



|                            |                       |
|----------------------------|-----------------------|
| Site Planning              | Environmental Studies |
| Civil Engineering          | Entitlements          |
| Landscape Architecture     | Construction Services |
| Land Surveying             | 3D Visualization      |
| Transportation Engineering | Laser Scanning        |

July 24, 2023

Mr. Christopher Carthy, Chairman  
and Members of the Planning Board  
Town of North Castle  
17 Bedford Road  
Armonk, NY 10504

RE: JMC Project 20101  
The Summit Club at Armonk-Residential Phase  
Bedford Road (Route 22)  
Town of North Castle, NY

**Response to Site Plan, Steep Slopes and Tree Removal Approval Resolution Conditions**

Dear Chairman Carthy and Members of the Planning Board:

On behalf of the owner and applicant, Summit Club Partners, LLC, we are pleased to submit the following documents associated with The Summit Club at Armonk residential phase:

I. JMC Drawings:

| <u>Dwg. No.</u> | <u>Title</u>                                | <u>Rev. #/Date</u> |
|-----------------|---|--------------------|
| C-000           | Cover Sheet                                 | 7 07/24/2023       |
| C-010           | Overall Existing Conditions Map             | 7 07/24/2023       |
| C-011           | Existing Conditions Map (South)             | 7 07/24/2023       |
| C-012           | Existing Conditions Map (North)             | 7 07/24/2023       |
| C-020           | Site Demolition & Tree Removal Plan (South) | 7 07/24/2023       |
| C-021           | Site Demolition & Tree Removal Plan (North) | 7 07/24/2023       |
| C-022           | Site Tree Removal Table                     | 7 07/24/2023       |
| C-100A          | Overall Site Layout and Phasing Plan        | 8 07/24/2023       |
| C-100           | Site Layout Plan (South)                    | 7 07/24/2023       |
| C-101           | Site Layout Plan (North)                    | 7 07/24/2023       |
| C-102           | Fire Truck Access Plan                      | 7 07/24/2023       |
| C-103           | Utility Complex Plans                       | 2 07/24/2023       |
| C-200           | Site Grading Plan (South)                   | 7 07/24/2023       |
| C-201           | Site Grading Plan (North)                   | 7 07/24/2023       |
| C-202           | Road Profiles Plan                          | 7 07/24/2023       |
| C-300           | Site Utilities Plan (South)                 | 7 07/24/2023       |
| C-301           | Site Utilities Plan (North)                 | 7 07/24/2023       |
| C-302           | Sanitary Sewer Profiles                     | 7 07/24/2023       |
| C-303           | Water Main Profile                          | 7 07/24/2023       |
| C-304           | Storm Sewer Profiles                        | 7 07/24/2023       |

|       |  |   |            |
|-------|--|---|------------|
| C-305 | Storm Sewer Profiles                           |   | 07/24/2023 |
| C-400 | Site Erosion and Sediment Control Plan (South) | 7 | 07/24/2023 |
| C-401 | Site Erosion and Sediment Control Plan (North) | 7 | 07/24/2023 |
| C-402 | Erosion and Sediment Control/Phasing Notes     | 7 | 07/24/2023 |
| C-900 | Construction Details                           | 7 | 07/24/2023 |
| C-901 | Construction Details                           | 7 | 07/24/2023 |
| C-902 | Construction Details                           | 7 | 07/24/2023 |
| C-903 | Construction Details                           | 7 | 07/24/2023 |
| C-904 | Construction Details                           | 3 | 07/24/2023 |
| C-905 | Construction Details                           | 1 | 07/24/2023 |
| PSP-1 | Preliminary Subdivision Plat                   | 7 | 07/24/2023 |
| IPP-1 | Integrated Plot Plan                           | 7 | 07/24/2023 |

2. Granoff Architects Drawings:

| <u>Dwg. No.</u>            | <u>Title</u>                                 |   | <u>Rev. #/Date</u> |
|----------------------------|--|---|--------------------|
| <u>Landscape:</u>          |  |   |                    |
| LS C                       | Cover-Landscape                              | 4 | 07/24/2023         |
| LS 100.0                   | Overall Site Plan-Phase I                    | 4 | 07/24/2023         |
| LS 100.1A                  | Overall Site Plan-Southern Development       | 4 | 07/24/2023         |
| LS 101.1B                  | Overall Site Plan-Northern Development       | 4 | 07/24/2023         |
| LS 100.2                   | Site Details                                 | 4 | 07/24/2023         |
| LS 101.0                   | Amenities Building Masonry Layout Plan       | 4 | 07/24/2023         |
| LS 101.1                   | Amenities Building – Planting Plan           | 4 | 07/24/2023         |
| LS 101.2                   | Amenities Building – Pool fencing Layout     | 4 | 07/24/2023         |
| LS 101.3                   | Amenities Building Details                   | 4 | 07/24/2023         |
| LS 101.4                   | Amenities Building – Pool Dec Elevations     | 4 | 07/24/2023         |
| LS 102                     | Main Entry – Planting Plan                   | 4 | 07/24/2023         |
| LS 103.1                   | Residential Building – Typical Planting Plan | 4 | 07/24/2023         |
| LS 104                     | Detention Basin Planting Plan                | 4 | 07/24/2023         |
| <u>Residences:</u>         |  |   |                    |
| A 100                      | Parking Level                                | 4 | 07/24/2023         |
| A 101                      | First Floor Plan                             | 4 | 07/24/2023         |
| A 102                      | Second Floor Plan                            | 4 | 07/24/2023         |
| A 103                      | Third Floor Plan                             | 4 | 07/24/2023         |
| A 400                      | Building Elevations                          | 4 | 07/24/2023         |
| A 401                      | Building Elevation                           | 4 | 07/24/2023         |
| <u>Amenities Building:</u> |  |   |                    |
| A 100                      | Pool Deck Level                              | 4 | 07/24/2023         |
| A 101                      | Gym Level Plan                               | 4 | 07/24/2023         |
| A 102                      | Floor Plan-Main Level                        | 4 | 07/24/2023         |
| A 400                      | Building Elevations                          | 4 | 07/24/2023         |
| A 401                      | Building Elevations                          | 4 | 07/24/2023         |
| A 402                      | Pool Bar Plans & Elevations                  | 4 | 07/24/2023         |

3. Apex Lighting Solutions Drawings:

| <u>Dwg. No.</u> | <u>Title</u>  | <u>Rev. #/Date</u>       |
|-----------------|---|--------------------------|
| SL-1A           | Exterior Lighting Photometric Calculation<br>Razar Series LED Cutsheet/Specifications | 10/19/2022<br>07/24/2023 |

4. Lasberg Construction Associates, Inc. Documents:

“Blasting Plan”, dated 10/21/2022  
“Preliminary Rock Crushing Plan”, dated 10/21/2022

5. “Report on Subsurface Soil and Foundation Investigation”, prepared by Carlin Simson & Associates, dated 05/31/2023.

6. “Email Correspondence to Armonk Fire Department Chief”, dated 07/18/2023.

The revisions depicted on the above noted plans reflect responses to conditions outlined in the Draft Town of North Castle Site Plan, Steep Slopes and Tree Removal Approval Resolution, dated July 10, 2023. For ease of review, we have repeated and enumerated the conditions in italic print, followed by our responses:

**Prior to the Signing of the Site Plan:**

Comment No. 1

*In the southeast corner of the amenities building the driveway traverses around the proposed tennis courts to the large, existing parking lot. There is also a driveway at this location, which descends to the cart shed building. Conflicting grades between the two (2) drives results in a very awkward slope. The site place shall be revised to improve on the grades to the satisfaction of the Town Engineer.*

Response No. 1

The proposed tennis courts are no longer located in this area, however, the grading adjacent to the existing driveway down to the existing cart shed has been revised accordingly.

Comment No. 2

*The Applicant shall submit a geotechnical report with respect to the proposed rock slope located along the cul-de-sac of Road B and driveway to Building #6 to the satisfaction of the Town Engineer or in the alternative, design a retaining wall to address the grading issue where the wall could be eliminated if a stable rock fence can be established during construction.*

Response No. 2

Refer to Section 6.3 ‘Soil and Rock Slopes’ in “Report on Subsurface Soil and Foundation Investigation”, prepared by Carlin Simpson & Associates, dated 05/31/2023.

Comment No. 3

*The site plan shall be revised to include an impervious paver detail to the satisfaction of the Town Engineer.*

Response No. 3

The proposed impervious decorative pavers in front of each of the six (6) residential buildings have been eliminated and asphalt concrete pavement is proposed to be installed in these areas.

Comment No. 4

*The width of the tennis court path shall be provided on the site plans to the satisfaction of the Town Engineer.*

Response No. 4

The width of the proposed cart path (10') leading to the tennis/pickleball courts along with the sidewalk width (5') of the tennis/pickleball court sidewalks have been dimensioned on the site plans.

Comment No. 5

*The Applicant shall prepare a cut and fill analysis for each phase of construction, to the satisfaction of the Town Engineer, so that there is an understanding of the overall requirement for import or export of materials and how materials will be handed between phases of construction.*

Response No. 5

A cut and fill analysis for each phase of construction has been prepared and summarized in a table on JMC drawing C-200 "Site Grading Plan (South)", last revised 07/24/2023 and JMC drawing C-201 "Site Grading Plan (North)", last revised 07/24/2023.

Comment No. 6

*The vertical curve at Road "C" Station 0+50.50 shall be increased to 105 feet in length to meet the minimum required K value of 15 comply with Town Road standards. The site plan shall be revised to the satisfaction of the Town Engineer.*

Response No. 6

Road "C" has been eliminated on the current site plan layout for the residential phase.

Comment No. 7

*The Applicant shall provide written comments from the Armonk Fire Department confirming that the proposed fire hydrant layout is acceptable to the Armonk Fire Department.*

Response No. 7

A separate submission (via email) was sent to the Armonk Fire Department for their continued review of the application and satisfaction of the above condition on 07/18/2023, a copy of which is included in this submission. We will submit any received email correspondence from the Armonk Fire Department for the Town's record.

Comment No. 8

*Individual domestic and fire service mains servicing the residential structures and the amenities of the building should include proposed size and type of the service main, so much information shall be included on the site plans to the satisfaction of the Town Engineer.*

Response No. 8

The size and types of the proposed individual domestic and fire water service connections to each proposed building have been depicted on the site plans.

Comment No. 9

*The four (4) inch service pipe to the gate house appears to be proposed at a depth, which is significantly lower than what may be necessary (16 feet deep at SMH 4-1B). This excessive depth could be due to a rim elevation at SMH 4-2B, which is ten (10) feet lower than the proposed grade. The Applicant shall re-examine the design with an aim to significantly reduce the proposed depth to the satisfaction of the Town Engineer.*

Response No. 9

The rim elevations and inverts for the 4" sanitary sewer service connection to the proposed gate house have been revised to accommodate the current layout and significantly reduce the cover over the proposed pipe.

Comment No. 10

*The Applicant shall address the runoff from the amenity building pool deck and driveway to the satisfaction of the Town Engineer.*

Response No. 10

The amenity building pool deck and driveway is classified as redeveloped impervious area and will be treated by use of a hydrodynamic structure.

Comment No. 11

*The Applicant shall check drainage profiles for adequate cover over pipes. In particular, downstream of DMH-5B, DMH-5A, WQS-4A, TD-4B-5-1 and DIC- C15C. The plans shall be revised to the satisfaction of*

*the Town Engineer.*  
Response No. 11

The drainage profiles have been revised to provide adequate cover over all proposed pipes.

Comment No. 12

*Revise note on concrete sidewalk detail to reflect 5” minimum thickness to the satisfaction of the Town Engineer.*

Response No. 12

The concrete sidewalk detail has been revised to depict a 5” minimum thickness.

Comment No. 13

*The 100-year proposed peak runoff for DP-1C-2 differs from Table 1 and Table 4. Please clarify between the two to the satisfaction of the Town Engineer.*

Response No. 13

The hydrologic analysis has been updated based on the layout changes and the 100-year peak flows have been updated in both locations.

Comment No. 14

*The Applicant shall revise the drainage map to break down existing/proposed impervious areas within the limits of disturbance, as well as the phased work to the satisfaction of the Town Engineer.*

Response No. 14

Total impervious for each drainage area was added to drainage area maps in the SWPPP Appendix.

Comment No. 15

*The Applicant shall obtain a NYSDEC SPDES permit for the proposed wastewater treatment plant to the satisfaction of the Town Engineer.*

Response No. 15

The comment is so noted. The project sewage treatment plant (STP) consultant (R&M Engineering) is in the process of coordinating this permit, a copy of which will be provided for the Town’s record once obtained.

Comment No. 16

*The Applicant shall obtain NYSDEC approval for the proposed water supply to the satisfaction of the Town*

Engineer.

Response No. 16

The comment is so noted. The project hydrogeologist/water supply consultant (WSP USA) is in the process of coordinating this approval, a copy of which will be provided for the Town's record once obtained.

Comment No. 17

*The Applicant shall secure an administrative wetland permit from the Town Engineer for the proposed work located with the Town-regulated wetland buffer.*

Response No. 17

The comment is so noted. A Town of North Castle Building Department "Administrative Wetland Permit Application" will be filled for the proposed work located within the Town-regulated wetland buffer.

Comment No. 18

*The site plan has been revised to depict a lighting/photometric plan that complies with Section 355-45.M of the Town Code. The Applicant shall confirm that all proposed site lighting is depicted on this plan to the satisfaction of the Planning Department.*

Response No. 18

Proposed lighting/photometric plans meeting the minimum requirements of Section 355-45.M of the Town Code have been prepared. Refer to "Exterior Lighting Photometric Calculation Phase I", prepared by Apex Lighting Solutions, dated 10/19/2022 and Razar Series LED Cutsheet/Specifications, prepared by U.S. Architectural Lighting.

Comment No. 19

*The Applicant has indicated that chipping would be required during construction. The Town Engineer shall determine that the proposed methodology and work plan is acceptable.*

Response No. 19

The comment is so noted. The project construction manager/site work contractor will prepare and provide all required documentation for review by the Town Consulting Engineer and Building Department for issuance of a Blasting and/or Chipping Permit. Refer to "Blasting Plan", prepared by Lasberg Construction Associates, Inc., dated 10/21/2022.

Comment No. 20

*The Applicant has indicated that rock processing would be proposed on the site. The Town Engineer shall determine that the proposed methodology and work plan is acceptable.*

Response No. 20

The comment is so noted. The project construction manager/site work contractor will prepare and provide all required documentation for review by the Town Consulting Engineer, Westchester County Department of Health (WCDH) and Building Department for issuance of a Rock Processing Permit. Refer to “Preliminary Rock Crushing Plan”, prepared by Lasberg Construction Associates, Inc., dated 10/21/2022.

Comment No. 21

*The Town charges a fee in lieu of providing recreation facilities. The Town Board has indicated that given the proposed amount of on-site recreational amenities that a \$1,000/unit recreation fee is appropriate. Therefore, the Applicant shall submit a \$72,000 recreation fee as stated in Chapter 225 of the Town Code.*

Response No. 21

The comment is so noted.

Comment No. 22

*The plans shall be revised to depict separate lots for the water infrastructure (wells, facilities, mains, pumps, tank) to be owned by the Water District and depict all required zones of control. Limitations within the zones of control should also be depicted on the plans. Subdivision plat approval by the Planning Board will be required to create the necessary lots.*

Response No. 22

The plans have been revised to depict five (5) additional lots and the modification of the existing lot line between the golf course parcel and the residential parcel. The additional lots will be utilized for the amenities building and pool complex and for utility infrastructure (sewer treatment plant, water supply wells, water treatment plant and water holding tank). The plat also depicts a future water main easement adjacent to lot 101.04-1-44.4 and extending to the Coman Hill Elementary School property line, due to site constraints, as coordinated with the Town of North Castle Director of Water & Sewer Operations, an access easement over the property for Water District personnel and all other required future utility easements for the project. Refer to JMC drawing PSP-1 “Preliminary Subdivision Plat”, last revised 07/24/2023 and JMC drawing IPP-1 “Integrated Plot Plan”, last revised 07/24/2023.

Comment No. 23

*The plans shall be revised to depict an access easement over the Property for Water District personnel to the satisfaction of the Town Engineer and Sewer and Water Department.*

Response No. 23



As indicated in above response No. 22, the subdivision plans have been revised to depict an access easement over the property for Water District personnel. Refer to JMC drawing PSP-I “Preliminary Subdivision Plat”, last revised 07/24/2023 and JMC drawing IPP-I “Integrated Plot Plan”, last revised 07/24/2023.

Comment No. 24

*The plans shall be revised to depict a future water main easement adjacent to lot 101.04-1-44.4 and extending to the site’s frontage on NYS Route 22 to the satisfaction of the Town Engineer and the Sewer and Water Department.*

Response No. 24

As indicated in above response No. 22, the subdivision plans have been revised to depict a future water main easement adjacent (benefiting the Town) to lot 101.04-1-44.4 and extending to the Coman Hill Elementary School property line, due to site constraints, as coordinated with the Town of North Castle Director of Water & Sewer Operations. Refer to JMC drawing PSP-I “Preliminary Subdivision Plat”, last revised 07/24/2023 and JMC drawing IPP-I “Integrated Plot Plan”, last revised 07/24/2023.

Comment No. 25

*The Applicant shall prepare documentation for the formation of a sewer works corporation pursuant to Transportation Corporations Law including a stock escrow agreement between the corporation and the Town.*

Response No. 25

The comment is so noted. The Applicant and the Town will enter into a sewage works corporation stock escrow agreement prior to the issuance of the first Certificate of Occupancy for a building.

Comment No. 26

*The Applicant will need to obtain Town Board Special Use Permit Approval (associated with the golf club) for the proposed location of all sewer and water infrastructure not located on the site to the satisfaction of the Town Engineer.*

Response No. 26

The comment is so noted.

Comment No. 27

*The Applicant shall prepare clear phasing plans and documents pursuant to agreements with the Town Board. Specifically, Phase 1 shall consist of 36 units and Phase 2 shall consist of 36 units. The plans shall note that Phase 2 shall be age restricted to 55 and older unless the aggregate average of the gross sales*

prices of Phase 1 market rate units is \$700/sq. ft. or more in which event the age restriction can be released at the Applicant's option.

If the AFFH units are on site, no more than 32 CO's can be issued in Phase 1 until CO's have been issued for 4 AFFH units and the Town will not issue more than 33 CO's for Phase 2 market units until CO's have been issued for the remaining 3 AFFH units. If the AFFH units are located offsite, no more than 32 CO's can be issued for Phase 1 market rate units until 4 CO's have been issued for AFFH units and in Phase 2, no more than 33 CO's can be issued for market rate units until 3 CO's have been issued for the remaining AFFH units.

Response No. 27

Phasing of the development along with associated phasing notes have been added to the site plans. Refer to JMC drawing C-100A "Overall Layout and Phasing Plan", last revised 07/24/2023.

Comment No. 28

The Summit Club shall be operating prior to the issuance of the first Certificate of Occupancy for a building.

Response No. 28

The comment is so noted.

Comment No. 29

The Applicant will need to obtain ARB approval for any proposed entrance signage attached to proposed walls.

Response No. 29

The comment is so noted.

Comment No. 30

The project will result in disturbances greater than one acre. As such, the applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) in accordance with Chapter 267, Stormwater Management of the Town Code to the satisfaction of the Town Engineer. In addition, the project is required to obtain coverage under the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit, GP-0-20-001 for Stormwater Discharge from Construction Activity. The applicant shall file a Notice of Intent (NOI) with the NYSDEC. A draft copy shall be provided for review to the satisfaction of the Town Engineer. The SWPPP and NOI shall reflect the requirements and conditions of the latest General Permit to the satisfaction of the Town Engineer. The Town will consent to the Applicant's application to NYSDEC to permit disturbance greater than five (5) acres at one time.

Response No. 30

The comment is so noted.

Comment No. 31

*The Applicant shall prepare a stormwater management plan that addresses the construction, maintenance and inspection of the features of the stormwater management plan to the satisfaction of the Town Engineer. In addition, the Applicant shall prepare an agreement, in recordable form, to the satisfaction of the Town Attorney, specifying that the property owner shall be responsible in perpetuity for maintenance of the stormwater basins and that the Town of North Castle shall be permitted access, if necessary, to perform maintenance of the features of the stormwater management system.*

Response No. 31

The Stormwater Pollution Prevention Plan (SWPPP) will include descriptions within the text along with checklists in the appendices that address the construction, maintenance and inspection of the features of the stormwater management system. The Applicant and the Town will enter into the Town's standard form of stormwater system maintenance and easement agreement prior to the issuance of the first Certificate of Occupancy for a building.

Comment No. 32

*Submission to the Planning Board of a suitable legal agreement, in form satisfactory to the Town Attorney, assuring the Town that the Applicant will deposit cash or file a surety bond or other security acceptable to the Town Board (such as a Letter of Credit) for the construction of the sanitary sewer and water main infrastructure, the amount of said bond or other security to be determined by the Town Board. Such bond shall be released after completion of the above to the satisfaction of the Town.*

*In the event that the issuer of the bond or other security furnished to the Town hereunder becomes insolvent or, for any reason, disaffirms the validity of such security, the Applicant shall notify the Town Board immediately and replace the invalid security with a new bond or other security acceptable to the Town Board within thirty (30) days thereafter. The existence of a valid bond, letter of credit or other security shall be a condition precedent to the validity of any permits issued or to be issued in connection with this subdivision.*

Response No. 32

The comment is so noted.

Comment No. 33

*The Applicant shall submit, as necessary and appropriate, final details to the satisfaction of the Town Engineer of site, final grading and storm drainage, utility connections, sight lines and curbing, parking, driveway and pavement specifications.*

Response No. 33

The comment is so noted.

Comment No. 34

*Pursuant to Section 127-17 of the Town Code, the Applicant shall submit a detailed quantity cost estimate for all site improvements proposed, with the quantities certified to by the applicant's engineer, to the satisfaction of the Town Engineer.*

Response No. 34

The comment is so noted.

Comment No. 35

*The Applicant shall obtain WCDH approval of all proposed sewer collection and sewer treatment facilities and water supply distribution facilities to the satisfaction of the Town Engineer.*

Response No. 35

The comment is so noted.

Comment No. 36

*Payment of all applicable fees, including any outstanding consulting fees.*

Response No. 36

The comment is so noted.

Comment No. 37

*The Applicant shall submit to the Planning Board Secretary one (1) set of plans (with required signature block) incorporating all required amendments to the plans as identified in this resolution of approval to the satisfaction of the Town Planner, Town Engineer and Town Attorney.*

Response No. 37

The comment is so noted.

All conditions outlined under "Prior to Issuance of a Building Permit", "Prior to Issuance of a Certificate of Occupancy" and "Other Conditions" shall be satisfied throughout the course of construction.

We trust the attached documents and above responses are sufficient for your review and we respectfully request placement on the August 7<sup>th</sup>, 2023, Planning Board agenda. Thank you for your consideration.

If you have any questions or require additional information, please do not hesitate to contact our office at (914) 273-5225.

Sincerely,

JMC Planning Engineering Landscape Architecture & Land Surveying, PLLC

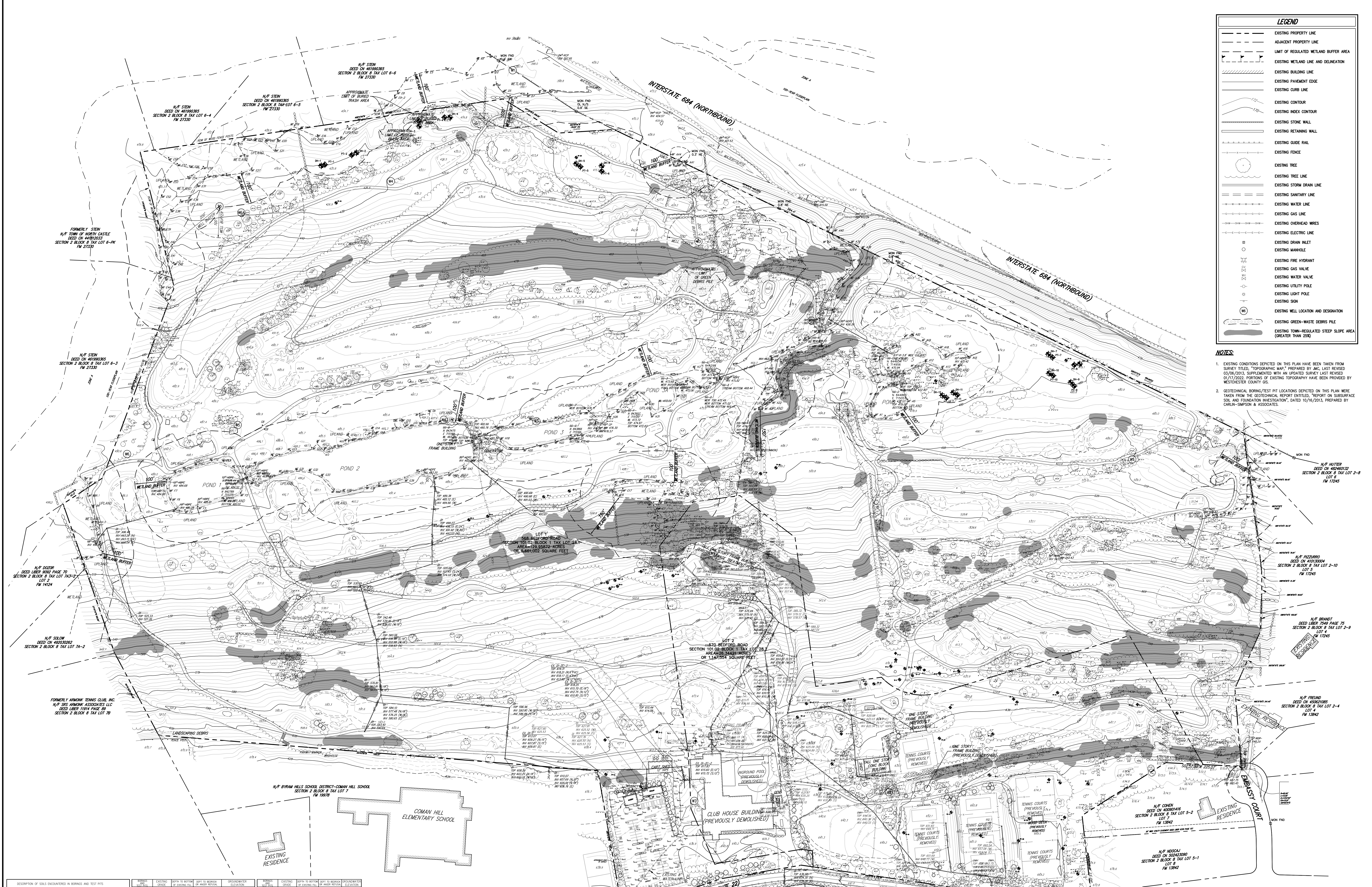


Paul R. Sysak, RLA  
Project Manager

cc: Adam R. Kaufman, AICP  
John Kellard, PE  
Joseph M. Cermele, PE, CFM  
Roland Baroni, Esq.  
Jeffrey B. Mendell  
Mark P. Weingarten, Esq.  
Peter J. Wise, Esq.  
Rich S. Granoff, AIA, LEED AP  
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**LEGEND**

- DESTROYED PROPERTY LINE
- ADJACENT PROPERTY LINE
- LIMIT OF REGULATED WETLAND BUFFER AREA
- EXISTING WETLAND LINE AND DELINEATION
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GLEDE RAIL
- EXISTING FENCE
- EXISTING TREE
- EXISTING TREE LINE
- EXISTING STORM DRAIN LINE
- EXISTING SANITARY LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING OVERHEAD WIRES
- EXISTING ELECTRIC LINE
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- EXISTING WELL LOCATION AND DESIGNATION
- EXISTING GREEN-WASTE DEBRIS PILE
- EXISTING TOWN-REGULATED STEEP SLOPE AREA (GREATER THAN 20%)

**NOTES**

- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP", PREPARED BY JMC, LAST REVISED 03/09/2013, SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 01/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
- GEOTECHNICAL BORING/TEST PIT LOCATIONS DEPICTED ON THIS PLAN WERE TAKEN FROM THE GEOTECHNICAL REPORT ENTITLED, "REPORT ON SUBSURFACE SOIL AND FOUNDATION INVESTIGATION", DATED 10/16/2013, PREPARED BY CARLEN-SIMPSON & ASSOCIATES.

**NOT FOR CONSTRUCTION**

| DESCRIPTION OF SOILS ENCOUNTERED IN BORINGS AND TEST PITS | DEPTH TO TOP OF SOIL (FEET) | DEPTH TO BOTTOM OF SOIL (FEET) | PERCENT SAND (%) | PERCENT SILT (%) | PERCENT CLAY (%) | PERCENT ORGANIC (%) | PERCENT ROCK (%) | PERCENT COBBLES (%) | PERCENT GRAVEL (%) | PERCENT STONES (%) | PERCENT ROOTS (%) | PERCENT TWIGS (%) | PERCENT LIMBS (%) | PERCENT BRANCHES (%) | PERCENT TRUNKS (%) | PERCENT LIMBS (%) | PERCENT BRANCHES (%) | PERCENT TRUNKS (%) |
|---|-----------------------------|--------------------------------|------------------|------------------|------------------|---------------------|------------------|---------------------|--------------------|--------------------|-------------------|-------------------|-------------------|----------------------|--------------------|-------------------|----------------------|--------------------|
| B-1   | 1.0                         | 1.5                            | 75               | 15               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-2   | 1.5                         | 2.0                            | 70               | 20               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-3   | 2.0                         | 2.5                            | 65               | 25               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-4   | 2.5                         | 3.0                            | 60               | 30               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-5   | 3.0                         | 3.5                            | 55               | 35               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-6   | 3.5                         | 4.0                            | 50               | 40               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-7   | 4.0                         | 4.5                            | 45               | 45               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-8   | 4.5                         | 5.0                            | 40               | 50               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-9   | 5.0                         | 5.5                            | 35               | 55               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-10  | 5.5                         | 6.0                            | 30               | 60               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-11  | 6.0                         | 6.5                            | 25               | 65               | 10               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-12  | 6.5                         | 7.0                            | 20               | 65               | 15               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-13  | 7.0                         | 7.5                            | 15               | 60               | 25               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-14  | 7.5                         | 8.0                            | 10               | 55               | 35               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-15  | 8.0                         | 8.5                            | 5                | 50               | 45               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-16  | 8.5                         | 9.0                            | 0                | 45               | 55               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-17  | 9.0                         | 9.5                            | 0                | 40               | 60               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-18  | 9.5                         | 10.0                           | 0                | 35               | 65               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-19  | 10.0                        | 10.5                           | 0                | 30               | 70               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-20  | 10.5                        | 11.0                           | 0                | 25               | 75               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-21  | 11.0                        | 11.5                           | 0                | 20               | 80               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-22  | 11.5                        | 12.0                           | 0                | 15               | 85               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-23  | 12.0                        | 12.5                           | 0                | 10               | 90               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-24  | 12.5                        | 13.0                           | 0                | 5                | 95               | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-25  | 13.0                        | 13.5                           | 0                | 0                | 100              | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-26  | 13.5                        | 14.0                           | 0                | 0                | 100              | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-27  | 14.0                        | 14.5                           | 0                | 0                | 100              | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |
| B-28  | 14.5                        | 15.0                           | 0                | 0                | 100              | 0                   | 0                | 0                   | 0                  | 0                  | 0                 | 0                 | 0                 | 0                    | 0                  | 0                 | 0                    | 0                  |

**FIELD PERMEABILITY TEST RESULTS**

| PERMEABILITY TEST NO. | PERMEABILITY TEST DEPTH | PERMEABILITY RATE |
|-----------------------|-------------------------|-------------------|
| BP-1                  | 7' 0" (+6210)           | 2.4 IN/HOUR       |
| P-1                   | 3' 6" (+6165)           | >20 IN/HOUR       |
| P-2                   | 1' 8" (+6163)           | NR                |
| P-3                   | 3' 0" (+6153)           | >20 IN/HOUR       |
| P-4                   | 2' 0" (+6150)           | NR                |

**APPLICANT/OWNER:** SUMMIT CLUB PARTNERS, LLC  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

**ARCHITECT:** GRANOFF ARCHITECTS  
330 RAILROAD AVENUE  
GREENWICH, CT 06850

**JMC**  
JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
JMC Site Development Consultants, LLC  
John Meyer Consulting, Inc.  
120 BEDFORD ROAD - ARMONK, NY 10534  
PHONE: 914-233-2222 - FAX: 914-233-2102  
www.jmcp.com

**OVERALL EXISTING CONDITIONS MAP**  
THE SUMMIT CLUB AT ARMONK  
(RESIDENTIAL PHASE)  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209. SUBSECTION 2.

**APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED** \_\_\_\_\_  
DATE: \_\_\_\_\_  
CHRISTOPHER CATHY, CHAIRMAN,  
TOWN OF NORTH CASTLE PLANNING BOARD  
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
JOSEPH M. GEMBLE, P.E.  
KELLARD SESSIONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

Scale: 1" = 100'  
Date: 11/23/2020  
Project No: 20010  
DWG: C-010  
DATE: \_\_\_\_\_

**C-010**

NOT FOR CONSTRUCTION



REFER TO SHEET C-103

**LEGEND**

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- - - - - LIMIT OF REGULATED WETLAND BUFFER AREA
- EXISTING WETLAND LINE AND DELINEATION
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING TREE
- EXISTING TREE LINE
- EXISTING STORM DRAIN LINE
- EXISTING WATER LINE
- EXISTING SANITARY LINE
- EXISTING GAS LINE
- EXISTING OVERHEAD WIRE
- EXISTING ELECTRIC LINE
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- EXISTING WELL LOCATION AND DESIGNATION
- EXISTING GREEN-WASTE DEBRIS PILE
- EXISTING TOWN-REGULATED SLOPE AREA (GREATER THAN 25%)

- NOTES**
- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLES, "TOPOGRAPHIC MAP" PREPARED BY JMC, LAST REVISED 03/06/2021, SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 07/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
  - GEOTECHNICAL BORINGS/TEST PIT LOCATIONS DEPICTED ON THIS PLAN WERE TAKEN FROM THE GEOTECHNICAL REPORT ENTITLED, "REPORT ON SUBSURFACE SOIL AND FOUNDATION INVESTIGATION", DATED 10/16/2013, PREPARED BY CARLIN-SIMPSON & ASSOCIATES.

**REVISIONS**

| No. | Date       | By | Rev.                      |
|-----|------------|----|---------------------------|
| 1.  | 07/17/2021 | NC | RESPONSE TO TOWN COMMENTS |
| 2.  | 03/06/2021 | NC | RESPONSE TO TOWN COMMENTS |
| 3.  | 06/14/2021 | NC | RESPONSE TO TOWN COMMENTS |
| 4.  | 07/07/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 5.  | 05/09/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 6.  | 05/09/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 7.  | 07/24/2023 | NC | RESPONSE TO TOWN COMMENTS |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
330 RAILROAD AVENUE  
GREENWICH, CT 06850

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
John Meyer Consulting, Inc.  
120 BEDFORD ROAD • ARMONK, NY 10534  
PHONE: 914.333.3222 • FAX: 914.233.2102  
www.jmcp.com

**EXISTING CONDITIONS MAP (SOUTH)**  
**THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE) (NY-22)**  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209.1 SUBSECTION 2.

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_  
CHRISTOPHER CATHY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
JOSEPH M. GEMBLE, P.E. DATE: \_\_\_\_\_  
KELLARD SESSIONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

Scale: 1" = 30'  
Date: 11/23/2020  
Project No: 20101  
DWG-DATE: 11/23/2020  
Drawing No: C-011





**LEGEND**

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- LIMIT OF REGULATED WETLAND BUFFER AREA
- EXISTING WETLAND LINE AND DEMINATION
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING QUACK RAIL
- EXISTING FENCE
- EXISTING TREE
- EXISTING TREE LINE
- EXISTING STORM DRAIN LINE
- EXISTING SANITARY LINE
- EXISTING WATER LINE
- EXISTING GAS LINE
- EXISTING OVERHEAD WIRES
- EXISTING ELECTRIC LINE
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING FIRE HYDRANT
- EXISTING GAS VALVE
- EXISTING WATER VALVE
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- EXISTING WELL LOCATION AND DESIGNATION
- EXISTING GREEN-WASTE DEBRIS PILE
- EXISTING TOWN-REGULATED STEEP SLOPE AREA (GREATER THAN 25%)

**NOTES:**

- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP" PREPARED BY JMC, LAST REVISED 03/19/2015. SUPERSEDED WITH AN UPDATED SURVEY LAST REVISED 01/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
- GEOTECHNICAL BORING/TEST PIT LOCATIONS DEPICTED ON THIS PLAN WERE TAKEN FROM THE GEOTECHNICAL REPORT ENTITLED, "REPORT ON SUBSURFACE SOIL AND FOUNDATION INVESTIGATION", DATED 10/16/2013, PREPARED BY CASHIN-SIMPSON & ASSOCIATES.

**REVISIONS**

| No. | Date       | By | Revised                   |
|-----|------------|----|---------------------------|
| 1.  | 07/17/2021 | NC | RESPONSE TO TOWN COMMENTS |
| 2.  | 03/08/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 3.  | 06/14/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 4.  | 07/07/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 5.  | 07/20/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 6.  | 05/09/2023 | NC | RESPONSE TO TOWN COMMENTS |
| 7.  | 07/24/2023 | NC | RESPONSE TO TOWN COMMENTS |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
330 RAILROAD AVENUE  
GREENWICH, CT 06850

JMC Planning, Engineering, Landscaping, Architecture & Land Surveying, PLLC  
John Meyer Consulting, Inc.  
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PHONE: 914.233.2222 - FAX: 914.233.2102  
www.jmcpllc.com

**EXISTING CONDITIONS MAP (NORTH)**

**THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)**  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209. SUBSECTION 2.

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_

CHRISTOPHER CARTHAY, CHAIRMAN,  
TOWN OF NORTH CASTLE PLANNING BOARD  
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. GEMELLE, P.E.  
KELLARD SESSIONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

| Drawn         | NC         | Approved   | AG       |
|---------------|------------|------------|----------|
| Scale:        | 1" = 30'   |            |          |
| Date:         | 11/23/2020 |            |          |
| Project No.:  | 20101      |            |          |
| Sheet Name:   | EX NORTH   | Sheet No.: | 001 of 2 |
| Client/Title: |            |            |          |

**C-012**

NOT FOR CONSTRUCTION

MATCHLINE A-A

SARA RICHELSON



**LEGEND**

|  |  |
|--|--|
|  | EXISTING PROPERTY LINE                 |
|  | ADJACENT PROPERTY LINE                 |
|  | LIMIT OF REGULATED WETLAND BUFFER AREA |
|  | EXISTING WETLAND LINE AND DELINEATION  |
|  | EXISTING BUILDING LINE                 |
|  | EXISTING PAVEMENT EDGE                 |
|  | EXISTING CURB LINE                     |
|  | EXISTING CONTOUR                       |
|  | EXISTING INDEX CONTOUR                 |
|  | EXISTING STONE WALL                    |
|  | EXISTING RETAINING WALL                |
|  | EXISTING GUIDE RAIL                    |
|  | EXISTING FENCE                         |
|  | EXISTING TREE                          |
|  | EXISTING TREE TO BE REMOVED            |
|  | EXISTING TREE LINE                     |
|  | EXISTING STORM DRAIN LINE              |
|  | EXISTING SANITARY LINE                 |
|  | EXISTING WATER LINE                    |
|  | EXISTING GAS LINE                      |
|  | EXISTING OVERHEAD WIRES                |
|  | EXISTING ELECTRIC LINE                 |
|  | EXISTING DRAIN INLET                   |
|  | EXISTING MANHOLE                       |
|  | EXISTING FIRE HYDRANT                  |
|  | EXISTING GAS VALVE                     |
|  | EXISTING WATER VALVE                   |
|  | EXISTING UTILITY POLE                  |
|  | EXISTING LIGHT POLE                    |
|  | EXISTING SIGN                          |
|  | EXISTING WELL LOCATION AND DESIGNATION |
|  | EXISTING FEATURE TO BE REMOVED         |
|  | PROPOSED SAWCUT LINE                   |
|  | PROPOSED LIMIT OF DISTURBANCE          |

TOTAL NUMBER OF TREES TO BE REMOVED: 265

**NOTES:**

- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP," PREPARED BY JMC, LAST REVISED 03/06/2013. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
- GEOTECHNICAL BORING/TEST PIT LOCATIONS DEPICTED ON THIS PLAN WERE TAKEN FROM THE GEOTECHNICAL REPORT ENTITLED, "REPORT ON SUBSURFACE SOIL AND FOUNDATION INVESTIGATION," DATED 10/16/2013, PREPARED BY CARL-SIMPSON & ASSOCIATES.
- CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ADHERE TO ALL REQUIREMENTS OF AGENCIES HAVING JURISDICTION OVER ROCK CRUSHING OPERATIONS. PORTABLE ROCK CRUSHING EQUIPMENT USED IN WESTCHESTER COUNTY IS SUBJECT TO PERMITTING BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH (WCDH). THE ROCK CRUSHING EQUIPMENT MUST MAINTAIN A VALID AND CURRENT PERMIT IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN CHAPTER 873, ARTICLE XII, SECTIONS 873.1353.1 AND 873.1306.1 OF THE WESTCHESTER COUNTY CODE. IN ADDITION TO COUNTY INSPECTION OF THE EQUIPMENT, THESE REGULATIONS REQUIRE MITIGATION MEASURES TO CONTROL THE POTENTIAL FOR FUGITIVE PARTICULATE EMISSIONS (STONE DUST).
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES TO BE DEMOLISHED AND EXISTING UTILITIES TO BE PROTECTED. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR AND JMC PRIOR TO THE START OF CONSTRUCTION.
- PRIOR TO THE START OF ANY DEMOLITION THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND/OR APPROVALS FROM THE TOWN OF NORTH CASTLE AND ALL OTHER AUTHORITIES HAVING JURISDICTION. CONTRACTOR SHALL PAY ALL OUTSTANDING FEES, CHARGES, AND DEPOSITS TO ACQUIRE SAID PERMITS. NO DEMOLITION SHALL COMMENCE UNTIL A PERMIT HAS BEEN OBTAINED FROM THE TOWN.
- THE CONTRACTOR SHALL COORDINATE THE DISCONNECTION OF ALL UTILITIES WITH THE UTILITY COMPANY HAVING JURISDICTION PRIOR TO THE START OF DEMOLITION. CONFIRMATION OF DISCONNECTED UTILITIES SHALL BE PROVIDED TO THE TOWN OF NORTH CASTLE BUILDING DEPARTMENT IN ACCORDANCE WITH THEIR REQUIREMENTS. LETTERS FROM THE APPROPRIATE UTILITIES STATING THAT GAS AND ELECTRIC HAVE BEEN CUT OFF SHALL BE PROVIDED TO THE TOWN.
- THE CONTRACTOR SHALL OBTAIN, AND PROVIDE A COPY TO THE TOWN, A SEWER PLUG PERMIT INDICATING THAT A LICENSED PLUMBER HAS PLUGGED ALL EXISTING SEWER LINES TO THE EXISTING BUILDING. THE CONTRACTOR SHALL OBTAIN, AND PROVIDE A COPY TO THE TOWN, A WATER USE PERMIT INDICATING THAT A LICENSED PLUMBER HAS CUT OUT AND SEALED ALL EXISTING WATER SERVICE TO THE EXISTING BUILDING.
- ANY UNSUITABLE MATERIAL FOUND ON-SITE DURING DEMOLITION/CONSTRUCTION, AS DETERMINED BY THE PROJECT'S GEOTECHNICAL ENGINEER, SHALL BE PROPERLY DISPOSED OF OFF-SITE IN A MANNER APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND REPLACED WITH SUITABLE MATERIAL AS REQUIRED.
- ALL DEMOLITION AND/OR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, INCLUDING STREETS AND SIDEWALKS, SHALL BE PERFORMED IN ACCORDANCE WITH TOWN/STATE REQUIREMENTS.
- ALL CONSTRUCTION/DEMOLITION DEBRIS NOT PROPOSED TO BE RECYCLED SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE IN ACCORDANCE WITH THE REGULATIONS OF ALL LOCAL, STATE AND FEDERAL AGENCIES HAVING JURISDICTION.
- EXISTING CONCRETE MAY BE STORED ON SITE, AND RECYCLED FOR USE AS COMPACTED FILL. ALL MATERIAL TO BE USED AS FILL SHALL BE APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER.
- PRIOR TO THE START OF SITE DEMOLITION, EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH TOWN REQUIREMENTS, AS REQUIRED AND/OR DIRECTED BY THE TOWN OF NORTH CASTLE OR JMC.
- EXISTING DRAINAGE PATTERNS ON SITE SHALL BE MAINTAINED TO THE MAXIMUM EXTENT PRACTICABLE.
- ALL EXISTING UTILITY CASTINGS WHICH ARE TO REMAIN SHALL BE REMOVED AND RESET TO THE NEW PROPOSED GRADES IN ACCORDANCE WITH THE DIRECTIONS OF THE OWNER'S FIELD REPRESENTATIVE. EXISTING CASTINGS WHICH ARE DAMAGED OR UNFIT FOR INSTALLATION IN THE NEW CONSTRUCTION, AS DETERMINED BY THE OWNER'S FIELD REPRESENTATIVE, SHALL BE REPLACED.
- ALL EXISTING SIDEWALKS, CURBS, PAVEMENT, ETC. TO REMAIN, WHICH ARE DISTURBED OR DAMAGED DUE TO THE NEW CONSTRUCTION, ARE TO BE REPLACED WITH MATERIALS CONSISTENT WITH EXISTING CONDITIONS.
- THESE PLANS ARE TO BE PROVIDED TO BOTH THE DEMOLITION CONTRACTOR AND THE SITE CONTRACTOR FOR THEIR USE. INFORMATION AND COORDINATION. ANY QUESTIONS OF CONTRACTOR RESPONSIBILITY AND/OR SEPARATION OF WORK SHALL BE DIRECTED TO THE GENERAL CONTRACTOR IN WRITING PRIOR TO ISSUANCE OF BID.
- THE OWNER SHALL RETAIN A LICENSED AND QUALIFIED PROFESSIONAL, CERTIFIED BY THE STATE, TO INSPECT FOR THE PRESENCE OF ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS WITHIN DEMOLITION AREAS PRIOR TO THE COMMENCEMENT OF DEMOLITION. IF REMEDIATION IS REQUIRED, THE OWNER SHALL DO SO IN ACCORDANCE WITH THE NYS ASBESTOS RULES AND REGULATIONS AND/OR ANY AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED DOCUMENTATION TO THE STATE PRIOR TO OBTAINING A DEMOLITION PERMIT.

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_

CHRISTOPHER CARRY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
 ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
 JOSEPH W. GERMELI, P.E., KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEER

- THE CONTRACTOR SHALL EXTERMINATE RODENTS AS REQUIRED BY WESTCHESTER COUNTY DEPARTMENT OF HEALTH AND MENTAL HYGIENE. A LETTER FROM THE HEALTH DEPARTMENT CERTIFYING THAT A LICENSED EXTERMINATOR HAS TREATED THE EXISTING BUILDING SHALL BE PROVIDED TO THE TOWN DEPARTMENT OF BUILDINGS.
- PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONTRACTOR MUST PROVIDE 24-HOUR NOTIFICATION TO THE TOWN.
- THE CONTRACTOR SHALL PROVIDE VERIFICATION TO THE TOWN THAT FIVE (5)

NOT FOR CONSTRUCTION

|                  |   |
|------------------|---|
| APPLICANT/OWNER: | SUMMIT CLUB PARTNERS, LLC                 |
| PROJECT:         | 568 BEDFORD ROAD (NY-22) ARMONK, NY 10504 |
| ARCHITECT:       | GRANOFF ARCHITECTS                        |
| ADDRESS:         | 330 RAILROAD AVENUE GREENWICH, CT 06850   |
| DATE:            | 07/17/2020                                |
| NO.:             | 1   |
| REVISION:        | RESPONSE TO TOWN COMMENTS                 |
| DATE:            | 03/08/2021                                |
| NO.:             | 2   |
| REVISION:        | RESPONSE TO TOWN COMMENTS                 |
| DATE:            | 06/14/2021                                |
| NO.:             | 3   |
| REVISION:        | RESPONSE TO TOWN COMMENTS                 |
| DATE:            | 07/07/2022                                |
| NO.:             | 4   |
| REVISION:        | RESPONSE TO TOWN COMMENTS                 |
| DATE:            | 05/09/2023                                |
| NO.:             | 5   |
| REVISION:        | RESPONSE TO TOWN COMMENTS                 |
| DATE:            | 07/24/2023                                |
| NO.:             | 6   |
| REVISION:        | RESPONSE TO TOWN COMMENTS                 |
| DATE:            | 07/24/2023                                |
| NO.:             | 7   |
| REVISION:        | RESPONSE TO TOWN COMMENTS                 |
| DATE:            | 07/24/2023                                |

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
 120 BEDFORD ROAD - ARMONK, NY 10504  
 PH: 845.486.1100  
 WWW.JMCPINC.COM

JMC  
 120 BEDFORD ROAD - ARMONK, NY 10504  
 PH: 845.486.1100  
 WWW.JMCPINC.COM

SITE DEMOLITION & TREE REMOVAL PLAN (SOUTH)  
 THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 2209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 2209.8 SUBSECTION 2.

DATE: 11/23/2020  
 PROJECT NO: 20101  
 DRAWING NO: 090

C-020



**LEGEND**

|  |  |
|--|--|
|  | EXISTING PROPERTY LINE                 |
|  | ADJACENT PROPERTY LINE                 |
|  | LIMIT OF REGULATED WETLAND BUFFER AREA |
|  | EXISTING WETLAND LINE AND DELINEATION  |
|  | EXISTING BUILDING LINE                 |
|  | EXISTING PAVEMENT EDGE                 |
|  | EXISTING CURB LINE                     |
|  | EXISTING CONTOUR                       |
|  | EXISTING INDEX CONTOUR                 |
|  | EXISTING STONE WALL                    |
|  | EXISTING RETAINING WALL                |
|  | EXISTING GUIDE RAIL                    |
|  | EXISTING FENCE                         |
|  | EXISTING TREE                          |
|  | EXISTING TREE TO BE REMOVED            |
|  | EXISTING TREE LINE                     |
|  | EXISTING STORM DRAIN LINE              |
|  | EXISTING SANITARY LINE                 |
|  | EXISTING WATER LINE                    |
|  | EXISTING GAS LINE                      |
|  | EXISTING OVERHEAD WIRES                |
|  | EXISTING ELECTRIC LINE                 |
|  | EXISTING DRAIN INLET                   |
|  | EXISTING MANHOLE                       |
|  | EXISTING FIRE HYDRANT                  |
|  | EXISTING GAS VALVE                     |
|  | EXISTING WATER VALVE                   |
|  | EXISTING UTILITY POLE                  |
|  | EXISTING LIGHT POLE                    |
|  | EXISTING SIGN                          |
|  | EXISTING WELL LOCATION AND DESIGNATION |
|  | EXISTING FEATURE TO BE REMOVED         |
|  | PROPOSED SAWCUT LINE                   |
|  | PROPOSED LIMIT OF DISTURBANCE          |

TOTAL NUMBER OF TREES TO BE REMOVED: 265

**NOTES:**

- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP," PREPARED BY JMC, LAST REVISED 03/06/2013. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
- THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND ADHERE TO ALL REQUIREMENTS OF AGENCIES HAVING JURISDICTION OVER ROCK CRUSHING OPERATIONS. PORTABLE ROCK CRUSHING EQUIPMENT USED IN WESTCHESTER COUNTY IS SUBJECT TO PERMITTING BY THE WESTCHESTER COUNTY DEPARTMENT OF HEALTH (WDOH). THE ROCK CRUSHING EQUIPMENT MUST MAINTAIN A VALID AND CURRENT PERMIT IN ACCORDANCE WITH REQUIREMENTS SET FORTH IN CHAPTER 873, ARTICLE XII, SECTIONS 873.133.1 AND 873.136.1 OF THE WESTCHESTER COUNTY CODE. IN ADDITION TO COUNTY INSPECTION OF THE EQUIPMENT, THESE REGULATIONS REQUIRE MITIGATION MEASURES TO CONTROL THE POTENTIAL FOR FUGITIVE PARTICULATE EMISSIONS (STONE DUST).
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF EXISTING UTILITIES TO BE DEMOLISHED AND EXISTING UTILITIES TO BE PROTECTED. IF ANY DISCREPANCIES ARE FOUND, THE CONTRACTOR SHALL NOTIFY THE GENERAL CONTRACTOR AND JMC PRIOR TO THE START OF CONSTRUCTION.
- PRIOR TO THE START OF ANY DEMOLITION THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND/OR APPROVALS FROM THE TOWN OF NORTH CASTLE AND ALL OTHER AGENCIES HAVING JURISDICTION. THE CONTRACTOR SHALL PAY ALL OUTSTANDING FEES, CHARGES, AND DEPOSITS TO ACQUIRE SAID PERMITS. NO DEMOLITION SHALL COMMENCE UNTIL A PERMIT HAS BEEN OBTAINED FROM THE TOWN.
- THE CONTRACTOR SHALL COORDINATE THE DISCONNECTION OF ALL UTILITIES WITH THE UTILITY COMPANY HAVING JURISDICTION PRIOR TO THE START OF DEMOLITION. CONFIRMATION OF DISCONNECTED UTILITIES SHALL BE PROVIDED TO THE TOWN OF NORTH CASTLE BUILDING DEPARTMENT IN ACCORDANCE WITH THEIR REQUIREMENTS. LETTERS FROM THE APPROPRIATE UTILITIES STATING THAT GAS AND ELECTRIC HAVE BEEN CUT OFF SHALL BE PROVIDED TO THE TOWN.
- THE CONTRACTOR SHALL OBTAIN, AND PROVIDE A COPY TO THE TOWN, A SEWER PLUG PERMIT INDICATING THAT A LICENSED PLUMBER HAS PLUGGED ALL EXISTING SEWER LINES TO THE EXISTING BUILDING. THE CONTRACTOR SHALL OBTAIN, AND PROVIDE A COPY TO THE TOWN, A WATER USE PERMIT INDICATING THAT A LICENSED PLUMBER HAS CUT AND SEALED ALL EXISTING WATER SERVICE TO THE EXISTING BUILDING.
- ANY UNSUITABLE MATERIAL FOUND ON-SITE DURING DEMOLITION/CONSTRUCTION, AS DETERMINED BY THE PROJECT'S GEOTECHNICAL ENGINEER, SHALL BE PROPERLY DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPROVED BY ALL AUTHORITIES HAVING JURISDICTION AND REPLACED WITH SUITABLE MATERIAL AS REQUIRED.
- ALL DEMOLITION AND/OR CONSTRUCTION WITHIN THE RIGHT-OF-WAY, INCLUDING STREETS AND SIDEWALKS, SHALL BE PERFORMED IN ACCORDANCE WITH TOWN/STATE REQUIREMENTS.
- ALL CONSTRUCTION/DEMOLITION DEBRIS NOT PROPOSED TO BE RECYCLED SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE IN ACCORDANCE WITH THE REGULATIONS OF ALL LOCAL, STATE AND FEDERAL AGENCIES HAVING JURISDICTION.
- EXISTING CONCRETE MAY BE STORED ON SITE, AND RECYCLED FOR USE AS COMPACTED FILL MATERIAL. TO BE USED AS FILL SHALL BE APPROVED BY THE PROJECT GEOTECHNICAL ENGINEER.
- PRIOR TO THE START OF SITE DEMOLITION, EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH TOWN REQUIREMENTS, AS REQUIRED AND/OR DIRECTED BY THE TOWN OF NORTH CASTLE OR JMC.
- EXISTING DRAINAGE PATTERNS ON SITE SHALL BE MAINTAINED TO THE MAXIMUM EXTENT PRACTICABLE.
- ALL EXISTING UTILITY CASTINGS WHICH ARE TO REMAIN SHALL BE REMOVED AND RESET TO THE NEW PROPOSED GRADES IN ACCORDANCE WITH THE DIRECTIONS OF THE OWNER'S FIELD REPRESENTATIVE. EXISTING CASTINGS WHICH ARE DAMAGED OR UNFIT FOR INSTALLATION IN THE NEW CONSTRUCTION, AS DETERMINED BY THE OWNER'S FIELD REPRESENTATIVE, SHALL BE REPLACED.
- ALL EXISTING SIDEWALKS, CURBS, PAVEMENT, ETC. TO REMAIN, WHICH ARE DISTURBED OR DAMAGED DUE TO THE NEW CONSTRUCTION, ARE TO BE REPLACED WITH MATERIALS CONSISTENT WITH EXISTING CONDITIONS.
- THESE PLANS ARE TO BE PROVIDED TO BOTH THE DEMOLITION CONTRACTOR AND THE SITE CONTRACTOR FOR THEIR USE. INFORMATION AND COORDINATION ANY QUESTIONS OF CONTRACTOR RESPONSIBILITY AND/OR SEPARATION OF WORK SHALL BE DIRECTED TO THE GENERAL CONTRACTOR IN WRITING PRIOR TO ISSUANCE OF BID.
- THE OWNER SHALL RETAIN A LICENSED AND QUALIFIED PROFESSIONAL, CERTIFIED BY THE STATE, TO INSPECT FOR THE PRESENCE OF ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS WITHIN DEMOLITION AREAS PRIOR TO THE COMMENCEMENT OF DEMOLITION. IF REMEDIATION IS REQUIRED, THE OWNER SHALL DO SO IN ACCORDANCE WITH THE NYS ASBESTOS RULES AND REGULATIONS AND/OR ANY AUTHORITIES HAVING JURISDICTION. THE CONTRACTOR SHALL PROVIDE ALL REQUIRED DOCUMENTATION TO THE STATE PRIOR TO OBTAINING A DEMOLITION PERMIT.
- THE CONTRACTOR SHALL EXTERMINATE RODENTS AS REQUIRED BY WESTCHESTER COUNTY DEPARTMENT OF HEALTH AND MENTAL HYGIENE. A LETTER FROM THE HEALTH DEPARTMENT CERTIFYING THAT A LICENSED EXTERMINATOR HAS TREATED THE EXISTING BUILDING SHALL BE PROVIDED TO THE TOWN DEPARTMENT OF BUILDINGS.
- PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONTRACTOR MUST PROVIDE 24-HOUR NOTIFICATION TO THE TOWN.
- THE CONTRACTOR SHALL PROVIDE VERIFICATION TO THE TOWN THAT FIVE (5)

NOT FOR CONSTRUCTION

SARA RICHESON  
11 FVROFFEN ROW

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_

CHRISTOPHER CARRY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
JOSEPH M. GERMELI, P.E., KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEER

|                 |   |
|-----------------|---|
| APPLICANT/OWNER | SUMMIT CLUB PARTNERS, LLC<br>568 BEDFORD ROAD (NY-22)<br>ARMONK, NY 10504 |
| ARCHITECT       | GRANOFF ARCHITECTS<br>330 RAILROAD AVENUE<br>GREENWICH, CT 06850          |
| DATE            | 07/17/2020  |
| NO.             | 1. RESPONSE TO TOWN COMMENTS  |
|                 | 2. RESPONSE TO TOWN COMMENTS  |
|                 | 3. RESPONSE TO TOWN COMMENTS  |
|                 | 4. RESPONSE TO TOWN COMMENTS  |
|                 | 5. RESPONSE TO TOWN COMMENTS  |
|                 | 6. RESPONSE TO TOWN COMMENTS  |
|                 | 7. RESPONSE TO TOWN COMMENTS  |

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
120 BEDFORD ROAD - ARMONK, NY 10504  
PHONE: 914-333-3242 - FAX: 914-233-2102  
www.jmcp.com

**SITE DEMOLITION & TREE REMOVAL PLAN (NORTH)**  
THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND PERMITS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 2209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 2209.9 SUBSECTION 2.

|             |            |          |    |
|-------------|------------|----------|----|
| Drawn       | NC         | Approved | AG |
| Scale       | 1" = 30'   |          |    |
| Date        | 11/23/2020 |          |    |
| Project No. | 20101      |          |    |
| Sheet No.   | C-021      |          |    |



**LANDSCAPE AREA LEGEND**

- PROPOSED PARKING AREA (+396,121 S.F.)
- PROPOSED INTERIOR PARKING LANDSCAPED AREA (+24,466 S.F.)

**PROPOSED INTERIOR PARKING LANDSCAPED AREA CALCULATION:**

TOTAL PROPOSED INTERIOR PARKING LANDSCAPED AREA → 24,466 S.F. X 100 = ±25.4%  
 TOTAL PROPOSED PARKING AREA → 96,121 S.F.

**PHASING NOTES:**

- IN DECEMBER, 2018, IN CONSIDERATION OF THE ADOPTION BY THE TOWN OF THE AMENDMENT, THE APPLICANT RECORDED A DECLARATION PURSUANT TO WHICH THE APPLICANT MAY, SUBJECT TO SITE PLAN APPROVAL, CONSTRUCT ON THE DEVELOPMENT LOT A FIRST PHASE OF THE COMMUNITY (PHASE 1), WHICH MAY CONSIST OF UP TO THIRTY-SIX (36) RESIDENCES, WHICH MAY BE TEE-SHAPED HOMES AND/OR CONDOMINIUM UNITS WITHOUT LIMITATION REGARDING FORM OF OWNERSHIP OF THE RESIDENCES, AND A SECOND PHASE OF THE COMMUNITY (PHASE 2), WHICH MAY CONSIST OF UP TO THIRTY-SIX (36) RESIDENCES, WHICH MAY BE TEE-SHAPED HOMES AND/OR CONDOMINIUM UNITS WITHOUT LIMITATION REGARDING FORM OF OWNERSHIP OF THE RESIDENCES, PROVIDED THAT THE AGGREGATE ADDRESS OF THE GROSS SALES PRICES OF THE CONDOMINIUM UNITS IS POINTED UNDER APPLICABLE FEDERAL LAW AND REGULATIONS. THE DECLARATION ALSO REQUIRES PHASE 1 TO INCLUDE FOUR (4) ON-SITE AFFORDABLE UNITS, AND PHASE 2 TO INCLUDE THREE (3) ON-SITE AFFORDABLE UNITS. HOWEVER, THE APPLICANT IS PERMITTED TO AT ANY TIME ELECT TO RELOCATE ALL OR A PORTION OF THE AFFORDABLE UNITS OFF-SITE WITHIN AREAS IN THE ARMONK HAMLETS THAT ARE SERVED BY PUBLIC SEWER AND WATER, AND THEREBY REDUCE THE ON-SITE AFFORDABLE UNITS AND SUBSTITUTE MARKET-RATE UNITS THEREFOR ON A ONE-TO-ONE BASIS, PROVIDED THAT IN NO EVENT SHALL THE TOTAL NUMBER OF RESIDENTIAL UNITS ON THE PROPERTY EXCEED SEVENTY-THREE (73).
- REFER TO DRAWING C-402 FOR SEQUENCE OF CONSTRUCTION.

| UNIT TYPE                                    | MARKET RATE UNITS                          | AFFORDABLE UNITS                           | TOTAL UNITS                         |
|--|--|--|-------------------------------------|
| MARKET RATE CONDOMINIUMS                     | 80   | 0  | 80                                  |
| Fair and Affordable Units                    | 8  | 8*   | 16                                  |
| <b>Total Residential Units</b>               | <b>88</b>                                  | <b>88</b>                                  | <b>176</b>                          |
| Golf Cottages (4 BR)                         | 5  | 10   | 15                                  |
| Residences (2 BR)                            | 55   | 70   | 125                                 |
| Golf Residences (2 BR)                       | 2  | 0  | 2                                   |
| Club Villa (2 BR)                            | 1  | 1  | 2                                   |
| Affordable Units (2 BR)                      | 6  | 7*   | 13                                  |
| Affordable Units (1 BR)                      | 1  | 0  | 1                                   |
| Affordable Units (4 BR)                      | 1  | 1*   | 2                                   |
| <b>Total Bedrooms</b>                        | <b>209</b>                                 | <b>176</b>                                 | <b>385</b>                          |
| Buffer on Bedford Road                       | 100 feet                                   | 100 feet                                   | 100 feet                            |
| Open Space                                   | 141.6 acres                                | 141.6 acres                                | 127.37 acres                        |
| Impervious Area                              | 17.5 ac. (6.6 ac. New Impervious)          | 16.7 acres (5.8 ac. New Impervious)        | 11.2 acres (5.2 ac. New Impervious) |
| Length of Private Road                       | 3,750 lf                                   | 3,258 lf                                   | 2,262 lf                            |
| Steep Slope Impact                           | 2.75 acres                                 | 2.75 acres                                 | ±1.42 acres                         |
| Trees to be Removed                          | 879 trees                                  | 873 trees                                  | 378 trees                           |
| Wetland Impacts                              | add 1.25 acres of new wetland enhancements | add 1.25 acres of new wetland enhancements | N/A                                 |
| Wetland Buffer Impacts                       | 4.34 acres                                 | 4.59 acres                                 | N/A                                 |
| Trip Generation (Peak)                       | 47 AM / 55 PM                              | 47 AM / 55 PM (or less)                    | 47 AM / 55 PM (or less)             |
| Additional Water Demand                      | 29,275 gpd                                 | 28,325 gpd                                 | 37,392 gpd                          |
| Additional Wastewater Generation             | 29,275 gpd                                 | 28,325 gpd                                 | 37,392 gpd                          |
| Annual Tax and Mitigation Payment Revenue    | \$1,483,223                                | \$2,558,230                                | \$2,558,230                         |
| Total Population                             | 185,204                                    | 183,191                                    | 156,157 (1)                         |
| School Children - Local Experience           | 10   | 9  | 4-5 (2)                             |
| School Children - Rutgers & Local Experience | 20   | 17   | 16-18 (2)                           |

| Project Summary Comparison Table             | DEIS plan   | FES Alternative 2   | Modified Project (New Residential Development)  |
|--|---|---|---|
| Market Rate Condominiums                     | 80  | 80  | See Unit/Bedroom Count Table  |
| Fair and Affordable Units                    | 8   | 8*  | See Unit/Bedroom Count Table  |
| <b>Total Residential Units</b>               | <b>88</b>   | <b>88</b>   | See Unit/Bedroom Count Table  |
| Golf Cottages (4 BR)                         | 5   | 10  | See Unit/Bedroom Count Table  |
| Residences (2 BR)                            | 55  | 70  | See Unit/Bedroom Count Table  |
| Golf Residences (2 BR)                       | 2   | 0   | See Unit/Bedroom Count Table  |
| Club Villa (2 BR)                            | 1   | 1   | See Unit/Bedroom Count Table  |
| Affordable Units (2 BR)                      | 6   | 7*  | See Unit/Bedroom Count Table  |
| Affordable Units (1 BR)                      | 1   | 0   | See Unit/Bedroom Count Table  |
| Affordable Units (4 BR)                      | 1   | 1*  | See Unit/Bedroom Count Table  |
| <b>Total Bedrooms</b>                        | <b>209</b>  | <b>176</b>  | <b>162</b>  |
| Buffer on Bedford Road                       | 100 feet  | 100 feet  | 100 feet  |
| Open Space                                   | 141.6 acres   | 141.6 acres   | 127.37 acres  |
| Impervious Area                              | 17.5 ac. (6.6 ac. New Impervious)   | 16.7 acres (5.8 ac. New Impervious)   | 11.2 acres (5.2 ac. New Impervious)   |
| Length of Private Road                       | 3,750 lf  | 3,258 lf  | 2,262 lf  |
| Steep Slope Impact                           | 2.75 acres  | 2.75 acres  | ±1.42 acres   |
| Trees to be Removed                          | 879 trees   | 873 trees   | 378 trees   |
| Wetland Impacts                              | add 1.25 acres of new wetland enhancements  | add 1.25 acres of new wetland enhancements  | N/A   |
| Wetland Buffer Impacts                       | 4.34 acres  | 4.59 acres  | N/A   |
| Trip Generation (Peak)                       | 47 AM / 55 PM   | 47 AM / 55 PM (or less)   | 47 AM / 55 PM (or less)   |
| Additional Water Demand                      | 29,275 gpd  | 28,325 gpd  | 37,392 gpd  |
| Additional Wastewater Generation             | 29,275 gpd  | 28,325 gpd  | 37,392 gpd  |
| Annual Tax and Mitigation Payment Revenue    | \$1,483,223   | \$2,558,230   | \$2,558,230   |
| Total Population                             | 185,204   | 183,191   | 156,157 (1)   |
| School Children - Local Experience           | 10  | 9   | 4-5 (2)   |
| School Children - Rutgers & Local Experience | 20  | 17  | 16-18 (2)   |
| Visual Impacts                               | 4 new residential buildings along Bedford Road, with landscaping in 25-foot buffer. | 3 new detached single family Golf Cottages along Bedford Road, portion of internal road close to Route 22 eliminated; landscaping added in 100 foot buffer along Bedford Road; 100' buffer extends around the perimeter of the site. Repair to stone wall on Windmill Farms side of Route 22. | 6 new residential buildings with tennis courts and amenities building more than 100 feet from Bedford Road. |

**LEGEND**

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING SETBACK LINE
- EXISTING WETLAND LINE AND DELINEATION
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING STONE WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING TREE AND DESIGNATION
- EXISTING TREE LINE
- EXISTING PAINT
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- PROPOSED BUILDING LINE
- PROPOSED BUILDING OVERHANG
- PROPOSED CONCRETE CURB
- PROPOSED SANUIT LINE
- PROPOSED ACCESSIBLE PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO SPACING DETAILS)
- PROPOSED PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO SPACING DETAILS)
- PROPOSED CONCRETE SIDEWALK
- PROPOSED HEAVY DUTY PAVEMENT
- PROPOSED DECORATIVE PAVERS
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- PROPOSED FENCE
- PROPOSED 2" x 4" WIDE YELLOW LINE #10/C
- PROPOSED 12" WIDE WHITE STOP LINE
- PROPOSED ARROW MARKING ON PAVEMENT
- TRAFFIC SIGN LOCATION & DESIGNATION
- PEDESTRIAN CROSSING

**NOTES:**

- EXISTING CONDITIONS DEPICED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY FILED "TOPOGRAPHIC MAP" PREPARED BY JMC, PLLC, LAST REVISED 03/04/2013, SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 07/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY US.

**REVISIONS**

| No. | Date       | By | Revision                  |
|-----|------------|----|---------------------------|
| 1   | 03/09/2023 | NC | RESPONSE TO TOWN COMMENTS |
| 2   | 06/14/2023 | NC | RESPONSE TO TOWN COMMENTS |
| 3   | 07/29/2023 | NC | RESPONSE TO TOWN COMMENTS |
| 4   | 08/22/2023 | NC | GENERAL REVISIONS         |
| 5   | 07/24/2023 | NC | RESPONSE TO TOWN COMMENTS |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
 330 RAILROAD AVENUE  
 GREENWICH, CT 06850

PREPARED BY: **JMC**  
 JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
 JMC Site Development Consultants, LLC  
 Julia Meyer Consulting, Inc.

120 BEDFORD ROAD - ARMONK, NY 10554  
 PH: 914-233-2424 - FAX: 914-233-2102  
 www.jmcpllc.com



**OVERALL LAYOUT AND PHASING PLAN**

**THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)**  
 TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED: \_\_\_\_\_ DATE: \_\_\_\_\_

CHRISTOPHER CARRHY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
 ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. GEMELLE, P.E. KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEER

Scale: 1" = 50'

Date: 11/23/2020

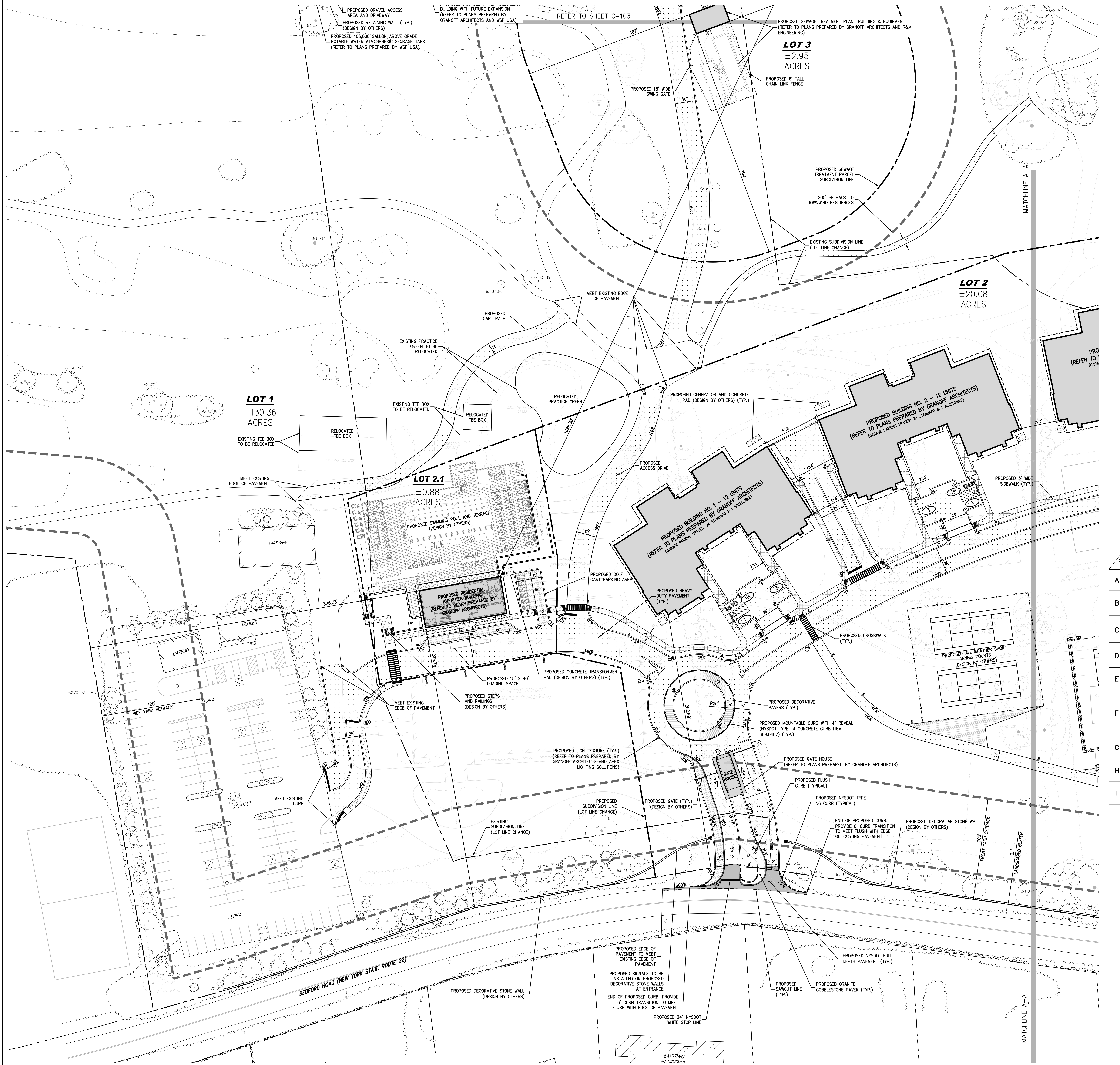
Project No.: 20101

DATE: \_\_\_\_\_

**C-100A**

NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION



### LEGEND

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING SETBACK LINE
- EXISTING WETLAND LINE AND DELINEATION
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING STONE WALL
- EXISTING GUIDE RAIL
- EXISTING FENCE
- EXISTING TREE AND DESIGNATION
- EXISTING TREE LINE
- EXISTING PAINT
- EXISTING UTILITY POLE
- EXISTING LIGHT POLE
- EXISTING SIGN
- PROPOSED BUILDING LINE
- PROPOSED BUILDING OVERHANG
- PROPOSED CONCRETE CURB
- PROPOSED SAWCUT LINE
- PROPOSED ACCESSIBLE PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO STRIPING DETAILS)
- PROPOSED PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO STRIPING DETAILS)
- PROPOSED CONCRETE SIDEWALK
- PROPOSED HEAVY DUTY PAVEMENT
- PROPOSED DECORATIVE PAVERS
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- PROPOSED FENCE
- PROPOSED 2'-4" WIDE YELLOW LINES 8" O.C.
- PROPOSED 12" WIDE WHITE STOP LINE
- PROPOSED ARROW MARKING ON PAVEMENT
- TRAFFIC SIGN LOCATION & DESIGNATION
- PEDESTRIAN CROSSING

**NOTES:**  
 1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP," PREPARED BY JMC, P.L.C., LAST REVISED 03/08/2013, SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 01/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.

**SIGN TABLE**

| DESIGNATION NUMBER | SIGN    | SIZE                   | DESCRIPTION                     | MARKING TYPE  | MARKING HEIGHT | REVEAL (FT)      | REFLECTORIZED |
|--------------------|---------|------------------------|---------------------------------|---------------|----------------|------------------|---------------|
| A                  | STOP    | 30"x30"                | WHITE ON RED                    | STEEL CHANNEL | 7'-0"          | R1-1             | X             |
| B                  | WALKWAY | 12"x18"                | GREEN & BLUE ON WHITE           | STEEL CHANNEL | 7'-0"          | R7-8             | X             |
| C                  | WALKWAY | 12"x18"<br>12"x6"      | GREEN & BLUE ON WHITE           | STEEL CHANNEL | 7'-0"          | R7-8<br>R7-8A    | X             |
| D                  | WALKWAY | 12"x18"                | RED ON WHITE                    | STEEL CHANNEL | 7'-0"          | N9P1-2           | X             |
| E                  | YIELD   | 30"x30"x30"            | RED ON WHITE                    | STEEL CHANNEL | 7'-0"          | R1-2             | X             |
| F                  | WALKWAY | 30"x30"x30"<br>30"x30" | RED ON WHITE<br>BLACK ON YELLOW | STEEL CHANNEL | 6'-0"          | R1-2<br>NYW3-15  | X             |
| G                  | WALKWAY | 30"x24"                | BLACK ON WHITE                  | STEEL CHANNEL | 7'-0"          | R6-4             | X             |
| H                  | WALKWAY | 30"x30"                | BLACK ON WHITE                  | STEEL CHANNEL | 7'-0"          | NYW3-15          | X             |
| I                  | WALKWAY | 30"x30"<br>24"x12"     | BLACK ON YELLOW                 | STEEL CHANNEL | 7'-0"          | W11-2<br>W16-7PL | X             |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
 330 RAILROAD AVENUE  
 GREENWICH, CT 06850

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
 120 BEDFORD ROAD • ARMONK, NY 10504  
 PHONE: 914.333.3222 • FAX: 914.233.2102  
 www.jmcpllc.com

**SITE LAYOUT (SOUTH)**

**THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)**  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

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APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_

CHRISTOPHER CARRY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
**ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER**

JOSEPH M. GEMELLE, P.E.  
 KELLARD SESSIONS CONSULTING, P.C.  
 CONSULTING TOWN ENGINEER

Scale: 1" = 30'

Date: 11/23/2020

Project No: 20101

Sheet: LAYOUT 5001H LAYO5

Drawing No: \_\_\_\_\_

**C-100**



| LEGEND |  |
|--------|--|
|        | EXISTING PROPERTY LINE   |
|        | ADJACENT PROPERTY LINE   |
|        | EXISTING SETBACK LINE  |
|        | EXISTING WETLAND LINE AND DELINEATION  |
|        | EXISTING BUILDING LINE   |
|        | EXISTING CURB LINE   |
|        | EXISTING STONE WALL  |
|        | EXISTING GUIDE RAIL  |
|        | EXISTING FENCE   |
|        | EXISTING TREE AND DESIGNATION  |
|        | EXISTING TREE LINE   |
|        | EXISTING PAINT   |
|        | EXISTING UTILITY POLE  |
|        | EXISTING LIGHT POLE  |
|        | EXISTING SIGN  |
|        | PROPOSED BUILDING LINE   |
|        | PROPOSED BUILDING OVERHANG   |
|        | PROPOSED CONCRETE CURB   |
|        | PROPOSED SAWCUT LINE   |
|        | PROPOSED ACCESSIBLE PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO STRIPING DETAILS) |
|        | PROPOSED PARKING SPACES WITH NUMBER OF SPACES INDICATED (REFER TO STRIPING DETAILS)            |
|        | PROPOSED CONCRETE SIDEWALK   |
|        | PROPOSED HEAVY DUTY PAVEMENT   |
|        | PROPOSED DECORATIVE PAVERS   |
|        | PROPOSED RETAINING WALL (DESIGN BY OTHERS)   |
|        | PROPOSED FENCE   |
|        | PROPOSED 2-4" WIDE YELLOW LINES 8" O.C.  |
|        | PROPOSED 12" WIDE WHITE STOP LINE  |
|        | PROPOSED ARROW MARKING ON PAVEMENT   |
|        | TRAFFIC SIGN LOCATION & DESIGNATION  |
|        | PEDESTRIAN CROSSING  |

**NOTES:**  
 1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP," PREPARED BY JMC, PLLC, LAST REVISED 03/08/2013, SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 01/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.

