CONSTRUCTION COMPLETION REPORT

BMS Syracuse Facility
B25/25N Demolition

Bristol-Myers Squibb Company
East Syracuse, NY

July 2019

OBG
Part of Ramboll

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1.0 BACKGROUND AND SITE DESCRIPTION

The Bristol-Myers Squibb (BMS) Syracuse facility is a 90-acre facility located at 6000 Thompson Road in the Village of East Syracuse, Town of Dewitt, Onondaga County, New York. Approximately 23.8 acres of the facility were entered into the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) as site C734138, which is referred to as the BMS Syracuse North Campus Restoration Area (the BCP site). BMS entered into a Brownfield Cleanup Agreement (BCA) for the BCP site with the NYSDEC on October 18, 2011.

The BMS Syracuse facility was used for the manufacture and packaging of antibiotic pharmaceuticals, including penicillin (PEN) and cephalosporin antibiotics, from the 1940s until 2007, as well as other activities. Buildings in which PEN production occurred cannot be used for other pharmaceutical production without completing and thoroughly documenting expensive and difficult PEN decontamination procedures required by the Food and Drug Administration (FDA). As a result, the BMS Syracuse Facility Transformation Project (Transformation Project) was implemented with the purpose of removing idle equipment, demolishing the vacant obsolete manufacturing buildings, and transforming the BMS Syracuse facility in to a "penicillin-free" biopharmaceutical campus. Many of the buildings and areas affected by the Transformation Project were within the BCP site boundary. When this project was completed in 2013, B25/25N remained. The B25/25N Demolition Project (the Project) was undertaken to remove this idle building.

The purpose of this report is to document the remedial actions that were taken as part of the B25/25N Demolition Project. This report documents work completed between January and November 2018 and does not include actions conducted before or since that date. Those actions will be documented in the final closure report for the BCA or other appropriate reports.

Figure 1-1 depicts the BMS Syracuse facility, the BDA boundary, and the buildings demolished as part of the Project.

1.1 PROJECT OVERVIEW

Buildings 25 and 25N are two buildings that stood west of the Building 23 complex. These buildings were used in several ways for the development and production of Potent Compounds Small Molecule Manufacturing.

Building 25

This structure was to the south of B25N and was constructed in the late 1960s. It was used as a pilot plant and for commercial manufacturing of potent compound API small molecule pharmaceuticals. The building contained stainless steel vessels and process equipment. This building had bulk chemical piping that was verified as drained as part of this project prior to demolition.

Building 25N

This structure stood to the north of B25 and was constructed in the mid 1990's. It was used as a potent compound API small molecule pilot plant & commercial manufacturing space. The building contained stainless steel vessels and process equipment. This building had bulk chemical piping that was verified as drained as part of this project prior to demolition.

The Project included the following general activities:

- Look-Verify-Label (LVL) activity to confirm process chemicals were removed from tanks and piping prior to demolition,
- Abatement of known hazardous materials,
- Demolition of the above-grade structures of B25 and B25N, including removal of interior utilities, tanks and other related materials
- Demolition of the pipe rack that ran west of B22A and south of B25
- Re-routing of associated overhead utilities still in use by the facility

- Cut and cap of site subsurface utilities (fire water, stormwater, tower and chilled water, gas) as needed to demolish designated buildings
- Site restoration required to stabilize the areas involved for stormwater drainage requirements along with repaving/recurbing of areas immediately east of the demolition area.
- Removal of the roadway and parking lot north and west of the buildings

The Project work began in January 2018 and the work was substantially completed on November 15, 2108. The Project was expanded in the summer of 2018 included activities that were located outside the boundaries of the BCP site, most notably the demolition of Building 7, which are not included in this report.

2.0 REMEDIAL ACTION OBJECTIVES

The Site will remain in control of BMS and be used as open space or potentially occupied by future buildings. NYSDEC's DER-10 specifies that NYSDEC's generic Remedial Action Objectives (RAOs) be used where applicable for Site media. Applicable general RAOs used for the Project are presented below for soil and groundwater at the Site. Final RAOs for the site will be developed as part of the remedial program that is currently being completed as part of the BDA.

Soil
Appropriate management of impacted materials requiring removal during completion of the Project activities.

Water
Prevent direct discharge of water generated during the Project activities through site outfalls.

2.1 DESCRIPTION OF THE PROJECT ACTIVITIES

The Project activities were primarily involved removal of above-grade structures and process equipment. Prior to start of the demolition activities, a hazardous materials survey and LVL was completed on the structures. This survey identified tanks, piping and containers of chemicals as well as items that would need to be handled as universal or solid waste. A document summarizing the survey findings was provided to BMS and was used by the abatement contractor prior to building demolition. A copy of this document is included with Attachment 1. These materials were subsequently removed and recycled or disposed of off-site. Documentation of this is included in Attachment 8.

Additional materials including asbestos, PCB-containing caulk and hydraulic oils were identified and removed in accordance with applicable regulations. The procedures for management of these materials are identified in the Waste Management Plan included as Attachment 1-5.

Subsurface excavation was limited to locations of utilities that were capped or rerouted and in some instances removal/cracking of slabs associated with process equipment. Contaminants encountered during the Project were located in relatively shallow areas, within utility corridors, under slabs or from process equipment. The objectives of the remedial actions were to permit the completion of the Project, and not to remove the full extent of the impacted materials. If encountered, impacted materials in the immediate area of the work were removed as appropriate, and the area noted (detailed in Project Logs in Attachment 4) with the intention that BMS would address, or further delineate, any remaining impacted materials later as part of the overall site remedial program for the BDA. Additional remediation objectives for specific areas are described in Section 3.1 Response Actions.

Following completion of the activities detailed in Section 1.1 above, the area was restored as an open area and was seeded, except for an area in the middle of the site that was left for further study and remediation, as described in Section 3.1.3 below.

3.0 RESPONSE ACTIONS AND AREAS OF CONCERN

3.1 RESPONSE ACTIONS

Response actions are defined for this document as areas where impacted soil, requiring additional actions that were beyond the scope of the Project as designed, were identified. These actions were in response to four types of material as follows:

3.1.1 Purple Dirt (Event 8)

Historically, areas of purple-colored dirt and rocks were observed in various areas of the BDA. Two potential sources of the purple staining were identified by BMS:

1) A purple dye (described as gentian violet, crystal violet or methyl violet) was used as an indicator color in a methanol-acetone solution used for temperature control systems;

2) There are reports that dimethylaniline used in the splitting/extraction process for 6-APA and 7-ACA production would exhibit a purple color when it contacted air and soil. A potential mechanism for this reaction was described by B.K.G. Theng in a paper entitled “Mechanisms of Formation of Colored Clay-Organic Complexes. A Review” (Clay and Clay Minerals, 1971, Vol. 19, pp 383-390).

To better characterize the nature of the "purple dirt," BMS collected and analyzed several samples of purple-colored soil from an excavation between Buildings 6 and 32 at the time of the Transformation Project. Based on the results of these analyses, no hazardous substances were identified in the "purple dirt" samples, and the purple color did not leach from the soil. A copy of the report summarizing the results of the analyses is in the Transformation Project Closure Report of 2018 and in Attachment 2 of this document.

While the existence of the purple color does indicate a historical release, it cannot be known if the release was significant or if any residual of the release other than the purple color remains. Gentian violet nor its breakdown products are listed or characterized as hazardous wastes. Based on data obtained during the subsequent remedial investigation, it appears analine is likely a breakdown product of n,n-dimethylanaline (n,n-DMA). DMA and aniline are included in the list of hazardous substances in 6 NYCRR 597.

Purple dirt was discovered at two separate locations during the Project. On August 14, 2018 while breaking up and removing the building slab in the western footprint of B25, Gorick Construction (the excavation subcontractor) observed purple-colored rocks directly below the concrete. On September 12, 2018, while exposing the “roof” of the tunnel that connected B25 and the former B24, Gorick observed purple-colored rocks and stained soil in contact with the concrete. On both occasions the purple-colored rocks and dirt were excavated, placed on plastic sheeting in the B61 parking lot and covered with plastic. At the end of the Project, this material was placed in a roll-off provided by BMS and shipped off site to an appropriate waste facility. Documentation pertaining to disposal can be found in Attachment 8-2. No documentation of any testing on this material was provided to OBG.

3.1.2 Elevator Oil

The elevator located in the southwest corner of B25 contained a pit which was not accessible for inspection during the hazardous waste removal phase prior to demolition. The pit contained a small amount of oil that subsequently leached out into the surrounding soil. Soil that contained oil based on visual inspection was removed and placed with the purple-colored dirt discussed in 3.1.1. At the end of the Project, this material was placed in a roll-off provided by BMS and shipped off site to an appropriate waste facility. Documentation pertaining to disposal can be found in Attachment 8-2. No documentation of any testing on this material was provided to OBG.

3.1.3 Underslab at B25 Pit (Event 11)

On September 6, 2018, under the direction of Arcadis, Gorick proceeded with the underslab investigation of the pit area east of B25. This was an area of concern for BMS, due to known leaks of process chemicals that occurred

historically in this building, and based on soil and groundwater sampling during Phase 1 of the BCA Remedial Investigation. As the slab was cracked and lifted, black-stained fill and liquid were observed along with an amine odor. Work was immediately halted and the excavated spoils were covered. The backhoe bucket was rinsed with city water which was allowed to drain into the excavation prior to removal from the work area. Arcadis personnel who were observing the activities monitored the area and recorded a headspace reading of 0.7ppm. BMS immediately notified the DEC Project Manager who visited the site the next day. Samples of the discolored soil were submitted for waste characterization analysis. The results of the analysis showed that the soil was non-hazardous. The liquid material was removed by Clean Harbors, and the solid material was placed in the roll-off supplied by BMS and disposed of with the purple-colored dirt and oil-contaminated dirt at an appropriate disposal facility. Documentation can be found in Attachment 8-2.

The Project was allowed to continue around the area of this pit while BMS determined a path forward for the area. At the end of the Project, the pit area was left open and uncovered for a subsequent environmental project to either address the contaminants or temporarily secure and cover the area until the final site remediation. Any further action in this area will be documented in a separate report to be provided by BMS.

3.1.4 Sytherm-XLT Release to Stormwater (Event 5)

On July 13, 2018, BMS personnel observed a sheen at stormwater Outfall 007 (Ley Creek). Because the watershed for this outfall included the Project area, demolition wetting activities were immediately halted to look for a possible source. Cursory investigation by OBG and Gorick personnel did not identify any noticeable discharge from the Project area. Based on more detailed investigation by BMS personnel, it was determined that equipment from B25N which contained residual Syltherm-XLT[1] was placed on bare ground where it was contacted by wetting activities and rainfall allowing the Syltherm to wash to the storm sewer catch basins which were only protected with silt filters. BMS contracted Clean Harbors Environmental Services to recover the material from Ley Creek and the impacted catch basins.

To prevent recurrence the following actions were taken.

1) For the duration of the Project, all stormwater collected from the Project area was captured in a catch basin upstream of Outfall 007 and directed to the BMS wastewater pretreatment plant
2) Oil-only absorbent booms were placed in several stormwater catch basins between the Project area and Outfall 007.
3) Gorick was advised to decrease the volume of water applied to the building during demolition; only a light mist should be applied to mitigate dust.

In addition to the Syltherm release to stormwater, two fires (July 18 and July 31, 2018) occurred in the Building 25N structure when sparks from mechanical action ignited Syltherm which had dripped during equipment removal. To prevent recurrence, the following additional measures were instituted to ensure all heat exchangers were 1) identified before removal from the building, 2) removed to a containment pad, 3) drained and residual Syltherm allowed to evaporate, 4) cut apart by personnel on the ground, and 5) placed in trucks with other scrap material to be sent for recycling. The residual Syltherm from the heat exchangers was collected by Abscope and disposed of by BMS.

[1] Syltherm-XLT (polydimethylsiloxane) is a high performance silicone polymer designed for use as a low temperature, liquid phase heat transfer medium. It offers low temperature heat transfer and pumpability, plus thermal stability. It is considered a “Hazardous Chemical” as defined by the OSHA Hazard Communication Standard, 29CFR 1910.1200. The liquid and vapor are combustible, extinguished with water fog or fine spray. It may be harmful if inhaled. It should be prevented from entering into soil, ditches, sewers, waterways and groundwater, although it is non-toxic to aquatic organisms and birds. There are no established exposure limits.

3.2 AREAS OF CONCERN

A Waste Handling Plan (WHP) was prepared as part of the Project. This plan identified general procedures for management of materials encountered during completion of the program. In addition to specific information pertaining to previously identified waste materials, the WHP (Attachment 1-5) included a process for the assessment of unknown wastes that might be encountered during demolition. This assessment process includes three steps as follows: 1) Notification, 2) Initial Response, and 3) Waste Characterization.

3.2.1 Hazardous Wastes

A Waste Survey was conducted within both buildings as part of the Project design activities. The result of this survey was a compilation of materials within each building organized by floor, and in some instance by room, in which they were located. The materials were categorized as Solid Waste, Universal Waste and/or Potentially Hazardous Waste. A copy of the list is included in Attachment 1.

Hazardous wastes are those defined in 6 NYCRR part 371 as meeting one or more of the following:

1. The waste exhibits any of the four characteristics of a hazardous waste: ignitability, corrosivity, reactivity, or toxicity.
2. The waste is a listed hazardous waste in Part 371.
3. The waste is a mixture of a listed hazardous waste and a non-hazardous waste.
4. Solid wastes containing 50 parts per million (ppm) by weight (on a dry weight basis for other than liquid wastes) or greater of polychlorinated biphenyls (PCBs)

The following types of hazardous wastes were managed during the process:

- Containerized Material, including laboratory reagent bottles, drums and process vessels.
- Residues contained in vessels pipes, sumps and pits.

Tables summarizing the materials removed from the site are included as Tables 3-1A, B and C, including the date of shipment, manifest or Bill of Lading number, disposal facility and the type and volume of waste. Included in this listing are small shipments of hazardous waste such as fluorescent lamps, lead, etc. that were containerized and combined with other site waste, as appropriate.

3.2.2 Tanks

Multiple bulk storage tanks, including NYSDEC regulated hazardous material bulk storage tanks, process tanks and vessels were removed during the Project. There was no list supplied by BMS to the project, as all tanks and vessels were interior to the buildings. All tanks and vessels had been drained and cleaned by BMS prior to initiation of the Project. The removal process included verification that the tanks were empty and cleaned, followed by disassembly, removal and disposal at a BMS-approved scrap metal facility. Disposal of scrap metal is documented in salvage tickets, included in Attachment 8-5.

3.2.3 Pipe Racks, Pipe Chases and Tunnels

A variety of structures were previously used by BMS as part of their operations to provide chemical and utility transfer pathways throughout the site, including:

- overhead pipe racks,
- tunnels, and
- below-grade concrete chases

The following substances and chemicals were transferred through these structures:

- steam and condensate
- acids and caustics (including, but not limited to, sulfuric acid, acetic acid, sodium hydroxide)

- ethylene glycol for heat transfer
- solvents (including, but not limited to, acetone, butyl acetate, methanol, methylene chloride, acetonitrile, toluene)
- ammonium hydroxide and
- waste solvent

These pipes were drained of contents by BMS prior to starting the Project. Contractors physically verified the lines were empty prior to removal. Where necessary, Asbestos Containing Material (ACM) was removed prior to dismantling. The overhead pipe racks and associated utility lines were dismantled and disposed of off-site as scrap metal where possible. The remaining materials were disposed of as Construction and Demolition (C&D) debris, ACM waste, or solid waste. Details pertaining to the scope of the overhead pipe rack demolition is provided in Attachment 1-15.

Subsurface pipe chase (tunnel)

Utility lines and chemical transfer pipes were also located within a pipe chase (tunnel) connecting Buildings 24 and 25/25N. This tunnel was constructed of concrete and was large enough to walk through. Due to the presence of an underground fire-water line traversing through this tunnel, the tunnel could not be completely demolished as part of the Project. The cover of the tunnel was removed and utility and process piping were removed from the tunnel. The walls and floor were retained intact. After the fire line was stabilized with flowable fill, the tunnel was backfilled.

Sanitary and storm sewers were cut and capped as indicated in the record drawings of the contract documents (C-Y-102, in Figure 4.1). For manholes being taken out of service, without direct lines to buildings, the manholes were filled directly with controlled low-strength material (flowable fill). For manholes remaining in service, plugging and grouting of abandoned piping was done per the contract documents. Additionally, piping (tower water, chilled water and fire water) over 4-inches in diameter that was abandoned in place was filled with flowable fill to protect the existing sewer forcemain and to prevent conduits for sub-grade material transfer.

3.3 REMEDIAL CONTRACTS

In addition to activities presented above, BMS remedial contracts included material removal by Clean Harbors Environmental Services (waste water from the pit east of B25 and purple dirt). This contract was managed separately by BMS. An excavation was performed on site by Syracuse Utilities associated with the cutting and capping of the chilled water lines which supplied Buildings 22/22A. Spoils generated by Syracuse Utilities were returned to the excavation. This contract was outside of the Project scope of work.

4.0 DESCRIPTION OF REMEDIAL ACTIONS PERFORMED

The primary remedial action performed was removal of contaminated materials encountered during the Project. Remedial activities conducted during the Project were conducted in accordance with the Soil Management Contingency Plan (SMCP; O'Brien & Gere, February 2012) as approved by NYSDEC. A copy of this document is included as Attachment 1-13.

