



March 10, 2017

Mr. Kevin Carpenter, P. E.
Senior Environmental Engineer, Remedial Bureau C,
Division of Environmental Remediation
New York State Department of Environmental Conservation
625 Broadway
Albany, New York 12233-7014

RE: Grading Scope of Work
109 Marbledale Road
Tuckahoe, New York 10707

BCP Site No. C360143

Dear Mr. Carpenter:

As requested by the Village of Tuckahoe (the Village) environmental consultant HDR and the New York State Department of Environmental Conservation (NYSDEC), the ownership and construction teams have compiled the following Scope of Work detailing the methods and approach for site grading:

The Grading Contractor:

Site Contractor:
Arthur Rossi
Siteworks Contracting Corp.
100 Hartford Avenue
Mount Vernon, NY 10553
Cell: 914-490-0060
Pho: 914-663-6355
Fax: 914-663-7605

All of Siteworks qualifications to perform this work were provided to the Village on 12/29/2016. Insurance certificates naming the Village as an additional insured were provided on 12/27/2016.

Site Grading Needs:

The purpose of this Site Grading Plan is to advise the Village and NYSDEC how Siteworks plans to adjust contours of the project site to rough grades per approved site plans as shown in the Civil Plans by SESI Consulting Engineers, as approved by the Planning Board, pursuant to the cross section cut and fill plans in the Remedial Action Work Plan Figure 5A through 6B. This process is referred to as "site balancing" by where the existing soils which have been designated for reuse will be relocated on the site to lower, or "cut" high spots or to raise, or "fill" low spots.

Summary:

- Total number of field days for grading / balancing to be approximately 30 days with the first work starting in the Southern portion of the property in the area in and around the hotel footprint.
- Excluding the Source Area work that has already been completed (and any additional Source Area work that is required by NYSDEC based on endpoint sample data or other observations), the maximum depth of "cut" proposed under this scope, located at Sediment Basin #1, is approximately 6 ft below current grade. The maximum "fill" proposed under this scope, located within the building footprint, is approximately 7 ft above current grade.
- Grading is proposed to begin before the Source Area work is completed; however, it is understood that final cut and fill cannot be completed site wide until the Source Area work is completed with approval from NYSDEC. Grading will not occur adjacent to source areas until data shows that no further excavation is needed at a particular source area. Grading and importation / placement of approved fill sources will begin as soon as practicable in areas of the site where no further source area work is required.
- Any soils that are graded ("cut") will be placed and covered at the designated areas (or temporary stockpiled) in accordance with the RAWP and approved Source Area scopes. The "cut" areas will be monitored as described below and immediately covered with approved materials (i.e., imported stone or soils). All areas of the site disturbed under this scope must be covered until the cap or temporary cover is in place. Plastic sheeting will be used at the new "cut" areas until the temporary cap is in place.
- As part of this scope, approved materials will be imported to the site (stone, sands) as described below. All materials have been or will be approved by NYSDEC prior to importation to the site. Staging and placement of approved materials will be done in a way that allows for additional source area excavation (that may be warranted, including based on the final validated data for the endpoint samples), and testpit work.

Schedule:

The project site is currently ready to begin site balancing after the Source Areas are excavated. This is anticipated to take approximately nine additional work days. As remediation of source areas is completed and backfilling is accomplished, the site surface needs to be raised or lowered to rough grade. This process will take a couple weeks to achieve.

Portions of the Site Impacted:

The majority of the site will have its final grade adjusted in accordance with the approved civil grading plan (pages G-1, G-1A and G-1B). The movement of surface soils will be performed in accordance with the RAWP Cut and Fill Plan (page 13). Cross-section locations of the cut and fill plan are shown on Figure 4 and proposed cut and fill cross section details are shown on Figure 5A through 6B in order to achieve the final SESI Overall Grade and Utility Plan Drawing G-1, which incorporated six rounds of Village comments and was approved as part of the final Site Plan approval package of signed and sealed engineer stamped drawings.

Sequencing of Grading Work:

Initially, the areas immediately adjacent to the completed source areas will be adjusted (these areas deemed complete by DEC based upon data provided by HES). This will be done in conjunction with implementing the Soil Erosion Control Plan (page SE-1) measures. Then the sequencing of the work will progress in roughly the following order:

Phase 1: Balance hotel building pad to “bottom of Pile Cap” grade 133.92’ (see cut and fill diagrams attached).

Phase 2: Cut sediment basins #1 & #2 – backfill and level all source areas

Phase 3: Cut detention basins, for the underground duromax systems, to rough grade – fill building footprint to “bottom of grade beam”

Phase 4: Cut Northern end of site – redistribute material to southern portion of site

Phase 5: Complete filling hotel footprint and cap with stone

Note: Areas to be stoned as they are completed to serve as a temporary cap until such time as the final cap may be installed.