**SIGN TABLE**

| DESIGNATION NUMBER | SHOW | SIZE               | DESCRIPTION           | MARKING TYPE  | MARKING HEIGHT | REGULATORY       | RECOMMENDED |
|--------------------|------|--------------------|-----------------------|---------------|----------------|------------------|-------------|
| A                  |      | 30"x30"            | WHITE ON RED          | STEEL CHANNEL | 7'-0"          | R1-1             | X           |
| B                  |      | 12"x18"            | GREEN & BLUE ON WHITE | STEEL CHANNEL | 7'-0"          | R7-8             | X           |
| C                  |      | 12"x18"<br>12"x30" | GREEN & BLUE ON WHITE | STEEL CHANNEL | 7'-0"          | R7-8<br>R7-8A    | X           |
| D                  |      | 12"x18"            | RED ON WHITE          | STEEL CHANNEL | 7'-0"          | NYP1-2           | X           |
| E                  |      | 30"x30"/30"        | RED ON WHITE          | STEEL CHANNEL | 7'-0"          | R1-2             | X           |
| F                  |      | 30"x30"/30"        | RED ON WHITE          | STEEL CHANNEL | 6'-0"          | R1-2             | X           |
| G                  |      | 30"x24"            | BLACK ON WHITE        | STEEL CHANNEL | 7'-0"          | R6-4             | X           |
| H                  |      | 30"x30"            | BLACK ON WHITE        | STEEL CHANNEL | 7'-0"          | NYWS-15          | X           |
| I                  |      | 30"x30"<br>24"x12" | BLACK ON YELLOW       | STEEL CHANNEL | 7'-0"          | W11-2<br>W16-79L | X           |

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHRISTOPHER CATHY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
 ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
 JOSEPH M. CERNIELE, P.E., KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEER DATE: \_\_\_\_\_

| Rev. | Date       | By | NC | AG |
|------|------------|----|----|----|
| 1    | 07/17/2021 | NC |    |    |
| 2    | 03/08/2022 | NC |    |    |
| 3    | 06/14/2022 | NC |    |    |
| 4    | 07/07/2022 | NC |    |    |
| 5    | 08/01/2022 | NC |    |    |
| 6    | 05/09/2023 | NC |    |    |
| 7    | 07/24/2023 | NC |    |    |

APPLICANT: SUMMIT CLUB PARTNERS, LLC  
 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504

ARCHITECT: GRANOFF ARCHITECTS  
 330 RAILROAD AVENUE  
 GREENWICH, CT 06850

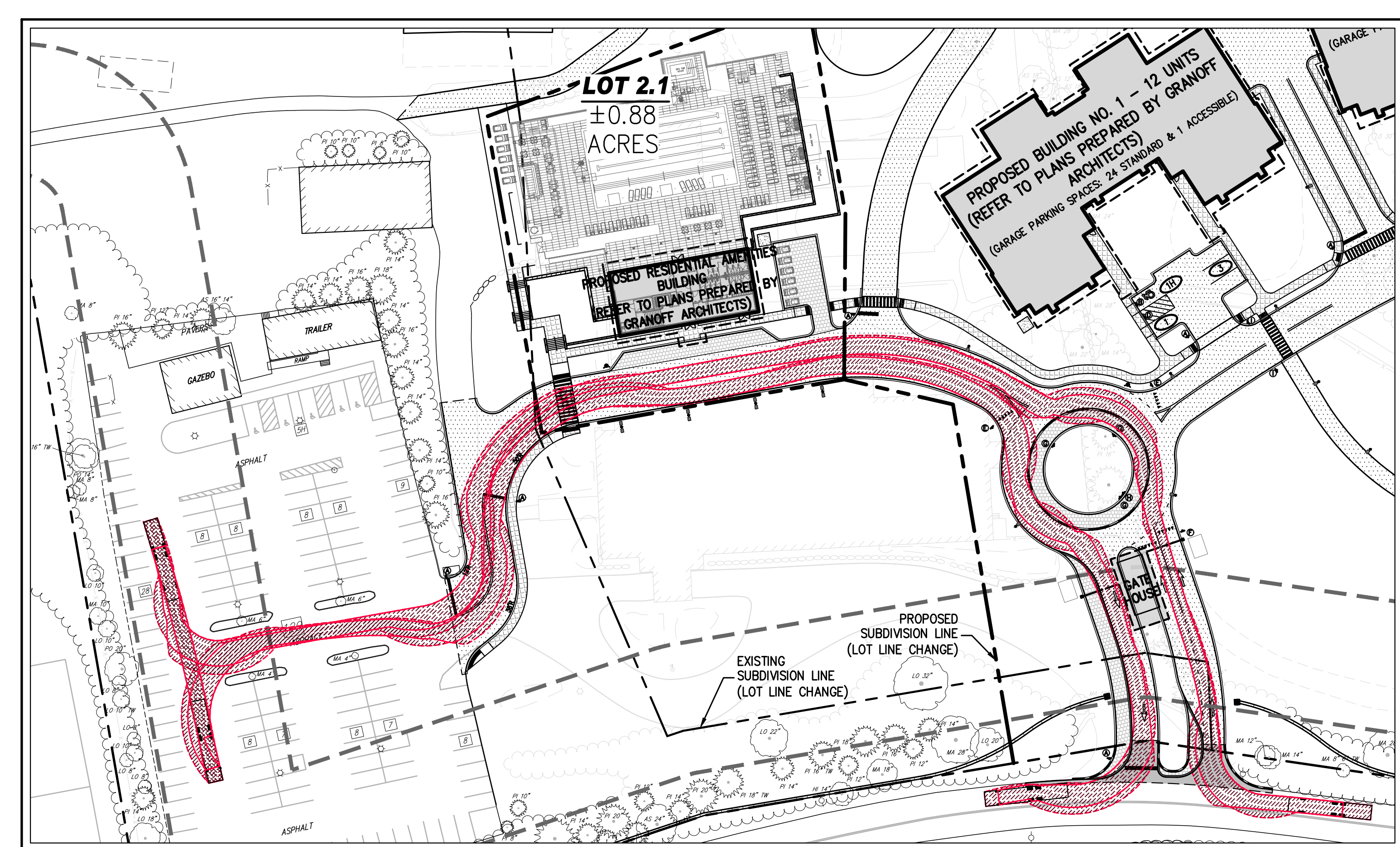
JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
 120 BEDFORD ROAD - ARMONK, NY 10504  
 PHONE: 914.233.2422 - FAX: 914.233.2102  
 www.jmcp.com

John Meyer Consulting, LLC  
 120 BEDFORD ROAD - ARMONK, NY 10504  
 PHONE: 914.233.2422 - FAX: 914.233.2102  
 www.jmcp.com

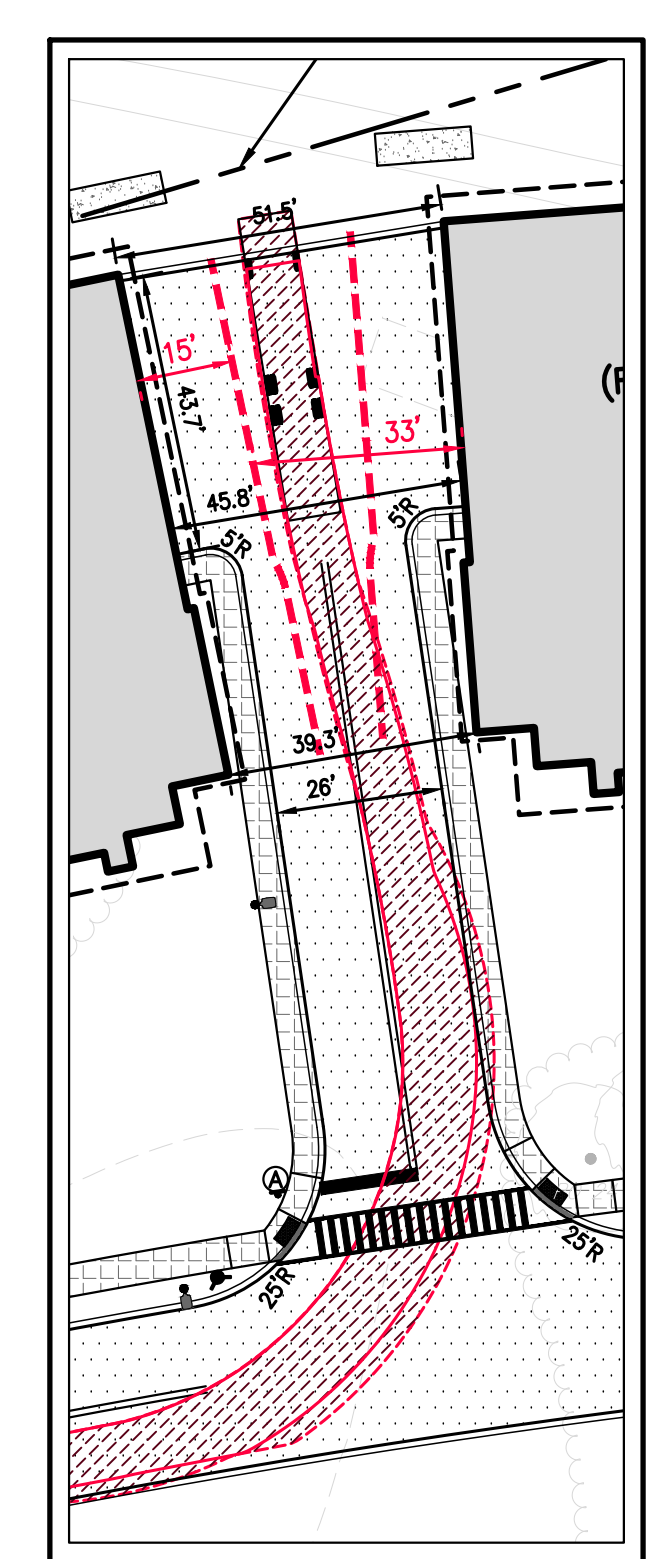
**SITE LAYOUT (NORTH)**  
 THE SUMMIT CLUB AT ARMONK  
 (RESIDENTIAL PHASE)  
 TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

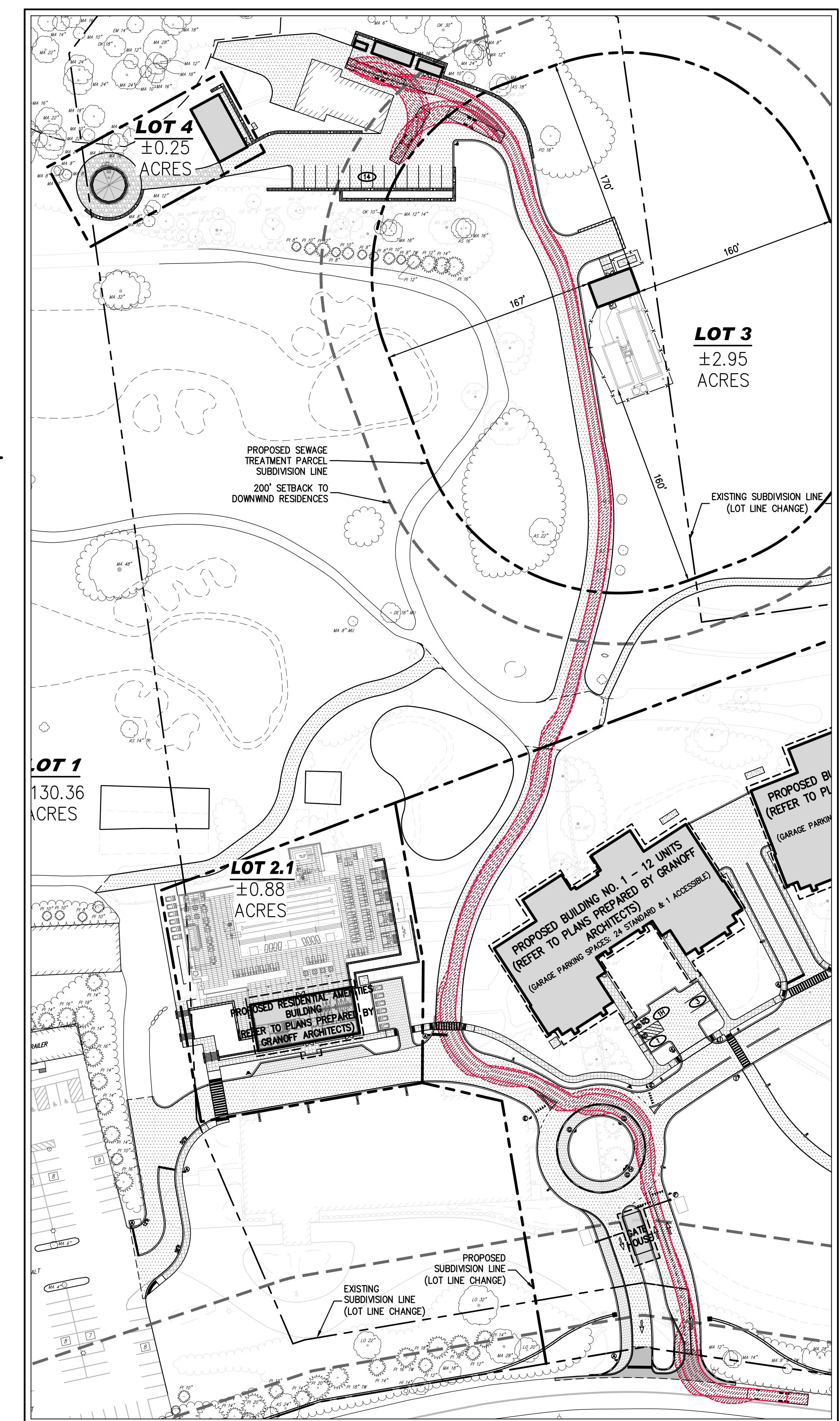
| FIRE TRUCK PROFILE         |          |
|----------------------------|----------|
| Overall Length             | 47.75ft  |
| Overall Width              | 7.917ft  |
| Overall Body Height        | 12.417ft |
| Min. Body Ground Clearance | 6.533ft  |
| Track Width                | 6.063ft  |
| Lock-to-lock time          | 8.00s    |
| Max Wheel Angle            | 45.00°   |



**ROAD A FIRE TRUCK TURNING ANALYSIS**  
SCALE: 1" = 50'



**TYPICAL SHARED DRIVEWAY  
FIRE TRUCK TURNING ANALYSIS**  
SCALE: 1" = 30'



**MAINTENANCE ACCESS ROAD FIRE TRUCK TURNING ANALYSIS**  
SCALE: 1" = 50'



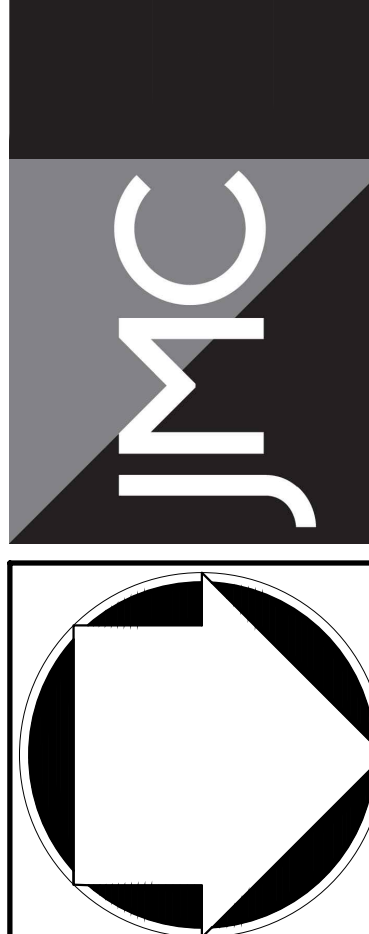
**ROAD B FIRE TRUCK TURNING ANALYSIS**  
SCALE: 1" = 50'

| No. | Date       | Revisions                 |
|-----|------------|---------------------------|
| 1.  | 07/17/2021 | RESPONSE TO TOWN COMMENTS |
| 2.  | 05/06/2021 | RESPONSE TO TOWN COMMENTS |
| 3.  | 06/14/2021 | RESPONSE TO TOWN COMMENTS |
| 4.  | 07/07/2021 | RESPONSE TO TOWN COMMENTS |
| 5.  | 05/09/2022 | RESPONSE TO TOWN COMMENTS |
| 6.  | 05/09/2022 | RESPONSE TO TOWN COMMENTS |
| 7.  | 07/24/2023 | RESPONSE TO TOWN COMMENTS |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
330 RAILROAD AVENUE  
GREENWICH, CT 06850

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
JMC Site Development Consultants, LLC  
John Meyer Consulting, Inc.  
120 BEDFORD ROAD - ARMONK, NY 10534  
PHONE: 914.333.2422 - FAX: 914.233.2102  
www.jmcpic.com



**FIRE TRUCK ACCESS PLAN**  
THE SUMMIT CLUB AT ARMONK  
(RESIDENTIAL PHASE)  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_

DATE: \_\_\_\_\_

CHRISTOPHER CARRHY, CHAIRMAN,  
TOWN OF NORTH CASTLE PLANNING BOARD

ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

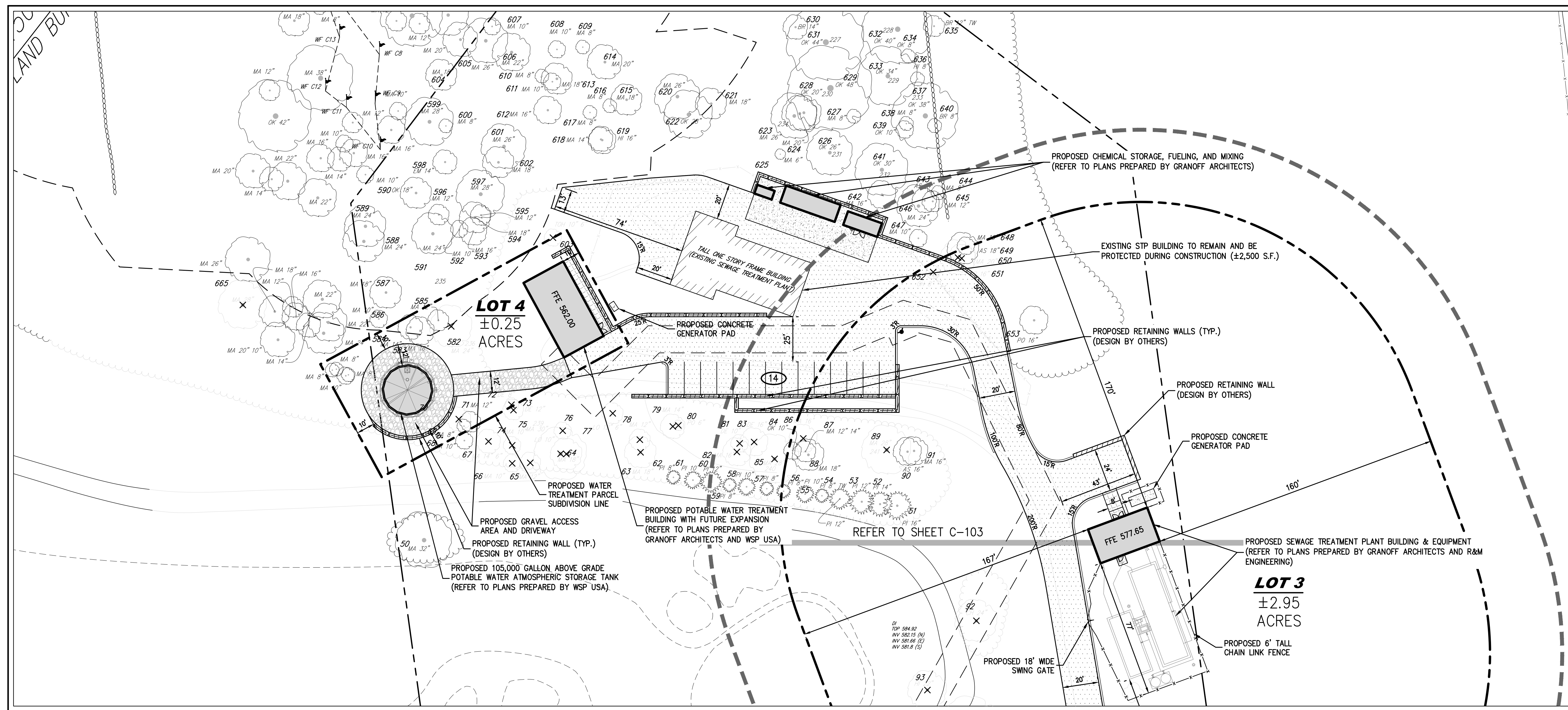
DATE: \_\_\_\_\_

JOSEPH M. CERNIELE, P.E.  
KELLARD SESSIONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

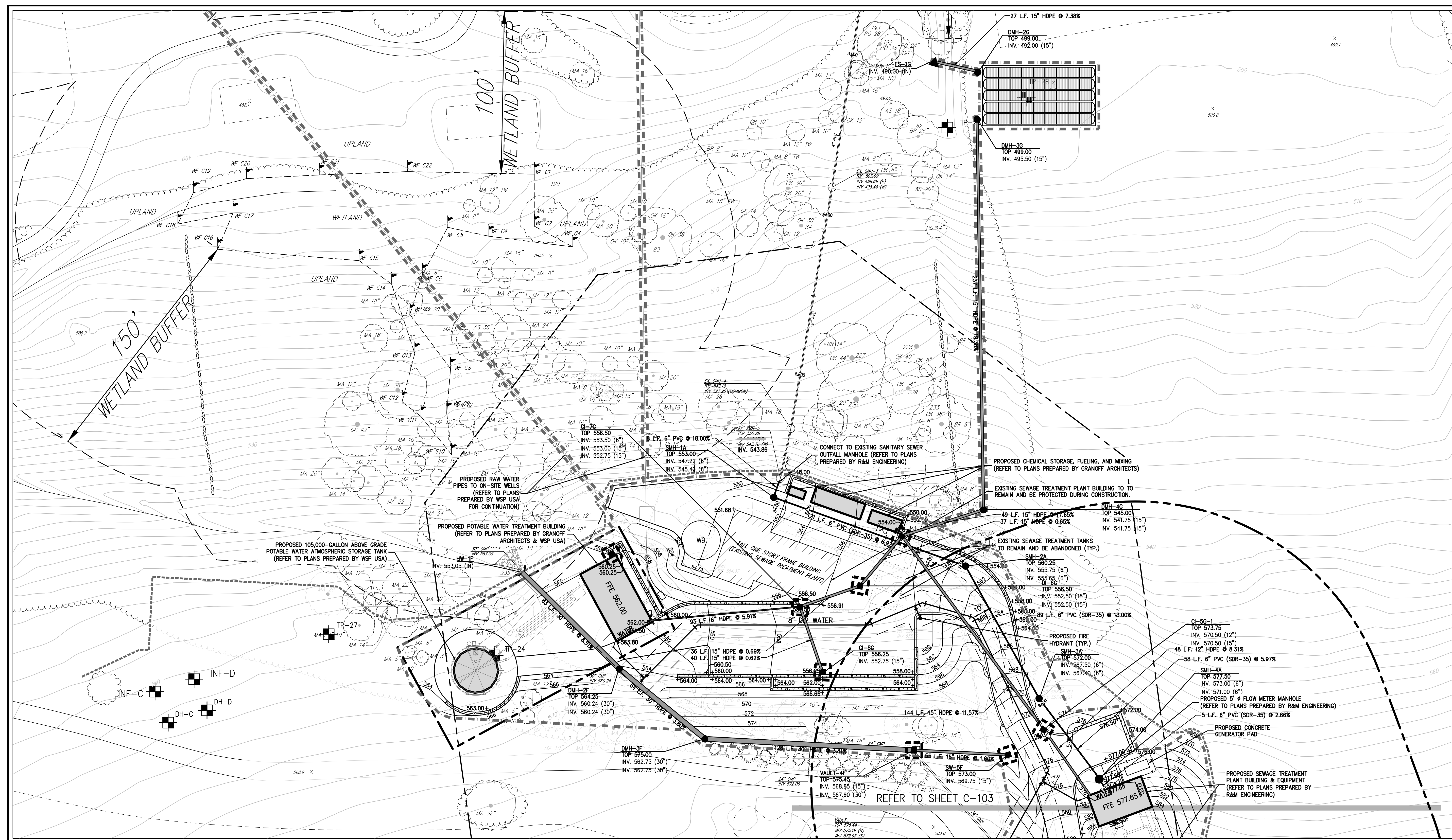
Drawn: NC Approved: AG  
Scale: AS SHOWN  
Date: 11/23/2020  
Project No: 20101  
JOB-DATE: FIRE ACCESS L&P  
Drawing No: **C-102**

NOT FOR CONSTRUCTION





**LAYOUT & TREE REMOVAL PLAN**  
SCALE: 1" = 30'

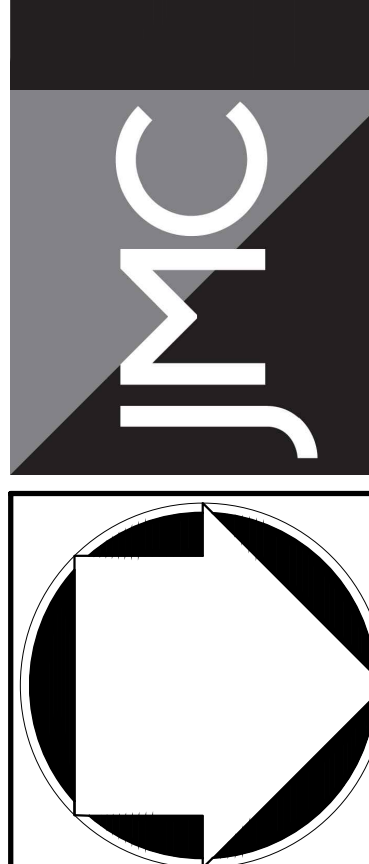


**GRADING, UTILITIES, AND EROSION & SEDIMENT CONTROL PLAN**  
SCALE: 1" = 30'

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_  
 AS SHOWN  
 03/28/2022  
 PROJECT NO: 20101  
 DRAWING NO: 200-2 UTIL COMPLEX (C-103) SEAR  
 DATE: \_\_\_\_\_  
 JOSEPH M. CERNIELE, P.E.  
 KELLARD SESSONS CONSULTING, P.C.  
 CONSULTING TOWN ENGINEER

|                              |   |
|------------------------------|---|
| APPLICANT/OWNER:             | SUMMIT CLUB PARTNERS, LLC<br>568 BEDFORD ROAD (NY-22)<br>ARMONK, NY 10504 |
| ARCHITECT:                   | GRANOFF ARCHITECTS<br>330 RAILROAD AVENUE<br>GREENWICH, CT 06850          |
| Revision                     | Date  |
| 1. RESPONSE TO TOWN COMMENTS | 05/09/2022  |
| 2. RESPONSE TO TOWN COMMENTS | 07/24/2023  |

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
 JMC Site Development Consultants, LLC  
 John Meyer Consulting, Inc.  
 120 BEDFORD ROAD - ARMONK, NY 10504  
 voice 914.233.2222 • fax 914.233.2102  
 www.jmcp.com



UTILITY COMPLEX PLANS  
 THE SUMMIT CLUB AT ARMONK  
 (RESIDENTIAL PHASE)  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

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C-103

NOT FOR CONSTRUCTION

REFER TO SHEET C-103

PROPOSED TOTAL LIMIT OF DISTURBANCE (4937.038 SF / 215.1 AC) (INCLUDES TRENCHING TO WATER SUPPLY WELLS)

MAINTENANCE ACCESS ROAD

PROPOSED BUILDING NO. 2 - 12 UNITS (REFER TO PLANS PREPARED BY GRANOFF ARCHITECTS) (GARAGE PARKING SPACES: 24 STANDARD & 1 ACCESSIBLE) FFE: 639.50

PROPOSED BUILDING NO. 3 - 12 UNITS (REFER TO PLANS PREPARED BY GRANOFF ARCHITECTS) (GARAGE PARKING SPACES: 24 STANDARD & 1 ACCESSIBLE) FFE: 640.05

PROPOSED RESIDENTIAL AMENITIES BUILDING (REFER TO PLANS PREPARED BY GRANOFF ARCHITECTS) FFE: 633.65

PROPOSED ALL WEATHER SPORT TENNIS COURTS (DESIGN BY OTHERS)

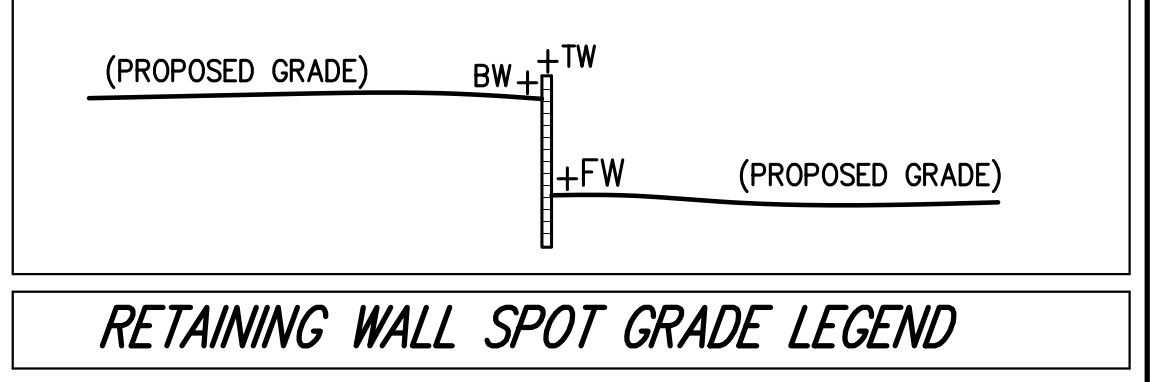
BEDFORD ROAD (NEW YORK STATE ROUTE 22)

EXISTING RESIDENCE

**LEGEND**

- EXISTING PROPERTY LINE
- ADJACENT PROPERTY LINE
- EXISTING EASEMENT LINE
- EXISTING WETLAND LINE AND DELINEATION
- EXISTING BUILDING OVERHANG
- EXISTING BUILDING LINE
- EXISTING PAVEMENT EDGE
- EXISTING CURB LINE
- EXISTING CONTOUR
- EXISTING INDEX CONTOUR
- EXISTING STONE WALL
- EXISTING RETAINING WALL
- EXISTING FENCE RAIL
- EXISTING FENCE
- EXISTING DRAIN INLET
- EXISTING MANHOLE
- EXISTING LIGHT POLE
- EXISTING UTILITY POLE
- EXISTING SIGN
- PROPOSED BUILDING LINE
- PROPOSED CONCRETE CURB
- PROPOSED CONCRETE SIDEWALK
- PROPOSED DROP CURB AND RAMP
- PROPOSED FINISHED GRADE
- PROPOSED SPOT GRADE
- PROPOSED SANITARY SEWER MANHOLE
- PROPOSED STORM DRAIN MANHOLE
- PROPOSED TYPE CI DRAIN INLET
- PROPOSED TYPE DI DRAIN INLET
- PROPOSED HEADWALL
- PROPOSED SUBSURFACE DRAINAGE OUTLET CONTROL STRUCTURE
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)
- BORING LOCATION AND DESIGNATION
- PROPOSED LIMIT OF DISTURBANCE

- NOTES:**
- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP", PREPARED BY JMC, LAST REVISED 03/06/2013, SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 01/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
  - GEOTECHNICAL BORING/TEST PIT LOCATIONS DEPICTED ON THIS PLAN WERE TAKEN FROM THE GEOTECHNICAL REPORT ENTITLED, "REPORT ON SUBSURFACE SOIL AND FOUNDATION INVESTIGATION", DATED 10/16/2013, PREPARED BY CARLIN-SIMPSON & ASSOCIATES.
  - ALL STORMWATER MANAGEMENT PRACTICES SHALL REMAIN UNDISTURBED AND BE PROTECTED FROM HEAVY MACHINERY TRAFFIC DURING CONSTRUCTION. HOWEVER DURING CONSTRUCTION OF THE PRACTICE THE CONTRACTOR SHALL MINIMIZE AND AVOID HEAVY MACHINERY TRAFFIC TO THE MAXIMUM EXTENT PRACTICABLE. THERE SHALL BE NO STORAGE OF MATERIALS WITHIN AREAS TO BE USED FOR STORMWATER MANAGEMENT PRACTICES. THE CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE AROUND THE PRACTICE TO DISCOURAGE VEHICLE TRAFFIC.



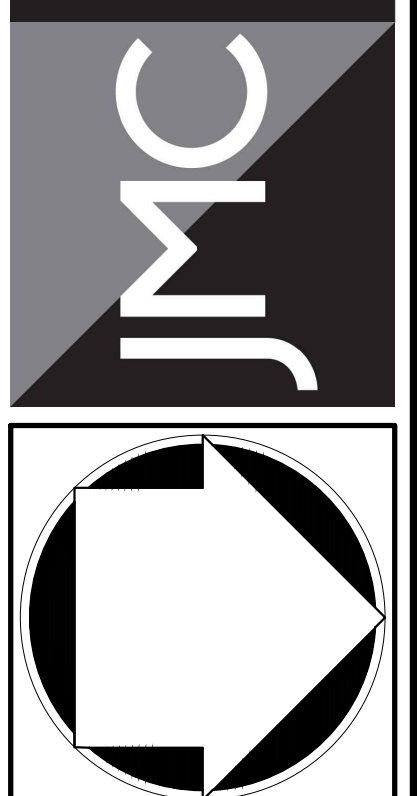
|         | CUT & FILL ANALYSIS        |                             |
|---------|----------------------------|-----------------------------|
|         | REQUIRED CUT (CUBIC YARDS) | REQUIRED FILL (CUBIC YARDS) |
| OVERALL | 52,900                     | 48,000                      |
| PHASE 1 | 29,200                     | 35,400                      |
| PHASE 2 | 17,000                     | 11,400                      |
| PHASE 3 | 6,700                      | 1,200                       |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
330 RAILROAD AVENUE  
GREENWICH, CT 06850

| No. | Revision                  | Date       |
|-----|---------------------------|------------|
| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2021 |
| 2.  | RESPONSE TO TOWN COMMENTS | 03/06/2022 |
| 3.  | RESPONSE TO TOWN COMMENTS | 06/14/2022 |
| 4.  | RESPONSE TO TOWN COMMENTS | 07/07/2022 |
| 5.  | RESPONSE TO TOWN COMMENTS | 05/09/2023 |
| 6.  | RESPONSE TO TOWN COMMENTS | 05/09/2023 |
| 7.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 |

JMC Planning, Engineering, Landscaping, Architecture & Land Surveying, PLLC  
John Meyer Consulting, Inc.  
420 BEDFORD ROAD - ARMONK, NY 10504  
PHONE: 914.233.2222 - FAX: 914.233.2162  
www.jmcpllc.com



**SITE GRADING PLAN (SOUTH)**  
THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

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APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_  
CHRISTOPHER CARRY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
JOSEPH M. CERNIELE, P.E. KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEER  
SARA RICHEL, 11/23/2020

Drawn: NC Approved: AG  
Scale: 1" = 30'  
Date: 11/23/2020  
Project No.: 20101  
300-DWG: GRAD 20101 GRAD.dwg  
Drawing No.: **C-200**

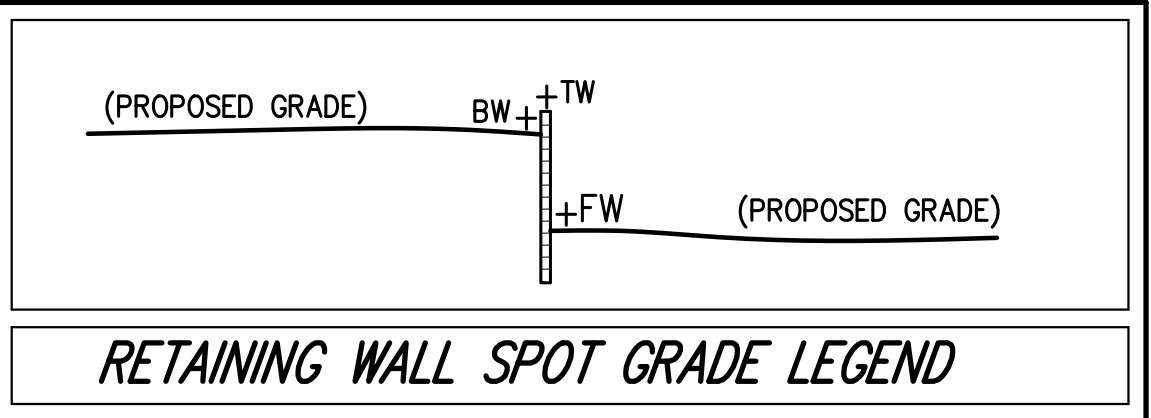
NOT FOR CONSTRUCTION



**LEGEND**

|  |   |
|--|---|
|  | EXISTING PROPERTY LINE                                |
|  | ADJACENT PROPERTY LINE                                |
|  | EXISTING EASEMENT LINE                                |
|  | EXISTING WETLAND LINE AND DELINEATION                 |
|  | EXISTING BUILDING OVERHANG                            |
|  | EXISTING BUILDING LINE                                |
|  | EXISTING PAVEMENT EDGE                                |
|  | EXISTING CURB LINE                                    |
|  | EXISTING INDEX CONTOUR                                |
|  | EXISTING STONE WALL                                   |
|  | EXISTING RETAINING WALL                               |
|  | EXISTING GUIDE RAIL                                   |
|  | EXISTING FENCE  |
|  | EXISTING DRAIN INLET                                  |
|  | EXISTING MANHOLE                                      |
|  | EXISTING UTILITY POLE                                 |
|  | EXISTING LIGHT POLE                                   |
|  | EXISTING SIGN   |
|  | PROPOSED BUILDING LINE                                |
|  | PROPOSED CONCRETE CURB                                |
|  | PROPOSED CONCRETE SIDEWALK                            |
|  | PROPOSED DROP CURB AND RAMP                           |
|  | PROPOSED FINISHED GRADE                               |
|  | PROPOSED SPOT GRADE                                   |
|  | PROPOSED SANITARY SEWER MANHOLE                       |
|  | PROPOSED STORM DRAIN MANHOLE                          |
|  | PROPOSED TYPE CI DRAIN INLET                          |
|  | PROPOSED TYPE DI DRAIN INLET                          |
|  | PROPOSED HEADWALL                                     |
|  | PROPOSED SUBSURFACE DRAINAGE OUTLET CONTROL STRUCTURE |
|  | PROPOSED RETAINING WALL (DESIGN BY OTHERS)            |
|  | BORING LOCATION AND DESIGNATION                       |
|  | PROPOSED LIMIT OF DISTURBANCE                         |

- NOTES:**
- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP," PREPARED BY JMC, LAST REVISED 03/06/2013, SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 01/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
  - GEOTECHNICAL BORING/TEST PIT LOCATIONS DEPICTED ON THIS PLAN WERE TAKEN FROM THE GEOTECHNICAL REPORT ENTITLED, "REPORT ON SUBSURFACE SOIL AND FOUNDATION INVESTIGATION," DATED 10/16/2013, PREPARED BY CARLIN-SIMPSON & ASSOCIATES.
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**CUT & FILL ANALYSIS**

|         | REQUIRED CUT (CUBIC YARDS) | REQUIRED FILL (CUBIC YARDS) |
|---------|----------------------------|-----------------------------|
| OVERALL | 52,900                     | 48,000                      |
| PHASE 1 | 29,200                     | 35,400                      |
| PHASE 2 | 17,000                     | 11,400                      |
| PHASE 3 | 6,700                      | 1,200                       |

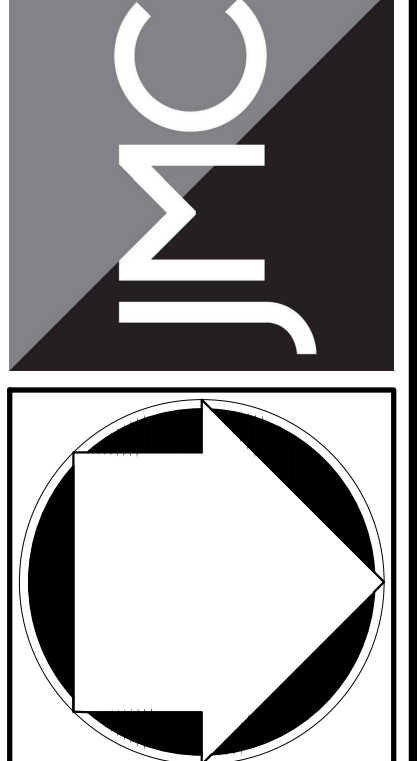
**REVISIONS**

| No. | Date       | By | Reason                    |
|-----|------------|----|---------------------------|
| 1.  | 01/17/2021 | NC | RESPONSE TO TOWN COMMENTS |
| 2.  | 03/06/2021 | NC | RESPONSE TO TOWN COMMENTS |
| 3.  | 06/14/2021 | NC | RESPONSE TO TOWN COMMENTS |
| 4.  | 07/07/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 5.  | 08/09/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 6.  | 09/09/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 7.  | 07/24/2023 | NC | RESPONSE TO TOWN COMMENTS |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
330 RAILROAD AVENUE  
GREENWICH, CT 06850

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
JMC Site Development Consultants, LLC  
John Meyer Consulting, Inc.  
120 BEDFORD ROAD - ARMONK, NY 10504  
PHONE: 914-333-3232 - FAX: 914-233-2102  
www.jmcpnc.com



**SITE GRADING PLAN (NORTH)**  
**THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)**  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

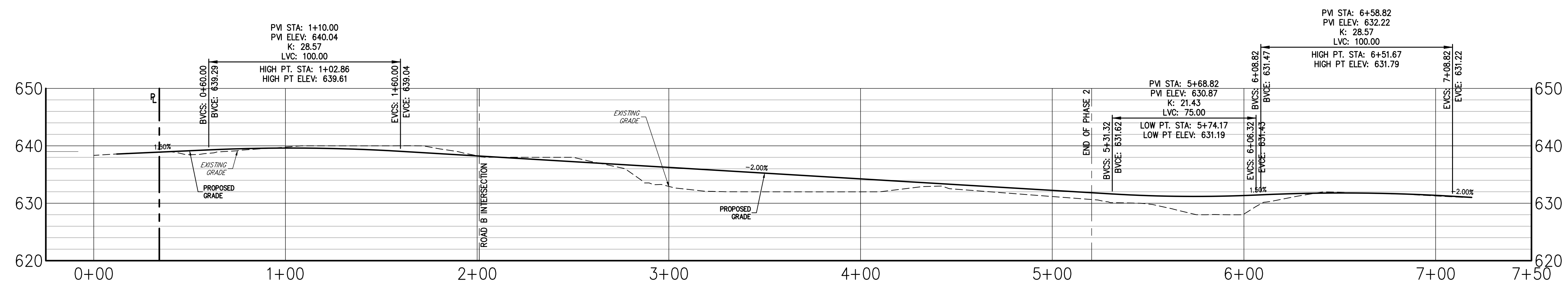
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APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_  
CHRISTOPHER CARTHAY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
JOSEPH M. GEMBLE, P.E. KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEER

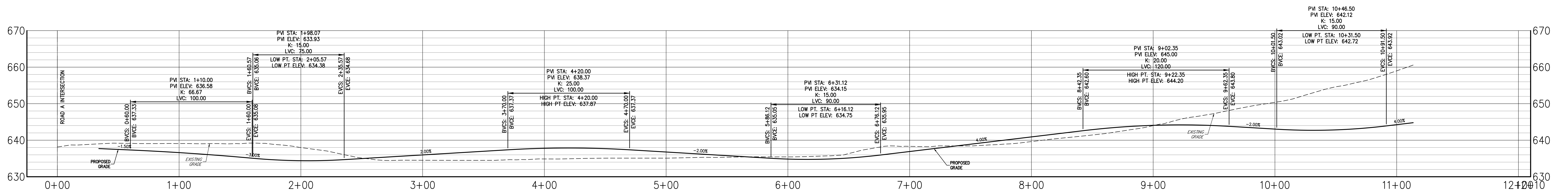
Scale: 1" = 30'  
Date: 11/23/2020  
Project No: 20101  
Sheet: 02 of 04  
Drawing No: C-201

NOT FOR CONSTRUCTION

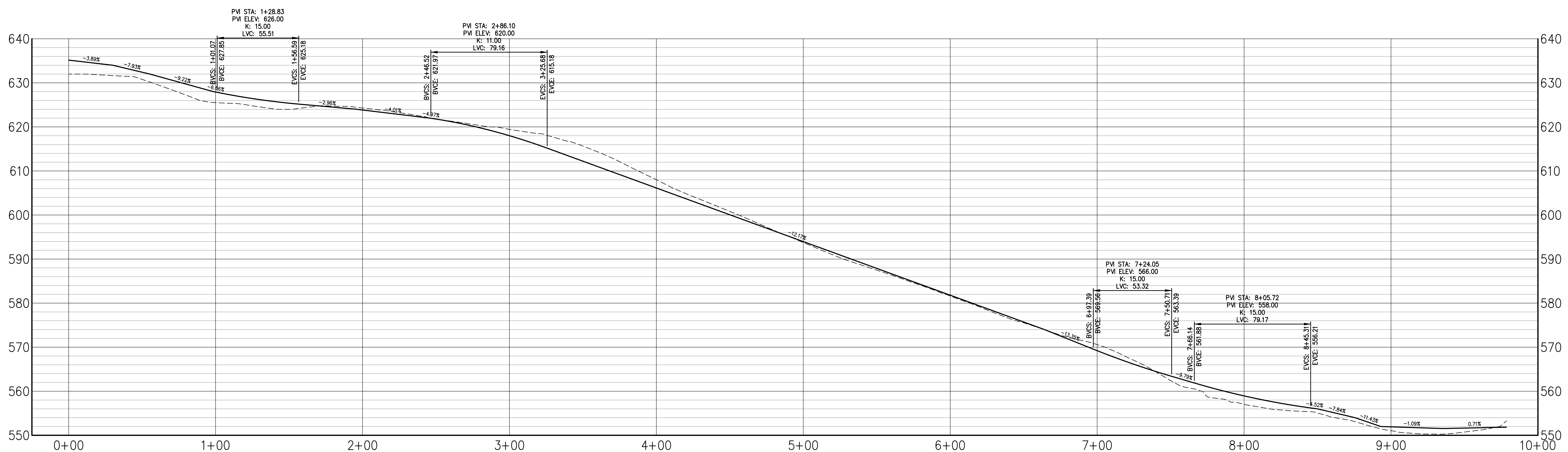
SARA RICHELSON  
11/23/2020 DWG



**ROAD A PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**ROAD B PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**MAINTENANCE ACCESS ROAD PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'

NOT FOR CONSTRUCTION

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_

CHRISTOPHER CARRHY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
 ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. GERMELI, P.E.  
 KELLARD SESSIONS CONSULTING, P.C.  
 CONSULTING TOWN ENGINEER

| No. | Revision                  | Date       |
|-----|---------------------------|------------|
| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2021 |
| 2.  | RESPONSE TO TOWN COMMENTS | 05/06/2021 |
| 3.  | RESPONSE TO TOWN COMMENTS | 06/14/2021 |
| 4.  | RESPONSE TO TOWN COMMENTS | 07/07/2021 |
| 5.  | RESPONSE TO TOWN COMMENTS | 05/09/2021 |
| 6.  | RESPONSE TO TOWN COMMENTS | 07/24/2021 |
| 7.  | RESPONSE TO TOWN COMMENTS | 07/24/2021 |

APPLICATION OWNER:  
**SUMMIT CLUB PARTNERS, LLC**  
 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504

ARCHITECT:  
**GRANOFF ARCHITECTS**  
 330 RAILROAD AVENUE  
 GREENWICH, CT 06850

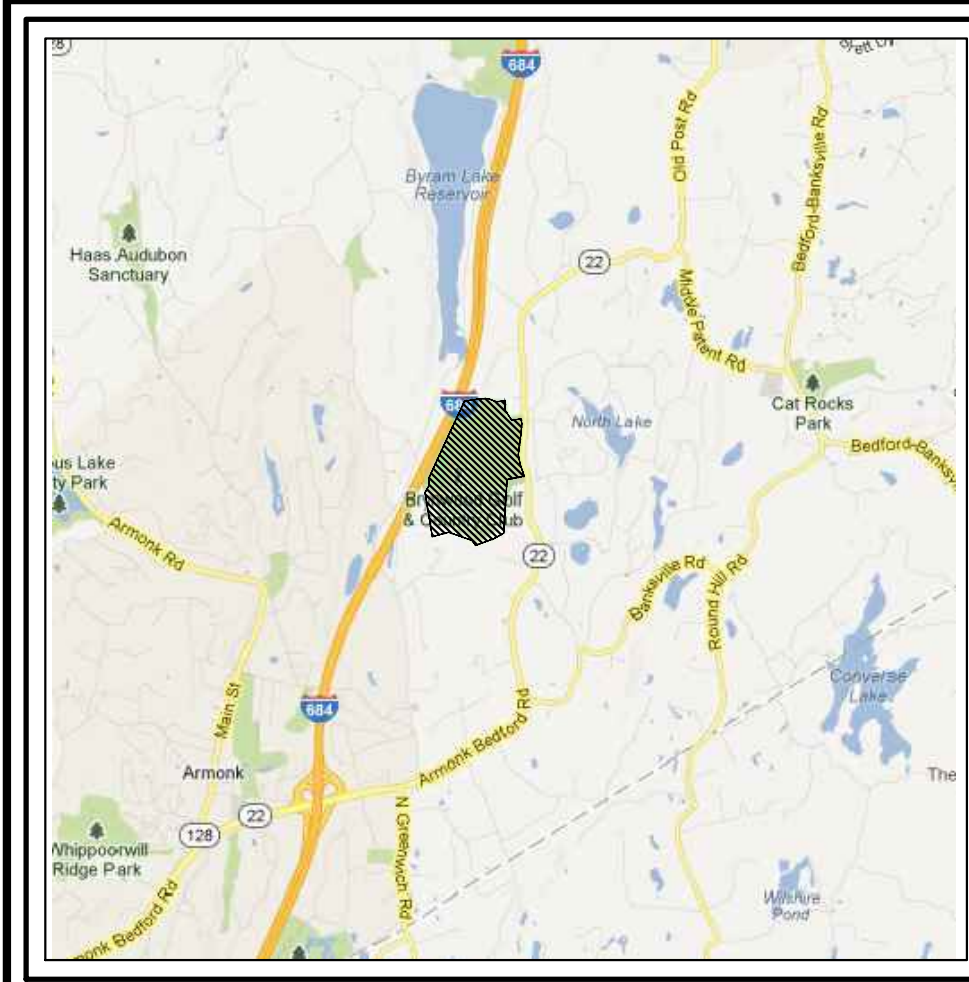
JMC Planning, Engineering, Landscape  
 Architecture & Land Surveying, PLLC  
 JMC Site Development Consultants, LLC  
 John Meyer Consulting, Inc.  
 120 BEDFORD ROAD - ARMONK, NY 10554  
 PH: 914-233-2424 - FAX: 914-233-2102  
 www.jmcpic.com



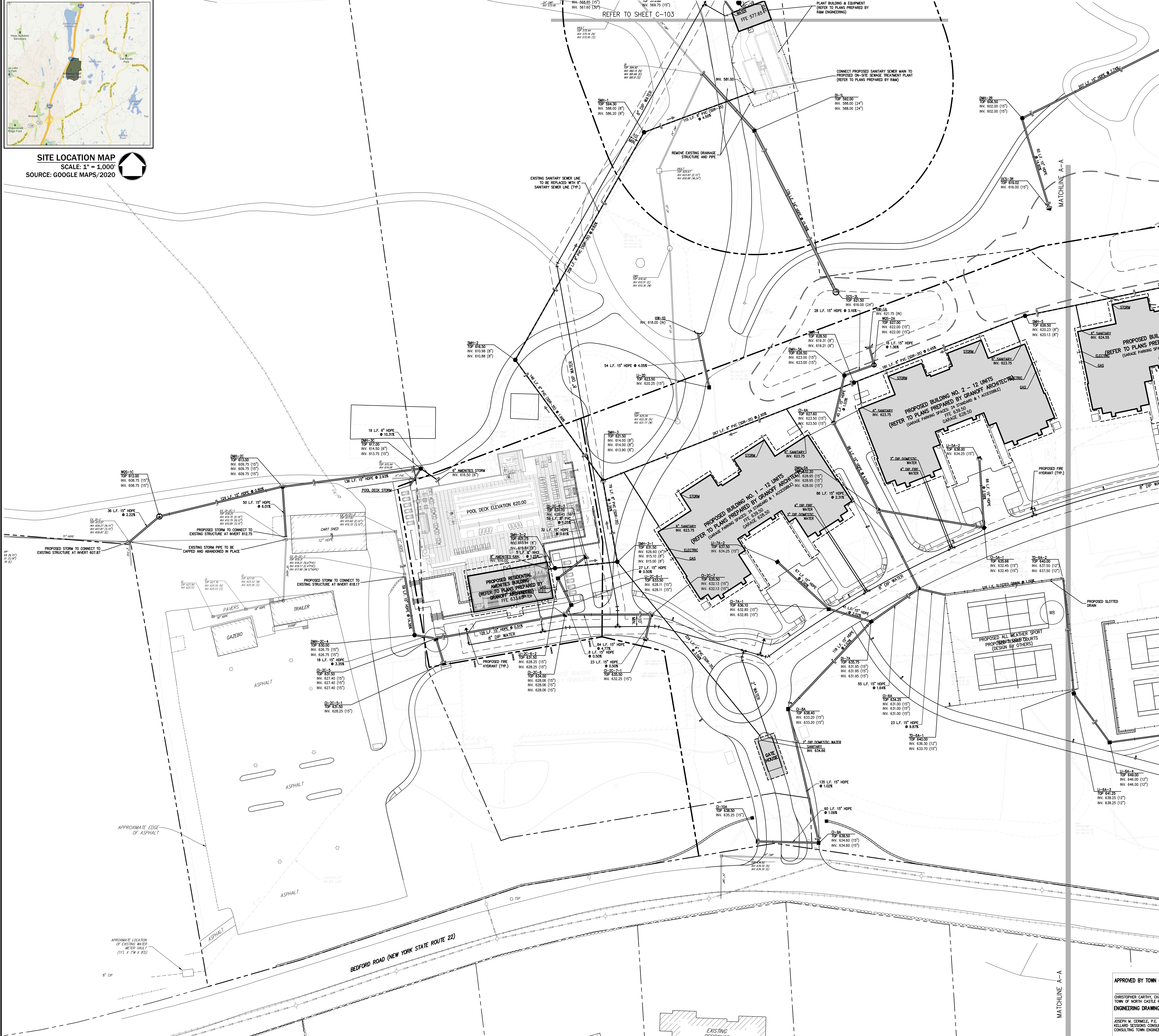
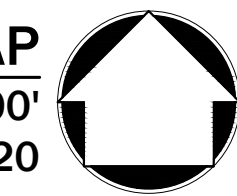
ROAD PROFILES PLAN  
 THE SUMMIT CLUB AT ARMONK  
 (RESIDENTIAL PHASE)  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS,  
 SPECIFICATIONS, PLATS AND  
 REPORTS BEARING THE SEAL  
 OF A LICENSED PROFESSIONAL  
 ENGINEER OR LICENSED LAND  
 SURVEYOR IS A VIOLATION OF  
 SECTION 7209 OF THE NEW  
 YORK STATE EDUCATION LAW,  
 EXCEPT AS PROVIDED FOR BY  
 SECTION 7209. SUBSECTION 2.

Drawn: NC  
 Scale: AS SHOWN  
 Date: 11/23/2020  
 Project No: 20101  
 Job Name: ROAD PROFILES  
 Drawing No: 020



**SITE LOCATION MAP**  
SCALE: 1" = 1,000'  
SOURCE: GOOGLE MAPS/2020



**LEGEND**

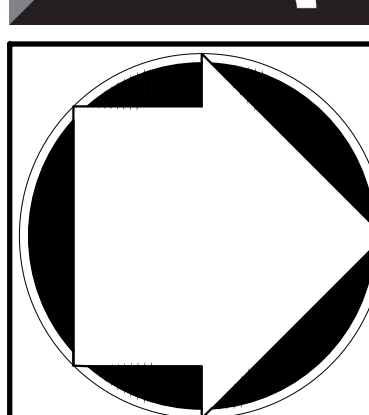
|  |   |
|--|---|
|  | EXISTING PROPERTY LINE                                |
|  | ADJACENT PROPERTY LINE                                |
|  | EXISTING EASEMENT LINE                                |
|  | EXISTING BUILDING OVERHANG                            |
|  | EXISTING BUILDING LINE                                |
|  | EXISTING PAVEMENT EDGE                                |
|  | EXISTING CURB LINE                                    |
|  | EXISTING INDEX CONTOUR                                |
|  | EXISTING STONE WALL                                   |
|  | EXISTING RETAINING WALL                               |
|  | EXISTING GUIDE RAIL                                   |
|  | EXISTING FENCE  |
|  | EXISTING STORM DRAIN LINE AND SIZE                    |
|  | EXISTING SANITARY LINE AND SIZE                       |
|  | EXISTING WATER LINE                                   |
|  | EXISTING GAS LINE                                     |
|  | EXISTING OVERHEAD WIRES                               |
|  | EXISTING DRAIN INLET                                  |
|  | EXISTING MANHOLE                                      |
|  | EXISTING FIRE HYDRANT                                 |
|  | EXISTING GAS VALVE                                    |
|  | EXISTING WATER VALVE                                  |
|  | EXISTING UTILITY POLE                                 |
|  | EXISTING LIGHT POLE                                   |
|  | EXISTING SIGN   |
|  | PROPOSED BUILDING LINE                                |
|  | PROPOSED CONCRETE CURB                                |
|  | PROPOSED CONCRETE SIDEWALK                            |
|  | PROPOSED DROP CURB AND RAMP                           |
|  | PROPOSED SANITARY SEWER MANHOLE                       |
|  | PROPOSED STORM DRAIN MANHOLE                          |
|  | PROPOSED TYPE C DRAIN INLET                           |
|  | PROPOSED TYPE D DRAIN INLET                           |
|  | PROPOSED HEADWALL                                     |
|  | PROPOSED SUBSURFACE DRAINAGE OUTLET CONTROL STRUCTURE |
|  | PROPOSED HYDRANT                                      |
|  | PROPOSED STORM DRAIN LINE & SIZE                      |
|  | PROPOSED SANITARY SEWER LINE & SIZE                   |
|  | PROPOSED WATER LINE & SIZE                            |
|  | PROPOSED GAS LINE                                     |
|  | PROPOSED ELECTRIC/TELEPHONE/CABLE                     |
|  | PROPOSED WATER VALVE                                  |
|  | PROPOSED GAS VALVE                                    |
|  | PROPOSED RETAINING WALL (DESIGN BY OTHERS)            |

- NOTES**
- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED "TOPOGRAPHIC MAP" PREPARED BY JMC LAST REVISED 03/06/2014. SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 07/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
  - ALL STORMWATER MANAGEMENT PRACTICES SHALL REMAIN UNDISTURBED AND BE PROTECTED FROM HEAVY MACHINERY TRAFFIC DURING CONSTRUCTION. HOWEVER, DURING CONSTRUCTION OF THE PROJECT THE CONTRACTOR SHALL MINIMIZE AND AVOID HEAVY MACHINERY TRAFFIC TO THE MAXIMUM EXTENT PRACTICABLE. THERE SHALL BE NO STORAGE OF MATERIALS WITHIN AREAS TO BE USED FOR STORMWATER MANAGEMENT PRACTICES. THE CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE AROUND THE PRACTICE TO DISCOURAGE VEHICLE TRAFFIC.
  - UNLESS OTHERWISE SPECIFIED, PIPE FOR STORM DRAINS SHALL BE HIGH DENSITY POLYETHYLENE PIPE (HDPE) WITH A SMOOTH INTERIOR AND ANULAR EXTERIOR CORROSION IN ACCORDANCE WITH ASTM F-2942. JOINTS SHALL BE WATER TIGHT IN ACCORDANCE WITH ASTM D-3212.
  - UNLESS OTHERWISE SPECIFIED, PIPE FOR SANITARY SEWER GRADY LINES SHALL BE POLYVINYL CHLORIDE PIPE (PVC), SDR-35, WITH PUSH-ON JOINTS IN ACCORDANCE WITH ASTM D-3054 AND D-3212.
  - UNLESS OTHERWISE SPECIFIED, PIPE FOR WATER LINES SHALL BE DOUBLE CEMENT-LEADED DUCTILE IRON PIPE (DIP), CLASS 52, WITH PUSH-ON JOINTS IN ACCORDANCE WITH ASTM A-1153, C-150, C-116 AND C-111.
  - ELECTRIC, TELEPHONE, FIRE ALARM AND CABLE TELEVISION LINES SHALL BE INSTALLED UNOCCUPIED IN CONDUIT IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY HAVING JURISDICTION.
  - THERE ARE NO WELLS WITHIN 25 FEET OF THE PROPOSED SANITARY SEWER.
  - LOW PRESSURE AIR TESTS FOR DIP SANITARY SEWER PIPES SHALL CONFORM TO ASTM F-1477 AND VACUUM TESTING OF SANITARY SEWER MANHOLES MUST CONFORM TO ASTM C-244. LEAKAGE TESTS AND MANHOLES FROM THE PROPOSED SEWAGE TREATMENT PLANT SHALL BE INCLUDED IN THE TESTING.
  - WOOD MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO ANY LEAKAGE TESTS.

| No. | Revision                  | Date       |
|-----|---------------------------|------------|
| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2022 |
| 2.  | RESPONSE TO TOWN COMMENTS | 03/06/2023 |
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| 4.  | RESPONSE TO TOWN COMMENTS | 07/07/2023 |
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| 7.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 |

APPLICANT/OWNER:  
**SUMMIT CLUB PARTNERS, LLC**  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

ARCHITECT:  
**GRANOFF ARCHITECTS**  
330 RAILROAD AVENUE  
GREENWICH, CT 06850



**SITE UTILITIES PLAN (SOUTH)**  
THE SUMMIT CLUB AT ARMONK  
(RESIDENTIAL PHASE)  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

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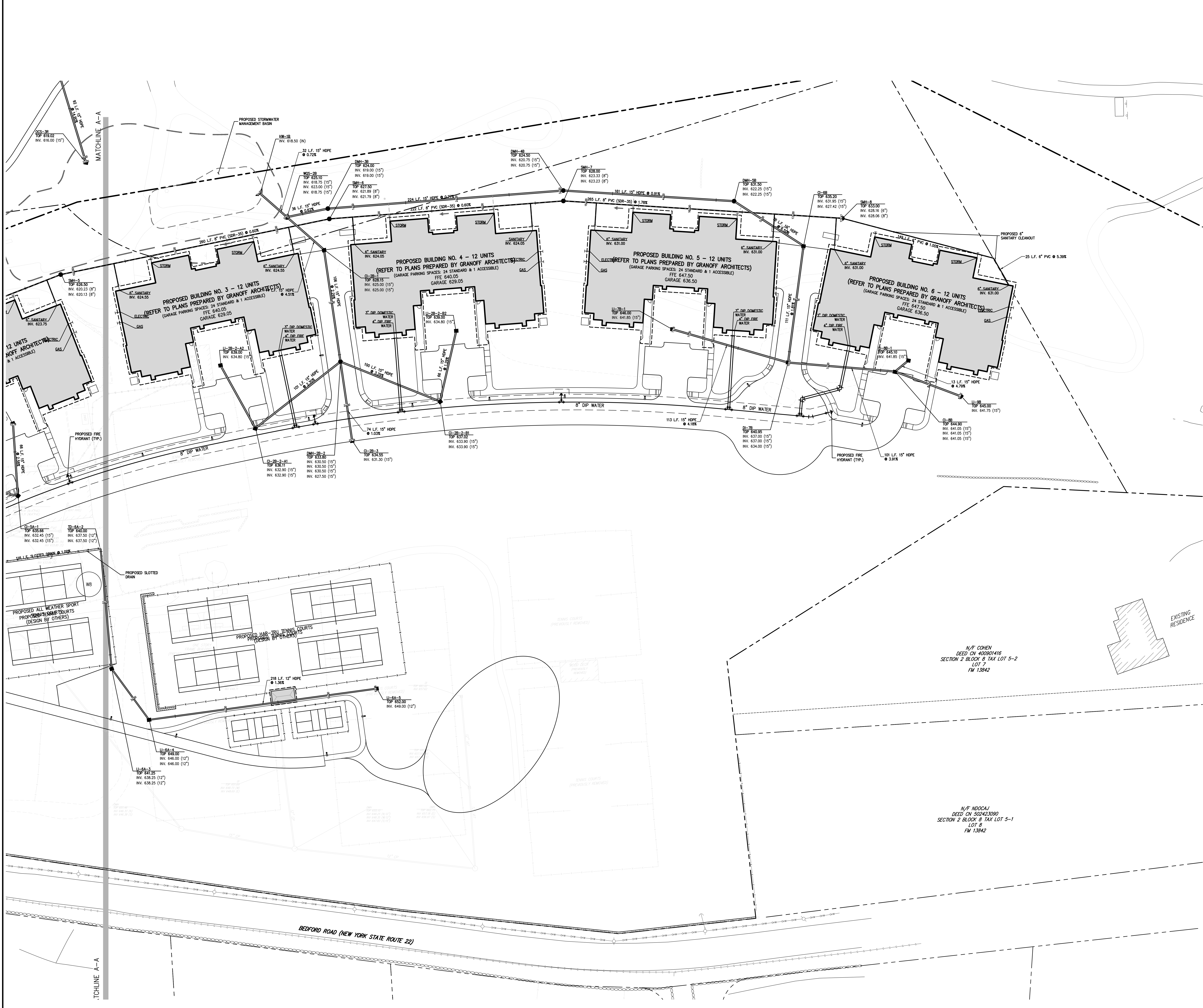
APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_

CHRISTOPHER CATHY, CHAIRMAN,  
TOWN OF NORTH CASTLE PLANNING BOARD  
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. CERNIELE, P.E.  
KELLARD SESSIONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

NOT FOR CONSTRUCTION

NOT FOR CONSTRUCTION



**LEGEND**

|     |   |
|-----|---|
| --- | EXISTING PROPERTY LINE                                |
| --- | ADJACENT PROPERTY LINE                                |
| --- | EXISTING EASEMENT LINE                                |
| --- | EXISTING BUILDING OVERHANG                            |
| --- | EXISTING BUILDING LINE                                |
| --- | EXISTING PAVEMENT EDGE                                |
| --- | EXISTING CURB LINE                                    |
| --- | EXISTING INDEX CONTOUR                                |
| --- | EXISTING STONE WALL                                   |
| --- | EXISTING RETAINING WALL                               |
| --- | EXISTING GUIDE RAIL                                   |
| --- | EXISTING FENCE  |
| --- | EXISTING STORM DRAIN LINE AND SIZE                    |
| --- | EXISTING SANITARY LINE AND SIZE                       |
| --- | EXISTING WATER LINE                                   |
| --- | EXISTING GAS LINE                                     |
| --- | EXISTING OVERHEAD WIRES                               |
| --- | EXISTING GRAB INLET                                   |
| --- | EXISTING MANHOLE                                      |
| --- | EXISTING FIRE HYDRANT                                 |
| --- | EXISTING GAS VALVE                                    |
| --- | EXISTING WATER VALVE                                  |
| --- | EXISTING UTILITY POLE                                 |
| --- | EXISTING LIGHT POLE                                   |
| --- | EXISTING SIGN   |
| --- | PROPOSED BUILDING LINE                                |
| --- | PROPOSED CONCRETE CURB                                |
| --- | PROPOSED CONCRETE SIDEWALK                            |
| --- | PROPOSED CURB CRIP AND RAMP                           |
| ○   | PROPOSED SANITARY SEWER MANHOLE                       |
| ○   | PROPOSED STORM DRAIN MANHOLE                          |
| ○   | PROPOSED TYPE G DRAIN INLET                           |
| ○   | PROPOSED TYPE D DRAIN INLET                           |
| ○   | PROPOSED HEADWALL                                     |
| ○   | PROPOSED SUBSURFACE DRAINAGE OUTLET CONTROL STRUCTURE |
| ○   | PROPOSED HYDRANT                                      |
| --- | PROPOSED STORM DRAIN LINE & SIZE                      |
| --- | PROPOSED SANITARY SEWER LINE & SIZE                   |
| --- | PROPOSED WATER LINE & SIZE                            |
| --- | PROPOSED GAS LINE                                     |
| --- | PROPOSED WATER VALVE                                  |
| --- | PROPOSED ELECTRIC/TELEPHONE/CABLE                     |
| --- | PROPOSED GAS VALVE                                    |
| --- | PROPOSED RETAINING WALL (DESIGN BY OTHERS)            |

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  - UNLESS OTHERWISE SPECIFIED, PIPE FOR SANITARY SEWER GRANTY LINES SHALL BE POLYVINYL CHLORIDE PIPE (PVC), 50#-35, WITH PUSH-ON JOINTS IN ACCORDANCE WITH ASTM D-3034 AND D-3212.
  - UNLESS OTHERWISE SPECIFIED, PIPE FOR WATER LINES SHALL BE DOUBLE CEMENT-LINED DUCTILE IRON PIPE (DIP), CLASS 52, WITH PUSH-ON JOINTS IN ACCORDANCE WITH ASTM C-150, C-151, C-154 AND C-111.
  - ELECTRIC, TELEPHONE, FIRE ALARM AND CABLE TELEVISION LINES SHALL BE INSTALLED UNDERGROUND IN CONDUIT IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY HAVING JURISDICTION.
  - THERE ARE NO WELLS WITHIN 25 FEET OF THE PROPOSED SANITARY SEWER.
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  - WOOD MUST BE NOTIFIED A MINIMUM OF 48 HOURS PRIOR TO ANY LEAKAGE TESTS.

**REVISIONS**

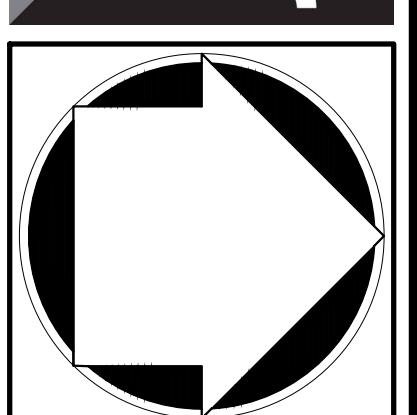
| No. | Date       | By | Rev. |
|-----|------------|----|------|
| 1.  | 07/17/2022 | NC | NC   |
| 2.  | 03/08/2022 | NC | NC   |
| 3.  | 06/14/2021 | NC | NC   |
| 4.  | 07/07/2022 | NC | NC   |
| 5.  | 05/09/2022 | NC | NC   |
| 6.  | 05/09/2022 | NC | NC   |
| 7.  | 07/24/2022 | NC | NC   |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
330 RAILROAD AVENUE  
GREENWICH, CT 06850

JMC Planning, Engineering, Landscaping  
Architectural & Land Surveying, PLLC  
JMC Site Development Consultants, LLC  
John Meyer Consulting, Inc.

120 BEDFORD ROAD - ARMONK, NY 10504  
PHONE: 914.333.3242 - FAX: 914.233.2102  
www.jmcp.com



**SITE UTILITIES PLAN (NORTH)**

**THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)**  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

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APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_

DATE: \_\_\_\_\_

CHISTOPHER CATHY, CHAIRMAN,  
TOWN OF NORTH CASTLE PLANNING BOARD

ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. GEMBLE, P.E.  
KELLARD SESSIONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

DATE: \_\_\_\_\_

Scale: 1" = 30'

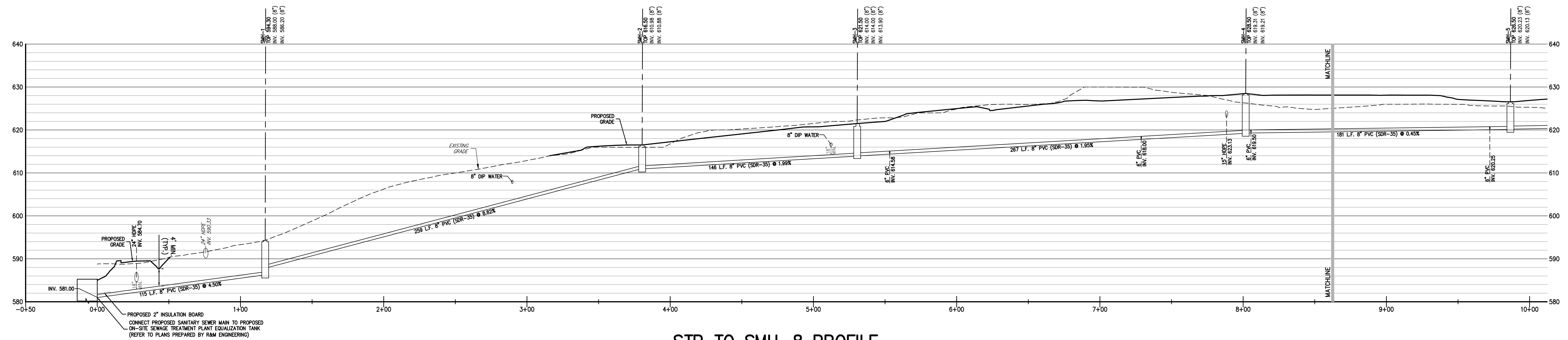
Date: 11/23/2020

Project No: 20101

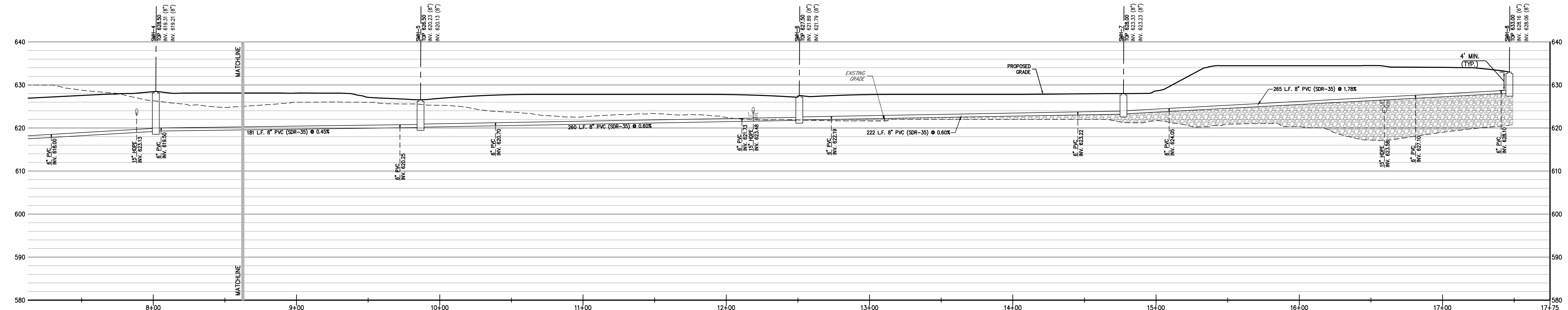
APP-URLES | UTL NORTH | UTL-201

Drawing No: \_\_\_\_\_

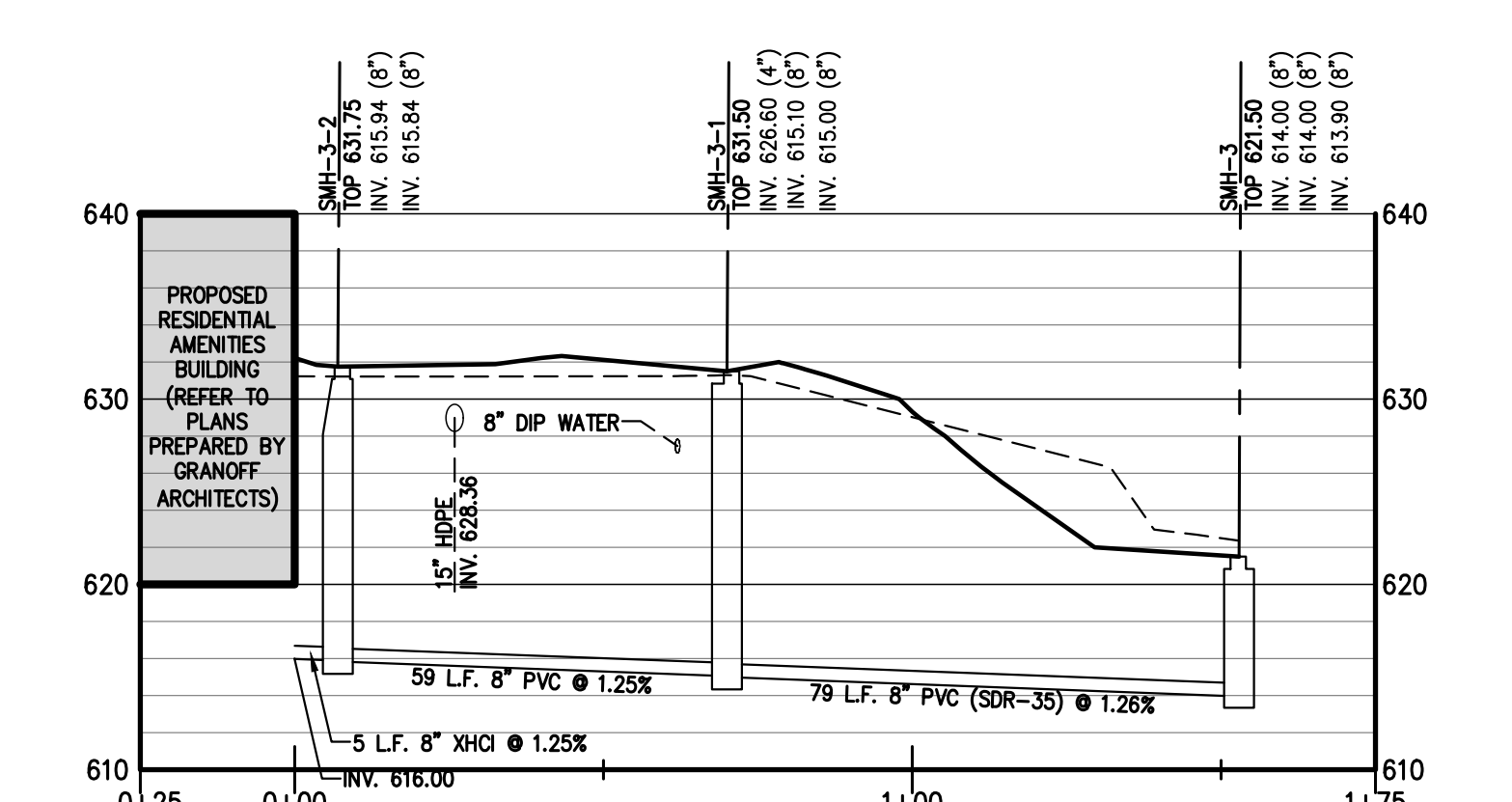
**C-301**



**STP TO SMH-8 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**STP TO SMH-8 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**AMENITIES BUILDING TO SMH-3 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS OF EXISTING UTILITIES AND STRUCTURES PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE TOWN OF NORTH CASTLE PLANNING BOARD AND THE STATE OF NEW YORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE TOWN OF NORTH CASTLE PLANNING BOARD AND THE STATE OF NEW YORK.

