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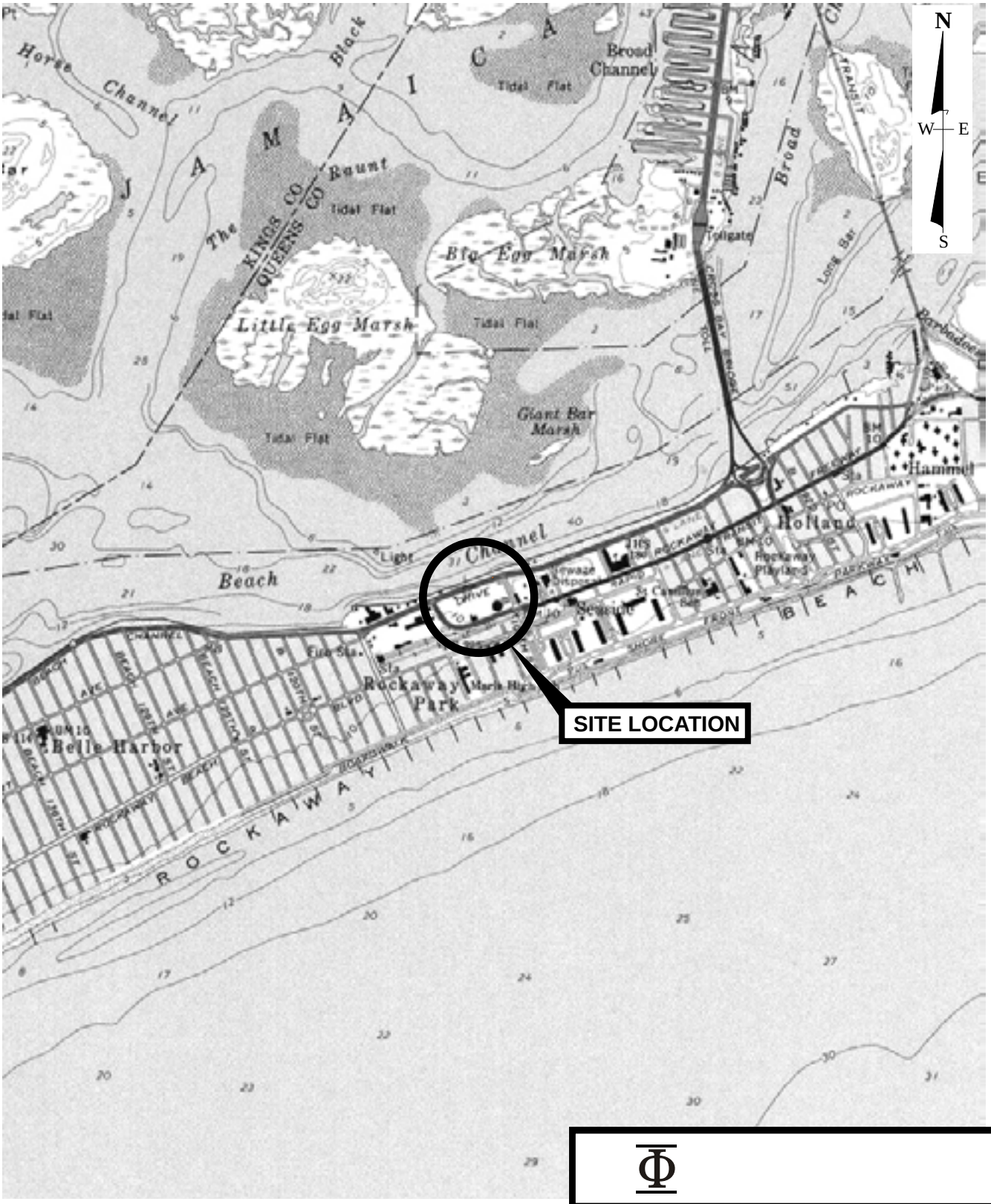

2000 1000 0 2000 4000

GRAPHIC SCALE IN FEET

SOURCE:
MAP CREATED WITH TOPO!™ ©2000 WILDFLOWER PRODUCTIONS
(www.topo.com)

KEYSPAN\ROCKAWAY\FIG\ROCK-LOC.CDR

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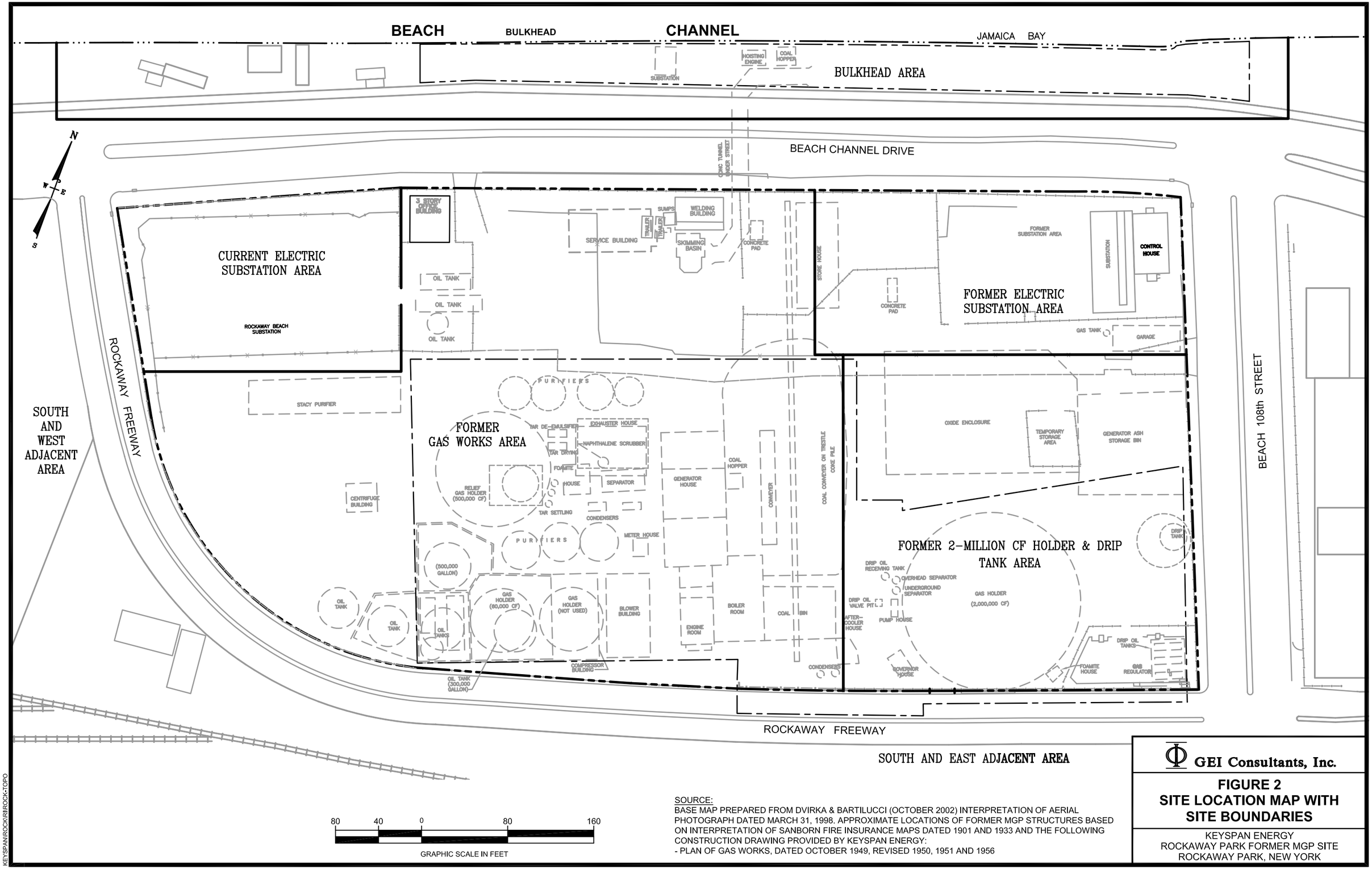
FIGURE 1
SITE LOCUS MAP

KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK



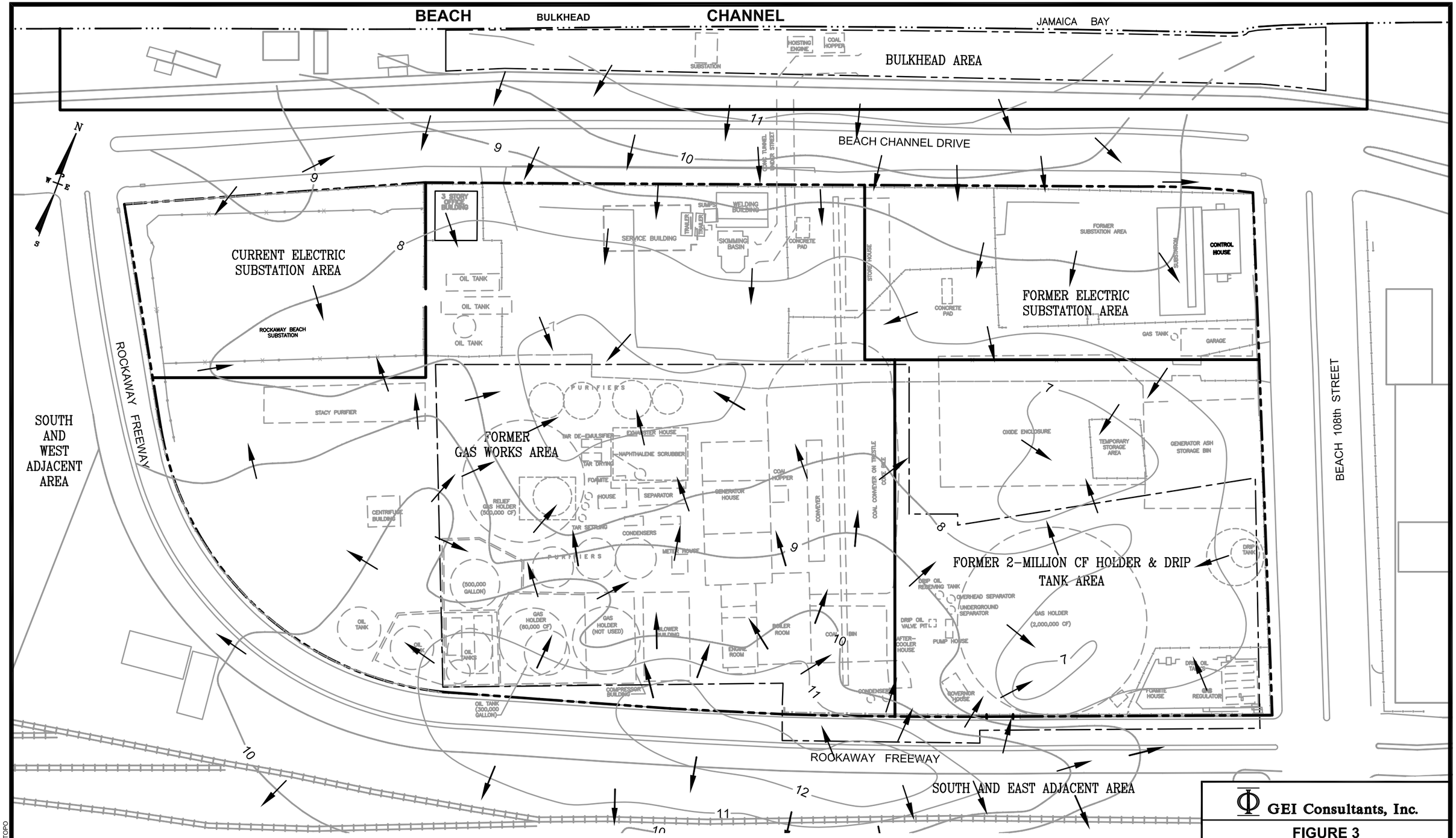
SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002) INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

GEI Consultants, Inc.

FIGURE 2
SITE LOCATION MAP WITH SITE BOUNDARIES

KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

KEYSPAN\ROCK\RROCK-TOPO



80 40 0 80 160

GRAPHIC SCALE IN FEET

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002) INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

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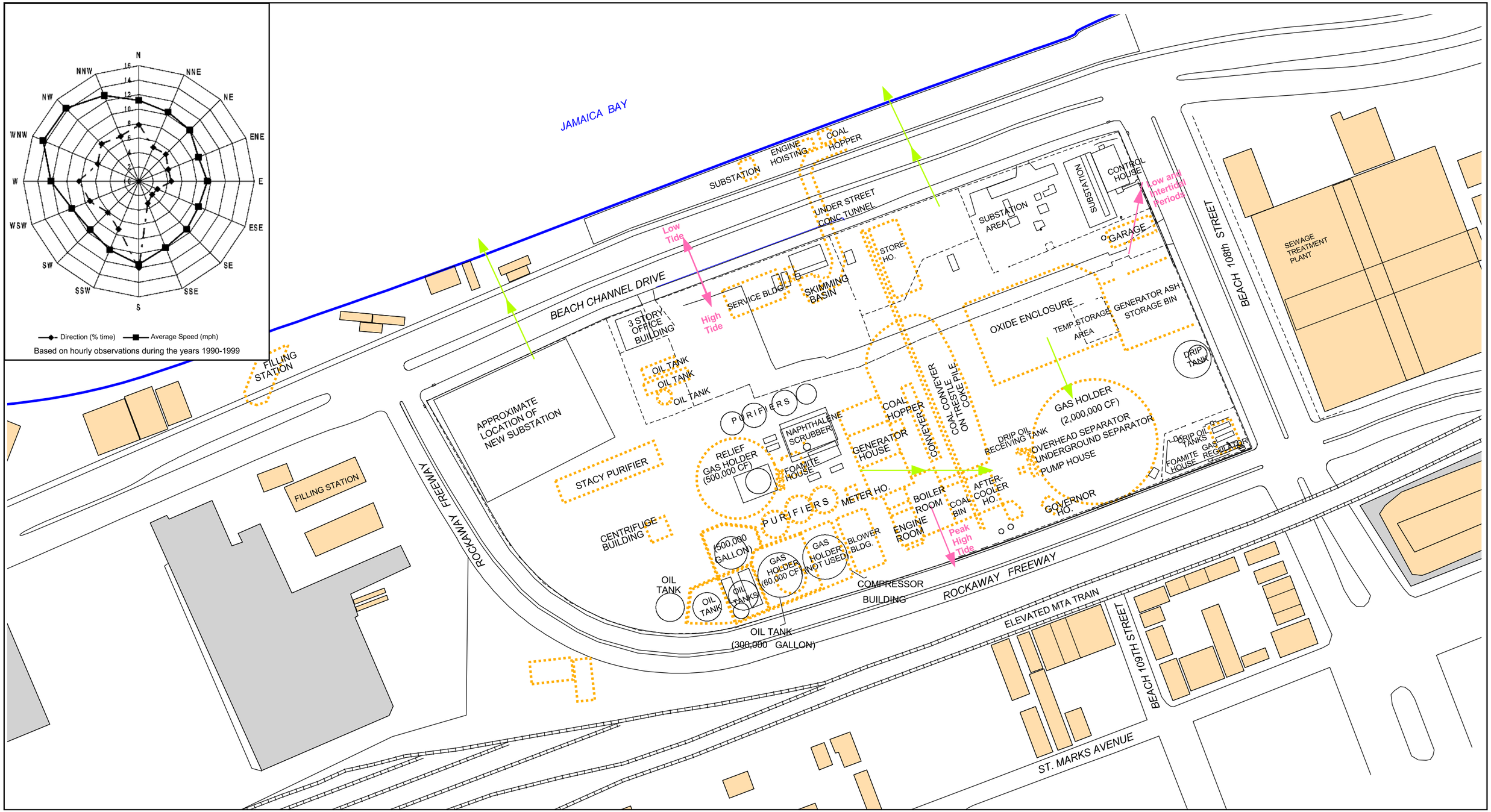
FIGURE 3
TOPOGRAPHIC MAP AND SURFACE FLOW PATHS

KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

KEYSPAN\ROCK\RI\ROCK-TOPO



SOURCE: Rockaway Park Site Plan prepared by Dvirka and Bartilucci, August 2000

Map Key

- Historic Features
- Existing Buildings (Offsite)
- Existing Parking
- Chain Link Fence
- Railroad
- Surface Drainage
- Approximate Groundwater Flow Direction

50 0 50 100 150 200 Feet

Map Compiled By:

VHB

Vanasse Hangen Brustlin, Inc.

DECEMBER 2002

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ctmiddat\projects\06392\QRA\Rockaway Park\December Submittal 2002\Figure6-1A.pdf

KEYSPAN

Figure 6-1A
Conceptual Site Model - Current Site Plan

Rockaway Park
Former Manufactured Gas Plant Site
Rockaway Park, New York

SOURCE: Aerial Photograph Taken in 1954

50 0 50 100 150 200 Feet

Map Key

Surface Drainage*

Approximate Groundwater Flow Direction*

*Based on data collected during the preliminary remedial investigation.

Map Compiled By:

VHB

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DECEMBER 2002

ctmiddat\projects\06392\QRA\Rockaway Park\December Submittal 2002\Figure6-1B.pdf

KEYSPAN

Figure 6-1B
Conceptual Site Model - Historic Aerial Photo

Rockaway Park
Former Manufactured Gas Plant Site
Rockaway Park, New York

Ruffle Bar-
Cattle Egret, Glossy Ibis
Snowy Egret, Great Egret

Vernam Barbados Peninsula-
Narrow-Leaf Sea Blite
Roland's Sea Blite
Willow Oak
Cut-Leaved Evening Primrose

E2EM5P
E2EM5P
E2EM5N
E2EM5N
E2EM5P
E2FLM
E2FLN
E2EM5N
E2EM5N
E2FLM
E2FLM

Little Egg Marsh -
Gull Nesting Area

Jamaica Bay National Refuge -
Retrorse Flatsedge
Yellow Flatsedge
Barn Owl

1 Mile Radius
1/2 Mile Radius

Beach Channel High School
Junior High School 180
St. Camillus School
Public School 225
Maris High School
Park Nursing Home
Promenade Nursing Home
Yeshiva Mercaz Hatorah School
St. Francis De Sales Christian School
Jacob Riis Beach-
Seabeach Knotweed

SITE

500 0 500 1000 1500 2000 Feet

SOURCES:
Historic Places - Environmental Data Resources, Inc., 5/2000
Offsite Receptors - Environmental Data Resources, Inc.,12/2002,
www.rockawave.com, 12/2002
USGS Topographic Map, Far Rockaway, NY, 1969
US Fish and Wildlife National Wetlands Inventory
Fresh Water Wetlands - NYSDEC
Protected Species - NYSDEC
FEMA Q3 Floodplain Data, 1996

Map Compiled By:
VHB
Vanasse Hangen Brustlin, Inc.
DECEMBER 2002

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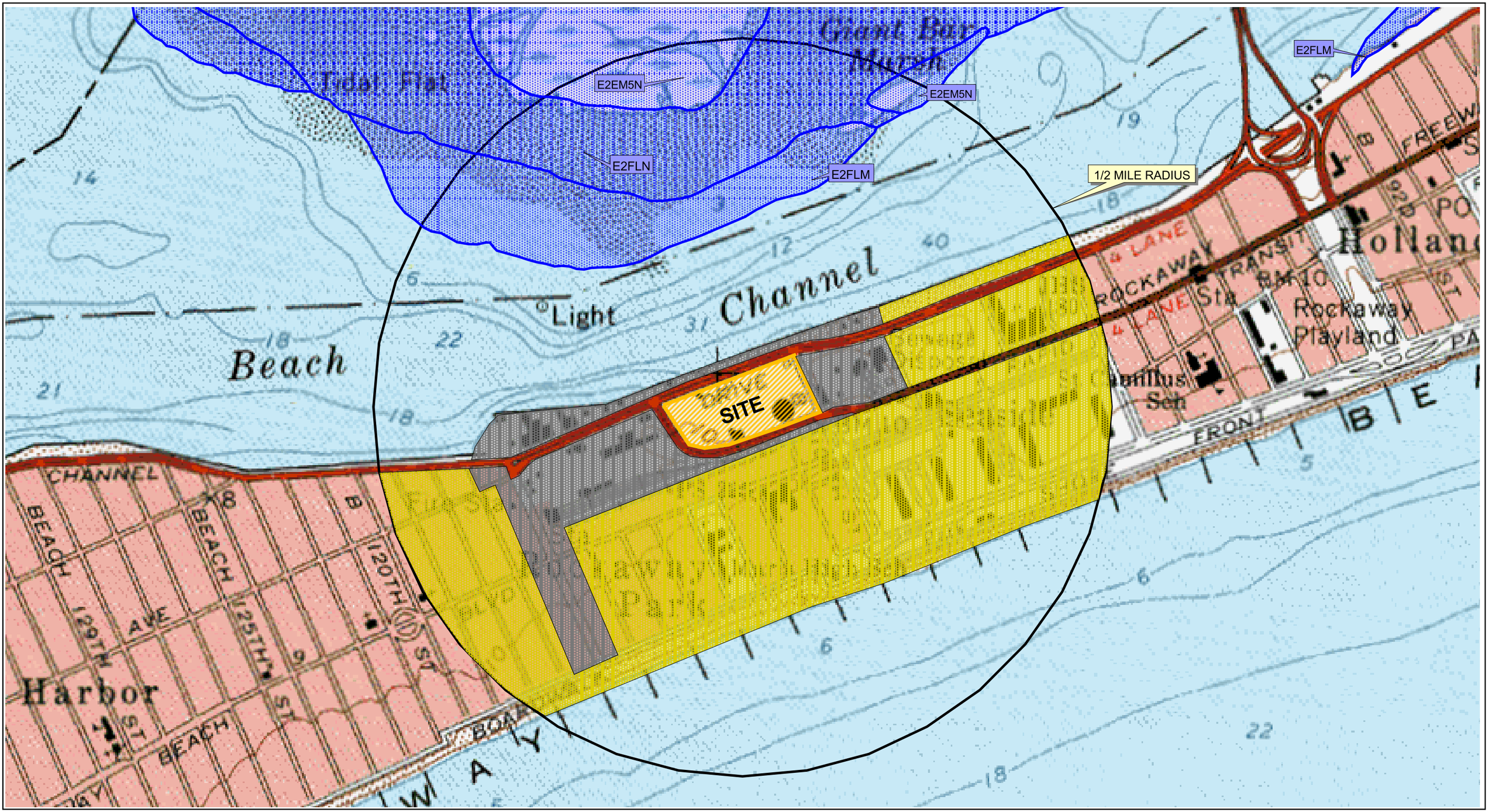
Map Key

- Site
- National Wetlands Inventory
- Fresh Water Wetlands (none)
- 100 Year Floodplain
- Offsite Receptors
- Historic Places (none)
- Rare Species and Ecological Communities

KEYSPAN

Figure 6-1C
Conceptual Site Model -
Environmental Attributes
and Sensitive Receptors

Rockaway Park
Former Manufactured Gas Plant Site
Rockaway Park, New York



SOURCES:
USGS Topographic Map, Far Rockaway, NY, 1969
US Fish and Wildlife National Wetlands Inventory
Field Observations

Map Compiled By:
VHB
Vanasse Hangen Brustlin, Inc.

