APPENDIX E

CORRESPONDENCE

FOR THE

DREDGED MATERIAL MANAGEMENT PLAN
MILWAUKEE HARBOR, WISCONSIN

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

WISCONSIN
DEPT. OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary

101 S. Webster St.
Box 7921
Madison, Wisconsin 53707-7921
Telephone 608-266-2621
FAX 608-267-3579
TTY 608-267-6897

June 28, 2004

Mr. William O'Donoghue
USAED-Detroit
Chief, Technical Services Branch
P.O. Box 1027
Detroit, MI 48231-1027

Subject: Request for CDF Use

Dear Mr. O'Donoghue:

The purpose of this letter is to request use of the U.S. Army Corps of Engineers CDF in Milwaukee, Wisconsin, to dispose up to 170,000 cubic yards of dredged material from the Kinnickinnic River between Becher Street and Kinnickinnic Avenue. The purpose of the project is to restore the river for improvement of local navigation conditions and remove contaminated sediments.

The project is located within the Milwaukee Estuary immediately upstream from the Federal Channel as shown in Figure 1 as well as in the attached information sheet. This stretch of the river was dredged to 21 feet deep between 1915 and 1936 according the available historic nautical charts. Sometime in the 1940s, dredging ceased after designation of the Federal Channel. Subsequently, sediment accumulated and resulted in a shallow condition in the area with the water levels ranging from 0-10 ft below the Lake Michigan chart datum water level (577.5 feet) as referenced to the International Great Lakes Datum 1985.

As a typical urban stream the sediment in the project area is contaminated with various pollutants, but mainly PCBs and PAHs. Multiple studies were conducted between 1980 and 1995 by different investigators to define the sediment contamination, and more recently, new navigation needs. A 2002 effort, conducted by the U.S. Army Corps of Engineers (USACE) and funded jointly by the USACE, U.S. Environmental Protection Agency (USEPA) and Wisconsin DNR (WDNR), assessed and defined sediment contamination in the study area. For your information I have enclosed the 2002 assessment data on a CD.

The 2002 sediment assessment data was used in the development of a Concept Design Documentation Report (CDDR) recently completed by the USACE to assist WDNR in determining the best alternative to meet navigation needs in the study area and remove and dispose of contaminated sediments. The alternatives were developed using an interagency team and input from local land and business owners. There is significant interest in this project at the local, state and federal level. As you can see from the letters received to date [Attachment 1], local government and businesses groups are very supportive of the project. However, they have been patient through the planning process and now want to see the project completed quickly.

To this end, WDNR is working with various government agencies and business groups to complete a final engineering design for the site. We plan to apply for a WDNR and USACE dredging permit in August 2004, finish the engineering design work by December 2004 and dredge in 2005, assuming the project is selected for USEPA funding under the Great Lakes Legacy Act. Subsequently, to avoid delays in our project schedule, we would like to initiate coordination now regarding use of the CDF so that any USACE requirements, special conditions or capacity issues can be addressed and, as necessary, be incorporated into the project design.

I look forward to working with you to complete another step toward implementation of the project. Thank you in advance for your prompt attention to our request. If you have any questions or need further information about the project please contact Xiaochun Zhang at 608-264-8888 or by e-mail ZHANGX@DNR.STATE.WI.US.

Sincerely,

Gregory Hill, Chief
Water Quality Modeling Section
Wisconsin Department of Natural Resources
101 S. Webster St., Box 7921
Madison, WI 53707-7921

Governor Doyle announces $1.5 million Harbor Assistance award for Port of Milwaukee

April 12, 2006

Governor Jim Doyle today announced a $1,488,000 award through the state's Harbor Assistance Program (HAP) that will expand the dredged-material disposal facility at the Port of Milwaukee.

"The Port of Milwaukee is a hub of economic activity that handles a variety of agricultural products and other bulk materials, supporting job growth in Wisconsin and throughout the Midwest," Governor Doyle said. "This award will help the port continue to fulfill its important economic role."

To encourage economic development, Governor Doyle's 2005 - 2007 state budget included $13.9 million to fund the HAP - a $9.7 million increase over the previous two-year state budget. Governor Doyle's "Grow Wisconsin" plan calls for strategic investments in the statewide transportation network to support job growth. In addition to the Port of Milwaukee project, Governor Doyle recently announced two other HAP awards totaling nearly $3 million in Superior and Manitowoc.

