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Framingham, MA 01701-9005
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RIZZO
ASSOCIATES

A TETRA TECH COMPANY

December 21, 2006

U.S. Environmental Protection Agency
EPA-NE
RGP-NOC Processing
Municipal Assistance Unit (CMU)
One Congress Street, Suite 1,100
Boston, Massachusetts 02114-2023

**Re: Notice of Intent
NPDES Remediation General Permit
414-434 Harrison Avenue
Boston, Massachusetts
MADEP RTN 3-26307**

Dear Sir or Madam:

On behalf of The Pine Street Inn, the owner of the above referenced property, and Chutehall Construction Corporation, the operator of the proposed test pit groundwater dewatering, treatment and discharge system, Rizzo Associates, Inc. is submitting this Notice of Intent (NOI) to be covered by the National Pollutant Discharge Elimination System (NPDES) Remediation General Permit (RGP). This NOI has been prepared in accordance with the provisions of the NPDES RGP (Federal Register Volume 70, No. 174) and related guidance documentation provided by the U.S. EPA.

Site Information

The property comprises a four story brick masonry apartment building in Boston Massachusetts. The entire 414 Harrison Avenue property and a portion of the 434 Harrison Avenue property is a confirmed Disposal Site identified by the Massachusetts Department of Environmental Protection (DEP) by Release Tracking Number (RTN) 3-26307, herein referred to as the Site.

Pine Street Inn owns the above referenced property and plans to renovate the building for use as a residential housing project at the Site. The first phase of renovation will include correcting structural issues with the buildings' foundation. The building foundation is supported by wood piles, some of which have deteriorated. Thus, foundation work will involve excavations beneath the foundations and around deteriorating wood piles. Implementation of remedial activities will be in accordance with the requirements of the Massachusetts Contingency Plan (310 CMR 40.0000) (the MCP). Planned remedial activities will be conducted in accordance with a MCP

Release Abatement Measure Plan (RAM) document submitted to the DEP. The RAM outlines the selected remedial activities necessary to address petroleum contamination within the basement renovation and subsurface work areas for the renovation project and provide procedures and controls to handle, manage, reuse on-Site or as a contingency, treat impacted groundwater, and dispose of construction derived waste (contaminated soil and groundwater) generated during the construction work at the Site. The RAM will involve the excavation of soil and removal of groundwater around the existing wood piles and the restoration of the basement concrete floor will follow the application of backfill.

During the excavation of soil and removal of groundwater around the existing wood piles, dewatering activities will be required to remove standing water (and possibly infiltration waters) within the test pits/trenches. Dewatering, treatment and discharge operations will be conducted in accordance with the provisions of the MCP and the NPDES RGP.

The first phase of renovation and test pit dewatering is scheduled to commence after January 1, 2007. Chutehall Construction Company will be the Operator and sole permittee for the discharge and is herein requesting coverage under the NPDES RGP for discharges of treated wastewater from test pit/trench dewatering operations to be conducted associated with the remedial activities at the Site.

Facility Permitting Information

Renovation activities will be conducted within the confines of the building and excavated soils removed from the basement excavation area will be stored outside and covered with a minimum of 6-mil polyethylene sheeting and barricaded with hay bales. Therefore, no additional permits related to potential impacts to the environment (i.e., storm water run-off, wetlands impact, etc.) are required.

Proposed Discharge Information

This NPDES Remediation General Permit will cover discharges from the basement dewatering system to be temporarily installed at the Site as part of proposed foundation construction activities. Dewatering will be conducted from one or more of the excavation areas where standing water exists. The wastewater will be pumped from the excavation areas via a dewatering system to an on-site treatment system described below. The dewatering system may include well points or trenches with wrapped collection structures to minimize the amount of suspended sediment pumped into the holding tank(s). This discharge is expected to be intermittent, with maximum flows during initial dewatering of the standing water within the excavation areas and limited flows to maintain the dewatered state during excavation of the

existing wood piles. The wastewater discharge will be directed to a stormwater drain located approximately 100 feet from the Site building. The discharge hose will discharge treated wastewater to a storm drain (MH-21K 187), which will follow a tributary to drain outfall #069, which empties to the Fort Point Channel. The location of the discharge to the Fort Point Channel is at a Longitude of $-71^{\circ}3'39.73''$ and a Latitude of $42^{\circ}20'34.70''$.

