4-762.7-LWT	Reads Landing	WI/Buffalo/Reads Landing	Federal Government
Site Identification	Site Name	State/County/Municipality	Landowner

Background:

This site was selected by GREAT I (Site No. 4.29T, Reference GREAT I Vol. 8-Part III). This site was endorsed by the RRF on 27 April 1982 (Reads Landing CMP Alt. G). GREAT selected 9.5 acres at this site for temporary placement of material from cut 5. The RRF endorsed Reconnaissance dated May 1982, recommended the following: 1) using the existing 9.5 acres at this site with an additional 5-8 acres for placement of material from cut 5; 2) dredging two sediment traps on the Chippewa River with placement at a site near Hwy 35 and a site at the Wabasha Gravel Pit (4-761.0-RMP); and 3) excavating material from this site to the permanent Wabasha Gravel Pit site (4-761.0-RMP). There are currently 22 acres based on measurements taken from 1992 aerial photography. The Corps will continue past practice and use as site to store material until practical to move. Approximately 1,279,000 cubic yards in 1985 and 1,094,200 cubic yards in 1995 were excavated from this site and transferred to the Wabasha Gravel Pit site (4-761.0-RMP).

Site Characteristics:

The site is in the floodplain and in the floodway. It is bordered by the river, bottomland, hardwoods, and backwater slough. After each excavation, a harbor area open to the main channel will remain providing benefits for recreation. There is no vegetation within the diked containment site.

Site Dimensions:

Area = 22 acres. The area is 1800 feet by 535 feet. This site was excavated to reach the Pre-Fill Elevation. Pre-Fill Elevation = 657.0. Maximum Fill Elevation = 712.0. LCP Elevation = 667.0. Estimated Capacity = 1,300,000 cubic yards.

Beneficial Use:

After excavation the large open harbor area has been used beneficially for recreational purposes and the riverward slopes have been shaped. The excavated material has been moved to the Wabasha Gravel Pit (4-761.0-RMP) for beneficial use removal and landfill.

Equipment Requirments/Limitations:

Hydraulic dredging and placement is the most efficient and practical method for this site. There is no land access to this site.

Special Conditions/Restrictions:

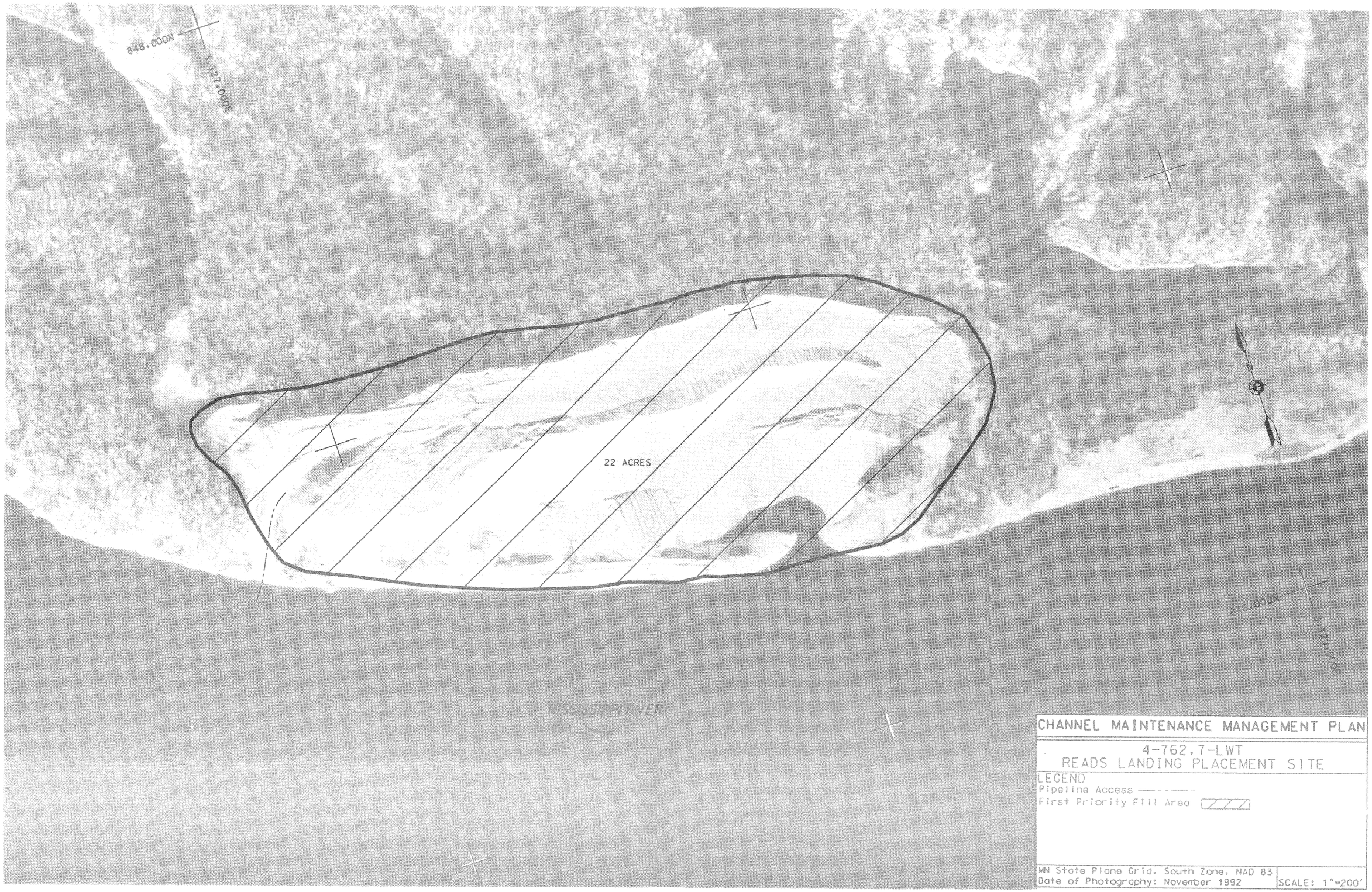
Material must be protected against erosion and will be removed when it is economical or when capacity has been reached. A submerged pipeline should be used when crossing the navigation channel to insure navigation traffic is not delayed during transfer to the Wabasha Gravel Pit site (4-761.0-RMP).

