

**SITE INVESTIGATION
RESULTS REPORT**

VOLUME VI OF VI

**FORMER THYPIN STEEL, INC. FACILITY
MANORHAVEN, NEW YORK**

November 16, 2001

Prepared for:

MBA-MANORHAVEN, LLC
215 Nassau Street
Princeton, New Jersey 08540

Prepared by:

ROUX ASSOCIATES, INC.
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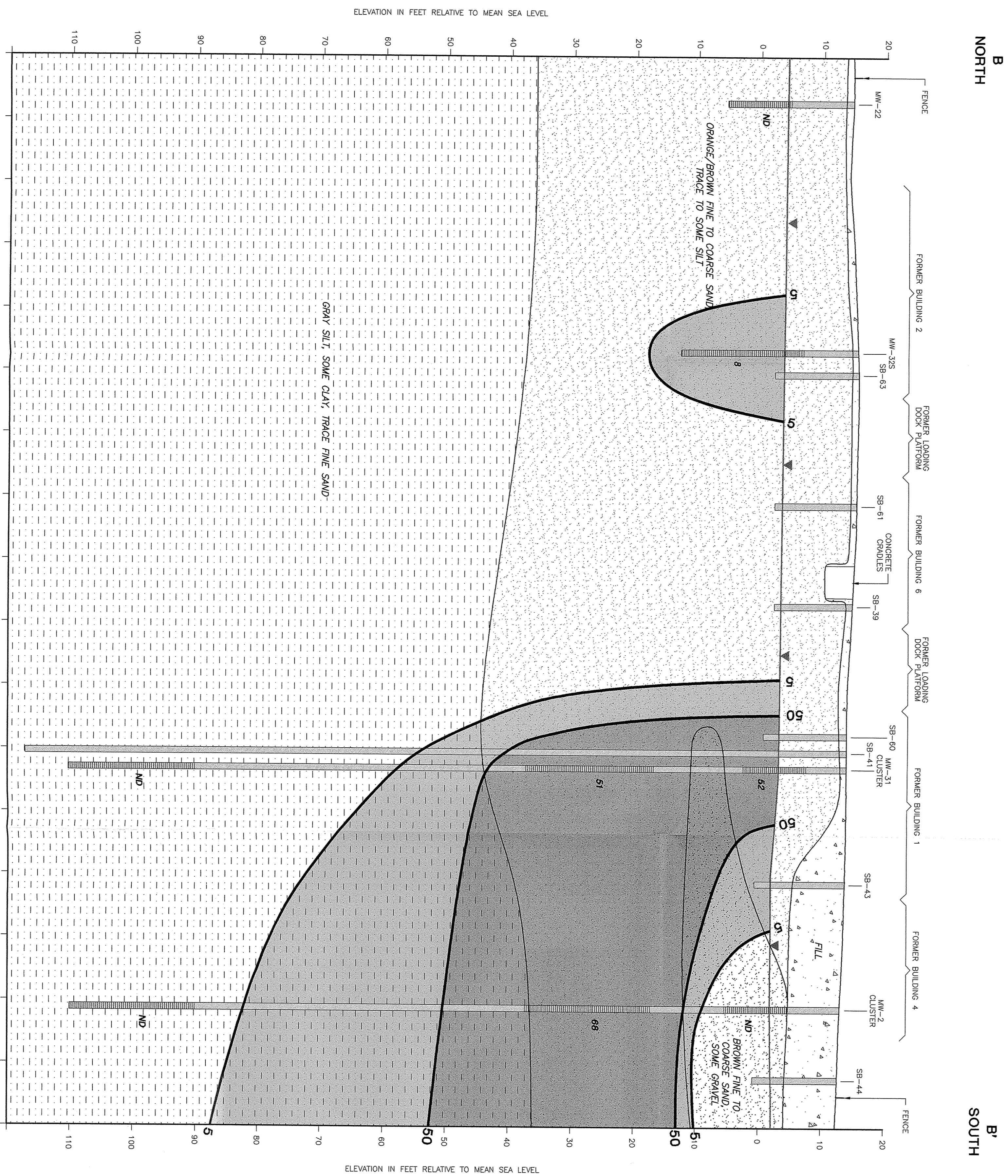
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LEGEND

- SR-43 LOCATION AND DESIGNATION OF SOIL BORING
- MM-2 LOCATION AND DESIGNATION OF MONITORING WELL
- RELATIVE TO THE LINE OF CROSS SECTION
- MM-22 PROJECTED FROM 10 FT EAST
- MM-22S PROJECTED FROM 33 FT EAST
- SR-43 PROJECTED FROM 34 FT EAST
- SR-43S PROJECTED FROM 35 FT EAST
- SR-39 PROJECTED FROM 40 FT WEST
- SR-41 PROJECTED FROM 20 FT WEST
- SR-41S PROJECTED FROM 21 FT WEST
- SR-43 PROJECTED FROM 5 FT EAST
- MM-2 PROJECTED FROM 10 FT WEST
- MM-2S PROJECTED FROM 15 FT WEST
- GROUNDWATER ELEVATION ON JULY 20, 2001
- ESTIMATED GEOLOGIC CONTACT
- 50 ESTIMATED LINE OF EQUAL 1,1,1-TRICHLOROETHANE (TCA) CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
- B-B' LINE OF CROSS SECTION
- 61 WELL SCREEN INTERVAL
- 61 TCA CONCENTRATION FROM MONITORING WELL SAMPLE IN ug/L
- 61 BOREROLE
- TCA CONCENTRATION GREATER THAN 50 ug/L
- TCA CONCENTRATION BETWEEN 5 ug/L AND 50 ug/L
- FT FEET
- NO PCE NOT DETECTED IN MONITORING WELL SAMPLE

NOTES

1. SOIL BORINGS SR-39, SR-41, SR-43, SR-44, SR-60, SR-61 AND SR-63 WERE INCLUDED FOR GEOLOGIC INFORMATION ONLY
2. MONITORING WELL CLUSTER INCLUDES SHALLOW, INTERMEDIATE AND DEEP WELL



