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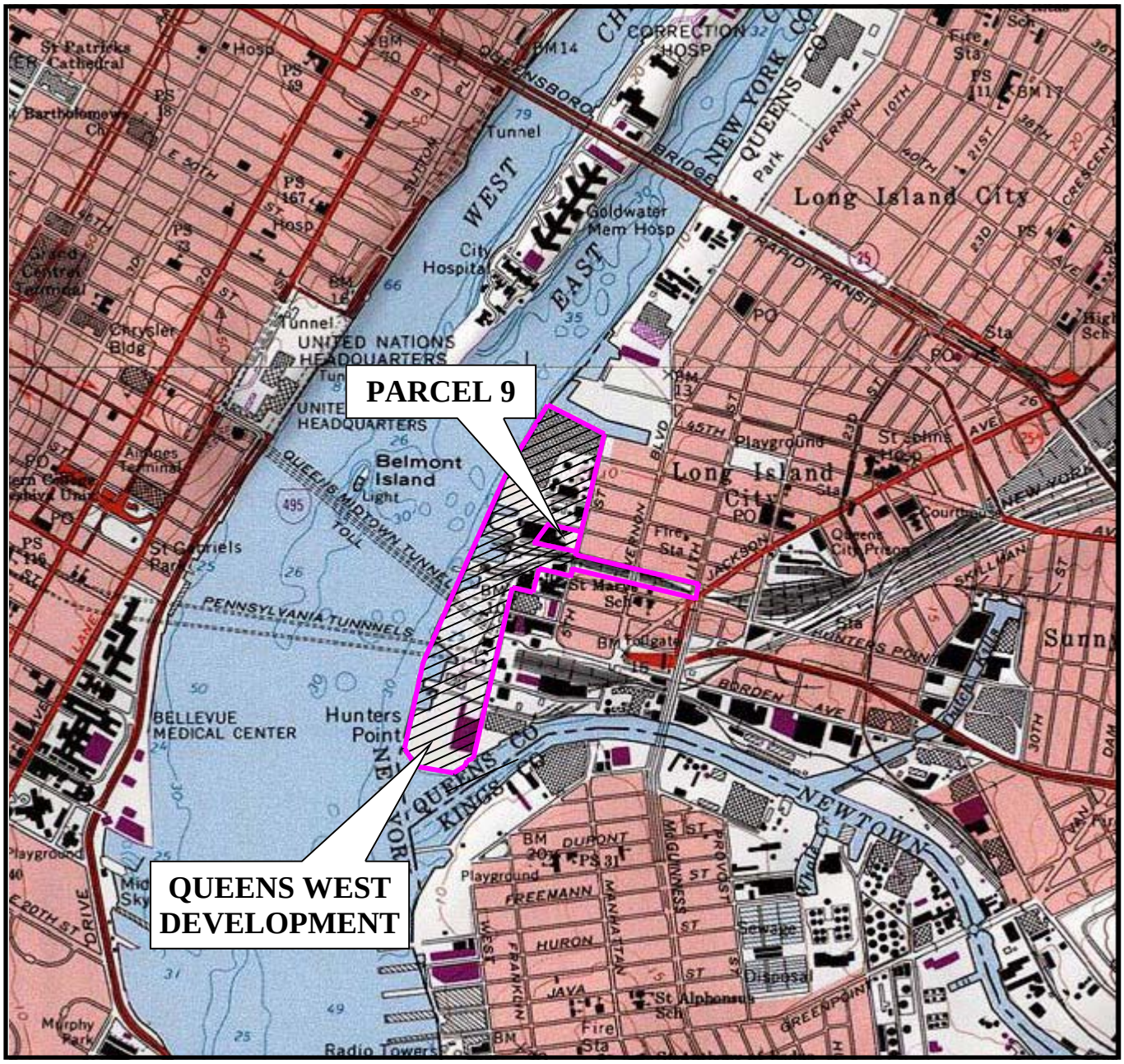
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SCALE IN FEET

0’ 1000’ 2000’ 4000’

SCALE: 1”=2000’