Contaminant Information

One water sample representing the proposed influent stream to the wastewater dewatering and treatment system was collected and submitted for laboratory analysis at Con-Test Laboratories of East Longmeadow, Massachusetts for parameters required to be analyzed under the NPDES RGP. The laboratory analysis identified the following compounds in the water sample at the following concentrations:

- Total Suspended Solids (TSS) (32.0 mg/l)
- Total Petroleum Hydrocarbons (TPH) (7.6 mg/l)
- Acenaphthene (0.30 $\mu\text{g/l}$)
- Anthracene (0.47 $\mu\text{g/l}$)
- Benzo(a)anthracene (0.950 $\mu\text{g/l}$)
- Benzo(a)pyrene (0.880 $\mu\text{g/l}$)
- Benzo(b)fluoranthene (0.900 $\mu\text{g/l}$)
- Benzo(k)fluoranthene (0.240 $\mu\text{g/l}$)
- Bis(2-ethylhexyl)phthalate (4.91 $\mu\text{g/l}$)
- Chrysene (0.98 $\mu\text{g/l}$)
- Fluoranthene (1.51 $\mu\text{g/l}$)
- Phenanthrene (2.03 $\mu\text{g/l}$)
- Pyrene (1.27 $\mu\text{g/l}$)
- Total metals including: cadmium (1.5 $\mu\text{g/l}$), copper (6.5 $\mu\text{g/l}$), iron (910 $\mu\text{g/l}$), and zinc (17 $\mu\text{g/l}$).

The detected influent concentrations for TSS, TPH, PAHs and the metal copper exceed the NPDES RGP effluent limitations listed in Appendix III of the NPDES RGP. Concentrations of the detected metal iron identified as believed present in the discharge water have the potential to exceed the NPDES RGP effluent limits at a zero dilution factor. In accordance with the guidance documentation, the dilution factor of 20 was calculated for discharge to the Boston Inner Harbor. Following determination of the appropriate dilution factor, detected compounds do not have the potential to exceed the NPDES RGP effluent limits using the calculated dilution factor.

Treatment System Information

The water removed from the excavation areas will require treatment and may be treated using readily available technologies such as sedimentation (settling in a tank), filtration (sand and/or bag filters), and adsorption (granular activated carbon and/or organoclay) in order to achieve effluent concentrations below the NPDES discharge limitations prior to discharge to the Fort Point Channel. The proposed wastewater treatment system will include a minimum of one 500 gallon tank or a proximate excavation with similar capacity, and pumps capable of pumping approximately 20-gallons per minute (not to exceed 50 gpm) to one set of 25-micron bag filters (minimum of two filters) connected in parallel and if necessary one set of 10-micron bag filters (minimum of two) connected in parallel. Due to the limited space for equipment available within the basement, the groundwater may be directly pumped from the excavation to the treatment system. A contingency is included for the addition of cartridge filters (1-micron filters) should solids or metals be detected at concentrations exceeding the NPDES RGP discharge limits or at levels that may expend/clog the carbon filters. In addition, equivalent sand filters and/or larger bag filters (50-micron) may be installed upgradient of the 25-micron filters to minimize the loading of large particles to the small aperture size filters. Following solids removal, the water will be pumped through two carbon filters connected in series each consisting of two 400 pound granular activated carbon (GAC) filters connected in series prior to discharge (via piping) to Boston Harbor via a nearby storm drain. Organoclay filters may also be used upstream of the carbon filters to reduce petroleum concentrations in the effluent groundwater. The treatment system will have sample ports to collect water samples from the system influent, system midpoint and system effluent.