The approved CAMP calls for possible special conditions for work less than 20’ from a receptor. A protocol was developed with NYSDEC and NYSDOH input that includes the following:

- If a 20’ buffer is maintained, special conditions will not be needed. For SA-1, cordoning off of parking spaces along Marbledale Road with traffic barrels with bright tape between (or rope), or use of temporary fencing is contemplated.
- For all areas less than 20’ from receptors or property lines, including grading operations, where a 20’ buffer zone cannot be maintained the following protocols should be implemented:

- monitoring for the presence of receptors within 20’ of the work zone shall be conducted.
- Installing fabric inserts on property fencing (south, east, and north perimeters)

Having water truck and sprays available at all work activities near property lines and actively suppressing dusts and “pre-wetting” the work areas during dry conditions. As noted elsewhere in the scope, dust suppression may be warranted for all work activities described in this scope.

- Use of Foam will continue to be available for use if warranted.
- CAMP stations must be operational. CAMP stations can be positioned in the buffer area
- Other measures, based on NYSDEC or NYSDOH directives. In particular source areas identified within 20’ of potential receptors warrant evaluation.

This protocol will be implemented during the site work that is referenced above under this scope. The implemented practices should be documented.

The grading and balancing work will be accomplished in sections of the site (e.g., southern area around hotel footprint; northern third of the site) at a pace of work so that appropriate community air monitoring (described below) can be implemented during the grading, visible dusts can be controlled at the work areas, and observations can be made by NYSDEC or HDR. Both NYSDEC and the Village will be kept apprised of the planned grading and balancing of the site. The work will be completed with excavators, bulldozers and dump trucks as needed.

In addition to the protocols for working within 20 ft of any property line (noted above), dust suppression will be used in accordance with the RAWP during site balancing, including in areas to be “cut” and during the importation and placement of approved cover materials. Should any source materials be encountered, they will be appropriately handled in accordance with the Source Area scopes of work, with findings reported to the NYSDEC and the Village.

Covering Graded Areas:

As areas are systematically worked and completed, a temporary cap will be applied and lightly compacted. The temporary cap for a given area will be dictated by the finished material in that area. It is understood that it is

desired to stabilize areas of the site with stone or approved soil layers as soon as possible (this will replace the need for plastic sheeting). The temporary cap will be maintained in accordance with the SWPPP, and to effectively suppress fugitive dusts from being created during the remainder of the project. Concrete, asphalt paved, or utility areas will be capped with BUD material including recycled concrete aggregate (RCA), stone or sand as required per the geotechnical engineer or civil plans as needed.

1. Sand is needed for the utility pipe bedding
2. DOT #2 Stone and ¾ in. stone is needed for structural fill for the building pad
3. Recycled concrete aggregate is needed for over-dig and excavation backfill (including source areas), structural fill for utility trenches, parking lot support, and building support.

The recycled concrete aggregate (RCA) source is being obtained from a number of potential sources. Excess concrete material from the concrete plant located at Peckham Industries' Patterson Quarry, 1150 Route 311, Patterson, NY 12563. The concrete material is not sourced from construction or demolition projects, but is instead recycled excess concrete fully within the ownership of Peckham Industries. Clean RCA is also being sourced from Thalle Industries Elmsford Quarry and the Petrillo Edison Avenue Recycle facility. The BUD for these two latter sources has been approved by the DEC.

The ¾ in. stone and sand are 100% virgin granite materials will be sourced from the Braen Stone Van Orden Sand & Gravel of Ringwood quarry, located at 589 Westbrook Rd., Ringwood, NJ 07456, which is an approved NYSDOT source (No. 8-63R) (see Exhibit A). The DOT #2 stone and sand are virgin materials that will be sourced from Peckham Industries natural hard rock Wingdale Quarry, 3206 Pleasant Ridge Road, Wingdale, NY 12594, which is an approved NYSDOT source, registered with NYSDEC. The BUD applications for these materials are pending.

Approximately 2800 cy of approved materials are anticipated to be imported to the site starting in March 2017 as needed for temporary caps and utility bedding and coverage.

As stated in the RAWP, all materials proposed for import onto the site will be approved by the qualified environmental professional and will be in compliance with provisions in this Plan prior to receipt at the site. Information on potential / proposed clean fill materials (source, soil / stone type) will be submitted to NYSDEC via a BUD application, which requires, at a minimum, sampling of the material and disclosure of the source. The Village will be copied on the applications and supporting data.

Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site. All imported soils will meet the backfill and cover soil quality standards established in 6NYCRR 375-6.7(d). Soils that meet "exempt" fill requirements under 6 NYCRR Part 360, but do not meet backfill or cover soil objectives for this site, will not be imported onto the site without prior approval by NYSDEC. Solid waste will not be imported onto the site. Trucks entering the site with imported soils will be securely covered with tight fitting covers depending upon source. Tightly fitting mesh covers in good condition will be acceptable for approved uncontaminated materials. Imported soils will be used immediately for backfill, or stockpiled separately from excavated materials and covered to prevent dust releases, and in accordance with the SWPPP Trucks delivering materials will enter and leave the site via the stabilized entrances, and truck tires will be inspected for soils that they may have tracked from the movements on-site. All trucks existing the site will be inspected and cleaned per the provisions in the source area scopes, and the roadway outside the site will be kept clean and maintained.

Off-site soils imported for purposes of grading / balancing will be documented as having originated from locations and sources having no evidence of disposal or release of hazardous, toxic or radioactive substances, wastes or petroleum products. Off-site soils intended for use as site backfill cannot otherwise be defined as a solid waste in accordance with 6NYCRR Part 360-1.2(a). If the contractor designates any other sources for backfill other than those listed above, the source shall be further documented in writing to be native material from areas not having supported any known prior industrial or commercial development or agricultural use, and first obtain NYSDEC approval before being used at the site. Virgin soils should be subject to collection of one representative composite sample per source. The sample should be analyzed for TCL VOCs, SVOCs, pesticides, PCBs, and the TAL metals plus cyanide. The soil will be acceptable for use as backfill provided that all parameters meet the Allowable Constituent Levels for Imported Fill or Soil, provided as Appendix 5 of DER-10 (May 2010).

Dust control (and the above protocol for working within 20 ft of a property line) will be implemented during the placement and grading of all imported materials at the site.

Environmental Compliance and Contingency Plans During Grading

All grading operations will be done in accordance with the following environmental compliance and contingency plans, which are included in the RAWP and more updated NYSDEC-BCP Investigation and Remedial Design document dated September 23, 2016 (RDWP) and the Source Area Scopes of Work and the above protocol for working within 20 ft of a property line.

The Site Specific Health and Safety Plan (HASP; HES), the Earthwork contractor's HASP, OSHA HAZWOPER training certifications / documentation, Quality Assurance Project Plan (QAPP) and Community Air Monitoring Plan (CAMP) contained in the RAWP and the Source Area scopes will all be implemented during this work. Therefore, in accordance with the approved RAWP, the CAMP will be implemented to monitor air quality during all on-site intrusive work and soil moving, loading, truck cleaning, backfilling, and stockpiling activities associated with site balancing work. The "Work Area", will be a more dynamic definition in this Plan based on the location of grading activities. However, the "Work Area" for purposes of placement of the CAMP equipment will still be roughly within 20-30 feet from the grading activities for the on-site CAMP stations, with the CAMP equipment being moved and monitored during the grading activities by the HES on-site geologist / environmental scientist as required to adequately cover the portion of the Site where grading activities will be taking place. Additionally, (1) a calibrated four gas meter (%LEL, %O₂, H₂S and CO); (2) photoionization detector (PID), and (3) a flame ionization detector (FID), all three of which will be immediately adjacent to the grading work while the work is ongoing; and (4) CAMP stations, two of which will be placed downwind, and one upwind of the Work Area will be used. A fourth CAMP station will be placed outside of the Work Area between the excavation and the nearest building or receptor, and a fifth CAMP monitor is located near the Waverly School. Each area of disturbance happening at one time, either cut areas or fill areas of existing soils, will require monitoring stations.

Contingency measures, including Water and spray foam (RusFoam® OC [AC645] [see attached specifications sheet attached to the SA-2 Work Plan] or equivalent) will be available on-site should dust and/or VOC/odor control become necessary during this grading work. The spray foam was tested on January 25, 2017 to ensure contractors are familiar with application techniques. All field work will be conducted in accordance with the requirements of the HASP and all collected soil data will be validated by an independent laboratory in accordance with the requirements of the QAPP. Prior to or at the start of this work, soil erosion and sediment controls will be maintained at the site and along the site perimeter in accordance with the approved site-wide Storm Water Pollution Prevention Plan (SWPPP).

In the event that stockpiling is necessary for “cut” soils, temporary stockpile staging areas will be constructed prior to the start of excavation activities. Any source materials or materials indicating PID/FID readings above background will be segregated for testing or off-site disposal (in accordance with the Source Area scopes). Stockpiling may be utilized under the following conditions if necessary, in accordance with the RAWP. Stockpiling on-site pre-characterized soil/fill not targeted for excavation and off-site disposal and with no evidence of contamination (i.e., no evidence of source material, staining, or elevated PID / FID measurements) may take place in approved areas in approximately 50 cubic yard piles, until removed or used as backfill below the temporary cap. If stockpiling is to take place, stockpiles will be placed, graded, shaped, and covered for proper drainage. Soil materials shall be located and retained away from the edge of excavations.