GENERALIZED HYDROGEOLOGIC CROSS-SECTION B-B' AND TCA CONCENTRATIONS IN GROUNDWATER

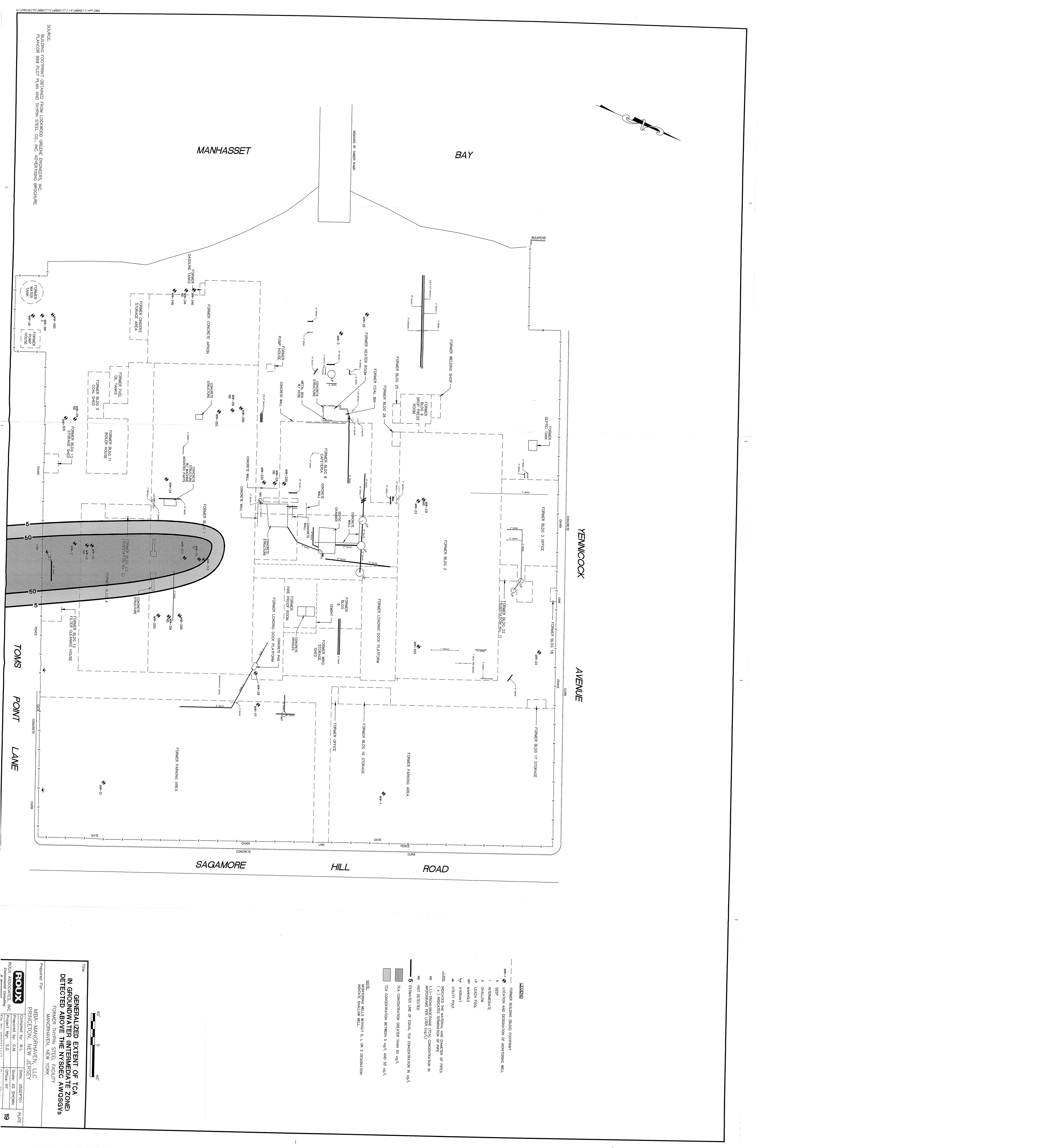
Prepared For: **MBA MANORHAVEN, LLC**
 Former Thruway Steel Facility
 MANORHAVEN, NEW JERSEY

Prepared by: **K.S.**
 Checked by: **G.M.**
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 Project: **77101Y**

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PROJECTS\MB0771\MB071114\MB01114.dwg
 SOURCE: BUILDING FOOTPRINT OBTAINED FROM LOGANWOOD GREEN ENGINEERS, INC.
 FUNDOR: 899 PLOT PLAN AND THYPIN STEEL CO., INC. ARCHITECTURAL BROCHURE.

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Prepared For: **MRB-MANORHAVEN, LLC**
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Sheet: 19 of 19

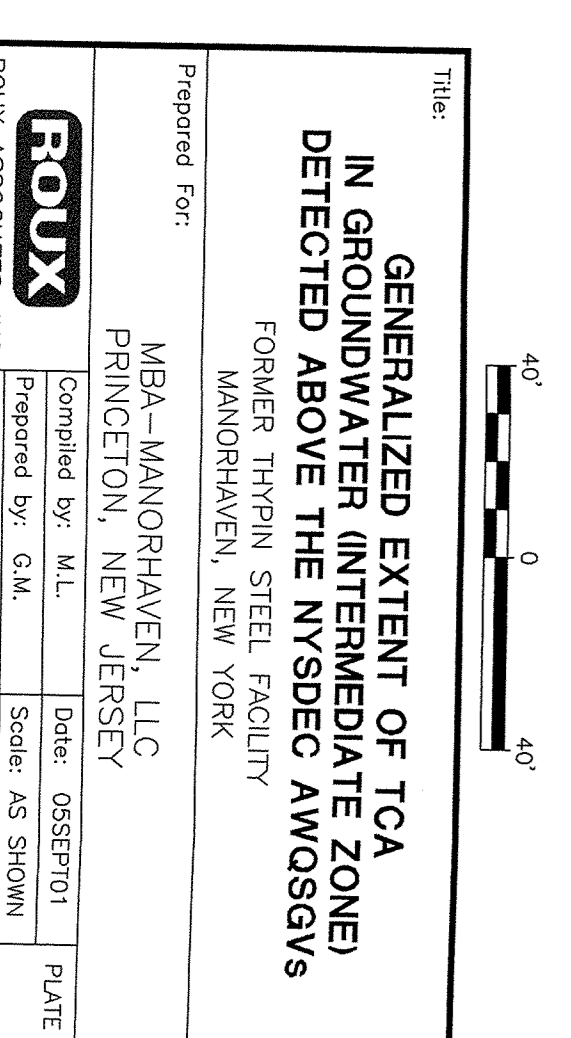
TITLE: **GENERALIZED EXTENT OF TCA IN GROUNDWATER INTERMEDIATE ZONE DETECTED ABOVE THE NYSDEC AWQS/GVS**

DATE: 05/28/2011

SCALE: AS SHOWN

DRAWN BY: J.S. SCHWIMM

CHECKED BY: M.L. KILPATRICK



NOTE:
 MONITORING WELLS WITHIN 0.1, 1, OR 5 RESOLUTION MONITORING SYSTEM WELL.

