

1. ACCESS TO SITE IS BY RIVER ONLY. NO LAND ACCESS IS AVAILABLE.
2. THE ENTIRE PROJECT SITE IS WITHIN THE RIVER AND IS THEREFORE HIGHLY SUSCEPTIBLE TO FLOODING AND RIVER STAGE FLUCTUATIONS THAT MAY IMPACT CONTRACTOR WORK PROGRESS. SEE HYDROGRAPHS IN SPECIFICATIONS.
3. TOPOGRAPHICAL CONTOURS AND SITE ELEVATIONS DEPICTED ON THESE DRAWINGS WERE DEVELOPED FROM AERIAL PHOTOGRAPHY AND SURVEY DATA COLLECTED OVER A NUMBER OF YEARS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL ACTUAL ELEVATIONS.
4. THE LAYOUT OF THE PROJECT FEATURES AS SHOWN SHALL BE FIELD STAKED BY THE CONTRACTOR AND APPROVED BY THE CONTRACTING OFFICER PRIOR TO CONSTRUCTION.
5. THE GOVERNMENT RESERVES THE RIGHT TO MAKE MINOR ADJUSTMENTS TO ANY OF THE PROJECT ALIGNMENTS
6. ALL ELEVATIONS ARE REFERENCED TO MEAN SEAL LEVEL 1912 (MSL 1912).
7. THE MAJORITY OF SUNFISH LAKE IS A STUMP FIELD. DUE CONSIDERATION MUST BE GIVEN TO THE DIFFICULTIES OF NAVIGATING AND DREDGING IN SUCH CONDITIONS.
8. WATER DEPTHS IN THE PROJECT AREA VARY FROM 0 - 2.5 METERS, AT FLAT POOL ELEVATION. THE AVERAGE DEPTH IS APPROXIMATELY 1 METER. FLOATING PLANT ACCESS TO THE PROJECT AREA MAY REQUIRE DREDGING.

1. THE ESTIMATED CAPACITY OF THE CDF, ALLOWING FOR 1.6 METERS OF FREEBOARD, IS APPROXIMATELY 100,000 CUBIC METERS. THE ESTIMATED QUANTITY OF MATERIAL TO BE EXCAVATED FROM ALIGNMENTS D-M IS APPROXIMATELY 80,000 CUBIC METERS. THE CONTRACTOR'S CHANNEL EXCAVATION PLAN MUST ADDRESS HOW EFFLUENT WATER QUALITY STANDARDS WILL BE MET, GIVING CONSIDERATION TO THE CAPACITY OF THE DISPOSAL FACILITY AND THE AMOUNT OF MATERIAL TO BE DREDGED. IF NECESSARY, THE PLAN MAY INCLUDE, BUT NOT BE LIMITED TO: ALTERNATING PERIODS OF DREDGING AND DECANTING; ADDITION OF CHEMICAL FLOCCULANTS; BUCKET/AUGER DREDGING; AND/OR DE-WATERING OF SEDIMENTS.
2. THE CONTRACTOR MUST MAINTAIN AT LEAST 1 METER OF FREEBOARD ABOVE THE WATER SURFACE IN THE CDF AT ALL TIMES, UNLESS OTHERWISE DIRECTED BY THE CONTRACTING OFFICER.

THE GOALS OF THE SUNFISH LAKE HABITAT REHABILITATION AND ENHANCEMENT PROJECT (HREP) ARE TO:

1. RESTORE BACKWATER HABITAT BY REDUCING SEDIMENTATION, AND PROVIDING PROTECTION AGAINST WIND-INDUCED WAVE FORCES THAT CAUSE SEDIMENT RESUSPENSION.
2. CREATE DEEP WATER AQUATIC HABITAT.

THE OBJECTIVES OF THE PROJECT ARE TO:

1. CONSTRUCT A 1568-METER EMBANKMENT TO DEFLECT RIVER FLOWS AWAY FROM THE SUNFISH LAKE AREA AND BREAK UP WIND-INDUCED WAVES.
2. CONSTRUCT A 10-HECTARE SYSTEM OF DEEP-WATER CHANNELS FOR FISH HABITAT.

THE OBJECTIVES OF THE PROJECT ARE TO:

1. CONSTRUCT A 2965-METER EMBANKMENT TO DEFLECT RIVER FLOWS AWAY FROM THE SUNFISH LAKE AREA AND BREAK UP WIND-INDUCED WAVES.
2. CONSTRUCT A 8.8-HECTARE SYSTEM OF DEEP-WATER CHANNELS FOR FISH HABITAT.

1. THE SCOPE OF WORK GENERALLY CONSISTS OF, BUT MAY NOT BE LIMITED TO:
 - A. EMBANKMENT CONSTRUCTION, WITHIN THE RIVER, USING MECHANICALLY EXCAVATED RIVERBED MATERIAL
 - B. CHANNEL EXCAVATION AND DISPOSAL OF MATERIAL IN THE CONFINED DISPOSAL FACILITY (CDF) ACCOMPLISHED BY HYDRAULIC DREDGING OR OTHER APPROVED METHOD
 - C. RIPRAP PLACEMENT
 - D. SEEDING



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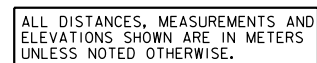
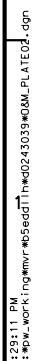
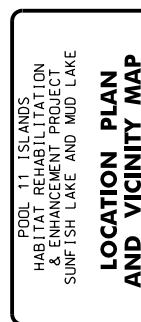
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U. S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ROCK ISLAND, ILLINOIS	Designated By: RTN Drawn By: SDB Checked By: MJA Reviewed By: DJH	Dates: 21 SEP. 2002 Status: AS SHOWN Drawing Code: EP66 Solicitation Number: DACW25-02-R-0008
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POOL 11 ISLANDS
HABITAT REHABILITATION
& ENHANCEMENT PROJECT
SUNFISH LAKE AND MUD LAKE

PROJECT DESCRIPTION

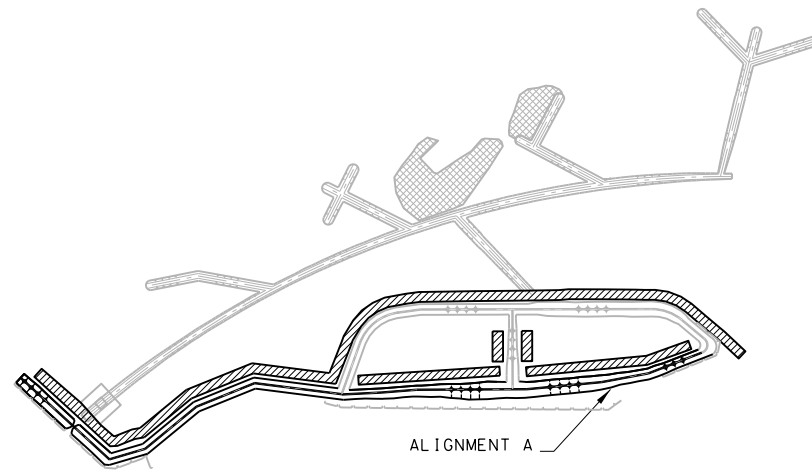
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PLATE 1



THE FOLLOWING PROVIDES A BRIEF DESCRIPTION OF THE MAJOR PROJECT FEATURES.
IT IS NOT NECESSARILY A CONSTRUCTION SEQUENCE.