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_  
 DATE: \_\_\_\_\_  
 CHRISTOPHER CATHY, CHAIRMAN,  
 TOWN OF NORTH CASTLE PLANNING BOARD  
 ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
 DATE: \_\_\_\_\_  
 JOSEPH M. GEMELLE, P.E.  
 KELLARD SESSIONS CONSULTING, P.C.  
 CONSULTING TOWN ENGINEER

Drawn: NC Approved: AG  
 Scale: AS SHOWN  
 Date: 11/23/2020  
 Project No: 20101  
 SHEET NO: SAN PROFILES VLL-201  
 Drawing No: \_\_\_\_\_  
**C-302**

| No. | Revisions                 | Date       | By |
|-----|---------------------------|------------|----|
| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2021 | NC |
| 2.  | RESPONSE TO TOWN COMMENTS | 05/06/2021 | NC |
| 3.  | RESPONSE TO TOWN COMMENTS | 06/14/2021 | NC |
| 4.  | RESPONSE TO TOWN COMMENTS | 07/07/2022 | NC |
| 5.  | RESPONSE TO TOWN COMMENTS | 05/09/2022 | NC |
| 6.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 | NC |
| 7.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 | NC |

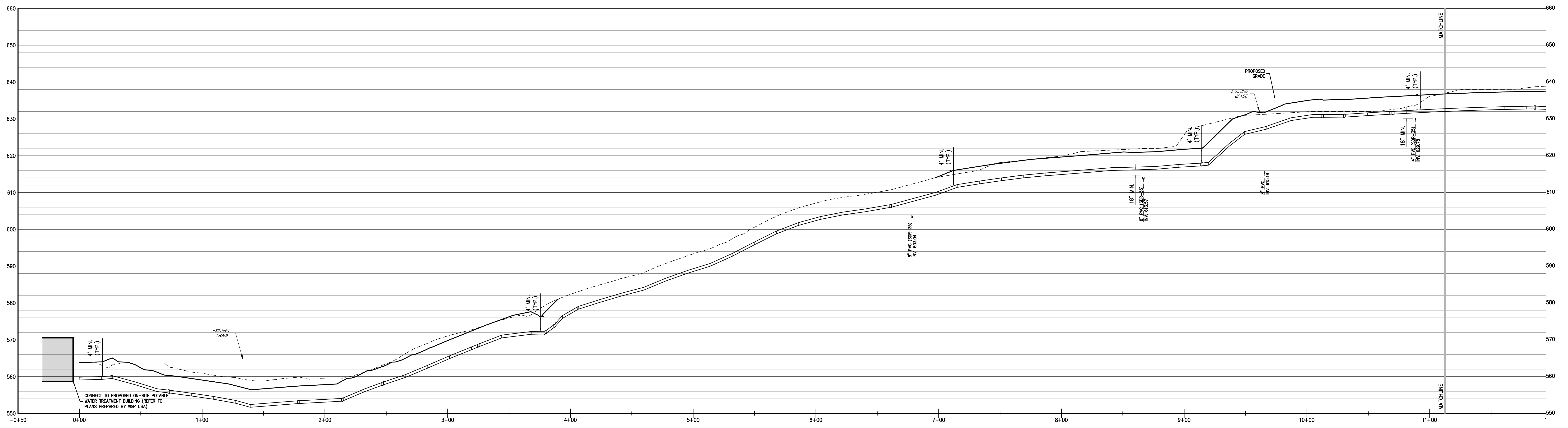
APPLICATION OWNER:  
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 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504  
 ARCHITECT:  
**GRANOFF ARCHITECTS**  
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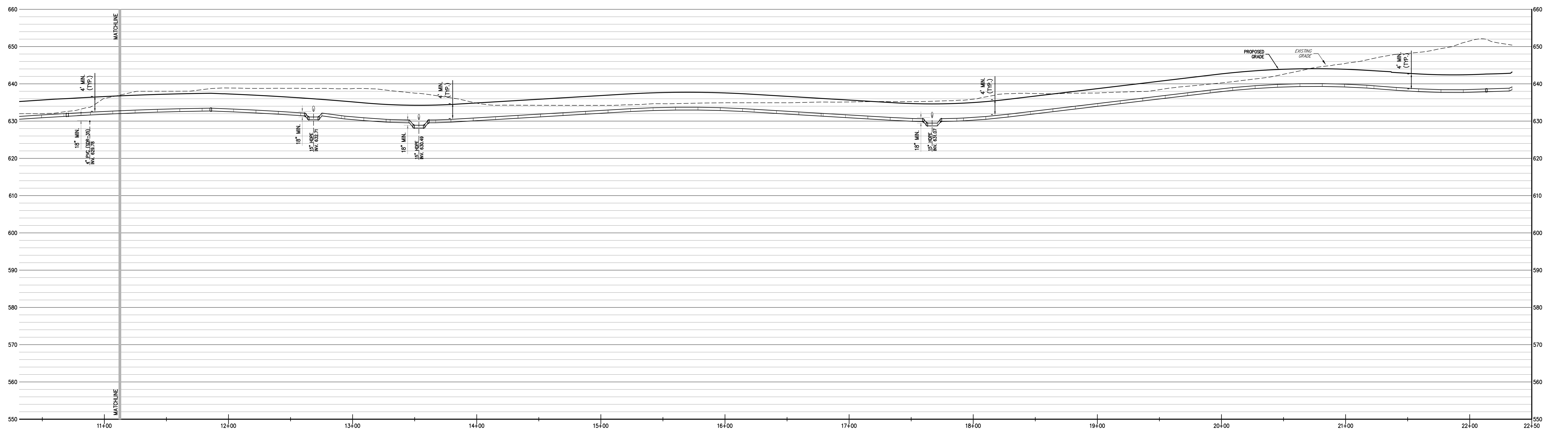


**SANITARY SEWER PROFILES**  
**THE SUMMIT CLUB AT ARMONK**  
**(RESIDENTIAL PHASE)**  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

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**WATER MAIN PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**WATER MAIN PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'

NOT FOR CONSTRUCTION

CONTRACT NO. 2020-01-001  
 CONTRACTOR: JMC PLANNING & ENGINEERING, LANDSCAPE ARCHITECTURE & LEAD SURVEYING, PLLC  
 CONTRACT VALUE: \$1,200,000.00  
 PROJECT LOCATION: 568 BEDFORD ROAD, ARMONK, NY 10504  
 PROJECT NAME: THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)  
 SHEET NO.: C-303 OF 303

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_

DATE: \_\_\_\_\_

CHRISTOPHER CARTHAY, CHAIRMAN,  
 TOWN OF NORTH CASTLE PLANNING BOARD

ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

DATE: \_\_\_\_\_

JOSEPH M. CERMIELE, P.E.  
 KELLARD SESSIONS CONSULTING, P.C.  
 CONSULTING TOWN ENGINEER

| No. | Revisions                 | Date       | By |
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| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2021 | NC |
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| 7.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 | NC |

APPLICANT/OWNER:  
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ARCHITECT:  
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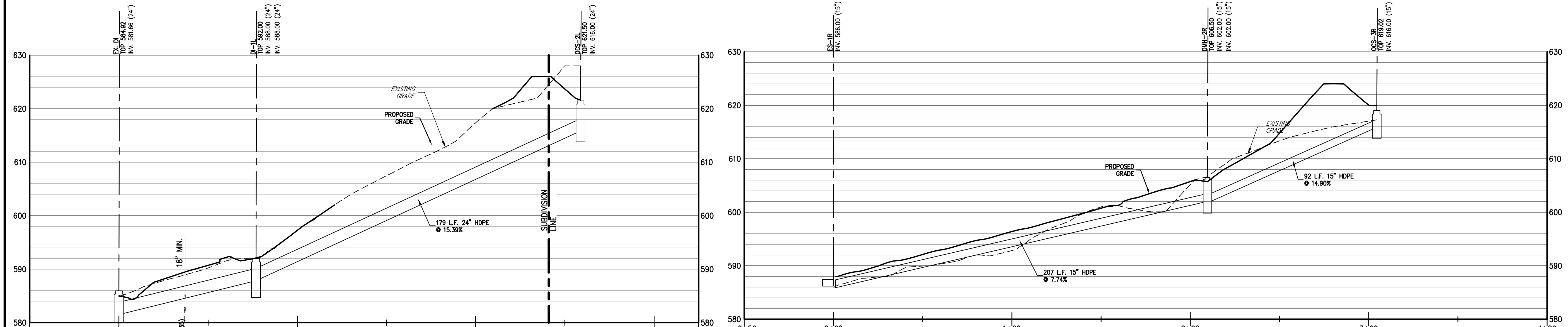


**WATER MAIN PROFILE**  
 THE SUMMIT CLUB AT ARMONK  
 (RESIDENTIAL PHASE)  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

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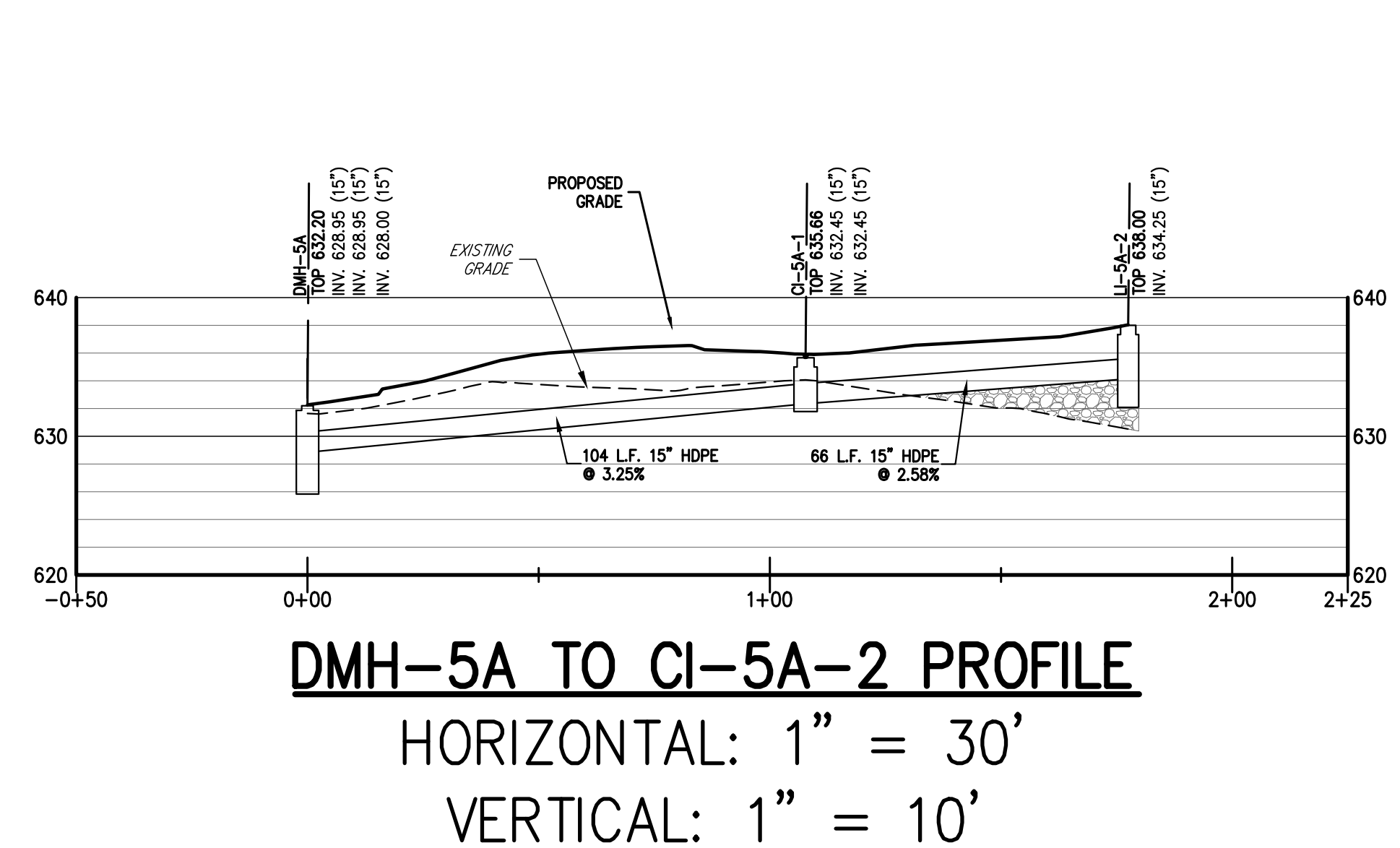
Drawn: NC Approved: AG  
 Scale: AS SHOWN  
 Date: 11/23/2020  
 Project No: 20101  
 SHEET NO.: WATER PROFILE ULLS27  
 Drawing No: \_\_\_\_\_  
**C-303**



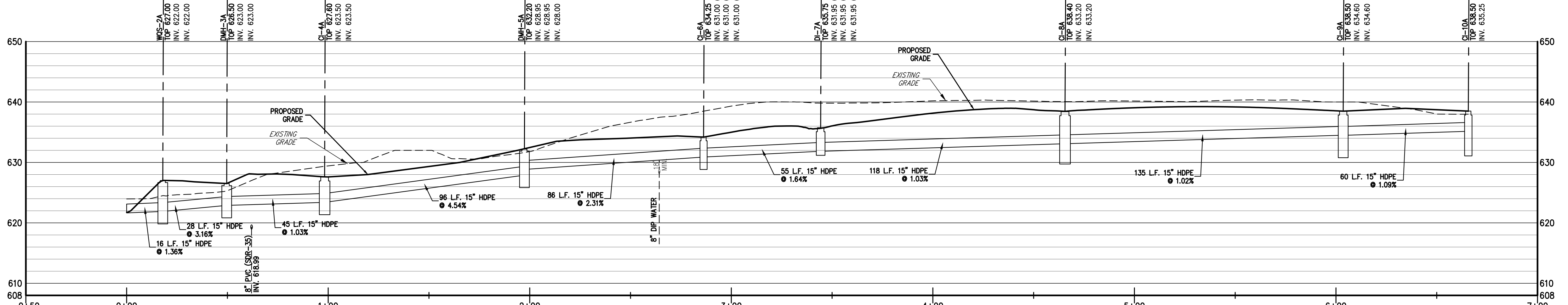


**EX. DI TO OCS-2L PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'

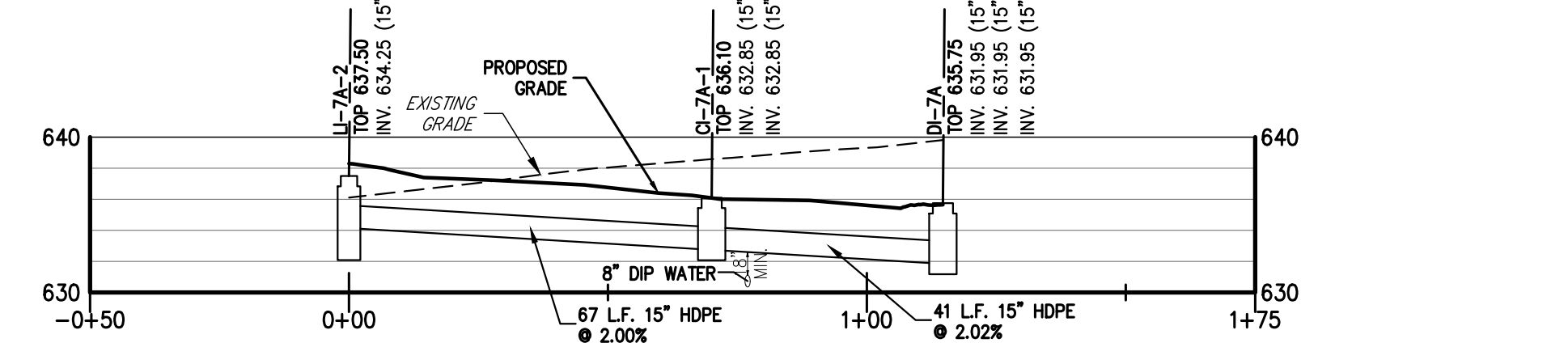
**ES-1R TO OCS-3R PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



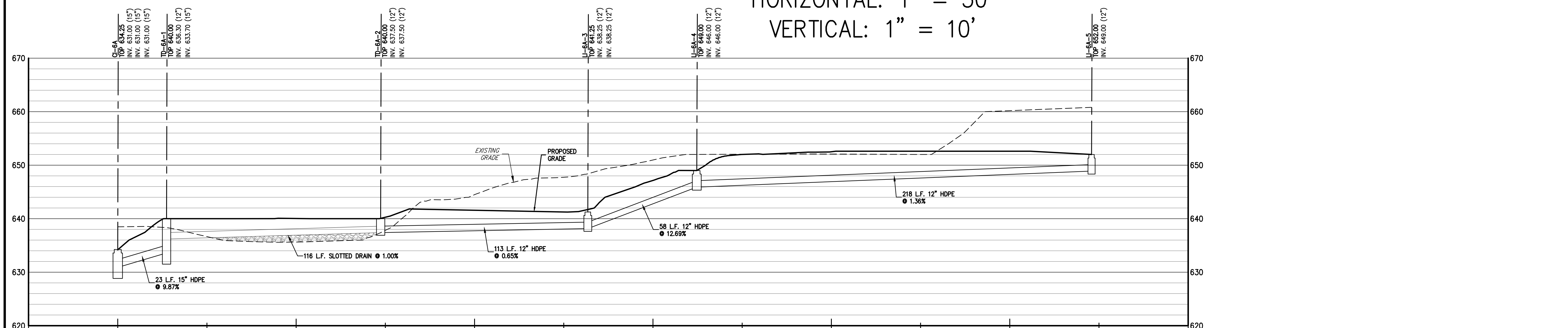
**DMH-5A TO CI-5A-2 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



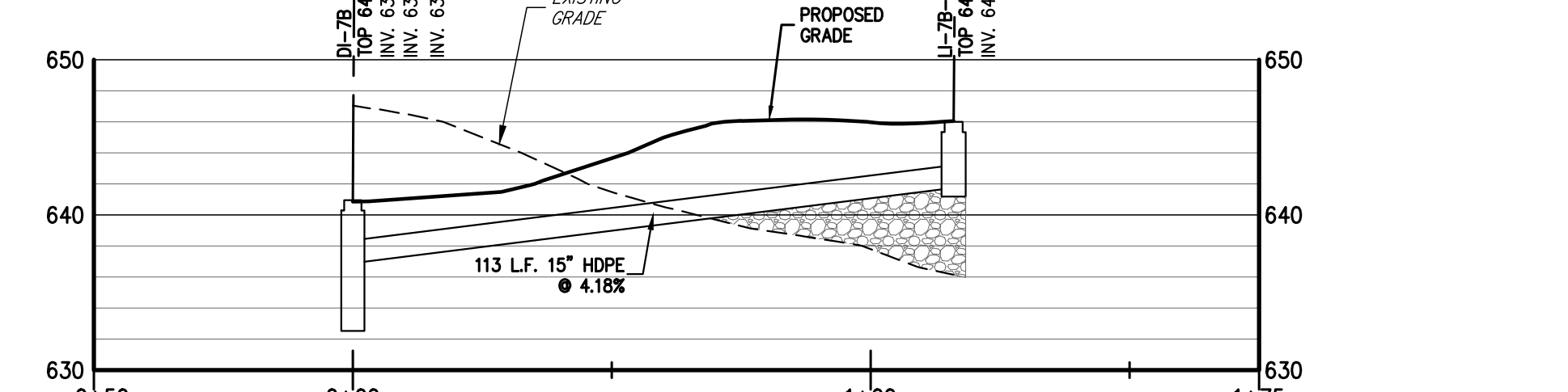
**DI-7A TO LI-7A-2 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



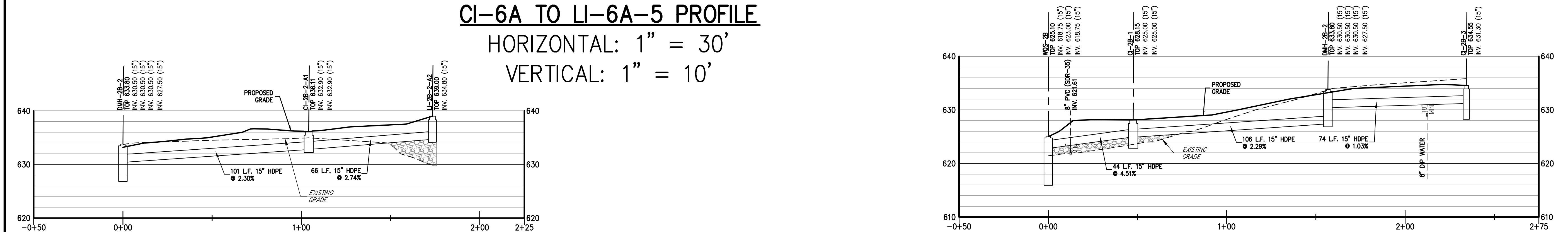
**DI-7B TO LI-7B-1 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



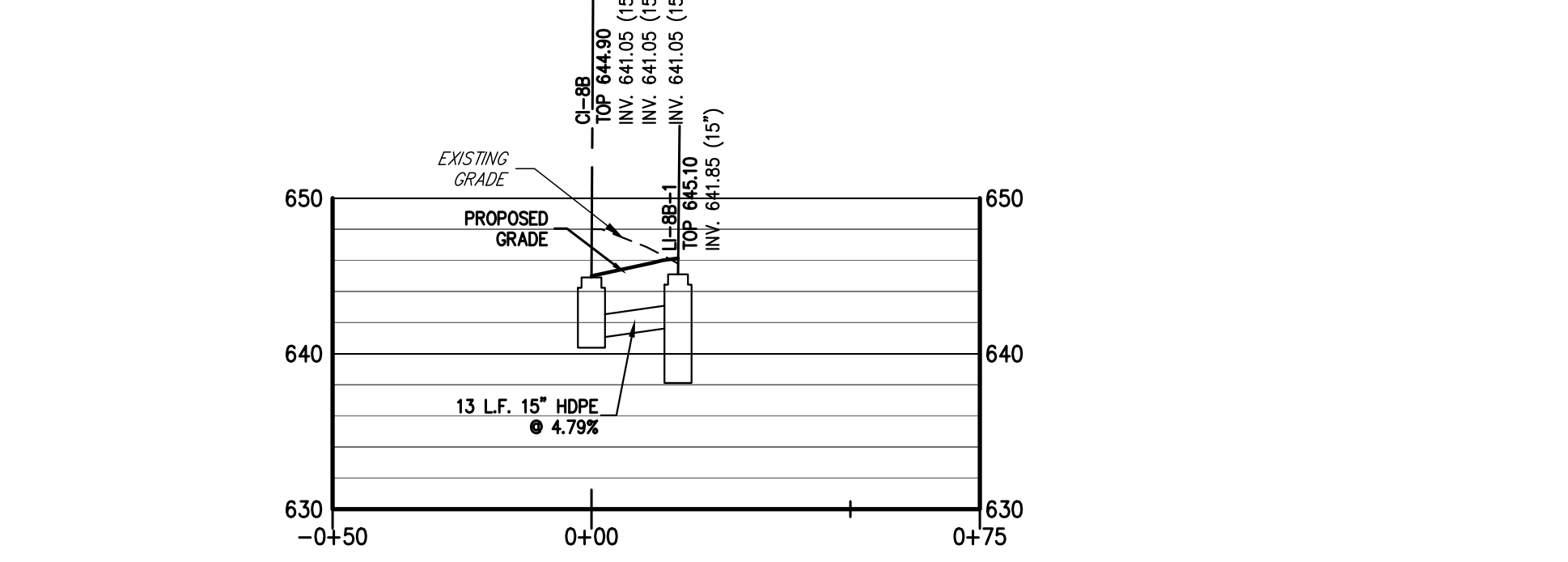
**HW-1A TO CI-10A PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



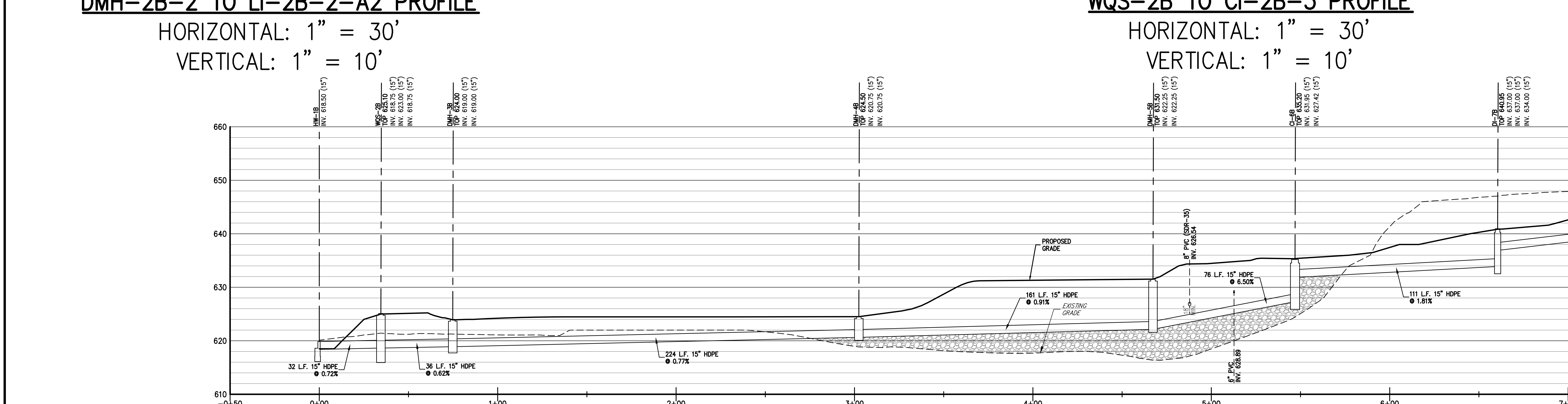
**DI-7B TO LI-7B-1 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**CI-6A TO LI-6A-5 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**CI-8B TO LI-8B-1 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**DMH-2B-2 TO LI-2B-2-A2 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'

**WQS-2B TO CI-2B-3 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'

**DMH-2B-2 TO LI-2B-2-B2 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**HW-1B TO LI-9B PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'

| No. | Revision                  | Date       |
|-----|---------------------------|------------|
| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2021 |
| 2.  | RESPONSE TO TOWN COMMENTS | 05/06/2021 |
| 3.  | RESPONSE TO TOWN COMMENTS | 06/14/2021 |
| 4.  | RESPONSE TO TOWN COMMENTS | 07/07/2021 |
| 5.  | RESPONSE TO TOWN COMMENTS | 05/09/2022 |
| 6.  | RESPONSE TO TOWN COMMENTS | 05/09/2022 |
| 7.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
 330 RAILROAD AVENUE  
 GREENWICH, CT 06850

JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
 JMC Site Development Consultants, LLC  
 John Meyer Consulting, Inc.  
 120 BEDFORD ROAD - ARMONK, NY 10554  
 PHONE: 914-233-2429 - FAX: 914-233-2102  
 www.jmcp.com



**STORM SEWER PROFILES**  
 THE SUMMIT CLUB AT ARMONK  
 (RESIDENTIAL PHASE)  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

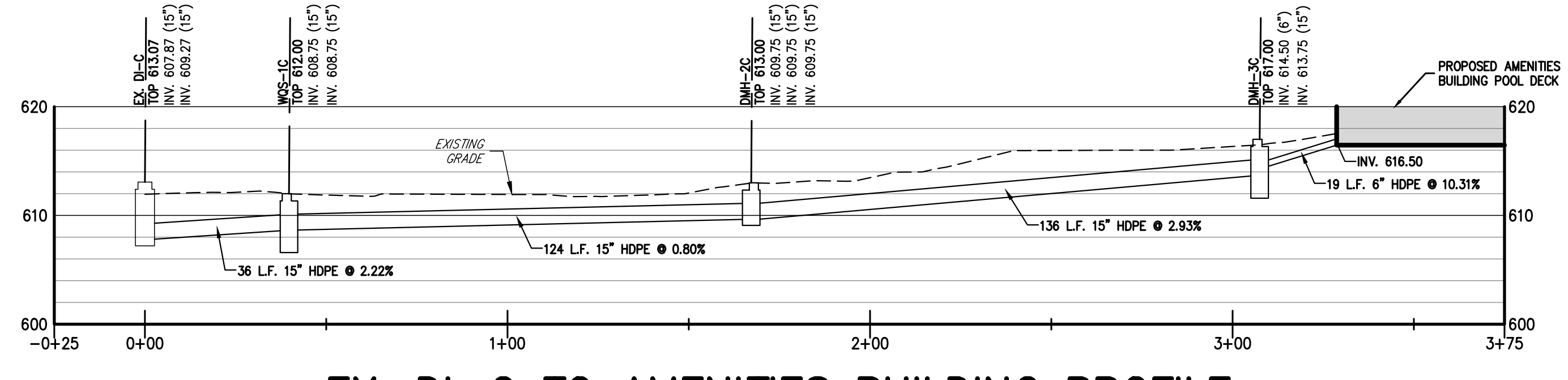
ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_

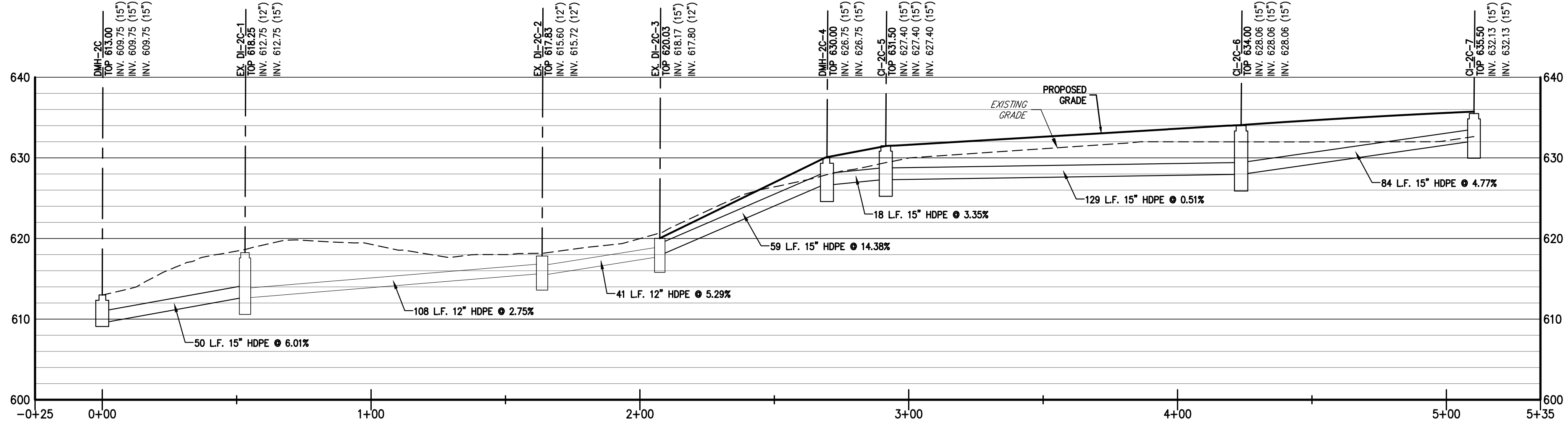
CHRISTOPHER CARRHY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
 ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. CERNIELE, P.E. KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEER DATE: \_\_\_\_\_

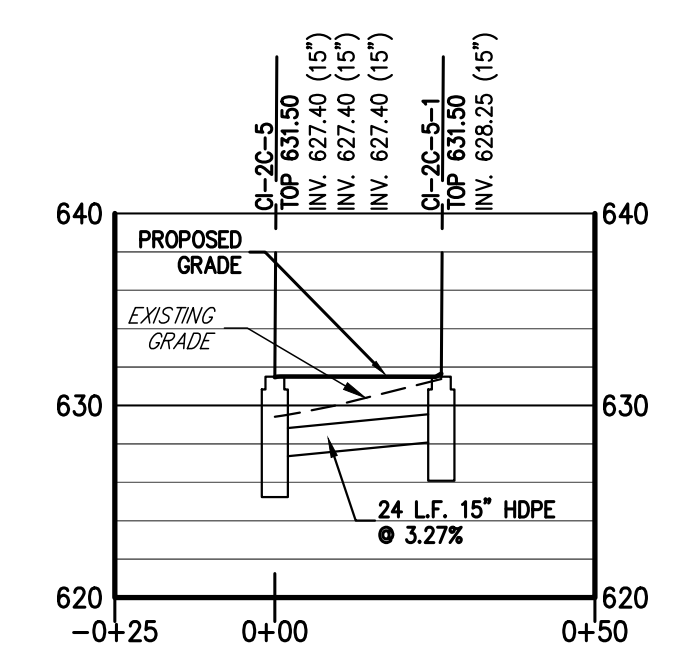
NOT FOR CONSTRUCTION



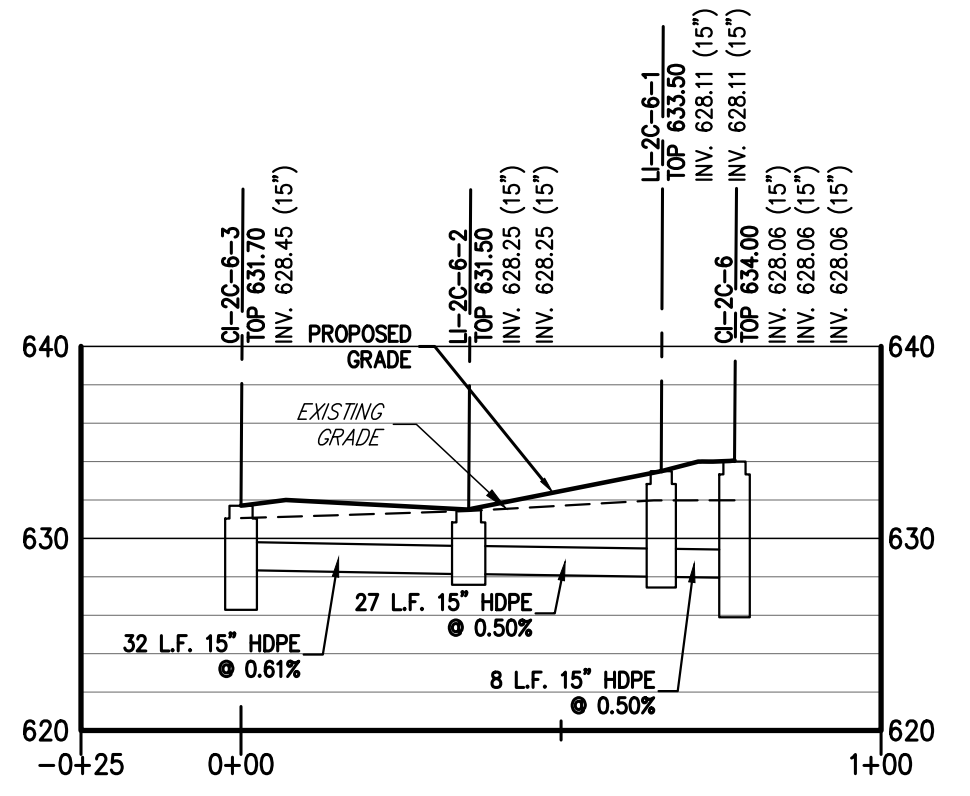
**EX. DI-C TO AMENITIES BUILDING PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



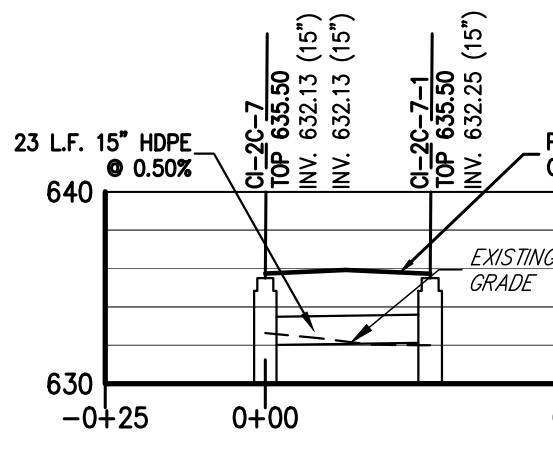
**DMH-2C TO CI-2C-7 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**CI-2C-5 TO CI-2C-5-1 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



**CI-2C-6 TO CI-2C-6-3 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'



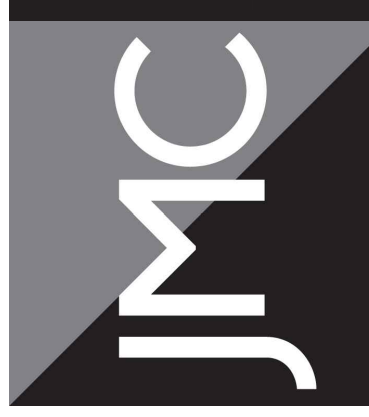
**CI-2C-7 TO CI-2C-7-1 PROFILE**  
 HORIZONTAL: 1" = 30'  
 VERTICAL: 1" = 10'

| No. | Revision                  | Date       | By |
|-----|---------------------------|------------|----|
| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2021 | NC |
| 2.  | RESPONSE TO TOWN COMMENTS | 05/06/2021 | NC |
| 3.  | RESPONSE TO TOWN COMMENTS | 06/14/2021 | NC |
| 4.  | RESPONSE TO TOWN COMMENTS | 07/07/2021 | NC |
| 5.  | RESPONSE TO TOWN COMMENTS | 05/09/2022 | NC |
| 6.  | RESPONSE TO TOWN COMMENTS | 05/09/2022 | NC |
| 7.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 | NC |

APPLICANT/OWNER:  
**SUMMIT CLUB PARTNERS, LLC**  
 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504

ARCHITECT:  
**GRANOFF ARCHITECTS**  
 330 RAILROAD AVENUE  
 GREENWICH, CT 06850

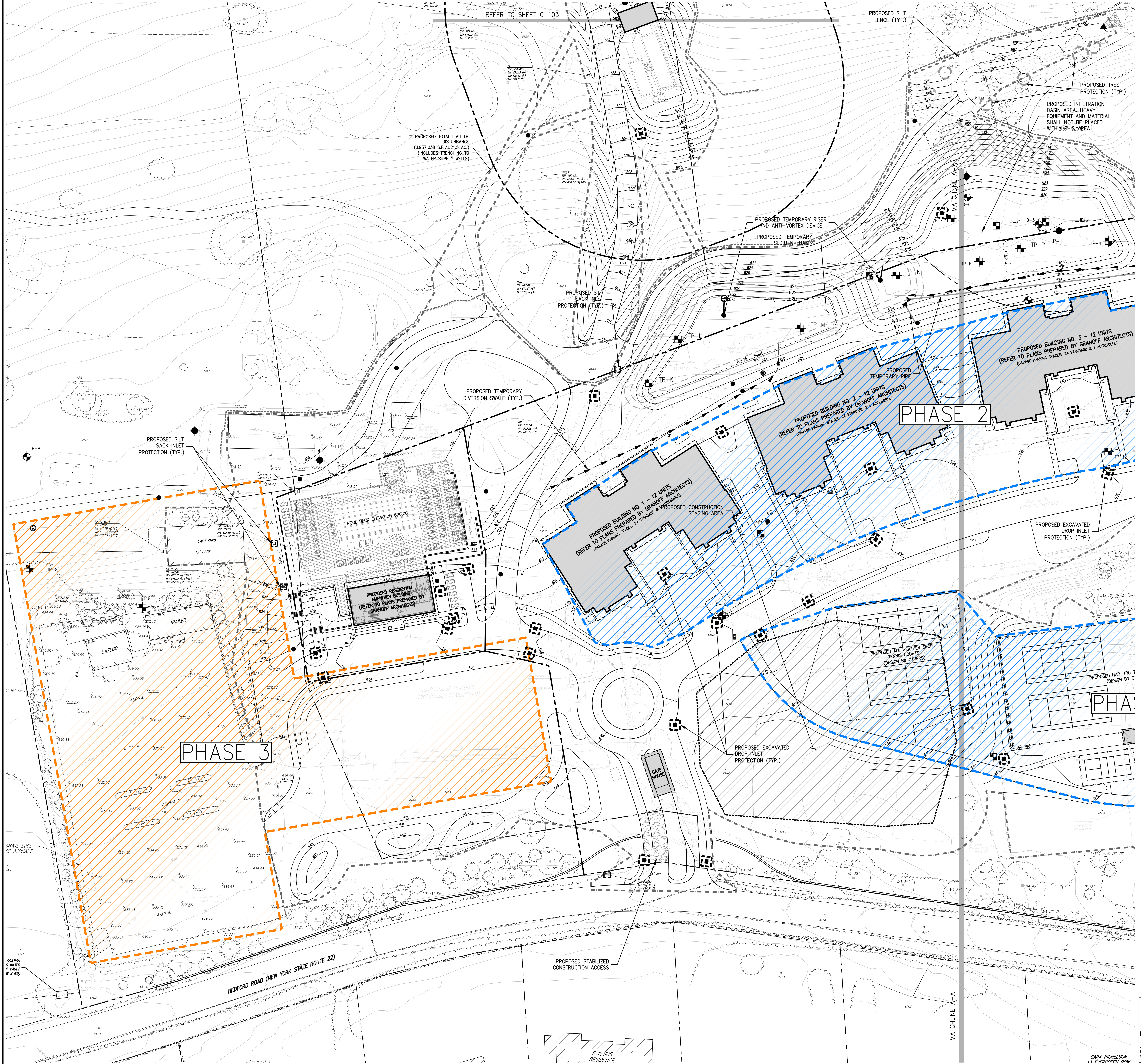
JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC  
 JMC Site Development Consultants, LLC  
 John Meyer Consulting, Inc.  
 120 BEDFORD ROAD • ARMONK, NY 10534  
 PHONE: 914.233.2424 • FAX: 914.233.2102  
 www.jmcp.com



**STORM SEWER PROFILES**  
 THE SUMMIT CLUB AT ARMONK  
 (RESIDENTIAL PHASE)  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

|   |                    |                   |
|---|--------------------|-------------------|
| APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED _____                   | Drawn: NC          | Approved: AG      |
| CHRISTOPHER CARRHY, CHAIRMAN,<br>TOWN OF NORTH CASTLE PLANNING BOARD                      | Scale: AS SHOWN    | Date: 11/23/2020  |
| ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER                                 | Project No: 202001 | Drawn By: JMC     |
| JOSEPH M. CERNIELE, P.E.<br>KELLARD SESSIONS CONSULTING, P.C.<br>CONSULTING TOWN ENGINEER | Date: _____        | Checked By: _____ |



**LEGEND**

- PROPOSED INLET PROTECTION
- PROPOSED CONSTRUCTION FENCE
- PROPOSED SILT FENCE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED STABILIZED CONSTRUCTION ENTRANCE
- PROPOSED STOOPLE AREA
- PROPOSED TEMPORARY SEDIMENT BASIN
- PROPOSED TEMPORARY SHALE
- PROPOSED TREE PROTECTION
- PROPOSED TEMPORARY RISER & ANTI-VORTEX DEVICE

- NOTES**
- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED "TOPOGRAPHIC MAP" PREPARED BY JMC, P.L.L.C. LAST REVISED 03/09/2021. SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 07/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
  - THIS PLAN IS FOR TEMPORARY EROSION AND SEDIMENT CONTROL INFORMATION ONLY.
  - BEFORE BEGINNING ANY CLEARING, GRUBBING OR EROSION, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL THE PLANS AND SPECIFICATIONS. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED. FINAL STABILIZATION OF LANDSCAPED AREAS SHALL BE IN ACCORDANCE WITH THE LANDSCAPE PLAN.
  - THE CONTRACTOR SHALL INSPECT AND MAINTAIN ON-SITE EROSION AND SEDIMENT CONTROL MEASURES ON A DAILY BASIS. ALL COLLECTED SEDIMENT WITHIN SEDIMENT BARRIERS SHALL BE REMOVED FREQUENTLY AS REQUIRED TO MAINTAIN THE FUNCTION OF THE SEDIMENT BARRIERS. ALL SEDIMENT COLLECTED SHALL BE REDEPOSITED ON-SITE WITHIN STABILIZED AREAS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
  - THE CONTRACTOR SHALL INSPECT DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS. AFTER EACH RAINFALL EVENT, AS MAY BE REQUIRED OR DIRECTED BY ALL APPLICABLE APPROVALS AND PERMITS, THE CONTRACTOR SHALL IMMEDIATELY PROVIDE A WRITTEN REPORT ON FININGS OF SEDIMENT IN DOWNSTREAM AREAS TO ALL AUTHORITIES HAVING JURISDICTION AND MAKE REPAIRS AS REQUIRED OR DIRECTED.
  - ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AS REQUIRED/WARRANTED BY FIELD CONDITIONS AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE, JMC, AND/OR ANY AUTHORITY HAVING JURISDICTION.
  - STOOPLING OF CONSTRUCTION MATERIAL SHALL BE PLACED ON-SITE IN THE AREA DESIGNATED ON THIS PLAN OR AS APPROVED BY THE OWNER'S REPRESENTATIVE. STOOPLED EXCAVATED MATERIAL SHALL HAVE TWO ROWS OF SILT FENCE LOCATED AROUND TO PREVENT ALL STOOPLED MATERIAL FROM BEING WASHED AWAY IN AN UNDESIRABLE MANNER SO AS NOT TO IMPED ON PEDESTRIAN AND/OR VEHICULAR TRAFFIC CIRCULATION ROUTES.
  - MUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
  - ALL STORMWATER MANAGEMENT PRACTICES SHALL REMAIN UNDISTURBED AND BE PROTECTED FROM HEAVY MACHINERY TRAFFIC DURING CONSTRUCTION. HOWEVER DURING CONSTRUCTION OF THE PRACTICE THE CONTRACTOR SHALL MINIMIZE AND AVOID HEAVY MACHINERY TRAFFIC TO THE MAXIMUM EXTENT PRACTICABLE. THERE SHALL BE NO STORAGE OF MATERIALS WITHIN AREAS TO BE USED FOR STORMWATER MANAGEMENT PRACTICES. THE CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE AROUND THE PRACTICE TO DISCOURAGE VEHICLE TRAFFIC.
  - ALL EXPOSED SLOPES AND GRAZED/DISTURBED AREAS THAT WILL NOT BE FURTHER DISTURBED WITHIN 14 CALENDAR DAYS (7 DAYS FOR CONSTRUCTION SITES THAT OTHER DIRECTLY DISBURSED TO ONE OF THE 3000 SEEDMENTS LISTED IN APPENDIX E OF THE GENERAL PERMIT OR ARE LOCATED WITHIN ONE OF THE WATERSHEDS LISTED IN APPENDIX D OF THE GENERAL PERMIT) SHALL BE TEMPORARILY SEEDED WITHIN 24 HOURS OF DISTURBANCE. IN ACCORDANCE WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) "EROSION AND SEDIMENT CONTROL GUIDELINES" AND THE ANSI ADO BEST MANAGEMENT PRACTICES FOR TREE AND SHRUB PLANTING, TRANSPLANTING, MAINTENANCE AND CARE, PREPARED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA), LATEST EDITIONS, AS FOLLOWS:
    - SEED MIXTURE AND RATE OF APPLICATION.
    - IN SPRING, SUMMER OR EARLY FALL, SEED THE AREA WITH RYEGRASS (ANNUAL OR PERENNIAL) AT 30 POUNDS PER ACRE (APPROXIMATELY 0.7 POUNDS/1000 SQUARE FEET OR USE 1 TON/1000 SQUARE FEET).
    - IN LATE FALL OR EARLY WINTER, SEED THE AREA WITH CERTIFIED "ARBORETOUR" MIXTURE (SEESEAL RYE) AT 100 POUNDS PER ACRE (2.5 POUNDS/1000 SQUARE FEET).
  - APPLICATION SHALL BE UNIFORM BY MECHANICAL OR HYDROSEED METHODS.
  - MULCH ALL SEEDED AREAS WITH STRAW AT A RATE OF 2 TONS PER ACRE (50 POUNDS PER 1000 SQUARE FEET) SUCH THAT THE MULCH FORMS A CONTINUOUS BLANKET.
  - ALL SEEDED AREAS SHALL BE FERTILIZED, RESEEDED, AND MULCHED AS NECESSARY TO MAINTAIN MOOROUS, DENSE, VEGETATIVE COVER.
  - TEMPORARY SEED MIXTURES SHALL NOT BE PLACED ON AREAS WHERE FINAL GRADE HAS BEEN ESTABLISHED AND TOPSOIL HAS BEEN PLACED UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT.

|         | REQUIRED CUT (CUBIC YARDS) | REQUIRED FILL (CUBIC YARDS) |
|---------|----------------------------|-----------------------------|
| OVERALL | 52,800                     | 48,000                      |
| PHASE 1 | 29,200                     | 35,400                      |
| PHASE 2 | 17,000                     | 11,400                      |
| PHASE 3 | 6,700                      | 1,200                       |

**DATE**

|            |    |          |    |
|------------|----|----------|----|
| 07/17/2021 | NC | Approved | AG |
| 03/09/2021 | NC | Drawn    | AG |
| 06/14/2021 | NC | Checked  | AG |
| 07/07/2022 | NC | Reviewed | AG |
| 05/09/2022 | NC | Reviewed | AG |
| 07/24/2023 | NC | Reviewed | AG |

**REVISIONS**

|     |                           |            |    |       |
|-----|---------------------------|------------|----|-------|
| No. | Description               | Date       | By | Appr. |
| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2021 | NC | AG    |
| 2.  | RESPONSE TO TOWN COMMENTS | 03/09/2021 | NC | AG    |
| 3.  | RESPONSE TO TOWN COMMENTS | 06/14/2021 | NC | AG    |
| 4.  | RESPONSE TO TOWN COMMENTS | 07/07/2022 | NC | AG    |
| 5.  | RESPONSE TO TOWN COMMENTS | 05/09/2022 | NC | AG    |
| 6.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 | NC | AG    |

**CLIENT/OWNER:** SUMMIT CLUB PARTNERS, LLC  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

**ARCHITECT:** GRANOFF ARCHITECTS  
330 GREENWOOD AVENUE  
RALEIGH, CT 06850

**JMC**  
JMC Planning, Engineering, Landscape Architecture & Land Surveying, P.L.L.C.  
John Meyer Consulting, Inc.  
420 BEDFORD ROAD - ARMONK, NY 10554  
PHONE: 914.833.5229 - FAX: 914.833.2192  
www.jmcp.com

**SITE EROSION & SEDIMENT CONTROL PLAN (SOUTH)**  
THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

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**APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED** \_\_\_\_\_

**DATE:** \_\_\_\_\_

**CHRISTOPHER CARRY, CHAIRMAN,**  
TOWN OF NORTH CASTLE PLANNING BOARD

**ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER**

**DATE:** \_\_\_\_\_

**JOSEPH M. CERNILE, P.E.,**  
KELLARD SESSONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

**Drawn:** NC **Approved:** AG  
**Scale:** 1" = 30'  
**Date:** 11/23/2020  
**Project No.:** 20101  
**Sheets:** 1 of 5  
**Sheet:** C-400

**C-400**

NOT FOR CONSTRUCTION

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_

DATE: \_\_\_\_\_

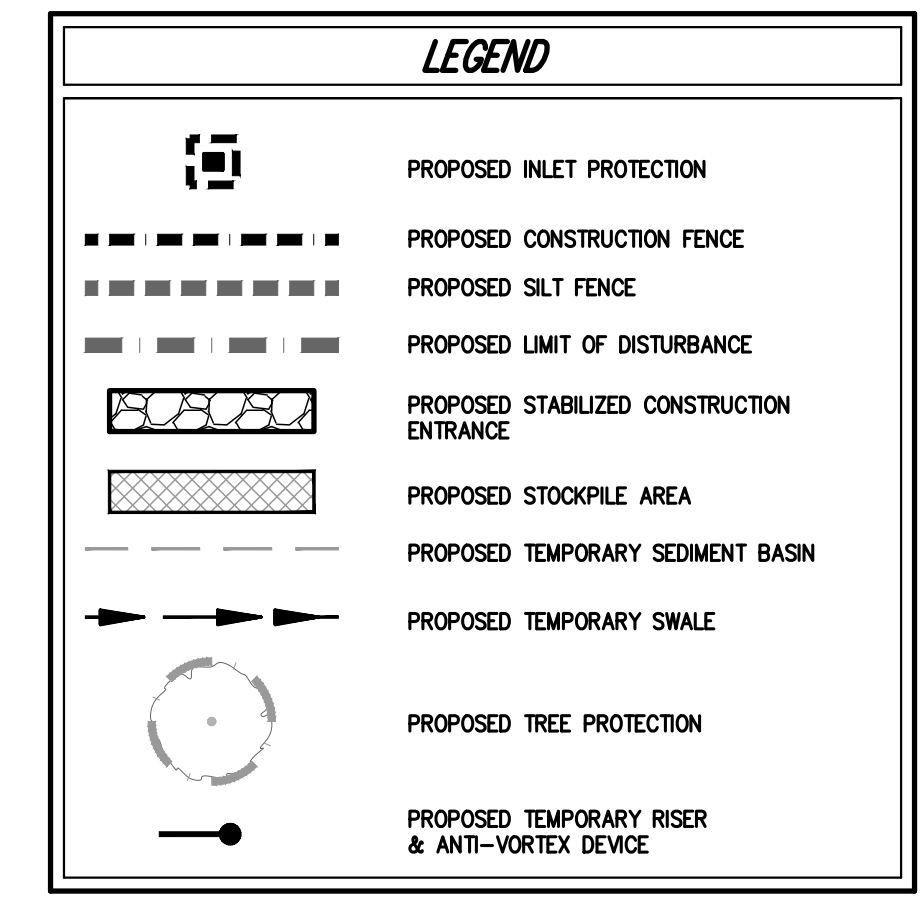
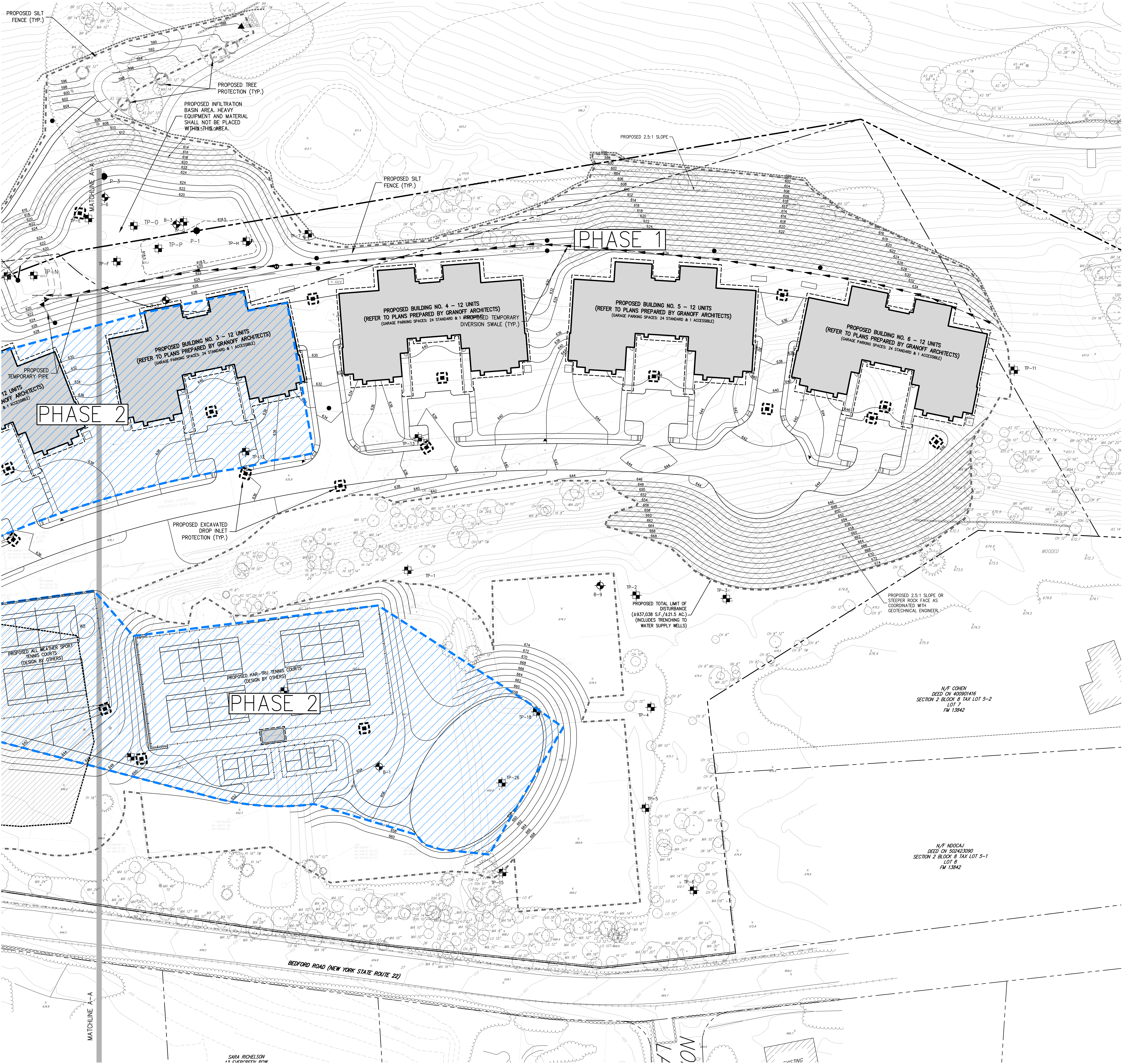
CHRISTOPHER CARRY, CHAIRMAN,  
TOWN OF NORTH CASTLE PLANNING BOARD

ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

DATE: \_\_\_\_\_

JOSEPH M. CERNILE, P.E.,  
KELLARD SESSONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

C-400



- NOTES**
1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED "TOPOGRAPHIC MAP" PREPARED BY JMC, P.L.L.C. LAST REVISED 03/06/2021. SUPPLEMENTED WITH AN UPRATED SURVEY LAST REVISED 07/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
  2. THIS PLAN IS FOR TEMPORARY EROSION AND SEDIMENT CONTROL INFORMATION ONLY.
  3. PRIOR TO BEGINNING ANY CLEARING OR EXCAVATION, ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL THE PLANS AND SPECIFICATIONS. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL THE SITE IS STABILIZED. FINAL STABILIZATION OF LANDSCAPED AREAS SHALL BE IN ACCORDANCE WITH THE LANDSCAPE PLAN.
  4. THE CONTRACTOR SHALL INSPECT AND MAINTAIN ON-SITE EROSION AND SEDIMENT CONTROL MEASURES ON A DAILY BASIS. ALL COLLECTED SEDIMENT WITHIN SEDIMENT BARRIERS SHALL BE REMOVED PERIODICALLY AS REQUIRED TO MAINTAIN THE FUNCTION OF THE SEDIMENT BARRIERS. ALL SEDIMENT COLLECTED SHALL BE REDEPOSITED ON-SITE WITHIN STABILIZED AREAS AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
  5. THE CONTRACTOR SHALL INSPECT CONSTRUCTION CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A WEEKLY BASIS. AFTER EACH RAINFALL EVENT, AS MAY BE REQUIRED OR DIRECTED BY ALL APPLICABLE APPROVALS AND PERMITS, THE CONTRACTOR SHALL IMMEDIATELY PROVIDE A WRITTEN REPORT ON FININGS OF SEDIMENT IN DOWNSLOPE AREAS TO ALL AUTHORITIES HAVING JURISDICTION AND MAKE REPAIRS AS REQUIRED OR DIRECTED.
  6. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AS REQUIRED, WARRANTED BY FIELD CONDITIONS AND AS DIRECTED BY THE OWNER'S REPRESENTATIVE, JMC, AND/OR ANY AUTHORITY HAVING JURISDICTION.
  7. STOOPLING OF CONSTRUCTION MATERIAL SHALL BE PLACED ON-SITE IN THE AREA DESIGNATED ON THIS PLAN OR AS APPROVED BY THE OWNER'S REPRESENTATIVE. STOOPLED EXCAVATED MATERIAL SHALL HAVE TWO ROWS OF SILT FENCE LOCATED AROUND IT. THE CONTRACTOR SHALL MAINTAIN AND MONITOR HEAVY MACHINERY TRAFFIC TO THE MAXIMUM EXTENT PRACTICABLE. THERE SHALL BE NO STORAGE OF MATERIALS WITHIN AREAS TO BE USED FOR STORMWATER MANAGEMENT PRACTICES. THE CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE AROUND THE PRACTICE TO DISCOURAGE VEHICLE TRAFFIC.
  8. ALL STORMWATER MANAGEMENT PRACTICES SHALL REMAIN UNDISTURBED AND BE PROTECTED FROM HEAVY MACHINERY TRAFFIC DURING CONSTRUCTION. HOWEVER DURING CONSTRUCTION OF THE PRACTICE THE CONTRACTOR SHALL MAINTAIN AND MONITOR HEAVY MACHINERY TRAFFIC TO THE MAXIMUM EXTENT PRACTICABLE. THERE SHALL BE NO STORAGE OF MATERIALS WITHIN AREAS TO BE USED FOR STORMWATER MANAGEMENT PRACTICES. THE CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE AROUND THE PRACTICE TO DISCOURAGE VEHICLE TRAFFIC.
  9. ALL EXPOSED SLOPES AND GRADED/DISTURBED AREAS THAT WILL NOT BE FURTHER DISTURBED WITHIN 14 CALENDAR DAYS (7 DAYS FOR CONSTRUCTION SITES THAT OTHER DIRECTLY EXPOSED TO ONE OF THE 3000 SEDIMENTS LISTED IN APPENDIX E OF THE GENERAL POINT OF ARE LOCATED WITHIN ONE OF THE WATERSHEDS LISTED IN APPENDIX D OF THE GENERAL POINTS) SHALL BE TEMPORARILY SEEDED WITHIN 24 HOURS OF DISTURBANCE. IN ACCORDANCE WITH THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (DEC) "EROSION AND SEDIMENT CONTROL GUIDELINES" AND THE ANSI ADO BEST MANAGEMENT PRACTICES FOR TREE AND SHRUB PLANTING, TRANSPLANTING, MAINTENANCE AND CARE, PREPARED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA), LATEST EDITIONS, AS FOLLOWS:
    - A.1. IN SPRING, SUMMER OR EARLY FALL, SEED THE AREA WITH RYEGRASS (ANNUAL OR PERENNIAL) AT 30 POUNDS PER ACRE (APPROXIMATELY 0.7 POUNDS/1000 SQUARE FEET) OR USE 1 POUND/1000 SQUARE FEET.
    - A.2. IN LATE FALL OR EARLY WINTER, SEED THE AREA WITH CERTIFIED "NOODOCK" WINTER RYE (CERIAL RYE) AT 100 POUNDS PER ACRE (2.5 POUNDS/1000 SQUARE FEET).
  - B. APPLICATION SHALL BE UNIFORM BY MECHANICAL OR HYDROSEED METHODS.
  - C. MULCH ALL SEEDED AREAS WITH STRAW AT A RATE OF 2 TONS PER ACRE (60 POUNDS PER 1000 SQUARE FEET) SUCH THAT THE MULCH FORMS A CONTIGUOUS BLANKET.
  10. ALL SEEDED AREAS SHALL BE FERTILIZED, RESEEDED, AND MOWED AS NECESSARY TO MAINTAIN MOOROUS, DENSE VEGETATIVE COVER.
  11. TEMPORARY SEED MIXTURES SHALL NOT BE PLACED ON AREAS WHERE FINAL GRADE HAS BEEN ESTABLISHED AND TOPSOIL HAS BEEN PLACED UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE ARCHITECT.

|         | OUT & FILL ANALYSIS | REQUIRED OUT (CUBIC YARDS) | REQUIRED FILL (CUBIC YARDS) |
|---------|---------------------|----------------------------|-----------------------------|
| OVERALL |                     | 52,900                     | 48,000                      |
| PHASE 1 |                     | 29,200                     | 35,400                      |
| PHASE 2 |                     | 17,000                     | 11,400                      |
| PHASE 3 |                     | 6,700                      | 1,200                       |

N/F COHEN  
DEED ON 400901416  
SECTION 2 BLOCK 8 TAX LOT 5-2  
LOT 8  
FM 13842

N/F NOODAK  
DEED ON 502423090  
SECTION 2 BLOCK 8 TAX LOT 5-1  
LOT 7  
FM 13842

NOT FOR CONSTRUCTION

SARA RICHELSON  
13 ELDONDALE DR

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHRISTOPHER CARRY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
 ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
 JOSEPH M. CERNILE, P.E. KELLARD SESSONS CONSULTING, P.C. CONSULTING TOWN ENGINEER DATE: \_\_\_\_\_

**APPLICANT:** SUMMIT CLUB PARTNERS, LLC  
568 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

**ARCHITECT:** GRANOFF ARCHITECTS  
330 GREENWOOD AVENUE  
GREENWICH, CT 06850

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John Meyer Consulting, Inc.  
420 BEDFORD ROAD - ARMONK, NY 10534  
PHONE: 914-233-2222 - FAX: 914-233-2192  
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**SITE EROSION & SEDIMENT CONTROL PLAN (NORTH) THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)**  
568 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

Drawn: NC Approved: AG  
Scale: 1" = 30'  
Date: 11/23/2020  
Project No: 20101  
200-2 (EAS NORTH) SEAR  
Drawing No: **C-401**

**DISTURBANCE AUTHORIZATION, PHASING OF THE PROJECT AND SEQUENCING OF CONSTRUCTION**

THE FOLLOWING SECTION DESCRIBES THE CONSTRUCTION PHASING PROPOSED FOR THIS PROJECT AND THE SEQUENCING OF THE INSTALLATION OF EROSION AND SEDIMENT CONTROLS AND THE PROPOSED CONSTRUCTION.

THE PLAN DIVIDES THE SITE INTO THREE (3) AREAS TO BE IMPACTED BY DEVELOPMENT. THE AREA OF PROPOSED GROUND DISTURBANCE WITHIN EACH OF THE THREE (3) AREAS TO BE DISTURBED BY THE RESIDENTIAL, RESIDENTIAL AMENITIES COMPLEX, AND FUTURE PERMANENT CLUBHOUSE IMPROVEMENTS WILL BE MORE THAN FIVE (5) ACRES. THEREFORE, AND IN ACCORDANCE WITH NYSDEC SPDES GENERAL PERMIT NO. GP-0-20-001 EFFECTIVE JANUARY 29, 2020 THE OPERATOR SHALL HAVE A QUALIFIED PROFESSIONAL CONDUCT AN ASSESSMENT OF THE SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION AND CERTIFY THAT THE APPROPRIATE EROSION AND SEDIMENT CONTROLS, AS SHOWN ON THE SEDIMENT & EROSION CONTROL PLANS, HAVE BEEN ADEQUATELY INSTALLED TO ENSURE OVERALL PREPAREDNESS OF THE SITE FOR THE COMMENCEMENT OF CONSTRUCTION. IN ADDITION, THE OPERATOR SHALL HAVE A QUALIFIED PROFESSIONAL CONDUCT TWO (2) SITE INSPECTIONS AT LEAST EVERY SEVEN (7) CALENDAR DAYS.

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITY, THE OWNER OR OPERATOR SHALL IDENTIFY THE CONTRACTOR(S) AND SUBCONTRACTOR(S) THAT WILL BE RESPONSIBLE FOR INSTALLING, CONSTRUCTING, REPAIRING, REPLACING, INSPECTING AND MAINTAINING THE EROSION AND SEDIMENT CONTROL PRACTICES INCLUDED IN THE SWPPP, AND THE CONTRACTOR(S) AND SUBCONTRACTOR(S) THAT WILL BE RESPONSIBLE FOR CONSTRUCTING THE POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICES INCLUDED IN THE SWPPP. THE OWNER OR OPERATOR SHALL HAVE EACH OF THE CONTRACTORS AND SUBCONTRACTORS IDENTIFY AT LEAST ONE PERSON FROM THEIR COMPANY THAT WILL BE RESPONSIBLE FOR IMPLEMENTATION OF THE SWPPP. THIS PERSON SHALL BE KNOWN AS THE TRAINED CONTRACTOR. THE OWNER OR OPERATOR SHALL ENSURE THAT AT LEAST ONE TRAINED CONTRACTOR IS ON SITE ON A DAILY BASIS WHEN SOIL DISTURBANCE ACTIVITIES ARE BEING PERFORMED.

THE OWNER OR OPERATOR SHALL HAVE EACH OF THE CONTRACTORS AND SUBCONTRACTORS IDENTIFIED ABOVE SIGN A COPY OF THE CERTIFICATION STATEMENT PROVIDED BEFORE THEY COMMENCE ANY CONSTRUCTION ACTIVITY.

**CONSTRUCTION ACCESS AND VEHICLE TRAVEL ON SITE**

THE SITE ACCESS FOR CONSTRUCTION VEHICLE TRAFFIC WILL BE VIA THE EXISTING DRIVEWAY ALONG BEDFORD ROAD (NY 22). THIS ENTRANCE SHALL BE POSTED WITH "CONSTRUCTION ACCESS" SIGNS VISIBLE IN BOTH DIRECTIONS OF ONCOMING TRAFFIC. WHERE PRACTICAL, THE EXISTING PAVED DRIVEWAY AND GOLF CART PATHS WHICH TRAVERSE THE SITE WILL BE USED FOR THE CONSTRUCTION VEHICLES.

A PRIMARY CONSTRUCTION STAGING AREA AND EQUIPMENT STORAGE AREA WILL BE ESTABLISHED AND LOCATED IN THE EXISTING LAWN AREA NEXT TO THE EXISTING ENTRANCE DRIVE. CONSTRUCTION VEHICLES SHALL NOT DISTURB ANY AREAS BEYOND THE CONSTRUCTION PHASE BEING WORKED AT THE TIME EXCEPT UNDER THE STRICT SUPERVISION OF THE OWNER'S FIELD REPRESENTATIVE AND ENCROLED WITH FOOT TALL CHAIN LINK SECURITY FENCING.

**SEQUENCE OF CONSTRUCTION**

THE CONTRACTOR SHALL FOLLOW THE SEQUENCE OF CONSTRUCTION OPERATION DESCRIBED BELOW AND AS NOTED ON THE PLANS.

**CONSTRUCTION PHASE 1 (~13.0 AC.)**

RESIDENTIAL BUILDINGS #4,5,6, AMENITIES COMPLEX, POOL, ROADWAYS, SIDEWALKS, ENTRANCE DRIVE, WATER SYSTEM AND SEWAGE TREATMENT PLANT.

- 1. STAKE OUT ALL LIMITS OF DISTURBANCE. (AREAS SHALL BE DELINEATED WITH ORANGE CONSTRUCTION FENCE)
- 2. TAG ALL EXISTING TREES TO BE REMOVED (TREES SHALL BE DELINEATED WITH COLORED CONSTRUCTION TAPE)
- 3. CUT EXISTING TREES TO BE REMOVED.
- 4. INSTALL CONSTRUCTION ACCESS, SILT FENCE (DOWNHILL OF ALL DISTURBANCE AREAS), INLET PROTECTION AND OTHER NECESSARY EROSION AND SEDIMENT CONTROLS, INCLUDING THE INSTALLATION OF THE TEMPORARY SEDIMENT BASIN AND TEMPORARY SWALES
- 5. COORDINATE INSPECTION OF INITIAL EROSION CONTROLS AND TREE REMOVAL BY TOWN CONSULTING ENGINEER AND JMC.
- 6. DEMOLITION OF EXISTING BUILDINGS AND SITE FEATURES AS REQUIRED.
- 7. STRIP AND STOCKPILE TOPSOIL, REMOVE STUMPS FROM CUT TREES.
- 8. BEGIN BUILDING AND ROADWAY CONSTRUCTION, ROUGH GRADING.
- 9. INSTALL STORM DRAIN SYSTEM COMPLETE (IMMEDIATELY INSTALL INLET PROTECTION ON ALL INLETS).
- 10. INSTALL WATER SYSTEM AND SEWAGE TREATMENT PLANT IMPROVEMENTS.
- 11. INSTALL PUBLIC UTILITIES (WATER, SANITARY SEWER, GAS, ELECTRIC, AND TELEPHONE) AS REQUIRED.
- 12. INSTALL CONCRETE AND ASPHALT CONCRETE PAVEMENT COMPLETE.
- 13. FINISH GRADING, REDISTRIBUTE TOPSOIL AND ESTABLISH VEGETATION AND/OR LANDSCAPING.
- 14. CLEAN PAVEMENTS AND STORM DRAIN SYSTEM OF ALL ACCUMULATED SEDIMENT IN CONJUNCTION WITH THE REMOVAL OF ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES.
- 15. COMPLETE SITE AND BUILDING CONSTRUCTION.
- 16. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS APPLICABLE ONCE VEGETATION IS ESTABLISHED (80X GRASS SPROUT OVER ENTIRE AREA).

**CONSTRUCTION PHASE 2 (~4.7 AC.)**

RESIDENTIAL BUILDINGS #1,2,3 AND TENNIS COURTS

- 1. STAKE OUT ALL LIMITS OF DISTURBANCE. (AREAS SHALL BE DELINEATED WITH ORANGE CONSTRUCTION FENCE)
- 2. TAG ALL EXISTING TREES TO BE REMOVED (TREES SHALL BE DELINEATED WITH COLORED CONSTRUCTION TAPE)
- 3. CUT EXISTING TREES TO BE REMOVED.
- 4. INSTALL CONSTRUCTION ACCESS, SILT FENCE (DOWNHILL OF ALL DISTURBANCE AREAS), INLET PROTECTION AND OTHER NECESSARY EROSION AND SEDIMENT CONTROLS, INCLUDING THE TEMPORARY SWALE BEHIND THE BUILDINGS.
- 5. COORDINATE INSPECTION OF INITIAL EROSION CONTROLS AND TREE REMOVAL BY TOWN CONSULTING ENGINEER AND JMC.
- 6. DEMOLITION OF EXISTING BUILDINGS AND SITE FEATURES AS REQUIRED.
- 7. STRIP AND STOCKPILE TOPSOIL, REMOVE STUMPS FROM CUT TREES.
- 8. BEGIN BUILDING AND ROADWAY/PARKING LOT CONSTRUCTION, ROUGH GRADING.
- 9. INSTALL STORM DRAIN SYSTEM COMPLETE (IMMEDIATELY INSTALL INLET PROTECTION ON ALL INLETS).
- 10. INSTALL PUBLIC UTILITIES (WATER, SANITARY SEWER, GAS, ELECTRIC, AND TELEPHONE) AS REQUIRED.
- 11. INSTALL CONCRETE AND ASPHALT CONCRETE PAVEMENT COMPLETE.
- 12. FINISH GRADING, REDISTRIBUTE TOPSOIL AND ESTABLISH VEGETATION AND/OR LANDSCAPING.
- 13. CLEAN PAVEMENTS AND STORM DRAIN SYSTEM OF ALL ACCUMULATED SEDIMENT IN CONJUNCTION WITH THE REMOVAL OF ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES.
- 14. COMPLETE SITE AND BUILDING CONSTRUCTION.
- 15. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS APPLICABLE ONCE VEGETATION IS ESTABLISHED (80X GRASS SPROUT OVER ENTIRE AREA).

**CONSTRUCTION PHASE 3 (~5.9 AC.)**

CLUBHOUSE, PARKING LOT EXPANSION, GUEST COTTAGES AND NEW MAINTENANCE BUILDING

- 1. STAKE OUT ALL LIMITS OF DISTURBANCE. (AREAS SHALL BE DELINEATED WITH ORANGE CONSTRUCTION FENCE)
- 2. TAG ALL EXISTING TREES TO BE REMOVED (TREES SHALL BE DELINEATED WITH COLORED CONSTRUCTION TAPE)
- 3. CUT EXISTING TREES TO BE REMOVED.
- 4. INSTALL CONSTRUCTION ACCESS, SILT FENCE (DOWNHILL OF ALL DISTURBANCE AREAS), INLET PROTECTION AND OTHER NECESSARY EROSION AND SEDIMENT CONTROLS.
- 5. COORDINATE INSPECTION OF INITIAL EROSION CONTROLS AND TREE REMOVAL BY TOWN CONSULTING ENGINEER AND JMC.
- 6. DEMOLITION OF EXISTING BUILDINGS AND SITE FEATURES AS REQUIRED.
- 7. STRIP AND STOCKPILE TOPSOIL, REMOVE STUMPS FROM CUT TREES.
- 8. BEGIN BUILDING AND PARKING LOT CONSTRUCTION, ROUGH GRADING.
- 9. INSTALL STORM DRAIN SYSTEM COMPLETE (IMMEDIATELY INSTALL INLET PROTECTION ON ALL INLETS).
- 10. INSTALL PUBLIC UTILITIES (WATER, SANITARY SEWER, GAS, ELECTRIC, AND TELEPHONE) AS REQUIRED.
- 11. INSTALL CONCRETE AND ASPHALT CONCRETE PAVEMENT COMPLETE.
- 12. FINISH GRADING, REDISTRIBUTE TOPSOIL AND ESTABLISH VEGETATION AND/OR LANDSCAPING.
- 13. CLEAN PAVEMENTS AND STORM DRAIN SYSTEM OF ALL ACCUMULATED SEDIMENT IN CONJUNCTION WITH THE REMOVAL OF ALL TEMPORARY SEDIMENT AND EROSION CONTROL DEVICES.
- 14. COMPLETE SITE AND BUILDING CONSTRUCTION.
- 15. REMOVE TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS APPLICABLE ONCE VEGETATION IS ESTABLISHED (80X GRASS SPROUT OVER ENTIRE AREA).

