US Army Corps of Engineers®

ILLINOIS WATERWAY

LOCKPORT POOL

LOCKPORT, IL

LOCKPORT POOL MAJOR REHABILITATION

STAGE IC, FOREBAY WALL, PHASE I

PRELIMINARY - NOT FOR CONSTRUCTION

Solicitation: W912EK-13-R-0040

Contract:

2013/08/16

THIS PROJECT WAS DESIGNED BY THE ROCK ISLAND DISTRICT CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152. SIGNATURES INDICATE OFFICIAL RECOMMENDATION OF ALL DRAWINGS IN THIS SET.

APPROVED BY:

Mark J. Deschenes 16 SEP 2013

DISTRICT COMMANDER DATE

APPROVAL RECOMMENDED BY:

for John A. Kuriawal 23 Aug 13

CHIEF, DESIGN BRANCH DATE

K. J. [illegible], P.E. 10 Sept 13

CHIEF, HYDROLOGY & HYDRAULICS BRANCH DATE

[illegible], P.E. 23 Aug 13

CHIEF, GEOTECHNICAL BRANCH DATE

Ronald L. Mott, A/A 11 SEP 13

CHIEF, TECHNICAL SERVICES BRANCH DATE

Thomas E. Mack 11 Sep 13

CHIEF, ENGINEERING & CONSTRUCTION DIVISION DATE

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MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

DESIGNED BY: JPF/AJG
DWN BY: AER/MAB
CKD BY: CMG
SUBMITTED BY: JAK
PLOT SCALE: AS SHOWN
PLOT DATE:
SIZE: ANSI D
FILE NAME: LP26_G-001.dgn
DATE: 2013/08/16
SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
COVER SHEET

Sheet ID
G-001

B5EDDAER
9/16/2013
LP26_G-001.dgn

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A1 INDEX

SHEET REF. NO.	TITLE OF DRAWING
	ARCHITECTURAL
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E-202	NEW MAINTENANCE GARAGE ELECTRICAL DETAILS

SCOPE OF WORK

THE SCOPE OF WORK FOR THE LOCKPORT POOL MAJOR REHABILITATION, STAGE IC, FOREBAY WALL PROJECT LOCATED IN LOCKPORT, WILL COUNTY, ILLINOIS INCLUDES, BUT MAY NOT BE LIMITED TO, THE FOLLOWING.

BASE BID
1. MOBILIZATION.
2. CLEARING AND GRUBBING OF TREES AND MISCELLANEOUS VEGETATION.
3. INSTALLATION OF THE TEMPORARY COMMUNICATION CABLE CONDUIT, REMOVAL OF THE EXISTING COMMUNICATION CABLE AND CONDUIT, AND AT&T WORK.
4. REMOVAL AND TEMPORARY STORAGE OF EXISTING CHAIN-LINK FENCING AND GATES.
5. REMOVAL AND TEMPORARY STORAGE OF EXISTING FLAGPOLE, TURBINE AND STONE WALL APPURTENANCES.
6. REMOVAL OF EXISTING GUARDRAIL.
7. PLACEMENT OF ROCK FILL AND ROCK SURFACING FOR CONSTRUCTION OF A TEMPORARY CONSTRUCTION ACCESS ROAD.
8. REMOVAL AND DISPOSAL OF EXISTING ASPHALT ROAD SURFACING.
9. REMOVAL, PROCESSING, AND STOCKPILING OF THE EXISTING STONE RETAINING WALL.
10. PLACEMENT OF JERSEY BARRIERS.
11. CONSTRUCTION OF MAINTENANCE GARAGE WITH CONCRETE FOUNDATION AND SLAB.
12. REMOVAL OF EXISTING ONSITE STRUCTURES INCLUDING A CONCRETE TOWER, MAINTENANCE GARAGE, LIGHT TOWER, AND 2 WEIRS.
13. EXCAVATION, PROCESSING AND STOCKPILING OF EXISTING ROCK FILL EMBANKMENT.
14. CONSTRUCTION OF SECANT PILE SHORING WALL.
15. CONSTRUCTION OF UPSTREAM SECANT PILE CUTOFF WALL
16. EXCAVATION, PROCESSING AND STOCKPILING OF EXISTING BEDROCK.
17. PLACEMENT OF DENTAL CONCRETE.
18. PLACEMENT OF ROLLER COMPACTED CONCRETE (RCC) FOR CONSTRUCTION OF RCC WALL.
19. INSTALLATION OF SEEPAGE CONTROL DRAINAGE SYSTEM, INCLUDING PERFORATED AND SOLID PVC PIPE, FILTER FABRIC, FREE-DRAINING GRAVEL, MANHOLES, RODENT GUARDS, PVC RISERS, AND ROCK FILL.
20. PLACEMENT OF IMPERVIOUS FILL MATERIAL.
21. PLACEMENT OF STOCKPILED ROCK BACKFILL.
22. PLACEMENT OF PROCESSED ROCK FILL, GRANULAR SUBBASE, RCC PAVEMENT, AND RIPRAP FOR CONSTRUCTION OF THE NEW LOWER ACCESS ROAD.
23. PLACEMENT OF BASE COURSE AND ACC PAVEMENT.
24. INSTALLATION OF NEW GUARDRAIL
25 RE-INSTALLATION OF CHAIN-LINK FENCING.
26. REMOVAL OF EXISTING AND INSTALLATION OF NEW ELECTRICAL AND ASSOCIATED ITEMS.
27. REINSTALLATION OF EXISTING FLAGPOLE, TURBINE, AND STONE WALL APPURTENANCES.
28. INSTALLATION OF OBSERVATION WELLS.
29. EXCESS MATERIAL DISPOSAL.
30. DEMOBILIZATION.

OPTION A
1. CLEARING AND GRUBBING OF TREES AND MISCELLANEOUS VEGETATION.
2. REMOVAL OF EXISTING GUARDRAIL.
3. PLACEMENT OF ROCK FILL AND ROCK SURFACING FOR CONSTRUCTION OF A TEMPORARY CONSTRUCTION ACCESS ROAD.
4. REMOVAL AND DISPOSAL OF EXISTING ASPHALT ROAD SURFACING.
5. REMOVAL, PROCESSING, AND STOCKPILING OF THE EXISTING STONE RETAINING WALL.
6. PLACEMENT OF JERSEY BARRIERS.
7. EXCAVATION, PROCESSING AND STOCKPILING OF EXISTING ROCK FILL EMBANKMENT.
8. CONSTRUCTION OF SECANT PILE SHORING WALL.
9. CONSTRUCTION OF DOWNSTREAM SECANT PILE CUTOFF WALL.
10. EXCAVATION, PROCESSING AND STOCKPILING OF EXISTING BEDROCK.
11. PLACEMENT OF DENTAL CONCRETE.
12. PLACEMENT OF ROLLER COMPACTED CONCRETE (RCC) FOR CONSTRUCTION OF RCC WALL.
13. INSTALLATION OF SEEPAGE CONTROL DRAINAGE SYSTEM, INCLUDING PERFORATED AND SOLID PVC PIPE, FILTER FABRIC, FREE-DRAINING GRAVEL, MANHOLES, RODENT GUARDS, PVC RISERS, AND ROCK FILL.
14. PLACEMENT OF IMPERVIOUS FILL MATERIAL.
15. PLACEMENT OF STOCKPILED ROCK BACKFILL.
16. PLACEMENT OF PROCESSED ROCK FILL, GRANULAR SUBBASE, RCC PAVEMENT, AND RIPRAP FOR CONSTRUCTION OF THE NEW LOWER ACCESS ROAD.
17. INSTALLATION OF NEW GUARDRAIL.
18. CONSTRUCTION OF NEW LIMESTONE WALL AND PROCESSED ROCK BERM.
19. INSTALLATION OF OBSERVATION WELLS.
20. EXCESS MATERIAL DISPOSAL.

PRELIMINARY - NOT FOR CONSTRUCTION

GENERAL NOTES

1. THE VERTICAL DATUM IS IN NGVD 1929, U.S. SURVEY FEET. THE HORIZONTAL DATUM IS IN STATE PLANE, NAD 1983, ILLINOIS EAST - 1201, U.S. SURVEY FEET. TO CONVERT FROM THE NGVD 1929 VERTICAL DATUM TO THE NAVD 1988 VERTICAL DATUM, SUBTRACT 0.30 FEET. U.S. ARMY CORPS OF ENGINEERS (USACE) BENCHMARKS (BM) ARE LOCATED ALONG THE LOCKPORT LOCK LAND BASED GUIDE WALL AS INDICATED ON THE DRAWINGS. ALL EXISTING AND NEW ELEVATIONS SHALL BE REFERENCED TO THESE BENCHMARKS.

2. SEE SHEETS V-101 TO V-105 FOR SURVEY CONTROL DATA AND PROJECT ALIGNMENT INFORMATION. PROJECT LAYOUT INFORMATION MAY BE ADJUSTED IN THE FIELD AS NEEDED AND AS APPROVED BY THE CONTRACTING OFFICER (K.O.). LAYOUT OF THE PROJECT FEATURES SHALL BE FIELD STAKED BY THE CONTRACTOR AND APPROVED BY THE K.O. PRIOR TO CONSTRUCTION OF THE PROJECT FEATURES.

3. THE CONTRACTOR SHALL USE THE SCOPE OF WORK AS A GENERAL SEQUENCE OF WORK. THE SEQUENCE AS SHOWN ILLUSTRATES A SEQUENCE OF EVENTS ASSUMED DURING CONSTRUCTION OF THE PROJECT. THE CONTRACTOR SHALL SUBMIT ANY REVISIONS TO THE SEQUENCE TO THE K.O. FOR REVIEW AND APPROVAL. SEE THE PROJECT SPECIFICATIONS, SECTION 00 73 05, FOR EXCEPTIONS TO THE GENERAL SEQUENCE OF WORK.

4. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO MINIMIZE DISTURBANCE WITHIN THE PROJECT WORK AREA LIMITS AND SHALL WORK WITHIN THE PROJECT WORK AREA LIMITS AS SHOWN ON SHEETS C-103 & C-104, EXCEPT AS APPROVED BY THE K.O.

5. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, AND ACCESS REQUIREMENTS ASSOCIATED WITH A PROJECT FEATURE PRIOR TO THE CONSTRUCTION OF THE FEATURE.

6. THE CONTRACTOR SHALL CONSTRUCT A TEMPORARY CONSTRUCTION ACCESS ROAD FOR ACCESS DURING CONSTRUCTION. SEE THE PROJECT SPECIFICATIONS, SECTION 00 73 05, FOR THE TEMPORARY CONSTRUCTION ACCESS ROAD REQUIREMENTS. THE CONTRACTOR SHALL MAINTAIN 12-FOOT WIDE UPPER AND LOWER ACCESS LANES AT ALL TIMES DURING THE DURATION OF THE CONTRACT PERIOD.

7. SEE SPECIFICATIONS FOR HYDRAULIC DATA FOR THE DES PLAINES RIVER AND CHICAGO SANITARY AND SHIP CANAL (CSSC). THE CONTRACTOR SHOULD BE AWARE THAT PERIODIC DRAW DOWNS ARE CONDUCTED FOR THE CANAL. THE CONTRACTOR SHALL COORDINATE WITH THE METROPOLITAN WATER RECLAMATION DISTRICT (MWRD) THROUGH THE K.O. TO MINIMIZE IMPACTS TO PROJECT CONSTRUCTION. SEE THE PROJECT SPECIFICATIONS.

8. THE CONTRACTOR MUST COORDINATE ALL MARINE BASED PROJECT ACTIVITIES WITH THE NAVIGATION INDUSTRY THROUGH THE U.S. COAST GUARD.

9. THE EXISTING FLAGPOLE, TURBINE, AND STONE WALL APPURTENANCES SHALL BE TEMPORARILY STORED AND REINSTALLED IN THE LOCATIONS INDICATED ON THE DRAWINGS OR AS COORDINATED WITH THE K.O.

10. THE LOCATION OF ALL UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR SHALL HAVE UTILITIES FIELD LOCATED PRIOR TO BEGINNING PROJECT WORK. THE CONTRACTOR SHALL NOT DISTURB THE UTILITIES TO REMAIN IN SERVICE AND SHALL REPAIR UTILITIES DAMAGED DURING CONSTRUCTION. SEE THE PROJECT SPECIFICATIONS FOR PROJECT REQUIREMENTS NEAR AND UNDER EXISTING POWER LINES.

11. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING SUITABLE IMPERVIOUS FILL MATERIAL AS NEEDED. THE MATERIAL SHALL BE OBTAINED FROM AN OFFSITE BORROW SOURCE AND TESTED PER SECTION 01 57 20.

12. NO MATERIALS SHALL BE REMOVED FROM OR BROUGHT ONTO THE PROJECT SITE UNTIL THEY ARE TESTED FOR POSSIBLE CONTAMINANTS AS REQUIRED, INCLUDING AGGREGATE AND IMPERVIOUS FILL TO BE USED FOR PROJECT CONSTRUCTION AND EXCESS MATERIAL TO BE SPOILED. SEE THE PROJECT SPECIFICATIONS, SECTION 01 57 20.

