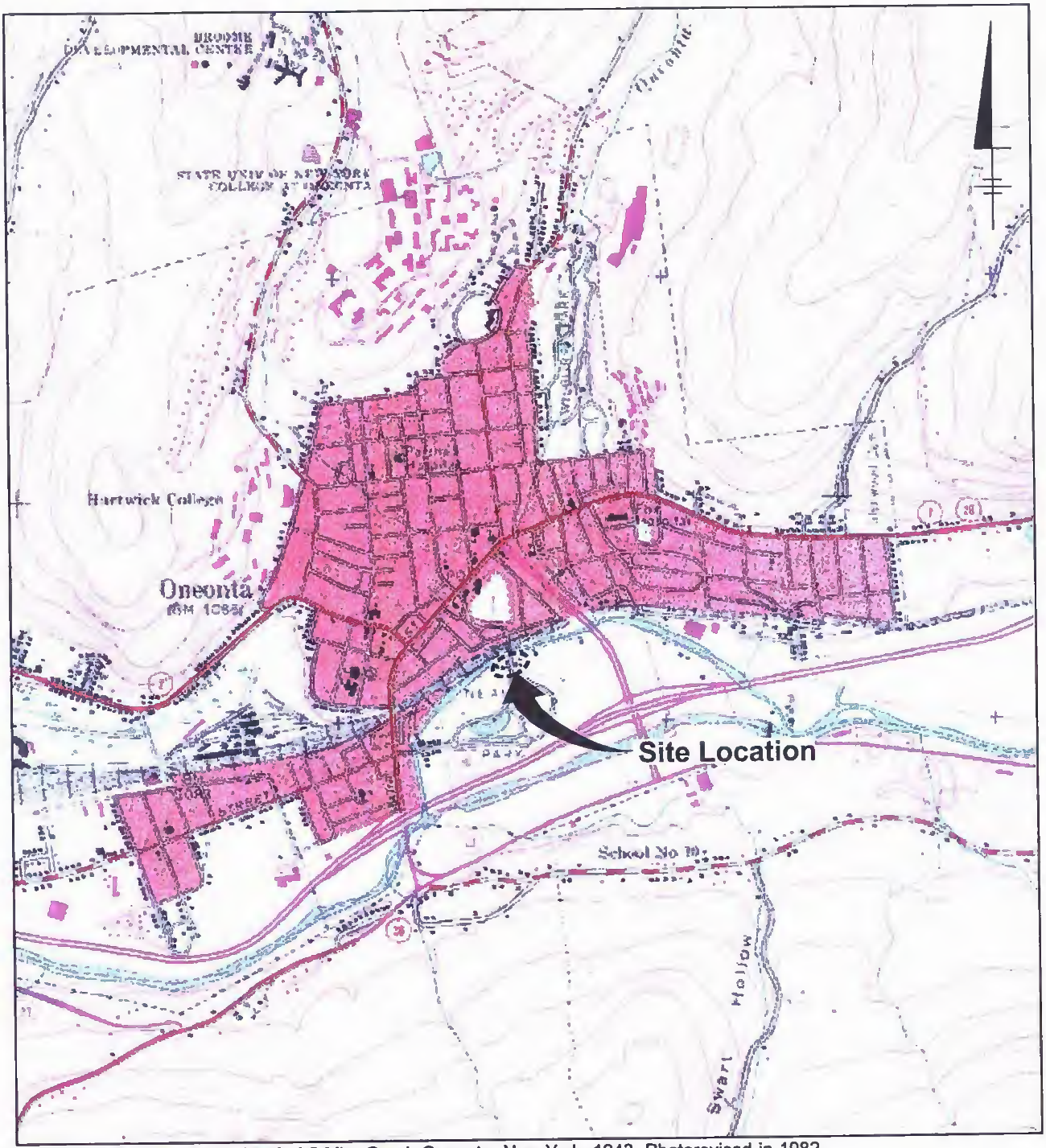


REFERENCE: Base Map USGS 7.5 Min. Quad. Oneonta, New York, 1943, Photorevised in 1982.

2000' 0 2000'

