYPE AND LOCATIONS OF MONOLITH JOINTS SEE TABLE ON THIS DRAWING.
3. FOR TYPE "A" AND TYPE "B" MONOLITH JOINT DETAILS SEE DRAWING NO. 20.1/2.
4. ALL CONCRETE MONOLITH JOINTS SHALL ALIGN WITH SHEET PILING JOINTS.
5. FOR WATERSTOP SHEET PILING CONNECTION AND CLAMP BAR DETAILS SEE DRAWING NO. 20.1/2.
6. FOR CORNER MONOLITH REINFORCING SEE DRAWING NO. 20.1/1.
7. SHEET PILING LAYOUT WAS BASED UPON THE PROPERTIES FOR SPZ-23.5 COLD-ROLLED STEEL SHEET PILING BY SYRO, INC. OTHER MANUFACTURERS OF STEEL SHEET PILING ARE ACCEPTABLE IF THEY MEET THE MINIMUM SECTION PROPERTIES OF Z-TYPE SHEET PILING GIVEN IN SPECIFICATION 02411. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL REVISED WALL MONOLITH JOINT SPACING THAT IS MODULAR WITH WIDTH OF THE PILES PROVIDED.
8. WALL MONOLITHS SHALL NOT EXCEED 22 FEET UNLESS NOTED OR APPROVED BY THE CONTRACTING OFFICER. THE DISTANCE BETWEEN TYPE "A" JOINTS SHALL NOT EXCEED 111 FEET.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: L.LINZELL
Reviewed by:
Approved by:

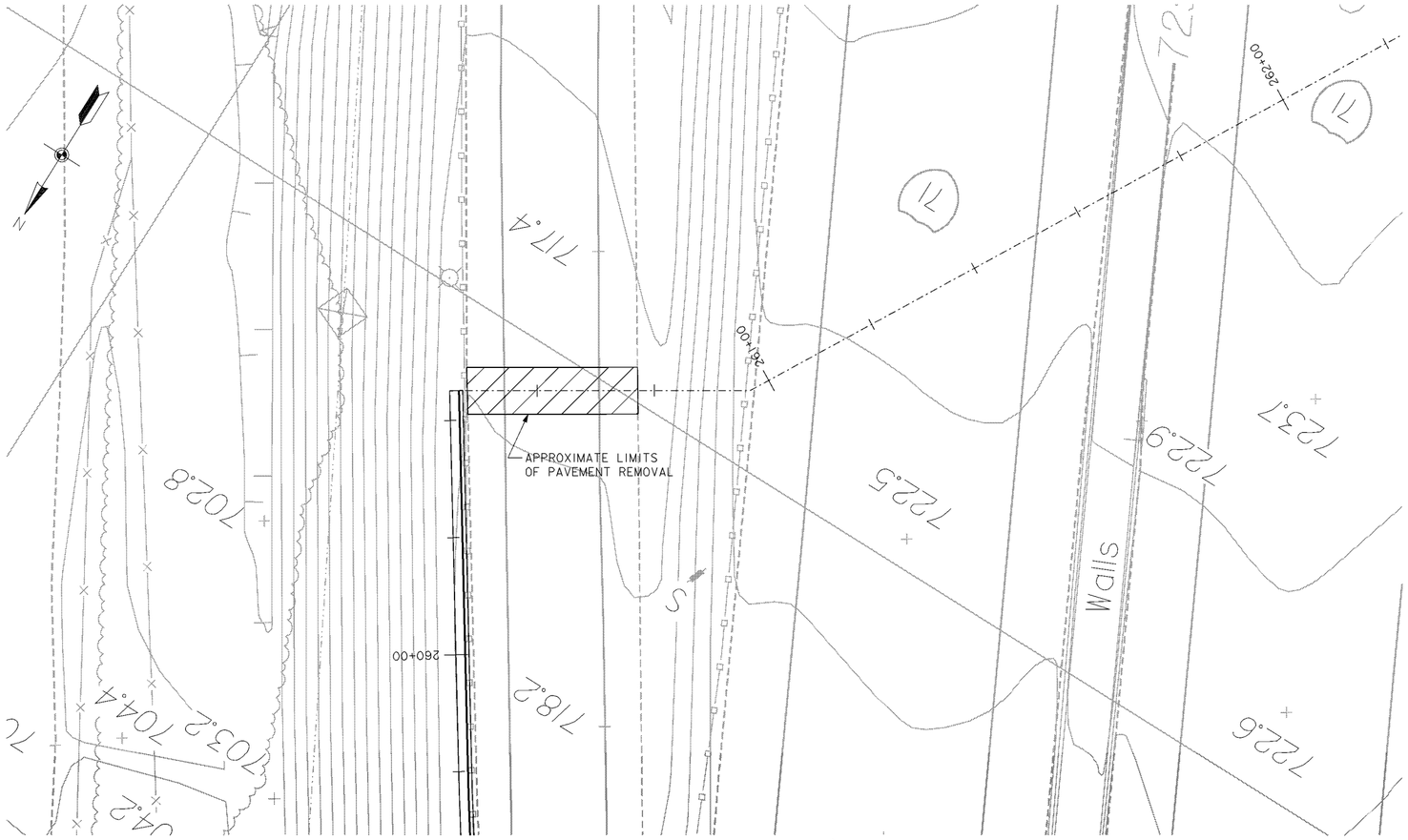
US Army Corps of Engineers

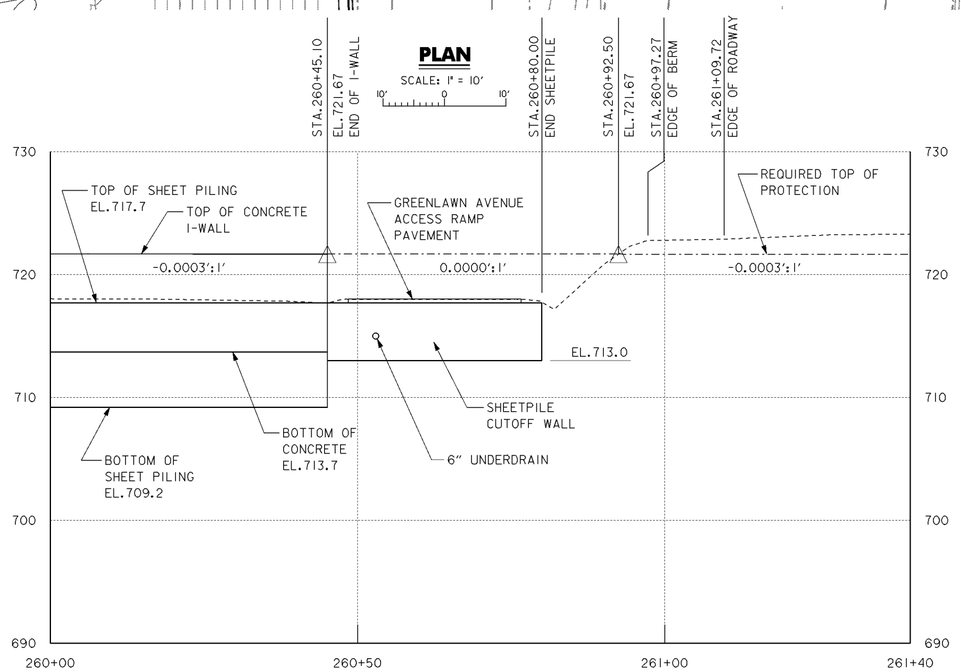
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

FLOODWALL PLAN
STA.256+00 TO 260+45

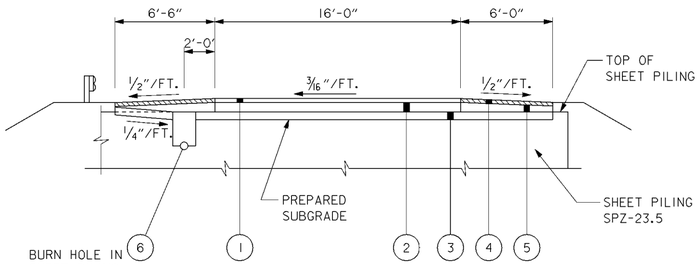
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.1/8
FILENAME: a0appc04.dgn
PEN TABLE:
Sheet 4 of 4

WORK AS CONSTRUCTED





PROFILE
SCALE IN FEET



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

	EXISTING		REPLACEMENT	
	CMSC/ODOT ITEM	DESCRIPTION	CMSC/ODOT ITEM	DESCRIPTION
1	T-35/B-35	1½" ASPHALT CONCRETE SURFACE COURSE, TYPE "C" OVER 1½" ASPHALT LEVELING COURSE (1957)	404/402	1½" MIN. (MATCH EXISTING THICKNESS) ASPHALT CONCRETE SURFACE COURSE OVER 1½" ASPHALT CONCRETE BASE COURSE
2	B-70	9" PORTLAND CEMENT CONCRETE BASE COURSE (1957)	451	9" REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT
3	I-22	SUBBASE GRADING A OR B MODIFIED, THICKNESS VARIES (1957)	310	SUBBASE, MATCH EXISTING THICKNESS
4	B-33	3" BITUMINOUS MACADAM BASE COURSE (1957)	404/301	ASPHALT CONCRETE SURFACE COURSE (MATCH EXISTING THICKNESS) OVER 3" BITUMINOUS AGGREGATE BASE
5	I-18	STABILIZED CRUSHED AGGREGATE SHOULDERS (1957)	304	9" AGGREGATE BASE
6	I-4	6" PIPE UNDERDRAIN (1957)	605	6" PIPE UNDERDRAIN

NOTE: SURFACE TO RECEIVE TACK COAT, CMSC ITEM 407, WITHOUT COVER AGGREGATE PRIOR TO EACH APPLICATION OF BITUMINOUS PAVING.

LEGEND

PAVEMENT REMOVAL LIMITS

NOTES

1. FOR ADDITIONAL PAVEMENT REPLACEMENT AND DOWEL DETAILS SEE DRAWING NO.20.1/3.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GREENLAWN AVENUE CLOSURE PLAN & PROFILE

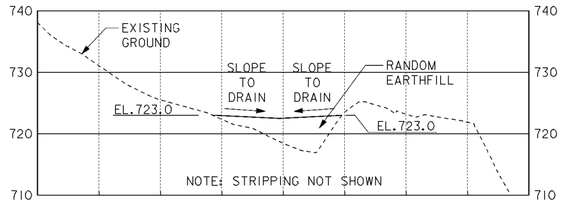
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.2/1
FILENAME: PEN TABLE: 00g1pp01.dgn
Sheet 1 of 1

WORK AS CONSTRUCTED

PLAN

SCALE: 1" = 50'

50' 0 50'



SECTION A–A
FILL AREA NO.3 EMBANKMENT

SCALE: 1" = 50'

50' 0 50'

LEGEND

APPROXIMATE FILL AREA LIMITS

NOTES

1. REMOVE EXISTING CATCH BASIN AND REPLACE WITH ODOT NO.5 CATCH BASIN. SEE DATA ON DRAWING FOR ADDITIONAL INFORMATION.
2. CONTRACTOR SHALL VERIFY INVERT ELEVATION OF CATCH BASIN NO.3-6. EXISTING CATCH BASIN WAS FILLED WITH DIRT AND INVERT ELEVATION COULD NOT BE DETERMINED. INVERT ELEVATION WAS OBTAINED FROM FRA-70-12.31S DRAWINGS.
3. FOR FILL AREA NO.1 SITE PLAN AND DETAILS SEE DRAWING NO.20.2/3
4. FOR FILL AREA NO.2 SITE PLAN AND DETAILS SEE DRAWING NO.20.2/4.
5. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

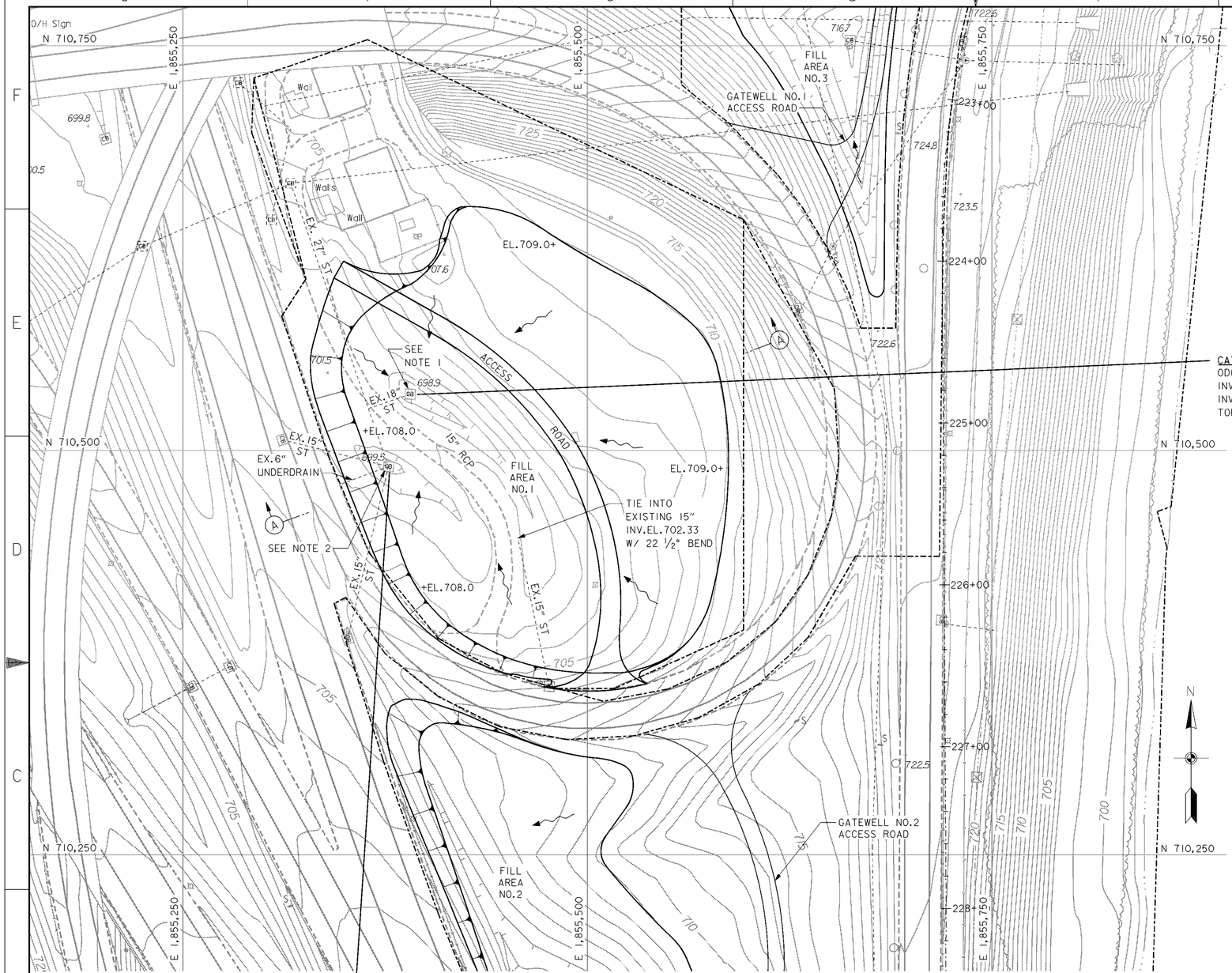
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

FILL AREA SITE PLAN

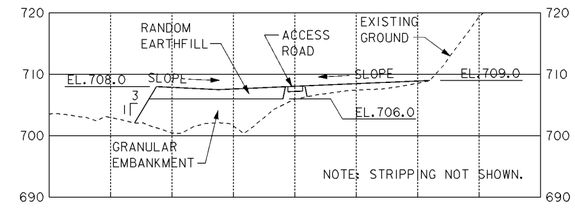
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.2/2
FILENAME: 00axgp01.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



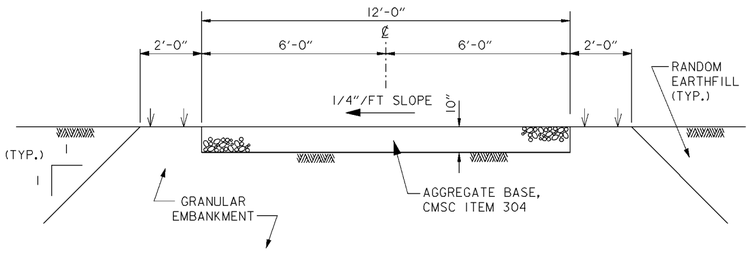
PLAN

SCALE: 1" = 30'
30' 0 30'



SECTION A-A
FILL AREA NO.1 EMBANKMENT

SCALE: 1" = 50'
50' 0 50'



TYPICAL ACCESS ROAD SECTION

SCALE: ½" = 1'-0"
12" 0 1' 2' 3' 4'

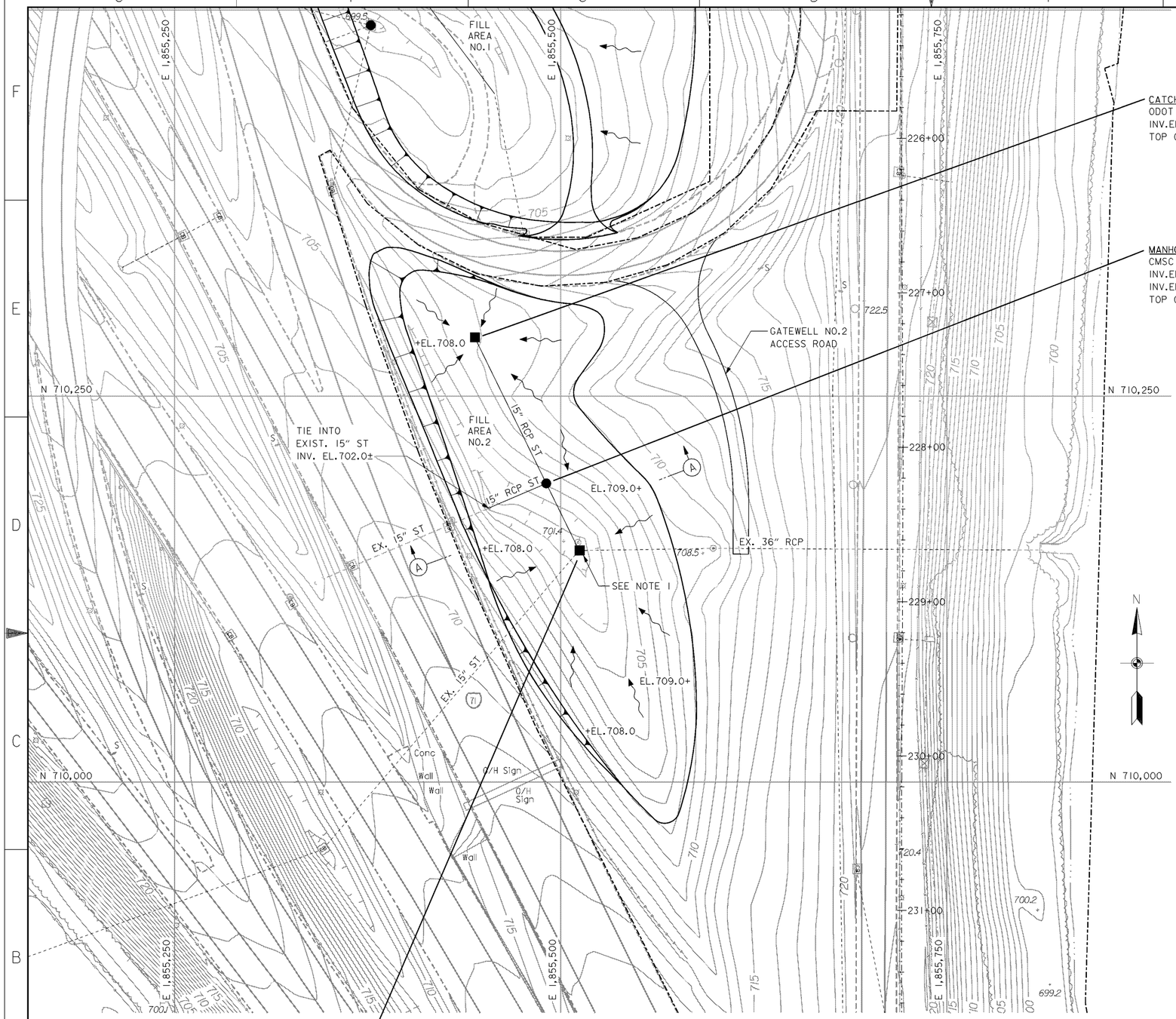
NOTES

1. REMOVE EXISTING CATCH BASIN AND REPLACE WITH ODOT STANDARD NO.5 CATCH BASIN. SEE DATA ON DRAWINGS FOR ADDITIONAL INFORMATION.
2. REMOVE EXISTING CATCH BASIN AND REPLACE WITH CMSC TYPE "C" MANHOLE. SEE DATA ON DRAWINGS FOR ADDITIONAL INFORMATION.
3. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF EXISTING STORM SEWERS INTO CATCH BASIN NO.3-7 AND MANHOLE NO.3-10. INVERT ELEVATIONS WERE OBTAINED FROM ODOT FRA-70-12.31S DRAWINGS.
4. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED PER NEGOTIATIONS MEETING - 1/13/00	1/21/00	P.O.C.

BURGESS & NIPLE, LIMITED COLUMBUS, OHIO	U.S.ARMY ENGINEER DISTRICT CORPS OF ENGINEERS HUNTINGTON, WEST VIRGINIA
Designed by: J.HALL	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS, L.P.P. PHASE IIIA
Drawn by: T.MULLINS	**FILL AREA NO.1 SITE PLAN**
Checked by: P.CONROY	
Reviewed by:	Scale: AS SHOWN
Approved by:	Date: OCTOBER 1999
	Drawing Code: 16-PWC-12-
	Sheet reference number: 20.2/3
	FILENAME: 00axgp02.dgn PEN TABLE:
	Sheet 1 of 1

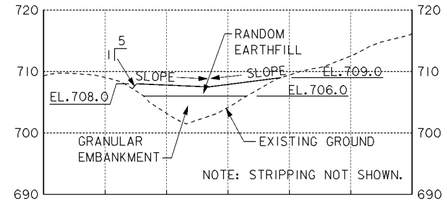
WORK AS CONSTRUCTED



CATCH BASIN NO.3-9 (SEE NOTE 2)
ODOT STANDARD NO.5 CB
INV.EL. EX. 36" OUT 697.0
INV.EL. EX. 15" IN 698.75
INV.EL. 15" IN 697.0
TOP OF CASTING EL. 707.5

PLAN

SCALE: 1" = 30'
30' 0 30'



SECTION A–A
FILL AREA NO.2 EMBANKMENT

SCALE: 1" = 50'
50' 0 50'

NOTES

1. REMOVE EXISTING CATCH BASIN AND REPLACE WITH ODOT STANDARD NO.5 CATCH BASIN. SEE DATA ON DRAWINGS FOR ADDITIONAL INFORMATION.
2. CONTRACTOR SHALL VERIFY INVERT ELEVATIONS OF EXISTING STORM SEWERS INTO CATCH BASIN NO.3-9. INVERT ELEVATIONS WERE OBTAINED FROM ODOT FRA-70-12.31S DRAWINGS.
3. FOR GATEWELL ACCESS ROAD TYPICAL SECTION SEE DRAWING NO.15/8.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED PER NEGOTIATIONS MEETING - 1/13/00	1/21/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

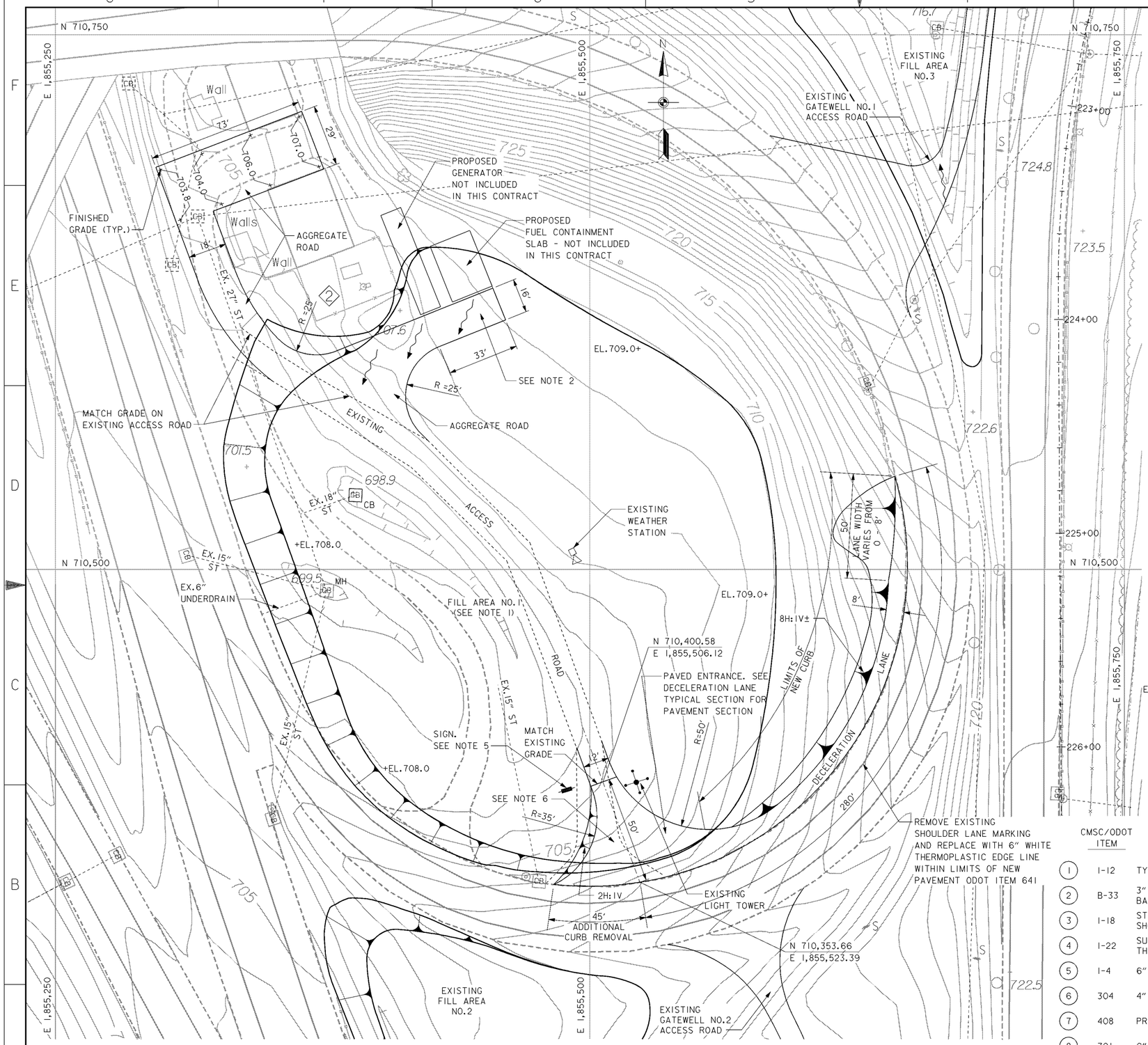
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

FILL AREA NO.2 SITE PLAN

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.2/4
FILENAME: 00axgp03.dgn
PIN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED

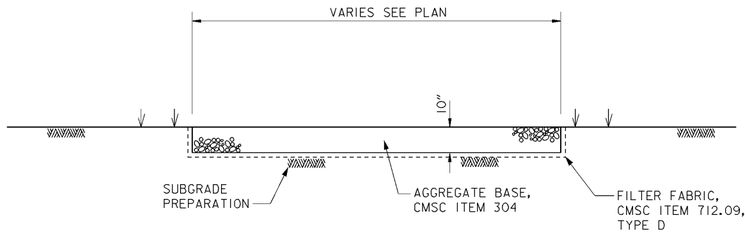


PLAN

SCALE: 1" = 20'
20' 0 20'

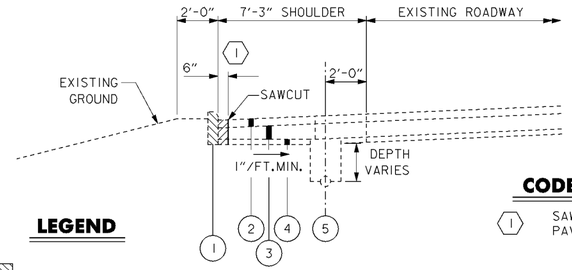
NOTES

1. SITE GRADING SHOWN FOR FILL AREA NO.1 PREVIOUSLY COMPLETED.
2. PROVIDE FLAT AREA FOR TURNAROUND. MATCH EXISTING GRADES AS MUCH AS POSSIBLE. SLOPE SLIGHTLY TO DRAIN AS INDICATED.
3. PROVIDE 6 INCHES TOPSOIL OVER NEW FILL.
4. ALL DISTURBED AREAS AND AREAS OF NEW FILL TO BE GRADED AND SEEDED.
5. STOP SIGN AND RIGHT TURN ONLY SIGN TO BE PROVIDED AND INSTALLED BY CITY OF COLUMBUS, DIVISION OF TRAFFIC.
6. RESHAPE AND REGRADE SUBGRADE FOR PAVED ENTRANCE TO PROVIDE A SMOOTH SLOPE WITH NO ABRUPT CHANGES IN GRADE.



AGGREGATE ROAD TYPICAL SECTION

SCALE: 1/2" = 1'-0"
12" 0 1' 2' 3' 4'



LEGEND

ITEM TO BE REMOVED

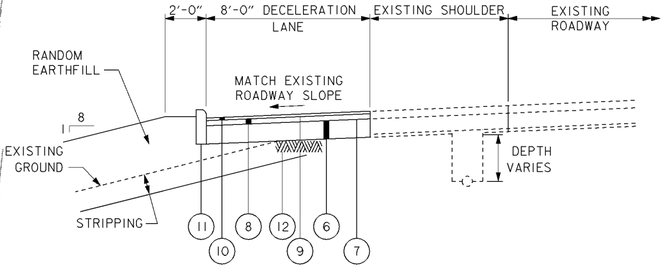
CODED NOTES

(1) SAWCUT AND REMOVE PAVEMENT AND CURB.

EXISTING SECTION

NOTE: EXISTING SECTION IS APPROXIMATE TO BE VERIFIED BY THE CONTRACTOR.

SCALE: 1" = 3'
3' 0 3'



DECELERATION LANE TYPICAL SECTION

DECELERATION LANE
SCALE: 1" = 3'
3' 0 3'

CMSC/ODOT ITEM		
(1)	I-12	TYPE 6 CURB (1957)
(2)	B-33	3" BITUMINOUS AGGREGATE BASE (1957)
(3)	I-18	STABILIZED CRUSHED AGGREGATE SHOULDERS (1957)
(4)	I-22	SUBBASE, GRADING A OR B MODIFIED, THICKNESS VARIES (1957)
(5)	I-4	6" PIPE UNDERDRAIN (1957)
(6)	304	4" AGGREGATE BASE
(7)	408	PRIME COAT
(8)	301	6" BITUMINOUS AGGREGATE BASE
(9)	407	TACK COAT
(10)	448	ASPHALT CONCRETE SURFACE COURSE TYPE 1, MATCH EXISTING THICKNESS (1 1/2" MIN.)
(11)	609	TYPE 6 CURB
(12)	203	PREPARED SUBGRADE

Revisions			
Symbol	Descriptions	Date	Approved
2	REVISED AS CONSTRUCTED - PHASE IIIA NORTH	4/01	P.O.C.
1	ADDED BY MODIFICATION MC009	11/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

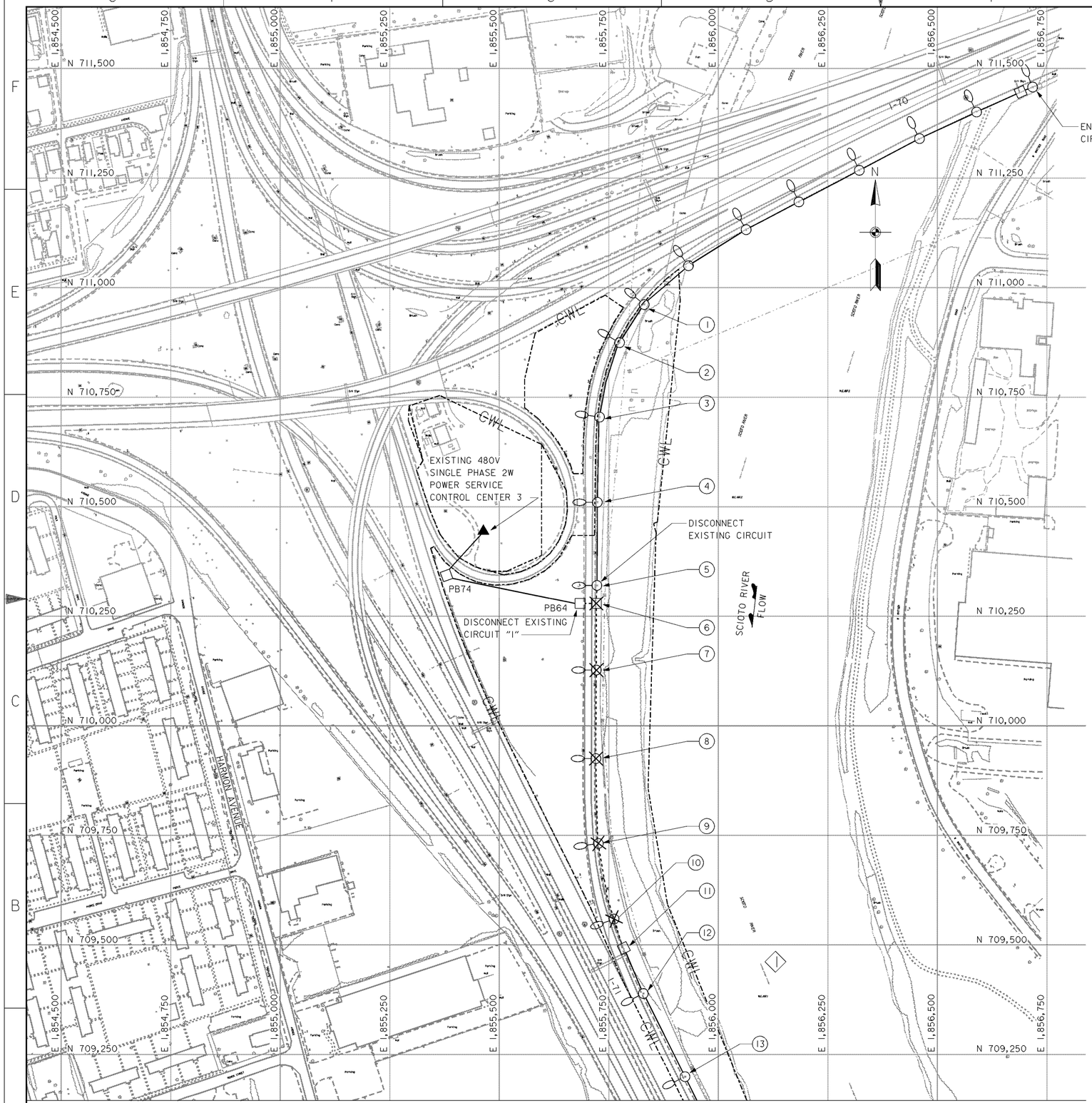
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

DECELERATION LANE AND ACCESS ROAD

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.2/4A
FILENAME: a0axgp04A.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 100'

100' 0 100'

EXISTING LIGHT POLE LOCATION AND DESCRIPTION SCHEDULE

1	STA. 220+30	250-11-AT10B34.2 13B
2	STA. 221+34	250-11-AT10B34.2 13A
3	STA. 223+11	250-11-AT10B34.2 13
4	STA. 225+06	250-11-AT10B34.2 12
5	STA. 226+96	250-11-AT10B34.2 11. REMOVE EXISTING LINE SIDE CABLE AND CONNECTOR KITS. CLEAN CONDUIT AND PLUG TEMPORARILY UNTIL NEW CONDUCTORS ARE PULLED IN.
6	STA. 227+38	PULLBOX FOR EXISTING CIRCUIT "1" FEEDER
7	STA. 228+90	250-11-AT10B34.2 19
8	STA. 230+92	250-11-AT10B34.2 110
9	STA. 232+85	310-11-AT10B41.7 111
10	STA. 234+60	FOUNDATION ONLY. LIGHTPOLE AND LUMINARE MISSING.
11	STA. 235+51	DISCONNECT EXISTING SIGN CIRCUIT IN EXISTING PULL BOX. REMOVE EXISTING ROADWAY LIGHTING CIRCUIT TO NORTH FROM BOX.
12	STA. 236+45	310-111-AT15B41.7 113
13	STA. 238+57	310-111-AT15B41.7 114

LEGEND

- EXISTING LIGHT POLE AND FOUNDATION TO REMAIN
- EXISTING LIGHT POLE AND FOUNDATION TO BE REMOVED
- EXISTING UNDERGROUND LIGHTING CIRCUIT TO REMAIN IN USE
- EXISTING UNDERGROUND LIGHTING CIRCUIT TO BE ABANDONED
- CWL — CONTRACTOR WORK LIMITS
- EXISTING PULL BOX TO REMAIN
- EXISTING PULL BOX TO BE REMOVED
- EXISTING LIGHT TOWER

NOTES

1. REFER TO SPECIFICATIONS SECTION 16528,3.16 FOR MAINTENANCE OF EXISTING LIGHTING DURING CONSTRUCTION.
2. SEE LIGHT POLE DESIGN NUMBER DESIGNATIONS ON DRAWING NO. 20.2/9.

Revisions			
Symbol	Descriptions	Date	Approved
1	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.AYRES
Drawn by: T.MULLINS
Checked by: D.SCHAMP
Reviewed by:
Approved by:

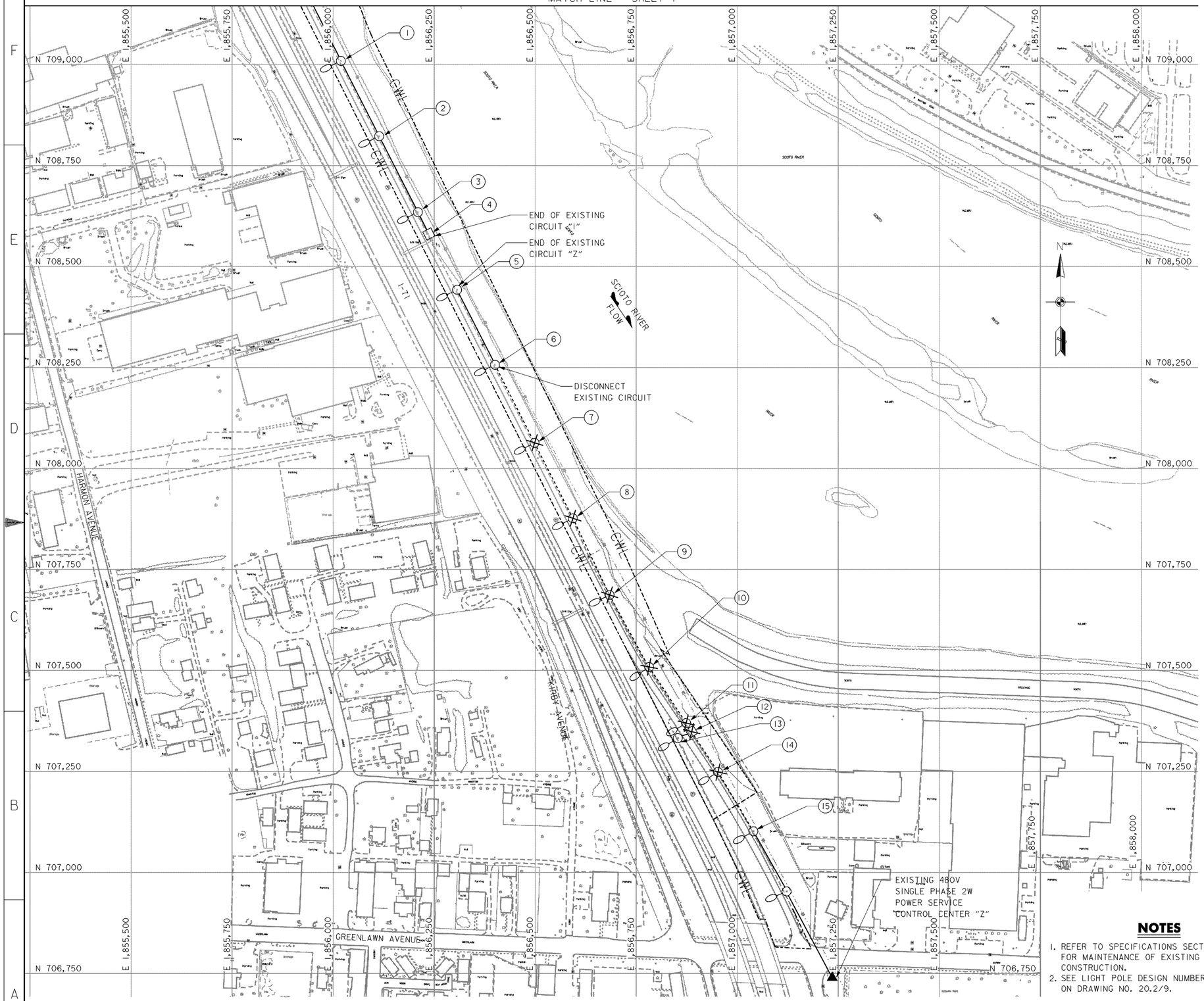
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

ROADWAY LIGHTING REMOVAL (1 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.2/5
FILENAME: 00u5ep01.dgn
PEN TABLE:
Sheet 1 of 2

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 100'
100' 0 100'

EXISTING LIGHT POLE LOCATION AND DESCRIPTION SCHEDULE

(1)	STA. 240+70	310-III-ATI5B41.7 I14
(2)	STA. 242+79	310-III-ATI5B41.7 I15
(3)	STA. 244+90	310-III-ATI5B41.7 I16
(4)	STA. 245+51	PULL BOX FOR EXISTING TRUSS SIGN.
(5)	STA. 247+05	310-III-ATI5B41.7 Z10
(6)	STA. 249+13	310-III-ATI5B41.7 Z9. REMOVE EXISTING LINE SIDE CABLE AND CONNECTOR KITS. CLEAN CONDUIT AND PLUG TEMPORARILY UNTIL NEW CONDUCTORS ARE PULLED IN.
(7)	STA. 251+30	310-III-ATI5B41.7 Z8
(8)	STA. 253+39	310-III-ATI5B41.7 Z7
(9)	STA. 255+50	310-III-ATI5B41.7 Z6
(10)	STA. 257+53	310-III-ATI5B41.7 Z5
(11)	STA. 259+20	310-III-ATI5B41.7 Z4
(12)	STA. 259+40	PULL BOX. REMOVE SPLICE KITS AND CONDUCTORS TO ITEM 13.
(13)	STA. 259+40	310-III-ATI5B41.7 Z3. REMOVE EXISTING LINE SIDE CABLE AND CONECTOR KITS. CLEAN CONDUIT AND PLUG TEMPORARILY UNTIL CONDUIT IS EXTENDED TO NEW PULLBOX.
(14)	STA. 260+45	250-II-ATI0B34.2
(15)		250-II-ATI0B34.2. REMOVE EXISTING LOAD SIDE CABLE AND CONNECTOR KITS. CLEAN CONDUIT AND PLUG TEMPORARILY UNTIL NEW CONDUCTORS ARE PULLED IN.