Future Plans:

Material from the Chippewa Delta and the Reads Landing dredge cut will continue to be placed in this site. When capacity is reached material will be excavated. A dike will be maintained and a vegetative screening plan will be implemented.

Permits/Approval Checklists:	Remarks:
☑ Cultural Resources	No action required
☑ Endangered Species	No impact at this site
☑ Floodplain Impact Analysis	No further analysis necessary
☑ NEPA	Covered by the GREAT and O&M, EIS
☑ Real Estate	Owned by federal government
☑ State	Exhibit A of WDNR's MOU
☐ 404(b)(1) Evaluatoin	Long-term 404(b)(1) proposed
Other:	

Potential Dredge Cuts:		Dredge Type	Pipeline Distance			
Name	Mile		Water	Land	Total	Lift
Chippewa River Delta	763.2	H	1000	50-2000	1050-3000	0-45
Reads Landing	761.8-763.8	H	3000	50-2000	3050-5000	0-45



CHANNEL MAINTENANCE MANAGEMENT PLAN

4-762.7-LWT
READS LANDING PLACEMENT SITE

LEGEND
Pipeline Access
First Priority Fill Area

MN State Plane Grid, South Zone, NAD 83
Date of Photography: November 1992

SCALE: 1"=200'

4-761.1-RMP	Carrels Pit	MN/Wabasha/Wabasha	Private
Site Identification	Site Name	State/County/Municipality	Landowner

Background:

This site was selected by GREAT I (Site No. 4.25, Reference GREAT I Vol. 8-Part III). There was no RRF endorsement prior to the CMMP. This site is located immediately upstream from the upper boat harbor in the city of Wabasha, MN. It has reviewed dredge material in the past, but at present there are no plans to use the site due to the current use of the Reads Landing and Wabasha Gravel Pit sites.

Site Characteristics:

This site is an abandoned gravel pit. A moderate growth of vegetation has been reestablished. Adjacent land use is agricultural and residential.

Site Dimensions:

Area = 18 acres. The area is 950 feet by 900 feet. Pre-Fill Elevation = 685.0. Maximum Fill Elevation = 710.0. LCP Elevation = 667.0. Estimated Capacity = 706,000 cubic yards.

Beneficial Use:

Located in Wabasha with good access by road, this site has high potential for beneficial use removal.

Equipment Requirments/Limitations:

Due to the distance, mechanical dredging with either mechanical rehandling (inland transport required), or hydraulic rehandling (diking required) from an inwater site would be necessary.

Special Conditions/Restrictions:

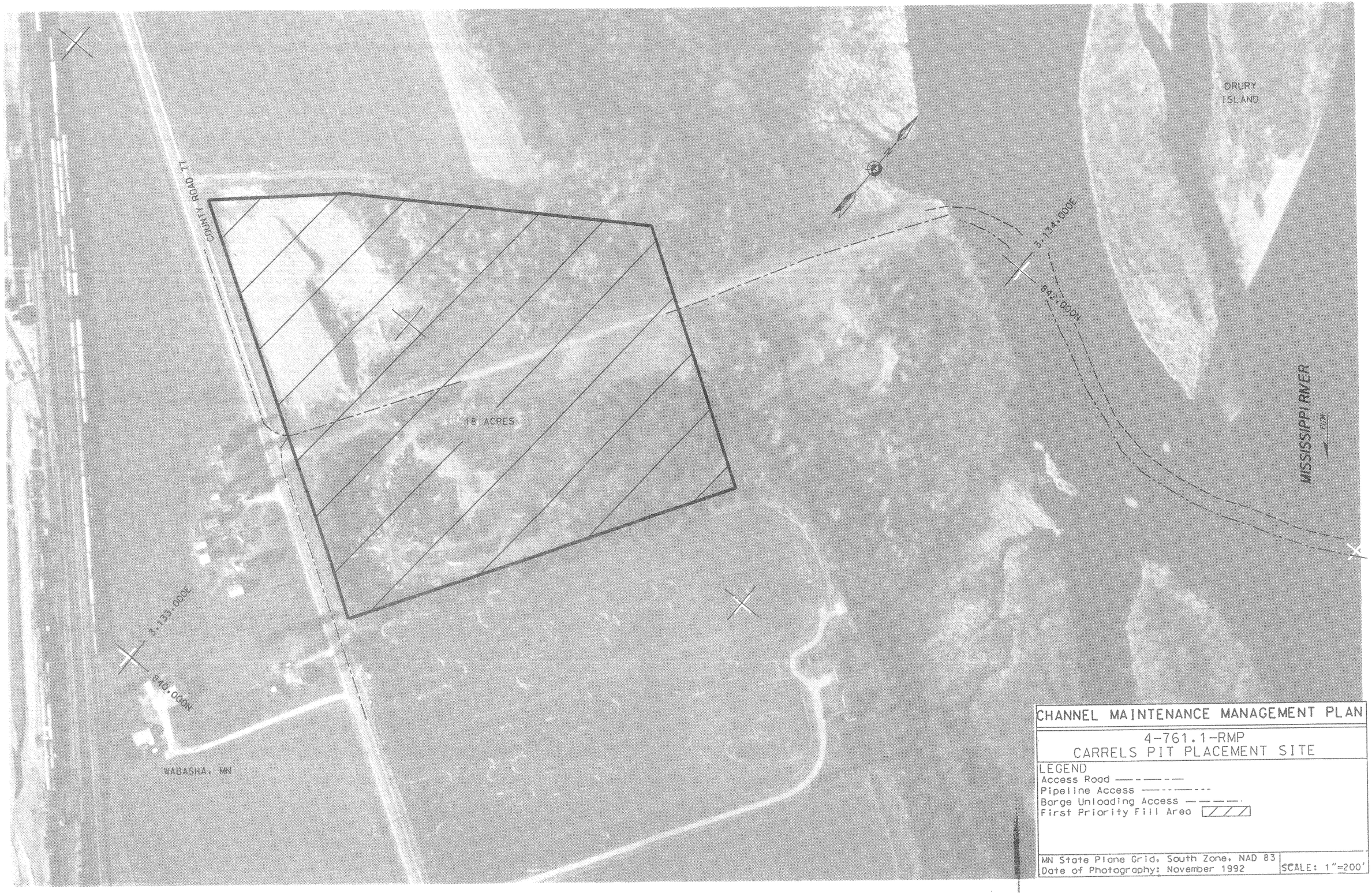
To gain access to the rehandling site in 1982, a wingdam had to be notched.