The HAP award to the city of Milwaukee will expand the capacity of the Port of Milwaukee's confined disposal facility (CDF) that holds dredged materials. The project is expected to extend the life of the CDF for at least another 10 years. Grant recipients must provide a 20% local match.

Created in 1979, the HAP assists harbor communities to maintain and improve waterborne commerce. Port projects typically involve dock reconstruction, mooring structure replacement, dredging and the construction of facilities to hold dredged material. Since the program began, the Wisconsin Department of Transportation (WisDOT) has administered some $50.2 million in matching funds for 56 port preservation and improvement projects. Successful projects must pass a rigorous cost/benefit analysis and must receive favorable recommendations from the state Harbor Advisory Council and the WisDOT Secretary. Wisconsin's harbors move some 40 million tons of goods worth over $7 billion each year and support some 11,400 jobs.

For more information contact:
Larry Kieck, WisDOT Bureau of Transit, Local Roads, Rails and Harbors

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Law of the month

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Public hearings and meetings

WisDOT media contacts

(608) 267-9319 lawrence.kieck@dot.state.wi.us

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Questions about the content of this page:
Office of Public Affairs, opa.exec@dot.state.wi.us
Last modified: April 12, 2006

Bowman, David W LRE

From: Bowman, David W LRE
Sent: Wednesday, May 10, 2006 10:05 AM
To: White, Michael B LRDOR; Hempfling, Thomas E LRDGL; Brown, Theodore A LRDOR; Pawlus, Larry LRE; Fulford, Mike B LRE; O'Bryan, Michael K LRE; Schloop, Wayne LRE; Mundell, Angela R LRE; Miller, Jan A LRDGL; O'Keefe, Gary A LRE; Long, Terry A LRE; Foster, David L LRE; Johnson, Thomas R LRE; Malaikal, Jan C MAJ LRE
Subject: Milwaukee Site Visit - DMMP

1. Attendees:

Dave Bowman - PM
Tom Johnson - LMAO
Mike White - LRD
Jan Miller - LRD
Eric Reinelt - Port Director
Larry Sullivan - Port Engineer
Jim Clausner - ERDC-WES

2. Meeting convened on 4 May 2006. Attendees met for a brief discussion of the Port of Milwaukee. The Port Director outlined some of the long-term plans of the Port. The Port of Milwaukee appears to be a vital concern with steady growth in the market. One of the areas where they see a lot of growth is in barge traffic. Barges are floated up the Mississippi and then through Chicago into Lake Michigan to Milwaukee. They reported that this type of transport costs only about $20/ton. (Later, on a tour of the Port we saw one of those barges being unloaded (Attached photos)).

After the meeting the Port Director took Mr. White on a tour of the Port of Milwaukee, including the Milwaukee CDF, the old car ferry slip that the Port Authority proposes to fill in with 80,000 cubic yards of dredged material from the CDF, and the proposed dredging area for the Kinnickinnic River. A portion of the Milwaukee CDF was leased back to the Port and they constructed a ferry terminal on that portion of the CDF. Mr. White was very impressed with this beneficial use of a CDF and recommended that the District and the Port work together to write up the story for publication. The Port and the Corps discussed the DMMP process. The Port asked the Corps to focus on two alternatives - raising the CDF dikes and northward expansion. Each alternative presents some potential environmental and engineering issues. Mr. White indicated that LRD strongly supported the link with the KK River project and the win-win nature of the project with the Port, the EPA, the Wisconsin DNR, and the Corps all benefiting from the project. He emphasized that the District needed to maintain close coordination with the Port to ensure that we meet the schedule imposed by the State grant that the Port has received. Scheduling is also critical to meet Federal funding cycles.

On Friday the PM met with the EPA, DNR, Port and stakeholders to provide the status of soil borings and stability analysis work being done by the Corps. The PM also met separately with the Port to outline design parameters for the DMMP. The Port provided

additional information about dredge quantities and that information will be reviewed.

Pictures of the first of several barges the Port of Milwaukee's tenant, Advance Boiler and Tank, located at the Ports inner harbor mooring basin, will receive for a local power plant project. Advance will fabricate these pieces and then barge them to the power plant later this summer. The first barge arrived on May 3rd, 2006; others are expected in June, October, November, December and next March.

The barge and tug used to transport these stainless steel structures to Chicago was Volunteer Barge & Transport of Nashville, TN. The pieces manufactured by PSP Industries of Mississippi were loaded in Utica, Mississippi. Once in Chicago, Calumet River Fleeting towed the barge to Milwaukee along the Lake Michigan coastline. The river barge service to/from Milwaukee is connected to the Mississippi River through the Illinois River, and is available year round.