N

SOURCE:
7.5 MINUTE SERIES USGS TOPOGRAPHIC MAP
QUADRANGLE: BROOKLYN, NY 1995

**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK

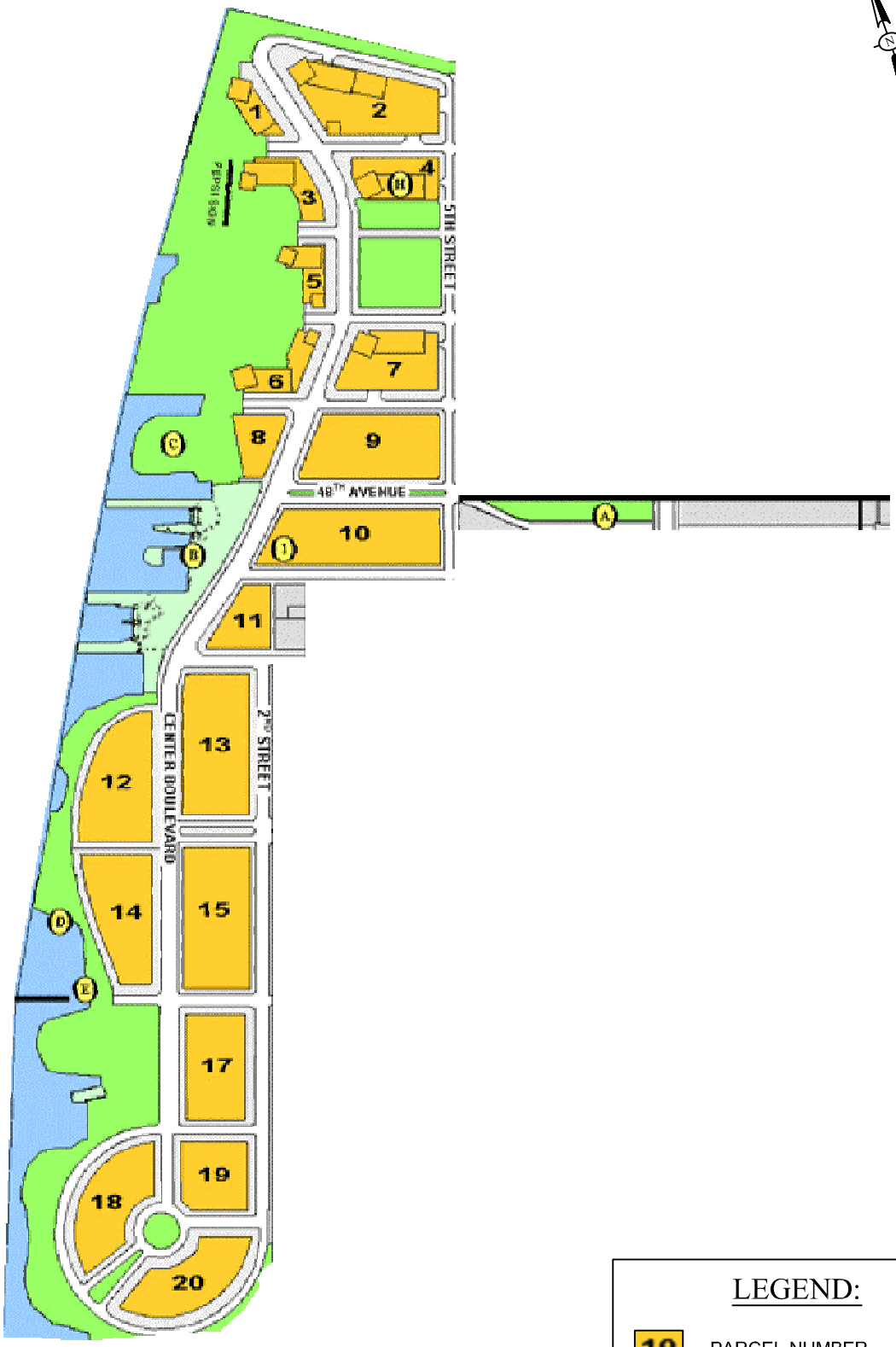
**PROJECT SITE LOCATION**

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DATE **12.20.06**
PROJECT No. **10516**
SCALE **AS SHOWN**
FIGURE **1**

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LEGEND:

10 PARCEL NUMBER

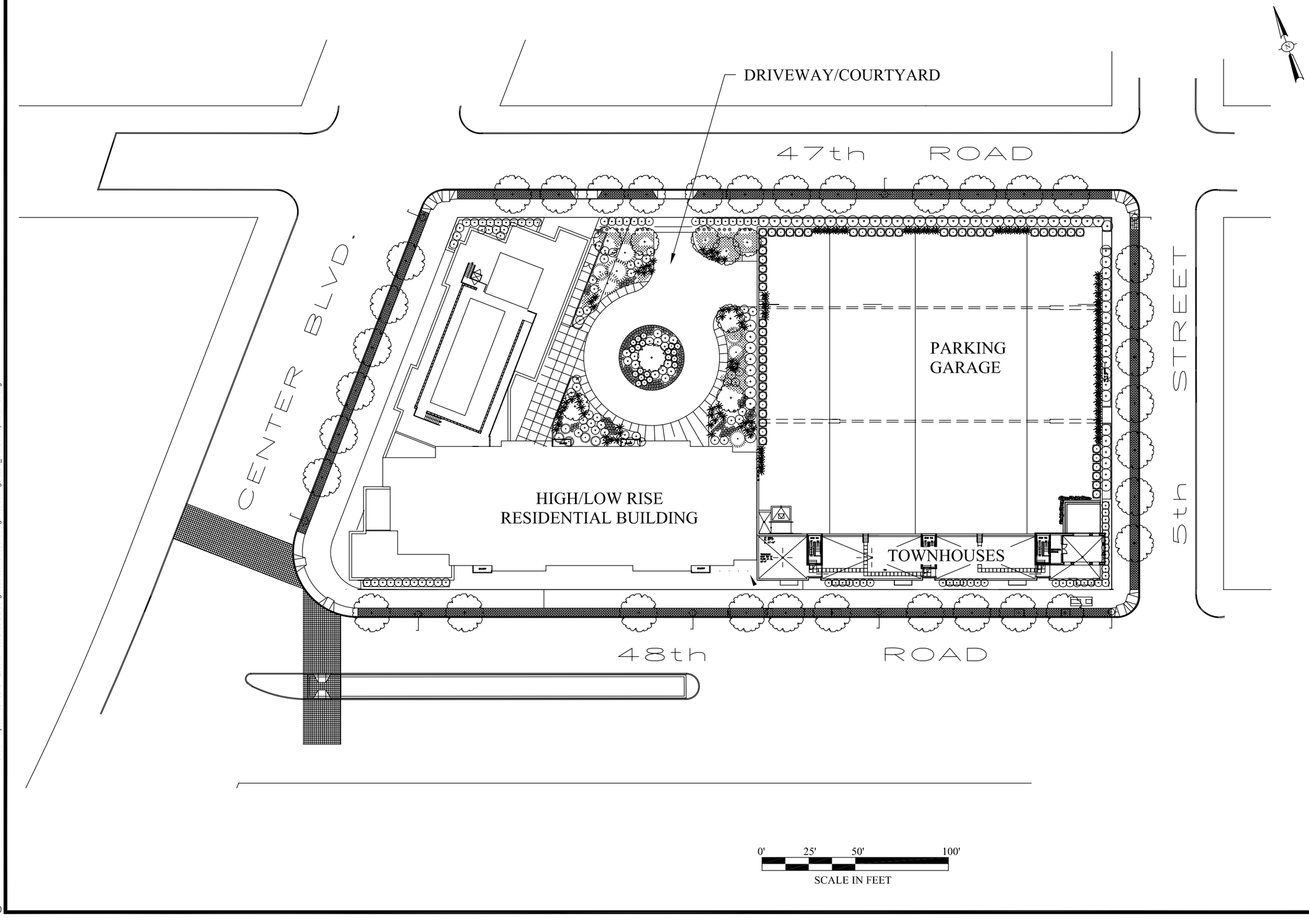
# QUEENS WEST PARCEL 9
## QUEENS, NEW YORK

## QUEENS WEST DEVELOPMENT PARCELS

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FIGURE No. 2

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**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK

**PARCEL 9 SITE DEVELOPMENT PLAN**

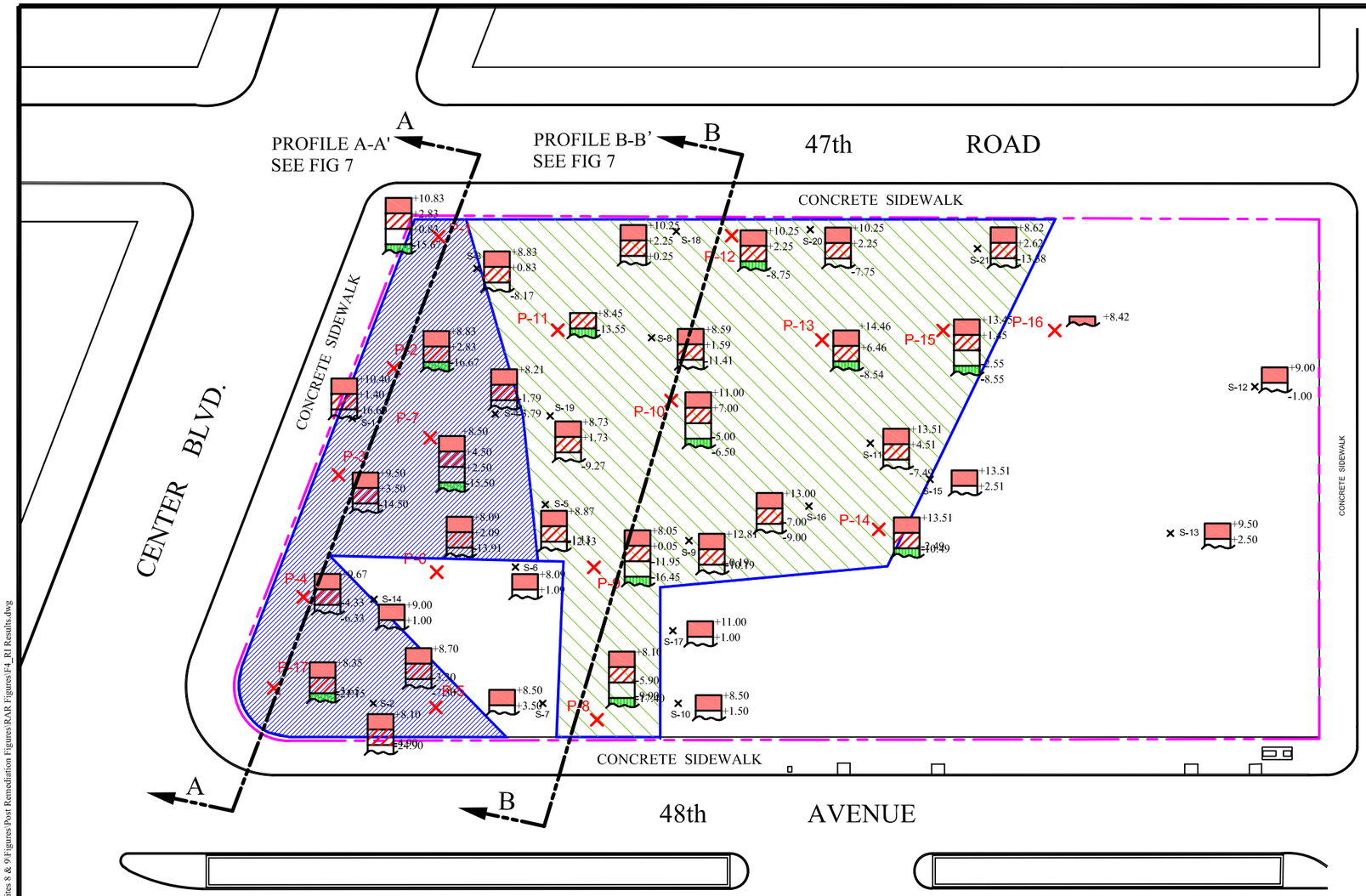
DATE
**12.20.06**

SCALE
**1"=50'**

PROJECT No.
**10516**

FIGURE
**3**

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**LEGEND:**

- P-2 — SOIL BORING (DELINEATION SAMPLING)
- S-2 — SOIL BORING (REMEDIAL INVESTIGATION)
- PROJECT SITE BOUNDARY
- PETROLEUM CONTAMINATED SOIL
- COAL TAR CONTAMINATED SOIL
- OVERLYING FILL MATERIAL
- HYDROCARBON CONTAMINATED SOIL
- NON-HYDROCARBON CONTAMINATED SOIL
- TILL AND/OR CLAY/SILT LAYER
- +13.51 — ELEVATION OF LAYER (FT.) RELATIVE TO QUEENS BOROUGH DATUM

0' 25' 50' 100'
SCALE IN FEET

**NOTES:**
MAP BASED ON GEOTECHNICAL REPORT FOR QUEENS WEST SITE 9, MUESER RUTLEDGE CONSULTING ENGINEERS, DATED: MAY 25, 2004.

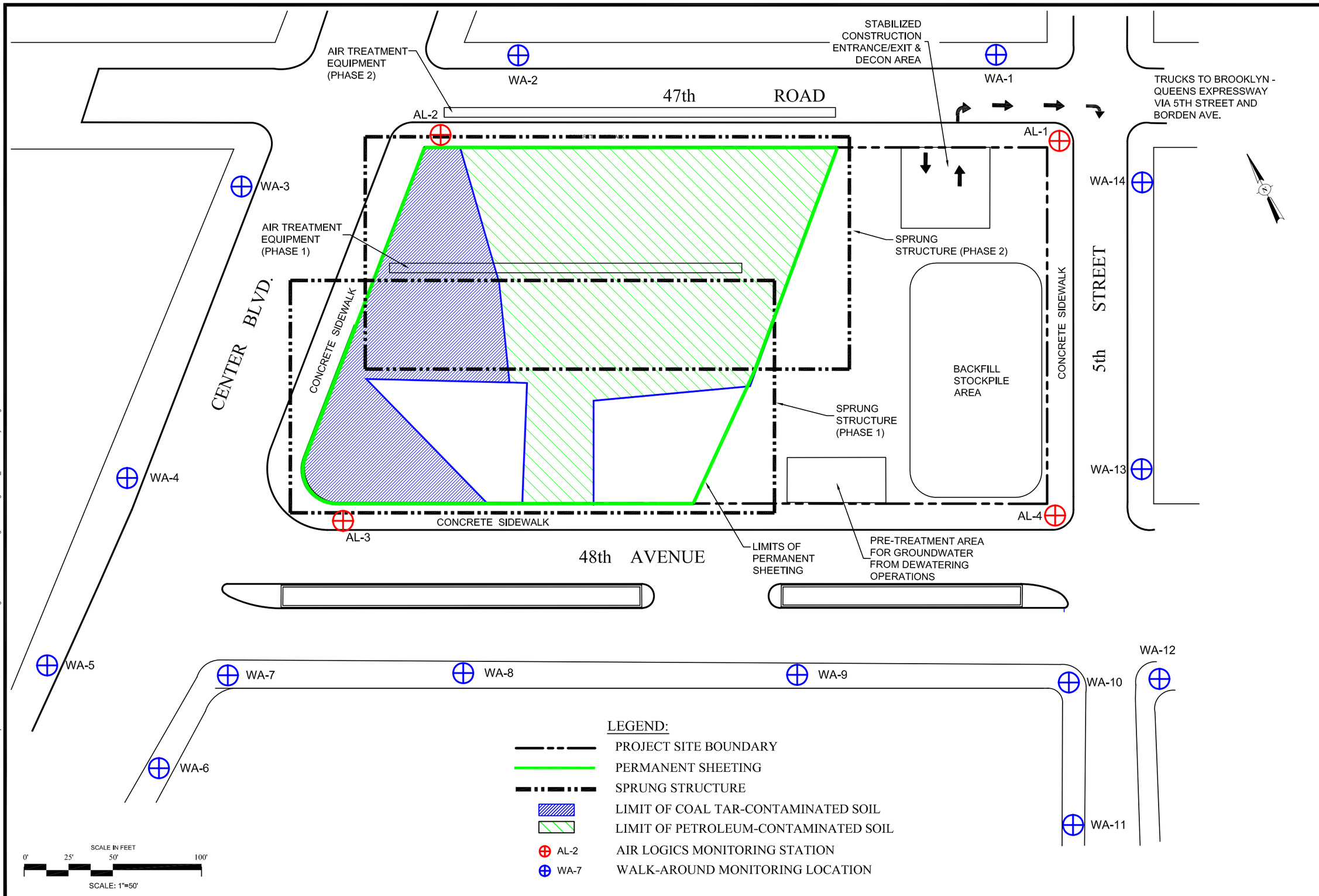
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**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK

**EXTENT OF CONTAMINATION IDENTIFIED DURING REMEDIAL INVESTIGATION**

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PROJECT NO. **10516**
SCALE **1"=50'**
FIGURE **4**

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# QUEENS WEST PARCEL 9

QUEENS, NEW YORK

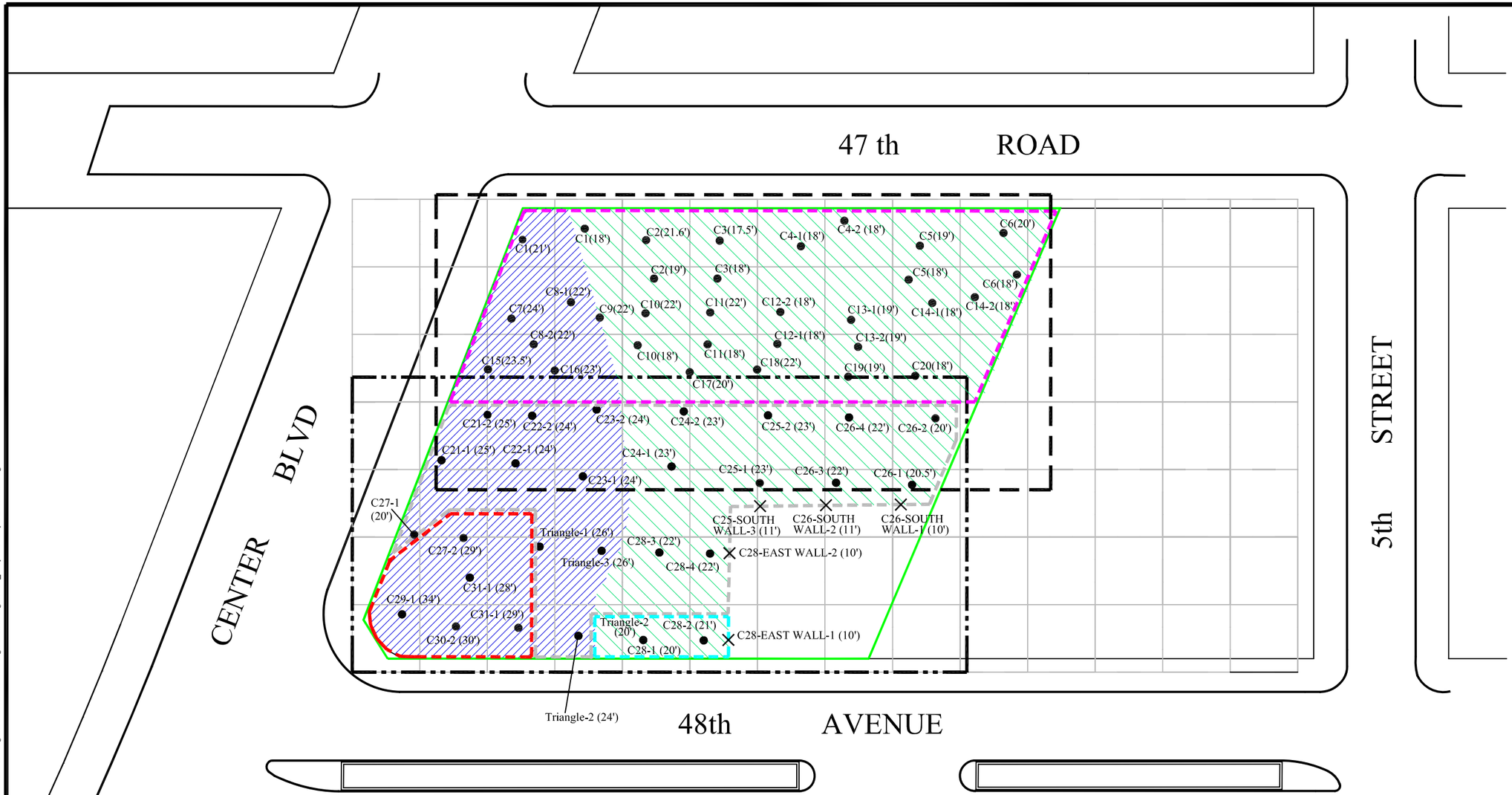
## SITE LAYOUT FOR REMEDIATION AND AIR MONITORING LOCATIONS

DATE
12.20.06

SCALE
1"=50'

PROJECT No.
10516

FIGURE No.
5




## LEGEND

- LIMIT OF COAL-TAR CONTAMINATED SOIL
- LIMIT OF PETROLEUM-CONTAMINATED SOIL
- EXCAVATED TO TILL LAYER AT 17.5 - 24' BELOW GRADE (PHASE 2)
- EXCAVATED TO DENSE CLAY LAYER AT 27 - 34' BELOW GRADE (PHASE 1)
- EXCAVATED TO BENCH AT 20'-21' BELOW GRADE (PHASE 1)
- EXCAVATED TO TILL LAYER AT 20 - 26' BELOW GRADE (PHASE 1)
- BOTTOM ENDPOINT SAMPLE LOCATION
- SIDEWALL ENDPOINT SAMPLE LOCATION
- EDGE OF PERMANENT SHEETING
- OUTLINE OF CONTAINMENT STRUCTURE PHASE 1
- OUTLINE OF CONTAINMENT STRUCTURE PHASE 2