Future Plans:

This site will be used to supplement the CMMP and provide greater longevity to the recommended sites.

Permits/Approval Checklists:	Remarks:
☑ Cultural Resources	No actoin required
☑ Endangered Species	None found at this site
☑ Floodplain Impact Analysis	No further analysis necessary
☑ NEPA	Covered by the GREAT and O&M, EIS
☐ Real Estate	Requires a permit from the landowner
☑ State	General permits required with MDNR & MPCA
☐ 404(b)(1) Evaluatoin	Long-term 404(b)(1) proposed
Other:	

Potential Dredge Cuts:		Dredge Type	Pipeline Distance			
Name	Mile		Water	Land	Total	Lift
Crats Island	758.5-759.5	M	13200	500-1500	13700-14700	8-38
Reads Landing	761.8-763.8	H	5400	500-1500	5900-6900	8-38


DRURY
ISLAND
COUNTY ROAD 77
18 ACRES
3,134,000E
842,000N
3,133,000E
840,000N
WABASHA, MN
MISSISSIPPI RIVER
FLOW
N
CHANNEL MAINTENANCE MANAGEMENT PLAN
4-761.1-RMP
CARRELS PIT PLACEMENT SITE
LEGEND
Access Road
Pipeline Access
Barge Unloading Access
First Priority Fill Area
MN State Plane Grid, South Zone, NAD 83
Date of Photography: November 1992
SCALE: 1"=200'

4-761.0-RMP	Wabasha Gravel Pit	MN/Wabasha/Wabasha	Federal Government
Site Identification	Site Name	State/County/Municipality	Landowner

Background:

This site was selected by GREAT I (Site No. 4.24, Reference GREAT I Vol. 8-Part III). This site was endorsed by the RRF on 27 April 1982 (Reads Landing CMP Alt. G). GREAT selected 60 acres at this site for permanent placement of material from cuts 4-5. The RRF endorsed Recon. dated May 1982, recommended placement of material at this site form cut 5 and from a sediment trap at the Chippewa Delta. Acres were revised to 86 based on real estate purchased by the Corps. A total of 3,170,183 cubic yards have been placed at this site (370,000 in 1984, 1,505,878 in 1985, and 1,294,305 in 1995) from the Reads Landing placement site (4-762.7-LWT) and the Chippewa River Delta. The Corps and the City of Wabasha are developing a final fill plan that will be coordinated with RRF agencies. At this time, the St. Paul District does not have the capability to reach the pit for each routine job.

Site Characteristics:

This site is an upland abandoned gravel pit vegetated with trees, shrubs, and grasses. GREAT identified the original area as 60 acres of upland meadow. The Corps changed this to 10 acres wetland and 76 acres upland.

Site Dimensions:

Area = 86 acres. The area is 4100 feet by 910 feet. Pre-Fill Elevation = 685.0. Maximum Fill Elevation = 735.0. LCP Elevation = 667.0. Estimated Capacity = 5,890,000 cubic yards.

Beneficial Use:

The site offers good beneficial use removal access and some material has been removed from the stockpile currently at the site. When filled, the land should be developable.

Equipment Requirments/Limitations:

The site is economically accessible only to hydraulic dredging equipment. The excavation of Reads Landing requires a submerged pipeline across the navigation channel to maintain river traffic.

Special Conditions/Restrictions:

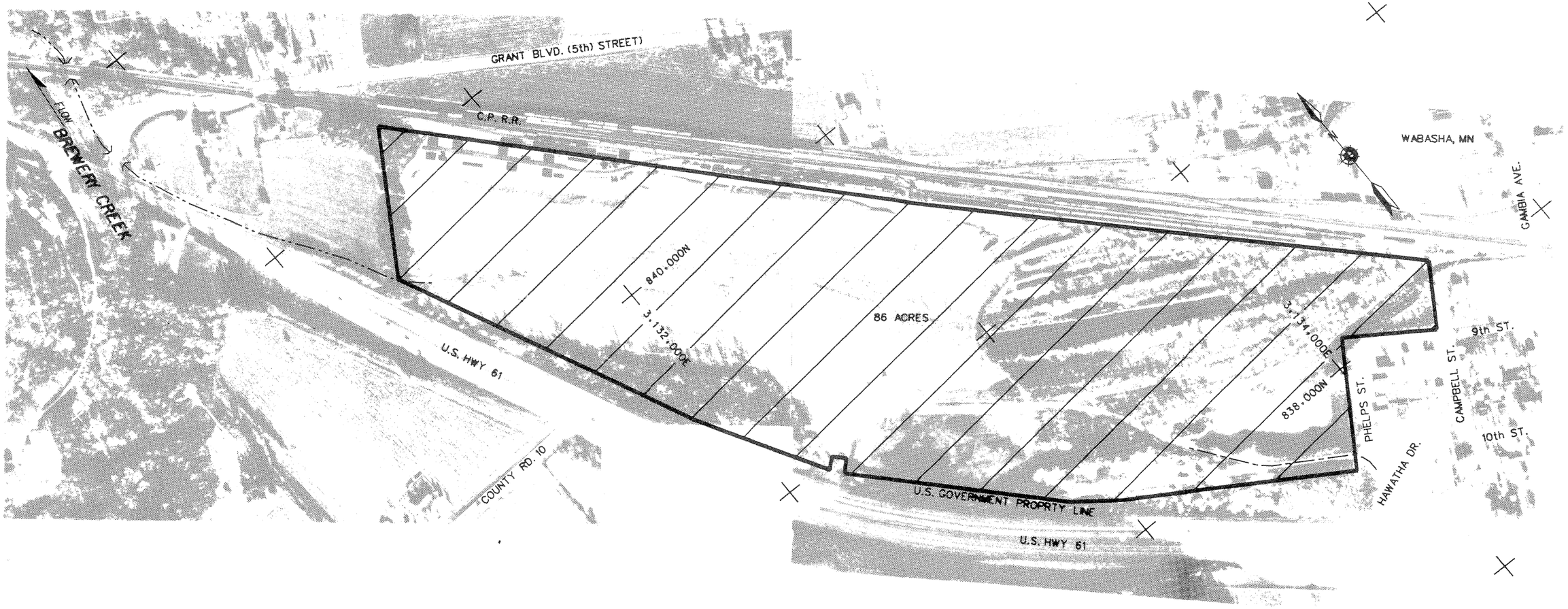
Monitoring of city and private wells near the pit was conducted in 1985 and 1995 before, during, and after placement of material. Insure that ponding effluent water does not inundate discarded railroad ties along the southeast side of the pit. Removing ties before next fill event is required. If necessary, effluent may be pumped through an enclosed pipeline to Brewery Creek.