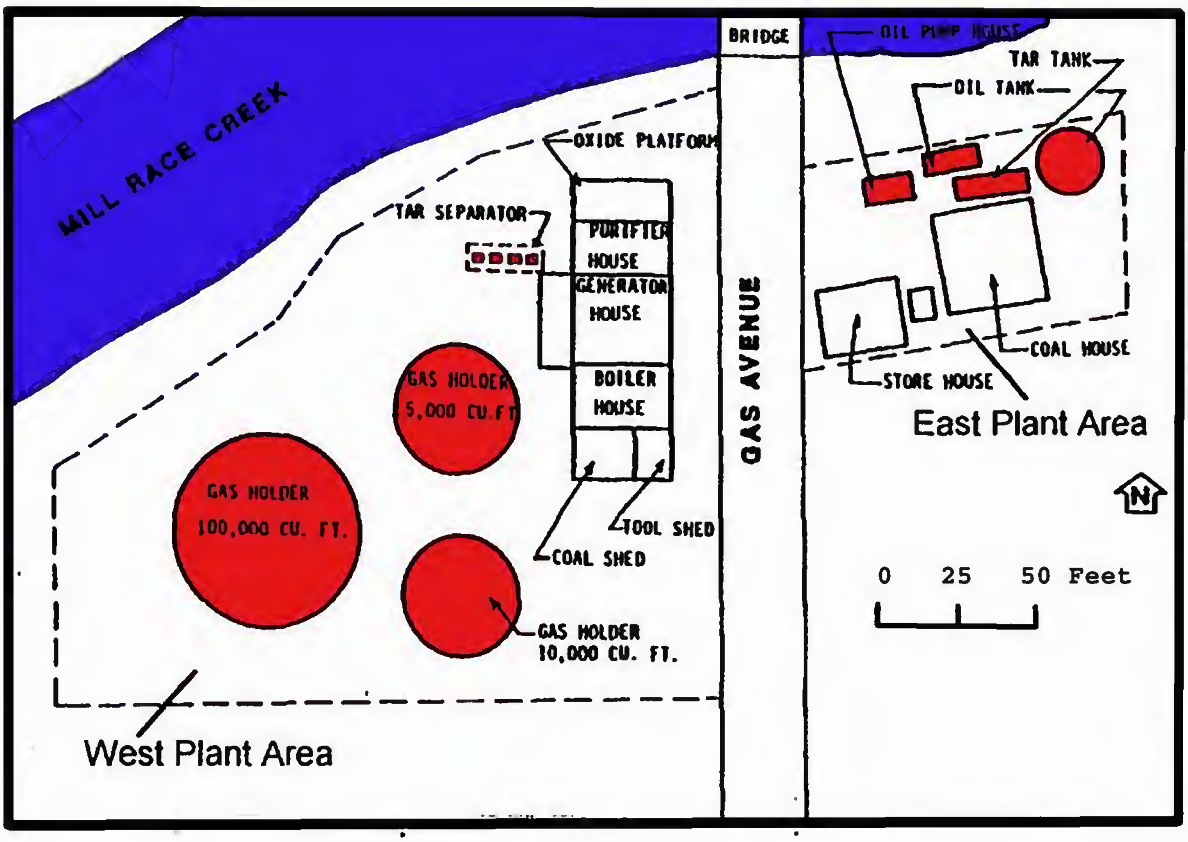
Approximate Scale: 1" = 2000'