13. THE CONTRACTOR IS LIMITED TO THE USE OF THE EXISTING UPPER ACCESS ROAD ALONG THE CANAL FOREBAY WALL AND SHALL HAVE WRITTEN APPROVAL FROM THE K.O. TO USE THE ROAD. SEE SECTION 31 00 00, PARAGRAPH 3.1.3 OF THE PROJECT SPECIFICATIONS.

14. REMOVAL AND DISPOSAL OF EXISTING ELECTRICAL FEATURES, INCLUDING THE ABANDONED SUBSTATION EMBANKMENT MATERIAL, SHALL NOT TAKE PLACE UNTIL PROPERLY TESTED FOR POSSIBLE CONTAMINANTS INCLUDING BUT NOT LIMITED TO HTRW, PCBS, AND LEAD. IF CONTAMINANTS ARE FOUND, PROPER HANDLING AND DISPOSAL SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATION.

15. REMOVAL AND DISPOSAL OF THE EXISTING MAINTENANCE GARAGE, CONCRETE CINDER TOWER, AND LIGHT TOWER AND THEIR UNDERLYING FOUNDATION MATERIALS SHALL NOT TAKE PLACE UNTIL PROPERLY TESTED FOR POSSIBLE CONTAMINANTS INCLUDING BUT NOT LIMITED TO HTRW, PCBS, AND LEAD. IF CONTAMINANTS ARE FOUND, PROPER HANDLING AND DISPOSAL SHALL BE DONE IN ACCORDANCE WITH THE SPECIFICATION.

16. DUE TO THE DETERIORATION OF THE LIME CEMENT/PORTLAND CEMENT CONCRETE FOREBAY WALL, POROUS BACKFILL MATERIAL IN THE EMBANKMENT, AND WEATHERED AND JOINTED BEDROCK, THE CONTRACTOR SHALL TAKE PREVENTATIVE MEASURES TO HANDLE THROUGH-SEEPAGE FROM THE CANAL. THROUGH SEEPAGE IS EXPECTED TO BE IN THE ORDER OF 0.05 CUBIC FEET PER SECOND PER LINEAR FOOT. SEEPAGE IS EXPECTED TO COMPLICATE EXCAVATION AND CONSTRUCTION OF THE RCC WALL BELOW THE LEVEL OF THE DESIGNED DRAINAGE SYSTEM. THE CONTRACTOR SHALL DEWATER SEEPAGE WATER FROM WORK AREAS.

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MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

DESIGNED BY: JPF/AJG
DWN BY: AER/MAB | CKD BY: CMG
SUBMITTED BY: JAK
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PROJECT CODE: LP26

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
INDEX, SCOPE OF WORK,
AND GENERAL NOTES

Sheet ID
G-002

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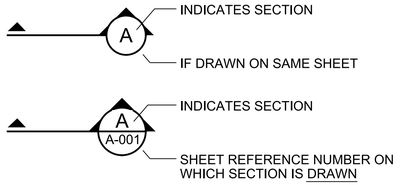
LEGEND



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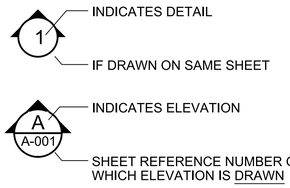

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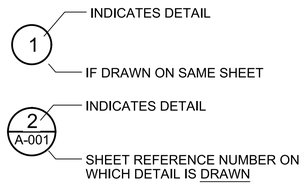

DETAIL IDENTIFICATION

EXCAVATE ROCK FILL EMBANKMENT (WITH SHORING LIMITS)

EXCAVATE ROCK FILL EMBANKMENT (WITHOUT SHORING LIMITS)

EXCAVATE WEATHERED BEDROCK

PLACE PROCESSED ROCK BACKFILL

CONSTRUCT RCC WALL OR RCC PAVEMENT

PLACE IMPERVIOUS FILL MATERIAL

STAGING AREAS (EXACT LOCATIONS TO BE APPROVED BY THE K.O.)

REMOVE EXISTING ASPHALT PAVEMENT

PLACE NEW ASPHALT PAVEMENT

EXISTING WETLANDS

SPOIL AREA

BORING LOCATION

OBSERVATION WELL LOCATION

53 STATE ROUTE

FLOODWAY

CONSTRUCTION BASELINE OR ALIGNMENT CENTERLINE

PROJECT WORK AREA LIMITS

UE UNDERGROUND ELECTRIC

OE OVERHEAD ELECTRIC

C COMMUNICATION CABLE

EXCAVATION OR FILL SLOPE

45+00 STATION

A1 LEGEND

ABBREVIATIONS

ACC	ASPHALT CEMENT CONCRETE	PC	POINT OF CURVATURE
BLDG	BUILDING	PI	POINT OF INTERSECTION
CJ	CONTRACTION JOINT	PT	POINT OF TANGENCY
CSSC	CHICAGO SANITARY AND SHIP CANAL	PVC	POINT OF VERTICAL CURVATURE
DNR	DEPARTMENT OF NATURAL RESOURCES	PVT	POINT OF VERTICAL TANGENCY
EJ	EXPANSION JOINT	RCC	ROLLER COMPACTED CONCRETE
EL.	ELEVATION	RCP	REINFORCED CONCRETE PIPE
INV. EL.	INVERT ELEVATION	STA	STATION
K.O.	CONTRACTING OFFICER	TEMP	TEMPORARY
MWRD	METROPOLITAN WATER RECLAMATION DISTRICT	TYP	TYPICAL
PCC	PORTLAND CEMENT CONCRETE	USACE	U.S. ARMY CORPS OF ENGINEERS
PVC	POLYVINYL CHLORIDE	VC	VERTICAL CURVE
PVI	POINT OF VERTICAL INDEX		

PRELIMINARY - NOT FOR CONSTRUCTION

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U.S. ARMY CORPS OF ENGINEERS ROCK ISLAND DISTRICT ROCK ISLAND, ILLINOIS	DESIGNED BY: JPF/AJG	DATE: 2013/08/16	
	DWN BY: AER/MAB	CKD BY: CMG	SOLICITATION NO.: W912EK-13-R-0040
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ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
LEGEND AND ABBREVIATIONS

Sheet ID
G-003

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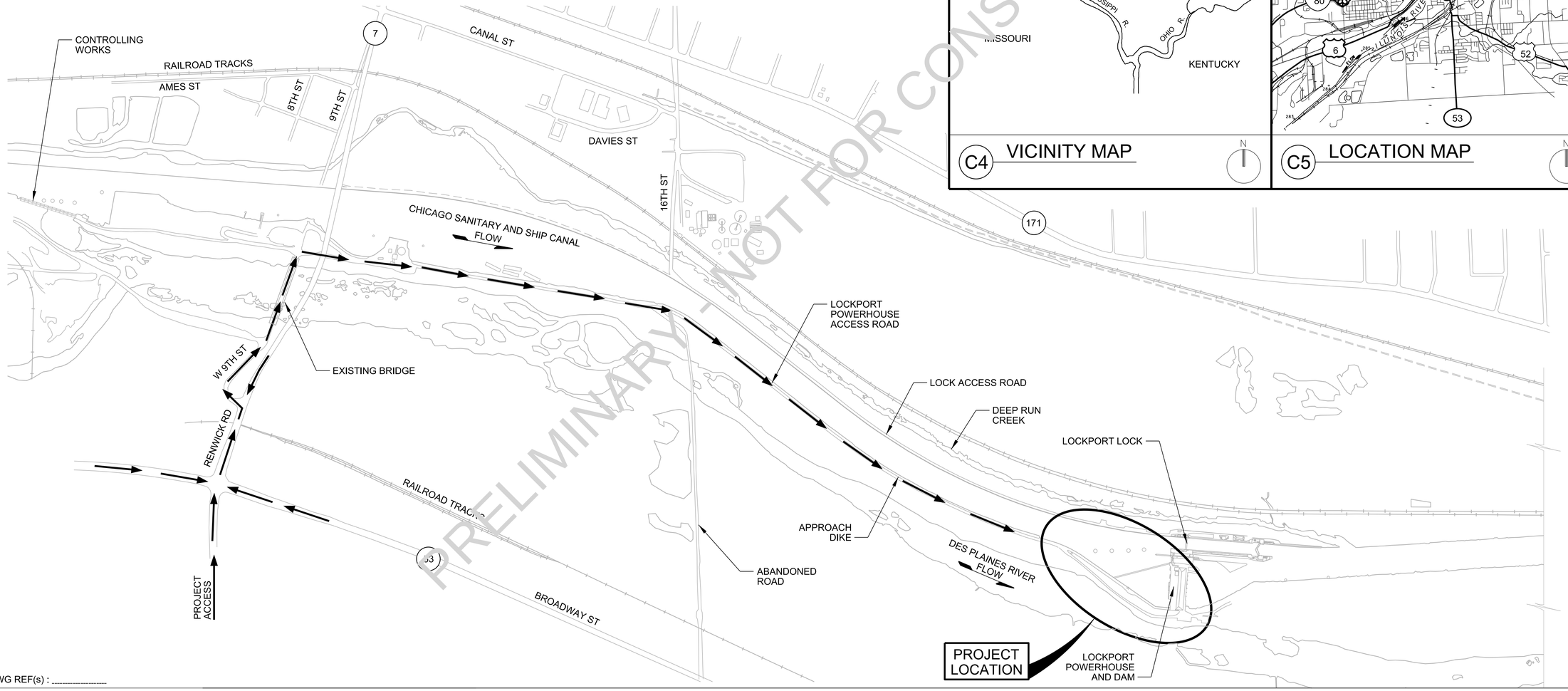
LOCKPORT
WILL COUNTY
ILLINOIS



PRELIMINARY - NOT FOR CONSTRUCTION

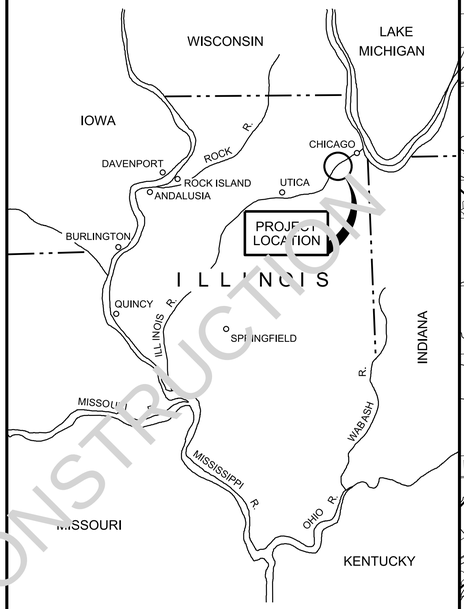
DWG REF(s) : _____

A1 SITE MAP

SCALE : 1"=500'-0" 0 500' 1000'

N

C4 VICINITY MAP



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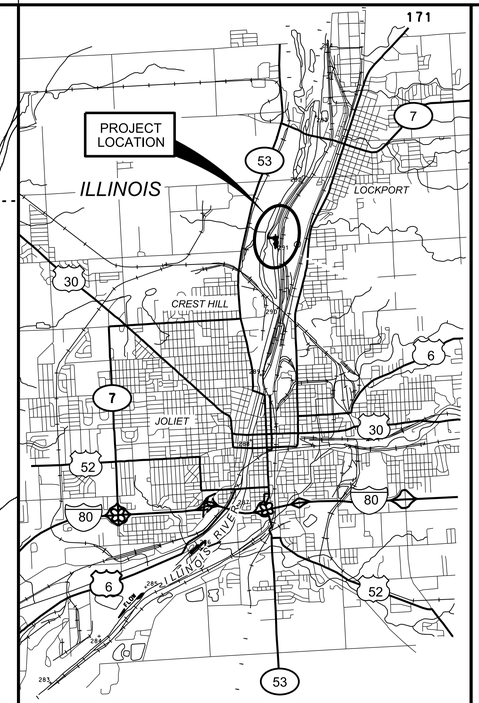
C5 LOCATION MAP



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US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

DESIGNED BY: JPF/AJG		DATE: 20130816	
DWN BY: AER/MAB	CKD BY: CMG	SOLICITATION NO.: W912EK-13-R-0040	
SUBMITTED BY: JAK		CONTRACT NO.:	
PLOT SCALE: AS SHOWN	PLOT DATE:	PROJECT CODE: LP26	
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ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC: FOREBAY WALL, PHASE I
VICINITY, LOCATION, AND SITE MAPS

