



SURVEY CONTROL POINTS			
STATION	COORDINATES		
	EAST X	NORTH Y	
COE3	19,731,430.738	829,044.618	
HAM1	19,735,939.645	829,666.149	
HAMMOND	19,736,758.430	829,197.472	
P1	19,735,805.443	829,714.889	
P2	19,737,413.599	830,136.686	
P3	19,736,869.817	828,645.105	
P4	19,737,789.491	829,609.922	
P5	19,737,932.404	827,586.695	
P6	19,738,368.627	828,649.498	
TANK	19,737,477.008	829,065.474	
NAVAID 1	19,737,283.629	830,239.432	
NAVAID 2	19,737,289.886	829,877.881	

CHANNEL LINE POINTS			
STATION	COORDINATES		
	EAST X	NORTH Y	
A	19,737,828.540	830,360.490	
B	19,737,281.930	830,299.538	
C	19,737,241.712	830,277.367	
D	19,737,228.945	830,235.254	
E	19,737,251.116	830,193.036	
F	19,737,479.947	830,010.121	
G	19,737,853.655	829,386.132	
H	19,737,777.131	829,340.304	
I	19,737,175.908	829,495.355	
J	19,737,144.745	829,593.247	
K	19,737,347.253	829,847.000	
L	19,737,331.546	829,923.506	
M	19,736,940.983	830,235.697	
N	19,736,562.880	830,940.712	

LIMITS OF FEDERAL PROJECT
PROJECT DEPTH 12.0 FT.

LIMITS OF FEDERAL PROJECT
PROJECT DEPTH 10.0 FT.

LEGEND

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

LOW WATER DATUM
ALL DEPTHS AND PROJECT DEPTHS ARE REFERRED TO LOW WATER DATUM ELEVATION 577.5 FT. ABOVE MEAN WATER LEVEL, (1:G.L.D. 1985).

GRID COORDINATES
GRIDS SHOWN ARE BASED ON THE NATIONAL GEODETIC SURVEY PROJECTION TABLES, STATE OF MICHIGAN, CENTRAL ZONE (2112), LAMBERT PROJECTION, 1983 NORTH AMERICAN DATUM, US SURVEY FOOT.

NAVIGATION BUOYS
LOCATION OF NAVIGATION BUOYS REPRESENTS THAT GENERAL LOCATION ON THE DATE OF THE SURVEY AND CANNOT BE CONSIDERED FOR NAVIGATION.

PROJECT INFORMATION
PROJECT DEPTH - AS NOTED
10.0 FT. CONTOUR
12.0 FT. CONTOUR

SURVEY INFORMATION
SURVEY BY: JOSEPH D. PERCELL AND RICHARD V. DELESZOWICZ
POSITION SYSTEM: TRIMBLE SPS DGPS VIA U.S. COAST GUARD SYSTEM
SONIC SOUNDING: ODM CY-300
TRANSDUCER: 200 KHZ WITH 4.0 DEGREE BEAM ANGLE

NO.	DATE	REVISION	R.D.
1	4 MAY. 2004	BM DOCK DESTROYED	

**U.S. ARMY ENGINEER DISTRICT, DETROIT
CORPS OF ENGINEERS
DETROIT, MICHIGAN**

**HAMMOND BAY HARBOR, MI.
CONDITION SURVEY
19 SEPTEMBER 2012
DETROIT AREA OFFICE**

DESIGNED BY:	
DRAWN BY:	J. PERCELL
CHECKED BY:	
REVIEWED BY:	
SUBMITTED BY:	APPROVAL RECOMMENDED: _____ DATE: _____
CHIEF, PROJ OPNS SEC	CHIEF, OPERATIONS TECHNICAL SUPPORT BRANCH
APPROVED:	

SCALE: 1 INCH = 100 FT.

DRAWING NUMBER: HH0112c.dgn

SHEET 1 OF 1

WATER LEVEL / GAGE INFORMATION
WATER LEVEL ELEVATIONS (GAGE) OBTAINED DURING THE SURVEY WERE FROM TWO (2) GAGES.
TBM WAS ESTABLISHED FROM NGS VERTICAL CONTROL POINT W 301 EPID 0K05141.