IMG_0513.JPGIMG_0521.JPG

KINNICKINNIC RIVER RESTORATION PROJECT
FINAL ENGINEERING DESIGN -SHORELINE STABILIZATION
MEETING, May 16, 2007
MEMORANDUM OF MINUTES

Logistics: The meeting began at 1:00 p.m. at the Port of Milwaukee office
Attendees: Larry Sullivan – Port of Milwaukee
Yisheng Lan – Port of Milwaukee
Todd Brachman – Lincoln Warehouse
Richard and Tom Gold – Lincoln Warehouse
Dave Ferron – Paul Davis
Gorge Marek – Quarles and Brady for Raitt Corporation
Lloyd Stephien – Commercial Heat Treating
Kevin Connell – Commercial Heat Treating
Chris Svoboda – Pier Milwaukee
Jerry Starr – B+E 53207
John Klement – Icon Development
Dan Druml – Paul Davis
Gregory F. Bird – Citizen
Sharon Gayan – Wisconsin DNR
Greg Hill – Wisconsin DNR (via teleconference)
Marsha Burzynski – Wisconsin DNR
Xiaochun Zhang – Wisconsin DNR

Key Issues discussed at the meeting:

❖ Project Update

- Barr Engineering will provide a preliminary final engineering design report on May 18, 2007
- The budget item proposed by the Governor for sediment remediation to match federal fund has been adopted by the Joint Committee on Finance of the Wisconsin Legislature. Then the budget proposal will be taken up by the Senate and Assembly.
- USACE is preparing a final design of a cell on Jones Island CDF for disposal of dredged materials from the KK River project area.
- USEPA and WDNR will soon enter a project agreement for supplemental design and remedial planning work for the project.

❖ Shoreline Protection Options

The primary purpose of this meeting was to get feedback from BID members on shoreline protection options. Our goal was to identify the preferred protection option for each riparian property parcel. After going through a discussion session, some of the riparian property owners reached a final decision. Table 1 summarizes the current status for each parcel.

Follow-up action: To those property owners/manager who have not made a final decision, it will be greatly appreciated if you could provide your decision to Xiaochun Zhang by May 25, 2007.

This step affects the overall project such as final engineering design, dredging permits application and approval and project funding. If you still have questions, please feel free to ask.

- **Input to dredging design elements (Attachment A for March-23-07 meeting)**

  - There might be confusions about the attachment A. Each property owner may provide his/her concerns and recommendations (if there is any) regarding the design elements listed in Attachment A. You could submit yours either to WDNR individually or as part of BID's collective comments. WDNR plans to complete the final engineering design report for dredging by the end of July. We will appreciate your comments no later than June 30, 2007. However, the sooner the better.

If anyone finds mistakes and/or missing main items in the above, please let Xiaochun Zhang know. Thank you for your participation in the meeting and support to the project.

Shoreline Protection -KK River Sediment Remediation Project

Parcel Number	Existing shoreline features	Business Owners/ Operation managers	Preferred shoreline protection option	Design for the preferred option		Comments
				Cost/ firm	Timeline	
425	Timber wall/	Commercial Heating/Fishing	Steel Sheet Piling (SSP)			
426A & 426B	Timber wall w/ concrete cap	Icon Development/ Milwaukee Marine	Unknown			considering SSP?
427	Timber wall (analyzed as not protected)	Paul Davis	SSP			
428	Timber wall (analyzed as not protected)	Paul Davis	SSP			
429	**Steel sheet piles (SSP)**	Pier Milwaukee	Baseline option			
432&433	**SSP**	Gillen Comp.	Additional SSP/or a waiver			Followed up after meeting
436	Apparently not protected	RAITT Company/ Gillen Comp.	Unknown/.			owner was absent at the meeting (absent)
437	Timber wall/concrete	Pump House Marina	Unknown /			absent
439	Apparently not protected	Lincoln Warehouse	Baseline option			considering other options
440	**SSP**	RDAR Corp.	Baseline option?			absent
441	Timber wall	B & E 53207 Corp, South wing marine	SSP			
442	Railroad crossing		Not applicable			
443	Not affected	Jon R Curro	Not applicable			