Sheet ID
G-004

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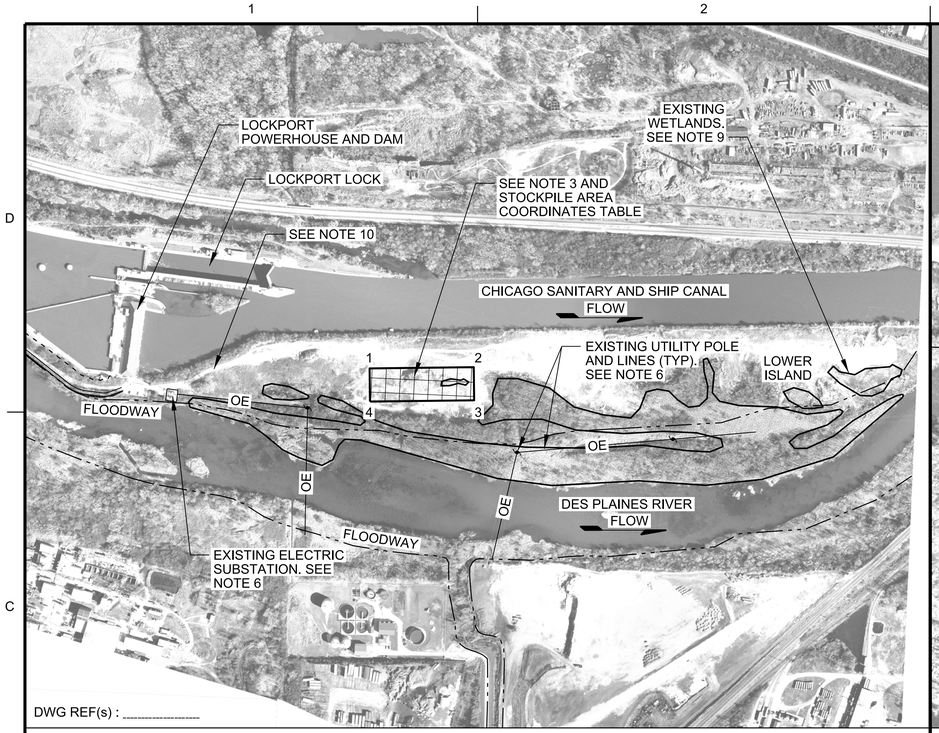

DWG REF(s) : _____

C1 SITE PLAN

SCALE : 1"=400'-0"

0 400' 800'

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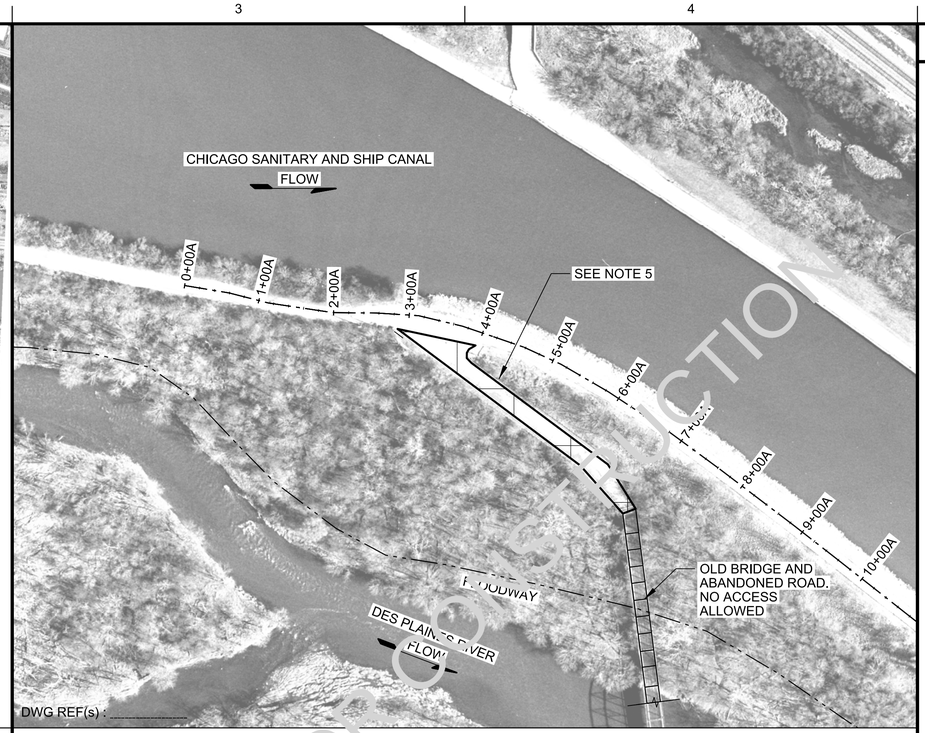

DWG REF(s) : _____

C3 SITE PLAN

SCALE : 1"=100'-0"

100' 200'

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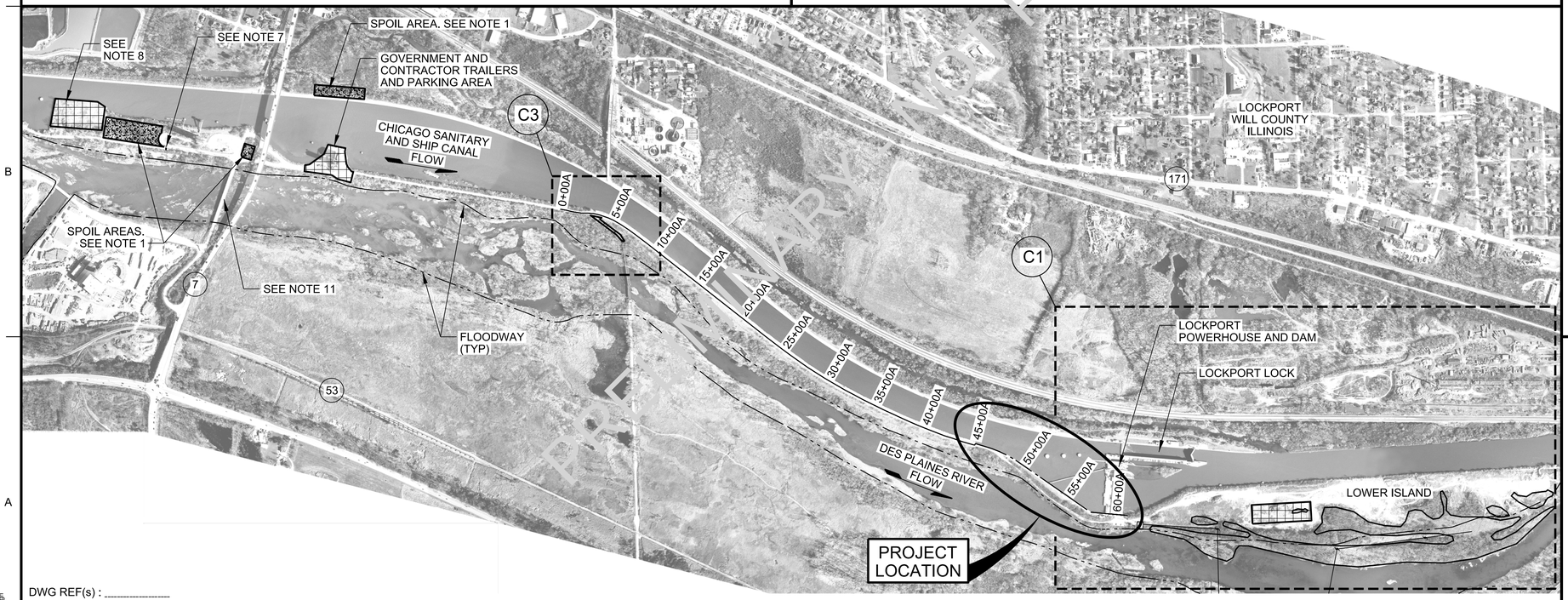


DWG REF(s) : _____

A1 SITE PLAN

SCALE : 1"=600'-0"

0 600' 1200'

N

GENERAL SHEET NOTES

1. STAGING, STOCKPILE, AND SPOIL AREAS ARE AS INDICTED ON THIS SHEET. THE CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF STAGING, STOCKPILE, AND SPOIL AREAS WITH THE K.O.
2. THE CONTRACTOR SHALL SUBMIT A STAGING AND STOCKPILE AREAS SITE PLAN TO THE K.O. INDICATING THE USE OF EACH AREA IDENTIFIED FOR CONTRACTOR USE PRIOR TO CONSTRUCTION.
3. THE INDICATED AREA SHALL BE USED AS THE PHASE I PROJECT STOCKPILE AREA AND BATCH PLANT LOCATION IF THE CONTRACTOR USES AN ONSITE BATCH PLANT. THE COORDINATES SHOWN ON THIS SHEET SHALL BE USED TO LAYOUT THE APPROXIMATE STOCKPILE AREA AND PLANT LOCATION, WITH THE EXACT LOCATION TO BE APPROVED BY THE K.O. THE STOCKPILE AREA AND PLANT LOCATION SHALL NOT BE LOCATED WITHIN 20' OF ANY TREE LINES OR ANY UTILITY POLES. EXISTING STOCKPILES OF MATERIALS CAN BE MOVED WITHIN THIS AREA TO ACCOMMODATE THE CONTRACTOR AT ITS EXPENSE.
4. THE STOCKPILE AREA WAS SIZED TO ACCOMMODATE 20,000 CUBIC YARDS OF EXCAVATED MATERIAL FOR THE PHASE I PROJECT, WITH THE HEIGHT OF THE STOCKPILED MATERIAL EXPECTED TO BE ABOUT 8 FEET.
5. THE INDICATED CONTRACTOR STAGING AREA SHALL BE USED AS AN AREA FOR EQUIPMENT AND MATERIALS, EXCEPT AS APPROVED BY THE K.O.
6. THE CONTRACTOR SHALL MAINTAIN A 12' WIDE ACCESS LANE TO ALL UTILITY POLES AND TO THE GOVERNMENT AND CONTRACTOR TRAILERS AND PARKING AREA AT ALL TIMES. THE CONTRATOR SHALL MAINTAIN ACCESS TO THE EXISTING ELECTRICAL SUBSTATION AT ALL TIMES. COORDINATE THE EXACT LOCATION OF THE REQUIRED ACCESS LANE(S) WITH THE K.O.
7. THE EXISTING GATE AS INDICATED IS TO REMAIN LOCKED WHEN THE ROAD IS NOT IN USE.
8. THE INDICATED CONTRACTOR STAGING AREA CAN BE USED AS A TEMPORARY BARGE LOADING/UNLOADING AREA AS NEEDED. THIS AREA MAY BE USED BY OTHER CONTRACTORS. THE CONTRACTOR SHALL COORDINATE ANY LOADING/UNLOADING OF BARGES BELOW THE DAM WITH MWRD, THE LOCKPORT LOCK LOCKMATER, THE U.S. COAST GUARD, AND THE K.O.
9. THE CONTRACTOR SHALL NOT DISTURB OR PLACE ANY EQUIPMENT OR MATERIAL IN THE INDICATED WETLANDS. COORDINATE EXACT LOCATION OF THE WETLANDS WITH THE K.O. AND THE ILLINOIS DNR.
10. THE CONTRACTOR SHALL NOT BLOCK THE EXISTING LOWER ISLAND ROAD AT ANY TIME.
11. ACCESS TO THE PROJECT SITE INCLUDES AN EXISTING BRIDGE OVER THE DES PLAINES RIVER. SEE THE PROJECT SPECIFICATIONS, SECTION 00 73 05, FOR BRIDGE REQUIREMENTS.

STOCKPILE AREA COORDINATES TABLE

POINT	NORTHING	EASTING
1	1784587.05	1053777.01
2	1784037.90	1053807.58
3	1784028.17	1053632.85
4	1784577.32	1053602.28

FOR CONSTRUCTION

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

DESIGNED BY: JPF/AJS
DWN BY: AER/MAB
SUBMITTED BY: JAK
PLOT SCALE: AS SHOWN
SIZE: ANSI D
DATE: 2013/08/16
CKD BY: CMG
PLOT DATE:
FILE NAME: LP26_G-005.dgn
SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26