Wastewater discharge from the treatment system shall be directed to the storm drain via an adequately sized (to accommodate flows up to 50 gpm) discharge pipe and/or hose.

If LNAPL thicknesses are encountered in the excavations, sorbent materials and sorbent booms will be used to control the LNAPL and prevent it from being pumped into the treatment system. As a contingency, passive or active LNAPL skimming will be conducted in the excavations. Passive product skimming would involve the installation of passive skimmers in the excavations with consistent measurable product thicknesses ($>0.01'$). Recovered product will be manually emptied from the passive skimming devices into a storage vessel (drum/tank) and then transported for disposal at an approved facility. Implementation of active product recovery would likely follow manual product recovery in the event that product recovery rates are sufficient to warrant the use of a skid-vacuum unit or vacuum truck. Implementation of product recovery would involve the proper transportation and disposal of recovered liquid petroleum product and water under a hazardous waste manifest to a licensed facility.

It is anticipated that the treatment system will be located within the basement or a heated structure such that freeze protection will not be necessary. A Massachusetts Certified Grade II Wastewater Treatment Plant Operator (the operator) will operate and maintain the treatment system. The operator will inspect the operating condition of system components for indications of wear or malfunction. The routine operation and maintenance of the treatment system will include replacement of filter media and/or treatment media and cleaning of system equipment as necessary. The operator will prepare and maintain a daily operation and maintenance log for the treatment system that will document the observed operating conditions and any maintenance activities.

The design maximum flow of the proposed treatment system is approximately 50 gpm (0.1 cfs). This design maximum flow is primarily restricted by the filter units including: bag filters, and liquid phase GAC filters. We estimate the average flow through the treatment system to be approximately 20 gpm (0.04 cfs).

Sediment pumped into the tank(s) or excavations during the dewatering activities will be allowed to settle out prior to pumping the water to the treatment system. If residence time within the tank(s)/excavations is not sufficient to allow for adequate settlement of solids prior to pumping to the treatment system or discharge, additional treatment including the addition of filtration units (i.e. sand filters, bag filters and/or cartridge filters) may be used to remove or drop-out suspended solids prior to discharge (or further filtering), as necessary.

Following treatment, the effluent water will be discharged to a stormwater drain (MH-21K 187), which empties through drain outfall 069 to the Fort Point Channel (Wastewater System Map).

Receiving Surface Water Information

Effluent from the remedial system discharge will be directed to a stormwater drain that will eventually discharge to the Fort Point Channel. The Fort Point Channel is not used as a drinking water supply and is classified as a Class SB_{CSO} surface water body. The length of tidal excursion (the distance a particle of water will travel on an ebb or flood tide) is approximately 2,100 feet. The mean tidal prism (water volume between mean low and mean high tides) is 21.5 million cubic feet, while the spring tidal prism is 24.9 million cubic feet (the spring tide generally occurs every 2 weeks when the moon is new or full). Studies conducted for the CA/T show that the average current velocity of water entering or leaving the channel at the Northern Avenue bridge is approximately 0.1 foot per second (fps), with a range of 0.03 to 0.17 fps (MBTA, North South Projects Underway Report, Volume 3, Appendix M, 2003).

The Boston Inner Harbor (listing ID# 70902) (which is a Massachusetts Category 5 Water (waters requiring a total maximum daily load (TMDL))). The TMDL is required for Segment ID

MA70-02_2004, which includes the discharge point for the proposed remedial discharge. The segment includes the portion of Boston Inner Harbor from the Mystic and Chelsea river, Chelsea/Boston, to the line between Governors Island and Fort Independence, East Boston/Boston (including Fort Point, Reserved and Little Mystic channels. This segment identifies the pollutants requiring a TMDL including: priority organics and pathogens. The potential cause of the pollution requiring a TMDL is listed as four vessel sewage pump out facilities located within the Boston Inner Harbor: Boston Waterboat Marina, Long Wharf; Constitution Marina; Shipyard Quarters Marina; and Marina at Rowes Wharf (Boston Harbor Watershed 1999 Water Quality Assessment Report).

