Appendix K:

Stormwater Pollution Prevention Plan

BIRDSALL SERVICES GROUP
ENGINEERS & CONSULTANTS

STORMWATER POLLUTION PREVENTION PLAN

FOR

CITY OF PEEKSKILL FIRE HEADQUARTERS
PEEKSKILL, NY

PREPARED FOR

CITY OF PEEKSKILL
840 MAIN STREET
PEEKSKILL, NY 10566

W. Charles Utschig, Jr., PE
N.Y.S. Lic. No. 62303

501132000100
September, 2011

CITY OF PEEKSKILL FIRE HEADQUARTERS

PEEKSKILL

Westchester County, New York

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SECTION 1

1358331598

NOTICE OF INTENT

New York State Department of Environmental Conservation
Division of Water
625 Broadway, 4th Floor
Albany, New York 12233-3505

NYR _____
(for DEC use only)

Stormwater Discharges Associated with Construction Activity Under State Pollutant Discharge Elimination System (SPDES) General Permit # GP-0-10-001

All sections must be completed unless otherwise noted. Failure to complete all items may result in this form being returned to you, thereby delaying your coverage under this General Permit. Applicants must read and understand the conditions of the permit and prepare a Stormwater Pollution Prevention Plan prior to submitting this NOI. Applicants are responsible for identifying and obtaining other DEC permits that may be required.

-IMPORTANT-

RETURN THIS FORM TO THE ADDRESS ABOVE

OWNER/OPERATOR MUST SIGN FORM

Owner/Operator Information

Owner/Operator (Company Name/Private Owner Name/Municipality Name)
CITY OF PEEKSKILL

Owner/Operator Contact Person Last Name (NOT CONSULTANT)
FINN

Owner/Operator Contact Person First Name
RICHARD M.

Owner/Operator Mailing Address
840 MAIN STREET

City
PEEKSKILL

State
NY

Zip
10566 -

Phone (Owner/Operator)
914 - 737 - 3400

Fax (Owner/Operator)
___ - ___ - ____

Email (Owner/Operator)

FED TAX ID
__ - _____ (not required for individuals)

Project Site Information

Project/Site Name

CITY OF PEEKSKILL FIRE HEADQUARTERS

Street Address (NOT P.O. BOX)

BROAD STREET

Side of Street

○ **North** ○ **South** ○ **East** ● **West**

City/Town/Village (THAT ISSUES BUILDING PERMIT)

CITY OF PEEKSKILL

State: NY

Zip: 10566 -

County: WESTCHESTER

DEC Region: 3

Name of Nearest Cross Street

MAIN STREET

Distance to Nearest Cross Street (Feet): 10

Project In Relation to Cross Street

○ **North** ● **South** ○ **East** ○ **West**

Tax Map Numbers
Section-Block-Parcel

Tax Map Numbers

1. Provide the Geographic Coordinates for the project site in NYTM Units. To do this you **must** go to the NYSDEC Stormwater Interactive Map on the DEC website at:

www.dec.ny.gov/imsmaps/stormwater/viewer.htm

Zoom into your Project Location such that you can accurately click on the centroid of your site. Once you have located your project site, go to the tool boxes on the top and choose "i"(identify). Then click on the center of your site and a new window containing the X, Y coordinates in UTM will pop up. Transcribe these coordinates into the boxes below. For problems with the interactive map use the help function.

X Coordinates (Easting): 590764

Y Coordinates (Northing): 4571671

2. What is the nature of this construction project?

○ **New Construction**

○ **Redevelopment with increase in imperviousness**

● **Redevelopment with no increase in imperviousness**

3. Select the predominant land use for both pre and post development conditions.
SELECT ONLY ONE CHOICE FOR EACH

Pre-Development Existing Land Use

- ○ FOREST
- ○ PASTURE/OPEN LAND
- ○ CULTIVATED LAND
- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ● COMMERCIAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY
- ○ PARKING LOT
- ○ OTHER

Post-Development Future Land Use

- ○ SINGLE FAMILY HOME
- ○ SINGLE FAMILY SUBDIVISION — Number of Lots
- ○ TOWN HOME RESIDENTIAL
- ○ MULTIFAMILY RESIDENTIAL
- ○ INSTITUTIONAL/SCHOOL
- ○ INDUSTRIAL
- ○ COMMERCIAL
- ● MUNICIPAL
- ○ ROAD/HIGHWAY
- ○ RECREATIONAL/SPORTS FIELD
- ○ BIKE PATH/TRAIL
- ○ LINEAR UTILITY (water, sewer, gas, etc.)
- ○ PARKING LOT
- ○ CLEARING/GRADING ONLY
- ○ DEMOLITION, NO REDEVELOPMENT
- ○ WELL DRILLING ACTIVITY *(Oil, Gas, etc.)
- ○ OTHER

*note: for gas well drilling, non-high volume hydraulic fractured wells only

4. Will future use of this site be an agricultural property as defined by the NYS Agriculture and Markets Law ? ○ **Yes** ● **No**

5. Is this a project which does not require coverage under the General Permit (e.g. Project done under an Individual SPDES Permit, or department approved remediation)? ○ **Yes** ● **No**

6. Is this property owned by a state authority, state agency, federal government or local government? ● **Yes** ○ **No**

7. In accordance with the larger common plan of development or sale, enter the total project site acreage, the acreage to be disturbed and the future impervious area (acreage)within the disturbed area. Round to the nearest tenth of an acre.

Total Site Acreage	Acreage To Be Disturbed	Existing Impervious Area Within Disturbed	Future Impervious Area Within Disturbed
1.7	1.7	1.7	1.7

8. Do you plan to disturb more than 5 acres of soil at any one time? ○ **Yes** ● **No**

9. Indicate the percentage of each Hydrologic Soil Group(HSG) at the site.

A	B	C	D
%	%	100 %	%

10. Is this a phased project? ○ Yes ● No

11. Enter the planned start and end dates of the disturbance

Start Date		End Date
11/01/2011	-	11/01/2012

12. Identify the nearest, natural, surface waterbody(ies) to which construction site runoff will discharge.

Name

MCGREGORY BROOK

12a. Type of waterbody identified in Question 12?

- ○ Wetland / State Jurisdiction On Site (Answer 12b)
- ○ Wetland / State Jurisdiction Off Site
- ○ Wetland / Federal Jurisdiction On Site (Answer 12b)
- ○ Wetland / Federal Jurisdiction Off Site
- ○ Stream / Creek On Site
- ○ Stream / Creek Off Site
- ○ River On Site
- ○ River Off Site
- ○ Lake On Site
- ○ Lake Off Site
- ○ Other Type On Site
- ○ Other Type Off Site

PIPED STREAM

12b. How was the wetland identified?

- ● Regulatory Map
- ○ Delineated by Consultant
- ○ Delineated by Army Corps of Engineers
- ○ Other (identify)

13. Has the surface waterbody(ies) in question 12 been identified as a 303(d) segment in Appendix E of GP-0-10-001? ○ Yes ● No

14. Is this project located in one of the Watersheds identified in Appendix C of GP-0-10-001? ○ Yes ● No

15. Is the project located in one of the watershed areas associated with AA and AA-S classified waters? **If no, skip question 16.** ○ Yes ● No

16. Does this construction activity disturb land with no existing impervious cover and where the Soil Slope Phase is identified as an E or F on the USDA Soil Survey? **If Yes, what is the acreage to be disturbed?** ____.__ ○ Yes ● No

17. Will the project disturb soils within a State regulated wetland or the protected 100 foot adjacent area? ○ Yes ● No

18. Does the site runoff enter a separate storm sewer system (including roadside drains, swales, ditches, culverts, etc)? ● Yes ○ No ○ Unknown

19. What is the name of the municipality/entity that owns the separate storm sewer system?

CITY OF PEEKSKILL

20. Does any runoff from the site enter a sewer classified as a Combined Sewer? ○ Yes ● No ○ Unknown

21. Has the required Erosion and Sediment Control component of the SWPPP been developed in conformance with the current NYS Standards and Specifications for Erosion and Sediment Control (aka Blue Book) ? ● Yes ○ No

22. Does this construction activity require the development of a SWPPP that includes Water Quality and Quantity Control components (Post-Construction Stormwater Management Practices) **(If No, skip questions 23 and 27-35)** * ● Yes ○ No

23. Have the Water Quality and Quantity Control components of the SWPPP been developed in conformance with the current NYS Stormwater Management Design Manual ? * ● Yes ○ No

*Quantity Control components are not provided as the project is considered to be "redevelopment with no increase in imperviousness".

24. The Stormwater Pollution Prevention Plan (SWPPP) was prepared by:

- ● **Professional Engineer (P.E.)**
- ○ **Soil and Water Conservation District (SWCD)**
- ○ **Registered Landscape Architect (R.L.A)**
- ○ **Certified Professional in Erosion and Sediment Control (CPESC)**
- ○ **Owner/Operator**
- ○ **Other**

SWPPP Preparer
BSG

Contact Name (Last, Space, First)
UTSCHIG, W. CHARLES

Mailing Address
1311 MAMARONECK AVE, SUITE 50

City
WHITE PLAINS

State
NY

Zip
10605-

Phone
914-686-1000

Fax
914-686-1212

Email
cutschig@birdsall.com

SWPPP Preparer Certification

I hereby certify that the Stormwater Pollution Prevention Plan (SWPPP) for this project has been prepared in accordance with the terms and conditions of the GP-0-10-001. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of this permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings.

First Name
W. CHARLES

MI

Last Name
UTSCHIG

Signature

Date
/ / 2011

25. Has a construction sequence schedule for the planned management practices been prepared? ● Yes ○ No

26. Select **all** of the erosion and sediment control practices that will be employed on the project site:

Temporary Structural

- ○ Check Dams
- ○ Construction Road Stabilization
- ● Dust Control
- ○ Earth Dike
- ○ Level Spreader
- ○ Perimeter Dike/Swale
- ○ Pipe Slope Drain
- ○ Portable Sediment Tank
- ○ Rock Dam
- ○ Sediment Basin
- ○ Sediment Traps
- ● Silt Fence
- ● Stabilized Construction Entrance
- ● Storm Drain Inlet Protection
- ○ Straw/Hay Bale Dike
- ○ Temporary Access Waterway Crossing
- ○ Temporary Stormdrain Diversion
- ○ Temporary Swale
- ○ Turbidity Curtain
- ○ Water bars

Biotechnical

- ○ Brush Matting
- ○ Wattling

Vegetative Measures

- ○ Brush Matting
- ○ Dune Stabilization
- ○ Grassed Waterway
- ● Mulching
- ○ Protecting Vegetation
- ○ Recreation Area Improvement
- ○ Seeding
- ○ Sodding
- ○ Straw/Hay Bale Dike
- ○ Streambank Protection
- ○ Temporary Swale
- ● Topsoiling
- ○ Vegetating Waterways

Permanent Structural

- ○ Debris Basin
- ○ Diversion
- ○ Grade Stabilization Structure
- ○ Land Grading
- ○ Lined Waterway (Rock)
- ○ Paved Channel (Concrete)
- ○ Paved Flume
- ○ Retaining Wall
- ○ Riprap Slope Protection
- ○ Rock Outlet Protection
- ○ Streambank Protection

Other

Water Quality and Quantity Control

Important: Completion of Questions 27-35 is not required if response to Question 22 is No.