**GENERAL NOTES**

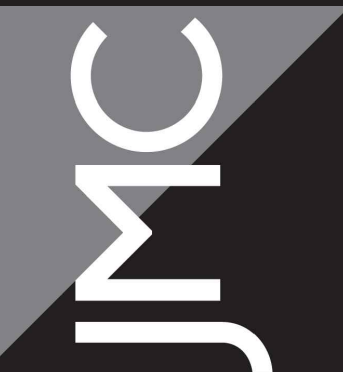
- 1. ALL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH ALL THE PLANS, PRIOR TO BEGINNING ANY CLEARING, GRUBBING OR EXCAVATION.
- 2. SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE DRAWINGS PRIOR TO BEGINNING ANY CLEARING AND GRUBBING OR EARTHWORK.
- 3. EXPOSED SLOPES AND ALL GRADED AREAS SHALL BE SEEDED IMMEDIATELY UPON COMPLETION OF ITS CONSTRUCTION AS DIRECTED BY THE OWNER'S FIELD REPRESENTATIVE.
- 4. GRASS SEED MIX FOR SEDIMENT AND EROSION CONTROL MAY BE APPLIED BY EITHER MECHANICAL OR HYDROSEEDING METHODS. HYDROSEEDING SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION, AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION.
- 5. SEEDED AREAS HAVING A GRADED SLOPE OF 25% OR LESS SHALL BE MULCHED WITH STRAW AT A RATE OF 2 TONS PER ACRE (90 LBS. PER 1,000 S.F.) SUCH THAT THE MULCH FORMS A CONTINUOUS BLANKET.
- 6. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED AND MAINTAINED ON A DAILY BASIS BY THE CONTRACTOR. ALL COLLECTED SEDIMENT WITHIN SEDIMENT BARRIERS SHALL BE REMOVED PERIODICALLY TO MAINTAIN THE FUNCTION OF THE SEDIMENT BARRIER. ALL SEDIMENT COLLECTED SHALL BE RESPREAD ON-SITE WITHIN STABILIZED AREAS AS DIRECTED BY THE OWNER'S FIELD REPRESENTATIVE.
- 7. DUST SHALL BE CONTROLLED BY SPRINKLING OR OTHER APPROVED METHODS AS NECESSARY, OR AS DIRECTED BY THE CONTRACTOR.
- 8. ALL FILLS SHALL BE COMPACTED TO PROVIDE STABILITY OF MATERIAL AND TO PREVENT SETTLEMENT.
- 9. EXCAVATIONS AND FILLS SHALL NOT ENDANGER ADJOINING PROPERTIES, NOR DIVERT WATER ONTO THE PROPERTY OF OTHERS.
- 10. THE CONTRACTOR SHALL INSPECT DOWNSTREAM CONDITIONS FOR EVIDENCE OF SEDIMENTATION ON A TWICE A WEEK BASIS AND AFTER RAINSTORMS.
- 11. AS WARRANTED BY FIELD CONDITIONS, SPECIAL ADDITIONAL SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED BY THE CONTRACTOR AS REQUIRED.
- 12. STOCKPILING OF CONSTRUCTION MATERIAL SHALL BE PLACED ON-SITE IN THE AREA DESIGNATED. STOCKPILED EXCAVATED MATERIAL SHALL HAVE SILT FENCE LOCATED AROUND PERIMETER. ALL STOCKPILED MATERIAL SHALL BE MAINTAINED IN AN ORDERLY MANNER SO AS NOT TO IMPEDE ON EXISTING TRAFFIC CIRCULATION ROUTES.
- 13. THIS PLAN IS FOR SEDIMENT AND EROSION CONTROL INFORMATION ONLY.
- 14. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADDITIONAL EROSION CONTROL MEASURES AS MAY BE REQUIRED BY THE OWNER'S FIELD REPRESENTATIVE AND/OR THE TOWN OF NORTH CASTLE.
- 15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH NYSDEC RULES AND REGULATIONS AS SET FORTH BY SPDES GENERAL PERMIT GP-0-20-001 FOR DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITIES EFFECTIVE 01/29/2020.
- 16. IN AREAS WHERE SOIL DISTURBANCE ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED, THE APPLICATION OF SOIL STABILIZATION MEASURES SHALL BE INITIATED BY THE END OF THE NEXT BUSINESS DAY AND COMPLETED WITHIN SEVEN (7) DAYS FROM THE DATE THE CURRENT SOIL DISTURBANCE ACTIVITY CEASED. THE SOIL STABILIZATION MEASURES SELECTED SHALL BE IN CONFORMANCE WITH THE TECHNICAL STANDARD, NYS STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, DATED AUGUST 2005.
- 17. THE OWNER OR OPERATOR SHALL INSTALL ANY ADDITIONAL SITE SPECIFIC PRACTICES NEEDED TO PROTECT WATER QUALITY.
- 18. CONTRACTOR SHALL UTILIZE EXISTING PAVED AREAS WHERE PRACTICAL AND AS MAY BE DIRECTED BY THE OWNER'S FIELD REPRESENTATIVE FOR ACCESS ROUTES THROUGH THE DURATION OF CONSTRUCTION. DAMAGE TO EXISTING CART PATHS CAUSED BY CONSTRUCTION ACTIVITIES SHALL BE REPAIRED UPON COMPLETION OF THE PROJECT.

| No. | Revision                  | Date       | By |
|-----|---------------------------|------------|----|
| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2023 | NC |
| 2.  | RESPONSE TO TOWN COMMENTS | 03/09/2023 | NC |
| 3.  | RESPONSE TO TOWN COMMENTS | 06/14/2021 | NC |
| 4.  | RESPONSE TO TOWN COMMENTS | 07/07/2022 | NC |
| 5.  | RESPONSE TO TOWN COMMENTS | 05/09/2022 | NC |
| 6.  | RESPONSE TO TOWN COMMENTS | 05/09/2022 | NC |
| 7.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 | NC |

APPLICANT/OWNER: **SUMMIT CLUB PARTNERS, LLC**  
 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504

ARCHITECT: **GRANOFF ARCHITECTS**  
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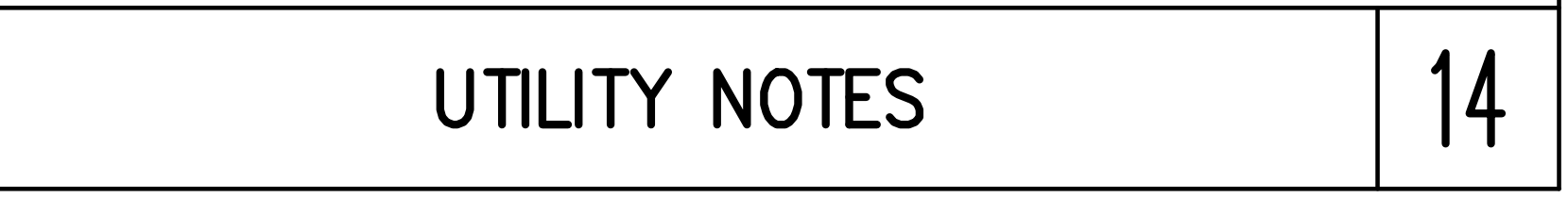
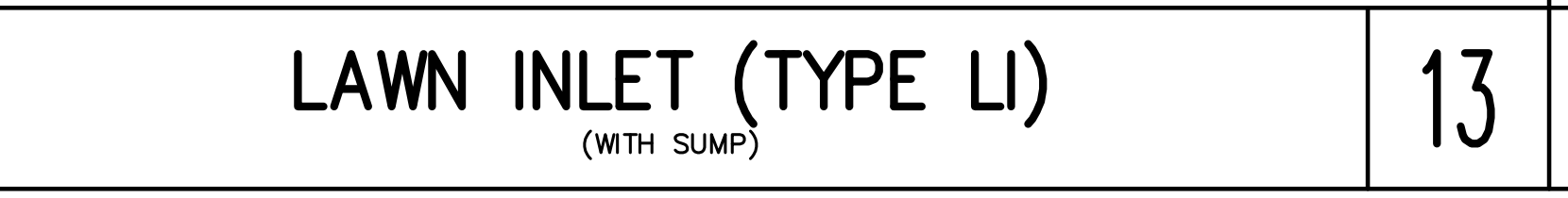
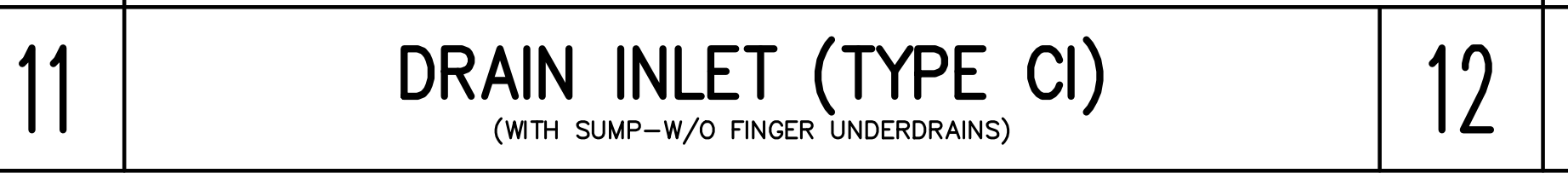
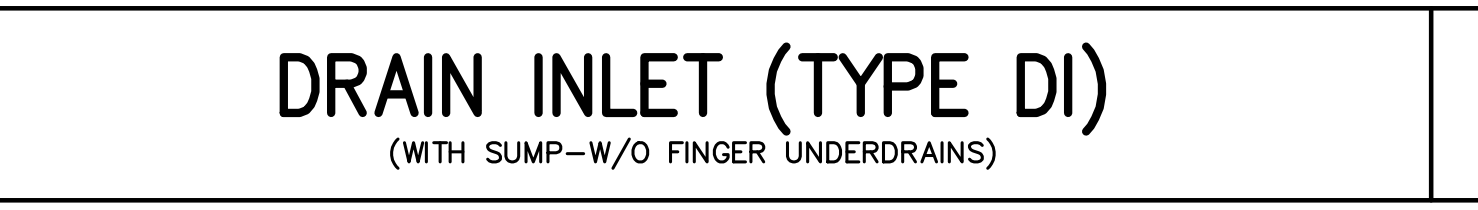
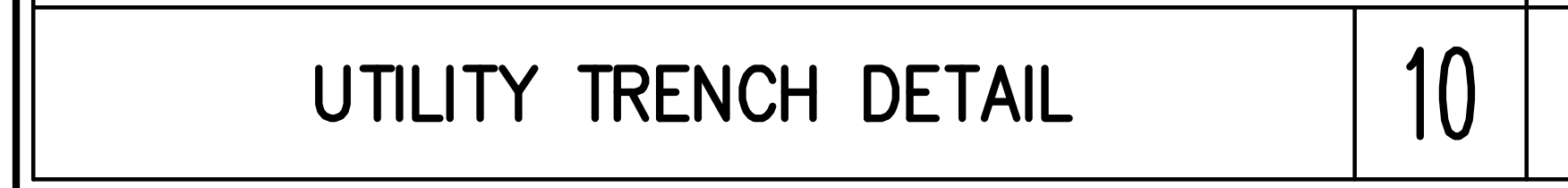
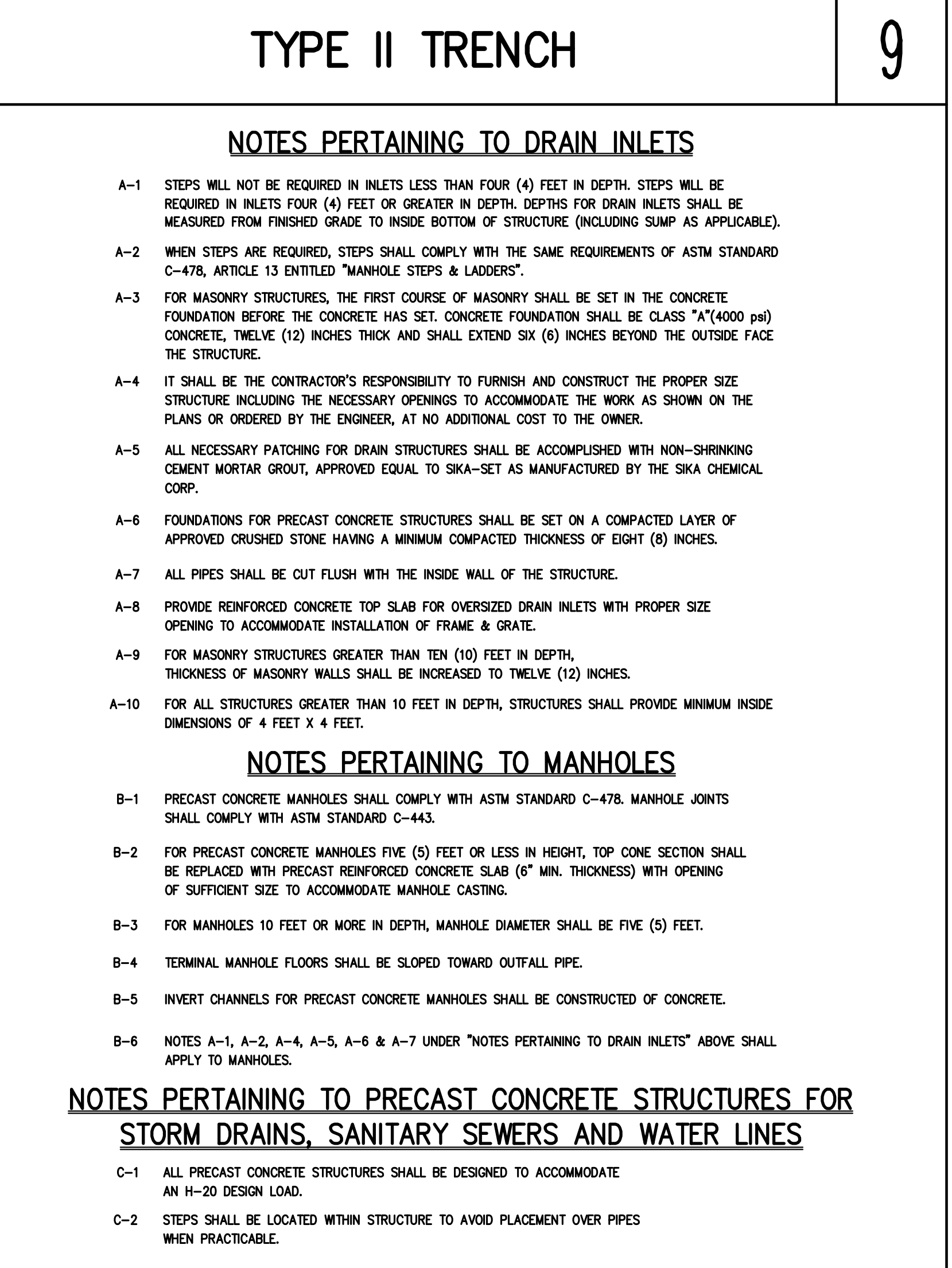
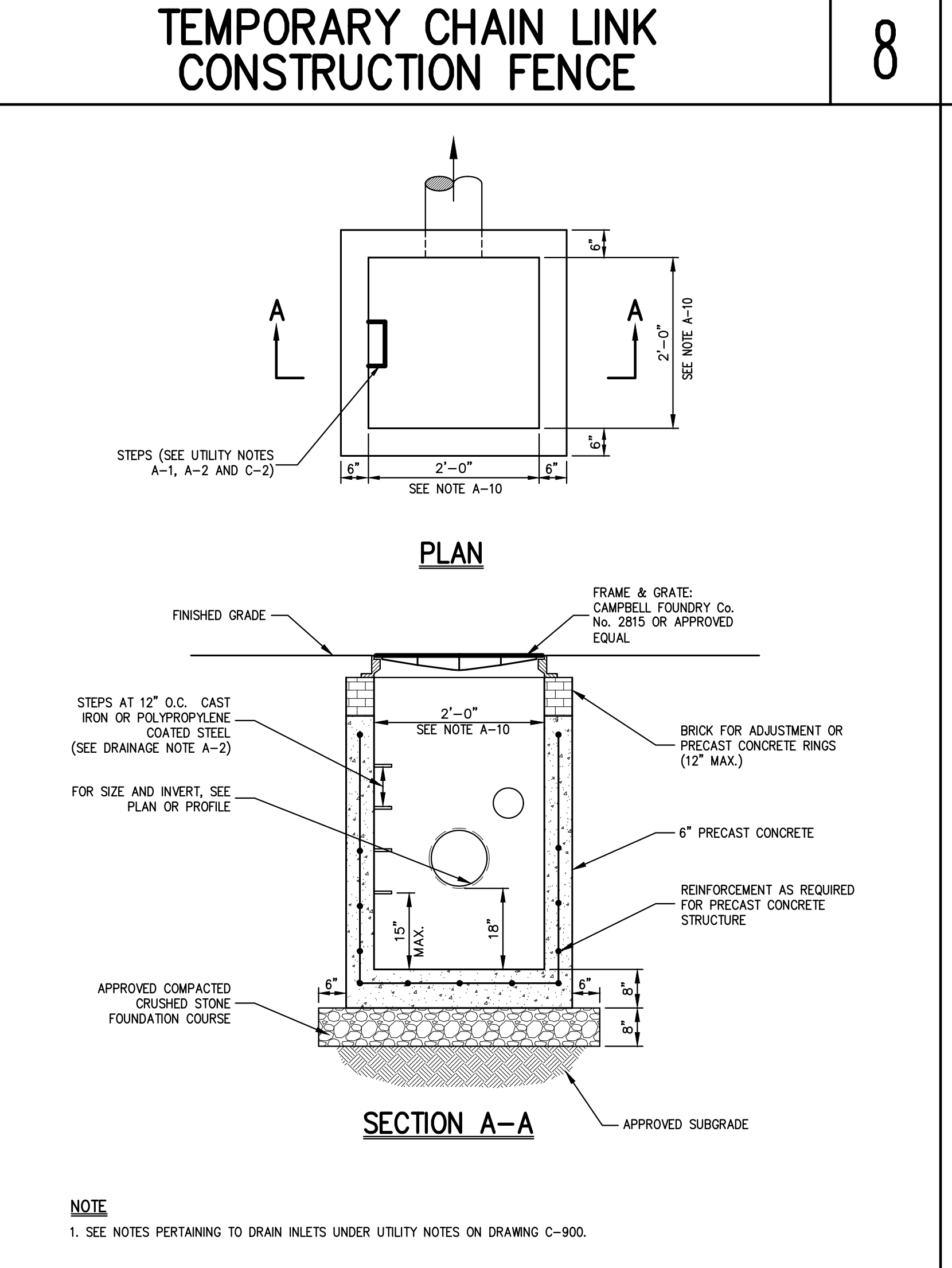
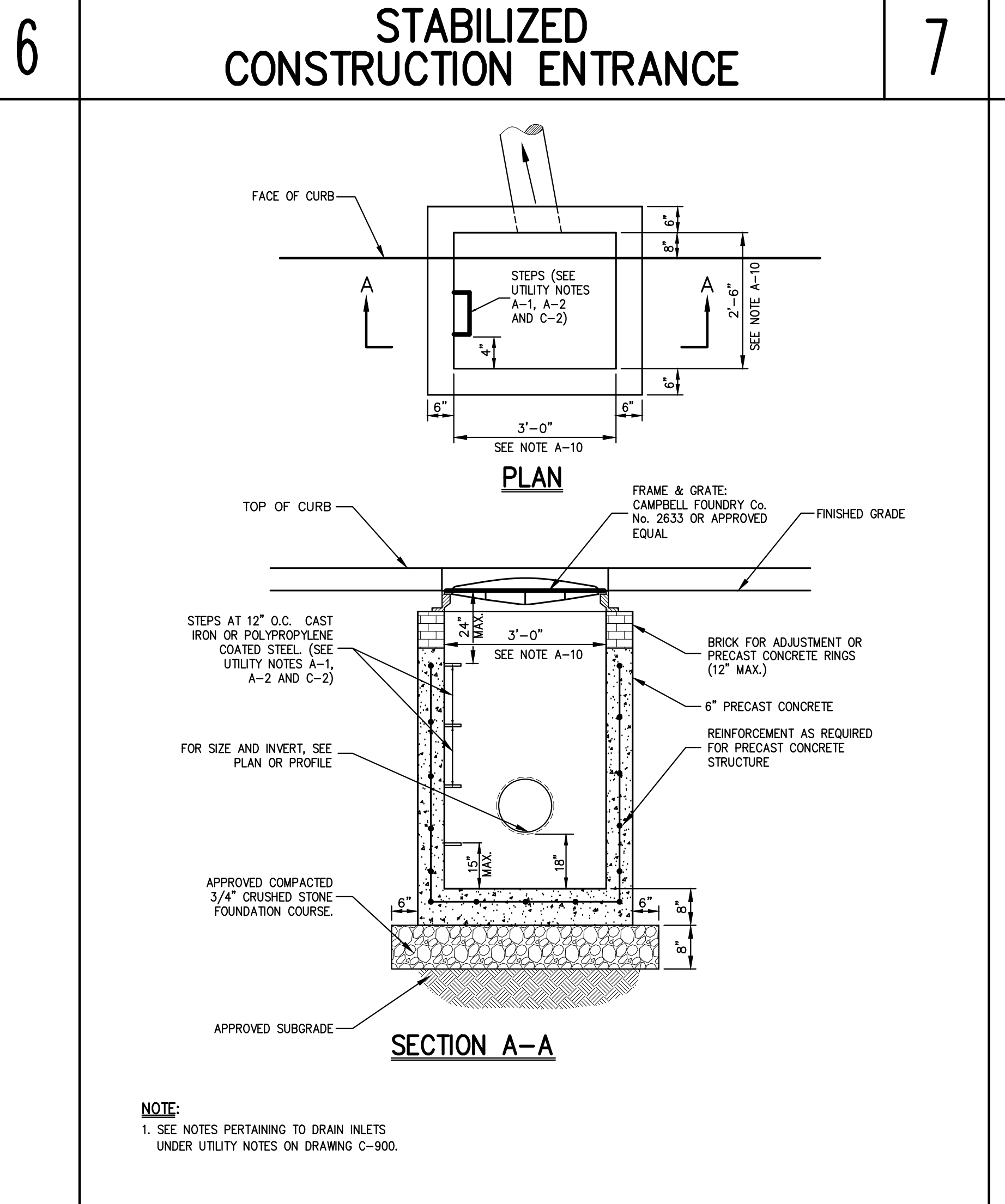
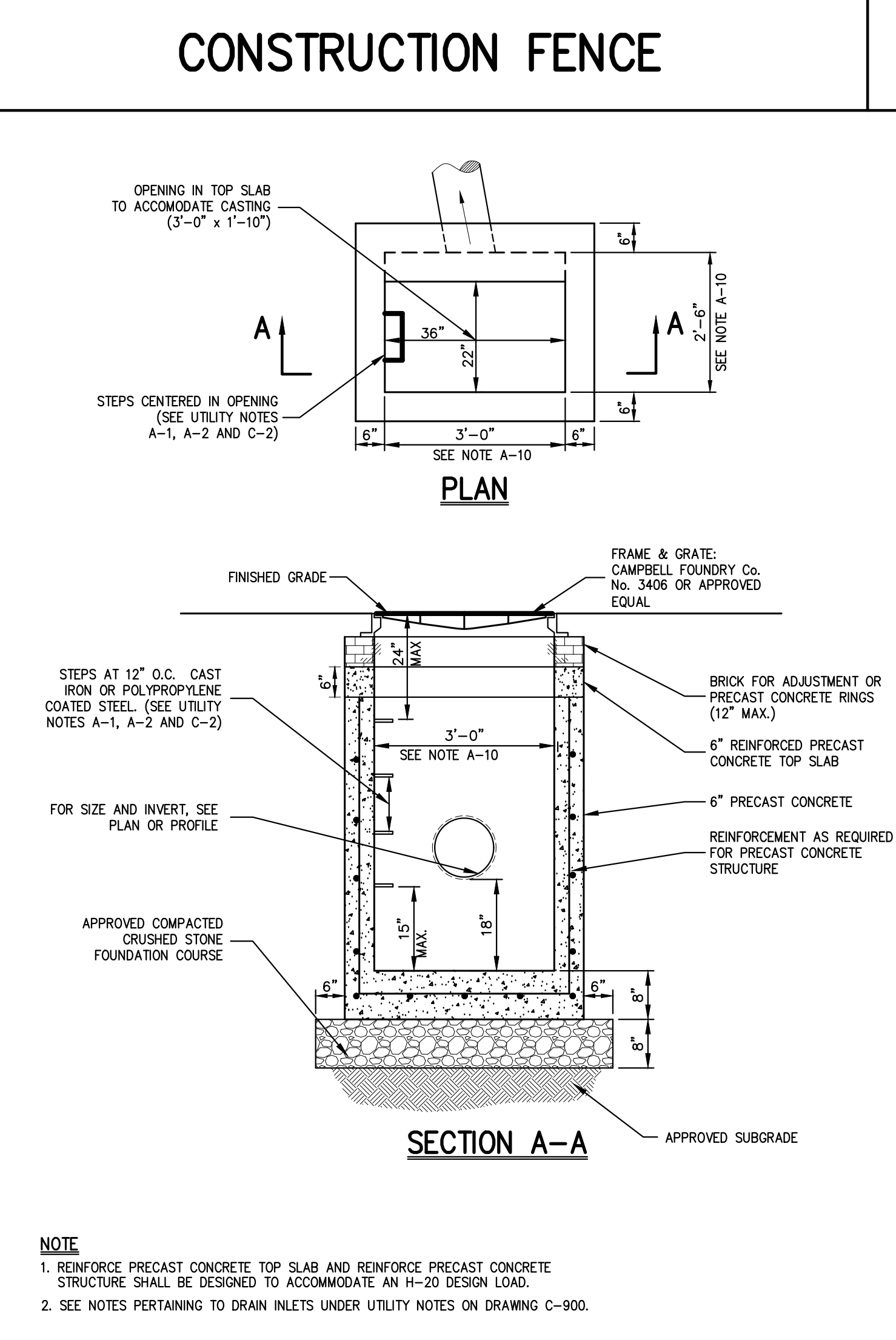
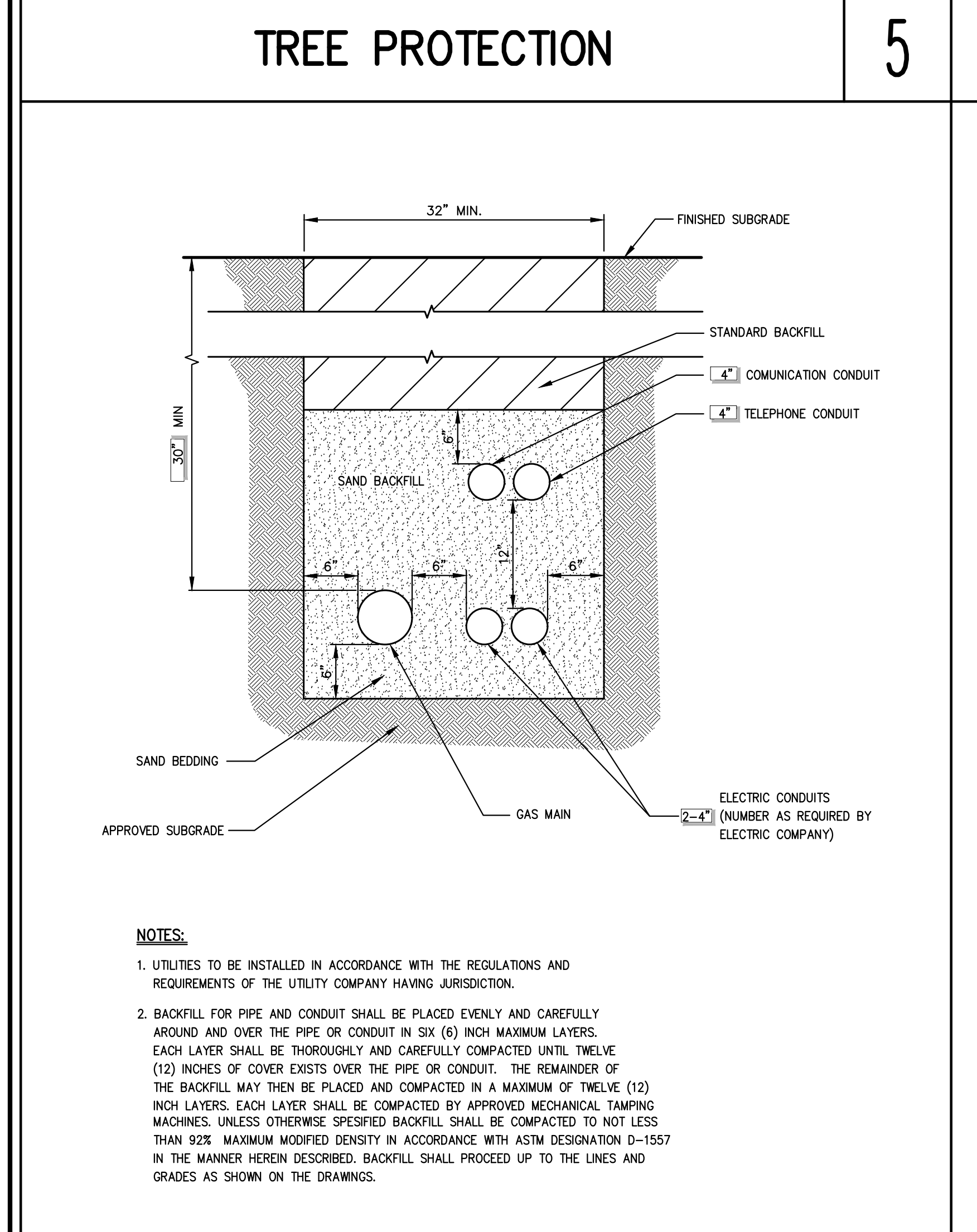
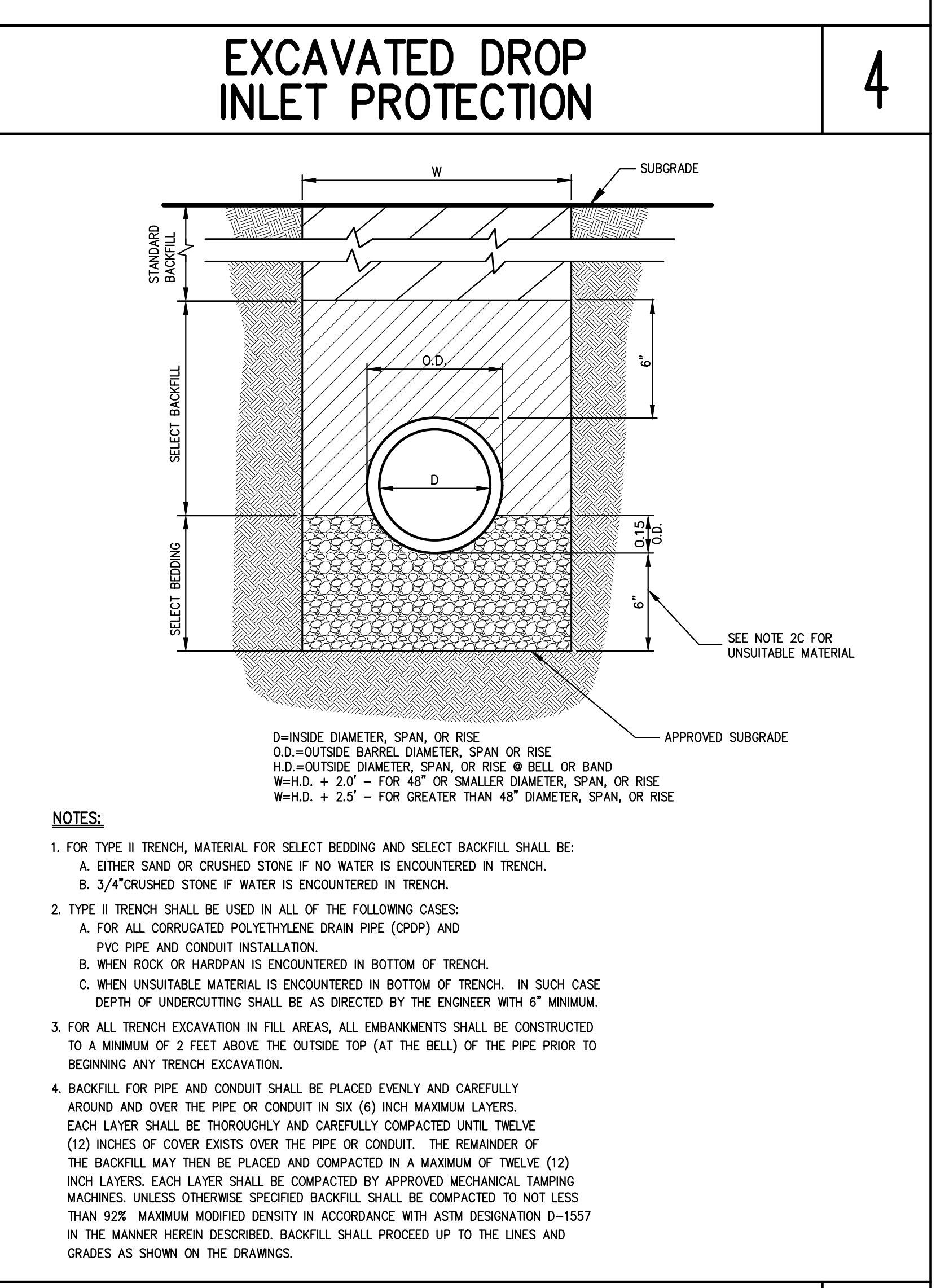
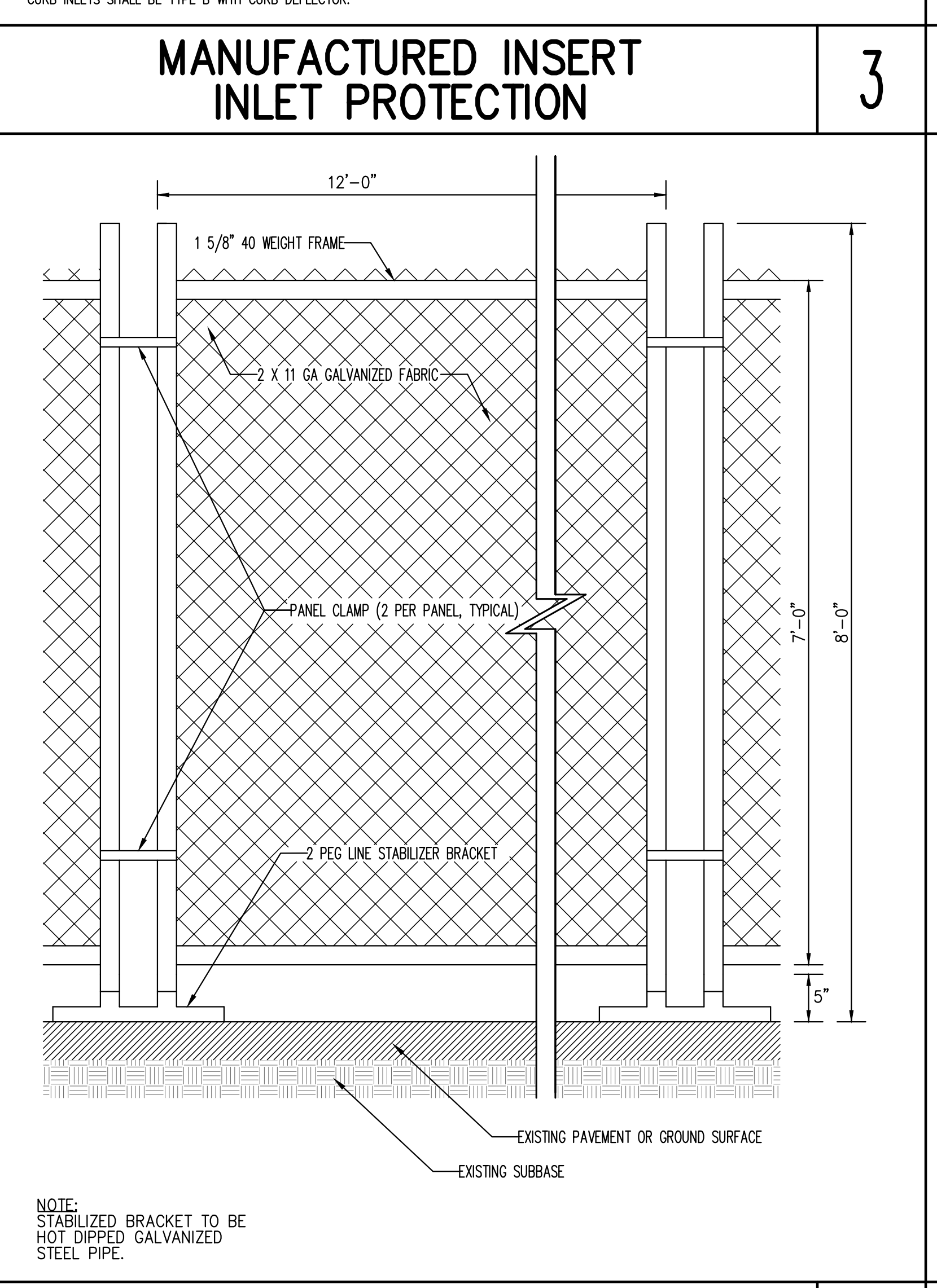
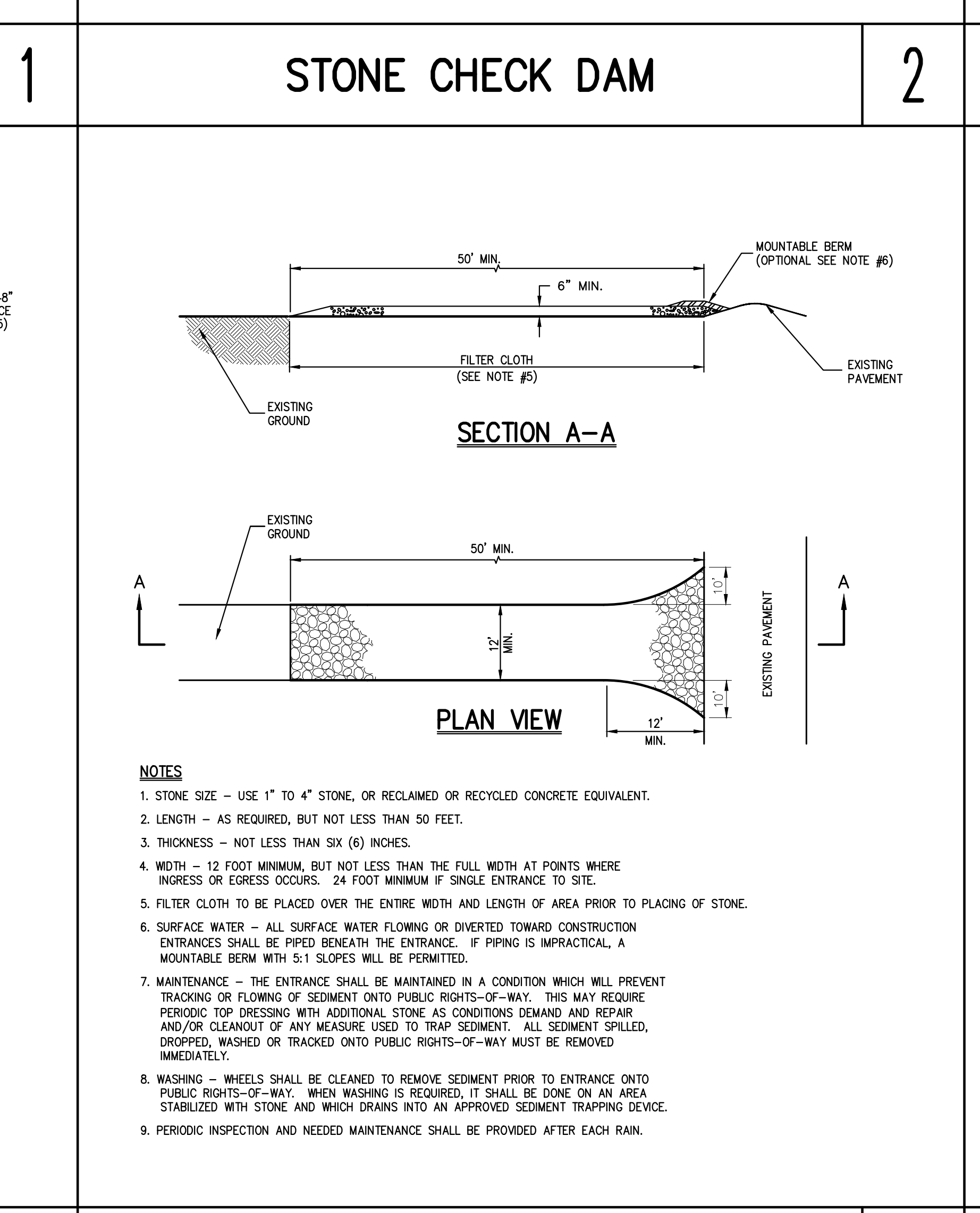
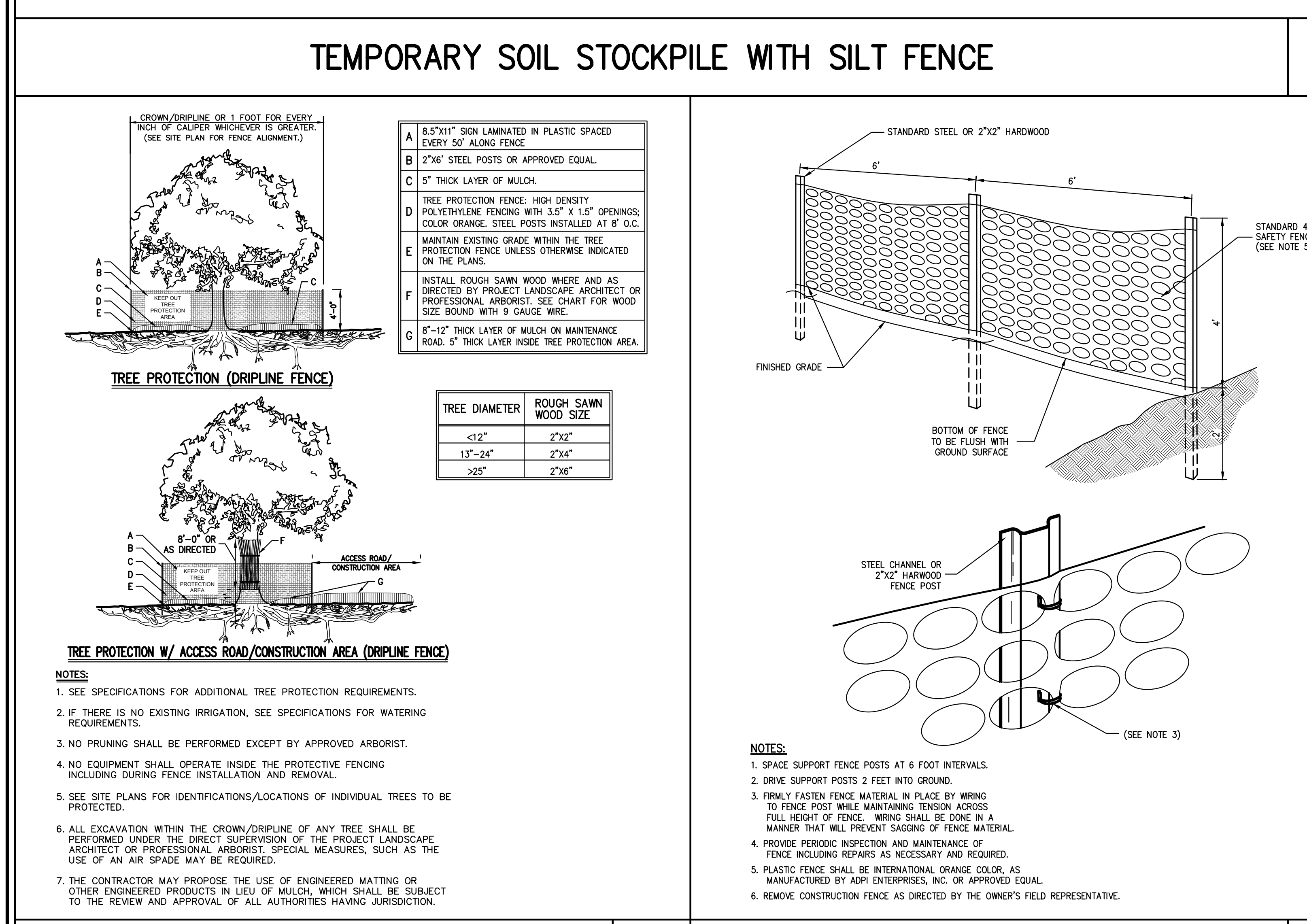
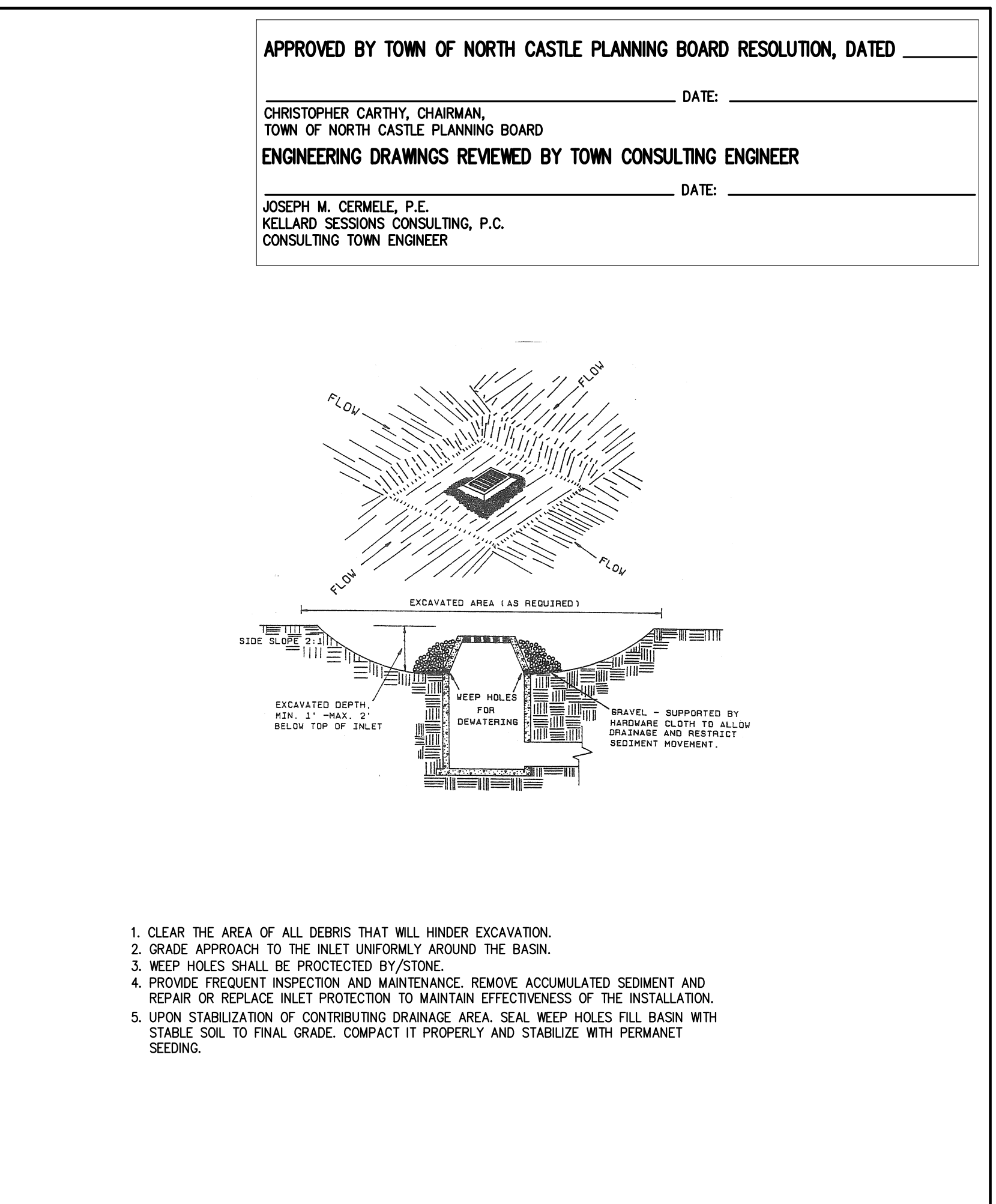
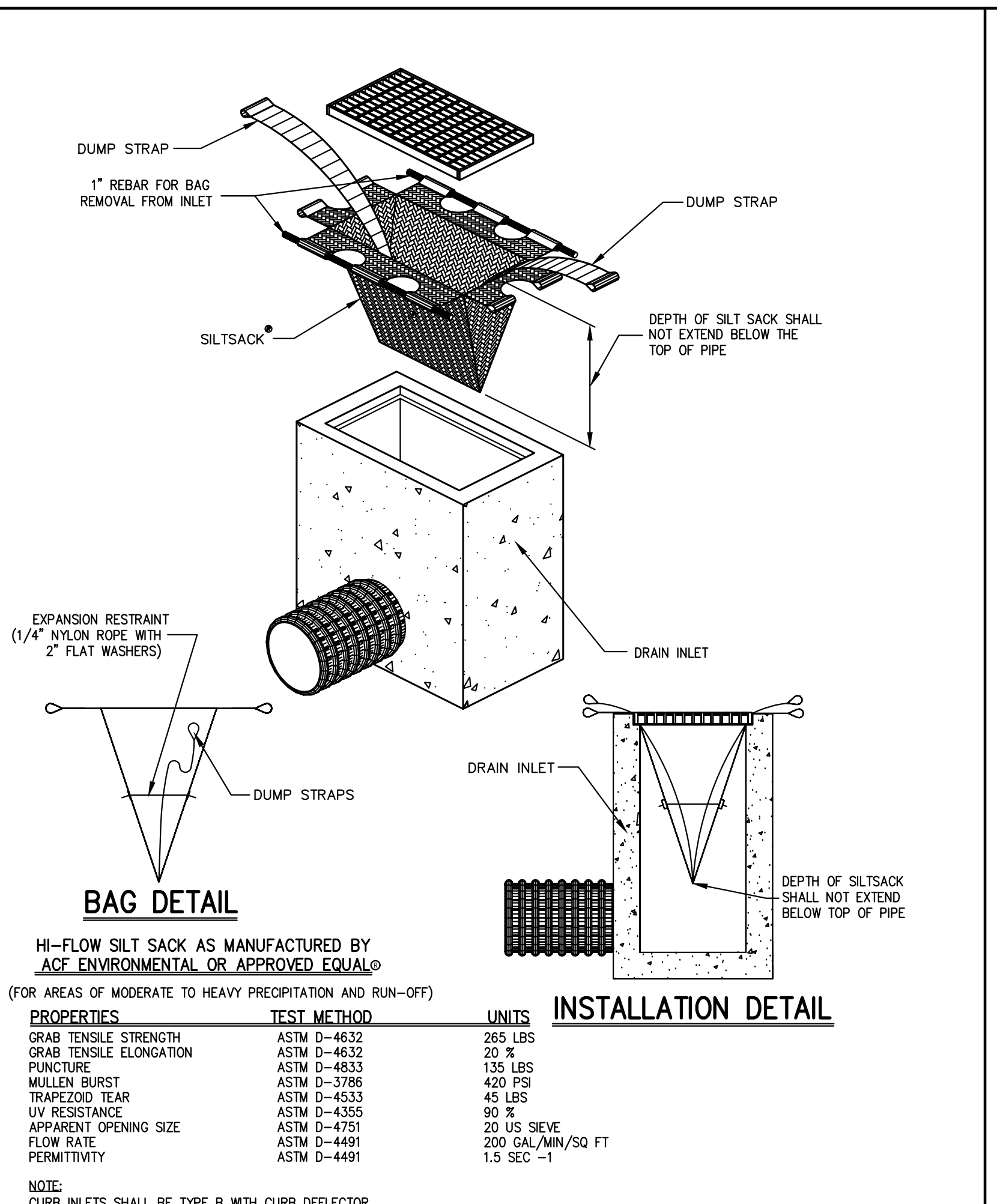
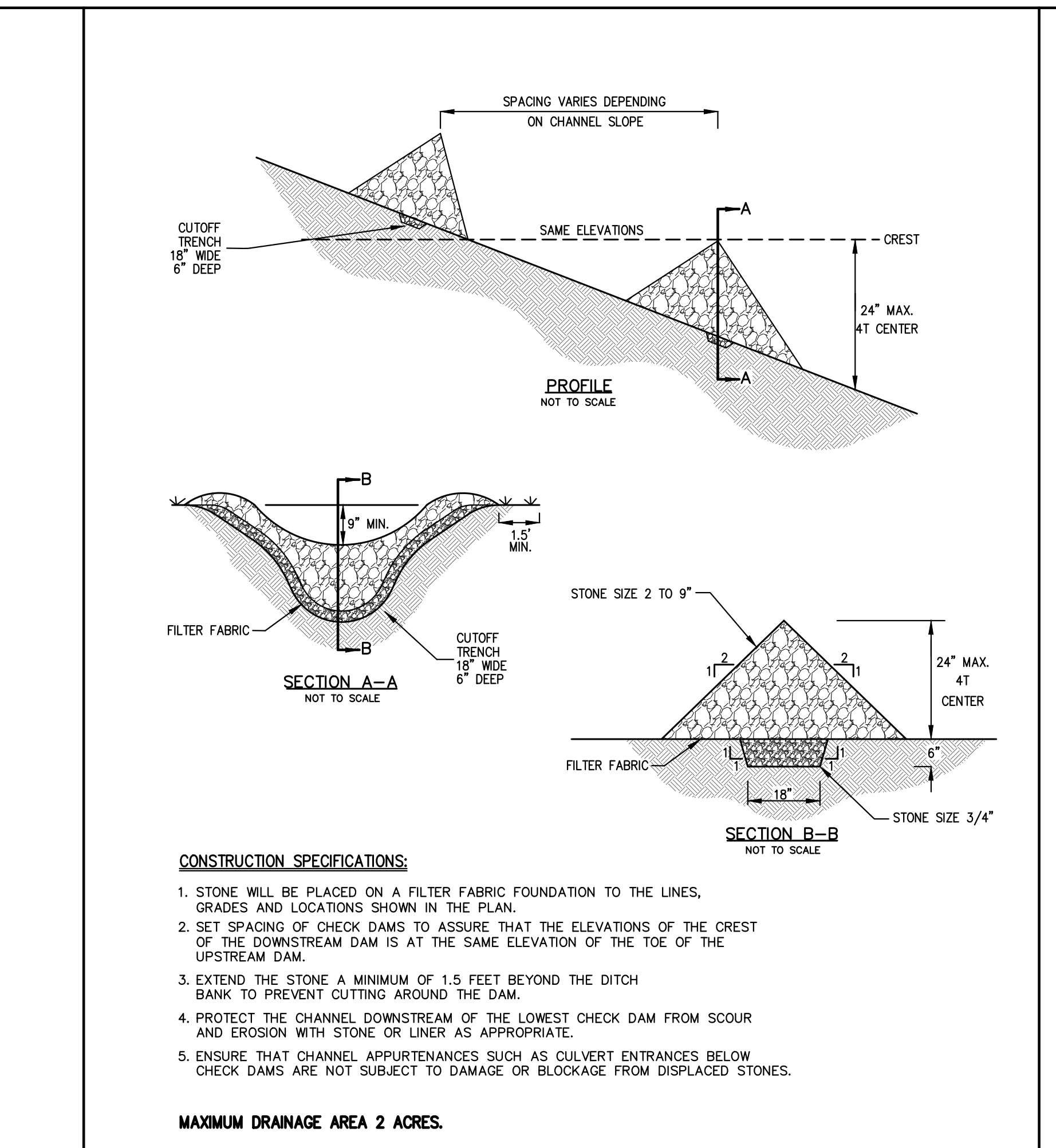
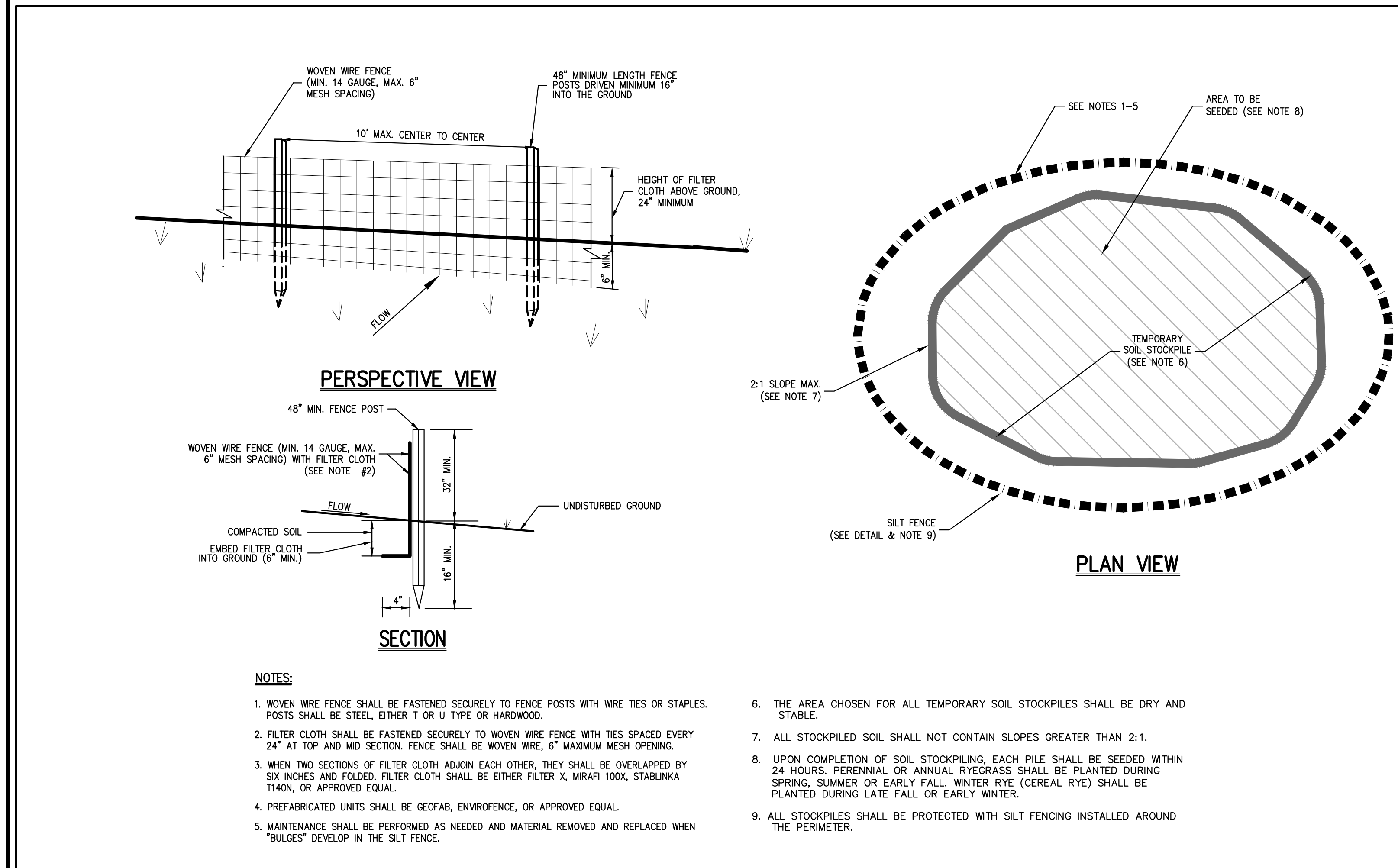
**EROSION & SEDIMENT CONTROL/PHASING NOTES**  
**THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)**  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

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**C-402**

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHRISTOPHER CARTHAY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
**ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER**  
 JOSEPH M. CERNILE, P.E., KELLARD SESSIONS CONSULTING, P.C., CONSULTING TOWN ENGINEER

|                     |                           |
|---------------------|---------------------------|
| Drawn: NC           | Approved: AG              |
| Scale: NOT TO SCALE | Date: 11/23/2020          |
| Project No: 20101   | Job # (E&S NOTES): 01.eur |
| Drawn By: _____     | DATE: _____               |



APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE \_\_\_\_\_

CHRISTOPHER CARY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD

ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. CERMELE, P.E. KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEER

| Date       | By | Revision                     |
|------------|----|------------------------------|
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| 05/09/2022 | NC | 5. RESPONSE TO TOWN COMMENTS |
| 07/24/2023 | NC | 6. RESPONSE TO TOWN COMMENTS |

| Drawn       | NC           | Approved | AG |
|-------------|--------------|----------|----|
| Scale       | NOT TO SCALE |          |    |
| Date        | 11/23/2020   |          |    |
| Project No. | 20101        |          |    |
| Sheet No.   | C-900        |          |    |

APPLICANT: SUMMIT CLUB PARTNERS, LLC  
566 BEDFORD ROAD (NY-22) ARMONK, NY 10504

ARCHITECT: GRANOFF ARCHITECTS  
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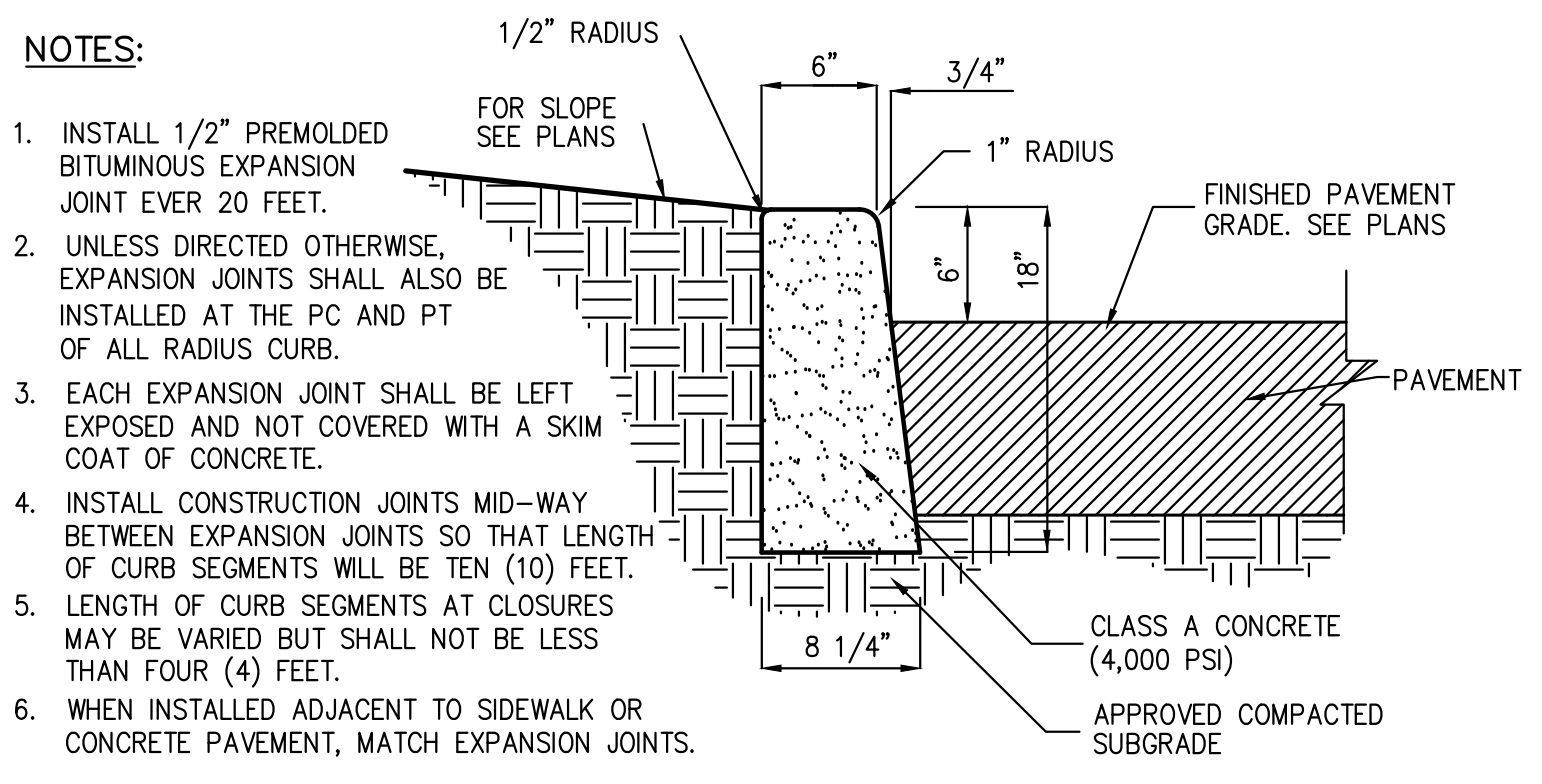
CONSTRUCTION DETAILS

THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)  
566 & 570 BEDFORD ROAD (NY-22) TOWN OF NORTH CASTLE, NEW YORK

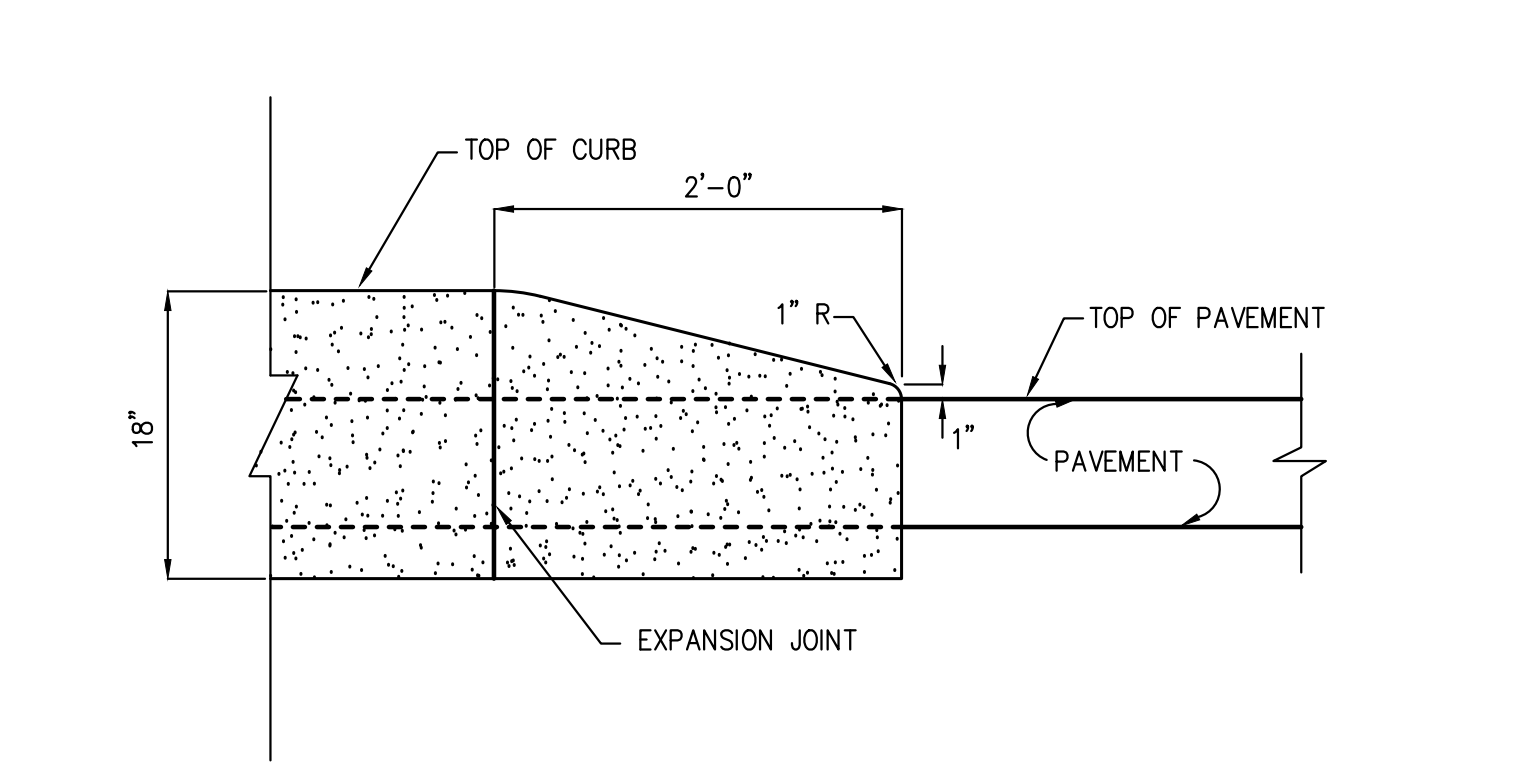
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NOT FOR CONSTRUCTION

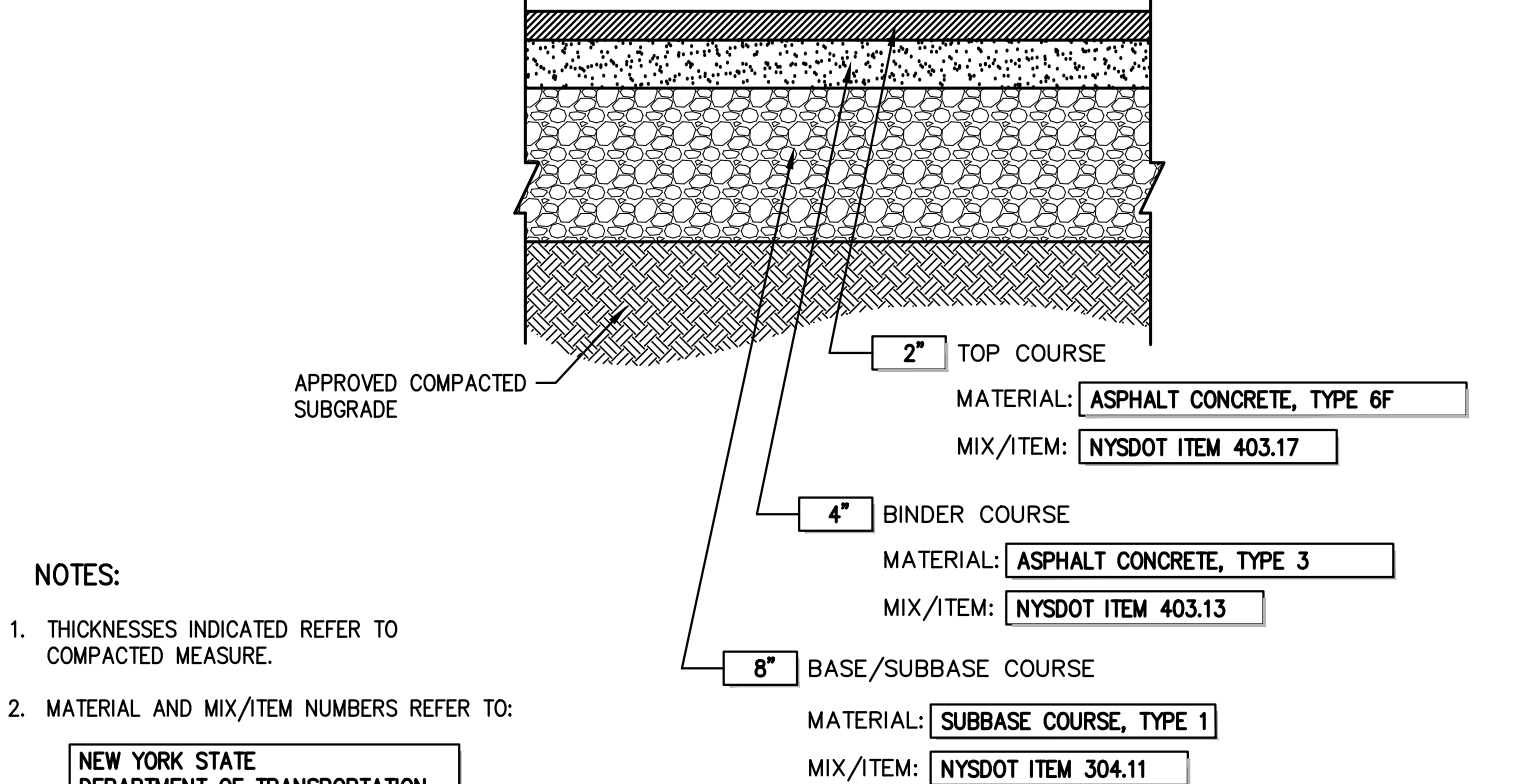




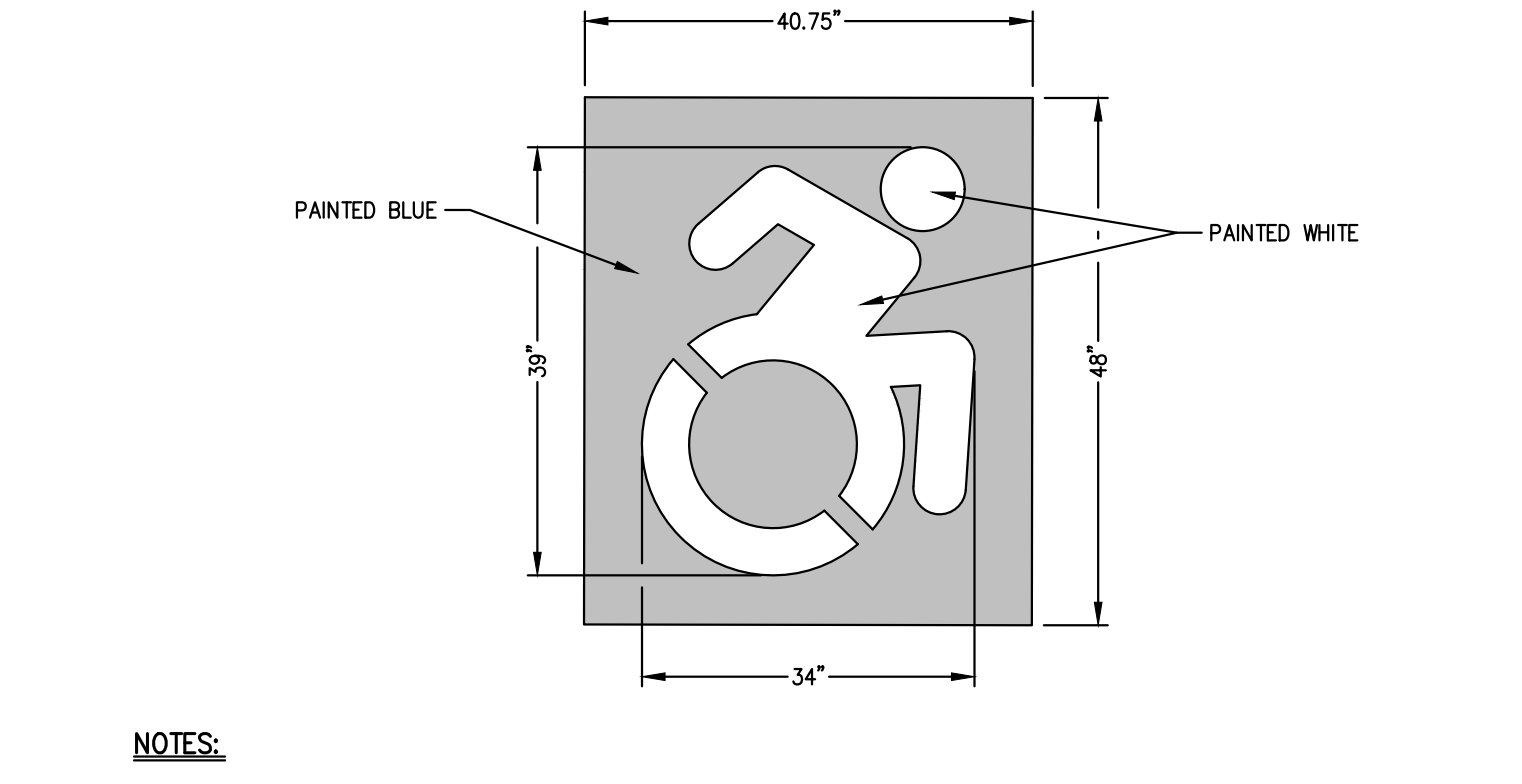
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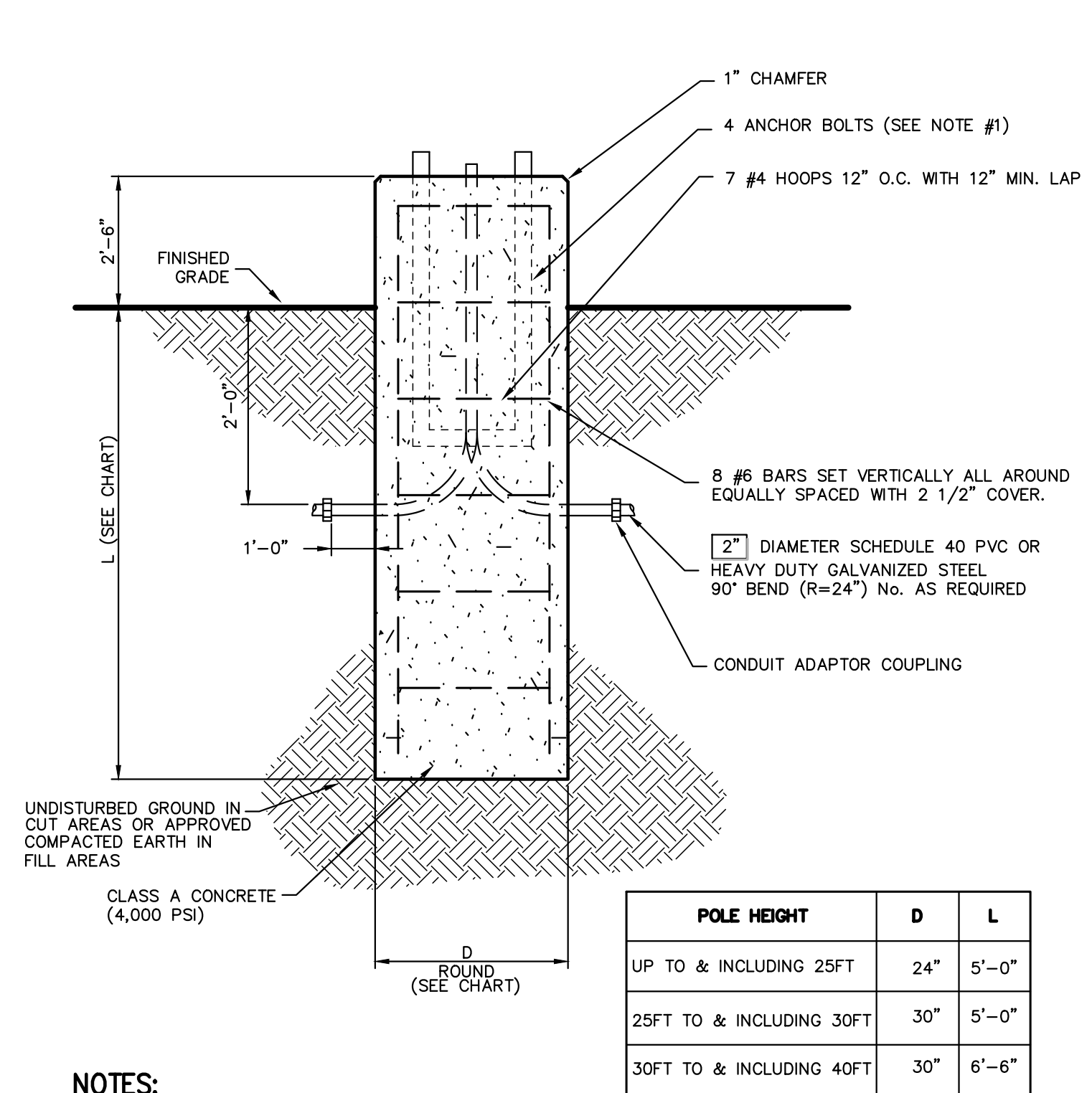
**CONCRETE CURB ENDING** 26