Endangered and Threatened Species and/or Critical Habitat

According to the Massachusetts Natural Heritage and Endangered Species on-line GIS map, no estimated habitat areas, certified vernal pools, or federally ranked species are located on or in the immediate vicinity of the Site.

No consultation with federal and/or state wildlife officials was determined to be necessary since the Site is not located within an area where federally listed endangered and/or threatened species exists nor is the Site located at or near a federally designated critical habitat.

Impacts to Locations of Historic Significance

In order to determine whether the discharge to the Fort Point Channel will have the potential to affect a property that is either listed or eligible for listing on the National Register of Historic Places research was completed identifying locations listed on the National Register of Historic Places and properties listed by the Massachusetts Historical Commission.

The results of our research did not identify properties listed on the National Register of Historic Places located in the vicinity of the Site

No consultation with federal and/or state officials was determined to be necessary since the Site is not expected to adversely impact locations of historic significance.

Request for Coverage Under NPDES RGP

On behalf of Pine Street Inn and Chutehall Construction Company, Rizzo Associates hereby requests coverage under the NPDES Remediation General Permit for discharges of remedial wastewater to the Fort Point Channel, from basement remedial dewatering and treatment operations at the Site. Sampling and laboratory analysis of the remedial influent waters has indicated the likely presence of the following compounds in the remedial wastewater influent:

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TSS, TPH, PAHs (acenaphthene, anthracene, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(k)fluoranthene, chrysene, fluoranthene, phenanthrene, and pyrene), bis(2-ethylhexyl)phthalate, cadmium, copper, zinc, and iron. The attached NOI form provides additional information pertaining to this NOI letter and appropriate signatures of the Operator and sole permittee of the treatment system (Chutehall). Applicable treatment of water, compliance sampling, required reporting and submittals, requests for permit modifications, and any other requirements of this permit will be conducted by Chutehall. Discharge of remedial wastewater is anticipated to begin around January 1, 2007 and be completed by June 2006. Upon receipt of notification from EPA and per the proposed construction schedule, the mobilization of the appropriate treatment system components and remedial dewatering operations, treatment, and discharge will commence under the NPDES RGP. Dewatering, treatment and discharge will be conducted in accordance with sampling and monitoring requirements determined by the EPA.

Please contact the undersigned at (508) 903-2000 if you have any questions.

