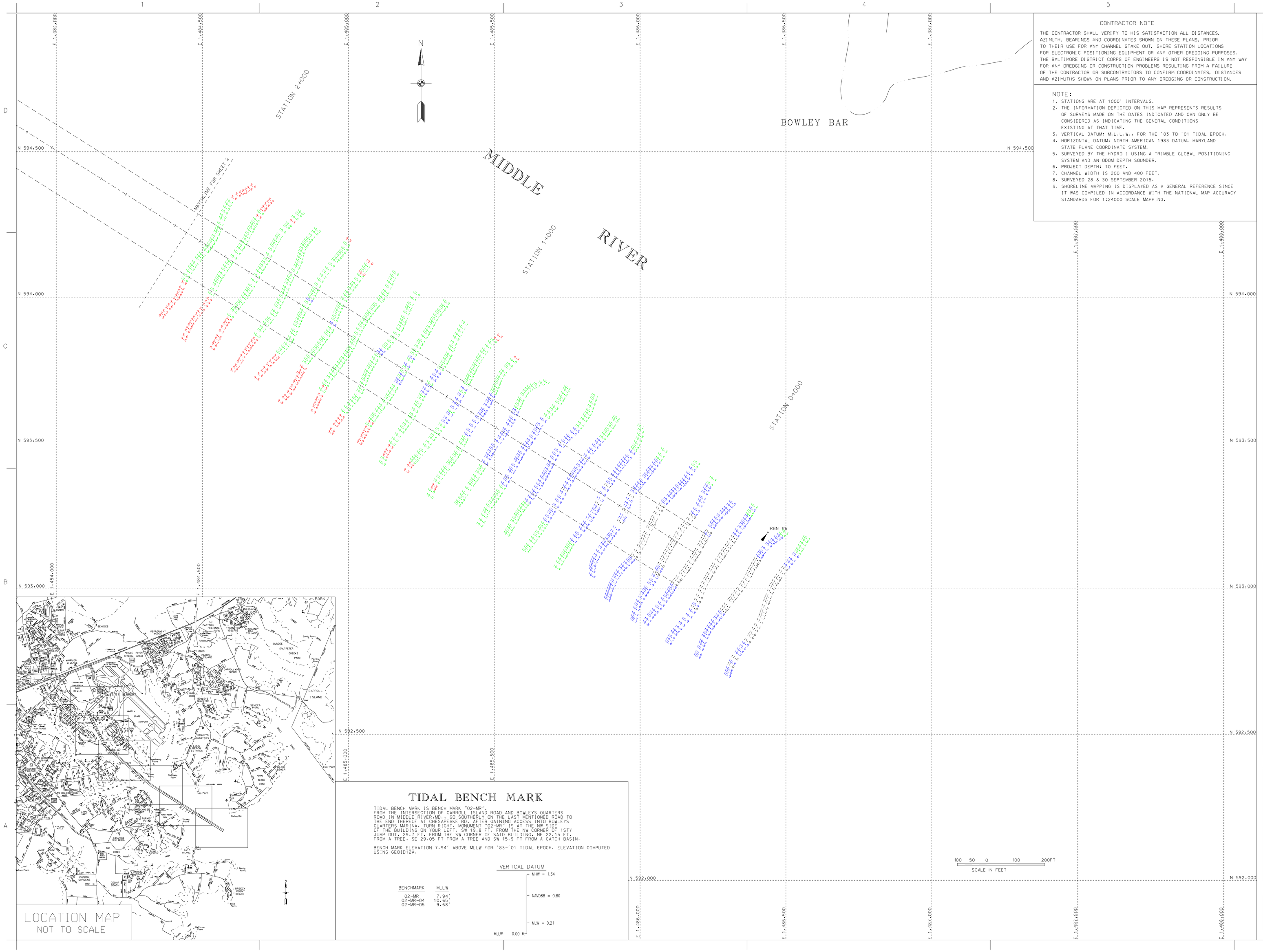


CONTRACTOR NOTE

THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

NOTE:

1. STATIONS ARE AT 1000' INTERVALS.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. VERTICAL DATUM: M.L.L.W.. FOR THE '83 TO '01 TIDAL EPOCH.
4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE COORDINATE SYSTEM.
5. SURVEYED BY THE HYDRO 1 USING A TRIMBLE GLOBAL POSITIONING SYSTEM AND AN ODOM DEPTH SOUNDER.
6. PROJECT DEPTH: 10 FEET.
7. CHANNEL WIDTH IS 200 AND 400 FEET.
8. SURVEYED 28 & 30 SEPTEMBER 2015.
9. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.

LOCATION MAP
NOT TO SCALE

TIDAL BENCH MARK

TIDAL BENCH MARK IS BENCH MARK "02-MR". FROM THE INTERSECTION OF CARROLL ISLAND ROAD AND BOWLEYS QUARTERS ROAD IN MIDDLE RIVER,MD., GO SOUTHERLY ON THE LAST MENTIONED ROAD TO THE END THEREOF AT CHESAPEAKE RD. AFTER GAINING ACCESS INTO BOWLEYS QUARTERS MARINA. TURN RIGHT. MONUMENT "02-MR" IS AT THE NW SIDE OF THE BUILDING ON YOUR LEFT. SW 19.8 FT. FROM THE NW CORNER OF 1STY JUMP OUT. 29.7 FT. FROM THE SW CORNER OF SAID BUILDING. NE 22.15 FT. FROM A TREE. SE 29.05 FT FROM A TREE AND SW 15.9 FT FROM A CATCH BASIN.

BENCH MARK ELEVATION 7.94' ABOVE MLLW FOR '83-'01 TIDAL EPOCH. ELEVATION COMPUTED USING GEOID12A.

BENCHMARK	MLLW
02-MR	7.94'
02-MR-04	10.65'
02-MR-05	9.68'

VERTICAL DATUM

MHW = 1.34
NAVD88 = 0.80
MLW = 0.21
MLLW 0.00 ft

US Army Corps of Engineers
Baltimore District

Mark	Description	Date	Appr.

Mark	Description	Date	Appr.

Mark	Description	Date	Appr.