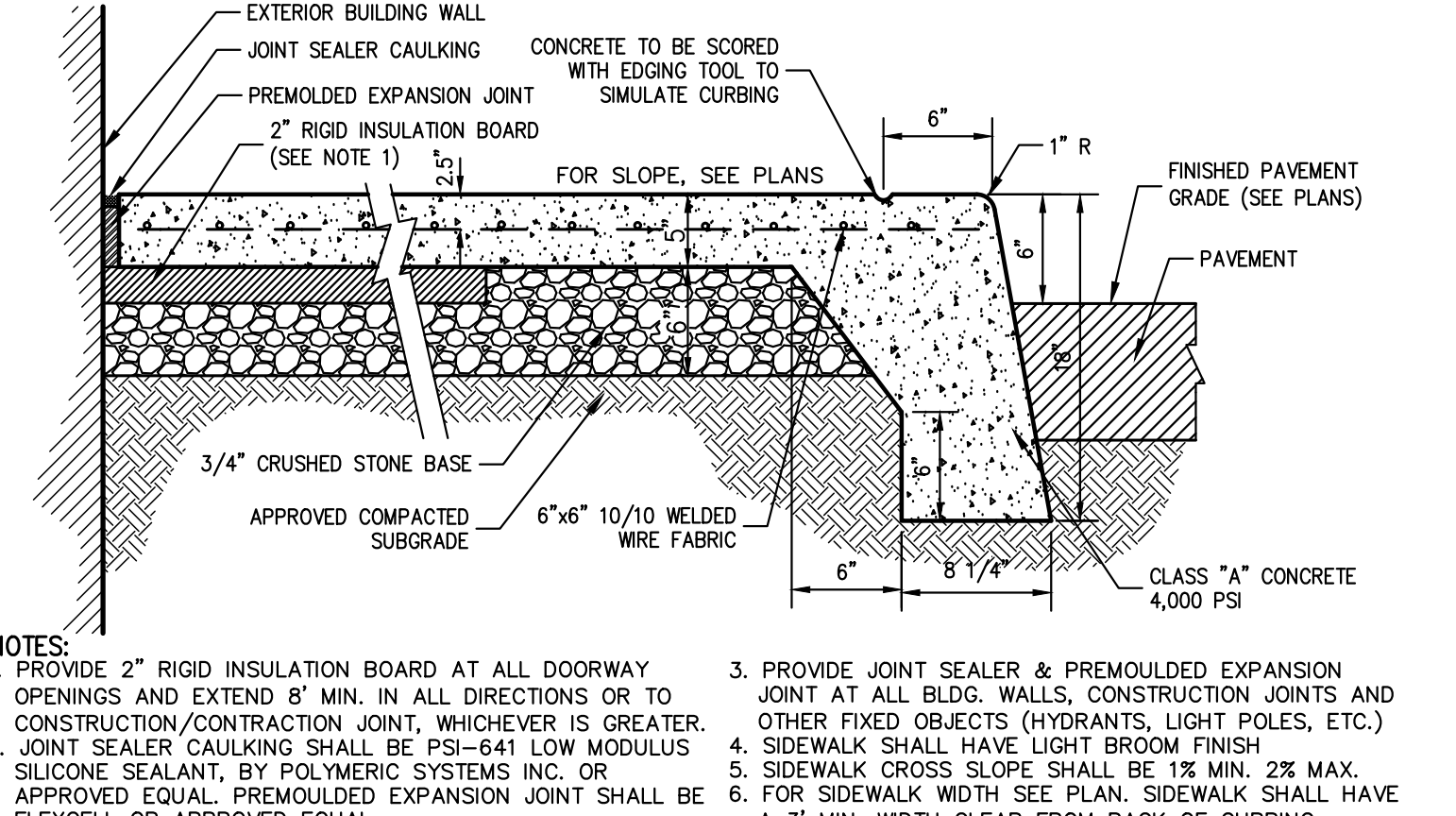
**SITE PAVEMENT (HEAVY DUTY)** 27



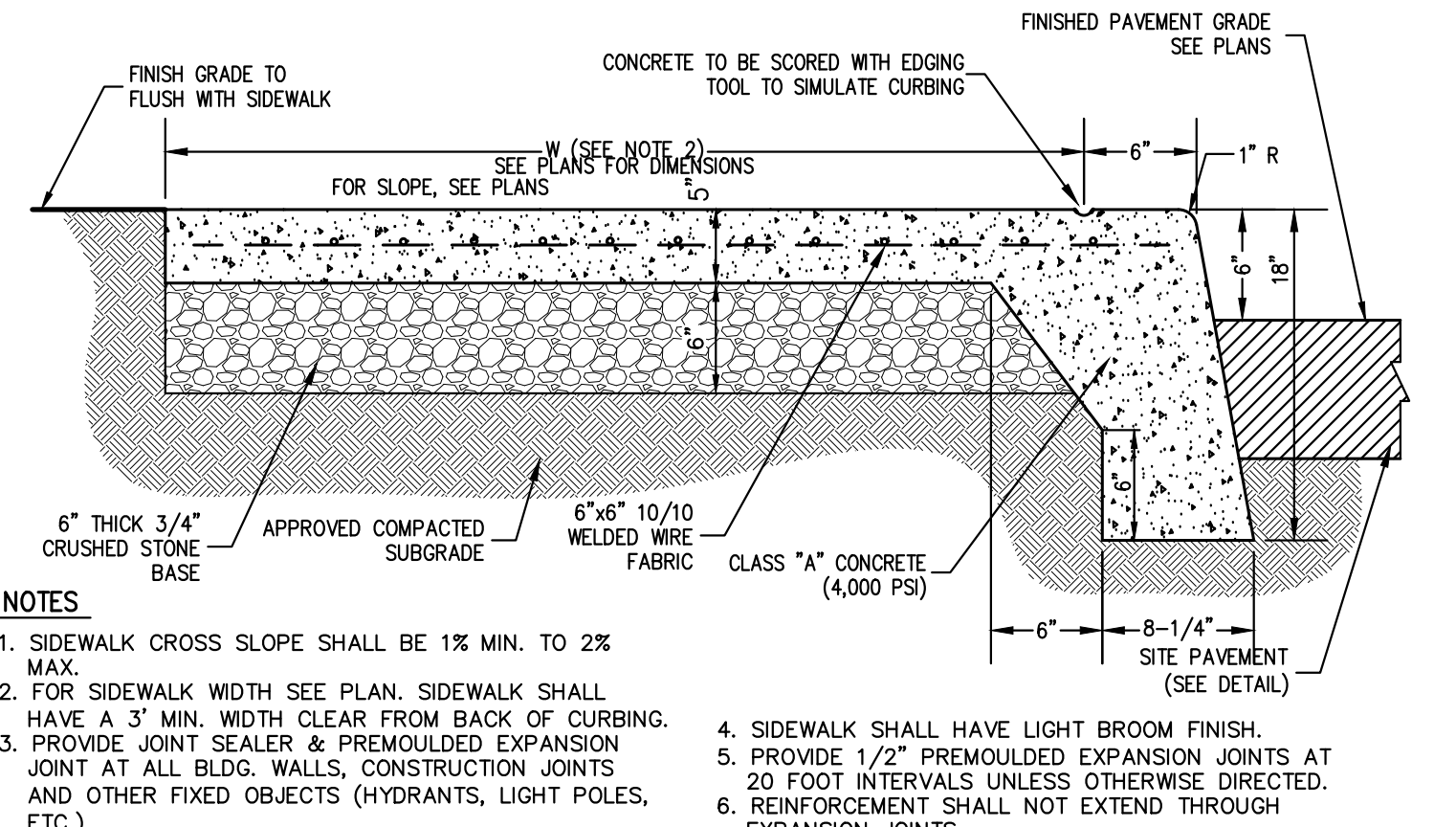
**PAINTED ACCESSIBLE SYMBOL** 28



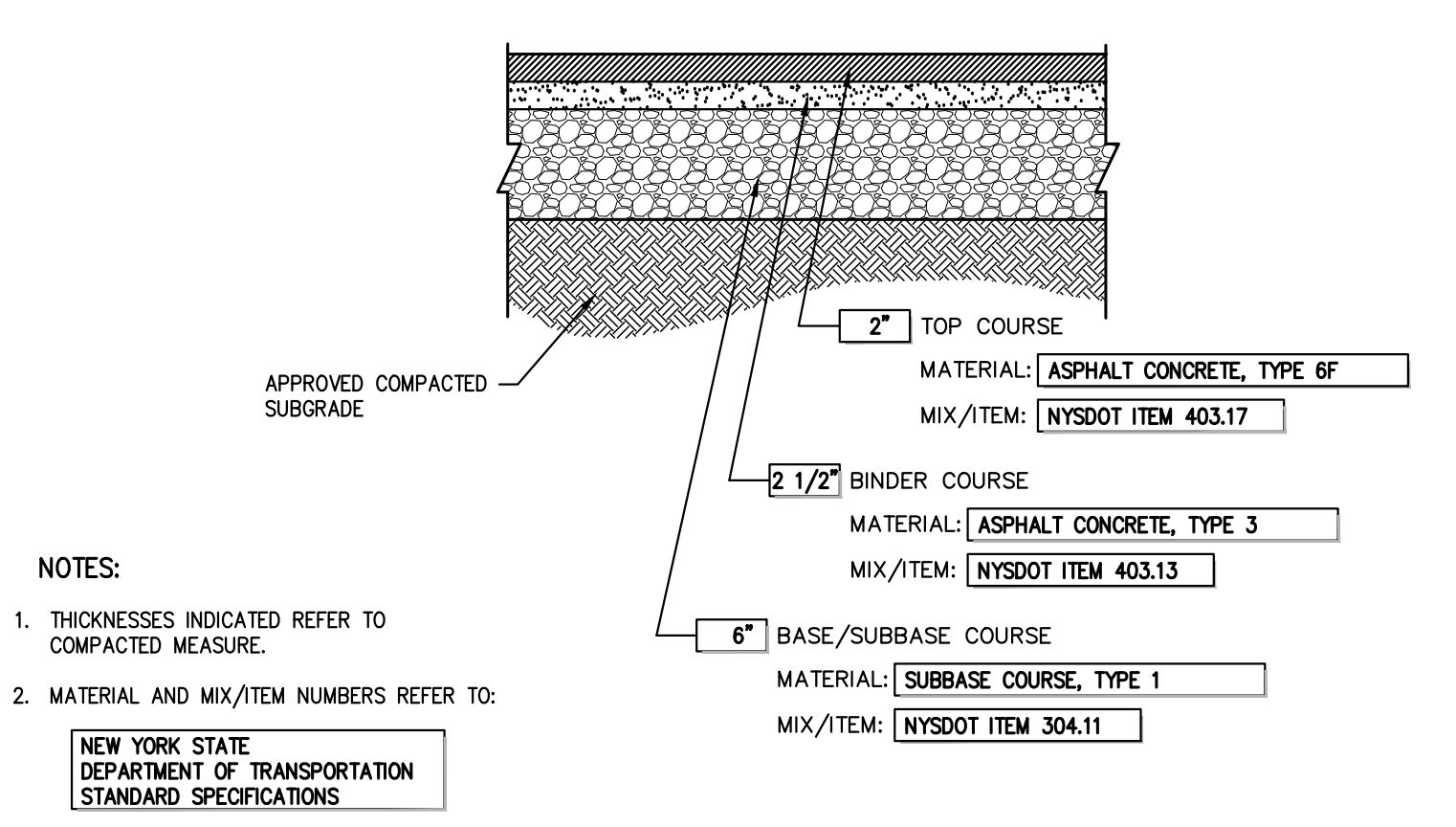
**LIGHTING STANDARD FOUNDATION (ROUND)** 33



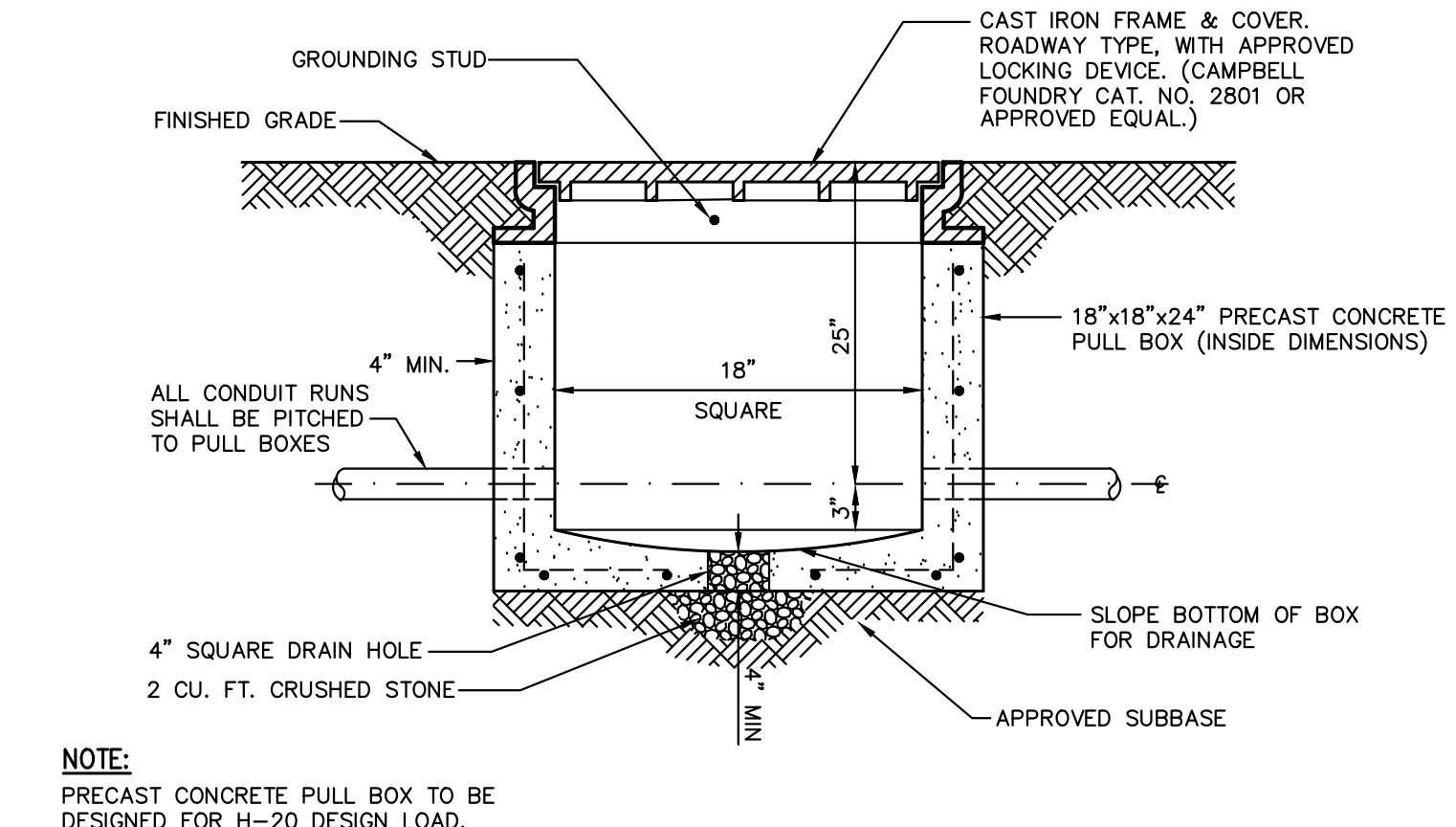
**BUILDING PERIMETER MONOLITHIC CURB & SIDEWALK** 29



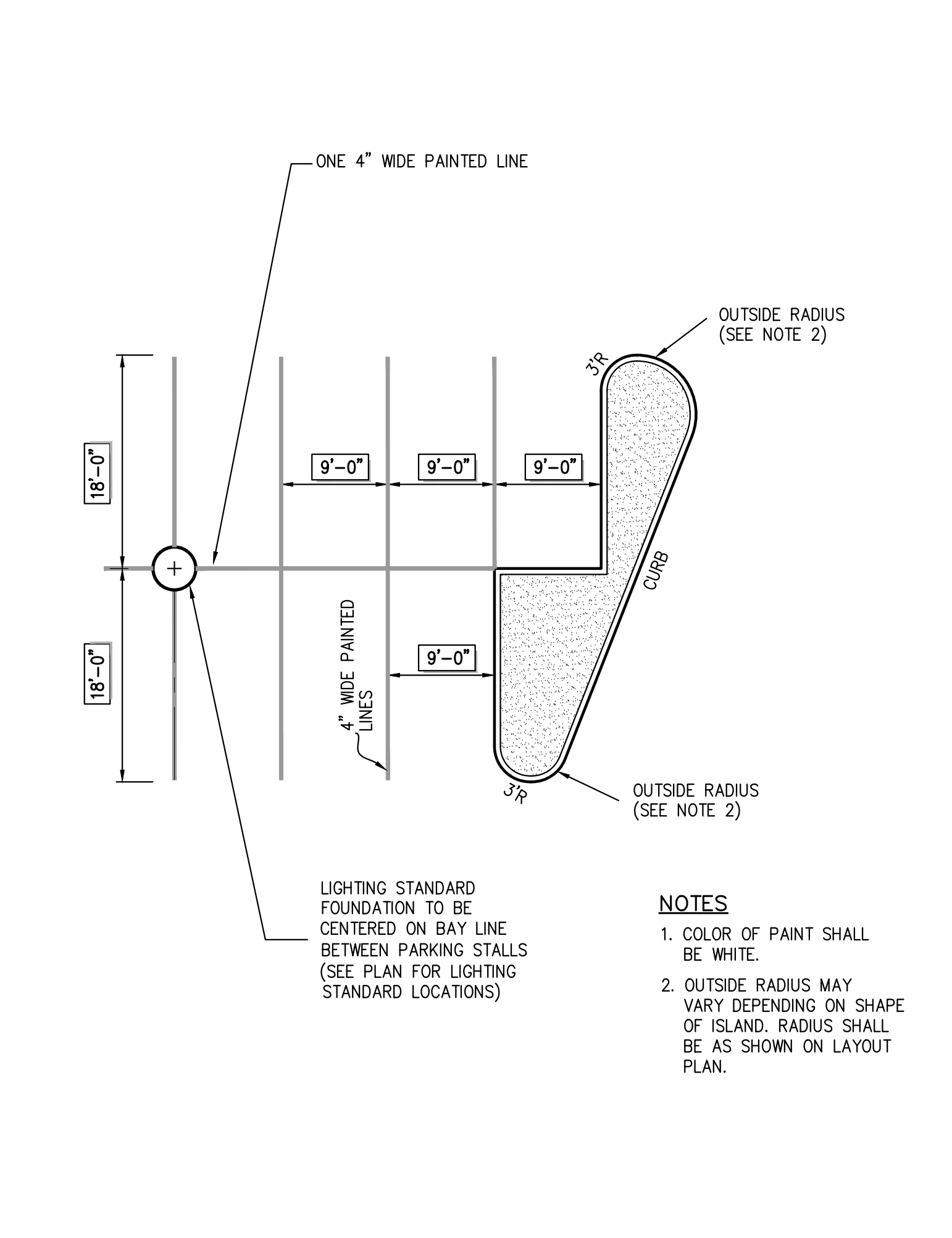
**MONOLITHIC CONCRETE CURB AND SIDEWALK** 30



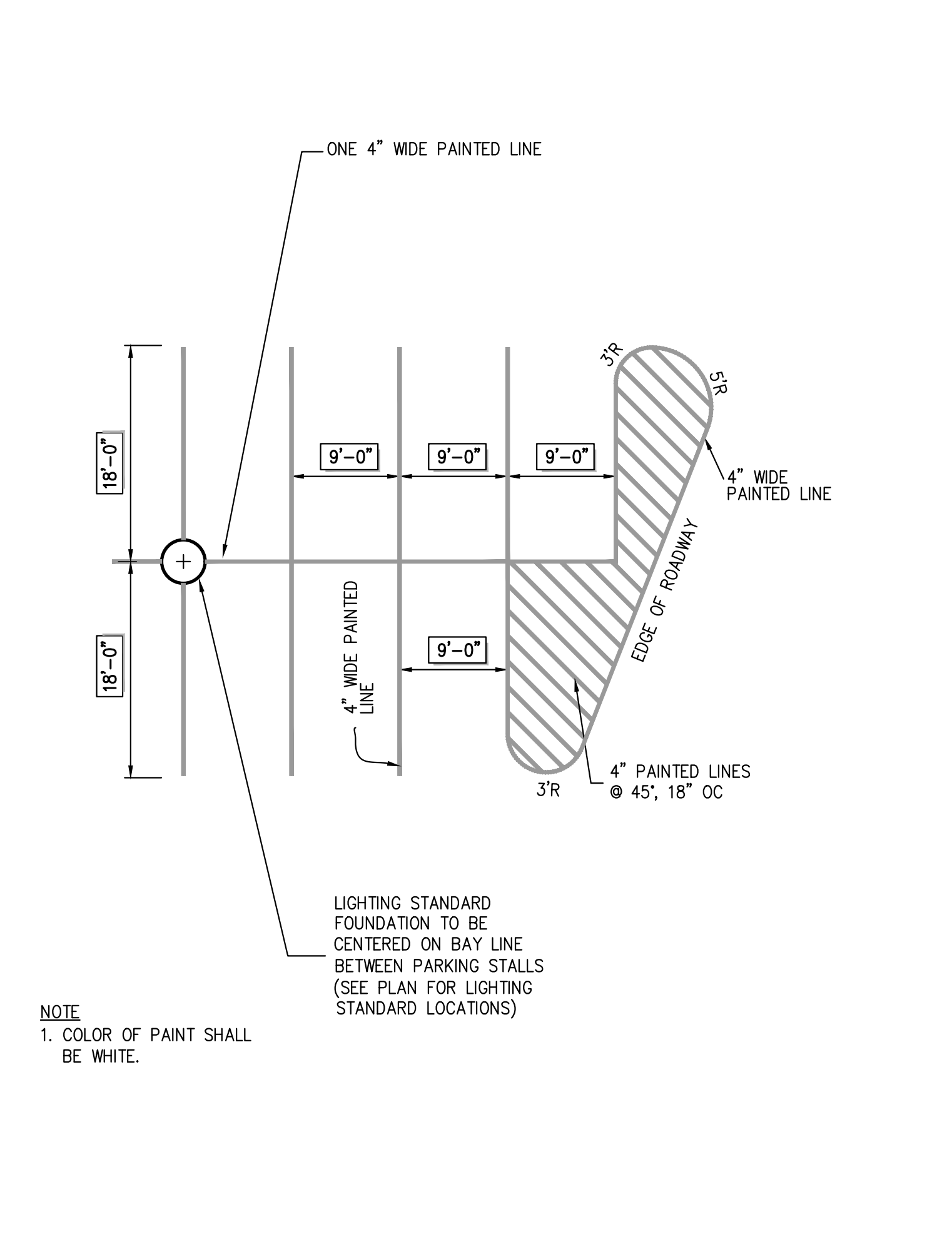
**SITE PAVEMENT (LIGHT DUTY)** 31



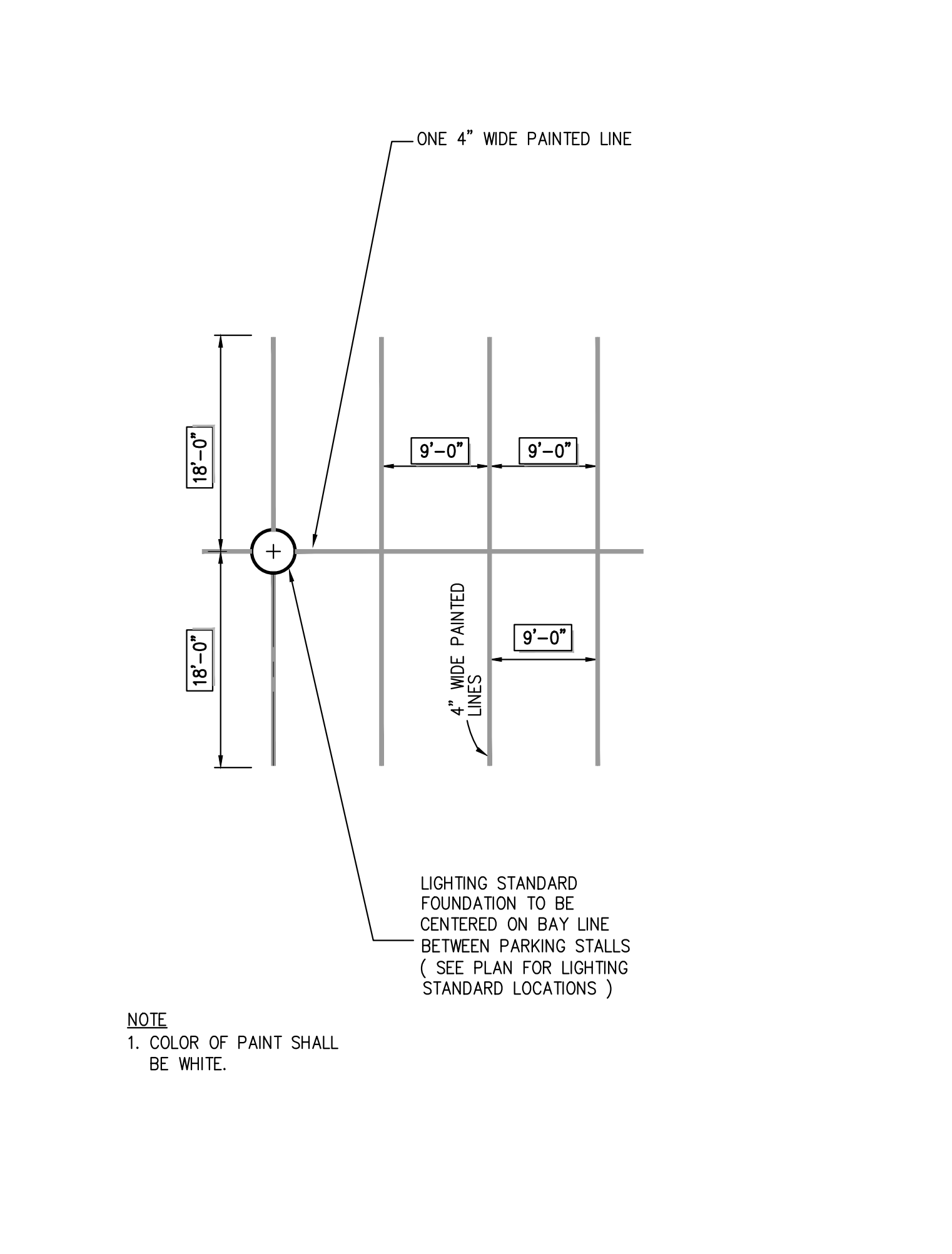
**ELECTRICAL PULL BOX** 32



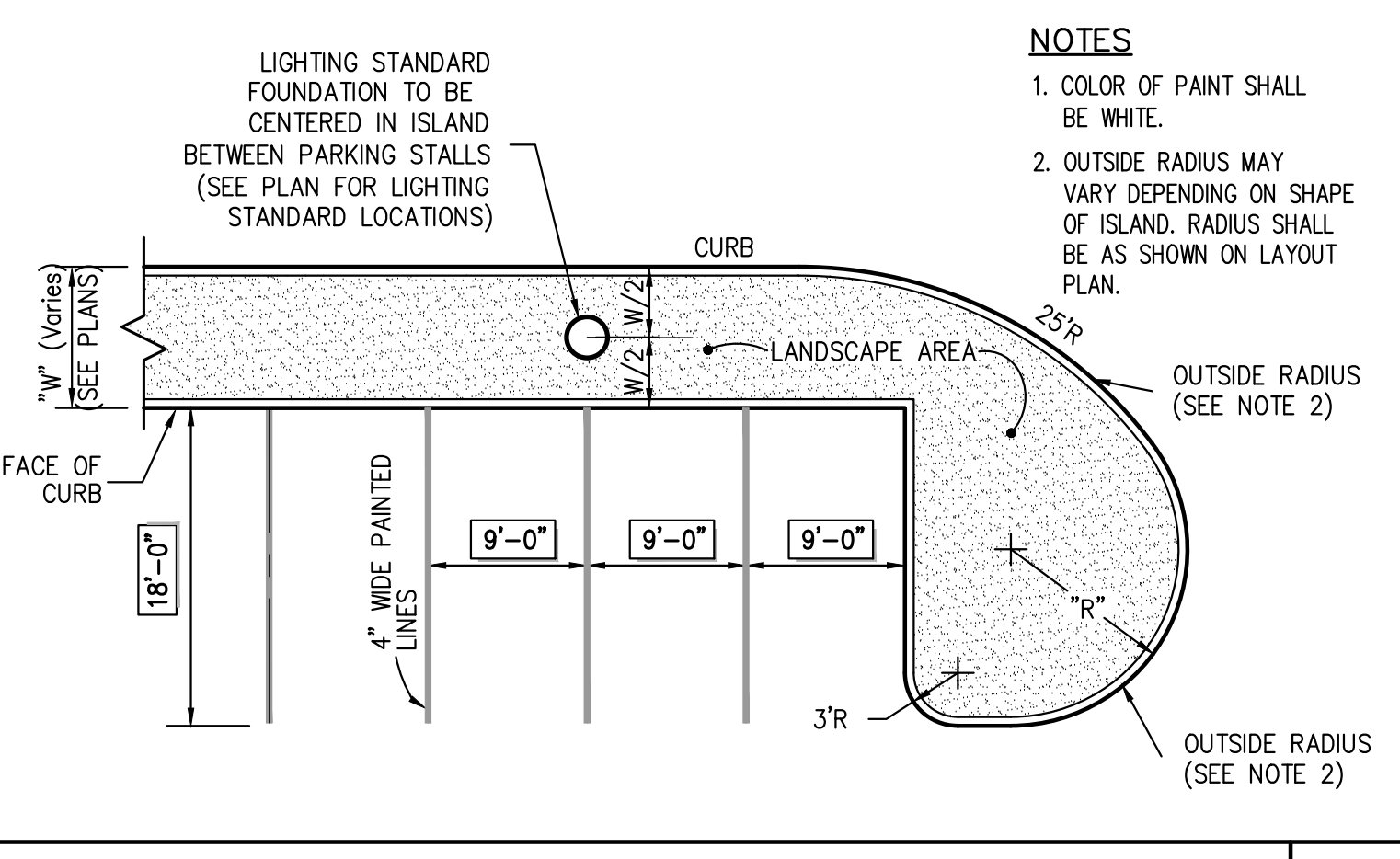
**90° PARKING (SINGLE STRIPING-CURBED END)** 34



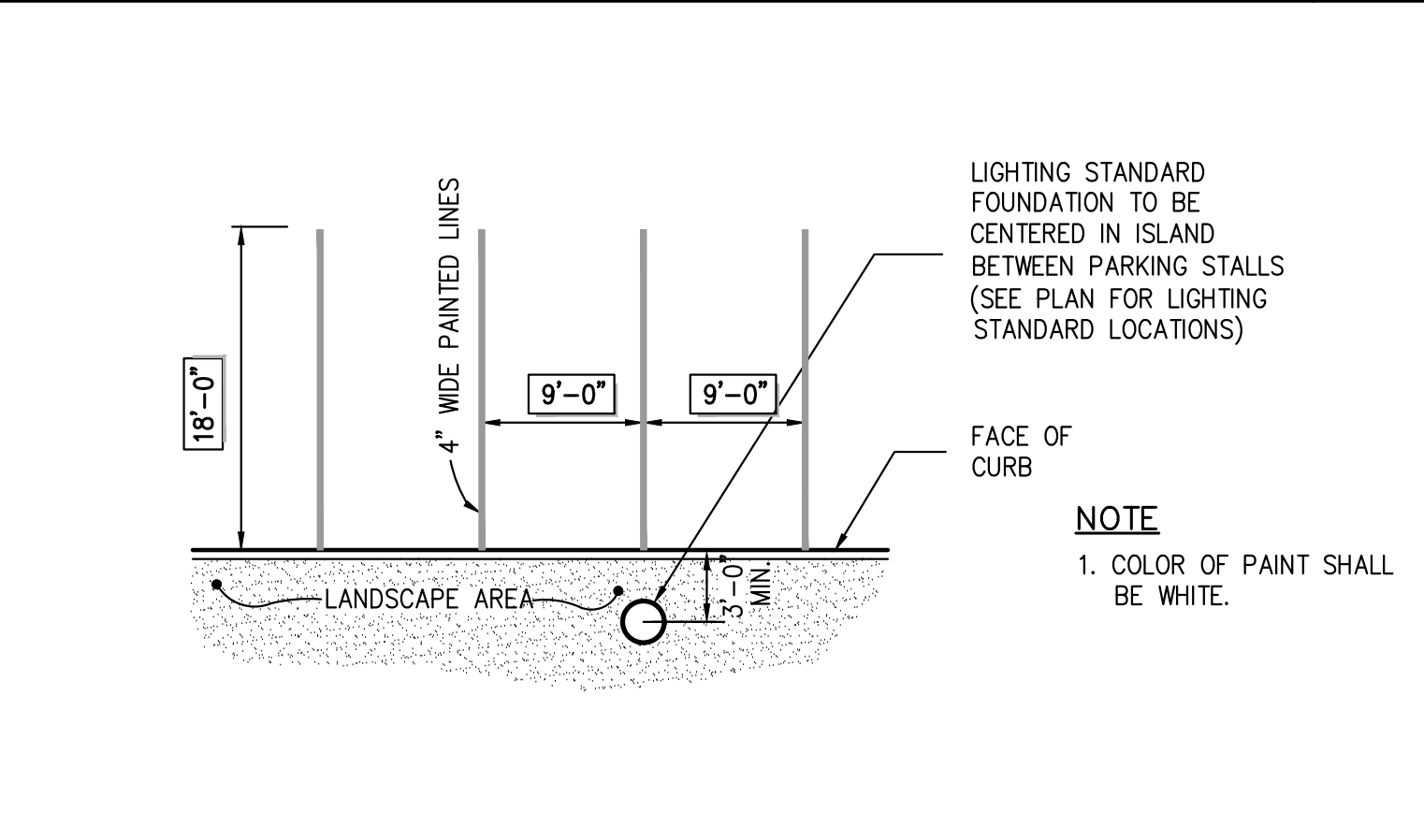
**90° PARKING (SINGLE STRIPING-PAINTED END)** 35



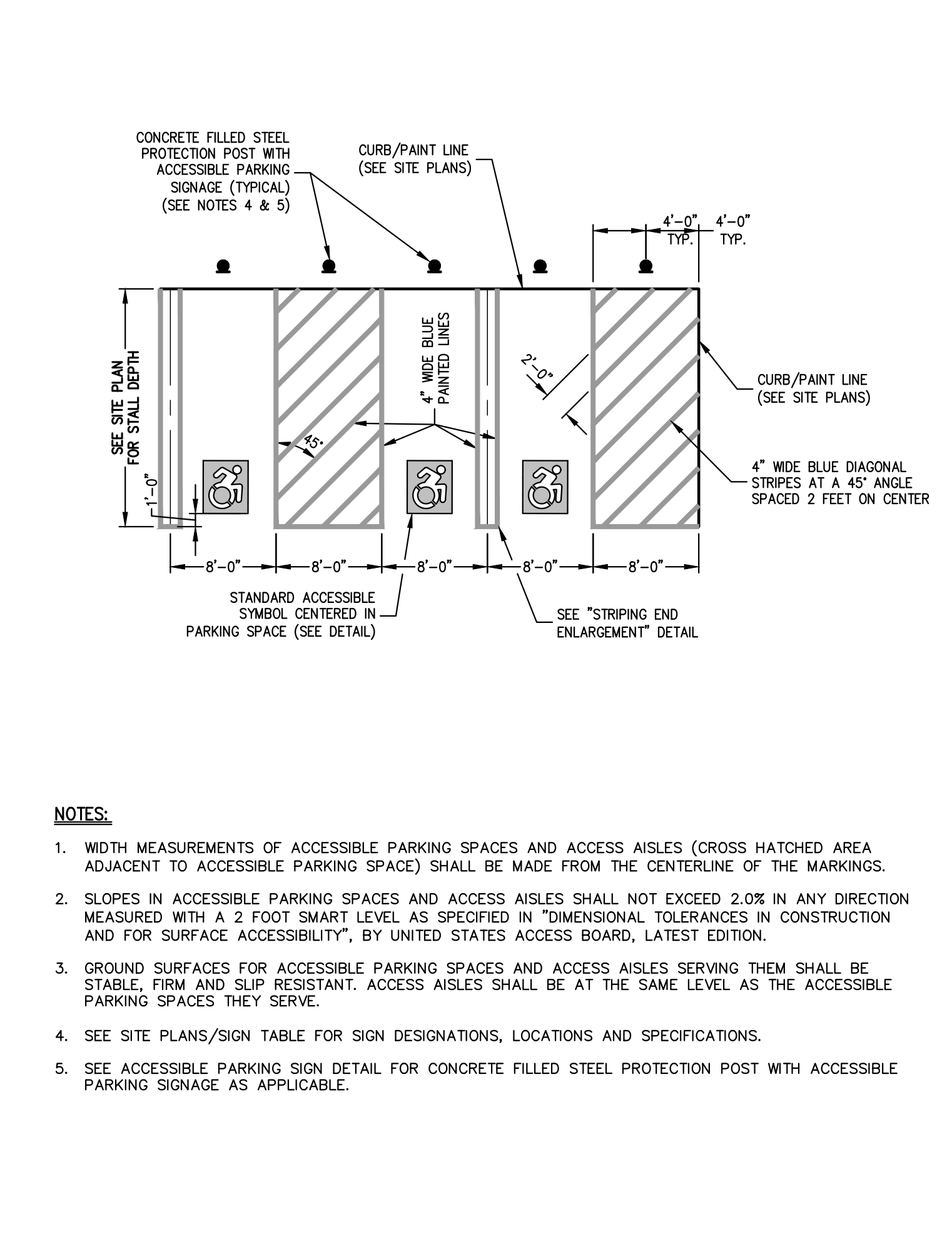
**90° PARKING (SINGLE STRIPING - W/O CURBED ISLAND)** 36



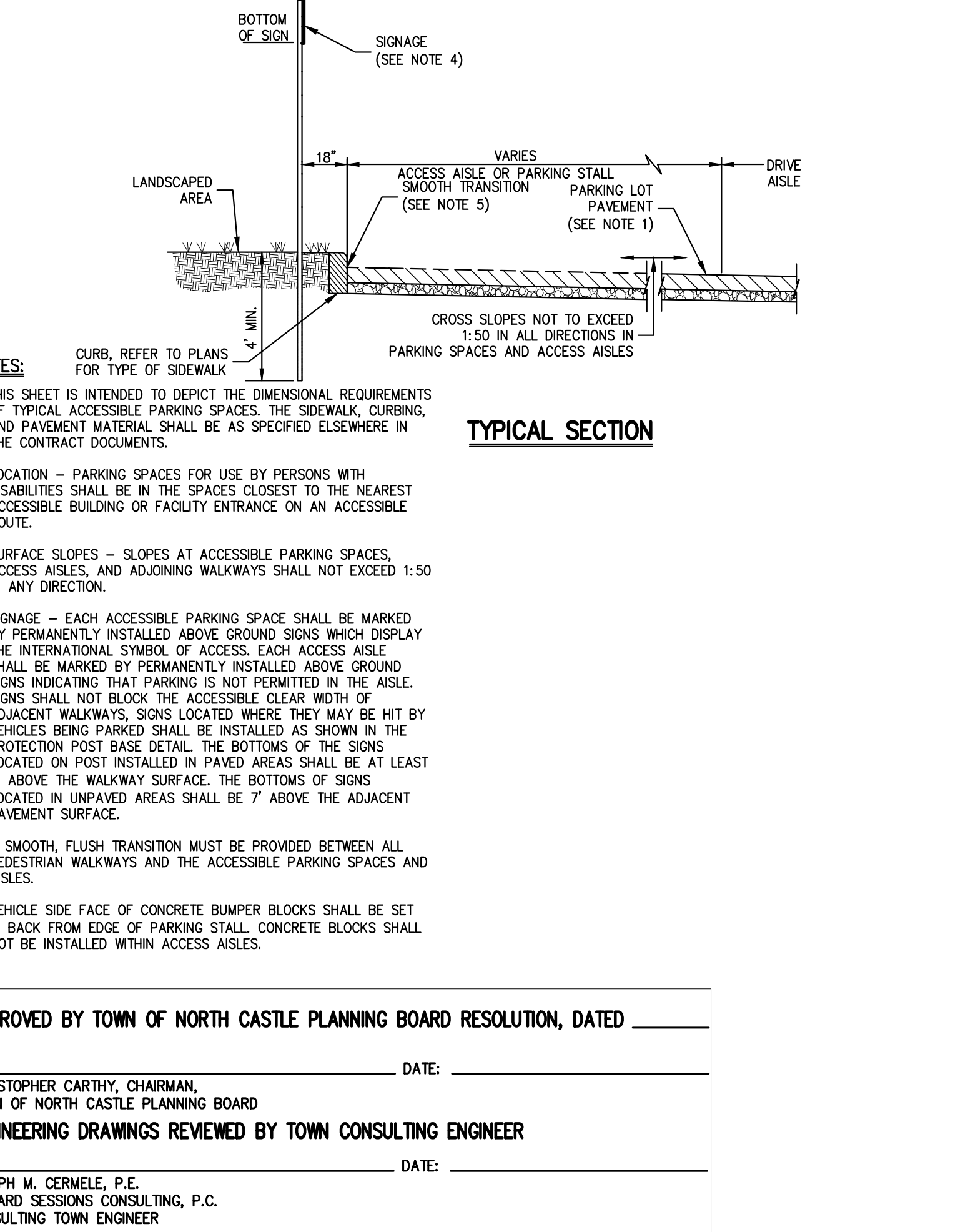
**90° PARKING (SINGLE STRIPING - CURBED ISLAND AND CURBED END)** 37



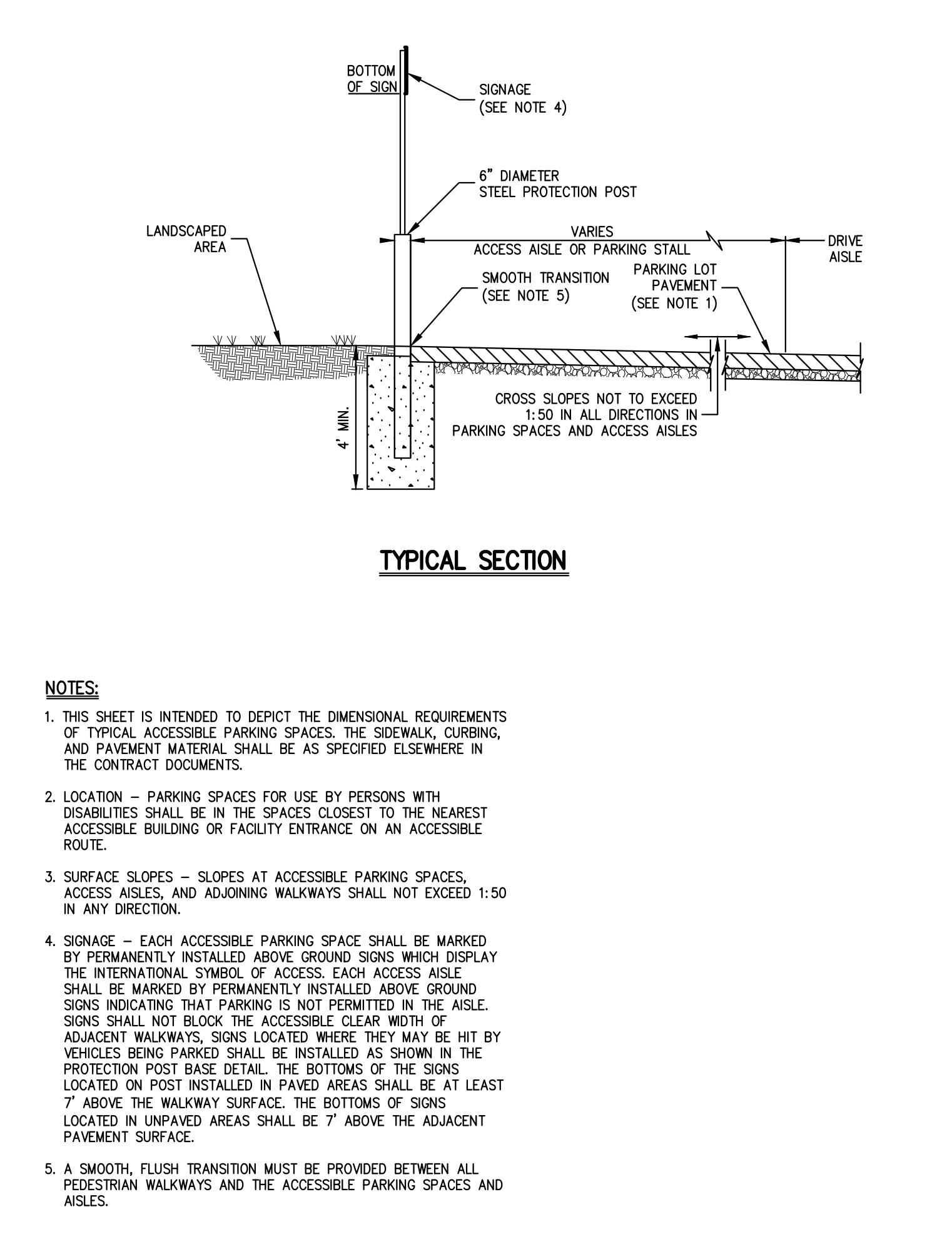
**90° PARKING (SINGLE STRIPING - CURBED PERIMETER)** 38



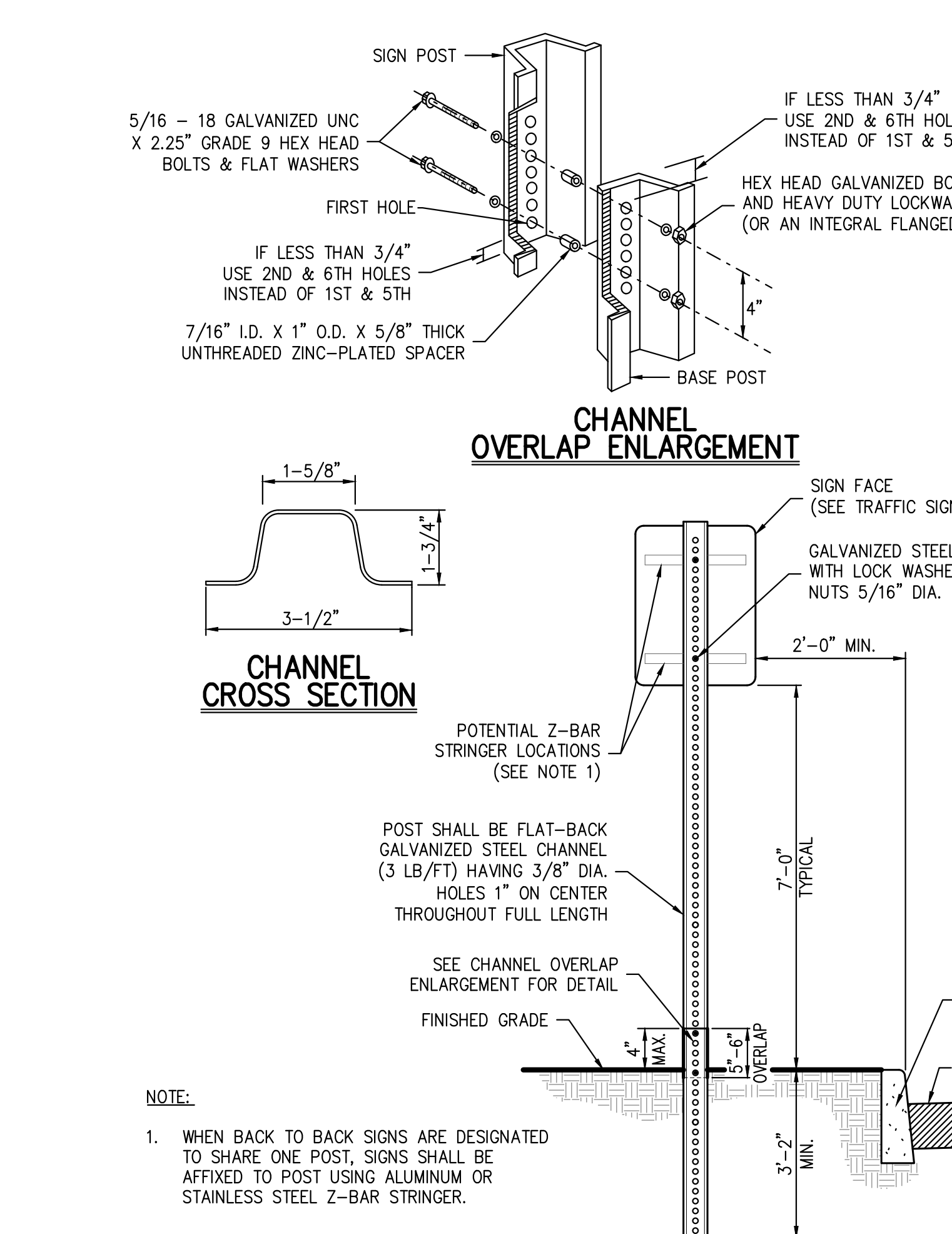
**ACCESSIBLE PARKING (DOUBLE STRIPING - NEW YORK)** 39



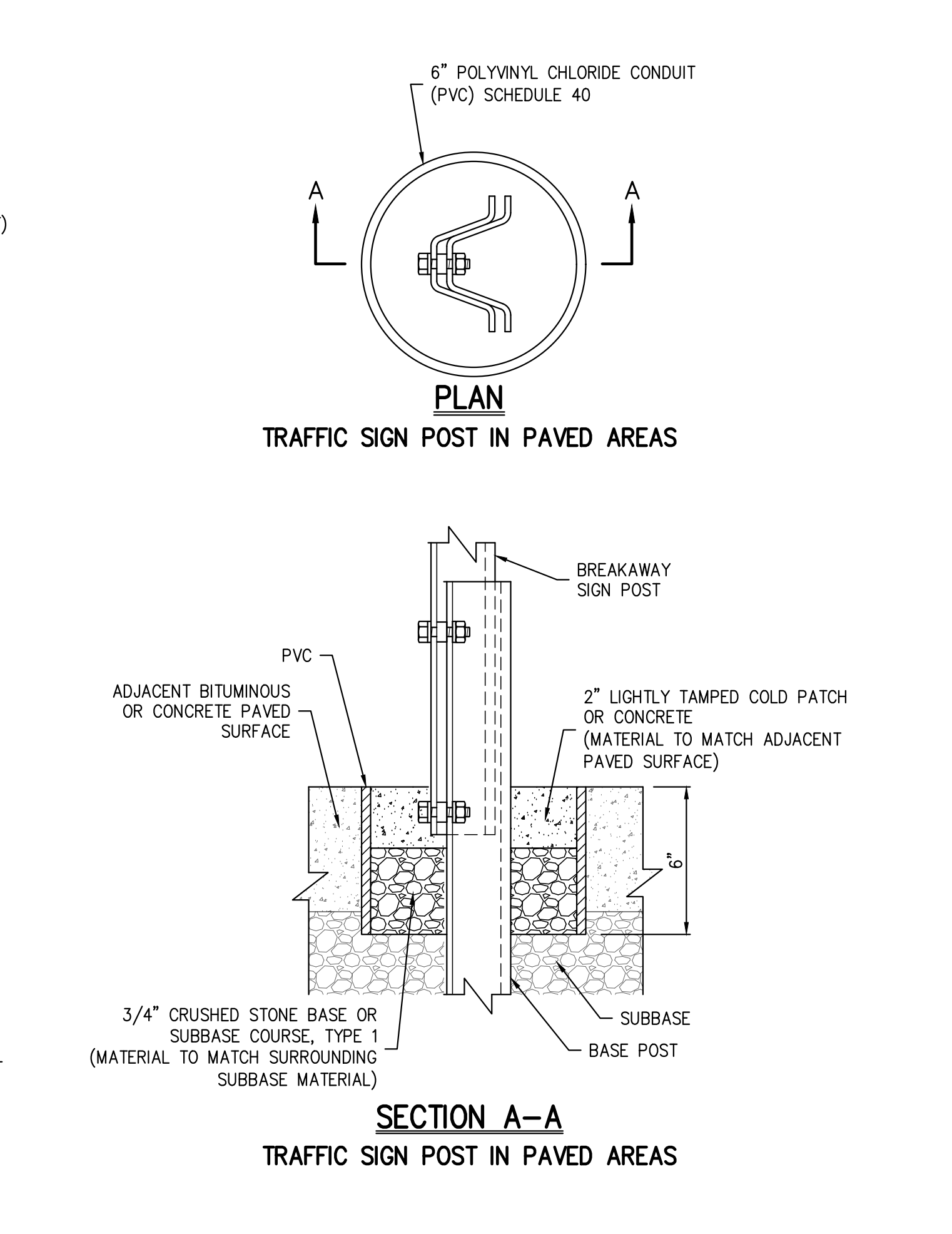
**TYPICAL ACCESSIBLE PARKING STALL AND AISLE (TYPE A)** 40



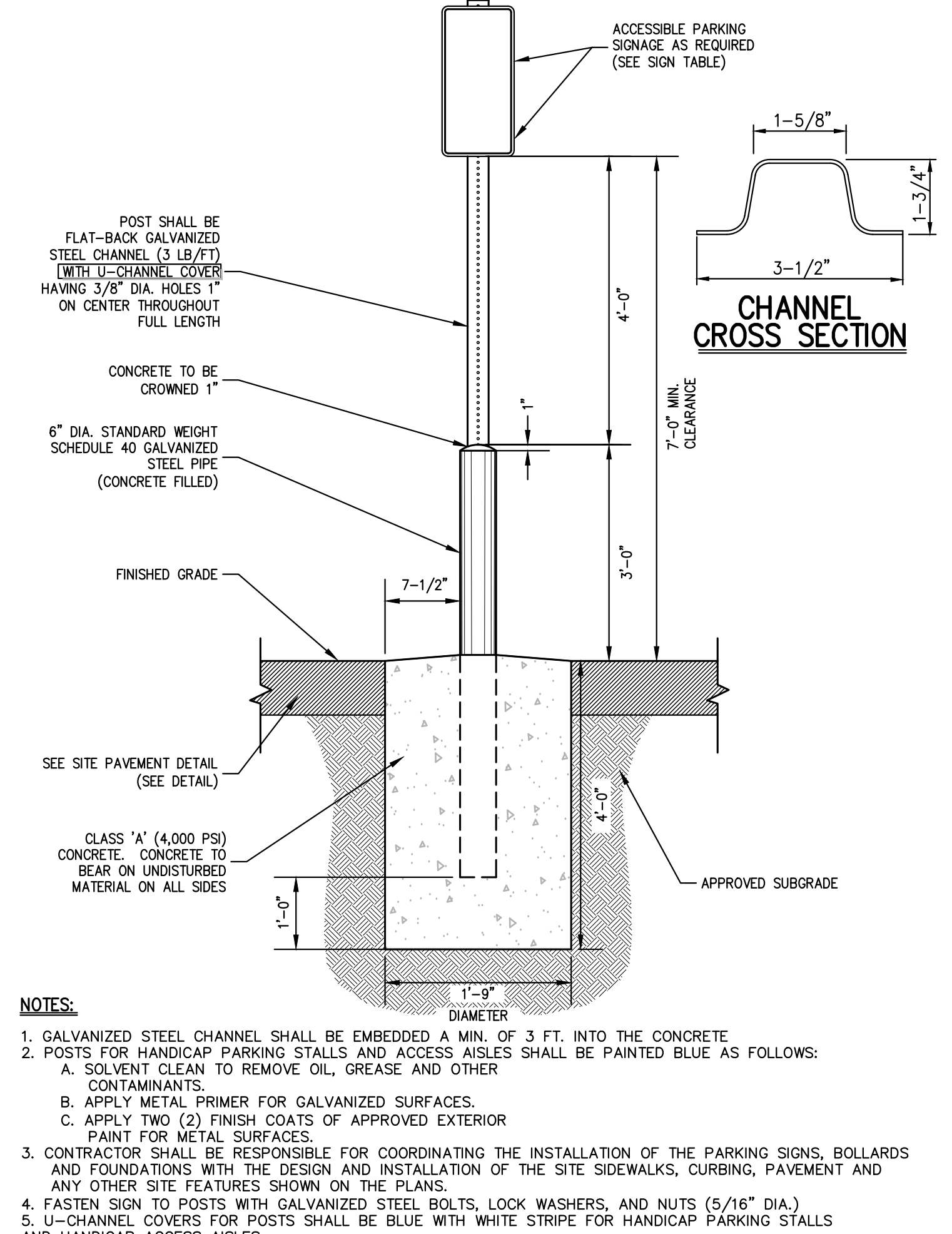
**TYPICAL ACCESSIBLE PARKING STALL AND AISLE (TYPE C)** 41



**TRAFFIC SIGN POST (BREAKAWAY STEEL CHANNEL)** 42



**TRAFFIC SIGN POST (BREAKAWAY STEEL CHANNEL)** 42



**ACCESSIBLE PARKING SIGN DETAIL** 43

**CONSTRUCTION DETAILS**

**THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)**

566 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

**APPLICANT:** SUMMIT CLUB PARTNERS, LLC  
566 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

**ARCHITECT:** GRANOFF ARCHITECTS  
330 RAILROAD AVENUE  
GREENWICH, CT 06850

| No. | Date       | Revision                  |
|-----|------------|---------------------------|
| 1.  | 01/17/2021 | RESPONSE TO TOWN COMMENTS |
| 2.  | 03/09/2021 | RESPONSE TO TOWN COMMENTS |
| 3.  | 06/14/2021 | RESPONSE TO TOWN COMMENTS |
| 4.  | 07/10/2022 | RESPONSE TO TOWN COMMENTS |
| 5.  | 08/09/2022 | RESPONSE TO TOWN COMMENTS |
| 6.  | 08/09/2022 | RESPONSE TO TOWN COMMENTS |
| 7.  | 07/24/2023 | RESPONSE TO TOWN COMMENTS |

**ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.**

Scale: **NOT TO SCALE**

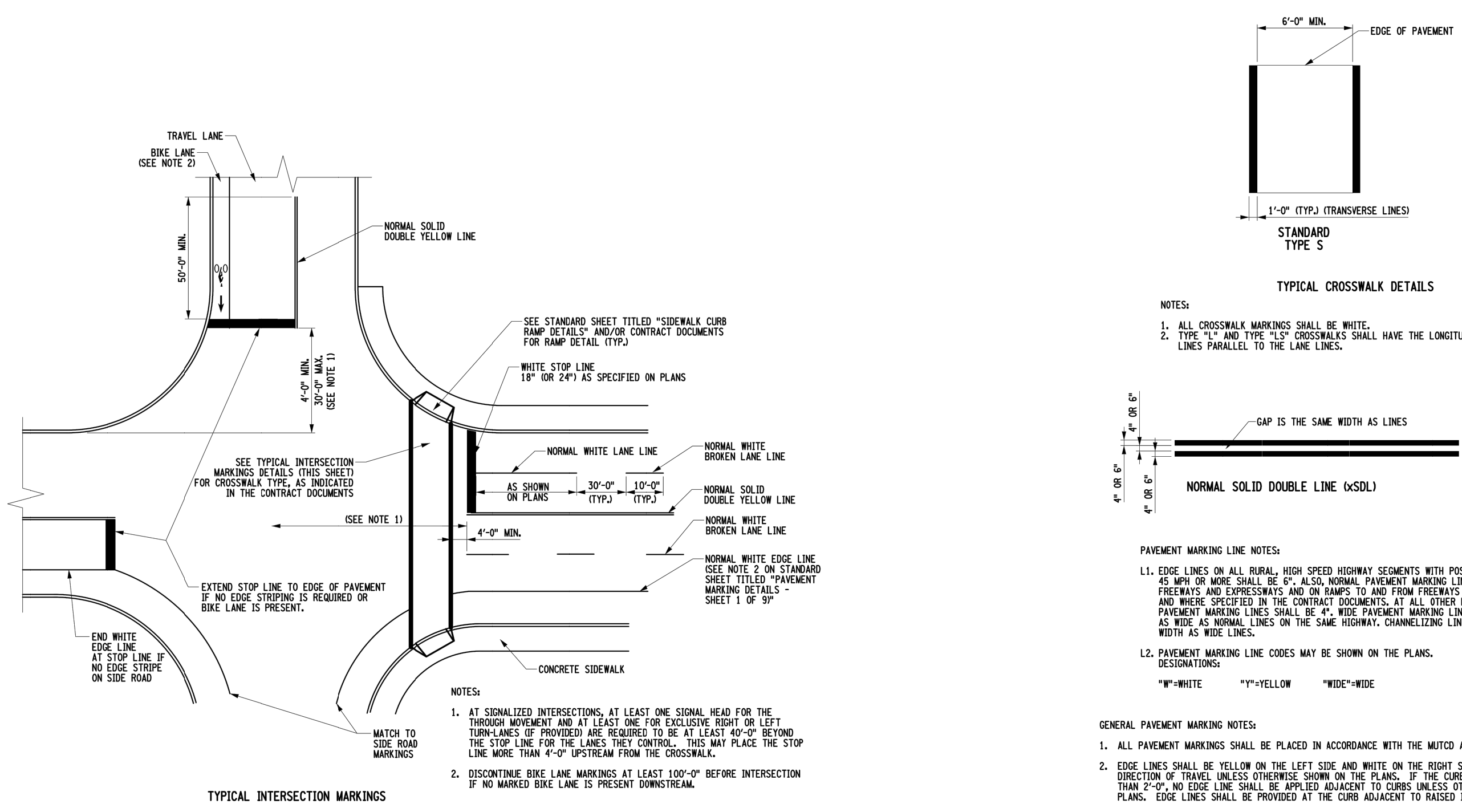
Date: **11/23/2020**

Project No.: **20101**

Job No.: **DET-3**

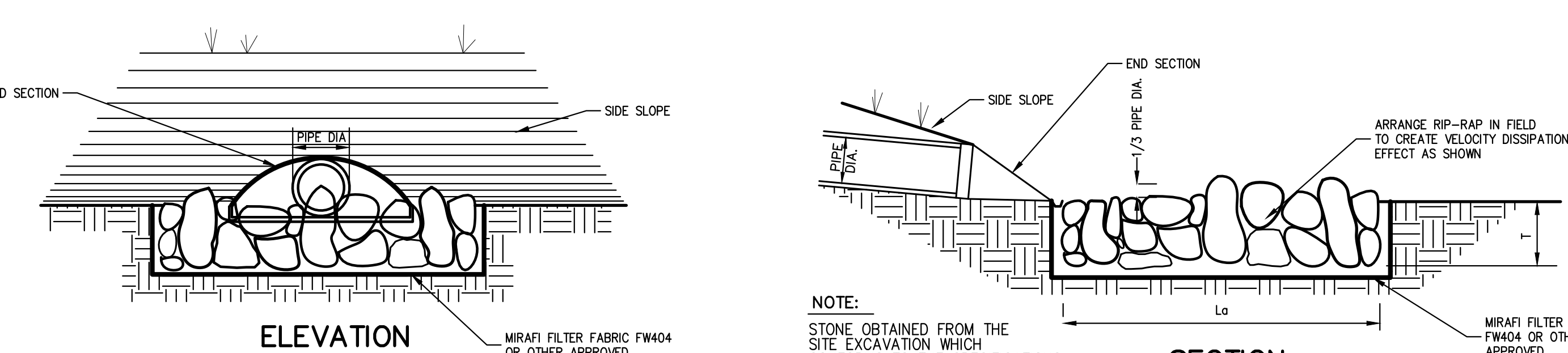
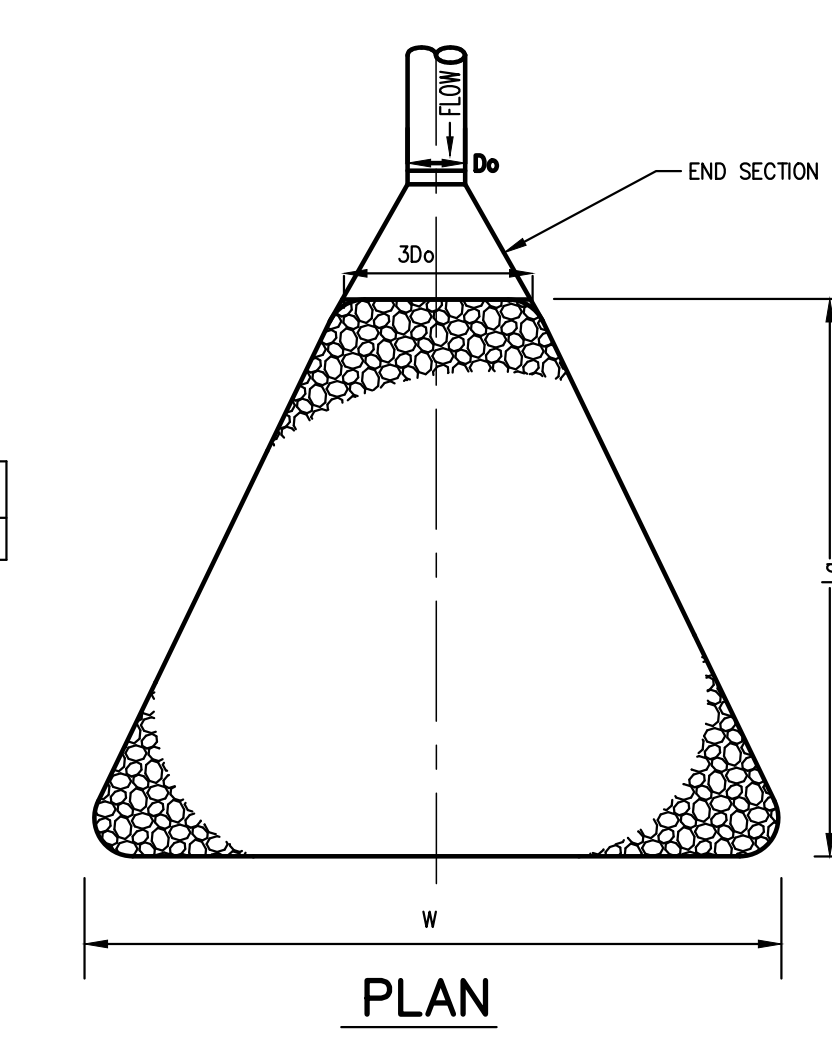
**C-902**





W = WIDTH (feet)  
L = LENGTH (feet)  
Do = DIAMETER (feet)  
d50 = MEAN STONE DIAMETER (feet)  
TW = TAILWATER (feet)  
Q = DISCHARGE (cfs)  
T = THICKNESS OF APRON (feet)

| STRUCTURE | Q     | Do   | TW | W     | L  | d50 | T    |
|-----------|-------|------|----|-------|----|-----|------|
| ES-IR     | 17.43 | 1.25 | 0  | 16.25 | 15 | 0.5 | 1.16 |



44

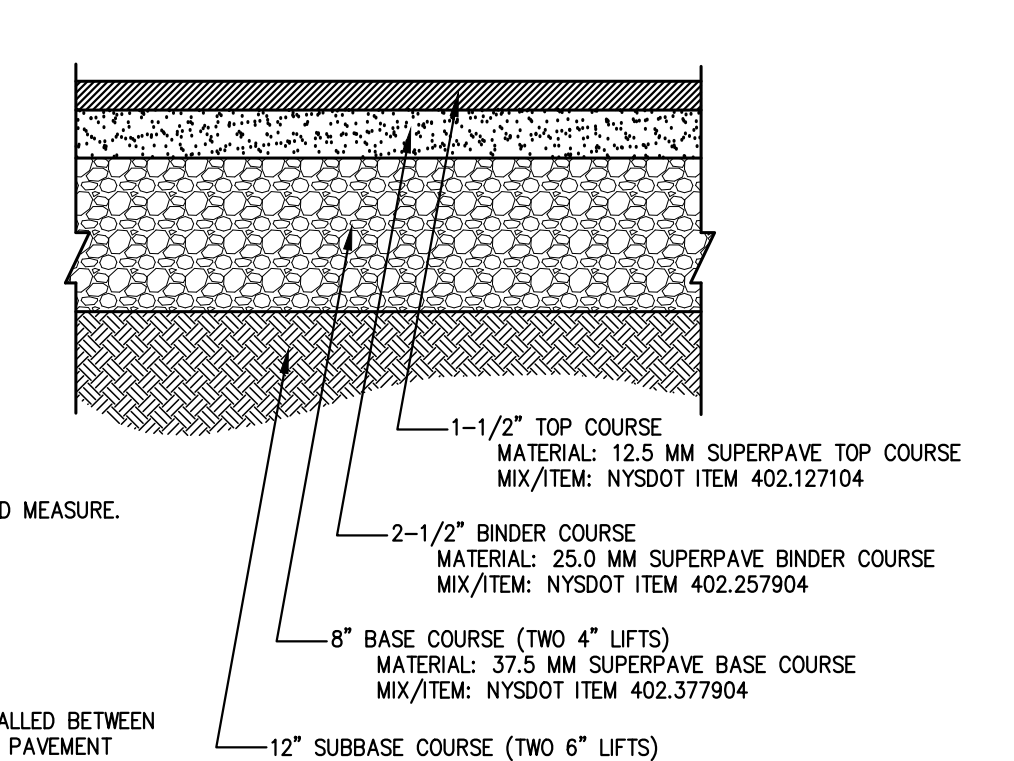
PAVEMENT MARKINGS

RIP-RAP APRON/ENERGY DISSIPATOR

45

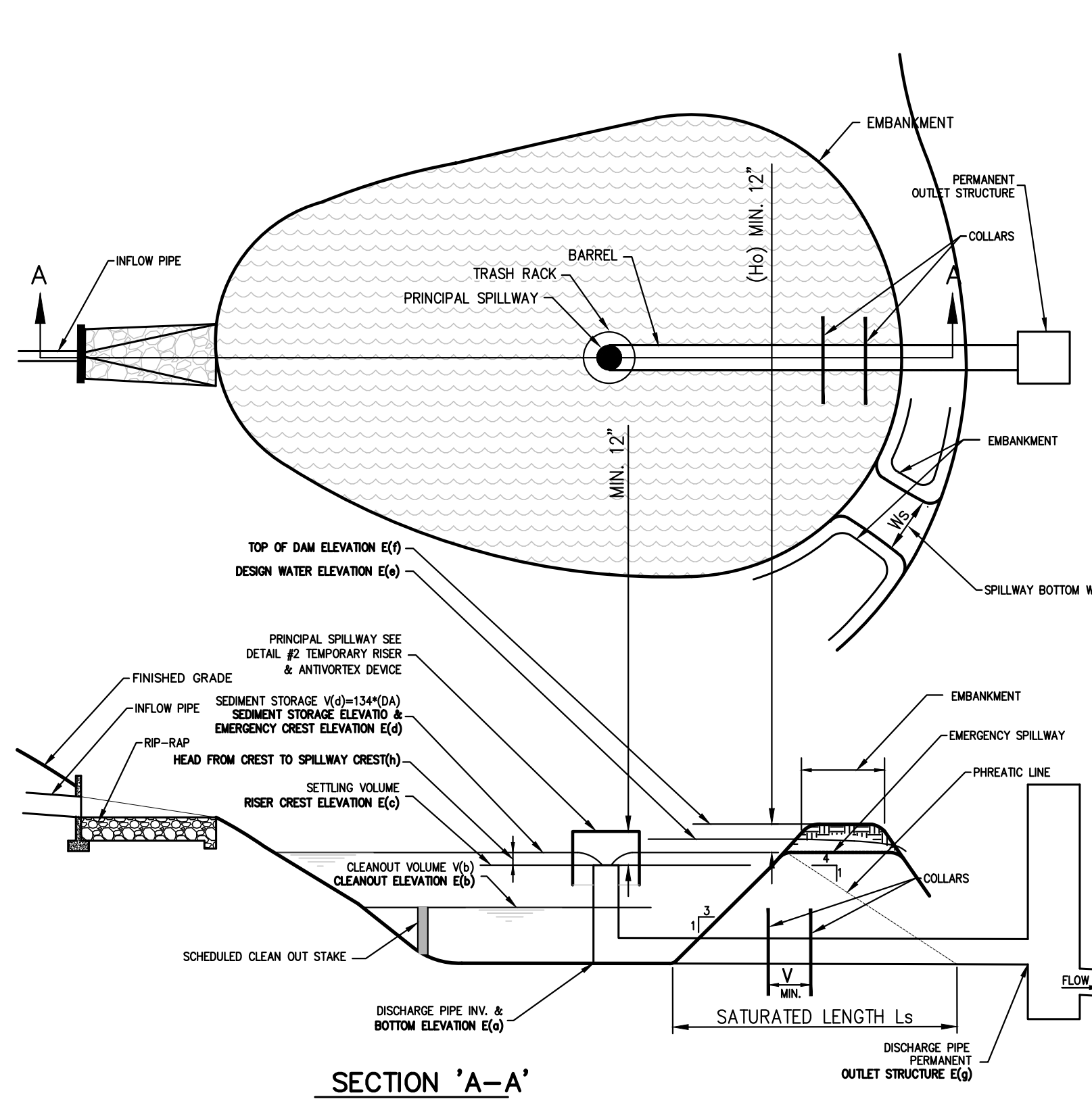
NYSDOT FULL DEPTH PAVEMENT SECTION

46



- NOTES:
- THICKNESSES INDICATED REFER TO COMPACTED MEASURE.
  - MATERIAL AND MIX/ITEM NUMBERS REFER TO:
    - DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS
  - TACK COATS (ITEM 407.20) SHALL BE INSTALLED BETWEEN ALL SUPERPAVE COURSES, BETWEEN EXISTING PAVEMENT COURSES & OVERLAYS AND BETWEEN NEW PAVEMENT & EXISTING PAVEMENT EDGES.
  - ASPHALT PAVEMENT JOINT ADHESIVE (ITEM 416.70) SHALL BE INSTALLED AT ALL TOP COURSE PAVEMENT EDGES.

| No. | Date       | Revisions |
|-----|------------|-----------|
| 1.  | 07/27/2021 | NC        |
| 2.  | 03/08/2021 | NC        |
| 3.  | 06/17/2021 | NC        |
| 4.  | 07/07/2022 | NC        |
| 5.  | 06/21/2022 | NC        |
| 6.  | 05/09/2022 | NC        |
| 7.  | 07/24/2023 | NC        |



**CASCADE SEPARATOR DESIGN NOTES**

THE STANDARD C&A CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO MEET SITE REQUIREMENTS.

| SITE SPECIFIC DATA REQUIREMENTS |       |      |    |
|---------------------------------|-------|------|----|
| STRUCTURE                       | Q     | Do   | TW |
| ES-IR                           | 17.43 | 1.25 | 0  |

**CONTECH ENGINEERS SOLUTIONS**  
485 Oak Orchard Road, Armonk, NY 10504  
(914) 899-8900

**CASCADE SEPARATOR DESIGN NOTES**

THE STANDARD C&A CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO MEET SITE REQUIREMENTS.

| SITE SPECIFIC DATA REQUIREMENTS |       |      |    |
|---------------------------------|-------|------|----|
| STRUCTURE                       | Q     | Do   | TW |
| ES-IR                           | 17.43 | 1.25 | 0  |

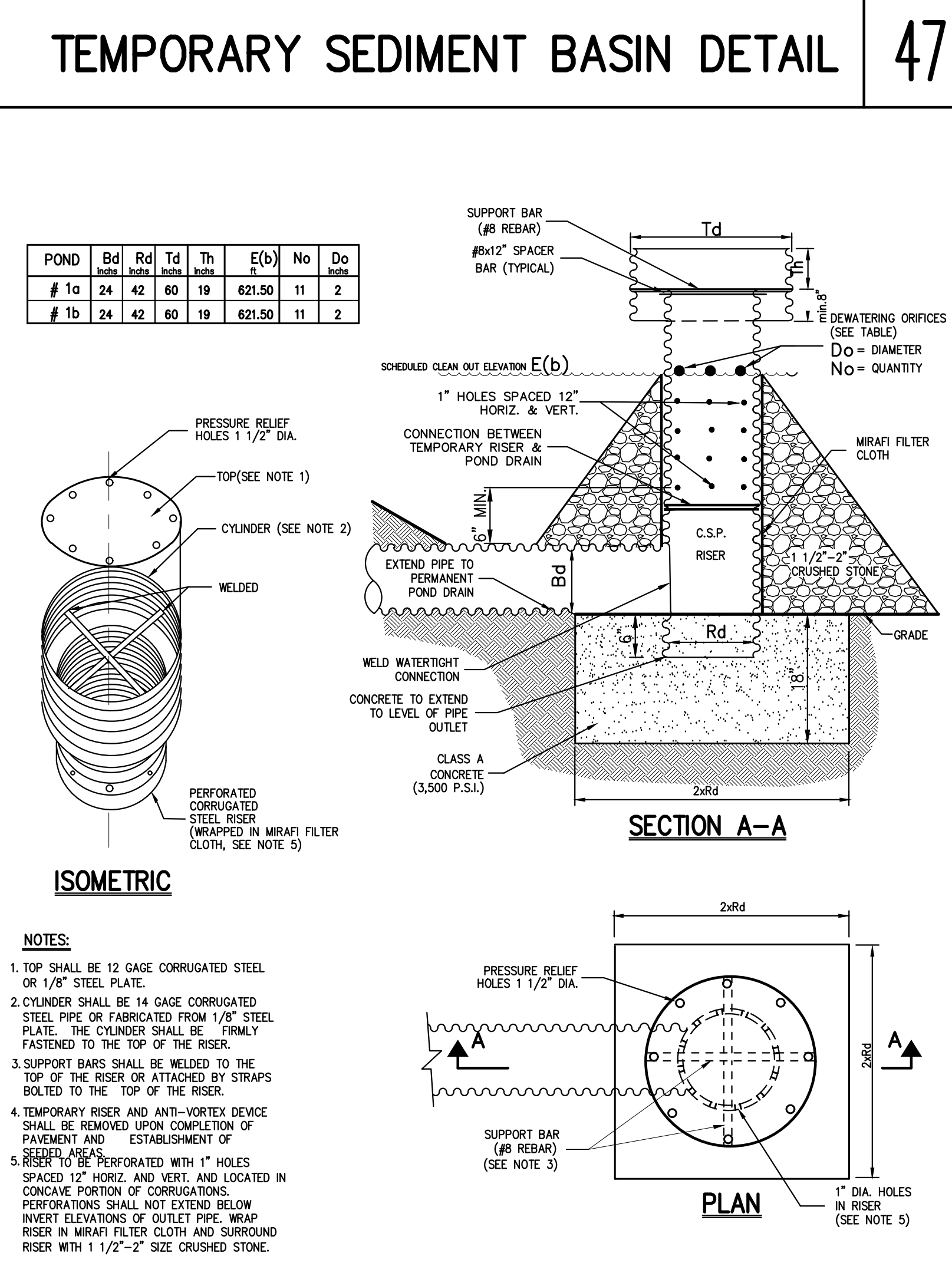
**CONTECH ENGINEERS SOLUTIONS**  
485 Oak Orchard Road, Armonk, NY 10504  
(914) 899-8900

**CASCADE SEPARATOR DESIGN NOTES**

THE STANDARD C&A CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO MEET SITE REQUIREMENTS.

| SITE SPECIFIC DATA REQUIREMENTS |       |      |    |
|---------------------------------|-------|------|----|
| STRUCTURE                       | Q     | Do   | TW |
| ES-IR                           | 17.43 | 1.25 | 0  |

**CONTECH ENGINEERS SOLUTIONS**  
485 Oak Orchard Road, Armonk, NY 10504  
(914) 899-8900



**6"-24" DURASLOT® Pipe With Variable Slot Riser**

**ADA Compliance for DURASLOT® Surface Drains**

DURASLOT® Surface Drains are manufactured with a standard 1/16" F304 stainless steel grate that is ADA compliant as described by the following:

The American Disability Act, Federal register Part III, Department of Justice, 28 CFR, Part 36, Appendix A, Paragraph 4.5.4 Gratings, states:  
"If gratings are located in walking surfaces, they shall have openings no greater than 1/2" (13mm) wide in one direction. If gratings have elongated openings, then they shall be placed so the long dimension is perpendicular to the direction of travel."

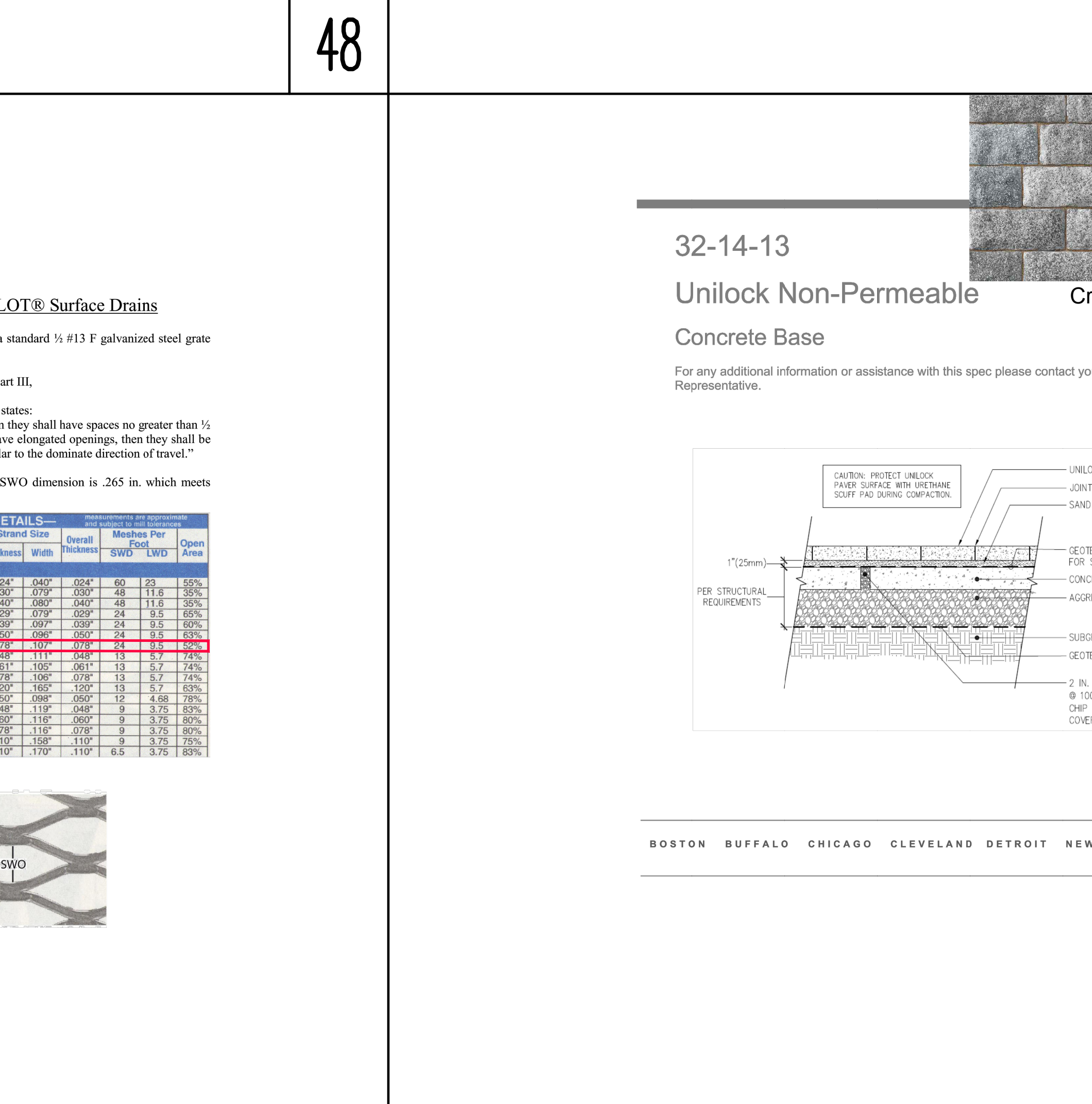
As shown in the below expanded metal cut sheet the S20 dimension is 265 mm which meets ADA compliance.

| PIPE DIAM   | PRODUCT # (GRATED) | PRODUCT # (OPEN TOP) |
|-------------|--------------------|----------------------|
| 6" (152mm)  | 0890DS             | 0890OSOT             |
| 8" (203mm)  | 0890DS             | 0890OSOT             |
| 10" (254mm) | 1090DS             | 1090OSOT             |
| 12" (305mm) | 1290DS             | 1290OSOT             |
| 15" (381mm) | 1590DS             | 1590OSOT             |
| 18" (457mm) | 1890DS             | 1890OSOT             |
| 24" (609mm) | 2490DS             | 2490OSOT             |

**CONTECH ENGINEERS SOLUTIONS**  
485 Oak Orchard Road, Armonk, NY 10504  
(914) 899-8900

TEMPORARY RISER & ANTI-VORTEX DEVICE

12" DURASLOT PIPE WITH VARIABLE SLOT RISER WITH ADA COMPLIANT GRATE



**UNILOCK**  
DESIGNED TO CONNECT

32-14-13  
Unilock Non-Permeable Concrete Base  
Crystalline Basalt

UNILOCK PATTERNS  
100% Standard

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APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_

CHRISTOPHER CARNEY, CHAIRMAN  
TOWN OF NORTH CASTLE PLANNING BOARD  
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. CEMELE, P.E.  
KELLARD SESSIONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

DECORATIVE PAVER

49

APPPLICANT/OWNER:  
**SUMMIT CLUB PARTNERS, LLC**  
566 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504

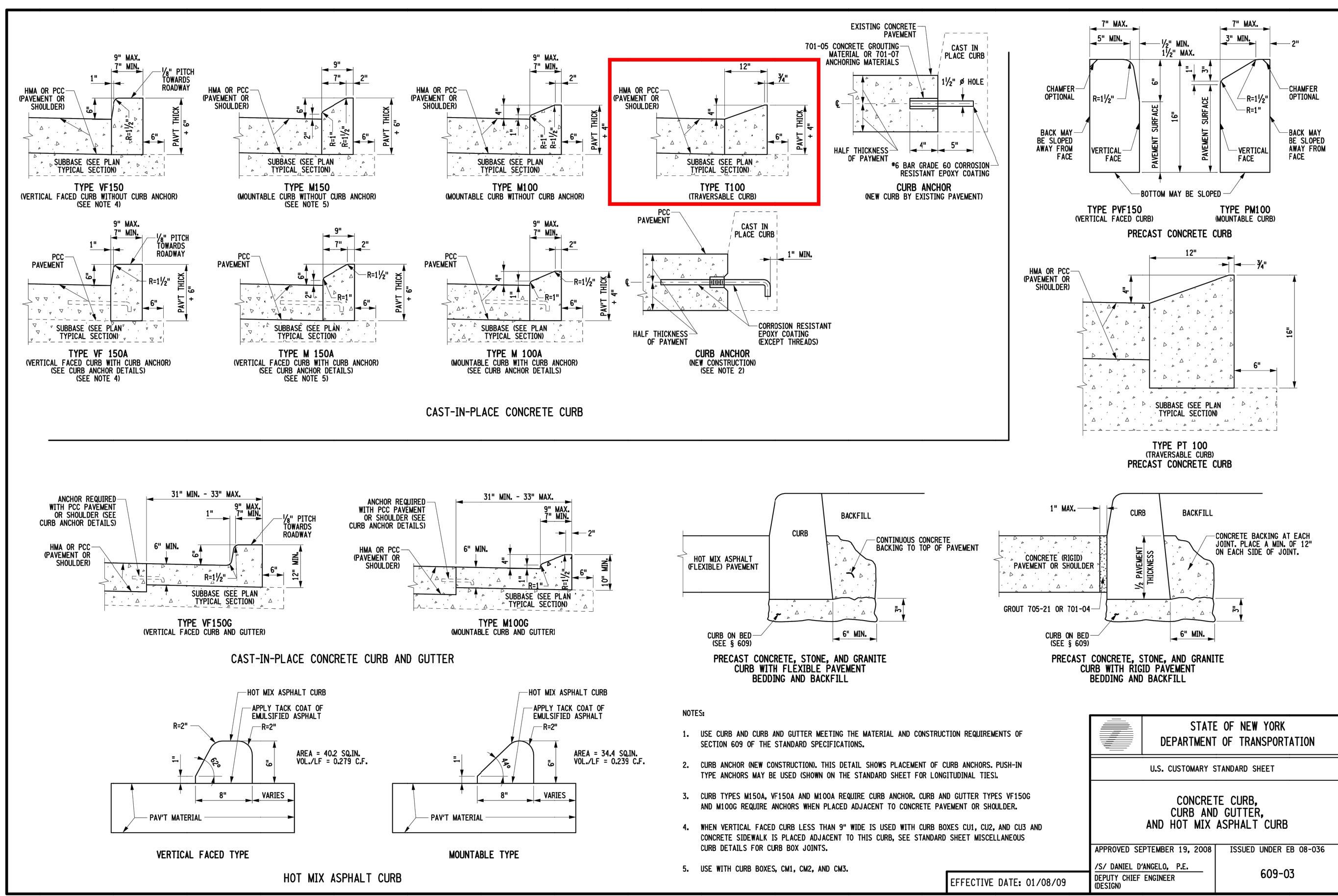
ARCHITECT:  
**GRANOFF ARCHITECTS**  
330 RAILROAD AVENUE  
GREENWICH, CT 06850

NYSDOT DESIGNER:  
**JMC**  
120 BELLEVILLE AVENUE  
ARMONK, NY 10504  
PHONE: 914.833.5253 - FAX: 914.833.2702  
WWW.JMCPINC.COM

**CONSTRUCTION DETAILS**

THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)  
566 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

Scale: NOT TO SCALE  
Date: 11/23/2020  
Project No: 20101  
Job No: DET-4

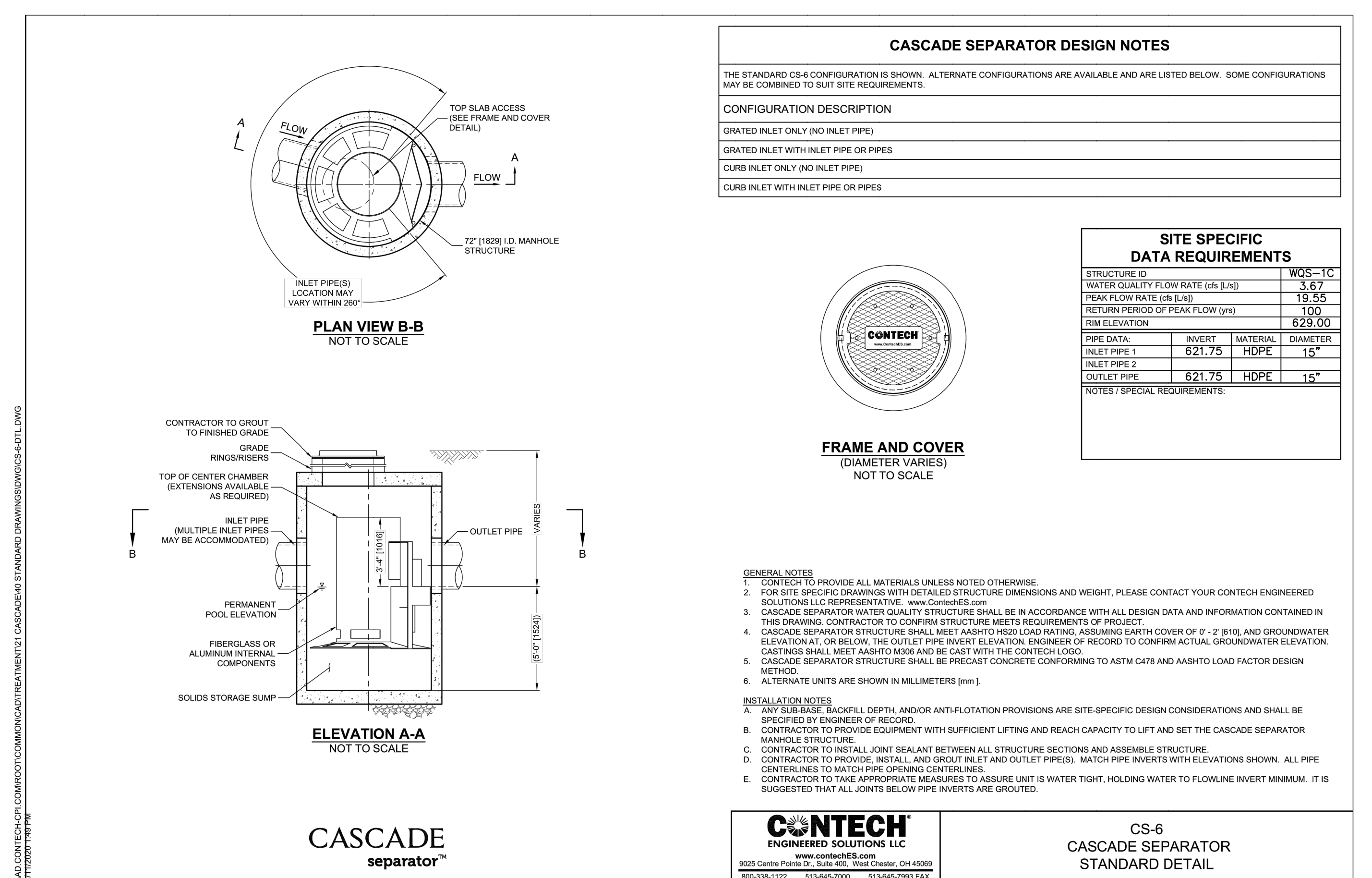
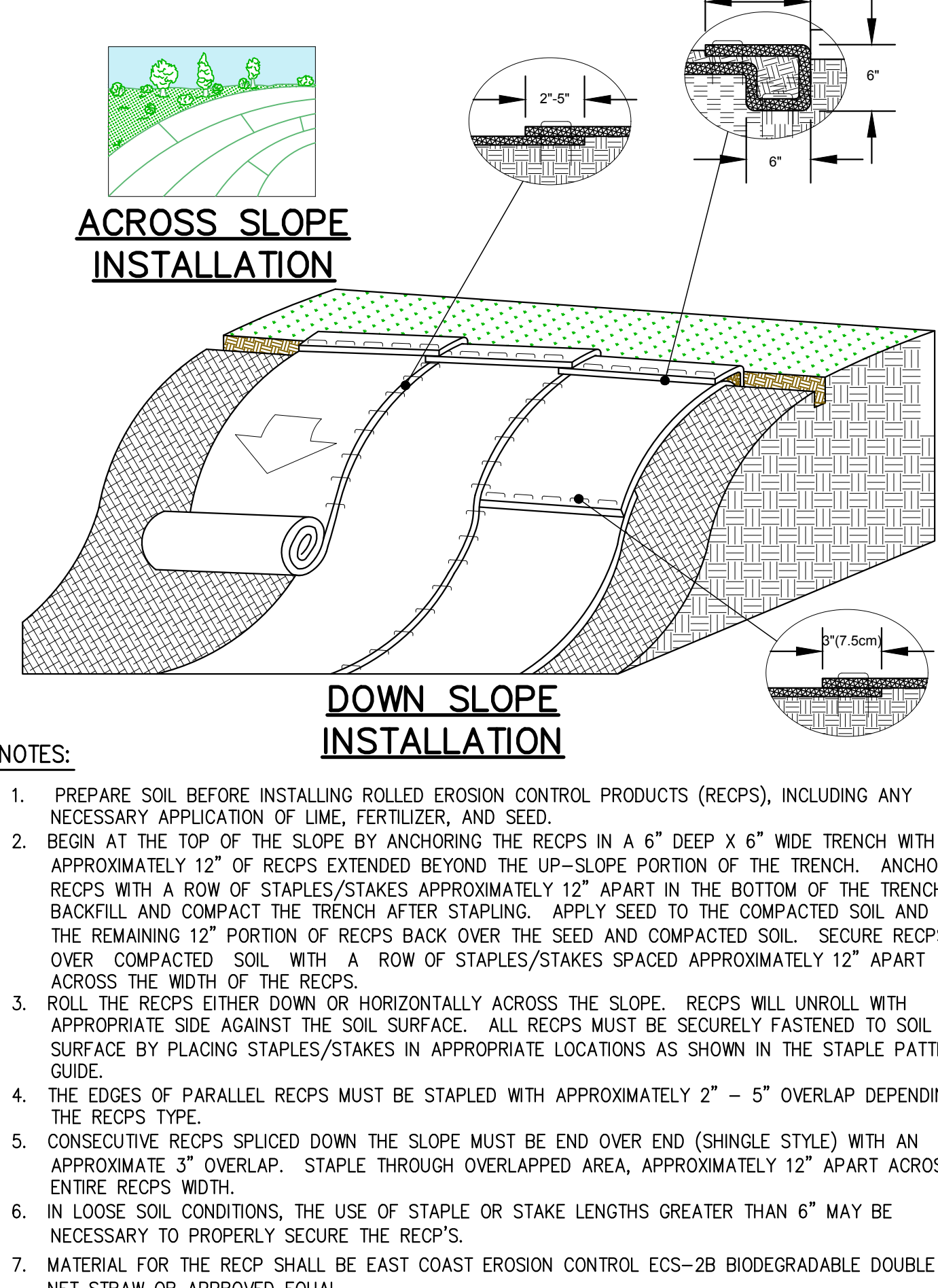