DEPARTMENT OF THE ARMY
DETROIT DISTRICT, CORPS OF ENGINEERS
BOX 1027
DETROIT, MICHIGAN 48231-1027

July 30, 2007

IN REPLY REFER TO:

Planning, Programs, & Project Management

Mr. Larry Sullivan
Harbor Engineer
2323 S. Lincoln Memorial Dr.
Milwaukee, WI 53207

Dear Mr. Sullivan;

This will provide for your review, technical information regarding the development of the design for a cell within the Milwaukee Harbor Confined Disposal Facility in Milwaukee, Wisconsin. The U.S. Environmental Protection Agency's Great Lakes National Program Office (GLNPO) and the Wisconsin Department of Natural Resources (WDNR) are proposing to conduct a sediment remediation project on the Kinnickinnic River in Milwaukee under authority of the Great Lakes Legacy Act. The U.S. Army Corps of Engineers, Detroit District (Corps) is designing a cell ("KK cell") to contain dredged material proposed to be placed in the Milwaukee Confined Disposal Facility (CDF) as part of a Support for Others Agreement with GLNPO. The proposed configuration of the KK cell is provided as Figures 1 and 2. This design is currently undergoing review by the U.S. Environmental Protection Agency and may undergo minor modifications.

In addition, Cell Design and Operation information (Attachment 1) is being provided in response to an e-mail dated March 23, 2007 from Mr. Bizhan Sheikholeslami (WDNR Waste and Materials Management Program) and subsequent conference calls. Participants in the calls included the WDNR Bureau of Watershed Management, the Milwaukee Port Authority, and the U.S. Environmental Protection Agency's Great Lakes National Program Office (GLNPO). The e-mail expressed concern about the elevation distance between the bottom of the proposed cell and the Low Water Datum for Lake Michigan and indicated that State regulations require that there shall be a separation distance of 10 feet between the lake elevation (Low Water Datum (LWD) =577.5 – IGLD 1985) and the bottom of the KK cell. The proposed design calls for a cell with a bottom elevation 1 foot above LWD. Wisconsin Statutes state that the WDNR can exempt certain solid waste facilities from the licensed landfill requirements on a case by case basis. Mr. Sheikholeslami suggested that the Corps should provide information which explains why the site should be exempted from the licensed landfill requirements. Mr. Sheikholeslami's memo further suggested that the request for exemption should come from the Port Authority as the owner of the site.

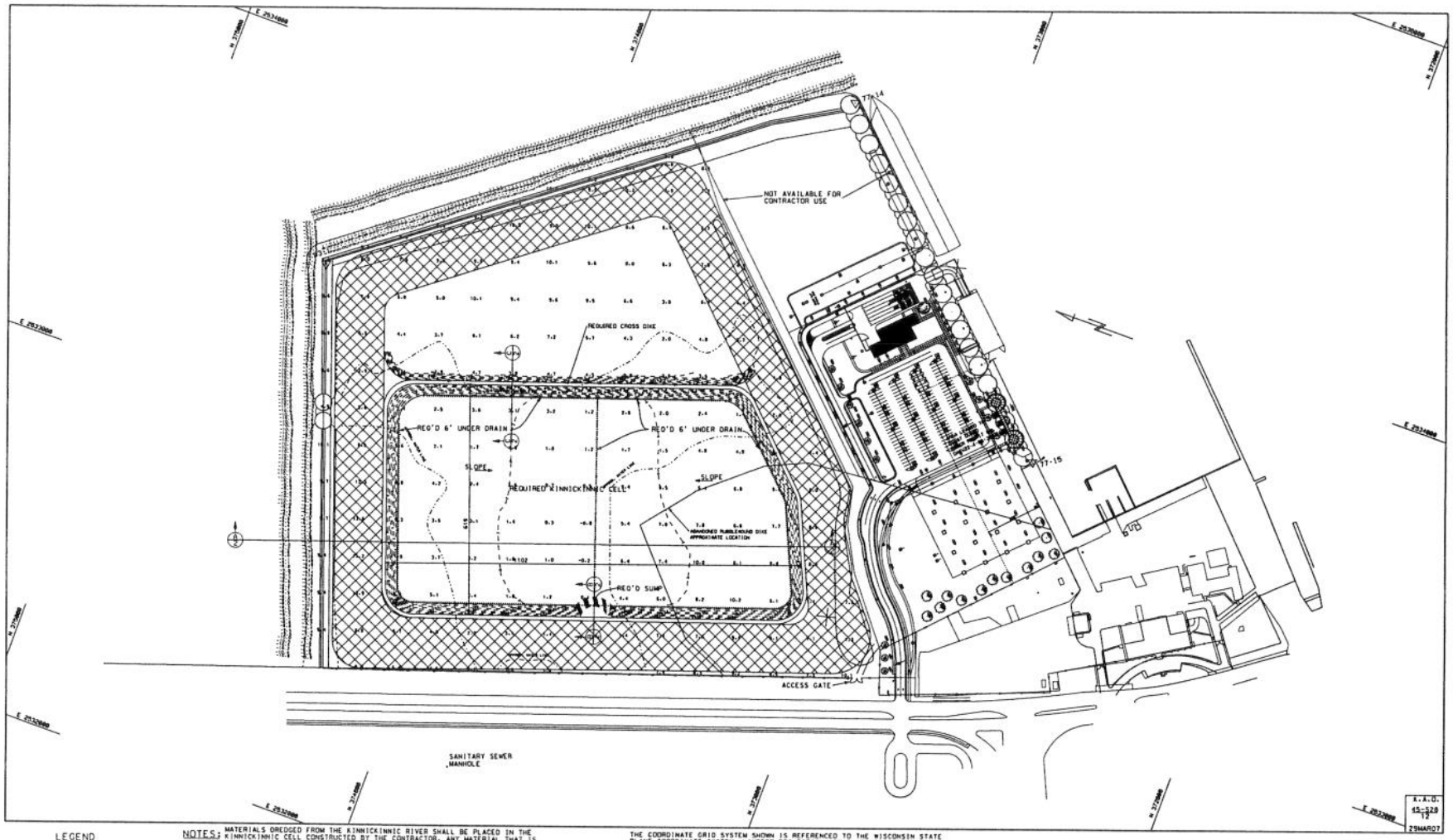
We would propose that you provide that information to the WDNR at your earliest convenience so that we can complete design of the KK cell. Please contact myself or Mr. David Bowman at (313) 226-2223 if you have any questions about the project.