Post-Construction Stormwater Management Practices

27. Indicate **all** Stormwater Management Practice(s) that will be installed/constructed on this site:

Ponds
- ○ **Micropool Extended Detention (P-1)**
- ○ **Wet Pond (P-2)**
- ○ **Wet Extended Detention (P-3)**
- ○ **Multiple Pond System (P-4)**
- ○ **Pocket Pond (P-5)**

Filtering
- ○ **Surface Sand Filter (F-1)**
- ○ **Underground Sand Filter (F-2)**
- ○ **Perimeter Sand Filter (F-3)**
- ○ **Organic Filter (F-4)**
- ○ **Bioretention (F-5)**
- ○ **Other** _____

Alternative Practice
- ○ **Rain Garden**
- ○ **Cistern**
- ○ **Green Roof**
- ○ **Stormwater Planters**
- ○ **Permeable Paving (Modular Block)**

Wetlands
- ○ **Shallow Wetland (W-1)**
- ○ **Extended Detention Wetland (W-2)**
- ○ **Pond/Wetland System (W-3)**
- ○ **Pocket Wetland (W-4)**

Infiltration
- ○ **Infiltration Trench (I-1)**
- ○ **Infiltration Basin (I-2)**
- ○ **Dry Well (I-3)**
- ● **Underground Infiltration System**

Open Channels
- ○ **Dry Swale (O-1)**
- ○ **Wet Swale (O-2)**

Verified Proprietary Practice
- ○ **Hydrodynamic**
- ○ **Wet Vault**
- ○ **Media Filter**

28. Describe other stormwater management practices not listed above or explain any deviations from the technical standards.

Quantity Control components are not provided as the project is considered to be "redevelopment with no increase in imperviousness".

29. Has a long term Operation and Maintenance Plan for the post-construction stormwater management practice(s) been developed? ● **Yes** ○ **No**

If Yes, Identify the entity responsible for the long term Operation and Maintenance

CITY OF PEEKSKILL

30. Provide the total water quality volume required and the total provided for the site.

WQv Required 0.044 **acre-feet**

WQv Provided 0.046 **acre-feet**

31. Provide the following Unified Stormwater Sizing Criteria for the site.

Total Channel Protection Storage Volume (CPv) - Extended detention of post-developed 1 year, 24 hour storm event

CPv Required 0.0 **acre-feet**

CPv Provided 0.0 **acre-feet**

31a. The need to provide for channel protection has been waived because:

○ **Site discharges directly to fourth order stream or larger**

Total Overbank Flood Control Criteria (Qp) - Peak discharge rate for the 10 year storm

Pre-Development 0.0 **CFS**

Post-development 0.0 **CFS**

Total Extreme Flood Control Criteria (Qf) - Peak discharge rate for the 100 year storm

Pre-Development 0.0 **CFS**

Post-development 0.0 **CFS**

31b. The need to provide for flood control has been waived because:

○ **Site discharges directly to fourth order stream or larger**

○ **Downstream analysis reveals that flood control is not required**

IMPORTANT: For questions 31 and 32, impervious area should be calculated considering the project site and all offsite areas that drain to the post-construction stormwater management practice(s). (Total Drainage Area = Project Site + Offsite areas)

32. Pre-Construction Impervious Area - As a percent of the Total Drainage Area enter the percentage of the existing impervious areas before construction begins. 100 %

33. Post-Construction Impervious Area - As a percent of the Total Drainage Area, enter the percentage of the future impervious areas that will be created/remain on the site after completion of construction. 100 %

34. Indicate the total number of post-construction stormwater management practices to be installed/constructed. 1

35. Provide the total number of stormwater discharge points from the site. (include discharges to either surface waters or to separate storm sewer systems) 1

36. Identify other DEC permits that are required for this project.

DEC Permits

○ Air Pollution Control	○ Navigable Waters Protection / Article 15
○ Coastal Erosion	○ Water Quality Certificate
○ Hazardous Waste	○ Dam Safety
○ Long Island Wells	○ Water Supply
○ Mined Land Reclamation	○ Freshwater Wetlands/Article 24
○ Other SPDES	○ Tidal Wetlands
○ Solid Waste	○ Wild, Scenic and Recreational Rivers
● None	○ Stream Bed or Bank Protection / Article 15
○ Other	

37. Does this project require a US Army Corps of Engineers Wetland Permit? ○ **Yes** ● **No**
If Yes, Indicate Size of Impact. ____.__

38. Is this project subject to the requirements of a regulated, traditional land use control MS4? ○ **Yes** ● **No**
(If No, skip question 39)

39. Has the "MS4 SWPPP Acceptance" form been signed by the principal executive officer or ranking elected official and submitted along with this NOI? ● **Yes** ○ **No**

40. If this NOI is being submitted for the purpose of continuing coverage under a general permit for stormwater runoff from construction activities, please indicate the former SPDES number assigned. N Y R

Owner/Operator Certification

I have read or been advised of the permit conditions and believe that I understand them. I also understand that, under the terms of the permit, there may be reporting requirements. I hereby certify that this document and the corresponding documents were prepared under my direction or supervision. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further understand that coverage under the general permit will be identified in the acknowledgment that I will receive as a result of submitting this NOI and can be as long as sixty (60) business days as provided for in the general permit. I also understand that, by submitting this NOI, I am acknowledging that the SWPPP has been developed and will be implemented as the first element of construction, and agreeing to comply with all the terms and conditions of the general permit for which this NOI is being submitted.

Print First Name R I C H A R D

MI M

Print Last Name F I N N

Owner/Operator Signature

Date __ / __ / ____

SECTION 2

CITY OF PEEKSKILL FIRE HEADQUARTERS
PEEKSKILL

Westchester County, New York

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A. Introduction

This report has been prepared as part of the permit application for a Stormwater Pollution Prevention Plan (SWPPP) for the construction of the *City of Peekskill Fire Headquarters* located at the intersection of North and Main Streets, City of Peekskill, Westchester County, State of New York. The project consists of the construction of a multiuse building (e.g. fire-fighting equipment, personnel and offices), related utility connections and the re-configuration of an existing parking lot; these improvements are proposed within a fully-developed area, as such, several buildings will be demolished.

This report and application shall hereafter refer to the "site" as the portion delineated by the disturbance area shown on site plans prepared by BSG and attached herewith. This SWPPP is required by the New York State Department of Environmental Conservation (NYSDEC) pursuant to the Phase II regulations under General Permit GP-0-10-001 for more than one acre of disturbance. The overall soil disturbance for the project is calculated to be 1.703 ac. with no increase in impervious areas; thus, NYSDEC *Chapter 9 Redevelopment* criteria were applied in the preparation of this SWPPP.

B. Site Description

The site consists entirely of Uf (C/D Soils); hydrologic groups based on NRCS. The site is analyzed in this report as one area labeled "Subarea 1" in the pre-development conditions, and "Subarea 1A" in the post-development conditions.

The grading and drainage plans have been designed to capture and treat all of the stormwater runoff from all impervious surfaces on the site. Stormwater will be collected through a series of inlets; this runoff will be directed towards the proposed Underground Infiltration System (CULTEC 330 HD infiltration units), and ultimately towards an existing catch basin near the intersection of Park and Broad Streets.

Water quality for the proposed impervious surfaces has been provided by means of infiltration by the Underground Infiltration System; stormwater runoff rates for the 1, 10 (Overbank Protection) and, 100-yr storm events have *not* been analyzed in accordance with NYSDEC Stormwater Management Design Manual (the "manual") *Chapter 9 Redevelopment* criteria (Section 9.3.2.A.I) for projects with no increase in impervious areas.

In the pre-development conditions, the site consists of mostly impervious areas (buildings and parking lot) with the exception of small landscaped areas; at the issuance of this report, no water quality treatment is known to exist on the site.

In the post-development conditions, the site will consist of a similar impervious area configuration (building and parking lot) with small landscaped areas. No additional impervious areas are proposed.

The pre and post development conditions shall be considered to have similar drainage *patterns* (i.e. fully developed impervious cover) and *design point* (ultimately discharging towards a 96" CMP drainage system); however, upon implementation of this SWPPP, the post-development condition will provide water quality volume storage via infiltration units; this practice is also expected to reduce the runoff discharge rates.

It is expected that construction will last 12 months from the time of ground breaking to final completion, with work commencing within 10 days following the receipt of all necessary approvals. Throughout the construction process strict adherence to the *Grading and Erosion Control Plan* and Specifications will be maintained to ensure all sediments are contained within the site.

C. Project Description

Proposed services, related studies and information for the electrical substation are as follows:

1. Sanitary Sewer:
   One (1) sanitary sewer connection is proposed; existing connections shall be cut and capped at the property line.

2. Water Supply:
   Two (2) water connections are proposed; existing connections shall be cut and capped at the property line.

3. Floodplain Analysis:
   FEMA floodplain maps show potential floodplains in the near vicinity of the site area; however, such areas refer to a stream which is currently piped.

4. Stormwater Management:
   This plan has been implemented to provide water quality (25% of the total WQv), in accordance with NYSDEC manual *Chapter 9 Redevelopment* criteria (Section 9.3.2.A.II & III) for projects with no increase in impervious areas. Detailed calculations are attached herewith and made part of this report (Section 9).

   Stormwater Quality:
   The project will reduce the total increase in pollutants carried by stormwater runoff; this has been accomplished through the use of an Underground Infiltration System practice (NYSDEC standard practice per Chapter 6 of the manual).

   Maintenance of temporary and Permanent Structures and Practices:
   Temporary and permanent erosion control measures will be maintained and inspected in accordance with the NYSDEC general permit.

   All proposed soil erosion and sediment control practices are designed in accordance with the following publications:

   - New York State Standards and Specifications for Erosion and Sediment Control, August 2005, latest edition;
   - New York State Guidelines for Urban Erosion and Sediment Control, latest edition;
   - New York State General Permit for Stormwater Discharges; and
   - "Reducing the Impacts of Stormwater Runoff from New Development", as published by the New York State Department of Environmental Conservation (NYSDEC), second edition, April 1993.

   The proposed soil erosion and sediment control devices include: protective earthmoving procedures and grading practices, soil stabilization and silt fencing. The approach of the plan is to control sedimentation, and re-establish vegetation as soon as practicable.

   Additionally, the contractor shall adhere to the recommended material stockpile locations and staging area as shown on the ***Grading and Erosion Control Plan*** prepared by BSG and attached herewith. The plan will be implemented prior to commencement of earthmoving activities.

D. Required Permits and Approvals

City of Peekskill:

- Planning Board
- Building Department

E. Stormwater Management Methodology

Stormwater management computations provided in this report are based upon the Soil Conservation Service (SCS) TR-20 and TR-55 methodologies. The stormwater management design is based on the NYSDEC 'New York State Stormwater Management Design Manual', latest edition and 'Controlling Urban Runoff: A practical Manual for Planning and Designing Urban BMP'S, by the Metropolitan Washington Council of Governments. Pre and post development rates of storm water runoff have *not* been computed for comparison for the 1, 10, and 100-year storms events as they are not required for redevelopment projects; however, these rates are expected to be reduced in the post-development conditions as no treatment/detention practices are known to exist for the pre-development conditions.

