TOWN OF OYSTER BAY
BETHPAGE COMMUNITY PARK
INTERIM REMEDIAL MEASURE - CONSTRUCTION AREA

REMEDIAL ACTION –
COMMUNITY HEALTH & SAFETY PLAN

NOVEMBER 1, 2006

Prepared For:

Town of Oyster Bay
Department of Public Works

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H2M GROUP
Engineers • Architects • Scientists • Planners • Surveyors

H2M GROUP

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1.0 INTRODUCTION

This Remedial Action Community Health & Safety Plan (CHASP) provides a summary of the Remedial Action (i.e., site cleanup activities) to be undertaken as part of the Interim Remedial Measure for the Bethpage Community Park in Bethpage, New York (Site), and a summary of the elements of the health & safety program to be implemented during the Remedial Action to ensure protection of human health, residents and the community. Procedures and contact information is provided for key project and emergency personnel.

The remedial action to be performed and addressed within this CHASP is for a portion of the Bethpage Community Park that has been designated as the Construction Area. The Town of Oyster Bay entered into an Order on Consent (W1-0018-02-03) with the New York State Department of Environmental Conservation (NYSDEC) in order to expedite the investigation and remediation of historical site contamination in this approximately 7-acre portion of the 18-acre Park. A remedial action plan has been approved by the (NYSDEC) and primarily involves the excavation and off-site disposal of a significant volume of contaminated soil. Previously prepared studies [Investigation Report and Remedial Action Plan, dated November 2005 (11/2005 IR/RAP), Supplemental Investigation Report, dated December 2005 (12/2005 SIR), and Addendum to the Remedial Action Plan, dated March 2006 (3/2006 Addendum)] identified the selected remedial action plan to be the best option for long-term protection of human health and the environment, and to permit unrestricted future site use within the subject area of Bethpage Community Park.

As stated, the remedial action plan offers long-term protection of human health and the environment, however, implementation of the site excavation activity raises certain safety

concerns. This CHASP identifies the potential hazards and identifies the actions that will be implemented by the Town and its contractors to prevent, minimize and respond to any hazards.

2.0 PROJECT BACKGROUND

2.1 Site Location

Bethpage Community Park is located in Bethpage, New York, which is within the Town of Oyster Bay in Nassau County. The Park entrance is located on the west side of the intersection of Stewart Avenue and Cherry Avenue. The Park is situated to the south of Cherry Avenue Extension (a private road) and to the west of Stewart Avenue. Commercial businesses and private residences are located to the north. A high school is located across Stewart Avenue to the east. A Northrop Grumman property bounds the subject property to the west. A Northrop Grumman access road and private residences adjoin the subject property to the south. A site location map is presented in Figure 1.

2.2 Site History and Description

Bethpage Community Park is currently owned by the Town of Oyster Bay, but was formerly owned and operated by Grumman Aircraft Engineering Corporation, a predecessor to Northrop Grumman Systems Corporation (Northrop Grumman). Ownership of the site was transferred to the Town of Oyster Bay in 1962, after which, the Town constructed the present-day Park. The park includes a pool, skating rink, picnic area, baseball field, tennis courts, basketballs courts, handball court, shuffleboard courts, children's playground and parking.

In approximately 2001, site investigations performed on behalf of Northrop Grumman documented contaminant impacts to some site soils from historical activities. Contaminants included metals, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs) and polychlorinated biphenyls (PCBs). Volatile organic compound impacts to groundwater were also documented at the site. The prior site investigation reports, prepared on behalf of Northrop Grumman, indicated that the site had been utilized

by Northrop Grumman for wastewater disposal activities including wastewater settling ponds and fire training activity that included ignition of waste oil and jet fuel. Subsequent to the identification of PCB and metal contamination in surface soils, portions of the site with any potential for contaminant exposure were closed pending further investigation and remediation.