Sincerely,

for Mike B.K. Fulford, P.E., REM
Chief, Planning, Programs, &
Project Management Division

Copy Furnished:

Ajit Vaidya, U.S. Environmental Protection Agency – Great Lakes National Program Office, 77 W. Jackson Blvd., Chicago, IL 60604



LEGEND

- GPS CONTROL MONUMENT
- BRONZE OR BRASS DISC
- CHANNEL LINE TURNING POINT
- FILL AREA
- 1.0' CONTOURS
- 6" UNDER DRAIN
- WATER LINE

NOTES:

MATERIALS DREDGED FROM THE KINNICKINNIC RIVER SHALL BE PLACED IN THE KINNICKINNIC CELL CONSTRUCTED BY THE CONTRACTOR. ANY MATERIAL THAT IS DEPOSITED ELSEWHERE THAN THE KINNICKINNIC CELL SHALL BE REQUIRED TO BE REMOVED AND PLACED IN THE KINNICKINNIC CELL AT THE CONTRACTOR'S EXPENSE.

ALL ROCK, BOULDERS, SCRAP MATERIALS, STUMPS, DEBRIS ENCOUNTERED IN THE EXCAVATION AREA SHALL BE DISPOSED OFFSITE. THE ABANDONED RUBBLEMOUND DIKE, IF ENCOUNTERED, IS NOT REQUIRED TO BE REMOVED.

ALL STANDING WATER SHALL BE PUMPED TO THE MSSD PRIOR TO CONSTRUCTION.

THE CROSS DIKE SHALL BE CONSTRUCTED PRIOR TO THE PLACEMENT OF DREDGED MATERIAL.

THE ENTIRE FILL AREA SHALL BE FILLED TO A MINIMUM OF +10.0 FEET ABOVE LWD. MATERIAL PLACED IN THE FILL AREA AND CROSS DIKE SHALL BE PLACED IN 1.0' LIFTS AND COMPACTED TO 90% OF THE MAXIMUM STANDARD PROCTOR DENSITY (ASTM D 698). THE FILL AREA SHALL BE GRADED TO A LEVEL SURFACE UPON COMPLETION.

MOORING, OFFLOADING, AND TRANSPORT FACILITIES ARE NOT AVAILABLE FOR CONTRACTOR USE. THE CONTRACTOR SHALL USE IT'S OWN FACILITIES FOR CONVEYING MATERIALS FOR THE DISPOSAL OPERATION AND SHALL BE REMOVED UPON COMPLETION OF WORK UNLESS APPROVED BY THE U.S. ARMY CORPS OF ENGINEERS.