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

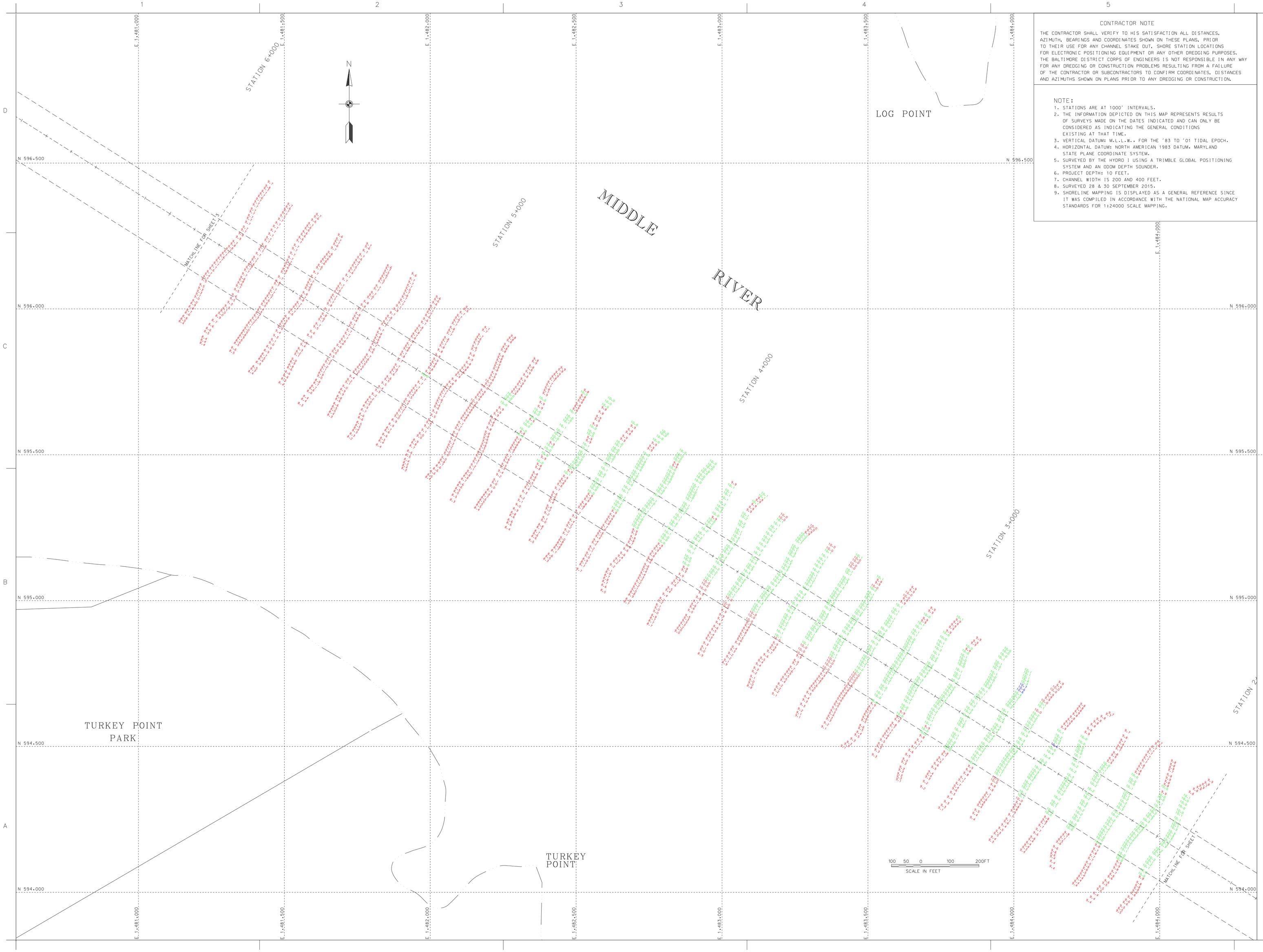
Designed by:
Dwn by: LJM
Cnd by: SMG
Reviewed by: SMG
Submitted by:
Check Des. Branch:

Cover
SHEET 15
Rev.
Design file no.
FCE/EB MAP 5-003
Drawing scale
File name:MD_DD_2015_20150928
Plot date
Plot scale

BALTIMORE COUNTY
MARYLAND

CONDITION SURVEY
MIDDLE RIVER
STATION 0+000 TO 2+000

Sheet reference number:
V-101
Sheet 1 of 6



CONTRACTOR NOTE

THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

NOTE:

1. STATIONS ARE AT 1000' INTERVALS.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. VERTICAL DATUM: M.L.L.W. FOR THE '83 TO '01 TIDAL EPOCH.
4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM. MARYLAND STATE PLANE COORDINATE SYSTEM.
5. SURVEYED BY THE HYDRO I USING A TRIMBLE GLOBAL POSITIONING SYSTEM AND AN ODOM DEPTH SOUNDER.
6. PROJECT DEPTH: 10 FEET.
7. CHANNEL WIDTH IS 200 AND 400 FEET.
8. SURVEYED 28 & 30 SEPTEMBER 2015.
9. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.

US Army Corps of Engineers
Baltimore District

Mark	Description	Date	Appr.

Mark	Description	Date	Appr.