Based on intentions to improve the Park grounds through the construction of new facilities including an indoor ice rink, the Town of Oyster Bay entered into an Order on Consent with the NYSDEC to investigate and remediate, as necessary, a portion of the Park that would be affected by redevelopment efforts, rather than await for a contamination investigation program to be performed by Northrop Grumman. The portion of the Park identified in the Order on Consent has been designated as the Construction Area and includes approximately 7-acres of the 18-acre Park. In general, the Construction Area is approximately central to the Park and includes the parking lot, picnic area, existing ice rink area near the northeast entrance, and handball, shuffleboard and basketball courts along the western boundary of the parking lot.

In accordance with the Order on Consent, the Town initiated a comprehensive investigation to characterize site soils within the boundaries of the Construction Area. The field investigation program was completed in late spring 2005. Subsequently, site investigation reports and a remedial action plan were submitted to the NYSDEC (11/2005 IR/RAP, 12/2005 SIR and 3/2006 Addendum). The proposed remedial action plan, as approved by the NYSDEC in May 2006, entails the removal and off-site disposal of approximately 100,000 cubic yards of contaminated soil. The remedial action plan targets areas with the highest contamination and results in the removal of all contaminants above State cleanup guidelines to a minimum depth of 10 feet below grade. Targeted removal of higher contamination areas will result in excavation to depths of up to 20 feet below grade in some areas. The comprehensive remedial action is protective of human-health, the environment and provides for unrestricted future site use to a depth of 10 feet. This permits future site activities to be performed with no contaminant-related health & safety concerns to the depth of 10 feet.

3.0 PROJECT SCHEDULE

The remedial action for the Construction Area within Bethpage Community Park is anticipated to initiate in November 2006. Prior to the start of any site excavation, regulatory approval is required of contractor-generated project plans including a truck transportation plan, soils excavation plan, dust suppression plan, decontamination plan and fill management plan. In addition, regulatory approval is required of this CHASP and a Community Air Monitoring Plan (CAMP). The Town requires that the remediation (excavation) contractor prepare certain additional plans, prior to the start of excavation, relating to contractor health & safety, environmental pollution control, site operations, spill and discharge control, construction water management and field sampling.

Duration of the remedial project is estimated at eight months. During this time, contaminated soils will be excavated, stockpiled and loaded into dump trucks for transportation to a permitted off-site disposal facility. Excavated areas will be backfilled and ultimately returned to existing grade as part of the Park redevelopment. The remedial excavation will follow a phased approach by which soils at the northern portion of the Construction Area and in the vicinity of the existing ice rink will be excavated first. Excavation will subsequently progress from the northern end towards the southern end of the Park. This methodology permits site reconstruction, including construction of the new indoor rink facility, to commence prior to completion of the remedial excavation at the southern end of the Park.

4.0 POTENTIAL HAZARDS AND RISKS

Although the planned remedial action provides for future protection of the environment and human health, the potential exists for short-term impacts to the community and environment. Community impacts may include quality of life inconveniences such as noise and traffic, or potential health and safety concerns such as contaminant exposure. Environmental impacts may result from the planned excavation that requires the excavation and transport of a large volume of soil. Potential adverse project impacts are discussed within this section as well as mitigation, prevention and control methods.

4.1 Environmental Pollution Control

In terms of planned site activity, the remedial action for the Park is primarily a large civil construction effort involving soil excavation, stockpiling and loading. Environmental concerns associated with a large excavation project include damage to land areas outside the planned excavation areas, damage to trees and shrubs, pollution of water resources from releases of construction-related materials, construction-related trash, dust control and noise control. Considering the presence of contaminants in the soils to be excavated, an additional environmental concern is the pollution of water resources from contaminated stormwater runoff. Dust control is also an important health and safety concern requiring careful monitoring, as discussed in Section 4.2.

Awareness of potential environmental concerns is vital in monitoring, preventing and minimizing any adverse environmental impacts from the planned remedial action. An environmental pollution control plan will be prepared by the contractor and reviewed by the Town prior to the initiation of excavation. However, potential environmental concerns are identified below with general prevention and minimization methods.