LEGEND

FORMER BUILDING (BLDG) FOOTPRINT

MW-# LOCATION AND DESIGNATION OF MONITORING WELL

0 DEEP

1 INTERMEDIATE

3 SHALLOW

4P LEACH POOL

M1 MANHOLE

H HERBARIUM

U UTILITY POLE

--- INDICATES THE MATERIAL AND NUMBER OF PIPES (X X) INDICATES TERMINATION OF PIPE MICROGRAMS PER LITER (ug/L)

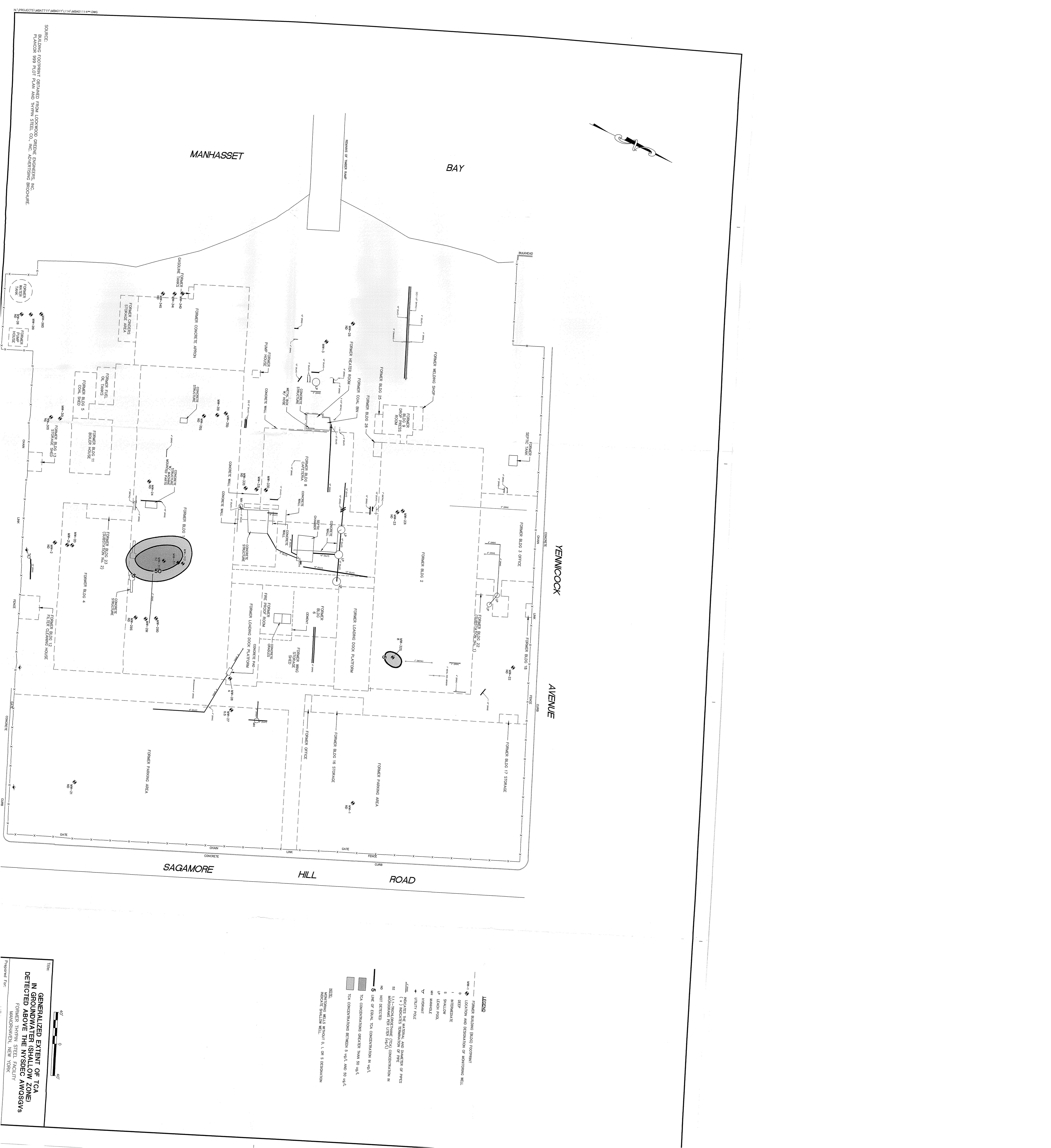
NO NOT DETECTED

5 ESTIMATED LINE OF EQUAL TCA CONCENTRATION IN ug/L

TCA CONCENTRATION GREATER THAN 50 ug/L

TCA CONCENTRATION GREATER THAN 5 ug/L AND 50 ug/L

TCA CONCENTRATION BETWEEN 5 ug/L AND 50 ug/L



SOURCE:
 BUILDING FOOTPRINT OBTAINED FROM LOCKWOOD GREENE ENGINEERS, INC.
 PARAGRAPH 899 PLOT PLAN AND THYSSIN STEEL CO., INC. ADVERTISING BROCHURE

MANHASSET

BAY

YEMCOCK AVENUE

AVENUE

SAGAMORE ROAD

HILL ROAD

ROAD

LEGEND

- FORMER BUILDING (BLDG) FOOTPRINT
- ◆ LOCATION AND RESERVATION OF MONITORING WELL
- 0 DEEP
- 1 INTERMEDIATE
- 3 SHALLOW
- UP LEAK POOL
- HM HAZARDOUS MATERIAL
- U UTILITY POLE
- MONITORS THE MATERIAL AND DIAMETER OF PIPES (1.1-3.0 INCHES DIAMETER) OR PPE
- SS MONITORING WELL (TW) CONCENTRATION IN NOT DETECTED
- NO NOT DETECTED
- 5 LINE OF EQUAL TCA CONCENTRATION IN ug/L
- 10 TCA CONCENTRATIONS GREATER THAN 10 ug/L
- 50 TCA CONCENTRATIONS GREATER THAN 50 ug/L
- 100 TCA CONCENTRATIONS GREATER THAN 100 ug/L

NOTE:
 MONITORING WELLS WITHOUT 0, 1 OR 3 DESIGNATION INDICATE SHALLOW WELL.