LEGEND

- EXISTING LIGHT POLE AND FOUNDATION TO REMAIN
- EXISTING LIGHT POLE AND FOUNDATION TO BE REMOVED
- EXISTING UNDERGROUND LIGHTING CIRCUIT TO REMAIN IN USE
- EXISTING UNDERGROUND LIGHTING CIRCUIT TO BE ABANDONED
- CWL — CONTRACTOR WORK LIMITS
- EXISTING PULL BOX TO REMAIN
- EXISTING PULL BOX TO BE REMOVED

NOTES

1. REFER TO SPECIFICATIONS SECTION 16528,3.16 FOR MAINTENANCE OF EXISTING LIGHTING DURING CONSTRUCTION.
2. SEE LIGHT POLE DESIGN NUMBER DESIGNATIONS ON DRAWING NO. 20.2/9.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

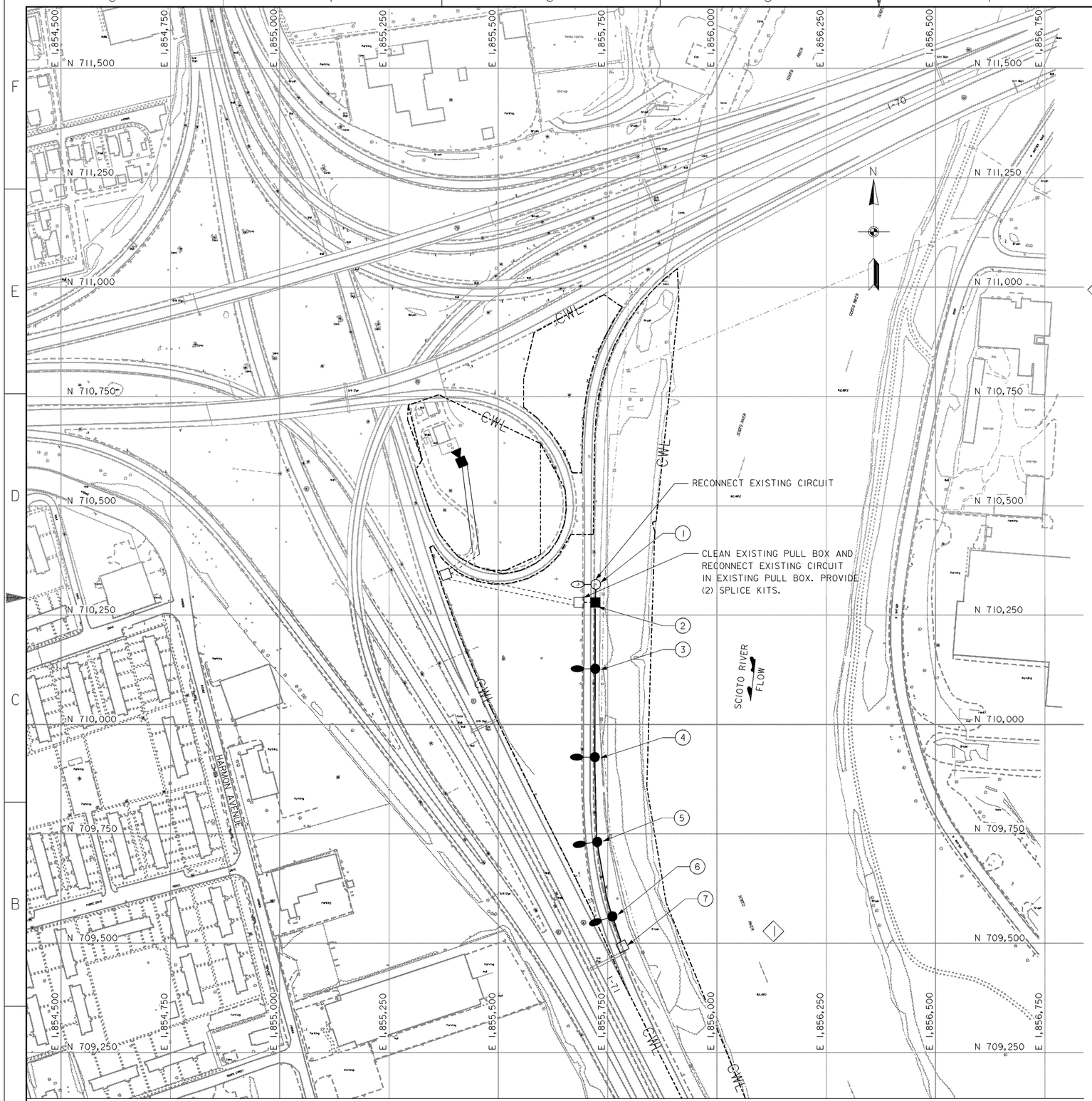
Designed by: J.AYRES
Drawn by: T.MULLINS
Checked by: D.SCHAMP
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

ROADWAY LIGHTING REMOVAL (2 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.2/6
FILENAME: 00u5ep02.dgn
PRN TABLE:
Sheet 2 of 2

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 100'

100' 0 100'

PROPOSED LIGHT POLE LOCATION AND DESCRIPTION SCHEDULE

(1)	STA. 226+96	2.0'L	EXISTING LIGHT POLE. PROVIDE (1) TYPE II AND (1) TYPE III CONNECTOR KITS AND RECONNECT EXISTING CIRCUIT CONDUCTORS AND POLE AND BRACKET CABLE TO NEW CONNECTOR KITS.
(2)	STA. 227+38	2.0'L	18" SQUARE CONCRETE PULL BOX. RECONNECT TO EXISTING 3" RGC UNDER RAMP AND PULL IN NEW 2-#4 AWG 5000 VOLT CABLES TO EXISTING PULL BOX. PROVIDE (2) SPLICE KITS. SEE NOTE 2 BELOW.
(3)	STA. 228+90	2.0'L	250-II-ATI2B34.2 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT 19.
(4)	STA. 230+92	2.0'L	250-II-ATI2B34.2 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT 110.
(5)	STA. 232+85	2.0'L	250-II-ATI2B34.2 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT 111.
(6)	STA. 234+60	2.0'L	310-II-ATI2B41.7 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT 112.
(7)	STA. 235+51	2.0'L	EXISTING CONCRETE PULL BOX. PROVIDE (2) SPLICE KITS AND RECONNECT EXISTING SIGN SERVICE AND ROADWAY LIGHTING CIRCUIT TO THE SOUTH.

LEGEND

- EXISTING LIGHT POLE AND FOUNDATION TO BE RECONNECTED
- PROPOSED LIGHT POLE AND FOUNDATION. SEE DETAILS ON DRAWING NOS. 20.2/9 THRU 20.2/12
- PROPOSED 18" SQUARE CONCRETE PULL BOX WITH CAST IRON COVER. SEE DETAIL ON DRAWING NO. 20.2/13
- 1½" DUCT-CABLE WITH TWO NO.4 AWG 5000 VOLT CABLES IN 24" DEEP TRENCH. SEE DETAIL ON DRAWING NO. 20.2/12
- CWL — CONTRACTOR WORK LIMITS
- EXISTING PULL BOX
- PROPOSED 3" RIGID CONDUIT
- EXISTING CONDUIT
- PROPOSED CONTROL CENTER AND 18" SQUARE CONCRETE PULLBOX

NOTES

1. SEE LIGHT POLE DESIGN NUMBER DESIGNATIONS ON DRAWING NO. 20.2/9.
2. IN THE EVENT THAT THE EXISTING CONDUIT UNDER THE RAMP IS NOT SUITABLE FOR RE-USE, PROVIDE 3" RGC JACKED OR DRILLED UNDER PAVEMENT PER DETAIL ON DRAWING NO. 20.2/13.

Revisions			
Symbol	Descriptions	Date	Approved
◇	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

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COLUMBUS, OHIO

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

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Checked by: D.SCHAMP
Reviewed by:
Approved by:

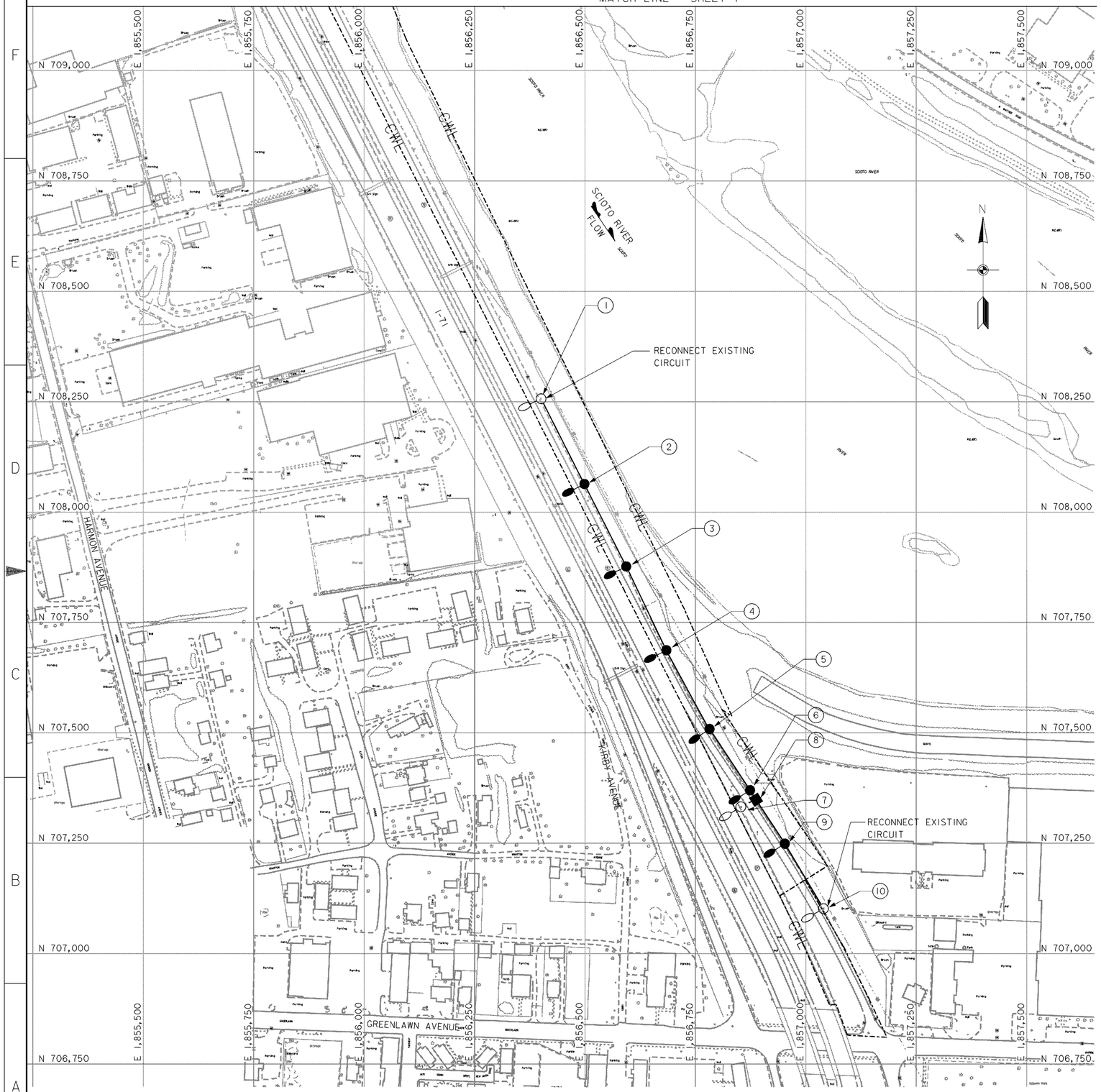
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

ROADWAY LIGHTING REPLACEMENT(1 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.2/7
FILENAME: 00u5ep03.dgn
PEN TABLE:
Sheet 1 of 2

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 100'
100' 0 100'

PROPOSED LIGHT POLE LOCATION AND DESCRIPTION SCHEDULE

1	STA. 249+18	0.9'L	EXISTING LIGHT POLE. PROVIDE (1) TYPE II AND (1) TYPE III CONNECTOR KITS AND RECONNECT EXISTING CIRCUIT CONDUCTORS AND POLE AND BRACKET CABLE TO NEW CONNECTOR KITS.
2	STA. 251+40	2.57'L	310-III-AT18B41.7 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT Z8.
3	STA. 253+99	0.11'L	310-III-AT18B41.7 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT Z7.
4	STA. 255+51	2.38'L	310-III-AT18B41.7 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT Z6.
5	STA. 257+54	2.53'L	310-III-AT20B41.7 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT Z5.
6	STA. 259+20	2.37'L	250-II-AT12B34.2 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT Z4.
7	STA. 259+40		EXISTING LIGHT POLE. PROVIDE (1) TYPE II AND (1) TYPE III CONNECTOR KITS AND RECONNECT EXISTING POLE AND BRACKET CABLE TO NEW CONNECTOR KITS.
8	STA. 259+40	2.0'L	18" SQUARE CONCRETE PULL BOX. RECONNECT TO EXISTING 3" RGC UNDER RAMP AND PULL IN NEW 2-#4 AWG 5000 VOLT CABLES TO LIGHT POLE ITEM 7. PROVIDE (2) SPLICE KITS. SEE NOTE 2 BELOW.
9	STA. 260+47	2.05'L	250-II-AT12B34.2 WITH TYPE II AND TYPE III CONNECTOR KITS CIRCUIT Z3.
10			EXISTING LIGHT POLE. PROVIDE (1) TYPE II AND (1) TYPE III CONNECTOR KITS AND RECONNECT EXISTING CIRCUIT CONDUCTORS AND POLE AND BRACKET CABLE TO NEW CONNECTOR KITS.

LEGEND

- EXISTING LIGHT POLE AND FOUNDATION
- PROPOSED LIGHT POLE AND FOUNDATION. SEE DETAILS ON DRAWING NOS. 20.2/9 THRU 20.2/12
- PROPOSED 18" SQUARE CONCRETE PULL BOX WITH CAST IRON COVER. SEE DETAIL ON DRAWING NO. 20.2/13
- 1½" DUCT-CABLE WITH TWO NO.4 AWG 5000 VOLT CABLES IN 24" DEEP TRENCH. SEE DETAIL ON DRAWING NO. 20.2/12
- C.W.L. CONTRACTOR WORK LIMITS
- EXISTING PULL BOX

NOTES

1. SEE LIGHT POLE DESIGN NUMBER DESIGNATIONS ON DRAWING NO. 20.2/9.
2. IN THE EVENT THAT THE EXISTING CONDUIT UNDER THE RAMP IS NOT SUITABLE FOR RE-USE, PROVIDE 3" RGC JACKED OR DRILLED UNDER PAVEMENT PER DETAIL ON DRAWING NO. 20.2/13.

Revisions			
Symbol	Descriptions	Date	Approved
1	REVISED AS CONSTRUCTED - PHASE IIIA SOUTH	4/01	P.O.C.

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Reviewed by:
Approved by:

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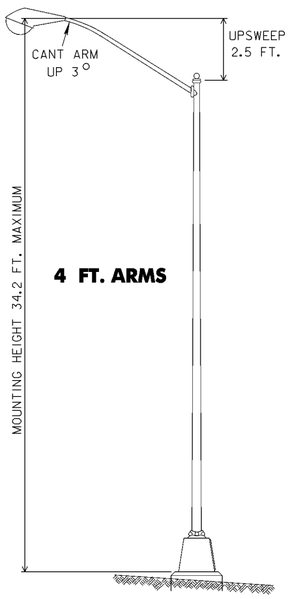
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

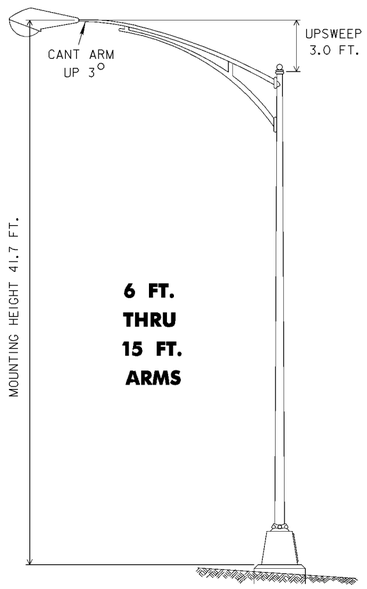
ROADWAY LIGHTING REPLACEMENT(2 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.2/8
FILENAME: a0u5ap04.dgn
PRN TABLE:
Sheet 2 of 2

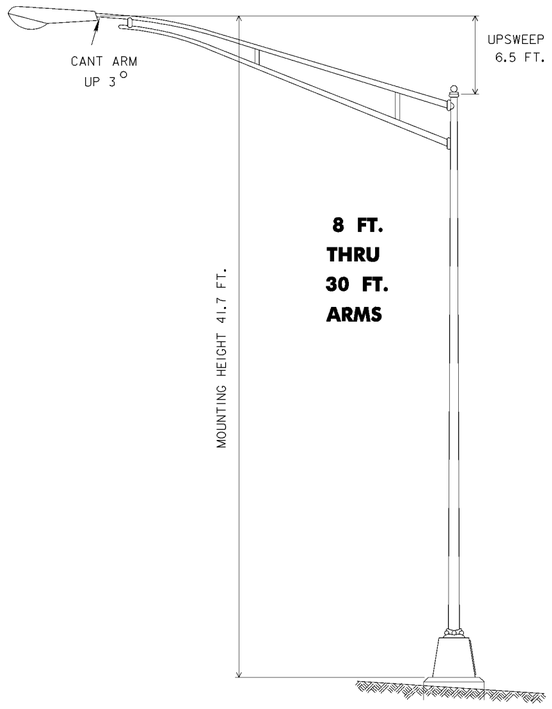
WORK AS CONSTRUCTED



STYLE I



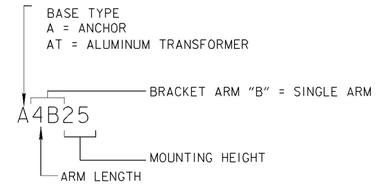
STYLE II



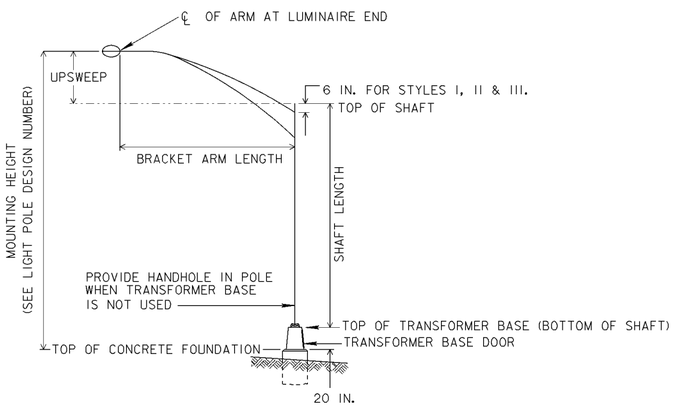
STYLE III

LIGHT POLE DESIGN NUMBER

SUBJECT TO THE APPROVAL OF THE CONTRACTING OFFICER'S REPRESENTATIVE, MODIFICATION OF THE RATIO OF BRACKET UPSWEEP TO ARM LENGTH IS PERMISSIBLE, PROVIDED THE BASIC POLE PROPORTIONS ARE MAINTAINED AS SHOWN.



MOUNTING HEIGHT IS DEFINED AS THE DISTANCE FROM TOP OF FOUNDATION TO THE CENTER OF THE BRACKET ARM AT THE LUMINAIRE END.



POLE COMPONENTS

Revisions			
Symbol	Descriptions	Date	Approved

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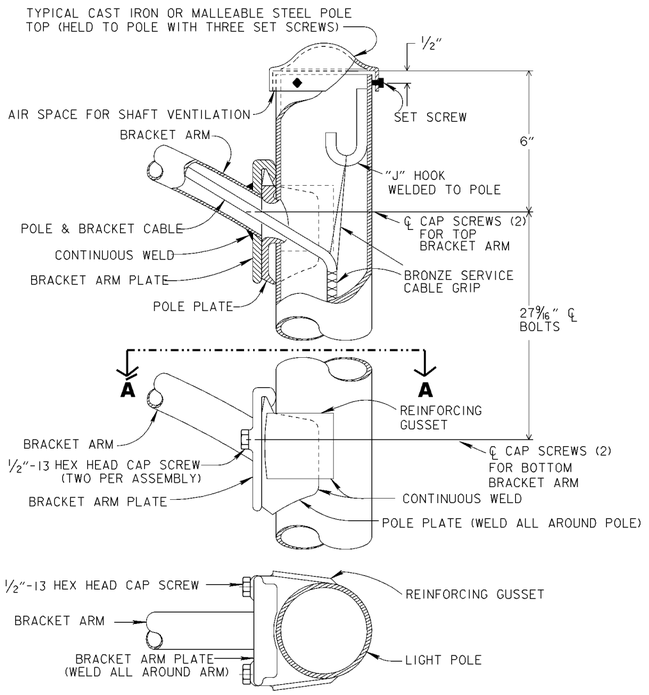
PHASE IIIA

ROADWAY LIGHTING DETAILS (1 OF 6)

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.2/9
FILENAME: 00u5dt01.dgn
PEN TABLE:
Sheet 1 of 6

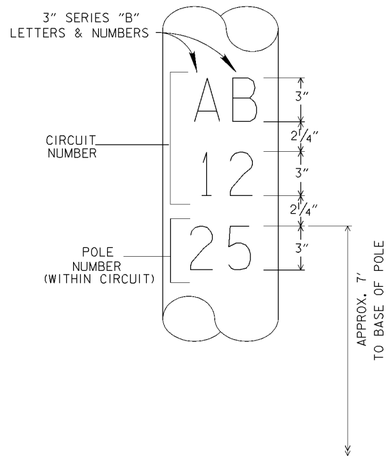
WORK AS CONSTRUCTED



SECTION A - A

POLE TOP AND BRACKET ARM

ASSEMBLIES

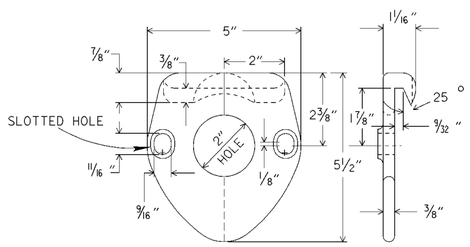


LIGHT POLE LABELS FOR CIRCUIT IDENTIFICATION

(SEE NOTE 3)

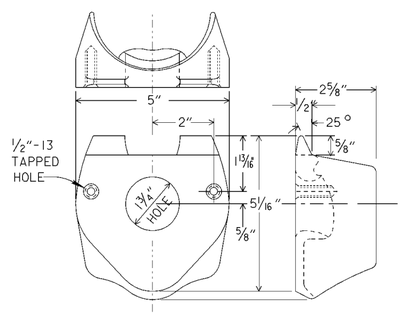
NOTES

1. HANDHOLES SHALL BE OPPOSITE SIDE FROM THE ROADWAY UNLESS SUCH LOCATION RENDERS THEM INACCESSIBLE.
2. USE OF REINFORCING GUSSETS IS OPTIONAL.
3. CIRCUIT AND LIGHT POLE NUMBERS SHALL BE AS SCHEDULED ON LIGHT PLAN SHEETS. LABELS SHALL MEET THE REQUIREMENTS OF SPECIFICATIONS SECTION 16528, 2.16, AND SHALL CONTAIN 3" SERIES "B" LETTERS AND NUMBERS AS PER THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS" PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION.
4. CIRCUIT IDENTIFICATION DETAILS ARE APPLICABLE TO ALL POLE DESIGNS.
5. SEE DRAWING 20.2/14 FOR DETAILS OF TERMINATION FOR GROUND CABLE.
6. ALSO SEE SPECIFICATIONS SECTION 16528, 2.2, FOR BRACKET ARM AND 2.15 FOR POLE MATERIAL SPECIFICATIONS.



BRACKET ARM PLATE

(CAST STEEL)



POLE PLATE

CAST STEEL

Revisions			
Symbol	Descriptions	Date	Approved

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Checked by: D.SCHAMP
Reviewed by:
Approved by:

US Army Corps of Engineers

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COLUMBUS, OHIO
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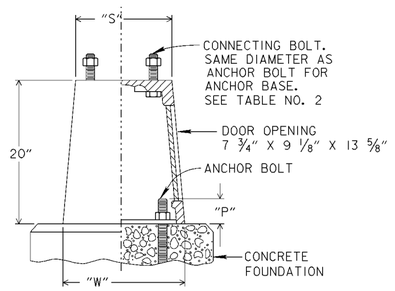
PHASE IIIA

ROADWAY LIGHTING DETAILS (2 OF 6)

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.2/10
FILENAME: 00u5d102.dgn
PEN TABLE:
Sheet 2 of 6

WORK AS CONSTRUCTED

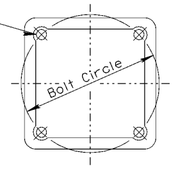


NOTES

1. FOR POLE GROUNDING DETAILS SEE DRAWING NO. 20.2/14.
2. TYPE AT-A BASE SHALL NORMALLY BE USED WITH ANCHOR BASE POLES HAVING DIAMETERS OF 6 INCHES THROUGH 9.2 INCHES INCLUSIVE, AND MOUNTING HEIGHTS THROUGH 41.7 FEET.
3. TYPE AT-C BASE MUST BE USED FOR ANCHOR BASE POLES HAVING DIAMETERS OF 9.5 INCHES AND 10 INCHES AND MOUNTING HEIGHTS THROUGH 51.7 FEET.
4. REFER TO SPECIFICATIONS SECTION 16528, 2.15.4, FOR TRANSFORMER TYPE BASES.

TABLE NO. 2 TRANSFORMER BASE ANCHOR BOLTS			
SHAFT SIZE	STEEL POLE GUAGE NO. 11	7	3
6.5"	1" ø X 40"	1" ø X 40"	1¼" ø X 40"
7"			
7.5"			
8"			
8.5"			
9"			
9.5"		1" ø X 48"	1¼" ø X 48"
10"	1¼"ø X 48"		

40" BOLTS INCLUDE 4" BEND
48" AND 60" BOLTS INCLUDE 6" BEND



BASE FRAME

TABLE NO. 3 ALUMINUM TRANSFORMER BASES					
TYPE	"P"	"S"	"W"	BOLT CIRCLE	SHAFT SIZE
AT-A	4½"	13"	16⅜"	15"	SEE NOTE 2
AT-C	4½"	14⅝"	17¼"	17¼"	SEE NOTE 3

CAST ALUMINUM TRANSFORMER BASES

Revisions			
Symbol	Descriptions	Date	Approved

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HUNTINGTON, WEST VIRGINIA

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Checked by: D.SCHAMP
Reviewed by:
Approved by:

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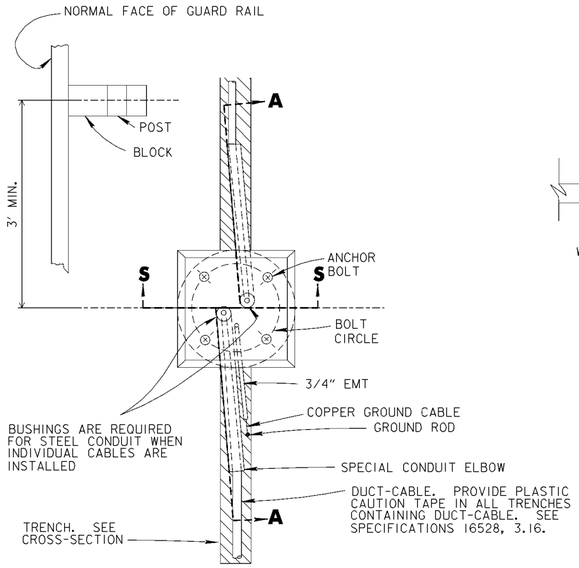
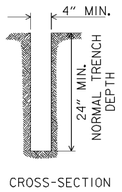
PHASE IIIA

ROADWAY LIGHTING DETAILS (3 OF 6)

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.2/11
FILENAME: 00u5dt03.dgn
PIN TABLE:
Sheet 3 of 6

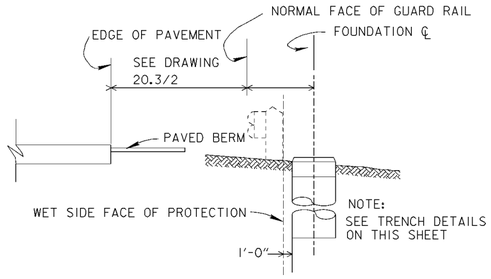
WORK AS CONSTRUCTED





CROSS-SECTION OF TRENCH

FOUNDATION PLAN NORMAL TRENCH ALIGNMENT



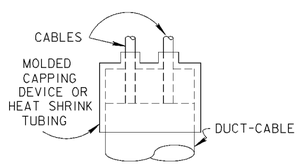
NORMAL LOCATION OF LIGHT POLE FOUNDATION

OPPOSITE HAND FOR POLES MOUNTED ON LEFT SIDE OF PAVEMENT

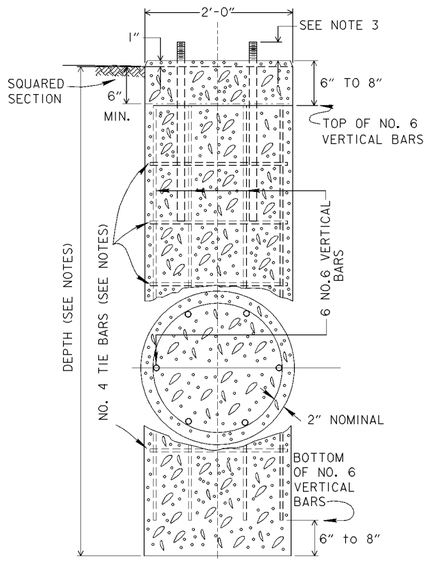
NOTES

1. FOUNDATION
   MINIMUM DEPTHS TO BE AS FOLLOWS:
   6 FEET FOR POLES HAVING A MOUNTING HEIGHT LESS THAN 40 FT.
   8 FEET FOR POLES HAVING A MOUNTING HEIGHT 40 FT. THRU 44 FT.
   NO. 4 TIE BARS REQUIRED AS FOLLOWS:
   4 NO. 4 TIE BARS FOR 6 FT. DEPTH
   5 NO. 4 TIE BARS FOR 8 FT. DEPTH
   ROTATE BARS TO CLEAR CONDUITS.
2. COPPER GROUND CABLE:
   NO. 4 AWG, STRANDED INSULATED COPPER GROUND CABLE SHALL BE USED. EXOTHERMICALLY WELD CABLE TO GROUND ROD. RUN FREE END THROUGH 3/4" EMT AND CONNECT AS SHOWN ON DRAWING NO. 20.2/14.
   USE TWO COATS OF INSULATING VARNISH OVER EXOTHERMIC WELD AND EXPOSED CONDUCTOR.
3. ANCHOR BOLT DATA:
   FOR ANCHOR BOLT DATA SEE DRAWING NO. 20.2/11, POLE BASE DETAILS.
4. CONDUIT:
   WHERE 2" OR 3" DIAMETER CONDUIT TERMINATES IN A FOUNDATION THE CONDUIT ELBOWS IN THE FOUNDATION SHALL BE THE SAME SIZE AS THE CONDUIT. THE ENDS OF THE CONDUIT ELBOWS CONTAINING DISTRIBUTION CABLE SHALL BE CLOSED AS DESCRIBED IN THE SPECIFICATIONS.
   WHEN THE TERMINATING CONDUIT IS STEEL, THE CONDUIT ELBOWS IN THE POLE FOUNDATION SHALL ALSO BE STEEL.
5. GROUND RODS:
   WHEN A SECOND GROUND ROD IS REQUIRED IT SHALL BE INSTALLED IN THE CABLE TRENCH.
6. REINFORCING STEEL:
   REINFORCING STEEL MAY BE ASSEMBLED IN CAGES BY APPROVED WELDING OF BARS. SUBJECT TO APPROVAL OF THE CONTRACTING OFFICER'S REPRESENTATIVE, CAGES MAY BE ASSEMBLED IN A SPIRAL CONFORMATION.
7. REFER TO SPECIFICATIONS SECTION 16528, 2.14, FOR GROUND RODS AND 3.5 FOR THEIR INSTALLATION AND TESTING.

SECTION A – A

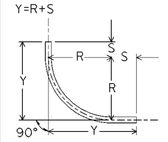


CAPPING DETAIL



SECTION S – S REINFORCING STEEL

R=BENDING RADIUS
S=STRAIGHT SECTION
Y=R+S



SPECIAL CONDUIT ELBOWS 90° BENDS

2", 2½" & 3" RGC			3" PVC		
R	S	Y	R	S	Y
24"	11"	35"	24"	8"	32"
30"	11"	41"			
36"	11"	47"	36"	2"	38"
42"	12"	54"			
48"	12"	60"			

Revisions			
Symbol	Descriptions	Date	Approved

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Reviewed by:
Approved by:

US Army Corps of Engineers

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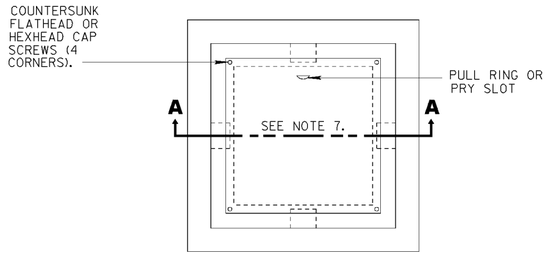
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

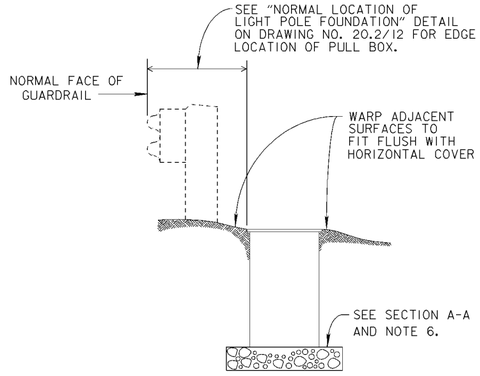
ROADWAY LIGHTING DETAILS (4 OF 6)

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.2/12
FILENAME: 00u5d104.dgn
PEN TABLE:
Sheet 4 of 6

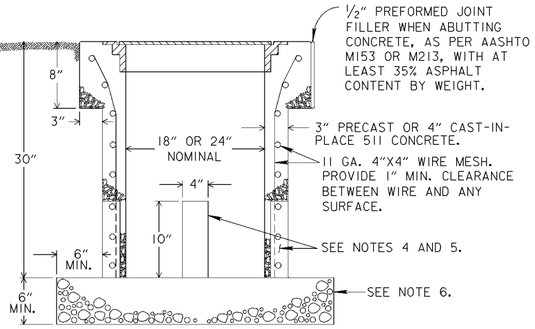
WORK AS CONSTRUCTED



PLAN VIEW



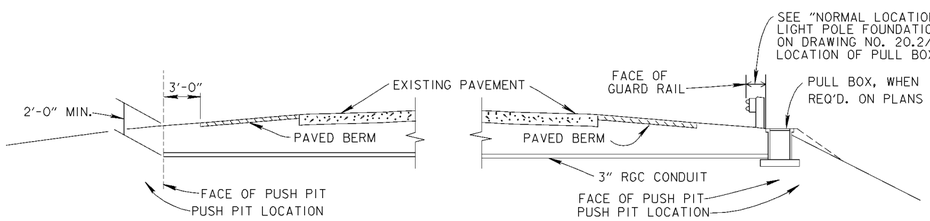
NORMAL INSTALLATION



SECTION A - A
CONCRETE PULL BOX

NOTES

1. CONCRETE PULL BOXES SHALL HAVE FERROUS METAL COVERS AND MATCHING FRAMES BY NEENAH, JOSAM OR ZURN FOUNDRIES, OR APPROVED EQUAL. COVERS MAY BE 1/2" MINIMUM GALVANIZED PLATE STEEL OR CAST IRON WITH REINFORCING RIBS.
2. TAPERED THICKNESS CONCRETE PULL BOX WALLS MAY BE USED: HOWEVER, MINIMUM WALL THICKNESS SHALL BE AS INDICATED.
3. LIFTING RINGS OR WIRE PULLING RINGS MAY BE INCORPORATED INTO PRECAST CONCRETE PULL BOX WALLS.
4. CONDUIT ENTRIES FOR CAST-IN-PLACE CONCRETE PULL BOXES SHALL BE CAST AS REQUIRED. PRECAST PULL BOXES MAY HAVE BLOCKED OUT SECTIONS OF THE WALL AS KNOCKOUTS IN THE QUANTITY OF ONE PER WALL.
5. UNUSED OPENING AREAS SURROUNDING CONDUITS SHALL BE BLOCKED AFTER CONDUIT INSTALLATION.
6. AGGREGATE USED FOR PULL BOXES SHALL BE NO. 7 OR 8, AT LEAST 6" DEEP.
7. SEE SPECIFICATIONS FOR COVER MARKING REQUIREMENTS.
8. SITE CLEARING AND RESTORATION SHALL BE IN ACCORDANCE WITH SPECIFICATIONS DIVISION 02.
9. WHEN UNDERMINING SHOULDER AREAS THAT DO NOT HAVE PAVED BERMS, PROVIDE 3/4" THICK STEEL SURFACE PLATES. CORRUGATED PIPE SLEEVES, SHORING OR OTHER APPROVED MEANS TO PREVENT CAVE-IN.
10. REFER TO SECTION 16528, 2.12, FOR CONCRETE PULL BOXES.
11. REFER TO SECTION 16528, 3.9, FOR ADDITIONAL REQUIREMENTS FOR CONDUIT JACKED OR DRILLED UNDER PAVEMENT.



CONDUIT JACKED OR DRILLED UNDER PAVEMENT

Revisions			
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HUNTINGTON, WEST VIRGINIA

Designed by: ODOT/J.AYRES
Drawn by: T.FAHERTY
Checked by: D.SCHAMP
Reviewed by:
Approved by:

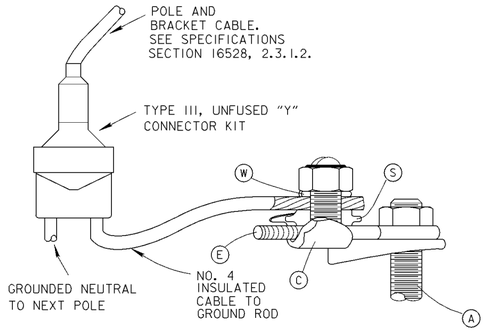
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

ROADWAY LIGHTING DETAILS (5 OF 6)

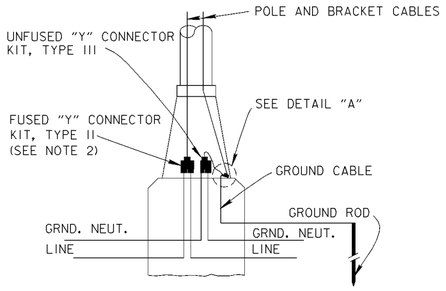
Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.2/13
FILENAME: 00u5d105.dgn
PEN TABLE:
Sheet 5 of 6

WORK AS CONSTRUCTED



DETAIL "A"

2-WIRE, GROUNDED NEUTRAL
TRANSFORMER BASE POLE

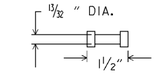


TRANSFORMER BASE POLE

480 VOLT, TWO-WIRE, GROUNDED NEUTRAL

NOTES

1. PROVIDE SUFFICIENT SLACK IN ALL CABLES TO PERMIT BRINGING KITS OUTSIDE OF POLE BASE THROUGH HANDHOLE OF ANCHOR BASE POLES OR DOOR IN TRANSFORMER BASE POLES.
2. FUSES FOR CONNECTOR KITS SHALL BE AS FOLLOWS:



ANY STANDARD MIDGET FERRULE TYPE FUSE,(EXCEPT GLASS TUBE) MAY BE USED IN THIS CONNECTION.