Stockpiling of on-site soil/fill with evidence of contamination (staining and/or elevated PID/FID measurements) may take place in approved areas in approximately 50 cubic yard piles, until sample analysis (or off-site disposal) is completed. Stockpiles will be placed, graded, shaped, and covered for proper drainage. This will ensure effective weather proofing of potentially contaminated soil stockpiles. Materials shall be located and retained away from edge of excavations.

Stockpiles will be kept covered at all times with appropriately anchored polyethylene sheeting or tarps. Foam suppressants will be utilized based on field screening and observations, and at the direction of NYSDEC and the Village.

Stockpiles will be routinely inspected, maintained and repaired in accordance with the procedures laid out in the Source Area scopes. Soil stockpiles will be continuously encircled with a berm and/or silt fence. Approved materials imported to the site shall follow these stockpiling procedures unless discussed and approved by NYSDEC and the Village.

As of the date of this Grading scope, all SWPPP measures (excluding temporary catch basins which are part of this scope) have been installed along with truck tracking pads at both entrances to the site. Stockpiles will be inspected at a minimum once each week and after every storm event, and in accordance with the site SWPPP. Results of inspections will be recorded in a logbook and maintained at the site and available for inspection by NYSDEC.

To the extent needed, the transport vehicle tracking pad for vehicle loading operations will be used to control and contain contaminated soil and debris spillage along with a truck cleaning station if materials are encountered that cannot be reused on site. The site entrance and tracking pad detail and truck washing station description and detail are included in the SA-2 Scope document Appendix B – “Alternative to Truck Washing Station”. Any open excavations will comply with the trenching and excavation requirements of 29 CFR 1926.651 and 1926.652. During non-work hours – or when awaiting laboratory data from end-point samples prior to placement of the temporary cap – the excavation / “cut” areas will be secured and covered with either 6 mil polyethylene sheeting and/or foam as required to control dust and vapor that could emanate from the open areas. If foam is required, it will be reapplied as needed to control odors and dust. The excavations will be backfilled as soon as practicable (i.e., if any sample results are required and received and reviewed with NYSDEC and the Village, given there are no safety, odor, or other nuisances issues related to the excavation), or immediately (i.e., if odors or other nuisance issues are noted, or for any safety reasons) even if backfill material has to be removed to perform more sampling or excavation at a later time. The contractor will provide excavation protection system(s) required by ordinances, codes, laws and regulations to prevent injury to workers and to prevent damage to new and existing structures or utilities.

Unless shown or specified otherwise, protection system(s) shall be utilized under the following conditions:

- o Excavations Less Than 5 Feet Deep: Excavations in stable rock or in soil conditions where there is no potential for a cave-in may be made with vertical sides. During excavation, a covered Roll-off container will be staged on-site for encountered / excavated debris.
- o A minimum of 2 drum overpacks will be staged at the site in the event that source material (e.g., buried drums / containers, or product) is encountered.
- o Excavations More Than 5 Feet Deep (SWPPP detention basins; storm water detention systems): Excavations in stable rock may be made with vertical sides. Under all other conditions, the side walls of the excavations shall only be sloped to sufficiently provide for safe excavation. It is not anticipated that benching, shielding or shoring and bracing will be required. When not being worked on, the excavation hole will be secured with a 6 mil polyethylene sheeting and/or foam as required to control dust and vapor that could emanate from the open excavation as noted above or will be backfilled with material from on-site or off-site sources approved pursuant to a NYSDEC BUD application.
- o Debris & Wastes (non-soil): Since debris may still be encountered during the grading work even though the Source Areas have been removed, a roll-off container will be available for any debris encountered. Overpacks will also be available if a buried drum or tank is encountered. All solid wastes, such as these, will be appropriately characterized and disposed of off-site in accordance with all applicable local, State, and Federal rules and regulations. If such sources are encountered, they will be cautiously and appropriately removed in accordance with the Source Area Scopes of work.

As described above, the excavations associated with this Grading Plan can be backfilled using appropriate backfill material in accordance with the regulations and DER-10 guidance requirements or with imported backfill material that also meet these requirements and has received an approved BUD. The plan is to use as much on-site material as possible for backfill material in the source area excavations (i.e., from the on-site borrow areas that were described in the Source Area scopes). All backfill material for source areas will be derived from on-Site soils will originate from non-source area excavations on the site that will be created from the installation of two detention basins; from the two underground retention systems located in the southeast and northwest corners of the site; and from two high elevation areas located on the northern third of the site. The detention basin and retention system areas of the site are shown in the SESI Consulting Engineers (SESI) drawings Figure G-1 (Overall Grading and Utility Plan) and SE-1 (Soil Erosion Plan) and the high elevation areas (depicted in an orange-red color) on a topographic drawing, which are included as attachments.