THIS
 GENERALIZED EXTENT OF TCA
 IN GROUNDWATER (SHALLOW ZONE)
 DETECTED ABOVE THE NYSDEC AWOSSGWS
 FORMER THYSSIN STEEL FACILITY
 MANHASSET, NEW YORK

Proposed For:

SOURCE:
BUILDING FOOTPRINT OBTAINED FROM LOCKWOOD GREENE ENGINEERS, INC.
PARSON 559 FLOI PLAN AND TRIVIN STEEL CO., INC. ADVERTISING BROCHURE



Title: **GENERALIZED EXTENT OF POE IN GROUNDWATER (SHALLOW ZONE) DETECTED ABOVE THE NYSDEC AMOSQV5**

Prepared For: **MBA-MANORHAVEN, LLC**
PRINCETON, NEW JERSEY

Prepared By: **ML** Date: **05/27/2011**

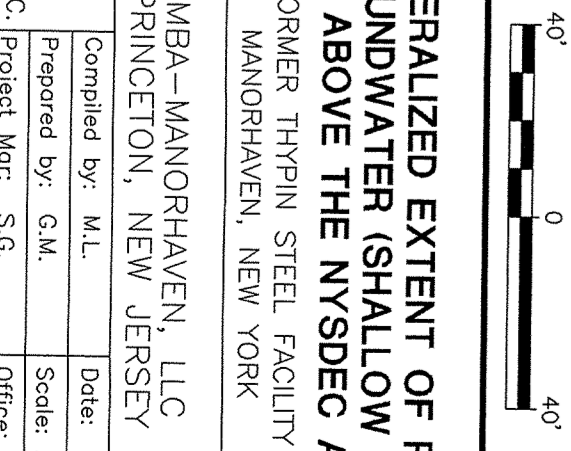
Checked By: **CM** Scale: **AS SHOWN**

Project Mgr: **SG** Office: **NY**

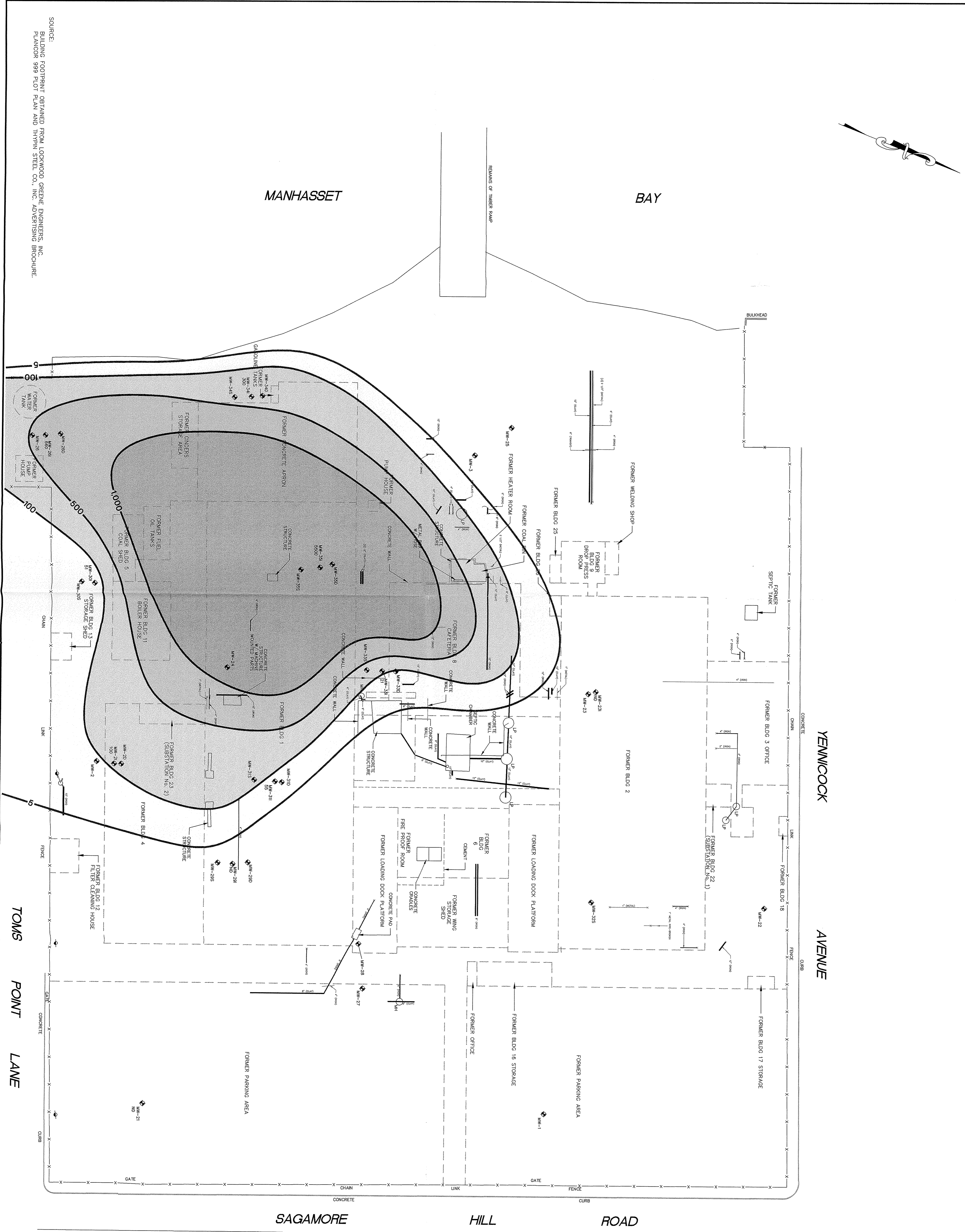
File No: **WBA011144** Project: **77101Y**

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PLATE **16**



- LEGEND**
- FORMER BUILDING (BLDG) FOOTPRINT
 - MW-1-4 LOCATION AND DESIGNATION OF MONITORING WELL
 - 0 DEEP
 - 1 INTERMEDIATE
 - 5 SHALLOW
 - UP LEACH POOL
 - MH MANHOLE
 - UP HIGHTAIL
 - UTILITY POLE
- MONITORING WELLS MATERIAL AND DIAMETER OF PIPES
- 20 20" TYPICAL OBSERVED (POE) CONCENTRATION IN MONITORING WELLS
 - 50 ESTIMATED LINE OF EQUAL POE CONCENTRATION IN 40% POE CONCENTRATION BETWEEN 5 ug/L AND 50 ug/L
 - 55 POE CONCENTRATION GREATER THAN 50 ug/L
- NOTE:
MONITORING WELLS WITHIN 0.1 OR 0.5 RESERVATION INDICATE SHALLOW WELL.



LEGEND

- FORMER BUILDING (BOLD) FOOTPRINT
- LOCATION AND DESIGNATION OF MONITORING WELL
- INTERSECT
- SHOULDER
- LEACH POOL
- MANHOLE
- HYDRANT
- UTILITY POLE

INDICATES THE MATERIAL AND DIAMETER OF PIPE
 (X) INDICATES TERMINATION OF PIPE
 THICKNESS (OR OLD CONCENTRATION IN MONITORING WELL) (UG/L)

5 ESTIMATED LINE OF EQUAL TCE CONCENTRATION IN UG/L

THE CONCENTRATION GREATER THAN 1000 UG/L

THE CONCENTRATION BETWEEN 500 UG/L AND 1000 UG/L

THE CONCENTRATION BETWEEN 100 UG/L AND 500 UG/L

THE CONCENTRATION BETWEEN 5 UG/L AND 100 UG/L

NOT DETECTED

NOTE:
 MONITORING WELLS WITHIN 0.1 OR 8 DESIGNATION ARE TO BE SHOWN WITHIN THIS ZONE.