07/08/03 SYR-D85-LBR
13042204/13042n02.cdr

NEW YORK STATE ELECTRIC & GAS
ONEONTA MGP SITE

SITE LOCATION MAP

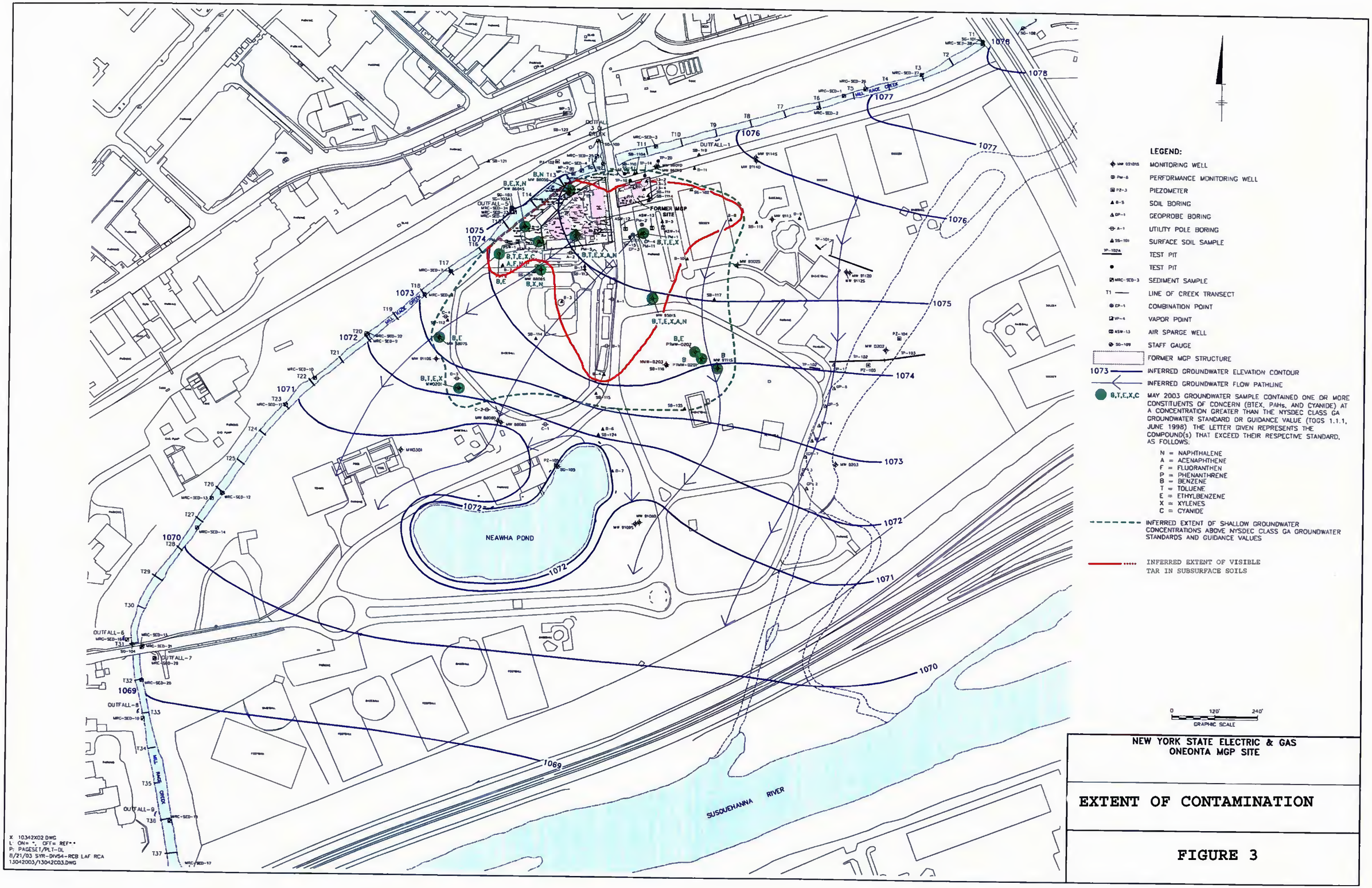
Figure 1



Oneonta MGP Site Layout, Approximately 1920

Likely Tar Sources Shaded In Orange

Figure 2

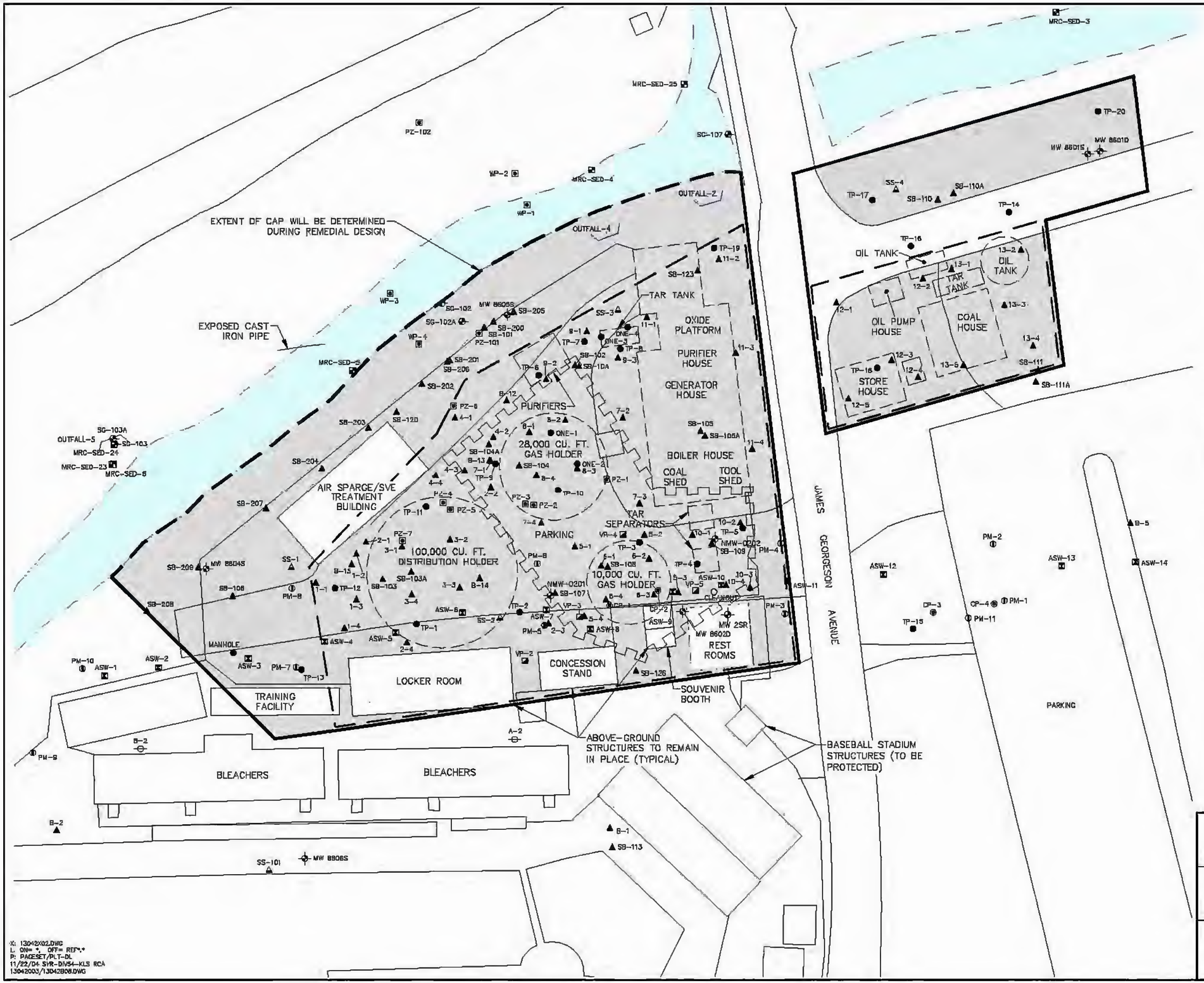


X 10342X02.DWG
L: ON= *, OFF= REF**
P: PAGESET/PLT-DL
8/21/03 SYR-DIV54-RCB LAF RCA
13042003/13042C03.DWG

NEW YORK STATE ELECTRIC & GAS
ONEONTA MGP SITE

EXTENT OF CONTAMINATION

FIGURE 3

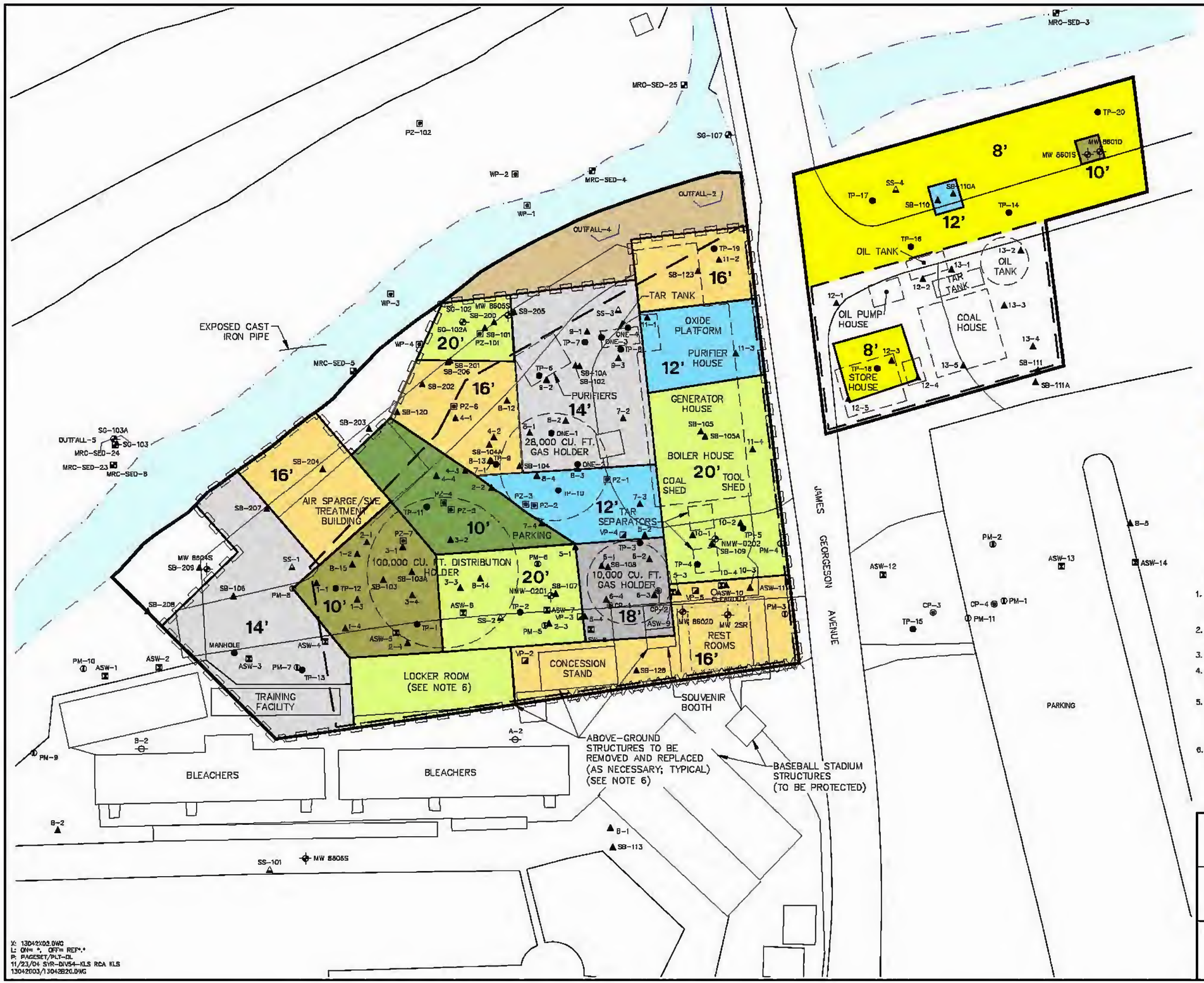


NYSEG
ONEONTA MGP SITE
ONEONTA, NEW YORK

ALTERNATIVE SM 2

FIGURE 4

X: 13042X02.DWG
L: ON= *, OFF= REF*,*
P: PAGESET/PLT-DL
11/22/04- SYR-DIV54--KLS RCA
13042003/13042B08.DWG



LEGEND:

- MONITORING WELL
- PERFORMANCE MONITORING WELL
- PIEZOMETER
- SOIL BORING
- GEOPROBE BORING
- UTILITY POLE BORING
- SURFACE SOIL SAMPLE
- TEST PIT
- TEST PIT
- SEDIMENT SAMPLE
- COMBINATION POINT
- VAPOR POINT
- AIR SPARGE WELL
- STAFF GAUGE
- FORMER MGP STRUCTURE
- LIMITS OF SUBSURFACE SOURCE MATERIAL
- APPROXIMATE LIMITS OF FORMER MGP PROPERTY BOUNDARY