THE CONTRACTOR SHALL PREVENT EROSION OR DAMAGE OF THE CDF DIKES BY IT'S OPERATIONS. ANY DAMAGE SHALL BE REPAIRED BY THE CONTRACTOR AT IT'S OWN EXPENSE. ALL REPAIRS SHALL BE APPROVED BY THE U.S. ARMY CORPS OF ENGINEERS.

THE COORDINATE GRID SYSTEM SHOWN IS REFERENCED TO THE WISCONSIN STATE PLANE COORDINATE SYSTEM, LAMBERT PROJECTION, SOUTH ZONE (4803), NORTH AMERICAN DATUM 1983, U.S. FOOT.

ALL ELEVATIONS AND DEPTHS ARE IN FEET AND ARE REFERENCED TO LOW WATER DATUM (LWD), 577.5 FEET ABOVE MEAN SEA LEVEL AT RIMOUSKI, QUEBEC, I.G.L.D. 1985.

THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS AT THAT TIME.

THE SURVEY SHOWN WAS CONDUCTED ON 26-28 MAY 2007.

THE SOUNDINGS SHOWN WAS CONDUCTED ON 20 MAY 1999. SOUNDINGS SHOWN AS THUS -10.2

100 0 100 200 300
1" = 100'

NUMBER	DATE	REVISION	BY

U.S. ARMY CORPS OF ENGINEERS, DETROIT DISTRICT
CONSTRUCTION, COST, & GENERAL ENGINEERING BRANCH

DESIGNED BY: KJW
DRAWN BY: KJW
CHECKED BY: PJD
REVIEWED BY: MGM
APPROVED BY: INI

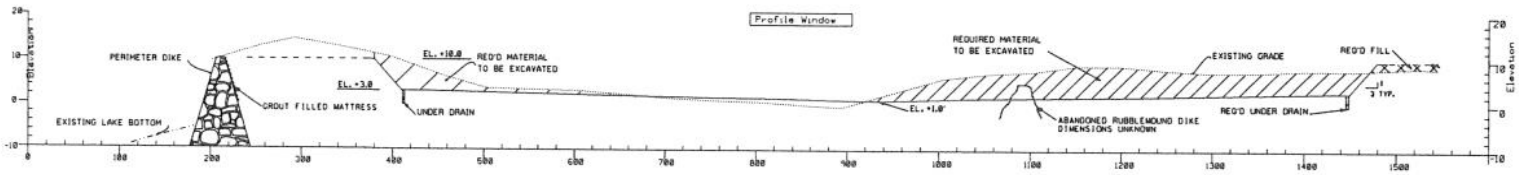
MILWAUKEE HARBOR, WI.

KINNICKINNIC CELL

SITE PLAN

PLOT SCALE: FULL
DATE: 15 JUN 07
SHEET: 1 OF 2
FILE NAME:
SOLICITATION NUMBER:
CONTRACT NUMBER:

Figure 1



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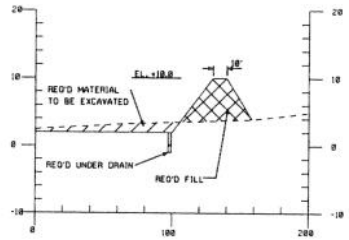

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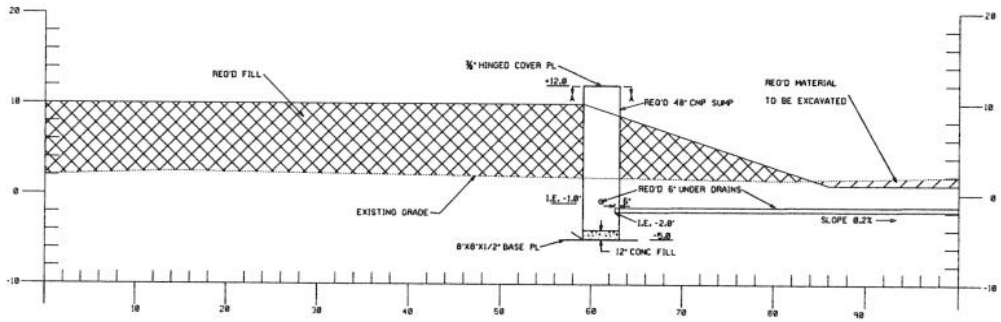
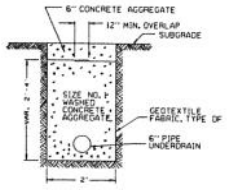
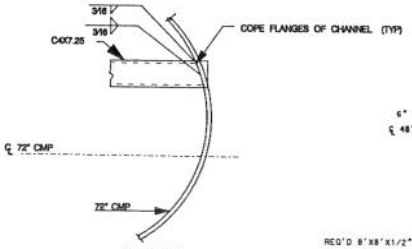