GENERALIZED EXTENT OF TOE IN GROUNDWATER (INTERMEDIATE ZONE) DETECTED ABOVE THE NYSDEC AMOSGVS

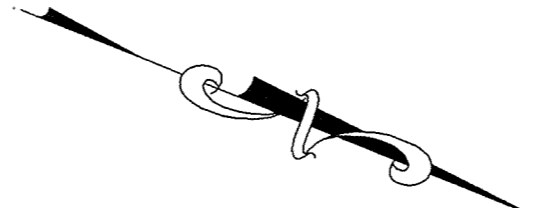
FORUM 899 PLOT PLAN AND TRUSS STEEL CO., INC. ADVERTISING BROCHURE
 MANORHAVEN, NEW YORK

Prepared For: M&A-MANORHAVEN, LLC
 PRINCETON, NEW JERSEY

ROUX ASSOCIATES, INC.
 15

Prepared By: M.L. Date: 08/20/2011
 Prepared By: G.M. Scale: AS SHOWN
 Project Mgr.: S.G. Office: NY
 Project: 77101Y

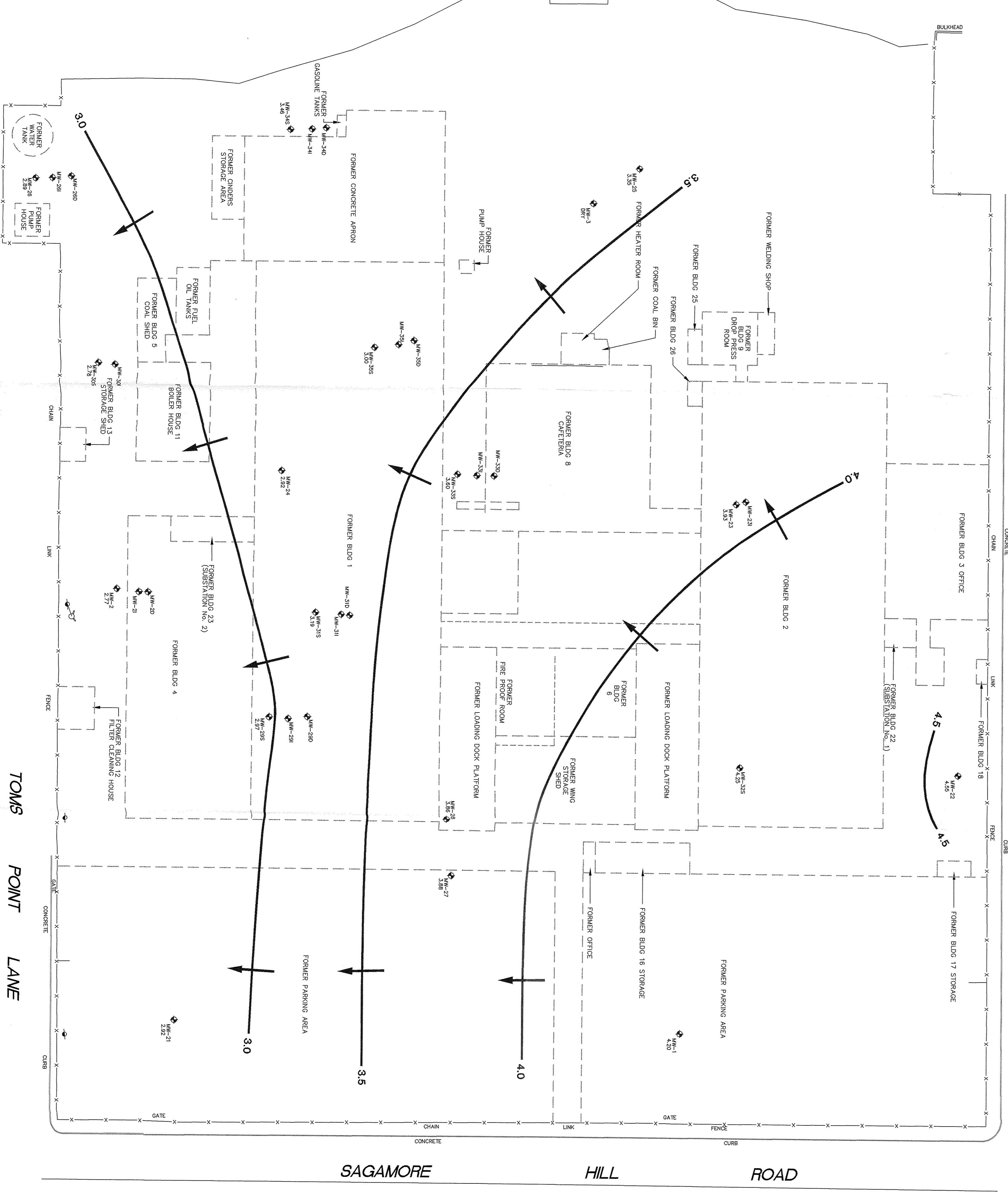
40' 0 40'



MANHASSET

BAY

SOURCE:
BUILDING FOOTPRINT OBTAINED FROM LOOKINGOD GEOTECH ENGINEERS, INC.
PLANBOOK 999 PLOT PLAN AND HYDRA STEEL CO., INC. ADVERTISING BROCHURE.



TOM'S POINT LANE

YENNICOCK AVENUE

SAGAMORE HILL ROAD

LEGEND

- FORMER BUILDING (BLDG) FOOTPRINT
- ◆ LOCATION AND DESIGNATION OF MONITORING WELL
- 0 DEPTH
- 1 INTERMEDIATE
- 5 SHALLOW
- ▽ HERKANT
- ▽ UTILITY POLE
- 4.0 WATER-LEVEL ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL
- 4.0 LINE OF EQUAL WATER-LEVEL ELEVATION RELATIVE TO MEAN SEA LEVEL
- ← ESTIMATED DIRECTION OF GROUNDWATER FLOW

NOTES:

1. WATER-LEVEL ELEVATION FOR MONITORING WELLS MW-24 AND MW-35S WERE NOT INCLUDED IN THE CONTOURING DUE TO ANOMALOUS MEASUREMENTS.
2. MONITORING WELLS WITHOUT D, I, OR S DESIGNATION INDICATE SHALLOW WELLS.