- 8 FOOT EXCAVATION DEPTH
- 10 FOOT EXCAVATION DEPTH
- 12 FOOT EXCAVATION DEPTH
- 14 FOOT EXCAVATION DEPTH
- 16 FOOT EXCAVATION DEPTH
- 18 FOOT EXCAVATION DEPTH
- 20 FOOT EXCAVATION DEPTH
- ADDITIONAL SOIL REMOVAL AREA ALONG CREEK BANK (SEE NOTE 5)
- TEMPORARY SHEETPILE
- PRE-DRILLING/PRE-TRENCHING

NOTES:

1. BASE MAP PROVIDED IN ELECTRONIC FORMAT FROM NYSEG, DRAWING TITLE "MONITORING WELL LOCATIONS ONEONTA FORMER MGP SITE AND SURROUNDING AREA", OTSEGO COUNTY, NEW YORK", AT A SCALE OF 1"=60', DATED 2/18/02.
2. BASE MAP POSITIONED IN STATE PLANE: NEW YORK CENTRAL 3102, HORIZONTAL DATUM: NAD 83 BY NYSEG.
3. ALL SAMPLE LOCATIONS SURVEYED BY NYSEG.
4. THE VERTICAL AND HORIZONTAL EXCAVATION LIMITS SHOWN ARE CONCEPTUAL IN NATURE, AND ARE FOR COMPARITIVE PURPOSES ONLY. THE ACTUAL ACHIEVABLE EXCAVATION LIMITS WILL BE DETERMINED BASED ON DESIGN ACTIVITIES.
5. THIS AREA WOULD BE REMOVED TO 14 FEET BELOW GRADE; HOWEVER, THE ACTUAL DEPTH WOULD BE CONFIRMED DURING DESIGN ACTIVITIES. UNDER ALTERNATIVE SM3, VISUALLY IMPACTED MATERIALS IN THIS AREA, WHICH WAS NOT CHARACTERIZED DURING THE REMEDIAL INVESTIGATION, WOULD BE REMOVED IN LIEU OF CONDUCTING ADDTIONAL INVESTIGATIONS.