**4" MOUNTABLE CONCRETE CURB**

**53**

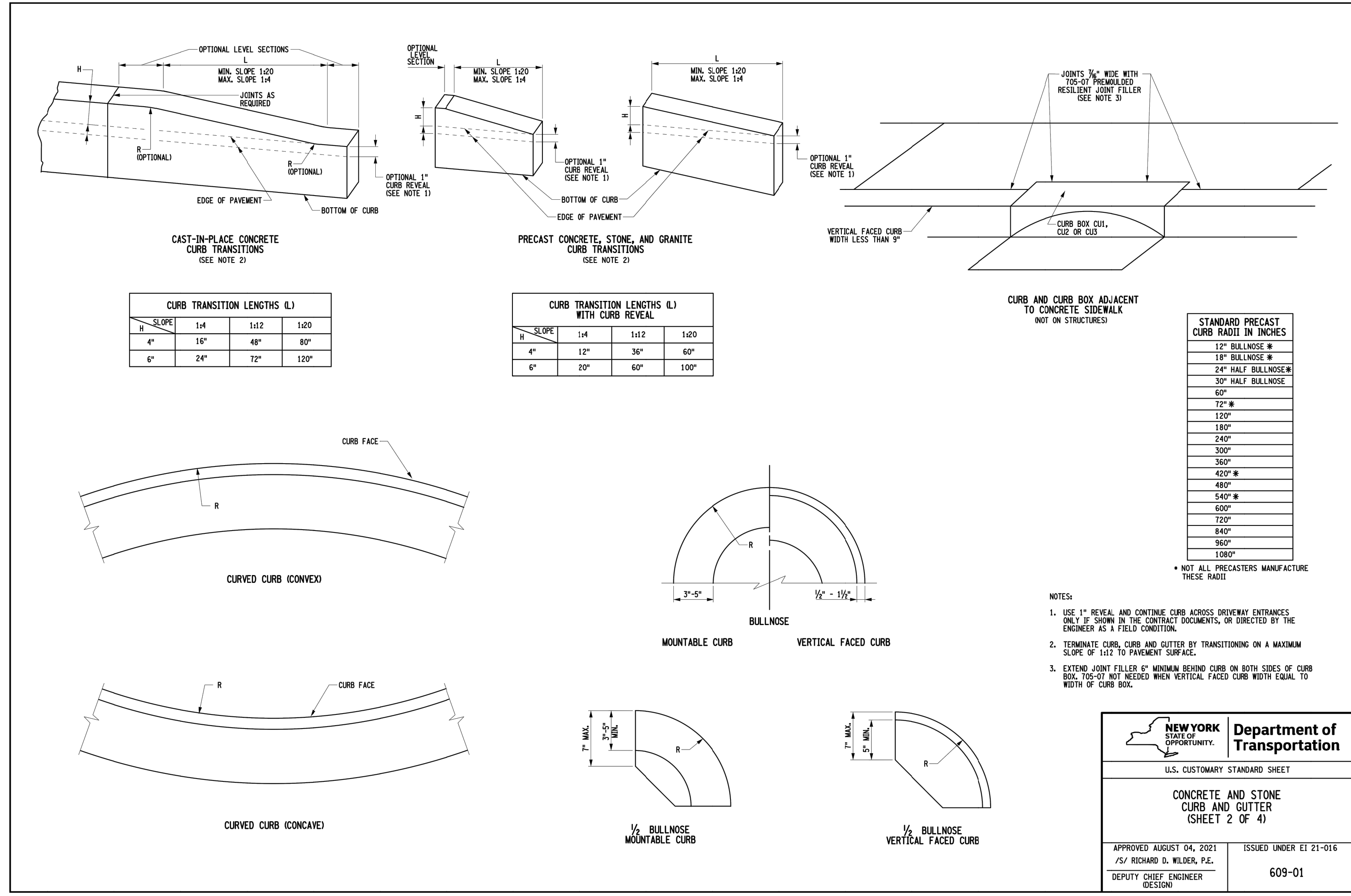
**ROLLED EROSION CONTROL MATTING**

**54**



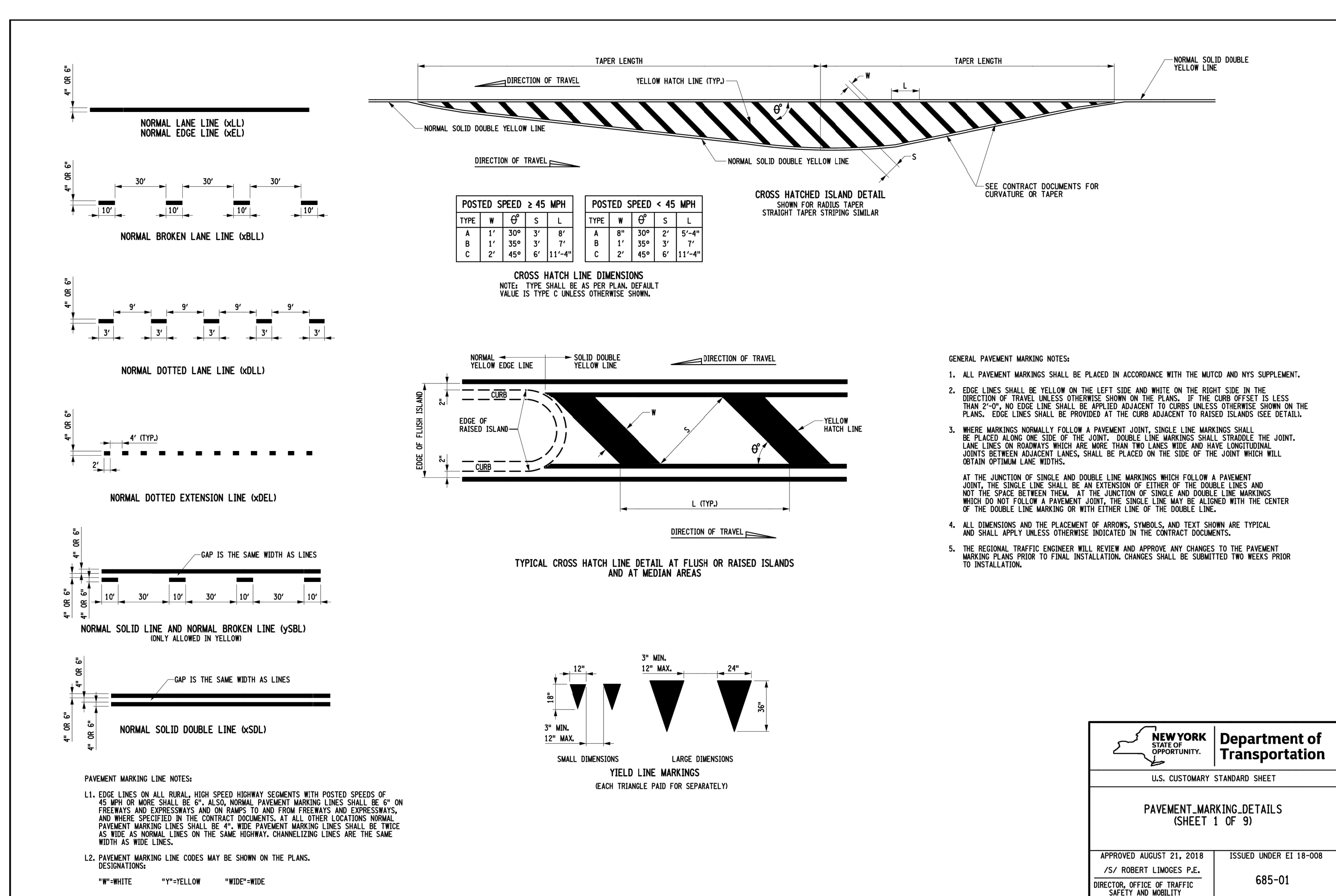
**WQS-1C**

**55**

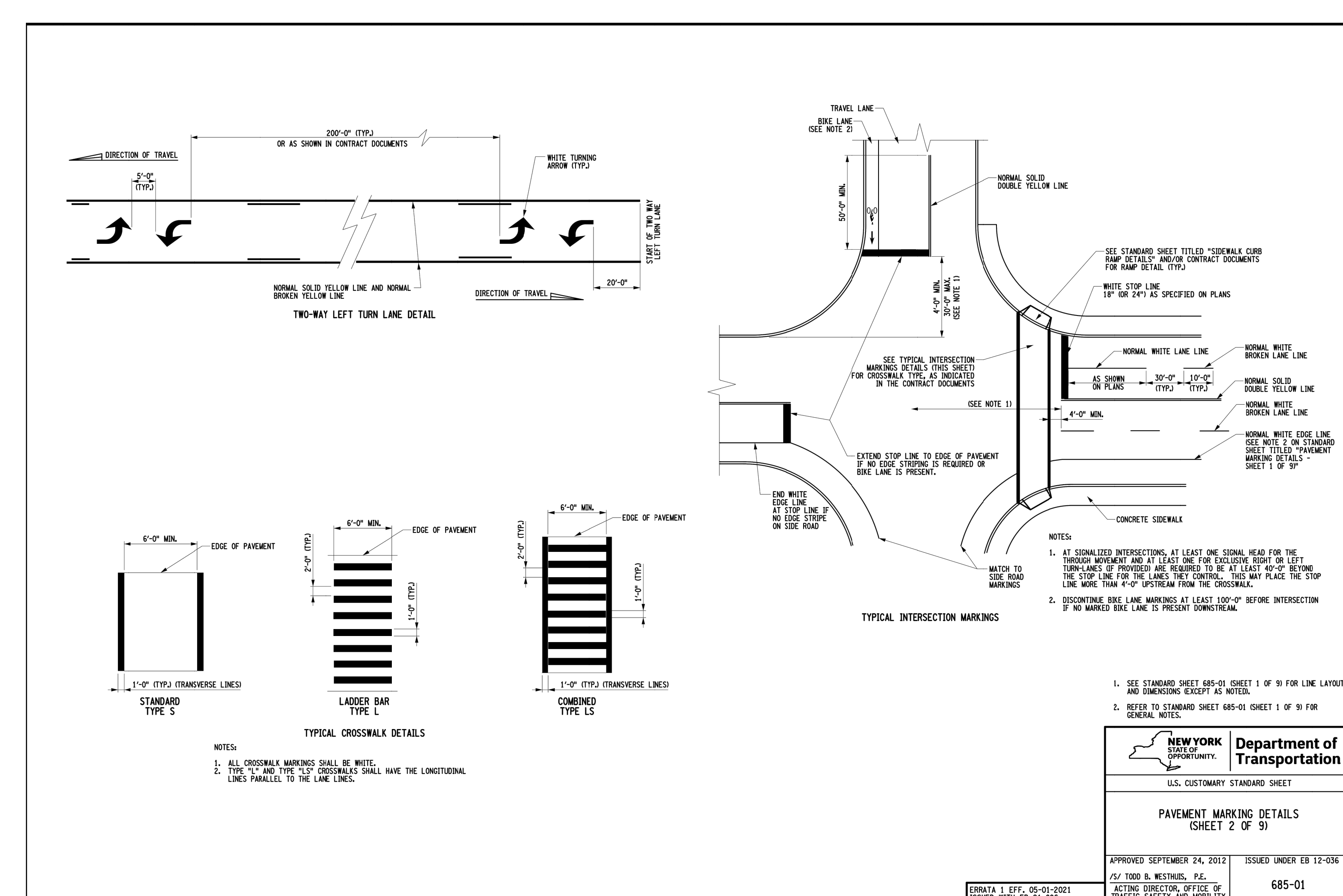


**NYSDOT CURB DETAILS**

**56**



**NYSDOT PAVEMENT MARKING DETAILS**



**57**

| APPREPROPRIATE | DATE       | BY | REVISION                  |
|----------------|------------|----|---------------------------|
| 1.             | 03/28/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 2.             | 05/09/2022 | NC | RESPONSE TO TOWN COMMENTS |
| 3.             | 07/24/2022 | NC | RESPONSE TO TOWN COMMENTS |

Summit Club Partners, LLC  
330 RAILROAD AVENUE  
GREENWICH, CT 06650

GRANOFF ARCHITECTS  
330 RAILROAD AVENUE  
GREENWICH, CT 06650

CONSTRUCTION DETAILS  
THE SUMMIT CLUB AT ARMONK  
(RESIDENTIAL PHASE)  
TOWN OF NORTH CASTLE, NEW YORK

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APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED: \_\_\_\_\_ DATE: \_\_\_\_\_

CHRISTOPHER CATHY, CHAIRMAN  
TOWN OF NORTH CASTLE PLANNING BOARD

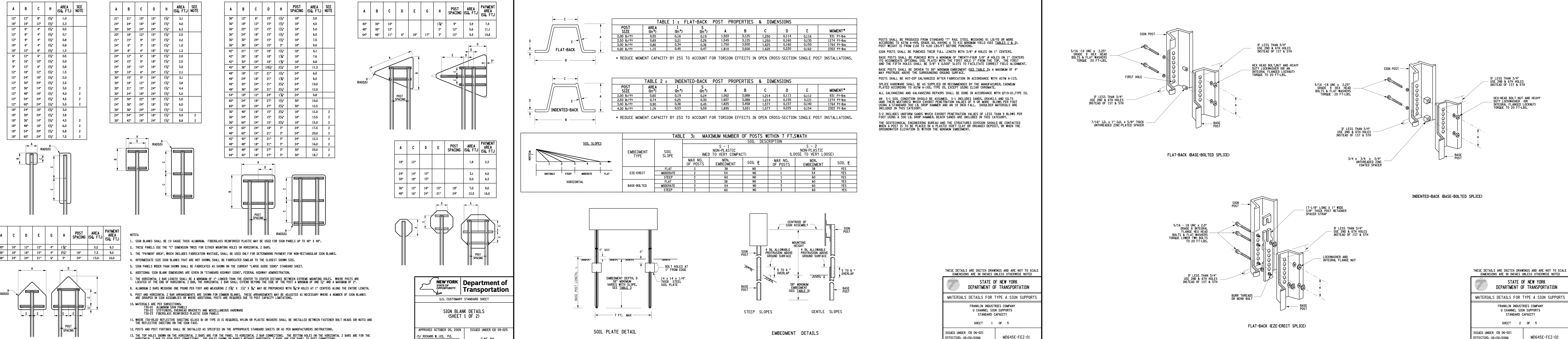
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. CEMELE, P.E.  
KELLARD SESSIONS CONSULTING, P.C.

DATE: \_\_\_\_\_

DRAWN BY: NC  
SCALE: NOT TO SCALE  
DATE: 01/10/2022  
PROJECT NO: 20101  
JOB NO: DET-5

**C-904**



### NYSOT TRAFFIC SIGN DETAILS

58

|  |  |   |   |   |  |  |   |   |   |
|--|--|---|---|---|--|--|---|---|---|
|  |  | X |   | X |  |  | X |   | X |
|  |  |   | X |   |  |  |   | X |   |
|  |  |   |   |   |  |  |   |   | X |
|  |  | X |   |   |  |  | X |   |   |
|  |  |   |   | X |  |  |   |   |   |
|  |  |   |   |   |  |  |   |   | X |
|  |  | X |   |   |  |  | X |   |   |
|  |  |   |   |   |  |  |   |   | X |

NOT FOR CONSTRUCTION

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_  
CHRISTOPHER CATHY, CHAIRMAN,  
TOWN OF NORTH CASTLE PLANNING BOARD  
ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
JOSEPH M. CERMELE, P.E.,  
KELLARD SESSIONS CONSULTING, P.C.  
CONSULTING TOWN ENGINEER

CONSTRUCTION DETAILS  
THE SUMMIT CLUB AT ARMONK  
(RESIDENTIAL PHASE)  
566 & 570 BEDFORD ROAD (NY-22)  
TOWN OF NORTH CASTLE, NEW YORK

APPLICANT/OWNER:  
SUMMIT CLUB PARTNERS, LLC  
566 BEDFORD ROAD (NY-22)  
ARMONK, NY 10504  
ARCHITECT:  
GRANOFF ARCHITECTS  
330 RAILROAD AVENUE  
GREENWICH, CT 06830

JMC Planning, Engineering, Landscape Architects & Land Surveying, LLC  
John Meyer Consulting, Inc.  
120 BELLEFLORE BOULEVARD - ARMONK, NY 10504  
VOICE 914.273.5545 - FAX 914.273.2702  
WWW.JMPC.COM

Revision Table:

| Rev. | Date       | Description |
|------|------------|-------------|
| 1    | 07/24/2023 | NC          |

Drawn: NC Approved: AG  
Scale: NOT TO SCALE  
Date: 05/09/2022  
Project No.: 20101  
JOB-SHEET: DET-4  
Drawing No.: C-905

NOTES

- 1. IN THE GOLF COURSE DISTRICT... 2. THE MINIMUM BUILDING HEIGHT... 3. RECREATION/AMUSEMENT CALCULATIONS... 4. TOTAL MARKET-HAVE DWELLING UNITS... 5. TOTAL APART DWELLING UNITS... 6. TOTAL REQUIRED PARKING FOR MARKET-SALE UNITS...

GOLF COURSE/CLUB PARKING CALCULATIONS

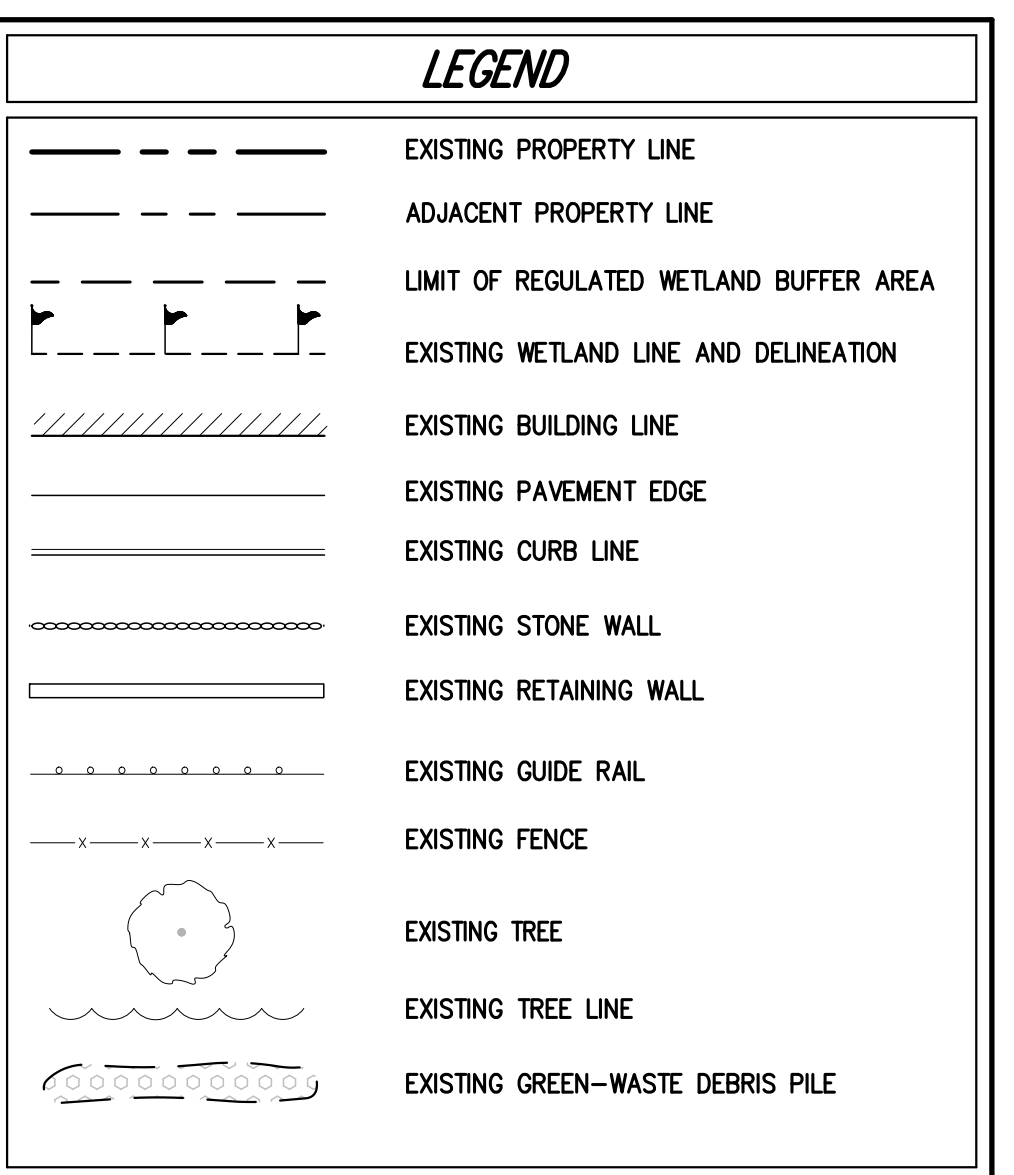
GOLF COURSE/CLUB REQUIREMENT: "GOLF OR COUNTRY CLUB" 1 FOR EACH 3 MEMBERS... 1 FOR EACH 3 SEATS IN THE MEETING AND/OR DINING ROOM... TOTAL REQUIRED PARKING FOR GOLF COURSE/CLUB: 277 PARKING SPACES

7. BUILDING COVERAGE BREAKDOWN

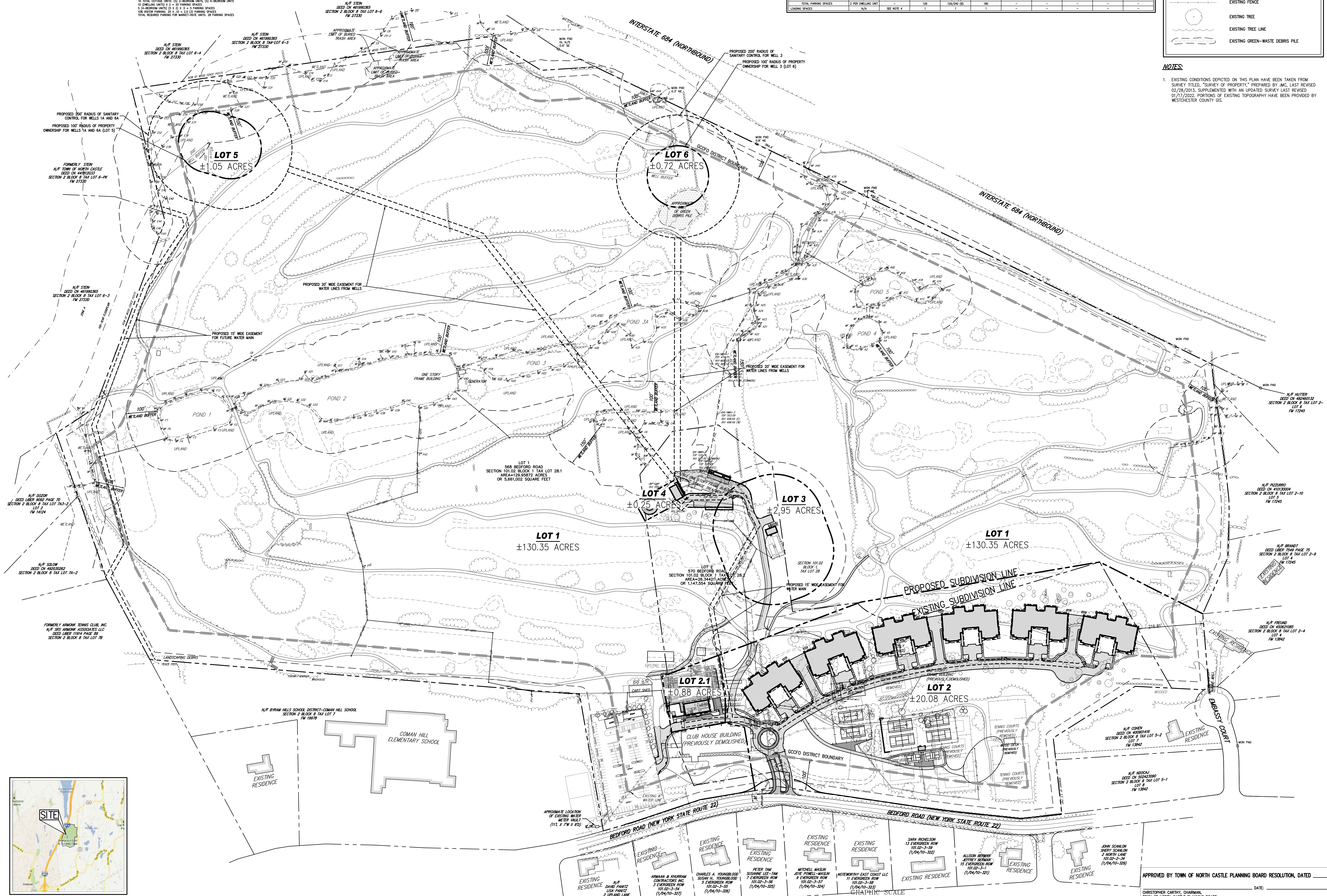
LOT 2.1: CLUBHOUSE BUILDING 14,000 S.F. GOLFHOUSE 4,000 S.F. TOTAL LOT 2.1 BUILDING COVERAGE: 18,000 S.F. LOT 2: RESIDENTIAL BUILDINGS 4,114,000 S.F. TOTAL LOT 2 BUILDING COVERAGE: 4,114,000 S.F.

ZONING COMPLIANCE CHART

Table with columns: DESCRIPTION, REQUIRED/PERMITTED, EXISTING, PROPOSED/PROVIDED. Rows include LOT AREA, LOT STREET FRONTAGE, LOT WIDTH, LOT DEPTH, MINIMUM BUILDING COVERAGE, etc.



- NOTES: 1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED "SURVEY OF PROPERTY" PREPARED BY JMC LAST REVISED 02/28/2013...

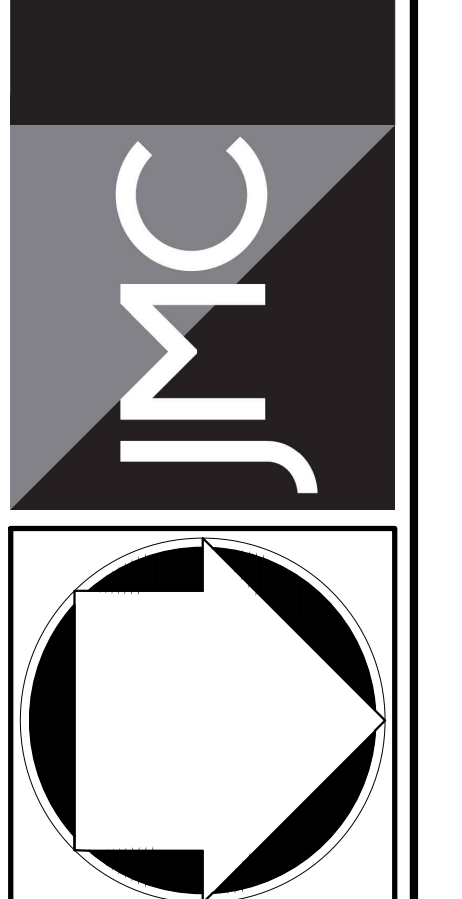


NOT FOR CONSTRUCTION

Revision table with columns: No., Date, Description. Rows 1-7 detailing revisions to the plan.

APPLICANT/TOWNSHIP: SUMMIT CLUB PARTNERS, LLC. 568 BEDFORD ROAD (NY-22) ARMONK, NY 10504

JMC Planning, Engineering, Landscaping, Architecture & Land Surveying, PLLC. John Meyer Consulting, Inc.



PRELIMINARY SUBDIVISION PLAN (NO JURISDICTION SUBDIVISION) THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED 11/23/2020. ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER. JOSEPH M. CERNIPE, P.E. KELLARD SESSIONS CONSULTING, P.C.

| LEGEND |  |
|--------|--|
|        | EXISTING PROPERTY LINE                 |
|        | ADJACENT PROPERTY LINE                 |
|        | LIMIT OF REGULATED WETLAND BUFFER AREA |
|        | EXISTING WETLAND LINE AND DELINEATION  |
|        | EXISTING BUILDING LINE                 |
|        | EXISTING PAVEMENT EDGE                 |
|        | EXISTING CURB LINE                     |
|        | EXISTING CONTOUR                       |
|        | EXISTING INDEX CONTOUR                 |
|        | EXISTING STONE WALL                    |
|        | EXISTING RETAINING WALL                |
|        | EXISTING GUIDE RAIL                    |
|        | EXISTING FENCE                         |
|        | EXISTING TREE                          |
|        | EXISTING TREE LINE                     |
|        | EXISTING STORM DRAIN LINE              |
|        | EXISTING SANITARY LINE                 |
|        | EXISTING WATER LINE                    |
|        | EXISTING GAS LINE                      |
|        | EXISTING OVERHEAD WIRES                |
|        | EXISTING ELECTRIC LINE                 |
|        | EXISTING DRAIN INLET                   |
|        | EXISTING MANHOLE                       |
|        | EXISTING FIRE HYDRANT                  |
|        | EXISTING GAS VALVE                     |
|        | EXISTING WATER VALVE                   |
|        | EXISTING UTILITY POLE                  |
|        | EXISTING LIGHT POLE                    |
|        | EXISTING SIGN                          |
|        | TOWN-REGULATED STEEP SLOPES            |
|        | EXISTING WELL LOCATION AND DESIGNATION |
|        | EXISTING GREEN-WASTE DEBRIS PILE       |

**NOTES:**  
 1. EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP" PREPARED BY AEC LAST REVISED 03/06/2013, SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 01/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTONESTER COUNTY GIS.

APPLICANT/TOWN: **SUMMIT CLUB PARTNERS, LLC**  
 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504

| No. | Revision                  | Date       |
|-----|---------------------------|------------|
| 1.  | RESPONSE TO TOWN COMMENTS | 07/17/2021 |
| 2.  | RESPONSE TO TOWN COMMENTS | 03/09/2022 |
| 3.  | RESPONSE TO TOWN COMMENTS | 06/14/2022 |
| 4.  | RESPONSE TO TOWN COMMENTS | 07/07/2022 |
| 5.  | RESPONSE TO TOWN COMMENTS | 05/09/2023 |
| 6.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 |
| 7.  | RESPONSE TO TOWN COMMENTS | 07/24/2023 |

APPRAISER: **Summit Club Partners, LLC**  
 568 BEDFORD ROAD - ARMONK, NY 10504  
 PHONE: 914.233.2222 - FAX: 914.233.2192  
[www.jmcplc.com](http://www.jmcplc.com)

**JMC**  
 JMC Planning, Engineering, Landscaping  
 Architecture & Land Surveying, PLLC  
 JMC Site Development Consultants, LLC  
 John Meyer Consulting, Inc.  
 120 BEDFORD ROAD - ARMONK, NY 10504  
 PHONE: 914.233.2222 - FAX: 914.233.2192  
[www.jmcplc.com](http://www.jmcplc.com)

**INTEGRATED PLOT PLAN**  
 (NO JURISDICTION SUBDIVISION)  
**THE SUMMIT CLUB AT ARMONK**  
 (RESIDENTIAL PHASE)  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

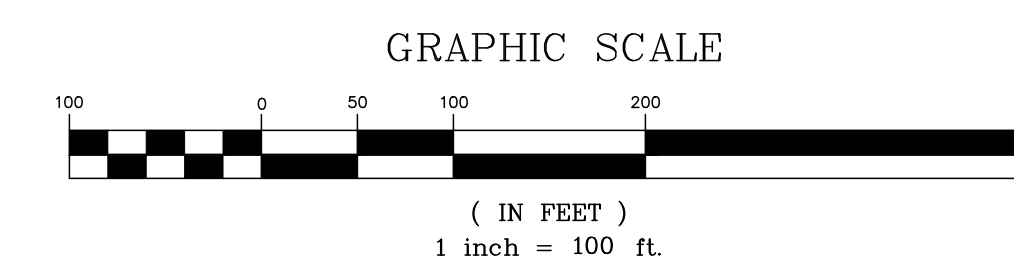
ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209, SUBSECTION 2.

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_  
 CHRISTOPHER CARRY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
 ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER  
 JOSEPH M. CERNIJE, P.E. KELLARD SESSIONS CONSULTING, P.C. CONSULTING TOWN ENGINEER

Scale: 1" = 100'  
 Date: 11/23/2020  
 Project No: 20101  
 Drawing No: **IPP-1**



**VICINITY MAP**  
 SCALE: 1" = 5,000'

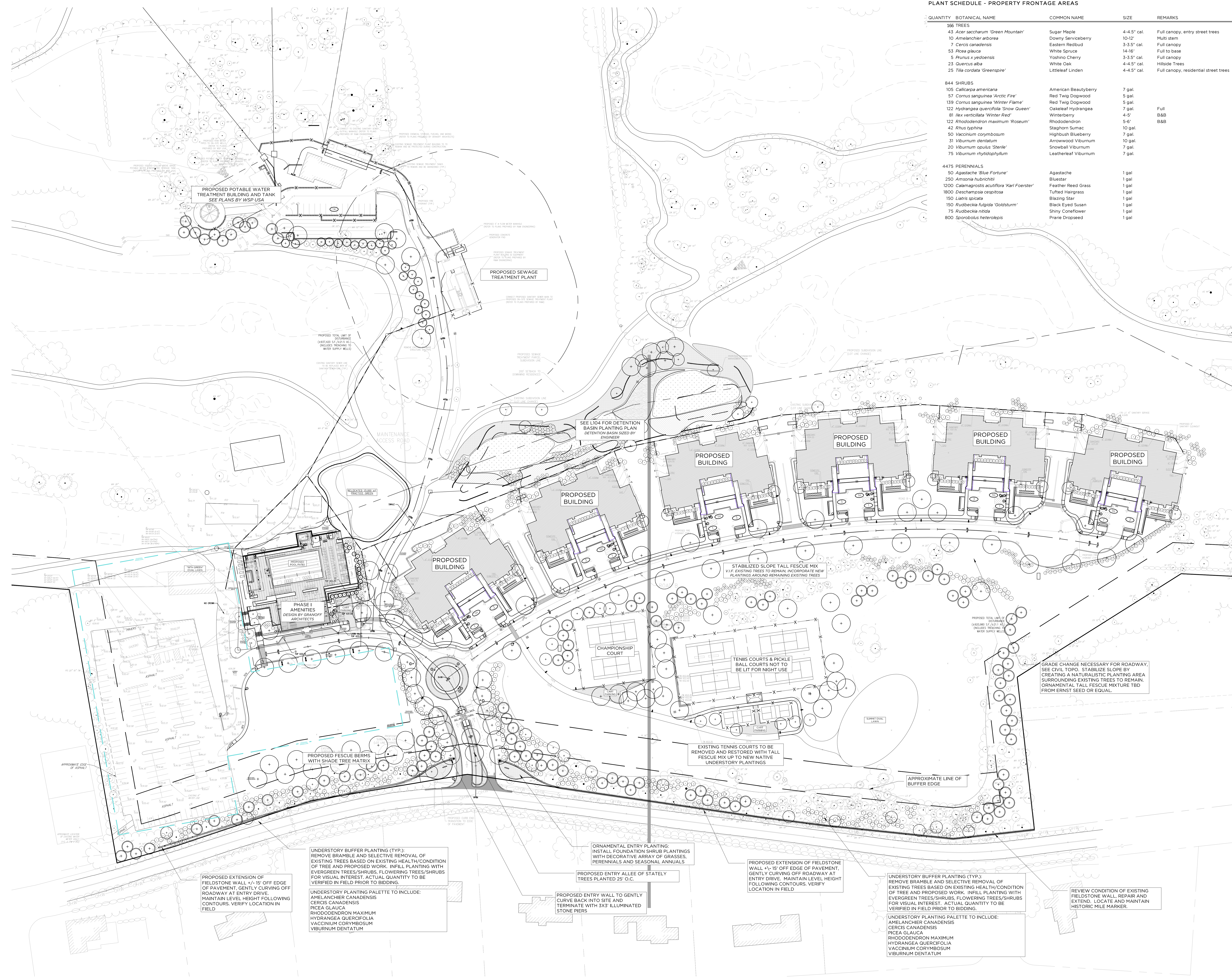


NOT FOR CONSTRUCTION



PLANT SCHEDULE - PROPERTY FRONTAGE AREAS

| QUANTITY | BOTANICAL NAME                                  | COMMON NAME          | SIZE        | REMARKS                               |
|----------|---|----------------------|-------------|---------------------------------------|
| 166      | TREES   |                      |             |                                       |
| 43       | <i>Acer saccharum</i> 'Green Mountain'          | Sugar Maple          | 4-4.5" cal. | Full canopy, entry street trees       |
| 10       | <i>Amelanchier arborea</i>                      | Downy Serviceberry   | 10-12'      | Multi stem                            |
| 7        | <i>Cercis canadensis</i>                        | Eastern Redbud       | 3-3.5" cal. | Full canopy                           |
| 53       | <i>Picea glauca</i>                             | White Spruce         | 14-16'      | Full to base                          |
| 5        | <i>Prunus x yedoensis</i>                       | Yoshino Cherry       | 3-3.5" cal. | Full canopy                           |
| 23       | <i>Quercus alba</i>                             | White Oak            | 4-4.5" cal. | Hideout Trees                         |
| 25       | <i>Tilia cordata</i> 'Greenspire'               | Littleleaf Linden    | 4-4.5" cal. | Full canopy, residential street trees |
| 844      | SHRUBS  |                      |             |                                       |
| 105      | <i>Calliopsis americana</i>                     | American Beautyberry | 7 gal.      |                                       |
| 97       | <i>Cornus sanguinea</i> 'Arctic Fire'           | Red Twig Dogwood     | 5 gal.      |                                       |
| 139      | <i>Cornus sanguinea</i> 'Winter Flame'          | Red Twig Dogwood     | 5 gal.      |                                       |
| 122      | <i>Hydrangea quercifolia</i> 'Snow Queen'       | Oakeleaf Hydrangea   | 7 gal.      | Full                                  |
| 81       | <i>Ilex verticillata</i> 'Winter Red'           | Winterberry          | 4-5'        | B&B                                   |
| 123      | <i>Rhododendron maximum</i> 'Roseum'            | Rhododendron         | 5-6'        | B&B                                   |
| 42       | <i>Rhus typhina</i>                             | Staghorn Sumac       | 10 gal.     |                                       |
| 50       | <i>Vaccinium corymbosum</i>                     | Highbush Blueberry   | 7 gal.      |                                       |
| 31       | <i>Viburnum dentatum</i>                        | Arrowwood Viburnum   | 10 gal.     |                                       |
| 20       | <i>Viburnum opulus</i> 'Sterile'                | Snowball Viburnum    | 7 gal.      |                                       |
| 75       | <i>Viburnum rhytidophyllum</i>                  | Leatherleaf Viburnum | 7 gal.      |                                       |
| 4475     | PERENNIALS                                      |                      |             |                                       |
| 50       | <i>Agastache</i> 'Blue Fortune'                 | Agastache            | 1 gal.      |                                       |
| 250      | <i>Ammannia tuberosa</i>                        | Bluestar             | 1 gal.      |                                       |
| 1200     | <i>Calamagrostis acutiflora</i> 'Karl Foerster' | Feather Reed Grass   | 1 gal.      |                                       |
| 1800     | <i>Deschampsia cespitosa</i>                    | Tufted Hairgrass     | 1 gal.      |                                       |
| 150      | <i>Liatris spicata</i>                          | Blazing Star         | 1 gal.      |                                       |
| 150      | <i>Rudbeckia fulgida</i> 'Goldsturm'            | Black Eyed Susan     | 1 gal.      |                                       |
| 75       | <i>Shirley corymbosa</i>                        | Shirley Poppy        | 1 gal.      |                                       |
| 800      | <i>Sporobolus heterolepis</i>                   | Prairie Dropseed     | 1 gal.      |                                       |



REVISIONS

| # | DATE       | REVISION DESCRIPTION      | BY: |
|---|------------|---------------------------|-----|
| 1 | 10/24/2022 | PLANNING BOARD SUBMISSION | KA  |
| 2 | 11/02/2022 | ARB SUBMISSION            | KA  |
| 3 | 01/30/2023 | PLANNING BOARD SUBMISSION | KA  |
| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

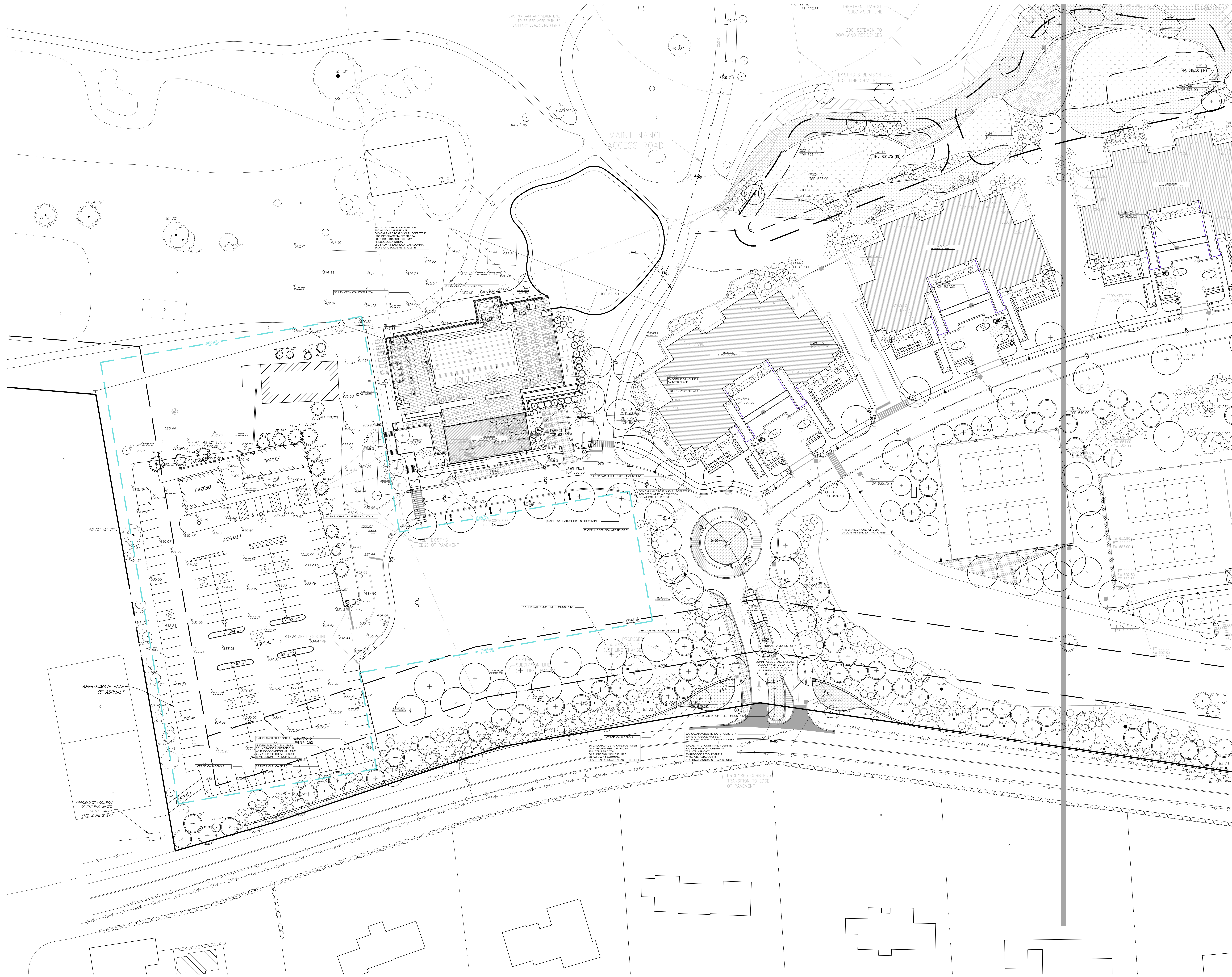
PHASE  
**PLANNING BOARD SUBMISSION**

PROJECT NAME  
**SUMMIT CLUB**

ARMONK, NY  
JOB NO.: ----  
DRAWN BY: JS      PROJ. MANAGER: KA  
DATE: 01/30/2023      SCALE: AS NOTED  
DRAWING TITLE  
**OVERALL SITE PLAN - PHASE I**

DRAWING NO.

**LS 100.0**



| # | DATE       | REVISION DESCRIPTION      | BY: |
|---|------------|---------------------------|-----|
| 1 | 10/24/2022 | PLANNING BOARD SUBMISSION | KA  |
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| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

PHASE  
**PLANNING BOARD  
SUBMISSION**

PROJECT NAME  
**SUMMIT CLUB**

ARMONK, NY  
JOB NO.:  
DRAWN BY: **JS** PROJ. MANAGER: **KA**  
DATE: **01/30/2023** SCALE: AS NOTED  
DRAWING TITLE  
**PHASE I SITE PLAN - SOUTHERN  
DEVELOPMENT**

DRAWING NO.

**LS 100.1A**

**OVERALL SITE PLAN - SOUTHERN DEVELOPMENT**

1" = 30'-0"

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| 3 | 01/30/2023 | PLANNING BOARD SUBMISSION | KA  |
| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

**PHASE I  
 PLANNING BOARD  
 SUBMISSION**

**PROJECT NAME  
 SUMMIT CLUB**

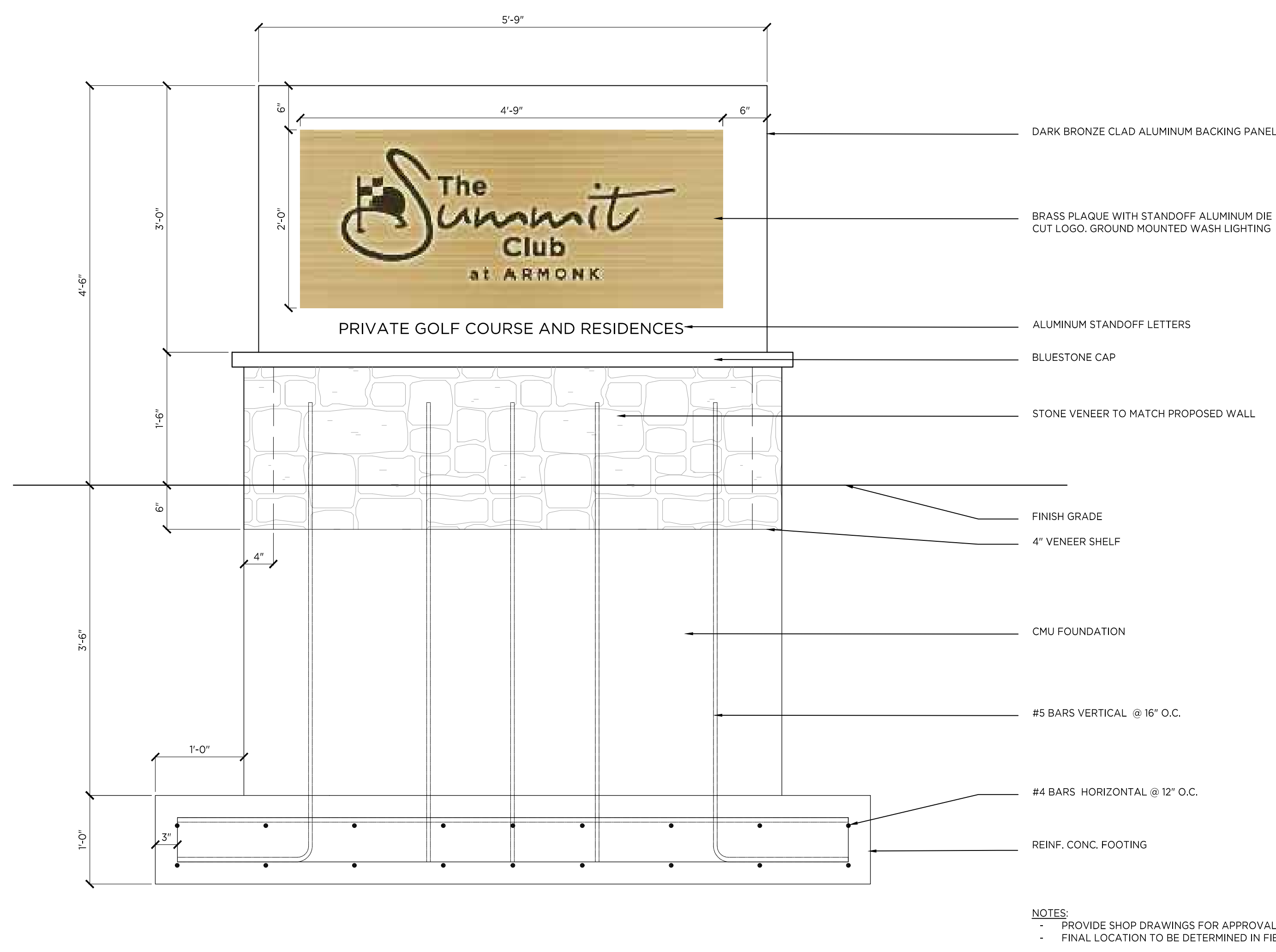
ARMONK, NY  
 JOB NO.:  
 DRAWN BY: JS PROJ. MANAGER: KA  
 DATE: 01/30/2023 SCALE: AS NOTED  
 DRAWING TITLE:  
**PHASE I SITE PLAN - NORTHERN  
 DEVELOPMENT**

**DRAWING NO.  
 LS 100.1B**

**OVERALL SITE PLAN - NORTHERN DEVELOPMENT**

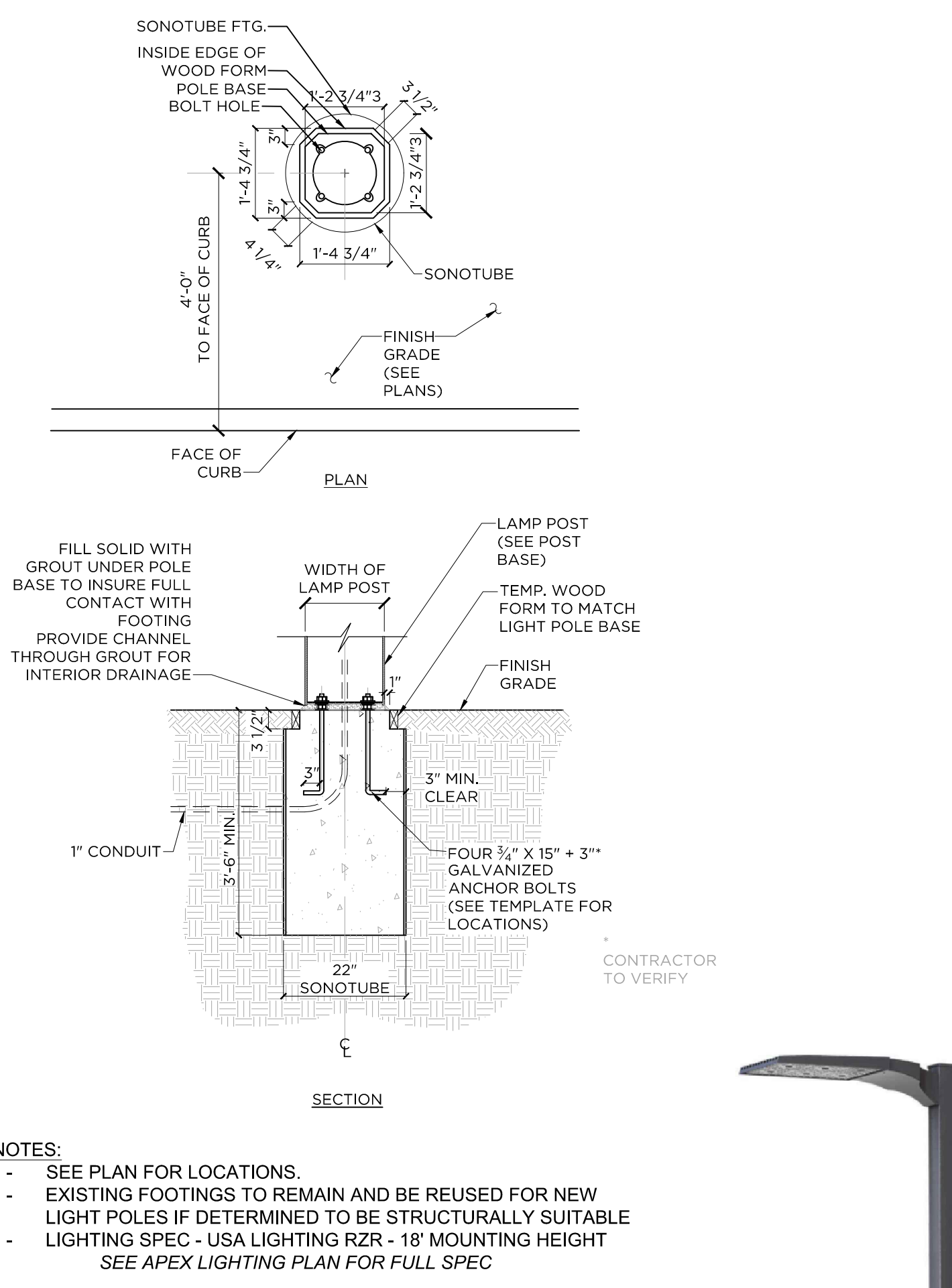
1" = 30'-0"

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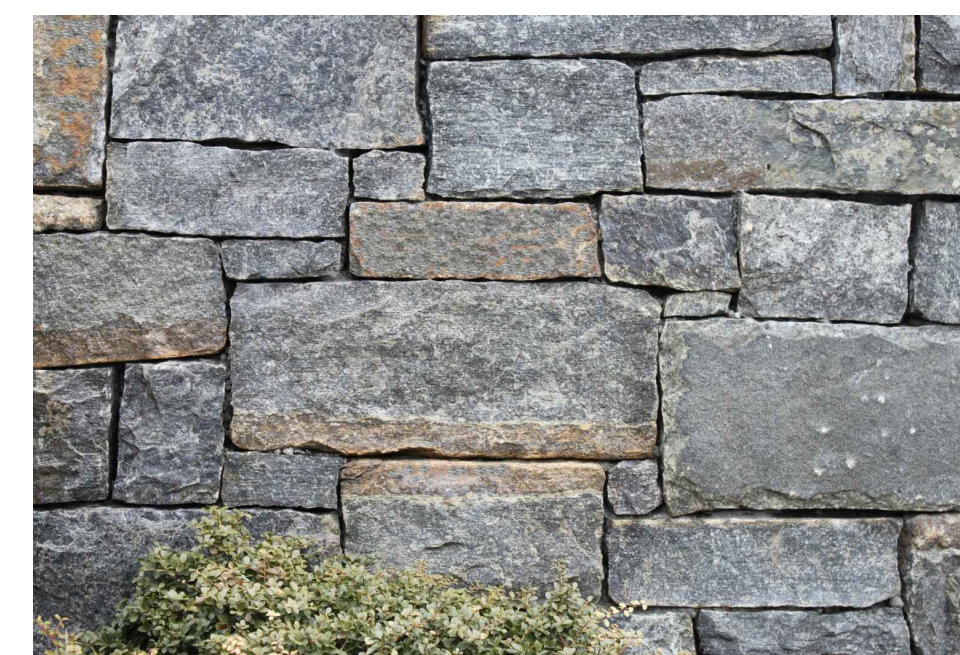
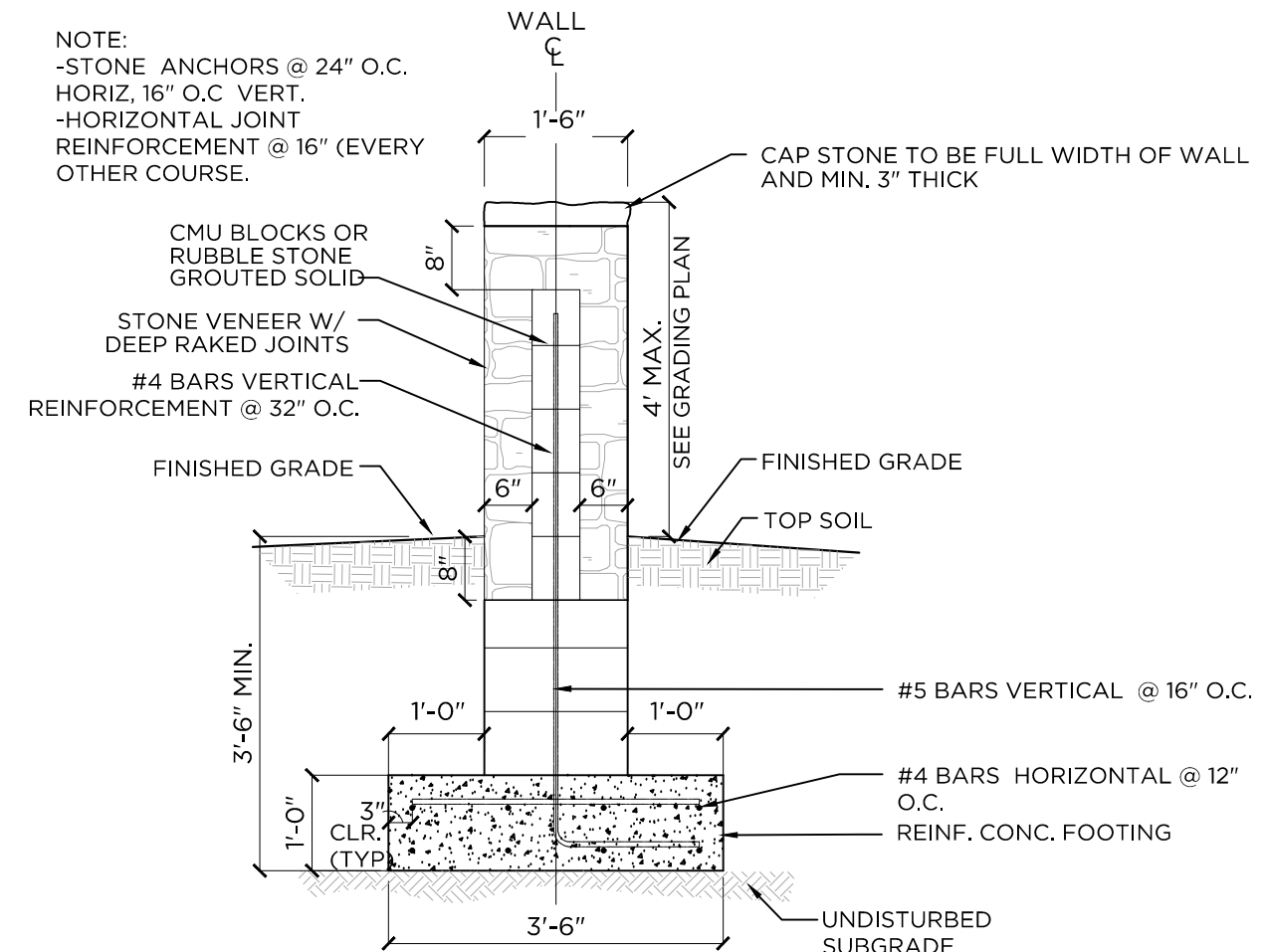
**1 ENTRY MONUMENT SIGNAGE**

1"=1'-0"



**4 CONCRETE LIGHT POST FOOTING DETAIL**

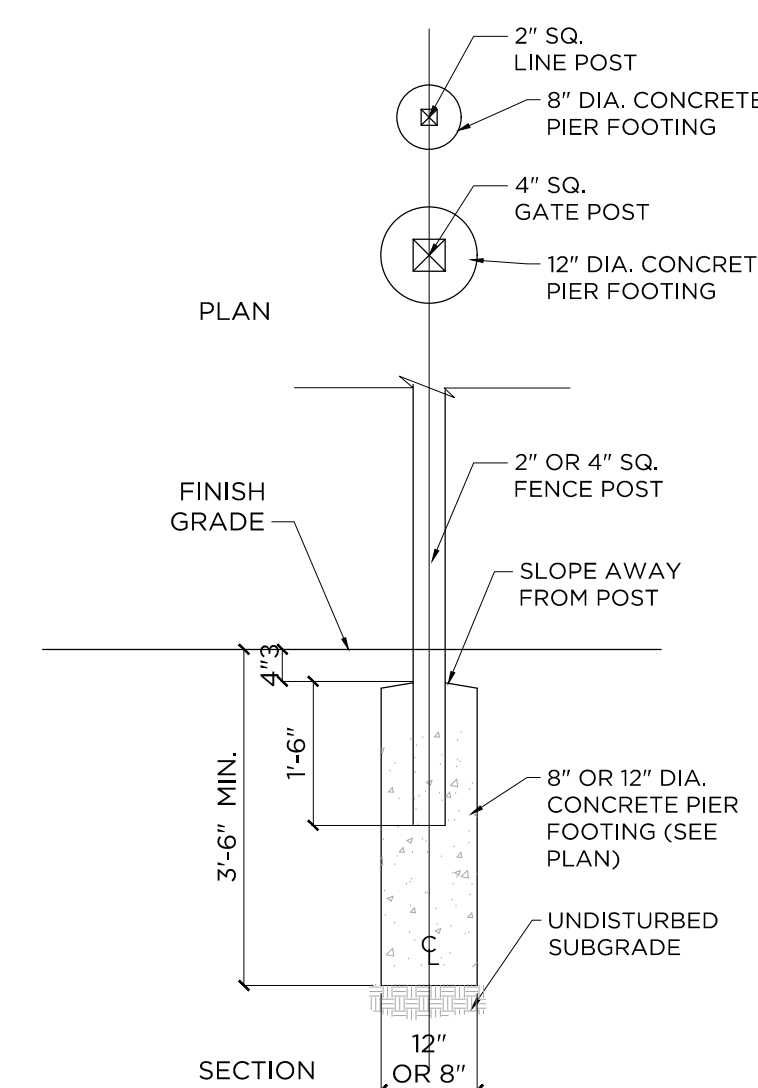
1/2"=1'-0"



**STONE VENEER INTENT**

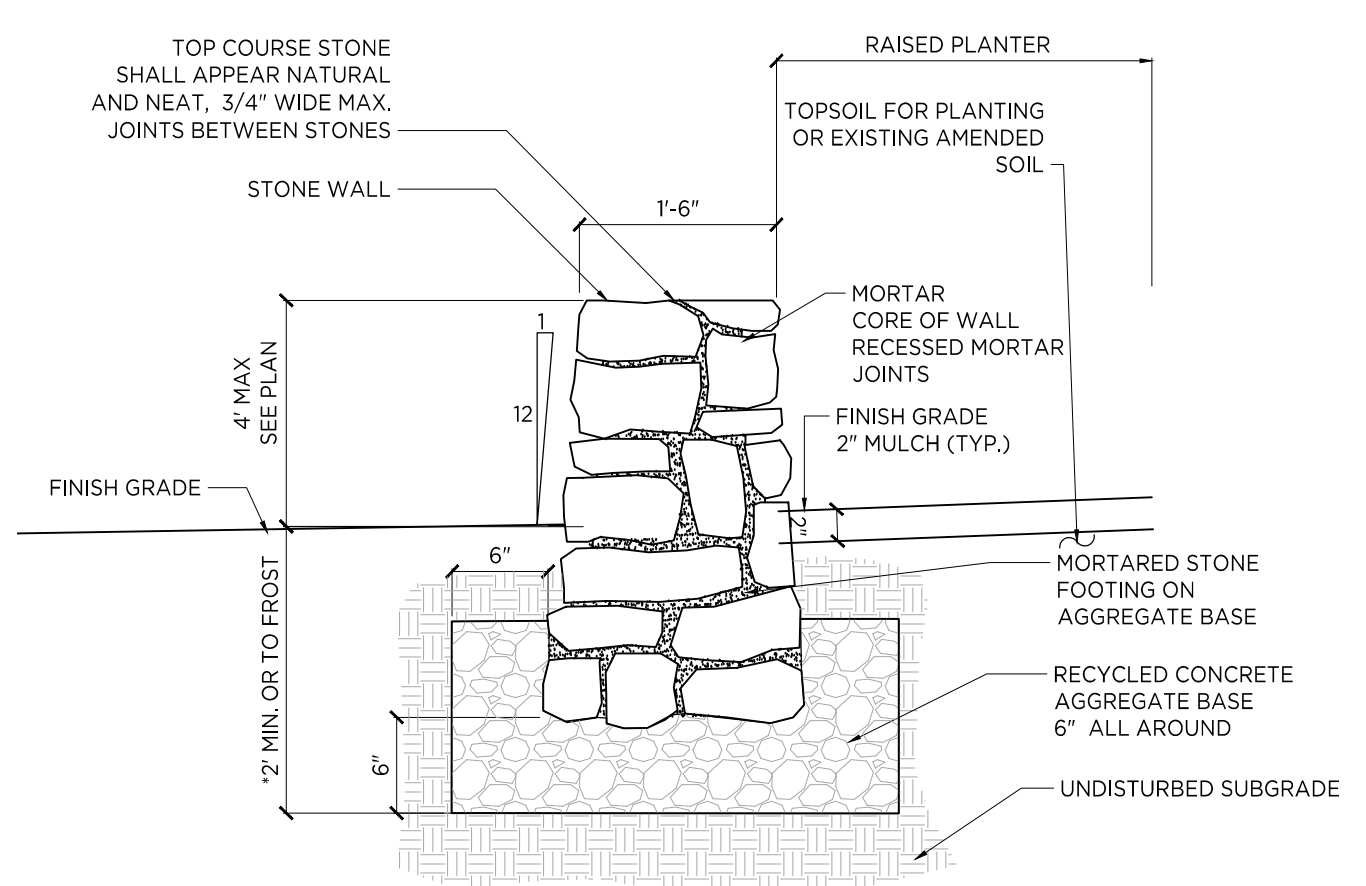
**2 FREE STANDING STONE WALL W/ CONCRETE FOOTING DETAIL**

1/2"=1'-0"



**5 TENNIS COURT FENCING POST DETAIL**

1/2"=1'-0"

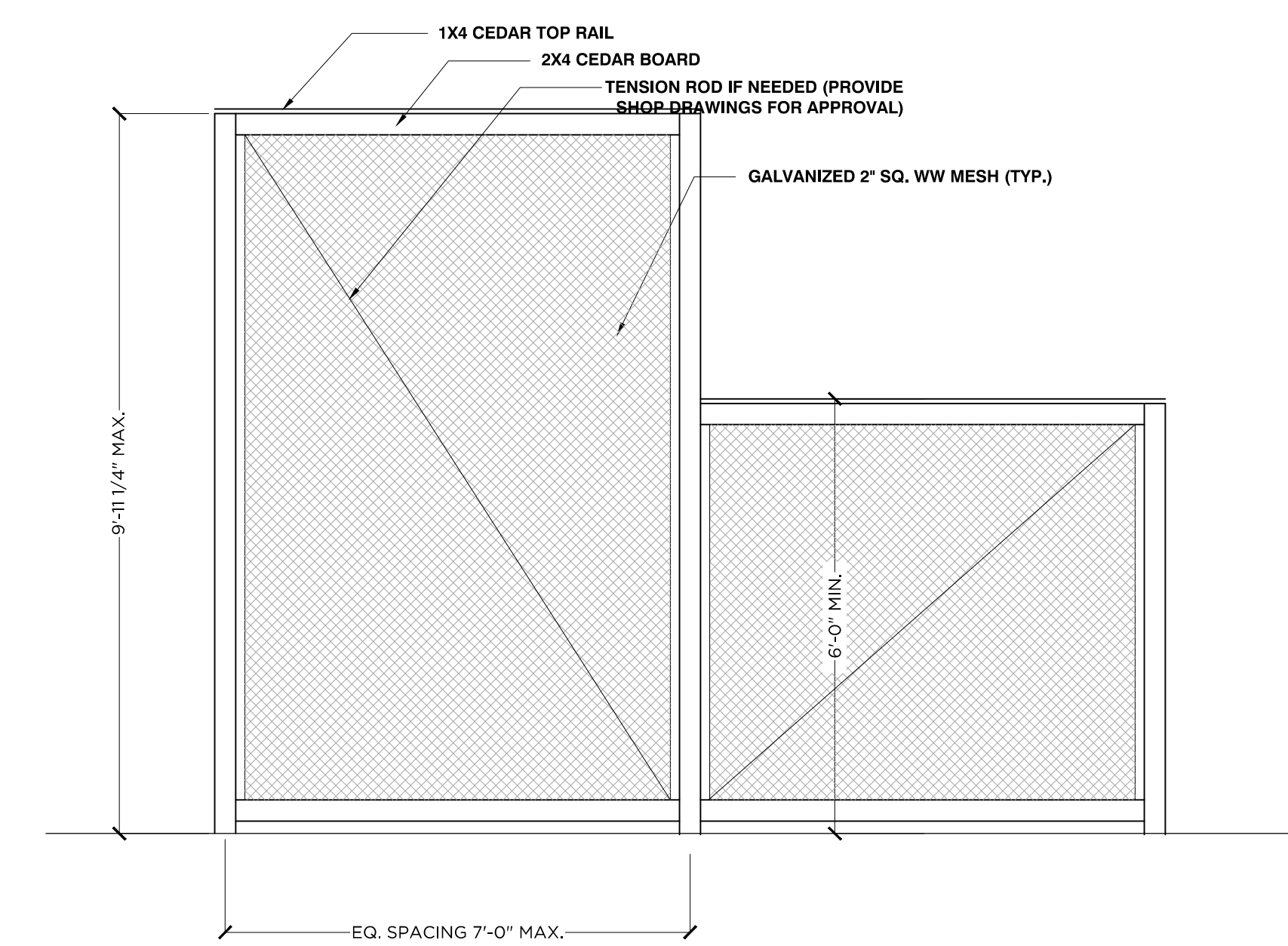


**MASONRY WALL INTENT - WILL DEPEND ON STONE FOUND FROM SITE EXAVATION**

- NOTES:
- STONE TYPE FOR WALL SHALL MATCH EXISTING STONE WALL. ALL EXISTING STONE TO BE RE-USED WHEREVER POSSIBLE.
  - SEE PLANS FOR LOCATION AND HEIGHT OF STONE WALL. HEIGHT MEASURED FROM AT-GRADE TO APPROX. 48 INCHES (SEE PLANS & VERIFY IN FIELD W/ LANDSCAPE ARCHITECT).
  - INTERIOR CORE TO BE MORTARED TO THE TOP OF THE WALL. JOINTS SHALL BE RECESSED.
  - EXTERIOR FACE OF WALL TO LOOK DRY-LAND, WALL SHALL HAVE NATURAL RANDOM PATTERN TO MATCH EXISTING WALL.
  - IF FOOTING DEPTH CANNOT BE ACHIEVED, COORDINATE WITH THE LANDSCAPE ARCHITECT.

**3 FREE STANDING STONE WALL ALTERNATIVE DETAIL**

1"=1'-0"



**6 TENNIS COURT FENCING PANEL DETAIL**

1/2"=1'-0"

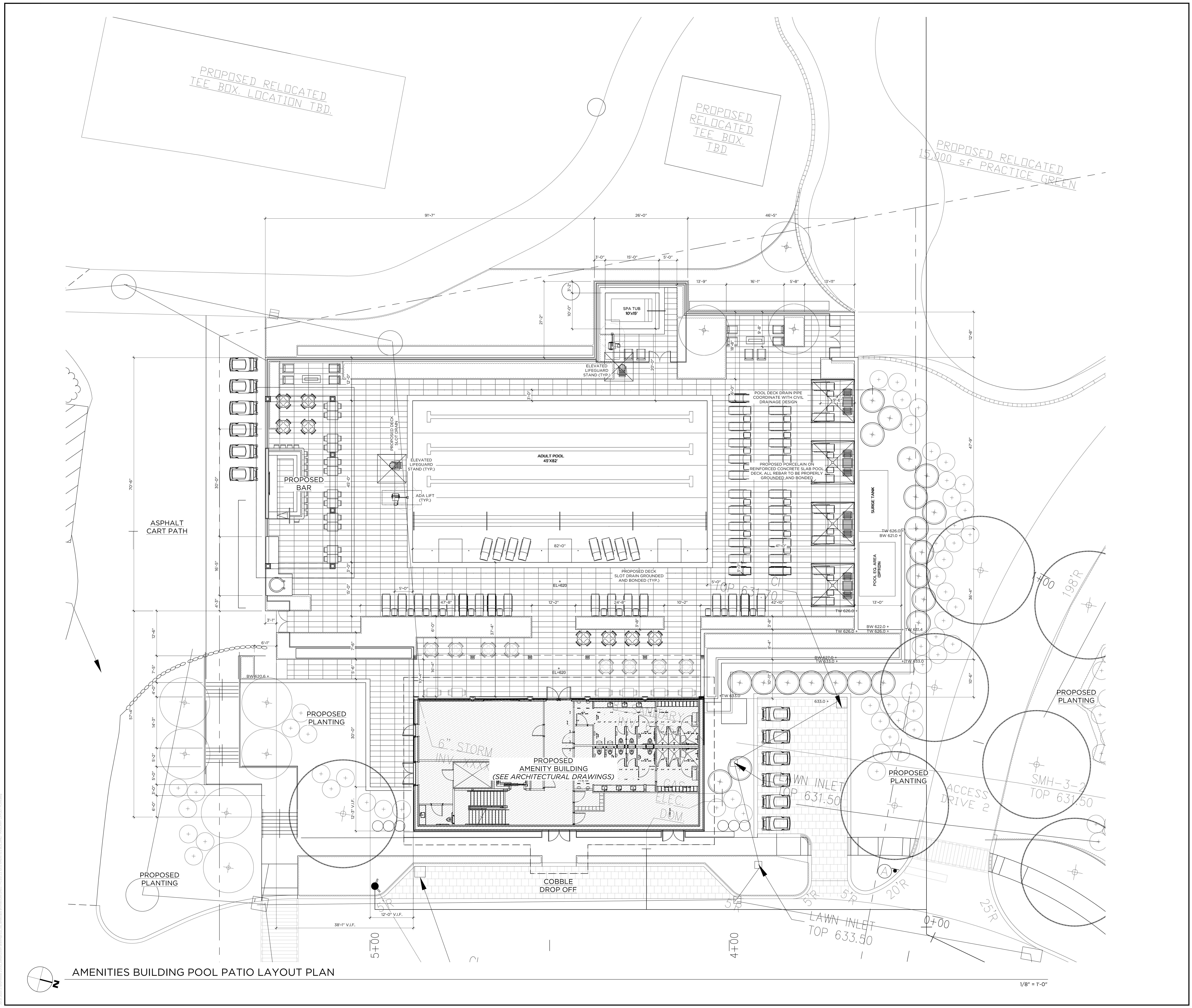
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| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

**PHASE**  
**PLANNING BOARD SUBMISSION**

PROJECT NAME  
**SUMMIT CLUB**  
 ARMONK, NY  
 JOB NO.: ----  
 DRAWN BY: **JS** PROJ. MANAGER: **KA**  
 DATE: **01/30/2023** SCALE: AS NOTED  
 DRAWING TITLE  
**SITE DETAILS**

DRAWING NO.  
**LS 100.2**

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| 3 | 01/30/2023 | PLANNING BOARD SUBMISSION | KA  |
| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

PHASE  
**PLANNING BOARD SUBMISSION**

PROJECT NAME  
**SUMMIT CLUB**

ARMONK, NY

JOB NO.: ----

DRAWN BY: **JS** PROJ. MANAGER: **KA**

DATE: **01/30/2023** SCALE: **AS NOTED**

DRAWING TITLE  
**AMENITIES BUILDING - MASONRY LAYOUT PLAN**

DRAWING NO.  
**LS 101.0**

1/8" = 1'-0"

PLANT SCHEDULE - AMENITIES BUILDING

| QUANTITY               | BOTANICAL NAME                                     | COMMON NAME        | SIZE        | REMARKS      |
|------------------------|--|--------------------|-------------|--------------|
| <b>34 TREES</b>        |  |                    |             |              |
| 3                      | <i>Amelanchier grandiflora</i> 'Autumn Brilliance' | Serviceberry       | 10-12"      | Multi stem   |
| 6                      | <i>Prunus x yedoensis</i>                          | Yoshino Cherry     | 3-3.5" cal. | Full canopy  |
| 25                     | <i>Thuja</i> 'Green Giant'                         | Arborvitae         | 10-12"      | Full to base |
| <b>179 SHRUBS</b>      |  |                    |             |              |
| 32                     | <i>Buxus</i> 'Wintergreen'                         | Boxwood            | 30-36"      | Full Shape   |
| 12                     | <i>Hydrangea quercifolia</i> 'Snow Queen'          | Coleleaf Hydrangea | 7 gal.      | Full         |
| 49                     | <i>Ilex crenata</i> 'Chesapeake'                   | Upright Holly      | 4-5'        | Full Shape   |
| 22                     | <i>Ilex crenata</i> 'Steeds'                       | Upright Holly      | 3-4'        | Full Shape   |
| 6                      | <i>Ilex crenata</i> 'Steeds'                       | Upright Holly      | 4-5'        | Full Shape   |
| 52                     | <i>Ilex crenata</i> 'Steeds'                       | Upright Holly      | 5-6'        | Full Shape   |
| 6                      | <i>Viburnum opulus</i> 'Sterile'                   | Snowball Viburnum  | 7 gal.      |              |
| <b>2555 PERENNIALS</b> |  |                    |             |              |
| 40                     | <i>Agastache</i> 'Blue Fortune'                    | Agastache          | 1 gal.      |              |
| 715                    | <i>Calamagrostis acutiflora</i> 'Karl Foerster'    | Feather Reed Grass | 1 gal.      |              |
| 225                    | <i>Deschampsia cespitosa</i>                       | Tufted Hairgrass   | 1 gal.      |              |
| 850                    | <i>Carex pennsylvanica</i>                         | Sedge              | 1 gal.      |              |
| 108                    | <i>Muhlenbergia capillaris</i>                     | Pink Muhly Grass   | 1 gal.      |              |
| 170                    | <i>Pennisetum alopecuroides</i> 'Hameln'           | Fountain Grass     | 1 gal.      |              |
| 135                    | <i>Salvia 'Cavalana'</i>                           | Meadow Sage        | 1 gal.      |              |
| 107                    | <i>Perovskia</i> 'Little Spire'                    | Russian Sage       | 1 gal.      |              |
| 205                    | <i>Leucanthemum superbum</i>                       | Shasta Daisy       | 1 gal.      |              |

PROPOSED RELOCATED  
TEE BOX. LOCATION TBD.

PROPOSED RELOCATED  
TEE BOX.  
TBD.

