MEMORANDUM FOR DIRECTOR TASK FORCE HOPE, U.S. ARMY CORPS OF ENGINEERS, MISSISSIPPI DIVISION, 7400 LEAKE AVENUE, NEW ORLEANS, LA 70118-3651

SUBJECT: Inner Harbor Navigation Canal Lake Borgne Barrier Wall – Conditional Waiver for Deflections of the Proposed Floodwall Structures

1. Reference memorandum, dated 22 December 2008, subject as above.

2. Conditional waiver for deflections of the proposed floodwall structure is approved.

3. Point of contact is Anjana Chudgar, 513-684-6210.

FOR THE COMMANDER:

JAMES C. DALTON, P.E.
Chief, Engineering and Construction
Directorate of Civil Works
MEMORANDUM THRU Director Task Force Hope, U. S. Army Corps of Engineers, Mississippi Division, 7400 Leake Ave, New Orleans, LA 70118-3651

FOR Mr. James Dalton, Chief, Engineering and Construction, Headquarters, U. S. Army Corps of Engineers, 441 G Street N. W., Washington DC 20314-1000

SUBJECT: Inner Harbor Navigation Canal Lake Borgne Barrier Wall – Conditional Waiver for Deflections of the Proposed Floodwall Structure

1. Request a conditional waiver that permits estimated deflections of the floodwall in excess of nearest relevant Corps criteria deflection limitations. After deflections are verified by lateral load tests, a final waiver will be requested. The conditional waiver is requested to maintain the schedule to provide advance measures by hurricane season 2009.

2. Below are excerpts from the nearest relevant Corps criteria.

   a. HSDRRS, Updated June 12, 2008: “Maximum structural deflections at pile heads:
      Case with 33½% overstress allowed:
      Vertical – 0.67” or less
      Horizontal – 1.0” or less”

   b. EM 1110-2-2906: “Calculated pile cap deformation should be checked against functional and geometric constraints on the structure. These values are usually ½-inch axially and ½-inch laterally. For unusual or extreme loads these values should be increased.”

3. Deflection analysis of the floodwall using conservative soil values indicates maximum horizontal deflections will be on the order of 1½ to 2 inches with negligible vertical deflections. This calculated deflection exceeds the limitations of the above Corps criteria by 1-inch. Lateral load tests will be performed to verify the soil parameters used to calculate horizontal deflections. A full scale field verification test will be performed to mimic load conditions. With the refined soil parameters, it is expected that the calculated lateral deflection will decrease.

4. The HSDRRS criterion is written in reference to T-walls and I-walls. The EM 1110-2-2906 criterion is written in reference to locks and dams. Neither structure performs the same as the floodwall. Deflections noted above are within the elastic range of both the structure and soil; therefore, the deflections are not detrimental to the performance of this floodwall. Attached please find a plan and cross section of the barrier wall.
CE-MVN-HPO
SUBJECT: Inner Harbor Navigation Canal Lake Borgne Barrier Wall – Conditional Waiver for Deflections of the Proposed Floodwall Structure