6. THE NEED FOR SOIL/SOURCE AREA MATERIAL REMOVAL FROM BENEATH THE LOCKER ROOM WOULD BE ASSESSED DURING DESIGN ACTIVITES.

0 40' 80'

GRAPHIC SCALE

NYSEG
ONEONTA MGP SITE
ONEONTA, NEW YORK

ALTERNATIVE SM3

Figure 5

X: 13042X03.DWG
L: ON= *, OFF= REF*.*
P: PAGESET/PLT-DL
11/23/04 SYR-DIV54-KLS RCA KLS
13042003/13042B26.DWG

OUTFALL-2
OUTFALL-4
OUTFALL-5
CAST IRON PIPE
TAR TANK
OXIDE PLATFORM
PURIFIER HOUSE
PURIFIERS
GENERATOR HOUSE
28,000 CU. FT. GAS HOLDER
BOILER HOUSE
COAL SHED
TOOL SHED
AIR SPARGE/SVE TREATMENT BUILDING
TAR SEPARATORS
PARKING
100,000 CU. FT. DISTRIBUTION HOLDER
10,000 CU. FT. GAS HOLDER
BLEAROUT
MANHOLE
REST ROOMS
LOCKER ROOM
CONCESSION STAND
TRAINING FACILITY
SOUVENIR BOOTH
ABOVE-GROUND STRUCTURES TO BE REMOVED AND REPLACED (AS NECESSARY) (TYPICAL)
BLEACHERS
BLEACHERS
BASEBALL STADIUM STRUCTURES (TO BE PROTECTED)
JAMES GEORGESON AVENUE
OIL TANK
TAR TANK
OIL TANK
OIL PUMP HOUSE
COAL HOUSE
STORE HSE.
PARKING