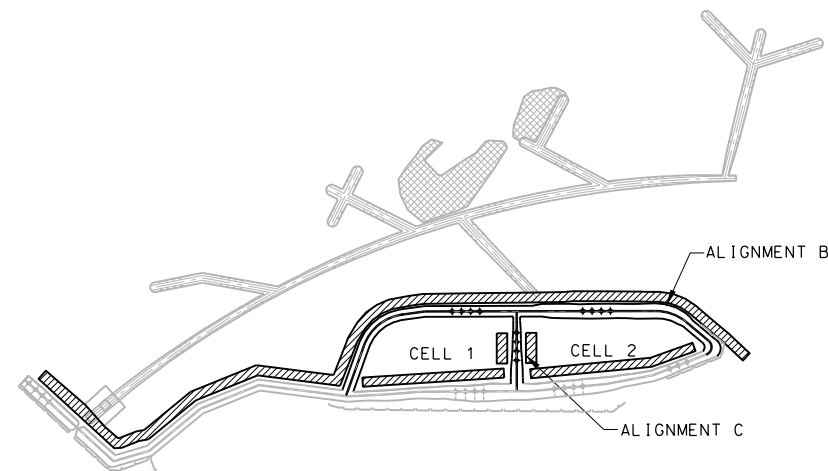


(ALIGNMENT A) CONSTRUCT DEFLECTION EMBANKMENT USING ADJACENT BORROW FROM RIVER BED.



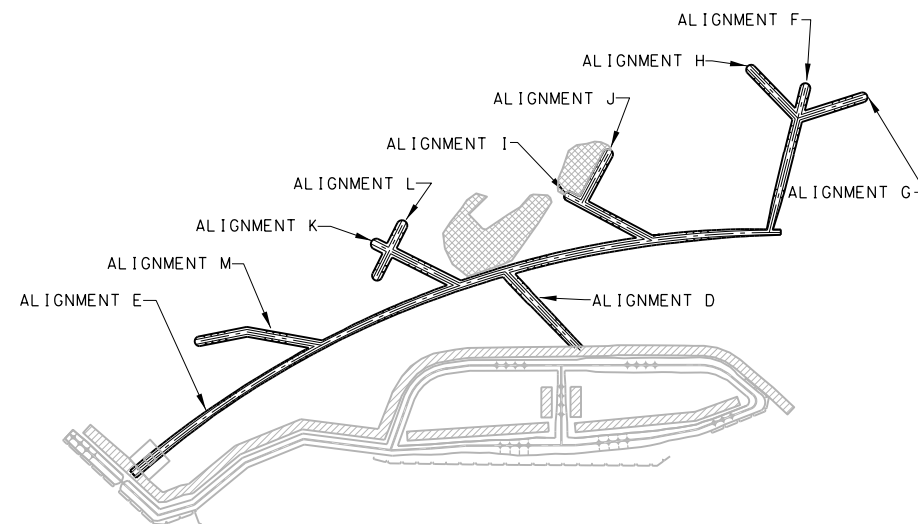
BORINGS INDICATE THE RIVERBED CONSISTS PRIMARILY CLAYS. THE COMPOSITION OF THE MATERIAL REQUIRES THAT EXCAVATION AND PLACEMENT BE ACCOMPLISHED MECHANICALLY, USING A 3 CUBIC METER BUCKET (MINIMUM), TO MAINTAIN IN-SITU SOIL STRENGTH.

(ALIGNMENTS B & C) CONSTRUCT A TWO- CELL CONFINED DISPOSAL FACILITY (CDF) USING ADJACENT BORROW FROM THE RIVERBED.



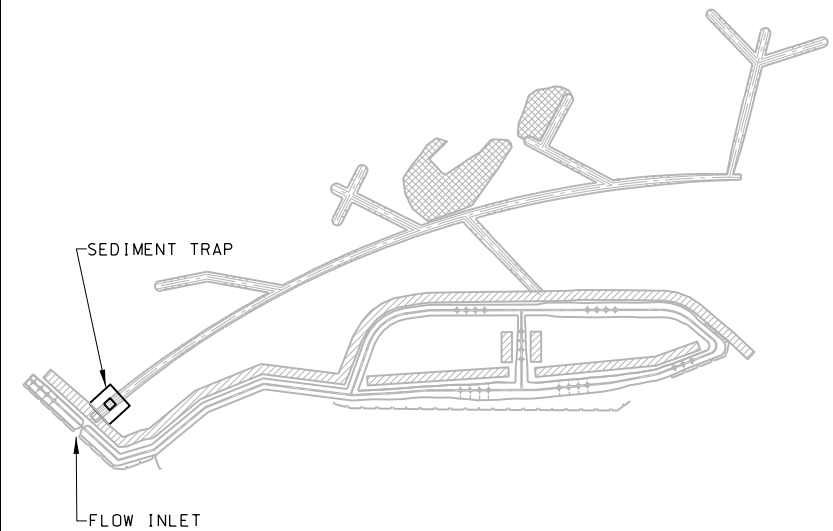
EMBANKMENT FOR THE CDF MUST ALSO BE PLACED MECHANICALLY USING A 3 CUBIC METER BUCKET (MINIMUM).

CONSTRUCT A SYSTEM OF DEEP-WATER CHANNELS FOR FISH HABITAT.