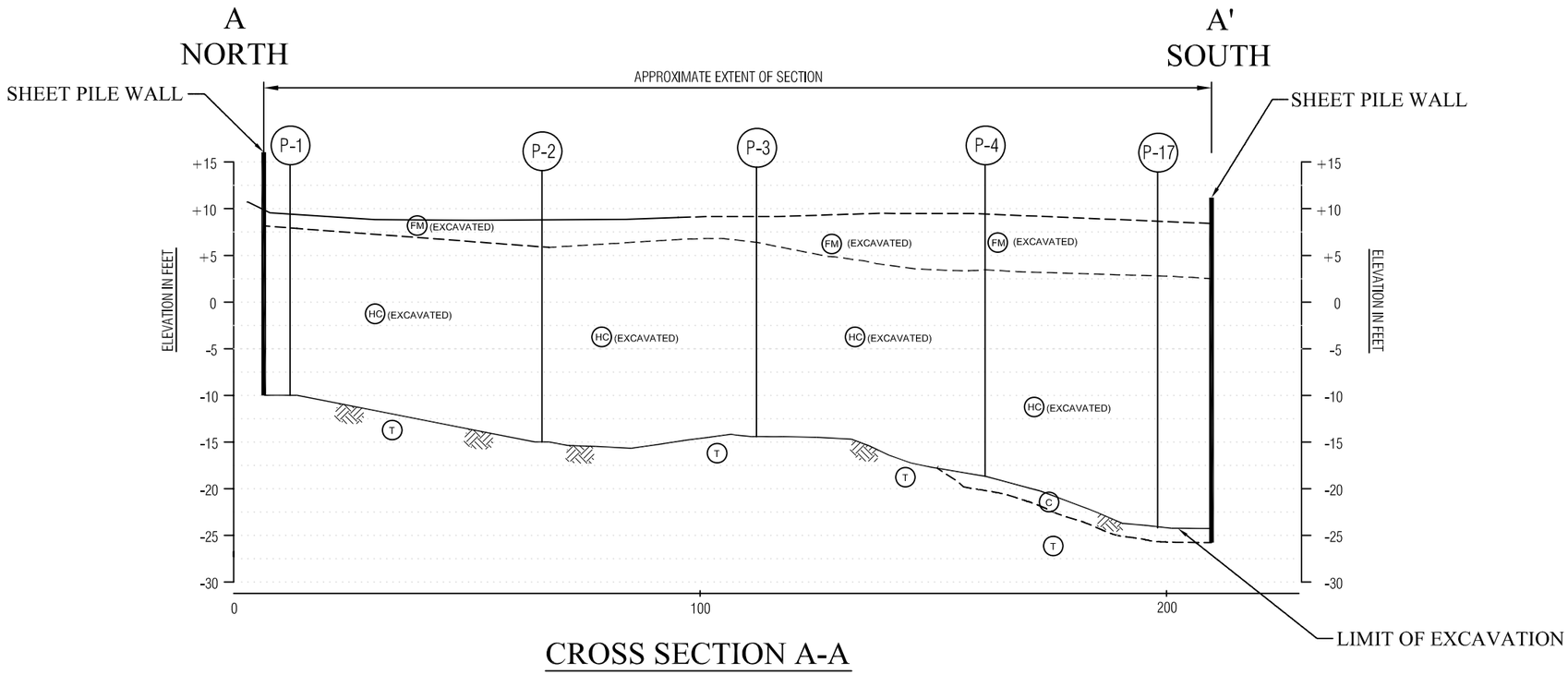
0' 25' 50' 100'
SCALE IN FEET

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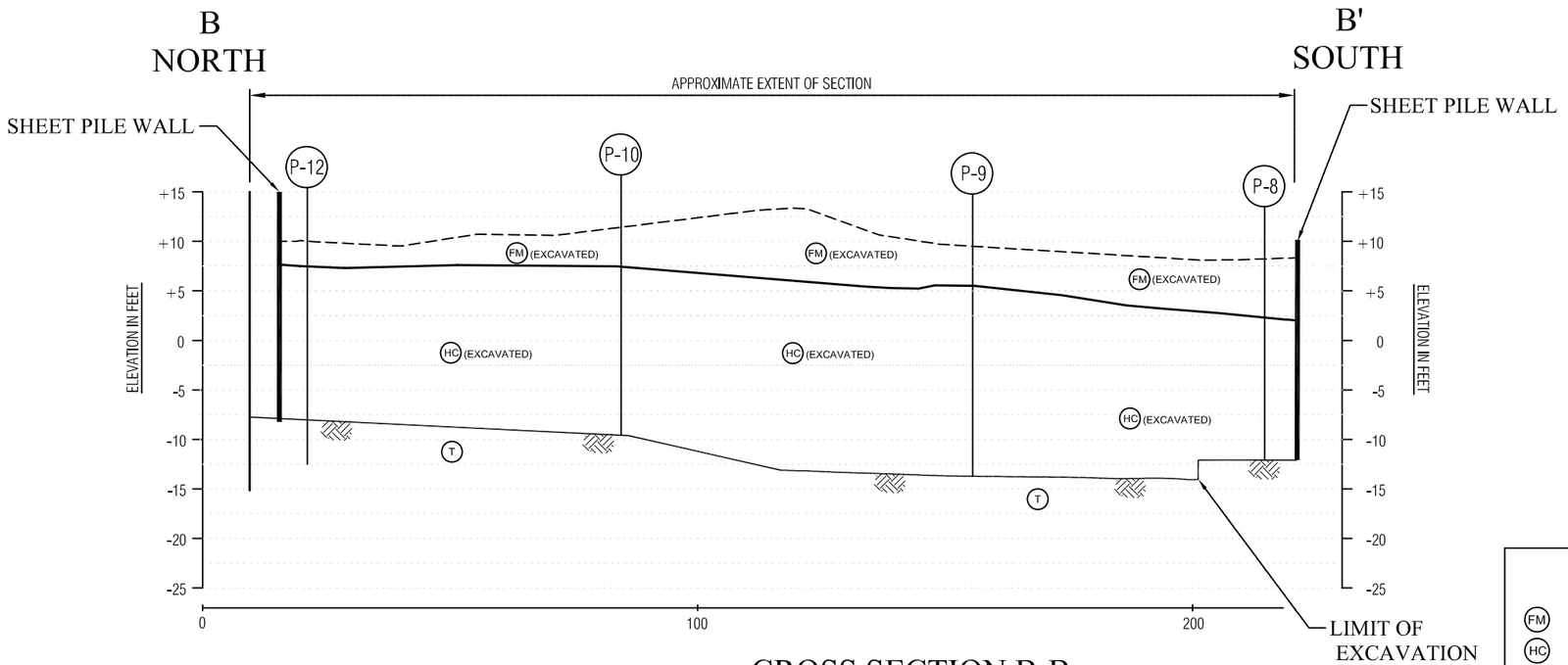
**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK
**ENDPOINT SAMPLE LOCATIONS**

DATE **12.20.06**
PROJECT NO. **10516**
SCALE **1"=50'**
FIGURE No. **6**

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CROSS SECTION A-A




CROSS SECTION B-B

0' 15' 30' 60'
SCALE IN FEET
HORIZONTAL SCALE: 1"=30'

0' 7.5' 15' 30'
SCALE IN FEET
VERTICAL SCALE: 1"=15'

**LEGEND:**

- (FM) OVERLYING FILL MATERIAL
- (HC) HYDROCARBON-CONTAMINATED SOIL
- (T) GLACIAL TILL
- (C) DENSE CLAY
- (P-2) LOCATION AND DESIGNATION OF SOIL BORING

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**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK

**SOIL REMOVAL CROSS-SECTIONS A-A' AND B-B'**

DATE
**12.20.06**

SCALE
**AS SHOWN**

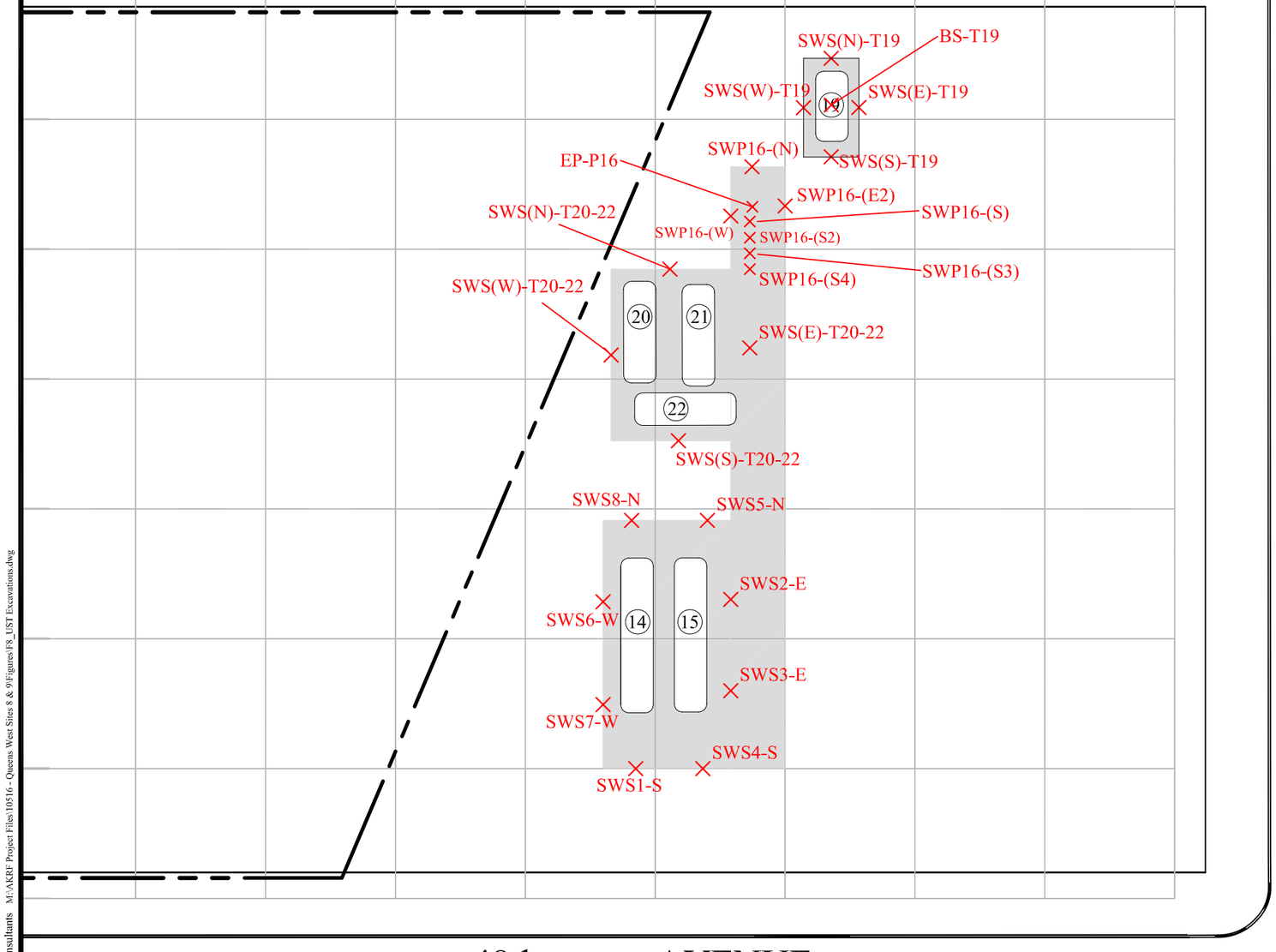
PROJECT No.
**10516**

FIGURE
**7**

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47 th ROAD

6 7 8 9 10 11 12 13 14




48th AVENUE

5th STREET

0' 15' 30' 60'

SCALE IN FEET

**LEGEND:**

19 — APPROX. UNDERGROUND STORAGE TANK LOCATION

SOIL EXCAVATION AREA

SWP16-(N) — ENDPOINT SAMPLE LOCATION

EDGE OF PERMANENT SHEETING

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**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK
**UNDERGROUND STORAGE TANK AND SOIL REMOVAL OUTSIDE OF SHEETING**

DATE **12.20.06**

PROJECT NO. **10516**

SCALE **1"=30'**

FIGURE No. **8**

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CENTER BLVD.

5th STREET

48th AVENUE

LEGEND:

- PROJECT SITE BOUNDARY
- PERMANENT SHEETING
- ×17.50 — THICKNESS IN FEET OF CONTAMINATED SOIL REMOVED
- 18 — CONTOURS OF EQUAL SOIL REMOVAL THICKNESS (FT)

0' 25' 50' 100'

SCALE IN FEET

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# QUEENS WEST PARCEL 9

QUEENS, NEW YORK

## SOIL REMOVAL THICKNESS CONTOURS

DATE
12.20.06

SCALE
1"=50'

PROJECT No.
10516

FIGURE No.
9

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47 th ROAD

5th STREET

CENTER BLVD

48th AVENUE

PR-1
PR-2
PR-3
PR-4
PR-5
PR-6
PR-7
PR-8
PR-9
PR-10
PR-11
PR-12
PR-13

0' 25' 50' 100'

SCALE IN FEET

**LEGEND:**

PR-13 PERIMETER SOIL BORING LOCATION

EDGE OF PERMANENT SHEETING

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**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK
**PERIMETER BORING LOCATIONS**

DATE **12.20.06**

PROJECT NO. **10516**

SCALE **1"=50'**

FIGURE No. **10**

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47th ROAD

CENTER BLVD.

5th STREET

48th AVENUE

UNDERGROUND STORAGE TANKS REMOVED IN MARCH 2005 (PRIOR TO REMEDIATION)

8 9 10 11 7 21 19 12 13 6 20 21 22 5 14 15 2 3 4

0' 25' 50' 100'

SCALE IN FEET

**LEGEND:**

19 APPROX. UNDERGROUND STORAGE TANK LOCATION

EDGE OF PERMANENT SHEETING

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**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK
**UNDERGROUND STORAGE TANK LOCATIONS**