4.1 GOVERNING DOCUMENTS

Elements of the SMCP were implemented in coordination with procedures and requirements established by the following documents:

4.1.1 Site Specific Health & Safety Plan (HASP)

Health and safety procedures associated with the Project were outlined in several documents. The BMS Syracuse Facilities Transformation Project EHS Work Plan (BMS, August 2010, in Attachment 1) document outlined facility-specific requirements and procedures to be followed and was organized into five sections:

- General Project Protocols
- General EHS Requirements
- Safety Specific Protocols
- Health Specific Protocols
- Environmental Specific Protocols

The document outlined pre-work notification and permit requirements, emergency notification and reporting obligations as well as the minimum expectation for health and safety precautions for on-site contractors.

To supplement the BMS EHS document, subcontractors provided company-specific health and safety plans that identified task-specific hazards and procedures to follow during implementation of specific tasks associated with the Project for the protection of employees and other personnel. Plans that were developed for this purpose are as follows:

- Health and Safety Plan (HASP) Bristol-Myers Squibb B25 Demolition Project, OBG. (March 29, 2018)
- Health & Safety Manual (Gorick Construction Company, Rev 09/19/2107)
- Demolition Plan for Buildings 25 and 25N, Bristol Myers Squibb Facility, Syracuse, New York (April 4, 2018)

These documents can be found in Attachment 3.

4.2 SOIL/MATERIAL MANAGEMENT

Soil and materials management for the Project were outlined in the SMCP. A general overview of the procedures follows. More detailed information is presented in the SMCP included as Attachment 1-13.

4.2.1 Planning/Scheduling

As outlined in the SMCP, an excavation planning process was used to manage the activities associated with excavations at the site. Step 1 of the process was completion and approval of the BMS Excavation Permit, which was required for all subgrade excavations. The permit was initiated by the contractor and reviewed by BMS engineering and EHS personnel prior to approval. Step 2 involved scheduling of the activity with the construction team as part of a 3-week look-ahead process. As appropriate, this schedule was provided to NYSDEC BDA Case Manager as part of the notification process for ground-intrusive activities.

The BMS Excavation Permit process provided the mechanism for tracking subsurface activities conducted as part of the Project. Table 4-1 is a summary of the excavation permits issued for areas located within Brownfield Development Area (BDA) by the Project.

4.2.2 Soil Management

Each excavation was monitored for the presence of discoloration, odors, or other indicators that were representative of potential contamination. Soil management was subsequently based on whether the soils were suspected to be contaminated as follows:

Soils Not Suspected to be Contaminated

Excavated soils that did not exhibit odors, discoloration, or other indicators suggesting contamination were available for reuse. The excavated soils were placed back within the footprint of the excavation, when possible, or they were stockpiled for later reuse in association with the Project. Stockpiling occurred within the BDA. This material was stockpiled separately from imported fill and other soil excavated during the Project that was suspected to be contaminated. These soils were not analyzed prior to reuse.

Soils Suspected to be Contaminated

When excavations encountered soils that were suspected to contain contamination based on observations of discoloration, odors or other indicators, work in that area ceased, BMS EHS was notified, and the impacted area of the excavation was protected as outlined in the SMCP. A Project Log was initiated to document the location and field observations. Copies of the Project Logs are included as Attachment 4. Table 4-2 summarizes the instances where impacted soil was encountered within the BDA and relevant activities associated with the discovery as identified in the project log.

As illustrated on Table 4-2, there were four instances where suspected impacted materials were encountered that required removal of material as follows:

Purple Dirt – Refer to Section 3.1.1, above, for the Purple Dirt discussion. Additional information is included in Attachment 2.

Elevator oil – Refer to Section 3.1.2 above.

Black dirt in the pit area east of B25. – Refer to Section 3.1.3 above.

Syltherm-XLT – Refer to Section 3.1.4 above.

Reused Fill Materials

In addition to the imported materials identified in Section 4.5 below, crushed demolition debris, including concrete, from the on-site buildings was used for backfill. This included demolition debris from Building 7, which was adjacent to but outside the boundaries of the BDA. NYSDEC approved (July 23, 2018 email from Joshua Cook to Anne Locke) reuse of the material from Building 7 demolition as deep fill at Building 25. This material was temporarily stockpiled within the Project area.

There was no excess soil or concrete that was removed during project activities.

Imported Fill Materials

Figure 4-3 shows the locations where the imported soil and fill materials were placed within the BDA. See Section 4.5 below for a discussion of imported fill materials.

4.2.3 Excavated Soil Characterization and Disposal

Excavated soils suspected to be contaminated were stockpiled at a separate location on the BDA pending characterization and off-site disposal. Once moved from the point of initial placement during excavation, the soils suspected to be contaminated were placed on, and covered by, plastic sheeting to minimize contact with underlying soil and precipitation and the generation of fugitive vapors or odors. The stockpile area(s) were surrounded by a

berm constructed using wood or containment barriers placed beneath the plastic underlayment. The small amount of soil determined to be contaminated and stockpiled were later placed in a roll-off and disposed of by BMS.

Soil disposed offsite was associated with the impacted material removals discussed in Section 4.2.2 and summarized on Table 4-2.

4.2.4 Excavation Dewatering

As outlined in the SMCP and in accordance with the Onondaga County Department Water Environment Protection (OCDWEP) permit, groundwater generated through dewatering of excavations was directed to the BMS Wastewater Pretreatment Plant (WWpTP) for treatment after being directed through silt socks. Groundwater that flowed into the B25 pit area was removed by Clean Harbors, as described in Section 3.1.3. This pit was left open at the end of the Project.

4.2.5 Restoration of Excavated Areas

Restoration of individual excavation areas was in accordance with the Project specifications and design drawings. In general, most excavations within the area were backfilled with the material removed or structural fill. There were no areas which required extensive soil removal due to suspected contaminated soils.

4.2.6 Stormwater Pollution Prevention Plan (SWPPP)

Erosion and sediment controls for the Project were performed in accordance with a Stormwater Pollution Prevention Plan (SWPPP) prepared by OBG (Stormwater Pollution Prevention Plan, Buildings 25/25N and 7 Demolition Project, May 24, 2018). The SWPPP describes temporary and permanent erosion and sediment control (ESC) measures to be implemented. In addition, NYSDEC acknowledged the Notice of Intent from BMS for coverage under General Permit No. GP-0-15-002 of construction-related activities associated with the Project (permit number NYR 20A348). A copy of the SWPPP is provided in Attachment 10. The SWPPP procedures were followed through completion of final surface restoration. The ESC structures were inspected on a weekly basis and the inspections were documented in SWPPP Inspection Summaries. The final inspection was not conducted as of the filing of this report. The SWPPP will be complete upon 80% stabilization of the area. Copies of the SWPPP Inspection Summaries are included in Attachment 10.

4.2.7 Community Air Monitoring Plan (CAMP)

An updated Community Air Monitoring Plan (CAMP) (RIWP CAMP 1-15-2103) was developed and included in the project documents (Attachment 1-8) to provide requirements for monitoring of air quality to document that unacceptable levels of volatile organic compounds (VOC) and/or particulates that might be generated during implementation of the work associated with the Project did not leave the BDA. The CAMP was implemented whenever ground-intrusive activities occurred within the BDA. There were no BDA excavations during this project time frame that were not accompanied by CAMP monitoring. Additional monitoring with a Flame Ionization Detector (FID) was required in the vicinity of B25 due to the suspected presence of acetonitrile.

In accordance with the CAMP, action levels were based on 15-minute time-weighted averages and compared the downwind to upwind concentrations. The specific action levels that required response action were 5 ppm for VOCs, 100 µg/m^3 (control dust) or 150 µg/m^3 (stop work) for particulates. If FID readings exceeded background by more than 25 ppm in the breathing zone, the FID was to be moved to a downwind monitoring location and used to monitor ambient air concentrations for 15 minutes.

Table 4-3 summarizes the CAMP results for the ground-intrusive activities conducted within the BDA. As illustrated on this table, there were no exceedances of the action levels for VOC, particulates, or FID findings. The daily logs for CAMP monitoring are included in Attachment 10.

4.2.8 Community Participation Plan

A Citizen Participation Plan (CPP) for the BMS North Campus Restoration Area was submitted to NYSDEC on November 30, 2011. This document provided an overview of the BDA and the Site and described opportunities for citizen participation during the execution of the BDA activities at the site, in addition to providing contact information for the regulatory agencies. A copy of the document was placed in the East Syracuse Library which was identified as the public repository for this project, and is included in this report in Attachment 6.

A fact sheet announcing the availability of the Draft Remedial Investigation Work Plan for public review and comment was distributed in January 2013. This was the first public participation activity identified in the CPP. A copy of this fact sheet is included in Attachment 7. This followed the first Fact Sheet announcing the Building Demolition Project, in August of 2012, included in Attachment 6.

4.3 REMEDIAL PROGRAM ELEMENTS

The Project was completed in accordance with the design documents prepared by O'Brien & Gere Engineers, dated April 2017 and included in Attachment 1. The following presents some of the elements of the implementation of the project:

4.3.1 Contractors and Consultants

Primary contractors and consultants that conducted activities associated with the Project and their roles are provided below:

- Project Management – BMS/O'Brien & Gere Engineers, Inc.
- Design Management – O'Brien & Gere Engineers, Inc.,
- Construction Management –Gorick Construction Company.

A list of all subcontractors and sub-consultants that worked on the project is provided as Table 4-4.

4.3.2 General Site Controls

The BMS site is fenced, with access controlled by a series of gates that are either manned or controlled by electronic badges. Access to the site for personnel involved with the Project was generally through a gate located on the north end of the site. Contractors were required to sign in and out at the field trailer or north guard shack on a daily basis.

4.3.3 Monitoring Well Abandonment

There were no monitoring wells that were abandoned during this project, though there were several active monitoring wells in the vicinity of the demolition.

4.3.4 Nuisance controls

A dust control plan was prepared for the program that required the use of water and other housekeeping practices to minimize the generation of dust during the Project, and is part of the Gorick Demolition Plan (Attachment 1). Gorick was responsible for implementing the plan. The plan identified activities that had the potential to produce dust and procedures to minimize fugitive dust emissions. These procedures generally consisted of minimizing vehicular traffic over unpaved areas and wetting of exposed soil and debris before and after certain activities. Additional efforts to minimize tracking of materials onto public roadways included requiring trucks leaving the site to cover loads with tarps and washing of truck tires before leaving the site when necessary. Dust control during actual building demolition was achieved with the use of misters, hoses and water cannons, with any runoff water directed to the appropriate catch basins and inlets.

4.3.5 CAMP Results

As discussed in Section 4.2.7, CAMP monitoring information is summarized on Table 4-3. Daily reports associated with the CAMP are included in Attachment 5.

4.4 CONTAMINATED MATERIALS REMOVAL

4.4.1 Contaminated Soil

Contaminated soil identified during the Project was associated with the occurrences recorded on the Project Log as provided on the Project Log Summary Table (Table 4-2). These materials were managed separately from other excavated materials and ultimately disposed of off-site. The disposal facility is listed on Table 4-2. Documentation of shipping is provided in Attachment 8.

4.4.2 Other Materials

C&D material and excavated soil that were deemed unsuitable for reuse in the BDA were disposed off-site as non-hazardous waste. C&D debris that was deemed unsuitable for backfill was disposed of at Ontario Landfill.

Other waste generated during the Project consisted of ACM, universal waste materials and unused chemicals. A summary of these materials is provided in Tables 3-1A, B and C. Bills of lading and manifests associated with these materials are included in Attachment 8.

4.5 IMPORTED BACKFILL

Backfill used for localized excavation and site restoration included typical processed rock materials as well as soil and topsoil from off-site sources. The SMCP defined a process for the use of imported materials at the site. The process was consistent with that defined in NYSDEC DER-10 (NYSDEC, 2010) and included documentation of the source and the absence of constituents of concern. Consistent with this process, imported materials were obtained from four sources for use in the restoration of surfaces following completion of the demolition and removals. Table 4-5 summarizes the imported fill and includes the type, volume and source of material, approximate location where it was used, in addition to the type of testing completed. Supporting information including test results is included as Attachment 9.

Processed gravel materials, topsoil, and other soil/fill material was imported from the following locations:

- Brickyard Road Mine, VanBuren, NY (topsoil, shale)
- Syracuse Sand & Gravel's Madison Mine (stone)
- 7700 Northern Boulevard, Syracuse (topsoil)
- Panther Lake Mine, Constantia Center (drainage fill)

4.6 CONTAMINATION REMAINING AT THE SITE

Contamination remaining at the site will be addressed through future Remedial Actions being conducted as part of the NYSDEC BCA.

4.7 SOIL COVER SYSTEM

Figure 4-1 provides the as-builts of the Project. The surface of the site is primarily covered with seeded topsoil, with repair to road paving and curbing along the east side of the Project area. NYSDEC-approved imported backfill was placed in an 8-inch layer, and topsoil was placed in a 4-inch layer on top of that, with a demarcation layer placed beneath the 12-inches of surface materials. The only area remaining uncovered at the completion of the project was the B25 pit area that was to be addressed after the completion of this project.

4.8 OTHER ENGINEERING CONTROLS

There were no other engineering controls installed by this project.

4.9 INSTITUTIONAL CONTROLS

The BDA occupies a portion of the BMS Syracuse Campus. It is surrounded by fencing and accessed through gates occupied by guards or secured by electronic key pads. Public access is not available to the site. The site surfaces will continue to be maintained by landscaping and personnel contracted by BMS. BMS has an Excavation Permit process in place for any subsurface work that is completed on the campus. Additional institutional controls (including deed restrictions) may be implemented at the conclusion of the BCA Remedial Activities.

DISPOSAL RECORDS

Line	Truck License Plate	Vendor	Soils/Concrete/ Origin Area	Material	Transported to Landfill	Landfill Destination	Weight (lb)	Manifest #	Net Tons
1	RIC 532	Gorick/Riccelli	B25/25N	C&D	9/5/2018	Seneca Meadows	78860	10001	39.43
2	RIC508	Gorick/Riccelli	B25/25N	C&D	9/5/2018	Seneca Meadows	78380	10002	39.19
3	RIC 532	Gorick/Riccelli	B25/25N	C&D	9/5/2018	Seneca Meadows	61680	10003	30.84
4	RIC508	Gorick/Riccelli	B25/25N	C&D	9/5/2018	Seneca Meadows	75340	10006	37.67
5	RIC 532	Gorick/Riccelli	B25/25N	C&D	9/6/2018	Seneca Meadows	70180	10009	35.09
6	RIC508	Gorick/Riccelli	B25/25N	C&D	9/6/2018	Seneca Meadows	75080	10010	35.47
7	RIC508	Gorick/Riccelli	B25/25N	C&D	9/6/2018	Seneca Meadows	74220	10013	37.11
8	RIC532	Gorick/Riccelli	B25/25N	C&D	9/7/2018	Seneca Meadows	64660	10016	32.22
9	RIC508	Gorick/Riccelli	B25/25N	C&D	9/7/2018	Seneca Meadows	72940	10017	36.47
10	RIC508	Gorick/Riccelli	B25/25N	C&D	9/7/2018	Seneca Meadows	72500	10020	36.25
11		Gorick/Riccelli	B25/25N	C&D	9/5/2018	Seneca Meadows	70160	10017	35.08
12		Gorick/Riccelli	B25/25N	C&D	9/5/2018	Seneca Meadows	52400	10004	26.2
13		Gorick/Riccelli	B25/25N	C&D	9/6/2018	Seneca Meadows	68800	10011	34.4
14		Gorick/Riccelli	B25/25N	C&D	9/6/2018	Seneca Meadows	61420	10007	30.71