FUSES RATED 600 VOLTS AND 10 AMPERES, MINIMUM SHALL BE USED UNLESS OTHERWISE SPECIFIED.

3. REFER TO SPECIFICATIONS SECTION 16528, 2.4.2, FOR CABLE CONNECTOR KITS.

LEGEND OF ITEMS COMMON TO DETAIL "A"

- (A) ANCHOR BOLT
- (C) TIN PLATED COPPER SPLIT BOLT CONNECTOR WITH THE FOLLOWING COMPONENTS:
- (S) SPACER (TIN PLATED)
- (W) WASHER
- (E) GALV. STEEL EYEBOLT

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: ODOT/J.AYRES
Drawn by: T.FAHERTY
Checked by: D.SCHAMP
Reviewed by:
Approved by:

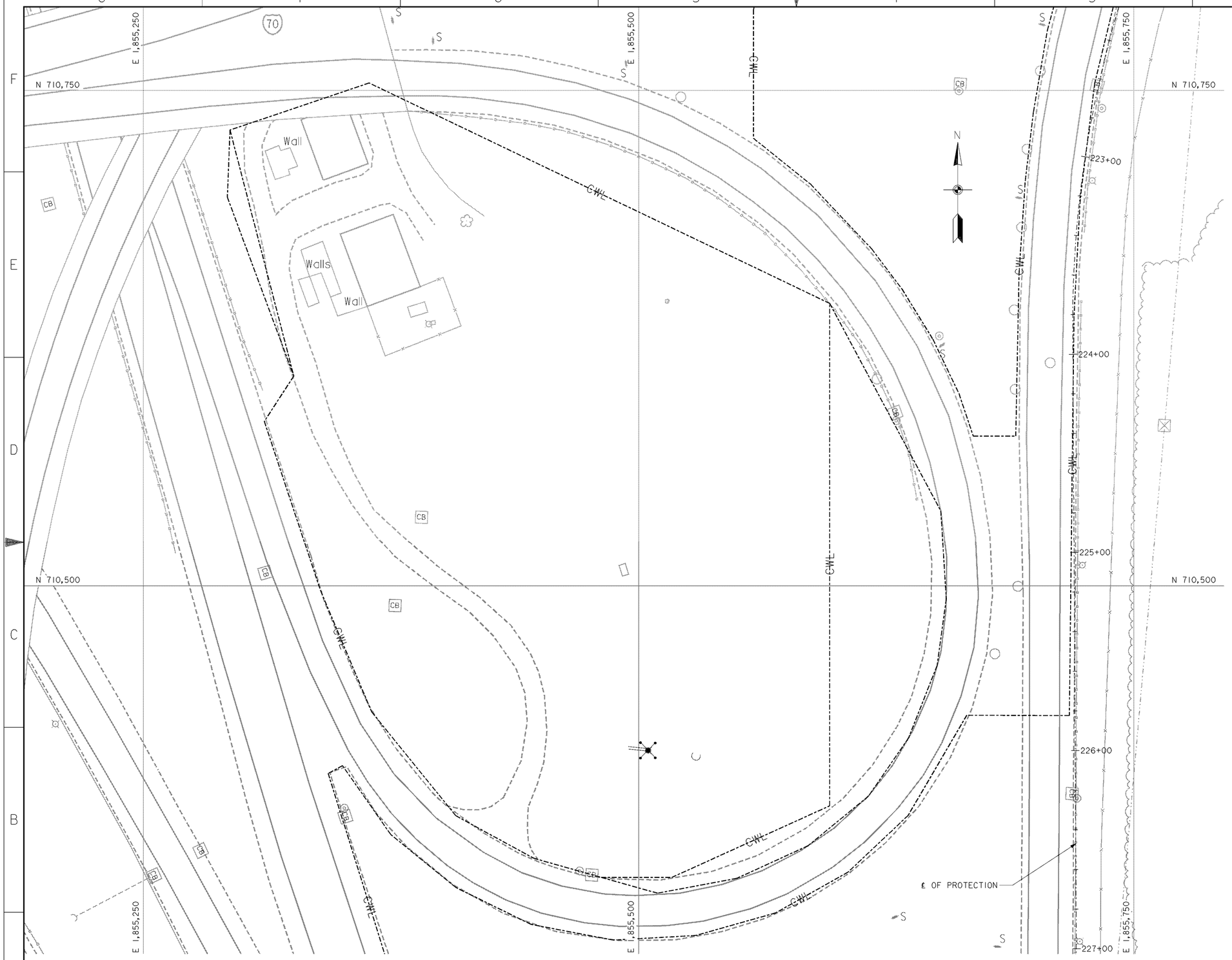
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

ROADWAY LIGHTING DETAILS (6 OF 6)

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.2/14
FILENAME: 00u5dt06.dgn
PEN TABLE:
Sheet 6 of 6

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 20'

20' 0 20'

NOTES

1. FOR CONTRACTOR WORK LIMITS SEE DRAWING NOS.6/1 THRU 6/5.
2. REFER TO SPECIFICATIONS SECTION 16528.3.16 FOR MAINTENANCE OF EXISTING LIGHTING DURING CONSTRUCTION.

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

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SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

LIGHT TOWER RELOCATION

Designed by: J.WOMACK	Scale: AS SHOWN	Sheet reference number: 20.2/15	FILENAME: 00u5rp01.dgn PEN TABLE:
Drawn by: T.FAHERTY	Date: OCTOBER 1999		
Checked by: J.WOMACK	Drawing Code: 16-PWC-12-		Sheet 1 of 1
Reviewed by: J.AYRES			
Approved by: E.TURNER			

WORK AS CONSTRUCTED

GENERAL

THIS PROJECT SHALL CONSIST OF DISCONNECTING AND ABANDONING THE CIRCUITS AT PULLBOX # 70 (PB70) FOR EXISTING LIGHT TOWER #5, AND THE PORTION OF THE CIRCUIT TO PB71 ON CIRCUIT C, FEEDING TOWER #2. CONTROL CENTER 3 WILL BE DISTURBED BY THE CONSTRUCTION, AND SHALL BE REPLACED WITH A NEW 480 VOLT, 2-WIRE, SINGLE PHASE SYSTEM MOUNTED ON A WOOD POLE, TOGETHER WITH THE RELOCATED WEATHER SENSOR UNIT, AND LOCATED NEAR THE EXISTING PUMP STATION AWAY FROM THE PROPOSED FILL. IN ADDITION, PB70 AND PB63 SHALL BE REMOVED.

A PORTION OF THE CIRCUIT AND CONDUIT FEEDING PB74 SHALL BE REPLACED WITH NEW 3-INCH RIGID CONDUIT ORIGINATING FROM THE NEW CONTROL CENTER. LIGHTING FOR TOWERS #5 AND #2 SHALL BE MAINTAINED BY INSTALLING A 1-1/2", TWO CONDUCTOR, NO. 4 AWG DUCT CABLE EACH IN 3-INCH RIGID CONDUIT. THE CIRCUIT SHALL ORIGINATE FROM THE NEW CONTROL CENTER, AND SHALL BE ADJUSTED FOR EACH STAGE OF THE FILL IN ORDER TO MAINTAIN EXISTING LIGHTING.

THE EXISTING FOUNDATION FOR TOWER #5 SHALL BE ABANDONED, AND A NEW FOUNDATION SHALL BE CONSTRUCTED IN A LOCATION AT LEAST 5 FEET TO THE EAST OF THE EXISTING FOUNDATION. DURING THE CONCRETE POUR, THE CONTRACTOR SHOULD HAVE THE FORM LEFT IN PLACE IN ORDER TO MAKE THE ELEVATION 1 FOOT ABOVE THE PROPOSED GROUND LINE. THE CONDUIT ELLS SHALL PROTRUDE AT THE STANDARD 24 INCHES BELOW THE PROPOSED GRADE, WITH A TEMPORARY CAP OVER THEM.

THE TOWER SHALL BE MOVED TO THE NEW FOUNDATION AFTER THE LUMINAIRE MOUNTING RING HAS BEEN LOWERED, AND THE LUMINAIRES HAVE BEEN INSPECTED AND CLEANED.

POWER SERVICE REMOVED, AS PER PLAN

THIS ITEM OF WORK INCLUDES THE REMOVAL OF THE LIGHTING CONTACTOR AND ENCLOSURE, AND ALL OTHER PORTIONS OF THE EXISTING POWER SERVICE NOT BEING REUSED. AN INVENTORY OF THE REMOVED ITEMS SHALL BE KEPT BY THE CONTRACTOR, FOR PURCHASE OF IDENTICAL HARDWARE FOR INSTALLATION OF THE NEW CONTROL CENTER. EXISTING UNDERGROUND CONDUIT AND WIRING MAY BE ABANDONED IN PLACE EXCEPT WHERE NEW WIRING IS TO BE PLACED IN EXISTING CONDUITS OR PULL BOXES. IN THIS LATTER CASE, THE OLD WIRES SHALL BE REMOVED. REMOVED MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT SITE. ALL DISTURBED AREAS SHALL BE RESTORED SO AS TO MATCH THE SURROUNDING AREA.

THIS ITEM SHALL ALSO COMPENSATE THE CONTRACTOR FOR COORDINATING WITH THE POWER COMPANY TO INSURE THAT THEY DISCONNECT AND REMOVE ANY OF THEIR ITEMS THAT ARE PART OF THE POWER SERVICE. IT ALSO INCLUDES RETURNING TO THE POWER COMPANY ANY ITEMS BELONGING TO THEM THAT WERE REMOVED BY THE CONTRACTOR.

CITY OF COLUMBUS WEATHER SENSOR UNIT RELOCATED, AS PER PLAN

THIS ITEM OF WORK INCLUDES THE REMOVAL AND STORAGE OF THE WEATHER SENSOR UNIT TOWER AND ALL OTHER PORTIONS OF THE EXISTING WEATHER SENSOR UNIT. EXISTING UNDERGROUND CONDUIT AND WIRING MAY BE ABANDONED IN PLACE EXCEPT WHERE NEW WIRING IS TO BE PLACED IN EXISTING CONDUITS. IN THIS LATTER CASE, THE OLD WIRES SHALL BE REMOVED. REMOVED WIRING AND COMMUNICATION MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE PROJECT SITE. ALL DISTURBED AREAS SHALL BE RESTORED SO AS TO MATCH THE SURROUNDING AREA.

THIS ITEM SHALL ALSO COMPENSATE THE CONTRACTOR FOR COORDINATING WITH THE CITY OF COLUMBUS AND POWER COMPANY TO INSURE THAT THEY DISCONNECT, REMOVE, AND STORE ANY OF THEIR ITEMS THAT ARE PART OF THE WEATHER SENSOR UNIT FOR RELOCATION.

POWER SERVICE

THE POWER SUPPLYING AGENCY FOR THIS PROJECT IS:

CITY OF COLUMBUS M.E.L.P.
DIVISION OF ELECTRICITY
910 DUBLIN ROAD
COLUMBUS, OHIO 43215
(614) 645-8371

ELECTRICAL SERVICE IS 480 VOLTS, SINGLE PHASE, 2-WIRE, GROUNDED NEUTRAL. THE CONTRACTOR SHALL INSURE THAT THE NEW CONTROL CENTER ITEMS, INCLUDING THE CABINET AND CONTACTOR, ARE IDENTICAL TO THE ORIGINAL EQUIPMENT. THIS ITEM OF WORK SHALL ALSO INCLUDE REINSTALLATION OF THE CITY OF COLUMBUS WEATHER SENSOR TOWER AND RELATED APPURTENANCES TO THE SATISFACTION OF THE CITY OF COLUMBUS.

AFTER ACCEPTANCE OF THE LIGHTING, THE POWER SERVICE ELECTRICAL ENERGY ACCOUNT SHALL BE TRANSFERRED TO THE MAINTAINING AGENCY NOTED IN THE PLANS.

PULLBOX REMOVED, AS PER PLAN

THIS ITEM OF WORK WILL CONSIST OF REMOVING AN EXISTING PULL BOX, WHICH WILL THEN BE PROPERLY DISPOSED OF. THE RESULTANT OPENING SHALL THEN BE BACKFILLED TO GRADE WITH SUITABLE COMPACTED SOIL AND RESTORED TO MATCH THE SURROUNDING AREA.

DISCONNECT EXISTING CIRCUIT, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF THE DISCONNECTION OF AN EXISTING LIGHT CIRCUIT AT A LIGHT TOWER, PULL BOXES, AND POWER SERVICE.

DISCONNECTION AT PULL BOXES PB71 AND PB74 SHALL INVOLVE THE REMOVAL OF THAT PART OF CABLE THAT IS TO BE REPLACED.

LIGHTING MISC.: CONNECT TO EXISTING CIRCUIT

THIS ITEM OF WORK SHALL CONSIST OF FEEDING DUCT CABLE INTO THE EMPTY CONDUIT BEND OF THE EXISTING CONDUIT, AT PULL BOXES PB71 AND PB74.

THE WORK SHALL INCLUDE EXCAVATING TO ACCESS THE STUBBED-OUT CONDUIT BEND, CLEANING AND REMOVING MUD AND DEBRIS FROM THE CONDUIT, FEEDING DUCT CABLE THROUGH CONDUIT.

LIGHT TOWER FOUNDATION REMOVED, AS PER PLAN

THIS ITEM OF WORK SHALL CONSIST OF REMOVING A LIGHT TOWER FOUNDATION. ANY PORTION OF THE EXISTING FOUNDATION, WHICH INTERFERES WITH THE PROPOSED CONSTRUCTION, SHALL BE REMOVED. IN ADDITION THE FOUNDATION SHALL BE REMOVED TO A MINIMUM OF ONE FOOT BELOW FINISHED GRADE. THE RESULTANT DEPRESSION SHALL BE BACKFILLED WITH COMPACTED SOIL AND THE DISTURBED AREA SHALL BE RESTORED TO NORMAL CONDITIONS TO THE SATISFACTION OF THE ENGINEER. IN ADDITION, WHERE A NEW FOUNDATION IS TO BE LOCATED WITHIN A TEN FOOT RADIUS OF A REMOVED FOUNDATION, THE RESULTANT OPENING LEFT BY A REMOVED LIGHT TOWER FOUNDATION SHALL BE BACKFILLED AND COMPACTED AS THOUGH IT WERE SUBGRADE FOR A ROADWAY.

LUMINAIRES REMOVED FOR STORAGE, AS PER PLAN

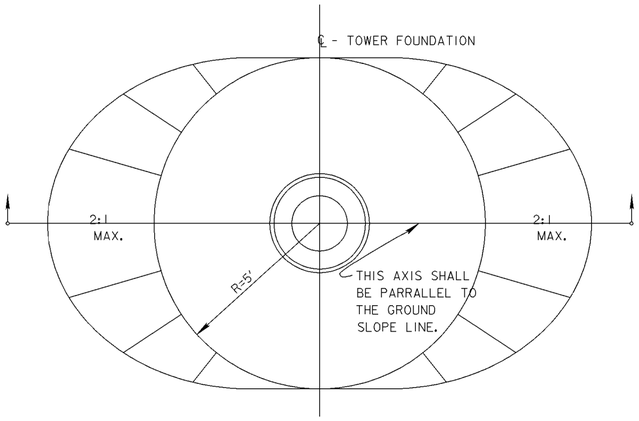
THIS ITEM OF WORK SHALL CONSIST OF REMOVING THE EXISTING LUMINAIRES AND STORING THEM FOR REERECTION.

REERECT EXISTING LUMINAIRES, AS PER PLAN

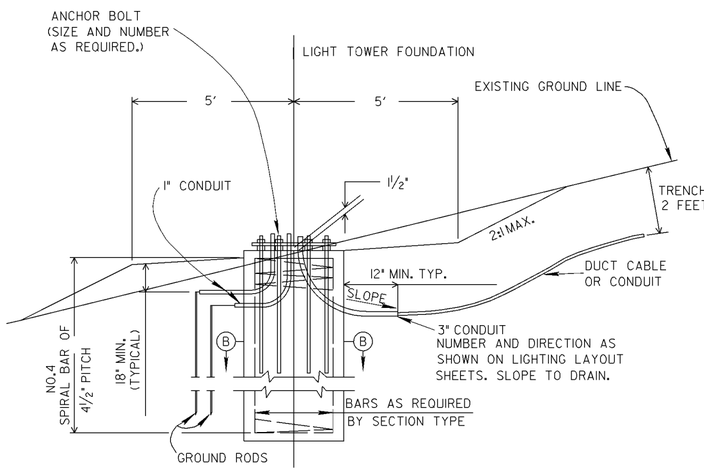
THIS ITEM OF WORK SHALL CONSIST OF CLEANING THE EXISTING LUMINAIRES REFLECTORS AND LENSES, REPLACING THE LAMPS, MAKING REPAIRS IF NECESSARY, VERIFYING THAT THE LUMINAIRES ARE IN OPERATING CONDITION, AND REERECTING THE LUMINAIRES ONTO THE RELOCATED TOWER.

REERECT EXISTING LIGHT TOWER, AS PER PLAN

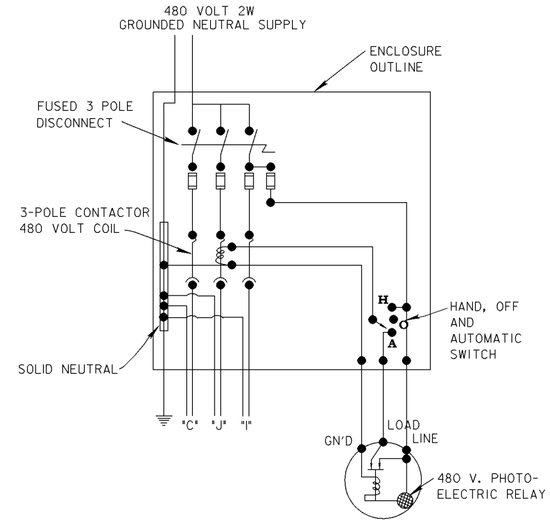
THIS ITEM OF WORK SHALL CONSIST OF THE REERECTION OF THE EXISTING LIGHT TOWER ON A NEW FOUNDATION. THE POLE SHALL BE WASHED AND RESTORED TO WORKING ORDER BEFORE REERECTION. NEW ANCHOR BOLTS SHALL BE PROVIDED AS PART OF THIS ITEM.



GRADING PLAN



FOUNDATION WITHOUT MAINTENANCE PLATFORM



480 VOLT, 2-WIRE GROUNDED NEUTRAL SINGLE UNIT

FOUNDATION DATA			
TYPE	D	B	BC MAX
I	36"	31"	26"
II	42"	37"	32"

TABLE #1

DETAIL NOTES

1. FOUNDATIONS ARE DESIGNED FOR STRUCTURES WITH ROUND TAPERED SHAFTS DESIGNED IN ACCORDANCE WITH THE LATEST AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS", FOR A 90 MPH WIND ZONE WHEN SUPPORTING THE FOLLOWING:

   SIX (6) CYLINDRICAL LUMINAIRES WITH PROJECTED AREA OF 3.5 SQUARE FEET AND WEIGHING 75 POUNDS EACH.

   ONE (1) CYLINDRICAL HEAD WITH PROJECTED AREA OF 5.3 SQUARE FEET AND 340 POUNDS TOP LATCHED LOWERING DEVICE.

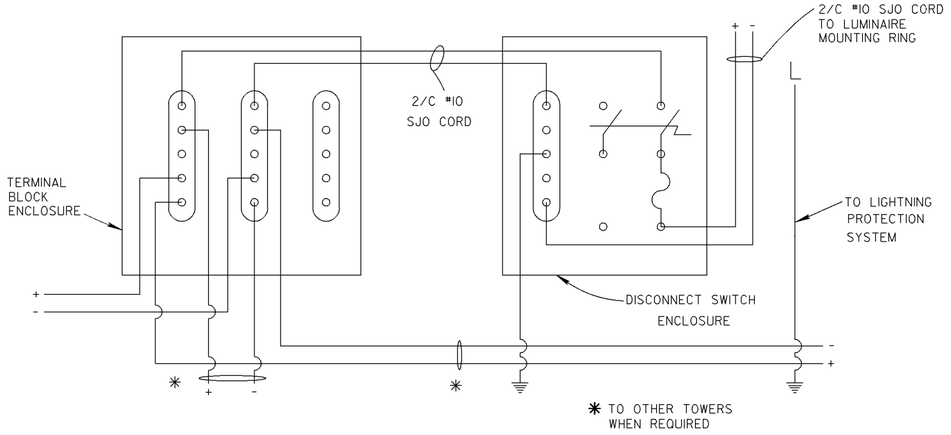
2. TOWER HAND HOLES SHALL BE ON DOWN-SLOPE SIDE OF TOWER.

3. ANCHOR BOLT SIZE AND SPACING TO FIT MOUNTING PLATE SUPPLIED WITH TOWER. HOWEVER, BOLT CIRCLE SHALL BE EQUAL TO OR LESS THAN THE MAXIMUM BOLT CIRCLE PERMITTED IN TABLE NO.1. THE MINIMUM LENGTH ANCHOR BOLT SHALL BE 60" AND THE BOLTS SHALL HAVE EITHER A 6 INCH "L" BEND OR A 5" X 5" PLATE ON THE EMBEDDED END.

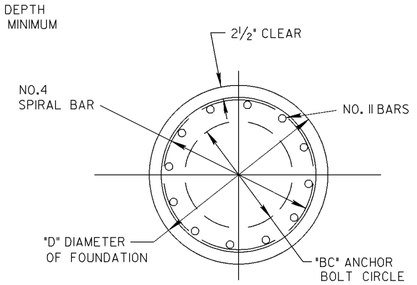
4. THE LENGTH "L" OF THE ½" NO.4 SPIRAL BAR IS THE FOUNDATION EMBEDMENT DEPTH WITH A 3" CLEARANCE AT EACH END. FOUR STEEL CHANNELS, TEE OR ANGLE SPACERS, WEIGHING APPROXIMATELY 0.80 POUNDS PER FOOT OF SPACER SHALL BE PROVIDED FOR EACH SPIRAL UNIT. THEY SHALL BE EQUALLY SPACED ALONG THE PERIPHERY OF THE COIL. THE NUMBER OF TURNS OF THE NO.4 SPIRAL BAR SHALL INCLUDE A FULL UNPITCHED TURN AT EACH END.

5. CONCRETE SHALL BE AS PER 499, CLASS "C".

6. CONDUITS IN THE FOUNDATION SHALL CONFORM TO 625 AND 713. THE FOUNDATION CONDUIT SHALL BE OF THE SAME MATERIAL AS THAT USED TO PROTECT THE CIRCUIT EXTENSION BEYOND THE FOUNDATION.



480 VOLT, 2-WIRE GROUNDED



SECTION B-B

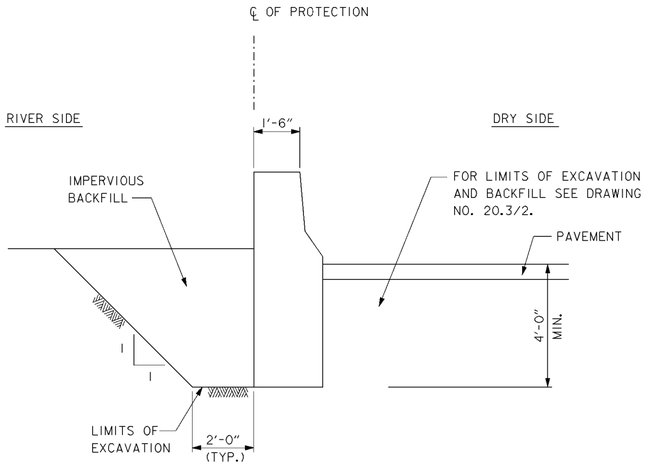
Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.WOMACK	SCIOTO RIVER COLUMBUS, OHIO WEST COLUMBUS, L.P.P. PHASE IIIA
Drawn by: T.FAHERTY	**TOWER LIGHTING NOTES AND DETAILS**
Checked by: J.WOMACK	
Reviewed by: J.AYRES	Scale: NONE
Approved by: E.TURNER	Date: OCTOBER 1999
	Drawing Code: 16-PWC-12-
	Sheet reference number: 20.2/6
	FILENAME: PEN TABLE: 00u5gn01.dgn
	Sheet 1 of 1

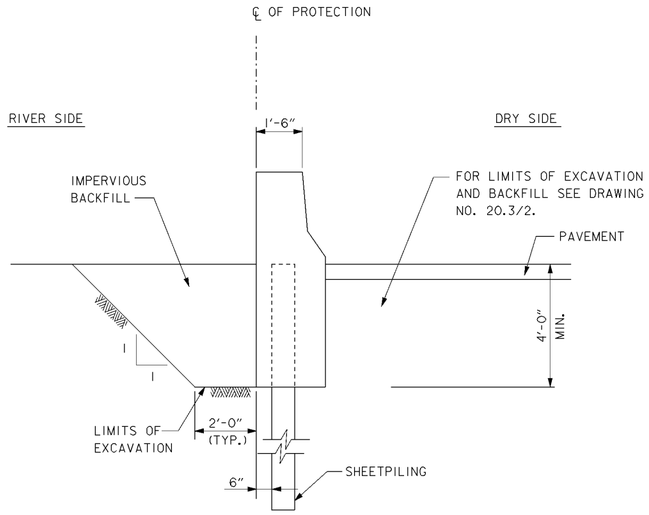
WORK AS CONSTRUCTED



TYPICAL I-WALL SECTION
STA.227+18.00 TO STA.231+13.38
STA.250+08.74 TO STA.251+82.07

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

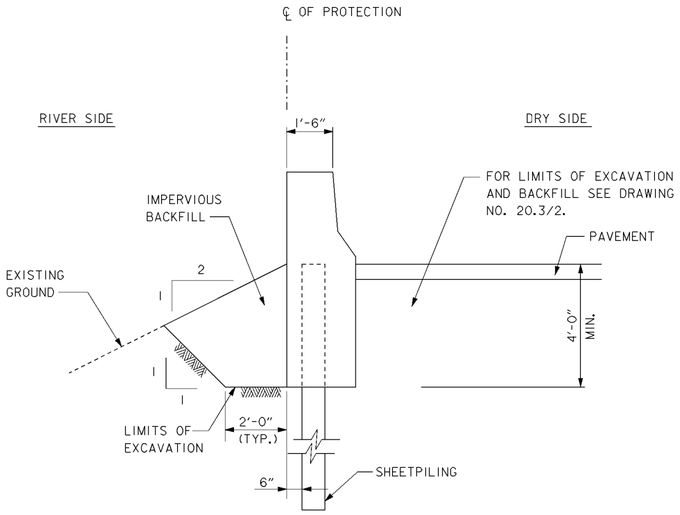
NOTE: EXISTING CURB NOT SHOWN.



TYPICAL I-WALL SECTION
STA.231+13.38 TO STA.235+32.19
STA.251+82.07 TO STA.254+66.95

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

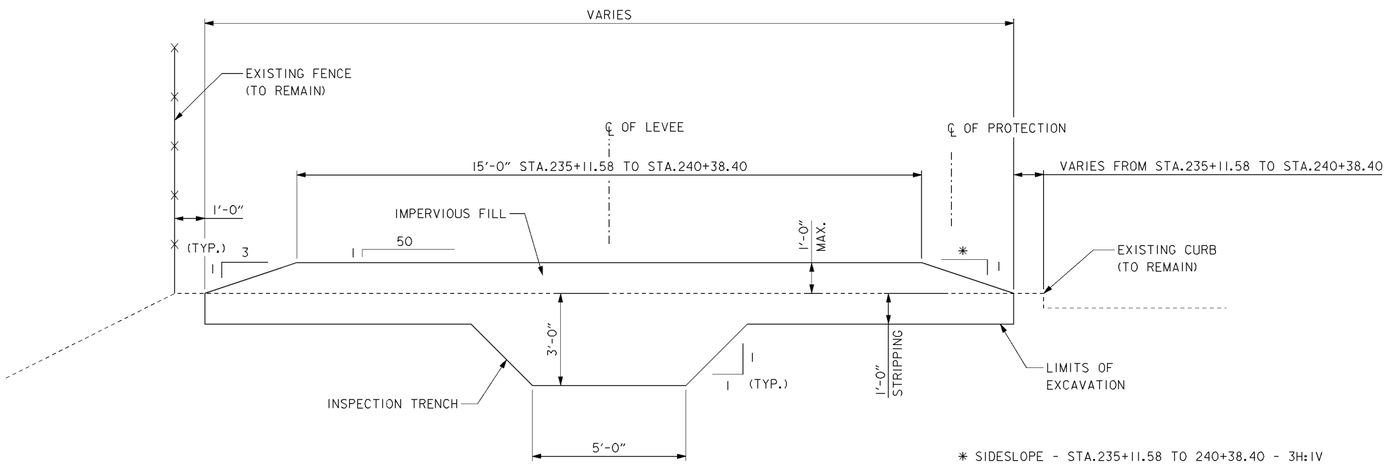
NOTE: EXISTING CURB NOT SHOWN.



TYPICAL I-WALL SECTION
STA.254+66.95 TO STA.260+45.10

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

NOTE: EXISTING CURB NOT SHOWN.



* SIDESLOPE - STA.235+11.58 TO 240+38.40 - 3H:1V
SIDESLOPE - STA.248+15.38 TO 250+08.74 - VARIES

TYPICAL LEVEE SECTION
STA.235+11.58 TO STA.240+38.40
STA.248+15.38 TO STA.250+08.74

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

NOTES

1. FOR PAVEMENT SECTION AND PAVEMENT GRADING SEE DRAWING NO. 20.3/2.

Revisions			
Symbol	Descriptions	Date	Approved
1	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

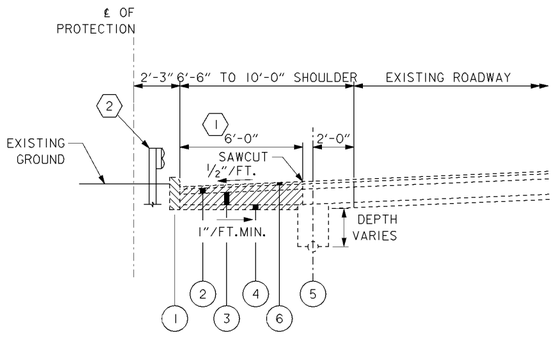
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

FLOOD PROTECTION TYPICAL SECTIONS

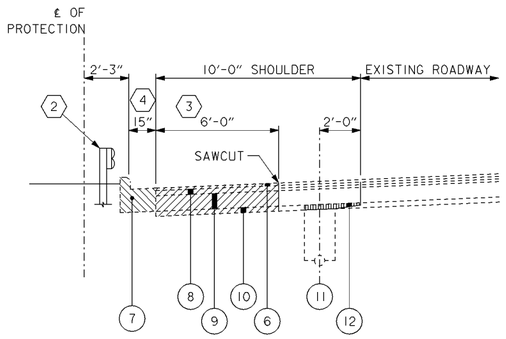
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.3/1
FILENAME: 00adts01.dgn
PRN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



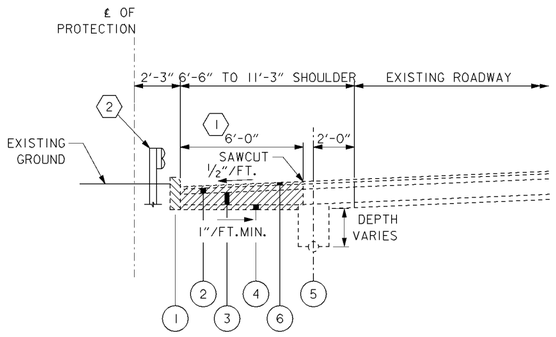
EXISTING SECTION

STA. 227+10 TO 235+32
NOTE: EXISTING SECTION OBTAINED FROM FRA62-12.56 FRA3-13.70 DRAWINGS.
SCALE: 1" = 3'



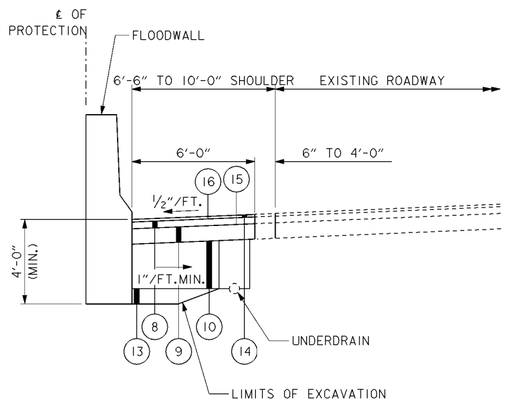
EXISTING SECTION

STA. 250+00 TO 254+30
NOTE: EXISTING SECTION OBTAINED FROM FRA70-12.31S DRAWINGS.
SCALE: 1" = 3'



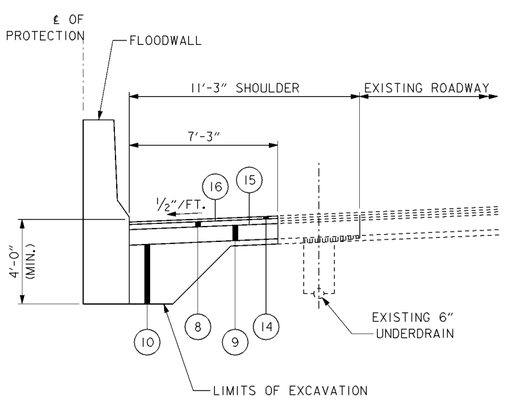
EXISTING SECTION

STA. 254+30 TO 260+45.10
NOTE: EXISTING SECTION OBTAINED FROM FRA62-12.56 FRA3-13.70 DRAWINGS.
SCALE: 1" = 3'



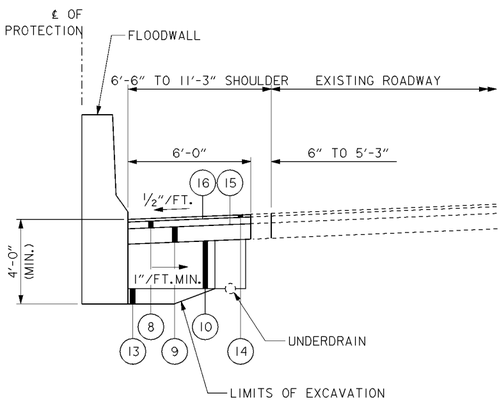
TYPICAL SECTION

STA. 227+10 TO 235+32
SCALE: 1" = 3'



TYPICAL SECTION

STA. 250+00 TO 254+30
SCALE: 1" = 3'



TYPICAL SECTION

STA. 254+30 TO 260+45.10
SCALE: 1" = 3'

	CMSC/ODOT ITEM	
1	1-12	TYPE 6 CURB (1957)
2	B-33	3" BITUMINOUS AGGREGATE BASE (1957)
3	1-18	STABILIZED CRUSHED AGGREGATE SHOULDERS (1957)
4	1-22	SUBBASE, GRADING A OR B MODIFIED, THICKNESS VARIES (1957)
5	1-4	6" PIPE UNDERDRAIN (1957)
6	-	ASPHALT CONCRETE OVERLAY
7	609	TYPE 2 COMBINATION CURB AND GUTTER
8	301	3" BITUMINOUS AGGREGATE BASE

	CMSC/ODOT ITEM	
9	304	9" AGGREGATE BASE
10	310	SUBBASE, THICKNESS VARIES
11	605	6" PIPE UNDERDRAIN
12	-	DRAINAGE CONNECTOR, NO. 8 AGGREGATE
13	-	IMPERVIOUS BACKFILL
14	404	ASPHALT CONCRETE SURFACE COURSE, MATCH EXISTING THICKNESS
15	408	PRIME COAT
16	407	TACK COAT

NOTES

1. FOR LIMITS OF EXCAVATION SEE DRAWING NO. 20.3/1.
2. WHERE EXISTING PIPE UNDERDRAINS AND OVERLYING GRANULAR FILTER MATERIAL ARE LOCATED WITHIN THE LIMITS OF EXCAVATION THEY SHALL BE REMOVED AND REPLACED BY THE CONTRACTOR. WHERE PIPE UNDERDRAINS AND GRANULAR FILTER MATERIAL, LOCATED OUTSIDE THE LIMITS OF EXCAVATION, ARE DISTURBED BY THE CONTRACTOR THEY SHALL BE REPLACED BY THE CONTRACTOR AS DIRECTED BY THE CONTRACTING OFFICER AT NO EXPENSE TO THE GOVERNMENT.
3. THE ESTIMATED QUANTITY FOR ASPHALT CONCRETE SURFACE COURSE WAS CALCULATED BASED ON AN ASSUMED THICKNESS OF 1-1/2 INCHES.

CODED NOTES

1. SAWCUT AND REMOVE PAVEMENT AND CURB.
2. REMOVE GUARDRAIL.
3. SAWCUT AND REMOVE PAVEMENT AND SUBBASE.
4. REMOVE TYPE 2 CURB AND GUTTER.

LEGEND

ITEM TO BE REMOVED

Revisions			
Symbol	Descriptions	Date	Approved
1	REV. IN ACCORDANCE WITH AMENDMENT MC001	2/28/00	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: P.CONROY
Drawn by: T.MULLINS
Checked by: R.OMAN
Reviewed by:
Approved by:

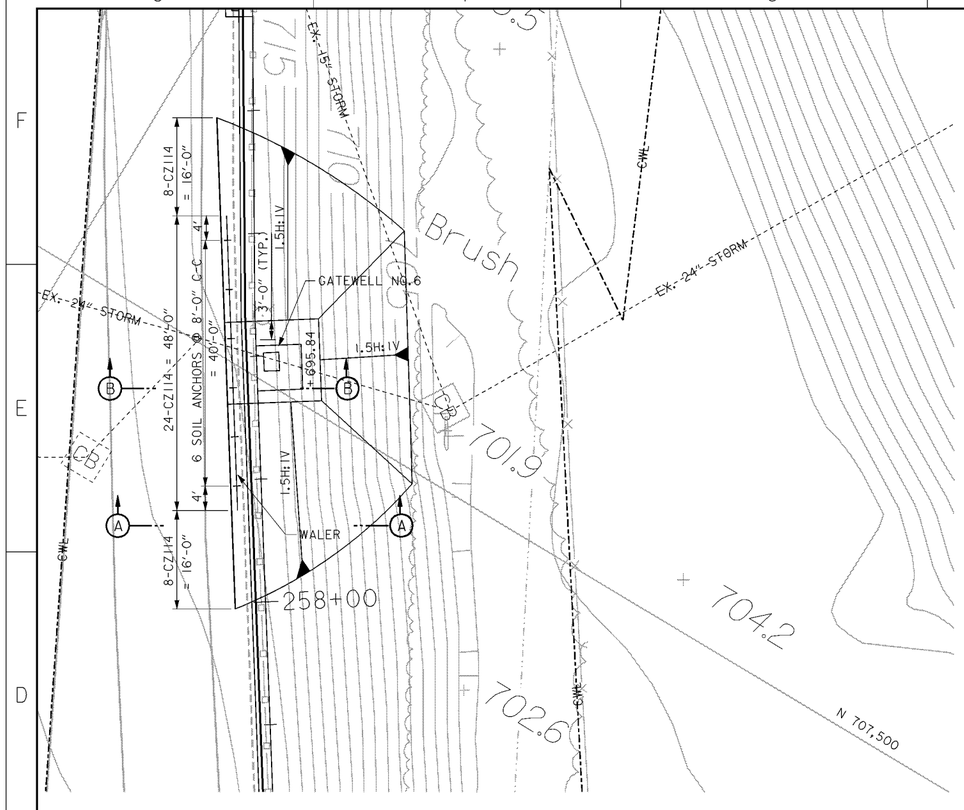
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

PAVEMENT DETAILS

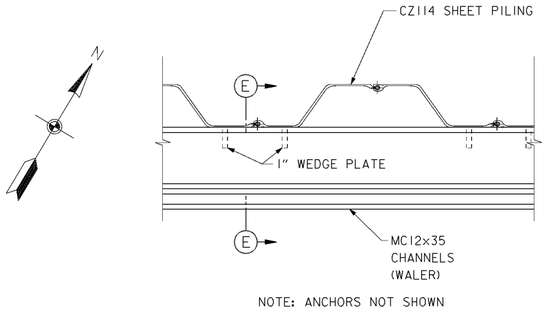
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 20.32
FILENAME: 00pvsc01.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



PLAN

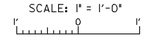
SCALE: 1" = 10'

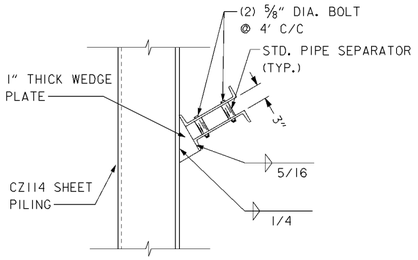


NOTE: ANCHORS NOT SHOWN

SECTION C-C

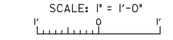
SCALE: 1" = 1'-0"

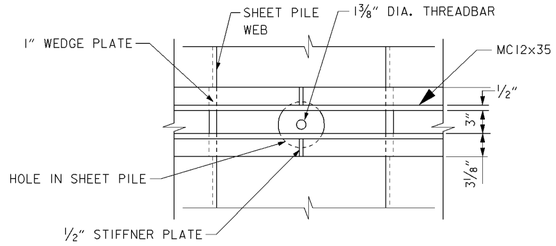




SECTION E-E

SCALE: 1" = 1'-0"





SECTION D-D

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

CODED NOTES

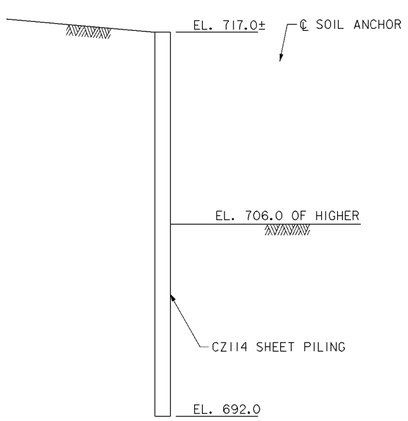
1. SOIL ANCHOR BONDED LENGTH AND DIAMETER TO BE DETERMINED BY THE CONTRACTOR BASED ON PROPOSED METHODS OF INSTALLATION. ANCHOR BOND LENGTH SHALL SAFELY SUPPORT AN ANCHOR DESIGN LOAD OF 80 KIPS WITH A FACTOR OF SAFETY AGAINST PULLOUT OF 2.5. THE MINIMUM BOND LENGTH SHALL BE 20 FEET.
2. VOID BETWEEN DRILL HOLE AND SHEATHING OF UNBONDED LENGTH SHALL BE FILLED WITH GROUT.