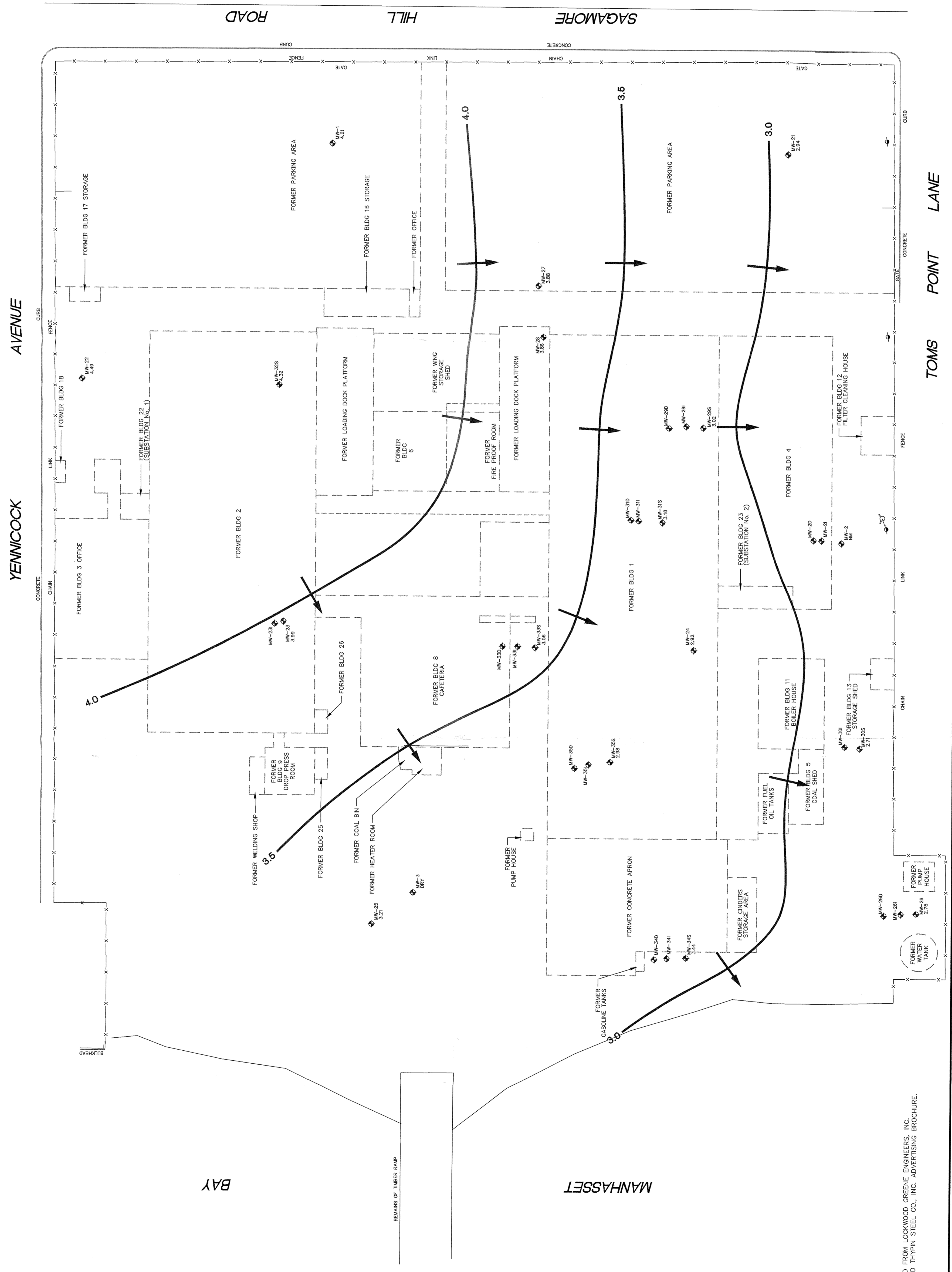
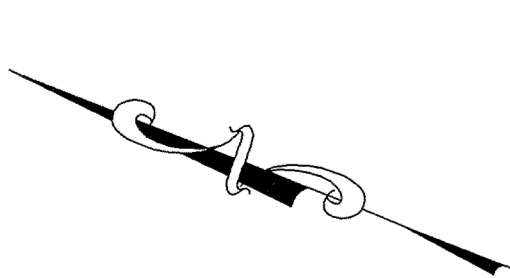


TITLE: WATER-LEVEL ELEVATIONS AND GENERALIZED GROUNDWATER FLOW DIRECTION SHALL ON 20' ZONE HIGH TIDE

Prepared For: MBA-MANORHAVEN, LLC
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FORMER TEMPLETON FACILITY
MANORHAVEN, NEW YORK

Prepared By: S.S. Date: 05/28/2011
 Prepared By: G.M. Scale: AS SHOWN
 ROUX ASSOCIATES, INC. Project Mgr.: S.G. Office: NY
 Project: 77101Y

ROUX ASSOCIATES, INC. **9**



LEGEND

FORMER BUILDING (BLDG) FOOTPRINT
 MW-# LOCATION AND DESIGNATION OF MONITORING WELL
 D DEEP
 I INTERMEDIATE
 S SHALLOW
 V VIBRANT
 → JUDITH POLE
 4.5 TO MEAN SEA LEVEL
 4.0 LINE OF EQUAL WATER-LEVEL ELEVATION
 → ESTIMATED DIRECTION OF GROUNDWATER FLOW

NOTES:

1. WATER-LEVEL ELEVATION FOR MONITORING WELLS MW-24 AND MW-355 WERE NOT INCLUDED IN THE CONTOURING DUE TO ANOMALOUS MEASUREMENTS.
 2. MONITORING WELLS WITHOUT D, I, OR S DESIGNATION INDICATE SHALLOW WELLS.