The RAWP allows reuse of such on-Site soils for backfill provided that the soils are found to be free of odors, debris / source materials, and there are no field screening indications of source material present. Any excavation or regrading area with any potential safety issues (e.g., due to vehicle traffic, equipment near the hole) or if any nuisance conditions / excessive odors are being encountered shall be immediately backfilled with the understanding that backfill placed under these circumstances may need to be removed in order to conduct additional removal and regrading work. All grading activities will be conducted in a manner to minimize the formation of dust. Contaminated soil and debris transport containers will be covered to prevent release of dust and VOCs and exposure of the contaminated soil and debris to precipitation.

Community Air Monitoring Plan Continued During Grading Work

The CAMP as previously approved (with approved modifications, including protocols for work less than 20 feet from receptors), will be followed for all site grading work. If cutting in one area and grading in a separate area then multiple CAMP setups will be required. As with all work being performed on the Site, for the CAMP stations, if the ambient air concentration of total organic vapors (PID) at the downwind perimeter of the work

area exceeds 5 parts per million (ppm) above background for a 15-minute average, work activities will be temporarily halted and monitoring continued. If the ambient air FID readings at the downwind perimeter of the work area exceeds 5 parts per million (ppm) above background for a 15-minute average, work activities will be temporarily halted and monitoring continued. If the total organic vapor level readily decreases (per instantaneous readings) below 5 ppm over background, work activities will resume with continued monitoring. If total organic vapor levels at the downwind perimeter of the Work Area persist at levels in excess of 5 ppm over background but less than 25 ppm, work activities will be halted, the source of vapors identified, corrective actions taken to abate emissions, and monitoring continued. After these steps bring the vapor levels below 5 ppm over background for the 15-minute average, work activities will resume provided that the total organic vapor level 200 feet downwind of the work area or half the distance to the nearest potential receptor or residential/commercial structure, whichever is less remain below 5 ppm over background for the 15-minute average. If the organic vapor level is above 25 ppm at the perimeter of the work area, activities will be shut down and the area backfilled or otherwise covered with foam suppressant and plastic sheeting.

Particulate concentrations will be monitored at each of the CAMP station locations. If the downwind PM-10 particulate level is 100 micrograms per cubic meter (mcg/m³) greater than background (upwind perimeter) for the 15-minute period or if airborne dust is observed leaving the work area, then dust suppression techniques will be employed. Work will continue with dust suppression techniques provided that downwind PM-10 particulate levels do not exceed 150 mcg/m³ above the upwind level and provided that no visible dust is migrating from the work area. If, after implementation of dust suppression techniques, downwind PM-10 particulate levels are greater than 150 mcg/m³ above the upwind level, work will be stopped and re-evaluation of activities will be initiated. Work will resume provided that dust suppression measures and other controls are successful in reducing the downwind PM-10 particulate concentration to within 150 mcg/m³ of the upwind level and in preventing visible dust migration. CAMP data will continue to be reported to the NYSDEC and NYSDOH on a weekly basis with the exception of exceedances of action levels that will be reported at the time of exceedance. Additionally, daily CAMP and summary sheets will continue to be sent to the Village's environmental consultant (weekly summaries to NYSDEC and NYSDOH). The CAMP will provide air monitoring data in real-time via Environet at the site so that there is no delay in responding to VOCs or particulates that approach or exceed the action levels. The CAMP systems will be setup to notify site personnel of exceedances (or "near-exceedance levels") so the contractor can respond promptly as necessary with corrective measures if the elevated readings are caused by the excavation activities.

Health and Safety Procedures for Intrusive Activities

As with all work on the Site, Contractors engaged in subsurface excavation activities will be required to implement appropriate health and safety procedures. These procedures will involve, at a minimum, donning adequate personal protective equipment, performing appropriate air monitoring, and implementing other engineering controls, as necessary, to mitigate potential ingestion, inhalation and contact with residual constituents in the soils. A site-specific, activity-specific Health and Safety Plan (HASP) has been prepared for the site by the Construction Contractor (Contractor) and has taken into account the RI and pre-characterization sampling results for soil and soil gas. All required on-site construction and technical personnel who are required to be OSHA 40-hour HAZWOPER training and 10-hour OSHA Construction training will maintain up to date training. An OSHA Competent Person in accordance with 29CFR-1926 will be on-site and responsible for excavation safety.

There will be regular data logging and special inspections documenting the work completed under this scope, with information presented on the Monthly Progress Reports prepared for NYSDEC review.



Please feel free to contact me should there be any questions about the Grading Scope of Work. I can be reached at 716-240-9177.

Sincerely
Peak Construction Group, LLC

A handwritten signature in blue ink, appearing to read "Lee Crewson", with a long horizontal flourish extending to the right.