BMS B25/25N Scrap Recycling

Line	Hauler	Load Date	Gross	Tare	Net lbs			Material Description	Source	Document	Destination
1	Gorick	7/2/2018	65,000	42,420	22,580	R4	FE3120	5' P&S	B25	1573247	Metalico
2	Gorick	7/2/2018	63,840	42,140	21,700	R4	FE3120	Unprepared P&S Shear	B25	1573350	Metalico
3	Gorick	7/2/2018	58,540	42,500	16,040	R4	FE3120	Unprepared P&S Shear	B25	1573146	Metalico
4	Gorick	7/2/2018	66,660	42, 120	24,540	R4	FE210	HMS	B25	1573450	Metalico
5	Gorick	7/3/2018	64,680	42,200	22,480	R4	FE3120	Unprepared P&S Shear	B25	1573520	Metalico
6	Gorick	7/3/2018	64,680	42,00	22,48o	R4	FE3120	Unprepared P&S Shear	B25	1573566	Metalico
7	Gorick	7/3/2018	62,600	42,140	20,460	R4	FE3120	Unprepared P&S Shear	B25	1573647	Metalico
8	Gorick	7/5/2018	57,880	42,120	15,760	R4	FE101	Loose Lite Iron	B25	1573976	Metalico
9	Gorick	7/5/2018	53,880	42,120	11,760	R4	FE101	Loose Lite Iron	B25	1573920	Metalico
10	Gorick	7/5/2018	57,880	42,060	15,820	R4	FE101	Loose Lite Iron	B25	1574030	Metalico
11	Gorick	7/5/2018	57,420	42,060	15,360	R4	FE101	Loose Lite Iron	B25	1574119	Metalico
12	Gorick	7/5/2018	55,180	42,060	13,120	R4	FE101	Loose Lite Iron	B25	1574178	Metalico
13	Gorick	7/5/2018	56,000	42,080	13,920	R4	FE101	Loose Lite Iron	B25	1574238	Metalico
14	Gorick	7/6/2018	58,320	42,060	16,260	R4	FE101	Loose Lite Iron	B25	1574514	Metalico
15	Gorick	7/6/2018	56,440	42,020	14,420	R4	FE101	Loose Lite Iron	B25	1574437	Metalico
16	Gorick	7/6/2018	59,000	42,080	16,920	R4	FE101	Loose Lite Iron	B25	1574364	Metalico
17	Gorick	7/6/2018	71,840	42,100	29,740	R4	FE301	Unprepared P&S Shear	B25	1574315	Metalico
18	Gorick	7/6/2018	68,360	42,100	26,260	R4	FE301	Unprepared P&S Shear	B25	1574273	Metalico
					9,580		SS300	18/8 SS Solids (tank)			
19	Gorick	7/9/2018	53,040	42,040	1,420	R4	FE101	Loose Lite Iron	B25	1575040	Metalico
20	Gorick	7/9/2018	60,340	42,040	18,300	R4	FE101	Loose Lite Iron	B25	1574839	Metalico
21	Gorick	7/9/2018	57,880	42,280	15,600	R4	FE101	Loose Lite Iron	B25	1574907	Metalico
22	Gorick	7/9/2018	52,820	42,000	10,820	R4	FE301	Unprepared P&S Shear	B25	1575290	Metalico
23	Gorick	7/9/2018	56,120	42,000	14,120	R4	FE301	Unprepared P&S Shear	B25	1575222	Metalico
24	Gorick	7/9/2018	65,180	42,020	23,160	R4	FE301	Unprepared P&S Shear	B25	1575134	Metalico
25	Gorick	7/9/2018	53,860	42,060	11,800	R4	SS300	18/8 SS Solids	B25	1574972	Metalico
26	Gorick	7/10/2018	54,900	41,940	12,960	R4	FE101	Loose Lite Iron	B25	1575491	Metalico
27	Gorick	7/10/2018	58,980	41,980	17,000	R4	FE101	Loose Lite Iron	B25	1575644	Metalico
28	Gorick	7/10/2018	50,500	41,980	8,520	R4	SS300	18/8 SS Solids	B25	1575411	Metalico
29	Gorick	7/10/2018	59,440	42,000	17,440	R4	FE301	Unprepared P&S Shear	B25	1575327	Metalico
30	Gorick	7/10/2018	55,700	42,000	13,700	R4	FE301	Unprepared P&S Shear	B25	1575365	Metalico
31	Gorick	7/10/2018	55,680	41,960	13,720	R4	FE301	Unprepared P&S Shear	B25	1575545	Metalico
32	Gorick	7/10/2018	56,780	41,920	14,860	R4	FE301	Unprepared P&S Shear	B25	1575718	Metalico
33	Gorick	7/11/2018	63,100	41,900	21,200	R4	FE301	Unprepared P&S Shear	B25	1575859	Metalico
34	Gorick	7/11/2018	61,180	41,920	19,260	R4	FE301	Unprepared P&S Shear	B25	1575777	Metalico
35	Gorick	7/11/2018	58,420	41,860	16,560	R4	FE101	Loose Lite Iron	B25	1576190	Metalico
36	Gorick	7/11/2018	55,700	41,840	13,860	R4	FE101	Loose Lite Iron	B25	1576113	Metalico
37	Gorick	7/11/2018	56,420	41,860	14,560	R4	FE101	Loose Lite Iron	B25	1576032	Metalico
38	Gorick	7/11/2018	56,440	41,900	14,540	R4	SS300	18/8 SS Solids	B25	1575807	Metalico
39	Gorick	7/12/2018	59,220	41,900	17,320	R4	FE101	Loose Lite Iron	B25	1576211	Metalico

BMS B25/25N Scrap Recycling

Line	Hauler	Load Date	Gross	Tare	Net lbs			Material Description	Source	Document	Destination
40	Gorick	7/12/2018	55,300	41,820	13,480	R4	FE101	Loose Lite Iron	B25	1576498	Metalico
41	Gorick	7/12/2018	54,940	41,800	13,140	R4	FE101	Loose Lite Iron	B25	1576581	Metalico
42	Gorick	7/12/2018	66,240	41,840	24,400	R4	FE101	Loose Lite Iron	B25	1576338	Metalico
43	Gorick	7/12/2018	56,700	41,900	14,800	R4	FE101	Loose Lite Iron	B25	1576241	Metalico
44	Gorick	7/12/2018	63,460	41,860	21,600	R4	FE101	Loose Lite Iron	B25	1576279	Metalico
45	Gorick	7/12/2018	60,180	41,800	18,380	R4	FE301	Unprepared P&S Shear	B25	1576388	Metalico
46	Gorick	7/13/2018	59,140	41,800	17,340	R4	FE301	Unprepared P&S Shear	B25	1573542	Metalico
47	Gorick	7/13/2018	52,380	41,820	10,560	R4	SS300	18/8 SS Solids	B25/25N	1576607	Metalico
48	Gorick	7/13/2018	53,960	41,800	12,160	R4	SS300	18/8 SS Solids	B25/25N	1576630	Metalico
49	Gorick	7/13/2018	58,000	42,100	15,900	R4	FE101	Loose Lite Iron	B25/25N	1576774	Metalico
50	Gorick	7/13/2018	57,180	42,060	15,120	R4	FE101	Loose Lite Iron	B25/25N	1576917	Metalico
51	Gorick	7/19/2018	56,899	41,960	14,840	R4	FE101	Loose Lite Iron	B25/25N	1578848	Metalico
52	Gorick	7/19/2018	66,100	42,040	24,060	R4	FE301	Unprepared P&S Shear	B25/25N	1578503	Metalico
53	Gorick	7/19/2018	67,340	42,020	25,320	R4	FE301	Unprepared P&S Shear	B25/25N	1578557	Metalico
54	Gorick	7/19/2018	64,340	42,020	22,320	R4	FE301	Unprepared P&S Shear	B25/25N	1578601	Metalico
55	Gorick	7/19/2018	59,980	41,960	18,020	R4	FE301	Unprepared P&S Shear	B25/25N	1578716	Metalico
56	Gorick	7/20/2018	52,300	41,860	10,440	R4	FE301	Unprepared P&S Shear	B25/25N, Trestle	1579145	Metalico
57	Gorick	7/20/2018	54,340	41,880	12,460	R4	FE301	Unprepared P&S Shear	B25/25N, Trestle	1579068	Metalico
58	Gorick	7/20/2018	67,620	41,900	25,720	R4	FE301	Unprepared P&S Shear	B25/25N, Trestle	1579018	Metalico
59	Gorick	7/20/2018	63,940	41,900	22,040	R4	FE301	Unprepared P&S Shear	B25/25N, Trestle	1578975	Metalico
60	Gorick	7/20/2018	57,800	41,980	15,820	R4	FE301	Unprepared P&S Shear	B25/25N, Trestle	1578924	Metalico
61	Gorick	7/20/2018	57,920	42,000	15,920	R4	SS300	18/8 SS Solids	B25/25N, Trestle	1578894	Metalico
62	Gorick	7/23/2018	55,540	41,840	13,700	R4	FE301	Unprepared P&S Shear	B25/25N, Trestle	1579660	Metalico
63	Gorick	7/23/2018	65,620	41,820	23,800	R4	FE301	Unprepared P&S Shear	B25/25N, Trestle	1579836	Metalico
64	Gorick	7/23/2018	62,180	41,900	20,280	R4	FE301	Unprepared P&S Shear	B25/25N, Trestle	1579508	Metalico
65	Gorick	7/24/2018	61,660	41,920	19,740	R4	FE301	Unprepared P&S Shear	B25/25N, Trestle	1579977	Metalico
66	Gorick	7/30/2018	56,140	41,940	14,200	R4	SS300	18/8 SS Solids	B25N/Trestle	1581892	Metalico
67	Gorick	7/30/2018	62,800	41,940	20,860	R4	FE301	Unprepared P&S Shear	B25N/Trestle	1581946	Metalico
68	Gorick	7/30/2018	70,440	41,900	28,540	R4	FE301	Unprepared P&S Shear	B25N/Trestle	1581990	Metalico
69	Gorick	7/30/2018	61,160	41,900	19,260	R4	FE301	Unprepared P&S Shear	B25N/Trestle	1582038	Metalico
70	Gorick	7/30/2018	53,840	41,880	11,960	R4	SS300	18/8 SS Solids	B25N/Trestle	1582160	Metalico
71	Gorick	7/30/2018	73,180	41,860	31,320	R4	FE101	Loose Lite Iron	B25N/Trestle	1582234	Metalico
72	Gorick	7/30/2018	78,440	41,840	36,600	R4	FE301	Unprepared P&S Shear	B25N/Trestle	1582311	Metalico
73	Gorick	7/31/2018	73,140	41,700	31,440	R4	FE301	Unprepared P&S Shear	B25N/Trestle	1582769	Metalico
74	Gorick	7/31/2018	69,200	41,880	27,320	R4	FE301	Unprepared P&S Shear	B25N/Trestle	1582691	Metalico
75	Gorick	7/31/2018	69,480	41,880	27,600	R4	FE301	Unprepared P&S Shear	B25N/Trestle	1582610	Metalico
76	Gorick	7/31/2018	61,600	41,840	19,760	R4	FE101	Loose Lite Iron	B25N/Trestle	1582537	Metalico
77	Gorick	7/31/2018	58,340	41,840	16,500	R4	FE301	Unprepared P&S Shear	B25N/Trestle	1582435	Metalico
78	Gorick	7/31/2018	58,340	41,860	16,480	R4	FE101	Loose Lite Iron	B25N/Trestle	1582397	Metalico
79	Gorick	7/31/2018	56,620	41,860	14,760	R4	FE101	Loose Lite Iron	B25N/Trestle	1582353	Metalico

BMS B25/25N Scrap Recycling

Line	Hauler	Load Date	Gross	Tare	Net lbs			Material Description	Source	Document	Destination
80	Gorick	8/1/2018	76,240	41,780	34,460	R4	FE301	Unprepared P&S Shear	B25N/Trestle	1583128	Metalico
81	Gorick	8/1/2018	73,320	41,740	31,580	R4	FE101	Loose Lite Iron	B25N/Trestle	1583055	Metalico

ACM, Hazardous and Universal Waste

Line	Quantity	Material Description	Location	Contaminant of Concern	Rolloff ID Truck License Plate	Hauler	Transportation Date	Destination	Estimate Volume	Manifest copy, signed	Weigh Ticket/Manifest #
ASBESTOS											
OBG1	Dumpster	Window Glazing	B25/25N	Asbestos	Abscope 003	Abscope	5/8/2018	High Acres	30 cy	yes	1216935
OBG3	Dumpster	Non-friable VAT, glazing, mastic, caulk, roofing, etc.	B25/25N	Asbestos	Abscope 003	Abscope	5/22/2018	High Acres	30 cy	yes	1220058
OBG2	264 bags, 2 dms, 31 wraps	Friable TSI, Mudded fittings	B25/25N	Asbestos	Abscope 26	Abscope	5/31/2018	High Acres	35 cy	yes	1221979
OBG4	Dumpster	Non-friable glazing, siding, caulk	B25/25N	Asbestos	Abscope 003	Abscope	6/4/2018	High Acres	20 cy	yes	1222857
OBG5	90 Black Bags	Friable TSI, mudded fittings	B25/25N	Asbestos	Riccelli RT 33	Abscope	6/12/2018	High Acres	10 cy	yes	1225434
OBG6	62 bags, 12 drums	Friable TSI insulation, plaster, poly	B7	Asbestos	Abscope	Abscope	7/2/2018	High Acres	10.7 cy	yes	(no number)
OBG7	Dumpster	Non-Friable Vat	B7	Asbestos	Abscope	Abscope	7/2/2018	High Acres	2.2 cy	yes	(no number)
HAZARDOUS MATERIAL											
BMS	1 DM	PCBs	B25/25N	PCBs	Clean Harbors	Frank's Truck Service	6/14/2018	Clean Harbors Deer Park, Tx	40 K (2 containers were B25 - rest were BMS)	yes	011614384FLE
BMS	8 CF	Piping - trace acids	B25/25N	Acids	Clean Harbors	Frank's Truck Service	6/14/2018	Spring Grove OH	4,000 lb	yes	1112283
UNIVERSAL WASTE											
OBG8	4 DF, 2 DM, 5 CW, 1 PL	lamps, ballasts, computers, batteries	B25/25N	various	Abscope	Abscope/ALR	6/14/2018	ALR	3380 lbs.	yes	06132018-006
BURNS	Various	refrigerant	B7	134A, HP80, 404A, R22	Abscope	Burns Bros	7/10/2018	Hudson Tech	72.5 lbs	yes	(no number)
OBG9	2 DF, 1DM, 1 CW 1 FL	universal waste	B7		Abscope	Abscope/ALR	7/13/2018	ALR	825 lbs.	yes	07122018-010

Excavation Permit Summary

BMS B25/25N Demolition Project

Date Issued	Description and Location of Activity	Date Closed	Excavation Permit #
13-Apr-18	B25 and 25N -Core Drill for LVL	3-May-18	016-0418
17-Apr-18	Around B25 and B25N	18-Oct-18	018-0418
21-May-18	Syracuse Utilities - North of B25N (outside Project scope)	May-18	024-0518
11-Jul-18	Steam Line Pipe Rack from Plaza to B22	22-Oct-18	041-0718
18-Jul-18	Cut and Cap All Utilities	10-Oct-18	042-0718

Table 4-2 Project Event Log Summary

B25/25N Demolition Spill/Contaminated Spoils Log

Event #	Spill/ Excavation	Date/Time	Location	Material	Volume	Responsible Party	Reported By	Reported To	Action Taken	Waste Management
2018 -01	Spill	03MAY18 - 0800	B25 N Basement	n-Butyl Acetate	< 0.5 gallons	Abscope	D.Walier, OBG	A. Locke, BMS	5-gallon buckets were placed under the leak and flushing activities were immediately stopped. A 4-gas meter, followed by a 5-gas meter, were placed in the location to monitor air quality. Temporary ventilation was placed in the area. In order to continue flushing operations the collection point and fitting were moved to the location of the leak	All waste collected in the 5-gallon buckets was disposed of in accordance with Abscope's Waste Handling Plan. Waste was characterized and disposed of.
2018 -02	Spill	16MAY18 - 1130	W of B25 - Asphalt	Hydraulic Oil	<1 liter	Gorick	D.Walier, OBG	A. Locke, BMS	The equipment was shut down and absorbent material was placed on the oil	Material was disposed of with B25/25N Hydraulic Oil
2018 -03	Spill	20JUN18 - 0830	W of B25 - Asphalt	Hydraulic Oil	1-2 liters	Gorick	D.Walier, OBG	A. Locke, BMS	The equipment was shut down and absorbent material was placed on the oil	Material was placed into a trash bag and disposed of at the BMS trash compactor
2018 -04	Spill	02JUL18 - 0920	W of B25 - Asphalt	Hydraulic Oil	1 Pint on the ground, 2 liters into a bucket	Gorick	D.Walier, OBG	BMS SEcurity	The equipment was shut down and absorbent material was placed on the oil. A bucket was then placed under the location of the leak to collect hydraulic fluid that continued to leak	Material was placed into a spill response container and disposed of in the BMS trash compactor.
2018 -05	Spill	13JUL18 - 11:30		unknown - initially presumed glycol, later presumed Syltherm-XLT	unknown	Gorick	A. Locke, BMS	NA	A sheen was noticed at the outfall to Ley Creek. Demolition was halted to look for a possible source. It was later presumed that Syltherm-XLT from B25N heat exchangers leaked out and contaminated the ground.	Installation of oil-only absorbent booms in stormwater manhole. For further demolition activities decrease the amount of water applied to the building during demolition. Only a light mist should be applied to mitigate dust.
2018 -06	Spill	26JUL18 - 1030	West of B25N Demo area	transmission fluid	2 gal	Gorick	D.Walier, OBG	A. Locke, BMS	Anne Locke was notified and an emulsifying agent (orange crush) was applied to any transmission fluid that was on the rubble. A universal absorbent was applied to transmission fluid that was on the pavement	Applied orange crush and absorbed any transmission fluid on the ground. Containerized waste for disposal. Absorbent was placed into an overpack barrel for disposal.