Stormwater quality has been analyzed in accordance with the guidelines set forth in the New York State General Permit for Storm Water Discharge, GP-0-10-001. Calculations for the water quality are included in section 9 this report.

F. Construction Phasing Plan and Stormwater Management Facilities Maintenance Program

Because of the size of the proposed disturbance (1.703 ac.), only one (1) phase of construction shall be implemented in the following order:

- Erosion and Sediment Control (ESC) measures implementation,
  - Install silt fences
  - Provide tree protection as shown on plans
  - Sawcut areas where stabilized construction entrance is proposed
  - Construct stabilized construction entrance for the site
- Saw cut parking lot within LOD,
- Tree removal,
- Commence building demolition,
- Excavation and rough grading of proposed driveway and areas within LOD
  - Establish topsoil stockpiles as shown on ***Grading and Erosion Control Plan***
  - Install silt fences around the stockpiles and temporarily stabilize the stockpiles with tarp or mulch or temporary seeding
  - Disturbed areas where construction will cease for more than 14 days will be stabilized with erosion controls, such hydro-seeding, hydro-mulch, or hay
- Utility installation
  - Construct combined staging and materials storage area as shown on the ***Grading and Erosion Control Plan***
  - Install temporary sanitary facilities (portasans, etc.)
  - Install dumpsters for the site
- Rough access driveway construction
  - Prepare driveway subgrade and install storm drain inlets
  - Install inlet protection as indicated on *Details Plans*
  - Allocation of concrete washout areas (provided by operator)
  - Construction waste shall be stored in dumpsters and carried off-site on a regular basis
- Final stabilization of disturbed areas,
  - Remove BMPs from storm drain inlets and finalize pavement activities

  - Remove temporary concrete washout areas and restore to original grade
  - Remove all ESC measures upon approval of design engineer and/or ESC inspector.
- Commence construction of building

Awarded contractor shall be responsible for the proper implementation of the ESC practices. The following maintenance program is proposed in order to maintain the proper function of all drainage and erosion and sediment control facilities:

- Inspect underground filtering units and if necessary remove accumulated sedimentation and debris; at no point should the filtering units be allowed to continue operations beyond 50% of their capacity being compromised by debris (six inches from bottom).
- All disturbed area will be stabilized and the sediment build-up in the filtering units removed. After the construction is completed, any areas disturbed shall be stabilized immediately after the required work is completed.
- During construction, erosion and sediment controls must be inspected by a qualified professional every seven days. The Owner shall inspect the facilities once a month. A report by the Professional Engineer shall be submitted to the Owner and the City of Peekskill in the event deficiencies are found. In addition, the Owner shall inspect the systems after each major storm event to ensure the inlets remain open. Specific attention should be paid to the following:
  - Evidence of clogging in inlets, pipes, and end sections,
  - Accumulation of sediment.
- All sediment removal and/or repairs will be followed *immediately* by re-vegetation.
- Maintenance and inspection checklists (as per NYSDEC) are attached herewith in section 10 of this plan. (Completed forms shall be kept on site at all times and made available to authorities upon request.)
- Clean inlets and other drainage structures from silt regularly, but not less than twice a year. Remove sediment build up in the sand filter as required, but a minimum of every five years.
- Restore and re-seed any eroded areas as soon as possible
- The Stormwater Management Facilities Maintenance Program will be managed the owner during construction and eventually by the City of Peekskill.

G. Material Handling and Waste Management

Operator shall be responsible for all waste materials being collected and disposed of into one (1) metal trash dumpster located in the combined staging area as shown on the site plans. Dumpster shall have a secure watertight lid, be placed away from stormwater conveyances and drains, and meet all local and state solid-waste management regulations. Only trash and construction debris from the site will be deposited in the dumpster.

Operator shall not store erodible or hazardous materials on any roadway. Oil and machinery fuels shall be kept to a necessary minimum and stored in structurally sound and sealed shipping containers in hazardous-material storage areas segregated from other non-waste materials. All hazardous materials will be disposed of in accordance with federal, state, and municipal regulations.

Operator shall be responsible for maintaining the cleanliness of the streets (driveways/parking and adjacent areas) and storm drain inlet protection (as applicable).

Operator shall provide adequate designated concrete washout areas throughout the construction project and will be responsible for proper disposal of the concrete, mortar or grout collected there.

One (1) temporary sanitary facility (portable toilet) shall be provided at the site in the combined staging

area. The toilet shall be away from a concentrated flow path and traffic flow and shall have collection pans underneath as secondary containment.

Wood pallets, cardboard boxes, and other recyclable construction scraps will be disposed of in a designated dumpster for recycling. Construction equipment and maintenance materials shall be stored at the combined staging area.

All spills shall be cleaned up immediately upon discovery. Spent absorbent materials and rags will be hauled off-site immediately after the spill is cleaned up for disposal. Spill large enough to discharge to surface water will be reported to the National Response Center at 1-800-424-8802. Material safety date sheets, a material inventory, and emergency contact information will be maintained on site.

H. Narrative Report

The primary goal of the soil erosion and sediment control measures is to reduce soil erosion from areas stripped of vegetation during and after construction, and to prevent discharge of silt offsite. Erosion control barriers shall be placed around exposed areas during construction. The barriers shall consist of silt fence.

Any areas stripped of vegetation during construction will be left bare for the shortest time possible. Any topsoil removed during construction will be temporarily stockpiled for future use in grading and landscaping. Stockpile locations have been provided on the Erosion and Sediment Control Plan and shall be contained within a silt fence/hay bale barrier.

Temporary vegetation will be established to protect exposed soil areas during construction. If growing conditions are not suitable for the temporary vegetation, mulch will be used. Materials that may be used for mulching include; straw, hay, salt hay, wood fiber, synthetic soil stabilizers, mulch netting, and sod. A permanent vegetative cover will be established upon completion of construction of those areas that have been brought to finish grade and to remain undisturbed.

A temporary stabilized construction entrance comprised of three inches clean stone will be constructed at the entrances to the site. The purpose of a stabilized entrance is to remove as much soil from the construction vehicle tires prior to exiting the site and traveling on the existing roadways. During construction, inlet protection (as applicable) will be installed at each storm sewer inlet to minimize the conveyance of silt and sediment through the storm sewer system.

If the contractor encounters ground water during the excavation of the sand filter, he shall notify the design engineer immediately. The contractor shall store all excavated material at the designated location show on the ***Grading and Erosion Control Plan*** with the appropriate erosion control measures corresponding to the stockpile detail.

I. Final Stabilization

Permanent seeding shall be applied immediately after the final design grades are achieved as applicable throughout the site but no later than fourteen (14) days after construction activities have ceased. After stabilization, accumulated sediment shall be removed from the site for disposal along with construction debris, trash and temporary BMPs e.g. silt fences, straw bales, material storage areas, sanitary toilets, etc.

Seedbed preparation/grass application

A minimum depth of 2 to 6 inches shall be applied on areas where disturbance results in subsoil being the final grade surface. The seedbed shall be free of large clods, rocks, woody debris and other intrusive materials; fertilizer shall be applied accordingly.

J. Conclusion:

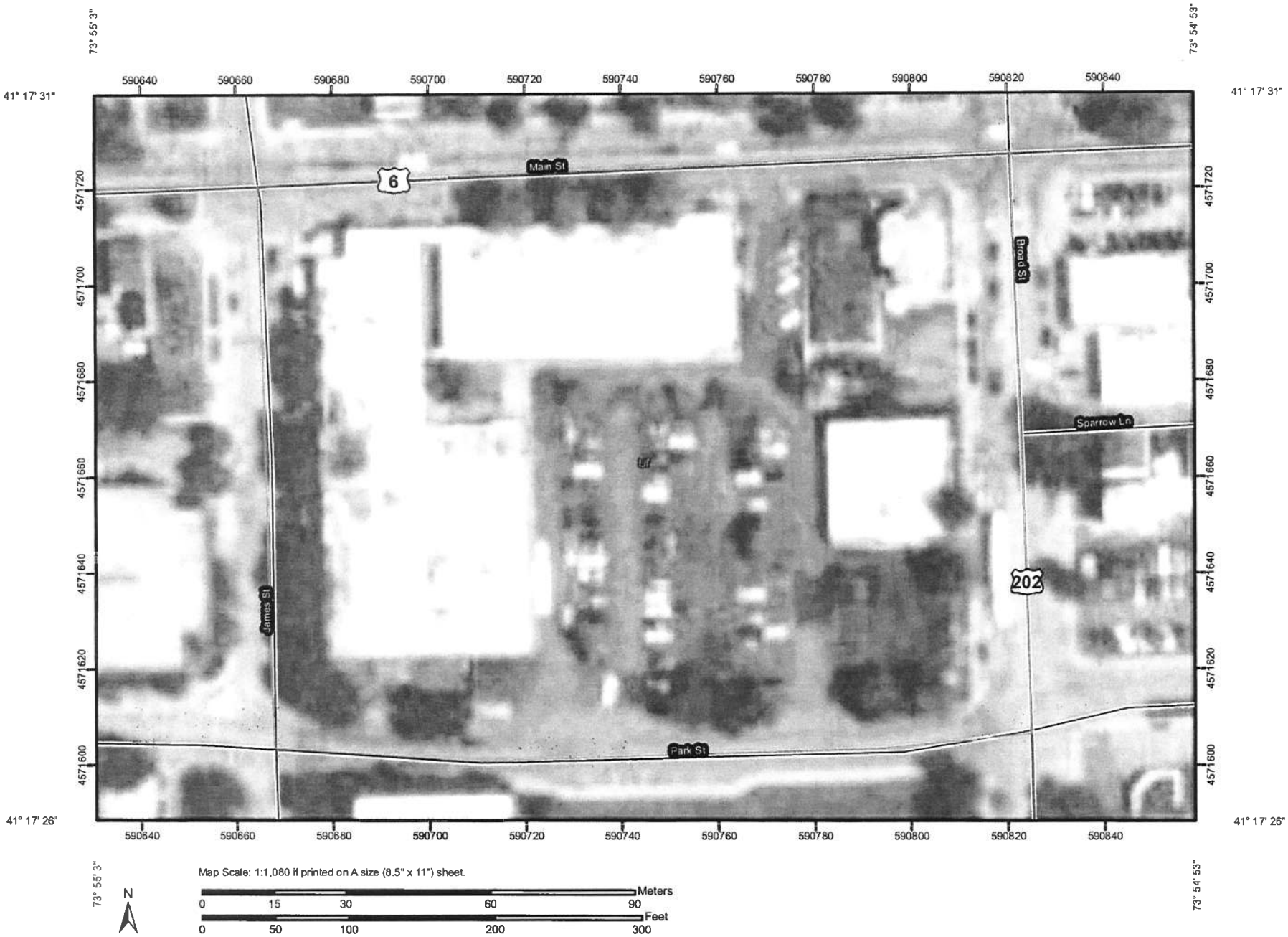
The implementation of this stormwater management plan will not adversely affect the existing drainage system along the downstream channel. The pre-development rates of runoff have been reduced in the developed condition and stormwater runoff treated in conformance with New York State Department of Environmental Conservation Phase II regulations.