Future Plans:

A survey will be completed after filling in 1995 to determine remaining capacity. Detailed final fill plans need to be completed. When filled, the Corps will likely dispose of the property. Wabasha has an interest in commercial development.

Permits/Approval Checklists:	Remarks:
☑ Cultural Resources	No action required
☑ Endangered Species	None found at this site
☑ Floodplain Impact Analysis	No further analysis necessary
☑ NEPA	Covered by the GREAT and O&M, EIS
☑ Real Estate	Owned by federal government
☑ State	General permit with MDNR and MPCA
☑ 404(b)(1) Evaluatoin	Long-term 404(b)(1) completed
Other:	

Potential Dredge Cuts:		Dredge Type	Pipeline Distance			
Name	Mile		Water	Land	Total	Lift
Reads Landing Site	4-762.7-LWT	H	1000	6000-9000	7000-10000	58-68
Chippewa River Delta	763.2	H	5000	6000-9000	11000-14000	58-68



CHANNEL MAINTENANCE MANAGEMENT PLAN	
4-761.0-RMP WABASHA GRAVEL PIT PLACEMENT SITE	
LEGEND Access Road —— - ——. Pipeline Access —— - - —— First Proirity Fill Area	
MN State Plane Grid, South Zone, NAD 83 Date of Photography: November 1992	SCALE: 1"=400'

4-759.3-LWT	Crats Island	WI/Buffalo/Wabasha, MN	Federal Government
Site Identification	Site Name	State/County/Municipality	Landowner

Background:

This site was not selected by GREAT I (Site No. 4.16T). The RRF added this site to the temporary/emergency list contained in Action Item 8 of GREAT I on 30 March 1983. On 20 October 1983, the RRF endorsed the Crats Island Reconnaissance Report (Alt C.). The Recon. Report recommended hydraulic dredging of cut 4 to GREAT site 4.17 (4-759.3 RMP) for rehandling and transport by truck to site MDNR.2 (4-760.2-RMP). The Corps proposed a plan to excavate the Crats Island site (4-759.3-LWT) and relocate material to MDNR.2 (4-760.2-RMP) and then reuse the site for routine channel maintenance. On 4 November 1985, the RRF decided the Corps proposal was acceptable and did not require further endorsement. A total of 1,427,000 cubic yards were excavated in 1987. Site MDNR.2 (4-760.2-RMP) received 1,327,000 cubic yards, site 4.19 (4-759.5-RMP) received 90,000 cubic yards, and site 4.17 (4-759.3-RMP) received 10,000 cubic yards.

Site Characteristics:

The excavation of 1,427,000 cubic yards in 1987 created a 22 acre containment site with open water (10' deep) in the middle. The notch for hydraulic dredge access was left open and the site has been used as a harbor for recreational boaters. The site is bound by bottomland forest and the main navigation channel.

Site Dimensions:

Area = 22 acres. The area is 1800 feet by 535 feet. Excavated 1,427,000 cubic yards to reach the Pre-Fill Elevation. Pre-Fill Elevation = 657.0. Maximum Fill Elevation = 707.0. LCP Elevation = 667.0. Estimated Capacity = 1,427,000 cubic yards.

Beneficial Use:

There is no access to the site by road which limits the beneficial uses. The excavated material was used beneficially for landfill and stockpile purposes and the harbor created at the site after excavation has been used by recreational boaters.

Equipment Requirments/Limitations:

This site will be used for direct hydraulic placement from the Crats Island dredge cut.

Special Conditions/Restrictions:

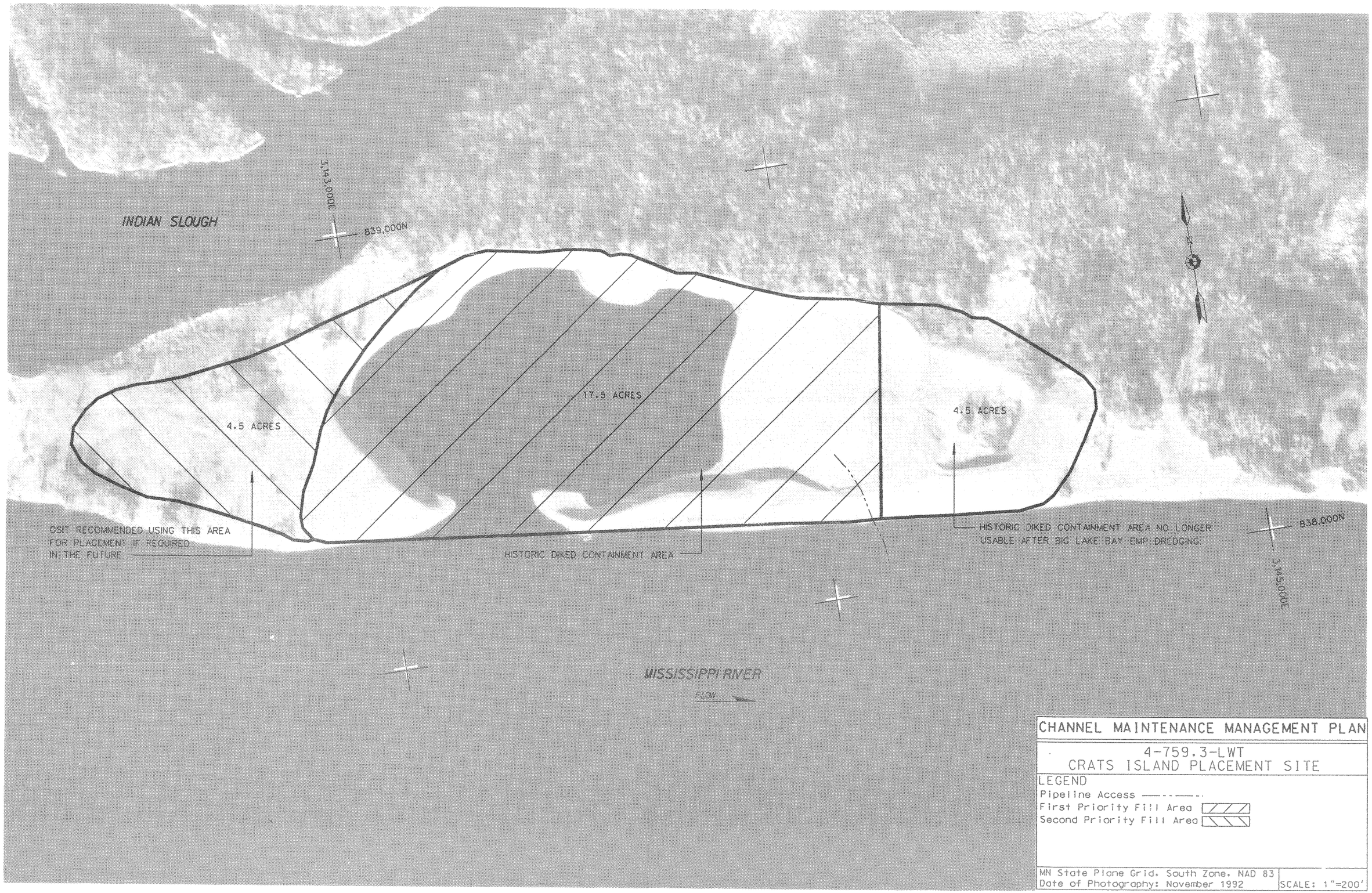
Big Lake Bay EMP dredging reduced the area available for placement by 4.5 acres. The OSIT recommended using area "C" on the site map if necessary in the future to compensate. Area "C" on the site map will only be used after OSIT coordination. Resources agencies recommended dredging deeper the next time the site is excavated to compensate for the 4.5 acres. The Corps will consider the recommendation when the next excavation is required.

Future Plans:

Use at this site is expected to continue. However, quantities placed may be smaller than anticipated due to the effectiveness of the Chippewa Delta sediment trap dredging.

Permits/Approval Checklists:	Remarks:
☑ Cultural Resources	No actoin required
☑ Endangered Species	None found at this site
☑ Floodplain Impact Analysis	No further analysis required
☑ NEPA	Covered by O&M, EIS
☑ Real Estate	Owned by federal government
☑ State	Exhibit A of WDNR's MOU
☐ 404(b)(1) Evaluatoin	Long-term 404(b)(1) proposed
Other:	

Potential Dredge Cuts:		Dredge Type	Pipeline Distance			
Name	Mile		Water	Land	Total	Lift
Crats Island	758.5-759.5	H	2000	50-650	2050-2650	0-40


INDIAN SLOUGH
3,143,000E
839,000N
4.5 ACRES
17.5 ACRES
4.5 ACRES
OSIT RECOMMENDED USING THIS AREA
FOR PLACEMENT IF REQUIRED
IN THE FUTURE
HISTORIC DIKED CONTAINMENT AREA
HISTORIC DIKED CONTAINMENT AREA NO LONGER
USABLE AFTER BIG LAKE BAY EMP DREDGING.
838,000N
3,145,000E
MISSISSIPPI RIVER
FLOW
CHANNEL MAINTENANCE MANAGEMENT PLAN
4-759.3-LWT
CRATS ISLAND PLACEMENT SITE
LEGEND
Pipeline Access
First Priority Fill Area
Second Priority Fill Area
MN State Plane Grid. South Zone. NAD 83
Date of Photography: November 1992
SCALE: 1"=200'

4-757.5-LW	Teepeeota Point	WI/Buffalo/Alma	Federal Government
Site Identification	Site Name	State/County/Municipality	Landowner

Background:

This site was selected by GREAT I (Site No. 4.13T, Reference GREAT I Vol. 8-Part III). This site was endorsed by the RRF on 22 June 1983 (Lower Pool 4 Recon. Alt. B). GREAT selected 7.5 acres as a temporary/emergency site. A Record of Decision was endorsed by RRF with the Recon. The Recon. recommended using 16 existing acres with expansion into 30 additional acres in 3 phases over the 40 year plan (see SPECIAL CONDITIONS 1&2) if dredging at cut 3 exceeded the beneficial use demand at the Alma Marina site (4-754.0-LWP). The RRF endorsed a Corps proposal on 8 December 1992 with the following conditions: 1) pursue taking existing material to the Genoa Power Plant; 2) this continues to be designated as a temporary site; 3) re-vegetation of the site does not preclude the excavation for beneficial use demand in the future. Expansion will start at the existing area and continue upstream as designated by the first, second, third, and fourth priority fill areas as shown on the site map.