Very truly yours,

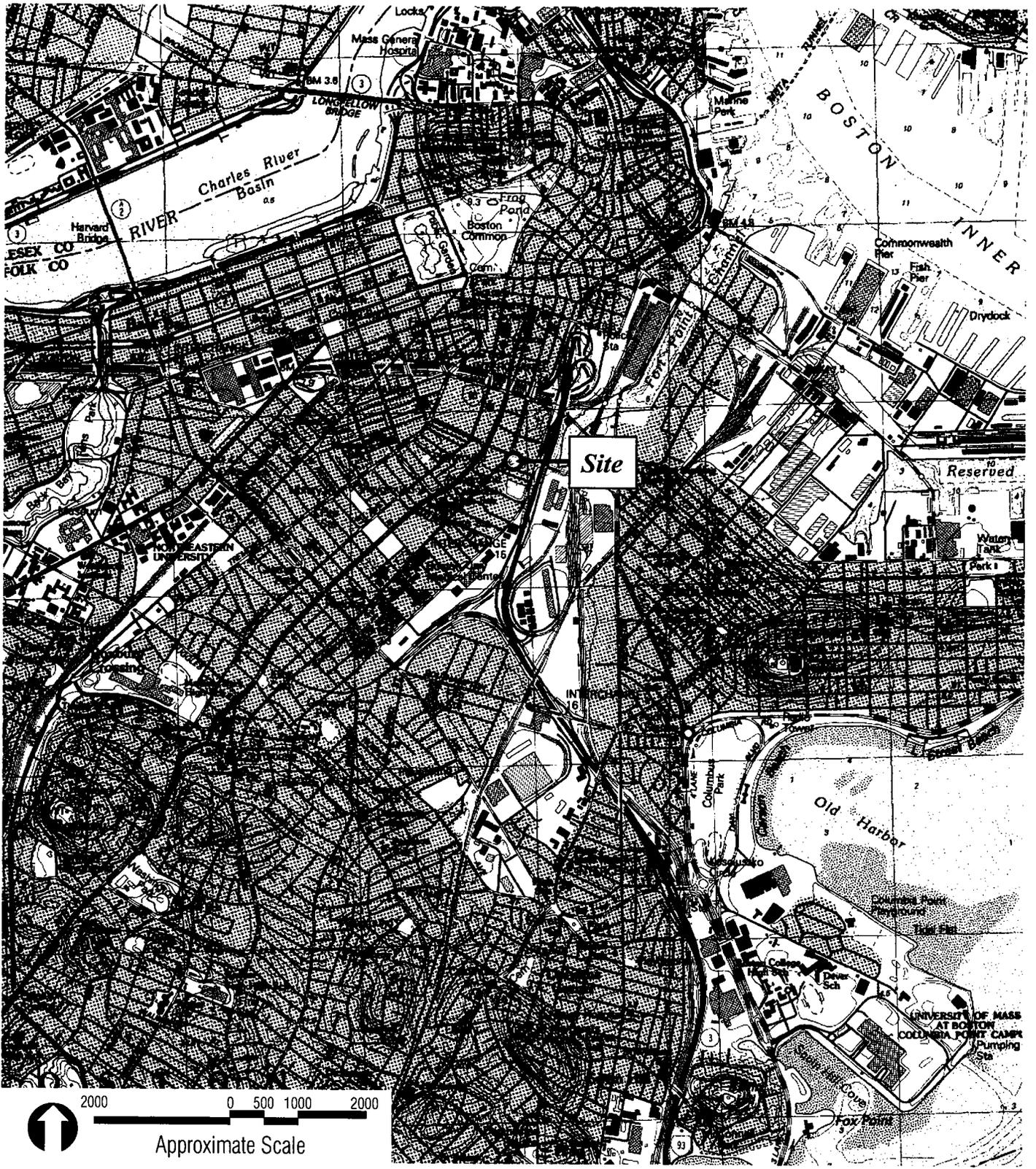


Robert J. Ankstitus, P.E., L.S.P.
Senior Project Manager

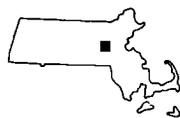
CC: Massachusetts Department of Environmental Protection – NERO
Pine Street Inn
Chutehall Construction Corporation

Attachments
Site Location Map
Wastewater System Map No. 21K
Sump Discharge and Treatment System Piping Schematic
Copy of BWSC Dewatering Discharge Permit Application

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414 Harrison Avenue
 Boston, Massachusetts