Table 4-2 Project Event Log Summary

B25/25N Demolition Spill/Contaminated Spoils Log

Event #	Spill/ Excavation	Date/Time	Location	Material	Volume	Responsible Party	Reported By	Reported To	Action Taken	Waste Management
2018-07	Spill	09AUG18 -1030	SW corner of B25 footprint	transmission fluid	2 gal	Gorick	D.Walier, OBG	A. Locke, BMS	Abscope Environmental applied universal absorbent to the fluid that was released on the ground and into the standing water. The universal absorbent was then containerized in a drum for disposal with C&D	Disposed of universal absorbent as C&D.
2018-08	Subsurface Discovery	14AUG18 - 1530	West side of B25 slab, south end	Purple Dirt	NA	Uncovered during breaking up of B25 slab		J. Killany and A. Locke, BMS	Dirt was removed by backhoe and placed on/covered by plastic. Samples were taken by Arcadis. Samples are being held and will be tested after the B25 underslab investigations are complete.	Dirt was placed on and coverd by plastic until determination was made to add to a BMS rolloff for disposal
2018-09	Spill	29AUG18 - 1510	North Parking Lot	Hydraulic Oil	< 5 gal.	Gorick	D.Walier, OBG	J. Killany, BMS	Orange crush was applied to the area followed by a loose absorbent. As the absorbent was being applied a heavy rain event began so the absorbent was left in place to be cleaned up at the end of the day. At ~1700 BMS EHS observed a sheen leaving the absorbent and traveling downhill in the parking lot. Absorbent booms were placed downstream of the sheen and loose absorbent was applied. Clean up continued until BMS EHS determined that the hydraulic oil was adequately cleaned up.	BMS EHS disposed of waste that was containerized into overpack drums.
2018-10	Spill	04SEP18 - 0820	B7 Parking Lot	oil	< 1 liter	Gorick	D.Walier, OBG	BMS Security	An absorbent boom was placed around storm inlets in the area. Loose absorbent was applied to the impacted area. The absorbent was containerized and will be disposed of as C&D.	Disposed of as C&D
2018-11	Subsurface Discovery	06SEP18 - 1430	B25 Pit, E of B25	unknown	unknown	BMS	OBG/BMS	BMS/DEC	Black fill material and water was found under the slab of the B25 pit. Arcadis and DEC (Josh Cook) were on site. Excavation work stopped and the material was sampled. No PID or FID readings were evident. BMS desires to "chase" as soon as demo debris is cleared and space is available	Excavated material left to drain back into pit. Excavation stopped until further investigation can begin. Excavated dirt was added to BMS rolloff (see Event 8) for disposal.

Table 4-2 Project Event Log Summary

2018-12	Spill	11SEP18 -0930	B7 Parking Lot and Roadway to North Lot	Motor Oil	<3 oz.	Gorick	Josh Baritell, OBG	Anne Locke, BMS	Loose absorbent was placed on all observed oil sheen in the B7 parking lot and the roadway between B7 and B23. An oil emulsifier was applied to oil located in the North Lot. Continue to monitor and spray with Orange Crush as needed.	Disposed of as C&D

AIR QUALITY MONITORING RESULTS SUMMARY

BMS SYRACUSE B25/B25N DEMOLITION – COMMUNITY AIR MONITORING

Date	Location of Ground Intrusive Activity	Dust (ug/m3)				TVOCs (ppm)	
		Upwind (Background)	Downwind Maximum[a]			Upwind (Background)	Downwind Maximum[b]
			Unadjusted	Background-corrected	FID (ppm)		
4/23/2018	E. side of B25, SW corner of B25	5 to 10	8	0	nm	<0.1	0.7
4/24/2018	SW corner of B25	5 to 10	8	0	nm	<0.1	0.3
5/7/2018	E. Side of B25	3 to 4	6	0	nm	<0.1	<0.1
5/8/2018	E. Side of B25 – water line /electrical duct bank	2 to 5	6	1	No spikes/exceedances	<0.1	<0.1
16-May-18	NE side of B25N	9 to 27	15	4	No spikes/exceedances	<0.1	<0.1
17-May-18	NE side of B25N	2 to 22	20	18	No spikes/exceedances	<0.1	<0.1
18-May-18	NE side of B25N	1 to 3	8	7	No spikes/exceedances	<0.1	<0.1
21-May-18	NE side of B25N, E of B25	2 to 7	10	8	No spikes/exceedances	<0.1	<0.1
22-May-18	E side of B25	-	-	(rain)	No spikes/exceedances	<0.1	<0.1
23-May-18	Driveway of B25N	18 to 23	11	0	No spikes/exceedances	<0.1	<0.1
24-May-18	E side of B25	20 to 34	22	2	No spikes/exceedances	<0.1	<0.1
25-May-18	E side of B25, N side of B25N	31 to 47	28	0	No spikes/exceedances	<0.1	0.5
20-Jun-18	E of B25/S of B25N – electrical duct bank	5 to 6	8	3	No spikes/exceedances	<0.1	<0.1
12-Jul-18	E of B25	12 to 13	13	0	<0.1 to 3.8	0.6	<0.1
14-Aug-18	Breaking S end of B25 slab, crunching pole bases	4 to 10	25	21	No spikes/exceedances	NA	<0.1
15-Aug-18	Breaking S end of B25 slab	30 to 35	67	37	<0.1 to 0.9	NA	0.4
16-Aug-18	Breaking S end of B25 slab	31 to 32	100	69	No spikes/exceedances	NA	<0.1
28-Aug-18	Exposing foundations of B25/25N	38 to 42	24	0	<0.1 to 2.4	NA	<0.1
30-Aug-18	Crunching trestle foundations near B61 lot	6 to 9	6	0	<0.1 to <0.1	<0.1	<0.1
4-Sep-18	Demo and clearing of foundations of B25N	17 to 23	15	0	<0.1 to <0.1	<0.1	<0.1
5-Sep-18	Exposing tunnel on NW corner of former B25N	25 to 31	17	0	No spikes/exceedances	<0.1	<0.1
6-Sep-18	Exposing under tank slabs at B25 and B25N	2 to 10	17	15	No spikes/exceedances	<0.1	<0.1
7-Sep-18	Trestle pedestal demo -Courtyard and B61 Lot	7 to 12	9	2	nm	<0.1	0.6

AIR QUALITY MONITORING RESULTS SUMMARY

BMS SYRACUSE B25/B25N DEMOLITION – COMMUNITY AIR MONITORING							
11-Sep-18	Exposing tunnel NW of B25	1 to 4	4	0	nm	<0.1	<0.1
12-Sep-18	Tunnel NW of B25, then water lines E of B25	1 to 10	25	24	<8/no spikes	<0.1	0.1
13-Sep-18	Water lines E of B25	6 to 7	9	3	<9/no spikes	<0.1	0.1
28-Sep-18	Trenching at pit east of B25 (Arcadis)	5 to 7	16	9	nm (Arcadis)	<0.1	<0.1
1-Oct-18	Taking up sidewalk south of B25	1 to 3	1	0	<3	<0.1	<0.1
4-Oct-18	Cutting into hillside for sub-grading	16 to 19	11	0	No spikes/exceedances	<0.1	<0.1
5-Oct-18	Final sub-grading	5 to 25	2 to 4	0	No spikes/exceedances	<0.1	1.4
8-Oct-18	Final sub-grading	12 to 77	6 to 10	0	<2.0*	<0.1	0.04
12-Oct-18	Installation of light pole bases at B61 Parking Lot	1 to 2	1	0	<7.0	<0.1	1.1
23-Oct-18	Trenching for granite curb	11 to 14	10	0	nm	0.4	2.2
26-Oct-18	Trenching for granite curb	5 to 17	7	0	nm	0.4	3.4**

Table 4-4

B25/25Demolition Project Contractors and Subcontractors	
Contactor/Subcontractor	Description of Service
OBG	DESIGN AND CONSTRUCTION OVERSIGHT SERVICES
Gorick Construction Co., Inc.	Demolition
Abscope	Hazardous Waste and ACM Abatement
Burns Bros.	Mechanical Disconnects
Ridley Electric	Electrical Disconnects
Thew Associates	Survey Services

Table 4-5

Imported Fill Summary

Name	Use	Source Location	Chemical Testing	Physical Testing	Volume*	Placements	Submitttal Backup Information	Other
#57 Stone	Drainage Fill	Constantia Center Mine (Panther Lake Mine)	no	yes	< 20 cy	water lines	02300-00_2.02I Drainage	Permit # 70353
Run of Crush	Subbase	Madison Mine	no	yes	68.7 tons	deep pit areas and subgrade	02300-00_2.02E	Permit # 70045
Imported Fill	subbase	Brickyard Mine	yes	yes	2,502 cy	site-wide, 12-8" deep	02300-00_2.02B	Permit # 70069
Imported Topsoil	topsoil (top 4")	Northern Boulevard	yes	yes	1,040 cy	site-wide, top 4"	02300-00_2.02B	
Flowable Fill	tunnel and water lines	Auburn (Vitale & Robinson)	no	no	15.15 tons	abandoned water lines and tunnel areas	Flowable Fill Submittal	

Notes:
cy = cubic yard
* volume estimated assuming 16cy truckloads

Imported Fill Materials

Line	License Plate	Vendor	Trucking	Type	Date	Location From	Location Placed	Ticket #	Tons/cy	Submittal Reference	Notes
1	ID: RE47	Syr. Sand & Gravel	Riccelli	#3 and #4 Stone	5/24/2018	Madison Pit	B25N Basement Driveway	173149/36088	23.4 Tons	Bedding / Drainage	02300-00_2.02H 02300-00_2.02I
2	RE321	Syr. Sand & Gravel	Riccelli	#3 and #4 Stone	7/24/2018	Madison Pit	Truck turnaround NW of B25N	177714/37606	24 tons	Bedding / Drainage	02300-00_2.02H 02300-00_2.02I
3	RE334	Syr. Sand & Gravel	Riccelli	#3 and #4 Stone	7/24/2018	Madison Pit	Truck turnaround NW of B25N	177713/37605	21.3 tons	Bedding / Drainage	02300-00_2.02H 02300-00_2.02I
4	Truck 100	Vitale & Robinson	Vitale & Robinson	Flowable fill	9/6/2018	Auburn	Tunnel on W side of B25N	606599	5 tons		Cover for water line in tunnel
5	Truck 134	Vitale & Robinson	Vitale & Robinson	Flowable fill	9/13/2018	Auburn	Water lines east of B25	606743	10.15 tons		Fill for water pipes east of B25
6	Truck 306	Syr. Sand & Gravel	Riccelli	shale fill	10/9/2018	Brickyard	B25	434858	160 cy	02300-00_2.02B	10 16 yd loads
10	Truck 48	Syr. Sand & Gravel	Riccelli	shale fill	10/10/2018	Brickyard	B25	434204	128 cy	02300-00_2.02B	8 16 yd loads
11	Truck 300	Syr. Sand & Gravel	Riccelli	shale fill	10/10/2018	Brickyard	B25	479603	144 cy	02300-00_2.02B	9 16 yd loads
12	Truck 98	Syr. Sand & Gravel	Riccelli	shale fill	10/10/2018	Brickyard	B25	438569	144 cy	02300-00_2.02B	9 16 yd loads
13	Truck 96	Syr. Sand & Gravel	Riccelli	shale fill	10/10/2018	Brickyard	B25	430970	144 cy	02300-00_2.02B	9 16 yd loads
14	Truck 45	Syr. Sand & Gravel	Riccelli	shale fill	10/10/2018	Brickyard	B25	485157	128 cy	02300-00_2.02B	8 16 yd loads
15	Truck 16	Syr. Sand & Gravel	Riccelli	shale fill	10/10/2018	Brickyard	B25	485106	80 cy	02300-00_2.02B	5 16 yd loads
16	Truck 306	Syr. Sand & Gravel	Riccelli	shale fill	10/10/2018	Brickyard	B25	434859	160 cy	02300-00_2.02B	10 16 yd loads
17	Truck Jet 323	Syr. Sand & Gravel	Riccelli	shale fill	10/10/2018	Brickyard	B25	336981	160 cy	02300-00_2.02B	10 16 yd loads
18	Truck 300	Syr. Sand & Gravel	Riccelli	shale fill	10/11/2018	Brickyard	B25	479604	80 cy	02300-00_2.02B	5 16 yd loads
19	Truck 96	Syr. Sand & Gravel	Riccelli	shale fill	10/11/2018	Brickyard	B25	430971	80 cy	02300-00_2.02B	5 16 yd loads
20	Truck 16	Syr. Sand & Gravel	Riccelli	shale fill	10/11/2018	Brickyard	B25	485107	64 cy	02300-00_2.02B	4 16 yd loads
21	Truck 306	Syr. Sand & Gravel	Riccelli	shale fill	10/11/2018	Brickyard	B25	434860	80 cy	02300-00_2.02B	5 16 yd loads
22	Truck 45	Syr. Sand & Gravel	Riccelli	shale fill	10/11/2018	Brickyard	B25	485158	64 cy	02300-00_2.02B	4 16 yd loads

Imported Fill Materials

Line	License Plate	Vendor	Trucking	Type	Date	Location From	Location Placed	Ticket #	Tons/cy	Submittal Reference	Notes
23	Truck 95	Syr. Sand & Gravel	Riccelli	shale fill	10/11/2018	Brickyard	B25	438570	64 cy	02300-00_2.02B	4 16 yd loads
24	Truck	Syr. Sand & Gravel	Riccelli	shale fill	10/11/2018	Brickyard	B25	434206	112 cy	02300-00_2.02B	7 16 yd loads
25	Truck 347	Syr. Sand & Gravel	Riccelli	shale fill	10/11/2018	Brickyard	B25	345---	80 cy	02300-00_2.02B	5 16 yd loads
26	Truck 98	Syr. Sand & Gravel	Riccelli	shale fill	10/12/2018	Brickyard	B25	438571	128 cy	02300-00_2.02B	8 16 yd loads
27	Truck 96	Syr. Sand & Gravel	Riccelli	shale fill	10/12/2018	Brickyard	B25	430973	112 cy	02300-00_2.02B	7 16 yd loads
28	Truck 300	Syr. Sand & Gravel	Riccelli	shale fill	10/12/2018	Brickyard	B25	479605	112 cy	02300-00_2.02B	7 16 yd loads
29	Truck 45	Syr. Sand & Gravel	Riccelli	shale fill	10/12/2018	Brickyard	B25	485160	112 cy	02300-00_2.02B	7 16 yd loads
30	Truck 98	Syr. Sand & Gravel	Riccelli	Topsoil	10/15/2018	Northern Blvd	B25 and B7 (6 loads)	43857-	64 cy	02300-00_2.02B	4 16 yd loads
31	Truck 96	Syr. Sand & Gravel	Riccelli	Topsoil	10/15/2018	Northern Blvd	B25 and B7 (5 loads)	430974	64 cy	02300-00_2.02B	4 16 yd loads
32	Truck 306	Syr. Sand & Gravel	Riccelli	Topsoil	10/15/2018	Northern Blvd	B25 and B7 (6 loads)	480351	64 cy	02300-00_2.02B	4 16 yd loads
33	Truck 306	Syr. Sand & Gravel	Riccelli	Topsoil	10/16/2018	Northern Blvd	B25	480352	112 cy	02300-00_2.02B	7 16 yd loads
	Truck 306	Syr. Sand & Gravel	Riccelli	shale fill	10/16/2018	Brickyard	B25	480352	96 cy	02300-00_2.02B	6 16 yd loads
34	Truck 98	Syr. Sand & Gravel	Riccelli	Topsoil	10/16/2018	Northern Blvd	B25	438574	208 cy	02300-00_2.02B	13 16 yd loads
35	Truck 96	Syr. Sand & Gravel	Riccelli	Topsoil	10/16/2018	Northern Blvd	B25	430975	208 cy	02300-00_2.02B	13 16 yd loads
36	Truck 96	Syr. Sand & Gravel	Riccelli	Topsoil	10/16/2018	Northern Blvd	B25	430976	16 cy	02300-00_2.02B	1 16 yd load
37	Truck 96	Syr. Sand & Gravel	Riccelli	Topsoil	10/17/2018	Northern Blvd	B25	430977	truc	02300-00_2.02B	4 16 yd loads
	Truck 96	Syr. Sand & Gravel	Riccelli	shale fill	10/17/2018	Brickyard	B25	430977	48 cy	02300-00_2.02B	3 16 yd loads
38	Truck 306	Syr. Sand & Gravel	Riccelli	shale fill	10/17/2018	Brickyard	B25	480353	32 cy	02300-00_2.02B	2 16 yd loads
	Truck 306	Syr. Sand & Gravel	Riccelli	Topsoil	10/17/2018	Northern Blvd	B25	480353	48 cy	02300-00_2.02B	3 16 yd loads
39	Truck ---	Syr. Sand & Gravel	Riccelli	Topsoil	10/17/2018	Northern Blvd	B25	439506	96 cy	02300-00_2.02B	6 16 yd loads

Imported Fill Materials

Line	License Plate	Vendor	Trucking	Type	Date	Location From	Location Placed	Ticket #	Tons/cy	Submittal Reference	Notes
40	Truck 98	Syr. Sand & Gravel	Riccelli	Topsoil	10/17/2018	Northern Blvd	B25	438575	96 cy	02300-00_2.02B	6 16 yd loads