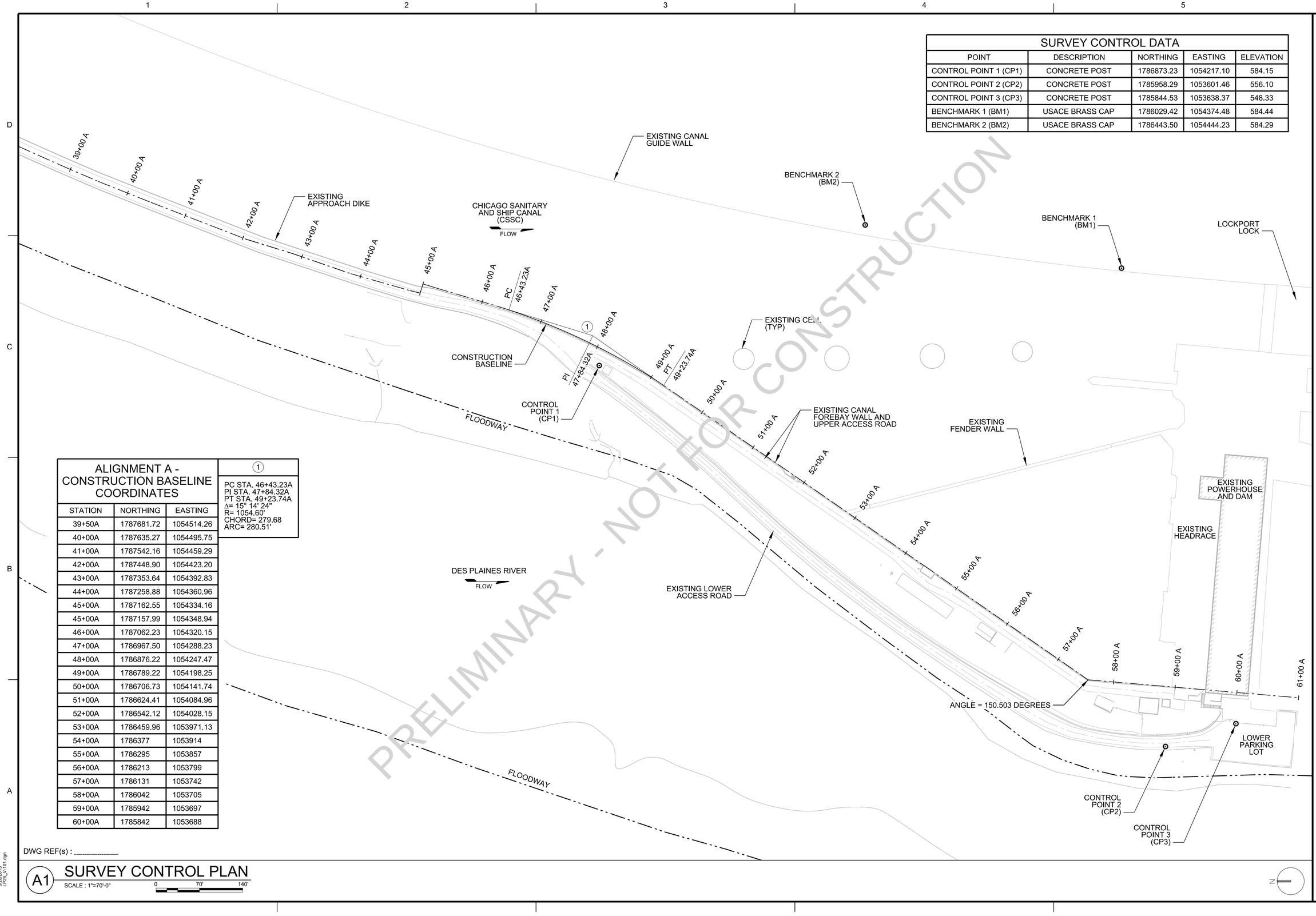
ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
STAGING AND STOCKPILE AREAS PLANS

Sheet ID
G-005

Z:\MVR\Brb9
8/20/2013
LP26_G-005.dgn

SURVEY CONTROL DATA

POINT	DESCRIPTION	NORTHING	EASTING	ELEVATION
CONTROL POINT 1 (CP1)	CONCRETE POST	1786873.23	1054217.10	584.15
CONTROL POINT 2 (CP2)	CONCRETE POST	1785958.29	1053601.46	556.10
CONTROL POINT 3 (CP3)	CONCRETE POST	1785844.53	1053638.37	548.33
BENCHMARK 1 (BM1)	USACE BRASS CAP	1786029.42	1054374.48	584.44
BENCHMARK 2 (BM2)	USACE BRASS CAP	1786443.50	1054444.23	584.29



ALIGNMENT A - CONSTRUCTION BASELINE COORDINATES

STATION	NORTHING	EASTING
39+50A	1787681.72	1054514.26
40+00A	1787635.27	1054495.75
41+00A	1787542.16	1054459.29
42+00A	1787448.90	1054423.20
43+00A	1787353.64	1054392.83
44+00A	1787258.88	1054360.96
45+00A	1787162.55	1054334.16
45+00A	1787157.99	1054348.94
46+00A	1787062.23	1054320.15
47+00A	1786967.50	1054288.23
48+00A	1786876.22	1054247.47
49+00A	1786789.22	1054198.25
50+00A	1786706.73	1054141.74
51+00A	1786624.41	1054084.96
52+00A	1786542.12	1054028.15
53+00A	1786459.96	1053971.13
54+00A	1786377	1053914
55+00A	1786295	1053857
56+00A	1786213	1053799
57+00A	1786131	1053742
58+00A	1786042	1053705
59+00A	1785942	1053697
60+00A	1785842	1053688

1

PC STA. 46+43.23A
PI STA. 47+84.32A
PT STA. 49+23.74A
Δ= 15° 14' 24"
R= 1054.60'
CHORD= 279.68
ARC= 280.51'

DWG REF(s) : _____

A1 SURVEY CONTROL PLAN
SCALE : 1"=70'-0"
0 70' 140'

PRELIMINARY - NOT FOR CONSTRUCTION

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

DESIGNED BY: AJG/JPF
DWN BY: AER
CKD BY: CMG
SUBMITTED BY: JAK
PLOT SCALE: AS SHOWN
PLOT DATE:
SIZE: ANSI D
FILE NAME: LP26_V-101.dgn
DATE: 2013/08/16
SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26

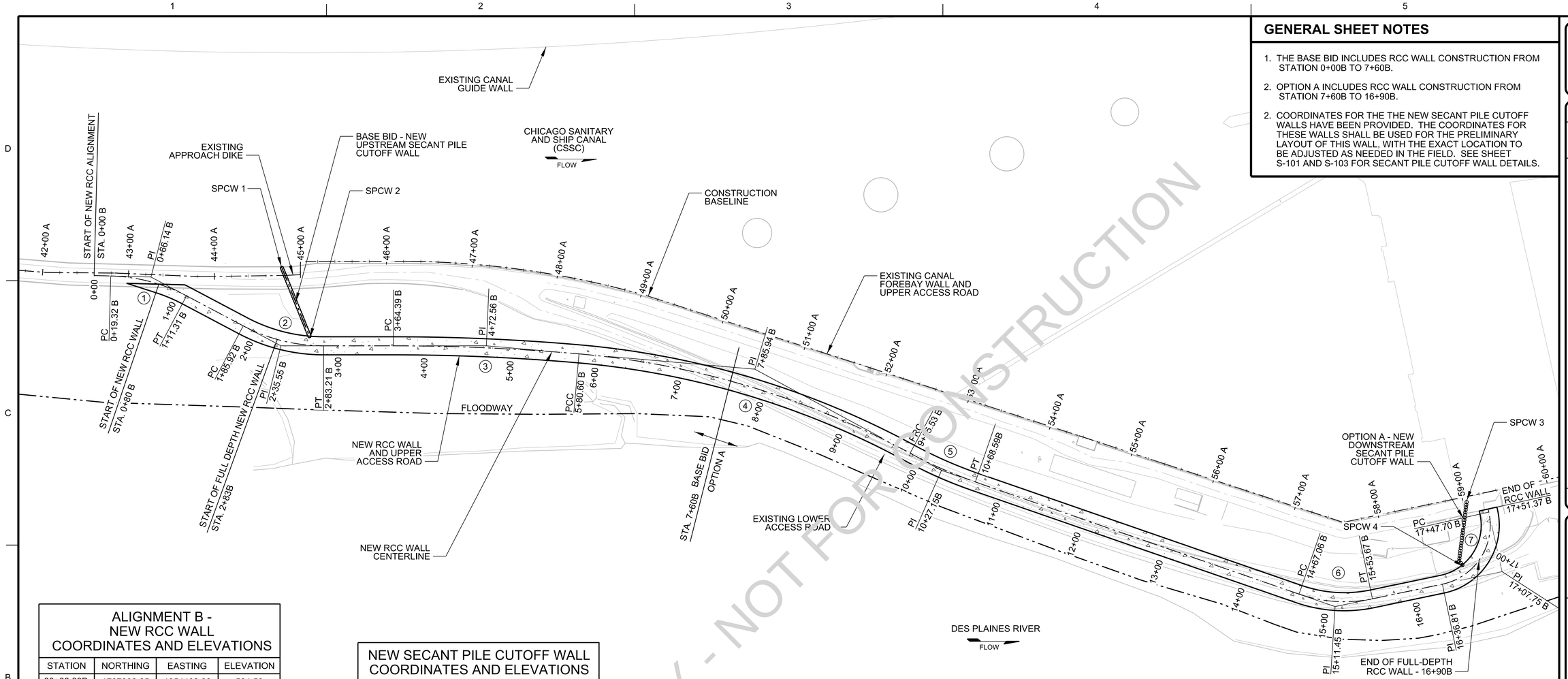
ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
PROJECT BASELINE AND CONTROL

Sheet ID
V-101

20MVRBD9
8/20/2013
LP26_V-101.dgn

GENERAL SHEET NOTES

1. THE BASE BID INCLUDES RCC WALL CONSTRUCTION FROM STATION 0+00B TO 7+60B.
2. OPTION A INCLUDES RCC WALL CONSTRUCTION FROM STATION 7+60B TO 16+90B.
2. COORDINATES FOR THE THE NEW SECANT PILE CUTOFF WALLS HAVE BEEN PROVIDED. THE COORDINATES FOR THESE WALLS SHALL BE USED FOR THE PRELIMINARY LAYOUT OF THIS WALL, WITH THE EXACT LOCATION TO BE ADJUSTED AS NEEDED IN THE FIELD. SEE SHEET S-101 AND S-103 FOR SECANT PILE CUTOFF WALL DETAILS.



PRELIMINARY - NOT FOR CONSTRUCTION

ALIGNMENT B - NEW RCC WALL COORDINATES AND ELEVATIONS

STATION	NORTHING	EASTING	ELEVATION
00+00.00B	1787392.65	1054402.23	584.50
01+00.00B	1787304.76	1054356.37	584.50
02+00.00B	1787232.99	1054286.76	584.50
03+00.00B	1787144.41	1054242.33	584.50
04+00.00B	1786953.99	1054213.32	584.50
05+00.00B	1786953.99	1054181.28	584.50
06+00.00B	1786860.67	1054145.35	584.50
07+00.00B	1786770.61	1054101.98	584.50
08+00.00B	1786685.39	1054049.75	584.50
09+00.00B	1786605.87	1053989.18	584.50
10+00.00B	1786543.00	1053931.24	584.50
11+00.00B	1786454.42	1053858.99	584.50
12+00.00B	1786373.34	1053800.47	584.50
13+00.00B	1786292.25	1053741.94	584.50
14+00.00B	1786211.17	1053683.42	584.50
15+00.00B	1786123.99	1053635.70	584.50
16+00.00B	1786025.04	1053629.60	584.50
17+00.00B	1785936.71	1053629.14	584.50
17+51.37B	1785917.67	1053675.65	584.50

NEW SECANT PILE CUTOFF WALL COORDINATES AND ELEVATIONS

POINT	NORTHING	EASTING	ELEVATION
SPCW 1	1787180.84	1054347.59	584.50
SPCW 2	1787173.02	1054262.70	584.50
SPCW 3	1785938.50	1053692.32	584.50
SPCW 4	1785964.32	1053620.17	584.50

①	②	③	④
PC STA. 0+19.32B PI STA. 0+66.14B PT STA. 1+11.31B Δ= 26° 21' 16" R= 200' CHORD= 91.19' ARC= 91.99'	PC STA. 1+85.92B PI STA. 2+35.55B PT STA. 2+83.21B Δ= 27° 52' 21" R= 200' CHORD= 96.34' ARC= 97.31'	PC STA. 3+64.39B PI STA. 4+72.56B PT STA. 5+80.60B Δ= 4° 58' 34" R= 2489.50' CHORD= 216.15' ARC= 216.21'	PCC STA. 5+80.60B PI STA. 7+85.94B PRC STA. 9+85.53B Δ= 23° 26' 49" R= 989.50' CHORD= 402.11' ARC= 404.93'
⑤	⑥	⑦	
PRC STA. 9+85.53B PI STA. 10+27.15B PT STA. 10+68.59B Δ= 9° 19' 19" R= 510.50' CHORD= 82.97' ARC= 83.06'	PC STA. 14+67.06B PI STA. 15+11.45B PT STA. 15+53.67B Δ= 30° 55' 05" R= 160.50' CHORD= 85.56' ARC= 86.61'	PC STA. 16+36.81B PI STA. 17+07.75B PT STA. 17+47.70B Δ= 90° 45' 34" R= 70' CHORD= 99.65' ARC= 110.88'	

BASELINE ALIGNMENT REFERENCE

ALIGNMENT A CONSTRUCTION BASELINE	ALIGNMENT B NEW RCC WALL
43+00.00A	0+40.00B
44+00.00A	1+48.59B
45+00.00A	2+31.56B
46+00.00A	3+56.32B
47+00.00A	4+52.82B
48+00.00A	5+48.94B
49+00.00A	6+42.09B
50+00.00A	7+34.83B
51+00.00A	8+28.68B
52+00.00A	9+22.08B
53+00.00A	10+22.11B
54+00.00A	11+29.97B
55+00.00A	12+29.95B
56+00.00A	13+29.94B
57+00.00A	14+32.88B.
58+00.00A	15+93.38B

DWG REF(s) : _____

A1 NEW RCC WALL LAYOUT PLAN

SCALE : 1"=60'-0" 0 60' 120'

N

US Army Corps of Engineers®

MARK	DATE	APPR.	DESCRIPTION

DESIGNED BY: AJG/JPF
DWN BY: AER
SUBMITTED BY: JAK
CKD BY: CMG
PLOT SCALE: AS SHOWN
PLOT DATE:
FILE NAME: LP26_V-102.dgn
DATE: 2013/08/16
SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC: FOREBAY WALL, PHASE I
NEW RCC WALL ALIGNMENT