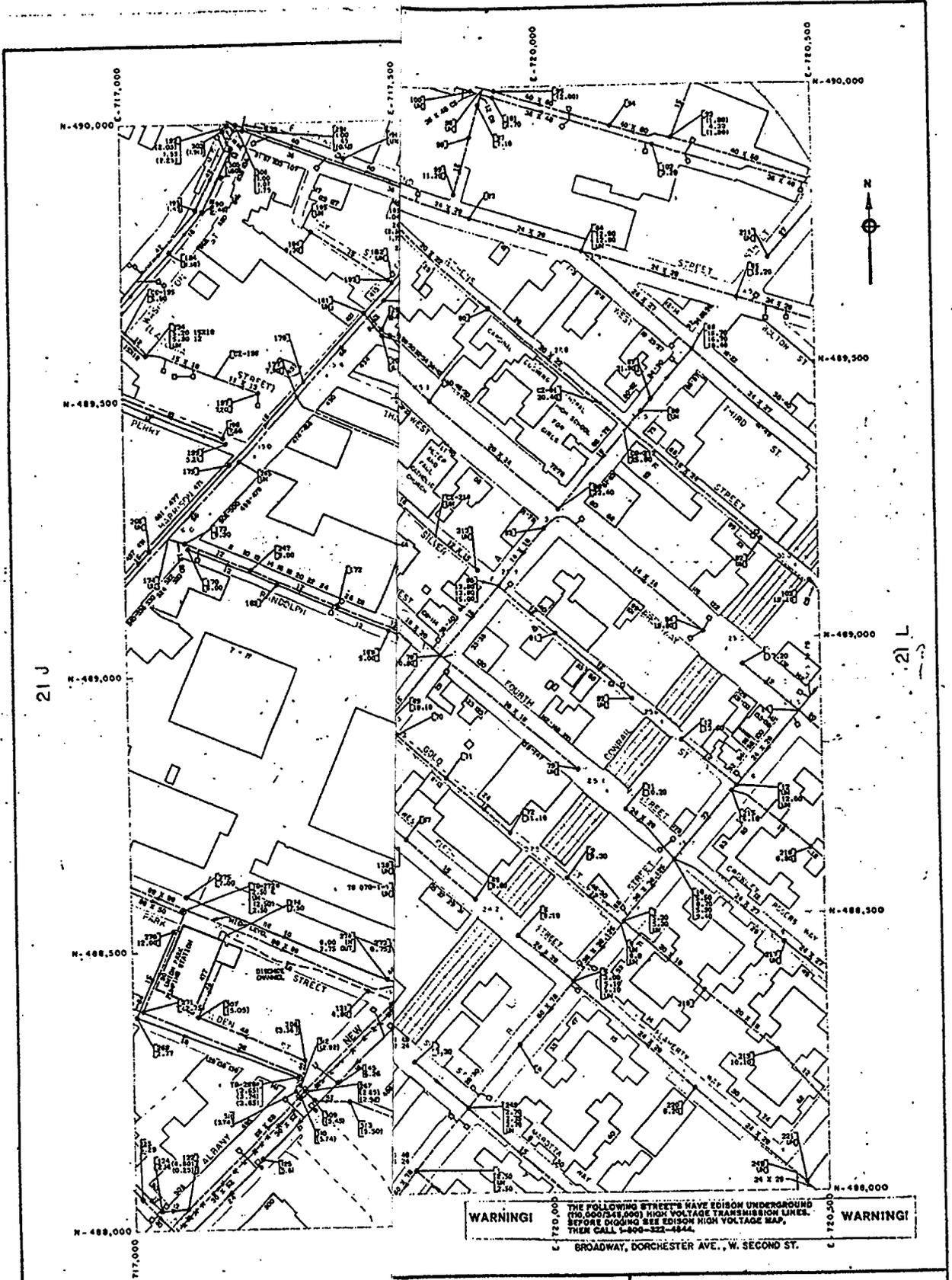


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Base Map: MA USGS
 Topographic Maps from CD

Site Location Map

Figure 1



BASE MAP PREPARED BY
CHAS. H. SOLLIS, INC.
 CONSULTING ENGINEERS
 AERIAL MAPPING
 SURVEYORS
 100 WASHINGTON ST., BOSTON, MASS. 02108
 TEL. 552-1111