GENERAL NOTES

1. SOIL ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH "RECOMMENDATIONS FOR PRESTRESSED ROCK AND SOIL ANCHORS, 1996 EDITION BY THE POST-TENSIONING INSTITUTE" (PTI).
2. SOIL ANCHOR DESIGN LOAD = 80 KIPS.
3. THE FIRST SOIL ANCHOR INSTALLED SHALL BE PERFORMANCE TESTED AND THE REMAINING SOIL ANCHORS SHALL BE PROOF TESTED. THE TEST PROCEDURES USED SHALL BE AS SET FORTH BY PTI RECOMMENDATIONS.
4. NO EXCAVATION BELOW ELEVATION 709 (EXCEPT FOR MINOR EXCAVATION TO DRILL SOIL ANCHOR) SHALL OCCUR UNTIL ALL SOIL ANCHORS FOR SHORING HAVE BEEN INSTALLED AND TESTED.
5. SHEET PILING LAYOUT WAS BASED UPON THE PROPERTIES FOR THE CZ114 COLD-ROLLED SHEET PILING MANUFACTURED BY CASTEEL, INC. OTHER MANUFACTURERS OF SHEET PILING ARE ACCEPTABLE IF THEY MEET THE MINIMUM SECTION PROPERTIES FOR Z-TYPE SHEET PILING GIVEN BELOW.

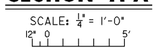
SECTION	WEB THICKNESS (IN.)	SECTION MODULUS (PER LIN. FT. OF WALL) (IN.^{3})	STEEL GRADE
CZ114	0.335	31.62	A572 GR50

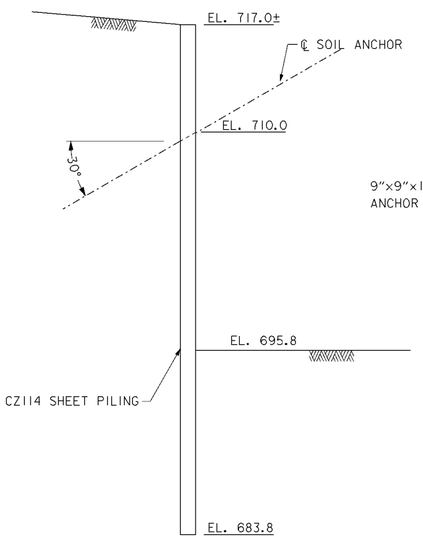
6. ANCHORS SHALL BE EQUIPPED WITH SIMPLE CORROSION PROTECTION IN ACCORDANCE WITH FHWA/RD-82/047, TIEBACKS.



SECTION A-A

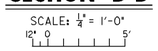
SCALE: 1/4" = 1'-0"

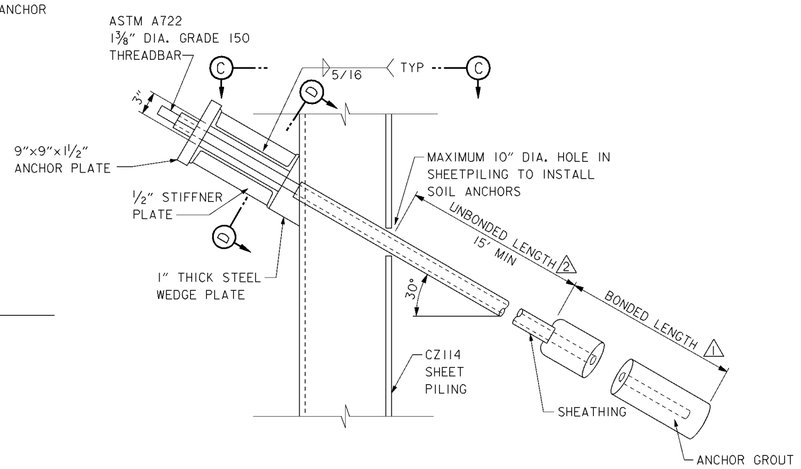




SECTION B-B

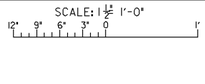
SCALE: 1/4" = 1'-0"





TYPICAL SOIL ANCHOR DETAIL

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



Revisions			
Symbol	Descriptions	Date	Approved
		7/99	J.A.H.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: A.PUMMELL
Checked by: V.AMATO
Reviewed by:
Approved by:

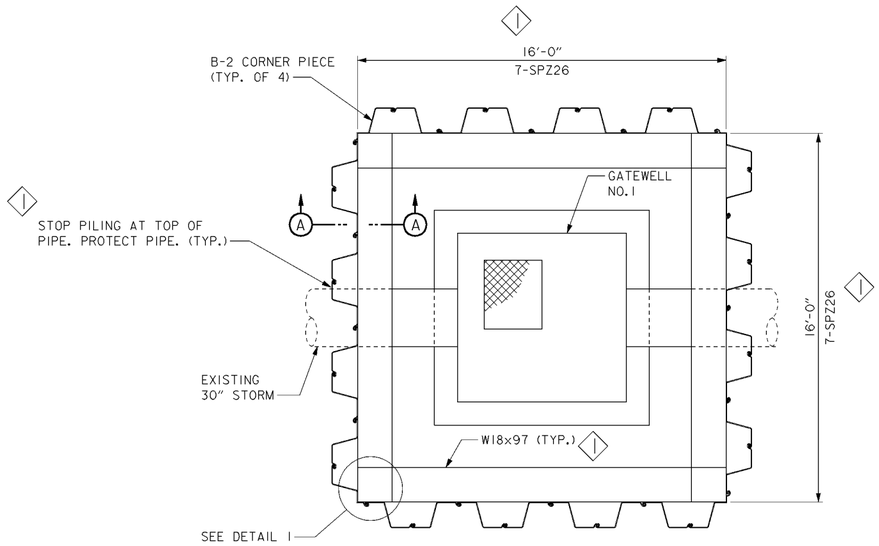
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GATEWELL NO.6 SHORING PLAN

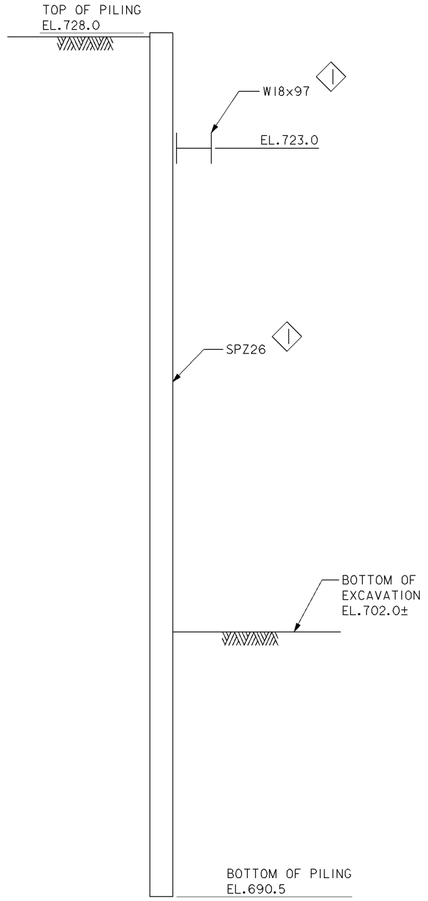
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.3/3
FILENAME: 00appI01.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



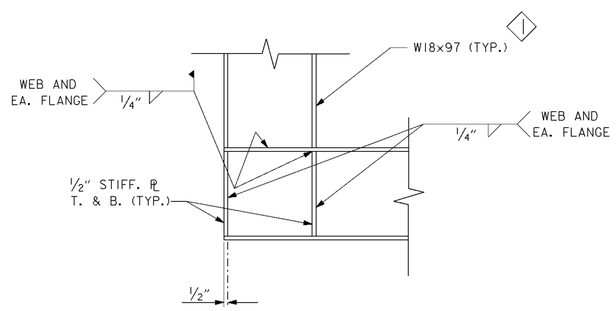
SHORING PLAN

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



SECTION A-A

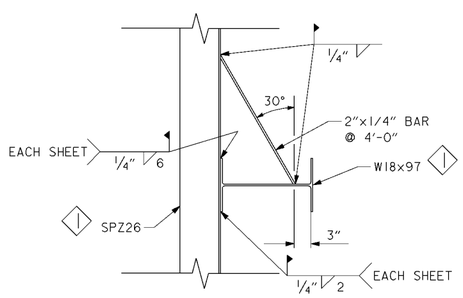
SCALE: 3/8" = 1'-0"



DETAIL 1

SCALE: 1" = 1'

* TYPICAL 4 LOCATIONS



TYPICAL WALE CONNECTION

SCALE: 1" = 1'

NOTE

1. NO EXCAVATION BELOW EL.722.0 SHALL OCCUR UNTIL ALL BRACING HAS BEEN INSTALLED.
2. SHEET PILING LAYOUT WAS BASED UPON THE PROPERTIES FOR THE SPZ26 COLD-ROLLED SHEET PILING MANUFACTURED BY SYRO, INC. OTHER MANUFACTURERS OF SHEET PILING ARE ACCEPTABLE IF THEY MEET THE MINIMUM SECTION PROPERTIES FOR Z-TYPE SHEET PILING GIVEN BELOW.

SECTION	WEB THICKNESS (IN.)	SECTION MODULUS (PER LIN. FEET OF WALL)	STEEL GRADE
SPZ26	0.375	34.82	A572 GR50

3. FOR GATEWELL NO.2 SEE DRAWING NOS.15/1, 15/7 AND 15/8.

Revisions			
Symbol	Descriptions	Date	Approved
1	REV. IN ACCORDANCE WITH AMENDMENT 0001	12/99	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

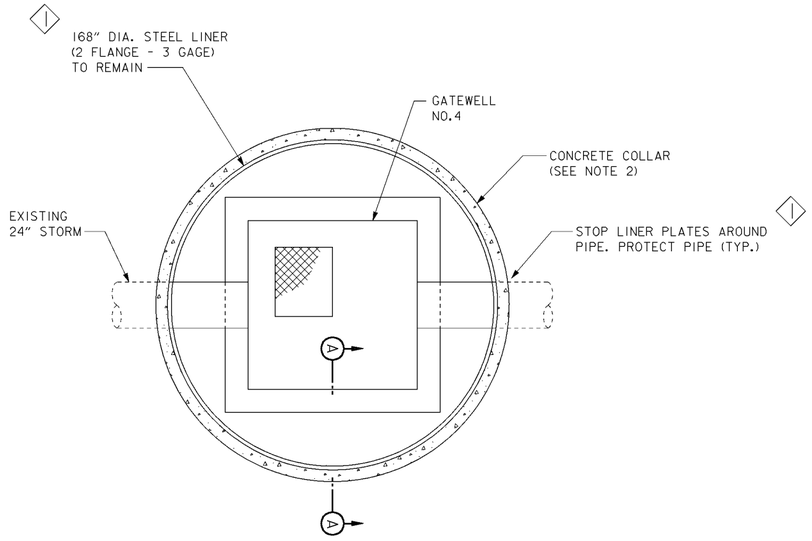
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GATEWELL NO.1 SHORING PLAN

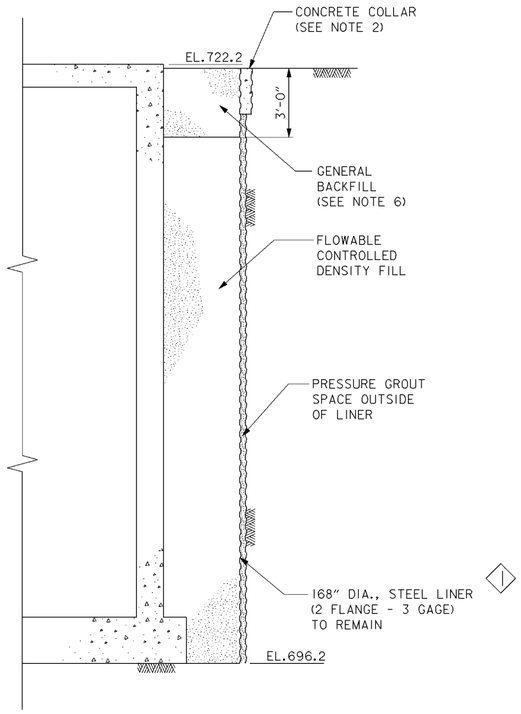
Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.3/4
FILENAME: 00epp102.dgn
PRN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED



SHORING PLAN

SCALE: $\frac{3}{8}$" = 1'-0"

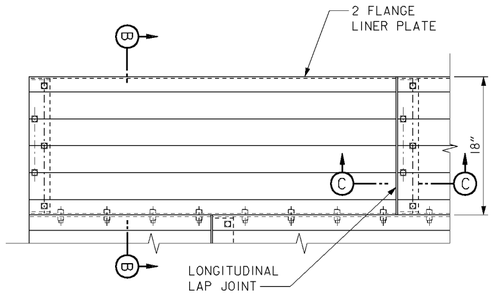


SECTION A-A

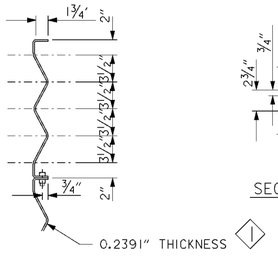
SCALE: $\frac{3}{8}$" = 1'-0"

NOTE

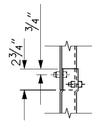
1. LOCATION. THE CONTRACTOR SHALL CONDUCT FIELD SURVEYS IN ORDER TO DETERMINE THE EXACT LOCATION OF THE EXISTING 24-INCH DIAMETER STORM SEWER. THE SHORING SHALL BE CENTERED OVER THE EXISTING STORM SEWER.
2. COLLAR. CONTRACTOR TO PROVIDE COLLAR IN ACCORDANCE WITH LINER PLATE MANUFACTURER'S RECOMMENDATIONS.
3. (1) LINER PLATE. SHAFT LINER IS TO BE INSTALLED AT THE ADVANCING SHAFT FACE. EACH COURSE OF LINER PLATES SHALL BE COMPLETED BEFORE EXCAVATING FOR ADJACENT, LOWER COURSES OF LINER PLATE. EXCAVATION SHALL NOT BE ADVANCED MORE THAN ONE COURSE OF LINER PLATES BELOW THE NEXT COMPLETED COURSE. LINER PLATES SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. FLOWABLE CONTROLLED DENSITY FILL. SPACE BETWEEN LINER PLATE AND GATEWELL TO BE BACKFILLED WITH FLOWABLE CONTROLLED DENSITY FILL (FCDF). FCDF SHALL BE IN ACCORDANCE WITH CMSC ITEM 636, TYPE I EXCEPT THAT IT SHALL CONTAIN 100 LB. OF CEMENT PER CUBIC YARD OF FCDF. FCDF SHALL BE PLACED IN LIFTS NOT EXCEEDING 7.5 FEET AND ALLOWED TO SET PRIOR TO PLACING THE NEXT LIFT. EACH LIFT OF FCDF SHALL BE PLACED AROUND THE STRUCTURE UNIFORMLY TO PREVENT UNBALANCED LOADING ON THE GATEWELL. CONCRETE SHALL CURE A MINIMUM OF 14 DAYS PRIOR TO PLACING ANY FCDF BACKFILL.
5. GROUTING. GROUTING BETWEEN THE LINER PLATE AND SURROUNDING SOIL SHALL CONFORM TO PARAGRAPH 908.10, GROUTING OF CMSC ITEM 908. GROUT HOLE SPACING IN THE LINER PLATES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. GROUTING SHALL BE PERFORMED AT DEPTH INTERVALS NOT TO EXCEED 6 FEET OR MORE FREQUENTLY AS REQUIRED FOR SOIL CONDITIONS ENCOUNTERED. GROUTING PRESSURES, MEASURED AS TOTAL HEAD, SHALL NOT EXCEED 13 POUNDS PER SQUARE INCH.
6. GENERAL BACKFILL. REMOVE TOP 3 FEET OF LINER PLATE AND ANY COLLAR PRIOR TO PLACING GENERAL BACKFILL.
7. DEWATERING. STEEL LINER PLATE HAS BEEN DESIGNED BASED ON GROUNDWATER BEING PRESENT BELOW THE BOTTOM OF THE EXCAVATION. IF GROUNDWATER IS ENCOUNTERED ABOVE THE BOTTOM OF THE EXCAVATION THE CONTRACTOR SHALL TAKE MEASURES TO LOWER AND MAINTAIN GROUNDWATER A MINIMUM OF 2 FEET BELOW THE BOTTOM OF THE EXCAVATION. GROUNDWATER SHALL BE LOWERED OUTSIDE THE EXCAVATION. SUMPING FROM THE EXCAVATION AS THE PRIMARY MEANS OF DEWATERING WILL NOT BE PERMITTED.



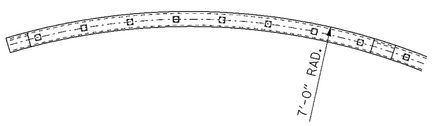
PLAN



SECTION B-B



SECTION C-C



SIDE ELEVATION

MINIMUM LINER PLATE PROPERTIES (1)

MATERIALS:

LINER PLATE: ASTM A 569
- MIN. TENSILE STRENGTH: 42,000 PSI
- MIN. YIELD STRENGTH: 28,000 PSI
- ULTIMATE SEAM STRENGTH: 92,000 POUNDS/FT.

BOLTS FOR LAPPED SEAMS: ASTM A 449
BOLTS FOR CIRCUMFERENTIAL SEAMS: ASTM A 307

NUTS: ASTM A 307 GRADE A

DIMENSIONS:

- THICKNESS: 3 GAGE MINIMUM
- WIDTH: 18 INCHES
- BOLTS: $\frac{5}{8}$"ø

SECTION PROPERTIES:

- AREA: 3.740 IN^2/FT
- MOMENT OF INERTIA: 1.4313 IN^4/FT
- SECTION MODULUS: 1.2777 IN^3/FT

LINER PLATE DETAILS AND NOTES

SCALE: 1$\frac{1}{2}$" = 1'-0"

Revisions			
Symbol	Descriptions	Date	Approved
(1)	REV. IN ACCORDANCE WITH AMENDMENT 0001	12/99	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: P.CONROY
Reviewed by:
Approved by:

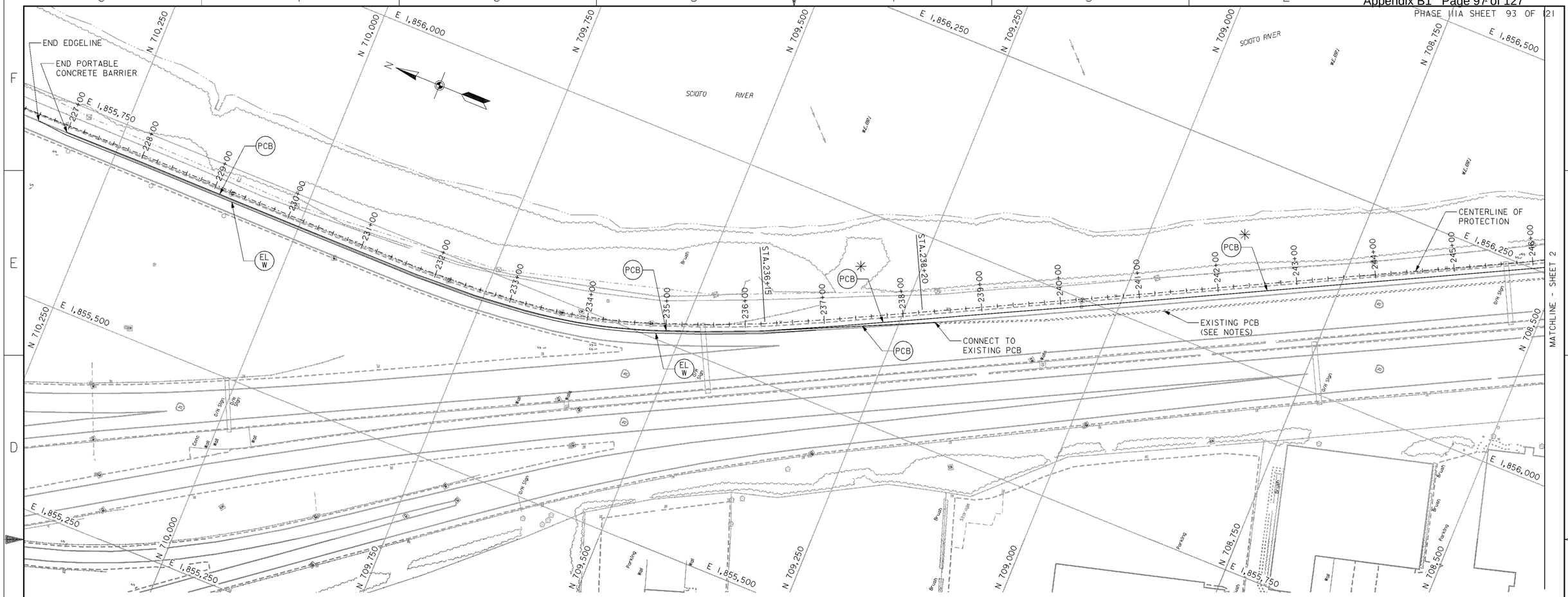
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GATEWELL NO.4 SHORING PLAN

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 20.35
FILENAME: PEN TABLE: 00epp103.dgn
Sheet 1 of 1

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 50'

NOTES

1. MAINTENANCE OF TRAFFIC
   TRAFFIC SHALL BE MAINTAINED PER THE REQUIREMENTS OF THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) "CONSTRUCTION AND MATERIAL SPECIFICATIONS" ITEM 614 AND OTHER APPLICABLE PORTIONS OF THE ODOT SPECIFICATIONS, AS WELL AS THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". THE CONTRACTOR SHALL CONTACT THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 6 AND THE CITY OF COLUMBUS TRAFFIC DIVISION 14 DAYS PRIOR TO BEGINNING THIS WORK.

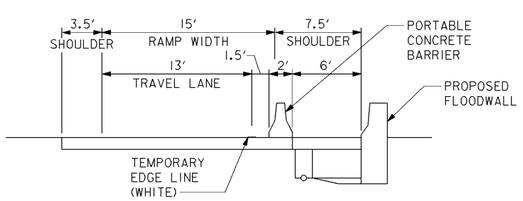
   ALL LANES OF I-71 SHALL REMAIN OPEN TO TRAFFIC AND I-71 TRAFFIC SHALL NOT BE BLOCKED OR IMPEDED IN ANY WAY DURING THE CONSTRUCTION OF THIS PROJECT. NO CONSTRUCTION ACCESS SHALL BE ALLOWED FROM I-71. THERE SHALL BE NO OPENINGS IN THE PORTABLE CONCRETE BARRIER AT ANY TIME.

2. TEMPORARY PAVEMENT MARKINGS
   THIS ITEM SHALL BE PERFORMED PER THE ODOT "CONSTRUCTION AND MATERIALS SPECIFICATIONS" ITEM 614.

3. PORTABLE CONCRETE BARRIERS
   THIS ITEM SHALL BE PERFORMED PER THE ODOT "CONSTRUCTION AND MATERIALS SPECIFICATIONS" ITEM 622 AND ODOT STANDARD CONSTRUCTION DRAWING RM-4.2M (10-21-97). THE BARRIER SHALL BE DELINEATED AS DESCRIBED IN ODOT STANDARD CONSTRUCTION DRAWING MT-95.40M (4-25-94). ◇1

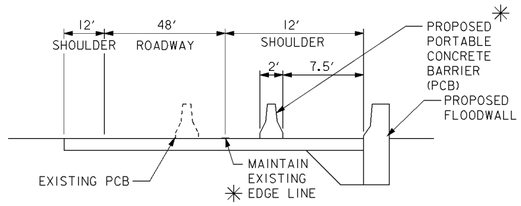
4. EXISTING PORTABLE CONCRETE BARRIER
   THE EXISTING PORTABLE CONCRETE BARRIER IS IN PLACE TO CLOSE THE NORTHBOUND RIGHT LANE OF I-71 AS PART OF THE SPRING-SANDUSKY INTERCHANGE PROJECT. IT IS ANTICIPATED THAT THIS BARRIER WILL BE IN PLACE UNTIL LATE 1999. AS LONG AS THIS BARRIER IS IN PLACE IT SHALL BE UTILIZED AS SHOWN ON THIS PLAN. IF THIS BARRIER IS NOT IN PLACE AT THE BEGINNING OF THIS PROJECT OR IS REMOVED DURING THE CONSTRUCTION OF THIS PROJECT, ADDITIONAL BARRIER, DRUMS, AND STRIPING WILL BE REQUIRED AS SHOWN ON THIS PLAN.

5. CLOSURE OF EXISTING GREENLAWN AVE. RAMP TO I-71
   WORK REQUIRING CLOSURE OF THE ON-RAMP FROM GREENLAWN AVE. TO I-71 SHALL BE PERFORMED SO THAT THE EXISTING CLOSURE (PART OF THE SPRING-SANDUSKY INTERCHANGE PROJECT) MAY BE UTILIZED. IT IS ANTICIPATED THAT THE RAMP CLOSURE AND DETOUR WILL BE IN PLACE UNTIL LATE 1999. IF THE RAMP CLOSURE AND DETOUR FROM THE MENTIONED PROJECT IS NOT IN PLACE, THE CONTRACTOR SHALL CLOSE THE RAMP AND SIGN A DETOUR MATCHING THE CLOSURE AND DETOUR THAT WAS IN PLACE DURING THE SPRING-SANDUSKY INTERCHANGE PROJECT. IF IT IS REQUIRED TO CLOSE THE GREENLAWN AVE. RAMP FOR THIS PROJECT, THE RAMP SHALL NOT BE CLOSED FOR MORE THAN 21 DAYS.



STATION 227+00 TO 238+20

SCALE: 3/16" = 1'-0"



STATION 238+20 TO 253+63

SCALE: NONE

LEGEND

✳ THESE ITEMS ONLY TO BE PERFORMED IF EXISTING PCB IS NOT IN PLACE. (SEE NOTES)

(PCB) PORTABLE CONCRETE BARRIER

(EL W) TEMPORARY EDGE LINE, WHITE

Revisions			
Symbol	Descriptions	Date	Approved
◇1	REV. IN ACCORDANCE WITH AMENDMENT 0001	12/99	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: S.THIEKEN
Drawn by: T.MULLINS
Checked by: M.LOVE
Reviewed by:
Approved by:

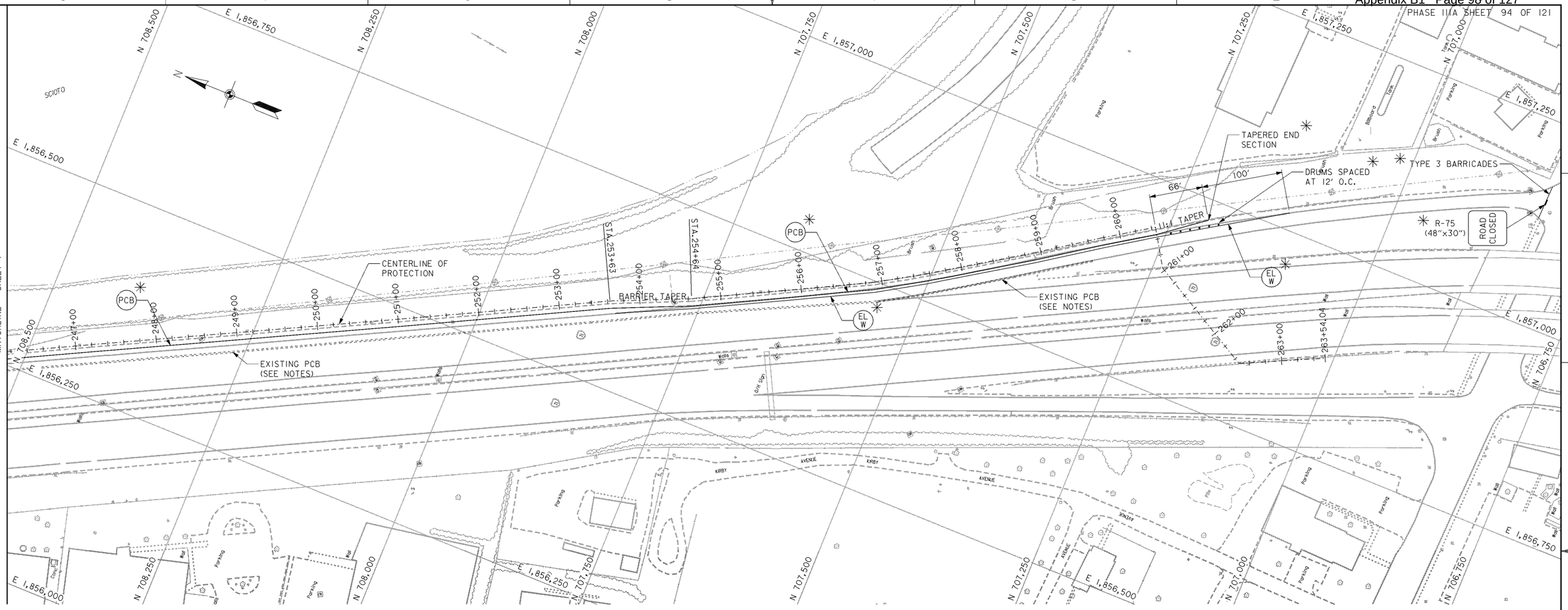
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

MAINTENANCE OF TRAFFIC (1 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 92/1
FILENAME: 00h1pl01.dgn
PEN TABLE:
Sheet 1 of 2

WORK AS CONSTRUCTED



PLAN

SCALE: 1" = 50'

50' 0 50'

NOTES

1. MAINTENANCE OF TRAFFIC
   TRAFFIC SHALL BE MAINTAINED PER THE REQUIREMENTS OF THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) "CONSTRUCTION AND MATERIAL SPECIFICATIONS" ITEM 614 AND OTHER APPLICABLE PORTIONS OF THE ODOT SPECIFICATIONS, AS WELL AS THE "OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES". THE CONTRACTOR SHALL CONTACT THE OHIO DEPARTMENT OF TRANSPORTATION DISTRICT 6 AND THE CITY OF COLUMBUS TRAFFIC DIVISION 14 DAYS PRIOR TO BEGINNING THIS WORK.

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2. TEMPORARY PAVEMENT MARKINGS
   THIS ITEM SHALL BE PERFORMED PER THE ODOT "CONSTRUCTION AND MATERIALS SPECIFICATIONS" ITEM 614.

3. PORTABLE CONCRETE BARRIERS
   THIS ITEM SHALL BE PERFORMED PER THE ODOT "CONSTRUCTION AND MATERIALS SPECIFICATIONS" ITEM 622 AND ODOT STANDARD CONSTRUCTION DRAWING RM-4.2M (10-21-97). THE BARRIER SHALL BE DELINEATED AS DESCRIBED IN ODOT STANDARD CONSTRUCTION DRAWING MT-95.40M (4-25-94). ◇1

4. EXISTING PORTABLE CONCRETE BARRIER
   THE EXISTING PORTABLE CONCRETE BARRIER IS IN PLACE TO CLOSE THE NORTHBOUND RIGHT LANE OF I-71 AS PART OF THE SPRING-SANDUSKY INTERCHANGE PROJECT. IT IS ANTICIPATED THAT THIS BARRIER WILL BE IN PLACE UNTIL LATE 1999. AS LONG AS THIS BARRIER IS IN PLACE IT SHALL BE UTILIZED AS SHOWN ON THIS PLAN. IF THIS BARRIER IS NOT IN PLACE AT THE BEGINNING OF THIS PROJECT OR IS REMOVED DURING THE CONSTRUCTION OF THIS PROJECT, ADDITIONAL BARRIER, DRUMS, AND STRIPING WILL BE REQUIRED AS SHOWN ON THIS PLAN.

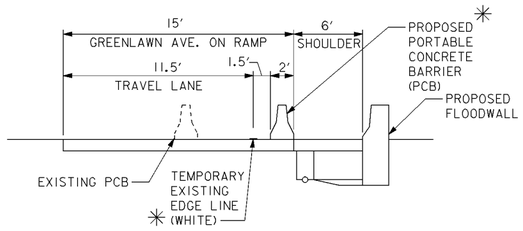
5. CLOSURE OF EXISTING GREENLAWN AVE. RAMP TO I-71
   WORK REQUIRING CLOSURE OF THE ON-RAMP FROM GREENLAWN AVE. TO I-71 SHALL BE PERFORMED SO THAT THE EXISTING CLOSURE (PART OF THE SPRING-SANDUSKY INTERCHANGE PROJECT) MAY BE UTILIZED. IT IS ANTICIPATED THAT THE RAMP CLOSURE AND DETOUR WILL BE IN PLACE UNTIL LATE 1999. IF THE RAMP CLOSURE AND DETOUR FROM THE MENTIONED PROJECT IS NOT IN PLACE, THE CONTRACTOR SHALL CLOSE THE RAMP AND SIGN A DETOUR MATCHING THE CLOSURE AND DETOUR THAT WAS IN PLACE DURING THE SPRING-SANDUSKY INTERCHANGE PROJECT. IF IT IS REQUIRED TO CLOSE THE GREENLAWN AVE. RAMP FOR THIS PROJECT, THE RAMP SHALL NOT BE CLOSED FOR MORE THAN 21 DAYS.

LEGEND

✳ THESE ITEMS ONLY TO BE PERFORMED IF EXISTING PCB IS NOT IN PLACE. (SEE NOTES)

(PCB) PORTABLE CONCRETE BARRIER

(EL W) TEMPORARY EDGE LINE, WHITE



STATION 254+64 TO 260+45

SCALE: NONE

Revisions			
Symbol	Descriptions	Date	Approved
◇1	REV. IN ACCORDANCE WITH AMENDMENT 0001	12/99	P.O.C.

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: S.THIEKEN
Drawn by: T.MULLINS
Checked by: M.LOVE
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

MAINTENANCE OF TRAFFIC (2 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 92/2
FILENAME: 00h1pl02.dgn
PEN TABLE:
Sheet 2 of 2

WORK AS CONSTRUCTED

D-93-138
D-98-260
D-98-261
UD-98-262
D-98-262
D-98-263
D-98-264
D-98-265
D-98-266
UD-98-267
D-98-267
D-98-268

MATCH LINE - SHEET 2

PLAN
SCALE: 1" = 100'
100' 0 100'

N

LEGEND

- DISTURBED BORING AND BORING NO. — D-98-270
- DISTURBED BORING W/ PIEZOMETER — D-98-263
- UNDISTURBED BORING — UD-98-275

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: V.AMATO
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

SOIL BORING PLAN (1 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 10/1
FILENAME: 00gdbp01.dgn
PEN TABLE:
Sheet 1 of 2

WORK AS CONSTRUCTED

MATCH LINE - SHEET 1

UD-98-269A
UD-98-269
D-98-269
D-98-270
D-98-271
D-98-272
UD-98-273
D-98-273
D-98-274
UD-98-275
D-98-275
D-98-276
D-98-277
D-98-278
D-98-279

SCIOTO RIVER

N

LEGEND

- DISTURBED BORING AND BORING NO. — D-98-270
- DISTURBED BORING W/ PIEZOMETER — D-98-263
- UNDISTURBED BORING — UD-98-275

PLAN
SCALE: 1" = 100'
100' 0 100'

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: V.AMATO
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

SOIL BORING PLAN (2 OF 2)

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 102
FILENAME: 00gdbp02.dgn
PEN TABLE:
Sheet 2 of 2

WORK AS CONSTRUCTED

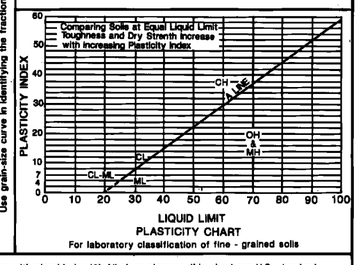
UNIFIED SOIL CLASSIFICATION

Including Identification and Description

MAJOR DIVISIONS			GROUP SYMBOLS	TYPICAL NAMES	FIELD IDENTIFICATION PROCEDURES Excluding particles larger than 3 inches and basing fractions on estimated weights			INFORMATION REQUIRED FOR DESCRIBING SOILS
1	2		3	4	5			6
COARSE - GRAINED SOILS More than half of material is larger than No. 200 sieve size	GRAVELS More than half of coarse fraction is smaller than No.4 sieve size. (For visual classification, the 1/4-inch size may be used as equivalent to the No.4 sieve size.)	Clean Gravels (Little or no fines)	GW	Well - graded gravels, gravel - sand mixtures, little or no fines.	Wide range in grain sizes and substantial amounts of all intermediate particle sizes.			For undisturbed soils add information on stratification, degree of compactness, cementation, moisture conditions and drainage characteristics.
			GP	Poorly - graded gravels, gravel - sand mixtures, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.			
		Gravels with Fines (Appreciable amount of fines)	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).			
	SANDS More than half of coarse fraction is smaller than No.4 sieve size. (For visual classification, the 1/4-inch size may be used as equivalent to the No.4 sieve size.)	Clean Sands (Little or no fines)	SW	Well - graded sands, gravelly sands, little or no fines.	Wide range in grain size and substantial amounts of all intermediate particle sizes.			
			SP	Poorly - graded sands, gravelly sands, little or no fines.	Predominantly one size or a range of sizes with some intermediate sizes missing.			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).
		Sands with Fines (Appreciable amount of fines)	SM	Silty sands, sand - silt mixtures.	Nonplastic fines or fines with low plasticity (for identification procedures see ML below).			
			SC	Clayey sands, sand - clay mixtures.	Plastic fines (for identification procedures see CL below).			
The No. 200 sieve size is about the smallest particle visible to the naked eye.					on Fraction Smaller than No. 40 Sieve Size			
					(crushing)	DILATANCY (reaction to shaking)	TOUGHNESS (consistency near PL)	
FINE - GRAINED SOILS More than half of material is smaller than No. 200 sieve size	Silts and Clays 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.
			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	
	Silts and Clays 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 to medium	For undisturbed soils add information on structure, stratification, consistency in undisturbed and remolded states, moisture and drainage conditions.
			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	EXAMPLE Clayey silt, brown, slightly plastic, small percentage of fine sand, numerous vertical root holes, firm and dry in place,loess (ML)
Highly Organic Soils			Pt	Peat and other highly organic soils.	Readily identified by color, odor spongy feel and frequently by fibrous texture.			

LABORATORY CLASSIFICATION CRITERIA
7
Determine percentages of gravel and sand from grain size curve. Depending on percentage of fines (fraction smaller than No.200 sieve size) coarse-grained soils are classified as follows: Less than 5% GW, GP, SW, SP; More than 12% GM, GC, SM, SC; 5% to 12% Borderline cases requiring use of dual symbols.
$C_U = \frac{D_{60}}{D_{10}}$ Greater than 4
$C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between one and 3
Not meeting all gradation requirements for GW
Atterberg limits below "A" line or PI less than 4 — Above "A" line with PI between 4 and 7 are borderline cases requiring use of dual symbols.
Atterberg limits above "A" line with PI greater than 7
$C_U = \frac{D_{60}}{D_{10}}$ Greater than 6
$C_C = \frac{(D_{30})^2}{D_{10} \times D_{60}}$ Between one and 3
Not meeting all gradation requirements for SW
Atterberg limits below "A" line or PI less than 4 — Limits plotting in hatched zone with PI between 4 and 7 are borderline cases requiring use of dual symbols.
Atterberg limits above "A" line with PI greater than 7

Use grain-size curve in identifying the fractions as given under field identification.



PLASTICITY CHART
For laboratory classification of fine - grained soils

(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.