FIGURE 1-1

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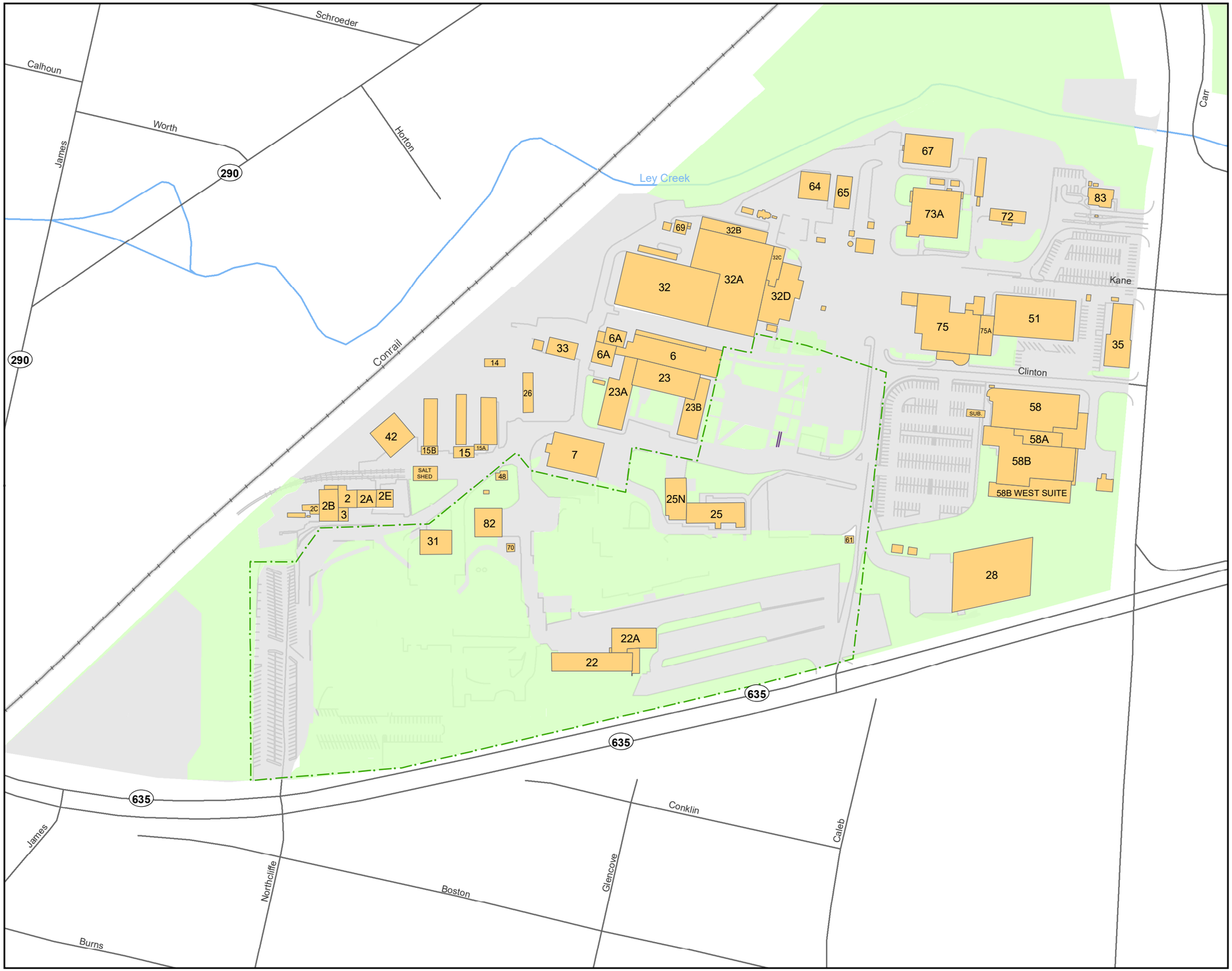


N

LEGEND

- PIPERACK
- BMS STRUCTURES
- GRASS \ LANDSCAPE
- PAVEMENT/CONCRETE/GRAVEL
- BDA BOUNDARY

BRISTOL-MYERS SQUIBB
SYRACUSE, NEW YORK

BDA BOUNDARY

0 125 250 500
Feet

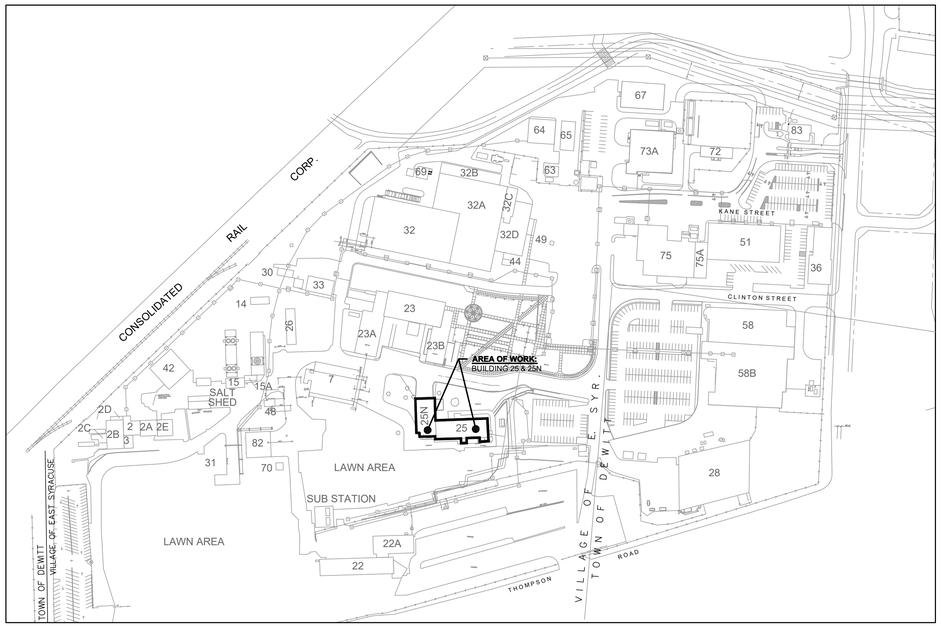
JULY 2019
2874.63643

O'BRIEN & GERE ENGINEERS, INC.

Bristol-Myers Squibb Company

BUILDING 25/25N DEMOLITION

PROJECT NO. 2874.63511
DATE: APRIL 2017
CONTRACT DRAWINGS



SITE LOCATION PLAN
BRISTOL–MYERS SQUIBB COMPANY
SYRACUSE, N.Y.

INDEX TO DRAWINGS

DRAWING NO.	DRAWING TITLE – GENERAL
G–T–001	COVER SHEET

DRAWING NO.	DRAWING TITLE – CIVIL– YARD
C–Y–001	GENERAL NOTES & LEGEND
C–Y–100	EROSION & SEDIMENT CONTROL PLAN, NOTES & DETAILS
C–Y–101	SITE DEMOLITION PLAN
C–Y–102	UTILITY DEMOLITION PLAN
C–Y–103	POST DEMOLITION SITE & UTILITY PLAN
C–Y–104	POST DEMOLITION GRADING & DRAINAGE PLAN
C–Y–105	CONSTRUCTION SITE LOGISTICS PLAN
C–Y–501	MISCELLANEOUS DETAILS
C–Y–502	MISCELLANEOUS DETAILS

DESIGN ENGINEER:

O'BRIEN & GERE ENGINEERS, INC.
333 WEST WASHINGTON STREET
SYRACUSE, NEW YORK 13221
(315) 956–6100

Issued for:
RECORD DRAWINGS

FOR BRISTOL-MYERS SQUIBB INTERNAL USE ONLY

VENDOR DOC. #
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AUTHORS
DISCIPLINE
SYSTEM
SYSTEM #
EQUIPMENT
DRAWING
FACILITY RECORDS

DRAWN BY: S. JOHNSON | REVIEWED BY: M. LASELL
CHECKED BY: B. NICHOLSON | APPROVED BY:

REVISIONS:

REV.	DATE	DESCRIPTION	DRAFTER	APPROVAL
1	11/6/18	ISSUED FOR RECORD DRAWINGS	CJO	
0	4/21/17	ISSUED FOR BID	SLJ	

SYRACUSE
NEW YORK

Bristol-Myers Squibb Company
SYRACUSE TECHNICAL OPERATIONS
P.O. BOX 4755 SYR.,N.Y. 13221

BUILDING 25/25N DEMOLITION

COVER SHEET
GENERAL

SCALE: AS NOTED | DATE: 04/21/17
PROJECT No.:
OBG FILE No.: 2874.63511. 001 | DWG. NO.: G-T-001

O'BRIEN & GERE ENGINEERS, INC
333 WEST WASHINGTON ST. SYRACUSE, NY 13202

FILE NAME: I:\BMS.2874\63511.825–25N–DEMO\DOCS\DWG\SHEETS\63511.G–T–001.DWG
PLOT DATE: 4/9/2010 3:29 PM PLOTTED BY: COLIN O'NEILL

SURVEY NOTES:

1. SITE PLAN PREPARED FROM TOPOGRAPHIC SURVEY MAPPING PROVIDED BY BMS AND PREPARED BY M.J. ENGINEERING AND LAND SURVEYING, P.C., DATED JULY 31, 2014. SEE SURVEY NOTES FOR ADDITIONAL INFORMATION.
2. HORIZONTAL COORDINATES ARE REPORTED ON NEW YORK STATE PLANE CENTRAL ZONE NAD 83/(CORS 2011) DATUM IN FEET.
3. ELEVATIONS ARE BASED ON LOCAL BRISTOL MYERS SQUIBB (BMS) DATUM FROM EXISTING MAPPING SUPPLIED BY OTHERS.
4. DATE OF SURVEY: JUNE 2014
5. RECORD UTILITY PLANS FROM BRISTAL-MYERS SQUIBB COMPANY. SEE THE FOLLOWING DRAWING NUMBERS FOR PLANS:

DWG NO.	DATE
E-Y-0282	1/17/14
E-Y-0280	1/17/14
D-Y-E827	4/22/14
E-Y-0278	1/17/14
E-Y-0279	1/17/14
E-Y-0601	2/21/14
E-Y-0607	1/23/14

5. UTILITIES NOT DENOTED "FROM RECORD" RESULT OF JUNE 2014 MJ FIELD SURVEY.
6. SUPPLEMENTAL UTILITY INFORMATION HAS BEEN ADDED TO THE SURVEY MAPPING BASED ON FIELD INFORMATION OBTAINED DURING SITE VISITS.

SITE NOTES:

1. THE SURVEY MAPPING SHOWS APPROXIMATE LOCATION OF KNOWN UNDERGROUND UTILITIES, AND SHALL NOT BE CONSIDERED ALL INCLUSIVE. ALL EXISTING UTILITIES (ABOVE GROUND AND BELOW GROUND) IN THE PROJECT AREA SHALL BE FIELD LOCATED BEFORE COMMENCING WORK, AND PROTECTED FROM DAMAGE THROUGHOUT CONSTRUCTION. IN THE EVENT A CONFLICT OR POTENTIAL CONFLICT BETWEEN EXISTING UTILITIES AND THE PROPOSED WORK IS IDENTIFIED, THE OWNER SHALL BE NOTIFIED IMMEDIATELY.
2. ALL DAMAGE TO THE EXISTING FACILITIES OR UTILITIES, WHICH ARE NOT A PART OF THE INTENDED WORK, SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AND/OR UTILITY OWNER, AT NO ADDITIONAL COST.
3. ALL DIMENSIONS PERTINENT TO THE WORK OF THIS CONTRACT SHALL BE VERIFIED IN THE FIELD. IF DISCREPANCIES EXIST BETWEEN THE PLANS AND PHYSICAL CONDITIONS OF THE SITE, THE OWNER SHALL BE NOTIFIED IMMEDIATELY.
4. ANY REFERENCE TO NYSDOT STANDARD SPECIFICATIONS IS LIMITED IN SCOPE TO TECHNICAL ENGINEERING AND CONSTRUCTION WORK; MATERIALS, DETAILS, PROCEDURES, ETC. ALL REFERENCES TO THE STATE OR THE NYSDOT OR ADMINISTRATIVE OFFICERS OR EMPLOYEES THEREOF ARE NULL AND VOID WITH RESPECT TO LEGAL OR CONTRACTUAL RESPONSIBILITIES.
5. COORDINATE ALL WORK AFFECTING UTILITIES WITH THE RESPECTIVE UTILITY OWNER. ALL DETAILS OF CONSTRUCTION, DEMOLITION AND/OR RELOCATION OF AFFECTED UTILITIES SHALL BE APPROVED BY THE UTILITY OWNER, THE OWNER AND OTHER APPROVING AGENCIES.
6. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE EROSION & SEDIMENT CONTROL (ESC) MEASURES, NOTES & DETAILS. REFER TO ESC NOTES THIS SHEET.
7. MOBILIZATION ACTIVITIES, INCLUDING LOCATIONS FOR FIELD OFFICE TRAILERS, CONSTRUCTION EQUIPMENT, MATERIAL LAYDOWN AREAS, AND TEMPORARY PARKING ASSOCIATED WITH CONSTRUCTION, SHALL BE COORDINATED WITH AND APPROVED BY THE OWNER.
8. GROUNDWATER FROM DEWATERING ACTIVITIES SHALL BE SAMPLED AND TESTED. TEST RESULTS SHALL BE SUBMITTED TO OWNER FOR RECORD. IF DEEMED HAZARDOUS, THE WATER SHALL BE CONTAINERIZED AND HAULED TO AN OWNER APPROVED LANDFILL FOR OFF-SITE DISPOSAL. COORDINATE ACTIVITIES WITH THE OWNER. IF WATER DEEMED NON-HAZARDOUS IT SHALL BE HAULED OFFSITE. ALL LANDFILL ACTIVITIES SHALL BE RECORDED AND SUBMITTED TO OWNER.

EXISTING LEGEND:

- PROPERTY LINE
- CHAIN LINK FENCE
- UNDERGROUND ELECTRIC
- OVERHEAD ELECTRIC (OHE)
- GAS LINE
- WATER LINE
- STORM PIPE
- SANITARY PIPE
- CHILLED WATER (CW)
- TOWER WATER (TW)
- FIRE WATER (FW)
- POTABLE CITY WATER (PCW)
- UNDERGROUND CABLES (COMM)
- EXISTING CONTOUR (417)
- SPOT ELEVATION (X 415.30)
- WATER VALVE (WV)
- HYDRANT
- SANITARY SEWER MANHOLE (M)
- STORM SEWER MANHOLE
- CATCH BASIN
- ELECTRIC VAULT
- UTILITY POLE
- BOLLARD
- MONITORING WELL

PROPOSED LEGEND:

- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- GRANITE CURB
- CONTOUR (412)
- SAWCUT LINE
- DEMOLITION AREA
- UTILITY PIPE CAP/PLUG
- INLET PROTECTION
- SILT FENCE

GENERAL ABBREVIATIONS:

A.O.B.E.	AS ORDERED BY THE ENGINEER
APPROX.	APPROXIMATE
AASHTO	AMERICAN ASSOCIATION OF HIGHWAY AND TRANSPORTATION OFFICIALS
ASPH	ASPHALT
BC	BOTTOM OF CURB
BLD.	BUILDING
BM	BENCHMARK
BOL	BOLLARD
BW	BOTTOM OF WALL
CB	CATCH BASIN
CHWS	CHILLED WATER SUPPLY
CHWR	CHILLED WATER RETURN
CI	CAST IRON
℄	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COMM.	COMMUNICATION
CONC	CONCRETE
CLSC	CONTROLLED LOW-STRENGTH CONCRETE
CWS	CITY WATER SERVICE
DI	DUCTILE IRON
DIA	DIAMETER
DWG	DRAWING
EA	EACH
ELEC	ELECTRIC
ELEV.	ELEVATION
EOC	EDGE OF CONCRETE
EP	EDGE OF PAVEMENT
ETC.	ET CETERA
EX.	EXISTING
EXIST.	EXISTING
FFE	FINISH FLOOR ELEVATION
FT	FEET
FM	FORCE MAIN
GRAN.	GRANITE
GV	GAS VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HH	HANDHOLE
HMA	HOT MIX ASPHALT
HP	HIGH POINT
HYD.	HYDRANT
INV.	INVERT
LF	LINEAR FEET
L.O.W.	LIMIT OF WORK
MAX.	MAXIMUM
MH	MANHOLE
MIN.	MINIMUM
MISC.	MISCELLANEOUS
N	NORTH
NE	NORTHEAST
NW	NORTHWEST
NO.	NUMBER
NTS	NOT TO SCALE
NYSDEC	NEW YORK STATE DEPARTMENT OF CONSERVATION
NYSDOT	NEW YORK STATE DEPARTMENT OF TRANSPORTATION
O.C.	ON CENTER
PAVT	PAVEMENT
PB	PULL BOX
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
S	SOUTH OR SANITARY
SE	SOUTHEAST
SW	SOUTHWEST
SAN	SANITARY
SCH	SCHEDULE
SICPP	SMOOTH INTERIOR CORRUGATED POLYETHYLENE PIPE
SMH	SANITARY MANHOLE
S.S.	STAINLESS STEEL
STA.	STATION
S/W	SIDEWALK
TC	TOP OF CURB
TW	TOP OF WALL
TYP.	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
VT	VITRIFIED TILE PIPE
VV	VALVE VAULT
W/	WITH
WMH	WATER MANHOLE
WV	WATER VALVE

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THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

O'BRIEN & GERE ENGINEERS, INC
333 WEST WASHINGTON ST. SYRACUSE, NY 13202

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VENDOR DOC. #
VENDOR NAME
AUTHORS
DISCIPLINE
SYSTEM
SYSTEM #
EQUIPMENT
DRAWING
FACILITY RECORDS