Lee Crewson
Principal

Attachments:

1. Grading plan by SESI (pages G-1, G-1A and G-1B)
2. Remedial Action Work Plan - Fig 5A - July 2016
3. Siteworks Grade Elevation Plan

Cc: Mr. Bill Weinberg – Bilwin Development Affiliates, LLC
Linda Shaw, Esq – Knauf Shaw, LLP
Mr. Mike Musso, PE, HDR – Village Environmental Consultant

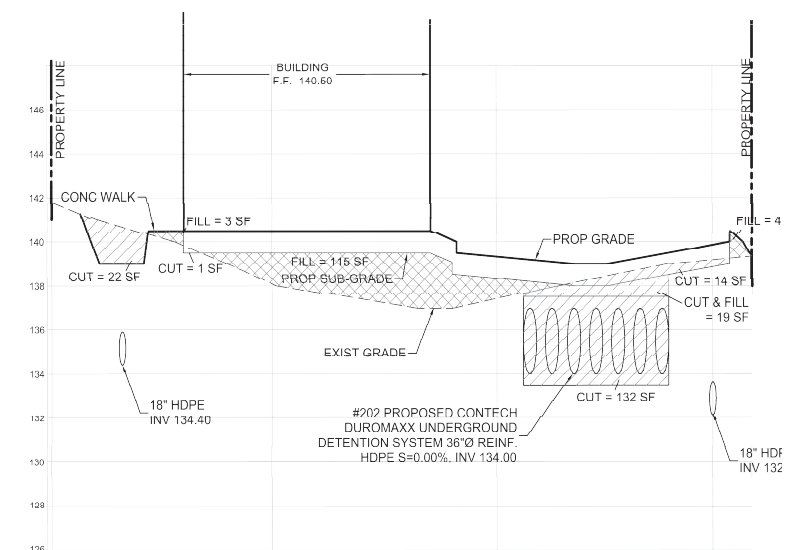
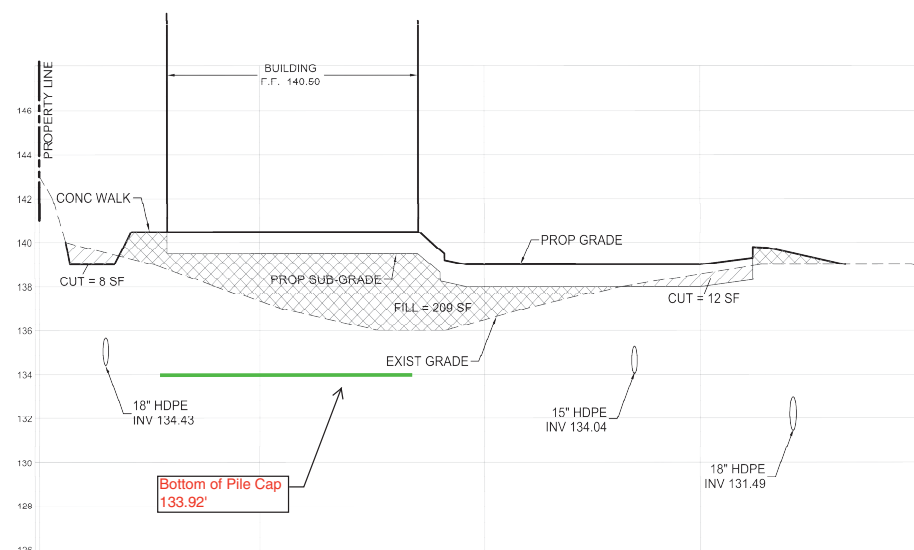
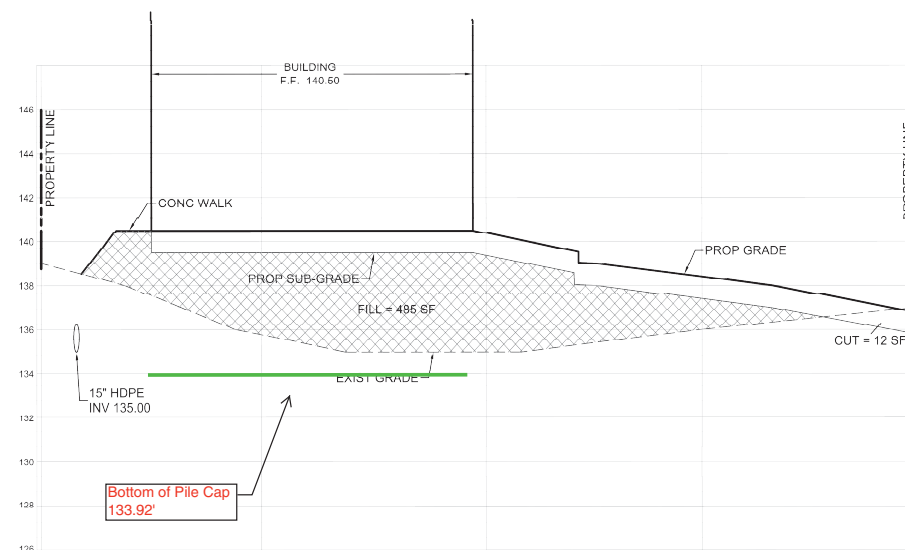
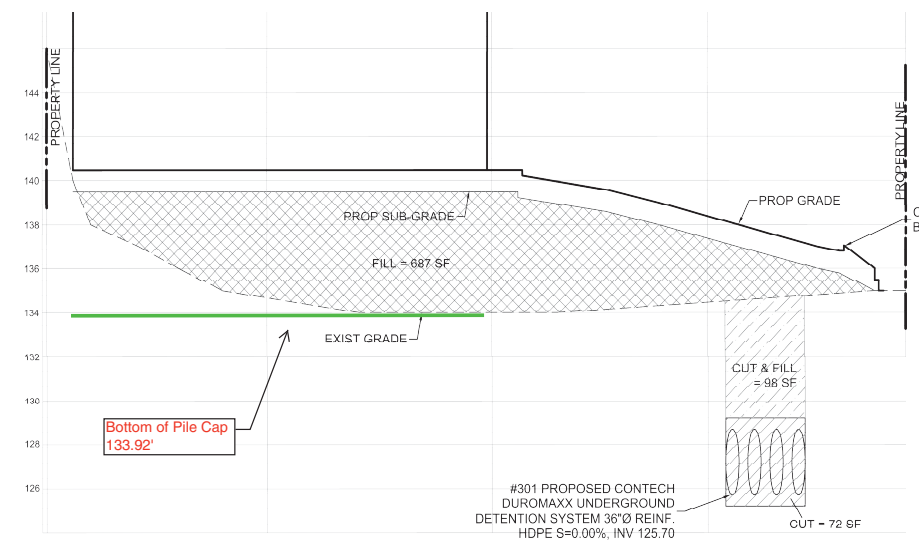
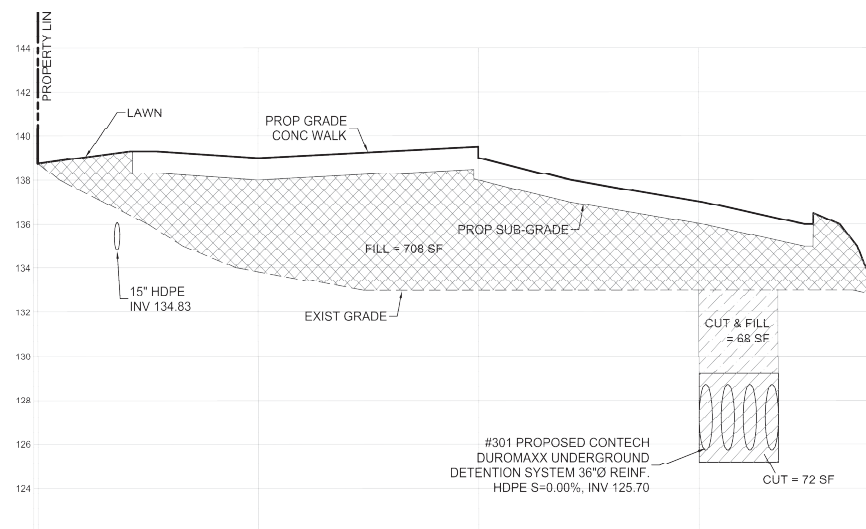
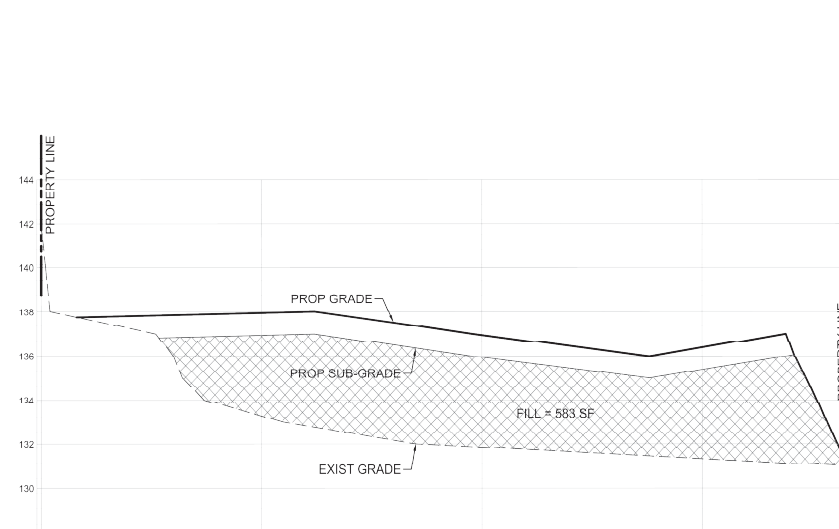