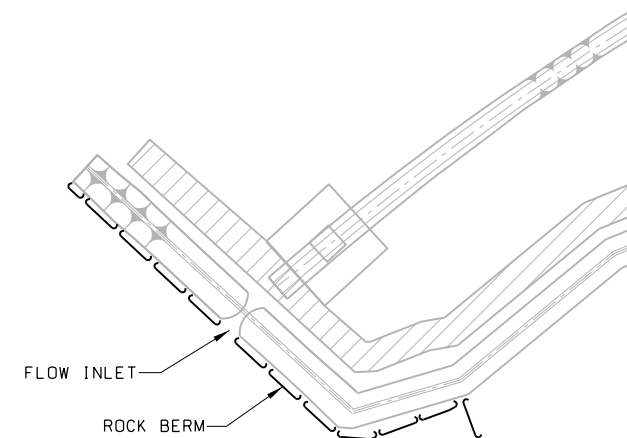


THE EXCAVATED CHANNEL RESULTING FROM EMBANKMENT BORROW OPERATIONS (ALIGNMENTS A & B) WILL PROVIDE APPROXIMATELY 3.8 HECTARES OF FISH HABITAT. THE REMAINING 6.2 HECTARES OF FISH HABITAT CHANNELS (ALIGNMENTS D-M) MAY BE EXCAVATED BY HYDRAULIC PIPELINE DREDGE, BUCKET/AUGER DREDGE, CLAMSHELL DREDGE, OR OTHER SUITABLE MEANS ACCEPTABLE TO THE GOVERNMENT. ALL EXCAVATED MATERIAL FROM CHANNELS D-M MUST BE PLACED IN THE CDF. SEE GENERAL NOTES FOR INFORMATION REGARDING CAPACITY OF CDF ON SHEET X2.

CONSTRUCT A FLOW INLET IN THE DEFLECTION EMBANKMENT TO ALLOW NOMINAL FLOW THROUGH THE NEWLY EXCAVATED CHANNELS. PLACE RIPRAP TO PROTECT THE INLET FROM EROSION. FLOW INLET DETAILS MAY BE FOUND ON SHEET C19. DIRECTLY DOWNSTREAM OF THE FLOW INLET, EXCAVATE A SEDIMENT TRAP. SEDIMENT TRAP DETAILS MAY BE FOUND ON SHEET C19.



CONSTRUCT A ROCK BERM ALONG THE UPSTREAM TOE
OF THE NEW EMBANKMENT, FROM STA 0+00 TO STA 3+50.



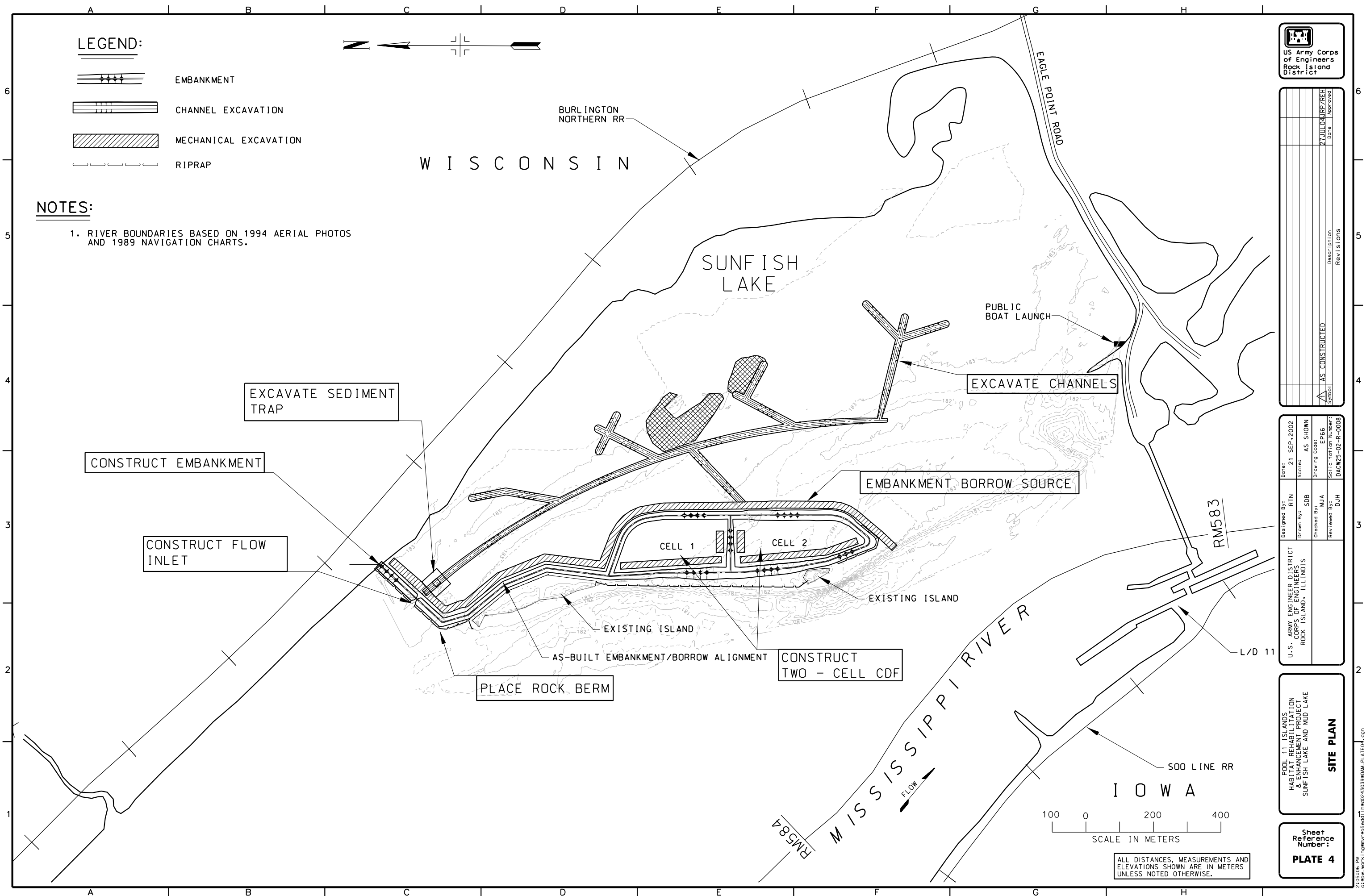
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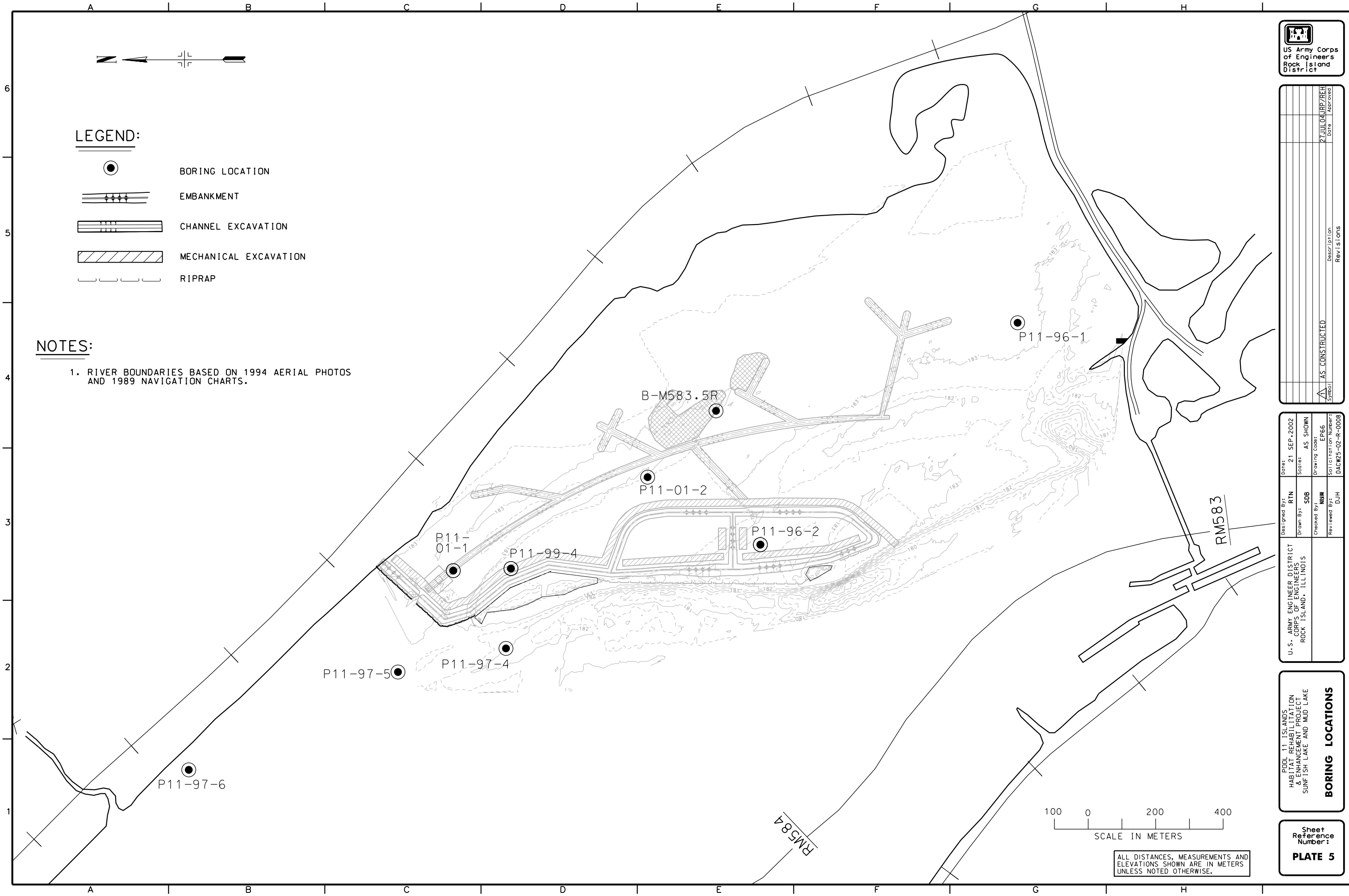
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	Drawn By: 508	Scale: AS SHOWN
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	Reviewed By: B47	Solicitation Number: DACW25-02-R-0008