Respectfully Submitted,

W. Charles Utschig, Jr., PE
N.Y.S. Lic. No. 62303
BSG

M:\WhitePlains\Jobs\Mitchell Associates Architects\501132000100\Reports\SWPPP\REPORT.doc

Soil Map—Westchester County, New York
(Peekskill Fire Headquarters)



MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features

- Gully
- Short Steep Slope
- Other

Political Features

- Cities

Water Features

- Oceans
- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:1,080 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Westchester County, New York
Survey Area Data: Version 6, Mar 10, 2011

Date(s) aerial images were photographed: 8/1/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Westchester County, New York (NY119)			
Map Unit Symbol	**Map Unit Name**	**Acres In AOI**	**Percent of AOI**
Uf	Urban land	4.7	100.0%
Totals for Area of Interest		**4.7**	**100.0%**

SECTION 3

MAP SCALE 1" = 500'

50 0 500 1000 FEET

METER

NFIP

NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0016F

FIRM

FLOOD INSURANCE RATE MAP

for WESTCHESTER COUNTY, NEW YORK (ALL JURISDICTIONS)

CONTAINS:

COMMUNITY	NUMBER
CORTLANDT, TOWN OF	360906
PEEKSKILL, CITY OF	360924

PANEL 16 OF 426

MAP SUFFIX: F

SEE MAP INDEX FOR PANEL LAYOUT.

Notice to User: The Map Number shown below should be used when placing map orders; the Community Number shown above should be used on insurance applications for the subject community.

MAP NUMBER

36119C0016F

EFFECTIVE DATE

SEPTEMBER 28, 2007

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps, check the FEMA Flood Map Store at www.msc.fema.gov

SECTION 4

BIRDSALL SERVICES GROUP
ENGINEERS & CONSULTANTS

Date:

RE: City of Peekskill Fire Headquarters
Peekskill, NY
Our Project Number: 501132000100

Dear Sir or Madam:

Please consider this letter, written confirmation of the following acknowledgement being made this day of , 2011.

ENGINEER CERTIFICATION:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law.

W. Charles Utschig, Jr. P.E.
BSG
1311 Mamaroneck Avenue, Suite 50
White Plains, NY 10605
Phone: 914-686-1000
Fax: 914-686-1222

SPDES General Permit for Stormwater Runoff from Construction Activity, GP-0-10-001.

Date:

RE: **City of Peekskill Fire Headquarters**
Peekskill, NY

Dear Sir or Madam:

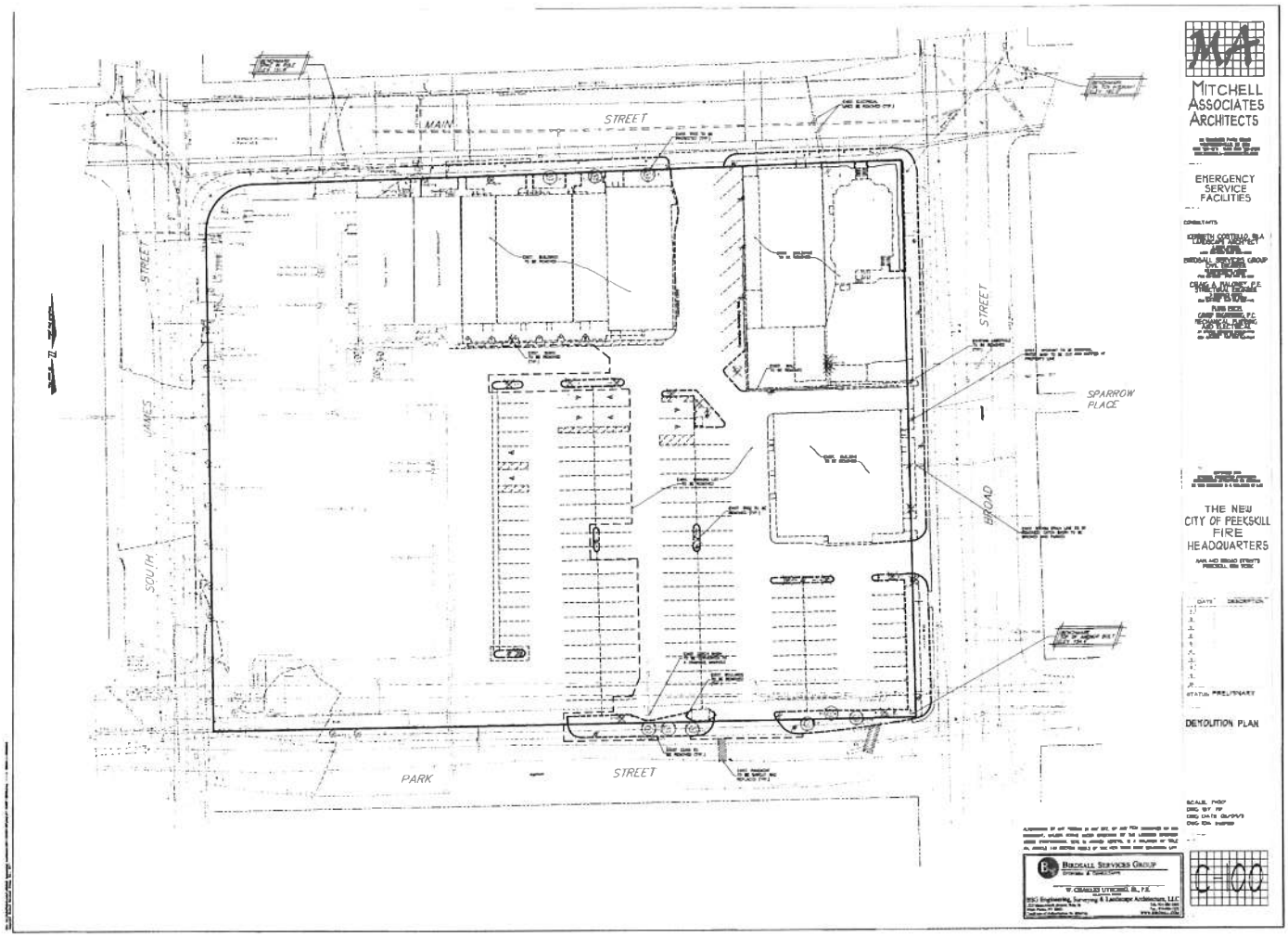
Please consider this letter, written confirmation of the following acknowledgement being made this day of , 20 .

CONTRACTOR STATEMENT:
"I hereby certify that I understand and agree to comply with the terms and conditions of the SWPPP and agree to implement any corrective actions identified by the *qualified inspector* during a site inspection. I also understand that the *owner or operator* must comply with the terms and conditions of the most current version of the New York State Pollutant Discharge Elimination System ("SPDES") general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards. Furthermore, I understand that certifying false, incorrect or inaccurate information is a violation of the referenced permit and the laws of the State of New York and could subject me to criminal, civil and/or administrative proceedings."

Trained Contractor Information:	Trained Contractor Signature	SWPPP-specific task *responsible* for:
Name:_____ Title:_____ Address:_____ _____ Telephone number: (_____)_____-_____	X_____ Date:_____	_____ _____ _____ _____ _____

In accordance to Section III.A.6 of GP-0-10-001 "The owner or operator shall attach the certification statement(s) to the copy of the SWPPP that is maintained at the construction site. If new or additional contractors are hired to implement measures identified in the SWPPP after construction has commenced, they must also sign the certification statement and provide the information listed above."

SECTION 5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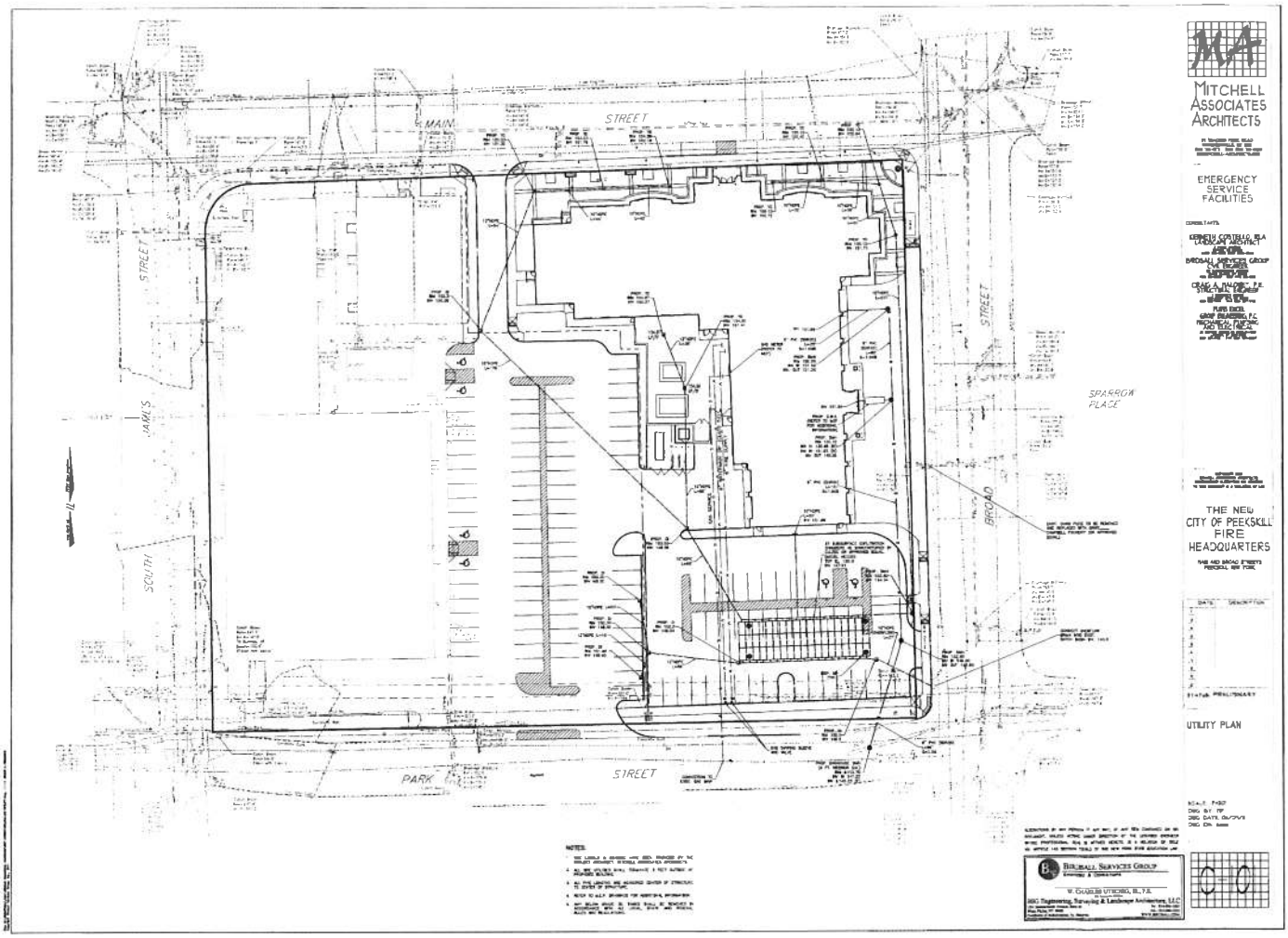
SOUTH
JAMES
STREET
BROAD
STREET
SPARROW
PLACE
PARK
STREET
MITCHELL
ASSOCIATES
ARCHITECTS
EMERGENCY
SERVICE
FACILITIES
THE NEW
CITY OF PEEKSKILL
FIRE
HEADQUARTERS
DATE
DESCRIPTION
STATUS PRELIMINARY
DEMOLITION PLAN
BIRDSALL SERVICES GROUP
C-100