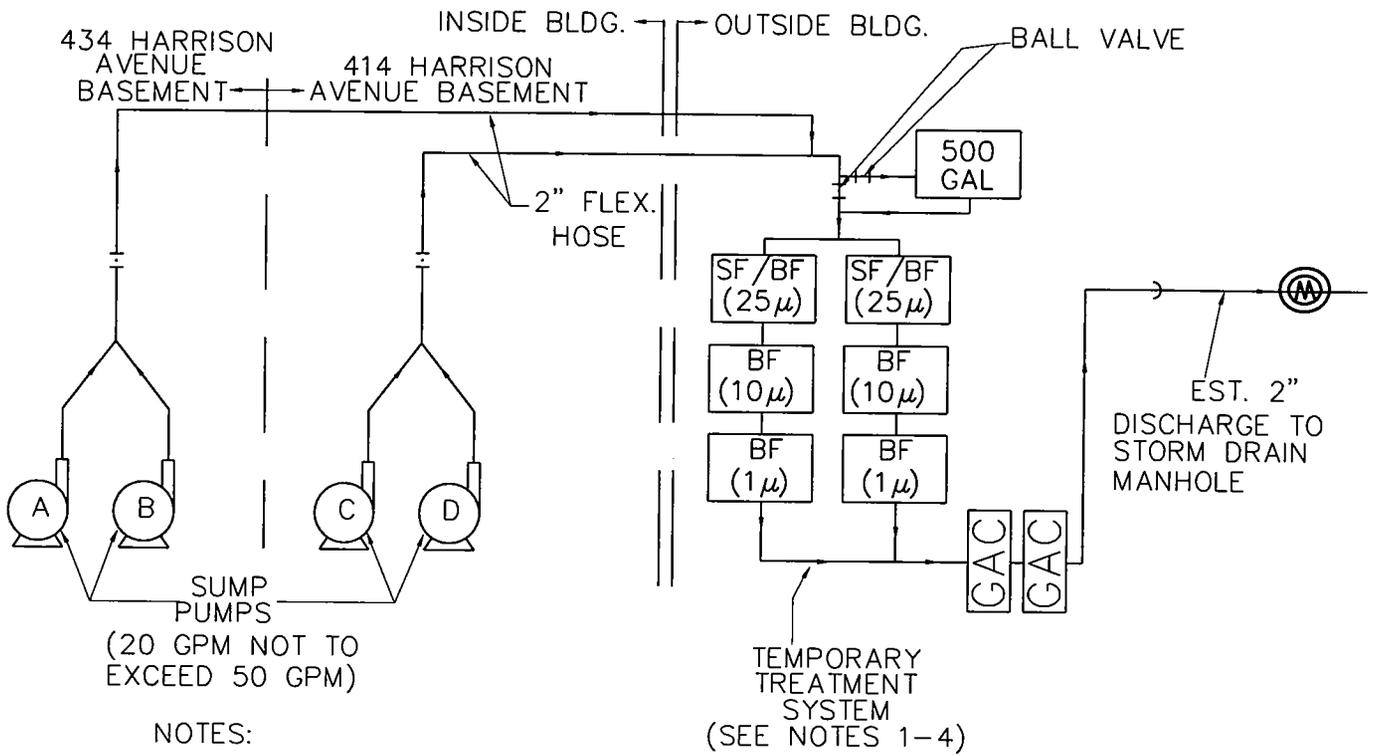
SYSTEM MAP
 PREPARED BY
IV, INC./ENGINEERS
 6-10-04-02

WASTEWATER SYSTEM MAP

SOUTH BOSTON
 BOSTON PROPER

SHEET NO.
21K

HWPC FILE NO.