Sheet ID
V-102

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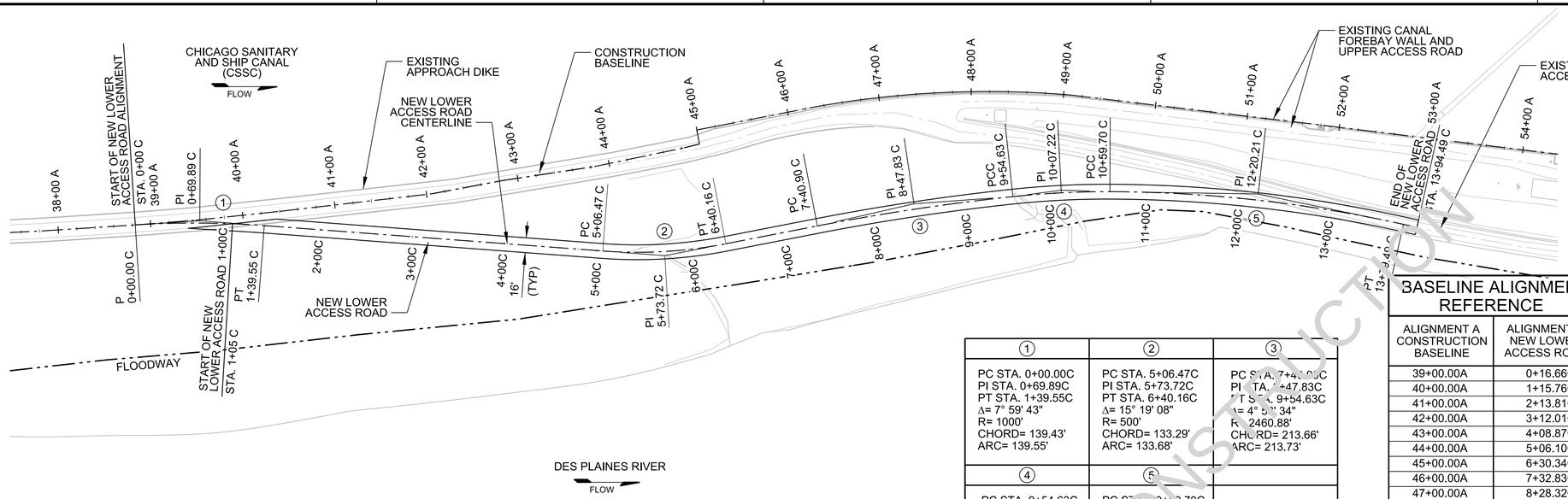


①	②	③
PC STA. 0+00.00C PI STA. 0+69.89C PT STA. 1+39.55C Δ= 7° 59' 43" R= 1000' CHORD= 139.43' ARC= 139.55'	PC STA. 5+06.47C PI STA. 5+73.72C PT STA. 6+40.16C Δ= 15° 19' 08" R= 500' CHORD= 133.29' ARC= 133.68'	PC STA. 7+4[illegible]C PI STA. [illegible]+47.83C PT STA. 9+54.63C Δ= 4° [illegible]' 34" R= 2460.88' CHORD= 213.66' ARC= 213.73'
④	⑤	
PC STA. 9+54.63C PI STA. 10+07.22C PT STA. 10+59.70C Δ= 6° 15' 55" R= 960.88' CHORD= 105.02' ARC= 105.07'	PC STA. [illegible]+59.70C PI STA. 12+20.21C PT STA. 13+79.49C Δ= 12° [illegible]' 50" R= 1492' CHORD= 319.18' ARC= 319.79'	

BASELINE ALIGNMENT REFERENCE

ALIGNMENT A CONSTRUCTION BASELINE	ALIGNMENT C NEW LOWER ACCESS ROAD
39+00.00A	0+16.66C
40+00.00A	1+15.76C
41+00.00A	2+13.81C
42+00.00A	3+12.01C
43+00.00A	4+08.87C
44+00.00A	5+06.10C
45+00.00A	6+30.34C
46+00.00A	7+32.83C
47+00.00A	8+28.32C
48+00.00A	9+32.33C
49+00.00A	10+14.34C
50+00.00A	11+05.88C
51+00.00A	12+94.32C
52+00.00A	13+88.78C

ALIGNMENT C - NEW LOWER ACCESS ROAD COORDINATES AND ELEVATIONS

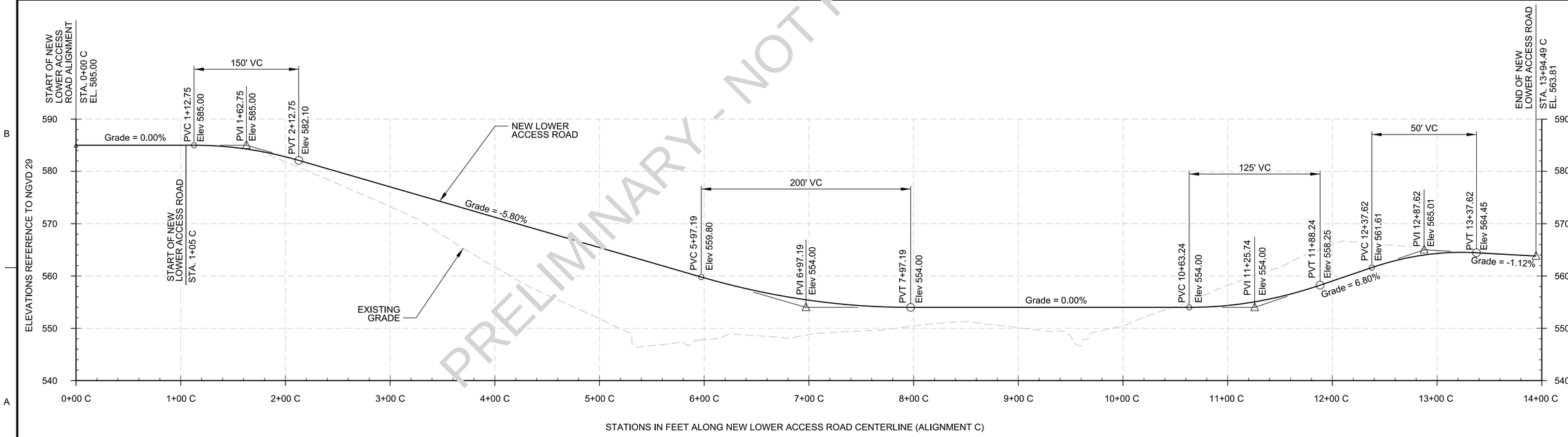
STATION	NORTHING	EASTING	ELEVATION
0+00.00C	1787742.97	1054540.59	585.50 ±
1+00.00C	1787653.84	1054495.35	585.50 ±
2+00.00C	1787568.66	1054442.97	582.79
3+00.00C	1787483.89	1054389.92	577.04
4+00.00C	1787399.12	1054336.87	571.24
5+00.00C	1787314.35	1054283.82	565.44
6+00.00C	1787225.42	1054238.46	559.64
7+00.00C	1787130.15	1054208.16	555.37
8+00.00C	1787034.59	1054178.71	554.00
9+00.00C	1786940.19	1054145.73	554.00
10+00.00C	1786847.46	1054108.34	554.00
11+00.00C	1786758.56	1054062.63	554.37
12+00.00C	1786673.25	1054010.50	559.05
13+00.00C	1786591.62	1053952.77	564.31
13+94.49C	1786518.15	1053893.37	563.81

DWG REF(s) : _____

A3 NEW LOWER ACCESS ROAD LAYOUT PLAN

SCALE : 1"=70'-0"

0 70' 140'



DWG REF(s) : _____

A1 NEW LOWER ACCESS ROAD LAYOUT PROFILE

SCALE : 1"=50'-0"

0 50' 100'

PRELIMINARY - NOT FOR CONSTRUCTION

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: AJG/JPF	DATE: 2013/08/16
DWN BY: AER	CKD BY: CMG
SUBMITTED BY: JAK	SOLICITATION NO.: W912EK-13-R-0040
PLOT SCALE: AS SHOWN	CONTRACT NO.:
SIZE: ANSI D	PLOT DATE:
	FILE NAME: LP26_V-103.dgn
	PROJECT CODE: LP26

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
BASE BID - LOWER ACCESS ROAD
PLAN AND PROFILE

Sheet ID
V-103

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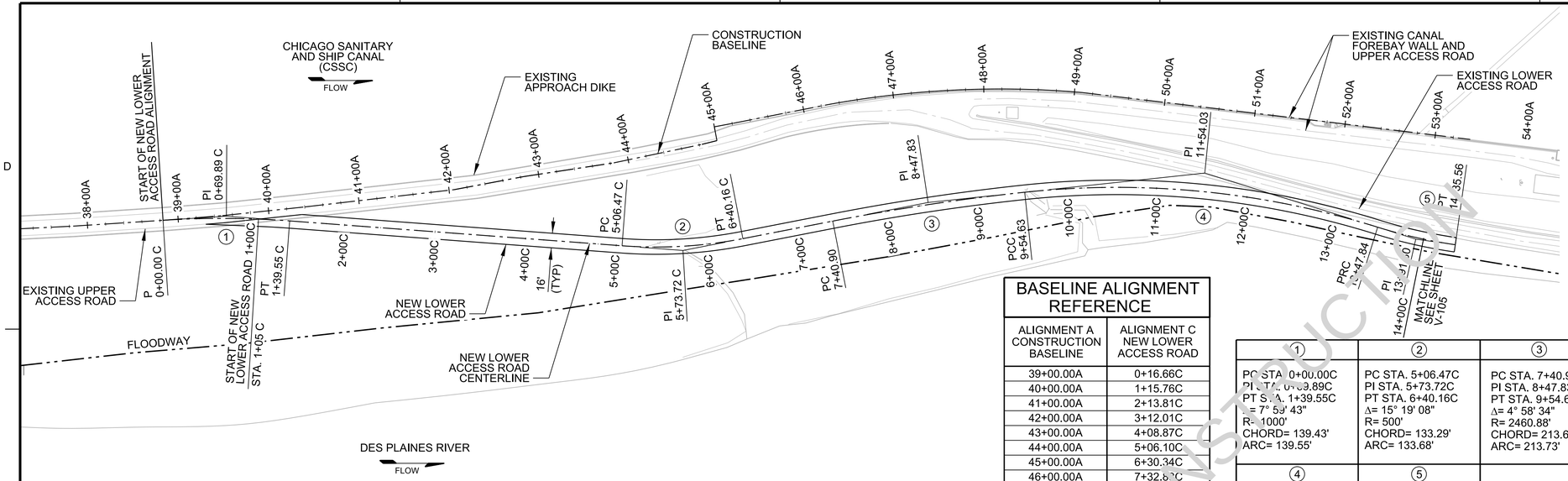


BASELINE ALIGNMENT REFERENCE

ALIGNMENT A CONSTRUCTION BASELINE	ALIGNMENT C NEW LOWER ACCESS ROAD
39+00.00A	0+16.66C
40+00.00A	1+15.76C
41+00.00A	2+13.81C
42+00.00A	3+12.01C
43+00.00A	4+08.87C
44+00.00A	5+06.10C
45+00.00A	6+30.34C
46+00.00A	7+32.80C
47+00.00A	8+28.32C
48+00.00A	9+23.33C
49+00.00A	10+14.54C
50+00.00A	11+04.40C
51+00.00A	11+95.53C
52+00.00A	12+86.23C
53+00.00A	13+86.47C

1	2	3
PC STA. 0+00.00C PI STA. 0+69.89C PT STA. 1+39.55C Δ= 7° 59' 43" R= 1000' CHORD= 139.43' ARC= 139.55'	PC STA. 5+06.47C PI STA. 5+73.72C PT STA. 6+40.16C Δ= 15° 19' 08" R= 500' CHORD= 133.29' ARC= 133.68'	PC STA. 7+40.90C PI STA. 8+47.83C PT STA. 9+54.63C Δ= 4° 58' 34" R= 2460.88' CHORD= 213.66' ARC= 213.73'
4	5	
PC STA. 9+54.63C PI STA. 11+54.03C PRC STA. 13+47.84C Δ= 23° 26' 49" R= 960.88' CHORD= 390.48' ARC= 393.21'	PRC STA. 13+47.84C PI STA. 13+91.80C PT STA. 14+35.56C Δ= 9° 19' 19" R= 539.13' CHORD= 87.62' ARC= 87.71'	