SECTION 6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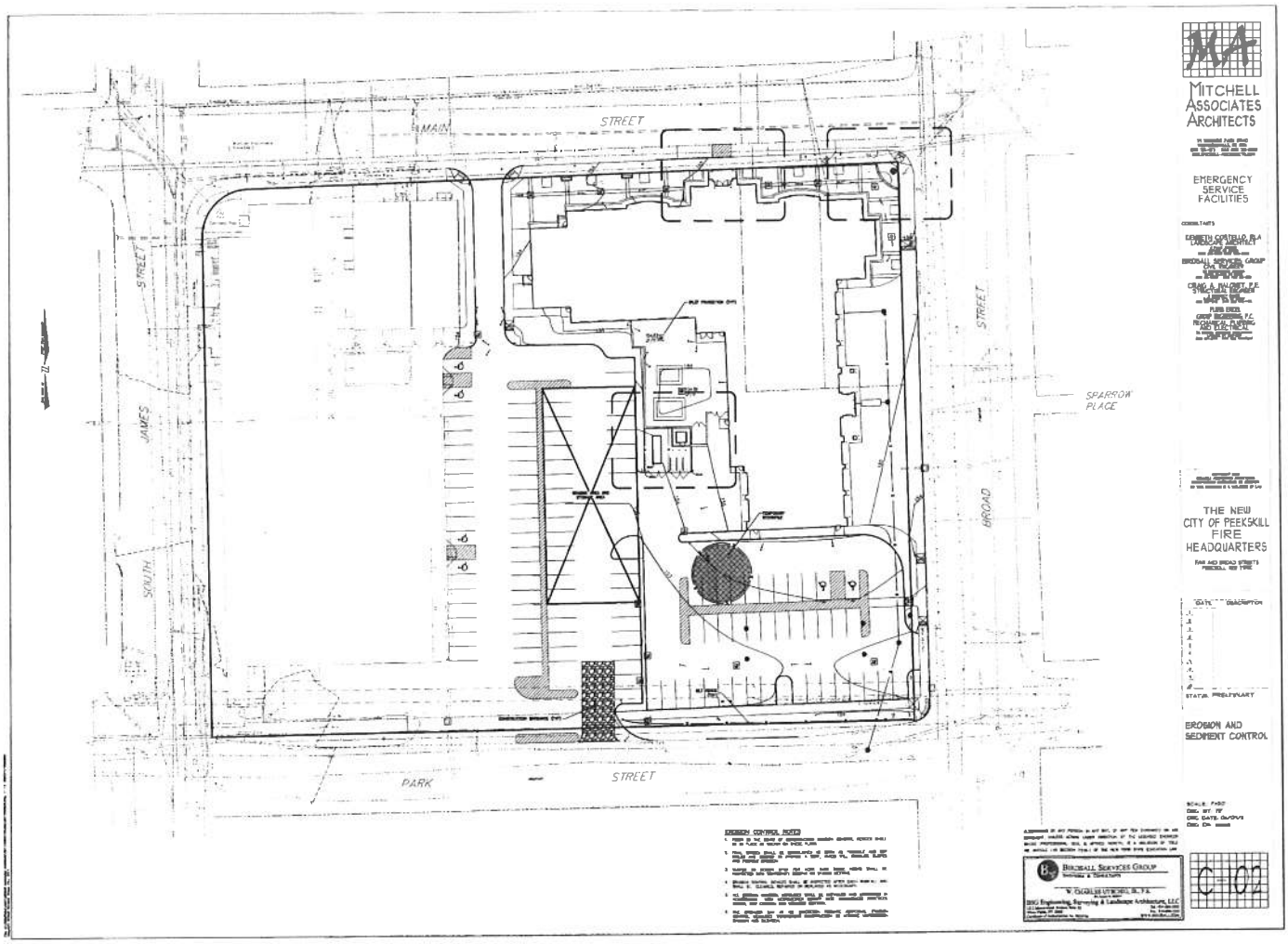
SOUTH JAMES STREET
BROAD STREET
PARK STREET
SPARROW PLACE
MITCHELL ASSOCIATES ARCHITECTS
EMERGENCY SERVICE FACILITIES
THE NEW CITY OF PEEKSKILL FIRE HEADQUARTERS
UTILITY PLAN
BIRCHALL SERVICES GROUP
W. CHARLES UTSCHIG, III, P.E.

SECTION 7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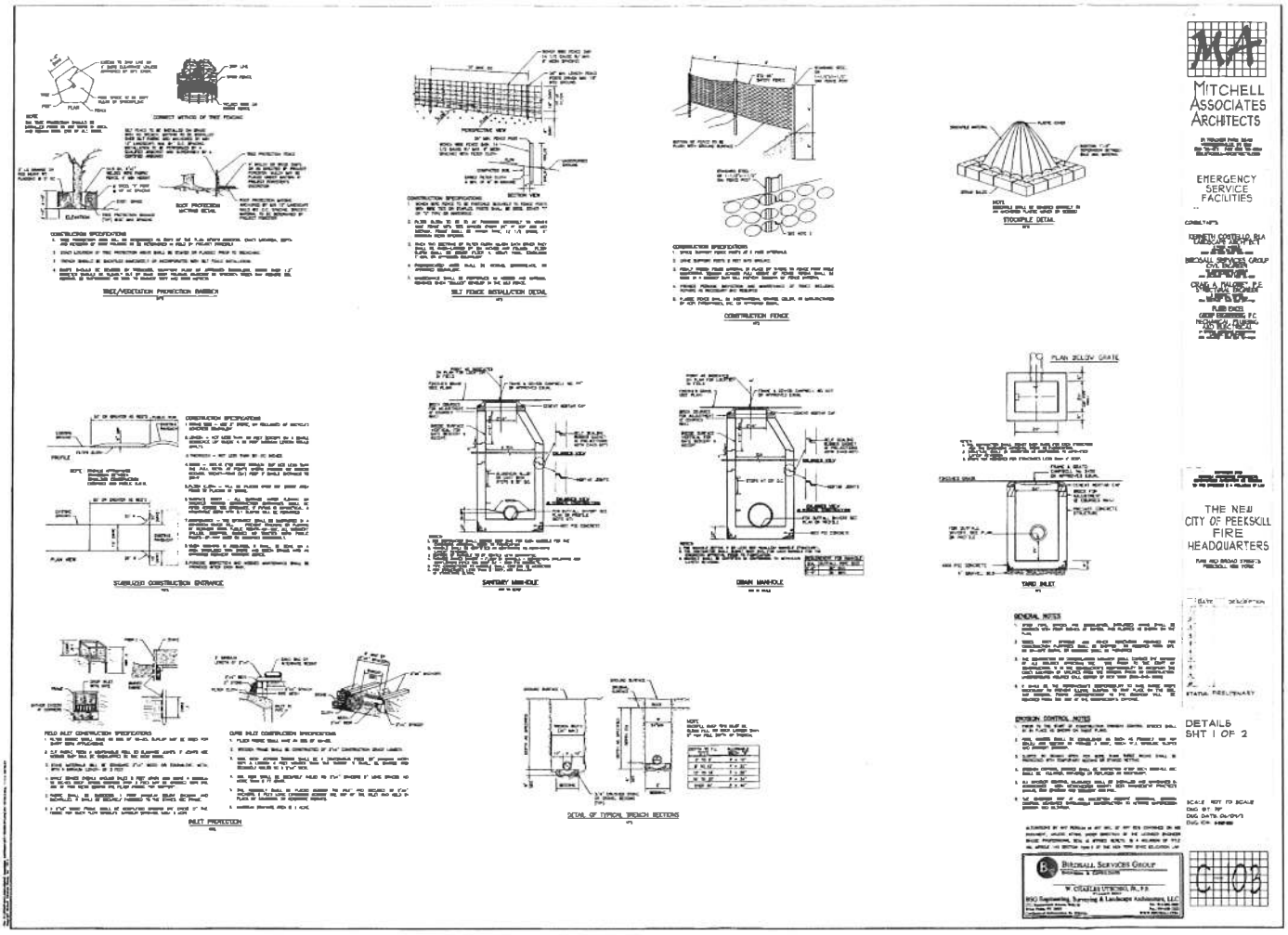
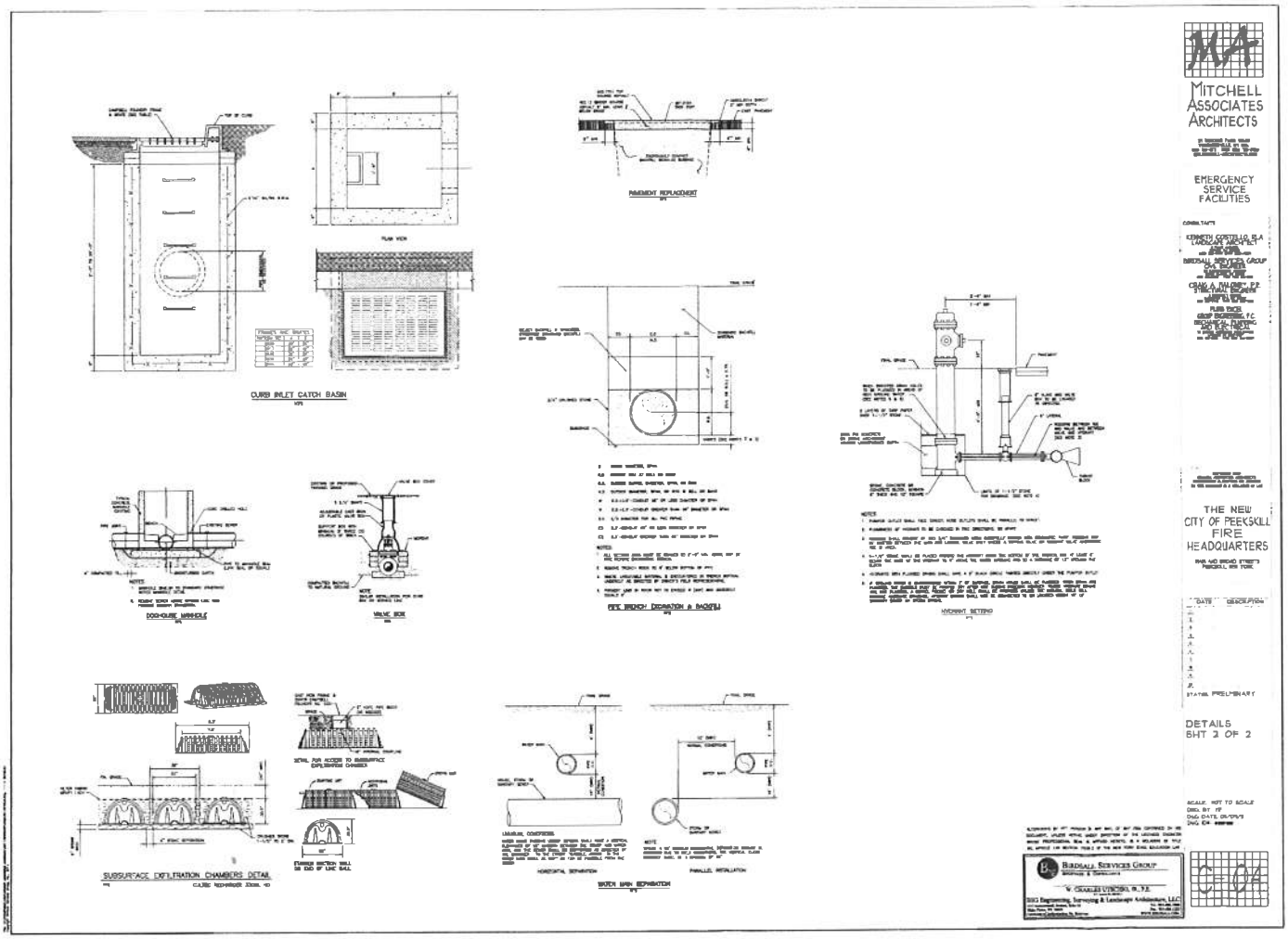
SOUTH JAMES STREET
BROAD STREET
PARK STREET
SPARROW PLACE
MITCHELL ASSOCIATES ARCHITECTS
EMERGENCY SERVICE FACILITIES
THE NEW CITY OF PEEKSKILL FIRE HEADQUARTERS
EROSION AND SEDIMENT CONTROL
C-02