**CONSTRUCTION
FEATURES**

Sheet
Reference
Number:
PLATE 3






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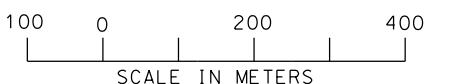
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Symbol	AS			
	AS	CONSTRUCTED	27 JUL 04	JRP/REH

U.S. ARMY ENGINEER DISTRICT CORPS OF ENGINEERS ROCK ISLAND, ILLINOIS	Designed By:	RTN	Date:	21 SEP 2002
	Drawn By:	SDB	Scale:	AS SHOWN
	Checked By:	MMW	Drawing Code:	EP66
	Reviewed By:	DUH	Solicitation Number:	DACW25-02-R-0008

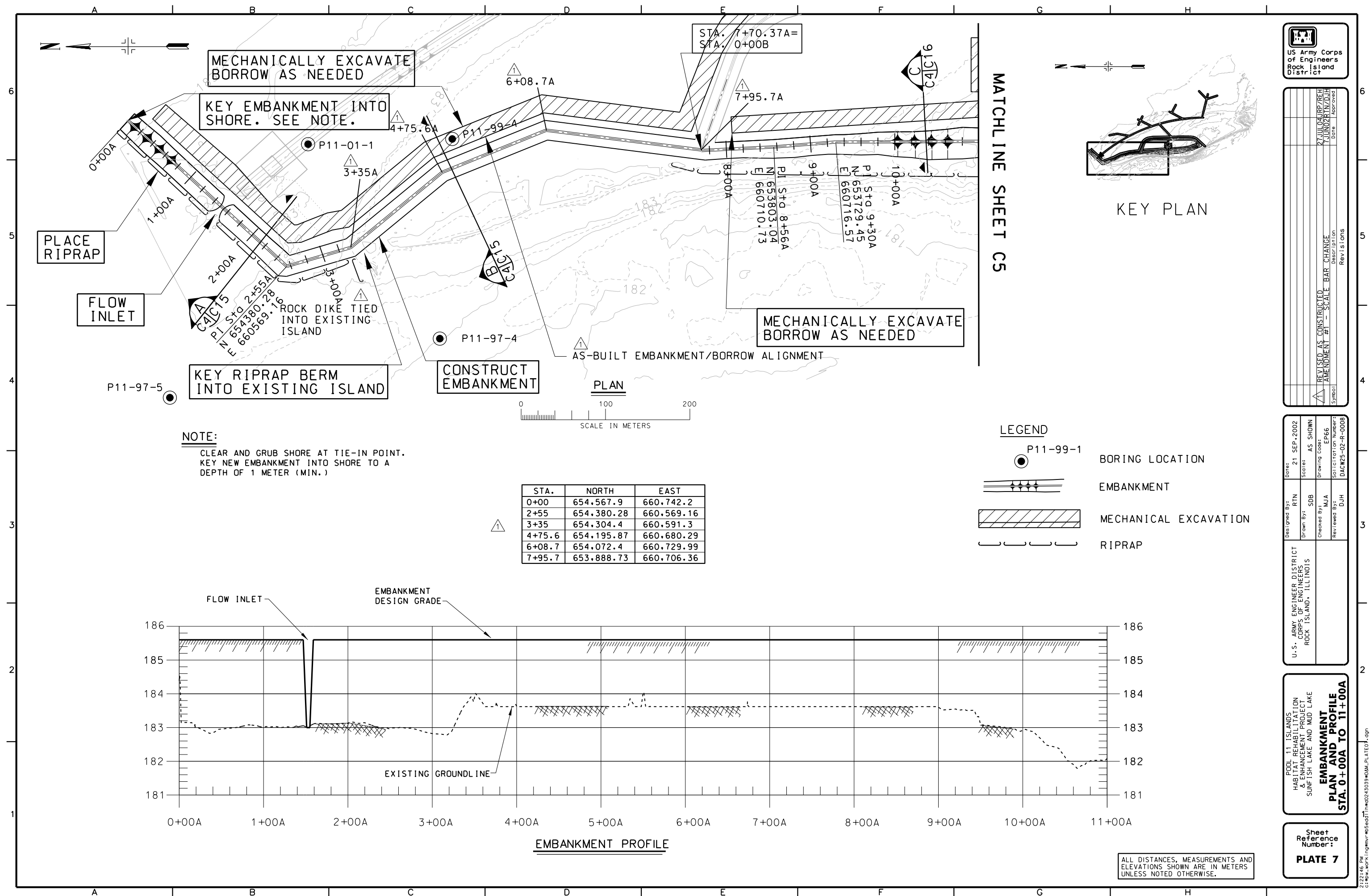
POOL 11 ISLANDS
HABITAT REHABILITATION
& ENHANCEMENT PROJECT
SUNFISH LAKE AND MUD LAKE

