

- PROJECT SPECIFIC NOTES:
1. COORDINATES REFER TO US STATE PLANE COORDINATE SYSTEM NAD 1983/2011, NEW JERSEY, ZONE 2900 US SURVEY FEET.
  2. THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF SURVEYS MADE ON THE DATES INDICATED AND CAN ONLY BE CONSIDERED AS THE GENERAL CONDITIONS EXISTING AT THAT TIME.
  3. THE SOUNDING DATA DEPICTED ON THIS MAP WAS COLLECTED USING PROJECT CLASSIFICATION GENERAL AS SPECIFIED IN EM 1110-2-1003.
  4. SOUNDINGS ON THIS MAP REFER TO THE PLANE OF MEAN LOWER LOW WATER (MLLW) [EPOCH 1983-2001].
  5. MEAN LOWER LOW WATER IS 2.9 FEET BELOW NAVD 88 AS DETERMINED USING VDATUM (VER. 2.2.51).
  6. SOUNDINGS DEPICTED ON THIS MAP HAVE BEEN SORTED TO A 15' INTERVAL USING THE FULL DATA SET.
  7. CONTOURS ON THIS MAP WERE GENERATED USING THE MAP DATA SET, PROJECT DEPTH IS 4 FEET.
  8. THE DATA DEPICTED ON THIS MAP SHOULD NOT BE USED FOR VOLUME CALCULATION PURPOSES.
  9. BACKGROUND IMAGERY PROVIDED BY THE CORPS OF ENGINEERS.
  10. THE PLANIMETRICS DEPICTED ON THIS MAP ARE FOR ORIENTATION PURPOSES ONLY.
  11. THIS SURVEY WAS PERFORMED USING LOCAL CONTROL ESTABLISHED BY CORPS OF ENGINEERS.
  12. THIS MAP IS CEPO COMPLIANT IN ACCORDANCE WITH ER 1110-2-8160 AND EM 1110-2-6056.
  13. THE SURVEY WAS CONDUCTED BY MCKIM & CREED USING THE FOLLOWING: SURVEY VESSELS: SV ZEO; ECHOSOUNDERS: SINGLE BEAM CODO CV000 200KHZ, AND CV100 200KHZ; NAVIGATION SYSTEMS: TRIMBLE 5700, IN REAL TIME KINEMATIC (RTK) MODE; SURVEY ACQUISITION SOFTWARE: HYPACK VERSION 2014; SURVEY PROCESSING SOFTWARE: HYPACK SINGLE BEAM EDITOR VERSION 2014; ATTITUDE CORRECTIONS FOR HEAVE, ROLL, PITCH AND HEADING WERE APPLIED USING A INTERNAL MOTION UNIT; CTD CAST WERE TAKEN DURING ACQUISITION FOR ACCURATE SPEED OF SOUND PROFILES.
  14. THE INFORMATION PRESENTED ON THIS DRAWING REPRESENTS THE RESULTS OF A SURVEY PERFORMED BY MCKIM & CREED ON 28 MAY - JUNE 01, 2015 AND CAN ONLY BE CONSIDERED AS INDICATING THE CONDITIONS EXISTING AT THAT TIME. BECAUSE THESE CONDITIONS ARE SUBJECT TO RAPID CHANGE DUE TO SHOALING EVENTS, A PRUDENT MARINER SHOULD NOT RELY EXCLUSIVELY ON THE INFORMATION PROVIDED HERE. REUSE OF THIS INFORMATION BY CLIENT OR OTHERS BEYOND THE SPECIFIC SCOPE OF WORK FOR WHICH IT WAS ACQUIRED SHALL BE AT THE SOLE RISK OF THE USER AND WITHOUT LIABILITY TO MCKIM AND CREED.

MATCHLINE SHEET 3

NSRS/NGS CONTROL DATA			
BENCHMARK:	WALNUT PID# KV 0757	NORTHING	EASTING
ELEVATION:	7.69' NAVD 88	585992.86	577648.70
LOCAL CONTROL DATA			
BENCHMARK:	T 81 PID# KV 3515	NORTHING	EASTING
ELEVATION:	21.95' NAVD 88	586690.41	567020.60



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**MCKIM & CREED**  
 245 NORTH FRONT STREET  
 WILMINGTON, NC 28401  
 TELEPHONE: (910) 343-1048  
 FAX: (910) 251-8282

DATE OF SURVEY:  
 MAY 28 - JUNE 01, 2015  
 FILE NO.: 87  
 REPORT NO.: 4329

SCALE:  
 1" = 100'  
 FIELD BOOKS:

APPROVED: RAYMOND D. CLARKE  
 FIELD COMMANDER/CONTROL SURVEYOR  
 APPROVED: REGINALD SMITH  
 PROJECT MANAGER  
 APPROVED: D. J. MAZ  
 LEAD CARTOGRAPHER  
 APPROVED: J. MAZ  
 DEPUTY CHIEF OF SURVEY  
 DATE: 30 JUNE 2015

DEPARTMENT OF THE ARMY  
 CORPS OF ENGINEERS  
 NEW YORK DISTRICT  
 OPERATIONS DIVISION  
 SURVEY SECTION  
 CEMANCO-S

**HYDROGRAPHIC SURVEY OF  
 MATAWAN CREEK  
 NEW JERSEY  
 FROM ROUTE 35 BRIDGE  
 UPSTREAM TO NEW YORK  
 TO LONG BRANCH RAILROAD  
 CONDITION SURVEY**

VH-102  
 SHEET 2 OF 3



US ARMY CORPS OF ENGINEERS NEW YORK DISTRICT

Table with 2 columns and 10 rows, likely for revision or record keeping.