Protection of Land Areas, Trees and Shrubs

Subsurface excavation will necessitate the removal of all surface features within the boundaries of the Construction Area. Land areas, trees and shrubs outside the boundary of the Construction Area will be protected to ensure preservation of land resources. Protection methods may include the placement of boards, planks, poles or temporary fencing to limit access in select areas. Scarred or damaged areas shall be restored or replaced to original condition.

Protection of Water Resources

The construction area will be strictly controlled and monitored to avoid pollution of surface waters, sewer systems or stormwater runoff. Construction-related materials such as fuels, lubricants, oils and paints shall be properly handled and disposed in accordance with applicable regulations. Soils that have been excavated and stockpiled will be

covered with poly sheeting. A site specific stormwater management plan will be implemented by the contractor to specifically address concerns associated with stormwater contamination from exposure to excavated site soils.

Trash and Debris Disposal

All project related trash and debris generated as part of the site remediation will be properly managed through collection and containerization for off-site disposed. Dumpsters will be utilized for collection of all trash and disposal in compliance with regulatory requirements. Litter will be picked up on at least a daily basis to ensure a clean work area.

Dust Control

Control of dust generated as part of the open excavation work is a critical component of the remediation plan and necessary for the protection of worker and community health and safety. Monitoring will be performed continually on-site for the duration of the intrusive excavation work. Authorization to proceed with excavation work will be dependent on the results of the real-time air monitoring, which will be performed for particulates as well as volatile organic compounds.

A site-specific Community Air Monitoring Plan (CAMP) has been prepared based on the New York State Department of Health (NYSDOH) Generic Community Air Monitoring Plan. The CAMP identifies the methods and procedures that will be followed to monitor air quality conditions and ensure adequate dust control.

In general, to minimize any dust nuisance or hazard, dust control methods will be implemented in all work areas including excavations, backfill areas, stockpiles and haul roads. Dust may be controlled by water or non-toxic chemical spray. For this project, water sprinkling is anticipated to be the primary dust control method.

Noise Control

Noise control efforts will be implemented for worker safety and to minimize nuisance to the community. Noise producing work will be maintained at or below the decibel levels for occupational exposure as specified in OSHA regulations (29 CFR 1910.95). Worker exposure issues will be addressed in a contractor-prepared site-specific Health and Safety Plan (HASP). To minimize nuisance noise, site activities will be limited to the Town ordinance that limits noise-generating activities to Monday through Friday, 7:00 a.m. to 7:30 p.m. Construction equipment will also be equipped with sound-deadening devices, as appropriate, including soundproof housings or enclosures, silencers on air intakes, and mufflers on internal combustion engines.

4.2 Community Health and Safety Control

Community impacts from the planned Park remediation may include adverse quality of life impacts or potential health and safety concerns. Potential community concerns primarily include adverse site emissions, increased vehicular traffic and open excavation areas. A summary of these concerns is presented below:

Site Emissions

Potential site emissions from the planned remedial excavation include VOCs and dust (i.e., particulates). A site-specific CAMP will be implemented to monitoring VOC and dust emissions. Based on the results of the site investigation that documented site contamination (11/2005 IR/RAP and 12/2005 SIR), no source areas for VOC contamination were identified. However, VOC emissions will be continually monitored although the potential concern for VOC emissions is considered minor. Dust emissions are a more significant potential concern and will be addressed through a dust control plan, and continual monitoring. All site excavation or soil handling activities are dependent on the air monitoring results. Exceedences of minimum thresholds, as identified within the CAMP, will trigger implementation of increased dust suppression measures or a work stoppage until dust emissions are rectified. It is anticipated that the liberal use of water will be used to abate fugitive dust emissions.

Air monitoring stations will consist of portable photoionization detectors (PID) for VOCs, dust monitors for particulate concentrations and a weather station to monitor wind direction and wind speed. A minimum of two downwind (downgradient) monitoring stations are anticipated with one monitoring station dedicated to each distinct work area (i.e., an excavation area and a soil stockpiling or loading area). Real-time measurements and up to 15-minute moving averages will be compared with background (or upwind/upgradient) air concentrations.