SECTION B 1|2





DETAIL 'A'
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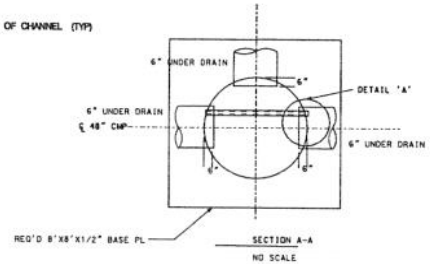

SECTION A-A
NO SCALE

NUMBER	DATE	REVISION	BY

U.S. ARMY CORPS OF ENGINEERS, DETROIT DISTRICT
CONSTRUCTION, COST, & GENERAL ENGINEERING BRANCH

DESIGNED BY: RJW
DRAWN BY: RJW
CHECKED BY: PJD
REVIEWED BY: MDW
APPROVED BY:

MILWAUKEE HARBOR, WI.

KINNICKINNIC CELL

SECTIONS & DETAILS

PLOT SCALE: FULL
DATE: 15 JUN 07
SHEET: 2 OF 2
FILE NAME:
SOLICITATION NUMBER:
CONTRACT NUMBER:

Figure 2.

Attachment 1.

Cell Design and Operation Information for the Proposed Great Lakes Legacy Act Project at the Kinnickinnic River in Milwaukee, Wisconsin

Prepared by the U.S. Army Engineer District, Detroit
for the
U.S. Environmental Protection Agency – Great Lakes National Program Office

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NR 504.06(2)(b) The separation distance between the seasonal high
groundwater table and the bottom of the clay component of a
composite liner or a clay liner shall be at least 10 feet except
for zone-of-saturation landfills.
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The existing dredged material in the Milwaukee CDF shows characteristics that have created an efficient barrier against the migration of any water or contaminants from within the CDF. Soil borings (previously provided) indicate that the dredged material present meets both the fine grain soil definition of WDNR [NR 500.03 (86)] as well as the soil requirements for clay liner material cited in WDNR [NR 504.06 (2) (a)]. Underneath the proposed bottom elevation of the cell throughout the entire CDF is consolidated dredged material ranging anywhere from 6-14 feet deep near shore to approximately 20-24 feet at the most lakeward side of the CDF. Extensive geotechnical data for permeability of fine-grained dredged material in CDFs show that they are capable of achieving field hydraulic conductivities low enough to equal that of constructed clay liners ($<10^{-7}$ cm/sec) (Krizek and Salem 1974). Guidance in USEPA/USACE (2004) states that fine-grained dredged material tends to form its own disposal-area liner as particles consolidate. Similar guidance is provided in USACE (1987) and USACE (2003). Guidance in Richardson et al. (1996) also notes the self-sealing property of fine-grained dredged material. Due to the low permeability of the dredged material beneath the bottom of the proposed KK cell (starting at elevation 577.5) which overlays an impermeable clay stratum, it is reasonable to conclude that no hydraulic connectivity will be present from which contaminants can migrate from the site to the lake (Richardson 1996).

There would be a minimum of 100 feet of this impermeable dredged material between Lake Michigan and the proposed cell (Figure 1). Currently the Milwaukee CDF has an upland area on the west side and a car ferry operation bordering the south side which provides a 300 foot buffer between the lake and the CDF. The east side of the cell is also at least 300 feet from the lake. The northernmost portion of the cell is approximately 100 feet from the lake however both the north and east perimeter dikes have an existing grout mattress liner within the CDF.