LEGEND:

- PROPOSED INJECTION WELL (APPROXIMATE LOCATIONS)
- FORMER MGP STRUCTURE
- APPROXIMATE LIMITS OF SUBSURFACE SOURCE MATERIAL
- FORMER MGP PROPERTY BOUNDARY

NOTES:

1. BASE MAP PROVIDED IN ELECTRONIC FORMAT FROM NYSEG, DRAWING TITLE "MONITORING WELL LOCATIONS ONEONTA FORMER MGP SITE AND SURROUNDING AREA", OTSEGO COUNTY, NEW YORK", AT A SCALE OF 1"=60', DATED 2/18/02.
2. BASE MAP POSITIONED IN STATE PLANE: NEW YORK CENTRAL 3102, HORIZONTAL DATUM: NAD 83 BY NYSEG.
3. ALL SAMPLE LOCATIONS SURVEYED BY NYSEG.
4. THE INJECTION/SPARGING LOCATIONS SHOWN ARE CONCEPTUAL IN NATURE, AND ARE FOR COMPARATIVE PURPOSES ONLY. THE ACTUAL ACHIEVABLE LOCATIONS WILL BE DETERMINED BASED ON PILOT STUDY AND DESIGN ACTIVITIES.

0 40' 80'

GRAPHIC SCALE

X: 13042X03.DWG
L: ON= *, OFF= REF*,*, *SP*
P: PAGESET/PLT-DL
11/23/04 SYR-DIV54-RCA LAF KLS
13042003/13042B17.DWG

NYSEG
ONEONTA MGP SITE
ONEONTA, NEW YORK
FEASIBILITY STUDY REPORT

ALTERNATIVE SM4

Figure 6

OUTFALL-2
OUTFALL-4
OUTFALL-5
CAST IRON PIPE
TAR TANK
OXIDE PLATFORM
PURIFIER HOUSE
PURIFIERS
GENERATOR HOUSE
28,000 CU. FT. GAS HOLDER
BOILER HOUSE
COAL SHED
TOOL SHED
AIR SPARGE/SVE TREATMENT BUILDING
TAR SEPARATORS
PARKING
100,000 CU. FT. DISTRIBUTION HOLDER
10,000 CU. FT. GAS HOLDER
STEAM PIT
MANHOLE
REST ROOMS
LOCKER ROOM
CONCESSION STAND
TRAINING FACILITY
SOUVENIR BOOTH
BLEACHERS
BLEACHERS
ABOVE-GROUND STRUCTURES TO BE REMOVED AND REPLACED (AS NECESSARY) (TYPICAL)
BASEBALL STADIUM STRUCTURES (TO BE PROTECTED)
JAMES GEORGESON AVENUE
PARKING
OIL TANK
OIL TANK
TAR TANK
OIL PUMP HOUSE
COAL HOUSE
STORE HOUSE

LEGEND:

- FORMER MGP STRUCTURE
- LIMITS OF SUBSURFACE SOURCE MATERIAL
- APPROXIMATE LIMITS OF FORMER MGP PROPERTY BOUNDARY
- PROPOSED LOCATION OF SURFACE SOIL EXCAVATION AND SUBSURFACE SOIL IN-SITU SOLIDIFICATION/STABILIZATON

NOTES:

1. BASE MAP PROVIDED IN ELECTRONIC FORMAT FROM NYSEG, DRAWING TITLE "MONITORING WELL LOCATIONS ONEONTA FORMER MGP SITE AND SURROUNDING AREA", OTSEGO COUNTY, NEW YORK", AT A SCALE OF 1"=60', DATED 2/18/02.
2. BASE MAP POSITIONED IN STATE PLANE: NEW YORK CENTRAL 3102, HORIZONTAL DATUM: NAD 83 BY NYSEG.
3. ALL SAMPLE LOCATIONS SURVEYED BY NYSEG.
4. THE IN-SITU SOLIDIFICATION/STABILIZATION LIMITS SHOWN ARE CONCEPTUAL IN NATURE, AND ARE FOR COMPARITIVE PURPOSES ONLY. THE AOTUAL N-SITU STABILIZATION LIMITS WILL BE DETERMINED BASED ON DESIGN ACTIVITIES.