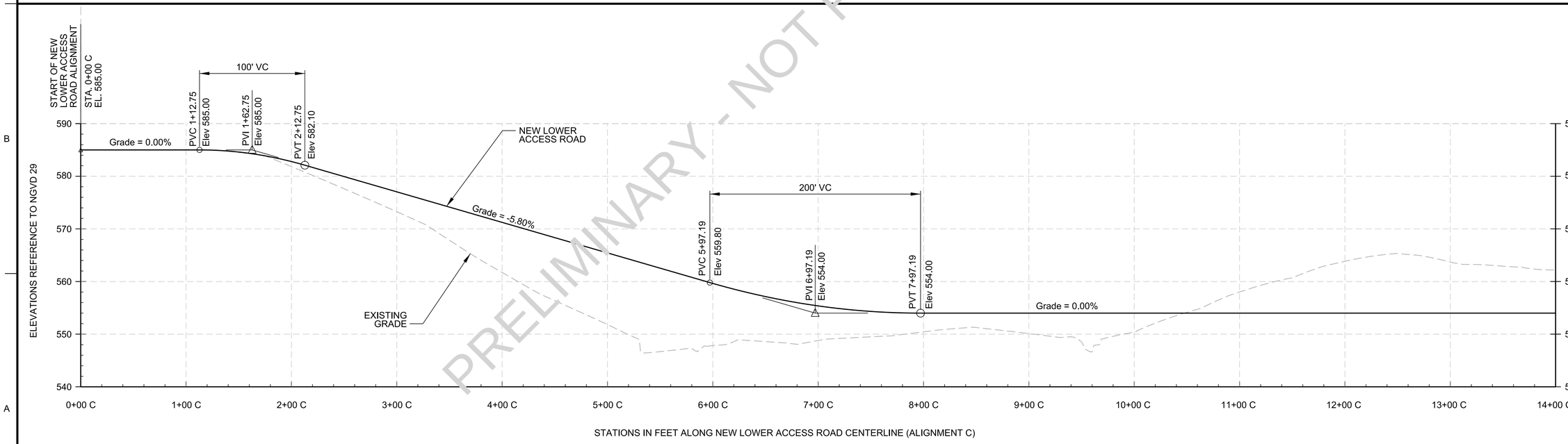
ALIGNMENT C - NEW LOWER ACCESS ROAD COORDINATES AND ELEVATIONS

STATION	NORTHING	EASTING	ELEVATION
0+00.00C	1787742.97	1054540.59	585.50 ±
1+00.00C	1787653.84	1054495.35	585.50 ±
2+00.00C	1787568.66	1054442.97	582.79
3+00.00C	1787483.89	1054389.92	577.04
4+00.00C	1787399.12	1054336.87	571.24
5+00.00C	1787314.35	1054283.82	565.44
6+00.00C	1787225.42	1054238.46	559.64
7+00.00C	1787130.15	1054208.16	555.37
8+00.00C	1787034.59	1054178.71	554.00
9+00.00C	1786940.19	1054145.73	554.00
10+00.00C	1786847.46	1054108.34	554.00
11+00.00C	1786758.56	1054062.63	554.00
12+00.00C	1786675.21	1054007.43	554.00
13+00.00C	1786597.87	1053944.11	554.00
14+00.00C	1786524.77	1053875.91	554.00

DWG REF(s) : _____

A3 NEW LOWER ACCESS ROAD LAYOUT PLAN

SCALE : 1"=70'-0" (0, 70', 140')



DWG REF(s) : _____

A1 NEW LOWER ACCESS ROAD LAYOUT PROFILE

SCALE : 1"=50'-0" (0, 50', 100')

PRELIMINARY - NOT FOR CONSTRUCTION

US Army Corps of Engineers®

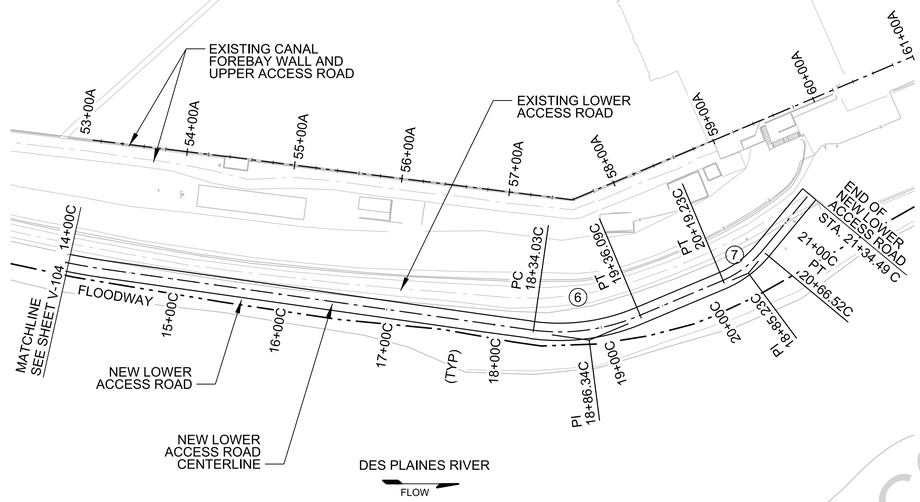
MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS ROCK ISLAND DISTRICT ROCK ISLAND, ILLINOIS	DESIGNED BY: AJGUPF	DATE: 2013/08/16	
	DWN BY: AER	CKD BY: CMG	SOLICITATION NO.: W912EK-13-R-0040
	SUBMITTED BY: JAK		CONTRACT NO.:
	PLOT SCALE: AS SHOWN	PLOT DATE:	PROJECT CODE: LP26
	SIZE: ANSI D	FILE NAME: LP26_V-104.dgn	

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
OPTION A - LOWER ACCESS ROAD
PLAN AND PROFILE I

Sheet ID
V-104

20MAY8829
20MAY8829
LP26_V-104.dgn



DWG REF(s) : _____

A3 NEW LOWER ACCESS ROAD LAYOUT PLAN

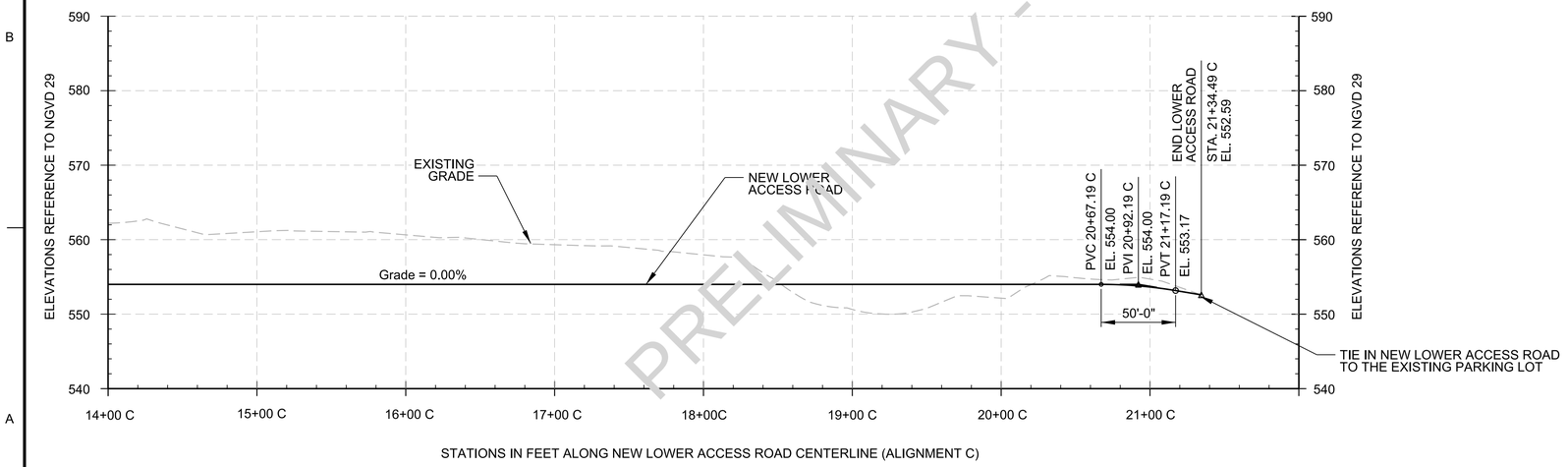
SCALE : 1"=70'-0"

0 70' 140'

BASELINE ALIGNMENT REFERENCE	
ALIGNMENT A CONSTRUCTION BASELINE	ALIGNMENT C NEW LOWER ACCESS ROAD
53+00.00A	13+86.47C
54+00.00A	14+96.94C
55+00.00A	15+96.92C
56+00.00A	16+96.91C
57+00.00A	18+00.75C
58+00.00A	19+76.78C
59+00.00A	20+75.33C

⑥	⑦
PC STA. 18+34.03C PI STA. 18+86.34C PT STA. 19+36.09C Δ= 30° 55' 05" R= 189.13' CHORD= 100.82' ARC= 102.06'	PC STA. 20+19.23C PI STA. 20+43.34C PT STA. 20+66.52C Δ= 27° 28' 27" R= 98.63' CHORD= 46.84' ARC= 47.29'

ALIGNMENT C - NEW LOWER ACCESS ROAD COORDINATES AND ELEVATIONS			
STATION	NORTHING	EASTING	ELEVATION
14+00.00C	1786524.77	1053875.91	554.00
15+00.00C	1786444.39	1053816.45	554.00
16+00.00C	1786363.31	1053757.93	554.00
17+00.00C	1786282.22	1053699.40	554.00
18+00.00C	1786201.14	1053640.88	554.00
19+00.00C	1786114.46	1053592.37	554.00
20+00.00C	1786015.34	1053580.42	554.00
21+00.00C	1785918.98	1053598.82	553.16
21+34.49C	1785887.14	1053612.06	552.59



DWG REF(s) : _____

A1 NEW LOWER ACCESS ROAD LAYOUT PROFILE

SCALE : 1"=50'-0"

0 50' 100'

PRELIMINARY - NOT FOR CONSTRUCTION

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

DESIGNED BY: AJGUPF
DWN BY: AER
CKD BY: CMG
SUBMITTED BY: JAK
PLOT SCALE: AS SHOWN
PLOT DATE:
SIZE: ANSI D
FILE NAME: LP26_V-105.dgn
DATE: 2013/08/16
SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
OPTION A - LOWER ACCESS ROAD
PLAN AND PROFILE II

Sheet ID
V-105

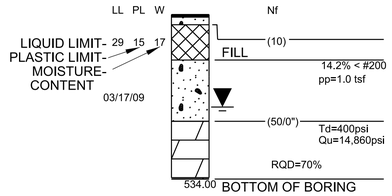
Z0MVRBD9
8/20/2013
LP26_V-105.dgn

UNIFIED SOIL CLASSIFICATION TABLE				
MAJOR DIVISION		TYPE	LETTER SYMBOL	TYPICAL NAMES
COARSE GRAINED SOILS GREATER THAN 50% OF MATERIAL IS RETAINED ON THE #200 SIEVE	GRAVELS GREATER THAN 50% OF COARSE FRACTION IS RETAINED ON #4 SIEVE	CLEAN GRAVELS	GW	GRAVEL, WELL GRADED, GRAVEL-SAND MIXTURE, LITTLE OR NO FINES
			GP	GRAVEL, POORLY GRADED, GRAVEL-SAND MIXTURE, LITTLE OR NO FINES
		GRAVELS WITH FINES	GM	SILTY GRAVEL, GRAVEL-SAND-SILT MIXTURES
			GC	CLAYEY GRAVEL, GRAVEL-SAND-CLAY MIXTURES
	SANDS GREATER THAN 50% OF COARSE FRACTION PASSES ON #4 SIEVE	CLEAN SANDS	SW	SAND, WELL GRADED, GRAVELLY SANDS
			SP	SAND, POORLY GRADED, GRAVELLY SANDS
		SANDS WITH FINES	SM	SILTY SAND, SAND-SILT MIXTURES
			SC	CLAYEY SAND, SAND-CLAY MIXTURES
FINE GRAINED SOILS GREATER THAN 50% OF MATERIAL PASSES A #200 SIEVE		SILTS &CLAY LL IS LESS THAN 50	ML	SILT & VERY FINE SAND, SILTY OR CLAYEY FINE SAND OR CLAYEY SILT
			CL	LEAN CLAY, SANDY CLAY, SILTY CLAY, OF LOW TO MEDIUM PLASTICITY
			OL	ORGANIC SILTS & ORGANIC SILTY CLAYS OF LOW PLASTICITY
		SILTS & CLAY LL IS GREATER THAN 50	MH	SILT, FINE SANDY OR SILTY SOIL WITH HIGH PLASTICITY
			CH	FAT CLAY, INORGANIC CLAY OF HIGH PLASTICITY
			OH	ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS				

THE CLASSIFICATION OF SOILS IS IN ACCORDANCE WITH THE UNIFIED SOIL CLASSIFICATION SYSTEM BRIEFLY PRESENTED IN THE TABLE ABOVE. FOR A COMPLETE DESCRIPTION OF THE UNIFIED SOIL CLASSIFICATION SYSTEM REFER TO: TECHNICAL MEMORANDUM NO. 3-357 PREPARED BY THE U.S. ARMY ENGINEER WATERWAY EXPERIMENT STATION, CORPS OF ENGINEERS, VICKSBURG, MISSISSIPPI.

DWG REF(s) : _____

C1 UNIFIED SOIL CLASSIFICATION TABLE



-BORING NUMBER
-COORDINATE LOCATION
-DATE DRILLED
-EXISTING GROUND SURFACE ELEVATION

-NUMBER OF BLOWS TO DRIVE STANDARD SPLIT SPOON ONE FOOT WITH 140 LB HAMMER AND 30-INCH DROP.