DECEMBER 2002

ctm

N

Map Key

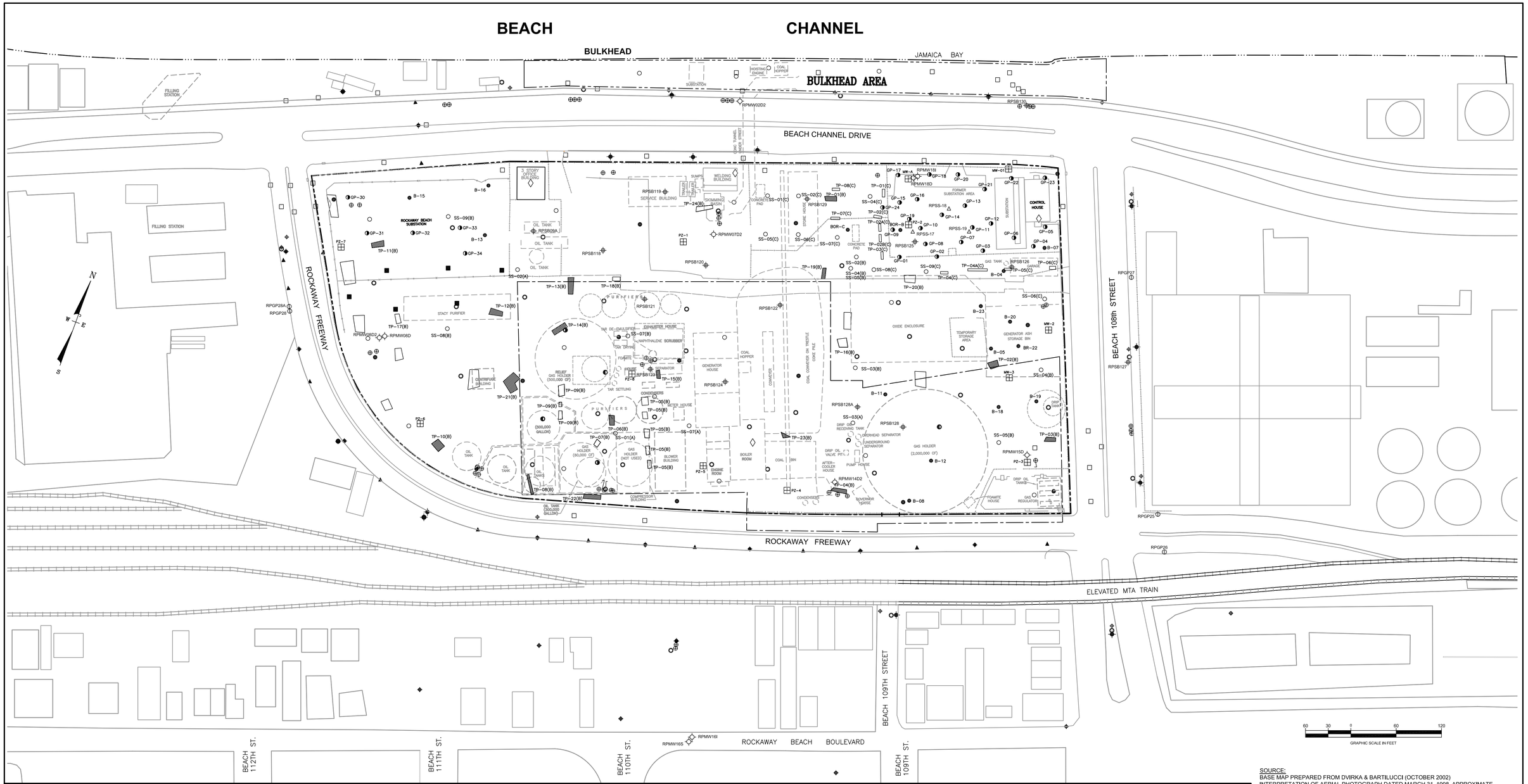
- Site
- Commercial
- Residential
- National Wetlands Inventory

0 500 1000 1500 Feet

KEYSPAN

Figure 6-1D
Conceptual Site Model - Land Cover/Land Use Map

Rockaway Park
Former Manufactured Gas Plant Site
Rockaway Park, New York



LEGEND:

- EXISTING PIEZOMETER/WELL LOCATION FROM PREVIOUS INVESTIGATION
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING)
- SUBSURFACE SOIL SAMPLING LOCATION (SAMPLING AT 5-FOOT INTERVALS)
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING 0-25 FEET BGS., SAMPLING AT 5-FOOT INTERVALS THEREAFTER)
- SURFACE SOIL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)
- GROUNDWATER PROBE LOCATION
- SOIL VAPOR/GAS PROBE LOCATION
- AMBIENT AIR SAMPLING LOCATION
- TEST PIT EXCAVATION LOCATION
- SOIL VAPOR/GAS PROBE LOCATION FROM D&B FEEDER CABLE INVESTIGATION-MARCH 2000
- SOIL SAMPLE LOCATION FROM D&B FEEDER CABLE INVESTIGATION-MARCH 2000
- SOIL SAMPLE LOCATION FROM D&B SUBSTATION INVESTIGATION AND DELISTING PETITION-AUGUST 2000
- SOIL SAMPLE LOCATION FROM D&B TRANSMISSION CABLE INVESTIGATION-NOVEMBER 2001
- GROUNDWATER PROBE LOCATION FROM D&B TRANSMISSION CABLE INVESTIGATION-NOVEMBER 2001
- SOIL VAPOR/GAS PROBE LOCATION FROM D&B TRANSMISSION CABLE INVESTIGATION-NOVEMBER 2001
- SOIL SAMPLE LOCATION FROM D&B BULKHEAD INVESTIGATION-APRIL 2002
- GROUNDWATER PROBE LOCATION FROM D&B BULKHEAD INVESTIGATION-APRIL 2002
- SURFACE SOIL SAMPLING LOCATION FROM D&B BULKHEAD INVESTIGATION-APRIL 2002
- BG-A (RUN 1) RIVER SEDIMENT SAMPLING LOCATION-OCTOBER 2002
- VIBRA-CORE SAMPLING LOCATION-OCTOBER 2002
- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- APPROXIMATE 1912 SITE BOUNDARY
- CURRENT SITE BOUNDARY
- FORMERLY OWNED PROPERTY
- FENCE
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- TEST PIT EXCAVATION FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- GRAB SOIL SAMPLE FROM TEST PIT EXCAVATION FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- TEST PIT EXCAVATION FROM GEI SUBTATION INVESTIGATION-FEBRUARY 1999
- APPROXIMATE SURFACE SOIL SAMPLING LOCATION FROM NUS INVESTIGATION-DECEMBER 1989
- SURFACE SOIL SAMPLING LOCATION FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SURFACE SOIL SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- GEOPROBE SOIL SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- APPROXIMATE LOCATION OF GRAB SOIL SAMPLE FROM "CUT AND PLUG" PROGRAM EXCAVATION-FEBRUARY 1999
- RPSS-18 △ SURFACE SOIL SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-SEPTEMBER 2002

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002)
INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998, APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
SITE SURVEY DATA SHOWN ON THIS MAP IS FOR KEYSPAN USE ONLY AND IS NOT TO BE RELIED UPON BY OTHERS.

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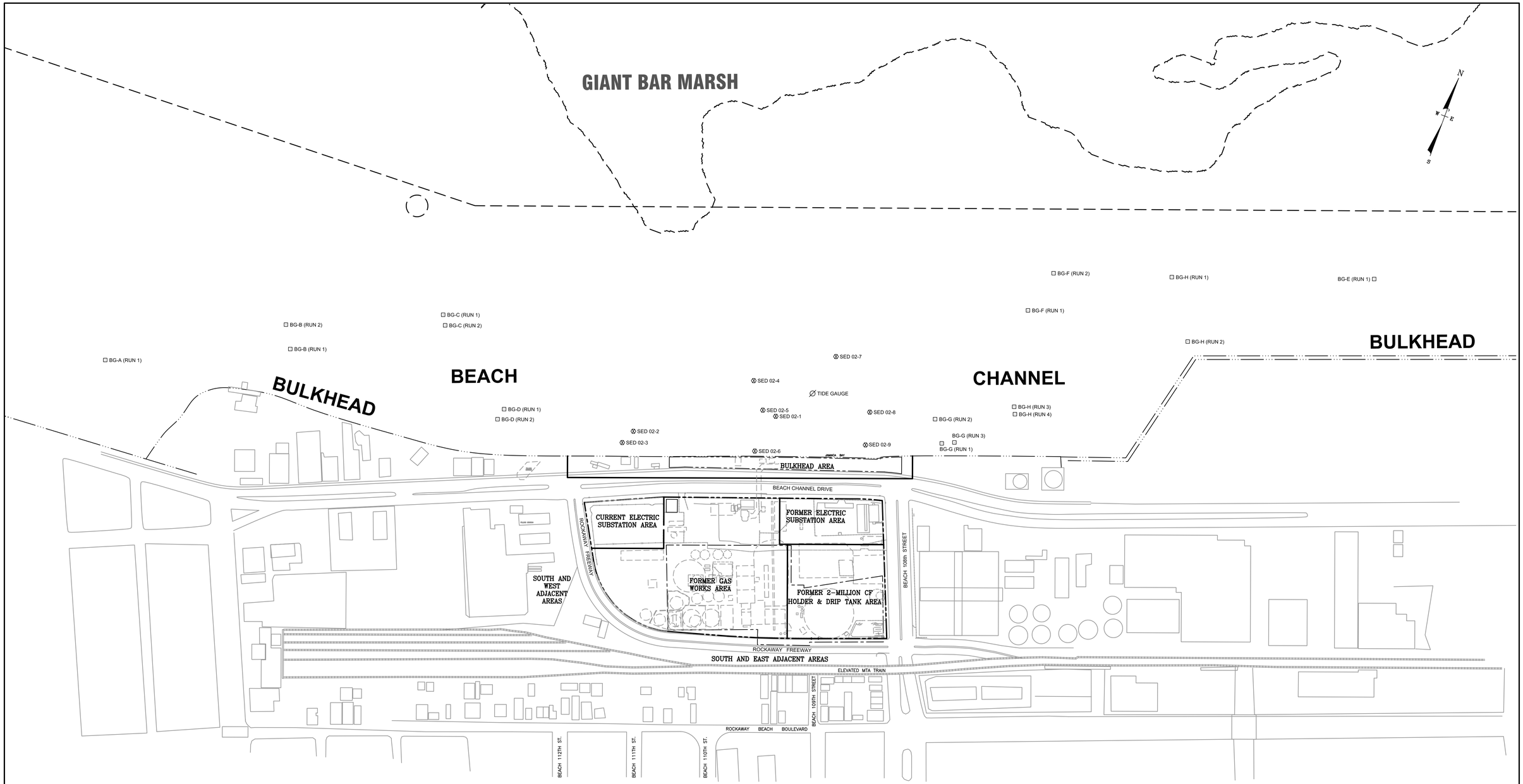
PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

SITE PLAN, SAMPLE LOCATIONS AND HISTORICAL STRUCTURES

SCALE: 1"=60'	DRN BY: SCG	**PLATE 1**
DATE: DEC 2002	982482-9-1810	

KEYSPAN\ROCKAWAY\RI REPORT\PLATE\ROCK-SPLAN



LEGEND

BG-A (RUN 1) ☐	RIVER SEDIMENT SAMPLING LOCATION-OCTOBER 2002
SED-02-1 ⊗	VIBRA-CORE SAMPLING LOCATION-OCTOBER 2002
	APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
	LOCATION OF EXISTING STRUCTURE
	APPROXIMATE 1912 SITE BOUNDARY
	CURRENT SITE BOUNDARY
	FORMERLY OWNED PROPERTY
	FENCE

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002)
INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
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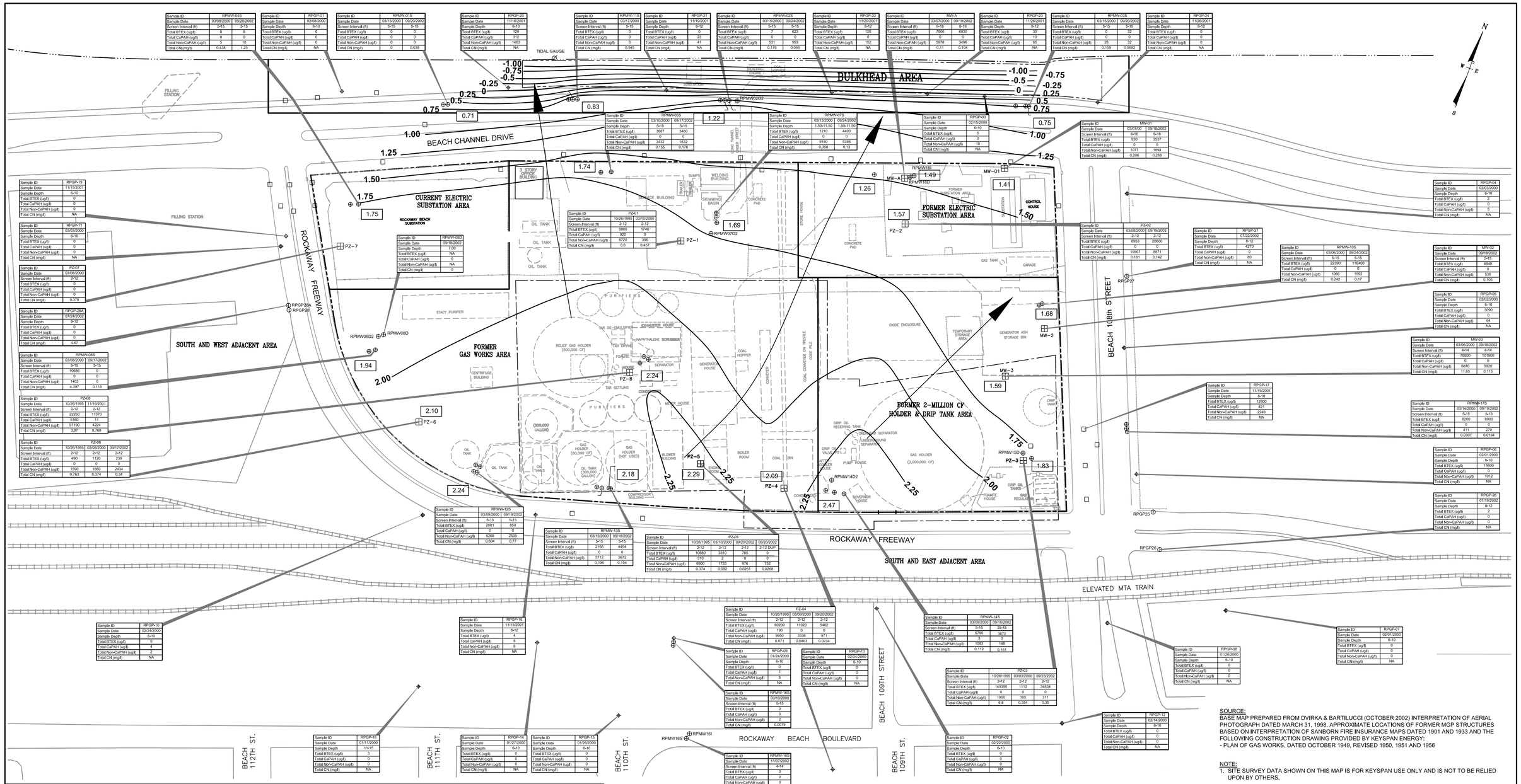
GEI Consultants, Inc.

PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

SEDIMENT SAMPLE LOCATION MAP

SCALE: 1"=150'	DRN BY: SCG	**PLATE 2**
DATE: DEC 2002	982482-9-1810	

KEYSPAN\ROCKAWAY\RI REPORT\PLATE\ROCK-SRIV



Sample ID	RPMW-04S
Sample Date	03/08/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	5
Total CN (mg/l)	0.438

Sample ID	RPMW-04D
Sample Date	09/20/2002
Screen Interval (ft)	5-15
Total BTEX (ug/l)	8
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	10
Total CN (mg/l)	1.25

Sample ID	RPGP-01
Sample Date	02/06/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPMW-01S
Sample Date	03/15/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	0.038

Sample ID	RPMW-01D
Sample Date	09/20/2002
Screen Interval (ft)	5-15
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	0

Sample ID	RPGP-20
Sample Date	11/16/2001
Sample Depth	6-10
Total BTEX (ug/l)	129
Total CaPAH (ug/l)	312
Total Non-CaPAH (ug/l)	1463
Total CN (mg/l)	NA

Sample ID	RPMW-11S
Sample Date	03/17/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	6
Total CN (mg/l)	0.545

Sample ID	RPGP-21
Sample Date	11/19/2001
Sample Depth	8-12
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	23
Total Non-CaPAH (ug/l)	41
Total CN (mg/l)	NA

Sample ID	RPMW-02S
Sample Date	03/15/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	7
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	531
Total CN (mg/l)	0.176

Sample ID	RPMW-02D
Sample Date	09/24/2002
Screen Interval (ft)	5-15
Total BTEX (ug/l)	623
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	993
Total CN (mg/l)	0.066

Sample ID	RPGP-22
Sample Date	11/20/2001
Sample Depth	8-12
Total BTEX (ug/l)	128
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	152
Total CN (mg/l)	NA

Sample ID	MW-A
Sample Date	03/07/2000
Screen Interval (ft)	6-16
Total BTEX (ug/l)	7900
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	5978
Total CN (mg/l)	0.11

Sample ID	RPGP-23
Sample Date	11/26/2001
Sample Depth	8-12
Total BTEX (ug/l)	30
Total CaPAH (ug/l)	10
Total Non-CaPAH (ug/l)	65
Total CN (mg/l)	NA

Sample ID	RPMW-03S
Sample Date	03/15/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	26
Total CN (mg/l)	0.159

Sample ID	RPMW-03D
Sample Date	09/20/2002
Screen Interval (ft)	5-15
Total BTEX (ug/l)	32
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	32
Total CN (mg/l)	0.0682

Sample ID	RPGP-24
Sample Date	11/26/2001
Sample Depth	8-12
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPMW-05S
Sample Date	03/10/2000
Sample Depth	5-15
Total BTEX (ug/l)	3497
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	3432
Total CN (mg/l)	0.155

Sample ID	RPMW-05D
Sample Date	09/17/2002
Sample Depth	5-15
Total BTEX (ug/l)	3460
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	1832
Total CN (mg/l)	0.176

Sample ID	RPMW-07S
Sample Date	03/13/2000
Sample Depth	1.50-11.50
Total BTEX (ug/l)	1210
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	9180
Total CN (mg/l)	0.358

Sample ID	RPMW-07D
Sample Date	09/24/2002
Sample Depth	1.50-11.50
Total BTEX (ug/l)	4400
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	5398
Total CN (mg/l)	0.13

Sample ID	RPGP-03
Sample Date	02/15/2000
Sample Depth	6-10
Total BTEX (ug/l)	5
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	15
Total CN (mg/l)	NA

Sample ID	MW-01
Sample Date	03/07/00
Screen Interval (ft)	6-16
Total BTEX (ug/l)	930
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	1077
Total CN (mg/l)	0.206

Sample ID	RPGP-04
Sample Date	02/03/2000
Sample Depth	6-10
Total BTEX (ug/l)	2
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	5
Total CN (mg/l)	NA

Sample ID	RPGP-19
Sample Date	11/15/2001
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-11
Sample Date	03/03/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	PZ-07
Sample Date	03/08/2000
Screen Interval (ft)	2-12
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	0.378

Sample ID	RPGP-28A
Sample Date	07/24/2002
Sample Depth	8-12
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	4.67

Sample ID	RPMW-06S
Sample Date	03/08/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	10686
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	1402
Total CN (mg/l)	4.397

Sample ID	PZ-08
Sample Date	10/26/1995
Screen Interval (ft)	2-12
Total BTEX (ug/l)	22050
Total CaPAH (ug/l)	5160
Total Non-CaPAH (ug/l)	97190
Total CN (mg/l)	3.87

Sample ID	PZ-06		
Sample Date	10/26/1995	03/08/2000	09/17/2002
Screen Interval (ft)	2-12	2-12	2-12
Total BTEX (ug/l)	490	1120	239
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	1590	1660	2434
Total CN (mg/l)	0.763	8.374	0.34

Sample ID	RPMW-08S
Sample Date	09/18/2002
Sample Depth	7.00
Total BTEX (ug/l)	NA
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	NA
Total CN (mg/l)	0

Sample ID	PZ-01	
Sample Date	10/26/1995	03/10/2000
Screen Interval (ft)	2-12	2-12
Total BTEX (ug/l)	5860	1740
Total CaPAH (ug/l)	920	0
Total Non-CaPAH (ug/l)	8720	396
Total CN (mg/l)	0.6	0.457

Sample ID	PZ-02	
Sample Date	03/08/2000	09/19/2002
Screen Interval (ft)	2-12	2-12
Total BTEX (ug/l)	8953	20600
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	10907	6871
Total CN (mg/l)	0.161	0.142

Sample ID	RPGP-27
Sample Date	07/22/2002
Sample Depth	8-12
Total BTEX (ug/l)	4270
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	80
Total CN (mg/l)	NA

Sample ID	RPMW-10S
Sample Date	03/06/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	22390
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	1066
Total CN (mg/l)	0.242

Sample ID	MW-02
Sample Date	09/18/2002
Screen Interval (ft)	5-15
Total BTEX (ug/l)	4840
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	538
Total CN (mg/l)	0.105

Sample ID	RPGP-05
Sample Date	02/02/2000
Sample Depth	6-10
Total BTEX (ug/l)	3090
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	64
Total CN (mg/l)	NA

Sample ID	MW-03
Sample Date	03/06/2000
Screen Interval (ft)	4-14
Total BTEX (ug/l)	78800
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	6870
Total CN (mg/l)	11.65

Sample ID	09/18/2002
Screen Interval (ft)	4-14
Total BTEX (ug/l)	101900
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	5920
Total CN (mg/l)	0.115

Sample ID	RPGP-17
Sample Date	11/19/2001
Sample Depth	6-10
Total BTEX (ug/l)	12800
Total CaPAH (ug/l)	421
Total Non-CaPAH (ug/l)	2246
Total CN (mg/l)	NA

Sample ID	RPMW-17S
Sample Date	03/14/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	8200
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	411
Total CN (mg/l)	0.0307

Sample ID	09/19/2002
Screen Interval (ft)	5-15
Total BTEX (ug/l)	6900
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	270
Total CN (mg/l)	0.0194

Sample ID	RPGP-06
Sample Date	02/01/2000
Sample Depth	6-10
Total BTEX (ug/l)	18600
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	1012
Total CN (mg/l)	NA

Sample ID	RPGP-26
Sample Date	07/19/2002
Sample Depth	8-12
Total BTEX (ug/l)	2
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPMW-12S
Sample Date	03/09/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	2081
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	5268
Total CN (mg/l)	0.604

Sample ID	RPMW-13S
Sample Date	03/13/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	2168
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	5712
Total CN (mg/l)	0.196

Sample ID	PZ-05			
Sample Date	10/26/1995	03/10/2000	09/20/2002	09/20/2002
Screen Interval (ft)	2-12	2-12	2-12	2-12 DUP
Total BTEX (ug/l)	10880	3310	785	0
Total CaPAH (ug/l)	310	2	0	0
Total Non-CaPAH (ug/l)	6900	1733	976	752
Total CN (mg/l)	0.374	0.092	0.0261	0.0268

Sample ID	RPGP-10
Sample Date	02/24/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	4
Total Non-CaPAH (ug/l)	2
Total CN (mg/l)	NA

Sample ID	RPGP-18
Sample Date	11/15/2001
Sample Depth	8-12
Total BTEX (ug/l)	4
Total CaPAH (ug/l)	8
Total Non-CaPAH (ug/l)	8
Total CN (mg/l)	NA

Sample ID	PZ-04		
Sample Date	10/26/1995	03/09/2000	09/20/2002
Screen Interval (ft)	2-12	2-12	2-12
Total BTEX (ug/l)	60200	11020	5402
Total CaPAH (ug/l)	190	0	0
Total Non-CaPAH (ug/l)	9950	3336	971
Total CN (mg/l)	0.071	0.0463	0.0234

Sample ID	RPMW-14S
Sample Date	03/09/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	6790
Total CN (mg/l)	0.112

Sample ID	RPMW-14D
Sample Date	09/18/2002
Screen Interval (ft)	5-15
Total BTEX (ug/l)	3672
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	1083
Total CN (mg/l)	0.161

Sample ID	RPGP-08
Sample Date	01/28/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-07
Sample Date	02/01/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-09
Sample Date	01/24/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	7
Total Non-CaPAH (ug/l)	8
Total CN (mg/l)	NA

Sample ID	RPGP-13
Sample Date	02/04/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	PZ-03		
Sample Date	10/26/1995	03/03/2000	09/23/2002
Screen Interval (ft)	2-12	2-12	2-12
Total BTEX (ug/l)	149390	1112	34834
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	1900	105	311
Total CN (mg/l)	6.8	0.354	0.35

Sample ID	RPMW-16S
Sample Date	03/10/2000
Screen Interval (ft)	5-15
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	0.0079

Sample ID	RPGP-12
Sample Date	02/14/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-16
Sample Date	01/11/2000
Sample Depth	11-15
Total BTEX (ug/l)	3
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-14
Sample Date	01/27/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-15
Sample Date	01/26/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPMW-16D
Sample Date	11/07/2002
Screen Interval (ft)	4-14
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	0

Sample ID	RPGP-02
Sample Date	02/22/2000
Sample Depth	6-10
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002) INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
1. SITE SURVEY DATA SHOWN ON THIS MAP IS FOR KEYSPAN USE ONLY AND IS NOT TO BE RELIED UPON BY OTHERS.
2. GROUNDWATER CONTOURS FOR SHALLOW GROUNDWATER AT LOW AND HIGH TIDE ARE PENDING THE SURVEY OF THE BULKHEAD GUAGE POINT TO DETERMINE SURFACE WATER ELEVATIONS. THEREFORE, GROUNDWATER CONTOURS BETWEEN BEACH CHANNEL DRIVE AND THE BULKHEAD ARE INACCURATE AS PORTRAYED.

LEGEND:

- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- APPROXIMATE 1912 SITE BOUNDARY
- CURRENT SITE BOUNDARY
- FORMERLY OWNED PROPERTY
- FENCE
- 1.25 POTENTIOMETRIC SURFACE CONTOUR (FEET MSL)
- FLOW DIRECTION
- 2.18 POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- EXISTING PIEZOMETER/WELL LOCATION FROM PREVIOUS INVESTIGATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)

60 30 0 60 120
GRAPHIC SCALE IN FEET

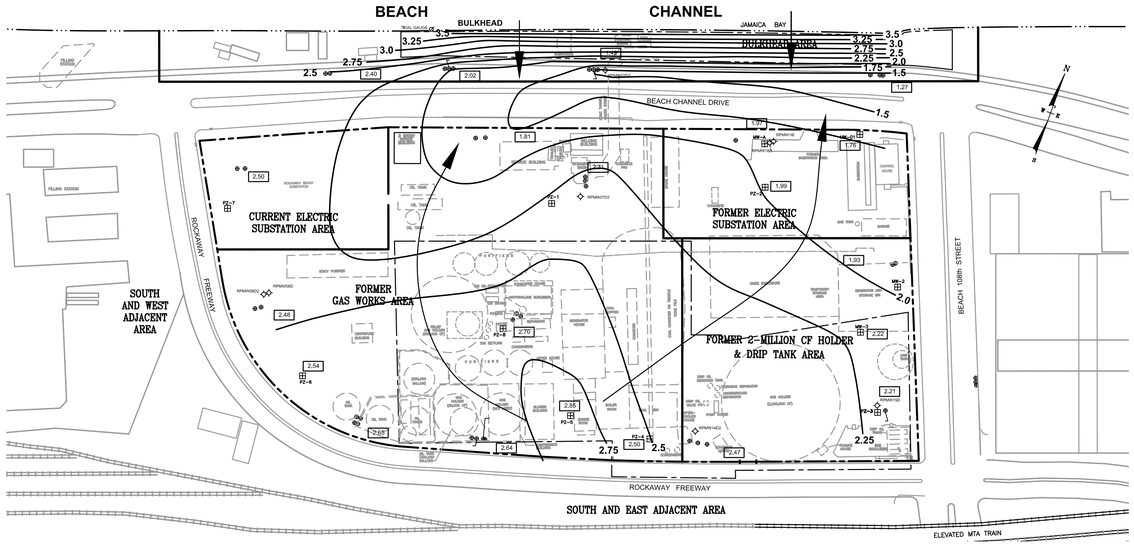
GEI Consultants, Inc.

PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

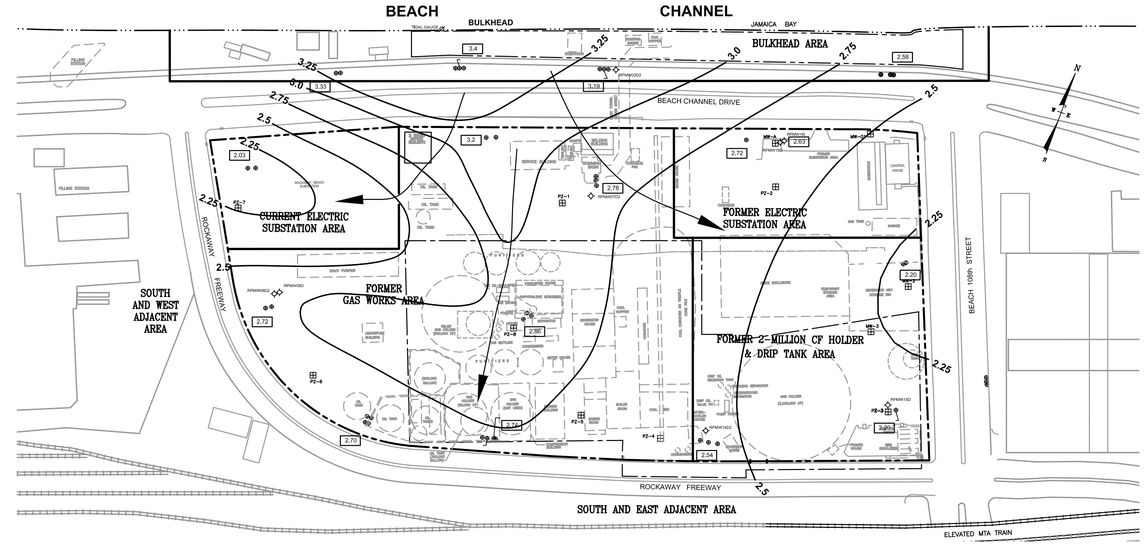
LOW TIDE SHALLOW GROUNDWATER CONTOUR MAP
SEPTEMBER 16, 2002

SCALE: 1"=60'	DRN BY: SCG	**PLATE 3**
DATE: DEC 2002	982482-9-1810	

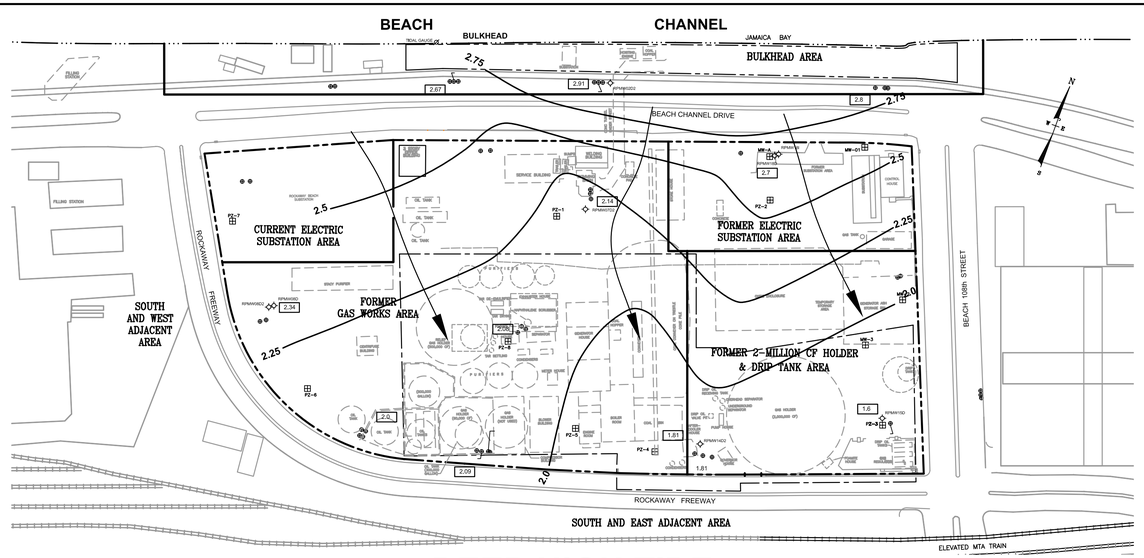
KEYSPAN\ROCKAWAY\RI\ROCK-GW-SHL-ANAL



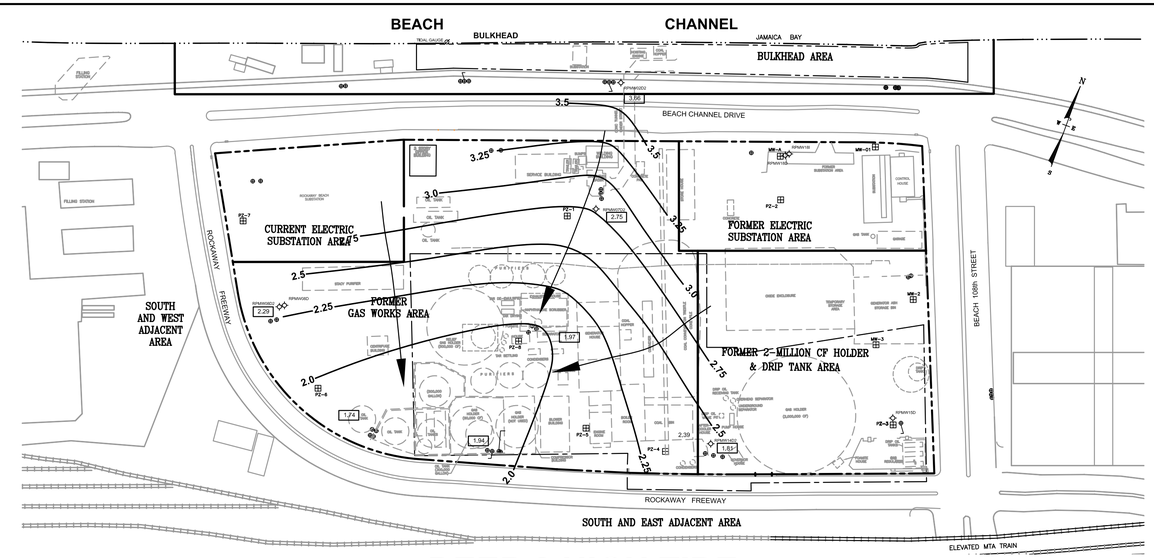
SHALLOW HIGH TIDE



INTERMEDIATE HIGH TIDE



DEEP HIGH TIDE



DEEP 2 HIGH TIDE

LEGEND:

- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- APPROXIMATE 1912 SITE BOUNDARY
- CURRENT SITE BOUNDARY
- FORMERLY OWNED PROPERTY
- FENCE
- 1.25 — POTENTIOMETRIC SURFACE CONTOUR (FEET MSL)
- FLOW DIRECTION
- 2.15 — POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- EXISTING PIEZOMETER/WELL LOCATION FROM PREVIOUS INVESTIGATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)

100 50 0 100 200
GRAPHIC SCALE IN FEET

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002)
INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
SITE SURVEY DATA SHOWN ON THIS MAP IS FOR KEYSPAN USE ONLY AND IS NOT TO BE RELIED UPON BY OTHERS.

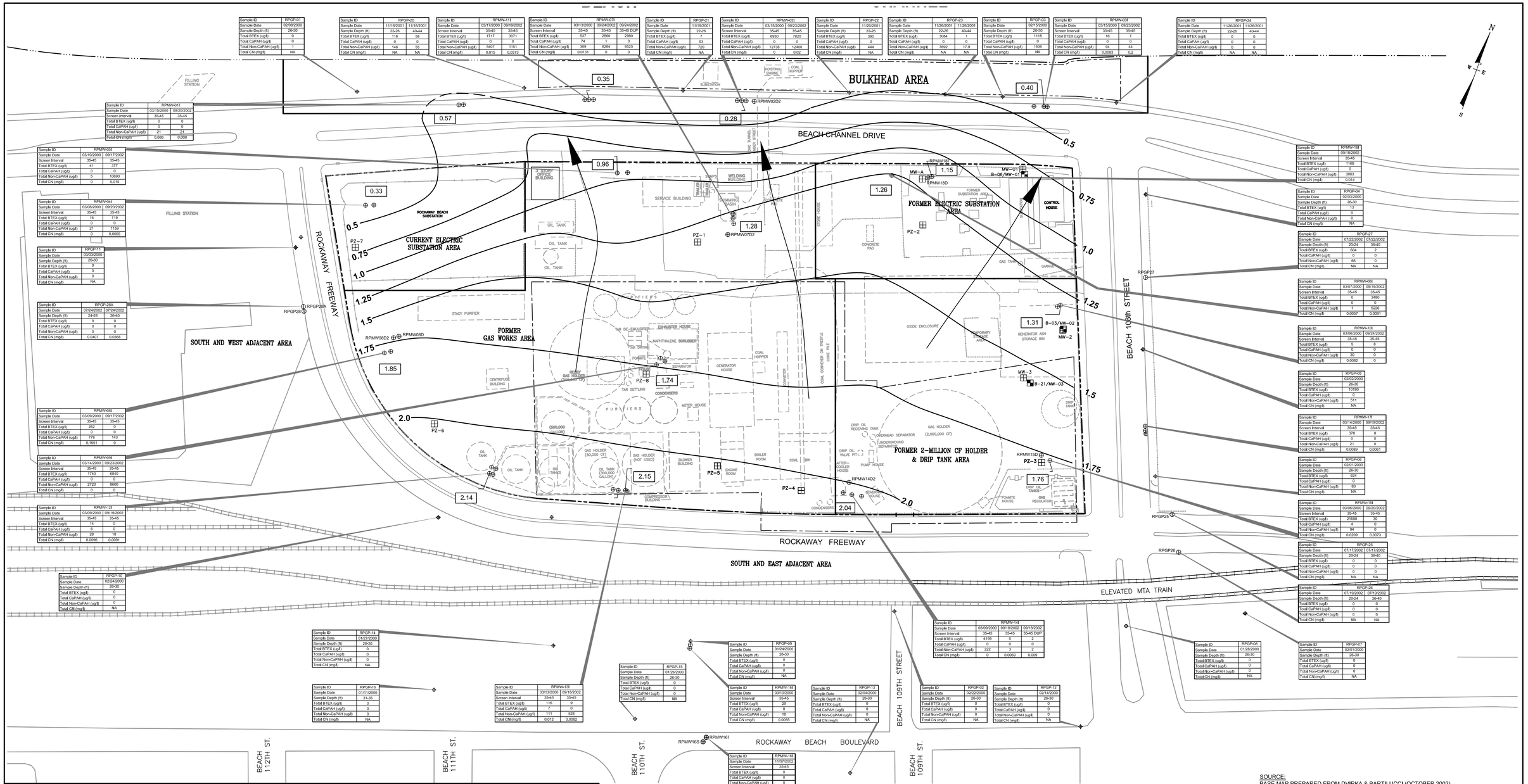
GEI Consultants, Inc.

PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

HIGH TIDE (SHALLOW, INTERMEDIATE, DEEP, DEEP(2)) GROUNDWATER CONTOUR MAPS - SEPTEMBER 16, 2002

SCALE: 1"=100'	DRN BY: SCG	**PLATE 4**
DATE: DEC 2002	982482-9-1810	

KEYSPAN\ROCKAWAY\RI\ROCK-GW HIGH TIDE



Sample ID	RPGP-01
Sample Date	02/09/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	1
Total CN (mg/l)	NA

Sample ID	RPGP-20	
Sample Date	11/16/2001	11/16/2001
Sample Depth (ft)	22-26	40-44
Total BTEX (ug/l)	116	58
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	146	55
Total CN (mg/l)	NA	NA

Sample ID	RPMW-11I	
Sample Date	03/17/2000	09/19/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	1717	3071
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	5407	1151
Total CN (mg/l)	0.015	0.0373

Sample ID	RPMW-07I		
Sample Date	03/13/2000	09/24/2002	09/24/2002
Screen Interval	35-45	35-45	35-45 DUP
Total BTEX (ug/l)	537	2950	2980
Total CaPAH (ug/l)	74	1	0
Total Non-CaPAH (ug/l)	369	6284	6525
Total CN (mg/l)	0.0131	0	0

Sample ID	RPGP-21
Sample Date	11/19/2001
Sample Depth (ft)	22-26
Total BTEX (ug/l)	7
Total CaPAH (ug/l)	53
Total Non-CaPAH (ug/l)	720
Total CN (mg/l)	NA

Sample ID	RPMW-02I	
Sample Date	03/15/2000	09/23/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	6930	7920
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	12738	12400
Total CN (mg/l)	0	0.02

Sample ID	RPGP-22
Sample Date	11/20/2001
Sample Depth (ft)	22-26
Total BTEX (ug/l)	390
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	444
Total CN (mg/l)	NA

Sample ID	RPGP-23	
Sample Date	11/26/2001	11/26/2001
Sample Depth (ft)	22-26	40-44
Total BTEX (ug/l)	3084	1
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	7692	17.9
Total CN (mg/l)	NA	NA

Sample ID	RPGP-03
Sample Date	02/15/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	1118
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	1606
Total CN (mg/l)	NA

Sample ID	RPMW-03I	
Sample Date	03/15/2000	09/23/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	16	7
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	94	44
Total CN (mg/l)	0.0083	0.2

Sample ID	RPGP-24	
Sample Date	11/26/2001	11/26/2001
Sample Depth (ft)	22-26	40-44
Total BTEX (ug/l)	0	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	0	0
Total CN (mg/l)	NA	NA

Sample ID	RPMW-01I	
Sample Date	03/15/2000	09/20/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	0	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	21	21
Total CN (mg/l)	0.688	0.008

Sample ID	RPMW-05I	
Sample Date	03/10/2000	09/17/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	41	377
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	5	10950
Total CN (mg/l)	0	0.015

Sample ID	RPMW-04I	
Sample Date	03/08/2000	09/20/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	16	719
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	21	1159
Total CN (mg/l)	0	0.0055

Sample ID	RPGPc11
Sample Date	03/03/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-28A	
Sample Date	07/24/2002	07/24/2002
Sample Depth (ft)	24-28	36-40
Total BTEX (ug/l)	0	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	0	0
Total CN (mg/l)	0.0407	0.0368

Sample ID	RPMW-06I	
Sample Date	03/08/2000	09/17/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	262	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	778	143
Total CN (mg/l)	0.1951	0

Sample ID	RPMW-09I	
Sample Date	03/14/2000	09/23/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	1740	6840
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	2720	8600
Total CN (mg/l)	0	0

Sample ID	RPMW-12I	
Sample Date	03/09/2000	09/19/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	14	0
Total CaPAH (ug/l)	6	0
Total Non-CaPAH (ug/l)	28	18
Total CN (mg/l)	0.0096	0.0091

Sample ID	RPGP-10
Sample Date	02/24/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-14
Sample Date	01/27/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-16
Sample Date	01/11/2000
Sample Depth (ft)	31-35
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPMW-13I	
Sample Date	03/13/2000	09/18/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	116	9
Total CaPAH (ug/l)	7	0
Total Non-CaPAH (ug/l)	111	528
Total CN (mg/l)	0.012	0.0082

Sample ID	RPGP-15
Sample Date	01/26/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-09
Sample Date	01/24/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPMW-16I	
Sample Date	03/10/2000	09/18/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	29	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	18	0
Total CN (mg/l)	0.0055	0

Sample ID	RPGP-13
Sample Date	02/04/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPMW-14I		
Sample Date	03/09/2000	09/18/2002	09/18/2002
Screen Interval	35-45	35-45	35-45 DUP
Total BTEX (ug/l)	4199	0	2
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	222	3	2
Total CN (mg/l)	0	0.0069	0.009

Sample ID	RPGP-02
Sample Date	02/22/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-12
Sample Date	02/14/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-08
Sample Date	01/26/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-07
Sample Date	02/01/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPMW-18I
Sample Date	09/18/2002
Screen Interval	35-45
Total BTEX (ug/l)	1168
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	3863
Total CN (mg/l)	0.014

Sample ID	RPGP-04
Sample Date	02/03/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	13
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-27	
Sample Date	07/22/2002	07/22/2002
Sample Depth (ft)	20-24	36-40
Total BTEX (ug/l)	604	2
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	66	0
Total CN (mg/l)	NA	NA

Sample ID	RPMW-06I	
Sample Date	03/07/2000	09/19/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	0	3480
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	1	5226
Total CN (mg/l)	0.0057	0.0091

Sample ID	RPMW-10I	
Sample Date	03/06/2000	09/24/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	5	8
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	30	0
Total CN (mg/l)	0.0082	0

Sample ID	RPGP-05
Sample Date	02/02/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	10180
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	511
Total CN (mg/l)	NA

Sample ID	RPMW-17I	
Sample Date	03/14/2000	09/19/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	378	8
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	21	0
Total CN (mg/l)	0.0089	0.0061

Sample ID	RPGP-06
Sample Date	02/01/2000
Sample Depth (ft)	26-30
Total BTEX (ug/l)	624
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	83
Total CN (mg/l)	NA

Sample ID	RPMW-15I	
Sample Date	03/06/2000	09/20/2002
Screen Interval	35-45	35-45
Total BTEX (ug/l)	21588	30
Total CaPAH (ug/l)	4	0
Total Non-CaPAH (ug/l)	94	0
Total CN (mg/l)	0.0209	0.0073

Sample ID	RPGP-25	
Sample Date	07/17/2002	07/17/2002
Sample Depth (ft)	20-24	36-40
Total BTEX (ug/l)	0	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	0	0
Total CN (mg/l)	NA	NA

Sample ID	RPGP-26	
Sample Date	07/19/2002	07/19/2002
Sample Depth (ft)	20-24	36-40
Total BTEX (ug/l)	0	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	0	0
Total CN (mg/l)	NA	NA

Sample ID	RPMW-16S
Sample Date	11/07/2002
Screen Interval	35-45
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	0

LEGEND:

- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- APPROXIMATE 1912 SITE BOUNDARY
- CURRENT SITE BOUNDARY
- FORMERLY OWNED PROPERTY
- FENCE
- FLOW DIRECTION
- 1.25 — POTENTIOMETRIC SURFACE CONTOUR (FEET MSL)
- 1.25 — INFERRED POTENTIOMETRIC SURFACE CONTOUR (FEET MSL)
- 2.15 — POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- EXISTING PIEZOMETER/WELL LOCATION FROM PREVIOUS INVESTIGATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)

60 30 0 60 120
GRAPHIC SCALE IN FEET

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002)
INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998, APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
SITE SURVEY DATA SHOWN ON THIS MAP IS FOR KEYSPAN USE ONLY AND IS NOT TO BE RELIED UPON BY OTHERS.

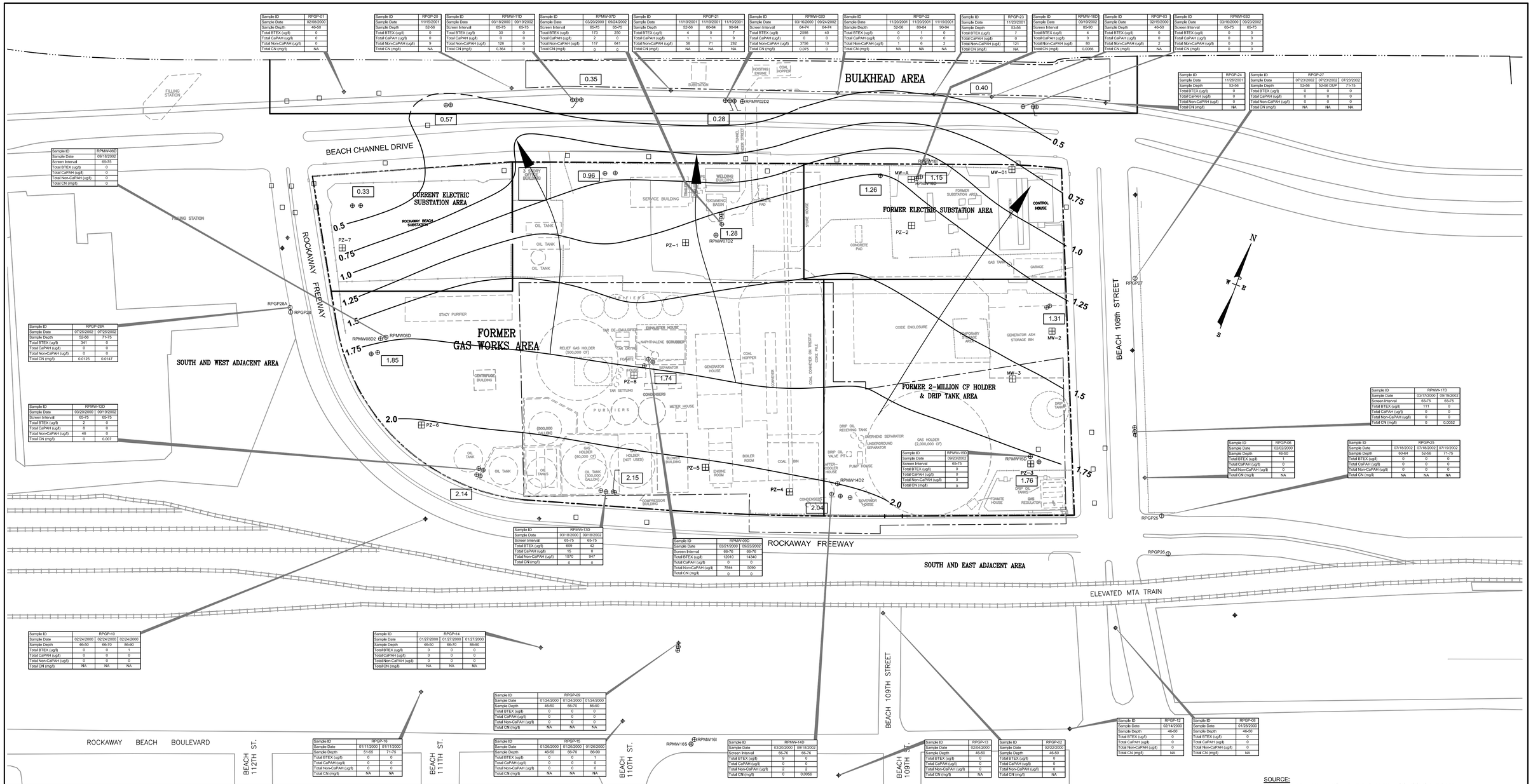
GEI Consultants, Inc.

PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

LOW TIDE INTERMEDIATE GROUNDWATER MAP
SEPTEMBER 16, 2002

SCALE: 1"=60'	DRN BY: SCG	**PLATE 5**
DATE: DEC 2002	982482-9-1810	

KEYSPAN\ROCKAWAY\RI\ROCK-GW-INT-ANAL



Sample ID	RPGP-01
Sample Date	02/08/2000
Sample Depth	46-50
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-20	
Sample Date	11/15/2001	
Sample Depth	52-56	
Total BTEX (ug/l)	0	
Total CaPAH (ug/l)	0	
Total Non-CaPAH (ug/l)	9	
Total CN (mg/l)	NA	

Sample ID	RPMW-11D	
Sample Date	03/18/2000	09/19/2002
Screen Interval	65-75	65-75
Total BTEX (ug/l)	30	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	126	0
Total CN (mg/l)	0.364	0

Sample ID	RPMW-07D	
Sample Date	03/20/2000	09/24/2002
Screen Interval	65-75	65-75
Total BTEX (ug/l)	173	250
Total CaPAH (ug/l)	2	0
Total Non-CaPAH (ug/l)	117	641
Total CN (mg/l)	0	0

Sample ID	RPGP-21		
Sample Date	11/19/2001	11/19/2001	11/19/2001
Sample Depth	52-56	80-84	90-94
Total BTEX (ug/l)	4	0	7
Total CaPAH (ug/l)	1	1	9
Total Non-CaPAH (ug/l)	58	71	282
Total CN (mg/l)	NA	NA	NA

Sample ID	RPMW-02D	
Sample Date	03/16/2000	09/24/2002
Screen Interval	64-74	64-74
Total BTEX (ug/l)	2598	40
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	3756	10
Total CN (mg/l)	0.075	0

Sample ID	RPGP-22		
Sample Date	11/20/2001	11/20/2001	11/19/2001
Sample Depth	52-56	80-84	90-94
Total BTEX (ug/l)	0	1	0
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	1	0	2
Total CN (mg/l)	NA	NA	NA

Sample ID	RPGP-23
Sample Date	11/20/2001
Sample Depth	53-56
Total BTEX (ug/l)	7
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	121
Total CN (mg/l)	NA

Sample ID	RPMW-18D
Sample Date	09/19/2002
Screen Interval	65-90
Total BTEX (ug/l)	4
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	80
Total CN (mg/l)	0.0066

Sample ID	RPGP-03
Sample Date	02/15/2000
Sample Depth	46-50
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	2
Total CN (mg/l)	NA

Sample ID	RPMW-03D	
Sample Date	03/16/2000	09/23/2002
Screen Interval	65-75	65-75
Total BTEX (ug/l)	0	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	0	0
Total CN (mg/l)	0	0

Sample ID	RPGP-24
Sample Date	11/26/2001
Sample Depth	52-56
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-27		
Sample Date	07/23/2002	07/23/2002	07/23/2002
Sample Depth	52-56	52-56 DUP	71-75
Total BTEX (ug/l)	0	0	0
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	0	0	0
Total CN (mg/l)	NA	NA	NA

Sample ID	RPMW-08D
Sample Date	09/18/2002
Screen Interval	65-75
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	0

Sample ID	RPGP-28A	
Sample Date	07/25/2002	07/25/2002
Sample Depth	52-56	71-75
Total BTEX (ug/l)	341	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	0	0
Total CN (mg/l)	0.0125	0.0147

Sample ID	RPMW-12D	
Sample Date	03/20/2000	09/19/2002
Screen Interval	65-75	65-75
Total BTEX (ug/l)	2	0
Total CaPAH (ug/l)	8	0
Total Non-CaPAH (ug/l)	46	0
Total CN (mg/l)	0	0.007

Sample ID	RPMW-15D	
Sample Date	09/23/2002	
Screen Interval	65-75	
Total BTEX (ug/l)	0	
Total CaPAH (ug/l)	0	
Total Non-CaPAH (ug/l)	0	
Total CN (mg/l)	0	

Sample ID	RPMW-17D	
Sample Date	03/17/2000	09/19/2002
Screen Interval	65-75	65-75
Total BTEX (ug/l)	111	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	0	0
Total CN (mg/l)	0	0.0052

Sample ID	RPGP-06
Sample Date	02/02/2000
Sample Depth	46-50
Total BTEX (ug/l)	1
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-25		
Sample Date	07/18/2002	07/18/2002	07/19/2002
Sample Depth	50-54	52-56	71-75
Total BTEX (ug/l)	0	0	0
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	0	0	0
Total CN (mg/l)	NA	NA	NA

Sample ID	RPMW-13D	
Sample Date	03/18/2000	09/18/2002
Screen Interval	65-75	65-75
Total BTEX (ug/l)	609	42
Total CaPAH (ug/l)	15	0
Total Non-CaPAH (ug/l)	1070	947
Total CN (mg/l)	0	0

Sample ID	RPMW-09D	
Sample Date	03/21/2000	09/23/2002
Screen Interval	66-76	66-76
Total BTEX (ug/l)	12010	14340
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	7844	5090
Total CN (mg/l)	0	0

Sample ID	RPGP-10		
Sample Date	02/24/2000	02/24/2000	02/24/2000
Sample Depth	46-50	66-70	86-90
Total BTEX (ug/l)	0	0	1
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	0	0	0
Total CN (mg/l)	NA	NA	NA

Sample ID	RPGP-14		
Sample Date	01/27/2000	01/27/2000	01/27/2000
Sample Depth	46-50	66-70	86-90
Total BTEX (ug/l)	0	0	0
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	0	0	0
Total CN (mg/l)	NA	NA	NA

Sample ID	RPGP-09		
Sample Date	01/24/2000	01/24/2000	01/24/2000
Sample Depth	46-50	66-70	86-90
Total BTEX (ug/l)	0	0	0
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	0	0	0
Total CN (mg/l)	NA	NA	NA

Sample ID	RPGP-16	
Sample Date	01/11/2000	01/11/2000
Sample Depth	51-55	71-75
Total BTEX (ug/l)	0	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	0	0
Total CN (mg/l)	NA	NA

Sample ID	RPGP-15		
Sample Date	01/26/2000	01/26/2000	01/26/2000
Sample Depth	46-50	66-70	86-90
Total BTEX (ug/l)	0	0	1
Total CaPAH (ug/l)	0	0	0
Total Non-CaPAH (ug/l)	0	0	0
Total CN (mg/l)	NA	NA	NA

Sample ID	RPMW-14D	
Sample Date	03/20/2000	09/18/2002
Screen Interval	66-76	66-76
Total BTEX (ug/l)	0	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	2	2
Total CN (mg/l)	0	0.0056

Sample ID	RPGP-13
Sample Date	02/04/2000
Sample Depth	46-50
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-02
Sample Date	02/22/2000
Sample Depth	46-50
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-12
Sample Date	02/14/2000
Sample Depth	46-50
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

Sample ID	RPGP-08
Sample Date	01/28/2000
Sample Depth	46-50
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	NA

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002)
INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998, APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
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LEGEND:

- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- APPROXIMATE 1912 SITE BOUNDARY
- CURRENT SITE BOUNDARY
- FORMERLY OWNED PROPERTY
- FENCE
- FLOW DIRECTION
- 1.25 POTENTIOMETRIC SURFACE CONTOUR (FEET MSL)
- 1.25 INFERRED POTENTIOMETRIC SURFACE CONTOUR (FEET MSL)
- 2.15 POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- EXISTING PIEZOMETER/WELL LOCATION FROM PREVIOUS INVESTIGATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)

60 30 0 60 120
GRAPHIC SCALE IN FEET

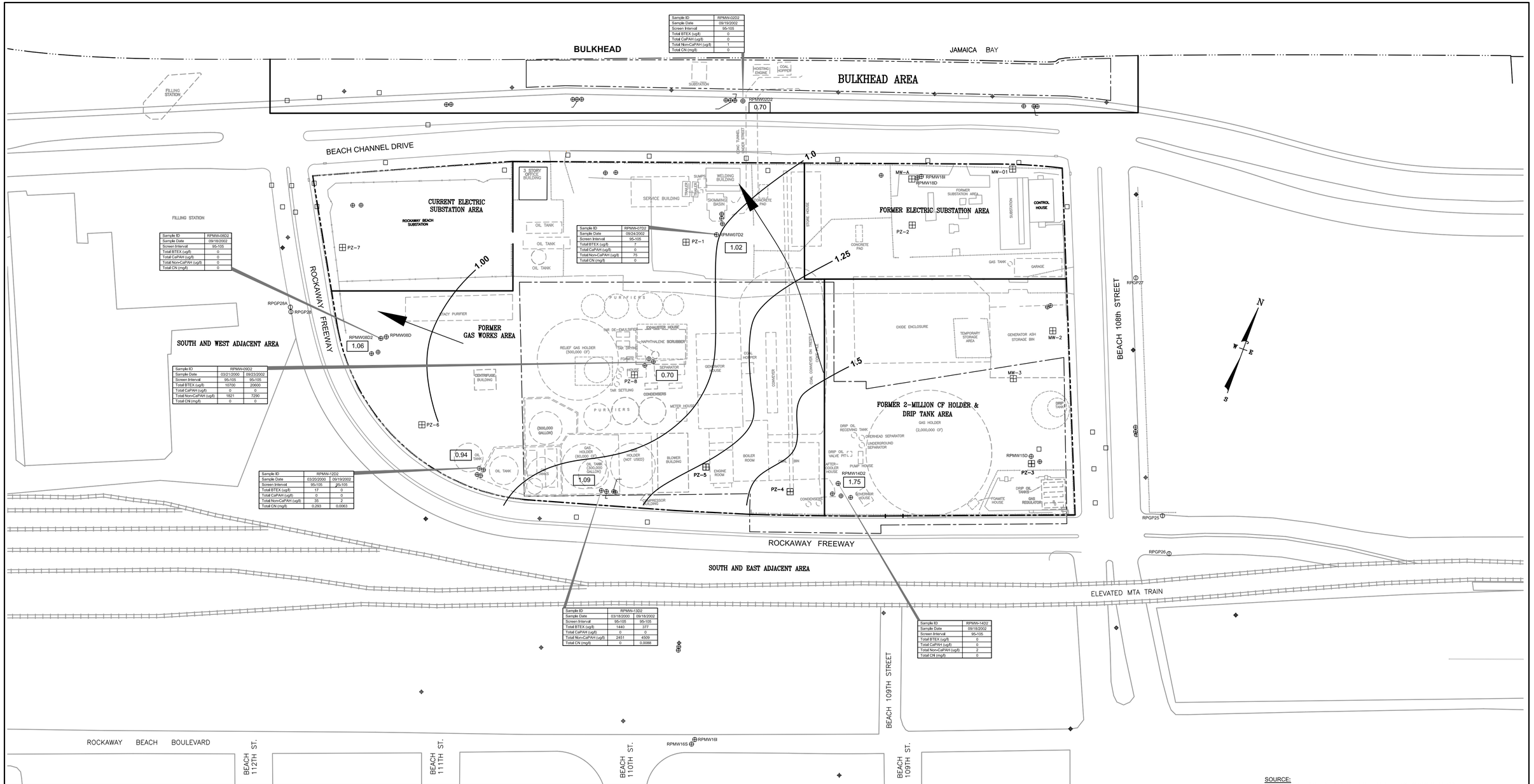
GEI Consultants, Inc.

PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

LOW TIDE DEEP GROUNDWATER CONTOUR MAP
SEPTEMBER 16, 2002

SCALE: 1"=60'	DRN BY: SCG	**PLATE 6**
DATE: DEC 2002	982482-9-1810	

KEYSPAN\ROCKAWAY\R\ROCK-GW-DEEP-ANAL



Sample ID	RPMW-02D2
Sample Date	09/19/2002
Screen Interval	95-105
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	1
Total CN (mg/l)	0

Sample ID	RPMW-08D2
Sample Date	09/18/2002
Screen Interval	95-105
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	0
Total CN (mg/l)	0

Sample ID	RPMW-07D2
Sample Date	09/24/2002
Screen Interval	95-105
Total BTEX (ug/l)	7
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	75
Total CN (mg/l)	0

Sample ID	RPMW-09D2	
Sample Date	03/21/2000	09/23/2002
Screen Interval	95-105	95-105
Total BTEX (ug/l)	10700	20600
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	1821	7290
Total CN (mg/l)	0	0

Sample ID	RPMW-12D2	
Sample Date	03/20/2000	09/19/2002
Screen Interval	95-105	95-105
Total BTEX (ug/l)	17	0
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	35	2
Total CN (mg/l)	0.293	0.0063

Sample ID	RPMW-13D2	
Sample Date	03/18/2000	09/18/2002
Screen Interval	95-105	95-105
Total BTEX (ug/l)	1440	377
Total CaPAH (ug/l)	0	0
Total Non-CaPAH (ug/l)	2451	4509
Total CN (mg/l)	0	0.0088

Sample ID	RPMW-14D2
Sample Date	09/18/2002
Screen Interval	95-105
Total BTEX (ug/l)	0
Total CaPAH (ug/l)	0
Total Non-CaPAH (ug/l)	2
Total CN (mg/l)	0

LEGEND:

- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- APPROXIMATE 1912 SITE BOUNDARY
- CURRENT SITE BOUNDARY
- FORMERLY OWNED PROPERTY
- FENCE
- 1.25 POTENTIOMETRIC SURFACE CONTOUR (FEET MSL)
- FLOW DIRECTION
- 2.15 POTENTIOMETRIC SURFACE ELEVATION (FEET MSL)
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
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- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)

60 30 0 60 120
GRAPHIC SCALE IN FEET

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002)
INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998, APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
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NOTE:
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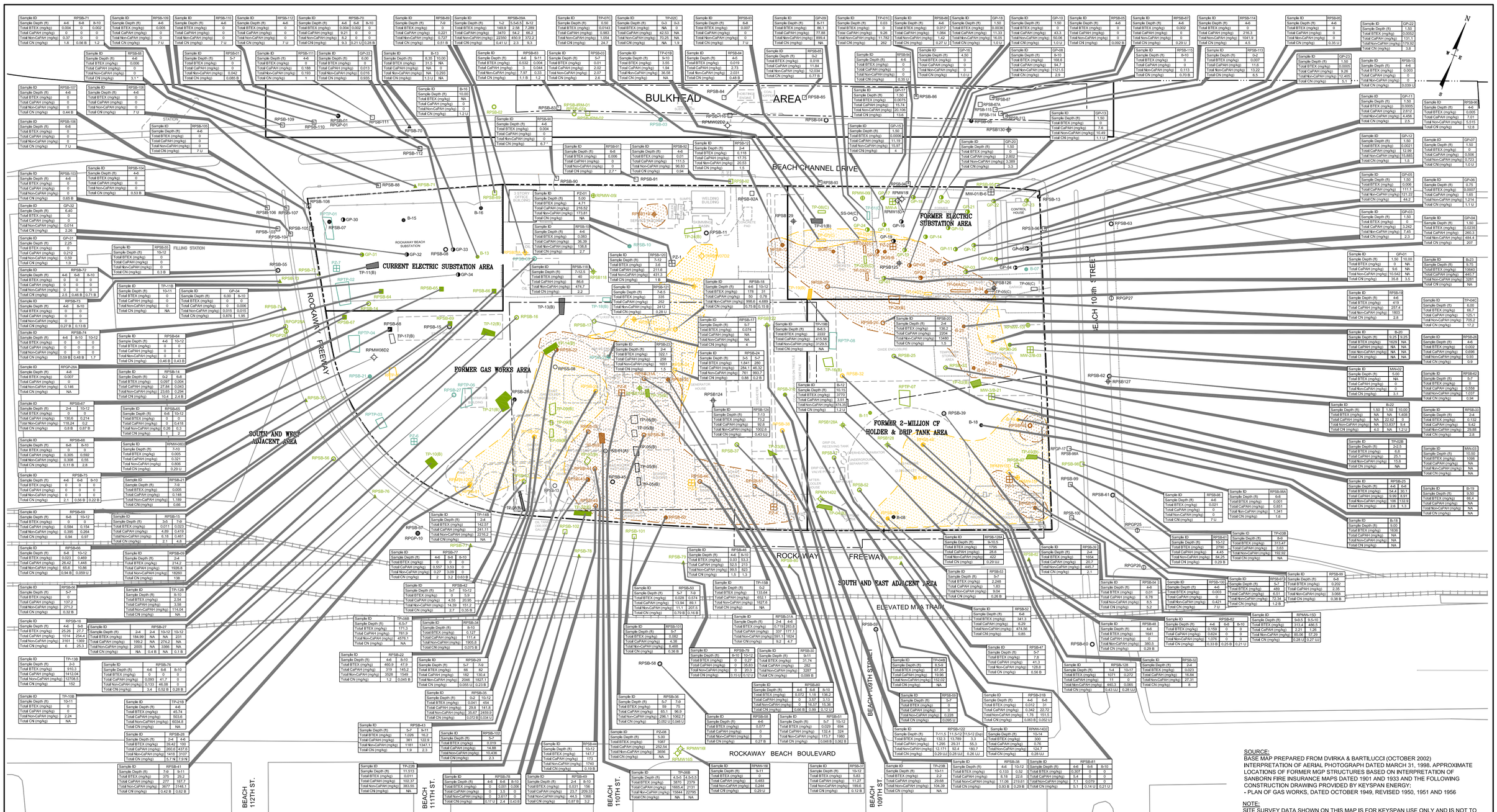
GEI Consultants, Inc.

PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

LOW TIDE DEEP(2) GROUNDWATER CONTOUR MAP
SEPTEMBER 16, 2002

SCALE: 1"=60'	DRN BY: SCG	**PLATE 7**
DATE: DEC 2002	982482-9-1810	

KEYSPAN\ROCKAWAY\RI\ROCK-GW-DP2-ANAL



SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002)
INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
SITE SURVEY DATA SHOWN ON THIS MAP IS FOR KEYSPAN USE ONLY AND IS NOT TO BE RELIED UPON BY OTHERS.

LEGEND:

- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- APPROXIMATE 1912 SITE BOUNDARY
- CURRENT SITE BOUNDARY
- FORMERLY OWNED PROPERTY
- FENCE
- EXISTING PIEZOMETER/WELL LOCATION FROM PREVIOUS INVESTIGATION
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING)
- SUBSURFACE SOIL SAMPLING LOCATION (SAMPLING AT 5-FOOT INTERVALS)
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING 0-25 FEET BGS, SAMPLING AT 5-FOOT INTERVALS THEREAFTER)
- SURFACE SOIL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)
- SOIL SAMPLE LOCATION FROM D&B SUBSTATION INVESTIGATION AND DELISTING PETITION - AUGUST 2000
- SOIL SAMPLE LOCATION FROM D&B TRANSMISSION CABLE INVESTIGATION-NOVEMBER 2001
- SOIL SAMPLE LOCATION FROM D&B BULKHEAD INVESTIGATION-APRIL 2002
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- GEOPROBE SOIL SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOLID TAR
- TAR SATURATED
- BLEBS, GLOBS, LENSES, GRAIN-COATING, SHEENS
- STAINING

60 30 0 60 120
GRAPHIC SCALE IN FEET

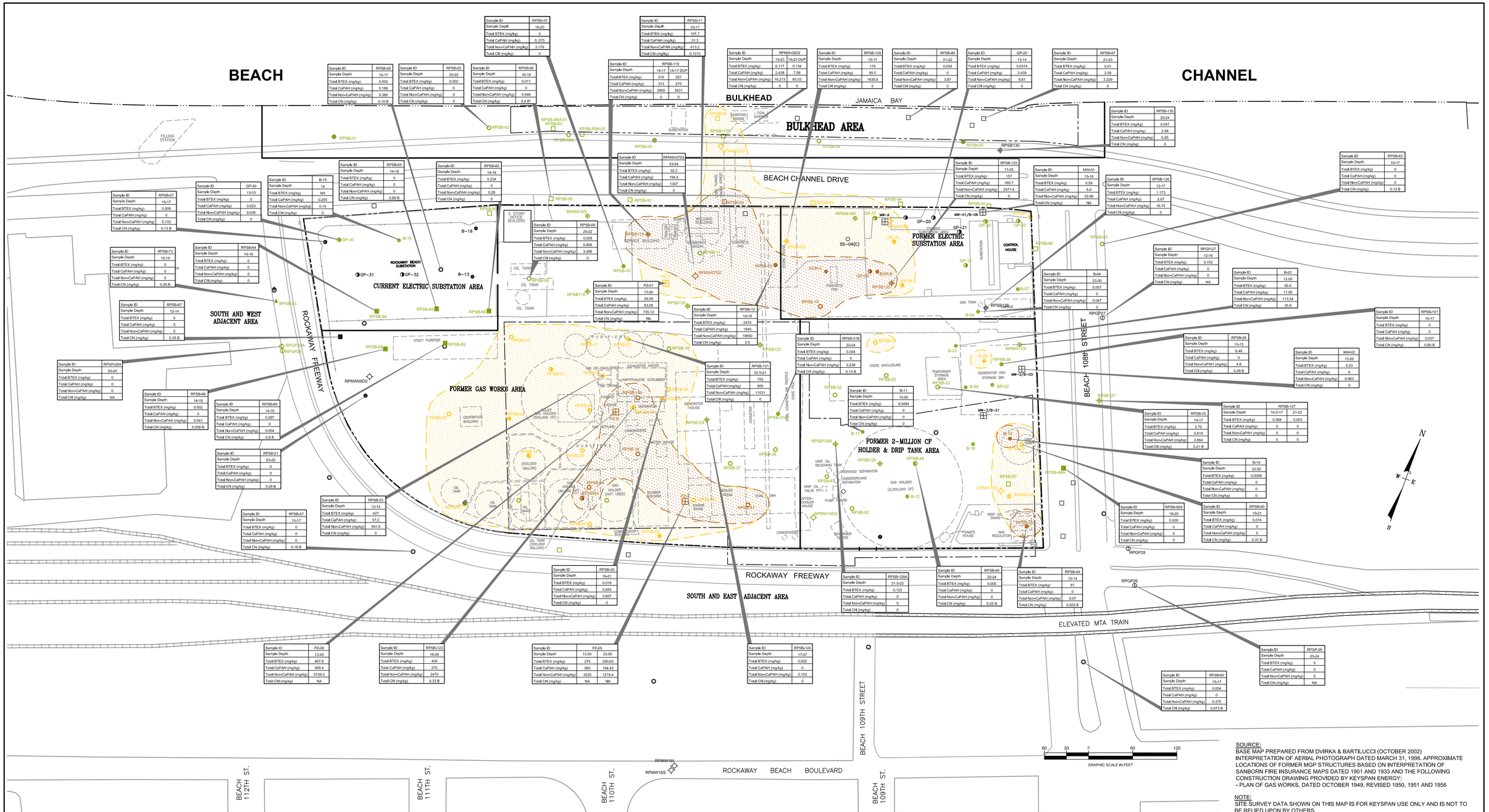
GEI Consultants, Inc.

PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

LATERAL EXTENT AND SOIL ANALYTICAL SUMMARY (0-12 FEET BELOW GRADE)

SCALE: 1"=60'	DRN BY: SCG	**PLATE 8**
DATE: NOV 2002	982482-9-1810	

KEYSPAN\ROCKAWAY\RI\PLATE\ROCK-LAT-SHLW



SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002) INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
SITE SURVEY DATA SHOWN ON THIS MAP IS FOR KEYSPAN USE ONLY AND IS NOT TO BE RELIED UPON BY OTHERS.

LEGEND:

- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- APPROXIMATE 1912 SITE BOUNDARY
- CURRENT SITE BOUNDARY
- FORMERLY OWNED PROPERTY
- FENCE
- EXISTING PIEZOMETER/WELL LOCATION FROM PREVIOUS INVESTIGATION
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING)
- SUBSURFACE SOIL SAMPLING LOCATION (SAMPLING AT 5-FOOT INTERVALS)
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING 0-25 FEET BGS, SAMPLING AT 5-FOOT INTERVALS THEREAFTER)
- SURFACE SOIL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)
- SOIL SAMPLE LOCATION FROM D&B SUBSTATION INVESTIGATION AND DELISTING PETITION - AUGUST 2000
- SOIL SAMPLE LOCATION FROM D&B TRANSMISSION CABLE INVESTIGATION-NOVEMBER 2001
- SOIL SAMPLE LOCATION FROM D&B BULKHEAD INVESTIGATION-APRIL 2002
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- GEOPROBE SOIL SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOLID TAR
- TAR SATURATED
- BLEBS, GLOBS, LENSES, GRAIN-COATING, SHEENS
- STAINING, MGP ODOR

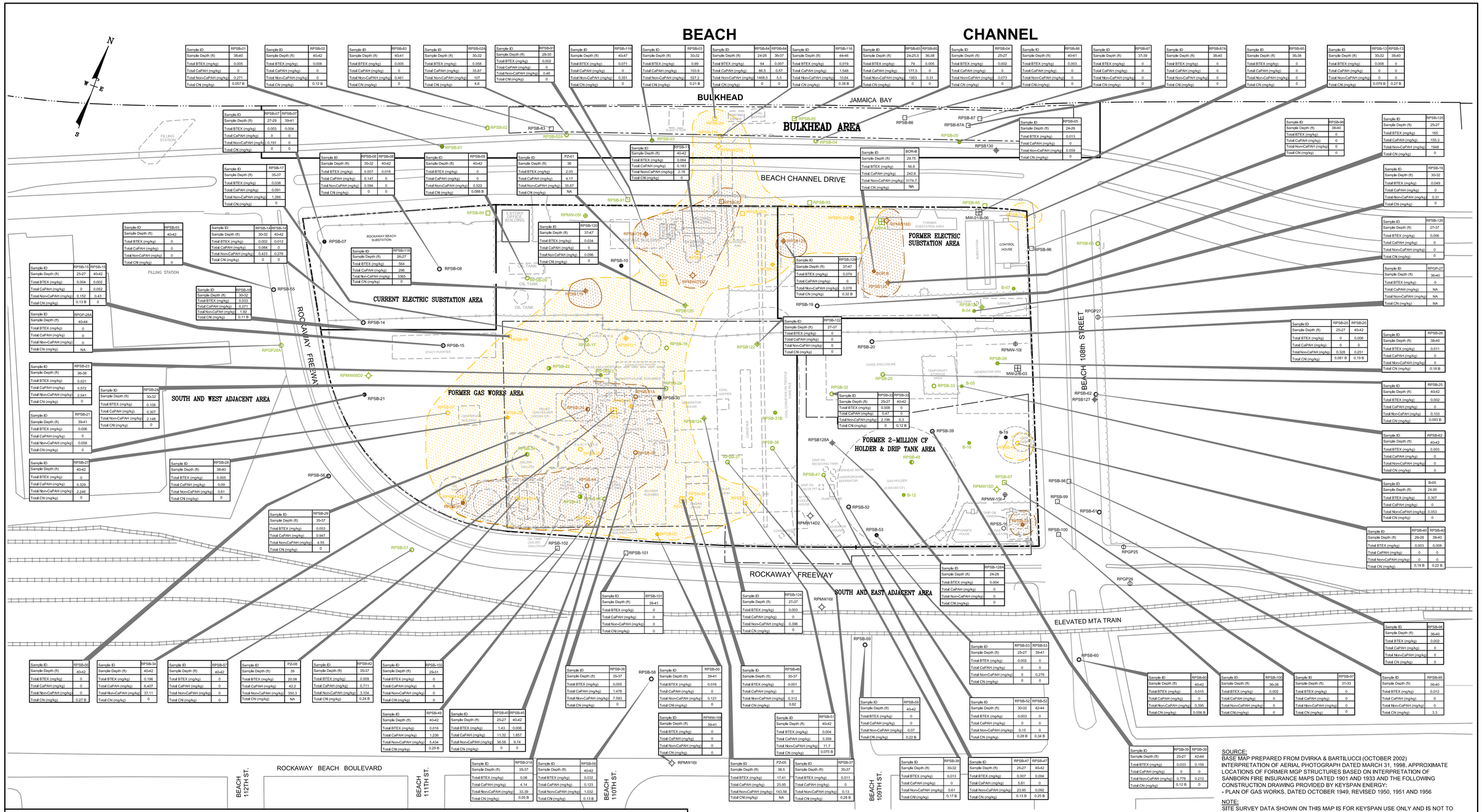
GEI Consultants, Inc.

PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

LATERAL EXTENT AND SOIL ANALYTICAL SUMMARY (12-24 FEET BELOW GRADE)

SCALE: 1"=60'	DRN BY: SCG	**PLATE 9**
DATE: DEC 2002	982482-9-1810	

KEYSPAN\ROCKAWAY\RI\PLATE\ROCK-LAT-INT



Sample ID	RPSB-01
Sample Depth (ft)	38-40
Total BTEX (mg/kg)	0.005
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.271
Total CN (mg/kg)	0.007 B

Sample ID	RPSB-02
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.006
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0.12 B

Sample ID	RPSB-83
Sample Depth (ft)	40-41
Total BTEX (mg/kg)	0.005
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.461
Total CN (mg/kg)	0

Sample ID	RPSB-02A
Sample Depth (ft)	30-32
Total BTEX (mg/kg)	0.058
Total CaPAH (mg/kg)	35.87
Total Non-CaPAH (mg/kg)	107
Total CN (mg/kg)	4.6

Sample ID	RPSB-91
Sample Depth (ft)	28-30
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.46
Total CN (mg/kg)	0

Sample ID	RPSB-119
Sample Depth (ft)	40-47
Total BTEX (mg/kg)	0.071
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.351
Total CN (mg/kg)	0

Sample ID	RPSB-03
Sample Depth (ft)	30-32
Total BTEX (mg/kg)	0.99
Total CaPAH (mg/kg)	103.9
Total Non-CaPAH (mg/kg)	527.2
Total CN (mg/kg)	0.21 B

Sample ID	RPSB-84	RPSB-84
Sample Depth (ft)	24-26	36-37
Total BTEX (mg/kg)	64	0.007
Total CaPAH (mg/kg)	86.5	0.57
Total Non-CaPAH (mg/kg)	1688.5	5.5
Total CN (mg/kg)	0	0

Sample ID	RPSB-116
Sample Depth (ft)	44-46
Total BTEX (mg/kg)	0.019
Total CaPAH (mg/kg)	1.546
Total Non-CaPAH (mg/kg)	10.64
Total CN (mg/kg)	0.38 B

Sample ID	RPSB-85	RPSB-85
Sample Depth (ft)	24-25.5	36-38
Total BTEX (mg/kg)	.79	0.005
Total CaPAH (mg/kg)	177.5	0
Total Non-CaPAH (mg/kg)	1953	0.31
Total CN (mg/kg)	0	0

Sample ID	RPSB-04
Sample Depth (ft)	25-27
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.073
Total CN (mg/kg)	0

Sample ID	RPSB-86
Sample Depth (ft)	40-41
Total BTEX (mg/kg)	0.003
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-87
Sample Depth (ft)	37-39
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-87A
Sample Depth (ft)	38-40
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-95
Sample Depth (ft)	36-38
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-13	RPSB-13
Sample Depth (ft)	30-32	38-40
Total BTEX (mg/kg)	0.008	0
Total CaPAH (mg/kg)	0	0
Total Non-CaPAH (mg/kg)	1948	0
Total CN (mg/kg)	0.079 B	0.27 B

Sample ID	RPSB-27	RPSB-07
Sample Depth (ft)	27-29	39-41
Total BTEX (mg/kg)	0.003	0.004
Total CaPAH (mg/kg)	0	0
Total Non-CaPAH (mg/kg)	0.191	0
Total CN (mg/kg)	0	0

Sample ID	RPSB-17
Sample Depth (ft)	35-37
Total BTEX (mg/kg)	0.038
Total CaPAH (mg/kg)	0.091
Total Non-CaPAH (mg/kg)	1.266
Total CN (mg/kg)	0

Sample ID	RPSB-06	RPSB-09
Sample Depth (ft)	30-32	40-42
Total BTEX (mg/kg)	0.007	0.018
Total CaPAH (mg/kg)	0.147	0
Total Non-CaPAH (mg/kg)	0.594	0
Total CN (mg/kg)	0	0

Sample ID	RPSB-09
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.522
Total CN (mg/kg)	0.088 B

Sample ID	PZ-01
Sample Depth (ft)	36
Total BTEX (mg/kg)	2.03
Total CaPAH (mg/kg)	4.17
Total Non-CaPAH (mg/kg)	35.87
Total CN (mg/kg)	NA

Sample ID	RPSB-11
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.064
Total CaPAH (mg/kg)	0.183
Total Non-CaPAH (mg/kg)	2.18
Total CN (mg/kg)	0

Sample ID	BOR-B
Sample Depth (ft)	29.75
Total BTEX (mg/kg)	56.8
Total CaPAH (mg/kg)	242.8
Total Non-CaPAH (mg/kg)	3174.7
Total CN (mg/kg)	NA

Sample ID	RPSB-05
Sample Depth (ft)	24-26
Total BTEX (mg/kg)	0.013
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.059
Total CN (mg/kg)	0

Sample ID	RPSB-96
Sample Depth (ft)	38-40
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-120
Sample Depth (ft)	25-27
Total BTEX (mg/kg)	165
Total CaPAH (mg/kg)	155.3
Total Non-CaPAH (mg/kg)	1948
Total CN (mg/kg)	0

Sample ID	RPSB-19
Sample Depth (ft)	30-32
Total BTEX (mg/kg)	0.049
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.31
Total CN (mg/kg)	0

Sample ID	RPSB-120
Sample Depth (ft)	27-37
Total BTEX (mg/kg)	0.006
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPGP-27
Sample Depth (ft)	36-40
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	NA
Total Non-CaPAH (mg/kg)	NA
Total CN (mg/kg)	NA

Sample ID	RPSB-55
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-14	RPSB-14
Sample Depth (ft)	30-32	40-42
Total BTEX (mg/kg)	0.002	0.012
Total CaPAH (mg/kg)	0.084	0
Total Non-CaPAH (mg/kg)	0.423	0.278
Total CN (mg/kg)	0	0

Sample ID	RPSB-118
Sample Depth (ft)	26-27
Total BTEX (mg/kg)	564
Total CaPAH (mg/kg)	296
Total Non-CaPAH (mg/kg)	3365
Total CN (mg/kg)	0

Sample ID	RPSB-120
Sample Depth (ft)	37-47
Total BTEX (mg/kg)	0.034
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.096
Total CN (mg/kg)	0

Sample ID	RPSB-15	RPSB-15
Sample Depth (ft)	25-27	40-42
Total BTEX (mg/kg)	0.004	0.002
Total CaPAH (mg/kg)	0	0.052
Total Non-CaPAH (mg/kg)	0.152	0.43
Total CN (mg/kg)	0.13 B	0

Sample ID	RPSB-16
Sample Depth (ft)	30-32
Total BTEX (mg/kg)	0.035
Total CaPAH (mg/kg)	0.274
Total Non-CaPAH (mg/kg)	1.92
Total CN (mg/kg)	0.11 B

Sample ID	RPGP-28A
Sample Depth (ft)	40-44
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	NA

Sample ID	RPSB-37
Sample Depth (ft)	37-47
Total BTEX (mg/kg)	0.079
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.078
Total CN (mg/kg)	0.32 B

Sample ID	RPSB-12
Sample Depth (ft)	27-37
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-20	RPSB-20
Sample Depth (ft)	25-27	40-42
Total BTEX (mg/kg)	0	0.006
Total CaPAH (mg/kg)	0	0
Total Non-CaPAH (mg/kg)	0.328	0.251
Total CN (mg/kg)	0.081 B	0.19 B

Sample ID	RPSB-26
Sample Depth (ft)	38-40
Total BTEX (mg/kg)	0.011
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0.18 B

Sample ID	RPSB-23
Sample Depth (ft)	36-38
Total BTEX (mg/kg)	0.021
Total CaPAH (mg/kg)	0.072
Total Non-CaPAH (mg/kg)	2.541
Total CN (mg/kg)	0

Sample ID	RPSB-24
Sample Depth (ft)	30-32
Total BTEX (mg/kg)	0.108
Total CaPAH (mg/kg)	0.307
Total Non-CaPAH (mg/kg)	2.148
Total CN (mg/kg)	0

Sample ID	RPSB-21
Sample Depth (ft)	39-41
Total BTEX (mg/kg)	0.006
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.058
Total CN (mg/kg)	0

Sample ID	RPSB-32	RPSB-32
Sample Depth (ft)	25-27	40-42
Total BTEX (mg/kg)	0.008	0
Total CaPAH (mg/kg)	0.47	0
Total Non-CaPAH (mg/kg)	2.196	0.3
Total CN (mg/kg)	0	0.12 B

Sample ID	RPSB-25
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.103
Total CN (mg/kg)	0.093 B

Sample ID	RPSB-62
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.003
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	B-05
Sample Depth (ft)	24.00
Total BTEX (mg/kg)	0.307
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.053
Total CN (mg/kg)	0

Sample ID	RPSB-27
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0.329
Total Non-CaPAH (mg/kg)	2.246
Total CN (mg/kg)	0

Sample ID	RPSB-28
Sample Depth (ft)	38-40
Total BTEX (mg/kg)	0.005
Total CaPAH (mg/kg)	0.09
Total Non-CaPAH (mg/kg)	0.61
Total CN (mg/kg)	0

Sample ID	RPSB-29
Sample Depth (ft)	35-37
Total BTEX (mg/kg)	0.053
Total CaPAH (mg/kg)	0.947
Total Non-CaPAH (mg/kg)	4.55
Total CN (mg/kg)	0

Sample ID	RPSB-40	RPSB-40
Sample Depth (ft)	26-28	38-40
Total BTEX (mg/kg)	0.003	0.008
Total CaPAH (mg/kg)	0	0
Total Non-CaPAH (mg/kg)	0	0
Total CN (mg/kg)	0.18 B	0.22 B

Sample ID	RPSB-126A
Sample Depth (ft)	24-28
Total BTEX (mg/kg)	0.004
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-101
Sample Depth (ft)	39-41
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-124
Sample Depth (ft)	27-37
Total BTEX (mg/kg)	0.003
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.396
Total CN (mg/kg)	0

Sample ID	RPSB-53	RPSB-53
Sample Depth (ft)	25-27	39-41
Total BTEX (mg/kg)	0.002	0
Total CaPAH (mg/kg)	0	0
Total Non-CaPAH (mg/kg)	0	0.276
Total CN (mg/kg)	0	0

Sample ID	RPSB-66
Sample Depth (ft)	38-40
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-56
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0.27 B

Sample ID	RPSB-34
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.196
Total CaPAH (mg/kg)	6.407
Total Non-CaPAH (mg/kg)	37.11
Total CN (mg/kg)	0

Sample ID	RPSB-57
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	PZ-08
Sample Depth (ft)	39
Total BTEX (mg/kg)	20.08
Total CaPAH (mg/kg)	42.2
Total Non-CaPAH (mg/kg)	350.3
Total CN (mg/kg)	NA

Sample ID	RPSB-42
Sample Depth (ft)	35-37
Total BTEX (mg/kg)	0.009
Total CaPAH (mg/kg)	0.711
Total Non-CaPAH (mg/kg)	3.104
Total CN (mg/kg)	0.24 B

Sample ID	RPSB-102
Sample Depth (ft)	29-31
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-36
Sample Depth (ft)	35-37
Total BTEX (mg/kg)	0.005
Total CaPAH (mg/kg)	1.478
Total Non-CaPAH (mg/kg)	7.593
Total CN (mg/kg)	0

Sample ID	RPSB-50
Sample Depth (ft)	39-41
Total BTEX (mg/kg)	0.016
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.121
Total CN (mg/kg)	0

Sample ID	RPSB-46
Sample Depth (ft)	35-37
Total BTEX (mg/kg)	0.001
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.312
Total CN (mg/kg)	0.82

Sample ID	RPSB-59
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.07
Total CN (mg/kg)	0.22 B

Sample ID	RPSB-52	RPSB-52
Sample Depth (ft)	30-32	42-44
Total BTEX (mg/kg)	0.003	0
Total CaPAH (mg/kg)	0	0
Total Non-CaPAH (mg/kg)	0.15	0
Total CN (mg/kg)	0.28 B	0.34 B

Sample ID	RPSB-48
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.016
Total CaPAH (mg/kg)	0.236
Total Non-CaPAH (mg/kg)	5.434
Total CN (mg/kg)	0.29 B

Sample ID	RPSB-45	RPSB-45
Sample Depth (ft)	25-27	40-42
Total BTEX (mg/kg)	1.43	0.006
Total CaPAH (mg/kg)	11.32	1.857
Total Non-CaPAH (mg/kg)	36.58	9.74
Total CN (mg/kg)	0	0

Sample ID	RPMW-16I
Sample Depth (ft)	39-41
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-51
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.004
Total CaPAH (mg/kg)	3.359
Total Non-CaPAH (mg/kg)	11.7
Total CN (mg/kg)	0.075 B

Sample ID	RPSB-49
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.016
Total CaPAH (mg/kg)	1.236
Total Non-CaPAH (mg/kg)	5.434
Total CN (mg/kg)	0.29 B

Sample ID	RPSB-31A
Sample Depth (ft)	35-37
Total BTEX (mg/kg)	0.08
Total CaPAH (mg/kg)	4.14
Total Non-CaPAH (mg/kg)	33.39
Total CN (mg/kg)	0.05 B

Sample ID	RPSB-58
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.032
Total CaPAH (mg/kg)	0.123
Total Non-CaPAH (mg/kg)	1.032
Total CN (mg/kg)	0.13 B

Sample ID	PZ-05
Sample Depth (ft)	38.5
Total BTEX (mg/kg)	17.41
Total CaPAH (mg/kg)	25.95
Total Non-CaPAH (mg/kg)	143.56
Total CN (mg/kg)	NA

Sample ID	RPSB-37
Sample Depth (ft)	35-37
Total BTEX (mg/kg)	0.011
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.13
Total CN (mg/kg)	0.28 B

Sample ID	RPSB-38
Sample Depth (ft)	30-32
Total BTEX (mg/kg)	0.013
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.61
Total CN (mg/kg)	0.17 B

Sample ID	RPSB-47	RPSB-47
Sample Depth (ft)	25-27	40-42
Total BTEX (mg/kg)	0.007	0.004
Total CaPAH (mg/kg)	5.81	0
Total Non-CaPAH (mg/kg)	23.95	0.092
Total CN (mg/kg)	0.13 B	0.25 B

Sample ID	RPSB-39	RPSB-39
Sample Depth (ft)	25-27	42-44
Total BTEX (mg/kg)	0.033	0.159
Total CaPAH (mg/kg)	0	0
Total Non-CaPAH (mg/kg)	0.778	0.212
Total CN (mg/kg)	0.12 B	0

Sample ID	RPSB-66
Sample Depth (ft)	38-40
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-40
Sample Depth (ft)	40-42
Total BTEX (mg/kg)	0.015
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.395
Total CN (mg/kg)	0.056 B

Sample ID	RPSB-100
Sample Depth (ft)	36-38
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-97
Sample Depth (ft)	31-33
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-99
Sample Depth (ft)	38-40
Total BTEX (mg/kg)	0.012
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	3.3

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002) INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998, APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
SITE SURVEY DATA SHOWN ON THIS MAP IS FOR KEYSPAN USE ONLY AND IS NOT TO BE RELIED UPON BY OTHERS.

LEGEND:

- APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
- LOCATION OF EXISTING STRUCTURE
- APPROXIMATE 1912 SITE BOUNDARY
- CURRENT SITE BOUNDARY
- FORMERLY OWNED PROPERTY
- FENCE
- EXISTING PIEZOMETER/WELL LOCATION FROM PREVIOUS INVESTIGATION
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING)
- SUBSURFACE SOIL SAMPLING LOCATION (SAMPLING AT 5-FOOT INTERVALS)
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING 0-25 FEET BGS, SAMPLING AT 5-FOOT INTERVALS THEREAFTER)
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)
- SOIL SAMPLE LOCATION FROM D&B SUBSTATION INVESTIGATION AND DELISTING PETITION - AUGUST 2000
- SOIL SAMPLE LOCATION FROM D&B TRANSMISSION CABLE INVESTIGATION-NOVEMBER 2001
- SOIL SAMPLE LOCATION FROM D&B BULKHEAD INVESTIGATION-APRIL 2002
- SOIL BORING SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- GEOPROBE SOIL SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOLID TAR
- TAR SATURATED
- BLEBS, GLOBS, LENSES, GRAIN-COATING, SHEENS
- STAINING

60 30 0 60 120
GRAPHIC SCALE IN FEET

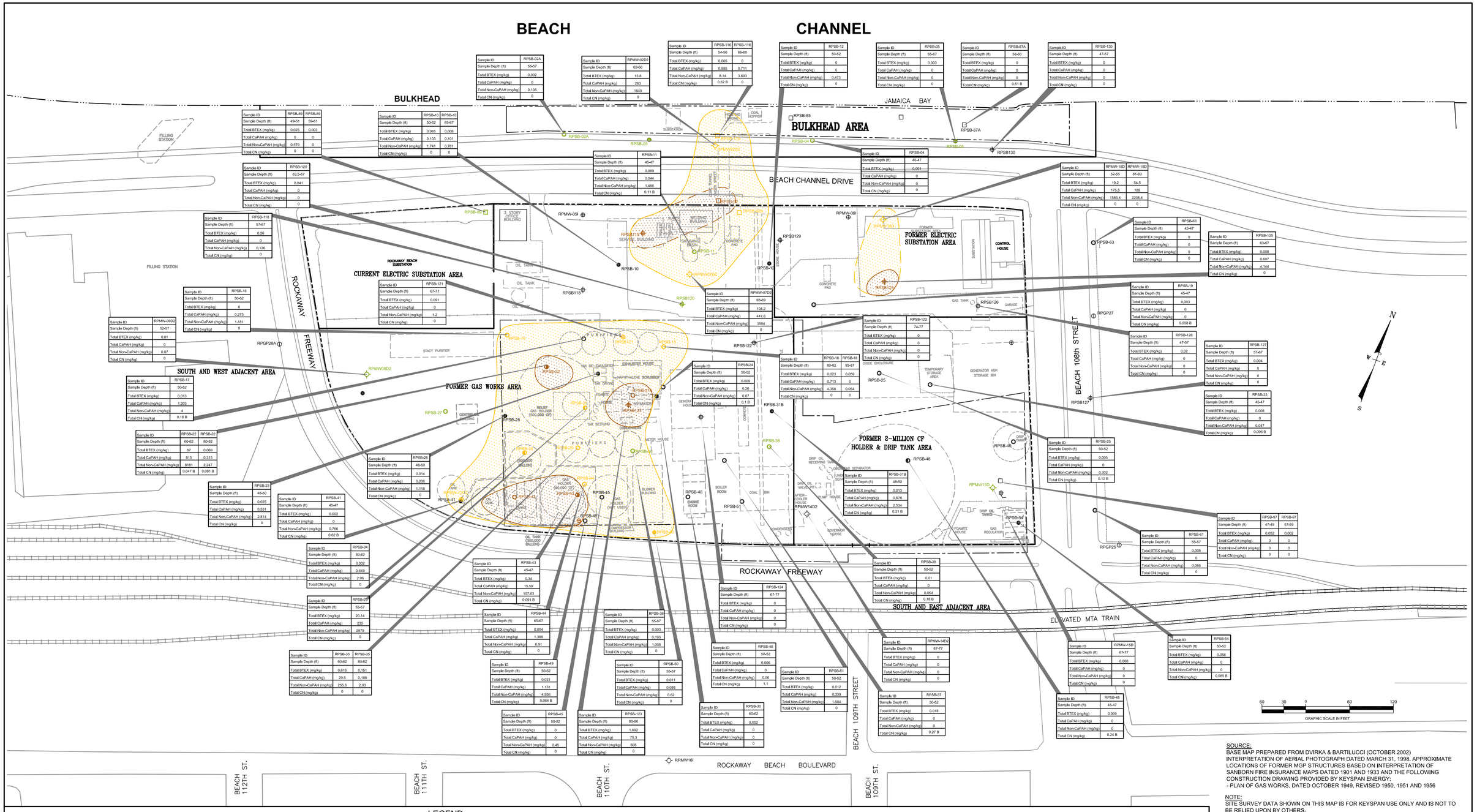
GEI Consultants, Inc.

PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

LATERAL EXTENT AND ANALYTICAL SOIL SUMMARY (24-45 FEET BELOW GRADE)

SCALE: 1"=60' | DRN BY: SCG | **PLATE 10**
DATE: DEC 2002 | 982482-9-1810

KEYSPAN\ROCKAWAY\RI\PLATE\ROCK-LAT-DEEP 24-45



Sample ID	RPSB-02A
Sample Depth (ft)	55-57
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.105
Total CN (mg/kg)	0

Sample ID	RPMW-02D2
Sample Depth (ft)	62-66
Total BTEX (mg/kg)	13.8
Total CaPAH (mg/kg)	263
Total Non-CaPAH (mg/kg)	1840
Total CN (mg/kg)	0

Sample ID	RPSB-116	RPSB-116
Sample Depth (ft)	54-56	66-68
Total BTEX (mg/kg)	0.005	0
Total CaPAH (mg/kg)	0.985	0.711
Total Non-CaPAH (mg/kg)	8.14	3.693
Total CN (mg/kg)	0.52 B	0

Sample ID	RPSB-12
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.473
Total CN (mg/kg)	0

Sample ID	RPSB-05
Sample Depth (ft)	65-67
Total BTEX (mg/kg)	0.003
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-87A
Sample Depth (ft)	58-60
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0.51 B

Sample ID	RPSB-130
Sample Depth (ft)	47-57
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-89	RPSB-89
Sample Depth (ft)	49-51	59-61
Total BTEX (mg/kg)	0.025	0.003
Total CaPAH (mg/kg)	0	0
Total Non-CaPAH (mg/kg)	0.579	0
Total CN (mg/kg)	0	0

Sample ID	RPSB-10	RPSB-10
Sample Depth (ft)	50-52	65-67
Total BTEX (mg/kg)	0.065	0.006
Total CaPAH (mg/kg)	0.103	0.101
Total Non-CaPAH (mg/kg)	1.741	0.761
Total CN (mg/kg)	0	0

Sample ID	RPSB-11
Sample Depth (ft)	45-47
Total BTEX (mg/kg)	0.069
Total CaPAH (mg/kg)	0.044
Total Non-CaPAH (mg/kg)	1.466
Total CN (mg/kg)	0.11 B

Sample ID	RPSB-04
Sample Depth (ft)	45-47
Total BTEX (mg/kg)	0.001
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-120
Sample Depth (ft)	63.5-67
Total BTEX (mg/kg)	0.041
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPMW-18D	RPMW-18D
Sample Depth (ft)	52-55	81-83
Total BTEX (mg/kg)	19.2	54.5
Total CaPAH (mg/kg)	175.5	189
Total Non-CaPAH (mg/kg)	1583.4	2208.4
Total CN (mg/kg)	0	0

Sample ID	RPSB-118
Sample Depth (ft)	57-67
Total BTEX (mg/kg)	0.26
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.126
Total CN (mg/kg)	0

Sample ID	RPSB-121
Sample Depth (ft)	67-71
Total BTEX (mg/kg)	0.091
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	1.2
Total CN (mg/kg)	0

Sample ID	RPMW-07D2
Sample Depth (ft)	68-69
Total BTEX (mg/kg)	104.2
Total CaPAH (mg/kg)	447.6
Total Non-CaPAH (mg/kg)	3584
Total CN (mg/kg)	0

Sample ID	RPSB-63
Sample Depth (ft)	45-47
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-125
Sample Depth (ft)	63-67
Total BTEX (mg/kg)	0.008
Total CaPAH (mg/kg)	0.687
Total Non-CaPAH (mg/kg)	4.144
Total CN (mg/kg)	0

Sample ID	RPSB-16
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0.275
Total Non-CaPAH (mg/kg)	1.181
Total CN (mg/kg)	0

Sample ID	RPMW-08D2
Sample Depth (ft)	52-57
Total BTEX (mg/kg)	0.01
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.07
Total CN (mg/kg)	0

Sample ID	RPSB-122
Sample Depth (ft)	74-77
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-19
Sample Depth (ft)	45-47
Total BTEX (mg/kg)	0.003
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0.058 B

Sample ID	RPSB-126
Sample Depth (ft)	47-57
Total BTEX (mg/kg)	0.02
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-127
Sample Depth (ft)	57-67
Total BTEX (mg/kg)	0.004
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-18	RPSB-18
Sample Depth (ft)	80-82	85-87
Total BTEX (mg/kg)	0.023	0.059
Total CaPAH (mg/kg)	0.713	0
Total Non-CaPAH (mg/kg)	4.358	0.054
Total CN (mg/kg)	0	0

Sample ID	RPSB-24
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0.009
Total CaPAH (mg/kg)	0.26
Total Non-CaPAH (mg/kg)	0.07
Total CN (mg/kg)	0.1 B

Sample ID	RPSB-33
Sample Depth (ft)	45-47
Total BTEX (mg/kg)	0.008
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.047
Total CN (mg/kg)	0.096 B

Sample ID	RPSB-17
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0.013
Total CaPAH (mg/kg)	1.303
Total Non-CaPAH (mg/kg)	4
Total CN (mg/kg)	0.18 B

Sample ID	RPSB-22	RPSB-22
Sample Depth (ft)	60-62	80-82
Total BTEX (mg/kg)	87	0.069
Total CaPAH (mg/kg)	815	0.315
Total Non-CaPAH (mg/kg)	8181	2.247
Total CN (mg/kg)	0.047 B	0.081 B

Sample ID	RPSB-28
Sample Depth (ft)	48-50
Total BTEX (mg/kg)	0.014
Total CaPAH (mg/kg)	0.206
Total Non-CaPAH (mg/kg)	1.118
Total CN (mg/kg)	0

Sample ID	RPSB-31B	RPSB-31B
Sample Depth (ft)	48-50	
Total BTEX (mg/kg)	0.013	
Total CaPAH (mg/kg)	0.678	
Total Non-CaPAH (mg/kg)	2.534	
Total CN (mg/kg)	0.21 B	

Sample ID	RPSB-25
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0.005
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.302
Total CN (mg/kg)	0.12 B

Sample ID	RPSB-07	RPSB-07
Sample Depth (ft)	47-49	57-59
Total BTEX (mg/kg)	0.052	0.002
Total CaPAH (mg/kg)	0	0
Total Non-CaPAH (mg/kg)	0	0
Total CN (mg/kg)	0	0

Sample ID	RPSB-23
Sample Depth (ft)	48-50
Total BTEX (mg/kg)	0.025
Total CaPAH (mg/kg)	0.531
Total Non-CaPAH (mg/kg)	2.814
Total CN (mg/kg)	0

Sample ID	RPSB-41
Sample Depth (ft)	45-47
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.766
Total CN (mg/kg)	0.62 B

Sample ID	RPSB-61
Sample Depth (ft)	55-57
Total BTEX (mg/kg)	0.008
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.066
Total CN (mg/kg)	0

Sample ID	RPSB-34
Sample Depth (ft)	80-82
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0.649
Total Non-CaPAH (mg/kg)	2.96
Total CN (mg/kg)	0

Sample ID	RPSB-43
Sample Depth (ft)	45-47
Total BTEX (mg/kg)	0.34
Total CaPAH (mg/kg)	15.59
Total Non-CaPAH (mg/kg)	157.63
Total CN (mg/kg)	0.091 B

Sample ID	RPSB-38
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.054
Total CN (mg/kg)	0.18 B

Sample ID	RPSB-124
Sample Depth (ft)	67-77
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-29
Sample Depth (ft)	55-57
Total BTEX (mg/kg)	20.14
Total CaPAH (mg/kg)	235
Total Non-CaPAH (mg/kg)	2979
Total CN (mg/kg)	0

Sample ID	RPSB-44
Sample Depth (ft)	65-67
Total BTEX (mg/kg)	0.004
Total CaPAH (mg/kg)	1.388
Total Non-CaPAH (mg/kg)	6.91
Total CN (mg/kg)	0

Sample ID	RPSB-36
Sample Depth (ft)	55-57
Total BTEX (mg/kg)	0.003
Total CaPAH (mg/kg)	0.193
Total Non-CaPAH (mg/kg)	1.008
Total CN (mg/kg)	0

Sample ID	RPSB-46
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0.006
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.06
Total CN (mg/kg)	1.1

Sample ID	RPMW-14D2
Sample Depth (ft)	67-77
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPMW-15D
Sample Depth (ft)	67-77
Total BTEX (mg/kg)	0.008
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-54
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0.056
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0.065 B

Sample ID	RPSB-35	RPSB-35
Sample Depth (ft)	60-62	80-82
Total BTEX (mg/kg)	0.616	0.151
Total CaPAH (mg/kg)	29.5	0.188
Total Non-CaPAH (mg/kg)	255.6	2.03
Total CN (mg/kg)	0	0

Sample ID	RPSB-49
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0.021
Total CaPAH (mg/kg)	1.131
Total Non-CaPAH (mg/kg)	4.936
Total CN (mg/kg)	0.064 B

Sample ID	RPSB-50
Sample Depth (ft)	55-57
Total BTEX (mg/kg)	0.011
Total CaPAH (mg/kg)	0.088
Total Non-CaPAH (mg/kg)	0.62
Total CN (mg/kg)	0

Sample ID	RPSB-51
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0.012
Total CaPAH (mg/kg)	0.339
Total Non-CaPAH (mg/kg)	1.584
Total CN (mg/kg)	0

Sample ID	RPSB-37
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0.018
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0.27 B

Sample ID	RPSB-48
Sample Depth (ft)	45-47
Total BTEX (mg/kg)	0.009
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0.24 B

Sample ID	RPSB-45
Sample Depth (ft)	50-52
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.45
Total CN (mg/kg)	0

Sample ID	RPSB-123
Sample Depth (ft)	80-86
Total BTEX (mg/kg)	1.692
Total CaPAH (mg/kg)	75.3
Total Non-CaPAH (mg/kg)	605
Total CN (mg/kg)	0

Sample ID	RPSB-30
Sample Depth (ft)	60-62
Total BTEX (mg/kg)	0.002
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002) INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
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NOTE:
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LEGEND:

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- LOCATION OF EXISTING STRUCTURE
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- CURRENT SITE BOUNDARY
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- FENCE
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- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING 0-25 FEET BGS, SAMPLING AT 5-FOOT INTERVALS THEREAFTER)
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- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)
- SOIL SAMPLE LOCATION FROM D&B SUBSTATION INVESTIGATION AND DELISTING PETITION - AUGUST 2000
- SOIL SAMPLE LOCATION FROM D&B TRANSMISSION CABLE INVESTIGATION-NOVEMBER 2001
- SOIL SAMPLE LOCATION FROM D&B BULKHEAD INVESTIGATION-APRIL 2002
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
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- SOLID TAR
- TAR SATURATED
- BLEBS, GLOBS, LENSES, GRAIN-COATING, SHEENS
- STAINING

GEI Consultants, Inc.

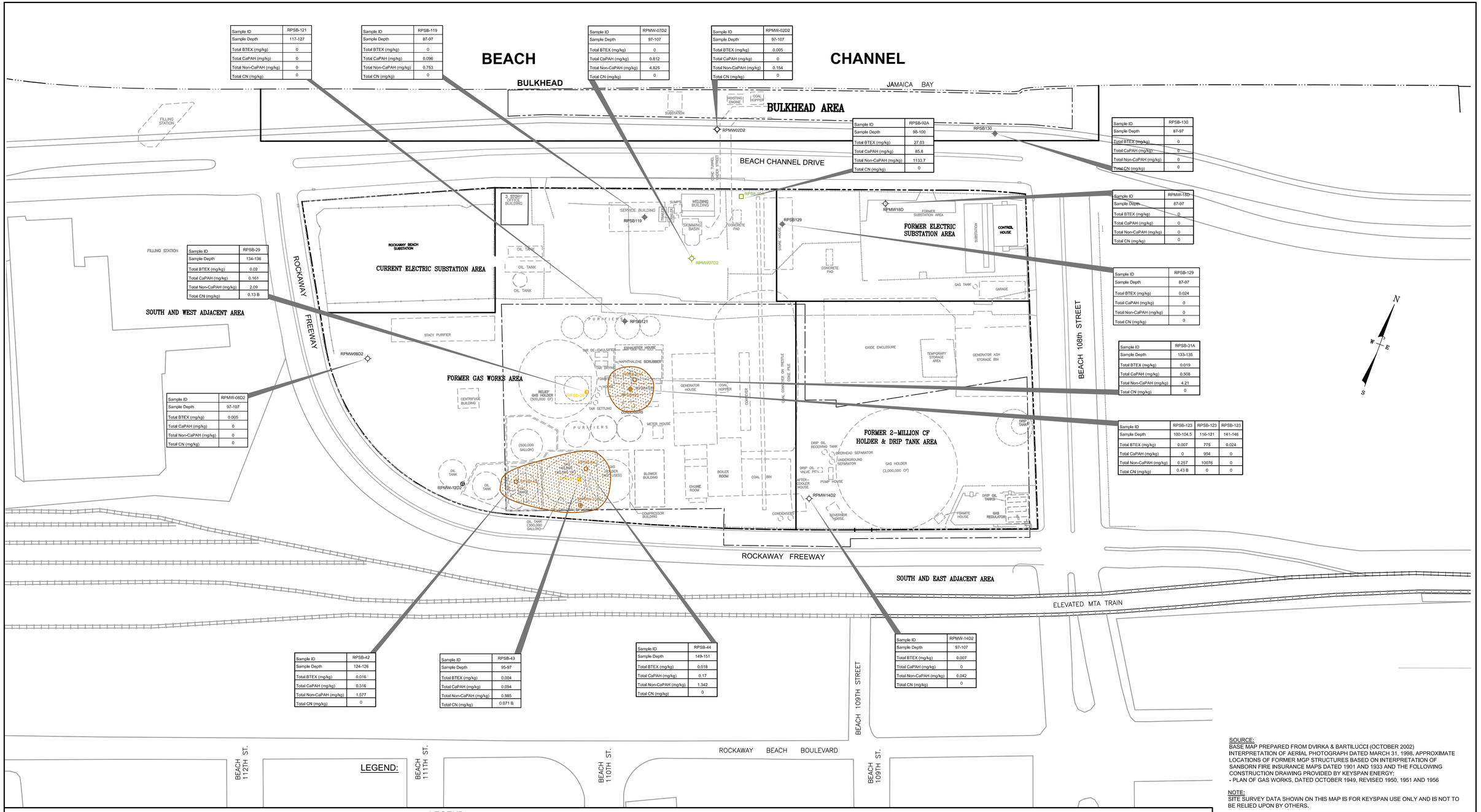
PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

LATERAL EXTENT AND SOIL ANALYTICAL SUMMARY (45-90 FEET BELOW GRADE)

SCALE: 1"=60' | DRN BY: SCG | DATE: NOV 2002 | 982482-9-1810

PLATE 11

KEYSPAN\ROCKAWAY\RI\PLATE\ROCK-LAT-DEEP 45-90



Sample ID	RPSB-121
Sample Depth	117-127
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-119
Sample Depth	87-97
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0.096
Total Non-CaPAH (mg/kg)	0.753
Total CN (mg/kg)	0

Sample ID	RPMW-07D2
Sample Depth	97-107
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0.812
Total Non-CaPAH (mg/kg)	4.825
Total CN (mg/kg)	0

Sample ID	RPMW-02D2
Sample Depth	97-107
Total BTEX (mg/kg)	0.005
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.154
Total CN (mg/kg)	0

Sample ID	RPSB-92A
Sample Depth	98-100
Total BTEX (mg/kg)	27.03
Total CaPAH (mg/kg)	85.8
Total Non-CaPAH (mg/kg)	1133.7
Total CN (mg/kg)	0

Sample ID	RPSB-130
Sample Depth	87-97
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPMW-18D
Sample Depth	87-97
Total BTEX (mg/kg)	0
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-129
Sample Depth	87-97
Total BTEX (mg/kg)	0.024
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-31A
Sample Depth	133-135
Total BTEX (mg/kg)	0.019
Total CaPAH (mg/kg)	0.508
Total Non-CaPAH (mg/kg)	4.21
Total CN (mg/kg)	0

Sample ID	RPSB-123	RPSB-123	RPSB-123
Sample Depth	100-104.5	116-121	141-146
Total BTEX (mg/kg)	0.007	775	0.024
Total CaPAH (mg/kg)	0	954	0
Total Non-CaPAH (mg/kg)	0.257	10076	0
Total CN (mg/kg)	0.43 B	0	0

Sample ID	RPSB-29
Sample Depth	134-136
Total BTEX (mg/kg)	0.02
Total CaPAH (mg/kg)	0.161
Total Non-CaPAH (mg/kg)	2.09
Total CN (mg/kg)	0.13 B

Sample ID	RPMW-08D2
Sample Depth	97-107
Total BTEX (mg/kg)	0.005
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0
Total CN (mg/kg)	0

Sample ID	RPSB-42
Sample Depth	124-126
Total BTEX (mg/kg)	0.016
Total CaPAH (mg/kg)	0.316
Total Non-CaPAH (mg/kg)	1.577
Total CN (mg/kg)	0

Sample ID	RPSB-43
Sample Depth	95-97
Total BTEX (mg/kg)	0.004
Total CaPAH (mg/kg)	0.094
Total Non-CaPAH (mg/kg)	0.985
Total CN (mg/kg)	0.071 B

Sample ID	RPSB-44
Sample Depth	149-151
Total BTEX (mg/kg)	0.018
Total CaPAH (mg/kg)	0.17
Total Non-CaPAH (mg/kg)	1.342
Total CN (mg/kg)	0

Sample ID	RPMW-14D2
Sample Depth	97-107
Total BTEX (mg/kg)	0.007
Total CaPAH (mg/kg)	0
Total Non-CaPAH (mg/kg)	0.042
Total CN (mg/kg)	0

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002)
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- EXISTING PIEZOMETER/WELL LOCATION FROM PREVIOUS INVESTIGATION
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING)
- SUBSURFACE SOIL SAMPLING LOCATION (SAMPLING AT 5-FOOT INTERVALS)
- SUBSURFACE SOIL SAMPLING LOCATION (CONTINUOUS SAMPLING 0-25 FEET BGS, SAMPLING AT 5-FOOT INTERVALS THEREAFTER)
- SURFACE SOIL SAMPLING LOCATION
- GROUNDWATER MONITORING WELL LOCATION (SHALLOW ZONE)
- GROUNDWATER MONITORING WELL LOCATION (INTERMEDIATE ZONE)
- GROUNDWATER MONITORING WELL LOCATION (DEEP ZONE)
- GROUNDWATER MONITORING WELL LOCATION (VERY DEEP ZONE)
- SOIL SAMPLE LOCATION FROM D&B SUBSTATION INVESTIGATION AND DELISTING PETITION - AUGUST 2000
- SOIL SAMPLE LOCATION FROM D&B TRANSMISSION CABLE INVESTIGATION-NOVEMBER 2001
- SOIL SAMPLE LOCATION FROM D&B BULKHEAD INVESTIGATION-APRIL 2002
- PIEZOMETER/WELL LOCATION FROM GEI PHASE I INVESTIGATION-FEBRUARY 1997
- PIEZOMETER/WELL LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI PHASE I INVESTIGATION-JANUARY 1997
- SOIL BORING CONVERTED TO PIEZOMETER/MONITORING WELL FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOIL BORING SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- GEOPROBE SOIL SAMPLING LOCATION FROM GEI SUBSTATION INVESTIGATION-FEBRUARY 1999
- SOLID TAR
- TAR SATURATED
- BLEBS, GLOBS, LENSES, GRAIN-COATING, SHEENS
- STAINING

60 30 0 60 120
GRAPHIC SCALE IN FEET

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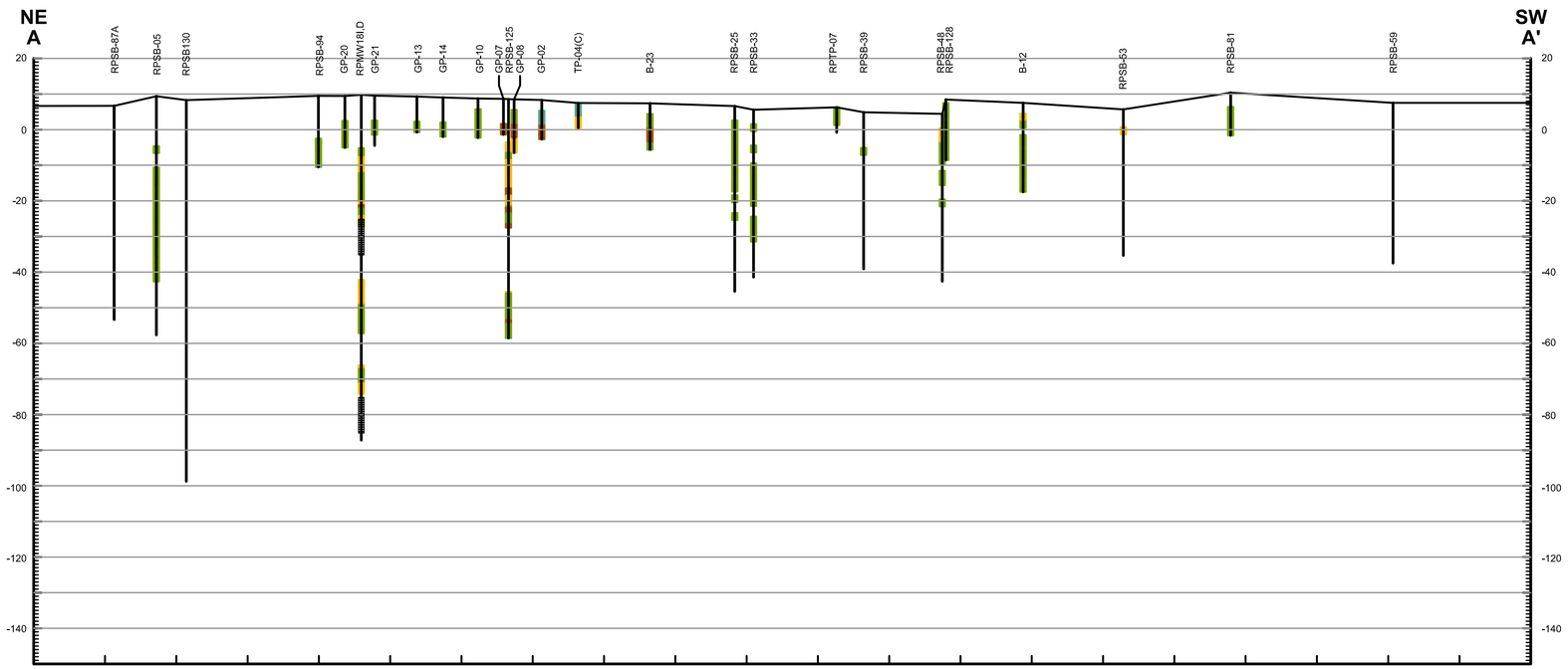
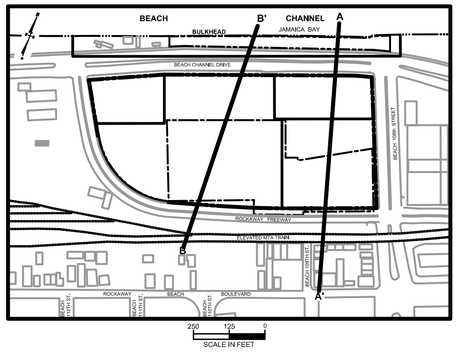
PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