5. Point of Contact is Angela DeSoto-Duncan, (504) 862-2735.

Encl

MICHAEL MCCORMICK
COL, EN
Commanding

CF:
Mr. Robert Fitzgerald
Chief, E&C, MVD
NOTES:
1. FOR 16" BATTERY PILE: A420 GRADE 46 STEEL OR ASUS ELUSION
2. THE SODIUM PILE WILL BE JET GROUTED.
3. CONSTRUCTION OR INSTALLING 16" CLOSURE PILES
   AFTER 16" CYLINDER PILES ARE INSTALLED:
   A. JET GROUT FROM EL. -90.0 TO EL. -93.0.
   B. IMMEDIATELY AFTER JET GROUTING 16" CLOSURE PILES TO EL. 20.0.
   C. THE BASE OF THE CLOSURE PILES ARE HOLE TIGHT AGAINST THE 16" STANDARD PILES IN THE HOLE PILES.
   D. AFTER THE GROUT HAS SET, FOR MINIMUM 5 DAYS, REMOVE THE 16" STANDARD PILES AND REPLACE THE 16" CLOSURE PILES TO EL. 20.0.
   E. INSPECT THE INTEGRITY OF GAP BETWEEN 16" CLOSURE PILES AND 16" CLOSURE PILES.
   F. ADD BACKING MOLDING TO CLOSE GAP BETWEEN 16" CLOSURE PILES AND 16" CLOSURE PILES.
   G. INSTALL CLOSURE PILES TO EL. 20.0.
4. THE SOLE EPOXY IN THE DIAMOND TIEPER BETWEEN 16" CLOSURE PILES AND 16" CLOSURE PILES PER LOUISIANA CLASS D.
NOTES:
1. AFTER THE CYLINDER, CL BUMPER AND BATTERY PILES ARE INSTALLED, PERFORM THE FOLLOWING OPERATIONS:
   A. INSTALL CYLINDER IN RILE DRIVING BARS. CASES AND PILE IN CONCRETE 
   B. PLACE HOPE JACKET AROUND BATTERY PILE. SEE DRAWING B-250.
   C. PLACE BATTERY PILE IN CONCRETE FROM EL 23.3 TO THE BOTTOM OF THE 
   D. INSERT REINFORCING STEEL CAST INTO PILE.
   E. SET THE PRECAST CONCRETE CAP SECTION AT THE SIDE OF THE 
   F. INSERT 2 1/2" HS ROD THROUGH GREASE Bannie, INTO THE BATTERY PILE.
   G. INSTALL THE TOP OF THE BATTERY PILE WITH PEA GRADE. CONCRETE PLACED 
   H. CONCRETE PLACED AROUND THE PILE IN THE GAP BETWEEN THE PILE TOP AND 
   I. POURED IN POURING SLEEVES.
J. POURED IN A CEMENT MIX.
K. POURED IN DRY CONCRETE MIX.
L. POURED IN A CEMENT MIX.
M. POURED IN A CEMENT MIX.
N. POURED IN A CEMENT MIX.
O. POURED IN A CEMENT MIX.
P. POURED IN A CEMENT MIX.
Q. POURED IN A CEMENT MIX.
R. POURED IN A CEMENT MIX.
S. POURED IN A CEMENT MIX.
T. POURED IN A CEMENT MIX.
U. POURED IN A CEMENT MIX.
V. POURED IN A CEMENT MIX.
W. POURED IN A CEMENT MIX.
X. POURED IN A CEMENT MIX.
Y. POURED IN A CEMENT MIX.
Z. POURED IN A CEMENT MIX.
AA. POURED IN A CEMENT MIX.
BB. POURED IN A CEMENT MIX.
CC. POURED IN A CEMENT MIX.
DD. POURED IN A CEMENT MIX.
EE. POURED IN A CEMENT MIX.
FF. POURED IN A CEMENT MIX.
GG. POURED IN A CEMENT MIX.
HH. POURED IN A CEMENT MIX.
II. POURED IN A CEMENT MIX.
JJ. POURED IN A CEMENT MIX.
KK. POURED IN A CEMENT MIX.
LL. POURED IN A CEMENT MIX.
MM. POURED IN A CEMENT MIX.
NN. POURED IN A CEMENT MIX.
OO. POURED IN A CEMENT MIX.
PP. POURED IN A CEMENT MIX.
QQ. POURED IN A CEMENT MIX.
RR. POURED IN A CEMENT MIX.
SS. POURED IN A CEMENT MIX.
TT. POURED IN A CEMENT MIX.
UU. POURED IN A CEMENT MIX.
VV. POURED IN A CEMENT MIX.
WW. POURED IN A CEMENT MIX.
XX. POURED IN A CEMENT MIX.
YY. POURED IN A CEMENT MIX.
ZZ. POURED IN A CEMENT MIX.
AA. POURED IN A CEMENT MIX.