DRAWN BY: S. JOHNSON | REVIEWED BY: M. LASELL
CHECKED BY: B. NICHOLSON | APPROVED BY:

REVISIONS:

REV.	DATE	DESCRIPTION	DRAFTER	APPROVAL
1	11/6/18	ISSUED FOR RECORD DRAWINGS	CJO	
0	04/21/17	ISSUED FOR BID	SLJ	

SYRACUSE
NEW YORK

Bristol-Myers Squibb Company
SYRACUSE TECHNICAL OPERATIONS
P.O. BOX 4755 SYR.,N.Y. 13221

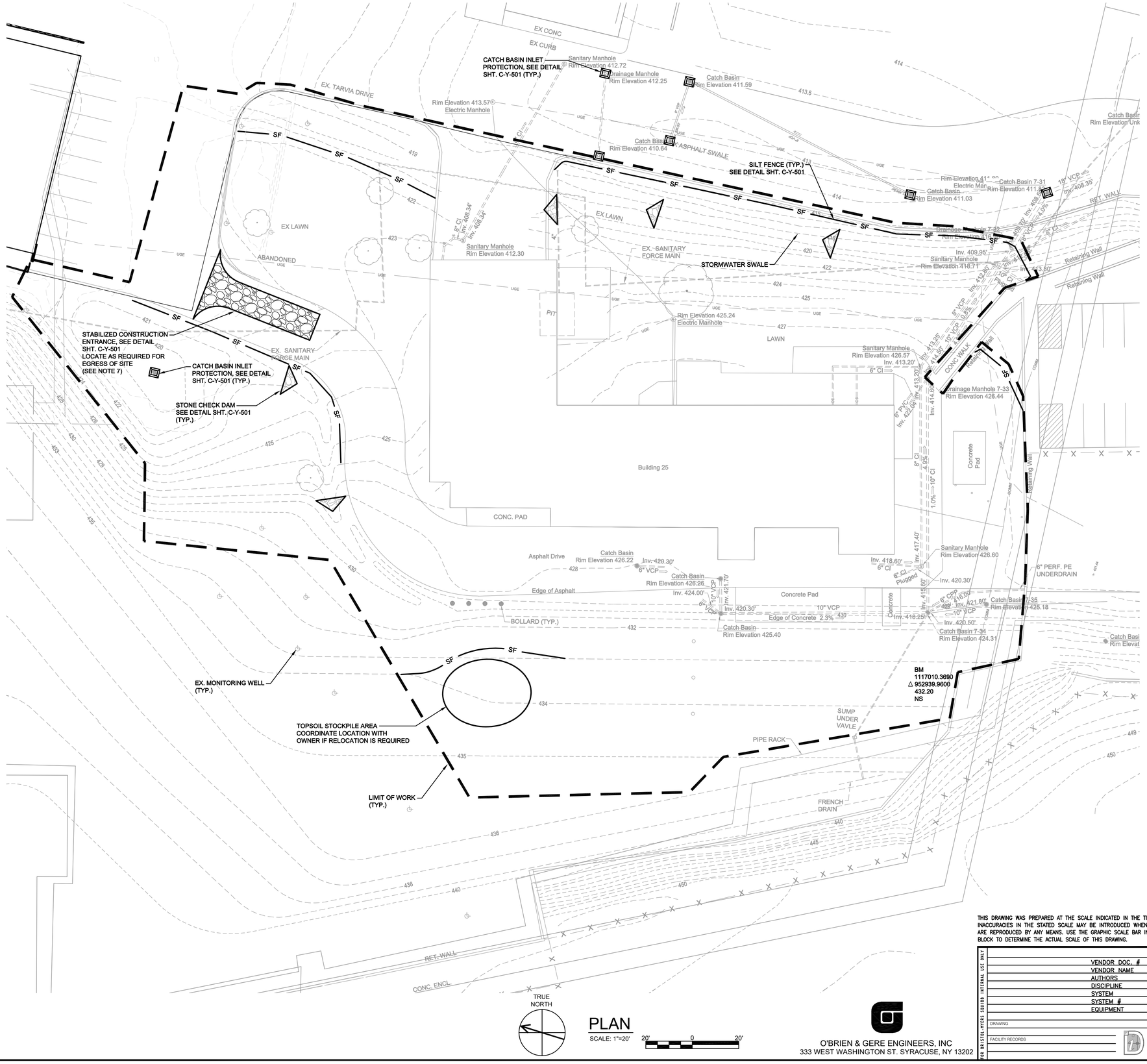
BUILDING 25/25N DEMOLITION

GENERAL NOTES & LEGEND

CIVIL

SCALE: AS NOTED | DATE: 04/21/17
PROJECT No.:
OBG FILE No.: 2874.63511. 001
DWG. NO.: C-Y-001

FILE NAME: I:\BMS.2874\63511.B25-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-001.DWG
PLOT DATE: 4/9/2010 3:29 PM PLOTTED BY: COLIN O'NEILL



PLAN

SCALE: 1"=20' 20' 0 20'

EROSION AND SEDIMENT CONTROL NOTES:

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN EFFECTIVE CONDITION UNTIL THE SITE HAS BEEN STABILIZED IN ACCORDANCE WITH NYSDEC SPDES GP-0-15-002, THE NEW YORK STATE STANDARDS & SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL DATED JULY 2016 OR CURRENT VERSION.
2. CONSTRUCTION ACTIVITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). PROVIDE AND INSTALL SILT FENCE AND/OR OTHER EROSION AND SEDIMENT CONTROL MEASURES THAT MAY NOT BE SHOWN ON THIS SHEET IN ORDER TO REMAIN COMPLIANT WITH SWPPP DURING CONSTRUCTION.
3. WASHDOWN WATER FROM CONTRACTOR'S STAGING AREA SHALL BE CONTROLLED AND DIRECTED TO OWNER APPROVED LOCATIONS.
4. ALL NECESSARY PRECAUTIONS SHALL BE TAKEN TO PRECLUDE CONTAMINATION OF ANY WATERWAYS BY SUSPENDED SOLIDS, SEDIMENTS, FUELS, SOLVENTS, LUBRICANTS, EPOXY COATINGS, PAINTS, CONCRETE, LEACHATE, OR ANY OTHER ENVIRONMENTALLY DELETERIOUS MATERIALS ASSOCIATED WITH THE PROJECT WORK.
5. CONSTRUCTION OPERATIONS SHALL BE COMPLETED AS EXPEDITIOUSLY AS PRACTICABLE TO MINIMIZE THE DURATION OF LAND DISTURBANCE.
6. ANY DUST CREATED AS A RESULT OF CONSTRUCTION OPERATIONS SHALL BE ELIMINATED OR CONTROLLED TO THE EXTENT OF DUST NOT LEAVING SITE LIMITS. CALCIUM CHLORIDE AND PETROLEUM PRODUCTS SHALL NOT BE USED FOR DUST CONTROL.
7. WASH WATER TO BE COLLECTED AND DIRECTED TO AN OWNER APPROVED LOCATION FOR OFF-SITE HAULING.

LEGEND:

- SF — SILT FENCE
- LIMIT OF WORK
- STONE CHECK DAM
- STABILIZED CONSTRUCTION ENTRANCE

Issued for:
RECORD DRAWINGS

O'BRIEN & GERE ENGINEERS, INC
333 WEST WASHINGTON ST. SYRACUSE, NY 13202

FOR BRISTOL-MYERS SQUIBB INTERNAL USE ONLY

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VENDOR NAME	
AUTHORS	
DISCIPLINE	
SYSTEM	
SYSTEM #	
EQUIPMENT	
DRAWING	
FACILITY RECORDS	

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NEW YORK

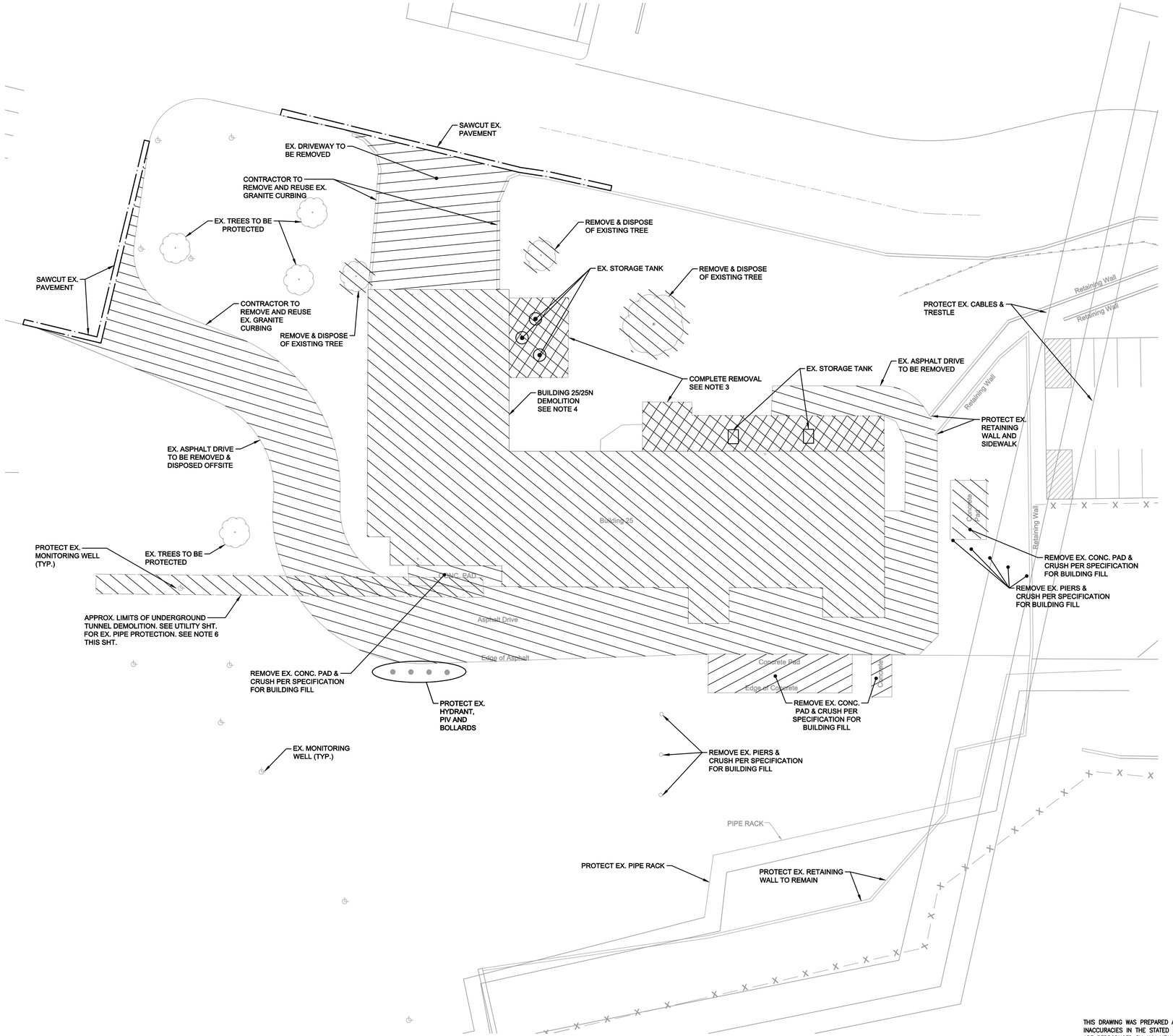
Bristol-Myers Squibb Company
SYRACUSE TECHNICAL OPERATIONS
P.O. BOX 4755 SYR.,N.Y. 13221

BUILDING 25/25N DEMOLITION

EROSION & SEDIMENT CONTROL
PLAN, NOTES & DETAILS
CIVIL

SCALE: 1"=20' | DATE: 04/21/17
PROJECT No.: | DWG. NO.: C-Y-100
OBG FILE No.: 2874.63511. 100

FILE NAME: I:\BMS.2874\63511.B25-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-100.DWG
PLOT DATE: 4/9/2010 3:29 PM PLOTTED BY: COLIN O'NEILL



PLAN

SCALE: 1"=20'

20' 0 20'

SHEET NOTES:

1. SITE PLAN BASE MAPPING OBTAINED FROM BMS. REFER TO GENERAL NOTES SHEET, SURVEY NOTES FOR ADDITIONAL INFORMATION.
2. PROTECT ALL EXISTING SITE FEATURES (TREES, SIDEWALKS, STAIRS AND RAILINGS, SITE LIGHTING, ETC.), NOT INCLUDED IN DEMOLITION SCOPE, FROM DAMAGE. ALL DAMAGE TO SITE FEATURES TO REMAIN, AS A RESULT OF CONSTRUCTION DEMOLITION, SHALL BE RESTORED/REPLACED IN KIND, AT NO ADDITIONAL COST.
3. EXISTING FOUNDATION WALL*S LEFT IN PLACE AS EXCAVATION SUPPORT WHILE HOLES WERE OPENED TO REMOVE SLAB.* ~~AND~~ SLAB TO BE REMOVED IN IT'S ENTIRETY. CONTRACTOR SHALL COORDINATE WITH OWNER TO CONFIRM LIMITS & PRIOR TO BACKFILL.
4. EXISTING FOUNDATION WALLS TO BE REMOVED A MINIMUM OF 18" BELOW PROPOSED GRADE. EXISTING FLOOR SLABS WITHIN BASEMENT AREA TO HAVE A MINIMUM 6" HOLE BY HOE-RAM OR EQUAL. HOLES LOCATED A MIN. OF ONE HOLE PER 36 SQFT.
5. PLACE ORANGE DELINEATION LAYER OVER EXISTING GRADES AND BUILDING FOUNDATION BEFORE PLACING IMPORTED FILL. TERMINATE DELINEATION LAYER ALONG THE OUTER BOUNDARY BY TURNING UP EDGES TO A HEIGHT OF 6" BELOW PROPOSED GRADES. ORANGE DELINEATION LAYER TO BE MIRAFI NON-WOVEN GEOTEXTILE BY TENCAFE OR APPROVED EQUAL.
6. REMOVE & CRUSH CONCRETE TUNNEL COVER. REMOVE & CRUSH CONCRETE WALLS A MINIMUM 18" BELOW PROPOSED GRADE. CRUSH ALL CONCRETE PER BUILDING DEMOLITION SPECIFICATION. BREAKUP FLOOR WITH A MINIMUM 10 FOOT SPACING ALONG TUNNEL.

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RECORD DRAWINGS

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FOR BRISTOL-MYERS SQUIBB INTERNAL USE ONLY

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SYSTEM #
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DRAWING
FACILITY RECORDS

DRAWN BY: S. JOHNSON | REVIEWED BY: M. LASELL
CHECKED BY: B. NICHOLSON | APPROVED BY:

REVISIONS:

REV.	DATE	DESCRIPTION	DRAFTER	APPROVAL
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SYRACUSE TECHNICAL OPERATIONS
P.O. BOX 4755 SYR.,N.Y. 13221

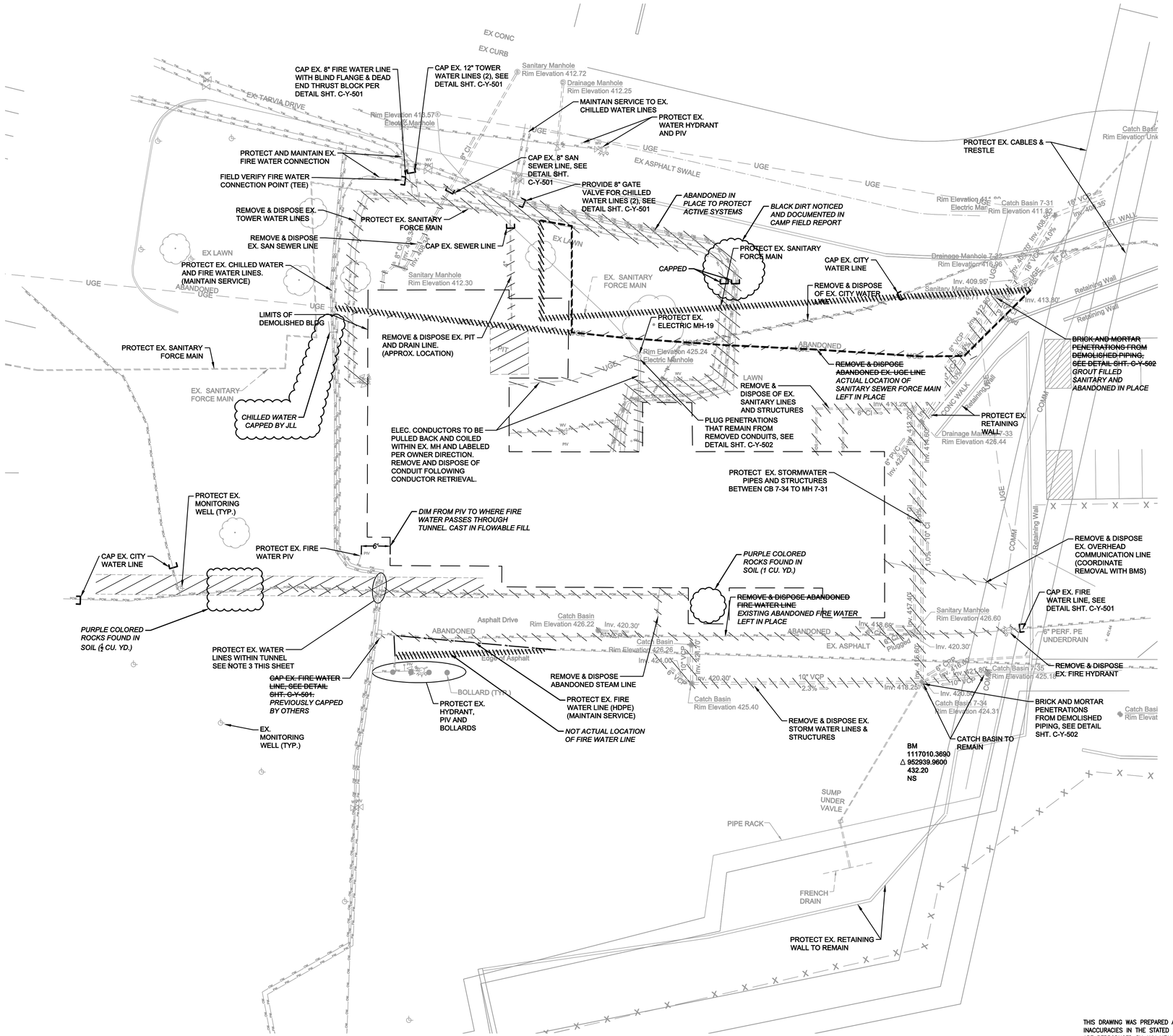
BUILDING 25/25N DEMOLITION

SITE DEMOLITION PLAN

CIVIL

SCALE: 1"=20' | DATE: 04/21/17
PROJECT No.:
OBG FILE No.: 2874.63511. 101 | DWG. NO.: C-Y-101

FILE NAME: I:\BMS.2874\63511.B25-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-101.DWG
PLOT DATE: 4/9/2010 3:29 PM PLOTTED BY: COLIN O'NEILL