Site Characteristics:

The site is a bermed island containment area that has been elevated by past placement of dredged material. Original berms were constructed in 1979. Revegetation projects have been conducted on areas no longer used for dredged material placement.

Site Dimensions:

Area = 46 acres. This area may be required. The area is 3800 feet by 525 feet. Currently at 16 acres. Pre-Fill Elevation = 675.0. Maximum Fill Elevation = 695.0. LCP Elevation = 666.8. Estimated Capacity = 972,000 cubic yards.

Beneficial Use:

Since this is an island site and road access is not possible, the only way material at this site would be used beneficially is through excavation and relocation after capacity is reached.

Equipment Requirments/Limitations:

Both hydraulic and mechanical dredging may be used. However, material dredged from Above Teepeeota Point will be done hydraulically if possible.

Special Conditions/Restrictions:

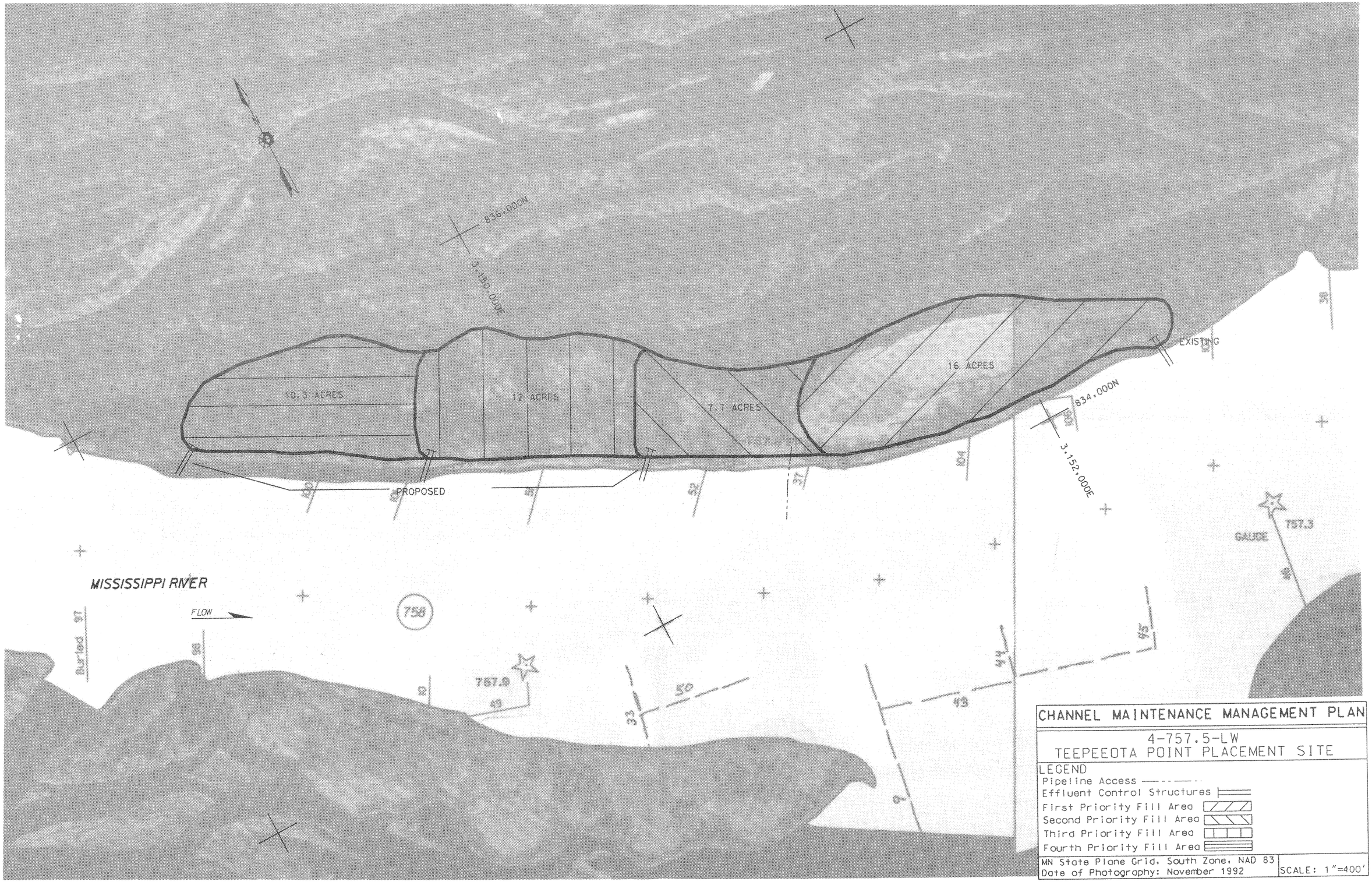
1) The Corps needs to amend the Memorandum of Understanding it has with the WDNR each time the site is expanded. 2) Before expansion of this site the Wabasha Gravel Pits will be reconsidered (Corps 92' proposal explains why use of Wabasha Pits for Teepeeota material will not be pursued).

Future Plans:

This site does not meet the criteria to be a transfer site because there is no current designated permanent site and no ability from the Corps to transfer the material. The Corps will capitalize on opportunities as they arise and will continue to pursue an alternative long-term permanent site. The plan for this site is to expand when necessary, maintain the containment dikes, and continue to use the site for placement of dredge material until filled to capacity. Areas of the site that are filled to capacity and no longer used will be revegetated and stabilized. At this time the site is not designated as transfer or permanent.