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 completly by oven, sun, or air drying, and then test its strength by breaking and crumbling between the fingers. This strenth 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-eight inch in diameter. The thread is then folded and rerolled 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.

Adopted by the Corps of Engineers and Bureau of Reclamation, January 1952.

ABBREVIATIONS

a.	angle	f.	fine	mot.	mottled	str.	stringer(s)
alt.	alternate(ly)(ing)	fer.	ferruginous	mst.	moist	sty.	stylolite(ic)
amt.	amount	fis.	fissile	mtx.	matrix		
ang.	angular	fill.	fill(ed)(ing)			t.	thin
approx.	approximate(ly)	fm.	firm	n.	near	tho.	throughout
ar.	argillaceous	fos.	fossil(iferous)	nod.	nodule(e)	tk.	thick
aren.	arenaceous	frac.	fracture(d)	num.	numerous	tr.	trace
asp.	asphaltic	frags.	fragment(s)(al)			v.	variably
		fri.	friable	o.	open	va.	variegated
b.	bone	FP	fixed-piston	od.	odor	ve.	very
ba.	banded(ing)	FW	free water	occ.	occasional(ly)	veg.	vegetation
bd.	bed(ded)(ing)			occu.	occurring	ver.	vertical(ly)
bdr.	bedrock	g.	grain(ed)	org.	organic	vu.	vuggy
bf.	buff	gen.	generally			w.	water
bk.	black	gn.	green(ish)	pa.	parting(s)	w/	with
bky.	blocky	gr.	gray	part.	particle(s)	w/o	without
bkn.	broken	gra.	gravelly	%	percent(age)	WC	water content
bl.	blue	grad.	grading(ed)	pi.	piece	wd.	weathered
bot.	bottom	GW	groundwater	pl.	plastic	WH	weight of hammer
bou.	boulder(s)			PL	plastic limit	whi.	white
bre.	breccia(ted)	h.	hard	peb.	pebble(s)	WL	water level
br.	brown(ish)	ha.	high angle	pk.	pink	wo.	wood
		hl.	high(er)(ly)	pkt.	pocket(s)		
c.	coarse	hor.	horizontal(ly)	pit.	pit(ted)(ting)	x-bd.	cross-bedded(ing)
ca.	calcareous			pn.	plane(s)		
carb.	carbonaceous	I C	initial contact	po.	porous	y.	yellow(ish)
cav.	cavern, cavity	inc.	included, inclusions	pt.	part(ly)		
cbl.	cobble(y)	incr.	increasing(ly)	pyr.	pyrite(ic)	z.	zone
ch.	chert	inla.	interlaminated				
cl.	clay(ey)	int.	interclations	q.	quartz(itic)		
clb.	claybands	intbd.	interbedded				
cle.	clean	irr.	irregular	r.	red(dish)		
coa.	coat(ed)(ing)			ro.	rock(s)		
comp.	compact(ed)	jt.	joint(ed)	rot.	rotted(en)		
con.	contains			rou.	round(ed)		
conc.	concretion	l.	low	rt.	root(s)(let)		
cong.	conglomerate(ic)	li.	little				
cont.	continuous	la.	low angle	s.	soft		
cr.	crushed	las.	laminate(ed)(ions)	SS	split spoon		
crm.	crumbly	lay.	layer(s)	sa.	sandy		
cst.	crystal(line)	le.	lean	sat.	saturated		
cem.	cement(ed)	lea.	leached	scat.	scattered		
		len.	lense(s)	se.	seams		
do.	decayed	lg.	large	sev.	severe(ly)		
di.	dirty	LL.	liquid limit	sevr.	several		
dia.	diameter	los.	loose	sh.	shaly		
diag.	diagonal	lt.	light	she.	shells		
dis.	disintegrated			sil.	siliceous		
disc.	discontinuous	m.	medium	si.	silty		
diss.	disseminated	ma.	many	slk.	slickensided		
dk.	dark	mas.	massively	sm.	small		
dn.	dense	mat.	material	so.	some		
dmp.	damp	mic.	micaceous	sol.	solution		
		min.	mineralized	sts.	stain(ed)		
ext.	extremely	mod.	moderate(ly)	stf.	stiff		
elem.	elements	mos.	mostly	stks.	streak(s)		

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

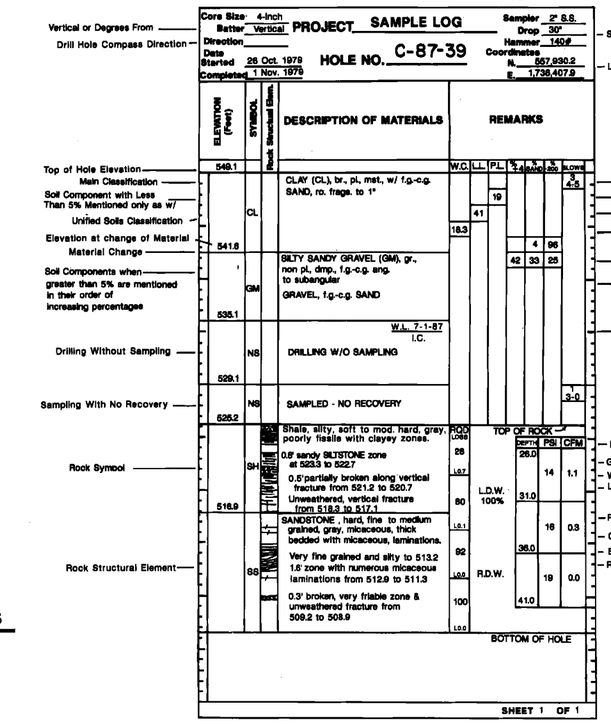
ROCK

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

- Broken in drilling or handling
- Natural break bedding plane or fracture
- Core loss
- Natural joint or fracture
- Core fragments insitu breaks or broken in drilling or handling
- Shaly (fissile)
- F - Mylonite, fault-plane
- Intact core

GRAPHIC LOG OF BORING



- Blow Count per Half Foot
- Plastic Limit (P.L.)
- Liquid Limit (L.L.)
- Water Content (W.C.)
- Gradation
- Perceived Moisture as Determined in the Field by Inspector e.g. dry, dmp., mst., or wet.
- Initial Ground Water Contact or last reading (month-day-year) include I.C. for Initial-Contact
- Pressure Test Data
- Gage Pressure (Pounds per Square Inch)
- Water Take (Cubic Feet per Minute)
- Lost Drill Water % Loss
- Rock Quality Designation (% per Run)
- Core Loss (Feet per Run)
- Bottom of Pressure Test (Increment Feet)
- Regained Drill Water

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: G.HENSLEY
Drawn by: G.HENSLEY
Checked by: M.NIELD
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GEOLOGY AND SOILS LEGEND

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 103
FILENAME: legend.dgn
PEN TABLE:
Sheet 1 of 1

WORK AS CONSTRUCTED

CORE SIZE —
BATTER VERTICAL
DIRECTION —
DATE:
STARTED 1-29-98
COMPLETED 2-3-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-260
SAMPLER 2" SPLITSPOON
DROP 30"
HAMMER 140#
COORDINATES:
N. 710252.7
E. 1855869.3

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% #200	BLOWS
729.7										
729.2	NS		ASPHALT							-
728.2	NS		DRILLING W/O SAMPLING							
	CL-ML		CLAYEY SANDY SILT (CL-ML), br., sli. pl., dmp., w/ c. gravel							9 13-30
728.2	SM		SILTY SAND (SM), br., non pl., dry, w/ gra.	14						24
724.8	SC		SANDY SILTY CLAY (CL), br. to dk. br.,	7						18-37
724.9	CL		sli. pl., dmp., w/ gravel	14						21
723.7	CL		GRAVELLY SANDY SILTY CLAY (CL), br., sli. pl., dmp., w/ gravel	14						15-18
	NS		SAMPLED - NO RECOVERY							6 8-4
722.2										
720.7	SC		SILTY CLAYEY GRAVELLY SAND (SC), br. sli. pl., dmp., occ. asphalt frags.	22	43	19	24	28	48	3 5-3
	CL		SILTY SANDY CLAY (CL), br. to dk. br.,							3
719.2			sli. pl., dmp., scat. cinders	33						3-4
717.7			COBBLE, bkn.							16 11-8
716.7	GC		SILTY CLAYEY SANDY GRAVEL (GC), br., sli. pl., dmp.	10						9
716.2	CL		SILTY CLAY (CL), dk. br., pl., mst., w/ sand and f. gravel	15						10-9
714.7			COBBLE, bkn.							8 12-16
713.2	SW-SC		CLAYEY SILTY GRAVELLY SAND (SW-SC), non pl., dry	11						8 38-22
	CL		SANDY CLAYEY SILT (CL), sli. pl., dmp., w/ gravel							6 5-5
710.9				17						2 4-8
	CL		SILTY CLAY (CL), dk. br., pl., dmp., w/ sand and f. gravel							4 6-12
708.2				21	32	16				4
707.7	CL		SILTY CLAY (CL), dk. br., pl., dmp.	29						8-14
706.7	SM-SC		SILTY CLAYEY SAND (SM-SC), y. br., non pl., dmp., w/ gravel	20						12 14-17
705.0	GC		GRAVEL (GC), lt. br., non pl., dmp.	20						16
704.2	NS		SAMPLED - NO RECOVERY							10-11
	GC		CLAYEY SANDY GRAVEL (GC), lt. br. gr., non pl., dmp., w/ silt							11 15-15
				11			63	21	16	11 15-18
699.2				9	W.L. 2-3-98 t.c.					16 19-31
	SM		SILTY GRAVELLY SAND (SM), lt. br., non pl., wet							12 16-14
										11 19-20
										13 14-22
693.7							37	49	14	13 15-15
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE —
BATTER VERTICAL
DIRECTION —
DATE:
STARTED 1-6-98
COMPLETED 1-9-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-261
SAMPLER 2" SPLITSPOON
DROP —
HAMMER AUTOMATIC
COORDINATES:
N. 710805.5
E. 1855758.2

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% #200	BLOWS
723.5										
	CL		SILTY CLAY (CL), br., sli. pl., dmp. w/ gravel							2 4-5
721.4				29						9
720.2	CL-ML		SILTY CLAY (CL-ML), dry, sli. pl., w/ sand and gravel	8						11-20
719.0	GC		SILTY CLAYEY SANDY GRAVEL (GC), br., non pl., dmp.	1			48	30	22	11-9
	SM		CLAYEY SANDY SILT (SM), gr., sli. pl., dmp., w/ gravel							6 6-6
717.5				13						
716.0	CL		GRAVELLY SILTY CLAY (CL), br., sli. pl., dmp., occ. rt,	18						3 3-4
	GM		SILTY SANDY GRAVEL (GM), br., non pl., dmp., w/ clay							4 4-4
							56	31	16	4 4-5
				8						5 5-4
710.0			CLAYEY SILTY SANDY GRAVEL (SM), br., non pl., dmp., ma. brk., ro. frags.	7						4 6-11
709.5	SM		COAL (possible slag & cinders), bk., non pl.	8			57	28	15	12 8-4
709.2			SILTY CLAY (CL), gr. to dk. gr., pl. to sl. pl., dmp., w/ gravel							3
	CL			23	49	22				4-7
705.4				23						4 6-10
	GP-GM		SILTY SANDY GRAVEL (GP-GM), br., non pl., dmp.							10 13-14
702.5				6			54	34	12	15 24-22
	SW		SAND (SW), br., non pl., w/ f.g. gravel							14 15-14
699.5				7						9 19-22
699.0	SW		GRAVELLY SAND (SW), br., non pl., dmp.	6						17
698.0	CL		SILTY CLAY (CL), r. br., non pl., dmp., w/ gravel	10						21-68
696.5			ROCK, ve. frac.							55 74-78
695.0	SW		GRAVELLY SAND (SW), br., non pl., dmp.	6						23 33-19
	SW-SC		CLAYEY GRAVELLY SAND (SW-SC), br., non pl.,							6
693.5			mst.,	16			W.L.: 1-9-98 t.c.			7-12
691.5	SP		SAND (SP), br., non pl., wet							6 6-7
690.5	CL		SANDY SILTY CLAY (CL) r. br., non pl., wet	10						21 34-35
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE —
BATTER VERTICAL
DIRECTION —
DATE:
STARTED 1-24-98
COMPLETED 1-26-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-262
SAMPLER 2" SPLITSPOON
DROP 30"
HAMMER 140#
COORDINATES:
N. 710484.2
E. 1855729.0

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% #200	BLOWS
723.6										
	CL		SILTY CLAY (CL), br., sli. pl., dmp., w/ sand and gravel							6-9
				16						11 13-15
719.1			0.5' clayey sand se. at 4.5'	14						15-18
717.6	NS		SAMPLED - NO RECOVERY							32
	CL-ML		CLAYEY SILT (CL-ML), br., sli. pl., dmp., w/ sand and gravel	11						9 4-7
716.1										10
714.6	NS		SAMPLED - NO RECOVERY							10-8
	CL		SILTY CLAY (CL), br., sli. pl., dmp. to mst., w/ sand and gravel	21						5 3-5
713.1										10
711.6	CL		SILTY SANDY CLAY (CL), br., sli. pl., mst., blk. inc., few brick frags., w/ gravel	18						5-6
711.1	CL		SILTY CLAY (CL), br., sli. pl., dmp., w/ gravel	24						3
	GC		SANDY GRAVEL (GC), br., sli. pl., dmp., few brick frags.							5-4
708.6				14	NP	NP	45	37	18	5-7
	SC		CLAYEY SAND (SC), br., sli. pl., dmp., w/ gravel sand se., gr., non pl., f.g., at 17.5'							6 5-4
705.6				23						8 14-9
705.4	CL		CLAYEY SILT (CL), dk. gr. to blk., sli. pl. to non pl., mst., few coal frags.	19						16 18-12
	GM		SILTY SANDY GRAVEL (GM), br., sli. pl. to non pl., dry to damp, becoming ci. at 22.5'	9						9 7-9
701.1			SANDY SILTY CLAY (CL), sli. pl., dmp., w/ gravel	12			46	38	16	7 9-10
700.7	CL			16						6-3
699.6	CL		SILTY CLAY (CL), dk. gr., sli. pl. to pl., dmp., few coal frags., w/ gravel and sand	31						5
698.0	CL		SILTY CLAY (CL), br., sli. pl., dmp. to mst., w/ sand and gravel	23						4-3
697.4	CL-ML		CLAYEY SILT (CL-ML), ve. dk. gr., sli. pl., dmp.,							2 3-5
695.2	CL		SANDY SILTY CLAY (CL), br., sli. pl. to pl., dmp., w/ gravel							3 5-7
693.3	GW-GC		CLAYEY SANDY GRAVEL (GW-GC), br., sli. pl., dmp. 2" se. gr.a. si. cl. at 28.7'							2 7-7
692.1	SC		CLAYEY SILTY SAND (SC), br., sli. pl., mst., w/ gravel							5 5-4
690.6	SP		GRAVELLY SAND (SP), br. gr., non pl., wet, few brick frags., and r. sta. and oily at 33.0'		W.L. 1-25-98					19 50-22
689.1	ML		SANDY SILT (ML), gr., wet, few wo. frags., oily							5 12-15
	GP-GM		SILTY SANDY GRAVEL (GP-GM), br., non pl., wet, w/ oily sheen							9 13-12
686.1							79	15	6	16 16-13
	SW		SILTY GRAVELLY SAND, br., non pl., wet							6 10-13
			becoming y. br., 4" se. of c. gravel at 41.0							10 17-15
681.6										21 40-31
	GP-GM		SILTY SANDY GRAVEL (GP-GM), gr. br., non pl., wet, inc. c. gravel at 45.0'							26 42-25
678.6							57	35	8	21 24-18
676.8	GW		SANDY GRAVEL, gr., non pl., wet, w/ c. gravel							12 15-18
676.3	CL-ML		CLAYEY SILT (CL-ML), gr., sli. pl., dry to dmp.							30
675.6	CL		SILTY CLAY (CL), gr., sli. pl., dry to dmp.	10						37-51
674.1	CL		SILTY CLAY (CL), gr., sli. pl., dmp. w/ rou. sand and gravel	10	22	13				30 48-82
			BOTTOM OF HOLE							

SHEET 1 OF 2 SHEETS

CONTINUATION OF
HOLE NO. D-98-262

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% #200	BLOWS
673.6										
672.6	ML		SILT TO CLAYEY SILT (ML), gr., non pl. to sli. pl., dmp., w/ rou. gra.	10						75-100
671.1	SW		non pl., at 51.0'	11						50 50/0.3
			SILTY GRAVELLY SAND (SW), gr., non pl., wet							38
	ML		SILT TO CLAYEY SILT (ML), gr., dry to damp, inc. rou. gravel @ 54.0'	10						50/0.4
668.6							34	53	13	12 100/0.4
668.2	SM		SILTY GRAVELLY SAND (SM), gr., non pl., wet, f.g.							
			BOTTOM OF HOLE							

SHEET 2 OF 2 SHEETS

CORE SIZE —
BATTER VERTICAL
DIRECTION —
DATE:
STARTED 1-26-98
COMPLETED 1-27-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-263
SAMPLER 2" SPLITSPOON
DROP —
HAMMER AUTOMATIC
COORDINATES:
N. 710445.8
E. 1855457.0

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% #200	BLOWS
702.3										
702.1	OL		SANDY SILTY CLAY (CL), dk. br., sli. pl., mst., org., (topsoil)	16						7 5-9
701.5	SM		SILTY GRAVELLY SAND (SM), br., non pl., dmp.	12						10 17-23
	CL		SILTY CLAY (CL), br., sli. pl., dmp., few r. brick frags.	15						11 7-11
697.2				24						4
696.3	SM		SILTY GRAVELLY SAND (SM), br., non pl., wet	12						3-4
	CL-ML		SILTY CLAY (CL-ML), br., sli. pl., wet, few brick frags.							3 3-3
693.3				41						3 2-2
692.9	ML		CLAYEY SILT (ML), br., sli. pl., wet	26						2 2-4
690.3	GC		SILTY SANDY CLAYEY GRAVEL (GC), br., sli. pl., wet	30	46	20	39	13	48	3 3-3
	CL-ML		CLAYEY SILT (CL-ML), br., sli. pl., wet, ma. brick frags., scat. wo. fibers, w/ sand		W.L.: 1-27-98					2 3-3
687.3				33						1-3
	CL		SILTY CLAY (CL), br., sli. pl., wet, w/ rou. gravel, 19.5' to 22.5'	26						5 5-7
										10 8-7
				14						4 5-6
678.3				33						2 0-0
676.8	CL-ML		SANDY SILTY CLAY (CL-ML), br., sli. pl., wet	34						0 1-3
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE —
BATTER VERTICAL
DIRECTION —
DATE:
STARTED 1-21-98
COMPLETED 1-22-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-264
SAMPLER 2" SPLITSPOON
DROP —
HAMMER AUTOMATIC
COORDINATES:
N. 710483.4
E. 1855262.4

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% #200	BLOWS
701.6										
700.6	CL		GRAVELLY CLAYEY SILT (CL), br., non pl., dry, w/sand	11						13 17-24
699.9	SM		SILTY GRAVELLY SAND (SM), br., non pl., wet	9						6 7-7
			SANDY CLAYEY GRAVEL, gr. to br., sli. pl., dmp., occ. coal frags., 1.7' to 4.5', w/silt							3 6-4
	GC		gr. to bk., scat. asp. frags., 4.5 to 7.5'	22	53	24	39	26	35	2 3-4
				33						2 4-4
			gr. to bl., occ. gra., 7.5' to 9.9'							3 3-3
691.7				30	W.L. 1-21-98					4 2-5
691.1			SANDSTONE FRAGMENTS, r., non pl., dmp.	2						5-7
	GP-GC		SILTY SANDY GRAVEL (GP-GC), br., non pl., wet	15	t.c.		64	27	9	4 7-13
										7 8-8
										11 12-8
										11 10-8
										10 12-11
682.1										12 11-10
	SW-SM		SILTY SAND (SW-SM), gr., non pl., wet, w/ f.g. gravel							9 12-13
										5 6-10
										10 11-16
				20			4	88	8	4 5-7
674.1										4 5-6
673.1	ML		SANDY SILT (ML), gr., sli. pl., wet							4 4-5
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE —
BATTER VERTICAL
DIRECTION —
DATE:
STARTED 1-20-98
COMPLETED 1-21-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-265
SAMPLER 2" SPLITSPOON
DROP —
HAMMER AUTOMATIC
COORDINATES:
N. 710014.3
E. 1855678.7

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% #200	BLOWS
714.4										
	CL		SILTY CLAY (CL), br. to gr. br., sli. pl., dmp., soat. brick & coal frags., w/ gravel, scat. rt. & asphalt frags., 0.0' to 4.0'							5 6-7
				19						7 6-9
710.4				17						8 8-8
	GC		SANDY CLAYEY GRAVEL (GC), gr. to br., sli. pl., dmp., w/ silt, bkn. tile, 4.0' to 6.0'							3 4-7
708.4				20	54	22	35	26	39	5 8-11
	NS		SAMPLED - NO RECOVERY c.g. gravel, auger cuttings, 6.0' to 10.5'							17 11-5
703.9				26						4 5-5
	CL		SILTY CLAY (CL), gr. br. to r. br., pl., dmp., few asp. frags., 10.5' to 13.5'							4 3-5
				22						5 9-13
698.7				17	44	17				5 8-11
	GM		SILTY SANDY GRAVEL (GM), br., non pl., dmp.							3 6-7
				14						7 10-10
692.9				10	W.L. 1-21-98		42	39	19	4 15-16
691.9	SM		SILTY SAND (SM), r. br., non pl., wet							9 14-24
	SW		SILTY SANDY GRAVEL (GM), br., non pl., wet.		l.C.					10 9-12
	GM									18 27-30
										11 21-12
										9 15-11
685.9							53	35	12	7 9-13
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE —
BATTER VERTICAL
DIRECTION —
DATE:
STARTED 1-18-98
COMPLETED 1-20-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-266
SAMPLER 2" SPLITSPOON
DROP —
HAMMER AUTOMATIC
COORDINATES:
N. 709780.7
E. 1855735.5

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% #200	BLOWS
720.2	OL		SILTY CLAY (CL), dk. br., mst., org. (topsoil)	15						3
719.8			SILTY CLAY (CL), r. br., sli. pl. to pl., dmp., w/ gravel							6-5
	CL			21	50	21				3 4-5
										2 3-3
714.1				22						2 2-4
	GM		SILTY SANDY GRAVEL (GM), br., non pl., dmp.							3 4-3
712.2				14			57	21	12	4 6-5
	CL		SILTY CLAY (CL), dk. br., sli. pl., dmp., w/. gravel							3 5-6
709.3	CL-ML		SANDY CLAYEY SILT (CL-ML), gr., sli. pl., dmp., w/ f.g. gravel, occ. brick frags.	29						2 4-3
708.2				34						1 3-4
	CL		CLAYEY SILT (CL), gr., sli. pl., dmp., w/ f.g. gravel, occ. coal frags.							2 3-3
705.2				35						3 2-2
	CH		SANDY SILTY CLAY (CH), bk., sli. pl., dmp. to mst., w/ f.g. gravel, scat. brick and porcelain frags.							3 4-6
702.2				39	65	27				4 14-9
701.5	CL		CLAYEY SILT (CL), gr., sli. pl., dmp.	17						16 18-12
	SC		CLAYEY SILTY GRAVELLY SAND (SC), br., non pl., dmp.							4 4-3
698.6				18	38	17	29	44	27	3 2-4
	CL		SILTY CLAY (CL), br., sli. pl., dmp.	W.L. 1-18-98						5 4-4
696.0				27	l.C.					2 3-5
	SM		SILTY GRAVELLY SAND (SM), br., non pl., dmp.							2 3-4
694.2				15						2 2-3
	SM		CLAYEY SILTY SAND (SM), br., non pl., dmp., wet at 27.8', w/ gravel							2 4-4
691.2							4	71	25	11 16-24
	GW		SILTY GRAVELLY SAND (GW), br. to gr., non pl., wet							16 38-36
										23 37-35
										49 36-29
682.5										27 23-22
	SM		CLAYEY SILTY GRAVELLY SAND (SM), br., non pl., wet							16 34-25
679.7										18 24-22
	GP-GM		SILTY SANDY GRAVEL (GP-GM), gr., non pl., wet							12 29-31
676.7							49	40	11	8 13-21
675.2	SW		SILTY GRAVELLY SAND (SW), gr., non pl., wet							29 20-26
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE —
BATTER VERTICAL
DIRECTION —
DATE:
STARTED 1-15-98
COMPLETED 1-16-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-267
SAMPLER 2" SPLITSPOON
DROP 30"
HAMMER 140#
COORDINATES:
N. 709516.0
E. 1855784.4

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% #200	BLOWS
720.3										
720.0	OL		SILTY CLAY (CL), dk. br., sli. pl., dmp. org., (topsoil)	14						7 50-10
	SC		GRAVELLY CLAYEY SAND (SC), r. br., sli. pl., dmp., w/ silt, scat. c.g. gravel and coal frags., 0.2' to 6.0'	15						16 7-9
										9 7-10
			1" bk sand se., 7.0'	12	49	22	26	46	28	8 4-2
712.2	SM		SILTY SAND (SM), br., non pl. to sli. pl., dmp., w/ clay	21						4 4-4
711.6	SM		SILTY SAND (SM), br., non pl. to sli. pl., dmp., w/ clay	15						8 7-4
711.3	CL		SANDY SILTY CLAY (CL), br., sli. pl., dmp	21						3 3-3
709.8	NS		SAMPLED - NO RECOVERY							7 10-9
	SC		GRAVELLY SILTY CLAYEY SAND (SC), br., sli. pl., dmp., 1" sand se., 13'							12 12-11
706.8				21	33	17	20	46	34	3 6-12
705.3	NS		SAMPLED - NO RECOVERY							10 7-5
	CL-ML		CLAYEY SILT, br. gr., sli. pl., dmp., occ. carb. frags.	25						9 5-8
703.8	NS		SAMPLED - NO RECOVERY							7 6-8
702.3			SILTY CLAY (CH), dk. br. gr. to brn., sli. pl., dmp.	26						4 8-13
	CH			24	54	22				4 7-12
										6 10-13
				25						7 7-10
694.8				21						4 6-5
	GC		SILTY CLAYEY SANDY GRAVEL (GC), br., non pl., wet 2" silt se., tan, 28.2'							5 12-12
691.8							54	25	21	8 11-10
	GM		SILTY SANDY GRAVEL (GM), br., non pl., wet	W.L. 1-16-98						2 10 12-12
688.8					l.C.		55	28	17	6 10-9
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: V.AMATO
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GRAPHIC LOGS OF BORINGS

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 10/4
FILENAME: borngig1.dgn
PRN TABLE:
Sheet 1 of 3

WORK AS CONSTRUCTED

CORE SIZE NX | BATTER VERTICAL | DIRECTION | DATE: STARTED 1-21-98 COMPLETED 1-21-98 | PROJECT WEST COLUMBUS LPP | HOLE NO. D-98-268 | SAMPLER 2" SPLITSPOON | DROP 30" HAMMER 140# | COORDINATES: N. 1059208.4 E. 1855926.2

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% -200	BLOWS
721.3										
720.8	OL		SILTY CLAY (OL), dk. br., sli. pl., dmp., org. (topsoil)	15						5 9-11
718.3	SM		CLAYEY SITLY SAND (SM), lt. br., sli. pl., dmp., w/ gravel	13						9 8-7
716.8	CL		SILTY CLAY (CL), br., sli. pl., dmp. c.g. gravel, 4.5'	17						3 5-5
715.3	SM		CLAYEY SILTY SAND (SM), br. to dk. br., sli. pl., dmp., w/ c.g. gravel, 4.5'	13						6 4-3
713.8	CL-ML		CLAYEY SANDY SILT (CL-ML), lt. br., sli. pl., dmp., w/ gravel	13						6 8-7
712.3	SM		GRAVELLY CLAYEY SILTY SAND (SM), br., sli. pl., dmp.	12			23	49	28	6 5-6
710.8	CL-ML		CLAYEY SILT (CL-ML), br., sli. pl., dmp., brick frags., 10.5'	17						4 5-6
707.2	SC		GRAVELLY CLAYEY SAND (SC), br., sli. pl., mst., w/ silt, occ. cinders and brick frags.	15 30	34	21	16	59	25	3 7-13 8 3-6
706.3	CL		SANDY SILTY CLAY (CL), br., sli. pl., dmp.	19						3 5-7
706.05	CL		SILTY CLAY (CL), br., w/ 1" coal lay. and gravel se., 15.'	15	46	22				5
704.6	CL		SILTY CLAY (CL), br. to gr., sli. pl., dmp.	17						6-7
701.8	GM		SILTY SANDY GRAVEL (GM), br. r., sli. pl., dmp., scat bkn. gravel	11						9 9-10 10 10-10
701.4	GM		CLAYEY SILTY SANDY GRAVEL (GM), br., non pl., dmp., w/ clay	25			65	16	19	10 12-8
699.9	GM		CLAYEY SILTY GRAVEL (GM), lt. gr. br., sli. pl., dmp. to dry	7						19 19-19 13 20-25
698.8			ROCK FRAGS, dry, non pl.							50/0.5
695.8	NS		AUGER WITHOUT SAMPLING							
692.8	GM		SILTY SANDY GRAVEL (GM), lt. br., non pl., dry to mst.	8			61	22	17	24 24-18 17 19-17
689.8	GW-GM		SILTY CLAYEY SANDY GRAVEL (GW-GM), lt. gr. br., non pl., dmp. to mst.	9 13	W.L. 1-21-98 I.C.					16 13-8 10 10-29
688.3	GM		CLAYEY SITLY SANDY GRAVEL (GM), br., non pl., wet							19 22-23
685.3	SM		SILTY GRAVELLY SAND (SM), br., non pl., wet							9 17-19 8 11-11
681.9	GM		SILTY SANDY GRAVEL (GM), br. to y. br., non pl., wet							9 16-29 21 20-17
680.8	GP		SANDY GRAVEL (GP), y. br., non pl.							17 21-18
680.3	SM		SILTY GRAVELLY SAND (SM), br., non pl., wet							27 21-16
677.8	GP-GM		SILTY SANDY GRAVEL (GP-GM), y. brn. to dk. gr., c.g., w/ clay				66	23	11	9 16-25
674.8	SM		SILTY GRAVELLY SAND (SM). br. to gr., non pl., wet							21 28-27
674.5	GP		SILTY SANDY GRAVEL (GP), gr. to br., non pl., wet							9 24-20
673.4	SP		GRAVELLY SAND (SP), gr., non pl., wet, c.g.							20
673.3	CL		SILTY CLAY (CL), gr., sli. pl., dmp.							19-24
671.8	NS		SAMPLED - NO RECOVERY							86/0.5
671.3	CL		SILTY CLAY (CL), gr., pl., dmp.	12						9

SHEET 1 OF 2 SHEETS

CONTINUATION OF HOLE NO. D-98-268

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% -200	BLOWS
671.3										
670.3	ML		CLAYEY SILT (ML), gr., sli. pl., mst.	20						55 50/0.3
668.8	ML		SILT (ML), gr., non pl., dmp., w/ gravel	12						60 114/0.5
667.3	ML		SILT (ML), gr., non pl., dmp., w/ f.g. gravel	11						45 112/0.5
665.8	ML		CLAYEY SILT TO SILT (ML), gr., non pl. to sli. pl., dmp., w/ gravel	12						59 50/0.1
665.0	SS.		SANDSTONE BOULDER, gy., fract.	ROD			BEGAN CORING			
660.8	CL		CLAYEY SILT, gy., sli. pl. to pl., w/ sand and gravel	LOSS 0 3.0'			POSSIBLE TOP OF ROCK			
656.8	GP		GRAVEL, c.g., rou.	7						
656.5	SS.		SANDSTONE; lt. gy., occ. lntbd. silty clay se.	3.2'						
656.2	LS.		LIMESTONE; dk. gy., fract., occ. lntbd. silty clay se. at it.							
			BOTTOM OF HOLE							

SHEET 2 OF 2 SHEETS

CORE SIZE | BATTER VERTICAL | DIRECTION | DATE: STARTED 1-13-98 COMPLETED 1-13-98 | PROJECT WEST COLUMBUS LPP | HOLE NO. D-98-269 | SAMPLER 2" SPLITSPOON | DROP AUTOMATIC HAMMER | COORDINATES: N. 708951.4 E. 1856053.8

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% -200	BLOWS
722.5										
721.0	OL		SILTY CLAY (OL), br., non pl., dry, w/ f.g. gravel, occ. rt., org., (topsoil)	22						4 21-13
717.8	GM		SILTY SANDY GRAVEL (GM), br., non. pl., dmp., occ. rt., w/ clay	8			49	35	16	10 10-26
715.7	ML		SANDY SILT (ML), y. br., non. pl., dmp., w/ f.g. gravel	11 10						6 11-7 6 5-2
713.7	CL		GRAVELLY SANDY SILTY CLAY (CL), br. to gr., sli. pl., dmp. occ. sand se., 9.8' - 12.8'	20						2 4-3 2 3-4 2 3-4
708.2	CL			25 24	41	19	8	37	55	1 3-5 2 5-7
705.8	ML		SANDY SILT (ML), br., non pl., dmp., occ. brick frags.	15						4 7-11
700.9	CL		SILTY CLAY (CL), gr., pl., dmp.	29 22	48	22				2 3-5 5 6-8
695.5	GC		SILTY CLAYEY SANDY GRAVEL (GC), br., non pl., dmp. wet, 31.5' - 34.5'	11 16 24	W.L. 1-13-98 I.C.		67	14	19	3 3-5 4 9-25 10 11-9 6 7-11 8 15-15 11 11-11 4 7-8 9 10-6 8 11-11 15 14-13
688.0			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE | BATTER VERTICAL | DIRECTION | DATE: STARTED 1-14-98 COMPLETED 1-18-98 | PROJECT WEST COLUMBUS LPP | HOLE NO. D-98-270 | SAMPLER 2" SPLITSPOON | DROP AUTOMATIC HAMMER | COORDINATES: N. 708687.3 E. 1856187.6

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% -200	BLOWS
722.8										
722.5	OL		SILTY CLAY (OL), dk. br., sli. pl., org., (topsoil)	26						4 4-8
720.9	CL		SILTY CLAY (CL), br., sli. pl., dmp., w/gravel	16	42	20				7 7-8
719.8	GM		SILTY SANDY GRAVEL (GM), br., non. pl., dmp., scat. clay lite frags.	6						5 6-3
713.8	CL-ML		CLAYEY SILT (CL-ML), br., sli. pl., dmp., w/ gravel, occ. asp. frags., 5.3' to 5.5', scat. coal & brick frags., 6.0' to 9.0'	21						2 3-4 3 4-5 4 2-4
710.8	GM		CLAYEY SILTY SANDY GRAVEL (GM), r. br., sli. pl., dmp.	7	38	18	32	29	39	6 3-4
709.3	NS		SAMPLED - NO RECOVERY							3 5-4
707.8	CL		GRAVELY SILTY CLAY (CL), br., sli. pl., dmp.	16						2 5-7
705.8	CL		CLAYEY SILT (CL), r. br., sli. pl., dmp., w/ f.g. gravel	20						4 7-11
704.5	SM		SILTY SAND (SM), br., non pl., dmp., f.g. to c.g.	9						2 3-5
695.5	GP-GM		SILTY SANDY GRAVEL (GP-GM), br., non pl., dmp., f.g. to c.g.	7			69	22	9	3 6-8 14 19-10
694.3	ML		CLAYEY SANDY SILT (ML), br., sli. pl., wet	31						6 10-17
693.0	GP-GM		SILTY SANDY GRAVEL (GP), br., non pl., mst. wet, 33.0' to 36.0'	15 10	W.L. 1-17-98					8 14-44 7 8-12
686.8	GM		SILTY SANDY GRAVEL (GM), br., non pl., wet				40	37	15	15 16-15 15 23-19 13 13-13 5 8-12 7 7-5
677.8	SM		SILTY GRAVELLY SAND (SM), br., non pl., wet							11 12-13 10 55-71
674.8	CL		SILTY CLAY (CL), gr., sli. pl., wet, w/ f.g. gravel and sand	11						23 37-79
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE | BATTER VERTICAL | DIRECTION | DATE: STARTED 1-26-98 COMPLETED 1-26-98 | PROJECT WEST COLUMBUS LPP | HOLE NO. D-98-271 | SAMPLER 2" SPLITSPOON | DROP AUTOMATIC HAMMER | COORDINATES: N. 708825.5 E. 1856112.7

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% -200	BLOWS
719.8										
718.3	-		6" ASPHALT & BASE							-
716.8	CH		SILTY CLAY (CH), dk. gr. to bk., pl., dmp., w/ sand and gravel	16	59	23				6 5-12
715.3	GC		CLAYEY SILTY SANDY GRAVEL (GC), gr., non pl., dmp., f.g. to c.g.	12			58	25	17	10 10-11
713.8	CL		SILTY CLAY (CL), dk. gr. to bk. to r. br., sli. pl., dmp., w/ sand and gravel, scat. brick frags., occ. org. occ. brick frags., 7.5' - 9.0'	19 22	40	22				3 3-4 3 4-5 5 6-7
710.8				28						5 5-10
709.3	GP		GRAVEL (GP), gr., non pl., dry, c.g.	3						15 28-27
706.8	GP-GM		SILTY SANDY GRAVEL (GP-GM), gr. br., non pl., dry, f.g. to c.g. dmp., 13.5' br., 15.0'	5			72	22	6	3 3-4 11 13-7 9 11-12 5 4-4 5 10-10 3 6-7
704.3			r. br., 19.5'	6 12 8	W.L. 2-1-98		83	10	7	4 10-8 3 4-4 5 9-4 4 8-17 6 10-12
701.8	GM		SILTY SANDY GRAVEL (GM), br., non pl., dmp. wet, 30.0' to 31.5'	7			64	23	13	7 16-23 10 18-25 16 28-17
688.3			BOTTOM OF HOLE							12 16-25

SHEET 1 OF 1 SHEETS

CORE SIZE | BATTER VERTICAL | DIRECTION | DATE: STARTED 1-29-98 COMPLETED 1-30-98 | PROJECT WEST COLUMBUS LPP | HOLE NO. D-98-272 | SAMPLER 2" SPLITSPOON | DROP AUTOMATIC HAMMER | COORDINATES: N. 708580.6 E. 1856025.7

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% -200	BLOWS
717.0										
714.7	CL		SANDY SILTY CLAY (CL), dk. br., sli. pl., dmp., w/ gravel, occ. rt.	21	47	21	4	17	79	3 5-5 5 7-14
693.7	GP-GM		SILTY SANDY GRAVEL (GP-GM), br. gr., non pl., dmp. to mst., scat. cbl., 2.3' to 5.3' petroliferous od., 5.3' to 23.3'	11 9 4 4 5 7 8	W.L. 1-30-98 I.C.		66	25	9	10 13-25 14 21-21 20 24-26 23 101-63 11 30-33 13 21-16 12 20-22 4 7-7 3 4-8 9 9-15 11 16-17 6 12-39
690.7	SM		SILTY GRAVELLY SAND (SM) , br., non pl., mst., wet below 25.5'	10						14 16-18 11 10-8
688.7	GM		SILTY SANDY GRAVEL (GM), br., non pl., wet, c.g. to f.g. w/ clay				57	29	14	21 14-12 11 12-14 4 16-20 4 7-17 10 15-18 14 16-24 11 14-12 8 10-14 12 16-13
675.0	NS		DRILLING W/O SAMPLING							-
			BOTTOM OF HOLE							-

SHEET 1 OF 1 SHEETS

CORE SIZE | BATTER VERTICAL | DIRECTION | DATE: STARTED 1-12-98 COMPLETED 1-12-98 | PROJECT WEST COLUMBUS LPP | HOLE NO. D-98-273 | SAMPLER 2" SPLITSPOON | DROP AUTOMATIC HAMMER | COORDINATES: N. 708411.2 E. 1856327.0

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% -200	BLOWS
722.4										
720.9	CL		SILTY CLAY (CL), br., non pl., dmp., w/ gravel, scat. refuse	15						3 5-10
719.2	SM		SILTY GRAVELLY SAND (SM), br., non pl., dmp., f.g. to c.g., w/ brick frags.,	18						9 9-5
717.9	SC		GRAVELLY CLAYEY SAND (SC), br., non pl., dmp., f.g., w/ silt	10						4 4-5
711.9	SC		SILTY CLAYEY SAND (SC), br. to r. br., sli. pl., dmp., w/ f.g. gravel	21 25	34	17	4	62	34	2 2-3 1 1-4 3 2-2 2 2-3
708.7	CL		SANDY SILTY CLAY (CL), gr. br., sli. pl., dmp., w/ f.g. gravel	22	50	22				1 3-3 2 4-8
707.1	GP		SANDY GRAVEL (GP), br., non pl., dmp., f.g. to c.g., w/ silt	31 16						6 8-11
704.2	CL		SILTY CLAY (CL), br., sli. pl., dmp., w/ sand and gravel	20						4 4-7 9 9-10
689.4	GM		SILTY SANDY GRAVEL (GM), br., non pl., dmp. mst., 30.2' wet, 32.2'	10 5 11 9	W.L. 1-12-98 I.C.		42	32	19	16 13-17 6 14-10 9 17-17 12 16-12 13 17-8 11 15-12 13 12-12 9 11-14 11 16-13 6 12-18
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE | BATTER VERTICAL | DIRECTION | DATE: STARTED 1-13-98 COMPLETED 1-14-98 | PROJECT WEST COLUMBUS LPP | HOLE NO. D-98-274 | SAMPLER 2" SPLITSPOON | DROP AUTOMATIC HAMMER | COORDINATES: N. 708117.0 E. 1856479.1