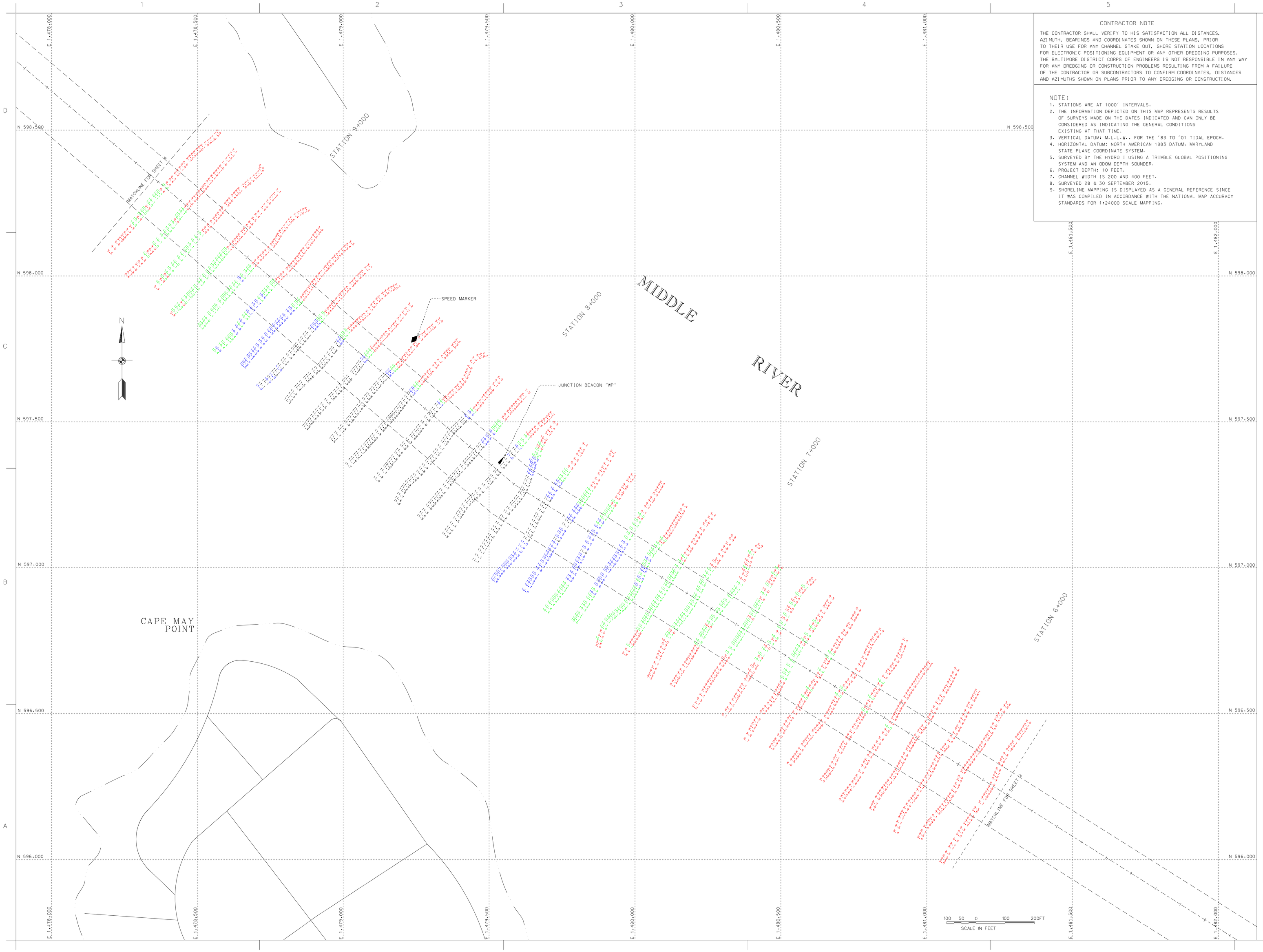
U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

Designed by: JJ/JW
Date: OCT '15
Drawn by: JJ/JW
Checked by: SMC
Reviewed by: SMC
Approved by: SMC
Date: Nov. 9, 2015
Rev.
Design file no.: C:\Projects\2015-15-004
Drawing name:
File name: MD_CD_C02_22100000
Plot date:
Plot scale:

BALTIMORE COUNTY
MARYLAND

CONDITION SURVEY
MIDDLE RIVER
STATION 2+000 TO 5+800

Sheet reference number:
V-102
Sheet 2 of 6



CONTRACTOR NOTE

THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

NOTE:

1. STATIONS ARE AT 1000' INTERVALS.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. VERTICAL DATUM: M.L.L.W.. FOR THE '83 TO '01 TIDAL EPOCH.
4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM. MARYLAND STATE PLANE COORDINATE SYSTEM.
5. SURVEYED BY THE HYDRO I USING A TRIMBLE GLOBAL POSITIONING SYSTEM AND AN ODOM DEPTH SOUNDER.
6. PROJECT DEPTH: 10 FEET.
7. CHANNEL WIDTH IS 200 AND 400 FEET.
8. SURVEYED 28 & 30 SEPTEMBER 2015.
9. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.

US Army Corps of Engineers
Baltimore District

Mark	Date	Appr.	Description

Mark	Date	Appr.	Description

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

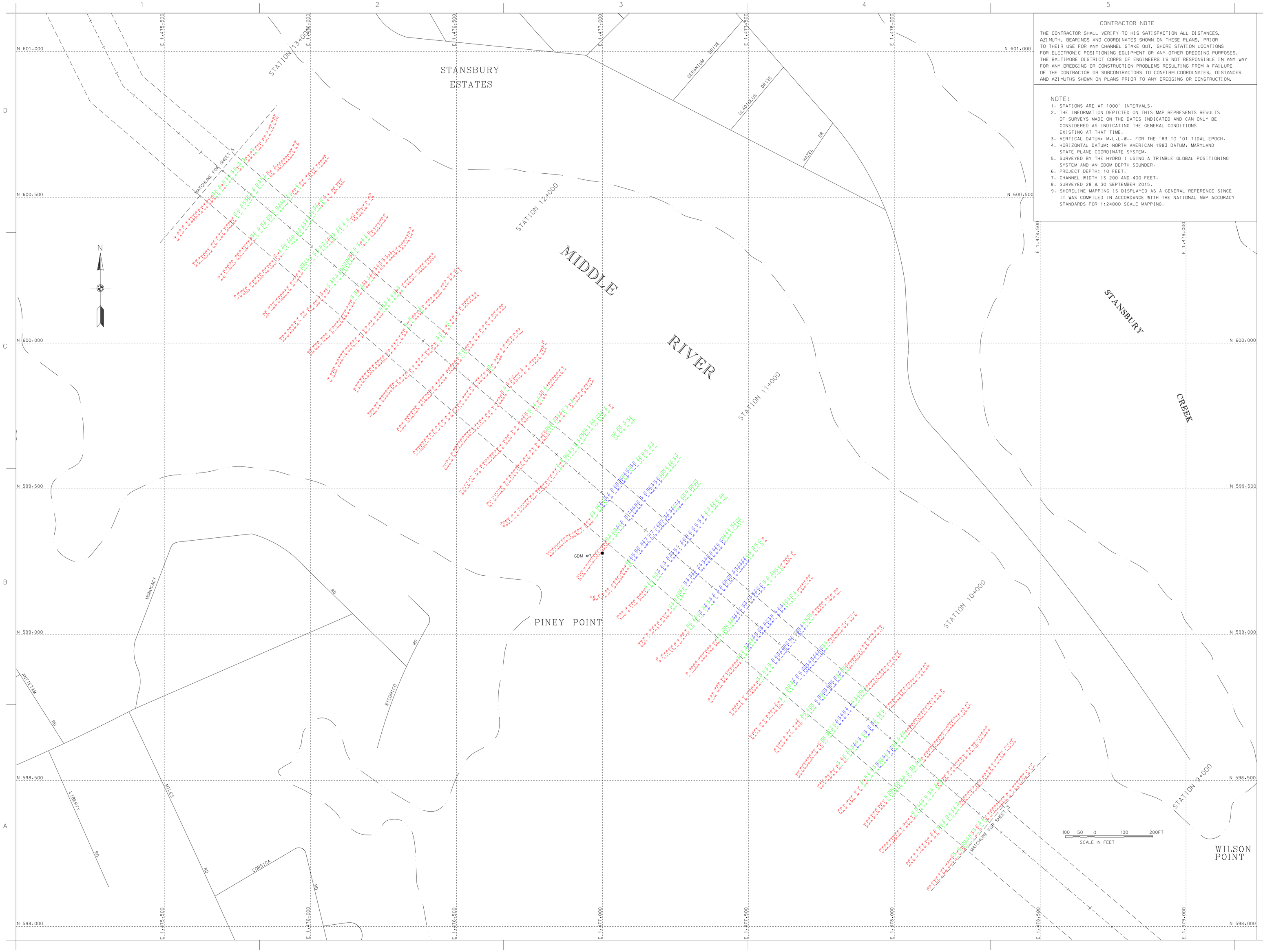
Designed by:
Date by: 10-01-15
Checked by:
Date by: SMC
Approved by:
SMC
Submitted by:
Chief, Navig. Branch