Permits/Approval Checklists:	Remarks:
☑ Cultural Resources	No action required
☑ Endangered Species	None found at this site - 07/27/79
☑ Floodplain Impact Analysis	No further analysis necessary
☑ NEPA	Covered by the GREAT and O&M, EIS
☑ Real Estate	Owned by federal government
☑ State	Exhibit A of WDNR's MOU
☐ 404(b)(1) Evaluatoin	Long-term 404(b)(1) proposed
Other:	

Potential Dredge Cuts:		Dredge Type	Pipeline Distance			
Name	Mile		Water	Land	Total	Lift
Teepeeota Point	757.0-757.9	H	200	30-2000	230-2200	28-40


836,000N
3,150,000E
10.3 ACRES
12 ACRES
7.7 ACRES
16 ACRES
EXISTING
834,000N
3,152,000E
PROPOSED
GAUGE
757.3
MISSISSIPPI RIVER
FLOW
758
757.9
Buried 97
CHANNEL MAINTENANCE MANAGEMENT PLAN
4-757.5-LW
TEEPEEOTA POINT PLACEMENT SITE
LEGEND
Pipeline Access
Effluent Control Structures
First Priority Fill Area
Second Priority Fill Area
Third Priority Fill Area
Fourth Priority Fill Area
MN State Plane Grid, South Zone, NAD 83
Date of Photography: November 1992
SCALE: 1"=400'

4-756.5-LWT	Grand Encampment	WI/Buffalo/Alma	Federal Government
Site Identification	Site Name	State/County/Municipality	Landowner

Background:

This site was selected by GREAT I (Site No. 4.10T, Reference GREAT I Vol. 8-Part III). This site was endorsed by the RRF on 22 June 1983 (Lower Pool 4 Recon. Alt. B). GREAT selected 4 acres as a temporary/emergency site for cut 2. A Record of Decision was endorsed by the RRF with the Recon. The Recon. recommended using the existing 8 acres for temporary/emergency placement. Approximately 13,000 cubic yards were excavated in 1988. The Corps is planning to excavate approximately 200,000 cubic yards of material from this site in 1996 or 1997. Because there is no capacity at the permanent Alma Marina site (4-754.0-LWP), material will be trucked away to other suitable locations.

Site Characteristics:

The site is a bermed island containment area that has been used in the past. Revegetation projects have been conducted on areas no longer used for dredged material placement.

Site Dimensions:

Area = 8 acres. The area is 1000 feet by 350 feet. Pre-Fill Elevation = 678.0. Maximum Fill Elevation = 695.0. LCP Elevation = 666.8. Estimated Capacity = 147,500 cubic yards.

Beneficial Use:

There is no road access to the site. Material will likely be used for beneficial use when removed.

Equipment Requirments/Limitations:

The site is suited for hydraulic placements. However, mechanical placement may also be used.

Special Conditions/Restrictions:

Material must be protected against erosion and will be removed when it is economical or when capacity has been reached.

Future Plans:

Continue to use as a transfer site until filled to capacity and then excavate. Material will be transferred to the permanent Alma Marina site (4-754.0-LWP).

Permits/Approval Checklists:	Remarks:
☑ Cultural Resources	No action required
☑ Endangered Species	None found at this site
☑ Floodplain Impact Analysis	No further analysis necessary
☑ NEPA	Covered by the GREAT and O&M, EIS
☑ Real Estate	Owned by federal government
☑ State	Exhibit A of WDNR's MOU
☐ 404(b)(1) Evaluatoin	Long-term 404(b)(1) proposed
Other:	

Potential Dredge Cuts:		Dredge Type	Pipeline Distance			
Name	Mile		Water	Land	Total	Lift
Grand Encampment	755.8-756.9	H	1000	100-800	1100-1800	23-28

833,000N
3,157,000E
8 ACRES
837,000N
3,158,000E
MISSISSIPPI RIVER
FLOW
CHANNEL MAINTENANCE MANAGEMENT PLAN
4-756.5-LWT
GRAND ENCAMPMENT PLACEMENT SITE
LEGEND
Pipeline Access
Barge Unloading Access
Effluent Control Structures
First Priority Fill Area
MN State Plane Grid, South Zone, NAD 83
Date of Photography: November 1992
SCALE: 1"=200'

4-754.0-LWP	Alma Marina	WI/Buffalo/Alma	Federal Government
Site Identification	Site Name	State/County/Municipality	Landowner

Background:

This site was selected by GREAT I (Site No. 4.02, Reference GREAT I Vol. 8-Part III). This site was endorsed by the RRF on 22 June 1983 (Lower Pool 4 Recon. Alt. B). GREAT selected 10.3 acres (open water) at this site for permanent placement from cuts 1-3. A Record of Decision was endorsed by RRF with the Recon. The Recon. recommended using 7 acres piled to elevation 677 with a 200'X300' stockpile with a maximum elevation of 702.0 (25 feet above initial fill elev. 677.0). Cuts 1-3 were taken to this site on a trial basis, but beneficial use did not meet the supply. A corps proposal endorsed by RRF (12/08/92) eliminates placement of cut 3 material at this site but material is still being supplied faster than it is being removed. The Corps is planning to excavate the site in 1996 to replenish the capacity. Material will be trucked away to other suitable locations.

Site Characteristics:

The site is located in the city of Alma and is bound by the river, the Burlington Northern RR., and the Alma Small Boat Harbor. The Corps will use 4 acres of old dredge material and 3 acres of shallow open water. Most of the 7 acres is for landfill and 3 acres will remain for a stockpile.

Site Dimensions:

Area = 7 acres. The area is 650 feet by 470 feet. The stockpile area will have a maximum fill elevation of 702.0 (25 feet higher than the adjacent fill elevation). Pre-Fill Elevation = 667.0 Maximum Fill Elevation = 702.0. LCP Elevation = 666.6. Estimated Capacity = 157,000 cubic yards (stockpile capacity is approximately 50,000 cubic yards).

Beneficial Use:

Approx. 15,000 cy/yr or 600,000 cubic yards for the 40-year period is projected for removal. Removal began in 1980 and since that time removal has been approximately 9,600 cy/yr. Some material has been used as fill at the site, but most has been removed for other uses.

Equipment Requirments/Limitations:

Material from Beef Slough could be placed hydraulically or mechanically. Mechanical unloading may require a short access channel to be dredged.