DATE **12.20.06**

PROJECT NO. **10516**

SCALE **1"=50'**

FIGURE No. **11**

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| C13-2(19') | | |
|---|---|---|
| B | 1.4 | 19' |
| X | 5.9 | 19' |

| C14-2(18') | | |
|---|---|---|
| B | 0.47 | 18' |

| C19(19') | | |
|---|---|---|
| N | 22 | 19' |

| C14-1(18') | | |
|---|---|---|
| B | 2.3 | 18' |

| C6(18') | | |
|---|---|---|
| B | 0.400 | 18' |

| C18(22') | | |
|---|---|---|
| B | 190 | 22' |
| T | 630 | 22' |
| E | 170 | 22' |
| X | 350 | 22' |
| N | 110 | 22' |
| tVOCs | 1,345 | 22' |

| C5(18') | | |
|---|---|---|
| B | 0.69 | 18' |

| PR-10 | | |
|---|---|---|
| N | 32 | 11'-13' |
| Pb | 2350 | 11'-13' |

| SWP-16(N) | | |
|---|---|---|
| Hg | 2.1 | 5' |

| C2(19') | | |
|---|---|---|
| X | 5.1 | 19' |

| C3(17.5') | | |
|---|---|---|
| B | 0.930 | 17.5' |
| T | 3.1 | 17.5' |
| X | 12.9 | 17.5' |
| tVOCs | 22.1 | 17.5' |

| SWS(N)-T19 | | |
|---|---|---|
| Hg | 3.9 | 7' |

| BS-T19 | | |
|---|---|---|
| Pb | 1430 | 8' |
| Hg | 6.6 | 8' |

| C11(18') | | |
|---|---|---|
| B | 15 | 18' |
| T | 1.7 | 18' |
| E | 21 | 18' |
| X | 33.6 | 18' |
| N | 18 | 18' |
| tVOCs | 71.4 | 18' |

| C10(18') | | |
|---|---|---|
| B | 1.5 | 18' |
| X | 1.1 | 18' |

| C24-2 (23') | | |
|---|---|---|
| B | 0.39 | 23' |

| SWS(W)-T20-22 | | |
|---|---|---|
| Hg | 10.1 | 7' |

| SWS(E)-T20-22 | | |
|---|---|---|
| Pb | 2890 | 7' |
| Hg | 2.4 | 7' |

| SWS(S)-T20-22 | | |
|---|---|---|
| BaA | 7.7 | 7' |
| Hg | 0.56 | 7' |

| C22-2 (24') | | |
|---|---|---|
| B | 0.170 | 24' |

| S-13 | | |
|---|---|---|
| B | 0.098 | 21'-21.5' |

| C22-1 (24') | | |
|---|---|---|
| B | 0.640 | 24' |

| C28-3 (22') | | |
|---|---|---|
| B | 0.085 | 22' |

| Triangle-3 (26') | | |
|---|---|---|
| B | 0.045 | 26' |

| SWS2-E | | |
|---|---|---|
| Pb | 1360 | 3.5' |

| SWS3-E | | |
|---|---|---|
| Pb | 1250 | 3.5' |

| SWS4-S | | |
|---|---|---|
| X | 1.4 | 3.5' |

| SWS1-S | | |
|---|---|---|
| Hg | 3.4 | 3.5' |

| Triangle-1 (26') | | |
|---|---|---|
| B | 0.160 | 26' |

| Triangle-2 (24') | | |
|---|---|---|
| B | 0.210 | 24' |

| Triangle-2 (20') | | |
|---|---|---|
| B | 0.080 | 20' |

| C28-2 (21') | | |
|---|---|---|
| B | 0.350 | 21' |

| C20(18') | | |
|---|---|---|
| B | 0.180 | 18' |

| C26-4 (22') | | |
|---|---|---|
| B | 0.280 | 22' |

| C26-3 (22') | | |
|---|---|---|
| B | 0.120 | 22' |

| C17(20') | | |
|---|---|---|
| B | 9.2 | 20' |
| T | 2.2 | 20' |
| E | 47 | 20' |
| X | 87.4 | 20' |
| N | 41 | 20' |
| tVOCs | 148 | 20' |

47 th ROAD

BLVD

CENTER

5th STREET

48th AVENUE

C2(19') C3(17.5') C5(18') C6(18') C10(18') C11(18') C13-2(19') C14-1(18') C14-2(18') C17(20') C18(22') C19(19') C20(18') C22-1 (24') C22-2 (24') C24-2 (23') C26-3 (22') C26-4 (22') C28-2 (21') C28-3 (22') PR-10 SWP 16-(N) SWS(N)-T19 BS-T19 SWS(W)-T20-22 SWS(E)-T20-22 SWS(S)-T20-22 S-13 SWS2-E SWS3-E SWS1-S SWS4-S Triangle-1 (26') Triangle-2 (24') Triangle-2 (20') Triangle-3 (26')

**LEGEND:**

- BOTTOM ENDPOINT SAMPLE LOCATION
- PR-11 — PERIMETER SOIL BORING LOCATION
- SWP16-(N) — ENDPOINT SAMPLE LOCATION
- P-16 — SOIL BORING (DELINEATION SAMPLING)
- S-13 — SOIL BORING (REMEDIAL INVESTIGATION)
- EDGE OF PERMANENT SHEETING

COMPOUND NAME — tVOCs | 148 | 20' — DEPTH (ft)

RESULT PARTS PER MILLION (PPM)

**ABBREVIATIONS**

| | |
|---|---|
| B | BENZENE |
| E | ETHYL BENZENE |
| T | TOLUENE |
| X | M/P-XYLENES AND O-XYLENE |
| tVOCS | TOTAL VOLATILE ORGANIC COMPOUNDS |
| N | NAPTHALENE |
| As | ARSENIC |
| Pb | LEAD |
| Hg | MERCURY |

0' 15' 30' 60'
SCALE IN FEET

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**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK

**RESIDUAL CONTAMINATED SOIL ABOVE SSSALs**

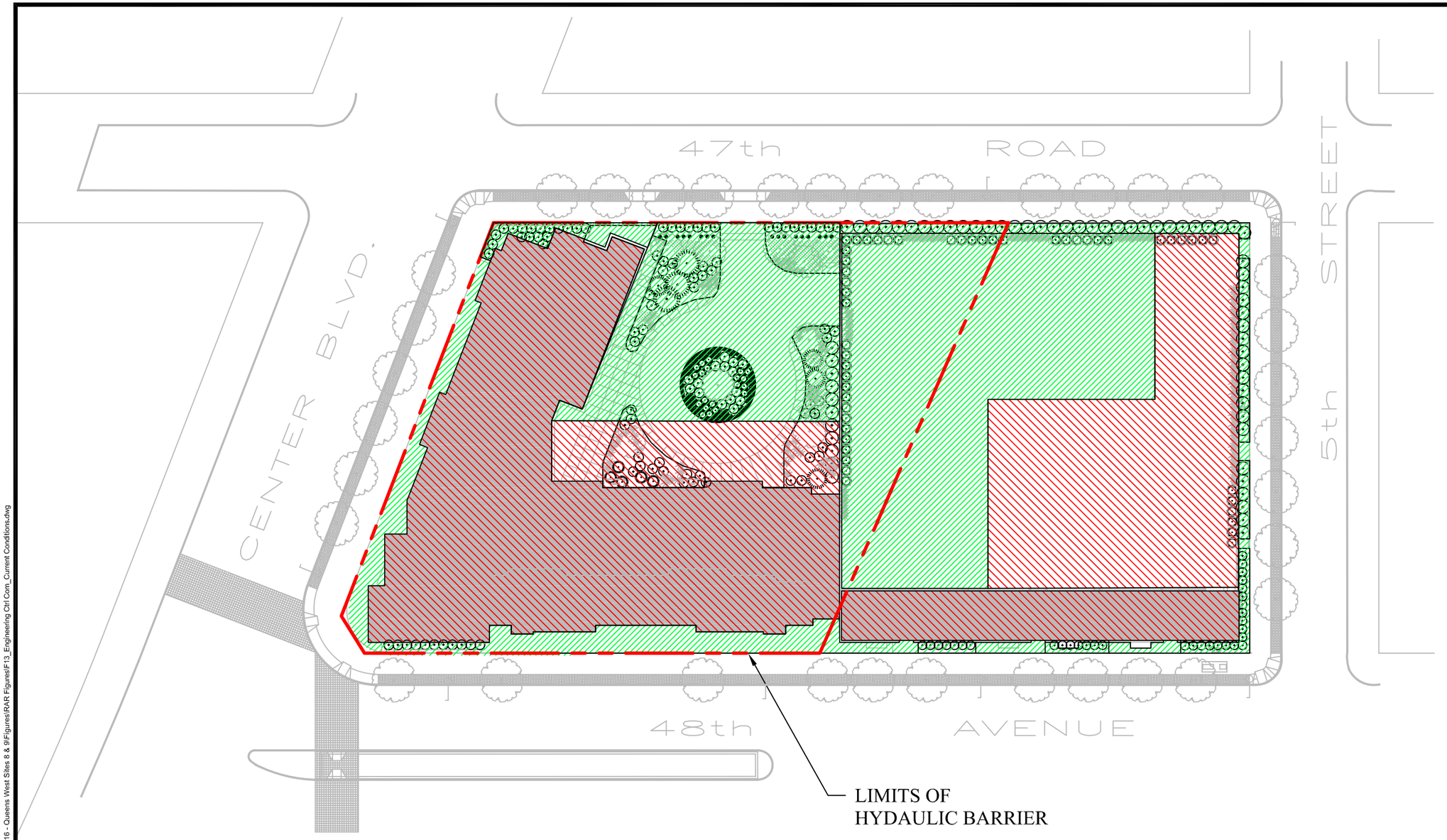
DATE
**12.20.06**

SCALE
**1"=30'**

PROJECT No.
**10516**

FIGURE
**12**

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**LEGEND:**

- COVERED BY ON-SITE STRUCTURE AND VAPOR MITIGATION SYSTEM BELOW
- COVERED BY 2 FEET OF CLEAN FILL
- COVERED BY ON-SITE STRUCTURE OR CONCRETE PAD
- LIMITS OF HYDRAULIC BARRIER

0' 25' 50' 100'

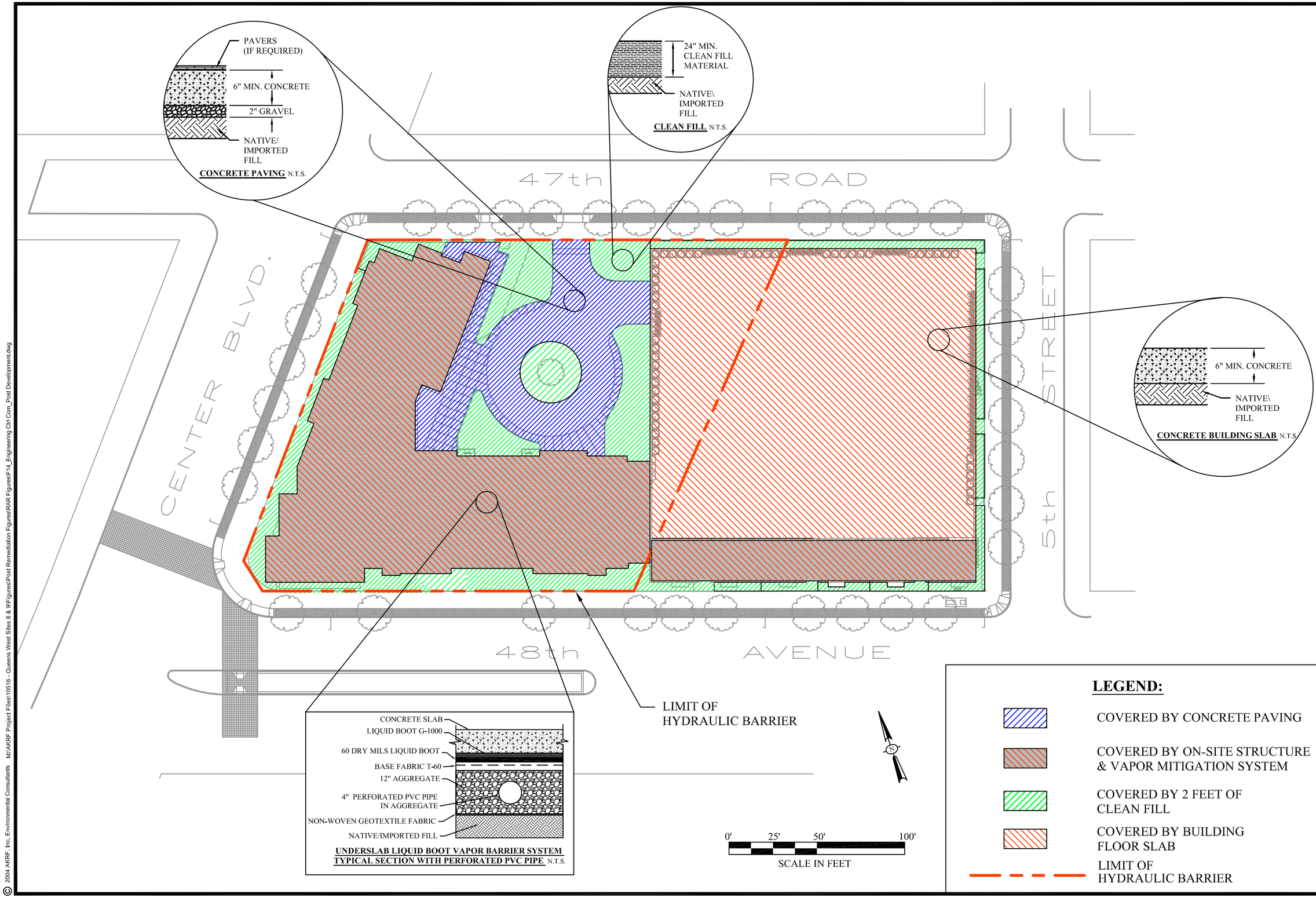
SCALE IN FEET

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**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK
**ENGINEERING CONTROL COMPONENTS - CURRENT CONDITIONS**

DATE **12.20.06**
SCALE **1"=50'**
PROJECT No. **10516**
FIGURE **13**

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**QUEENS WEST PARCEL 9**
QUEENS, NEW YORK

**ENGINEERING CONTROL COMPONENTS - POST DEVELOPMENT**

DATE
**12.20.06**

SCALE
**1"=50'**

PROJECT No.
**10516**

FIGURE
**14**

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