Date: 10-01-15
Scale: 1:20
Design file name: 15-0015
Drawing name:
File name: 15-0015_CS_V103_STA9000.dgn
Plot date:
Plot scale:

BALTIMORE COUNTY
MARYLAND

CONDITION SURVEY
MIDDLE RIVER
STATION 5+900 TO 9+400

Sheet reference number:
V-103
Sheet 3 of 6



CONTRACTOR NOTE

THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

NOTE:

1. STATIONS ARE AT 1000' INTERVALS.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. VERTICAL DATUM: M.L.L.W.. FOR THE '83 TO '01 TIDAL EPOCH.
4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM. MARYLAND STATE PLANE COORDINATE SYSTEM.
5. SURVEYED BY THE HYDRO I USING A TRIMBLE GLOBAL POSITIONING SYSTEM AND AN ODOM DEPTH SOUNDER.
6. PROJECT DEPTH: 10 FEET.
7. CHANNEL WIDTH IS 200 AND 400 FEET.
8. SURVEYED 28 & 30 SEPTEMBER 2015.
9. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.

US Army Corps of Engineers
Baltimore District

Mark	Description	Date	Appr.

Designed by:	Date: Oct. '15
Drawn by: JABC	Cost for: JABC
Reviewed by: DMC	Contract No.: DACW31-15-D56
Submitted by:	Check: JDB
Chief, Nav. Branch:	File: wp1406-02-002_20160606
	Rev. date:
	Rev. date:

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

BALTIMORE COUNTY
MARYLAND

CONDITION SURVEY
MIDDLE RIVER
STATION 9+500 TO 12+900

Sheet reference number:
V-104
Sheet 4 of 6

CONTRACTOR NOTE

THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS, PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

NOTE:

1. STATIONS ARE AT 1000' INTERVALS.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. VERTICAL DATUM: M.L.L.W., FOR THE '83 TO '01 TIDAL EPOCH.
4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM, MARYLAND STATE PLANE COORDINATE SYSTEM.
5. SURVEYED BY THE HYDRO I USING A TRIMBLE GLOBAL POSITIONING SYSTEM AND AN ODOM DEPTH SOUNDER.
6. PROJECT DEPTH: 10 FEET.
7. CHANNEL WIDTH IS 200 AND 400 FEET.
8. SURVEYED 28 & 30 SEPTEMBER 2015.
9. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.

US Army Corps of Engineers
Baltimore District

Mark	Description	Date	Appr.	Mark	Description	Date	Appr.