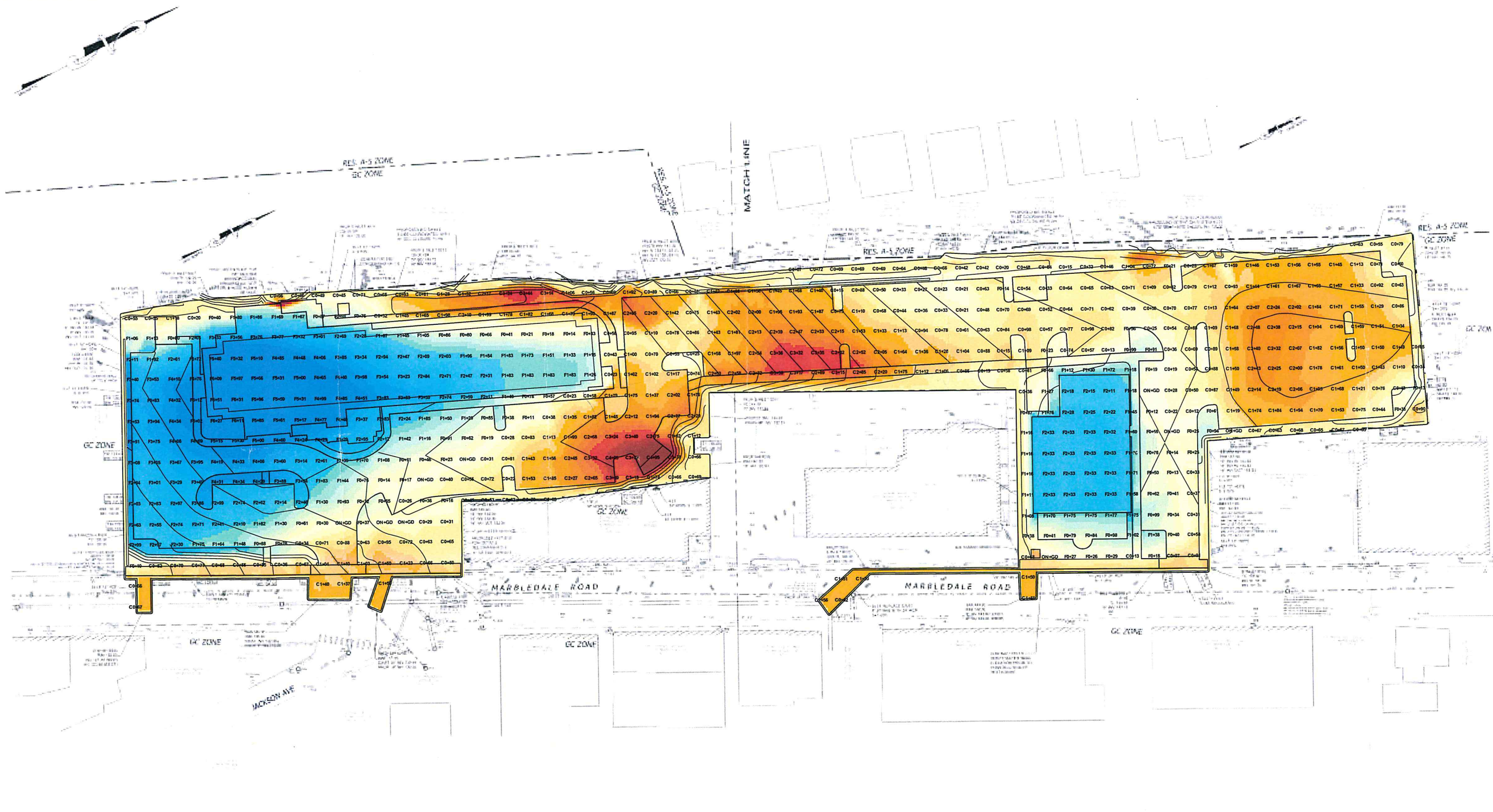
FIGURE ADAPTED FROM PLAN BY SESI CONSULTING ENGINEERS, PC.

109-125 MARBLEDALE ROAD
TUCKAHOE, NEW YORK

CROSS SECTION DETAILS
OF PROPOSED CUT AND
FILL AREA

FIGURE 5A





LEGEND

PROPOSED CURB	W	PROPOSED WATER SERVICE
EXISTING EDGE OF PAVEMENT	W	EXISTING WATER MAIN
PROPERTY LINE	GAZ	PROPOSED GAS SERVICE
EXISTING CONTOUR		PROPOSED E INLET
PROPOSED CONTOUR		PROPOSED MANHOLE
EXISTING SPOT ELEVATION		EXISTING MANHOLE
PROPOSED SPOT ELEVATION		PROPOSED CONC. FLATWORK