0 40' 80'

GRAPHIC SCALE

NYSEG
ONEONTA MGP SITE
ONEONTA, NEW YORK

ALTERNATIVE SM5

Figure 7

X: 13042X02.DWG
L: ON= *, OFF= REF*,*, *SP*
P: PAGESET/PLT-DL
11/22/04 SYR-DIV54-KLS RCA
13042003/13042B19.DWG

LEGEND:

SAMPLE LOCATIONS
- NONE
- NAPL
- ORGANIC ODOR
- PRODUCT ODOR
- SHEEN*

PROBE POINTS
- NO SHEEN
- SHEEN*

300 SERIES BORINGS
- 312 (4.0-4.5) BORING (NAPL, NO SHEEN) (NAPL DEPTH INTERVAL, IN FEET)
- 310 BORING (SHEEN*, NO NAPL)

- 2.5' REMOVAL/ENGINEERED BACKFILL AREA
- 4' REMOVAL/ENGINEERED BACKFILL AREA (INCLUDES NAPL COLLECTION SYSTEM AND NAPL BARRIER)
- APPROXIMATE LOCATION OF ENGINEERED BARRIER/COLLECTION SYSTEM AREA

NOTE:

*SHEEN OBSERVED WITHIN 0-4FT DEPTH BELOW SEDIMENT BED.

0 20 40 Feet

11/22/04 SYR-85 EAB
NYSEG 13042006
Q:\NYSEG_ONEONTA\mxd\Figure_Alt3.mxd

NYSEG
ONEONTA MGP SITE
ONEONTA, NEW YORK

ALTERNATIVE CK3

Figure 8

LEGEND:

SAMPLE LOCATIONS
- NONE
- NAPL
- ORGANIC ODOR
- PRODUCT ODOR
- SHEEN*

PROBE POINTS
- NO SHEEN
- SHEEN*

300 SERIES BORINGS
- 312 (4.0-4.5) BORING (NAPL, NO SHEEN) (NAPL DEPTH INTERVAL, IN FEET)
- 310 BORING (SHEEN*, NO NAPL)

- 2.5' REMOVAL/ENGINEERED BACKFILL AREA
- 8.5' REMOVAL/ENGINEERED BACKFILL AREA
- APPROXIMATE LOCATION OF VERTICAL ENGINEERED BARRIER/COLLECTION SYSTEM AREA

NOTE:

*SHEEN OBSERVED WITHIN 0-4FT DEPTH BELOW SEDIMENT BED.