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

Designed by:		Date: OCT. '15	Rev.
Dwn by: JAH	Ckd by: SMG	Design file no. FILE: 88 MAP: 15-007	
Reviewed by: SMG		Drawing code:	
Submitted by: Chief, Nav. Branch		File name: MD_02_002_20150930 Plot date: Plot scale:	

BALTIMORE COUNTY
MARYLAND

CONDITION SURVEY
MIDDLE RIVER
STATION 13+000 TO 15+900

Sheet reference number:
V-105
Sheet 5 of 6

MIDDLE RIVER & DARKHEAD CREEK CHANNEL COORDINATES

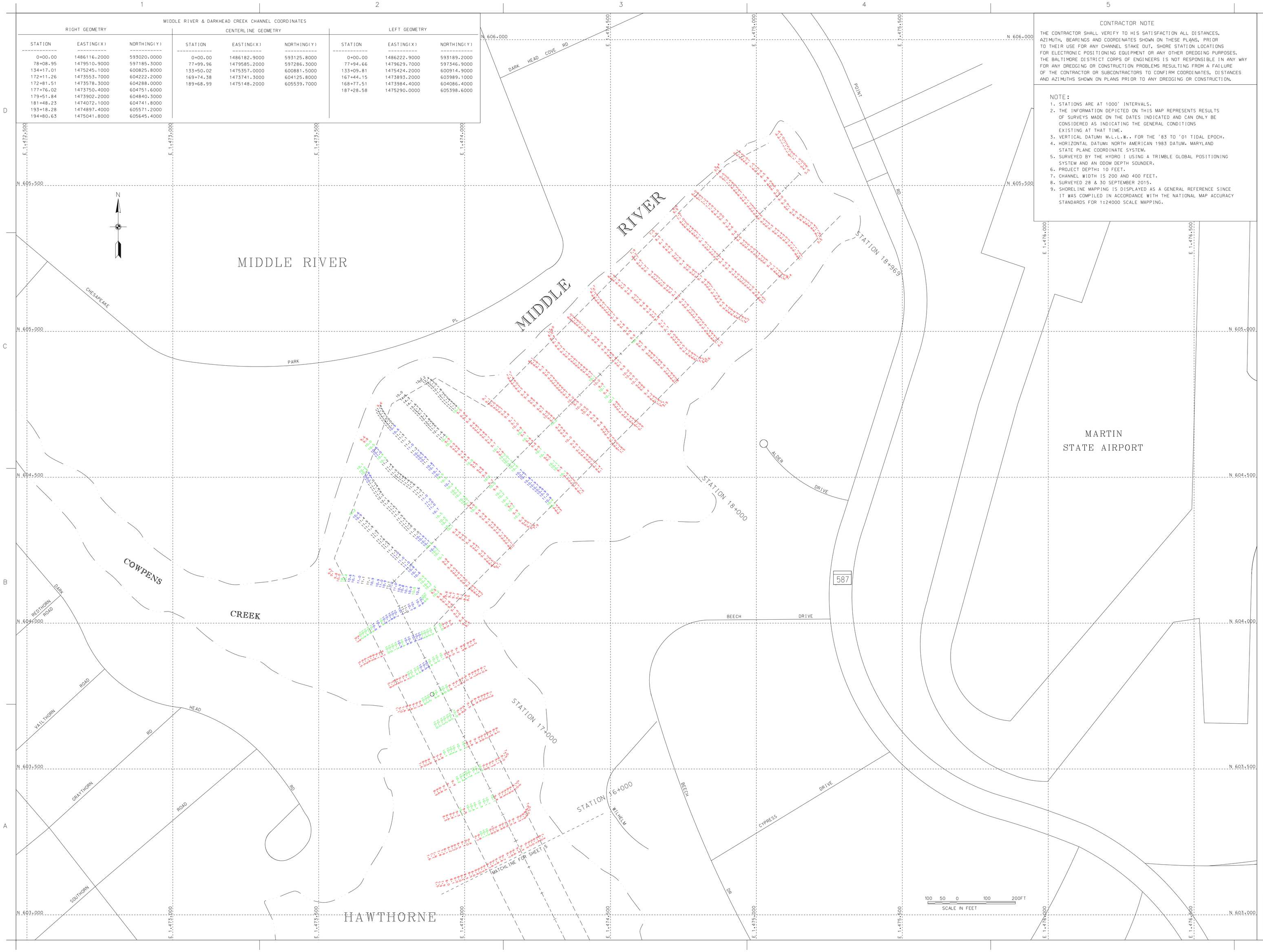
RIGHT GEOMETRY			CENTERLINE GEOMETRY			LEFT GEOMETRY		
STATION	EASTING(X)	NORTHING(Y)	STATION	EASTING(X)	NORTHING(Y)	STATION	EASTING(X)	NORTHING(Y)
0+00.00	1486116.2000	593020.0000	0+00.00	1486182.9000	593125.8000	0+00.00	1486222.9000	593189.2000
78+08.95	1479510.9000	597185.3000	77+99.96	1479585.2000	597286.3000	77+94.66	1479629.7000	597346.9000
134+17.01	1475245.1000	600825.8000	133+50.02	1475357.0000	600881.5000	133+09.81	1475424.2000	600914.9000
172+11.26	1473553.7000	604222.2000	169+74.38	1473741.3000	604125.8000	167+44.15	1473893.2000	603989.1000
172+81.51	1473578.3000	604288.0000	189+68.99	1475148.2000	605539.7000	168+77.51	1473984.4000	604086.4000
177+76.02	1473750.4000	604751.6000				187+28.58	1475290.0000	605398.6000
179+51.84	1473902.2000	604840.3000						
181+48.23	1474072.1000	604741.8000						
193+18.28	1474897.4000	605571.2000						
194+80.63	1475041.8000	605645.4000						