(3) AMELANCHIER 'GRANDIFLORA  
'AUTUMN BRILLIANCE'  
(25) CALAMAGROSTIS ACUTIFLORA  
'KARL FOERSTER'  
(50) PENNSETUM ALOP. 'HAAMELN'  
(5) PEROVSKIA 'LITTLE SPIRE'  
(15) SALVIA CARADONNA  
(15) LEUCANTHEMUM SUPERBUM

(60) DESCHAMPSIA CESPITOSA  
(100) PENNSETUM ALOP. 'HAAMELN'  
(25) SALVIA CARADONNA  
(25) LEUCANTHEMUM SUPERBUM  
(30) CALAMAGROSTIS ACUTIFLORA  
'KARL FOERSTER'  
(5) PEROVSKIA 'LITTLE SPIRE'

(20) CALAMAGROSTIS ACUTIFLORA 'KARL  
FOERSTER'  
(5) MUHLENBERGIA CAPILLARIS  
(100) CALAMAGROSTIS ACUTIFLORA  
'KARL FOERSTER'  
(10) MUHLENBERGIA CAPILLARIS  
(20) PEROVSKIA 'LITTLE SPIRE'  
(40) LEUCANTHEMUM SUPERBUM  
(11) ILEX CRENATA 'STEEDS' 36-48"  
(11) ILEX CRENATA 'STEEDS' 36-48"

(6) PRUNUS X 'YOSHINO' 3.5-4"  
(6) HYDRANGEA QUERCIFOLIA

(250) CAREX PENNSYLVANICA  
(150) CALAMAGROSTIS ACUTIFLORA  
'KARL FOERSTER'  
(75) DESCHAMPSIA CESPITOSA  
(25) MUHLENBERGIA CAPILLARIS  
(20) AGASTACHE 'BLUE FORTUNE'  
(50) SALVIA CARADONNA  
(25) PEROVSKIA 'LITTLE SPIRE'  
(50) LEUCANTHEMUM SUPERBUM

(600) CAREX PENNSYLVANICA  
(250) CALAMAGROSTIS ACUTIFLORA  
'KARL FOERSTER'  
(100) DESCHAMPSIA CESPITOSA  
(50) MUHLENBERGIA CAPILLARIS  
(20) AGASTACHE 'BLUE FORTUNE'  
(50) SALVIA CARADONNA  
(25) PEROVSKIA 'LITTLE SPIRE'  
(50) LEUCANTHEMUM SUPERBUM

(40) CALAMAGROSTIS ACUTIFLORA 'KARL  
FOERSTER'  
(4) MUHLENBERGIA CAPILLARIS  
(50) CALAMAGROSTIS ACUTIFLORA 'KARL  
FOERSTER'  
(20) PENNSETUM ALOP. 'HAAMELN'  
(4) MUHLENBERGIA CAPILLARIS

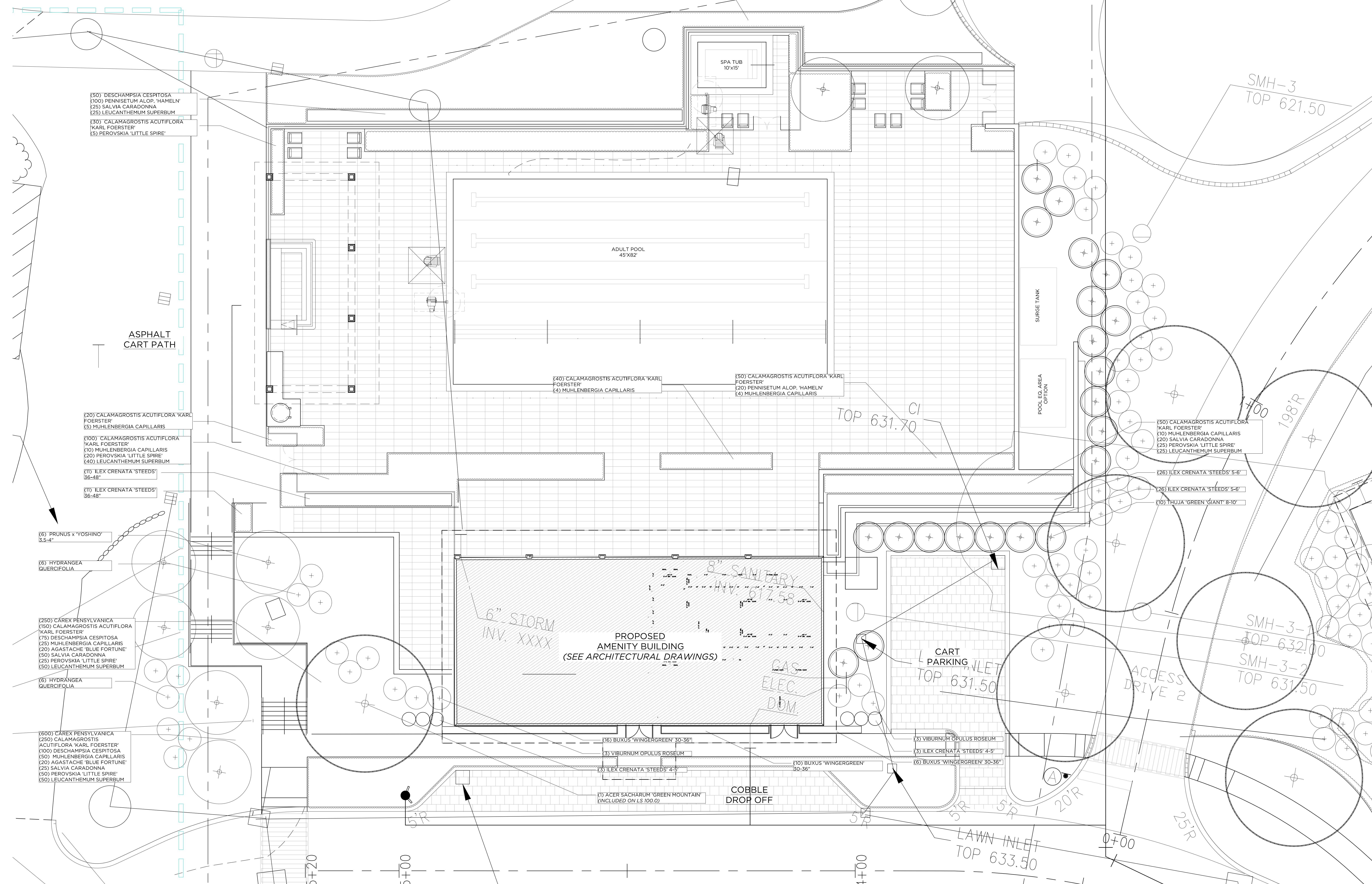
(50) CALAMAGROSTIS ACUTIFLORA  
'KARL FOERSTER'  
(10) MUHLENBERGIA CAPILLARIS  
(20) SALVIA CARADONNA  
(25) PEROVSKIA 'LITTLE SPIRE'  
(25) LEUCANTHEMUM SUPERBUM

(26) ILEX CRENATA 'STEEDS' 5-6'  
(26) ILEX CRENATA 'STEEDS' 5-6'  
(10) THUJA 'GREEN GIANT' 8-10'

PROPOSED AMENITY BUILDING  
(SEE ARCHITECTURAL DRAWINGS)

6" STORM INV. XXXX  
8" SANITARY INV. 617.58  
GAS ELEC. DDM.

(16) BUXUS 'WINTERGREEN' 30-36"  
(3) VIBURNUM OPULUS ROSEUM  
(3) ILEX CRENATA 'STEEDS' 4-5'  
(10) BUXUS 'WINTERGREEN' 30-36"  
(6) BUXUS 'WINTERGREEN' 30-36"  
(1) ACER SACHARUM 'GREEN MOUNTAIN' (INCLUDED ON LS 101.0)



AMENITIES BUILDING PLANTING PLAN

1/8" = 1'-0"

REVISIONS

| # | DATE       | REVISION DESCRIPTION      | BY: |
|---|------------|---------------------------|-----|
| 1 | 10/24/2022 | PLANNING BOARD SUBMISSION | KA  |
| 2 | 11/02/2022 | ARB SUBMISSION            | KA  |
| 3 | 01/30/2023 | PLANNING BOARD SUBMISSION | KA  |
| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

PHASE  
**PLANNING BOARD SUBMISSION**

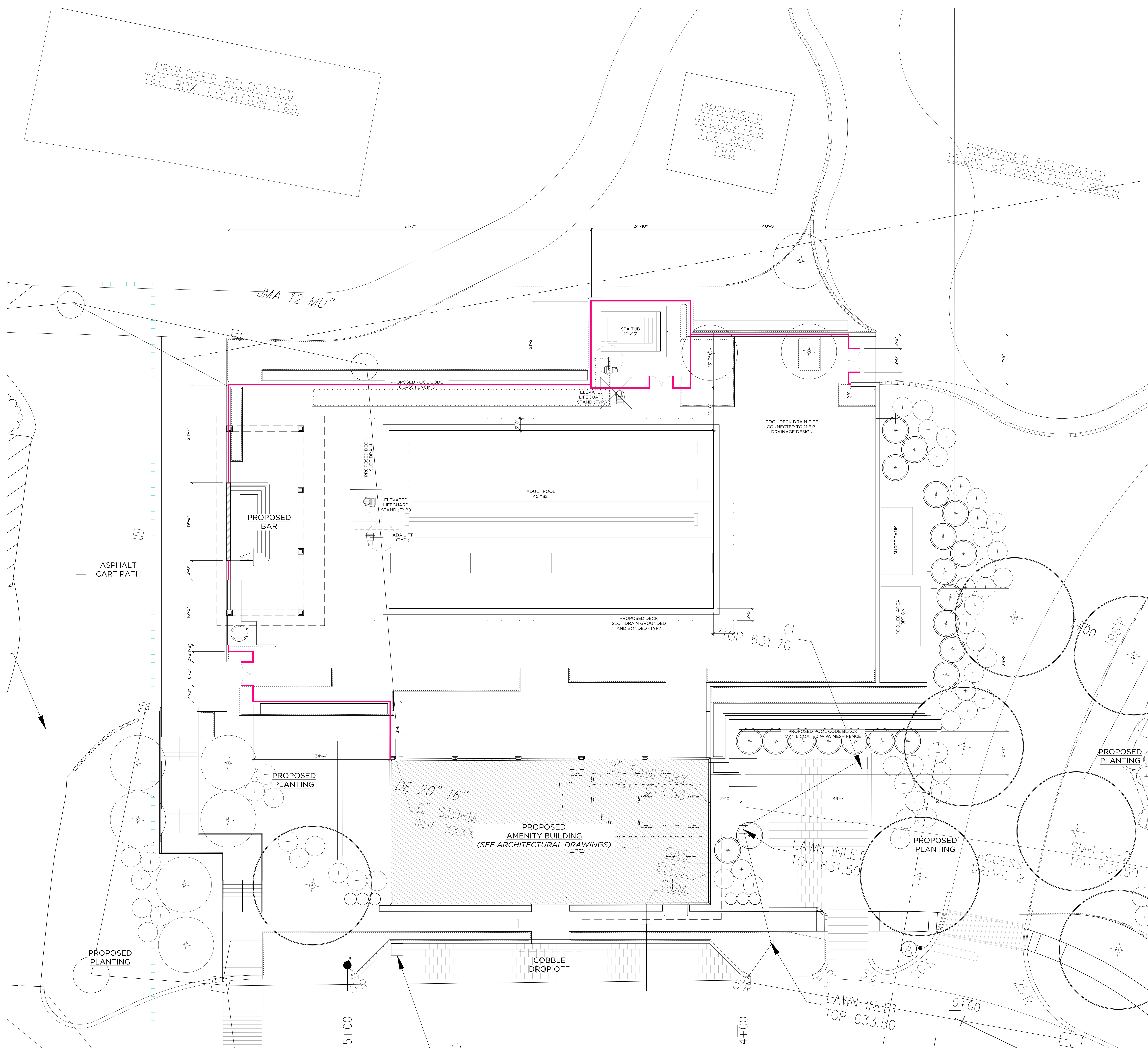
PROJECT NAME  
**SUMMIT CLUB**

ARMONK, NY  
 JOB NO.: ----  
 DRAWN BY: JS PROJ. MANAGER: KA  
 DATE: 01/30/2023 SCALE: AS NOTED  
 DRAWING TITLE  
**AMENITIES BUILDING - PLANTING PLAN**

DRAWING NO.

**LS 101.1**

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PHASE  
**PLANNING BOARD SUBMISSION**

PROJECT NAME  
**SUMMIT CLUB**

ARMONK, NY

JOB NO.: ----

DRAWN BY: **JS** PROJ. MANAGER: **KA**

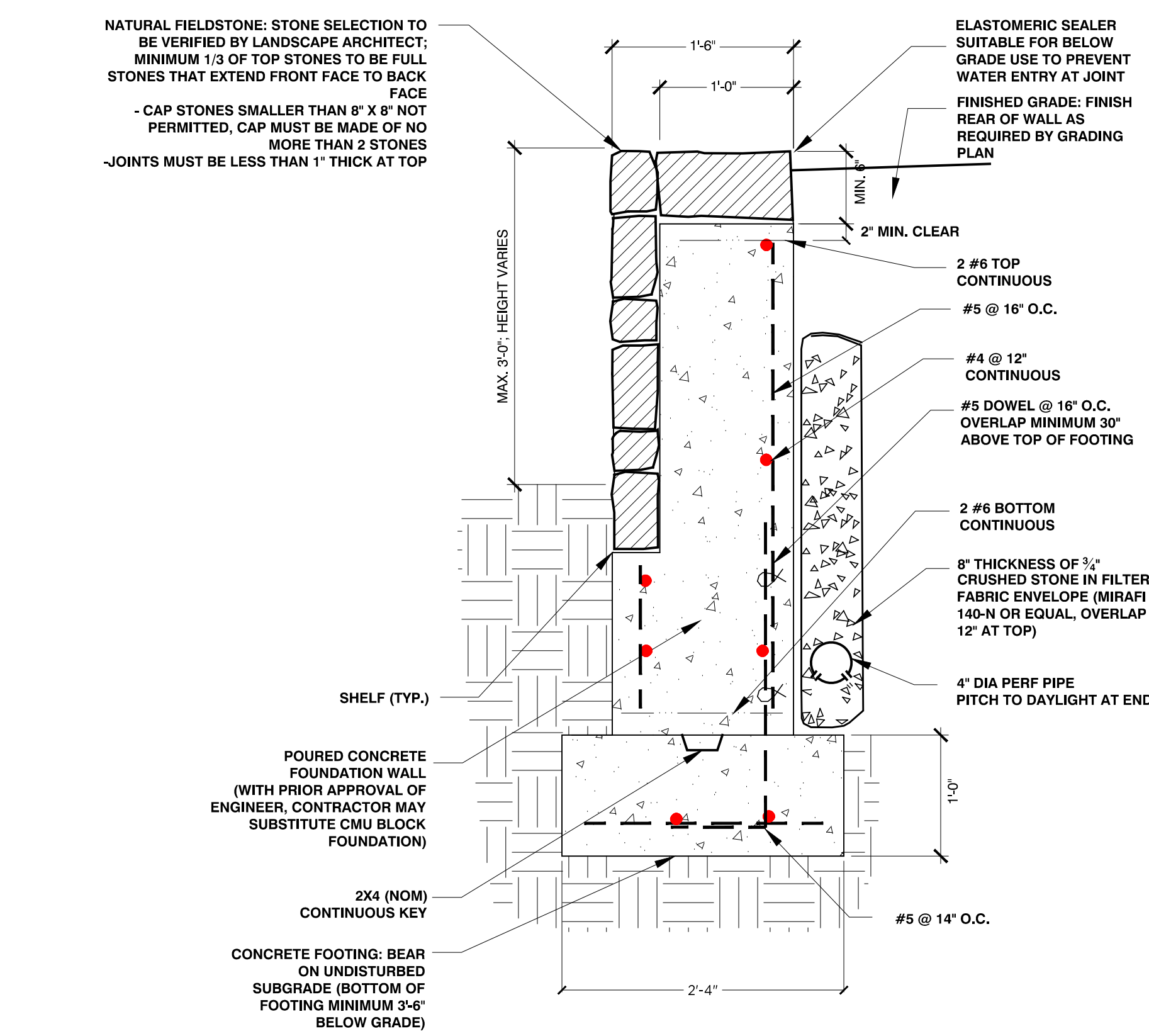
DATE: **01/30/2023** SCALE: AS NOTED

DRAWING TITLE  
**AMENITIES BUILDING - POOL FENCING PLAN**

DRAWING NO.  
**LS 101.2**

1/8" = 1'-0"

AMENITIES BUILDING POOL PATIO LAYOUT PLAN

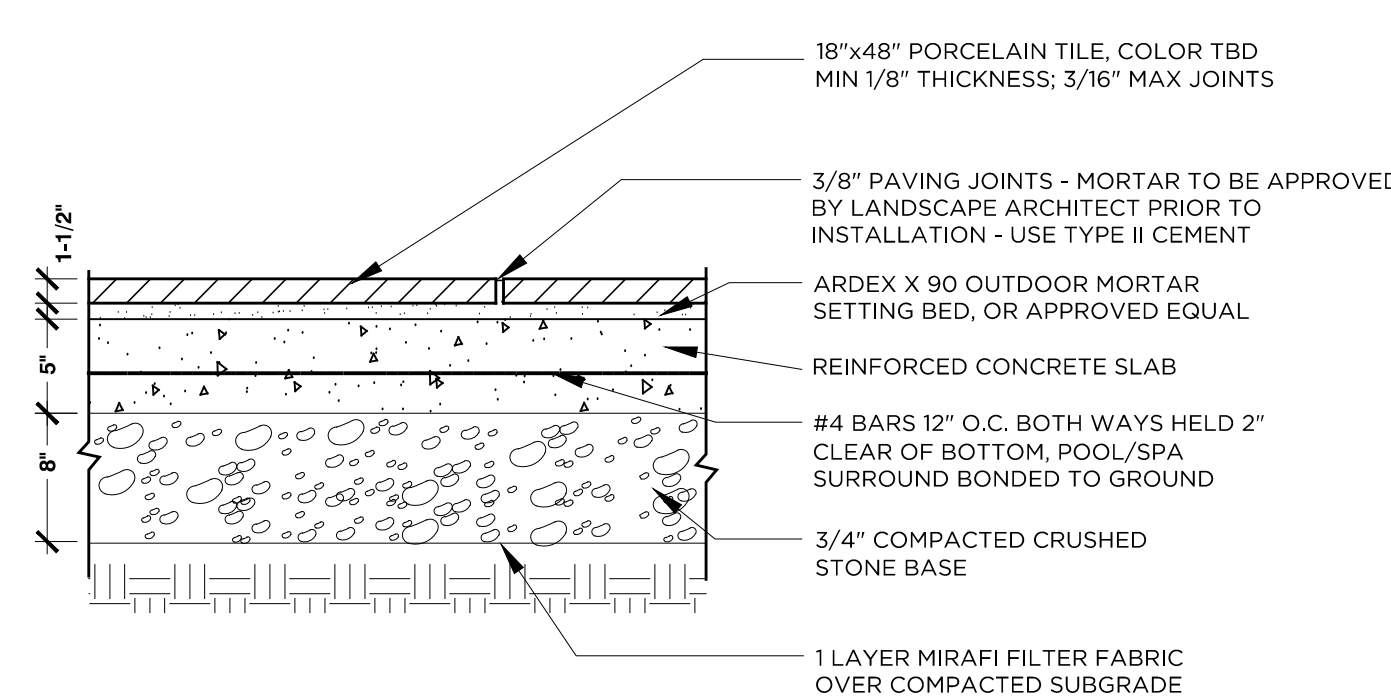


1 STONE VENEER RETAINING WALL 0' - 3' DETAIL

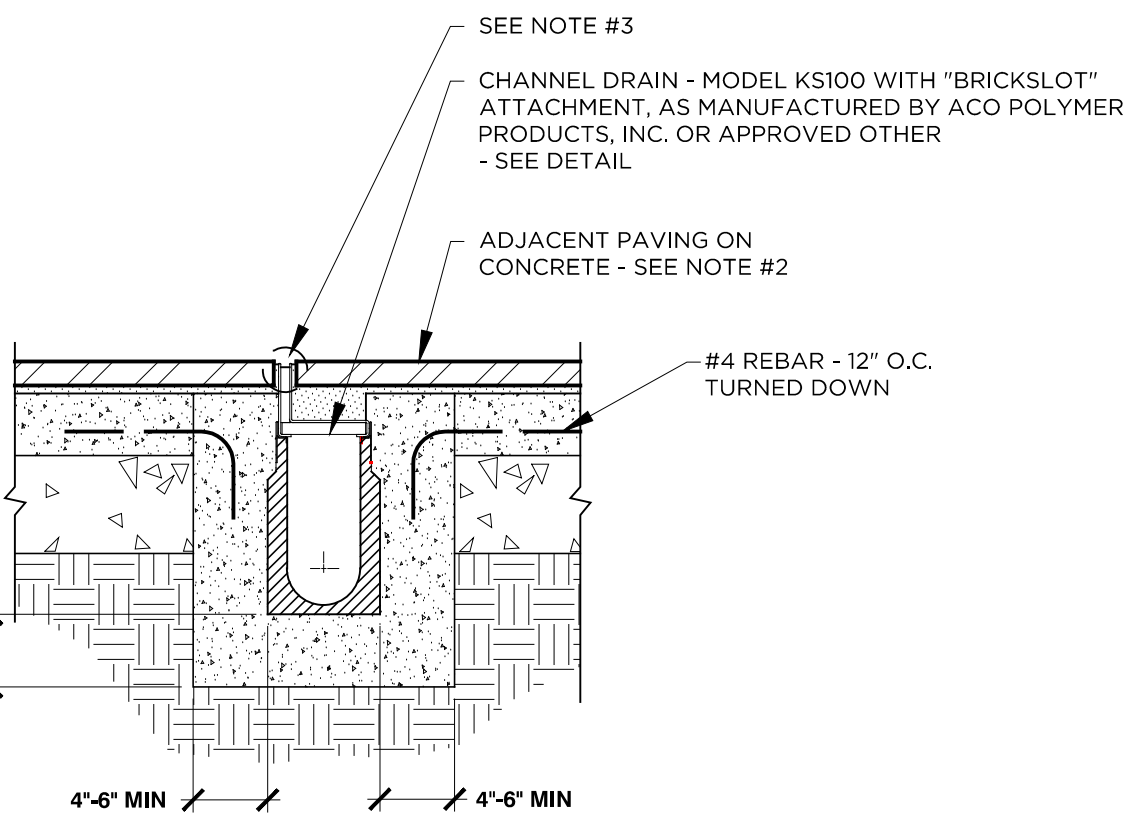


PORCELAIN TILE INTENT - COLOR TBD

4 PORCELAIN TILE ON REINFORCED CONCRETE SLAB DETAIL

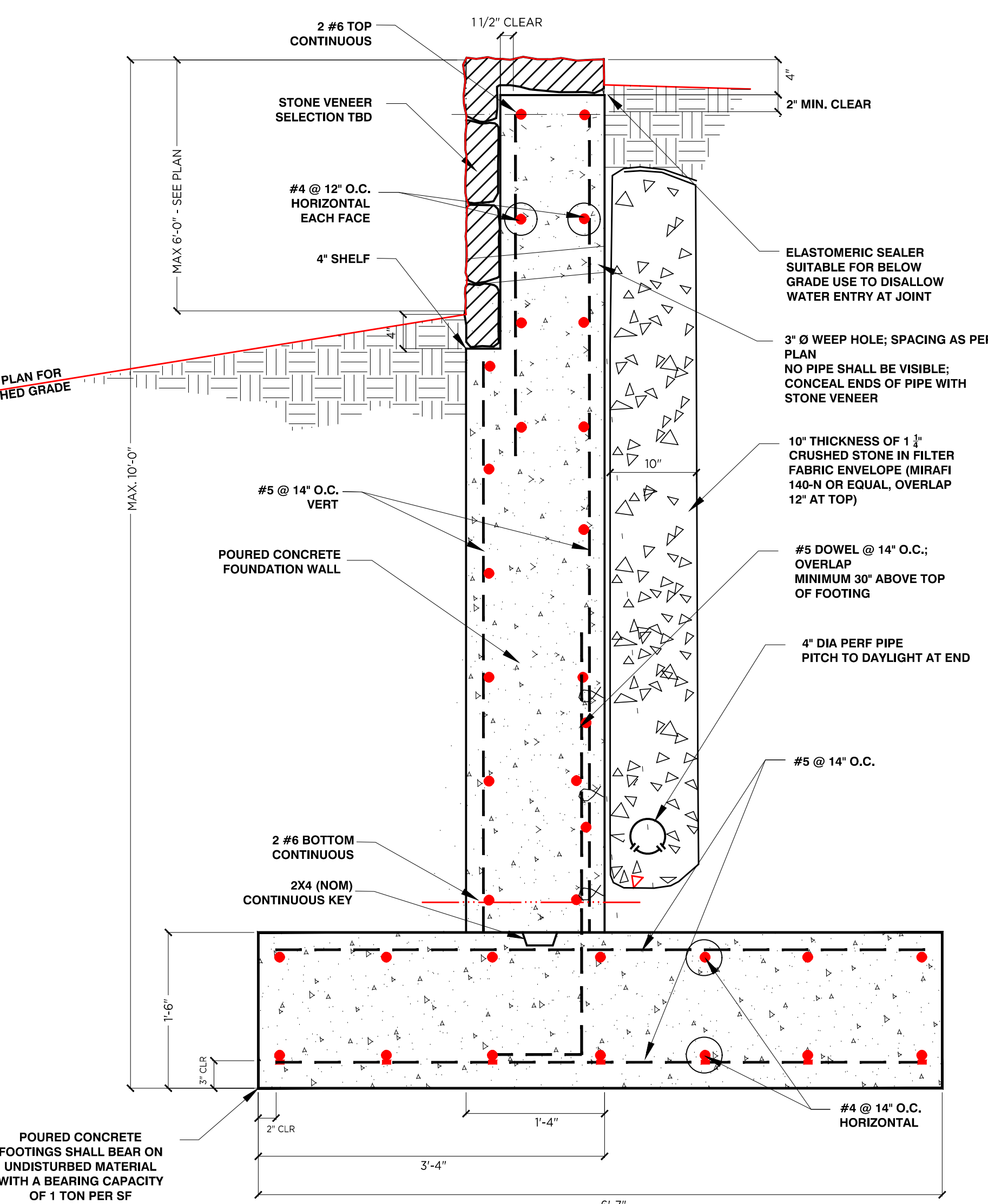


- NOTES:  
 1. ALL CONCRETE SLABS MUST BE SUPPORTED ON HAUNCHES FROM ADJOINING WALLS AND SWIMMING POOL AND/OR PIERS TO UNDISTURBED DUE TO PRESENCE OF LOOSE FILL ON SITE.  
 2. CONTRACTOR SHALL SUBMIT STONE SAMPLE FOR APPROVAL BY L.A. PRIOR TO INSTALLATION.  
 3. CONTRACTOR SHALL FURNISH 6\"/>



- NOTES:  
 1. CONCRETE SHALL BE A MINIMUM STRENGTH OF 3000 PSI AND SHALL BE VIBRATED TO ELIMINATE AIR POCKETS.  
 2. THE PAVER COURSE ADJACENT TO THE CHANNEL EDGE MUST BE FULLY BONDED TO THE CONCRETE SURROUND.  
 3. THE FINISHED LEVEL OF THE PAVEMENT SURROUND MUST BE APPROX. 1/8\"/>

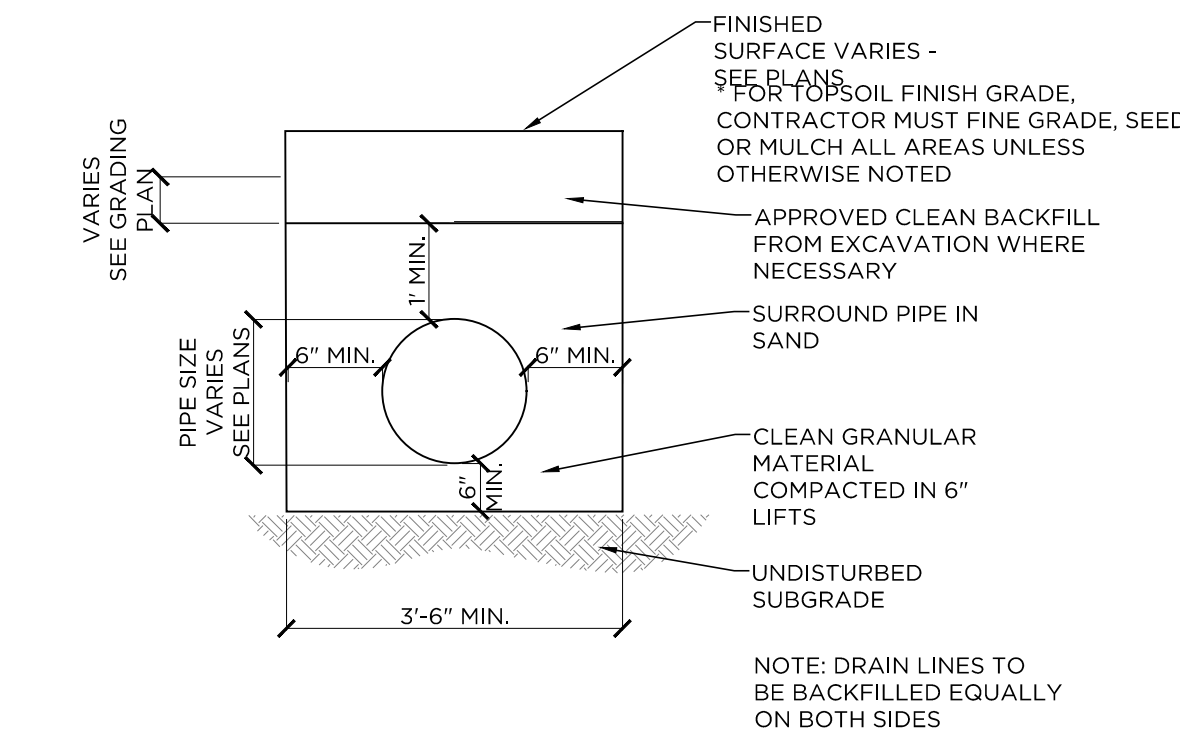
5 POOL PERIMETER OVERFLOW DRAIN DETAIL



2 STONE VENEER RETAINING WALL 3' - 6' DETAIL

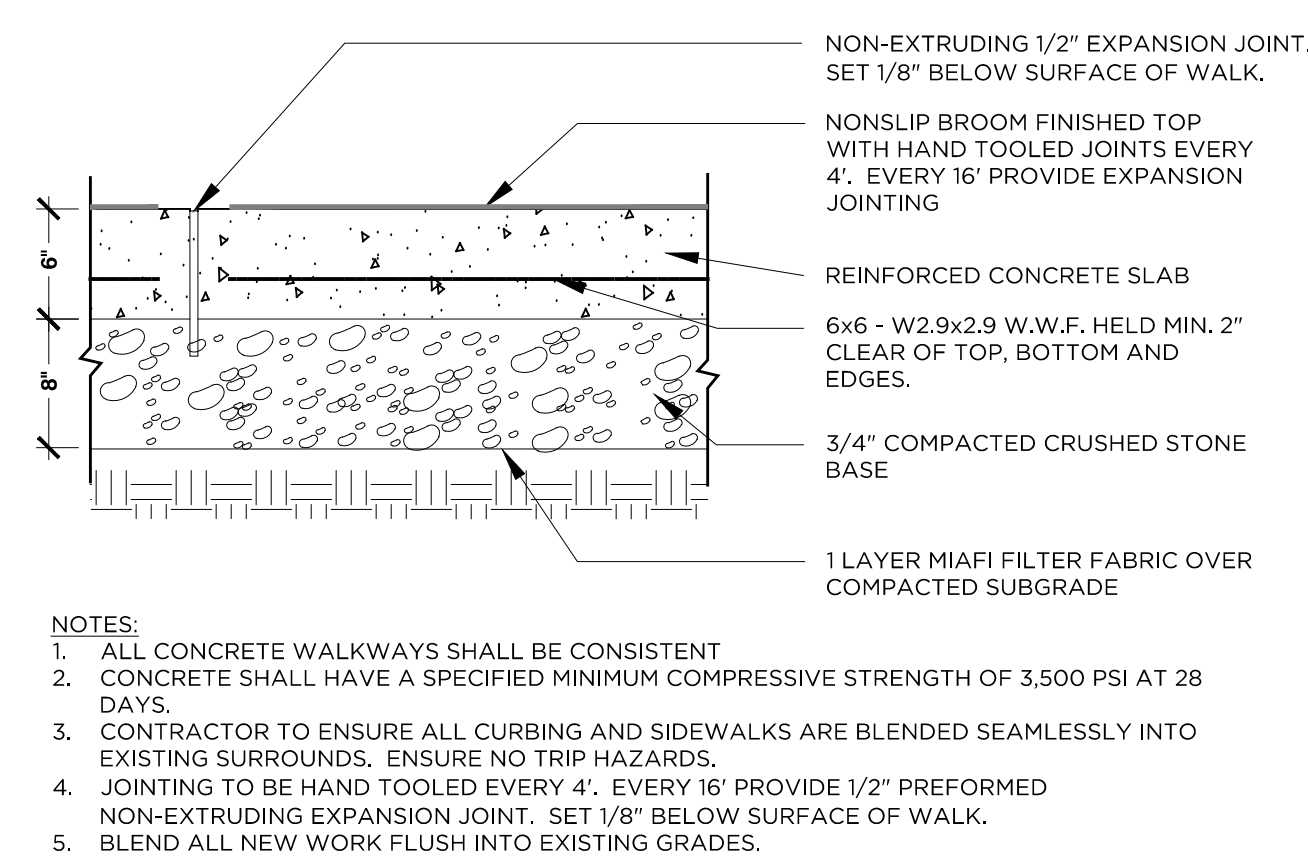
STONE VENEER INTENT

6 TYPICAL DRAINAGE LINE DETAIL



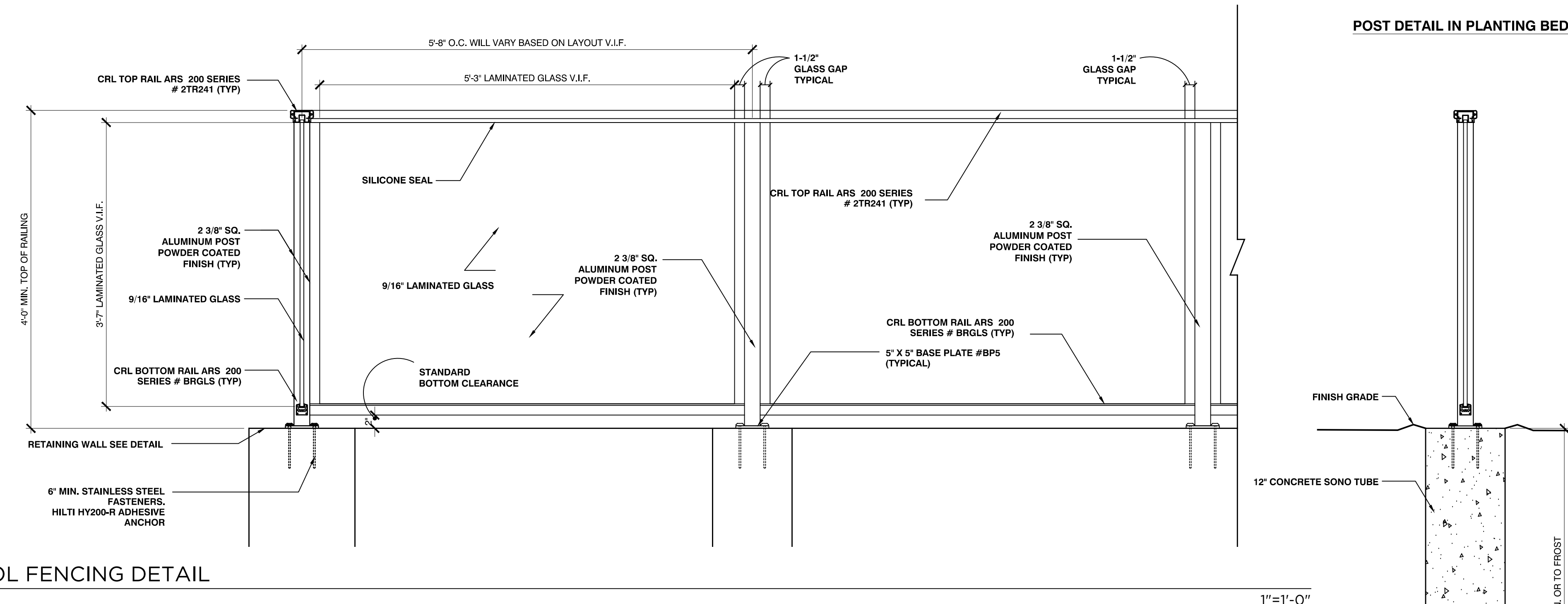
- NOTE: DRAIN LINES TO BE BACKFILLED EQUALLY ON BOTH SIDES.

3 CONCRETE SIDEWALK DETAIL



- NOTES:  
 1. CONCRETE WALKWAYS SHALL BE CONSISTENT.  
 2. CONCRETE SHALL HAVE A SPECIFIED MINIMUM COMPRESSIVE STRENGTH OF 3,500 PSI AT 28 DAYS.  
 3. CONTRACTOR TO ENSURE ALL CURBING AND SIDEWALKS ARE BLENDED SEAMLESSLY INTO EXISTING SURROUNDS. ENSURE NO TRIP HAZARDS.  
 4. JOINTING TO BE HAND TOoled EVERY 4'. EVERY 8' PROVIDE 1/2\"/>

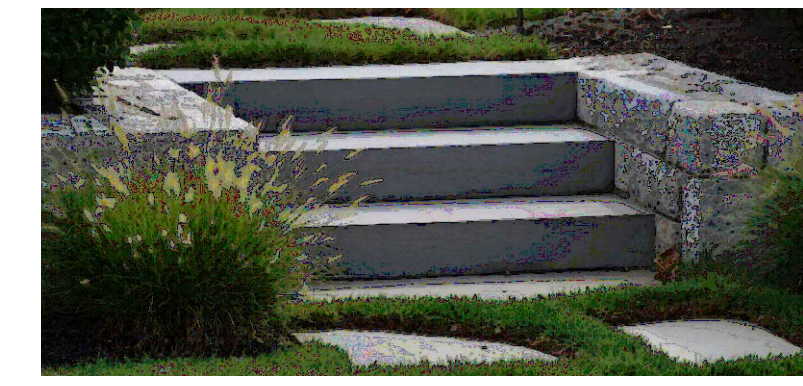
7 POOL FENCING DETAIL



- NOTES:  
 1. ALL POOL FENCING, GATES AND HARDWARE SHALL BE IN COMPLIANCE WITH POOL CODE FOR COMMERCIAL APPLICATIONS.  
 2. DETAIL IS BASED ON C.R. LAURENCE FENCING SYSTEM COMPONENTS, SUBMIT SHOP DRAWINGS FOR APPROVAL.  
 3. PRIOR TO ORDERING GLASS, CONTRACTOR SHALL LAY OUT FENCING LOCATION AND MARK POST LAYOUT FOR APPROVAL BY LANDSCAPE ARCHITECT. POSTS SHOULD BE LAID OUT WITH A TYPICAL DIMENSION, SOME PANELS WILL VARY BASED ON LAYOUT.

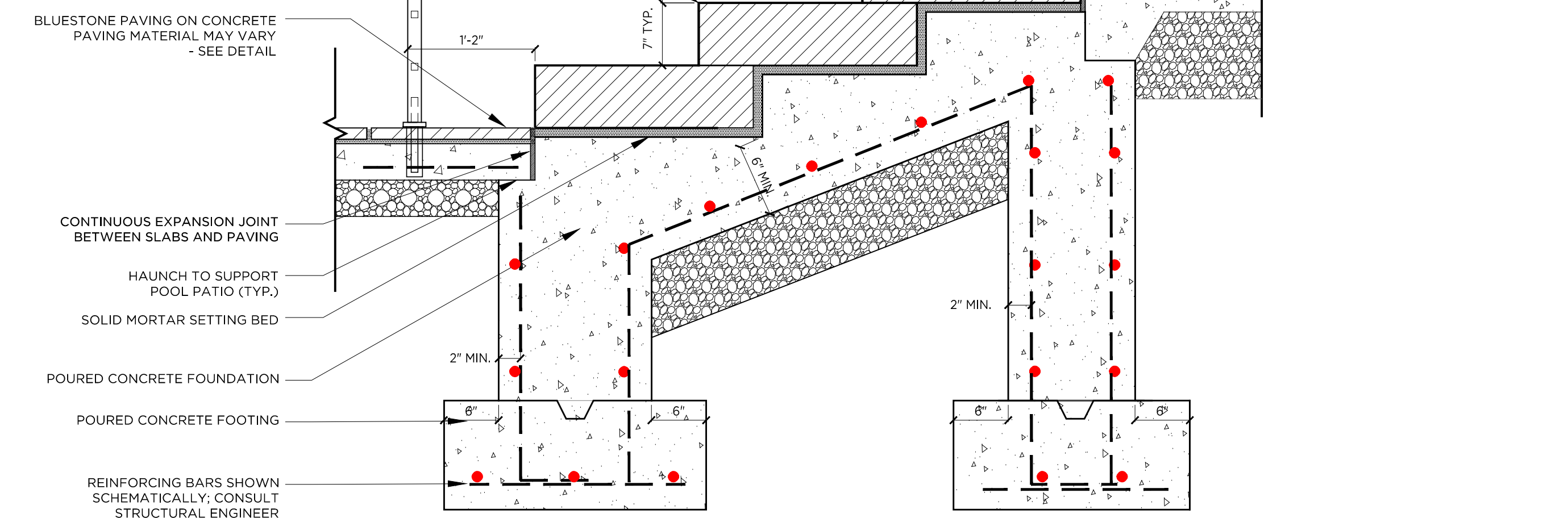
8 MONOLITHIC STONE STEPS ON REINFORCED CONCRETE

NTS



SLAB STEP INTENT

- 7\"/>



- NOTES:  
 1. REINFORCING SHOWN IS SCHEMATIC. CONSTRUCT STEP FOUNDATIONS/REINFORCING CONTINUOUS WITH ANY ADJACENT PROPOSED WALL FOUNDATIONS/REINFORCING (NOT SHOWN). SUBMIT PHOTOS OF STONE SLABS PRIOR TO PROCUREMENT.  
 2. ALL STONE SLABS MUST BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.  
 3. WITH PRIOR APPROVAL OF STRUCTURAL ENGINEER, CONTRACTOR MAY SUBSTITUTE REINFORCED CONCRETE BLOCK FOUNDATION CONSTRUCTION.  
 4. EXPANSION JOINT.  
 5. INSTALL POLYETHYLENE FOAM EXP. JOINT FILLER: HARRISTRIP-OFF OR EQUAL.  
 6. SEAL JOINTS TO WITHIN 1/8\"/>

| # | DATE       | REVISION DESCRIPTION      | BY: |
|---|------------|---------------------------|-----|
| 1 | 10/24/2022 | PLANNING BOARD SUBMISSION | KA  |
| 2 | 11/02/2022 | ARB SUBMISSION            | KA  |
| 3 | 01/30/2023 | PLANNING BOARD SUBMISSION | KA  |
| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

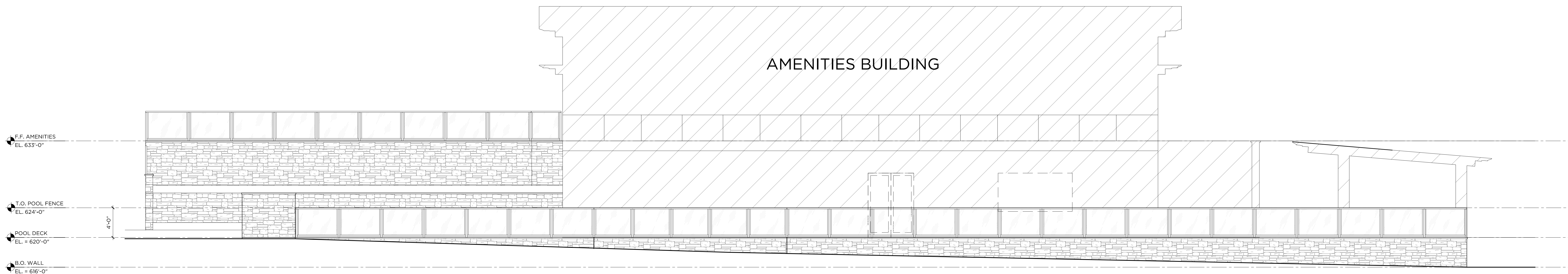
PHASE  
**PLANNING BOARD SUBMISSION**

PROJECT NAME  
**SUMMIT CLUB**

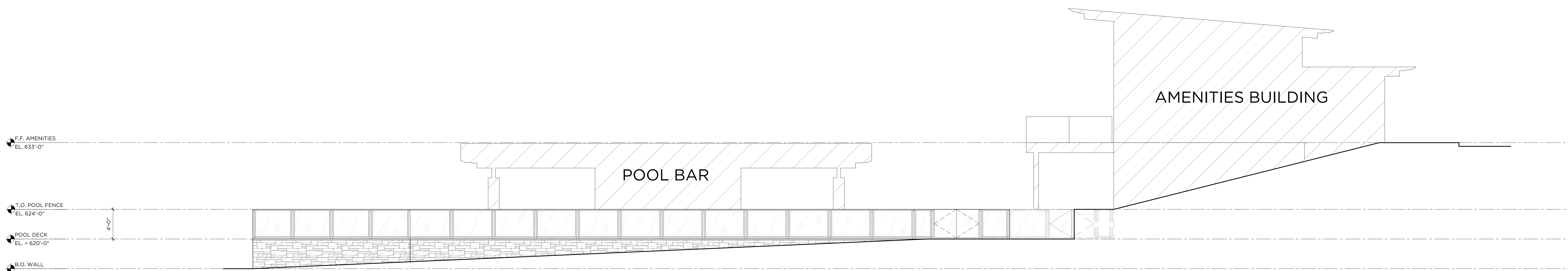
ARMONK, NY  
 JOB NO.: ----  
 DRAWN BY: JS PROJ. MANAGER: KA  
 DATE: 01/30/2023 SCALE: AS NOTED  
 DRAWING TITLE  
**AMENITIES BUILDING - DETAILS**

DRAWING NO.

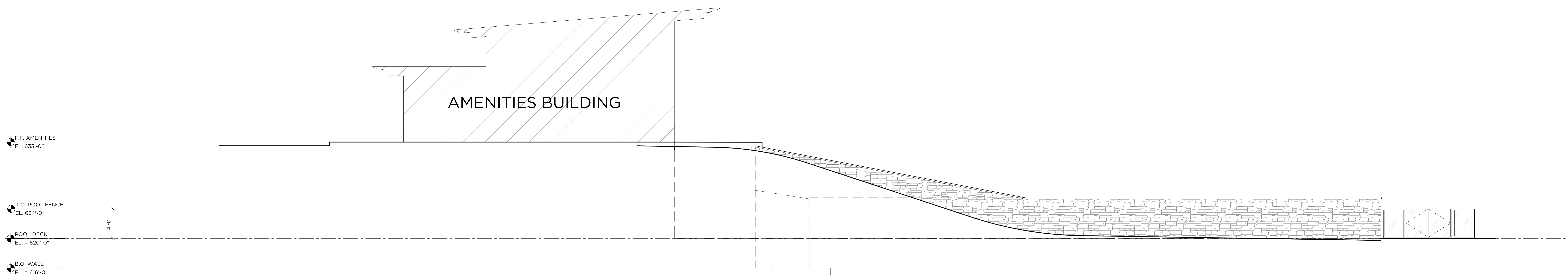
**LS 101.3**



**1 WEST ELEVATION - POOL TERRACE**  
 3/16"=1'-0"



**2 SOUTH ELEVATION - POOL TERRACE**  
 3/16"=1'-0"



**3 NORTH ELEVATION - POOL TERRACE**  
 3/16"=1'-0"

NOTES:  
 SEE LS 101.4 FOR MORE INFORMATION.

NOTES:  
 SEE LS 101.4 FOR MORE INFORMATION.

NOTES:  
 SEE LS 101.4 FOR MORE INFORMATION.

| # | DATE       | REVISION DESCRIPTION      | BY: |
|---|------------|---------------------------|-----|
| 1 | 10/24/2022 | PLANNING BOARD SUBMISSION | KA  |
| 2 | 11/02/2022 | ARB SUBMISSION            | KA  |
| 3 | 01/30/2023 | PLANNING BOARD SUBMISSION | KA  |
| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

PHASE:  
**PLANNING BOARD  
 SUBMISSION**

PROJECT NAME:  
**SUMMIT CLUB**

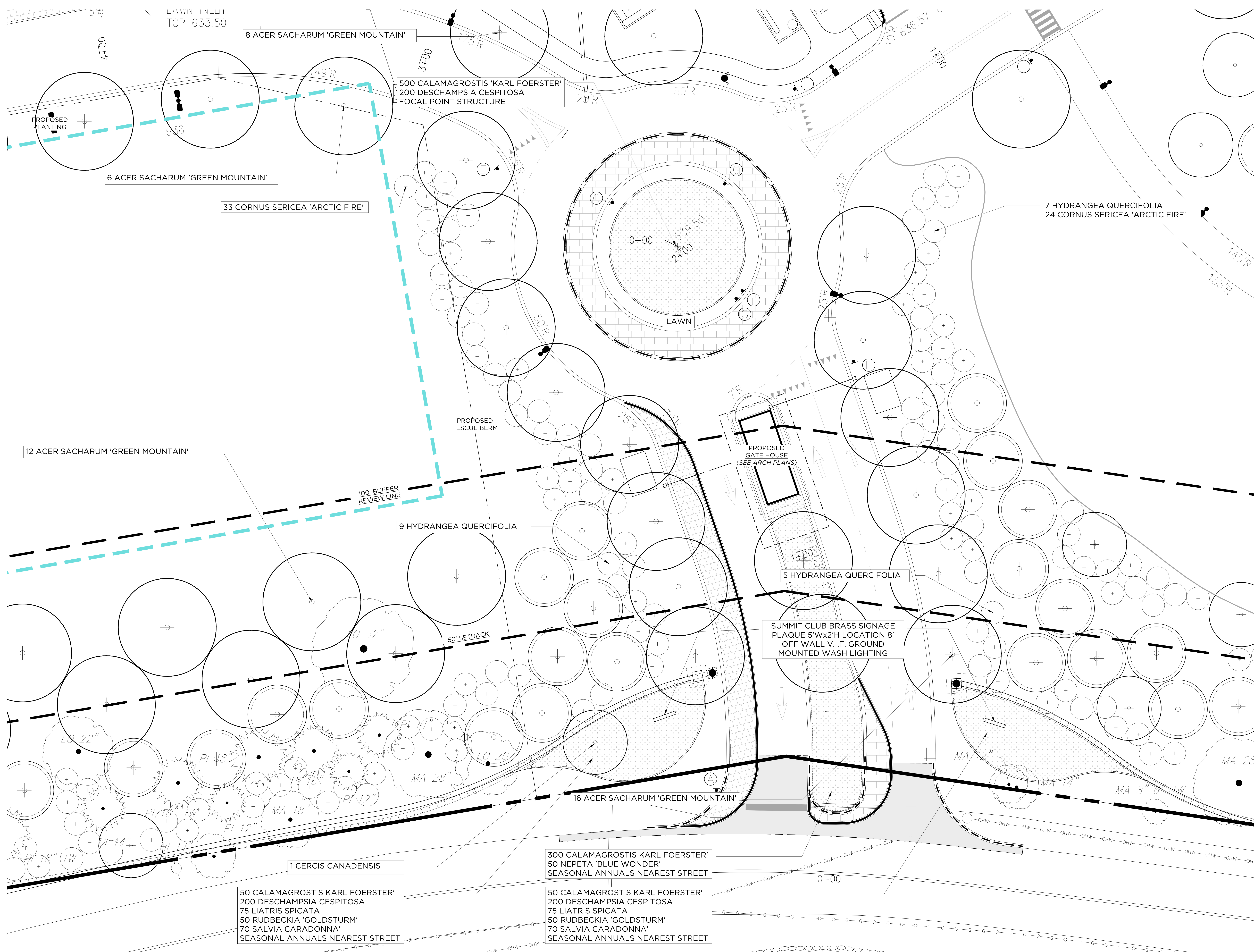
ARMONK, NY  
 JOB NO.: ----  
 DRAWN BY: **JS** PROJ. MANAGER: **KA**  
 DATE: **01/30/2023** SCALE: AS NOTED

DRAWING TITLE:  
**AMENITIES BUILDING - POOL DECK  
 ELEVATIONS**

DRAWING NO.

**LS 101.4**

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MAIN ENTRY PLANTING PLAN

1" = 10'-0"

| # | DATE       | REVISION DESCRIPTION      | BY: |
|---|------------|---------------------------|-----|
| 1 | 10/24/2022 | PLANNING BOARD SUBMISSION | KA  |
| 2 | 11/02/2022 | ARB SUBMISSION            | KA  |
| 3 | 01/30/2023 | PLANNING BOARD SUBMISSION | KA  |
| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

PHASE  
**PLANNING BOARD SUBMISSION**

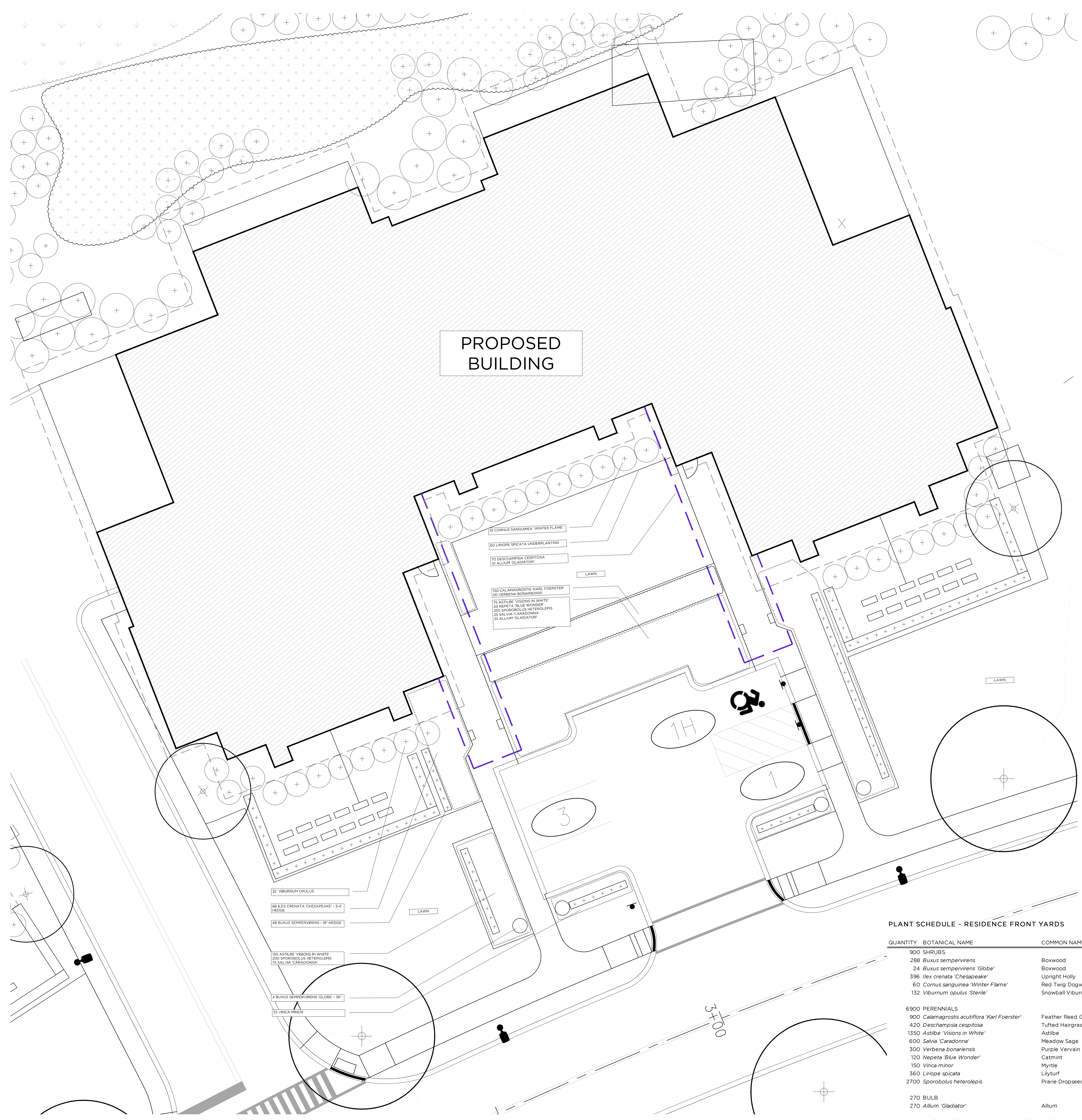
PROJECT NAME  
**SUMMIT CLUB**

ARMONK, NY  
 JOB NO.:  
 DRAWN BY: JS PROJ. MANAGER: KA  
 DATE: 01/30/2023 SCALE: AS NOTED  
 DRAWING TITLE  
**MAIN ENTRY - PLANTING PLAN**

DRAWING NO.  
**LS 102**

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PROPOSED BUILDING

PLANT SCHEDULE - RESIDENCE FRONT YARDS

| QUANTITY               | BOTANICAL NAME                                  | COMMON NAME        | SIZE   | REMARKS       |
|------------------------|---|--------------------|--------|---------------|
| <b>900 SHRUBS</b>      |   |                    |        |               |
| 288                    | <i>Buxus sempervirens</i>                       | Boxwood            | 16"    | Hedge quality |
| 24                     | <i>Buxus sempervirens</i> 'Globe'               | Boxwood            | 36"    | Full round    |
| 396                    | <i>Ilex crenata</i> 'Chesapeake'                | Upright Holly      | 3'-4'  | Full Shape    |
| 60                     | <i>Cornus sanguinea</i> 'Winter Flame'          | Red Twig Dogwood   | 5 gal. | Full Shape    |
| 132                    | <i>Viburnum opulus</i> 'Sterile'                | Snowball Viburnum  | 7 gal. |               |
| <b>6900 PERENNIALS</b> |   |                    |        |               |
| 900                    | <i>Calamagrostis acutiflora</i> 'Karl Foerster' | Feather Reed Grass | 1 gal  |               |
| 420                    | <i>Deschampsia cespitosa</i>                    | Tufted Hairgrass   | 1 gal  |               |
| 1350                   | <i>Astilbe</i> 'Visions in White'               | Astilbe            | 1 gal  |               |
| 600                    | <i>Salvia 'Cavatina'</i>                        | Meadow Sage        | 1 gal  |               |
| 300                    | <i>Verbena bonariensis</i>                      | Purple Vervain     | 1 gal  |               |
| 120                    | <i>Nepeta</i> 'Blue Wonder'                     | Catmint            | 1 gal  |               |
| 150                    | <i>Vinca minor</i>                              | Myrtle             | 1 gal  |               |
| 360                    | <i>Lilium spicata</i>                           | Lilyturf           | 1 gal  |               |
| 2700                   | <i>Sporobolus heterolepis</i>                   | Prarie Dropseed    | 1 gal  |               |
| <b>270 BULB</b>        |   |                    |        |               |
| 270                    | <i>Allium 'Glauciatum'</i>                      | Allium             | Bulb   |               |

NOTE: Qty shown for 6 total buildings. To get plant qty allocated for 1 building divide by 6.

REVISIONS

| # | DATE       | REVISION DESCRIPTION      | BY: |
|---|------------|---------------------------|-----|
| 1 | 10/24/2022 | PLANNING BOARD SUBMISSION | KA  |
| 2 | 11/02/2022 | ARB SUBMISSION            | KA  |
| 3 | 01/30/2023 | PLANNING BOARD SUBMISSION | KA  |
| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

PHASE  
**PLANNING BOARD SUBMISSION**

PROJECT NAME  
**SUMMIT CLUB**

ARMONK, NY  
 JOB NO.: ----  
 DRAWN BY: JS PROJ. MANAGER: KA  
 DATE: 01/30/2023 SCALE: AS NOTED

DRAWING TITLE  
**RESIDENTIAL BUILDING - TYPICAL PLANTING PLAN**

DRAWING NO.  
**LS 103.1**



**PLANT SCHEDULE - DETENTION BASIN**

| QUANTITY                  | BOTANICAL NAME                                  | COMMON NAME        | SIZE        | REMARKS         |
|---------------------------|---|--------------------|-------------|-----------------|
| <b>18 TREES</b>           |   |                    |             |                 |
| 13                        | <i>Amelanchier canadensis</i>                   | Serviceberry       | 10-12"      | Multi stem      |
| 5                         | <i>Quercus palustris</i>                        | Pin Oak            | 4-4.5" cal. | Upland Slope    |
| <b>143 SHRUBS</b>         |   |                    |             |                 |
| 42                        | <i>Ilex verticillata</i> 'Winter Red'           | Winterberry        | 4-5'        | B&B             |
| 35                        | <i>Lindera benzoin</i>                          | Northern Spicebush | 4-5'        |                 |
| 66                        | <i>Viburnum dentatum</i>                        | Arrowwood          | 10 gal.     |                 |
| <b>8975 PERENNIALS</b>    |   |                    |             |                 |
| 1075                      | <i>Andropogon gerardii</i>                      | Big Bluestem       | 2 gal       |                 |
| 550                       | <i>Echinacea purpurea</i> 'White Swan'          | Coneflower         | 1 gal       |                 |
| 300                       | <i>Nepeta</i> 'Blue Wonder'                     | Catmint            | 1 gal       |                 |
| 1650                      | <i>Calamagrostis acutiflora</i> 'Karl Foerster' | Feather Reed Grass | 1 gal       |                 |
| 3450                      | <i>Deschampsia cespitosa</i>                    | Tufted Hairgrass   | 1 gal       |                 |
| 200                       | <i>Perovskia</i> 'Little Spire'                 | Russian Sage       | 1 gal       |                 |
| 350                       | <i>Loebelia cardinalis</i>                      | Cardinal Flower    | 1 gal       |                 |
| 1400                      | <i>Panicum virgatum</i>                         | Switchgrass        | 2 gal       |                 |
| 300                       | <i>Salvia</i> 'Caradonna'                       | Meadow Sage        | 1 gal       |                 |
| <b>16,000 SF SEED MIX</b> |   |                    |             |                 |
| 70%                       | <i>Carex pennsylvanica</i>                      | Sedge              | seed        | Detention Basin |
| 30%                       | <i>Juncus effusus</i>                           | Soft Rush          | seed        | Detention Basin |

REVISIONS

| # | DATE       | REVISION DESCRIPTION      | BY: |
|---|------------|---------------------------|-----|
| 1 | 10/24/2022 | PLANNING BOARD SUBMISSION | KA  |
| 2 | 11/02/2022 | ARB SUBMISSION            | KA  |
| 3 | 01/30/2023 | PLANNING BOARD SUBMISSION | KA  |
| 4 | 07/24/2023 | CIVIL BACKGROUND UPDATE   | KA  |

PHASE  
**PLANNING BOARD SUBMISSION**

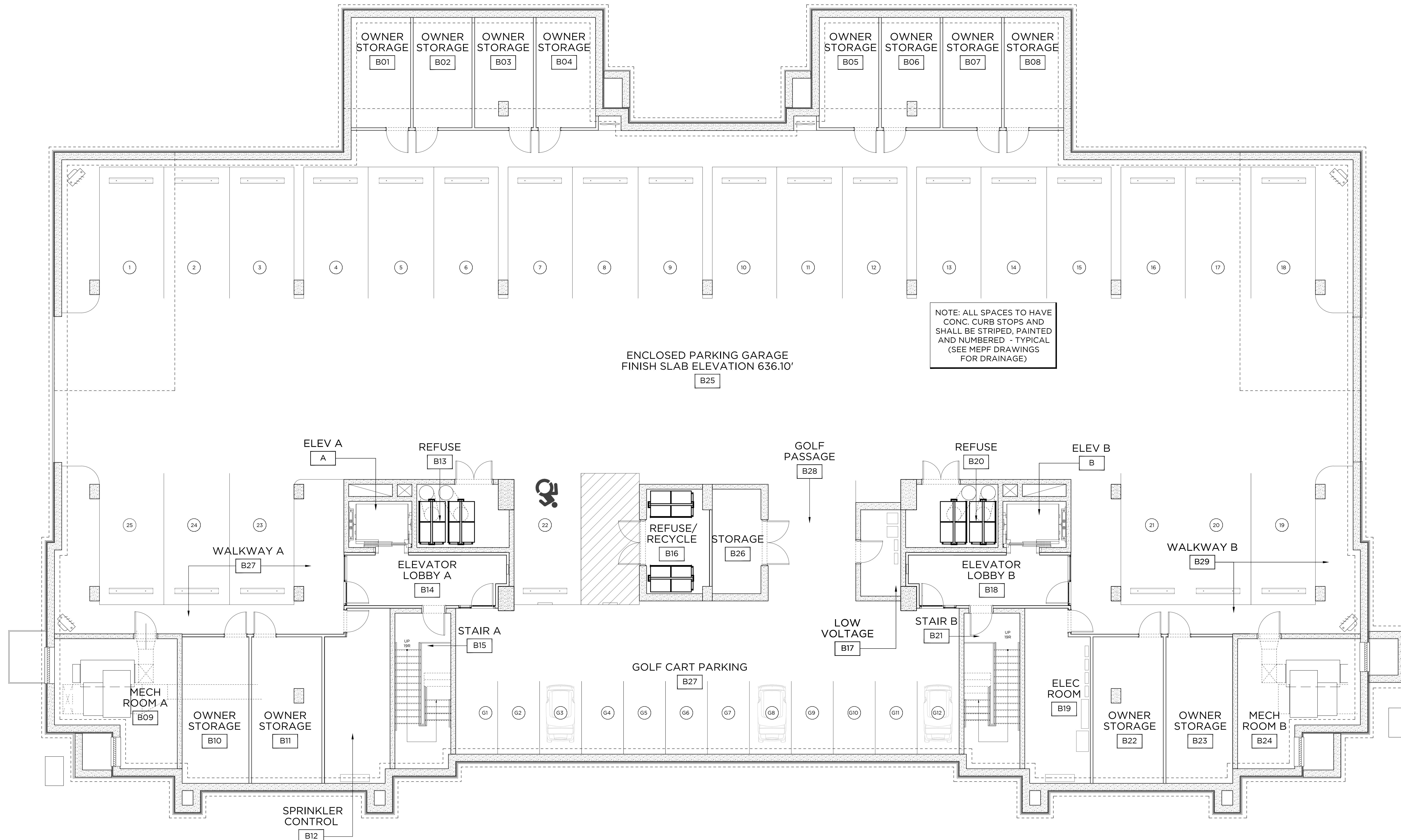
PROJECT NAME  
**SUMMIT CLUB**

ARMONK, NY  
 JOB NO.: ----  
 DRAWN BY: **JS** PROJ. MANAGER: **KA**  
 DATE: **01/30/2023** SCALE: AS NOTED  
 DRAWING TITLE  
**DETENTION BASIN PLANTING PLAN**

DRAWING NO.

**LS 104**

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NOTE: ALL SPACES TO HAVE CONC. CURB STOPS AND SHALL BE STRIPED, PAINTED AND NUMBERED - TYPICAL (SEE MEFP DRAWINGS FOR DRAINAGE)

**Density Unit Calculation:**  
 Site:  
 Lot 1= 129.95872 acres  
 Lot 2= 26.34421 acres  
 Total Site = 156.30293 acres x 43,560sf/ac = (6,808,555.6308 sf) / 133,000=51.921476  
 51 Density Units Available  
 39 Density Units Proposed (COMPLIES)

**Dwelling Unit Calculation:**  
 Site:  
 Total Site Area=156.30293 acres / 18 Acres = 86.834961  
 87 Dwelling Units Available (88 Studied in the EIS)  
 72 Dwelling Units Proposed (COMPLIES)  
 73 Dwelling Units Previously Approved

**Minimum Unit Sizes:**  
 Market Rate Units  
 Efficiency: 450 sf Min. N/A  
 One-Bedroom: 700 sf Min. N/A  
 Two-Bedroom: 900 sf 2,377 sf is smallest (complies)  
 Three-Bedroom: 1,100 sf 2,997 sf is smallest (complies)  
 AFFH Units\*\*  
 Efficiency: 450 sf Min. N/A  
 One-Bedroom: 700 sf Min. N/A  
 Two-Bedroom: 900 sf 2,377 sf is smallest (complies)  
 Three-Bedroom: 1,100 sf 2,997 sf is smallest (complies)

\*\*AFFH UNITS IDENTICAL TO MARKET RATE UNITS.  
**Density Unit Definition:**  
 A density unit is defined as being equal to one or a proportionate combination of the following:

- A. One one-family detached dwelling unit.
- B. One dwelling unit containing four or more bedrooms in a permitted type of dwelling other than a one-family detached unit.
- C. One and one-half dwelling units containing three bedrooms each in permitted dwellings other than one-family detached units.
- D. Two dwelling units containing two bedrooms each in permitted dwellings other than one-family detached units.
- E. Two and one-half dwellings containing one bedroom or less each in permitted dwellings other than one-family detached units.
- F. Three efficiency dwelling units in permitted dwellings other than one-family detached units

[2]Density. The maximum permitted density shall not exceed one density unit, as defined in § 355-4 of this chapter, per 133,000 square feet of the aggregate total lot area (as defined in § 355-4 of this chapter) in the GCCFO District and one dwelling unit, as defined in § 355-4 of this chapter, per 18 acres of the aggregate total lot area (as defined in § 355-4 of this chapter) in the GCCFO District.  
 [2] Editor's Note: Former Subsection D(1), regarding lots and dwelling units in the GCCFO District, was repealed 3-27-2019 by L.L. No. 2-2019. This local law also renumbered former Subsections D(2) through D(6) as Subsections D(1) through D(5), respectively.

**AFFH UNIT MIX**

| UNIT / BEDROOM COUNT          | MARKET RATE Units                            | AFFH Units                                 | TOTAL bedrooms      |
|-------------------------------|--|--|---------------------|
| BUILDING 1 (3 STORY) 12 UNITS | (5) 3 BEDROOMS & (6) 2 BEDROOMS              | (1) 3 BEDROOM (UNIT 101)                   | 30 BEDROOMS/BLDG    |
| BUILDING 2 (3 STORY) 12 UNITS | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 3 (3 STORY) 12 UNITS | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 4 (3 STORY) 12 UNITS | (5) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 3 BEDROOM (UNIT 101)                   | 30 BEDROOMS/BLDG    |
| BUILDING 5 (3 STORY) 12 UNITS | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 6 (3 STORY) 12 UNITS | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| <b>TOTALS</b>                 | <b>(34) 3 BEDROOMS &amp; (31) 2 BEDROOMS</b> | <b>(2) 3 BEDROOMS &amp; (5) 2 BEDROOMS</b> | <b>180 BEDROOMS</b> |
|                               | 65 MARKET RATE UNITS                         | 7 AFFH UNITS                               |                     |

| DENSITY UNITS  | 42 UNITS | (36) 3 BEDROOMS = 12 DENSITY UNITS<br>(36) 2 BEDROOMS = 27 DENSITY UNITS | (36 / 3) X 2 = 24<br>36 / 2 = 18 |
|----------------|----------|--|----------------------------------|
| DWELLING UNITS | 72 UNITS |  |                                  |

**PLAN LEGEND**

|  |                 |
|--|-----------------|
|  | CORRIDOR/CORE   |
|  | 2-BEDROOM UNITS |
|  | 3-BEDROOM UNITS |

**REVISIONS**

| # | DATE       | REVISION DESCRIPTION       | BY: |
|---|------------|----------------------------|-----|
| 1 | 03/28/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 2 | 05/09/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 3 | 11/01/2022 | ARCHITECTURAL REVIEW BOARD | KA  |
| 4 | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

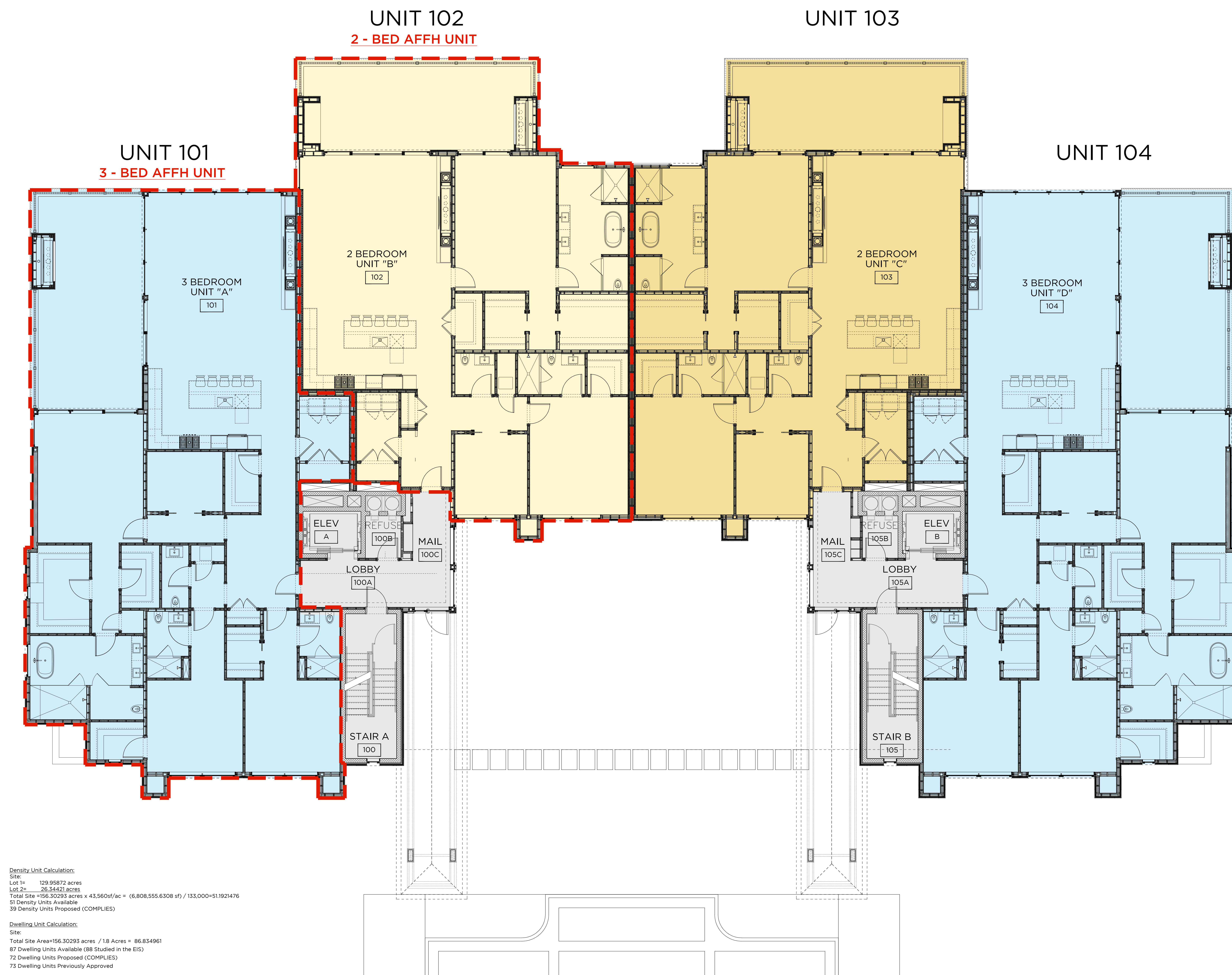
**FINAL RESOLUTION PLANS**

**PROJECT NAME**  
**SUMMIT CLUB PARTNERS LLC - RESIDENCES**  
 AIRMONT, NY  
 JOB NO.: ----  
 DRAWN BY: JT PROJ. MANAGER: KA  
 DATE: 07/24/2023 SCALE: AS NOTED  
 DRAWING TITLE  
**PARKING LEVEL**

DRAWING NO.

**A-100**

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**Density Unit Calculation:**  
 Site:  
 Lot 1= 129.95872 acres  
 Lot 2= 26.34421 acres  
 Total Site = 156.30293 acres x 43,560sf/ac = (6,808,555.6308 sf) / 133,000=51.921476  
 51 Density Units Available  
 39 Density Units Proposed (COMPLIES)

**Dwelling Unit Calculation:**  
 Site:  
 Total Site Area=156.30293 acres / 18 Acres = 86.834961  
 87 Dwelling Units Available (88 Studied in the EIS)  
 72 Dwelling Units Proposed (COMPLIES)  
 73 Dwelling Units Previously Approved

**Minimum Unit Sizes:**  
**Market Rate Units**  
 Efficiency: 450 sf Min. N/A  
 One-Bedroom: 700 sf Min. N/A  
 Two-Bedroom: 900 sf 2,377 sf is smallest (complies)  
 Three-Bedroom: 1,100 sf 2,997 sf is smallest (complies)  
**AFFH Units\*\***  
 Efficiency: 450 sf Min. N/A  
 One-Bedroom: 700 sf Min. N/A  
 Two-Bedroom: 900 sf 2,377 sf is smallest (complies)  
 Three-Bedroom: 1,100 sf 2,997 sf is smallest (complies)

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**Density Unit Definition:**  
 A density unit is defined as being equal to one or a proportionate combination of the following:

- A. One one-family detached dwelling unit.
- B. One dwelling unit containing four or more bedrooms in a permitted type of dwelling other than a one-family detached unit.
- C. One and one-half dwelling units containing three bedrooms each in permitted dwellings other than one-family detached units.
- D. Two dwelling units containing two bedrooms each in permitted dwellings other than one-family detached units.
- E. Two and one-half dwellings containing one bedroom or less each in permitted dwellings other than one-family detached units.
- F. Three efficiency dwelling units in permitted dwellings other than one-family detached units.

[2]Density. The maximum permitted density shall not exceed one density unit, as defined in § 355-4 of this chapter, per 133,000 square feet of the aggregate total lot area (as defined in § 355-4 of this chapter) in the GCCFO District and one dwelling unit, as defined in § 355-4 of this chapter, per 1.8 acres of the aggregate total lot area (as defined in § 355-4 of this chapter) in the GCCFO District.  
 [2] Editor's Note: Former Subsection D(1), regarding lots and dwelling units in the GCCFO District, was repealed 3-27-2019 by L.L. No. 2-2019. This local law also renumbered former Subsections D(2) through D(6) as Subsections D(1) through D(5), respectively.

**AFFH UNIT MIX**

| UNIT / BEDROOM COUNT | MARKET RATE Units                        | AFFH Units                                 | TOTAL bedrooms      |
|----------------------|--|--|---------------------|
| BUILDING 1 (3 STORY) | 12 UNITS (5) 3 BEDROOMS & (6) 2 BEDROOMS | (1) 3 BEDROOM (UNIT 101)                   | 30 BEDROOMS/BLDG    |
| BUILDING 2 (3 STORY) | 12 UNITS (6) 3 BEDROOMS & (5) 2 BEDROOMS | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 3 (3 STORY) | 12 UNITS (6) 3 BEDROOMS & (5) 2 BEDROOMS | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 4 (3 STORY) | 12 UNITS (5) 3 BEDROOMS & (5) 2 BEDROOMS | (1) 3 BEDROOM (UNIT 101)                   | 30 BEDROOMS/BLDG    |
| BUILDING 5 (3 STORY) | 12 UNITS (6) 3 BEDROOMS & (5) 2 BEDROOMS | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 6 (3 STORY) | 12 UNITS (6) 3 BEDROOMS & (5) 2 BEDROOMS | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| <b>TOTALS</b>        | <b>72 UNITS</b>                          | <b>(2) 3 BEDROOMS &amp; (5) 2 BEDROOMS</b> | <b>180 BEDROOMS</b> |
|                      | 65 MARKET RATE UNITS                     | 7 AFFH UNITS                               |                     |

| DENSITY UNITS  | 42 UNITS (36) 3 BEDROOMS = 12 DENSITY UNITS (36 / 3) X 2 = 24 |
|----------------|---|
| DWELLING UNITS | 72 UNITS (36) 2 BEDROOMS = 27 DENSITY UNITS (36 / 2 = 18)     |

PHASE II  
 PHASE I

**PLAN LEGEND**

|  |                 |
|--|-----------------|
|  | CORRIDOR/CORE   |
|  | 2-BEDROOM UNITS |
|  | 3-BEDROOM UNITS |

**REVISIONS**

| # | DATE       | REVISION DESCRIPTION       | BY: |
|---|------------|----------------------------|-----|
| 1 | 03/28/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 2 | 05/09/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 3 | 11/01/2022 | ARCHITECTURAL REVIEW BOARD | KA  |
| 4 | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

**FINAL RESOLUTION PLANS**

**PROJECT NAME:**  
**SUMMIT CLUB PARTNERS LLC - RESIDENCES**  
 AIRMONT, NY  
 JOB NO.: ----  
 DRAWN BY: **JT** PROJ. MANAGER: **KA**  
 DATE: **07/24/2023** SCALE: AS NOTED  
 DRAWING TITLE:  
**FIRST FLOOR PLAN**



**Density Unit Calculation:**  
 Site: 129.95872 acres  
 Lot 1: 26.34421 acres  
 Lot 2: 103.61451 acres  
 Total Site = 156.30293 acres x 43,560 sq ft/ac = (6,808,555.6308 sq ft) / 133,000 = 51.1921476  
 51 Density Units Available  
 39 Density Units Proposed (COMPLIES)

**Dwelling Unit Calculation:**  
 Site: 156.30293 acres / 1.8 Acres = 86.834961  
 87 Dwelling Units Available (88 Studied in the EIS)  
 72 Dwelling Units Proposed (COMPLIES)  
 73 Dwelling Units Previously Approved

**Minimum Unit Sizes:**  
**Market Rate Units**  
 Efficiency: 450 sf Min. N/A  
 One-Bedroom: 700 sf Min. N/A  
 Two-Bedroom: 900 sf 2,377 sf is smallest (complies)  
 Three-Bedroom: 1,100 sf 2,997 sf is smallest (complies)  
**AFFH Units\*\***  
 Efficiency: 450 sf Min. N/A  
 One-Bedroom: 700 sf Min. N/A  
 Two-Bedroom: 900 sf 2,377 sf is smallest (complies)  
 Three-Bedroom: 1,100 sf 2,997 sf is smallest (complies)

\*\*AFFH UNITS IDENTICAL TO MARKET RATE UNITS.  
**Density Unit Definition:**  
 A density unit is defined as being equal to one or a proportionate combination of the following:

- A. One one-family detached dwelling unit.
- B. One dwelling unit containing four or more bedrooms in a permitted type of dwelling other than a one-family detached unit.
- C. One and one-half dwelling units containing three bedrooms each in permitted dwellings other than one-family detached units.
- D. Two dwelling units containing two bedrooms each in permitted dwellings other than one-family detached units.
- E. Two and one-half dwellings containing one bedroom or less each in permitted dwellings other than one-family detached units.
- F. Three efficiency dwelling units in permitted dwellings other than one-family detached units.

[2] Density. The maximum permitted density shall not exceed one density unit, as defined in § 355-4 of this chapter, per 133,000 square feet of the aggregate total lot area (as defined in § 355-4 of this chapter) in the GCCFO District and one dwelling unit, as defined in § 355-4 of this chapter, per 1.8 acres of the aggregate total lot area (as defined in § 355-4 of this chapter) in the GCCFO District.  
 [2] Editor's Note: Former Subsection D(1), regarding lots and dwelling units in the GCCFO District, was repealed 3-27-2019 by L.L. No. 2-2019. This local law also renumbered former Subsections D(2) through D(6) as Subsections D(1) through D(5), respectively.