Title: **WATER-LEVEL ELEVATIONS AND GENERALIZED GROUNDWATER FLOW DIRECTION SHALLOW ZONE (LOW TIDE) JULY 20, 2001**

Prepared For: **FORMER THYPIN STEEL FACILITY MANORHAVEN, NEW YORK**

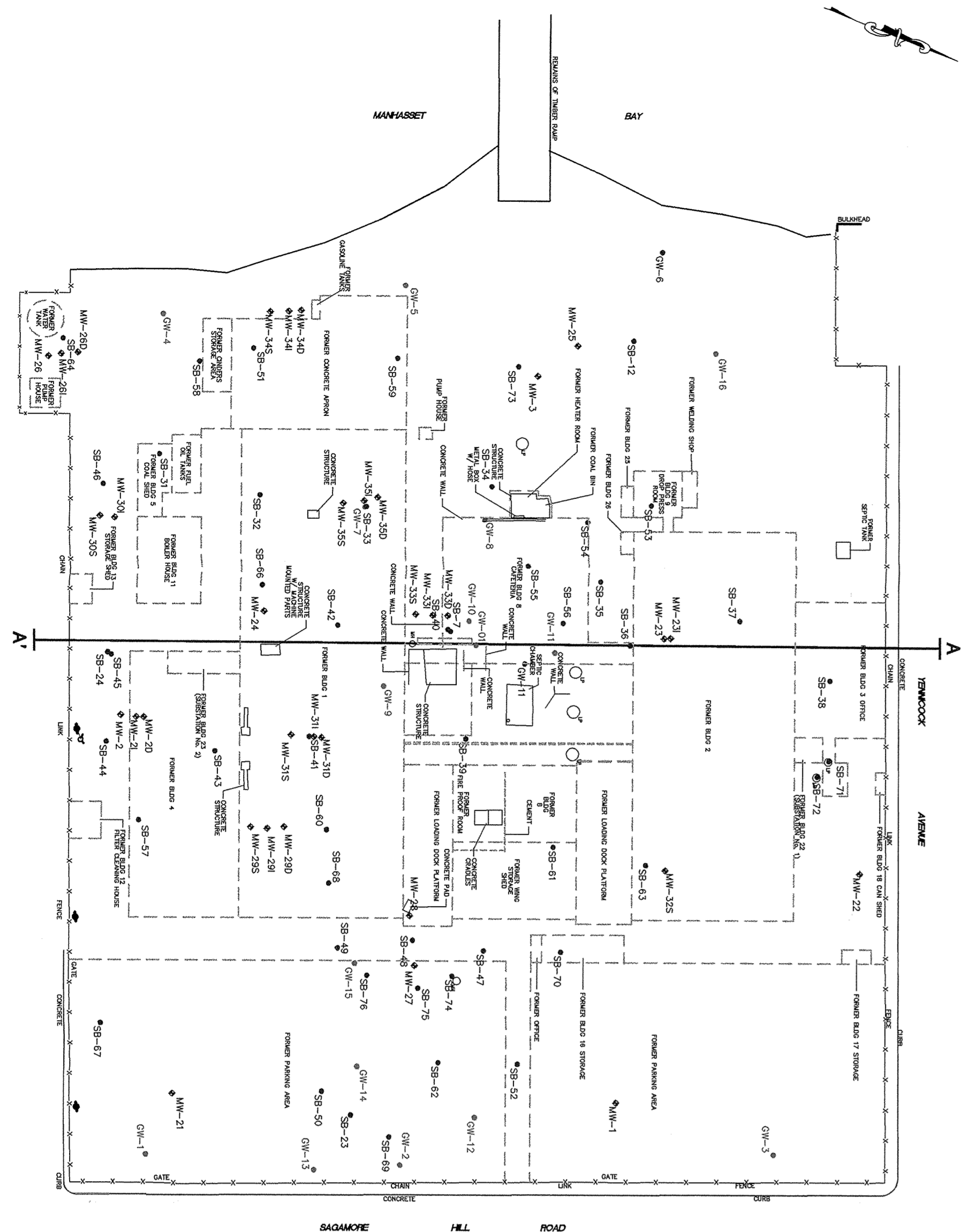
Prepared By: **ROUX ASSOCIATES, INC. Environmental Consulting & Management**

Compiled by: S.S. Date: 08/27/01
 Prepared by: S.S. Date: 08/27/01
 Project No.: S.C. Office No.:
 File No.: 080111437 Project: 771017

PLATE **8**

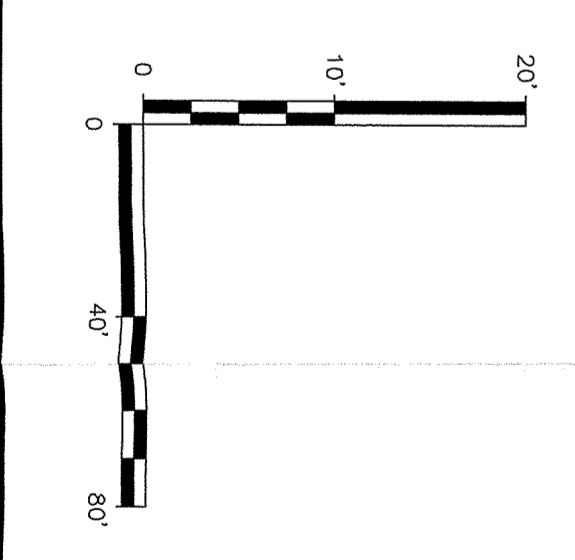
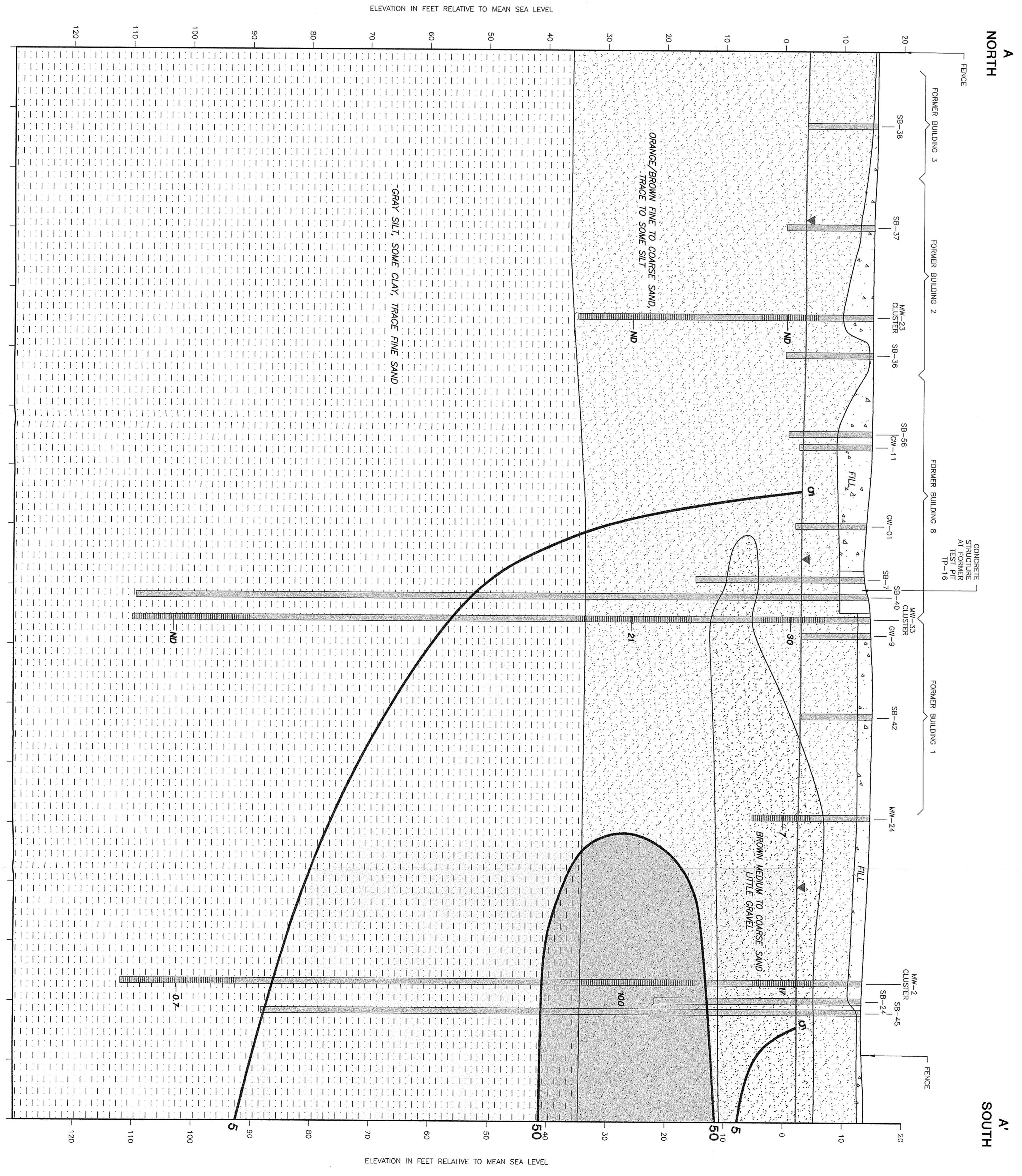
SOURCE: BUILDING FOOTPRINT OBTAINED FROM LOCKWOOD GREENE ENGINEERS, INC. PLANNOR 999 PLOT PLAN AND THYPIN STEEL CO., INC. ADVERTISING BROCHURE.