SHEET NOTES:

1. SITE PLAN BASE MAPPING OBTAINED FROM BMS. REFER TO GENERAL NOTES SHEET, SURVEY NOTES FOR ADDITIONAL INFORMATION.
2. PROTECT ALL EXISTING SITE FEATURES (TREES, SIDEWALKS, STAIRS AND RAILINGS, SITE LIGHTING, ETC.), NOT INCLUDED IN DEMOLITION SCOPE, FROM DAMAGE. ALL DAMAGE TO SITE FEATURES TO REMAIN, AS A RESULT OF CONSTRUCTION DEMOLITION, SHALL BE RESTORED/REPLACED IN KIND, AT NO ADDITIONAL COST.
3. CONTRACTOR TO ADD PIPE BACKFILL MATERIAL A MIN. OF 24" OVER TOP OF EXPOSED PIPES WITHIN TUNNEL PRIOR TO DEMOLISHING TUNNEL. TUNNEL TOP TO BE BROKEN UP AND FILL EX. TUNNEL
4. ALL CUT/CAPS OF PIPES SHALL BE MADE WITHIN THE LIMITS OF PROJECT SITE BOUNDARY.

LEGEND:

CW	CHILLED WATER
TW	TOWER WATER
FW	FIRE WATER
PCW	POTABLE CITY WATER
	MONITORING WELL

TRUE NORTH

PLAN

SCALE: 1"=20' 20' 0 20'

O'BRIEN & GERE ENGINEERS, INC
333 WEST WASHINGTON ST. SYRACUSE, NY 13202

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SYRACUSE NEW YORK

Bristol-Myers Squibb Company
SYRACUSE TECHNICAL OPERATIONS
P.O. BOX 4755 SYR.,N.Y. 13221

BUILDING 25/25N DEMOLITION

UTILITY DEMOLITION PLAN

CIVIL

SCALE: 1"=20' | DATE: 04/21/17
PROJECT No.:
OBG FILE No.: 2874.63511. %%032
DWG. NO.: C-Y-102

FILE NAME: I:\BMS.2874\63511.B25-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-102.DWG
PLOT DATE: 4/9/2010 3:29 PM PLOTTED BY: COLIN O'NEILL

TOWER WATER PREVIOUSLY CAPPED BY OTHERS

CAP EX. SAN SEWER LINE, SEE DETAIL SHT. C-Y-501

Sanitary Manhole
Rim Elevation 412.72

Drainage Manhole
Rim Elevation 412.25

INSTALL GRANITE CURBING SEE DETAIL SHT. C-Y-501 AND RESTORE PAVEMENT AS NECESSARY

Rim Elevation 413.57
Electric Manhole

PROTECT EX. CABLES & TRESTLE

Catch Basin
Rim Elevation Unk

PROVIDE GATE VALVES FOR TOWER WATER LINES (TYP. OF 3). SEE DETAIL SHT. C-Y-501 NOT INSTALLED

RESTORE PAVEMENT AS NECESSARY

INSTALL GRANITE CURBING AND PROVIDE ANY ADDITIONAL CURBING AS NECESSARY. SEE DETAIL SHT. C-Y-501

CAP EX. FIRE WATER LINE, SEE DETAIL SHT. C-Y-501

CAP EX. CITY WATER LINE, SEE DETAIL SHT. C-Y-501

Rim Elevation 411.80
Electric Manhole

Catch Basin 7-31
Rim Elevation 411.80

CAP EX.SEWER LINE, SEE DETAIL SHT. C-Y-501

PROVIDE GATE VALVES FOR CHILLED WATER LINES(2) TO REMAIN. SEE DETAIL SHT. C-Y-501 NOT INSTALLED

CAPPED

THRUST BLOCK

SANITARY FORCE MAIN

Drainage Manhole 7-32
Rim Elevation 416.96

Inv. 409.95'
Sanitary Manhole
Rim Elevation 418.71

Inv. 412.80'

Inv. 413.80'

Retaining Wall

Retaining Wall

4" YELLOW TRAFFIC PAINT MEETING NYSDOT 727-09 (WATERBORNE)

EX. SANITARY FORCE MAIN

Rim Elevation 425.24
Electric Manhole

PROTECT EX. SANITARY FORCE MAIN

TOPSOIL & SEED

TOPSOIL & SEED

Inv. 414.50'

Retaining Wall

Drainage Manhole 7-33
Rim Elevation 426.44

Inv. 414.80'

PROTECT EXISTING STORMWATER PIPES AND STRUCTURES BETWEEN CB 7-34 TO MH 7-31 TO REMAIN

1.0% = 10' Cl

Retaining Wall

PROTECT EX. MONITORING WELL (TYP.)

CAP EX. FIRE WATER LINE, SEE DETAIL SHT. C-Y-501

4" CITY WATER CAP (BY T&M)

CAP EX. CITY WATER LINE, SEE DETAIL SHT. C-Y-501

CAP EX. FIRE WATER LINE, SEE DETAIL SHT. C-Y-501

TOPSOIL & SEED

PERF. PE UNDERDRAIN

EX. MONITORING WELL (TYP.)

PROTECT EX. FIRE WATER LINE (HDPE) (MAINTAIN SERVICE)

RAISE FRAME & GRATE TO MATCH PROPOSED GRADE, SEE DETAIL SHT. C-Y-502

Catch Basin 7-34
Rim Elevation 424.31

Catch Basi
Rim Elevat

BM
1117010.3690
△ 952939.9600
432.20
NS

SUMP UNDER VAVLE

PIPE RACK

FRENCH DRAIN

TRUE NORTH

PLAN

SCALE: 1"=20'

20' 0 20'

O'BRIEN & GERE ENGINEERS, INC
333 WEST WASHINGTON ST. SYRACUSE, NY 13202

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SYRACUSE
NEW YORK

Bristol-Myers Squibb Company
SYRACUSE TECHNICAL OPERATIONS
P.O. BOX 4755 SYR.,N.Y. 13221

BUILDING 25/25N DEMOLITION

POST DEMOLITION
SITE & UTILITY PLAN
CIVIL

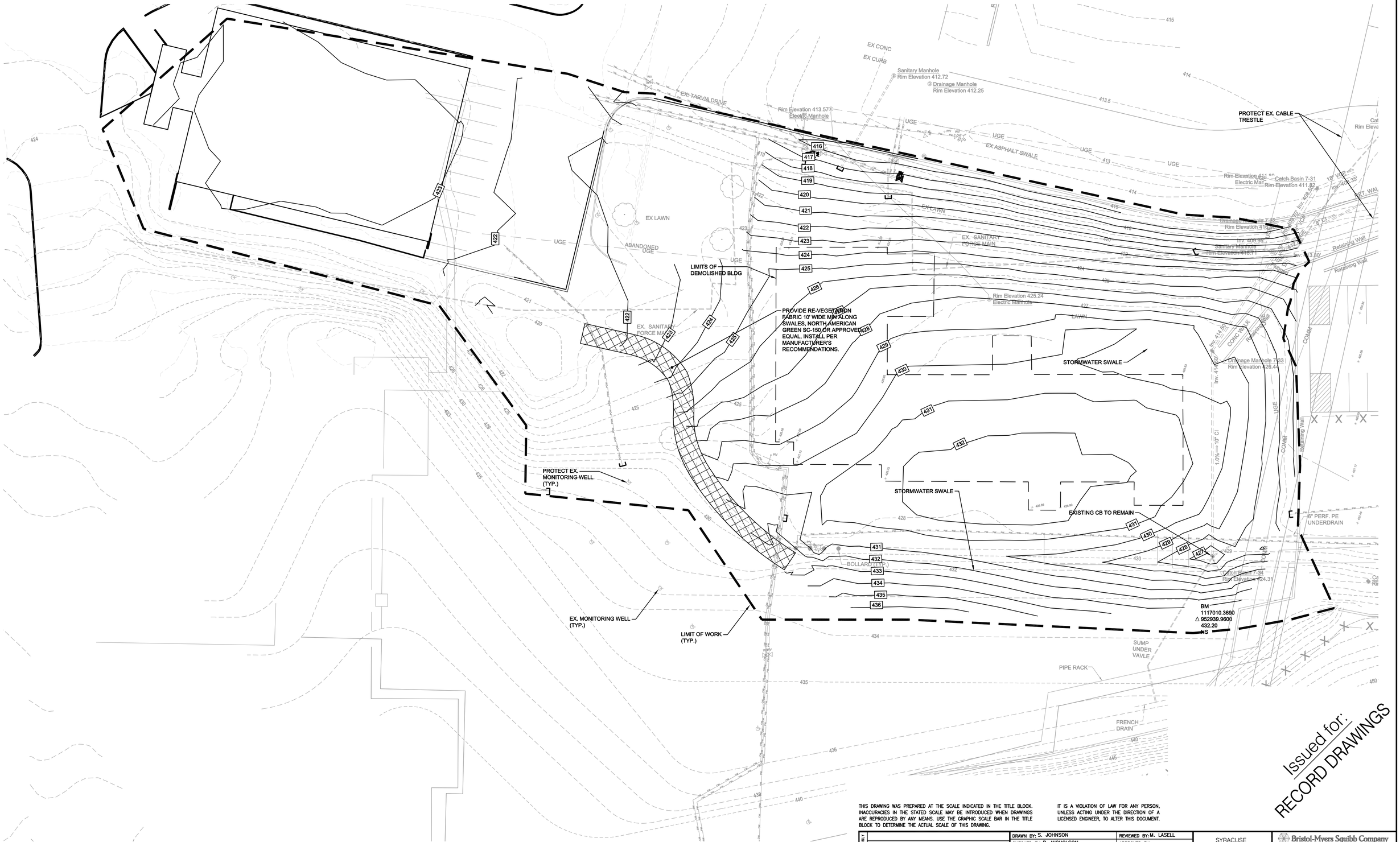
SCALE: 1"=20' | DATE: 04/21/17

PROJECT No.:
OBG FILE No.: 2874.63511. 102

DWG. NO.: C-Y-103

Issued for:
RECORD DRAWINGS

FILE NAME: I:\BMS\2874\63511.B25-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-103.DWG
PLOT DATE: 4/9/2010 3:29 PM PLOTTED BY: COLIN O'NEILL



GRADING NOTES:

1. IMPORTED CLEAN FILL, AS SPECIFIED, SHALL BE PLACED WITHIN DISTURBED AREAS AT A MINIMUM DEPTTH OF 12 INCHES TO MEET GRADES AS SHOWN. IMPORTED 4 INCHES OF TOPSOIL IS INCLUDED WITHIN THE 12" COVER LAYER.
2. PLACE ORANGE DELINEATION LAYER OVER EXISTING GRADES AND BUILDING FOUNDATION BEFORE PLACING IMPORTED FILL. TERMINATE DELINEATION LAYER ALONG THE OUTER BOUNDARY BY TURNING UP EDGES TO A HEIGHT OF 6" BELOW PROPOSED GRADES. ORANGE DELINEATION LAYER TO BE MIRAFI NON-WOVEN GEOTEXTILE BY TENCAFE OR APPROVED EQUAL.

TRUE NORTH

PLAN

SCALE: 1"=20'

20' 0 20'

O'BRIEN & GERE ENGINEERS, INC
333 WEST WASHINGTON ST. SYRACUSE, NY 13202

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RECORD DRAWINGS

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CHECKED BY: B. NICHOLSON | APPROVED BY:

REVISIONS:

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SYRACUSE
NEW YORK

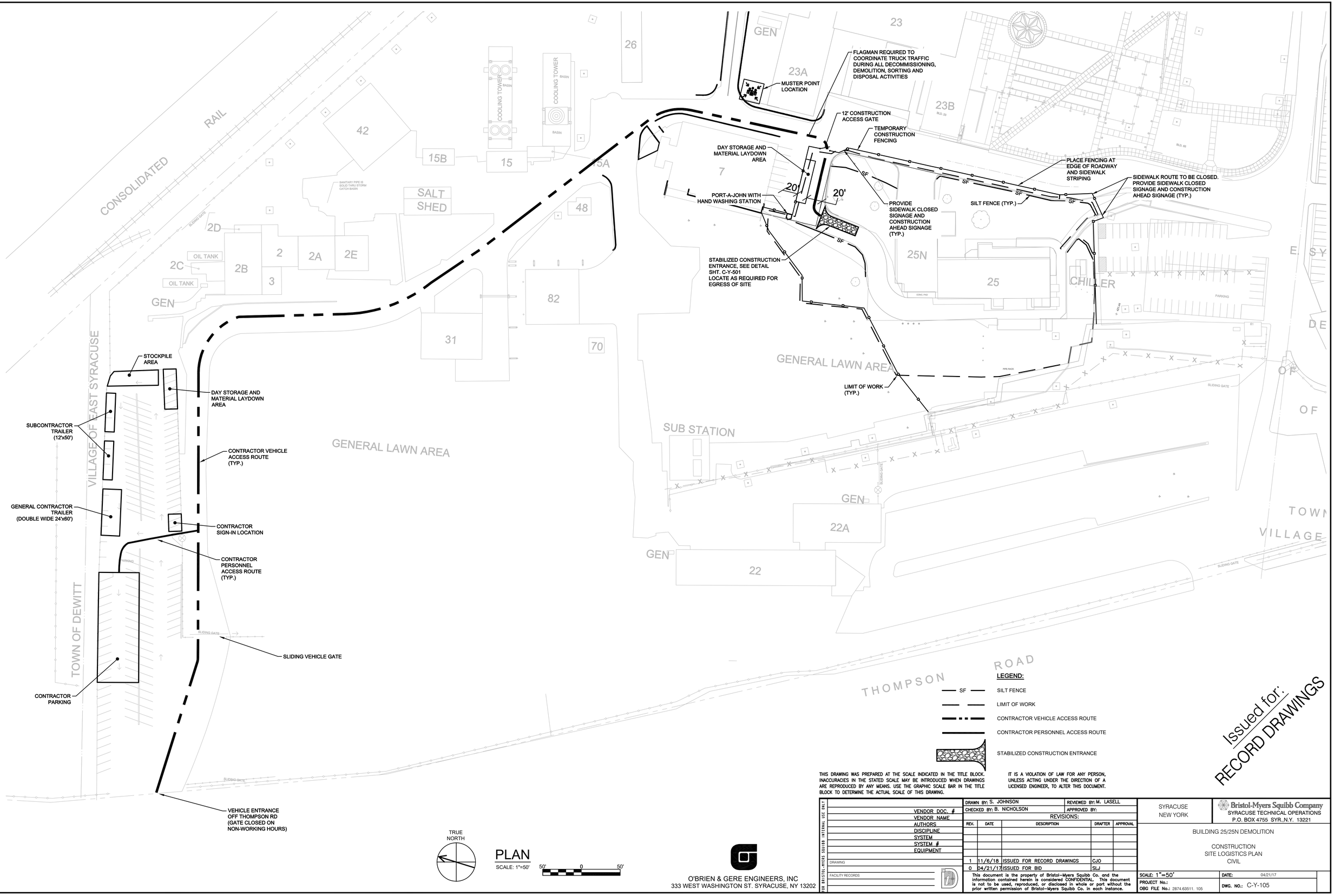
Bristol-Myers Squibb Company
SYRACUSE TECHNICAL OPERATIONS
P.O. BOX 4755 SYR.,N.Y. 13221

BUILDING 25/25N DEMOLITION

POST DEMOLITION
GRADING & DRAINAGE PLAN
CIVIL

SCALE: 1"=20' | DATE: 04/21/17
PROJECT No.:
OBG FILE No.: 2874.63511. 103 | DWG. NO.: C-Y-104

FILE NAME: I:\BMS.2874\63511.B25-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-104.DWG
PLOT DATE: 4/9/2010 3:29 PM PLOTTED BY: COLIN O'NEILL



TRUE NORTH

PLAN

SCALE: 1"=50'

50' 0 50'

LEGEND:

- SF — SILT FENCE
- LIMIT OF WORK
- CONTRACTOR VEHICLE ACCESS ROUTE
- CONTRACTOR PERSONNEL ACCESS ROUTE
- STABILIZED CONSTRUCTION ENTRANCE

THIS DRAWING WAS PREPARED AT THE SCALE INDICATED IN THE TITLE BLOCK. INACCURACIES IN THE STATED SCALE MAY BE INTRODUCED WHEN DRAWINGS ARE REPRODUCED BY ANY MEANS. USE THE GRAPHIC SCALE BAR IN THE TITLE BLOCK TO DETERMINE THE ACTUAL SCALE OF THIS DRAWING.