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%#4	% SAND	% -200	BLOWS
720.2										
719.9	CL		SILTY CLAY (CL), dk. br., sli. pl., dmp., org., (topsoil)	17						7 14-16
717.2	GM		SANDY CLAYEY SILTY GRAVEL (GM), br., non. pl., dmp., occ. brick frags.	9						8 6-5
716.0	CL		SANDY SILTY CLAY (CL), br., sli. pl., dmp., scat. glass and coal frags.	18						5 6-8
712.7	SC		SILTY CLAYEY GRAVELLY SAND (SC), br., sli. pl., dmp., occ. coal frags. inc. sand, occ. brick frags., 6.0' to 7.5'	14 20			32	46	22	3 4-6 6 6-4
709.7	CL		SANDY SILTY CLAY (CL), br., sli. pl., dmp., w/ f.g. gravel, occ. coal frags.	25						7 5-5 6 6-7
708.2	CL		SILTY CLAY (CL), r. br., sli. pl., dmp., w/ f.g. sand, occ. coal frags	22						9 6-8
706.7	CH		SILTY CLAY (CH), dk. br., sli. pl., dmp., w/ f.g. sand	22	55	23				7 8-17
705.2	GW-GC		CLAYEY SANDY GRAVEL (GW-GC), lt. br., non pl., dry, w/ silt	7						18 22-33
703.7	CL		GRAVELLY SANDY SILTY CLAY (CL), br., sli. pl., dmp.	6						22 24-26
700.7	GP-GC		CLAYEY SANDY GRAVEL (GP-GC), br., sli. pl., dry	6			68	24	8	16 18-22 10 14-15
699.2	GP		GRAVEL (GP), tan, non pl., dry, c.g.							36 20-22
697.4	GM		SILTY SANDY GRAVEL (GM), non pl., dry, c.g.	5						16 32-28
696.2	SW-SM		GRAVELLY SILTY SAND (SW-SM), br., non pl., dmp.	8						18 19-20
691.7	GC		CLAYEY SANDY GRAVEL (GC), non. pl., dmp. to mst., f.g. to c.g., w/ silt	6 19	W.L. 1-14-98		61	18	21	14 13-10 11 12-14 13 13-17
690.2	GP		GRAVEL (GP), tan, non pl., dry, c.g.							20 11-10
688.7	NS		SAMPLED - NO RECOVERY							8 5-11
679.2	GM		SILTY SANDY GRAVEL (GM), br., non pl., wet, c.g. to f.g., w/ clay				48	36	16	12 22-19 7 14-17
678.9	SP		SAND (SP), gy., non. pl., wet, f.g.							12 7-9
678.2	CL		CLAYEY SILT (CL), gy., sli. pl., dmp.							12 24-30
676.7	SW-SM		SILTY GRAVELLY SAND (SW-SM), gr., non pl., wet							23 21-19
675.2	ML		SILT (ML), br., non pl., wet to mst., w/ gravel							12 19-13
674.6	CL		SILTY CLAY (CL), gr., sli. pl., dmp., w/ gravel	9	23	14				36 30-35 50 50/0.2 50/0.2 60 50/0.1
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: V.AMATO
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GRAPHIC LOGS OF BORINGS

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 10/5
FILENAME: borngig2.dgn
PRN TABLE:
Sheet 2 of 3

WORK AS CONSTRUCTED

CORE SIZE NX
BATTER VERTICAL
DIRECTION
DATE: STARTED 1-9-98
COMPLETED
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-275
SAMPLER 2" SPLITSPOON
DROP 30"
HAMMER 140#
COORDINATES: N. 707770.6 E. 1856658.9

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%+4	% SAND	% -200	BLOWS
717.0										
	OL		SILTY CLAY (OL), dk. br., sli. pl., org., occ. rt., topsoil							4 7-10
714.0				22						8 9-9
	CL		SILTY CLAY (CL), br., sli. pl., dmp., w/ sand, occ. rt, occ. shale and rc. frags, 4.5'-6.0'							4 5-7
711.0				17						4 5-6
	GC		SILTY CLAYEY SANDY GRAVEL (GC), br., sli. pl., dmp., occ. rc. and coal frags., 7.5'-9.0'							4 4-7
708.0				20	42	22	37	26	37	5 5-9
	CL		SILTY SANDY CLAY (CL), br., sli. pl., dmp.							8 8-8
706.0				23						4 6-5
705.5	SC		CLAYEY SAND (SC), br., sli. pl., mst., f.g. to c.g.	18						3 5-7
	CH		GRAVELLY SANDY SILTY CLAY (CH), dk. br., pla., dmp., occ. shale frags. 13.5' to 15.0'	26	51	26	7	42	51	5 10-16
702.0				26						12 11-9
	GC		CLAYEY SANDY GRAVEL (GC), lt. br., sli. pl., dmp., c.g.							13 12-14
			tan, 19.5' -21.0'	12						19 16-28
694.5				16			61	23	16	21 13-12
	CL		GRAVELLY SANDY SILTY CLAY (CL), lt. br. to gr., sli. pl., mst.	13						14 11-15
691.5			inc. sand, wet, 25.5'	12						7 6-13
690.0	NS		DRILLING W/O SAMPLING	W.L. 1-9-98						10 8-9
	GP-GM		SILTY SANDY GRAVEL (GP-GM), br., non pl., wet, f.g. to c.g.	I.C.			60	30	10	- 12 29-19
685.5										10 10-11
	GM		SILTY SANDY GRAVEL (GM), br., non pl., wet, c.g.							13 7-7
			inc, c.g. gravel, 34.0'							21 20-11
679.5							54	32	14	12 13-14
	NS		DRILLING W/O SAMPLING							14 19-18
677.0										8 10-14
676.2	GW		SANDY GRAVEL (GW), gy., non pl., wet, c.g.							- 69 30-19
	CL		SILTY CLAY (CL), gr., pl., dmp., w/ gravel							17 40-32
			inc. gravel 43.0'-43.7'	10						45 50/0.2
672.5										19 25-42
	CL		SILTY CLAY (CL), gy., sli. pl., dmp., w/ sand and gravel 2" silt len., 45.5'	16	31	17				26 40-46
										16 30-43
										29 40-50

SHEET 1 OF 2 SHEETS

CONTINUATION OF
HOLE NO. D-98-275

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%+4	% SAND	% -200	BLOWS
667.0										
			SAME AS ABOVE							24 50-50
				18						16 33-50
660.5				19						31 37-46
660.4	NS		BEDROCK OVERBURDEN							15 26-50
659.6	SS.		DRILLING W/O SAMPLING	RQD						50/0.1)
658.9	DO.		SANDSTONE: h., gr., f. loe., f. g.	LOSS						
658.1			DOLOMITE: h., dk. gr., f. cst.	0						BEGAN CORING
	CL		CLAYEY GRAVEL (CG), gr., f.g. to c.g., rou.	0.45						
656.3				45						
	SS.		SANDSTONE: lt. gr., h., f.g., pyr., occ. c.g. inc., occ. diag. froc.	1.1'						
654.2			BOTTOM OF HOLE							

SHEET 2 OF 2 SHEETS

CORE SIZE
BATTER VERTICAL
DIRECTION
DATE: STARTED 1-19-98
COMPLETED 1-21-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-276
SAMPLER 2" SPLITSPOON
DROP 30"
HAMMER 140#
COORDINATES: N. 707405.6 E. 1856838.9

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%+4	% SAND	% -200	BLOWS
718.1			DRILLING W/O SAMPLING, asphalt							10 14-8
717.0	GW		SANDY GRAVEL (GW), non pl., dmp., f.g. to c.g.	6						7 10-20
	CL		GRAVELLY SANDY SILTY CLAY (CL), lt. br. to dk. br., sli. pl., dmp.	21	48	21	9	17	74	7 11-19
714.0				18						28 26-19
713.7	CL		SILTY CLAY (CL), dk. br., pla. dmp., w/ gravel and sand	19						9 12-18
	GM		SANDY SILTY GRAVEL (GM), lt. br., non pl., dmp., w/ clay, f.g. to c.g.	13						14 13-15
711.0				16						11 13-8
	GC		SANDY SILTY CLAYEY GRAVEL (GC), br. gr. to br., sli. pl., dmp., f.g. to c.g., rou.	21	54	23	39	18	43	10 16-21
				19						21 19-23
702.0				23						20 33-32
700.5	NS		SAMPLED - NO RECOVERY							7 15-12
	CL		SANDY SILTY CLAY (CL), br., sli. pl., dmp.							10 12-15
697.5				22	48	21	0	24	76	7 8-9
	CL-ML		CLAYEY SILT (CL-ML), br., sli. pl., dmp.	19						6 8-7
695.5										4 6-8
	GW-GM		CLAYEY SILTY SANDY GRAVEL (GW-GM), lt. br. gr., non pl. to sli. pl., dmp., inc. at 25.5'							4 7-16
693.0	NS		SAMPLED - NO RECOVERY							11 16-27
691.5										50/0.2
	GM		SILTY SANDY GRAVEL (GM), br., non pl., dmp. to wet, w/ clay	13						33 52-40
				W.L. 1-20-98						22 33-37
687.0			inc. clay 31.5'							25 18-12
	SM		SILTY GRAVELLY SAND (SM), br. to gr., non pl., wet, f.g. to c.g.							35 40-31
										15 16-17
			1" clayey sand se. at 37.5'							18 16-25
679.9										25 21-27
	SP		SILTY SAND (SW), gr. non pl., wet, c.g. f.g., w/ f. gra.							9 17-17
										14 20-21
675.0			BOTTOM OF HOLE							13 15-22
										12 17-19

SHEET 1 OF 1 SHEETS

CORE SIZE
BATTER VERTICAL
DIRECTION
DATE: STARTED 2-2-98
COMPLETED 2-2-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-277
SAMPLER 2" SPLITSPOON
DROP
HAMMER AUTOMATIC
COORDINATES: N. 707300.5 E. 1856707.4

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%+4	% SAND	% -200	BLOWS
716.8										
716.3	OL		SILTY CLAY (OL), dk. br., sli. pl., dmp., org. (topsoil)	16						2 6-7
	CL		SILTY CLAY (CL), br., sli. pl. to pl., dmp. to mst., w/ f.g. to c.g. gravel and sand							5 4-5
713.8				49	46	27				6 6-17
712.3			LIMESTONE FRAGS., c.g.	8						13 6-9
710.8	SM		SILTY SAND (SM), br., non pl., dmp. to mst., c.g., w/ f.g. gra.	7						3 5-8
709.3	NS		SAMPLED - NO RECOVERY							4 7-15
	CH		SANDY GRAVELLY SILTY CLAY (CH), br., pl., dmp., inc. c.g. gravel, 9'							9 12-16
706.3				16	74	29	26	23	51	9 24-28
	GM		SILTY SANDY GRAVEL (GM), dk. br., sli. pl., dmp., f.g. to c.g., rou., w/ clay							6 5-14
703.3				18	40	20	39	33	28	13 17-25
	GP-GM		SILTY SANDY GRAVEL (GP-GM), lt. br., non pl., dry to dmp., c.g. to f.g., w/ clay	5			66	23	11	8 11-15
698.7				7						13 16-15
	GM		CLAYEY SILTY GRAVEL (GM), br. gr., sli. pl., dmp., w/ sand	8						12 15-18
697.3										13 20-11
	GM		SILTY SANDY GRAVEL (GM), lt. gr., non pl., dmp. w/ clay							12 18-27
694.3				8			61	24	15	28 42-33
	SM		SILTY GRAVELLY SAND (SM), br., non pl., dry, c.g. f.g., br. clay se., 22.8' to 23.0'	9						
692.8			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE
BATTER VERTICAL
DIRECTION
DATE: STARTED 1-27-98
COMPLETED 1-28-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-278
SAMPLER 2" SPLITSPOON
DROP
HAMMER AUTOMATIC
COORDINATES: N. 707238.7 E. 1856619.5

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%+4	% SAND	% -200	BLOWS
705.5										
	OH		SILTY CLAY (OH), dk. br., sli. pl., mst., org., scat. rt. (topsoil)							1 3-3
				34	52	28				0 0-1
700.5				27						1 3-3
699.0	CH		SANDY SILTY CLAY (CH), br., sli. pl., dmp.	22	60	23	0	31	69	1 3-4
	GP-GM		SILTY SANDY GRAVEL (GP-GM), br. gr., non pl., dmp., f.g. to c.g.							2 4-6
				9			66	23	11	5 8-13
696.0				6						5 13-13
693.0										6 12-15
	GM		SILTY SANDY GRAVEL (GM), br. gr., non pl., dmp. to wet, f.g. to c.g.							9 13-16
				8	W.L. 1-28-98					20 27-21
										8 19-24
							54	32	14	7 17-18
										13 16-19
										10 19-17
										3 12-27
										7 31-24
681.5										47 80-58
680.0	NS		SAMPLED - NO RECOVERY							13 13-15
679.5	GM		SILTY SANDY GRAVEL (GM), br., non pl., wet, f.g. to c.g.							
678.5	SM		SILTY SAND (SM), gr., non pl., wet, w/ f.g. gravel				1	85	14	
			BOTTOM OF HOLE							

SHEET 1 OF 1 SHEETS

CORE SIZE
BATTER VERTICAL
DIRECTION
DATE: STARTED 1-31-98
COMPLETED 1-31-98
PROJECT WEST COLUMBUS LPP
HOLE NO. D-98-279
SAMPLER 2" SPLITSPOON
DROP
HAMMER AUTOMATIC
COORDINATES: N. 706927.0 E. 1856918.8

ELEVATION (FEET) MSL	SYMBOL	* R.S.E.	DESCRIPTION OF MATERIALS	WC	LL	PL	%+4	% SAND	% -200	BLOWS
725.8										
724.3	NS		DRILLING W/O SAMPLING, 6" asphalt & 12" base							-
723.1	SM		SILTY SAND (SM), br. to gr., non pl., dmp., f.g. to c.g.	5						6 7-6
	SC		SILTY CLAYEY GRAVELLY SAND (SC), dk. gr. br. to bk., sli. pl., dmp.	18						5 6-7
719.8				25	65	25	33	33	34	3 5-5
718.3	GC		SANDY CLAYEY GRAVEL (GC), gr. br., sli. pl., dmp., w/silt	18						5 8-7
716.8	NS		SAMPLED - NO RECOVERY							6 7-6
715.3	CL		SILTY CLAY (CL), dk. gr. to bk., sli. pl., dmp., org., scat. c.g. rc. frags.	18						4 8-9
	GM		SILTY SANDY GRAVEL (GM), gr. br., non pl., dry, c.g. to f.g.	8			58	27	15	17 19-18
710.8				6						13 20-26
	GM		SANDY SILTY GRAVEL (GM), mot. gr. and br., non pl. to sli. pl., dmp. w/ clay, inc. org., 16.5'-18.5'	17			44	23	33	9 16-19
707.8										18 23-25
	CL		SANDY GRAVELLY CLAY (CL), dk. gr., sli. pl., dmp. w/ silt	16						11 17-21
704.8										11 15-19
703.3	GC		SANDY CLAYEY GRAVEL (GC), gr., non pl., dmp.	7						20 26-23
702.8	CL		SANDY GRAVELLY CLAY (CL), dk. gr., sli. pl., dmp., occ. org., w/ silt	17						7 12-9
701.8	SW		GRAVELLY SAND (SW), gr. to br., non pl., dmp., occ. burnt wo. frags.	9						5 38-36
700.3	CL-ML		CLAYEY SILT (CL-ML), dk. gy., sli. pl., dmp, org., occ. brick frags.	22						6 10-14
698.8	CH		SILTY CLAY (CH), dk. gr., sli. pl., dmp, scat. org.	26	55	24				4 7-12
	CL		SILTY CLAY (CL), dk. to lt. br., sli. pl., dmp, to mst.							4 7-11
694.3				25	49	20				3 7-9
	SM		GRAVELLY SITY SAND (SM), br. to bk., non pl., dmp. to mst., f.g. to c.g., w/ clay	22						2 5-12
690.8				13						7 8-8
	GM		SILTY SANDY GRAVEL (GM), gr. to br., non pl., dmp. to wet, c.g. to f.g.	16	W.L. 1-31-98 I.C.		7	67	26	7 11-10
688.3			BOTTOM OF HOLE							3 13-23
										8 22-20

SHEET 1 OF 1 SHEETS

Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: J.HALL
Drawn by: T.MULLINS
Checked by: V.AMATO
Reviewed by:
Approved by:

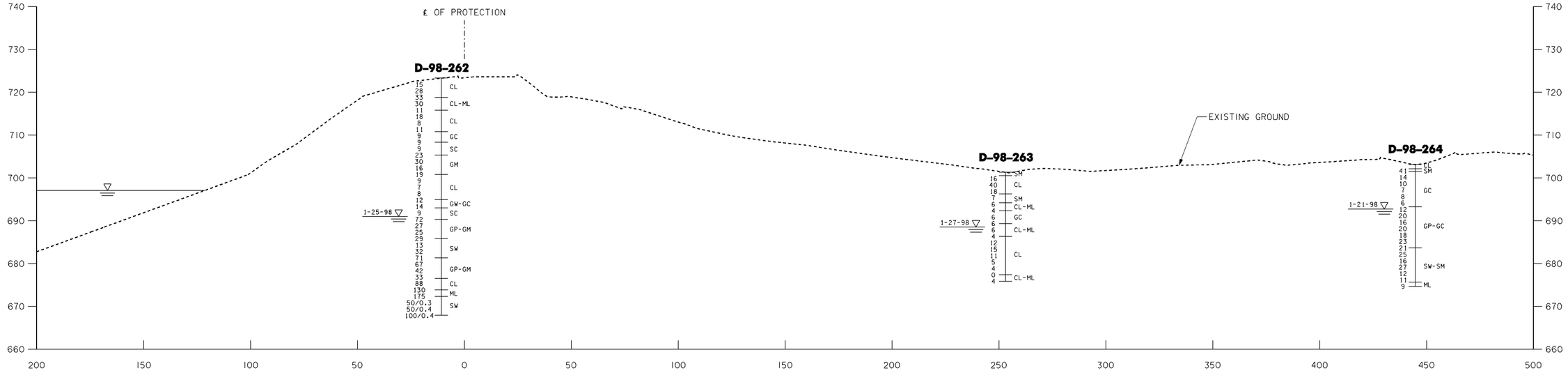
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GRAPHIC LOGS OF BORINGS

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 10/6
FILENAME: borngig3.dgn
PRN TABLE:
Sheet 3 of 3

WORK AS CONSTRUCTED



Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
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U.S.ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
HUNTINGTON, WEST VIRGINIA

Designed by: C.CLARKE
Drawn by: T.MULLINS
Checked by: J.HALL
Reviewed by:
Approved by:

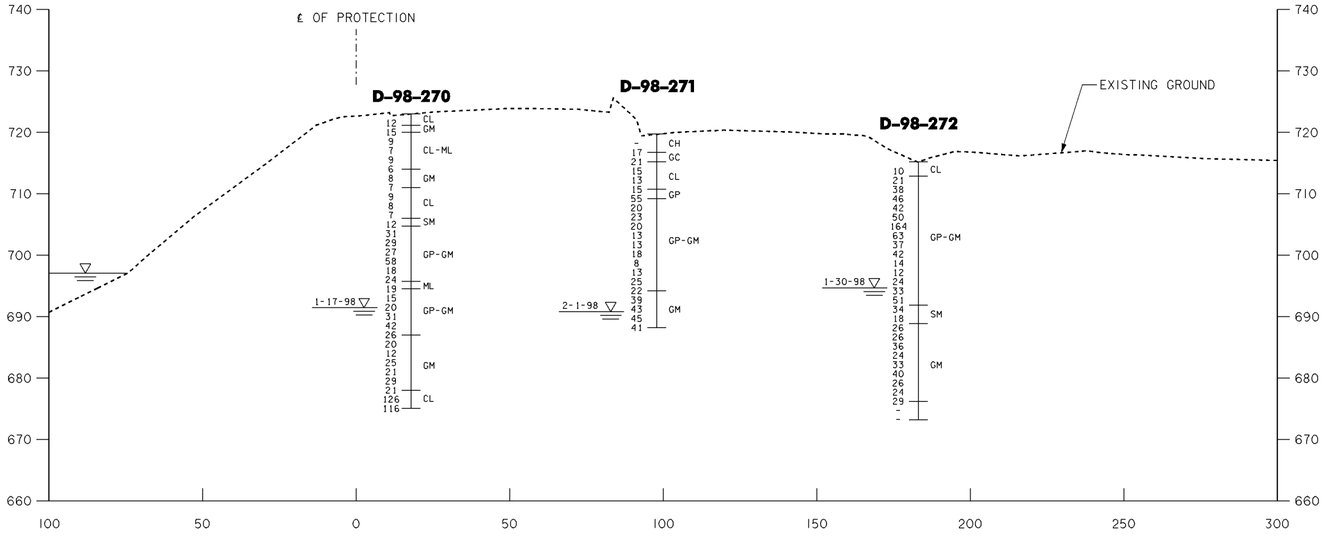
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GEOLOGIC SECT A-A
STA. 225+27

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 107
FILENAME: 00ggsc01.dgn
PEN TABLE:
Sheet 1 of 3

WORK AS CONSTRUCTED



Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
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U.S.ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
HUNTINGTON, WEST VIRGINIA

Designed by: C.CLARKE
Drawn by: T.MULLINS
Checked by: J.HALL
Reviewed by:
Approved by:

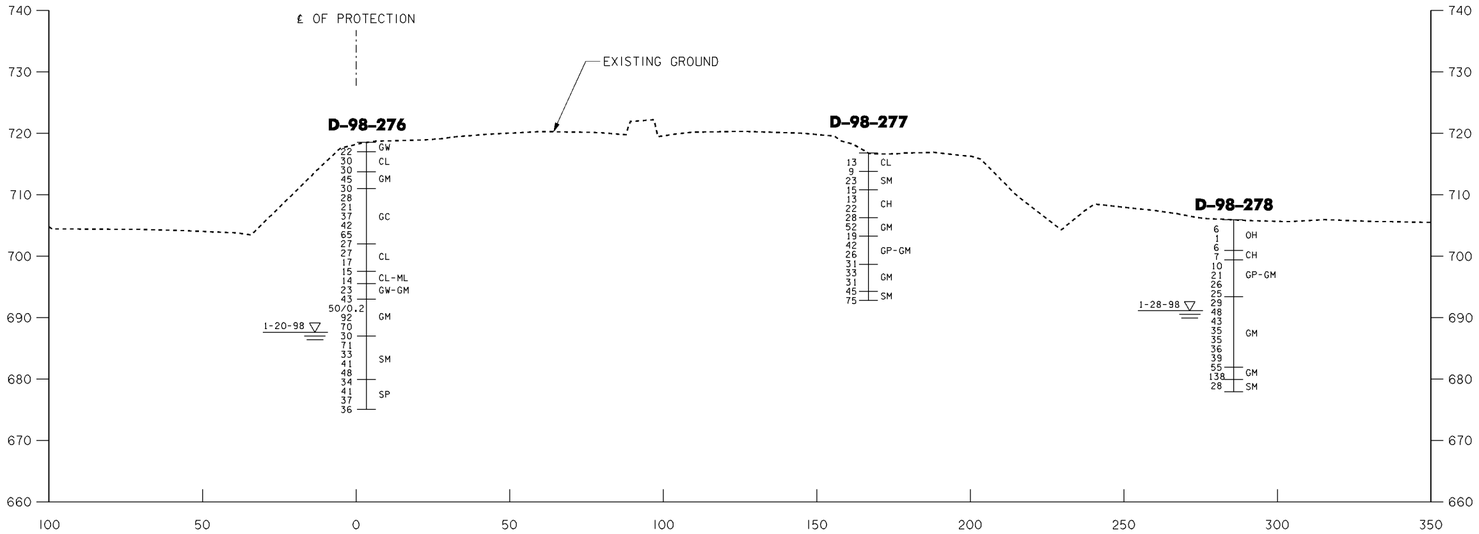
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GEOLOGIC SECT B-B
STA. 244+42

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12--
Sheet reference number: 108
FILENAME: 00ggsc02.dgn
PEN TABLE:
Sheet 2 of 3

WORK AS CONSTRUCTED



Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
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U.S.ARMY ENGINEER DISTRICT
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HUNTINGTON, WEST VIRGINIA

Designed by: C.CLARKE
Drawn by: T.MULLINS
Checked by: J.HALL
Reviewed by:
Approved by:

US Army Corps of Engineers

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PHASE IIIA

GEOLOGIC SECT C-C
STA. 258+92

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 109
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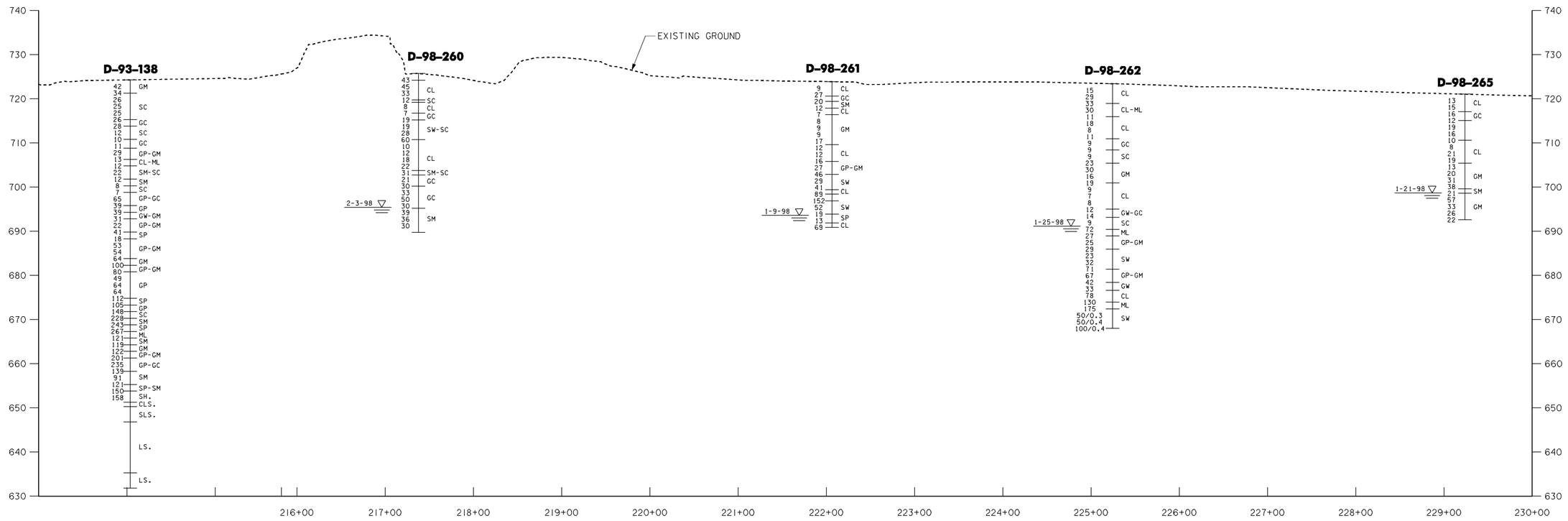
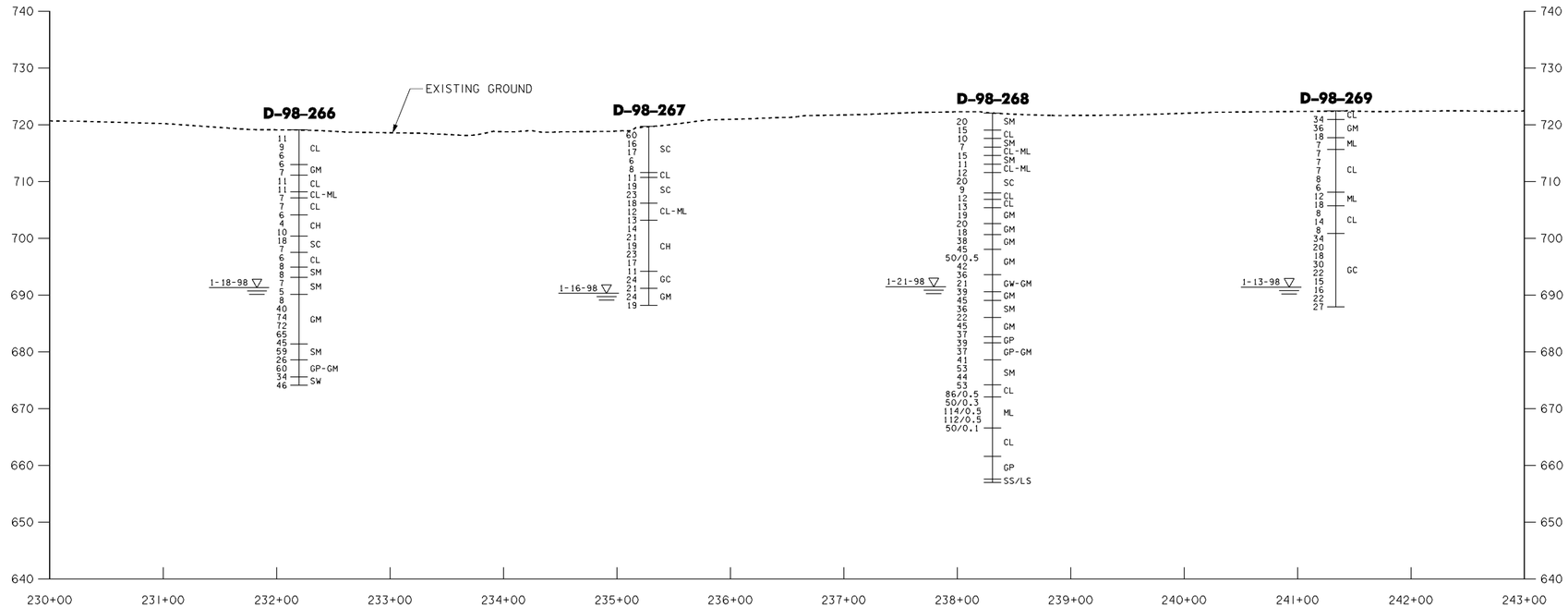
PIN TABLE:
Sheet 3 of 3

WORK AS CONSTRUCTED





Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
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U.S.ARMY ENGINEER DISTRICT
CORPS OF ENGINEERS
HUNTINGTON, WEST VIRGINIA

Designed by: C.CLARKE
Drawn by: T.MULLINS
Checked by: J.HALL
Reviewed by:
Approved by:

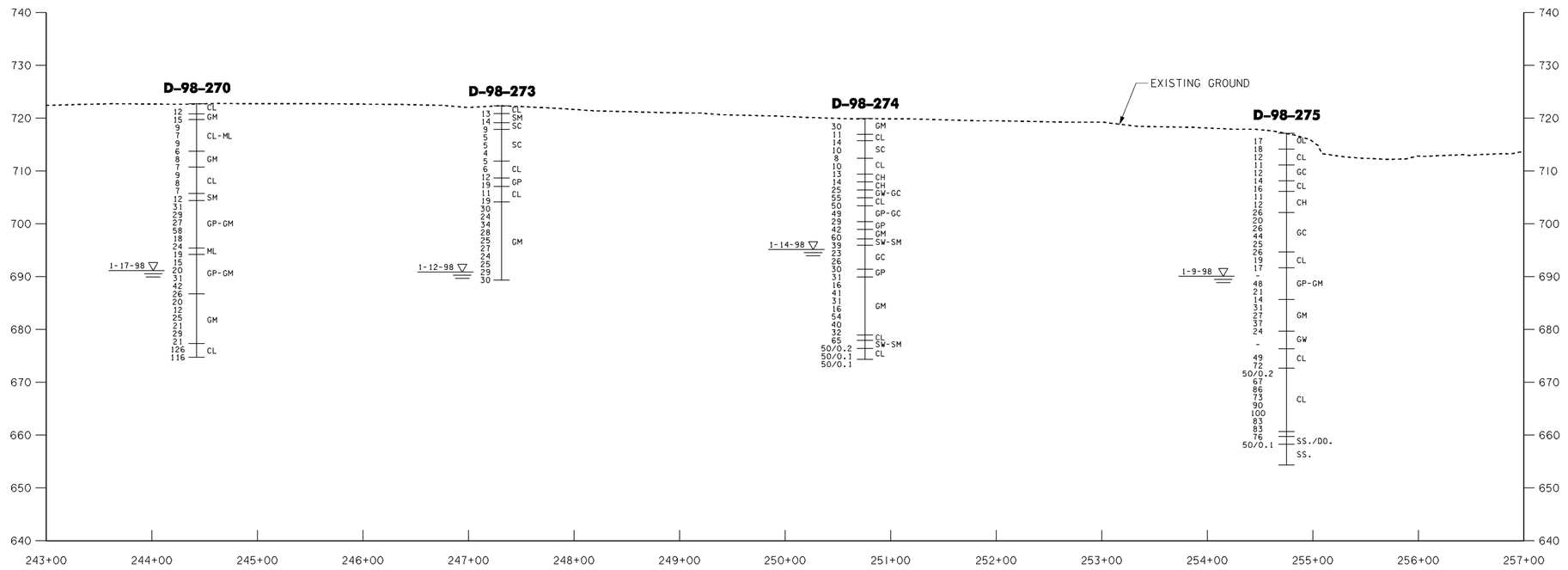
US Army Corps of Engineers

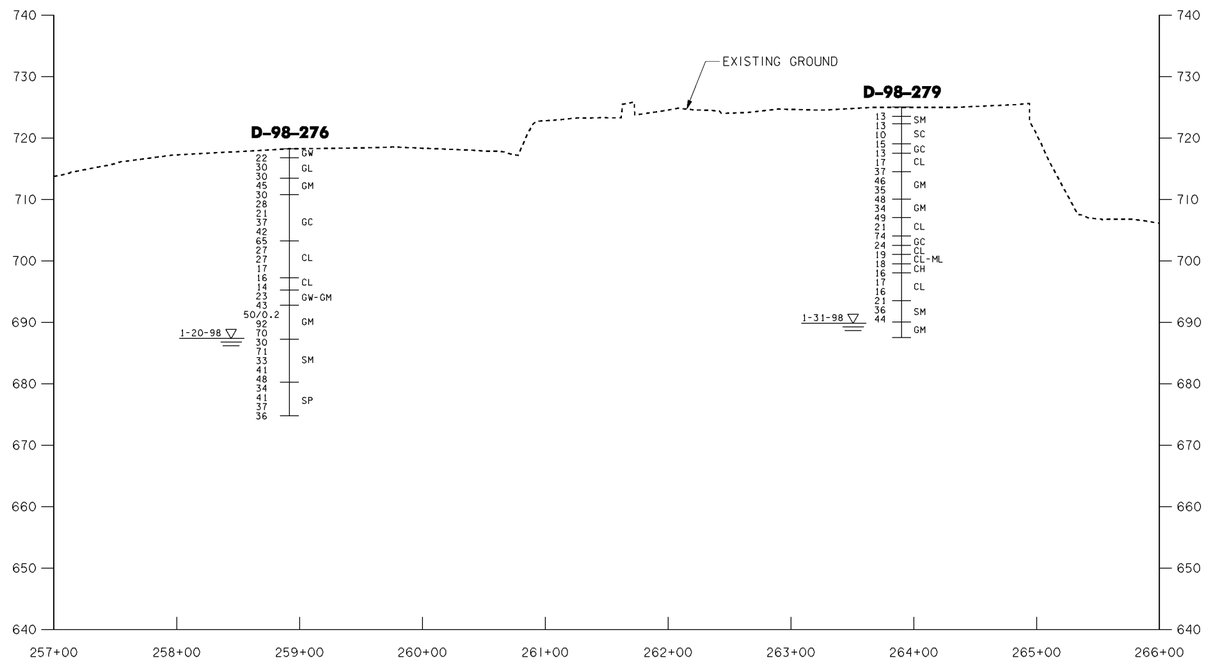
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GEOLOGIC PROFILE SECTION D-D

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 10/10
FILENAME: 00ggpr01.dgn
PRN TABLE:
Sheet 1 of 2

WORK AS CONSTRUCTED





Revisions			
Symbol	Descriptions	Date	Approved

BURGESS & NIPLE, LIMITED
COLUMBUS, OHIO

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

Designed by: C.CLARKE
Drawn by: T.MULLINS
Checked by: J.HALL
Reviewed by:
Approved by:

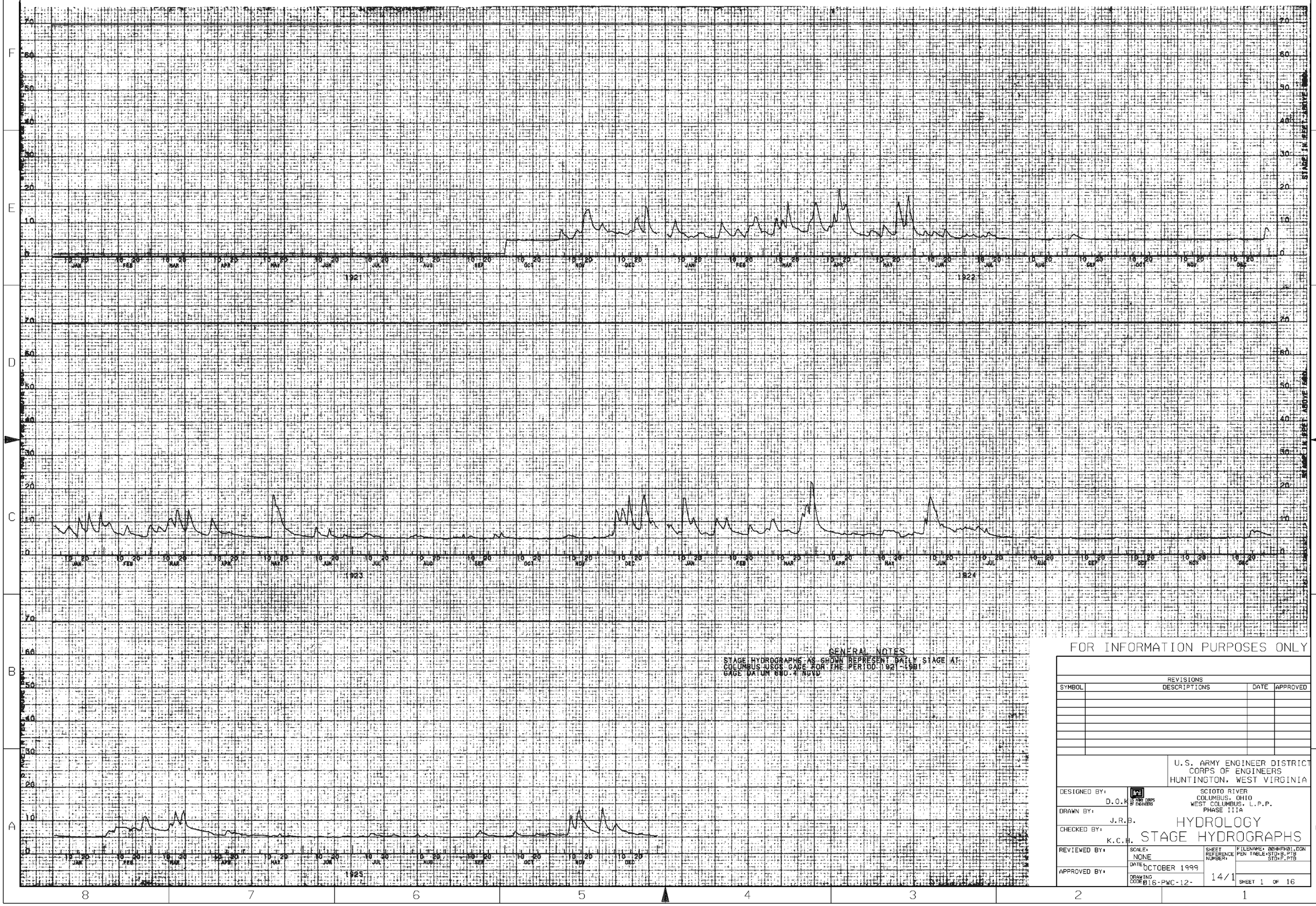
US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

GEOLOGIC PROFILE SECTION D-D

Scale: AS SHOWN
Date: OCTOBER 1999
Drawing Code: 16-PWC-12-
Sheet reference number: 10/11
FILENAME: 00ggpr02.dgn
PRN TABLE:
Sheet 2 of 2

WORK AS CONSTRUCTED



GENERAL NOTES

STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT COLUMBUS USGS GAGE FOR THE PERIOD 1921-1981 . GAGE DATUM 680.4 NGVD

FOR INFORMATION PURPOSES ONLY

REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVED

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

DESIGNED BY: D.O.K
DRAWN BY: J.R.B.
CHECKED BY: K.C.H.
REVIEWED BY:
APPROVED BY:

US ARMY CORPS OF ENGINEERS

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

SCALE: NONE
DATE: OCTOBER 1999
DRAWING CODE: 016-PWC-12-
SHEET REFERENCE NUMBER: 14/1
FILENAME: 00HHTH01.DGN
PEN TABLE: STDSB.PTB STDSF.PTB
SHEET 1 OF 16