Special Conditions/Restrictions:

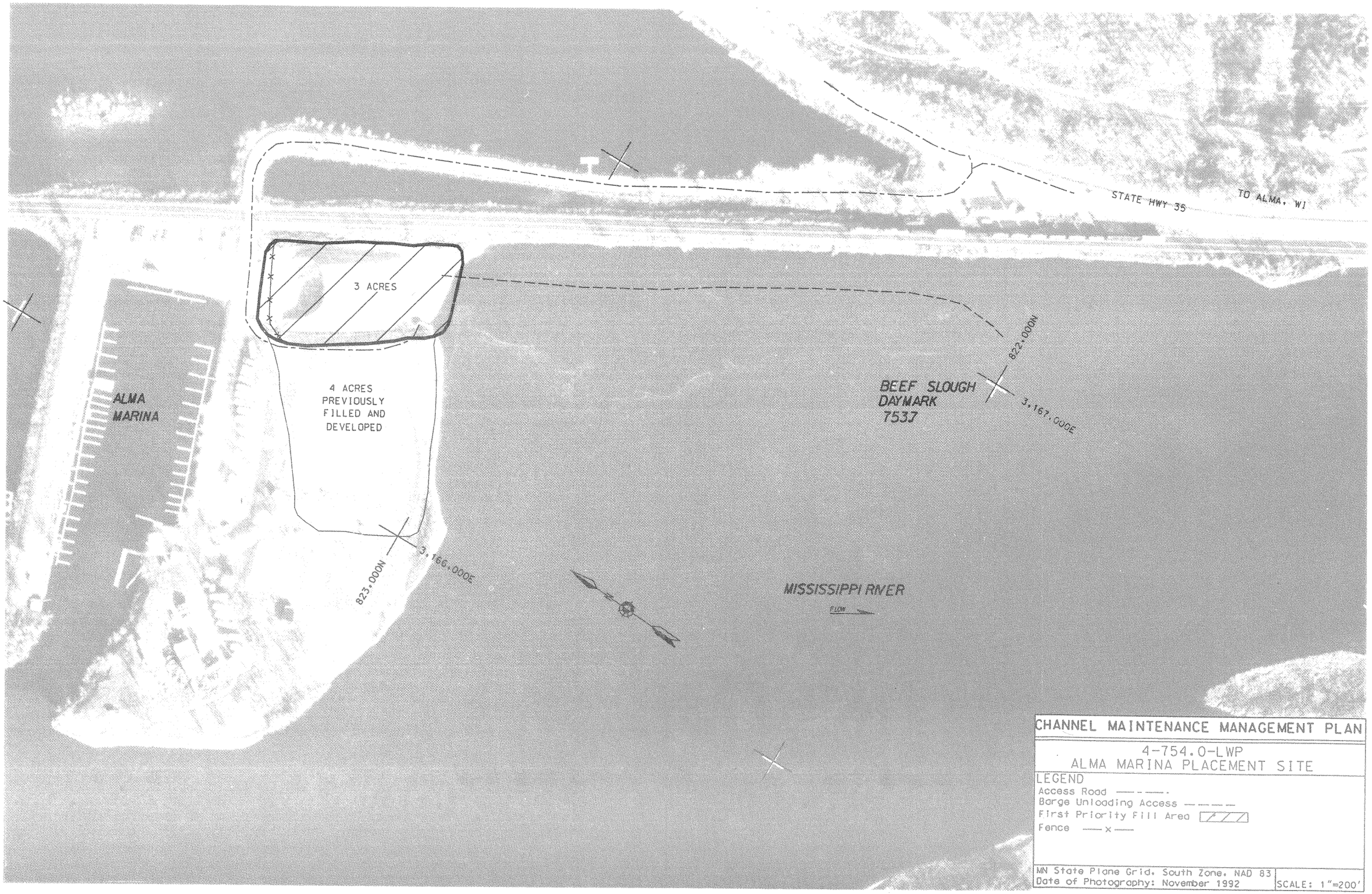
A culvert for circulating water exists at the site and extends from the back of the marina, through the placement site and out on the downstream side. The Corps will extend the culvert as needed for planned expansion of the site. If material is placed near the RR. a stability analysis may be needed.

Future Plans:

Once the area is filled to grade a barge unloading facility may be installed. The site will be operated as a beneficial use removal site.

Permits/Approval Checklists:	Remarks:
☑ Cultural Resources	No action required
☑ Endangered Species	None found at this site
☑ Floodplain Impact Analysis	No further analysis necessary
☑ NEPA	Covered by the GREAT and O&M, EIS
☑ Real Estate	Owned by the federal government
☑ State	Exhibit A of WDNR's MOU
☑ 404(b)(1) Evaluatoin	Long-term evaluation from 7/28/83 to 2025
Other: Stability analysis	May be required for placement near RR

Potential Dredge Cuts:		Dredge Type	Pipeline Distance			
Name	Mile		Water	Land	Total	Lift
Teepeeota Point	757.0-757.9	M	20000	10-200	20010-20200	1-25
Grand Encampment	755.8-756.9	M	14800	10-200	14810-15000	1-25
Grand Encamp. Site	4-756.5-LWT	M,H	13200	10-200	13210-13400	1-25
Beef Slough	753.9-754.6	M,H	1500	10-200	1510-1700	1-25


STATE HWY 35
TO ALMA, WI
3 ACRES
4 ACRES
PREVIOUSLY
FILLED AND
DEVELOPED
ALMA
MARINA
BEEF SLOUGH
DAYMARK
7537
822,000N
3,167,000E
823,000N
3,166,000E
MISSISSIPPI RIVER
FLOW
CHANNEL MAINTENANCE MANAGEMENT PLAN
4-754.0-LWP
ALMA MARINA PLACEMENT SITE
LEGEND
Access Road
Barge Unloading Access
First Priority Fill Area
Fence
MN State Plane Grid, South Zone, NAD 83
Date of Photography: November 1992
SCALE: 1"=200'