SECTION 8


MITCHELL ASSOCIATES ARCHITECTS
EMERGENCY SERVICE FACILITIES
THE NEW CITY OF PEEKSKILL FIRE HEADQUARTERS
DETAILS SHT 1 OF 2
TREE/VEGETATION PROTECTION BARRIER
SILT FENCE INSTALLATION DETAIL
CONSTRUCTION FENCE
STOCKPILE DETAIL
STABILIZED CONSTRUCTION ENTRANCE
SANITARY MANHOLE
DRAIN MANHOLE
YARD INLET
INLET PROTECTION
DETAIL OF TYPICAL SPENCH SECTIONS
PLAN BELOW GRATE
GENERAL NOTES
EROSION CONTROL NOTES
BIRDSALL SERVICES GROUP
W. CHARLES UTSCHIG, R.P.S.
BSG Engineering, Surveying & Landscape Architecture, LLC


CURB INLET CATCH BASIN
PAVEMENT REPLACEMENT
PIPE TRENCH EXCAVATION & BACKFILL
HYDRANT SETTING
DOG-HOUSE MANHOLE
VALVE BOX
SUBSURFACE EXFILTRATION CHAMBERS DETAIL
WATER MAIN SEPARATION
MITCHELL ASSOCIATES ARCHITECTS
EMERGENCY SERVICE FACILITIES
THE NEW CITY OF PEEKSKILL FIRE HEADQUARTERS
DATE
DESCRIPTION
STATUS PRELIMINARY
DETAILS SHT 2 OF 2
SCALE: NOT TO SCALE
BIRDSALL SERVICES GROUP

SECTION 9

BIRDSALL SERVICES GROUP
ENGINEERS & CONSULTANTS

Re: City of Peekskill Fire Headquarters

Date: June, 2011

Total Disturbance Area	74,204.00 S.F.	1.703 AC.

PRE-DEVELOPMENT						
	Impervious Area			Pervious Area		
		S.F.	AC.		S.F.	AC.
Subarea 1	Buildings/parking lot	74,204.00	1.703	Woods/grass	0.00	0.000
	Gravel areas	0.00	0.000		0.00	0.000
	Paved driveway	0.00	0.000		0.00	0.000
74,204.00 sf	Rock outcrop	0.00	0.000		0.00	0.000
1.703 AC.		0.00	0.000		0.00	0.000
Totals:		**74,204.00**	**1.703**		**0.00**	**0.000**

WATER QUALITY COMPUTATIONS

Data: City of Peekskill Fire Headquarters

Site Area									1.703 ac		
Offsite Drainage Area									0.000 ac		
A = Total Site Area								=	1.703 ac	=	74,374 s.f.
Ai = Impervious Area at Post Development Condition								=	1.703 ac	=	74,374 s.f.
I = percent Impervious Area =			[(	Ai	)(	100	)]/(	A	)=		
I = percent Impervious Area =			[(	1.703 ac	)(	100	)]/(	1.703 ac	)=	100.00 %	
Rv = Volumetric Runoff Coeff. =			(	0.05	)+[(	0.009	)(	100.00	)]=		
Rv = Volumetric Runoff Coeff. =			(	0.05	)+[(	0.009	)(	100.00	)]=	0.950	
P = Precipitation Depth =										1.3 in.	
WQv = Water Quality Volume =	[(	P	)(	Rv	)(	A	)]/	12			
WQv (required)	[(	1.3 in.	)(	0.950	)(	1.703 ac	)]/	12	=	0.175 ac.ft	= 7,637 cf
25% WQv (required per re-development)									=	0.044 ac.ft	= 1,909 cf
WQv (provided)									=	**0.044 ac.ft**	= **1,933 cf**

BIRDSALL SERVICES GROUP
ENGINEERS & CONSULTANTS

DRAINAGE CALCULATIONS

City of Peekskill
Fire Headquarters

Percolation rate:

Time of percolation	30 min
Height percolation	1 inch
Percolation rate:	30 min / inch
Diameter of cylinder	12 inch
Average height	10 inch

Surface area of cylinder: $Ac = p \times Dia. \times h_{avg}$
$= 3.14159265 \times 12 \times 10$
$= 2.618$ sf.

Bottom area: $Ab = pr^2$
$= 3.14159265 \times 6^2$
$= 0.785$ sf.

Total percolation area: $Ap = 2.61799388 + 0.78539816$
$= 3.403$ sf

Volume of percolation: $Vp = Ab \times h_{(perc)}$
$= 0.785 \times 1$
$= 0.065$ cf

Soil percolation rate: $Sr = Vp / Ap / t$
$= 0.065 / 3.403 / 30$
$= 0.00064103$ cf/sf/min.
$= 0.923$ cf/sf/day
$Sr = 0.923$ - 25% clogging factor
$= 0.69$ cf/sf/day

NOTE: Percolation rate to be confirmed

Required Volume:

75% WQv = 1,909.00 cf

Volume Required= 1,909.00 cf

Volume Provided: (Cultec 330)

Dimensions:

Length =	7.50 ft	
Width =	4.33 ft	
Height =	2.54 ft	
Volume per chamber=	79.29	cf (6" of gravel bed - 33% voids of stone included)
No of chambers =	19	

Dimensions for chambers bed:

Length =	7.5 x	19 =	142.50 ft
Width =	4.3 x	1 =	4.33 ft
Height =		=	2.54 ft

Volume from chambers:

Volume = 79.29 x 19.00

= 1506.51 cf

Volume from percolation (Entire Chamber Bed):

Vp (bottom) = Length x Width x Sr

= 142.50 x 4.33 x 0.69

= 427.17 cf

Total Volume Provided:

Vt = Vc + Vp (bottom)

= 1506.51 + 427.17

= 1933.68 cf

Therefore: Provided Vol. > Required Vol.

1,933.68 > 1,909.00 OK

_____Date_____

W. Charles Utschig, Jr. , P.E.
NY Professional Engineeer
License Number 62303

SECTION 10

STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM FOR CONSTRUCTION ACTIVITIES

CONSTRUCTION SITE LOG BOOK

Table of Contents

I. Pre-Construction Meeting Documents.

a. Preamble to Site Assessment and Inspections

b. Operator's Certification

c. Qualified Professional's Credentials & Certification

d. Pre-Construction Site Assessment Checklist

a.

II. Construction Duration Inspections

a. Directions

b. Modification to the SWPPP

III. Monthly Summary Reports

IV. Monitoring, Reporting, and Three-Month Status Reports

a. Operator's Compliance Response Form

a

Properly completing forms such as those contained in this document meet the inspection requirement of NYSDEC SPDES GP for Construction Activities. Completed forms shall be kept on site at all times and made available to authorities upon request.

I. PRE-CONSTRUCTION MEETING DOCUMENTS

Project Name _____

Permit No. _____ **Date of Authorization** _____

Name of Operator _____

Prime Contractor _____

a. Preamble to Site Assessment and Inspections -The Following Information To Be Read By All Person's Involved in The Construction of Stormwater Related Activities:

The Operator agrees to have a qualified professional[1] conduct an assessment of the site prior to the commencement of construction[2] and certify in this inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site for the commencement of construction.

Prior to the commencement of construction, the Operator shall certify in this site logbook that the SWPPP has been prepared in accordance with the State's standards and meets all Federal, State and local erosion and sediment control requirements.

When construction starts, site inspections shall be conducted by the qualified professional at least every 7 calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater (Construction Duration Inspections). The Operator shall maintain a record of all inspection reports in this site logbook. The site logbook shall be maintained on site and be made available to the permitting authorities upon request. The Operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis (Monthly Summary Report).

The operator shall also prepare a written summary of compliance with this general permit at a minimum frequency of every three months (Operator's Compliance Response Form), while coverage exists. The summary should address the status of achieving each component of the SWPPP.

Prior to filing the Notice of Termination or the end of permit term, the Operator shall have a qualified professional perform a final site inspection. The qualified professional shall certify that the site has undergone final stabilization[3] using either vegetative or structural stabilization methods and that all temporary erosion and sediment controls (such as silt fencing) not needed for long-term erosion control have been removed. In addition, the Operator must identify and certify that all permanent structures described in the SWPPP have been constructed and provide the owner(s) with an operation and maintenance plan that ensures the structure(s) continuously functions as designed.

1 "Qualified Professional means a person knowledgeable in the principles and practice of erosion and sediment controls, such as a Certified Professional in Erosion and Sediment Control (CPESC), soil scientist, licensed engineer or someone working under the direction and supervision of a licensed engineer (person must have experience in the principles and practices of erosion and sediment control).

2 "Commencement of construction" means the initial removal of vegetation and disturbance of soils associated with clearing, grading or excavating activities or other construction activities.

3 "Final stabilization" means that all soil-disturbing activities at the site have been completed and a uniform, perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

b. Operators Certification

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. Further, I hereby certify that the SWPPP meets all Federal, State, and local erosion and sediment control requirements. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law. "

Name (please print):_____

Title _____**Date:**_____

Address: _____

Phone: _____ **Email:**_____

Signature:_____

c. Qualified Professional's Credentials & Certification

" I hereby certify that I meet the criteria set forth in the General Permit to conduct site inspections for this project and that the appropriate erosion and sediment controls described in the SWPPP and as described in the following Pre-construction Site Assessment Checklist have been adequately installed or implemented, ensuring the overall preparedness of this site for the commencement of construction."

Name (please print):_____

Title _____**Date:**_____

Address: _____

Phone: _____ **Email:**_____

Signature:_____

d. Pre-construction Site Assessment Checklist (NOTE: Provide comments below as necessary)

1. Notice of Intent, SWPPP, and Contractors Certification:

Yes No NA

[ ] [ ] [ ] Has a Notice of Intent been filed with the NYS Department of Conservation?
[ ] [ ] [ ] Is the SWPPP on-site? Where?_____
[ ] [ ] [ ] Is the Plan current? What is the latest revision date?_____
[ ] [ ] [ ] Is a copy of the NOI (with brief description) onsite? Where?_____
[ ] [ ] [ ] Have all contractors involved with stormwater related activities signed a contractor's certification?