MCKIM & CREED 245 NORTH FRONT STREET WILMINGTON, NC 28401 TELEPHONE: (910) 343-1048 FAX: (910) 251-8282

DATES OF SURVEY: MAY 28 - JUNE 01, 2015 FILE NO.: 87 PROJECT NO.: 4329

SCALE: 1" = 100' FIELD BOOKS:

APPROVED: [Signatures] DEPARTMENT OF THE ARMY MCKIM & CREED NEW YORK DISTRICT OPERATIONS DIVISION SURVEY SECTION CEMANLQPS

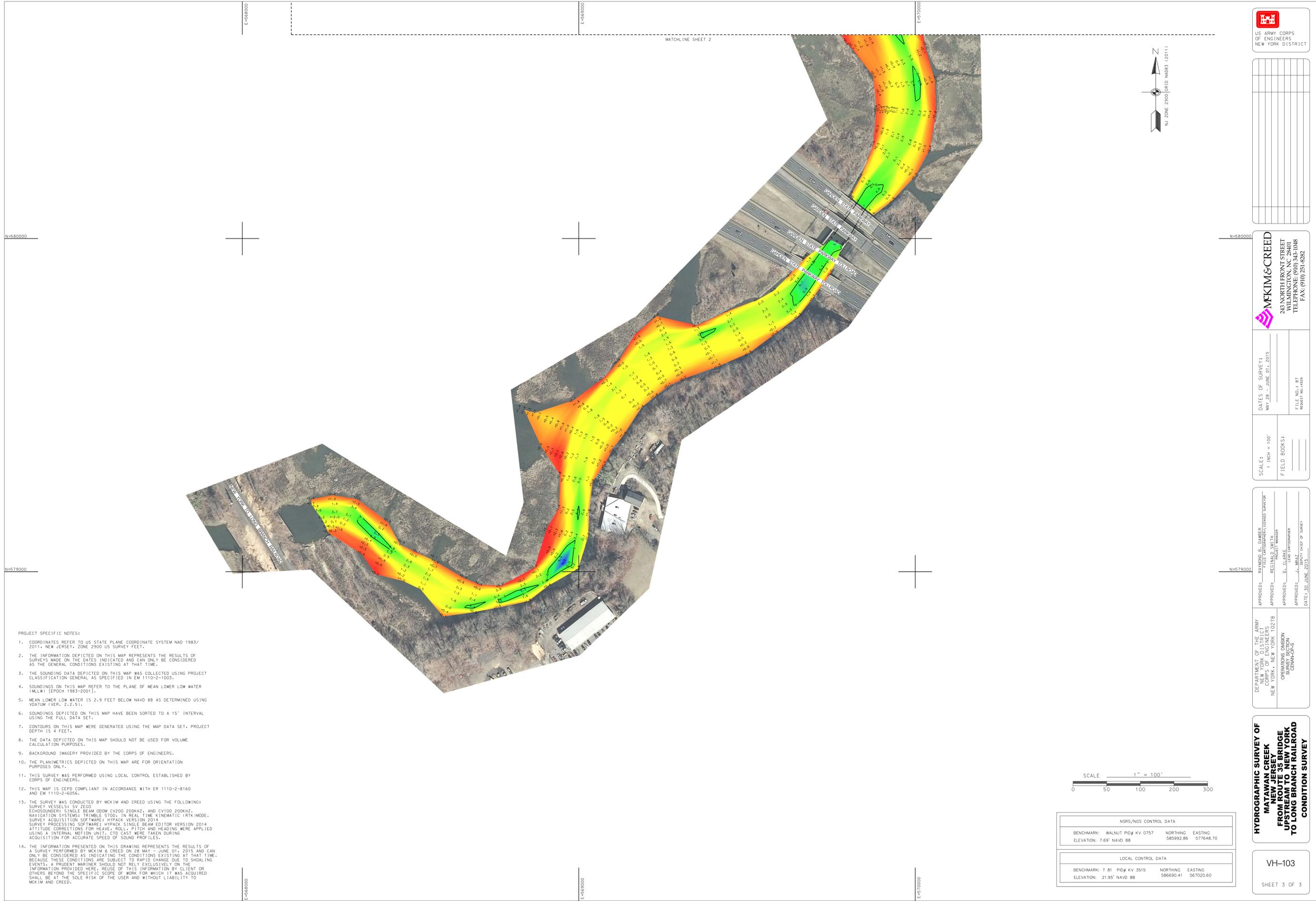
APPROVED: [Signatures] DEPARTMENT OF THE ARMY MCKIM & CREED NEW YORK DISTRICT OPERATIONS DIVISION SURVEY SECTION CEMANLQPS

HYDROGRAPHIC SURVEY OF MATAWAN CREEK NEW JERSEY FROM ROUTE 35 BRIDGE UPSTREAM TO NEW YORK TO LONG BRANCH RAILROAD CONDITION SURVEY

VH-103

SHEET 3 OF 3

FILE NO: 87 REG NO: 4329



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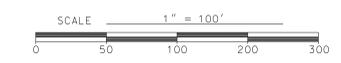


Table with 2 sections: NSRS/NGS CONTROL DATA and LOCAL CONTROL DATA. Includes benchmark names, IDs, and coordinates.