-PERCENT PASSING #200 SIEVE
-POCKET PENETROMETER (TSF)
-WATER LEVEL AND DATE

-DIRECT TENSILE STRENGTH
-UNCONFINED COMPRESSIVE STRENGTH

-ROCK QUALITY DESIGNATION SEE DETAIL A2.
-ELEVATION AT THE BOTTOM OF BORING

ASPHALT PAVEMENT
CONCRETE
RANDOM FILL
NS - NO SAMPLE
VOID
GP - USCS GRAVEL, POORLY GRADED
GC - USCS CLAYEY GRAVEL
GM - USCS SILTY GRAVEL
CL - USCS LEAN CLAY
CLAYEY SILT

SLTY CLAY
SM - SILTY SAND
SC - CLAYEY SAND
ML - INORGANIC SILT
SP - SAND, POORLY GRADED

DOLOMITE
BEDROCK
LIMESTONE
SHALE

ROCK QUALITY DESIGNATION	
RQD (%)	ROCK QUALITY
0-25	VERY POOR
25-50	POOR
50-75	FAIR
75-90	GOOD
90-100	EXCELLENT

DWG REF(s) : _____

A1 BORING LEGEND

GENERAL NOTES

THE FORE BAY WALL IS A GRAVITY WALL CONSTRUCTED, FROM 1905 TO 1907, USING SOFT LIME CEMENT CONCRETE. IN 1924 THE FORE BAY WALL WAS CAPPED WITH PORTLAND CEMENT CONCRETE. THE FORE BAY EMBANKMENT WAS CONSTRUCTED FROM SPOILS EXCAVATED FROM THE CONSTRUCTION OF THE CANAL. THE EMBANKMENT CONSISTS OF VARIOUS MIXTURES OF EARTH AND ROCK FILL. ROCK FILL MATERIALS CONSIST OF ROCK VARYING IN SIZE FROM GRAVEL TO LARGE BOULDERS. MOST OF THE ROCK IS LIMESTONE/DOLOMITE, BUT GLACIAL ERRATICS (METAMORPHIC/IGNEOUS ROCKS) HAVE BEEN ENCOUNTERED IN PAST CONSTRUCTION. OTHER FILL MATERIAL MAY INCLUDE BRICKS, BROKEN CONCRETE, WOOD, AND OTHER RANDOM MATERIALS. IT IS ALSO ANTICIPATED THAT AIR VOIDS AND KARST AREAS WILL BE ENCOUNTERED DURING EXCAVATIONS.

THE FOLLOWING TERMS SHALL BE USED:

RANDOM ROCK FILL - HIGHLY VARIABLE SIZES OF ROCK, CONCRETE, ASPHALT, GRAVEL, DENSE CONSOLIDATED DEPOSITS, LOOSE SOIL, OR CONGLOMERATE MATERIALS WHICH ARE NOT INCLUDED IN THE DEFINITION OF "ROCK " BUT MAY REQUIRE THE USE OF HEAVY EXCAVATION EQUIPMENT, RIPPER TEETH, OR JACK HAMMERS FOR REMOVAL. MOST OF THE MATERIAL IS LESS THAN ONE CUBIC FEET IN SIZE, BUT PIECES OF ROCK AND CONCRETE HAVE BEEN LARGER THAN FOUR CUBIC YARDS IN SIZE. THIS MATERIAL CAME FROM THE EXCAVATIONS FOR THE CANAL AND PAST REHABILITATIONS.

WEATHERED BEDROCK - ANY BEDROCK THAT IS POORLY CEMENTED, FRACTURED, OR JOINTED, WHICH CAN BE REMOVED WITH HEAVY EXCAVATION EQUIPMENT AND IS NOT SOLIDLY ATTACHED TO THE ROCK FORMATION. WEATHERED BEDROCK MAY STILL INCLUDE RELATIVELY LARGE MASSES OF ROCK THAT WOULD REQUIRE MECHANICAL FRACTURING THROUGH THE USE OF HEAVY EQUIPMENT PRIOR TO EXCAVATION. MECHANICAL FRACTURING WEATHERED ROCK MAY AID IN RCC FOUNDATION PREPARATION, BUT IS NOT REQUIRED.

SOLID BEDROCK - BEDROCK THAT IS GENERALLY WELL CEMENTED AND INTACT. SOLID BEDROCK CANNOT BE REMOVED WITHOUT MECHANICAL FRACTURING THROUGH THE USE OF HEAVY EQUIPMENT AND/OR EXPLOSIVES.

KARST - KARST IS A GEOLOGICAL TERM USED TO DESCRIBE AREAS OF IRREGULAR LIMESTONE IN WHICH EROSION HAS PRODUCED FISSURES, SINKHOLES, UNDERGROUND STREAMS, OR CAVERNS. KARST AREAS COULD HAVE BEEN FILLED WITH CLAY, RANDOM ROCK FILL, CONCRETE, OR MAY STILL BE A VOID.

PRELIMINARY - NOT FOR CONSTRUCTION

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS ROCK ISLAND DISTRICT ROCK ISLAND, ILLINOIS	DESIGNED BY: JKP	DATE: 2013/08/16	
	DWN BY: BTT	CKD BY: CEB	SOLICITATION NO.: W912EK-13-R-0040
	SUBMITTED BY: TEM		CONTRACT NO.:
	PLOT SCALE: AS SHOWN	PLOT DATE:	PROJECT CODE: LP26
	SIZE: ANSI D	FILE NAME: LP26_B-001.dgn	

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION

SOIL CLASSIFICATION TABLE, BORING LOG LEGENDS, AND NOTES

Sheet ID
B-001

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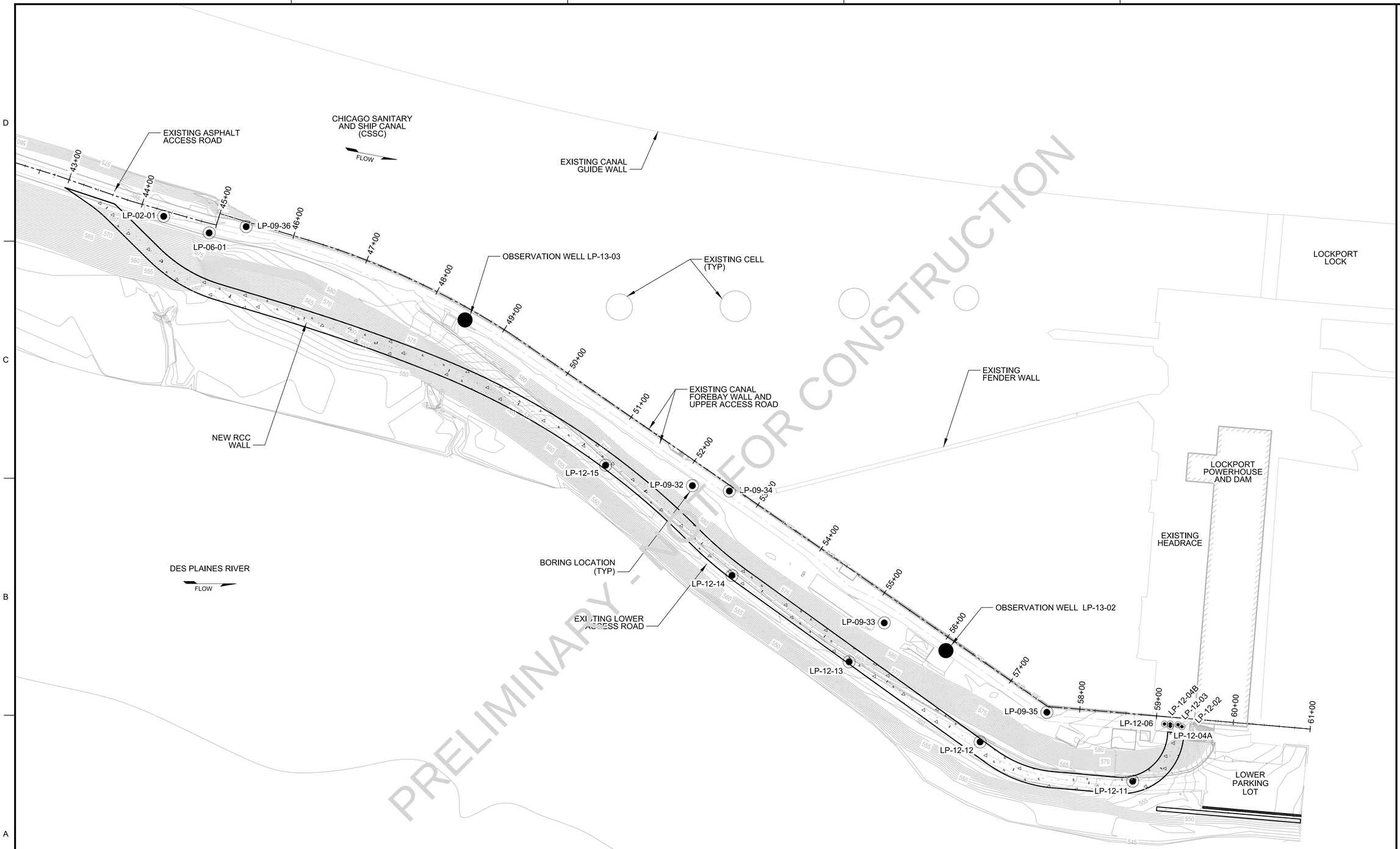
2013/08/16
LP26_B-001.dgn



PRELIMINARY - NOT FOR CONSTRUCTION

A1 BORING LOCATION PLAN
1" = 60' 0"
0 60' 120'

BSEDDAER
BORING PLAN
LP26_B-101.dgn

US Army Corps of Engineers®

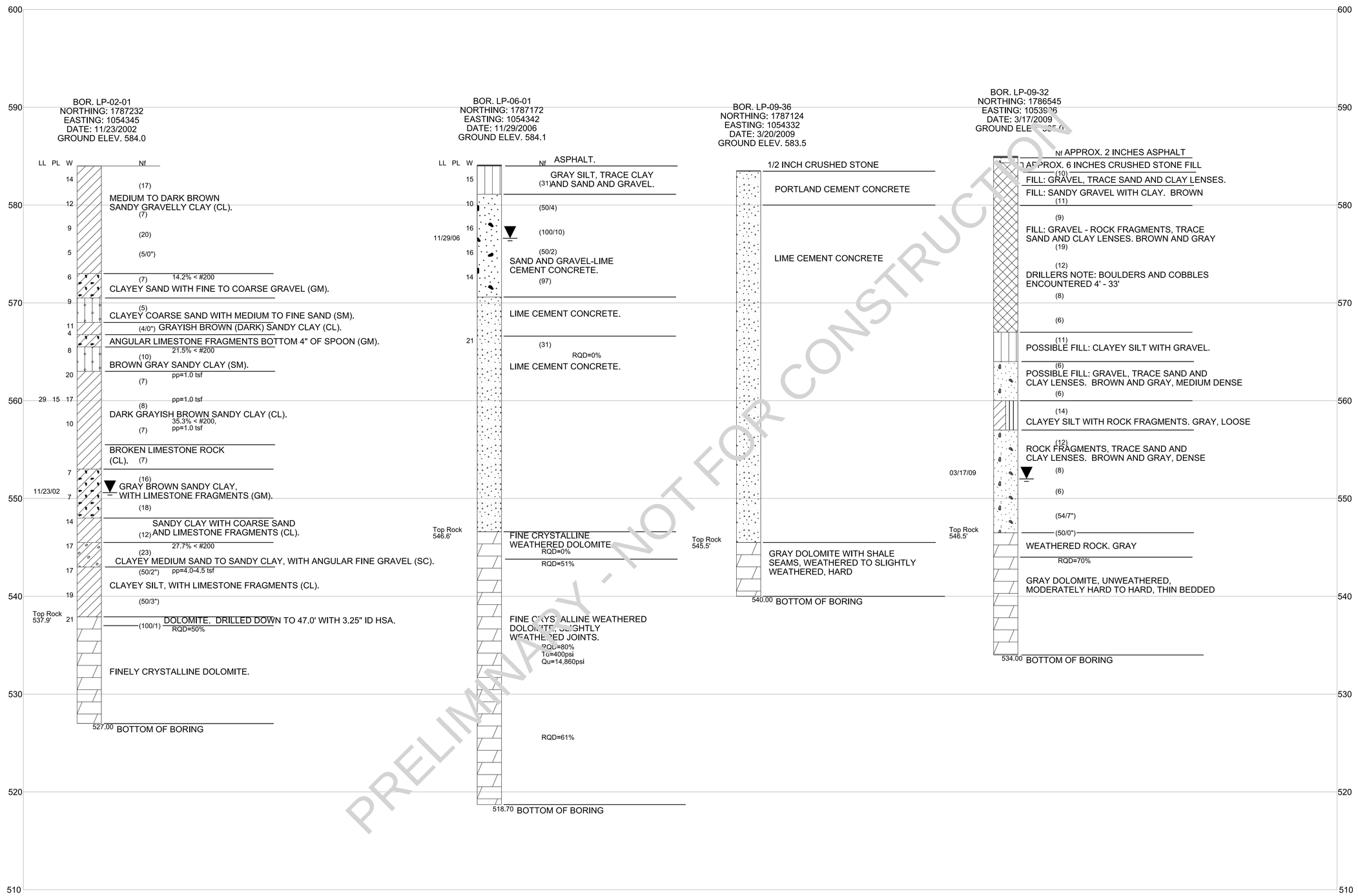
MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