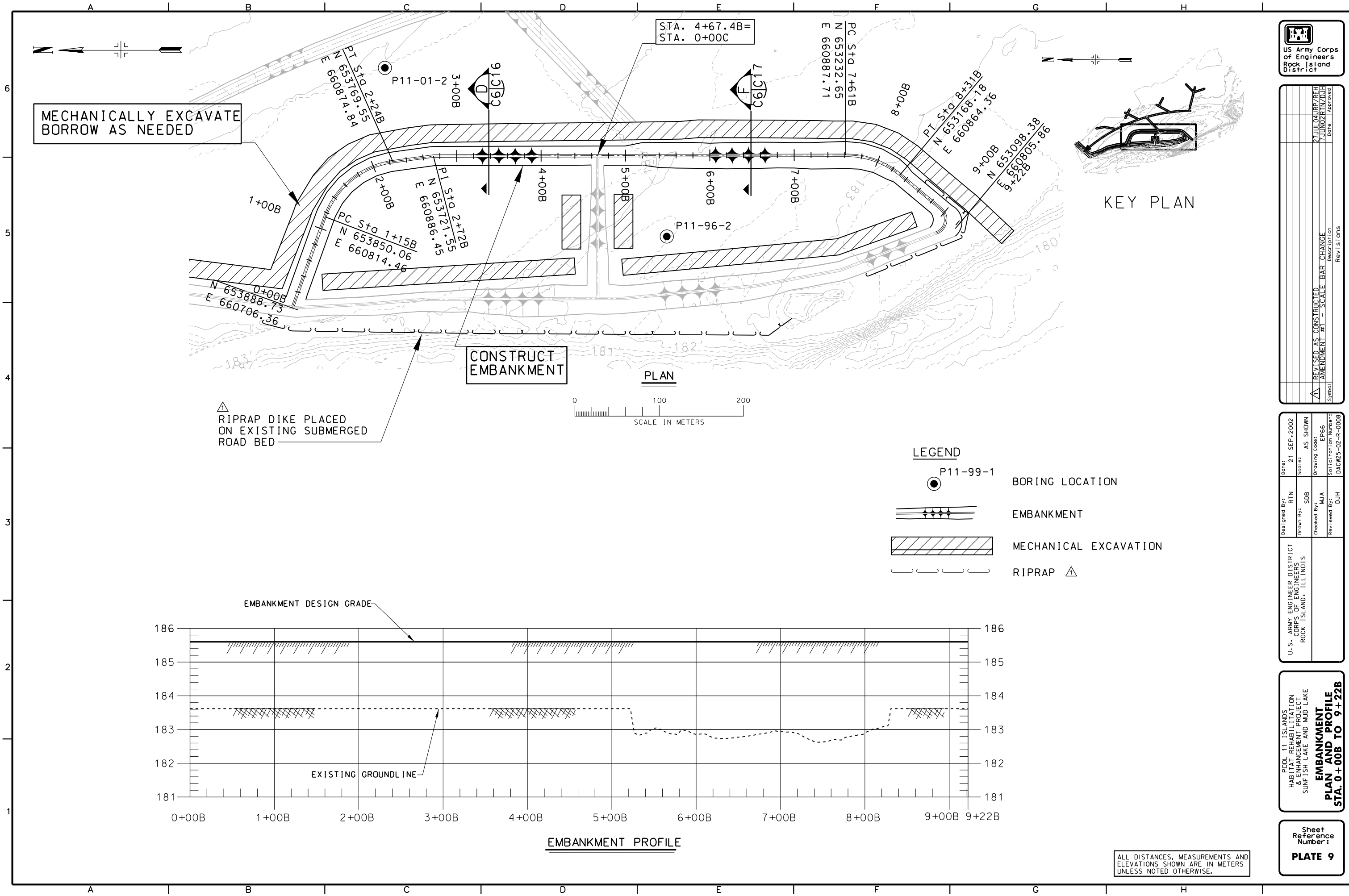
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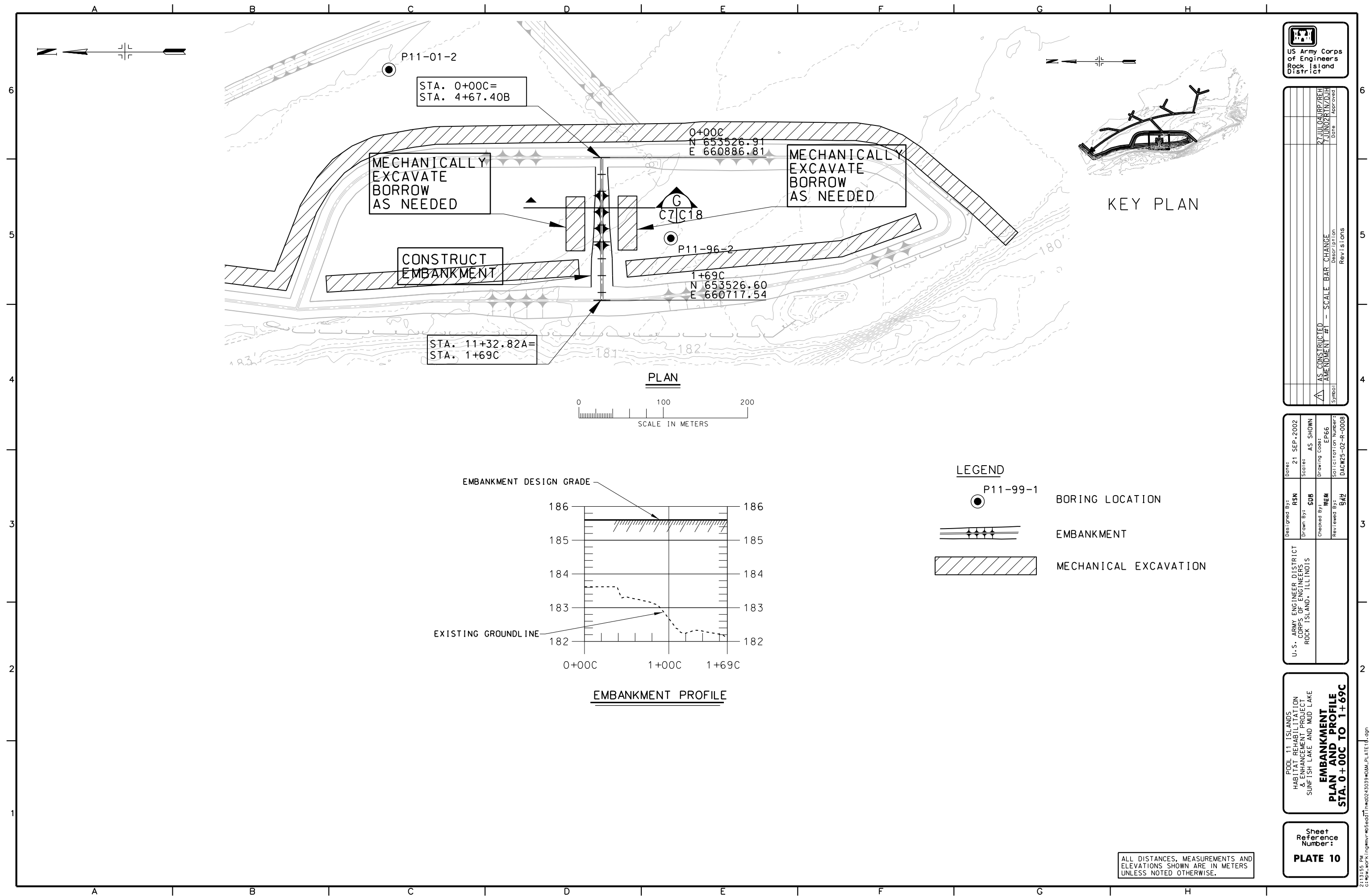
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PLATE 5