SOURCE:
 BUILDING FOOTPRINT OBTAINED FROM LOCKWOOD GREENE ENGINEERS, INC.
 PLANCOR 999 PLOT PLAN AND THYPIN STEEL CO., INC. ADVERTISING BROCHURE



- NOTES
1. SOIL BORINGS SB-7, SB-24, SB-36, SB-37, SB-38, SB-40, SB-42, SB-45, SB-56, GW-01, AND GW-11 WERE INCLUDED FOR GEOLOGIC INFORMATION ONLY.
 2. MONITORING WELL CLUSTER MW-2 AND MW-11 INCLUDES SHALLOW, INTERMEDIATE AND DEEP WELL.
 3. WHILE MONITORING WELL CLUSTER MW-23 INCLUDES SHALLOW AND INTERMEDIATE WELL.

- LEGEND
- MW-9 LOCATION AND DESIGNATION OF SOIL BORING
 - SB-43 LOCATION AND DESIGNATION OF MONITORING WELL
 - MW-2 LOCATION AND DESIGNATION OF MONITORING WELL
 - RELATIVE TO THE LINE OF CROSS SECTION
 - SB-38 PROJECTED FROM 28 FT EAST
 - SB-37 PROJECTED FROM 18 FT WEST
 - SB-36 PROJECTED FROM 2 FT WEST
 - SB-35 PROJECTED FROM 2 FT WEST
 - SB-34 PROJECTED FROM 16 FT WEST
 - SB-33 PROJECTED FROM 16 FT WEST
 - SB-32 PROJECTED FROM 16 FT WEST
 - SB-31 PROJECTED FROM 16 FT WEST
 - SB-30 PROJECTED FROM 16 FT WEST
 - SB-29 PROJECTED FROM 16 FT WEST
 - SB-28 PROJECTED FROM 16 FT WEST
 - SB-27 PROJECTED FROM 16 FT WEST
 - SB-26 PROJECTED FROM 16 FT WEST
 - SB-25 PROJECTED FROM 16 FT WEST
 - SB-24 PROJECTED FROM 16 FT WEST
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 - SB-22 PROJECTED FROM 16 FT WEST
 - SB-21 PROJECTED FROM 16 FT WEST
 - SB-20 PROJECTED FROM 16 FT WEST
 - SB-19 PROJECTED FROM 16 FT WEST
 - SB-18 PROJECTED FROM 16 FT WEST
 - SB-17 PROJECTED FROM 16 FT WEST
 - SB-16 PROJECTED FROM 16 FT WEST
 - SB-15 PROJECTED FROM 16 FT WEST
 - SB-14 PROJECTED FROM 16 FT WEST
 - SB-13 PROJECTED FROM 16 FT WEST
 - SB-12 PROJECTED FROM 16 FT WEST
 - SB-11 PROJECTED FROM 16 FT WEST
 - SB-10 PROJECTED FROM 16 FT WEST
 - SB-9 PROJECTED FROM 16 FT WEST
 - SB-8 PROJECTED FROM 16 FT WEST
 - SB-7 PROJECTED FROM 16 FT WEST
 - SB-6 PROJECTED FROM 16 FT WEST
 - SB-5 PROJECTED FROM 16 FT WEST
 - SB-4 PROJECTED FROM 16 FT WEST
 - SB-3 PROJECTED FROM 16 FT WEST
 - SB-2 PROJECTED FROM 16 FT WEST
 - SB-1 PROJECTED FROM 16 FT WEST
 - SB-0 PROJECTED FROM 16 FT WEST
 - SB-38 PROJECTED FROM 28 FT EAST
 - SB-37 PROJECTED FROM 18 FT WEST
 - SB-36 PROJECTED FROM 2 FT WEST
 - SB-35 PROJECTED FROM 2 FT WEST
 - SB-34 PROJECTED FROM 16 FT WEST
 - SB-33 PROJECTED FROM 16 FT WEST
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 - SB-10 PROJECTED FROM 16 FT WEST
 - SB-9 PROJECTED FROM 16 FT WEST
 - SB-8 PROJECTED FROM 16 FT WEST
 - SB-7 PROJECTED FROM 16 FT WEST
 - SB-6 PROJECTED FROM 16 FT WEST
 - SB-5 PROJECTED FROM 16 FT WEST
 - SB-4 PROJECTED FROM 16 FT WEST
 - SB-3 PROJECTED FROM 16 FT WEST
 - SB-2 PROJECTED FROM 16 FT WEST
 - SB-1 PROJECTED FROM 16 FT WEST
 - SB-0 PROJECTED FROM 16 FT WEST



Title: **GENERALIZED HYDROGEOLOGIC CROSS-SECTION A-A' AND TCE CONCENTRATIONS IN GROUNDWATER**

Prepared For: **MBA MANORHAWEN, LLC**
 FORMER THYPIN STEEL FACILITY
 MANORHAWEN, NEW JERSEY

Prepared By: **CLB** Date: 05SEP2011
 Checked By: **CLB** Scale: AS SHOWN
 Project No.: 77101Y

ROUX CONSULTANTS, INC.
 Environmental Consulting & Management
 Project No.: 77101Y

PLATE **6**