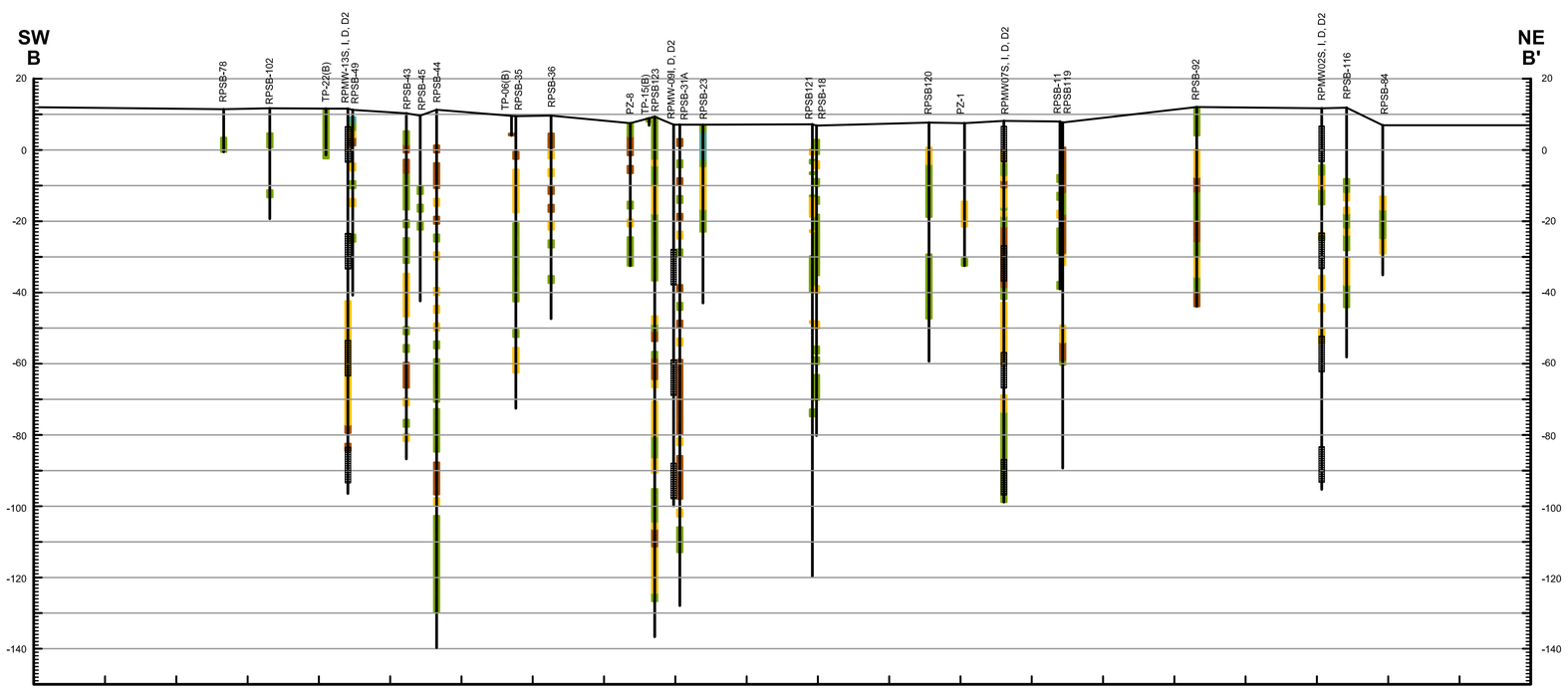
LATERAL EXTENT AND SOIL ANALYTICAL SUMMARY (90-DEEPER FEET BELOW GRADE)

SCALE: 1"=60'	DRN BY: SCG	**PLATE 12**
DATE: DEC 2002	982482-9-1810	

KEYSPAN\ROCKAWAY\RI\PLATE\ROCK-LAT-DEEP 90-







LEGEND:

- SOLID TAR
- TAR SATURATED
- BLEBS, GLOBS, LENSES, GRAIN-COATING, SHEENS
- STAINING

40 20 0 40 80
APPROXIMATE HORIZONTAL GRAPHIC SCALE IN FEET

20 10 0 20 40
APPROXIMATE VERTICAL GRAPHIC SCALE IN FEET

NOTE:
LOCATION OF RPSB-121 IS APPROXIMATE PENDING RESURVEY OF BORING LOCATION.

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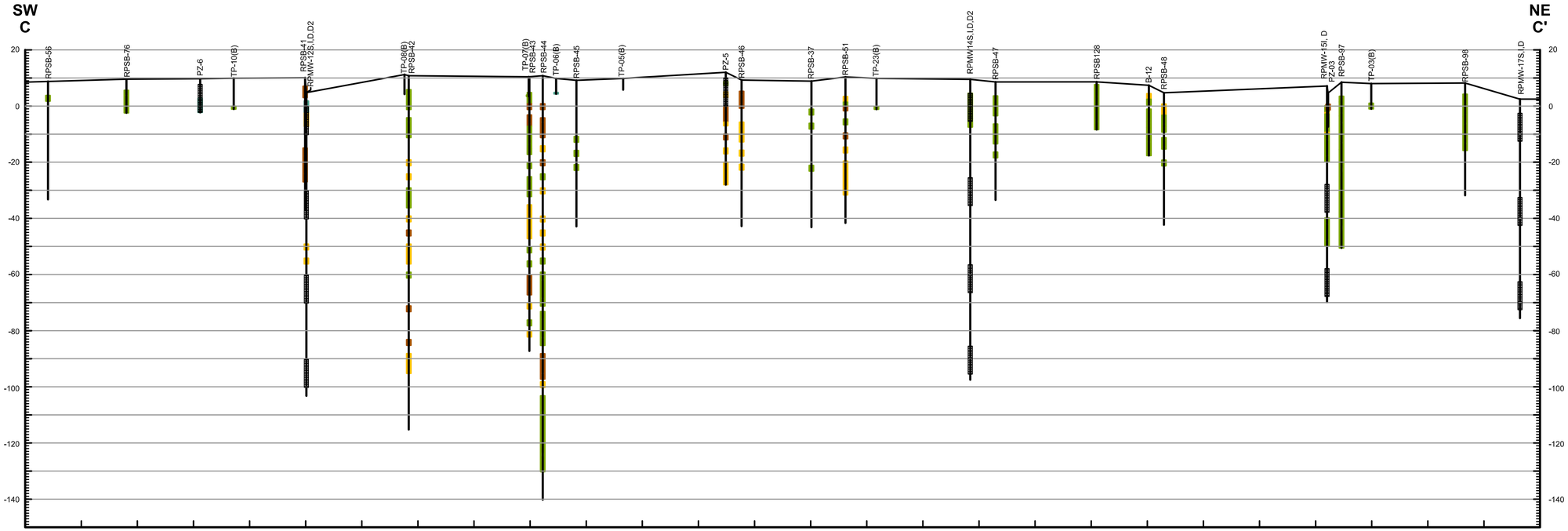
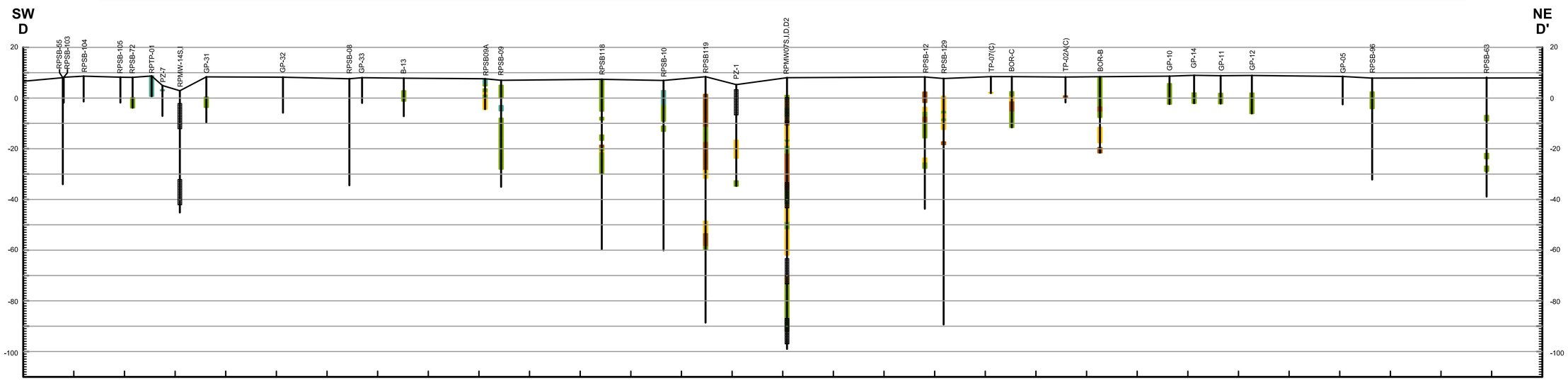
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

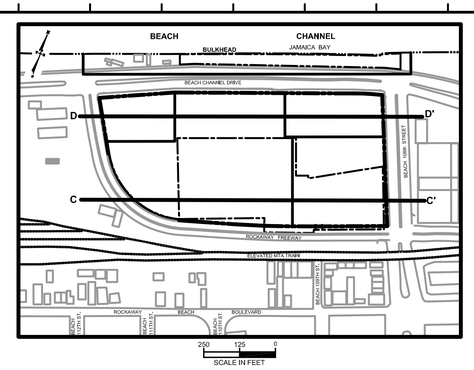
CROSS SECTIONS A-A' AND B-B'

SCALE: AS NOTED	DRN BY: JNG	**PLATE 13**
DATE: DEC 2002	982482-9-1810	

GEI\KEY\ROCK\RI REPORT\PLATE\ROCK X-SEC







40 20 0 40 80
APPROXIMATE HORIZONTAL GRAPHIC SCALE IN FEET

20 10 0 20 40
APPROXIMATE VERTICAL GRAPHIC SCALE IN FEET
VERTICAL EXAGGERATION = 2X

LEGEND:

- SOLID TAR
- TAR SATURATED
- BLEBS, GLOBS, LENSES, GRAIN–COATING, SHEENS
- STAINING

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PLAN PREPARED FOR
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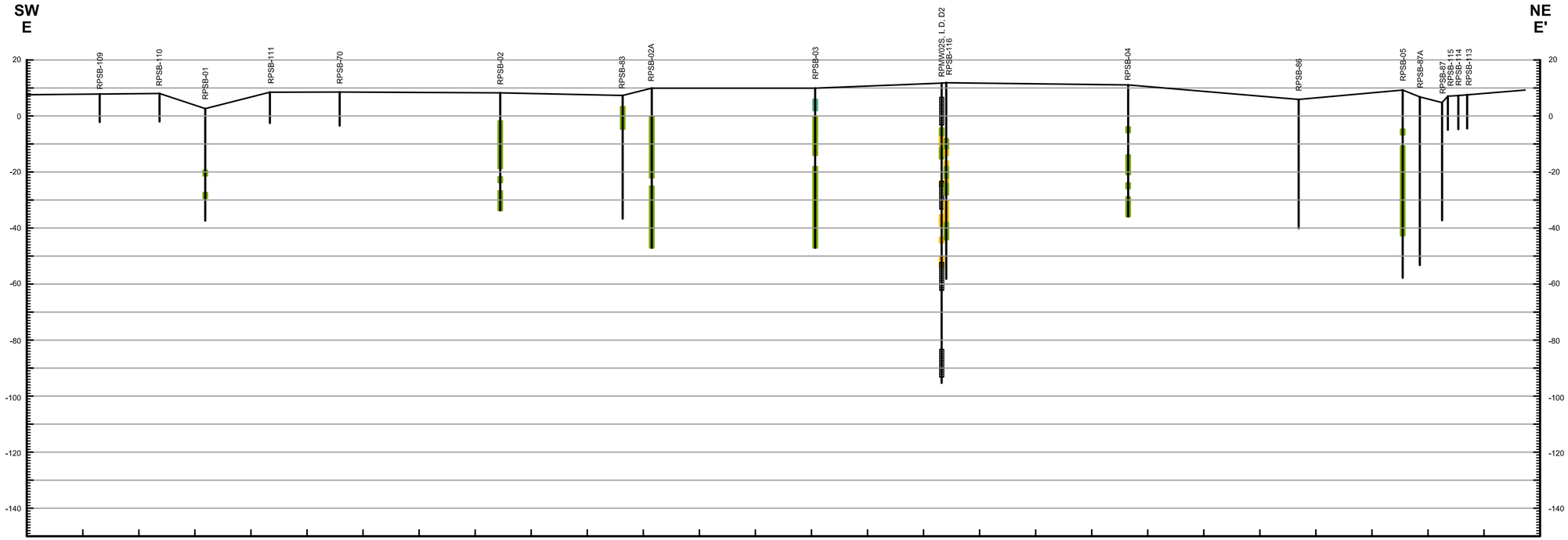
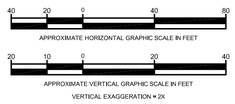
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

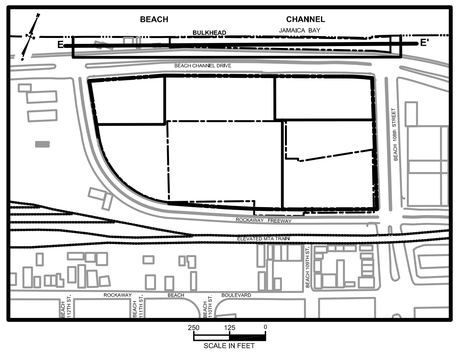
CROSS SECTIONS C-C' AND D-D'

SCALE: AS NOTED	DRN BY: JNG	**PLATE 14**
DATE: DEC 2002	982482-9-1810	

GEI\KEY\ROCK\RI REPORT\PLATE\ROCK X-SEC







LEGEND:

- SOLID TAR
- TAR SATURATED
- BLEBS, GLOBS, LENSES, GRAIN–COATING, SHEENS
- STAINING

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PLAN PREPARED FOR

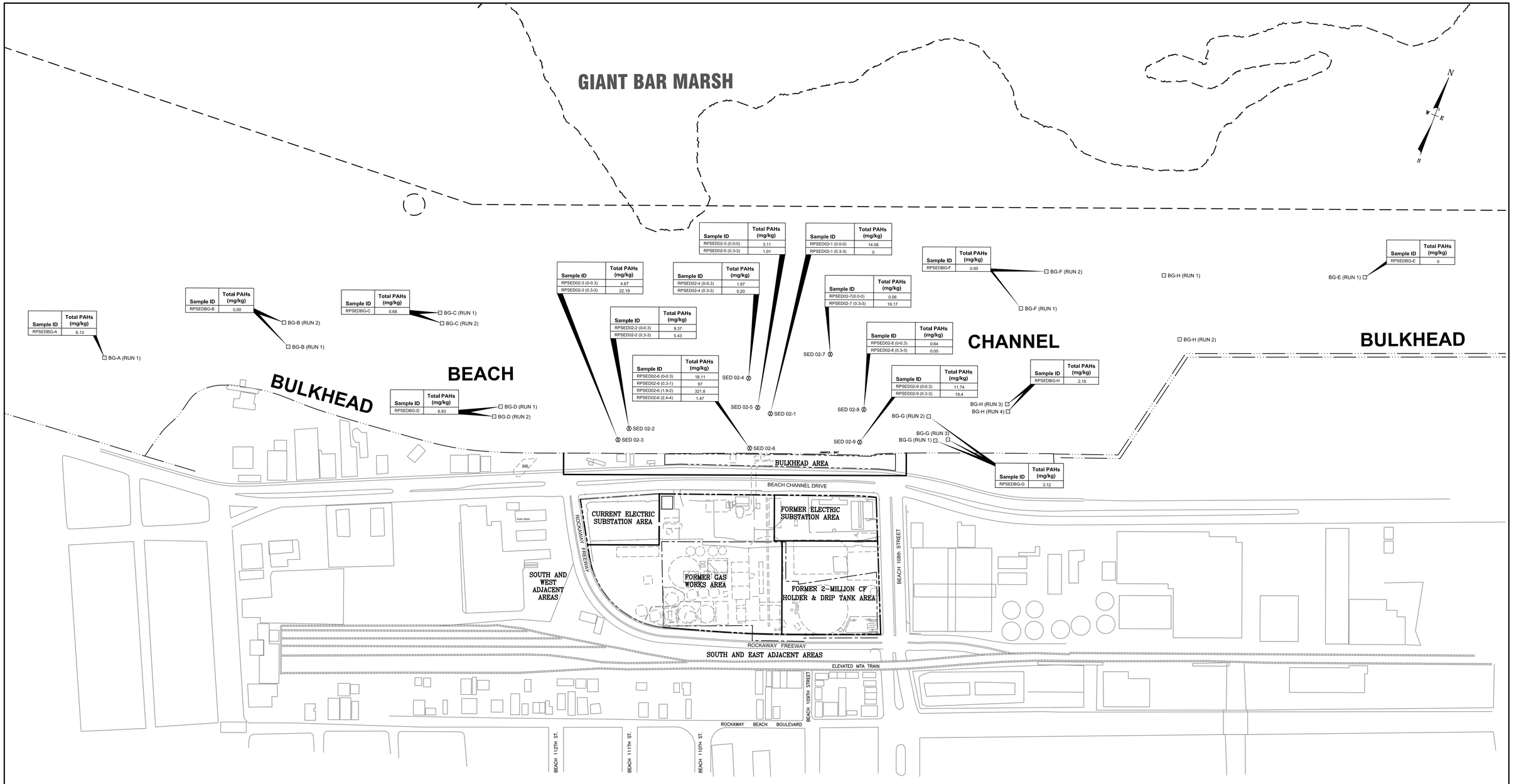
KEYSPAN ENERGY

ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

CROSS SECTION E-E'

SCALE: AS NOTED	DRN BY: JNG	**PLATE 15**
DATE: DEC 2002	982482-9-1810	

GEI\KEY\ROCK\RI REPORT\PLATE\ROCK X-SEC



LEGEND

BG-A (RUN 1)	RIVER SEDIMENT SAMPLING LOCATION-OCTOBER 2002
SED-02-1	VIBRA-CORE SAMPLING LOCATION-OCTOBER 2002
	APPROXIMATE LOCATION OF FORMER MGP STRUCTURE
	LOCATION OF EXISTING STRUCTURE
	APPROXIMATE 1912 SITE BOUNDARY
	CURRENT SITE BOUNDARY
	FORMERLY OWNED PROPERTY
	FENCE

NOTES:
RPSED02-X (0.3-3.0) = SEDIMENT VIBRACORE SAMPLE COLLECTED IN OCTOBER 2002; DEPTH BENEATH SEDIMENT INTERFACE (FEET)
RPSEDBG-X = BACKGROUND SEDIMENT SAMPLE COLLECTED AT SEDIMENT INTERFACE WITH SHIPECK SAMPLER IN OCTOBER 2002

SOURCE:
BASE MAP PREPARED FROM DVIRKA & BARTILUCCI (OCTOBER 2002)
INTERPRETATION OF AERIAL PHOTOGRAPH DATED MARCH 31, 1998. APPROXIMATE LOCATIONS OF FORMER MGP STRUCTURES BASED ON INTERPRETATION OF SANBORN FIRE INSURANCE MAPS DATED 1901 AND 1933 AND THE FOLLOWING CONSTRUCTION DRAWING PROVIDED BY KEYSPAN ENERGY:
- PLAN OF GAS WORKS, DATED OCTOBER 1949, REVISED 1950, 1951 AND 1956

NOTE:
SITE SURVEY DATA SHOWN ON THIS MAP IS FOR KEYSPAN USE ONLY AND IS NOT TO BE RELIED UPON BY OTHERS.

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PLAN PREPARED FOR
KEYSPAN ENERGY
ROCKAWAY PARK FORMER MGP SITE
ROCKAWAY PARK, NEW YORK

SEDIMENT SAMPLES
TOTAL PAHs (mg/kg)

SCALE: 1"=150'	DRN BY: SCG	**PLATE 16**
DATE: JAN 2003	982482-9-1810	

KEYSPAN\ROCKAWAY\RI\PLATE\ROCK-SEDTPAH