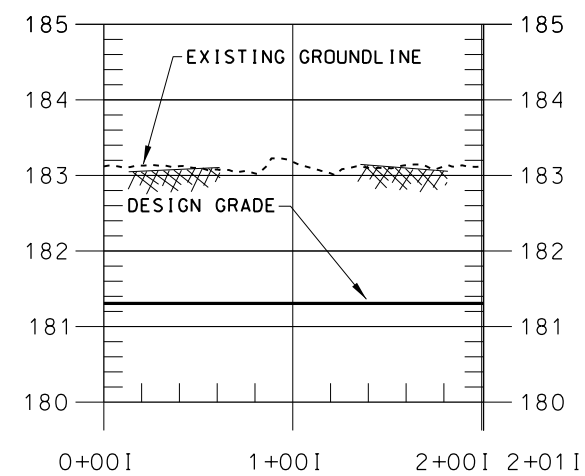
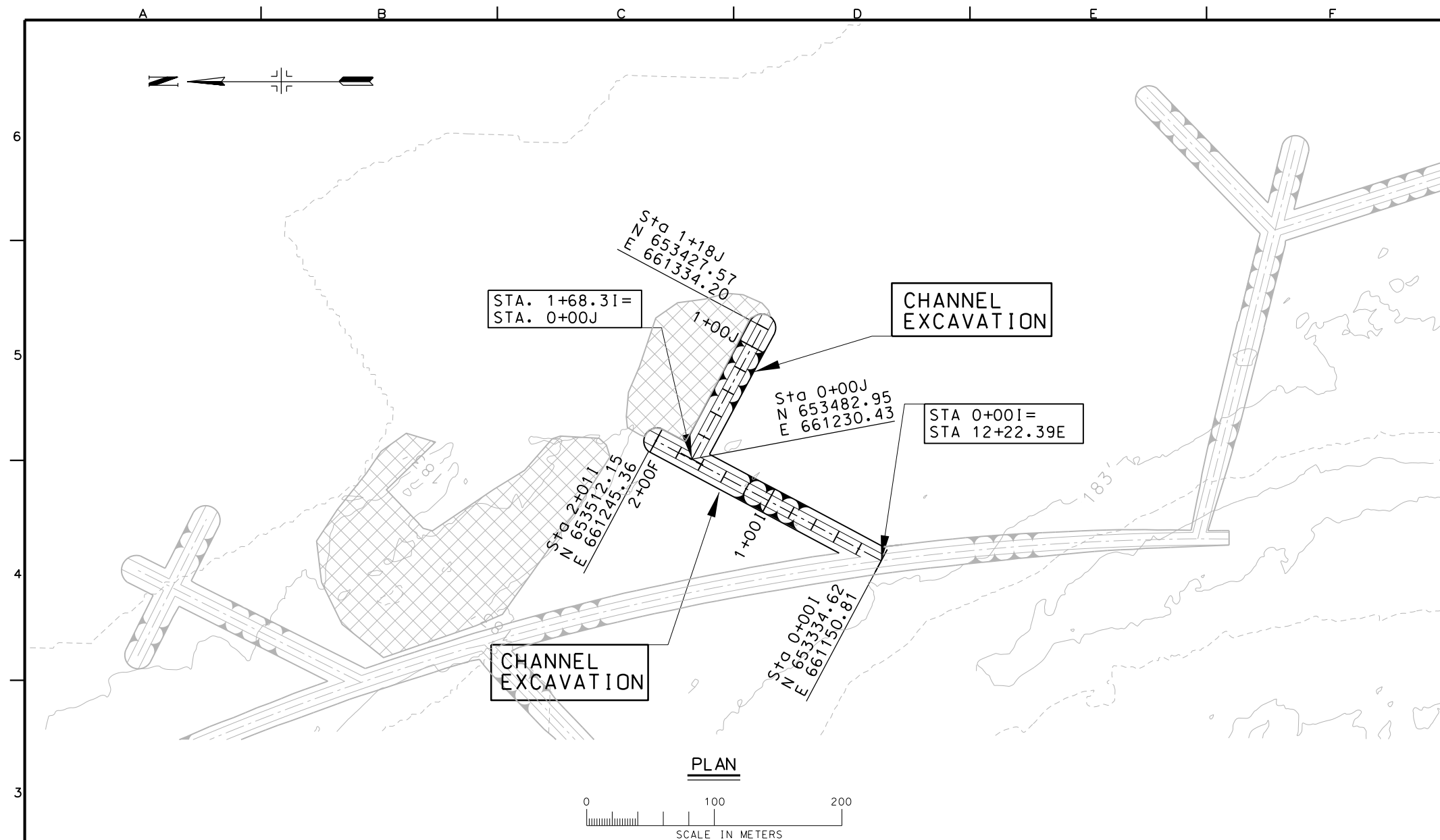