DESIGNED BY: JKP
DWN BY: BTT
SUBMITTED BY: TEM
CKD BY: CEB
PLOT SCALE: AS SHOWN
PLOT DATE:
FILE NAME: LP26_B-101.dgn
DATE: 20130816
SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26
SIZE: ANSI D

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
BORING LOCATION PLAN

Sheet ID
B-101



PRELIMINARY - NOT FOR CONSTRUCTION

DWG REF(s) : _____

A1 BORING LOGS I

SCALE : 1"=5'-0"

0 5' 10'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

DESIGNED BY: JKP
DWN BY: BTT
CKD BY: CEB
SUBMITTED BY: TEM
PLOT SCALE: AS SHOWN
PLOT DATE:
SIZE: ANSI D
FILE NAME: LP26_B-301.dgn
DATE: 2013/08/16
SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
BORING LOGS I

Sheet ID
B-301

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8/20/2013
LP26_B-301.dgn

PRELIMINARY - NOT FOR CONSTRUCTION

ELEVATIONS REFERENCED TO NAVD 88

600 590 580 570 560 550 540 530 520 510

BOR. LP-09-34
NORTHING: 1786497
EASTING: 1053989
DATE: 3/18/2009
GROUND ELEV. 583.5

3-1/4 INCHES ASPHALT

PORTLAND CEMENT CONCRETE

RQD=36%

RQD=0%

RQD=17%

LIME CEMENT CONCRETE

RQD=0%

RQD=0%

RQD=0%

RQD=0%

Top Rock
543.5'

RQD=11%

GRAY DOLOMITIC, WEATHERED,
GREEN MOTTLING, DOLOMITE SEAMS

RQD=72%

537.50 BOTTOM OF BORING

BOR. LP-09-33
NORTHING: 1786296
EASTING: 1053818
DATE: 3/17/2009
GROUND ELEV. 583.5

Nf APPROX. 2 INCHES

CRUSHED STONE, FILL: CLAYEY SAND.

(14)

(10)

(11)

FILL: BOULDERS AND COBBLES.
POSSIBLE FILL: SAND WITH CLAY AND GRAVEL.

(12)

(12)

(25)

(8)

(32)

ROCK FRAGMENTS WITH SAND AND CLAY LENSES. LIGHT BROWN

(14)

(12)

(50/2")

SAND WITH CLAY LENSES AND GRAVEL. BROWN, MEDIUM DENSE

(13)

(12)

ROCK FRAGMENTS WITH SAND

(12)

AND CLAY LENSES. LIGHT BROWN

03/17/09

(4)

(11)

Top Rock
541.0'

CLAYEY SAND WITH ROCK FRAGMENTS. BROWN, MEDIUM DENSE

541.00 (11)

BOTTOM OF BORING

BOR. LP-09-35
NORTHING: 1786085
EASTING: 1053702
DATE: 3/19/2009
GROUND ELEV. 583.5

3-3/4 INCHES ASPHALT

PORTLAND CEMENT CONCRETE
(REBAR ENCOUNTERED 2-1/2" INTO PCC)

LIME CEMENT CONCRETE

WEATHERED ROCK, WOOD FRAGMENTS,
WIRE DEBRIS

Top Rock
544.9'

5 INCHES OF WOOD, 3 INCHES WEATHERED ROCK

GRAY DOLOMITE, UNWEATHERED, HARD

539.50 BOTTOM OF BORING

DWG REF(s) : _____

A1 BORING LOGS II
SCALE : 1"=5'-0" 0 5' 10'

Z:\MVR\BD\projects\LP26_B-302.dgn

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

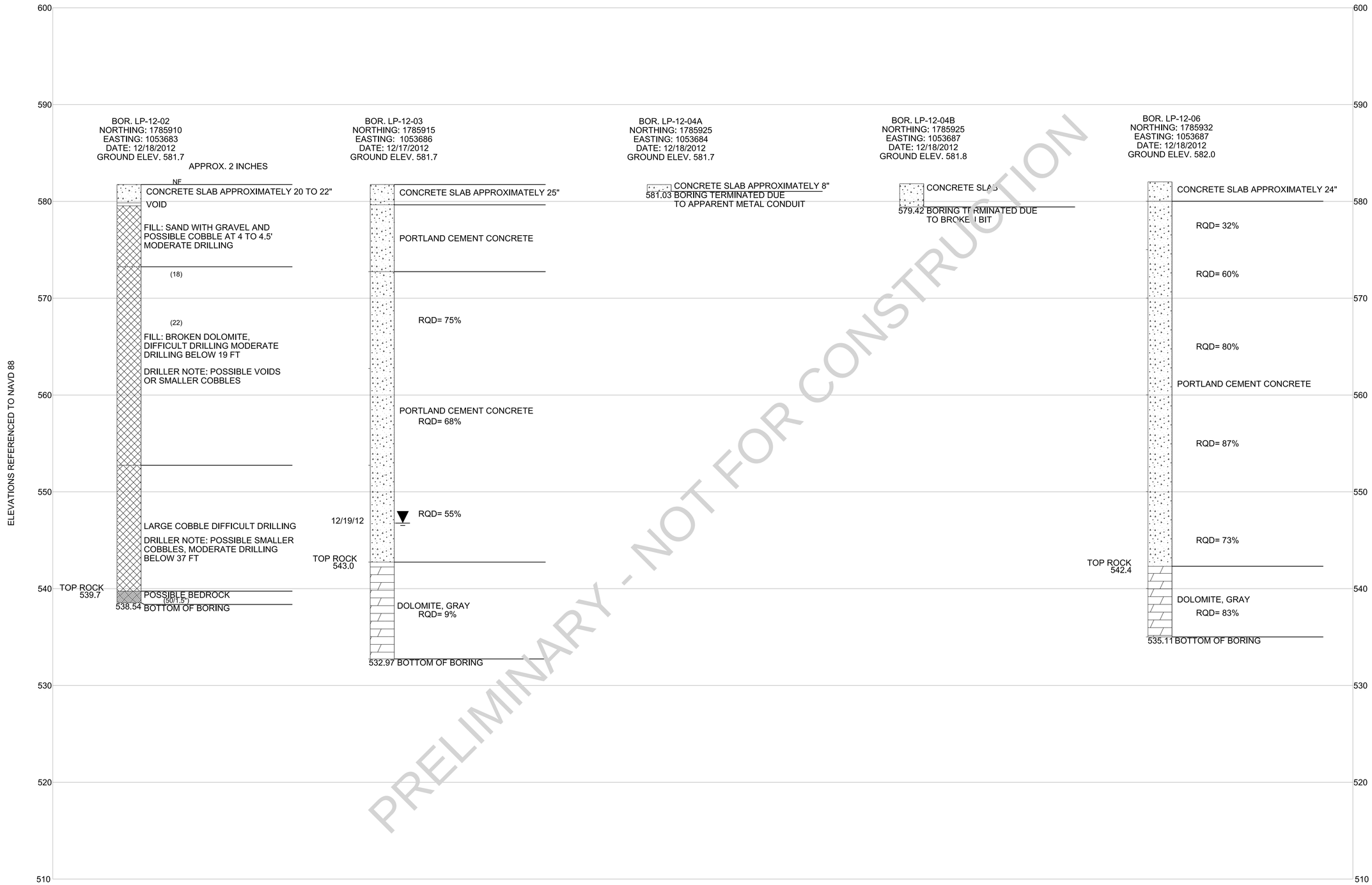
DESIGNED BY:	DATE:
JKP	20130816
DWN BY:	CKD BY:
BTT	CEB
SUBMITTED BY:	
TEM	
PLOT SCALE:	PLOT DATE:
AS SHOWN	
SIZE:	FILE NAME:
ANSI D	LP26 B-302.dgn

SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL PHASE I

BORING LOGS II

Sheet ID
B-302



PRELIMINARY - NOT FOR CONSTRUCTION

DWG REF(s) : _____

A1 BORING LOGS III

SCALE : 1"=5'-0"

0 5' 10'

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

DESIGNED BY: JKP
DWN BY: BTT
CKD BY: CEB
SUBMITTED BY: TEM
PLOT SCALE: AS SHOWN
PLOT DATE:
SIZE: ANSI D
FILE NAME: LP26_B-303.dgn
DATE: 2013/08/16
SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL, PHASE I
BORING LOGS III

Sheet ID
B-303

Z0MVRBD9
8/20/2013
LP26_B-303.dgn

PRELIMINARY - NOT FOR CONSTRUCTION

ELEVATIONS REFERENCED TO NAVD 88

600 590 580 570 560 550 540 530 520 510

BOR. LP-12-11
NORTHING: 1785973
EASTING: 1053612
DATE: 12/26/2012
GROUND ELEV. 556.9

- ASPHALT APPROXIMATELY 6"
- FILL: GRAVEL TRACE SAND
- BROKEN DOLOMITE, MODERATE TO DIFFICULT DRILLING
- DRILLER NOTE: POSSIBLE START OF WEATHERED BEDROCK HARD LAYER FROM 10 TO 10.5 FT
- 12/26/12 ▼ BROKEN DOLOMITE, OR POSSIBLE BEDROCK, MODERATE DRILLING
- TOP ROCK 541.9
- DOLOMITE, GRAY RQD= 6%
- 536.86 BOTTOM OF BORING

BOR. LP-12-12
NORTHING: 1786171
EASTING: 1053663
DATE: 12/26/2012
GROUND ELEV. 560.1

- NF
- ASPHALT APPROXIMATELY 3"
- FILL: WITH A LAYER OF ASPHALT IN THE MIDDLE CRUSHED STONE AGGREGATE APPROXIMATELY 11"
- FILL: SAND AND GRAVEL, DARK BROWN, WITH LARGE GRAVEL PARTICLES
- FILL: BROKEN DOLOMITE, MODERATE TO DIFFICULT DRILLING
- HARD SEAM FROM 10 TO 10.5 FT
- RQD= 0%
- FILL: BROKEN DOLOMITE
- RQD= 0%
- LEAN CLAY, OR POSSIBLE SOFT SHALE SEAM (34)
- 533.09 BOTTOM OF BORING

BOR. LP-12-13
NORTHING: 1786341
EASTING: 1053767
DATE: 12/27/2012
GROUND ELEV. 561.5

- ASPHALT APPROXIMATELY 5"
- CLAY WITH GRAVEL, GRAY
- FILL: BROKEN DOLOMITE, MODERATE TO DIFFICULT DRILLING
- TOP ROCK 543.0 12/28/12 ▼
- DOLOMITE, GRAY RQD= 30%
- 538.03 BOTTOM OF BORING

BOR. LP-12-14
NORTHING: 1786493
EASTING: 1053879
DATE: 12/27/2012
GROUND ELEV. 563.3

- ASPHALT APPROXIMATELY 3.25"
- DRILLER NOTE: BLIND DRILLING WITH AUGER
- THIN LAYER OF GRAY SEAM OVER 2" OF ASPHALT OR TAR
- FILL: BROKEN DOLOMITE, OR COARSE GRAVEL WITH SOME FINES, MODERATE TO DIFFICULT DRILLING
- TOP ROCK 540.8 12/27/12 ▼
- WEATHERED DOLOMITE AUGER REFUSAL AT 23 FT
- DOLOMITE GRAY RQD= 28%
- 535.31 BOTTOM OF BORING

BOR. LP-12-15
NORTHING: 1786657
EASTING: 1054022
DATE: 12/28/2012
GROUND ELEV. 567.3

- ASPHALT APPROXIMATELY 5"
- FILL: BROKEN DOLOMITE WITH FINES, MODERATE TO DIFFICULT DRILLING
- TOP ROCK 541.8
- DOLOMITE, GRAY RQD= 30%
- 536.83 BOTTOM OF BORING
- RQD=36%

DWG REF(s) : _____

A1 BORING LOGS IV
SCALE : 1"=5'-0" 0 5' 10'

Z:\MVR\BD\projects\LP26_B-304.dgn

US Army Corps of Engineers®

MARK	DESCRIPTION	DATE	APPR.

DESIGNED BY: JKP
DWN BY: BTT
CKD BY: CEB
SUBMITTED BY: TEM
DATE: 2013/08/16
SOLICITATION NO.: W912EK-13-R-0040
CONTRACT NO.:
PROJECT CODE: LP26
PLOT SCALE: AS SHOWN
PLOT DATE:
SIZE: ANSI D
FILE NAME: LP26_B-304.dgn

U.S. ARMY CORPS OF ENGINEERS
ROCK ISLAND DISTRICT
ROCK ISLAND, ILLINOIS

ILLINOIS WATERWAY
LOCKPORT POOL
LOCKPORT, IL
LOCKPORT POOL MAJOR REHABILITATION
STAGE IC, FOREBAY WALL PHASE I
BORING LOGS IV

Sheet ID
B-304