Trucking and Increased Vehicular Traffic

A truck transportation plan will be prepared and implemented by the remediation contractor throughout the project. The plan will be submitted to the NYSDEC for approval and identify trucking routes and staging areas. Any off-site staging of trucks will be minimized to the extent possible and trucks will not be permitted to remain idling for extended periods of time. For the duration of the site remediation, site access for trucking will be through a temporary access road constructed approximately mid-point along the Park frontage on Stewart Avenue. The access road will be situated to the immediate north of the swimming pool portion of the Park. This will reduce traffic congestion at the Stewart Avenue and Cherry Avenue intersection.

Decontamination of trucks will be performed prior to any trucks leaving the site. The environmental contractor will provide a traffic coordinator at the truck wash and scale entrance to direct truck traffic into the site from Stewart Avenue when arriving and onto Stewart Avenue when leaving. Once loaded, trucks will also be covered on-site and driven directly to the disposal facility. When leaving the site, trucks will be directed to the Long Island Expressway via Stewart Ave, onto Cherry Avenue and north on the Seaford Oyster Bay Expressway. Intermediate loading stations will not be permitted.

Open Excavation Areas

For the duration of the planned remedial action, the Bethpage Community Park will be closed to residents and the community for enhanced project safety. Site security will be

maintained to ensure that the project areas remain enclosed, prevent vandalism and properly fenced to prevent accidental intrusion into work zones or open excavations.

5.0 EMERGENCY CONTACT INFORMATION AND KEY PROJECT PERSONNEL

A list of emergency contacts and key project personnel is provided in Table 1. On behalf of the Town of Oyster Bay, Holzmacher, McLendon & Murrell, P.C. (H2M) will serve as the project engineer and will be managing the site remediation. The remediation contractor is Blue Water Environmental Inc. Contact numbers for Town of Oyster Bay and H2M personnel are provided.

Emergency contact numbers in Table 1 include hospital, police, fire and ambulance. Any emergency call should be directed to "911." After calling 911, the appropriate emergency response will be provided. Non-emergency call numbers for hospital, police, fire and ambulance are also provided in Table 1. The nearest hospital is North Shore University Hospital located at 888 Old Country Road in Plainview, NY. A map showing directions to the hospital from Bethpage Community Park is provided as Figure 2.

Regulatory agency contact information is provided in Table 1 for the New York State Department of Environmental Conservation (NYSDEC), New York State Department of Health (NYSDOH) and Nassau County Department of Health (NCDH). The number for the NYSDEC spill hotline is also provided.

6.0 COMMUNITY NOTIFICATION

A community notification program will be maintained for the duration of the remediation and redevelopment project at Bethpage Community Park. Public notifications will be provided to the local residents in the vicinity of the Park and community affected by the Park closure. Notifications will provide contact information for project inquiries and project status updates.