CONTRACTOR NOTE

THE CONTRACTOR SHALL VERIFY TO HIS SATISFACTION ALL DISTANCES, AZIMUTH, BEARINGS AND COORDINATES SHOWN ON THESE PLANS. PRIOR TO THEIR USE FOR ANY CHANNEL STAKE OUT, SHORE STATION LOCATIONS FOR ELECTRONIC POSITIONING EQUIPMENT OR ANY OTHER DREDGING PURPOSES. THE BALTIMORE DISTRICT CORPS OF ENGINEERS IS NOT RESPONSIBLE IN ANY WAY FOR ANY DREDGING OR CONSTRUCTION PROBLEMS RESULTING FROM A FAILURE OF THE CONTRACTOR OR SUBCONTRACTORS TO CONFIRM COORDINATES, DISTANCES AND AZIMUTHS SHOWN ON PLANS PRIOR TO ANY DREDGING OR CONSTRUCTION.

NOTE:

1. STATIONS ARE AT 1000' INTERVALS.
2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITIONS EXISTING AT THAT TIME.
3. VERTICAL DATUM: M.L.L.W.. FOR THE '83 TO '01 TIDAL EPOCH.
4. HORIZONTAL DATUM: NORTH AMERICAN 1983 DATUM. MARYLAND STATE PLANE COORDINATE SYSTEM.
5. SURVEYED BY THE HYDRO I USING A TRIMBLE GLOBAL POSITIONING SYSTEM AND AN ODOM DEPTH SOUNDER.
6. PROJECT DEPTH: 10 FEET.
7. CHANNEL WIDTH IS 200 AND 400 FEET.
8. SURVEYED 28 & 30 SEPTEMBER 2015.
9. SHORELINE MAPPING IS DISPLAYED AS A GENERAL REFERENCE SINCE IT WAS COMPILED IN ACCORDANCE WITH THE NATIONAL MAP ACCURACY STANDARDS FOR 1:24000 SCALE MAPPING.



US Army Corps of Engineers
Baltimore District

Mark	Date	Appr.	Description

U.S. ARMY CORPS OF ENGINEERS
BALTIMORE DISTRICT

Designed by: Dan Tyl
Date for Chart: Oct '15
Drawn by: Chris Allen
Date for SMG: 10-15-15
Reviewed by: SMG
Submitted by: (Chief, Nav. Branch)
Drawing scale:
File name: 90-02-002_20150930
Proj. date:
Proj. scale:
Rev.

BALTIMORE COUNTY
MARYLAND

CONDITION SURVEY
MIDDLE RIVER
STATION 16+000 TO 18+968

Sheet reference number:
V-106
Sheet 6 of 6