WORK AS CONSTRUCTED

GENERAL NOTES

STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT COLUMBUS USGS GAGE FOR THE PERIOD 1926-1930
GAGE DATUM 680.4 NGVD

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REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVED

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CORPS OF ENGINEERS
HUNTINGTON, WEST VIRGINIA

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CHECKED BY: K.C.H.
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PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

SCALE: NONE
DATE: OCTOBER 1999
DRAWING CODE: 016-PWC-12-
SHEET REFERENCE NUMBER: 14/2
FILENAME: 00HHFH02.DGN
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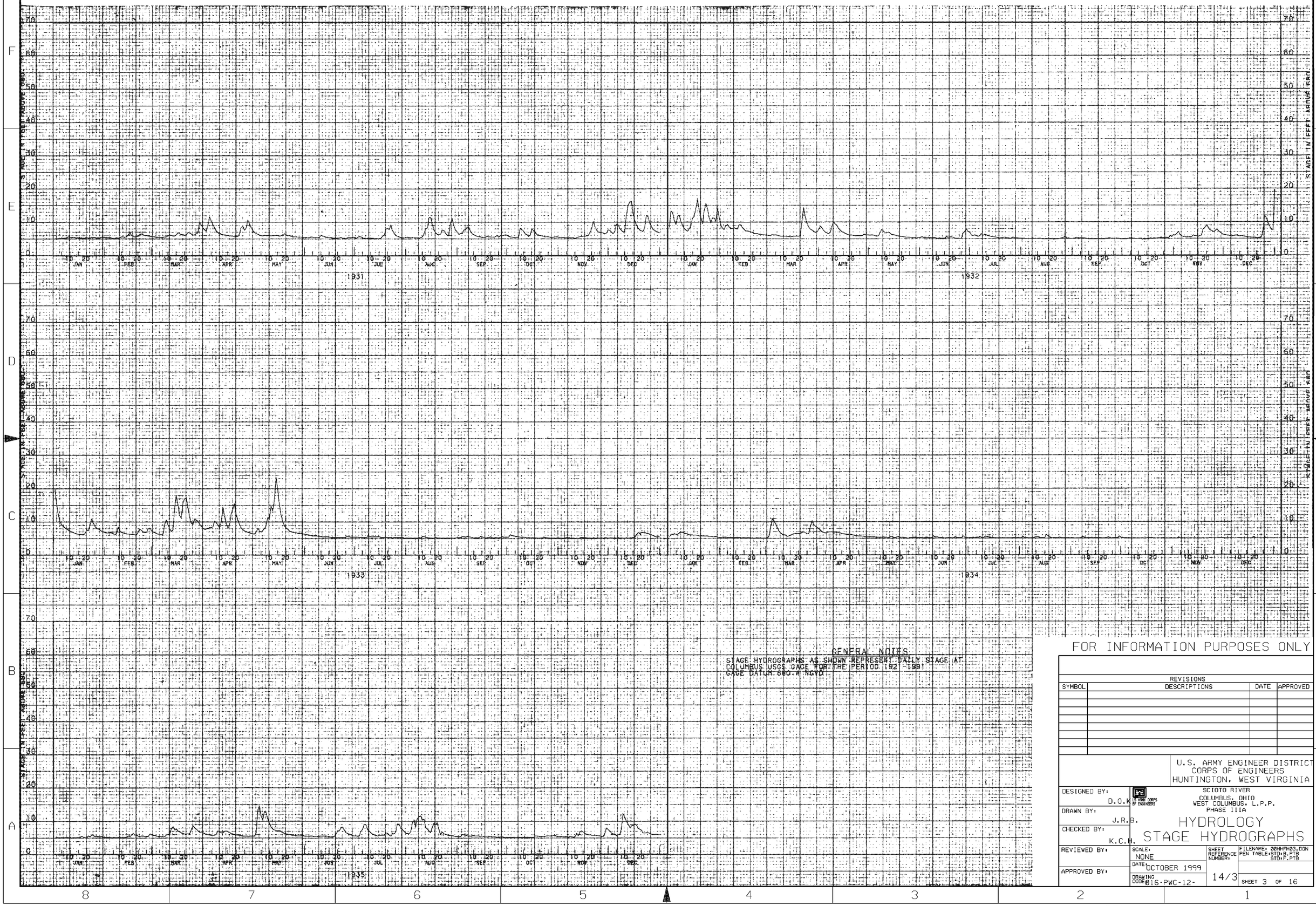
SHEET 2 OF 16

WORK AS CONSTRUCTED



GENERAL NOTES

STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT COLUMBUS USGS GAGE FOR THE PERIOD 192 -1991
GAGE DATUM 680.# NGVD

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REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVED

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CORPS OF ENGINEERS
HUNTINGTON, WEST VIRGINIA

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CHECKED BY: K.C.H.
REVIEWED BY:
APPROVED BY:

US ARMY CORPS OF ENGINEERS

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PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

SCALE: NONE
DATE: OCTOBER 1999
DRAWING CODE: 916-PWC-12-
SHEET REFERENCE NUMBER: 14/3
FILENAME: 00HHFH03.DGN
PEN TABLE: STD+B.PTB STD+F.PTB
SHEET 3 OF 16

WORK AS CONSTRUCTED

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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REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVED

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CORPS OF ENGINEERS
HUNTINGTON, WEST VIRGINIA

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CHECKED BY: K.C.H.
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APPROVED BY:

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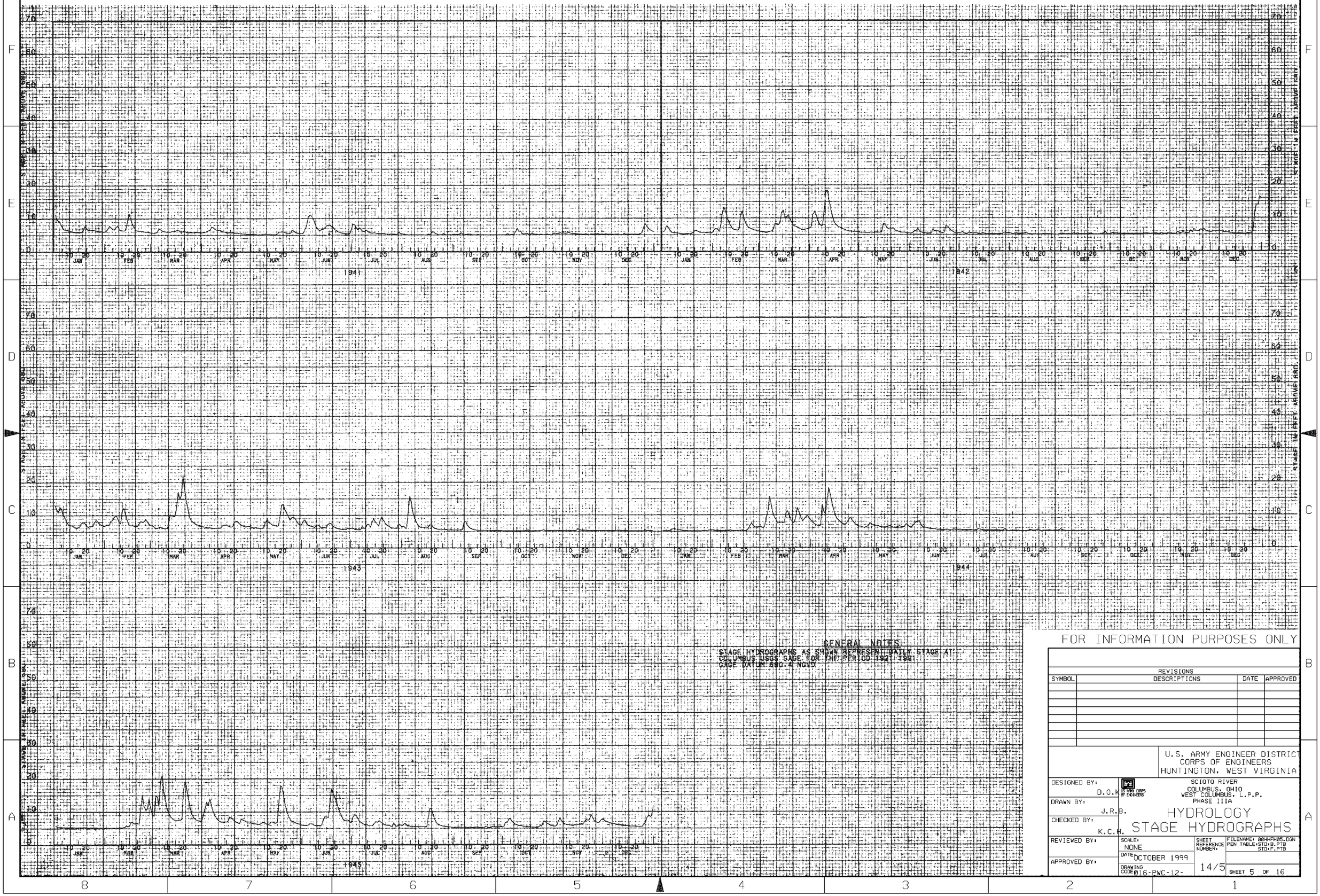
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

SCALE: NONE
DATE: OCTOBER 1999
DRAWING CODE: 0116-PWC-12-
SHEET REFERENCE NUMBER: 14/4
FILENAME: 00HHFH04.DGN
PEN TABLE: STD-B.PTB STD-F.PTB
SHEET 4 OF 16

WORK AS CONSTRUCTED



GENERAL NOTES

STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT COLUMBUS USGS GAGE FOR THE PERIOD 1927 1981
GAGE DATUM 680.4 NGVD

FOR INFORMATION PURPOSES ONLY

REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVED

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

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CHECKED BY: K.C.H.
REVIEWED BY:
APPROVED BY:

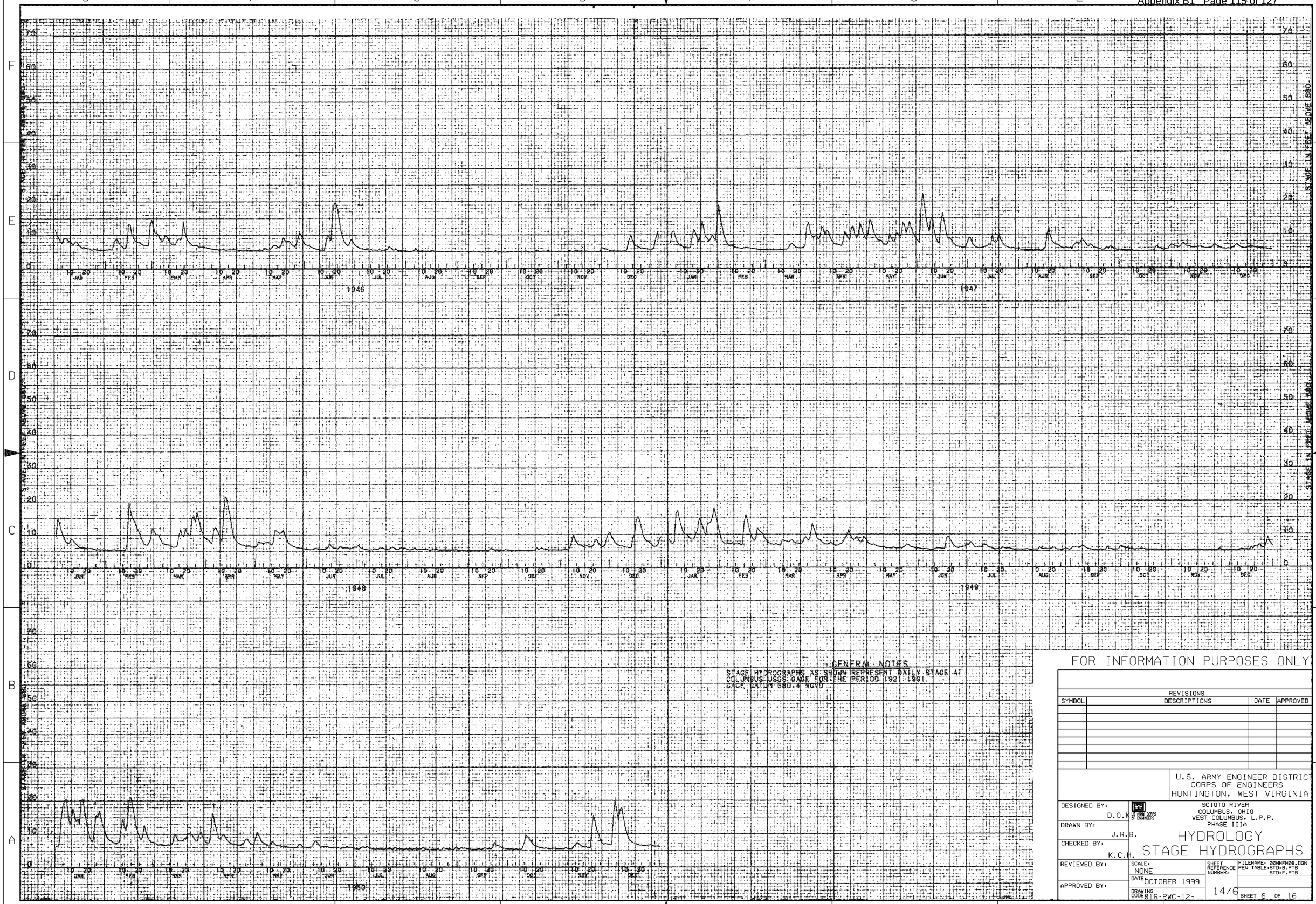
US ARMY CORPS OF ENGINEERS

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

SCALE: NONE
DATE OCTOBER 1999
DRAWING CODE 916-PWC-12-
SHEET REFERENCE NUMBER 14/5
FILENAME: 00HHFH05.DGN
PEN TABLE: STD_B.PTB STD_F.PTB
SHEET 5 OF 16

WORK AS CONSTRUCTED



GENERAL NOTES

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

FOR INFORMATION PURPOSES ONLY

REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVED

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

DESIGNED BY: D.O.K
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CHECKED BY: K.C.H.
REVIEWED BY:
APPROVED BY:

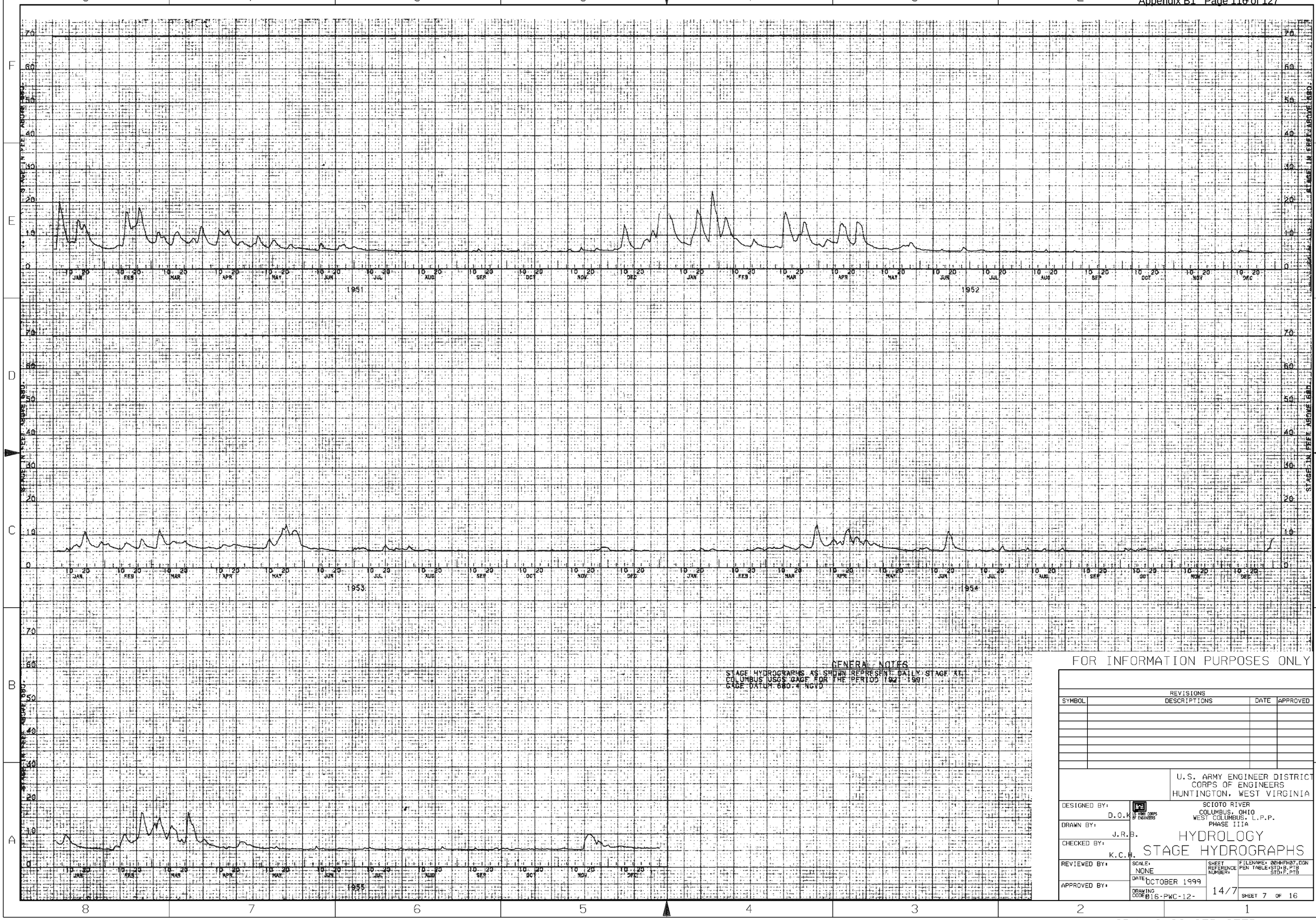
US ARMY CORPS OF ENGINEERS

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

SCALE: NONE
DATE: OCTOBER 1999
DRAWING CODE: 016-PWC-12-
SHEET REFERENCE NUMBER: 14/6
FILENAME: 00HHFH06.DGN
PEN TABLE: STDHP.PTB STDHF.PTB
SHEET 6 OF 16

WORK AS CONSTRUCTED



GENERAL NOTES

STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT COLUMBUS USGS GAGE FOR THE PERIOD 1951 1991
GAGE DATUM 680.4 NGVD

FOR INFORMATION PURPOSES ONLY

REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVED

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

DESIGNED BY: D.O.K.
DRAWN BY: J.R.B.
CHECKED BY: K.C.H.
REVIEWED BY:
APPROVED BY:

US ARMY CORPS OF ENGINEERS

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

SCALE: NONE
DATE: OCTOBER 1999
DRAWING CODE: 016-PWC-12-
SHEET REFERENCE NUMBER: 14/7
FILENAME: 00HHH07.DGN
PEN TABLE: STD.B.PTB STD.F.PTB
SHEET 7 OF 16

WORK AS CONSTRUCTED

GENERAL NOTES

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

FOR INFORMATION PURPOSES ONLY

REVISIONS			
SYMBOL	DESCRIPTIONS	DATE	APPROVED

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

DESIGNED BY: D.O.K
DRAWN BY: J.R.B.
CHECKED BY: K.C.H.
REVIEWED BY:
APPROVED BY:

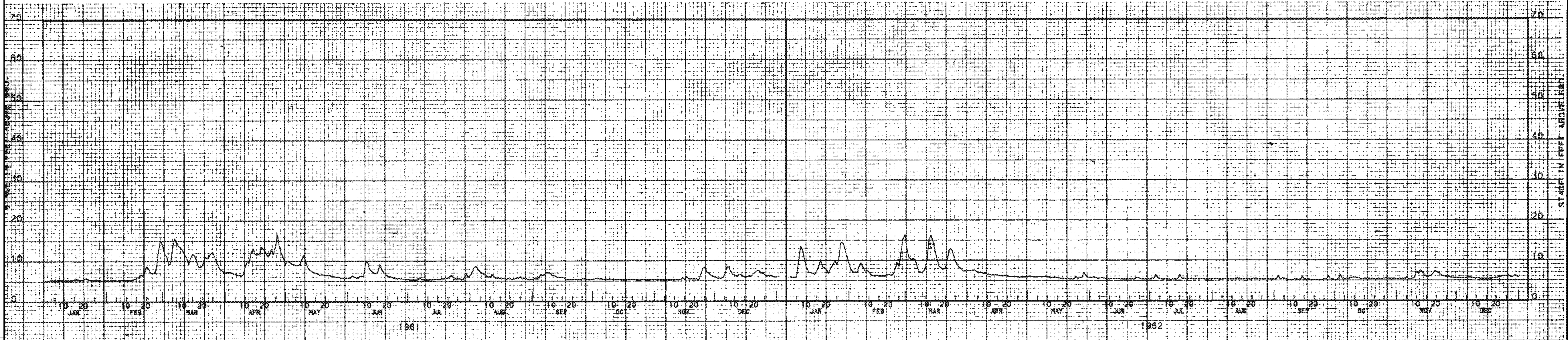
US ARMY CORPS OF ENGINEERS

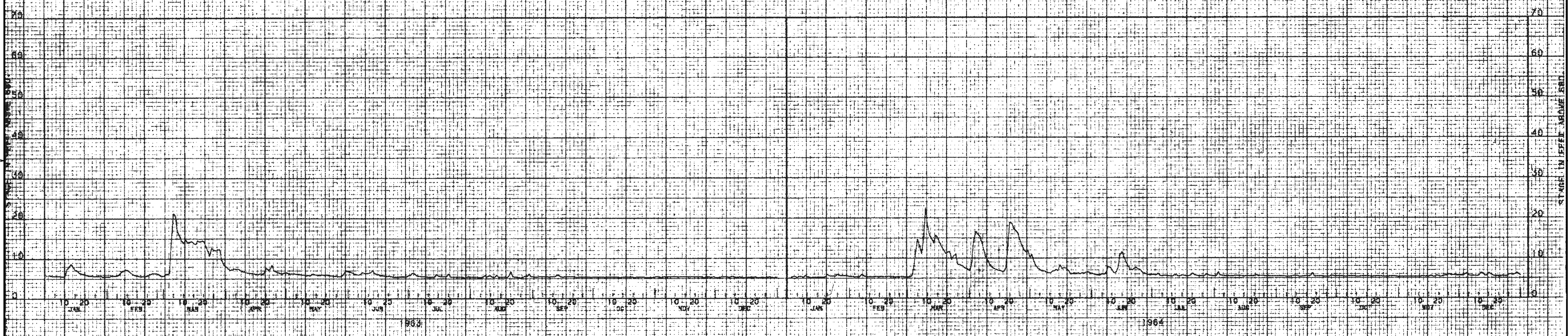
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

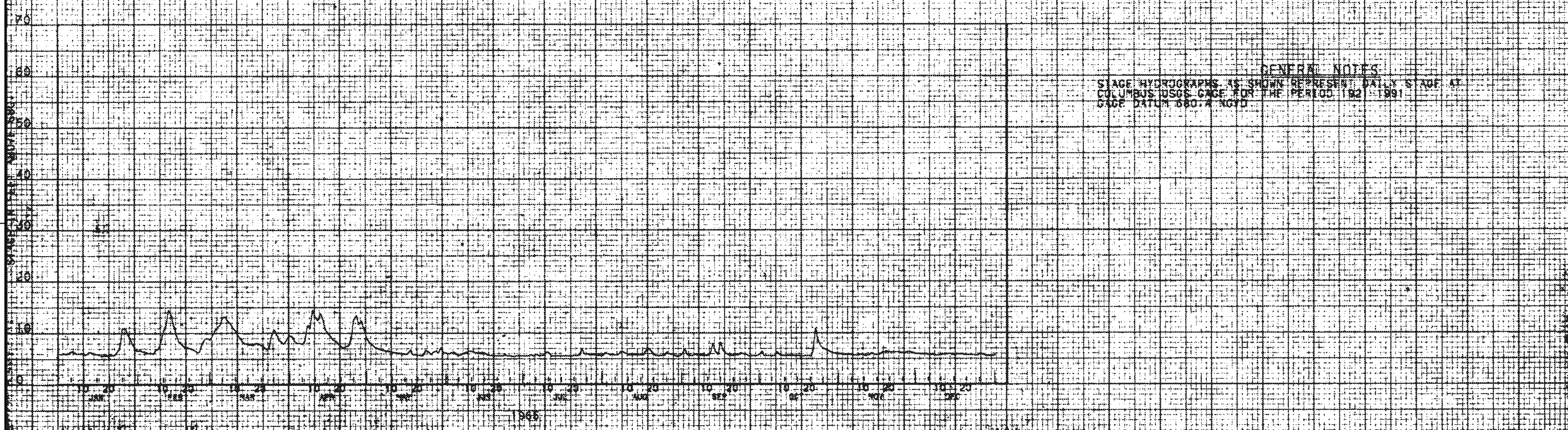
HYDROLOGY
STAGE HYDROGRAPHS

SCALE: NONE
DATE: OCTOBER 1999
DRAWING CODE: 016-PWC-12-
SHEET REFERENCE NUMBER: 14/8
FILENAME: 00HHFH08.DGN
PEN TABLE: STD.P.PTB STD.F.PTB
SHEET 8 OF 16

WORK AS CONSTRUCTED







GENERAL NOTES

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

FOR INFORMATION PURPOSES ONLY

Revisions			
Symbol	Descriptions	Date	Approved

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

Designed by: D.O.K.
Drawn by: J.R.B.
Checked by: K.C.H.
Reviewed by:
Approved by:

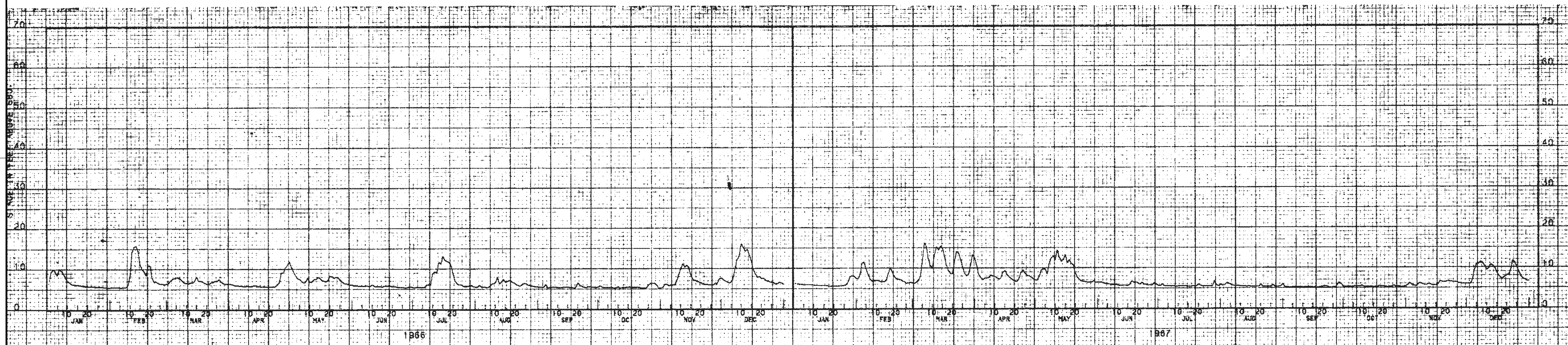
US Army Corps of Engineers

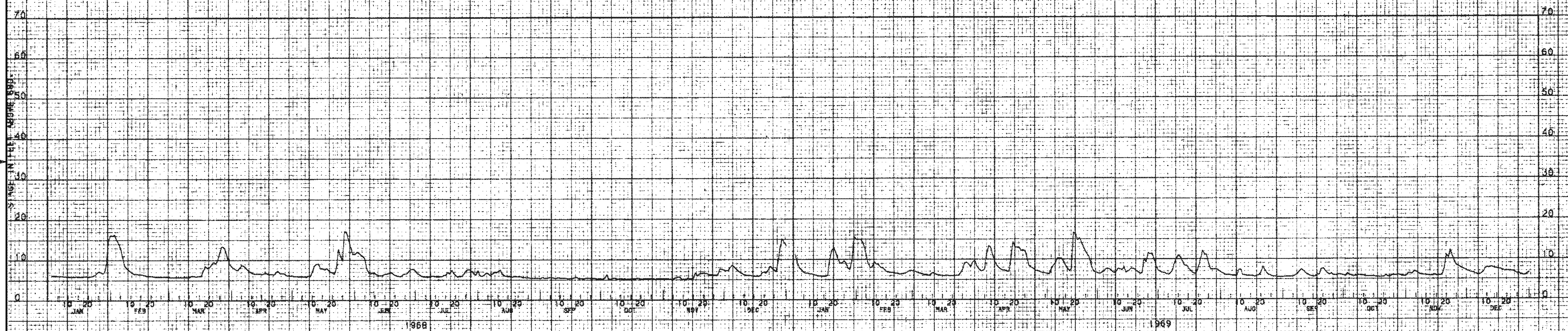
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

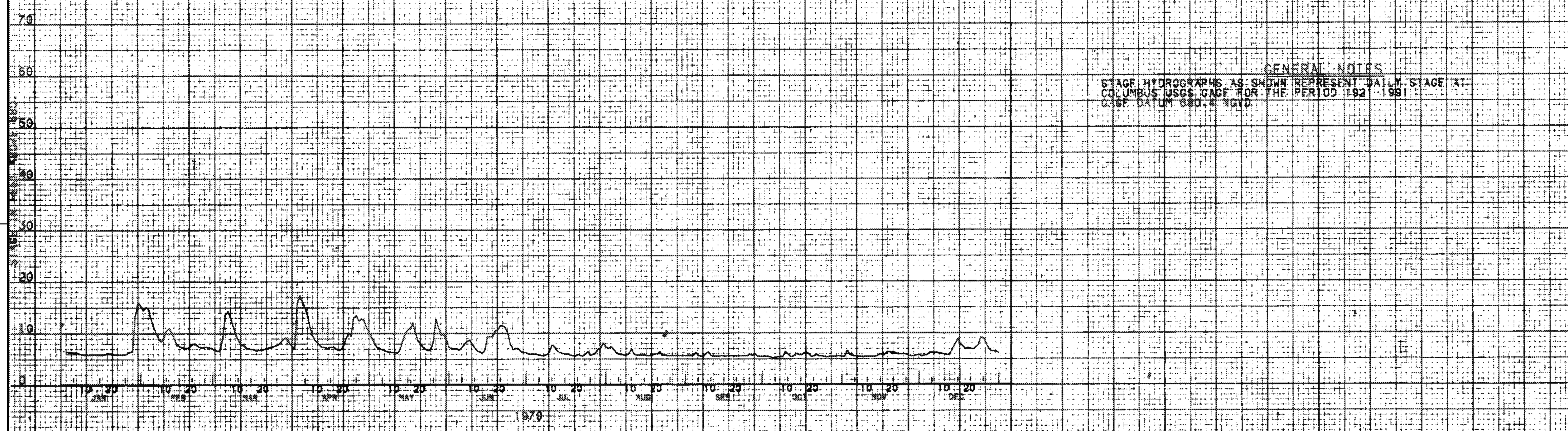
HYDROLOGY
STAGE HYDROGRAPHS

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 016-PWC-12-
Sheet reference number: 149
FILENAME: 00hhfh09.dgn
PEN TABLE: STD:b.ptb STD:f.ptb
Sheet 9 of 16

WORK AS CONSTRUCTED







GENERAL NOTES

STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT COLUMBUS USGS GAGE FOR THE PERIOD 192 -1991
GAGE DATUM 680.4 NGVD.

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Revisions			
Symbol	Descriptions	Date	Approved

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

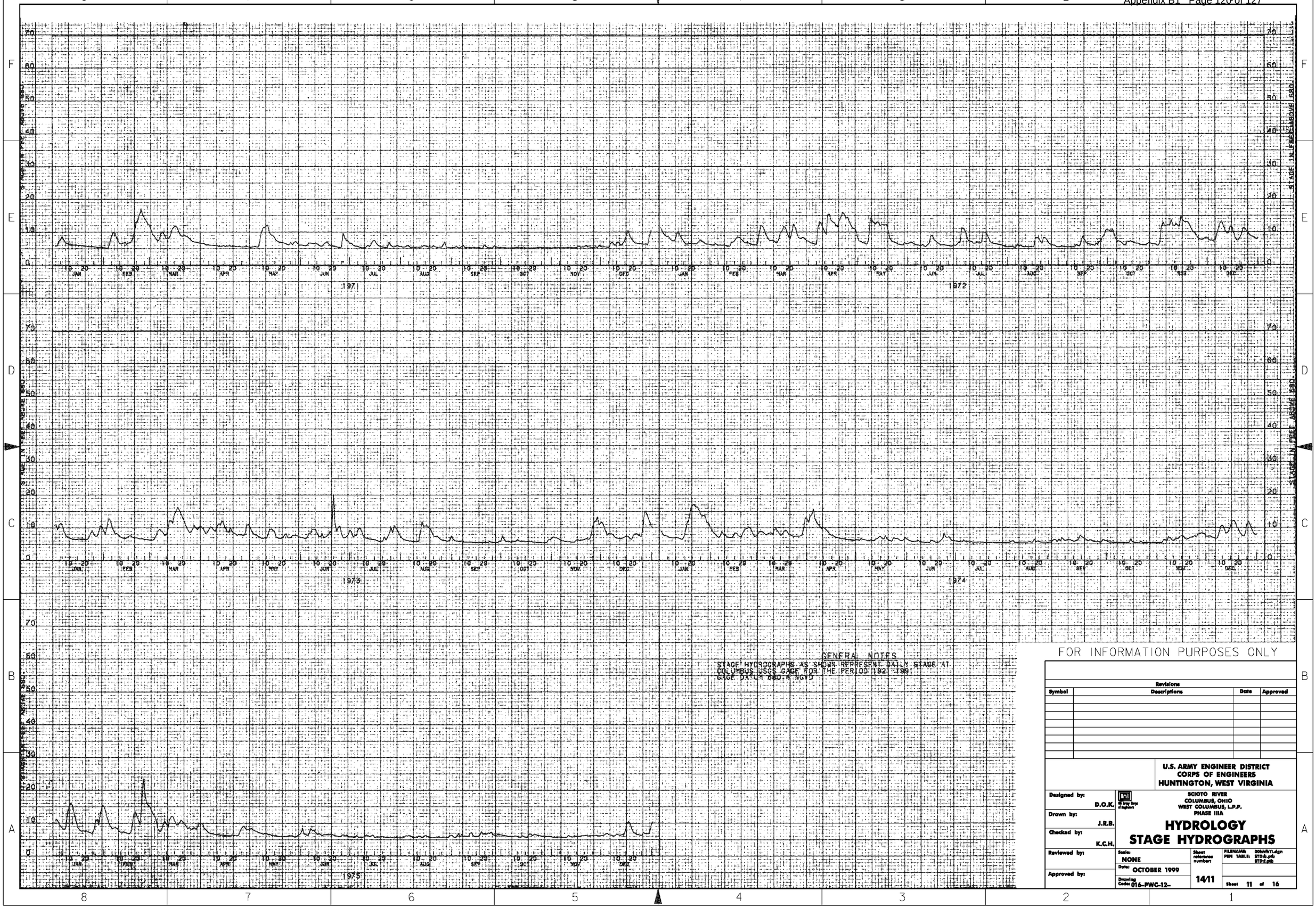
Designed by: D.O.K.
Drawn by: J.R.B.
Checked by: K.C.H.
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 016-PWC-12-
Sheet reference number: 14/10
FILENAME: 00hhfh10.dgn
PEN TABLE: STD:b.ptb STD:f.ptb
Sheet 10 of 16

WORK AS CONSTRUCTED



GENERAL NOTES

STAGE HYDROGRAPHS AS SHOWN REPRESENT DAILY STAGE AT COLUMBUS USGS GAGE FOR THE PERIOD 1972 - 1981
GAGE DATUM 580.0 NGVD

FOR INFORMATION PURPOSES ONLY

Revisions			
Symbol	Descriptions	Date	Approved

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

Designed by: D.O.K.
Drawn by: J.R.B.
Checked by: K.C.H.
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 016-PWC-12-
Sheet reference numbers: 14/11
FILENAME: 00hhfh11.dgn
PEN TABLE: STDcb.pltb STDvf.pltb
Sheet 11 of 16

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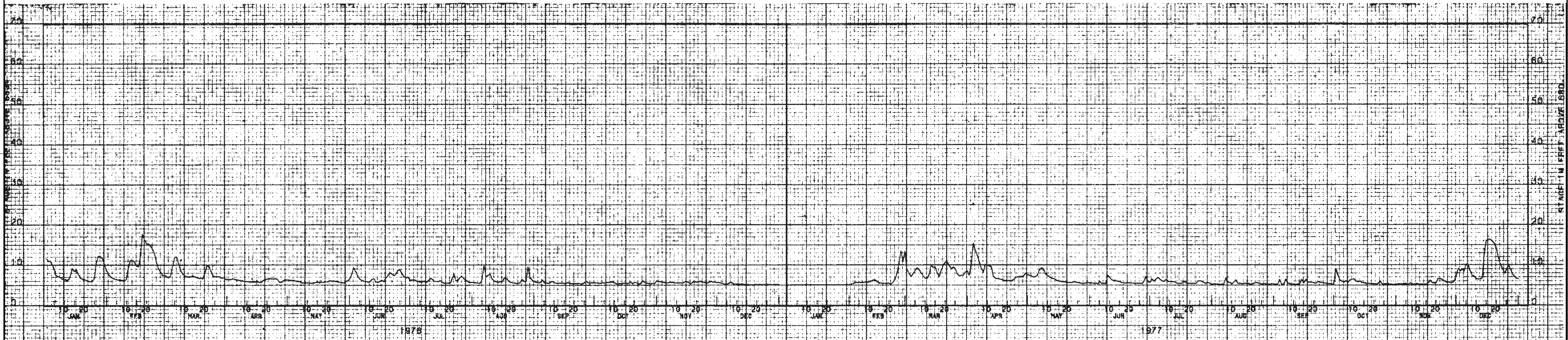

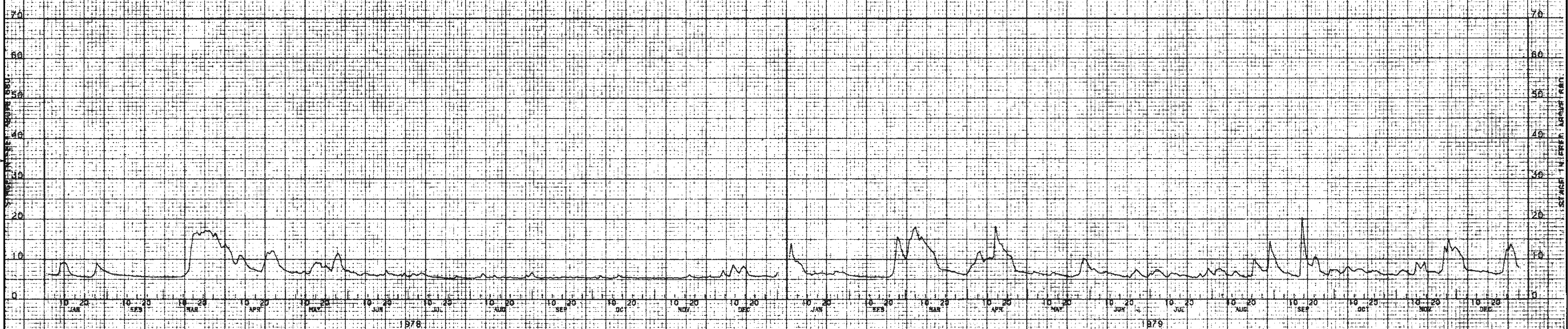

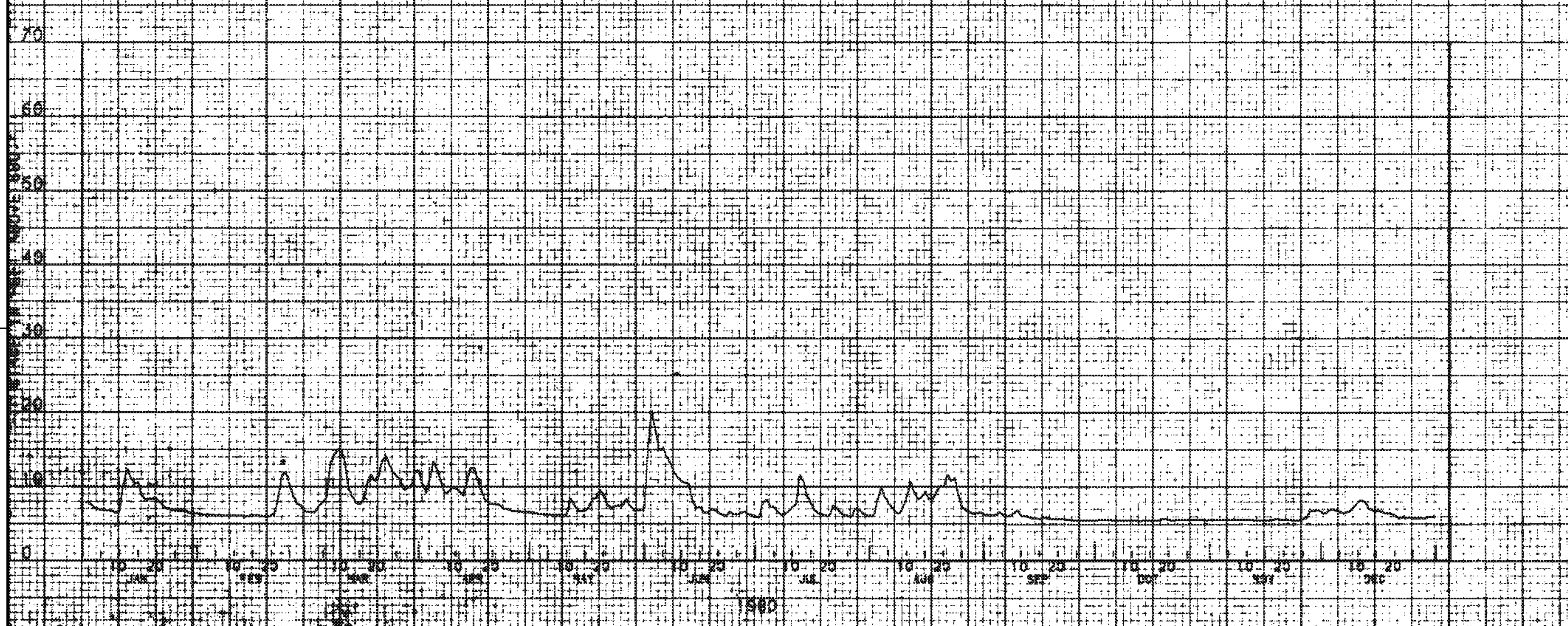

GENERAL NOTES

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

FOR INFORMATION PURPOSES ONLY

Revisions

Symbol	Descriptions	Date	Approved

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

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COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