FIGURES

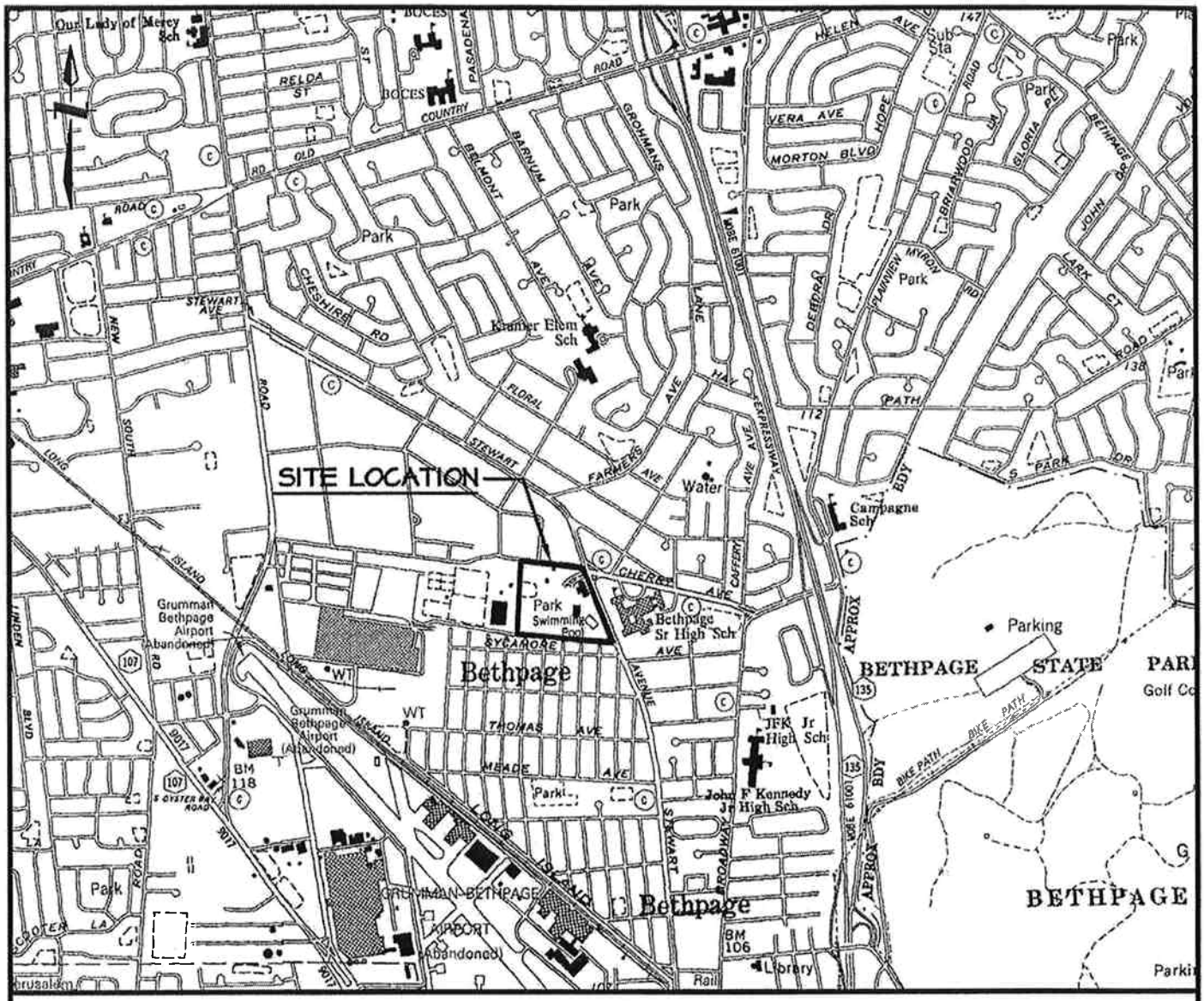

FIGURE 1. SITE LOCATION

SCALE: 1" = 2000'