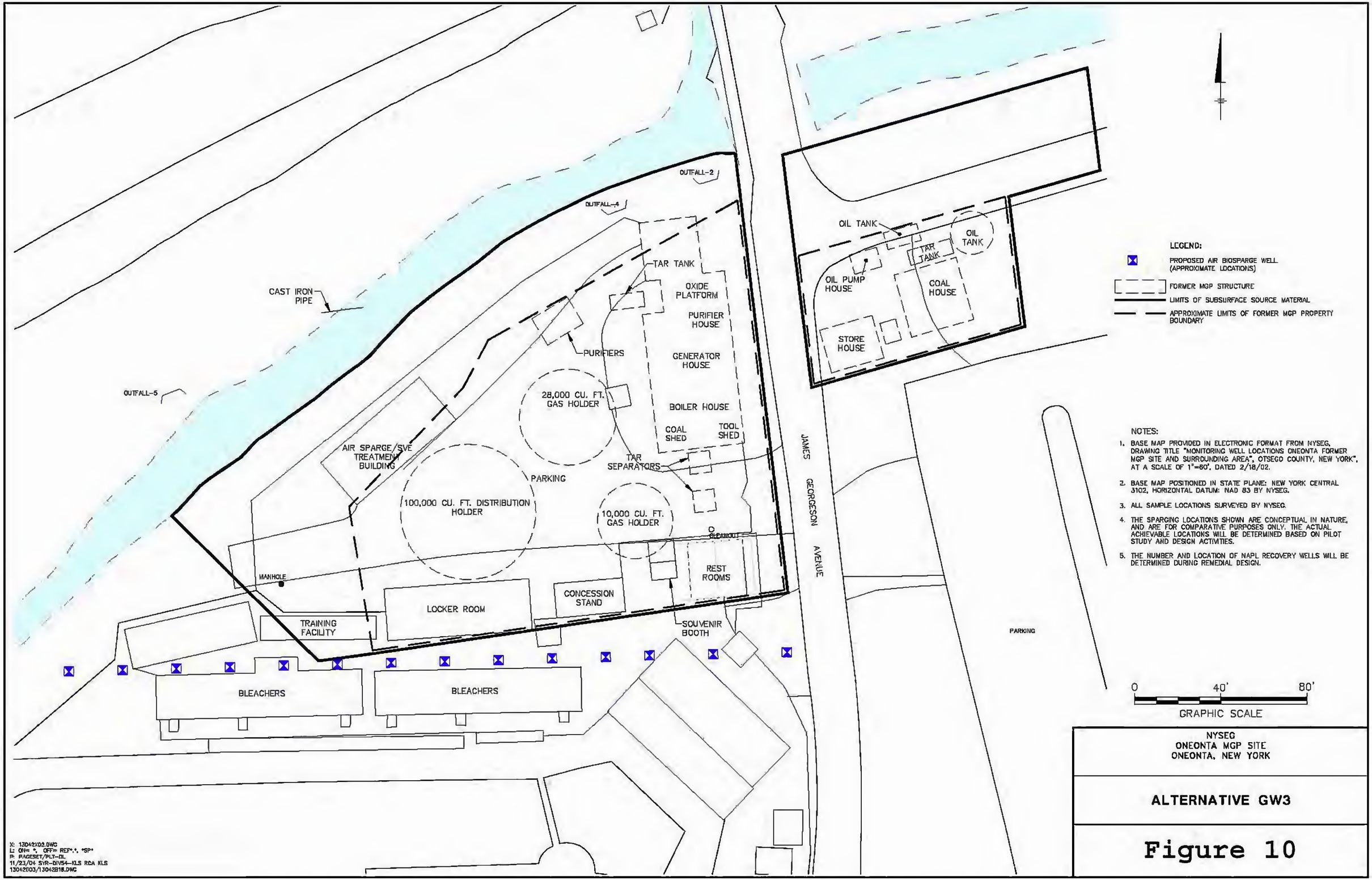
0 20 40 Feet

NYSEG
ONEONTA MGP SITE
ONEONTA, NEW YORK

ALTERNATIVE CK4

Figure 9

11/22/04 SYR-85 EAB
NYSEG 13042006
Q:\NYSEG_ONEONTA\mxd\Figure_Alt4.mxd


OUTFALL-2
OUTFALL-4
OUTFALL-5
CAST IRON PIPE
TAR TANK
OXIDE PLATFORM
PURIFIER HOUSE
PURIFIERS
GENERATOR HOUSE
28,000 CU. FT. GAS HOLDER
BOILER HOUSE
COAL SHED
TOOL SHED
AIR SPARGE/SVE TREATMENT BUILDING
TAR SEPARATORS
PARKING
100,000 CU. FT. DISTRIBUTION HOLDER
10,000 CU. FT. GAS HOLDER
MANHOLE
REST ROOMS
CONCESSION STAND
LOCKER ROOM
TRAINING FACILITY
SOUVENIR BOOTH
BLEACHERS
BLEACHERS
JAMES GEORGESON AVENUE
OIL TANK
TAR TANK
OIL TANK
OIL PUMP HOUSE
COAL HOUSE
STORE HOUSE
PARKING
LEGEND:
PROPOSED AIR BIOSPARGE WELL (APPROXIMATE LOCATIONS)
FORMER MGP STRUCTURE
LIMITS OF SUBSURFACE SOURCE MATERIAL
APPROXIMATE LIMITS OF FORMER MGP PROPERTY BOUNDARY
NOTES:
1. BASE MAP PROVIDED IN ELECTRONIC FORMAT FROM NYSEG, DRAWING TITLE "MONITORING WELL LOCATIONS ONEONTA FORMER MGP SITE AND SURROUNDING AREA", OTSEGO COUNTY, NEW YORK", AT A SCALE OF 1"=60', DATED 2/18/02.
2. BASE MAP POSITIONED IN STATE PLANE: NEW YORK CENTRAL 3102, HORIZONTAL DATUM: NAD 83 BY NYSEG.
3. ALL SAMPLE LOCATIONS SURVEYED BY NYSEG.
4. THE SPARGING LOCATIONS SHOWN ARE CONCEPTUAL IN NATURE, AND ARE FOR COMPARATIVE PURPOSES ONLY. THE ACTUAL ACHIEVABLE LOCATIONS WILL BE DETERMINED BASED ON PILOT STUDY AND DESIGN ACTIVITIES.
5. THE NUMBER AND LOCATION OF NAPL RECOVERY WELLS WILL BE DETERMINED DURING REMEDIAL DESIGN.
0
40'
80'
GRAPHIC SCALE
NYSEG
ONEONTA MGP SITE
ONEONTA, NEW YORK
ALTERNATIVE GW3
Figure 10
X: 13042X03.DWG
L: ON= *; OFF= REF*,*, *SP*
P: PAGESET/PLT-DL
11/23/04 SYR-DIV54-KLS RCA KLS
13042003/13042B18.DWG

N
W
E
S
Legend
Sparge Points
Land Excavation Area
Deep Sediment Excavation(8.5')
Shallow Sediment Excavation(4')
NYSEG Oneonta MGP Site
Figure 11
Selected Remedy