1. (SF/BF) TEMPORARY TREATMENT SYSTEM TO CONSIST OF ONE SET OF 25 MICRON BAG FILTERS CONNECTED IN PARALLEL AND (IF NECESSARY) ONE SET OF 10-MICRON BAG FILTERS CONNECTED IN PARALLEL; EQUIVALENT SAND FILTERS AND/OR LARGE BAG FILTERS (50-MICRON) MAY BE INSTALLED UP-GRADIENT OF THE 25-MICRON FILTERS
2. (BF) A CONTINGENCY IS INCLUDED FOR THE ADDITION OF CARTRIDGE FILTERS (1-MICRON FILTERS) SHOULD SOLIDS OR METALS BE DETECTED AT CONCENTRATIONS EXCEEDING NPDES RGP DISCHARGE LIMITS
3. (GAC) FOLLOWING SOLIDS REMOVAL, WATER WILL BE PUMPED THROUGH TWO 400 LB. GRANULAR ACTIVATED CARBON (GAC) VESSELS IN SERIES, PRIOR TO DISCHARGE TO STORM DRAIN TO FORT POINT CHANNEL
4. FLEXIBLE HOSE IS TO BE USED FOR FLUID CONVEYANCE (EST. 20 GPM) FROM SUMP PUMPS TO STORAGE TANK OR DIRECTLY TO TREATMENT SYSTEM AND FROM TREATMENT SYSTEM THROUGH STANDARD WATER METER (M) TO STORM DRAIN MANHOLE 187.

SUMP DISCHARGE & TREATMENT
SYSTEM PIPING SCHEMATIC

N.T.S.

RIZZO ASSOCIATES DETAIL - 50PDEP.DWG 1-9-01 10:19:42 AM EST

RIZZO ASSOCIATES A TETRA TECH COMPANY One Grant Street Framingham, MA 01701-9005 508.903.2000 www.rizzo.com	STANDARD DETAIL NUMBER: 1
	FILE: Pine St. Inn
	SCALE: As Shown

Boston Water and Sewer Commission's Dewatering Discharge Permit Application

Facility/Business Name: Pine Street Inn

Mailing Address: 444 Harrison Avenue, Boston, MA

Authorized Representative concerning information provided herein:

Name: Dimitri Gounis Title: Environmental Scientist

Phone #: 508 903 2305 ^{Cell} ~~Office~~ #: 508 254 3993 Fax #: 508 903 2001

Owner of property being dewatered: Pine Street Inn

Location of Discharge:
Intersection of Harrison Ave & East Berkeley Street
Street East Berkeley Street Neighborhood _____ Phone # _____

Discharge is to a: Sanitary Sewer Combined Sewer Storm Drain (Circle One)

BWSC Outfall #: 069 Receiving Waters: Fort Point Channel

Temporary Discharges: January 1, 2007 To June 1, 2007 (Provide anticipated dates of discharge)

- Groundwater Remediation Tank Removal/Installation Foundation Excavation
- Utility/Manhole Pumping Test Pit Trench Excavation
- Accum. Surface Water Hydrogeologic Testing Other _____

- Permanent Discharges:
- Foundation Drainage Crawl Space/Footing Drain.
 - Accumulated Surface Water Non-contact/Uncontaminated Cooling
 - Non-contact/Uncontaminated Process Other _____

1. Attach a Site Plan showing the source of the discharge and the location of the point of discharge (i.e. the sewer pipe or catch basin). Include meter type, meter number, size, make and start reading. All discharges are assessed current sewer charges.
2. If discharging to a sanitary or combined sewer, attach a copy of MWRA's Sewer Use Discharge permit or application.
3. If discharging to a separate storm drain attached a copy of EPA's NPDES Permit or NOI application, or NPDES Permit exclusion letter for the discharge, as well as other relevant information.
4. Dewatering Drainage Permit will be denied or revoked if applicant fails to obtain the necessary permits from MWRA or EPA.

Submit to: Mr. Francis M. McLaughlin Phone: 617-989-7000
Manager, Engineering Customer Services Fax: 617-989-7716
Boston Water and Sewer Commission
980 Harrison Ave.
Boston, MA 02119

=====**BWSC Use Only**=====

Date Received: _____ Comments: _____