Designed by: D.O.K.
Drawn by: J.R.B.
Checked by: K.C.H.
Reviewed by:
Approved by:

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 016-PWC-12-
Sheet reference number: 14/12
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PEN TABLE: STD:b.ptb STD:f.ptb
Sheet 12 of 16

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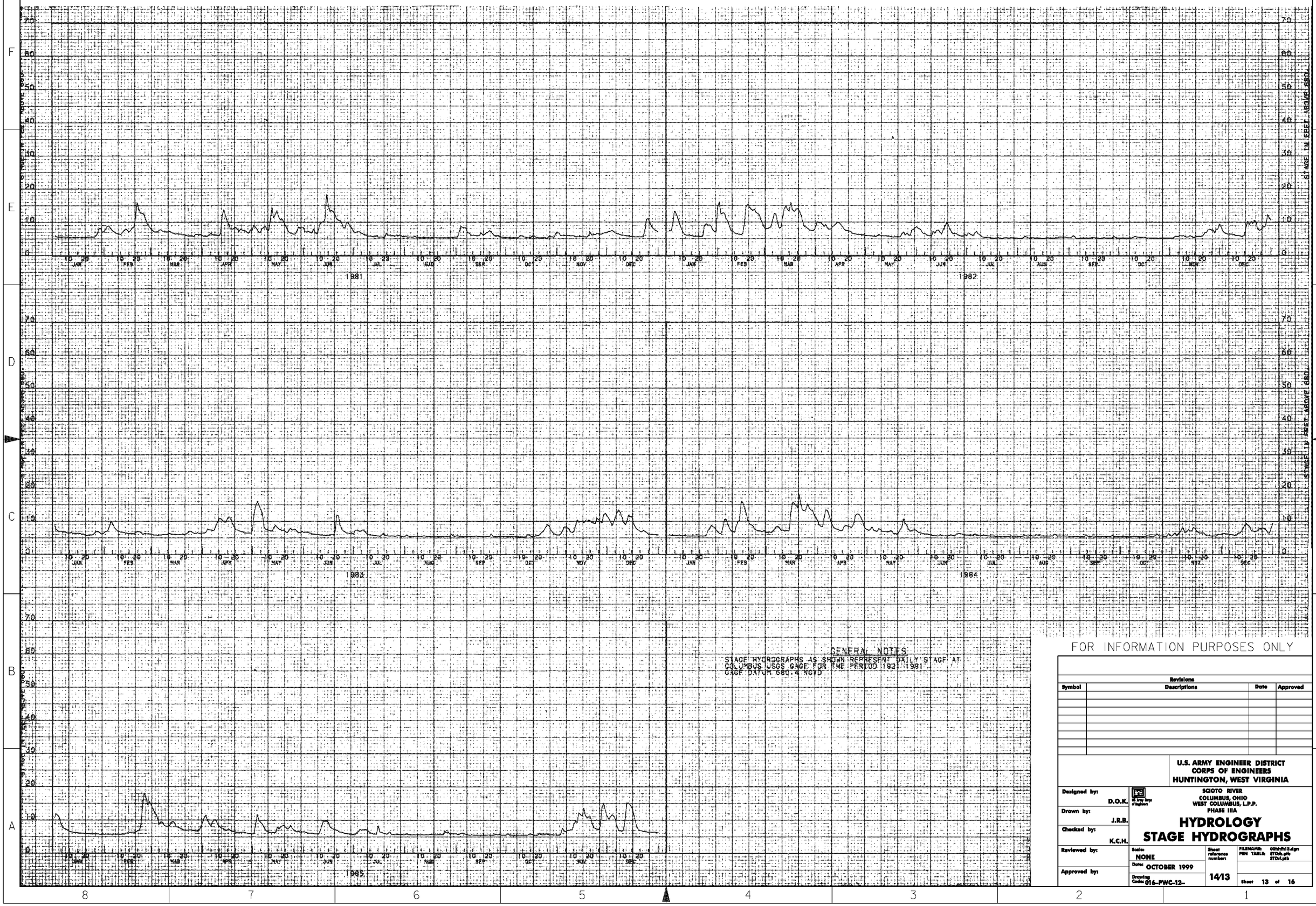

GENERAL NOTES

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

FOR INFORMATION PURPOSES ONLY

Revisions			
Symbol	Description	Date	Approved

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

Designed by: D.O.K.
Drawn by: J.R.B.
Checked by: K.C.H.
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 016-PWC-12-
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Sheet 13 of 16

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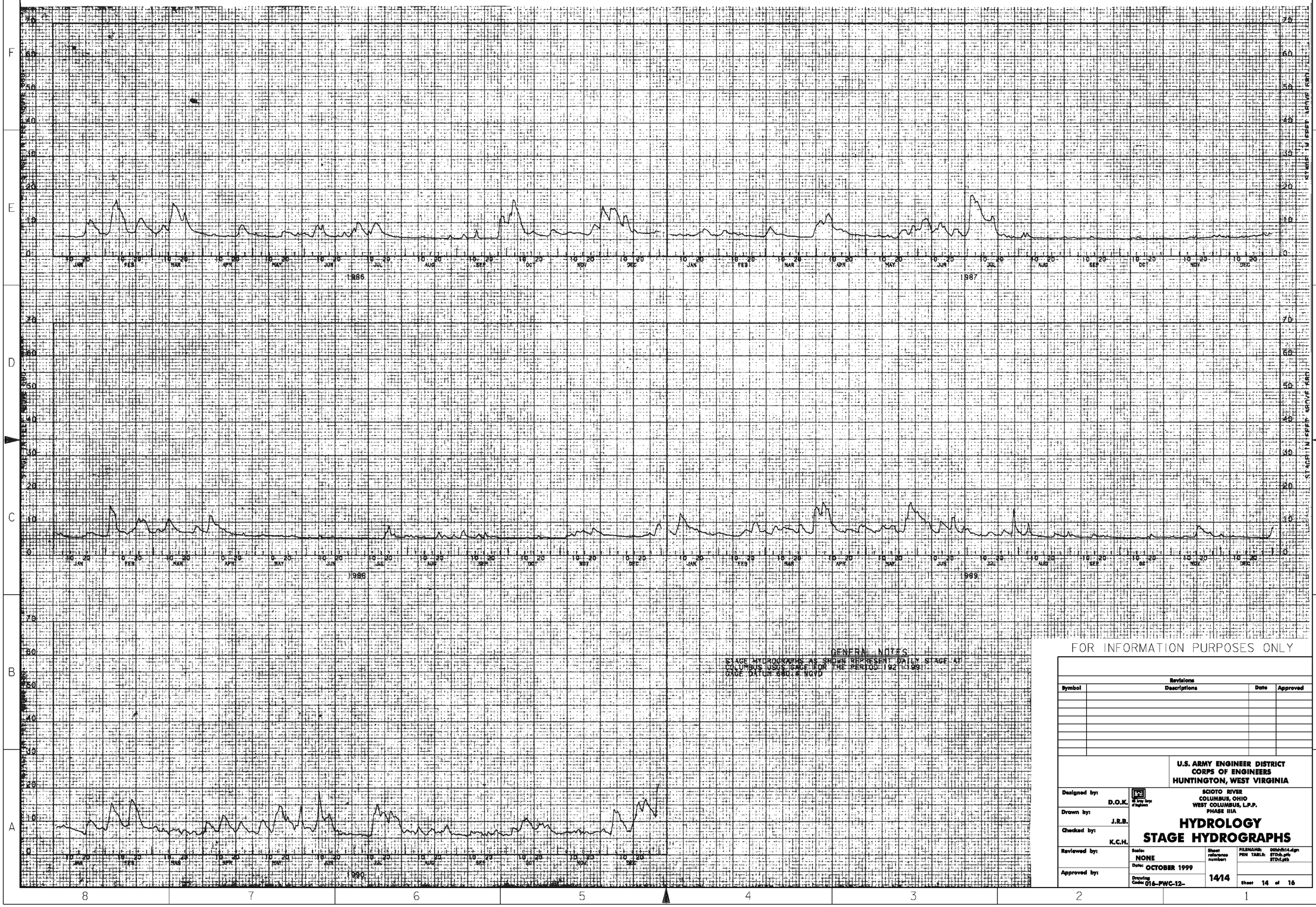

GENERAL NOTES

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

FOR INFORMATION PURPOSES ONLY

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

Designed by: D.O.K.
Drawn by: J.R.B.
Checked by: K.C.H.
Reviewed by:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 016-PWC-12-
Sheet reference numbers: 14/14
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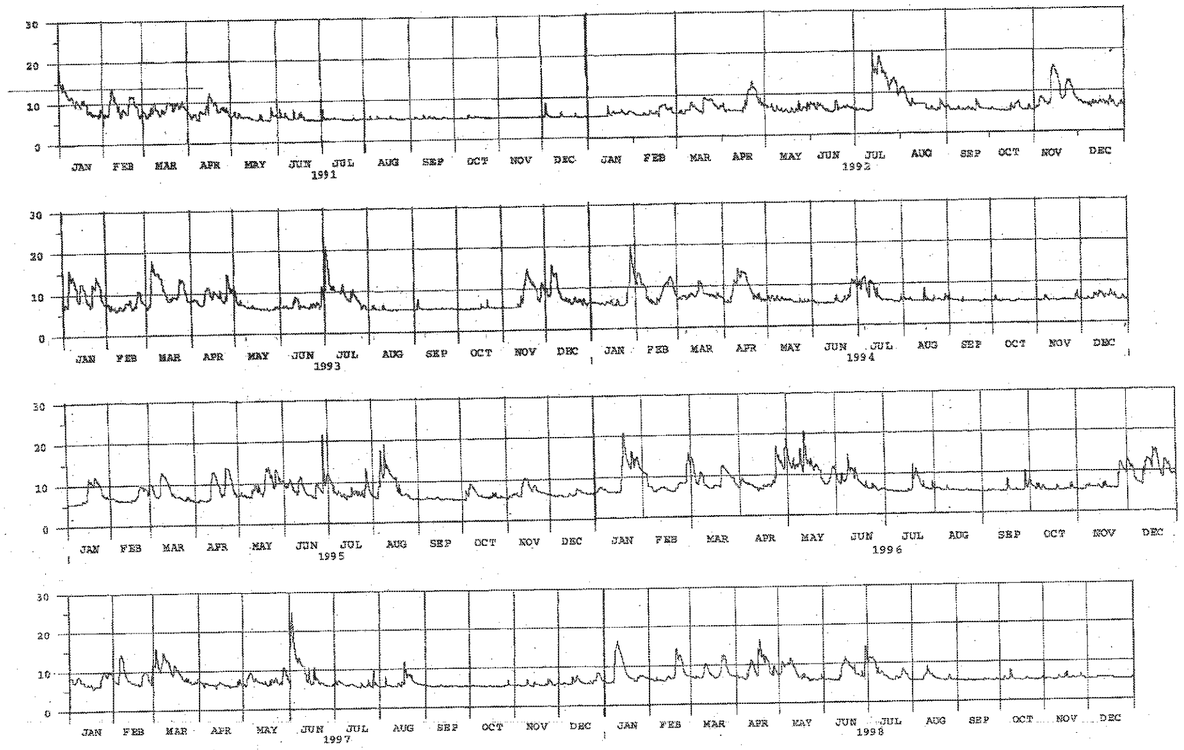
Sheet 14 of 16

WORK AS CONSTRUCTED

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.

FOR INFORMATION PURPOSES ONLY

Revisions			
Symbol	Descriptions	Date	Approved

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:
Approved by:

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY
STAGE HYDROGRAPHS

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 016-PWC-12-
Sheet reference number: 1415
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PRN TABLE: STD: b.prb STD: l.prb
Sheet 15 of 16

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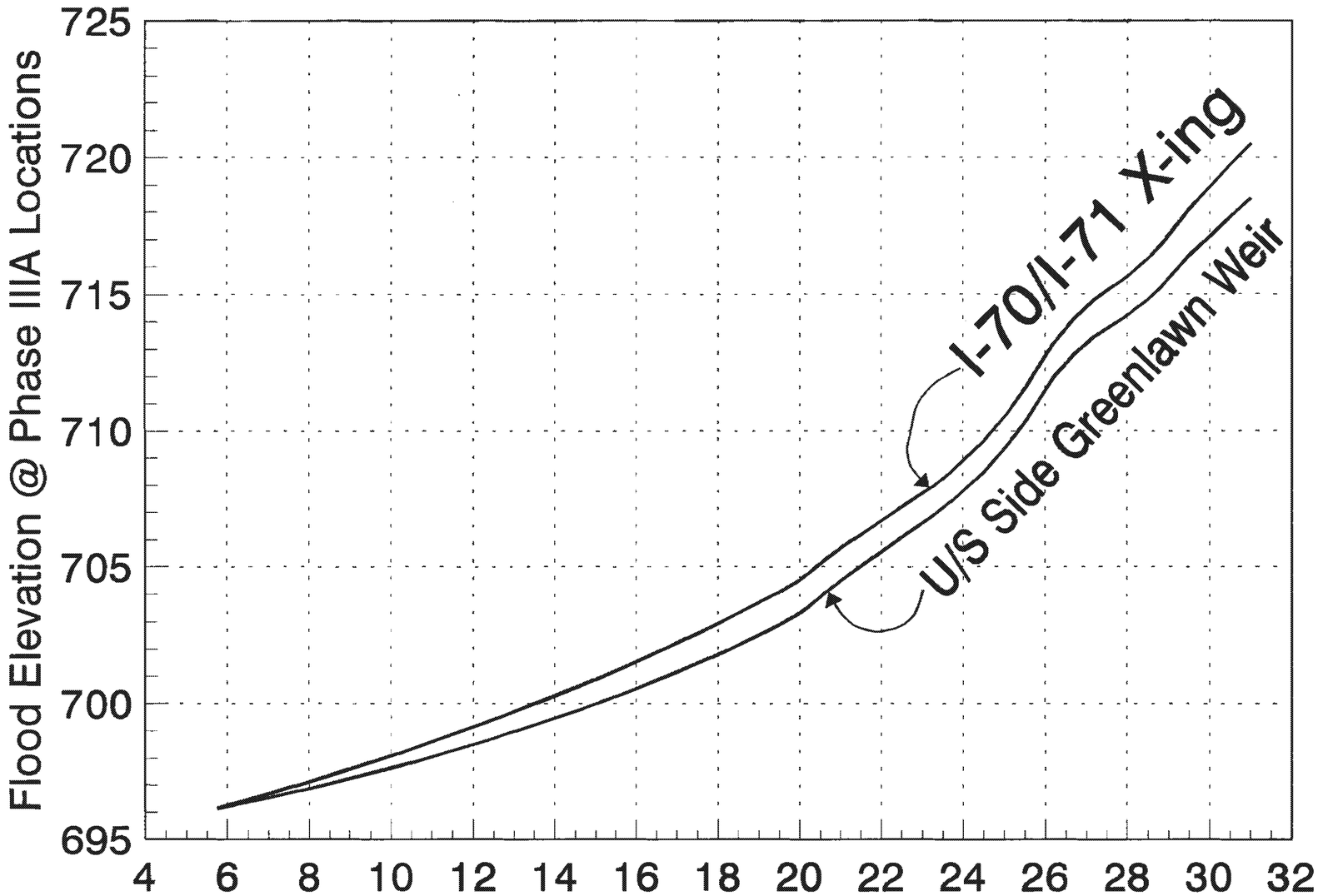

Correlation from USGS Gage to Greenlawn Weir & Vicinity (Phase IIIA)

FOR INFORMATION PURPOSES ONLY

Revisions			
Symbol	Descriptions	Date	Approved

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

Designed by: K.C.H.
Drawn by: J.R.B.
Checked by: C.W.M.
Reviewed by:
Approved by:

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

HYDROLOGY CORRELATION CURVE

Scale: NONE
Date: OCTOBER 1999
Drawing Code: 016-PWC-12-
Sheet reference number: 14/16
FILENAME: 00hhff16.dgn
PRN TABLE: STDh.prb STDrf.prb
Sheet 16 of 16

WORK AS CONSTRUCTED

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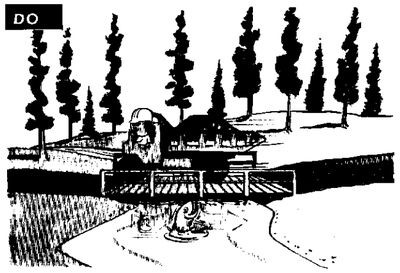
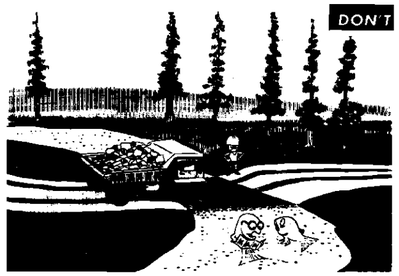


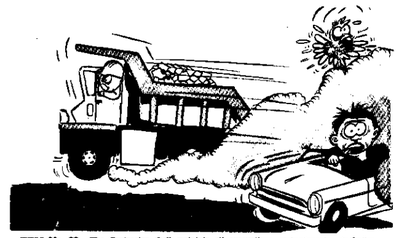
EPM No. 20.—Where frequent stream crossings are necessary, temporary culverts or bridges shall be provided.

DON'T



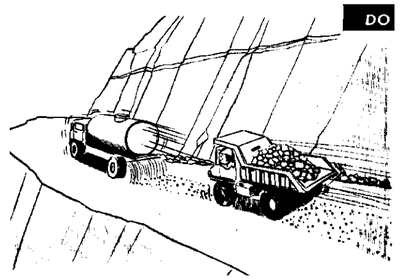
EPM No. 21.—The Contractor shall perform all work in a manner to prevent any interference or disturbance to the safe passage and spawning of game fish.

DON'T



EPM No. 22.—The Contractor shall maintain all excavations, embankments, stockpiles, roads, plant sites, waste areas, borrow areas, and all other work areas within or without the project boundaries free from dust which would cause a hazard or nuisance to others.

DO

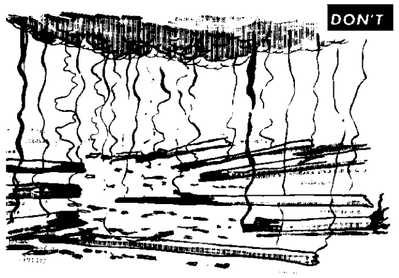


EPM No. 23.—Approved temporary methods of stabilization consisting of sprinkling, chemical treatment, light bituminous treatment or equal methods shall be provided to control dust.

DO

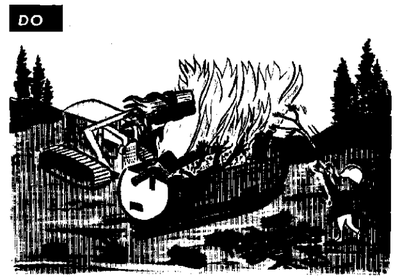
EPM No. 24.—Except as restricted by the Fire Control Officer, burning shall assure continuous, rapid and complete combustion. To meet this requirement, burning piles shall be kept under constant attendance by heavy equipment and operators who shall stack or push in burning piles from the edges, or shall feed fires with additional combustibles.

DON'T



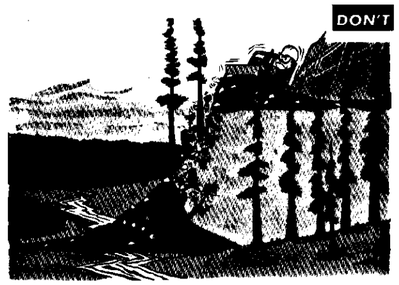
EPM No. 25.—Burn piles and individual pieces of burned material shall not be allowed to smolder.

DO



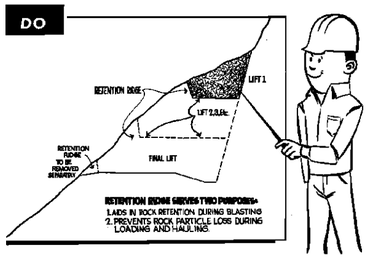
EPM No. 26.—High heat burning shall be done in burning boxes, portable incinerators, open pits or trenches.

DON'T



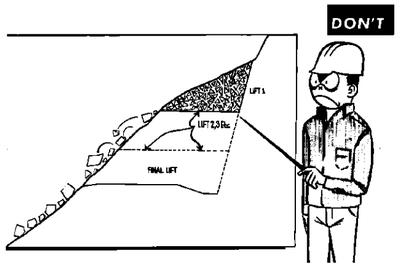
EPM No. 27.—Waste materials shall not be dumped on slopes.

DO



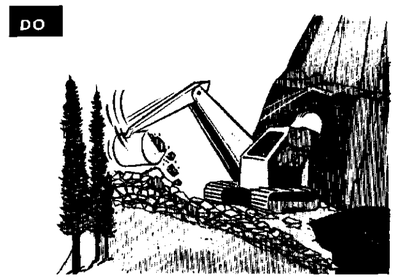
EPM No. 28.—The pattern of drilling and the depth, size and loading of holes along the outer edge of benched cuts shall be such as to provide retention ridges of rock to act as a restraint against loss of material down the slope.

DON'T



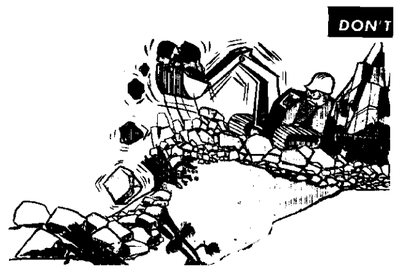
EPM No. 29.—The pattern of drilling and the depth, size and loading of holes along the outer edge of benched cuts shall be such as to provide retention ridges of rock to act as a restraint against loss of material down the slope. (See DO for proper procedure.)

DO



EPM No. 29.—Excavation of blasted material shall be conducted in such a manner that operation of excavation equipment does not contribute to loss of material down the slope.

DON'T

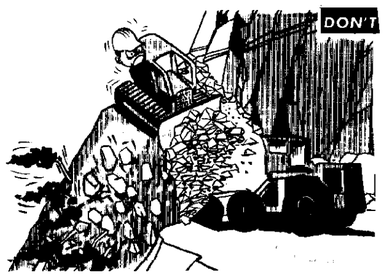


EPM No. 29.—Excavation of blasted material shall be conducted in such a manner that operation of excavation equipment does not contribute to loss of material down the slope. (See DO for proper procedure.)

DO

EPM No. 30.—Full U-blades shall be used on dozers excavating on slopes.

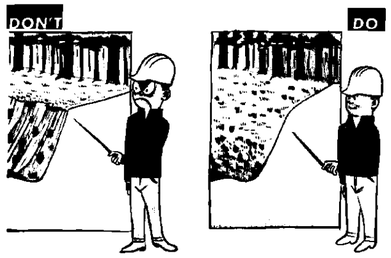
DON'T



EPM No. 30.—Full U-blades shall be used on dozers excavating on slopes. (See DO for proper procedure.)

DON'T

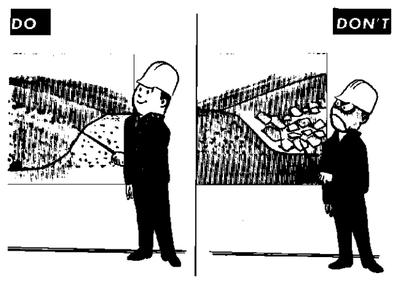
DO



EPM No. 31.—In other than solid rock, the tops of excavated slopes shall be rounded off as shown on the contract drawings.

DO

DON'T



EPM No. 32.—Loose rocks, cobbles and boulders falling outside the finished slopes shall be removed where operations for removal of such material will not deface the landscape.

Revisions			
Symbol	Descriptions	Date	Approved

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

Designed by:
Drawn by:
Checked by:
Reviewed by:
Approved by:

US Army Corps of Engineers

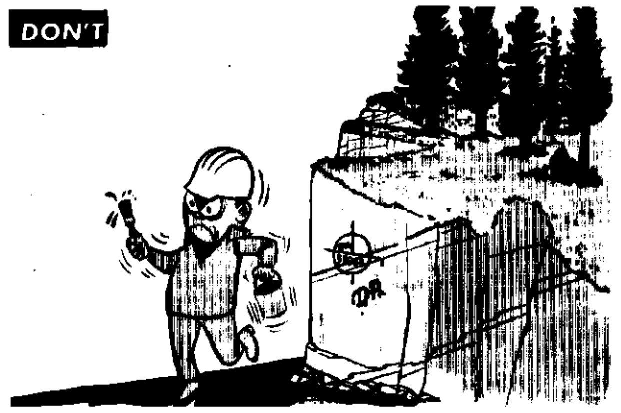
SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

ENVIRONMENTAL PROTECTION MEASURES

Scale: NONE
Date: OCTOBER 1999
Drawing Code:
Sheet reference number: Z2 107/1
FILENAME: SCDC100evad01.dgn
PRM TABLE: STDcf.prb STDch.ptb
Sheet 1 of 2

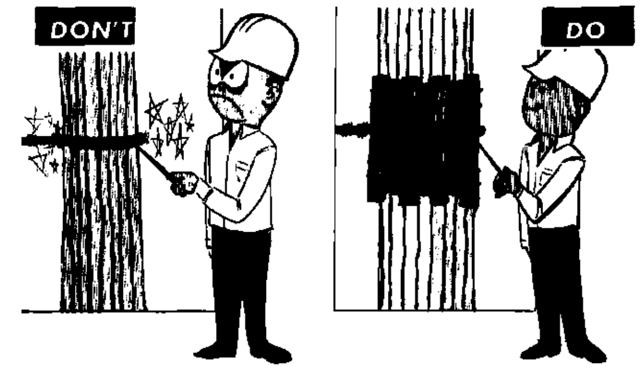
FOR INFORMATION ONLY

EPM No. 1.—The Contractor shall conduct frequent on the job training courses, not less than monthly, for the purpose of emphasizing the environmental protection requirements of the contract. He shall emphasize that prevention of damage to the environment is the primary goal and that restoration should be necessary only when damage is unavoidable.

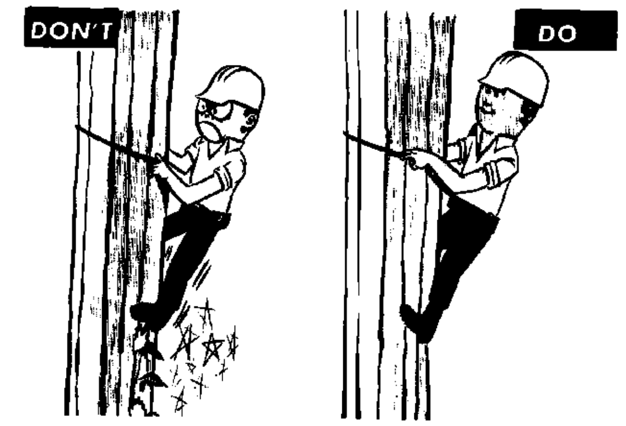


EPM No. 2.—Rock faces and other interesting geologic features, including natural boat landings, which will be exposed by drawdown of the reservoir shall be preserved.

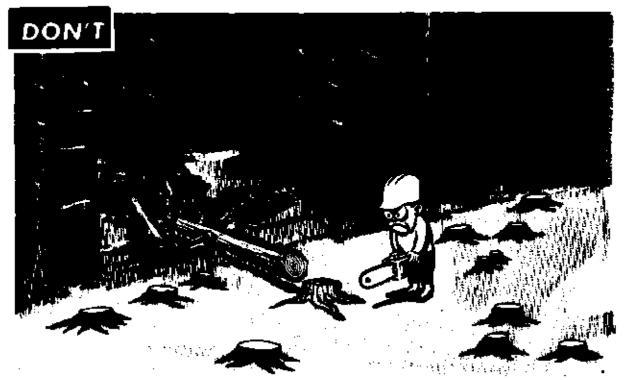
EPM No. 3.—Survey lines shall be located to avoid cutting large trees and to minimize clearing beyond established clearing limits. Clearing of brush and branches for sight lines shall be held to the minimum practical limits.



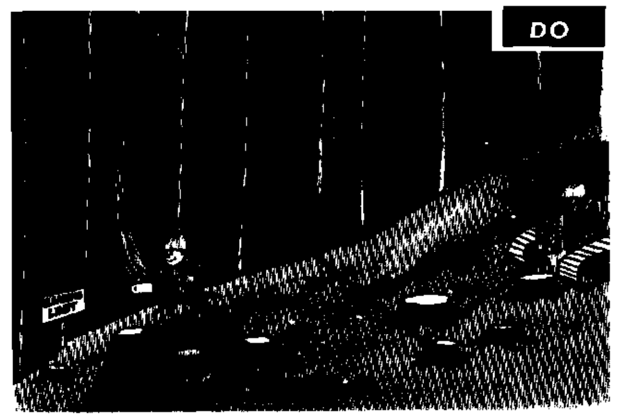
EPM No. 4.—Except in areas to be cleared, no ropes, cables or guys shall be fastened to or attached to trees unless specifically authorized by the Contracting Officer. Where such anchorage is permitted, the trunk shall first be wrapped with not less than 4 layers of burlap or equivalent padding over which softwood cleats shall be tied before any rope, cable or wire is placed.



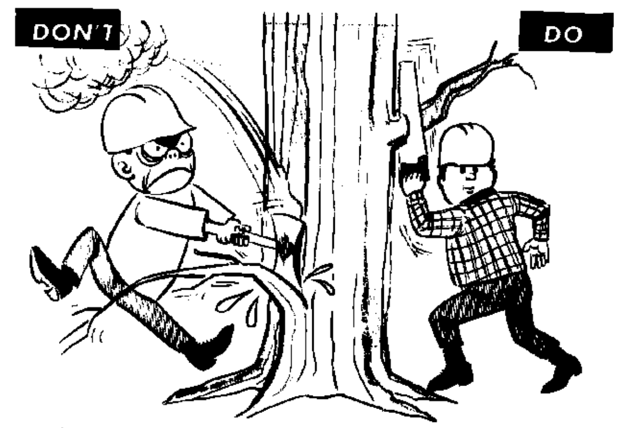
EPM No. 5.—Where tree climbing is necessary, the use of climbing spurs will not be permitted.



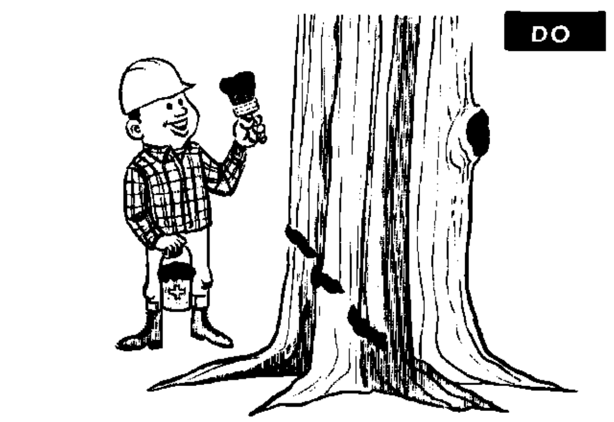
EPM No. 6.—During clearing operations, trees and debris shall not be allowed to fall outside the clearing limits where such fall would damage or injure trees and shrubs which are to remain and where operations for removal of fallen materials will damage or injure trees and shrubs which are to remain.



EPM No. 7.—Ropes, guys or other means shall be used where necessary to restrain materials from damaging trees or shrubs which are to remain.



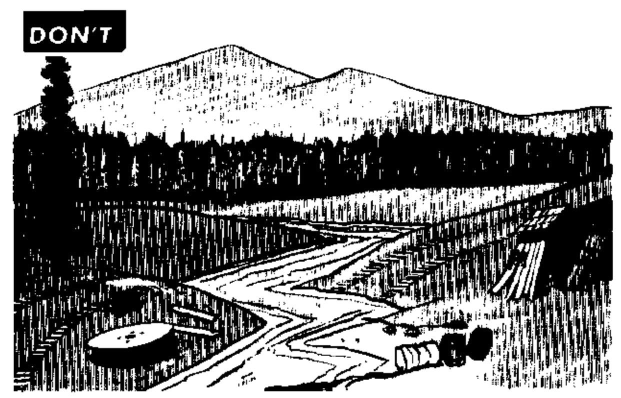
EPM No. 8.—All trimming or pruning shall be done with saws or pruning shears. Tree trimming with axes will not be permitted.



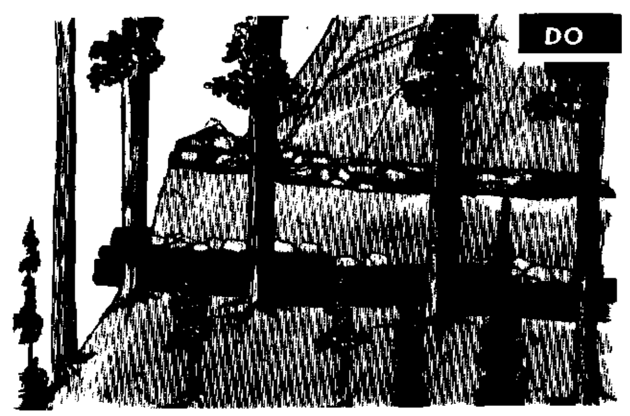
EPM No. 9.—All treated wounds and specified pruning cuts shall be painted with an approved tree pruning compound of a color approximately matching the color of the bark.

EPM No. 10.—Where game trails or hiking trails cross construction areas, such trails shall not be covered by debris and shall be maintained in a safe and passable condition at all times.

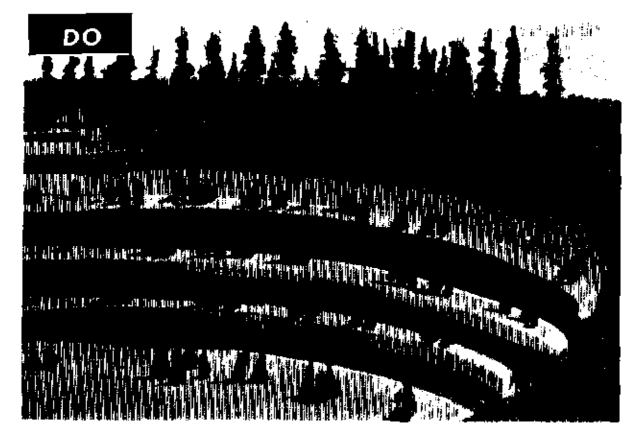
EPM No. 11.—Ramps shall be constructed in cut areas or trails shall be rerouted to provide access. Location of rerouted trails shall be subject to the approval of the Contracting Officer. Traffic warning signs shall be provided at hiking trails and maintained during construction operations.



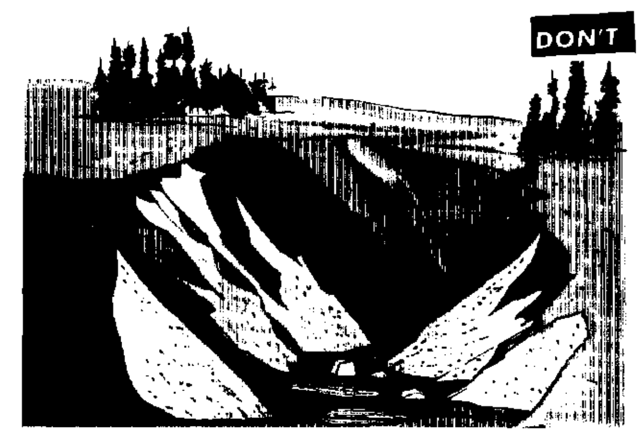
EPM No. 12.—When work is completed, whether on Government-owned lands or on private lands, all camp, storage and other contractor's buildings shall be removed, and the sites restored to a neat and presentable condition appropriate to the landscape, unless otherwise specified.



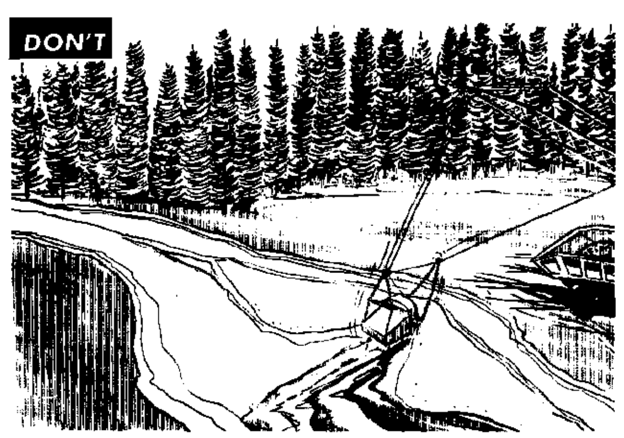
EPM No. 13.—The contractor shall erect log barriers in specified locations to prevent excavated material from escaping down the slope. The log barriers shall be placed at the edge of the cleared area or in other locations up the slope as approved by the Contracting Officer.



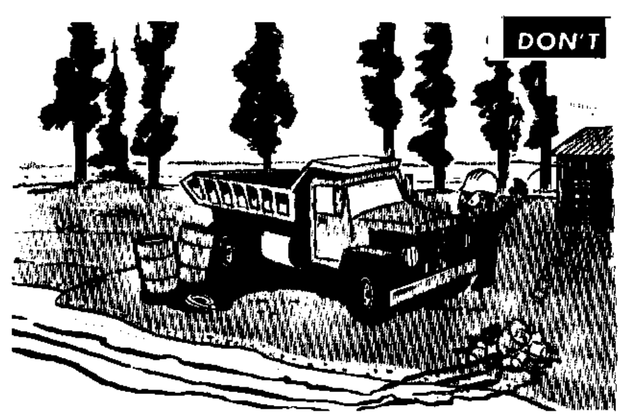
EPM No. 14.—Development and reclamation of borrow areas shall be in accordance with the approved borrow area reclamation plan.



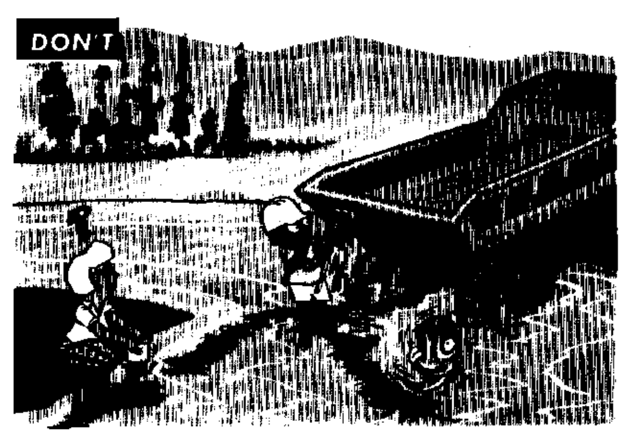
EPM No. 15.—Slopes of the borrow site shall be graded and dressed to blend with the adjacent terrain.



EPM No. 16.—Borrow areas shall not be located in or adjacent to live streams.



EPM No. 17.—At all times of the year, special measures shall be taken to prevent chemicals, fuels, oils, greases, bituminous materials, waste washings, herbicides, insecticides, lime, wet concrete, cement, silt or organic or other deleterious material from entering waterways.



EPM No. 18.—Waters used to wash down equipment shall be disposed of in a manner to prevent their entry into a waterway.

EPM No. 19.—The use of equipment within streams shall be held to that necessary for preparing a base for culverts and for channel diversion only.

FOR INFORMATION ONLY

Revisions

Symbol	Descriptions	Date	Approved

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

US Army Corps of Engineers

SCIOTO RIVER
COLUMBUS, OHIO
WEST COLUMBUS, L.P.P.
PHASE IIIA

ENVIRONMENTAL PROTECTION MEASURES

Designed by:
Drawn by:
Checked by:
Reviewed by:
Approved by:

Scale: NONE
Date: OCTOBER 1999
Drawing Code:
Sheet reference number: Z2 107/2
FILENAME: ECDC:00evsd02.dgn
PEN TABLE: STDrf.ptb STD:b.ptb
Sheet 2 of 2