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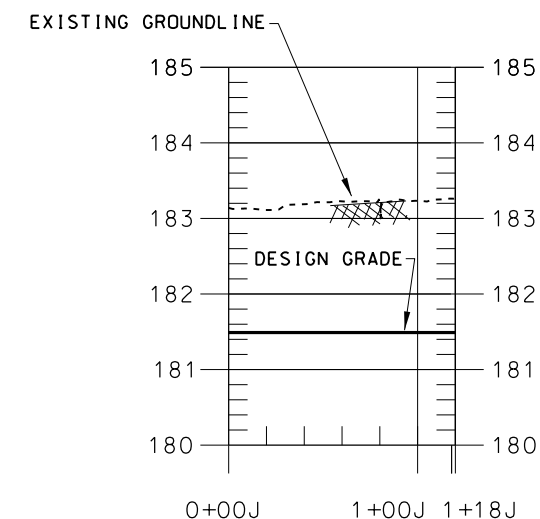






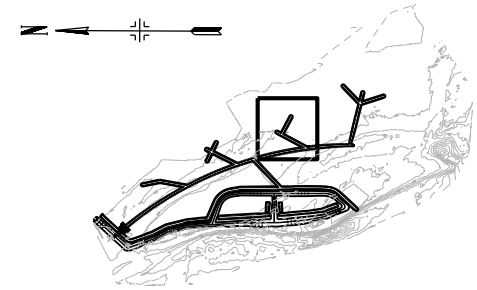


CHANNEL EXCAVATION PROFILE I



CHANNEL EXCAVATION PROFILE J

ALL DISTANCES, MEASUREMENTS AND ELEVATIONS SHOWN ARE IN METERS UNLESS NOTED OTHERWISE.



KEY PLAN



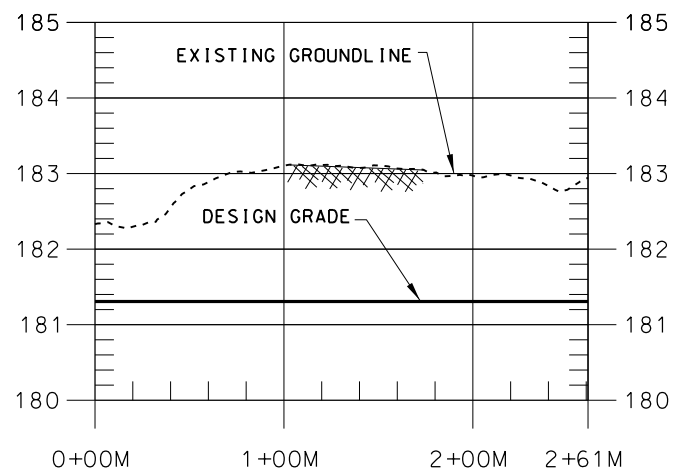
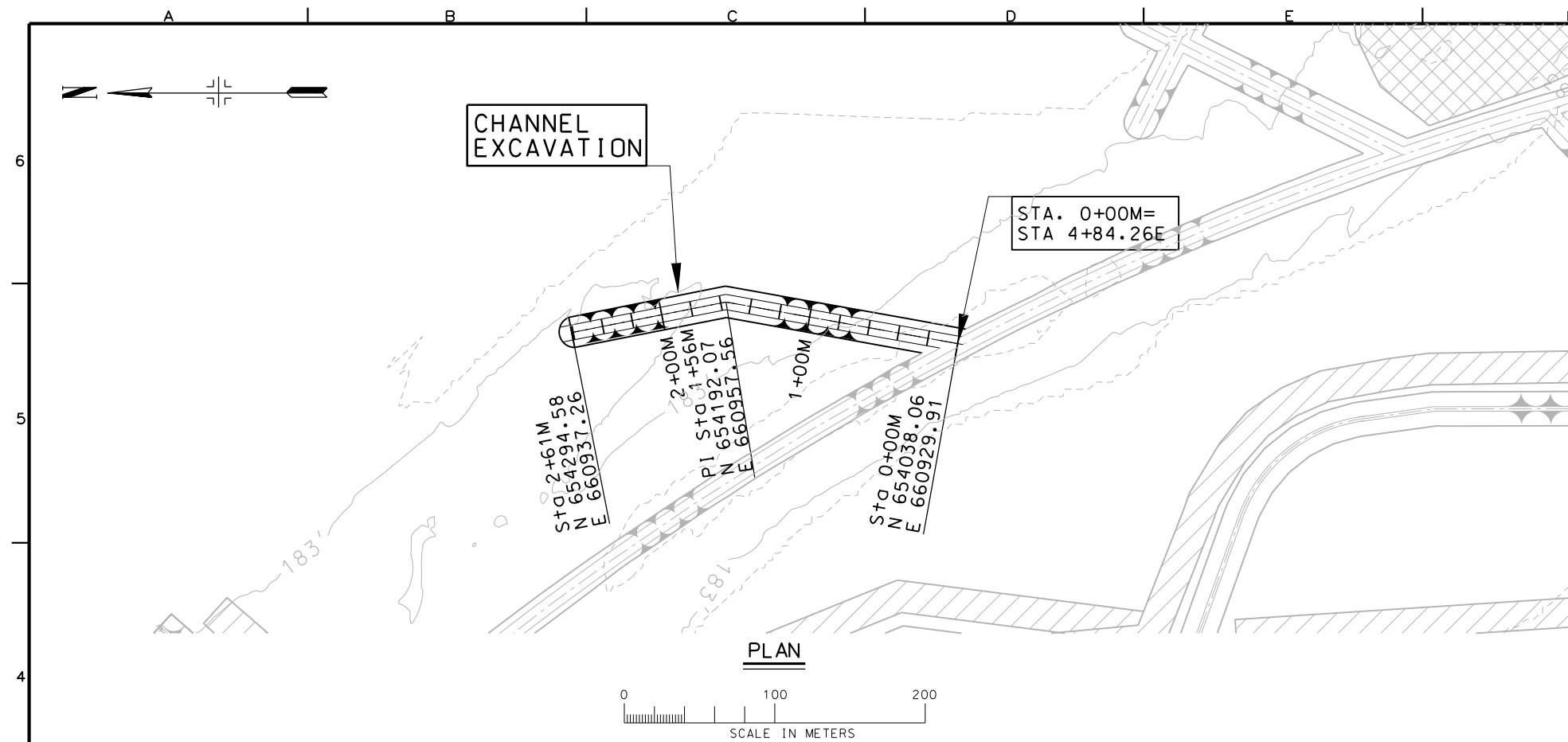
US Army Corps
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Rock Island
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	AS CONSTRUCTED		2 JUL 04 JRP/REH
	AMENDMENT #1	SCALE BAR CHANGE	7 JUN 02 TN/OJH
	Symbol	Description	Date
	Revisions		