Pre-construction Site Assessment Checklist (continued)

2. Resource Protection

Yes No NA

[ ] [ ] [ ] Are construction limits clearly flagged or fenced?

[ ] [ ] [ ] Important trees and associated rooting zones, on-site septic system absorption fields, existing vegetated areas suitable for filter strips, especially in perimeter areas, have been flagged for protection.

[ ] [ ] [ ] Creek crossings installed prior to land-disturbing activity, including clearing and blasting.

3. Surface Water Protection

Yes No NA

[ ] [ ] [ ] Clean stormwater runoff has been diverted from areas to be disturbed.

[ ] [ ] [ ] Bodies of water located either on site or in the vicinity of the site have been identified and protected.

[ ] [ ] [ ] Appropriate practices to protect on-site or downstream surface water are installed.

[ ] [ ] [ ] Are clearing and grading operations divided into areas <5 acres?

4. Stabilized Construction Entrance

Yes No NA

[ ] [ ] [ ] A temporary construction entrance to capture mud and debris from construction vehicles before they enter the public highway has been installed.

[ ] [ ] [ ] Other access areas (entrances, construction routes, equipment parking areas) are stabilized immediately as work takes place with gravel or other cover.

[ ] [ ] [ ] Sediment tracked onto public streets is removed or cleaned on a regular basis.

5. Perimeter Sediment Controls

Yes No NA

[ ] [ ] [ ] Silt fence material and installation comply with the standard drawing and specifications.

[ ] [ ] [ ] Silt fences are installed at appropriate spacing intervals

[ ] [ ] [ ] Sediment/detention basin was installed as first land disturbing activity.

[ ] [ ] [ ] Sediment traps and barriers are installed.

6. Pollution Prevention for Waste and Hazardous Materials

Yes No NA

[ ] [ ] [ ] The Operator or designated representative has been assigned to implement the spill prevention avoidance and response plan.

[ ] [ ] [ ] The plan is contained in the SWPPP on page _____

[ ] [ ] [ ] Appropriate materials to control spills are onsite. Where? _____

II. CONSTRUCTION DURATION INSPECTIONS

a. Directions:
Inspection Forms will be filled out during the entire construction phase of the project.
Required Elements:

(1) On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;

(2) Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;

(3) Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;

Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of sediment storage volume (for example, 10 percent, 20 percent, 50 percent);

(5) Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems (earthen berms or silt fencing) and containment systems (sediment basins and sediment traps). Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and

(6) Immediately report to the Operator any deficiencies that are identified with the implementation of the SWPPP.

SITE PLAN/SKETCH

_____ _____

Inspector (print name) **Date of Inspection**

_____ _____

Qualified Professional (print name) **Qualified Professional Signature**

The above signed acknowledges that, to the best of his/her knowledge, all information provided on the forms is accurate and complete.

Maintaining Water Quality

Yes No NA

[ ] [ ] [ ] Is there an increase in turbidity causing a substantial visible contrast to natural conditions?

[ ] [ ] [ ] Is there residue from oil and floating substances, visible oil film, or globules or grease?

[ ] [ ] [ ] All disturbance is within the limits of the approved plans.

[ ] [ ] [ ] Have receiving lake/bay, stream, and/or wetland been impacted by silt from project?

Housekeeping

1. General Site Conditions

Yes No NA

[ ] [ ] [ ] Is construction site litter and debris appropriately managed?

[ ] [ ] [ ] Are facilities and equipment necessary for implementation of erosion and sediment control in working order and/or properly maintained?

[ ] [ ] [ ] Is construction impacting the adjacent property?

[ ] [ ] [ ] Is dust adequately controlled?

2. Temporary Stream Crossing

Yes No NA

[ ] [ ] [ ] Maximum diameter pipes necessary to span creek without dredging are installed.

[ ] [ ] [ ] Installed non-woven geotextile fabric beneath approaches.

[ ] [ ] [ ] Is fill composed of aggregate (no earth or soil)?

[ ] [ ] [ ] Rock on approaches is clean enough to remove mud from vehicles & prevent sediment from entering stream during high flow.

Runoff Control Practices

1. Excavation Dewatering

Yes No NA

[ ] [ ] [ ] Upstream and downstream berms (sandbags, inflatable dams, etc.) are installed per plan.

[ ] [ ] [ ] Clean water from upstream pool is being pumped to the downstream pool.

[ ] [ ] [ ] Sediment laden water from work area is being discharged to a silt-trapping device.

[ ] [ ] [ ] Constructed upstream berm with one-foot minimum freeboard.

2. Level Spreader

Yes No NA

[ ] [ ] [ ] Installed per plan.

[ ] [ ] [ ] Constructed on undisturbed soil, not on fill, receiving only clear, non-sediment laden flow.

[ ] [ ] [ ] Flow sheets out of level spreader without erosion on downstream edge.

3. Interceptor Dikes and Swales

Yes No NA

[ ] [ ] [ ] Installed per plan with minimum side slopes 2H:1V or flatter.

[ ] [ ] [ ] Stabilized by geotextile fabric, seed, or mulch with no erosion occurring.

[ ] [ ] [ ] Sediment-laden runoff directed to sediment trapping structure

Runoff Control Practices (continued)

4. Stone Check Dam

Yes No NA

[ ] [ ] [ ] Is channel stable? (flow is not eroding soil underneath or around the structure).

[ ] [ ] [ ] Check is in good condition (rocks in place and no permanent pools behind the structure).

[ ] [ ] [ ] Has accumulated sediment been removed?.

5. Rock Outlet Protection

Yes No NA

[ ] [ ] [ ] Installed per plan.

[ ] [ ] [ ] Installed concurrently with pipe installation.

Soil Stabilization

1. Topsoil and Spoil Stockpiles

Yes No NA

[ ] [ ] [ ] Stockpiles are stabilized with vegetation and/or mulch.

[ ] [ ] [ ] Sediment control is installed at the toe of the slope.

2. Revegetation

Yes No NA

[ ] [ ] [ ] Temporary seedings and mulch have been applied to idle areas.

[ ] [ ] [ ] 4 inches minimum of topsoil has been applied under permanent seedings

Sediment Control

1. Stabilized Construction Entrance

Yes No NA

[ ] [ ] [ ] Stone is clean enough to effectively remove mud from vehicles.

[ ] [ ] [ ] Installed per standards and specifications?

[ ] [ ] [ ] Does all traffic use the stabilized entrance to enter and leave site?

[ ] [ ] [ ] Is adequate drainage provided to prevent ponding at entrance?

2. Silt Fence

Yes No NA

[ ] [ ] [ ] Installed on Contour, 10 feet from toe of slope (not across conveyance channels).

[ ] [ ] [ ] Joints constructed by wrapping the two ends together for continuous support.

[ ] [ ] [ ] Fabric buried 6 inches minimum.

[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.

Sediment accumulation is ___% of design capacity.

Sediment Control (continued)

3. Storm Drain Inlet Protection (Use for Stone & Block; Filter Fabric; Curb; or, Excavated practices)

Yes No NA

[ ] [ ] [ ] Installed concrete blocks lengthwise so open ends face outward, not upward.
[ ] [ ] [ ] Placed wire screen between No. 3 crushed stone and concrete blocks.
[ ] [ ] [ ] Drainage area is 1acre or less.
[ ] [ ] [ ] Excavated area is 900 cubic feet.
[ ] [ ] [ ] Excavated side slopes should be 2:1.
[ ] [ ] [ ] 2" x 4" frame is constructed and structurally sound.
[ ] [ ] [ ] Posts 3-foot maximum spacing between posts.
[ ] [ ] [ ] Fabric is embedded 1 to 1.5 feet below ground and secured to frame/posts with staples at max 8-inch spacing.
[ ] [ ] [ ] Posts are stable, fabric is tight and without rips or frayed areas.

Sediment accumulation ___% of design capacity.

4. Temporary Sediment Trap

Yes No NA

[ ] [ ] [ ] Outlet structure is constructed per the approved plan or drawing.
[ ] [ ] [ ] Geotextile fabric has been placed beneath rock fill.

Sediment accumulation is ___% of design capacity.

5. Temporary Sediment Basin

Yes No NA

[ ] [ ] [ ] Basin and outlet structure constructed per the approved plan.
[ ] [ ] [ ] Basin side slopes are stabilized with seed/mulch.
[ ] [ ] [ ] Drainage structure flushed and basin surface restored upon removal of sediment basin facility.

Sediment accumulation is ___% of design capacity.

Note: Not all erosion and sediment control practices are included in this listing. Add additional pages to this list as required by site specific design.
Construction inspection checklists for post-development stormwater management practices can be found in Appendix F of the New York Stormwater Management Design Manual.

CONSTRUCTION DURATION INSPECTIONS

b. Modifications to the SWPPP (To be completed as described below)

The Operator shall amend the SWPPP whenever:

1. There is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or

2. The SWPPP proves to be ineffective in:

a. Eliminating or significantly minimizing pollutants from sources identified in the SWPPP and as required by this permit; or

b. Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity; and

3. Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.

Modification & Reason:

III. Monthly Summary of Site Inspection Activities

Name of Permitted Facility:	Today's Date:	Reporting Month:
Location:	Permit Identification #:	
Name and Telephone Number of Site Inspector:		

Date of Inspection	Regular / Rainfall based Inspection	Name of Inspector	Items of Concern

Owner/Operator Certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law."

Signature of Permittee or Duly Authorized Representative

Name of Permittee or Duly Authorized Representative date

Duly authorized representatives must have written authorization, submitted to DEC, to sign any permit documents.

Appendix L:

City Manager Memorandum to Mayor and Common Council (July 8, 2010)

MEMORANDUM

Office of the City Manager

TO: **Mayor Mary F. Foster and Members of the Common Council**

FROM: **Richard M. Finn, City Manager**

DATE: **July 8, 2010**

RE: **Review of the Fire Station Public Meetings – Recommended Next Steps**

As you are aware, the City has just completed a series of five (5) public informational meetings (June 9, June 16, June 23, June 29, and June 30) on the report and analysis of constructing a new Central Fire Station or Rehabilitating the existing five (5) Fire Stations. Both reports were prepared by Mitchell and Associates and have been made public.

Please note that two (2) of the five (5) meetings were televised, the June 9th and the June 29th meetings. Most public comments were positive in nature and some questions focused on the financial aspect of constructing a new Central Fire Station. Attached is a list of comments made during the fire (5) Public Meetings (Exhibit "A"), along with other correspondence submitted by residents pertaining to the Fire Station Project.

At this time, the City has spent several years studying and analyzing the Fire Station question. Working closely with the management of the Fire Department, two (2) major studies were prepared by Mitchell and Associates. The first study reviewed the possibility and cost of implementing a Central Fire Station. The plan called for a centralized Fire Station which had an estimated cost of approximately $15,685,024 which included $2,750,000 in land acquisition costs. The plan, if implemented, would include having the new Central Fire Station and keep one existing Fire Station (Washington) and eliminate the use of the remaining five (5) Fire Houses.