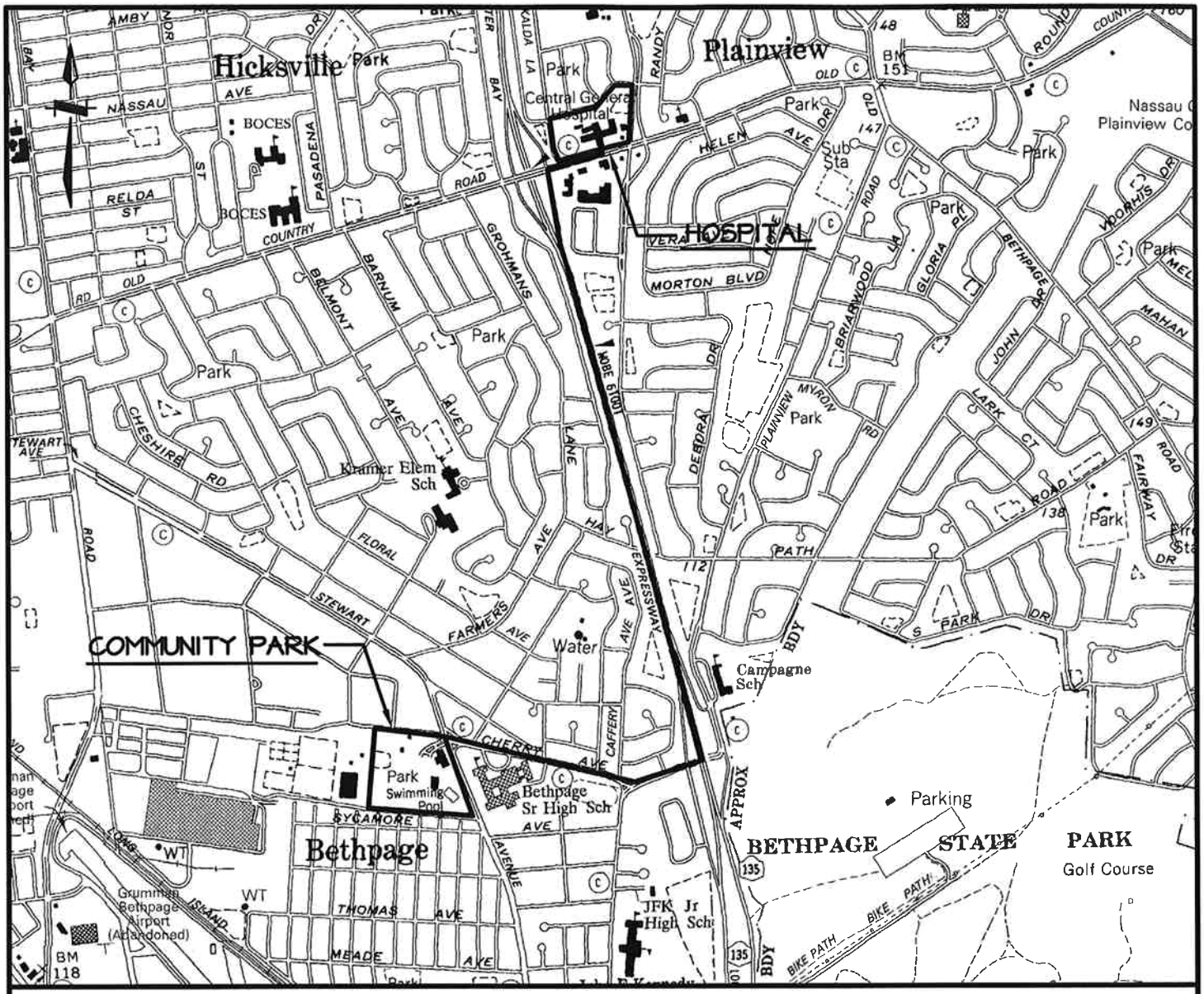

FIGURE 2. MAP TO HOSPITAL

TABLES

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Table 1. Emergency and Project Contact Information

Emergency Contact	Name	Telephone No.
HOSPITAL	North Shore University Hospital 888 Old Country Road Plainview, New York 11803	(516) 719-3000
POLICE (Nassau County Police Dept.)	Emergency Non-emergency	911 (516) 264-0400
FIRE (Bethpage Fire Dept.)	Emergency Non-emergency	911 or (516) 931-0606 (516) 931-0666
AMBULANCE	Emergency Non-emergency	911 (516) 226-1212
New York State Department of Environmental Conservation	NYSDEC Steve Scharf, P.E.	(518) 402-9620
New York State Department of Health	NYSDOH Jacquelyn Nealon	(518) 402 7870
Nassau County Department of Health	NCDH Bob Weitzman	(516) 571-3410
NYSDEC Spill Hotline		(800) 457-7362

Project Contact	Name	Telephone no.
Public Information Officer, Town of Oyster Bay	Phyllis Barry	(516) 624-6390
Engineering Dept., Town of Oyster Bay	Matt Russo	(516) 677-5719
Project Manager, H2M	Paul Lageraaen, P.E.	(631) 756-8000 x1483
Site Manager, H2M	Tom Carrihill	(631) 756-8000 x1406
Site Health & Safety Officer, H2M	Lee Kaplan, MPH	Cell: (631) 312-3845