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ENGINEER, TO ALTER THIS DOCUMENT.

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SYRACUSE
NEW YORK

Bristol-Myers Squibb Company
SYRACUSE TECHNICAL OPERATIONS
P.O. BOX 4755 SYR.,N.Y. 13221

BUILDING 25/25N DEMOLITION

CONSTRUCTION
SITE LOGISTICS PLAN
CIVIL

SCALE: 1"=50' | DATE: 04/21/17
PROJECT No.:
OBG FILE No.: 2874.63511. 105 | DWG. NO.: C-Y-105

FILE NAME: I:\BMS.2874\63511.825-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-105.DWG
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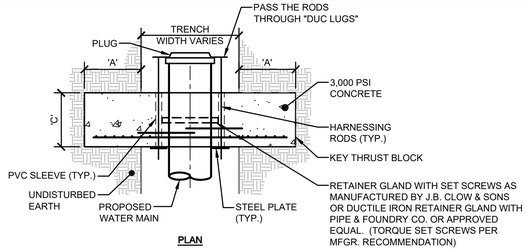
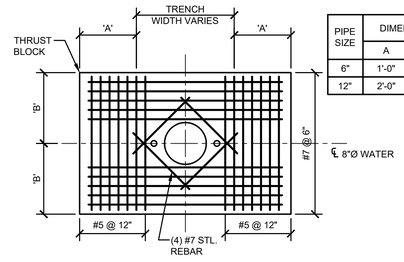


PLAN

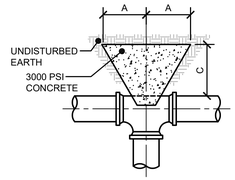


PIPE SIZE	DIMENSION SCHEDULE		
	A	B	C
6"	1'-0"	2'-0"	1'-0"
12"	2'-0"	2'-6"	1'-0"

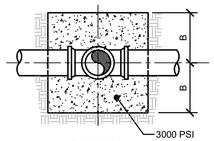
ELEVATION

A DEAD END THRUST BLOCK AND CAP DETAIL

NOT TO SCALE



PLAN

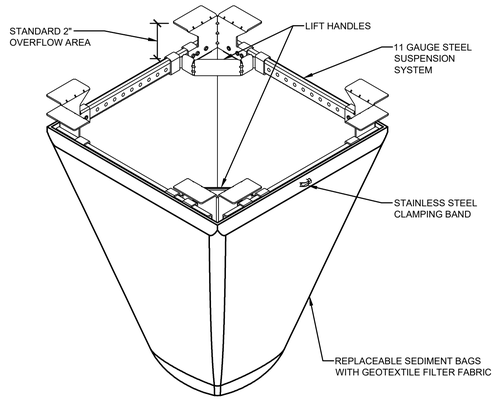


ELEVATION

PIPE SIZE	DIMENSION		
	A	B	C
6"	1'-3"	1'-3"	1'-3"
8"	1'-8"	1'-8"	1'-8"

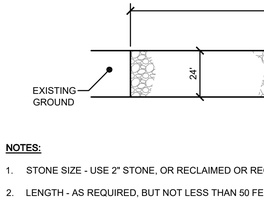
B TYPICAL THRUST BLOCK FOR TEE, TAP SLEEVE AND VALVE (TS&V)

NOT TO SCALE



F TYPICAL RECTANGULAR CATCH BASIN INSERT

NOT TO SCALE



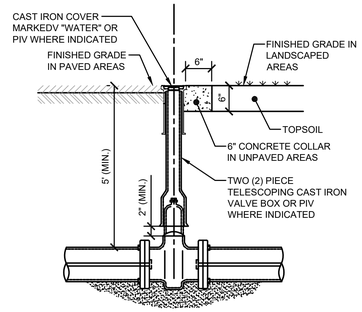
PLAN VIEW

NOTES:

1. STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET
3. THICKNESS - NOT LESS THAN 6".
4. WIDTH 24' MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE EGRESS OCCURS.
5. FILTER FABRIC (MIRAFI 140N OR EQUAL) - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
6. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARDS CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS NOT POSSIBLE, A MOUNTABLE BERM 3' WIDE (MIN.) WITH 5:1 SLOPES WILL BE PERMITTED.
7. MAINTENANCE - THE ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC OP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY OR OWNER'S ROADWAY. WASHING SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS TO A LINDED SEDIMENT BASIN AT AN OWNER APPROVED LOCATION.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED IN ACCORDANCE WITH THE PROJECT STORM WATER POLLUTION PREVENTION PLAN.
10. CONTRACTOR SHALL FIELD LOCATE AS REQUIRED WITH APPROVAL BY THE OWNER'S REPRESENTATIVE.

C STABILIZED CONSTRUCTION ENTRANCE DETAIL

NOT TO SCALE

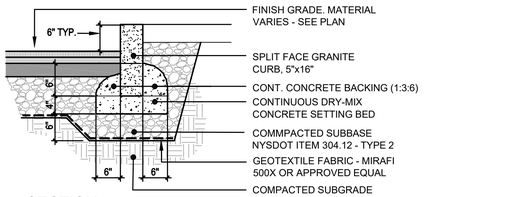


NOTES:

1. NON-RISING STEM GATE VALVE, OPERATING DIRECTION SHALL BE COUNTERCLOCKWISE TO OPEN.
2. MINIMUM DISTANCE TO JOINTS, FITTINGS, OR OTHER WET TAPS OR STOPS SHALL BE 3 FEET.

D TYPICAL GATE VALVE DETAIL

NOT TO SCALE

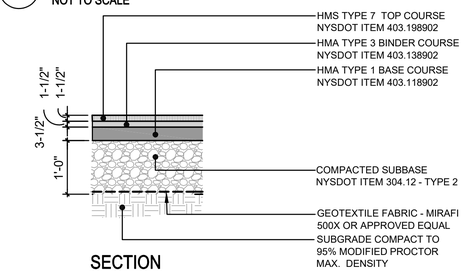


SECTION

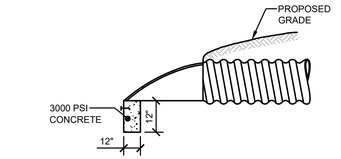
NOTES:
1. AT FLUSH CURBS, 5"x12" DEEP MIN. CURB PIECES MAY BE USED.
2. HAUNCH CONCRETE SIDEWALK ONTO GRANITE CURB CONCRETE BACKING WHERE CURB AND WALK ABUT.

E GRANITE CURB

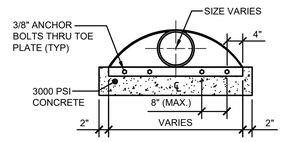
NOT TO SCALE



SECTION



CROSS SECTION



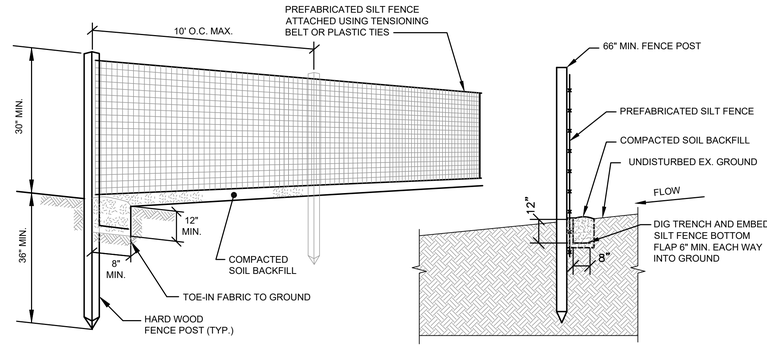
ELEVATION

NOTES:

1. GALVANIZED END SECTION SHALL BE ORDERED ONE SIZE LARGER THAN NOMINAL DIAMETER OF PIPE WHEN ATTACHING TO SICPP.
2. END SECTIONS TO BE INSTALLED ON ALL PROPOSED STORM SEWER INLETS AND OUTLETS.

G FLARED END SECTION

NOT TO SCALE



SECTION DETAIL

NOTES:

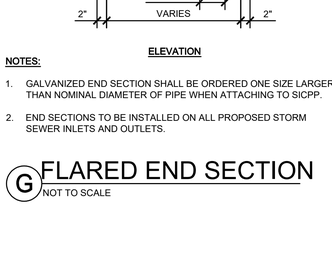
1. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED.
2. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
3. FENCE TO BE ALIGNED ALONG CONTOUR AS CLOSELY AS POSSIBLE.
4. SILT FENCE MUST BE INSTALLED AT LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST EXTEND AT LEAST 10 FEET UP SLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT.
5. SEDIMENT MUST BE REMOVED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE.
6. ANY FENCE SECTION WHICH HAS BEEN UNDERMINED OR TOPPED MUST BE IMMEDIATELY REPLACED AT DIRECTION OF CONTRACTING OFFICER.
7. PREFABRICATED SILT FENCE MATERIAL SHALL BE MIRAFI ENVIROFENCE OR APPROVED EQUAL.
8. SILT FENCE - SILT SOCK MAY BE USED IN LIEU OF PREFABRICATED SILT FENCE. SEE DETAIL THIS SHEET.

POSTS:	STEEL T-POSTS, CHANNEL POST, OR 2"x2" HARDWOOD STAKE
FILTER CLOTH:	MINIMUM TENSILE STRENGTH OF 120 LBS. (ASTM D-16826)

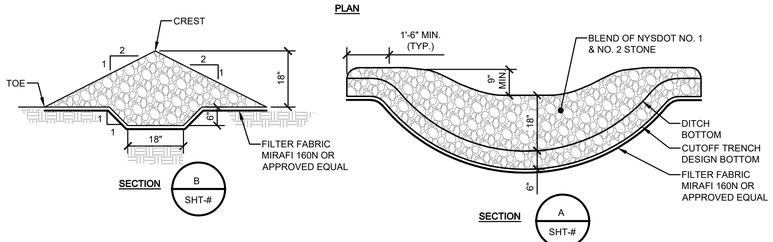
STANDARD SYMBOL —— SF —— SF

H SILT FENCE DETAIL

NOT TO SCALE



PLAN



SECTION

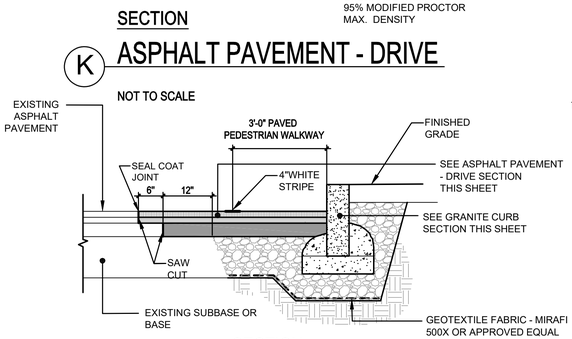
SECTION

NOTES:

1. STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION.
2. SET SPACING OF CHECK DAMS SUCH THAT THE ELEVATION OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
3. EXTEND THE STONE A MINIMUM OF 1.5' BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.

J STONE CHECK DAM DETAIL

NOT TO SCALE



SECTION

K ASPHALT PAVEMENT - DRIVE

NOT TO SCALE

I ASPHALT PAVEMENT - RESTORATION

NOT TO SCALE

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SYSTEM #
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DRAWING
FACILITY RECORDS

DRAWN BY: S. JOHNSON | REVIEWED BY: M. LASELL
CHECKED BY: B. NICHOLSON | APPROVED BY:

REVISIONS:

REV.	DATE	DESCRIPTION	DRAFTER	APPROVAL
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SYRACUSE TECHNICAL OPERATIONS
P.O. BOX 4755 SYR.,N.Y. 13221

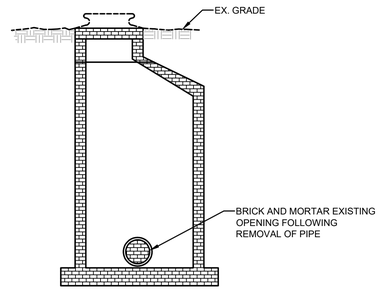
BUILDING 25/25N DEMOLITION

MISCELLANEOUS DETAILS

CIVIL

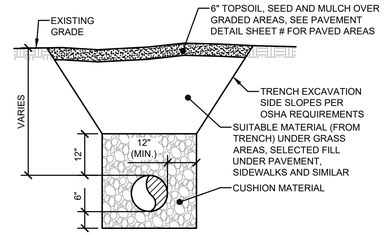
SCALE: NTS | DATE: 04/21/17
PROJECT No.:
OBG FILE No.: 2874.63511. 501
DWG. NO.: C-Y-501

FILE NAME: I:\BMS.2874\63511.B25-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-501.DWG
PLOT DATE: 4/9/2010 3:29 PM PLOTTED BY: COLIN O'NEILL

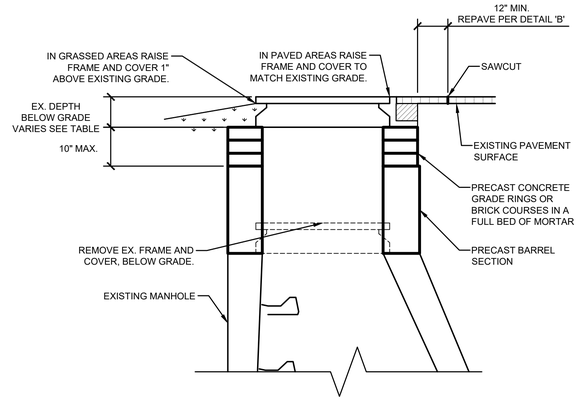


ELEVATION

A MANHOLE PIPE OPENING DETAIL
NOT TO SCALE



STORM SEWER PIPE TRENCH/BACKFILL DETAIL
B NOT TO SCALE



NOTES:

1. LIMITS OF DISTURBED PAVEMENT AND GRASSED AREAS SHALL BE RESTORED TO EXISTING CONDITIONS.

EXISTING MANHOLE RAISE FRAME AND COVER DETAIL
C NOT TO SCALE

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CHECKED BY: B. NICHOLSON | APPROVED BY:

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BUILDING 25/25N DEMOLITION

MISCELLANEOUS DETAILS

CIVIL

SCALE: NTS | DATE: 04/21/17
PROJECT No.:
OBG FILE No.: 2874.63511. 502 | DWG. NO.: C-Y-502

FILE NAME: I:\BMS.2874\63511.B25-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-502.DWG
PLOT DATE: 4/9/2010 3:29 PM PLOTTED BY: COLIN O'NEILL

Figure 4-3 - Imported Fill Locations

Note: Entire project area was covered with 8" of Type E material and 4" of imported topsoil cover/cap. Building rubble was used as deep fill and existing grades were modified to meet contours for proper drainage of the site. This figure indicates the new contours and location of of deep fill

GRADING NOTES:

1. IMPORTED CLEAN FILL, AS SPECIFIED, SHALL BE PLACED WITHIN DISTURBED AREAS AT A MINIMUM DEPTTH OF 12 INCHES TO MEET GRADES AS SHOWN. IMPORTED 4 INCHES OF TOPSOIL IS INCLUDED WITHIN THE 12" COVER LAYER.
2. PLACE ORANGE DELINEATION LAYER OVER EXISTING GRADES AND BUILDING FOUNDATION BEFORE PLACING IMPORTED FILL. TERMINATE DELINEATION LAYER ALONG THE OUTER BOUNDARY BY TURNING UP EDGES TO A HEIGHT OF 6" BELOW PROPOSED GRADES. ORANGE DELINEATION LAYER TO BE MIRAFI NON-WOVEN GEOTEXTILE BY TENCAFE OR APPROVED EQUAL.

TRUE NORTH

PLAN
SCALE: 1"=20'

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CHECKED BY: B. NICHOLSON — APPROVED BY:

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BUILDING 25/25N DEMOLITION

POST DEMOLITION
GRADING & DRAINAGE PLAN
CIVIL

SCALE: 1"=20' — DATE: 04/21/17
PROJECT No.:
OBG FILE No.: 2874.63511. 103 — DWG. NO.: C-Y-104

FILE NAME: I:\BMS.2874\63511.B25-25N-DEMO\DOCS\DWG\SHEETS\63511.C-Y-104.DWG
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