The second study, also prepared by Mitchell and Associates, examined the feasibility of renovating the existing Fire Houses. The results of the study indicated that two of the Fire Houses could not be renovated because there was no additional space available to expand and meet established codes. The Plan recommended taking three (3) Fire Stations and expanding and renovating each respective building. The approximate cost of the renovation alternative was $14,326.182.

The Fire Department through the involvement of the respective Fire Chiefs have played a major role in reviewing the two alternatives. The Fire Chief and his two Assistants, have indicated that the Volunteer Department is in full support of the Central Fire Station option. The Fire Chief will be present at Monday night's meeting to present the Department's recommendation.

As City Manager, I have reviewed the two (2) studies and participated in much of the public process. Based on the current conditions of the City's six (6) Fire Houses, it is of critical importance that the City take action to correct the problems that have been identified and documented by Mitchell and Associates. I have reviewed both options and have concluded that the construction of a new Central Fire Station at Main Street and Broad is in the City's best interest and will provide the City with the most cost effective fire service.

Recommended Next Steps

It is recommended that the City Council hold one final Public Hearing to allow the public one last opportunity to provide their comments on the subject of the Fire Department project.

This Public Hearing would be scheduled on Monday, July 19, 2010. Subsequent to the Public Hearing at the following Council Work Session (Monday, August 9, 2010), it is recommended that this item be placed on the Council's Agenda for discussion and for a decision to be made.

Recommend Approach to Funding the Central Fire Station

City Staff has been reviewing the options for the City to fund the Central Fire Station proposal. Based on Council's direction, the Staff started its review with the understanding that the City property tax should not be the primary funding source. It is my recommendation that the City fund the Central Fire Station as follows:

1. Implement the Transfer Tax at one (1%) percent, effective September 1, 2010. This will provide an estimated $410,000 per year, based on the last twelve (12) month period. This dollar amount is considered low given the slow down in the sale of real estate. However, once the economy improves (back to pre-recession times), the potential for the Transfer Tax will be well over $500,000 per year.

2. Increase the City property tax effective for the F.Y. 2011 by two (2%) percent. This property tax increase would bring in approximately $270,000 ($135,000 per each one (1%) percent increase).

3. Provide a second property tax increase of one (1%) percent during the F.Y. 2012 budget which again would bring in approximately $135,000.

4. Utilize the one (1%) percent property tax levied during F.Y. 2010 and reserved for the Central Fire Station (approximately $135,000 per year).

Add together the transfer tax and two (2) year property tax increase would bring in the following:

Transfer Tax	$410,000 annually
F.Y. 2011 Property Tax Increase (2%)	$270,000 annually
F.Y. 2012 Property Tax Increase (1%)	$135,000 annually
Property Tax Allocated in F.Y. 2010 Budget	$135,000 annually
TOTAL	$950,000

The $950,000 would be enough to pay the annual cost of the twenty-five (25) year loan. I look forward to presenting this information to you on Monday evening.

:le

EXHIBIT "A"

Attendance of the five (5) special meetings are as follows:

		General Public	Fire Service Personnel
6/9/10	Centennial Hose	0	30
6/16/10	Fire Patrol	5	22
6/23/10	Centennial Hose	3	20
6/29/10	Neighborhood Center	6	16
6/30/10	Fire Patrol	12	17

A summary of comments and questions are as follows:

6/9/10 **None of the General Public in attendance.**

6/16/10 **Complements to all for the hard work and thanks to the fire department but….. 15 million dollars is tough to accept in these difficult times. There is concern that 5% contingency costs were not real based on the Middle School Project; and with the City's failing infrastructure; and with the increase of crime; where are the City's priorities?**

Response: Bob Mitchell responded that several of his most recent projects have been completed with only a 2% cost overrun and the City just completed a water filtration plant with a cost overrun of 2.38%. The existing fire houses are in extreme condition of disrepair and council's priority is that action needs to take place by rehabilitating the existing facilities or build a new Central Firehouse.

Did the City consider the Highland Avenue the current White Plains Linen Site as the New Location of the New Central Fire house after they move to John Walsh Blvd.?

Response: A computer generated model for response time was developed and identified an area of the city best suited for the location of the Central Fire house. This location was in the Broad Street/Main Street location. The Highland Avenue site would generate a higher response time than what currently exists.

6/23/10 **There was concern as to how the City was going to pay for this; and how much money is in the construction budget to upgrade Centennial Fire House? Also, how can the City use the meeting room at Columbia Hose (behind the Beach Shopping Center) when it was privately owned?**

Response: The City would be looking for partial payment by property tax increase and then other possible revenue sources such as a transfer tax and a gross utility tax.

Out of the 15 million dollar construction budget there is a contingency if not used would be reallocated to the Centennial Fire House and that amount is approx. $500,000.

The City would do a lease arrangement for the use of the meeting room if we were not going to build the Central Firehouse and modify the existing firehouses.

6/29/10 **What happens to response time with the proposed Central Fire House?**

Response: Response time has the 2 to 3 minute areas remains the same and we reduced the amount of the 4 and 5 minute response time areas. Overall a general response time will improve with the new Central Fire House.

Will the new Central Fire House proposal require renovations to the Centennial Fire House and how much will it cost?

Response: It will require renovations $500,000 could be allocated.

Does 15 million dollars also include land costs?

Response: Yes, the 15 million dollars includes the land acquisition.

Don't construct towers and other Architectural details and drive thru bay to save some construction costs and the "Fire Patrol" truck should be at the new Central Fire House.

Response: the City's concern is that the building needs to be and architecturally Attractive building since it will be one of the Gateways into our City and yes, the City is open minded to cost saving items and that this will be revisited at a later date and yes, the Fire Patrol Truck will be stationed in the new central fire house.

Why now are there violations on the existing buildings?

Response: The existing buildings have been deteriorating over the last 30 years. The City commissioned Bob Mitchell to do a full evaluation of the existing facilities and these are the finding of his report.

What is the Life expectancy of the new Central Fire House and will it be designed to last? How did you know what needs will be required in 30, 40, 50 years?

Response: If constructed as per the concept drawing it is anticipated to last 100 years. It is difficult to predict the future, but appropriated space is being allocated into the building that should serve for many years.

Will there be any "Green Technology" incorporated into the new project? Storm Water Management, Green Roofing?

Response: Yes. We will be looking at high efficiency boilers, installation, and possible green roofing if the budget allows.

6/30/10 **If the new Central Fire House is built what will happen to the Fire Patrol Building, the Hook and Ladder building, and the Youth Bureau Department?**

Response: No decisions have been made, options would be to sell or lease the Fire Patrol. The Hook and ladder apparatus would be relocated, but the building is still home to the Youth Bureau.

There are concerns that the old fire houses, once vacated, will not be reused in a timely fashion and will become eye sores from neglect by the City.

Response: The City will take every step necessary to not let that happen.

Has the City looked at alternate sites away from Broad Street? Example: Construction yards in the adjoining areas to reduce costs and reduce property tax loss; and what happened to the three story concept?

Response: Yes, but because of narrow street widths, the ideal location is on Broad Street.

A three story building would increase construction costs and it is deemed to be more economical to be a two story building.

Why destroy old fire houses, they should be kept and fixed.

Response: That is the point of this meeting to weigh the pros and cons of repairing the existing facilities or building a new Central Fire House. a final decision has not been rendered yet and this will be on for discussion for July 12th City Council work session.

Why build now in these difficult times?

Response: Bob Mitchell indicated that this is a good time to build and that construction costs are at approx. 20% lower than they were three years ago and along with low interest rates so this makes very good sense.

How can the City consider "Eminent Domain: when the people were against it several yeas ago during the special meeting on the Downtown redevelopment concept plan?

Response: The City is not planning on using Eminent Domain for Economic Development but for public purpose; and municipal Fire House is a public purpose project. This administration recently passed a law that restricted them from using Eminent Domain for Economic Development reasons.

Who gave cost of land for CrossRoads Shopping Center and how does the Eminent Domain process work and the timeframe for completion?

Response: The cost were given to us by a certified appraiser, Lane Appraisals.

According to State Law the process would be that the property owner would be notified, they would not have the legal right to stop the city from taking the property; but what would be argued in court is the price of the property. The City could move forward with the project while court action would continue over the final cost of the property.

If the City can't sell old firehouses, what would the cost of demolition be?

Response: We do not have any numbers of that right now it would take environmental studies and asbestos abatement surveys in order to obtain a firm number.

What "LEED" technology would be incorporated into the new building?

Response: We would be providing high performance windows, boilers HVAC equipment high performance insulation and possible green roofing.

Why weren't all the meetings televised and what makes this meeting different than others?

Response: The City chose to televise two meetings, one at the Centennial Fire house and the other at the neighborhood Center. The power point presentation was identical in all meetings and was a live presentation lecture, so there may have been time variations.

What is the cost of operation for the existing fire houses?

Response: The funds allocated in the City budget are currently for basic operations.

What is the next step, where do we go from here?

Response: A summary recap with the City council of the five meetings at the July 12th Common Council Meeting.

How long of a process would this be to complete?

Response: Bob Mitchell anticipates 4 to 6 months to develop contract specifications; a two month bidding and award period; and an 18 month construction schedule.

With the New Central Fire House, closing the Hook & Ladder and Fire Patrol will compromise response time to Bowman Towers and Dunbar Heights!

Response: As per the computer generated model, there would no decrease in response time to these areas.

Mr. and Mrs. Fitzgerald wanted to go on record that they fully support the new Central Fire House.

See attached additional e-mails and support from Mary Crescenzo, Paul Mesches and Mike Sellers.

Appendix M:

Project Cost Funding Spreadsheet

City of Peekskill
Firehouse Funding
10/28/2010

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022
Carryover		$ 694,935	$ 557,587	$ 443,372	$ 322,682	$ 225,926	$ 143,519	$ 75,893	$ 23,492	$ (13,229)	$ (33,798)	$ (37,732)
Debt Service		$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)
Transfer Tax	$ 425,000	$ 437,750	$ 450,883	$ 464,409	$ 478,341	$ 492,691	$ 507,472	$ 522,696	$ 538,377	$ 554,529	$ 571,164	$ 582,588
3% Increase												
until 2022												
Property Tax												
1% 2011	$ 269,935	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967
1% 2012		$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967
1% 2013			$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967
Total	$ 694,935	$ 422,619	$ 433,371	$ 332,682	$ 225,924	$ 143,518	$ 75,892	$ 23,490	$ (13,230)	$ (33,799)	$ (37,733)	$ (30,243)

FY2023	FY2024	FY2025	FY2026	FY2027	FY2028	FY2029	FY2030	FY2031	FY2032	FY2033	FY2034	FY2035
$ (30,242)	$ (11,101)	$ 13,983	$ 27,184	$ 40,385	$ 53,586	$ 66,787	$ 79,988	$ 93,189	$ 106,390	$ 119,591	$ 132,792	$ 145,993
$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)	$ (980,000)
$ 594,240	$ 600,182	$ 588,299	$ 588,299	$ 588,299	$ 588,299	$ 588,299	$ 588,299	$ 588,299	$ 588,299	$ 588,299	$ 588,299	$ 588,299
$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967
$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967
$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967	$ 134,967
$ (11,101)	$ 13,982	$ 27,183	$ 40,384	$ 53,585	$ 66,786	$ 79,987	$ 93,188	$ 106,389	$ 119,590	$ 132,791	$ 145,992	$ 159,193