Potential migration will be further reduced as leachate is pumped from the cell to minimize any lateral flows or downward migration from the site. Prior to construction, any ponded water

in the CDF would be removed. Leachate would be collected in the KK cell during dredging operations and until a suitable cover is placed. Since the dredging and disposal operation involves mechanical (rather than hydraulic) methods, the addition of water will be minimal. Placing perimeter trenches in the cell eliminates the need for an extensive leachate collection system. The design calls for a temporary leachate collection system that is low to zero maintenance and will insure proper collection of surface runoff as well as perched water within the cell. A trench will be dug around the cell perimeter and filter cloth will be installed along with 6-inch perforated pipe and then filled with crushed stone. The trench will drain to a stand pipe with a sump where any leachate would then be discharged to the Milwaukee Metropolitan Sewerage District wastewater treatment system. We understand that approval to discharge this liquid into the wastewater treatment system has been obtained by the Port of Milwaukee. Leachate collection systems not only remove unwanted liquid in the cell, but they increase consolidation in fine grained sediments while decreasing permeability. The type of leachate collection described above has been shown to decrease permeability by 2 orders of magnitude in fine grain dredged material (USACE 1978). Again, a leachate collection system will reduce the hydraulic head in the cell, further eliminating the probability of migration of the contaminants out of the site.

In summary, after analysis of WDNR Solid Waste and Landfill regulations in reference to the KK cell, it is apparent that impermeable soil and a properly designed leachate collection systems are key attributes of a well designed dredged material containment cell. Existing data has shown that development of an impermeable layer in the bottom of the new cell has occurred over time as the dredged material has consolidated. The favorable characteristics of the existing soil material combined with controls such as the leachate collection system described ensures a secure environment will continue to exist for the materials that will be placed in the KK cell.

> The interim and final cover cap. The cover needs to be placed within 30 days of the completion of dredging [NR 506.08(3)]. If the cap is not impervious then a leachate collection system needs to continue to operate until an impervious cap is placed. The Department will accept the future dredging as the final cover if it exceeds three feet in depth with minimum 2% slope on the top. The leachate collection will continue until such requirement is met.

Up to 170,000 cubic yards of dredged sediment from the Kinnickinnic River is expected to be placed into the KK cell constructed in the western half of the CDF. The placement of this Kinnickinnic River material would bring the top elevation of the cell back up to +10.0 feet above LWD. The top of the existing SSP walls on the west side of the CDF are at elevation +10.5 above LWD, the outer dike rubblemound structures on the north and east side of the CDF are at elevation +10 above LWD. Immediate capping of this material would be difficult due to the unconsolidated nature of the dredged material. The dredging and disposal operation would need to be modified to add a solidification agent. We would propose instead to allow the leachate collection system to operate for at least six months after the dredging operation has been completed. The Corps is preparing a Dredged Material Management Plan for the Milwaukee Harbor. One alternative under consideration would construct a new dredged

material disposal facility on top of the existing CDF. This new facility would eventually provide 8 feet of impermeable dredged material above the proposed CDF cell. However, due to the size of the KK cell a 3- foot cover would likely not be obtained for several dredging cycles. A minimum two percent slope at the final grade will be completed if determined necessary by the WDNR after analysis of the final closure conditions (USACE 2007).

REFERENCES

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State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Matthew J. Frank, Secretary
Gloria L. McCutcheon, Regional Director

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December 21, 2007

File Ref: 1600

U.S. Army Corps of Engineers - Detroit District
ATTN: CELRE-PL
P.O. Box 1027
Detroit, MI 48231-1027

Dear Mr. Gary A. O'Keffe:

Thank you for the opportunity to comment on the *November 2007 Phase II Report, Draft Dredged Material Management Plan (DMMP) and Environmental Assessment* for Milwaukee Harbor, Milwaukee. The Department concurs with the report's recommendation to construct a new Dredge Material Disposal Facility on top of the existing Jones Island Confined Disposal Facility. The new facility would have a minimum 20-year (510,000 cubic yard) capacity for management of dredged material.

Frank Schultz, Waste& Materials Management Program supervisor (414) 263-8694, is our liaison for the project. He will facilitate Department endangered resources, waste management, and water quality regulatory activities on this project as the Detroit District proceeds with detailed design.

Sincerely,

Gloria L. McCutcheon

Gloria L. McCutcheon, P.E.
Regional Director

cc. Marsha Burzynski – SER/Milwaukee
Sharon Gayan – SER/ Milwaukee
Mike Thompson – SER/Milwaukee
Bizhan Sheikholeslami - SER/Waukesha
Frank Schultz – SER/Milwaukee
John Melby – SER/Milwaukee
James McNelly – SER Milwaukee
Rachel Sabre – SER/Milwaukee
Xiaochun Zhang – WT/2