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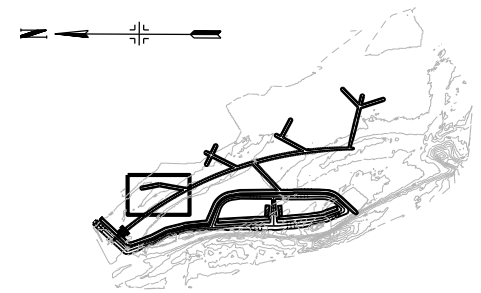
HABITAT REHABILITATION & ENHANCEMENT PROJECT SUNFISH LAKE AND MUD LAKE CHANNEL EXCAVATION PLAN AND PROFILES I, J

Sheet
Reference
Number:
PLATE 15



CHANNEL EXCAVATION PROFILE M

ALL DISTANCES, MEASUREMENTS AND ELEVATIONS SHOWN ARE IN METERS UNLESS NOTED OTHERWISE.



KEY PLAN



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Rock Island
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	AS CONSTRUCTED		BAR CHANGE		27 JUL 04 JRP/REH
	AMENDMENT #1 -		SCALE		7 JUN 02 RTN/DJH
Symbol	Description		Date		Approved
Revisions					

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HABITAT REHABILITATION
& ENHANCEMENT PROJECT
SUNFISH LAKE AND MUD LAKE

CHANNEL EXCAVATION PLAN AND PROFILE M

Sheet
Reference
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PLATE 17 |

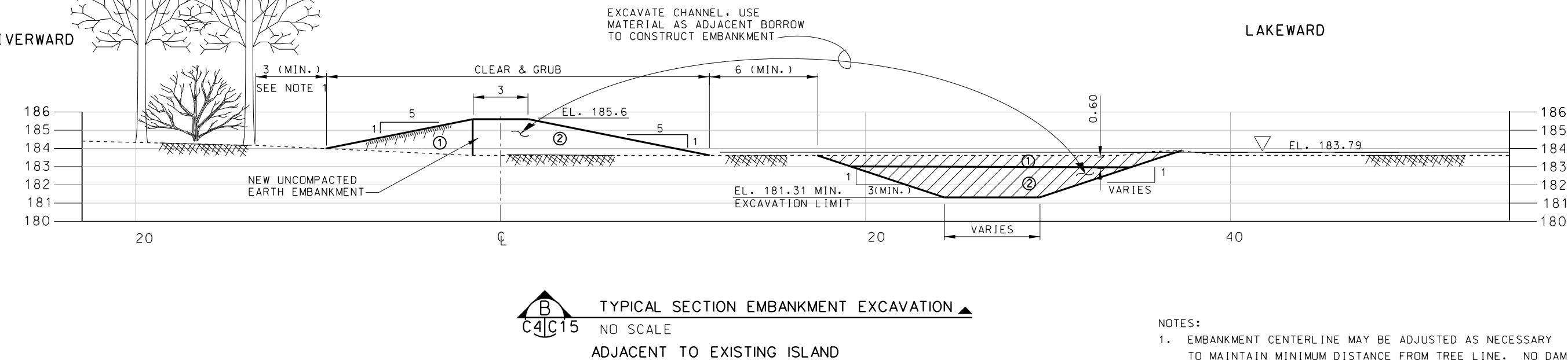
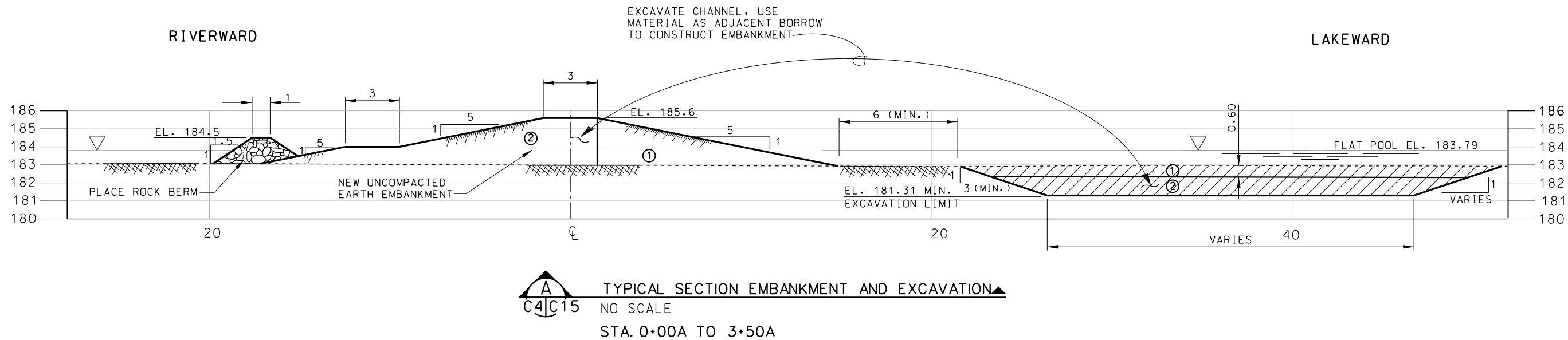
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POOL 11 ISLANDS
HABITAT REHABILITATION
& ENHANCEMENT PROJECT
SUNFISH LAKE AND MUD LAKE

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PLATE 18

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- NOTES:
- EMBANKMENT CENTERLINE MAY BE ADJUSTED AS NECESSARY TO MAINTAIN MINIMUM DISTANCE FROM TREE LINE. NO DAMAGE MAY BE CAUSED TO ANY TREE LARGER THAN 10 CENTIMETER DIAMETER.

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