**AFFH UNIT MIX**

| UNIT / BEDROOM COUNT Revised 10-26-22 | MARKET RATE Units                            | AFFH Units                                 | TOTAL bedrooms      |
|---------------------------------------|--|--|---------------------|
| BUILDING 1 (3 STORY) 12 UNITS         | (5) 3 BEDROOMS & (6) 2 BEDROOMS              | (1) 3 BEDROOM (UNIT 101)                   | 30 BEDROOMS/BLDG    |
| BUILDING 2 (3 STORY) 12 UNITS         | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 3 (3 STORY) 12 UNITS         | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 4 (3 STORY) 12 UNITS         | (5) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 3 BEDROOM (UNIT 101)                   | 30 BEDROOMS/BLDG    |
| BUILDING 5 (3 STORY) 12 UNITS         | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 6 (3 STORY) 12 UNITS         | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| <b>TOTALS</b>                         | <b>(34) 3 BEDROOMS &amp; (31) 2 BEDROOMS</b> | <b>(2) 3 BEDROOMS &amp; (5) 2 BEDROOMS</b> | <b>180 BEDROOMS</b> |
|                                       | 65 MARKET RATE UNITS                         | 7 AFFH UNITS                               |                     |

| DENSITY UNITS  | 42 UNITS | (36) 3 BEDROOMS = 12 DENSITY UNITS<br>(36) 2 BEDROOMS = 27 DENSITY UNITS | (36 / 3) X 24<br>36 / 2 = 18 |
|----------------|----------|--|------------------------------|
| DWELLING UNITS | 72 UNITS |  |                              |

PHASE II  
 PHASE I

**PLAN LEGEND**

|  |                 |
|--|-----------------|
|  | CORRIDOR/CORE   |
|  | 2-BEDROOM UNITS |
|  | 3-BEDROOM UNITS |

**REVISIONS**

| # | DATE       | REVISION DESCRIPTION       | BY: |
|---|------------|----------------------------|-----|
| 1 | 03/28/2022 | PLANNING BOARD SUBMISSION  | KA  |
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| 3 | 11/01/2022 | ARCHITECTURAL REVIEW BOARD | KA  |
| 4 | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

**FINAL RESOLUTION PLANS**

**PROJECT NAME**  
**SUMMIT CLUB PARTNERS LLC - RESIDENCES**  
 AIRMONT, NY  
 JOB NO.: ----  
 DRAWN BY: **JT** PROJ. MANAGER: **KA**  
 DATE: **07/24/2023** SCALE: AS NOTED  
 DRAWING TITLE  
**SECOND FLOOR PLAN**

DRAWING NO.

**A-102**



**Density Unit Calculation:**  
 Site: 129.95872 acres  
 Lot 1 = 26.34421 acres  
 Lot 2 = 103.61451 acres  
 Total Site = 156.30293 acres x 43,560sf/ac = (6,808,555.6308 sf) / 133,000=51.921476  
 51 Density Units Available  
 39 Density Units Proposed (COMPLIES)

**Dwelling Unit Calculation:**  
 Site: 156.30293 acres / 18 Acres = 86.834961  
 87 Dwelling Units Available (88 Studied in the EIS)  
 72 Dwelling Units Proposed (COMPLIES)  
 73 Dwelling Units Previously Approved

**Minimum Unit Sizes:**  
**Market Rate Units**  
 Efficiency: 450 sf Min. N/A  
 One-Bedroom: 700 sf Min. N/A  
 Two-Bedroom: 900 sf 2,377 sf is smallest (complies)  
 Three-Bedroom: 1,100 sf 2,997 sf is smallest (complies)  
**AFFH Units\*\***  
 Efficiency: 450 sf Min. N/A  
 One-Bedroom: 700 sf Min. N/A  
 Two-Bedroom: 900 sf 2,377 sf is smallest (complies)  
 Three-Bedroom: 1,100 sf 2,997 sf is smallest (complies)

\*\*AFFH UNITS IDENTICAL TO MARKET RATE UNITS.  
**Density Unit Definition:**  
 A density unit is defined as being equal to one or a proportionate combination of the following:

- A. One one-family detached dwelling unit.
- B. One dwelling unit containing four or more bedrooms in a permitted type of dwelling other than a one-family detached unit.
- C. One and one-half dwelling units containing three bedrooms each in permitted dwellings other than one-family detached units.
- D. Two dwelling units containing two bedrooms each in permitted dwellings other than one-family detached units.
- E. Two and one-half dwellings containing one bedroom or less each in permitted dwellings other than one-family detached units.
- F. Three efficiency dwelling units in permitted dwellings other than one-family detached units.

[2]Density. The maximum permitted density shall not exceed one density unit, as defined in § 355-4 of this chapter, per 133,000 square feet of the aggregate total lot area (as defined in § 355-4 of this chapter) in the GCCFO District and one dwelling unit, as defined in § 355-4 of this chapter, per 1.8 acres of the aggregate total lot area (as defined in § 355-4 of this chapter) in the GCCFO District.  
 Editor's Note: Former Subsection D(1), regarding lots and dwelling units in the GCCFO District, was repealed 3-27-2019 by L.L. No. 2-2019.  
 This local law also renumbered former Subsections D(2) through D(6) as Subsections D(1) through D(5), respectively.

**AFFH UNIT MIX**

| UNIT / BEDROOM COUNT Revised 10-26-22 | MARKET RATE Units                            | AFFH Units                                 | TOTAL bedrooms      |
|---------------------------------------|--|--|---------------------|
| BUILDING 1 (3 STORY) 12 UNITS         | (5) 3 BEDROOMS & (6) 2 BEDROOMS              | (1) 3 BEDROOM (UNIT 101)                   | 30 BEDROOMS/BLDG    |
| BUILDING 2 (3 STORY) 12 UNITS         | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 3 (3 STORY) 12 UNITS         | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 4 (3 STORY) 12 UNITS         | (5) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 3 BEDROOM (UNIT 101)                   | 30 BEDROOMS/BLDG    |
| BUILDING 5 (3 STORY) 12 UNITS         | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| BUILDING 6 (3 STORY) 12 UNITS         | (6) 3 BEDROOMS & (5) 2 BEDROOMS              | (1) 2 BEDROOM (UNIT 102)                   | 30 BEDROOMS/BLDG    |
| <b>TOTALS</b>                         | <b>(34) 3 BEDROOMS &amp; (31) 2 BEDROOMS</b> | <b>(2) 3 BEDROOMS &amp; (5) 2 BEDROOMS</b> | <b>180 BEDROOMS</b> |
|                                       | 65 MARKET RATE UNITS                         | 7 AFFH UNITS                               |                     |

|                |          |                                    |                   |
|----------------|----------|------------------------------------|-------------------|
| DENSITY UNITS  | 42 UNITS | (36) 3 BEDROOMS = 12 DENSITY UNITS | (36 / 3) X 2 = 24 |
|                |          | (6) 2 BEDROOMS = 27 DENSITY UNITS  | (36 / 2) = 18     |
| DWELLING UNITS | 72 UNITS |                                    |                   |

PHASE II  
 PHASE I

**PLAN LEGEND**

|  |                 |
|--|-----------------|
|  | CORRIDOR/CORE   |
|  | 2-BEDROOM UNITS |
|  | 3-BEDROOM UNITS |

**REVISIONS**

| # | DATE       | REVISION DESCRIPTION       | BY: |
|---|------------|----------------------------|-----|
| 1 | 03/28/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 2 | 05/09/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 3 | 11/01/2022 | ARCHITECTURAL REVIEW BOARD | KA  |
| 4 | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

**FINAL RESOLUTION PLANS**

**PROJECT NAME**  
**SUMMIT CLUB PARTNERS LLC - RESIDENCES**  
 AIRMONT, NY  
 JOB NO.: ----  
 DRAWN BY: JT PROJ. MANAGER: KA  
 DATE: 07/24/2023 SCALE: AS NOTED  
 DRAWING TITLE  
**THIRD FLOOR PLAN**

DRAWING NO.

**A-103**

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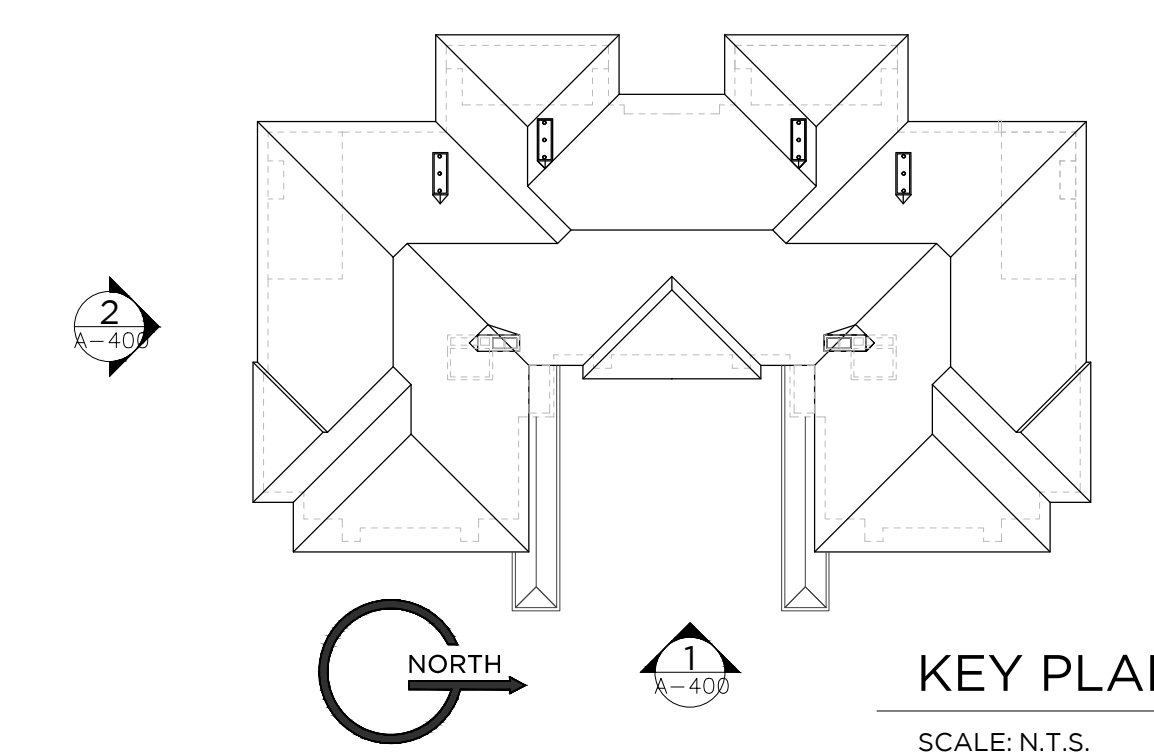
1 EAST ELEVATION

3/16" = 1'-0"



2 SOUTH ELEVATION

3/16" = 1'-0"



| # | DATE       | REVISION DESCRIPTION       | BY: |
|---|------------|----------------------------|-----|
| 1 | 03/28/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 2 | 05/09/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 3 | 11/01/2022 | ARCHITECTURAL REVIEW BOARD | KA  |
| 4 | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

PHASE  
**FINAL RESOLUTION PLANS**

PROJECT NAME  
**SUMMIT CLUB PARTNERS  
 LLC - RESIDENCES**  
 ARMONK, NY

JOB NO.: ----  
 DRAWN BY: **JT** PROJ. MANAGER: **KA**  
 DATE: **07/24/2023** SCALE: AS NOTED

DRAWING TITLE  
**BUILDING ELEVATIONS**

DRAWING NO.  
**A-400**

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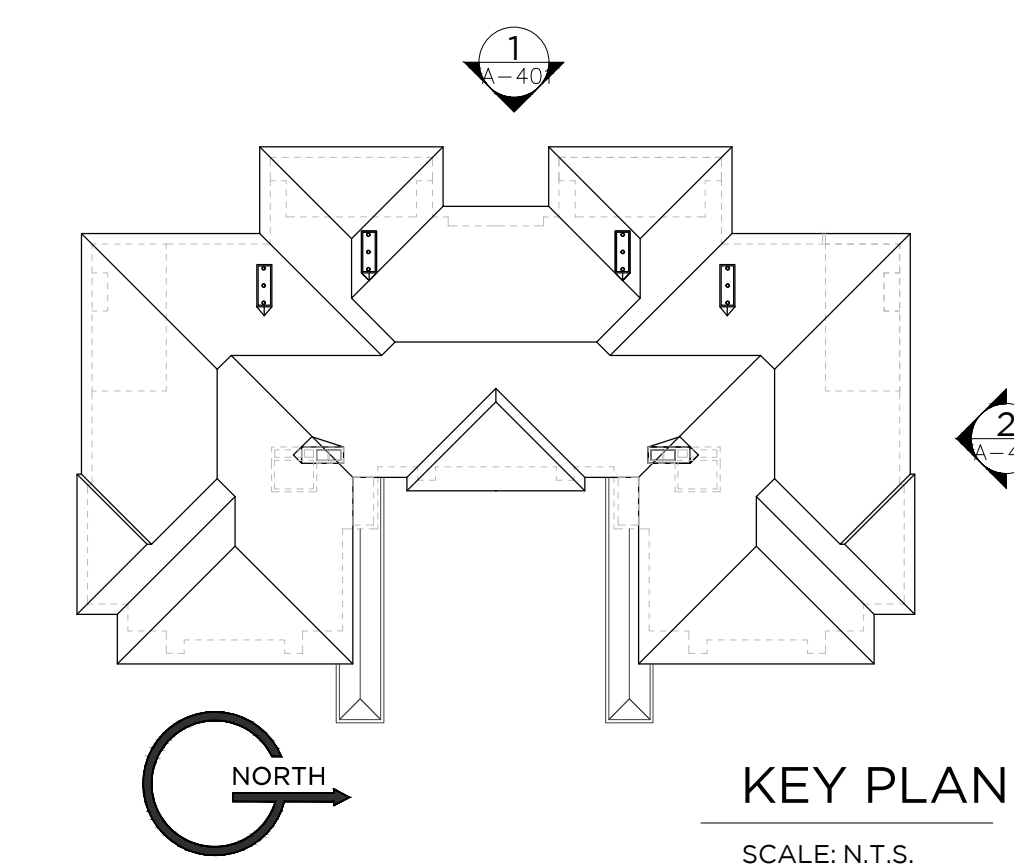
1 WEST ELEVATION

3/16" = 1'-0"



2 NORTH ELEVATION

3/16" = 1'-0"



| # | DATE       | REVISION DESCRIPTION       | BY: |
|---|------------|----------------------------|-----|
| 1 | 03/28/2022 | PLANNING BOARD SUBMISSION  | KA  |
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| 4 | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

PHASE  
**FINAL RESOLUTION PLANS**

PROJECT NAME  
**SUMMIT CLUB PARTNERS  
 LLC - RESIDENCES**  
 ARMONK, NY

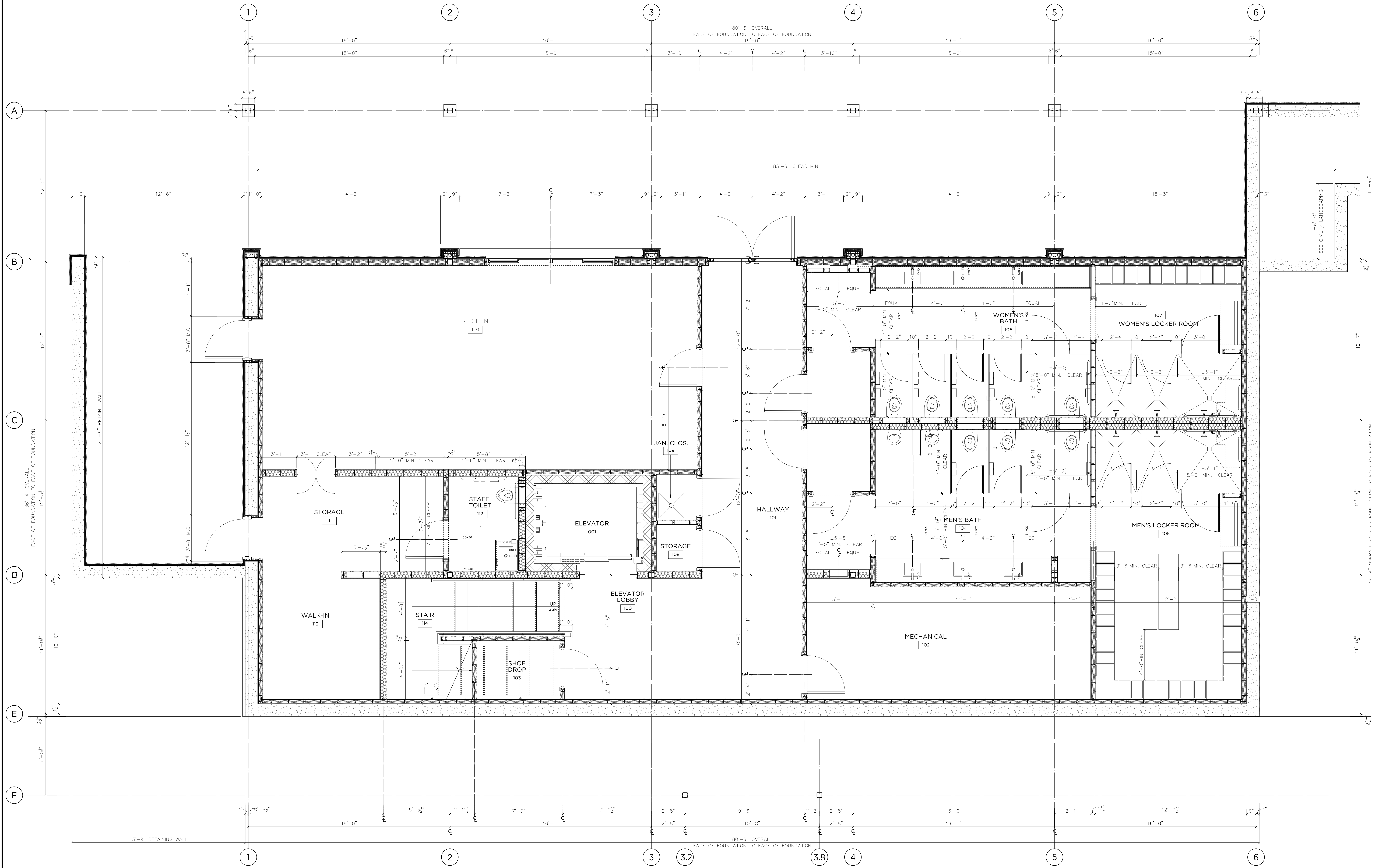
JOB NO.: ----  
 DRAWN BY: **JT** PROJ. MANAGER: **KA**  
 DATE: **07/24/2023** SCALE: AS NOTED

DRAWING TITLE  
**BUILDING ELEVATIONS**

DRAWING NO.

**A-401**





| REVISIONS |            |                            |     |
|-----------|------------|----------------------------|-----|
| #         | DATE       | REVISION DESCRIPTION       | BY: |
| 1         | 03/28/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 2         | 05/09/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 3         | 11/01/2022 | ARCHITECTURAL REVIEW BOARD | KA  |
| 4         | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

PHASE  
**FINAL RESOLUTION PLANS**

PROJECT NAME  
**SUMMIT CLUB PARTNERS  
 LLC - AMENITIES BUILDING**

ARMONK, NY

JOB NO: ----

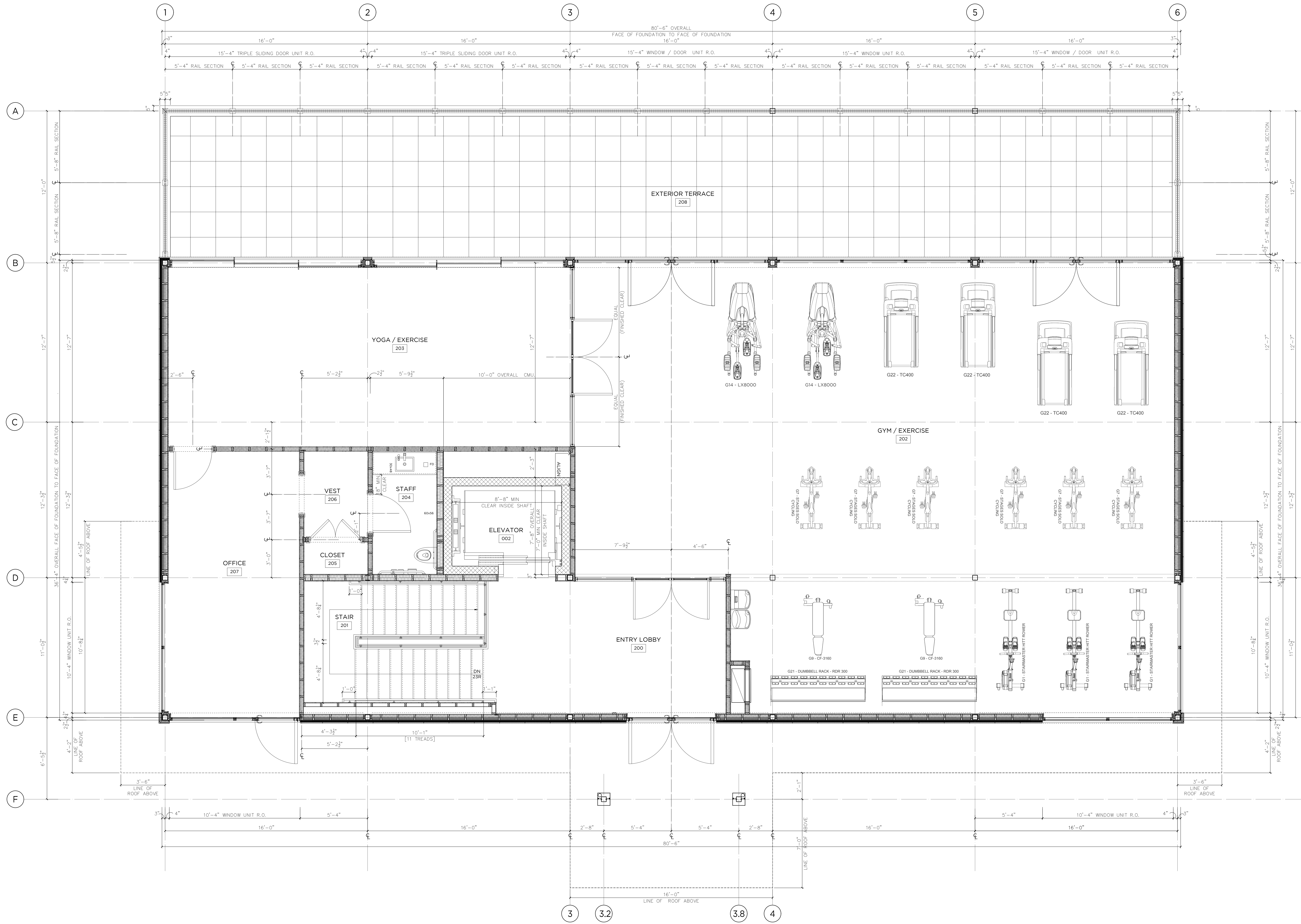
DRAWN BY: **JT** PROJ. MANAGER: **KA**

DATE: **07/24/2023** SCALE: AS NOTED

DRAWING TITLE  
**POOL DECK LEVEL PLAN**

DRAWING NO:  
**A100**

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| REVISIONS |            |                            |     |
|-----------|------------|----------------------------|-----|
| #         | DATE       | REVISION DESCRIPTION       | BY: |
| 1         | 03/28/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 2         | 05/09/2022 | PLANNING BOARD SUBMISSION  | KA  |
| 3         | 11/01/2022 | ARCHITECTURAL REVIEW BOARD | KA  |
| 4         | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

PHASE  
**FINAL RESOLUTION PLANS**

PROJECT NAME  
**SUMMIT CLUB PARTNERS  
 LLC - AMENITIES BUILDING**

ARMONK, NY

JOB NO: ----

DRAWN BY: **JT** PROJ. MANAGER: **KA**

DATE: **07/24/2023** SCALE: AS NOTED

DRAWING TITLE  
**GYM LEVEL PLAN**

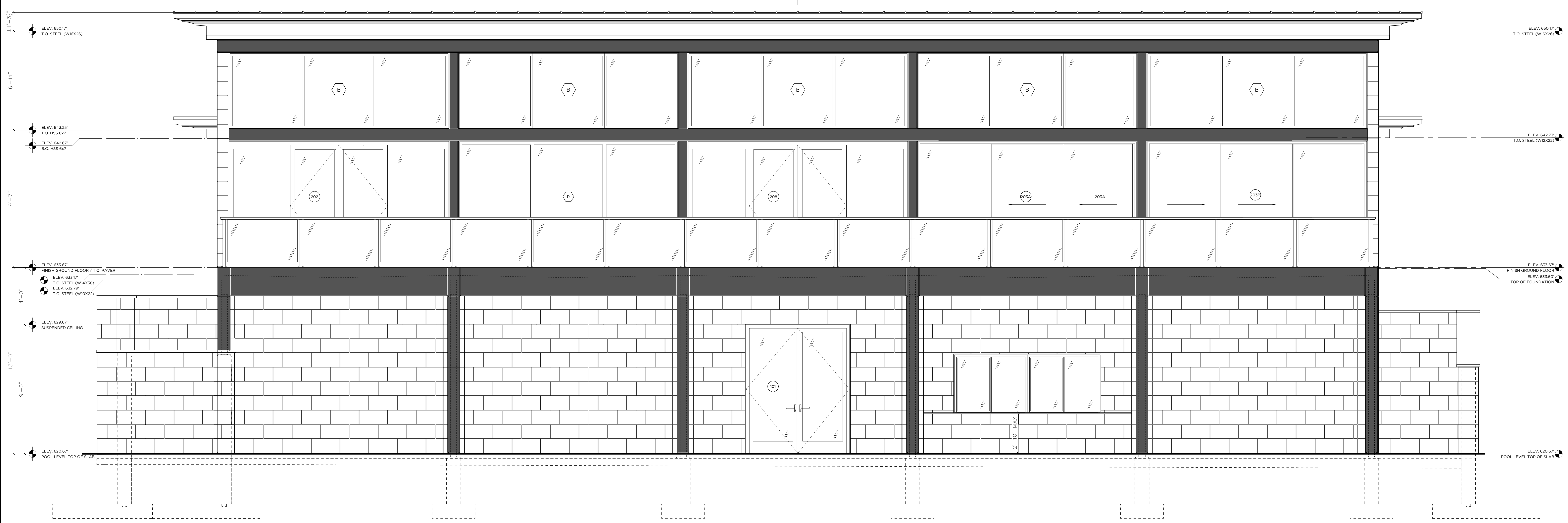
DRAWING NO.  
**A101**

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1 EAST ELEVATION

3/16" = 1'-0"



2 WEST ELEVATION

3/16" = 1'-0"

REVISIONS

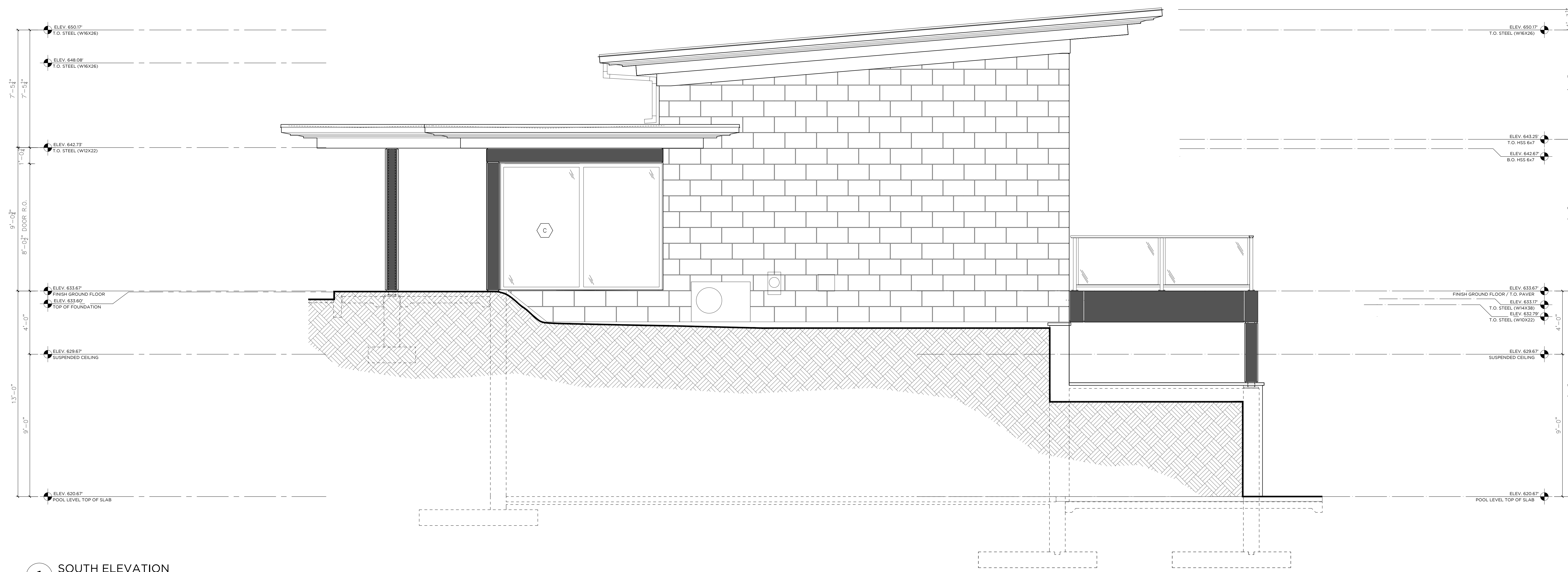
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|---|------------|----------------------------|-----|
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| 3 | 11/01/2022 | ARCHITECTURAL REVIEW BOARD | KA  |
| 4 | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

PHASE  
**FINAL RESOLUTION PLANS**

PROJECT NAME  
**SUMMIT CLUB PARTNERS  
 LLC - AMENITIES BUILDING**  
 ARMONK, NY  
 JOB NO.: ----  
 DRAWN BY: **JT** PROJ. MANAGER: **KA**  
 DATE: **07/24/2023** SCALE: AS NOTED  
 DRAWING TITLE  
**BUILDING ELEVATIONS**

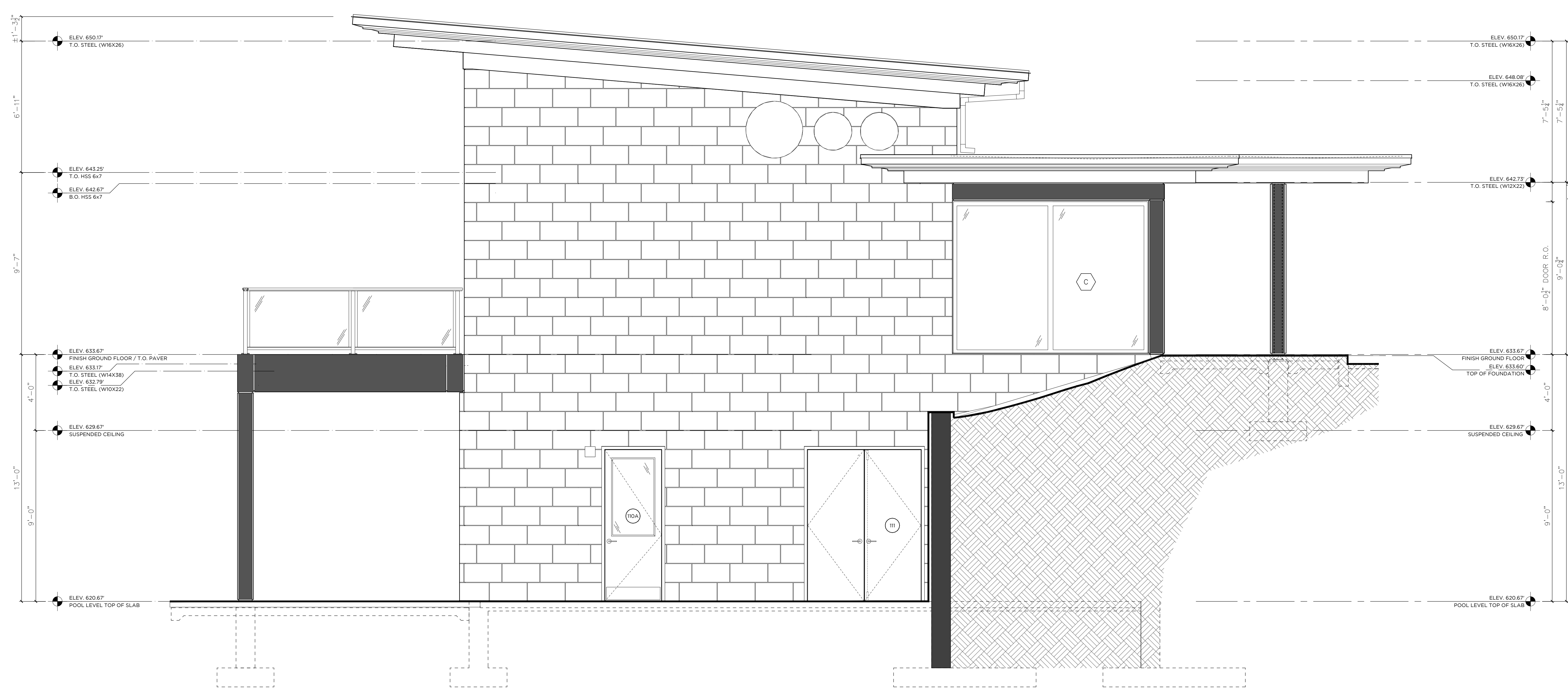
DRAWING NO.  
**A400**

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1 SOUTH ELEVATION

3/16" = 1'-0"



2 NORTH ELEVATION

3/16" = 1'-0"

REVISIONS

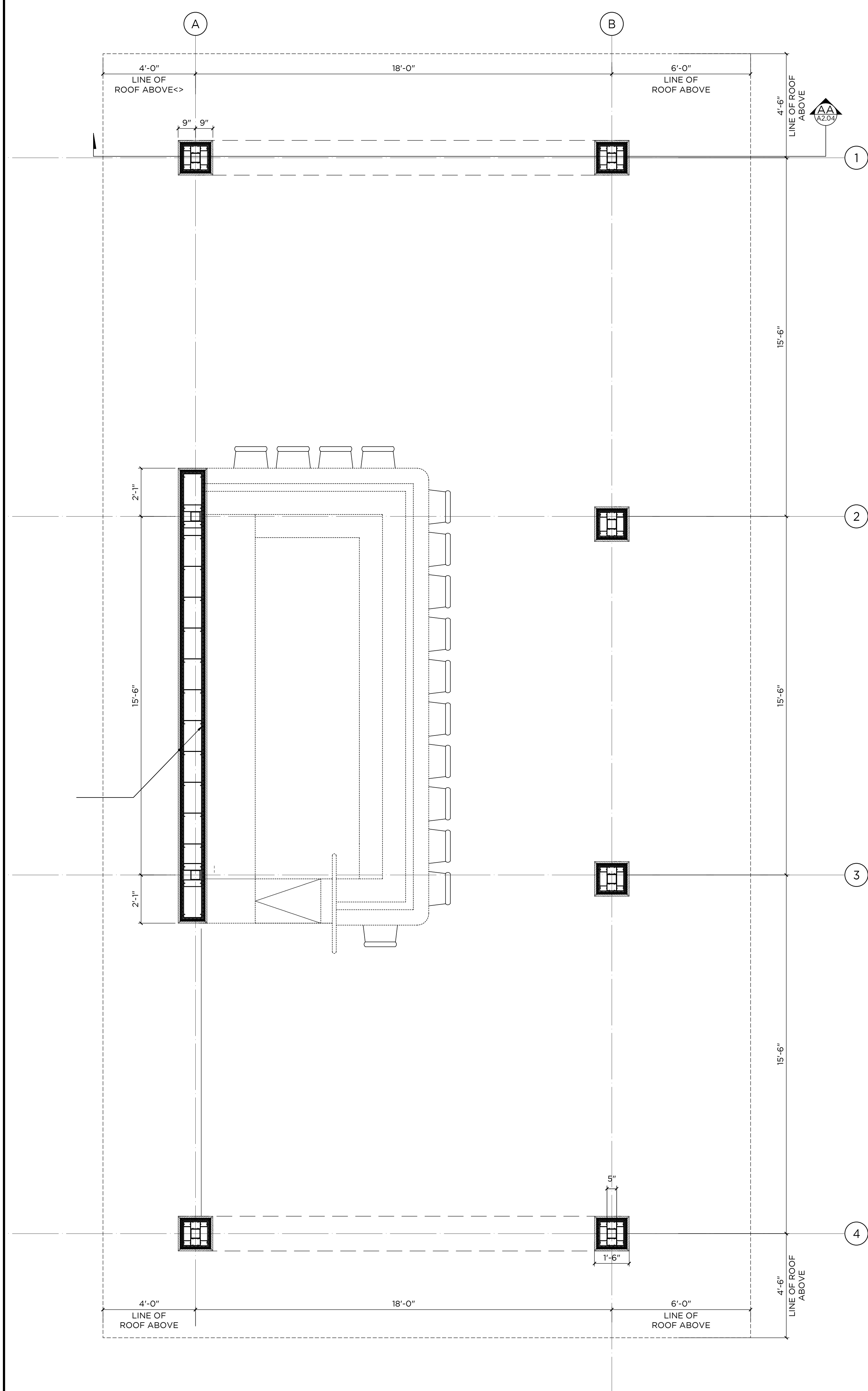
| # | DATE       | REVISION DESCRIPTION       | BY: |
|---|------------|----------------------------|-----|
| 1 | 03/28/2022 | PLANNING BOARD SUBMISSION  | KA  |
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| 4 | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

PHASE  
**FINAL RESOLUTION PLANS**

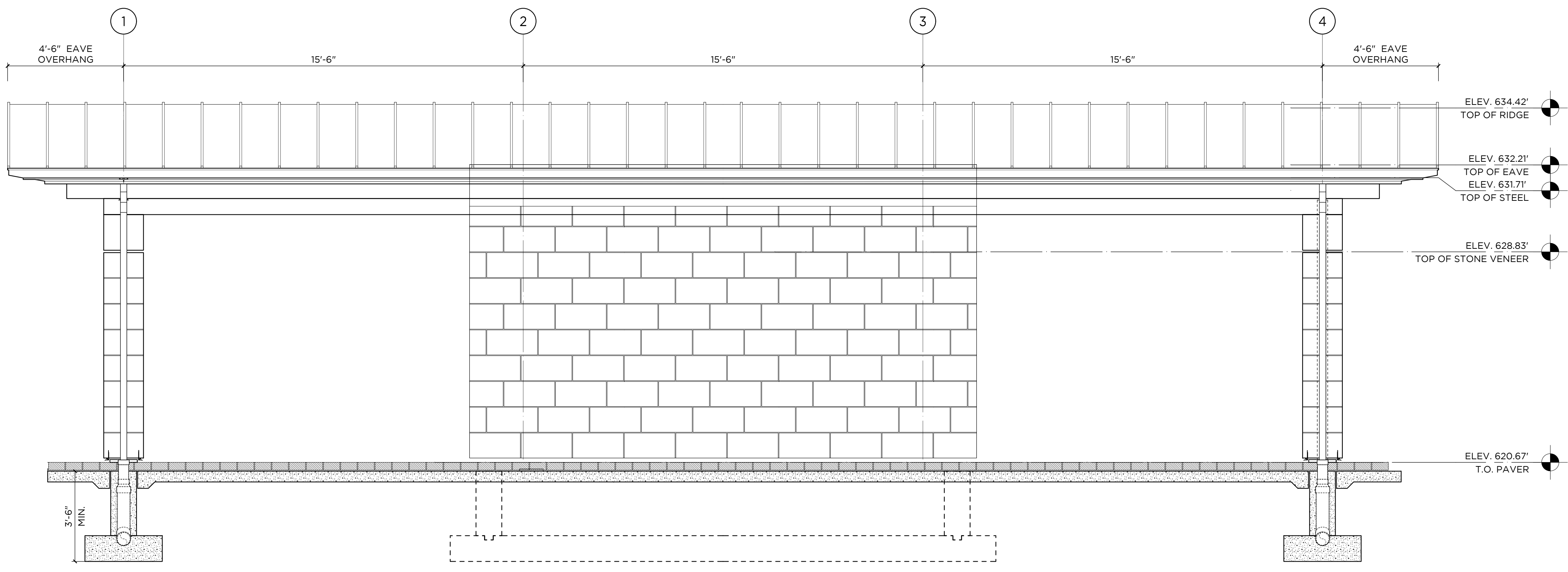
PROJECT NAME  
**SUMMIT CLUB PARTNERS  
 LLC - AMENITIES BUILDING**  
 ARMONK, NY  
 JOB NO.:  
 DRAWN BY: **JT** PROJ. MANAGER: **KA**  
 DATE: **07/24/2023** SCALE: AS NOTED  
 DRAWING TITLE  
**BUILDING ELEVATIONS**

DRAWING NO.  
**A401**

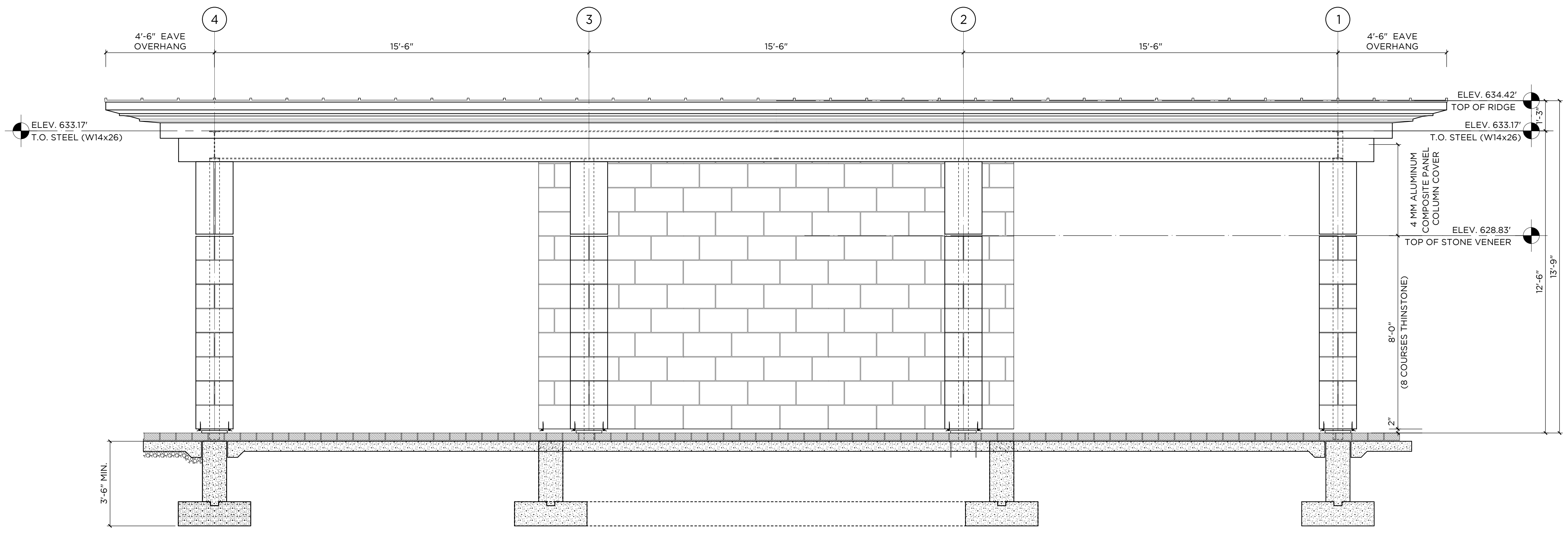
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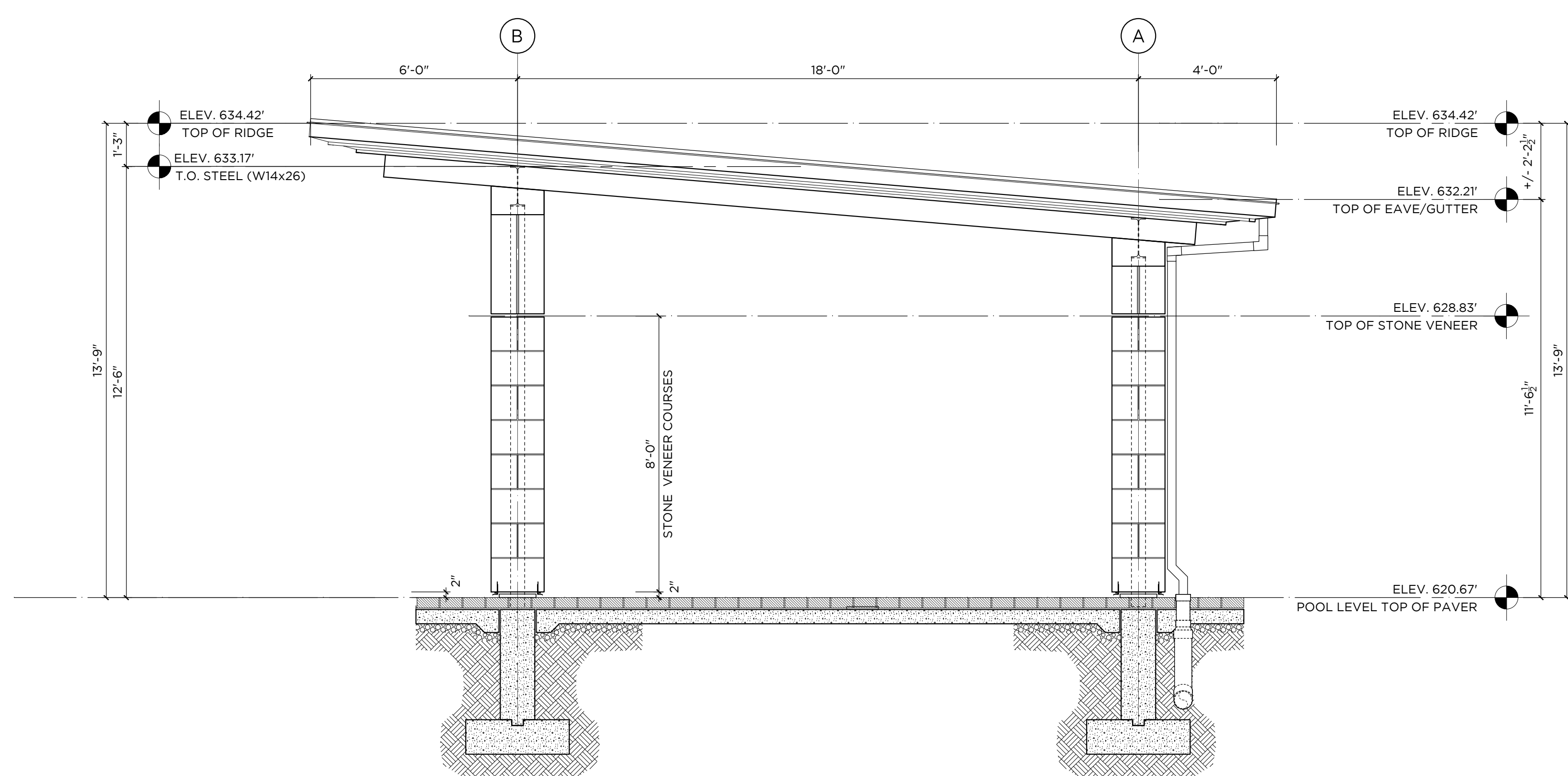
1 PLAN - POOL BAR  
 3/16" = 1'-0"



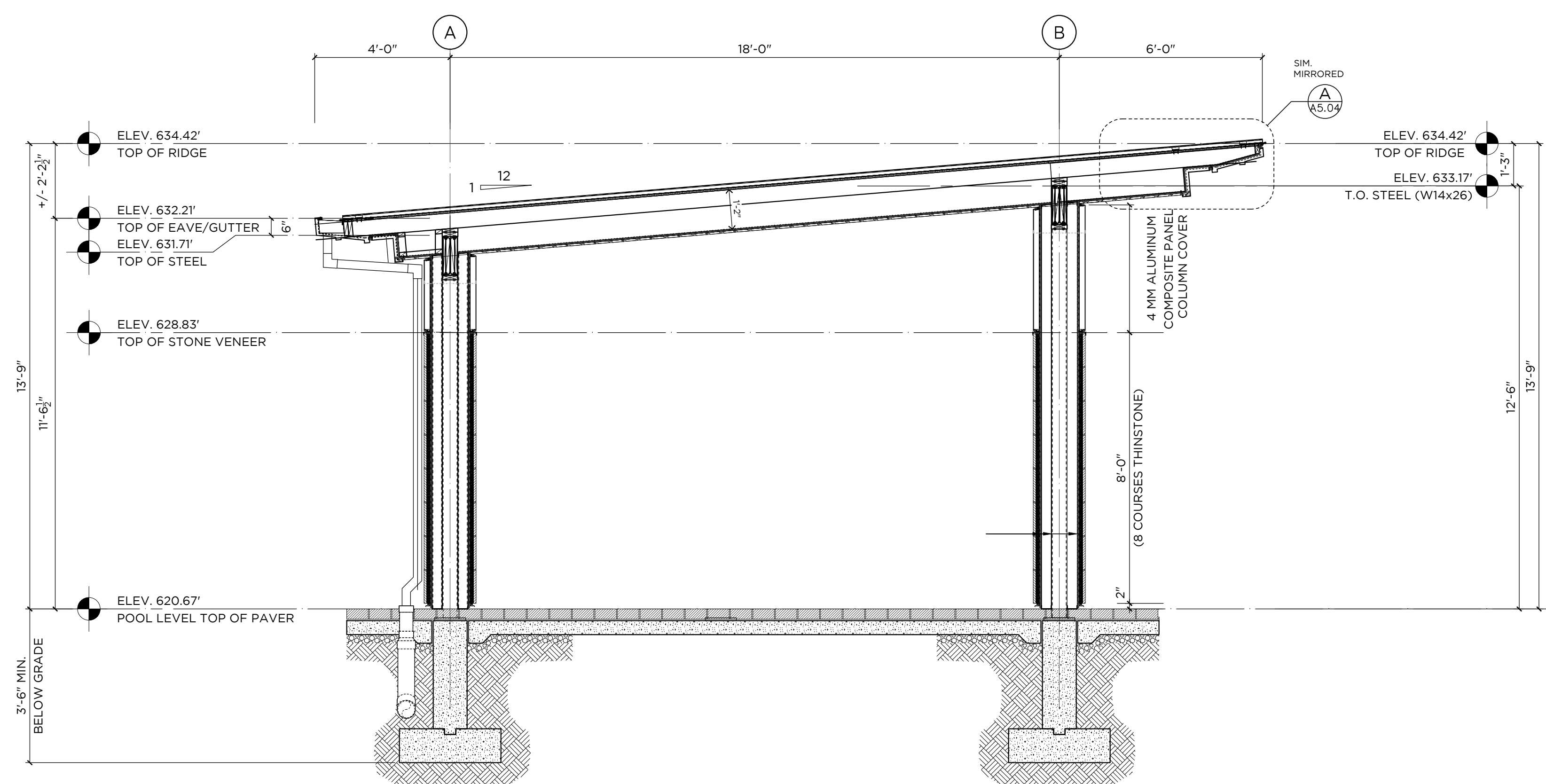
2 SOUTH ELEVATION  
 3/16" = 1'-0"



3 NORTH ELEVATION  
 3/16" = 1'-0"



4 WEST ELEVATION  
 3/16" = 1'-0"



5 EAST ELEVATION  
 3/16" = 1'-0"

| # | DATE       | REVISION DESCRIPTION       | BY: |
|---|------------|----------------------------|-----|
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| 4 | 07/24/2023 | PLANNING BOARD SUBMISSION  | KA  |

PHASE  
**FINAL RESOLUTION PLANS**

PROJECT NAME  
**SUMMIT CLUB PARTNERS  
 LLC - AMENITIES BUILDING**

ARMONK, NY  
 JOB NO.: ----  
 DRAWN BY: JT PROJ. MANAGER: KA  
 DATE: 07/24/2023 SCALE: AS NOTED  
 DRAWING TITLE  
**POOL BAR PLANS & ELEVATIONS**

DRAWING NO.

**A402**

JOB NAME: SUMMIT CLUB  
 APEX LIGHTING SOLUTIONS  
 REFLECTANCES: N/A  
 WORKPLANE/CALC PLANE: @ GRADE  
 MOUNTING HEIGHT: SEE LUMINAIRE SCHEDULE  
 APPS: LED  
 SALES: TM

| Qty | Label | Arrangement | Lumens | Input Watts | LLF   | BUG Rating | Description  |
|-----|-------|-------------|--------|-------------|-------|------------|--|
| 1   | SL2   | SINGLE      | 11518  | 86.8        | 0.850 | B2-U0-G2   | USA RZR-PLD-II-40LED-700MA-WW-VOLT-FINISH MOUNTED TO 18FT POLE @ 18FT AFG TO BOF             |
| 7   | SL2B  | Single      | 6281   | 42.7        | 0.850 | B2-U0-G1   | USA RZR-PTY-PLD-II-40LED-350MA-WW-VOLT-FINISH MOUNTED TO 12FT POLE WITH OPTICAL HT @ 13.89FT |
| 1   | SL3   | SINGLE      | 10880  | 86.8        | 0.850 | B2-U0-G3   | USA RZR-PLD-III-W-40LED-700MA-WW-VOLT-FINISH MOUNTED TO 18FT POLE @ 18FT AFG TO BOF          |
| 3   | SL4   | SINGLE      | 10595  | 86.8        | 0.850 | B2-U0-G3   | USA RZR-PLD-IV-FT-W-40LED-700MA-WW-VOLT-FINISH MOUNTED TO 18FT POLE @ 18FT AFG TO BOF        |
| 21  | SL5   | SINGLE      | 11920  | 86.8        | 0.850 | B4-U0-G2   | USA RZR-PLD-VSQ-M-40LED-700MA-WW-VOLT-FINISH MOUNTED TO 18FT POLE @ 18FT AFG TO BOF          |

| Label   | Grid Z | Avg  | Max | Min | Avg/Min | Max/Min |
|---------|--------|------|-----|-----|---------|---------|
| SITE    | 0      | 0.27 | 5.1 | 0.0 | N.A.    | N.A.    |
| PATHWAY |        | 2.12 | 5.1 | 0.0 | N.A.    | N.A.    |
| PHASE 1 |        | 1.48 | 4.6 | 0.0 | N.A.    | N.A.    |



**GENERAL DISCLAIMER:**  
 Calculations have been performed according to IES standards and good practice. Some differences between measured values and calculated results may occur due to variations in calculation methods, lighting procedures, component performance, environmental conditions and field conditions. Approximate performance variations. Input data used to generate the attached calculations such as room dimensions, reflectance, furniture and architectural elements can significantly affect the lighting calculations. If the real environment conditions do not match the input data, differences will occur between measured values and calculated values.  
 \* LLF Determined Using Current Published Lamp Data  
**NOTE TO REVIEWER:**  
 Total Light Loss Factor (LLF) applied at time of design is determined by applying the Luminaire Dirt Deposition Factor (LDD) based on IES recommended values and a Ballast Factor (BF) from current fixture specifications sheets. Application of an incorrect Light Loss Factor (LLF) will result in forecasts of performance that will not accurately depict actual results.  
 For proper comparison of alternative designs, it is essential that you insert all designs an correct Light Loss Factor.



20-30 BEAVER ROAD  
 WETHERSFIELD, CT 06099  
 TELEPHONE 860.632.8766  
 FACSIMILE 860.632.8236  
 www.apexlighting.com

PROJECT TITLE: SUMMIT CLUB

DRAWING TITLE: EXTERIOR LIGHTING PHOTOMETRIC CALCULATION PHASE 1

SCALE: 1"=40'-0"

DATE: 10/19/22

DRAWN BY: LED

SHEET: SL-1A

FILE NAME: SL-1A SUMMIT CLUB - PHASE 1 10-19-2022 LED.dwg

# SOLID STATE AREA LIGHTING

# RAZAR SERIES-LED

## SPECIFICATIONS

PROJECT NAME: \_\_\_\_\_

PROJECT TYPE: \_\_\_\_\_

### OPTICAL HOUSING

Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly with integral cooling fins. The Optical Panel mounting surface is milled flat (surface variance  $\leq \pm .002"$ ) to facilitate thermal transfer of heat to housing and cooling fins. Solid barrier wall separates optical and electrical compartments. The optical and electrical compartments are integrated to create one assembly. Minimum wall thickness is .188".

### ELECTRICAL HOUSING w/ INTEGRATED ARM

Heavy cast low copper aluminum (A356 alloy; <0.2% copper) assembly with integral cooling ribs surrounding the electrical compartment and a flat surface on the top of the arm to accommodate a photocell receptacle. Solid barrier wall separates optical and electrical compartments. The optical compartment and electrical compartment with the integrated support arm combine to create one assembly. Minimum wall thickness is .188". Cast and hinged driver assembly cover is integrated with wiring compartment cover.

### PLED™ OPTICS

Emitters (LED's) are arrayed on a metal core PCB panel with each emitter located on a copper thermal transfer pad and enclosed by an LED refractor. LED optics completely seal each individual emitter to meet an IP66 rating. In asymmetric distributions, a micro-reflector inside the refractor re-directs the house side emitter output towards the street side and functions as a house side shielding element. Refractors are injection molded H12 acrylic. Each LED refractor is sealed to the PCB over an emitter and all refractors are retained by an aluminum frame. Any one Panel, or group of Panels in a luminaire, have the same optical pattern. LED refractors produce standard site/area distributions. Panels are field replaceable and field rotatable in 90° increments.

### LED DRIVER(S)

Constant current electronic with a power factor of >.90 and a minimum operating temperature of -40°F/-40°C. Driver(s) is/are UL and cUL recognized and mounted directly against the Electrical Housing to facilitate thermal transfer, held down by universal clamps to facilitate easy removal. In-line terminal blocks facilitate wiring between the driver and optical arrays. Drivers accept an input of 120-277V, 50/60Hz or 347V-480V, 50,60Hz. (0 - 10V dimmable driver is standard. Driver has a minimum of 3KV internal surge protection. Luminaire supplied with 20KV surge protector for field accessible installation.)

### LED EMITTERS

High output LED's are utilized with drive currents ranging from 350mA to 1050mA. 70CRI Minimum. LED's are available in standard Neutral White (4000K), or optional Cool White (5000K) or Warm White (3000K). Consult Factory for other LED options.

### AMBER LED's

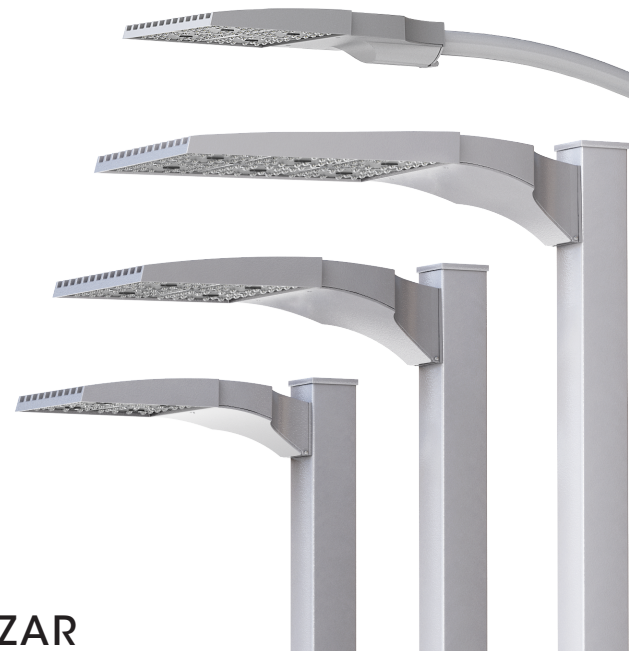
**PCA** (Phosphor Converted Amber) LED's utilize phosphors to create color output similar to LPS lamps and have a slight output in the blue spectral bandwidth. **TRA** (True Amber) LED's utilize material that emits light in the amber spectral bandwidth only without the use of phosphors.

### FINISH

Electrostatically applied TGIC Polyester Powder Coat on substrate prepared with 20 PSI power wash at 140°F. Four step media blast and iron phosphate pretreatment for protection and paint adhesion. 400°F bake for maximum hardness and durability.

### MAST ARM FITTER/ELECTRICAL HOUSING

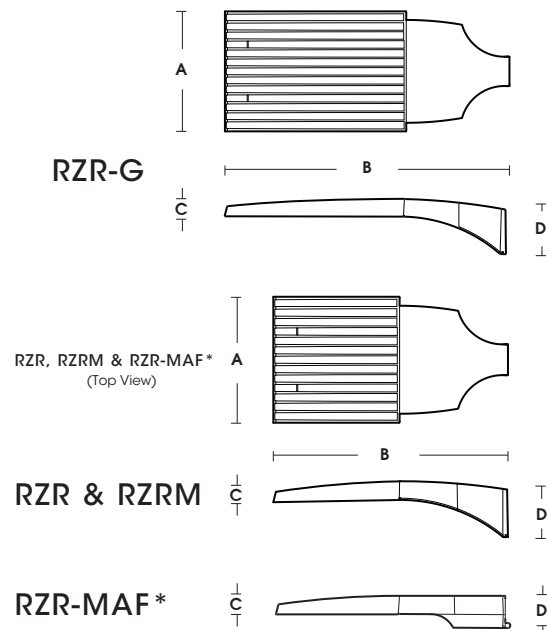
Replaces standard Electrical Housing. Fits standard 2 3/8" O.D. horizontal tenon. Two (2) straps with two (2) bolts each encircle the lower half of the tenon. Upper half of the tenon rests on self-centering steps that position the angle of the luminaire at 0°, +1.5°, +1.5 or +3° up from the horizontal. All hardware is stainless steel.



## RAZAR

(MODELS: RZRM, RZR, RZR-G & RZR-MAF\*)

PATENT PENDING



| FIXTURE        | A               | B               | C             | D              |
|----------------|-----------------|-----------------|---------------|----------------|
| <b>RZR-G</b>   | 15"<br>381mm    | 36.5"<br>927mm  | 3"<br>76mm    | 7"<br>187mm    |
| <b>RZR</b>     | 14.75"<br>375mm | 28.25"<br>718mm | 2.75"<br>70mm | 6.5"<br>165mm  |
| <b>RZRM</b>    | 11.5"<br>292mm  | 22"<br>559mm    | 2.5"<br>64mm  | 5.25"<br>133mm |
| <b>RZR-MAF</b> | 15"<br>381mm    | 28.25"<br>724mm | 2.5"<br>64mm  | 4"<br>102mm    |

\*DLC PENDING AS OF 7/19



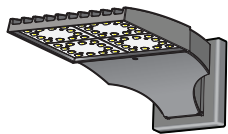
2020248



# RAZAR SERIES-LED

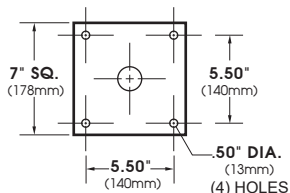
## S P E C I F I C A T I O N S

### WALLMOUNT

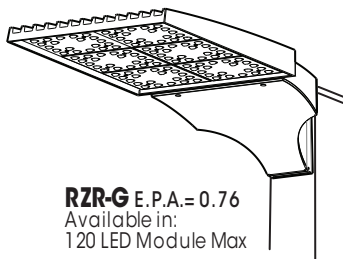


CAST ALUMINUM ARM AND WALL BRACKET ASSEMBLY PROVIDED WITH BUILT IN GASKETED WIRE ACCESS FOR FIXTURE/SUPPLY WIRE CONNECTION.

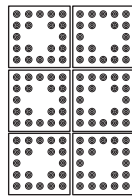
### WALL PLATE



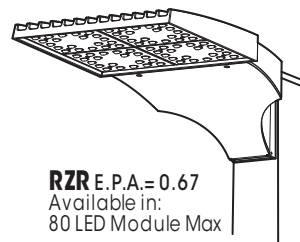
### PLED® MODULES



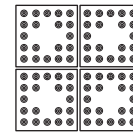
**RZR-G** E.P.A.= 0.76  
Available in:  
120 LED Module Max



120 LED Module

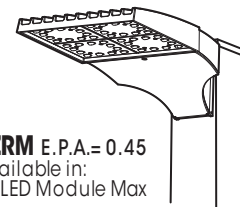
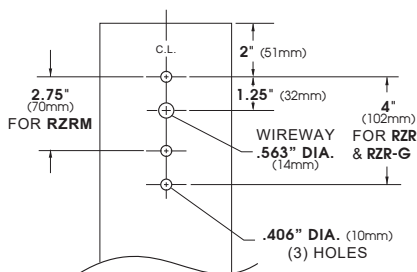


**RZR** E.P.A.= 0.67  
Available in:  
80 LED Module Max

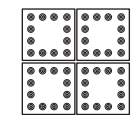


80 LED Module

### POLE DRILLING TEMPLATE



**RZRM** E.P.A.= 0.45  
Available in:  
48 LED Module Max



48 LED Module

Spec/Order Example: RZR/PLED-IV/80LED-700mA/CW/277/RAL-8019-S

## S P E C / O R D E R I N G I N F O R M A T I O N

| MODEL   | OPTICS   | LED MODE  | VOLTAGE  | FINISH  | OPTIONS   |
|---|--|---|--|---|---|
| MODEL   | OPTICS   | LED MODE  | VOLTAGE  | FINISH  | OPTIONS   |
| <input type="checkbox"/> RZR-G                | <input type="checkbox"/> TYPE II<br><b>PLED-II</b> .....                       | <b>RZR-G</b><br><input type="checkbox"/> 120LED <input type="checkbox"/> 350mA <input type="checkbox"/> NW (4000K)*<br><input type="checkbox"/> 80LED <input type="checkbox"/> 525mA <input type="checkbox"/> CW (5000K)<br><input type="checkbox"/> 700mA <sup>2</sup> <input type="checkbox"/> WW (3000K)<br><input type="checkbox"/> 1050mA <sup>2</sup> | <input type="checkbox"/> 120<br><input type="checkbox"/> 208<br><input type="checkbox"/> 240<br><input type="checkbox"/> 277<br><input type="checkbox"/> 347<br><input type="checkbox"/> 480 | <b>STANDARD TEXTURED FINISH</b><br><input type="checkbox"/> BLACK<br><b>RAL-9005-T</b><br><input type="checkbox"/> WHITE<br><b>RAL-9003-T</b><br><input type="checkbox"/> GREY<br><b>RAL-7004-T</b><br><input type="checkbox"/> DARK BRONZE<br><b>RAL-8019-T</b><br><input type="checkbox"/> GREEN<br><b>RAL-6005-T</b> | <input type="checkbox"/> HIGH-LOW DIMMING FOR HARDWIRED SWITCHING OR NONINTEGRATED MOTION SENSOR ..... <b>HL5W</b><br><input type="checkbox"/> INTERNAL HOUSE SIDE SHIELD ... <b>HS-PLED</b><br><input type="checkbox"/> PHOTO CELL + VOLTAGE (EXAMPLE: PC120V) ... <b>PC+V</b><br><input type="checkbox"/> TWIST LOCK RECEPTACLE ONLY ... <b>TPR</b><br><input type="checkbox"/> 7-PIN TWIST LOCK RECEPTACLE ONLY ... <b>TPR7</b><br><input type="checkbox"/> SINGLE FUSE (120V, 277V, 347V) ... <b>SF</b><br><input type="checkbox"/> DOUBLE FUSE (208V, 240V, 480V) ... <b>DF</b><br><input type="checkbox"/> STEP DIM MOTION SENSOR (PROGRAMMED 50/100) ..... <b>MS-F211</b><br><input type="checkbox"/> REMOTE MOTION SENSOR CONFIGURATOR ..... <b>MS-FC10</b> |
| <input type="checkbox"/> RZR                  | <input type="checkbox"/> TYPE II MEDIAN ILLUMINATOR<br><b>PLED-II-ML</b> ..... | <b>RZR</b><br><input type="checkbox"/> 80LED<br><input type="checkbox"/> 40LED  |  | <input type="checkbox"/> GREEN<br><b>RAL-6005-T</b>   |   |
| <input type="checkbox"/> RZR-MAF <sup>1</sup> | <input type="checkbox"/> TYPE III MED.<br><b>PLED-III-M</b> .....              |   |  |   |   |
| <input type="checkbox"/> RZRM                 | <input type="checkbox"/> TYPE III WIDE<br><b>PLED-III-W</b> .....              | <b>RZRM</b><br><input type="checkbox"/> 48LED<br><input type="checkbox"/> 24LED   |  | FOR SMOOTH FINISH REPLACE SUFFIX "T" WITH SUFFIX "S" (EXAMPLE: RAL-9005-S)<br>CONSULT FACTORY FOR CUSTOM COLORS   |   |
|   | <input type="checkbox"/> TYPE IV<br><b>PLED-IV</b> .....                       |   |  |   |   |
|   | <input type="checkbox"/> TYPE IV<br><b>PLED-IV-FT</b> .....                    |   |  |   |   |
|   | <input type="checkbox"/> TYPE V NARROW<br><b>PLED-VSQ-N</b> .....              |   |  |   |   |
|   | <input type="checkbox"/> TYPE V MED.<br><b>PLED-VSQ-M</b> .....                |   |  |   |   |
|   | <input type="checkbox"/> TYPE V WIDE<br><b>PLED-VSQ-W</b> .....                |   |  |   |   |

NOTES:  
1 - DLC PENDING AS OF 7/19

NOTES:  
2 - 700mA and 1050mA NOT FOR USE WITH TRA LED'S  
3 - NARROW BAND AMBERS HAVE NO DEFINABLE COT EQUIVALENT  
4 - AVAILABLE IN 350mA & 525mA DRIVE CURRENTS ONLY





### Approximate Average Lumens - 4000K (Lumens median of all distributions)

|     | 350mA |        |         | 525mA |        |         | 700mA |        |         | 1050mA |        |          |
|-----|-------|--------|---------|-------|--------|---------|-------|--------|---------|--------|--------|----------|
|     | Watts | Lumens | HID Eq. | Watts | Lumens | HID Eq. | Watts | Lumens | HID Eq. | Watts  | Lumens | HID Eq.  |
| 24  | 28    | 3541   | 50      | 41    | 5058   | 70-100  | 53    | 6567   | 100     | 81     | 8773   | 150-175  |
| 40  | 45    | 5997   | 70-100  | 66    | 8653   | 100-150 | 87    | 10995  | 175     | 134    | 14647  | 200-250  |
| 48  | 55    | 7046   | 100     | 81    | 10018  | 150-175 | 105   | 12600  | 200     | 160    | 17566  | 250      |
| 80  | 87    | 11622  | 175-200 | 131   | 16736  | 200-250 | 174   | 21235  | 400     | 266    | 28190  | 450-575  |
| 120 | 127   | 17405  | 250     | 195   | 24860  | 450     | 260   | 31592  | 575-750 | 396    | 43323  | 750-1000 |

| LED COUNT    | SOURCE TYPE | SOURCE                           | INITIAL LUMENS - 4000K CCT | INITIAL LUMENS - 3000K CCT | INITIAL LUMENS - 5000K CCT | L70 GREATER THAN (HR) | STARTING TEMP. | SYSTEM WATTS | VOLTS      | MAX INPUT AMPS |
|--------------|-------------|----------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|----------------|--------------|------------|----------------|
| 24           | LED         | 24 PLED® Optical Module - 350mA  | 3,298 - 3,784              | 3,133 - 3,595              | 3,463 - 3,973              | 60,000+               | -20°F          | 29           | 120<br>277 | 0.24<br>0.10   |
| 24           | LED         | 24 PLED® Optical Module - 525mA  | 4,711 - 5,405              | 4,475 - 5,135              | 4,947 - 5,675              | 60,000+               | -20°F          | 42           | 120<br>277 | 0.34<br>0.15   |
| 24           | LED         | 24 PLED® Optical Module - 700mA  | 6,023 - 6,911              | 5,722 - 6,565              | 6,324 - 7,256              | 60,000+               | -20°F          | 56           | 120<br>277 | 0.45<br>0.20   |
| 24           | LED         | 24 PLED® Optical Module - 1050mA | 8,171 - 9,375              | 7,762 - 8,906              | 8,580 - 9,844              | 60,000+               | -20°F          | 82           | 120<br>277 | 0.68<br>0.30   |
| 40           | LED         | 40 PLED® Optical Module - 350mA  | 5,585 - 6,408              | 5,306 - 6,088              | 5,864 - 6,729              | 60,000+               | -20°F          | 43           | 120<br>277 | 0.38<br>0.17   |
| 40           | LED         | 40 PLED® Optical Module - 525mA  | 8,059 - 9,246              | 7,656 - 8,784              | 8,462 - 9,709              | 60,000+               | -20°F          | 65           | 120<br>277 | 0.55<br>0.24   |
| 40           | LED         | 40 PLED® Optical Module - 700mA  | 10,240 - 11,749            | 9,728 - 11,162             | 10,752 - 12,337            | 60,000+               | -20°F          | 87           | 120<br>277 | 0.73<br>0.32   |
| 40           | LED         | 40 PLED® Optical Module - 1050mA | 13,642 - 15,652            | 12,960 - 14,870            | 14,324 - 16,435            | 60,000+               | -20°F          | 128          | 120<br>277 | 1.12<br>0.49   |
| 48           | LED         | 48 PLED® Optical Module - 350mA  | 6,562 - 7,529              | 6,234 - 7,153              | 6,890 - 7,909              | 60,000+               | -20°F          | 53           | 120<br>277 | 0.46<br>0.20   |
| 48           | LED         | 48 PLED® Optical Module - 525mA  | 9,330 - 10,705             | 8,864 - 10,170             | 9,797 - 11,240             | 60,000+               | -20°F          | 79           | 120<br>277 | 0.68<br>0.29   |
| 48           | LED         | 48 PLED® Optical Module - 700mA  | 11,735 - 13,464            | 11,148 - 12,791            | 12,322 - 14,137            | 60,000+               | -20°F          | 106          | 120<br>277 | 0.88<br>0.38   |
| 48           | LED         | 48 PLED® Optical Module - 1050mA | 16,360 - 18,771            | 15,542 - 17,832            | 17,178 - 19,709            | 60,000+               | -20°F          | 160          | 120<br>277 | 1.33<br>0.58   |
| <b>RZR</b>   |             |                                  |                            |                            |                            |                       |                |              |            |                |
| 80           | LED         | 80 PLED® Optical Module - 350mA  | 10,824 - 12,419            | 10,283 - 11,798            | 11,365 - 13,040            | 60,000+               | -20°F          | 86           | 120<br>277 | 0.75<br>0.33   |
| 80           | LED         | 80 PLED® Optical Module - 525mA  | 15,587 - 17,884            | 14,808 - 16,990            | 16,366 - 18,778            | 60,000+               | -20°F          | 130          | 120<br>277 | 1.10<br>0.48   |
| 80           | LED         | 80 PLED® Optical Module - 700mA  | 19,767 - 22,680            | 18,779 - 21,546            | 20,755 - 23,814            | 60,000+               | -20°F          | 174          | 120<br>277 | 1.45<br>0.63   |
| 80           | LED         | 80 PLED® Optical Module - 1050mA | 26,255 - 30,124            | 24,942 - 28,618            | 27,568 - 31,630            | 60,000+               | -20°F          | 257          | 120<br>277 | 2.22<br>0.96   |
| <b>RZR-G</b> |             |                                  |                            |                            |                            |                       |                |              |            |                |
| 80           | LED         | 80 PLED® Optical Module - 350mA  | 10,950 - 12,564            | 10,403 - 11,936            | 11,498 - 13,192            | 60,000+               | -20°F          | 87           | 120<br>277 | 0.75<br>0.33   |
| 80           | LED         | 80 PLED® Optical Module - 525mA  | 15,735 - 18,054            | 14,948 - 17,151            | 16,522 - 18,957            | 60,000+               | -20°F          | 129          | 120<br>277 | 1.10<br>0.48   |
| 80           | LED         | 80 PLED® Optical Module - 700mA  | 20,074 - 23,032            | 19,071 - 21,881            | 21,078 - 24,184            | 60,000+               | -20°F          | 174          | 120<br>277 | 1.45<br>0.63   |
| 80           | LED         | 80 PLED® Optical Module - 1050mA | 27,651 - 31,725            | 26,268 - 30,139            | 29,033 - 33,311            | 60,000+               | -20°F          | 266          | 120<br>277 | 2.22<br>0.96   |



# RAZAR SERIES-LED

| LED COUNT | SOURCE TYPE | SOURCE                            | INITIAL LUMENS - 4000K CCT | INITIAL LUMENS - 3000K CCT | INITIAL LUMENS - 5000K CCT | L70 GREATER THAN (HR) | STARTING TEMP. | SYSTEM WATTS | VOLTS      | MAX INPUT AMPS |
|-----------|-------------|-----------------------------------|----------------------------|----------------------------|----------------------------|-----------------------|----------------|--------------|------------|----------------|
| 120       | LED         | 120 PLED® Optical Module - 350mA  | 16,211 - 18,599            | 15,400 - 17,669            | 17,021 - 19,529            | 60,000+               | -20°F          | 130          | 120<br>277 | 1.06<br>0.46   |
| 120       | LED         | 120 PLED® Optical Module - 525mA  | 23,154 - 26,566            | 21,996 - 25,238            | 24,312 - 27,894            | 60,000+               | -20°F          | 192          | 120<br>277 | 1.63<br>0.70   |
| 120       | LED         | 120 PLED® Optical Module - 700mA  | 29,424 - 33,760            | 27,953 - 32,072            | 30,895 - 35,448            | 60,000+               | -20°F          | 260          | 120<br>277 | 2.17<br>0.94   |
| 120       | LED         | 120 PLED® Optical Module - 1050mA | 40,350 - 46,296            | 38,333 - 43,981            | 42,368 - 48,611            | 60,000+               | -20°F          | 398          | 120<br>277 | 3.33<br>1.43   |

- NOTES:**
1. Max Input Amps is the highest of starting, operating, or open circuit currents.
  2. Lumen values for LED Modules vary according to the distribution type. 80LED array appears in both the RZR and RZR-G models.
  3. System Watts includes the source watts and all driver components.
  4. Fuse value should be sufficient to protect all wiring components. For electronic driver and LED component protection, use surge suppressor supplied with luminaire.  
**Note: Surge suppressors are considered a perishable device.**
  5. L70(10K) – TM-21 6x rule applied.

**WARNING:** All fixtures must be installed in accordance with local codes or the National Electrical Code. Failure to do so may result in serious personal injury.





LASBERG CONSTRUCTION  
ASSOCIATES, INC.

**SUMMIT CLUB  
ARMONK, N.Y.  
BLASTING PLAN  
OCTOBER 21, 2022**

**INTRODUCTION:**

This Blasting Plan describes the blasting operations that may occur during construction of the Summit Club Project. The purpose of this Blasting Plan is to provide project-specific information concerning blasting procedures, including the safe use and storage of explosives, and the measures and best management practices (BMPs) that will be implemented to prevent potential adverse impacts to human health, safety, and the environment from the use of explosives during blasting activities.

The exact scope of blasting to be undertaken and quantities of rock is undetermined at this time. This Report will be updated as required upon receipt of the forthcoming additional subsurface investigation and the hiring of a licensed Blasting Subcontractor.

**REGULATORY OVERVIEW:**

The project shall comply with all conditions within this plan as well all requirements and regulations included in Part II Chapter 122 of the Town of North Castle Code. The project shall also comply with all Federal Occupational Safety and Health Administration (OSHA) and Federal Bureau of Alcohol, Tobacco, and Firearms (BATF) regulations regarding the use and storage of explosives.

As there may be conflicts between the laws and regulations governing the use and storage of explosives, the project will comply with the most stringent provisions.

**LOCATION:**

Blasting will occur primarily at terrain where rock is encountered below grade, where it cannot be removed with traditional excavation and earth moving equipment. It is anticipated that rock will be encountered in various areas throughout the project where excavation is required for the installation of building foundations and utilities.

**PROCEDURES:**

The project shall contract with a qualified, experienced, and licensed blasting contractor to perform the work. The Blasting Contractor shall use current and professionally accepted methods, products, and procedures to maximize safety during blasting operations. Blasting procedures will be carried out according to and in compliance with applicable laws, and will be closely monitored by the Project Construction Manager, Lasberg Construction Associates, Inc. as well as the project Geotechnical Engineer, Carlin Simpson Associates.

Blasting procedures will be conducted according to the following four basic principles:

1. The blast will produce fractured rock of appropriate dimensions.
2. The blast will prevent/minimize production of flyrock and air blast hazards.
3. The blast will minimize peak particle velocities.
4. The blast will be scaled/sized to minimize overblasting.

The project shall provide a description of all structures and utilities, residential dwellings, garages, tennis courts, etc. within 500' of the blast site.

The Blasting Contractor shall furnish the Town of North Castle with a Certificate of Insurance issued by a company to do business in the Ste of New York in accordance with Town requirements. Additionally, the Blasting Contractor shall provide the Town with an Indemnification and Hold Harmless Agreements.

Notices shall be sent to all property owners within 500' of the blast site.

Blasting shall only occur between the hours of 8:00 AM and 5:00 PM Monday through Saturday. No blasting shall be conducted on Sunday and Federal holidays.

**SAFETY MEASURES:**

Safe storage and use of explosive materials will be a top priority during construction. The project will conduct pre-blast surveys of all structures within 500 feet and will employ the services of a testing lab to monitor the vibration seismic impacts at all times when blasting operations are being conducted.

All personnel responsible for handling explosives and present in and around blasting sites will be fully informed and trained in applicable safety precautions/procedures.

The Blasting Contractor shall use a signaling system to alert workers of an impending blast. The signaling system will be comprised of the following components:

1. Warning Signal: 5 minutes prior to the blasting signal, a 1-minute series of long, audible signals will be sounded at the blast site.
2. Blasting Signal: 1 minute prior to a blast, a series of short, audible signals will be sounded at the blast site.
3. All-clear Signal: Following inspection of the blast area, a prolonged, audible signal will be sounded at the blast site.

Signage shall be posted at key access points to ensure the public does not accidentally enter a blast zone. Before blasting, the Blasting Supervisor will make sure the blasting area is clear. Following detonation, the blasting area will be inspected for undetonated or misfired explosives. Once the area has been inspected, the "all-clear" signal will sound.

Blasting mats shall be used to prevent flyrock from exiting the blast area.

**MISCELLANEOUS:**

- Rock Hammering: At various stages of the project the size, location and quantity of rock may require the use of a pneumatic chipping hammer. All rock hammering shall be conducted in accordance of the Town of North Castle Code.
- Upon contracting with a Blasting Contractor, the project shall revise this Plan as required.

END



LASBERG CONSTRUCTION  
ASSOCIATES, INC.

**SUMMIT CLUB  
ARMONK, N.Y.  
PRELIMINARY ROCK CRUSHING PLAN  
OCTOBER 21, 2022**

**INTRODUCTION:**

This Rock Crushing Plan describes the crushing operations that may occur during construction of the Summit Club Project. The purpose of this Crushing Plan is to provide project-specific information concerning crushing procedures, including the measures and best management practices (BMPs) that will be implemented to prevent potential adverse impacts to human health, safety, and the environment during crushing activities.

The exact scope of crushing to be undertaken and quantities of rock is undetermined at this time. This plan will be updated as required upon receipt of the forthcoming additional subsurface investigation and the hiring of a Site Contractor.

**REGULATORY OVERVIEW:**

The project shall comply with all conditions within this plan as well all requirements and regulations included in the Town of North Castle Code. The project shall also comply with all Federal Occupational Safety and Health Administration (OSHA).

As there may be conflicts between the laws and regulations governing the use and storage of explosives, the project will comply with the most stringent provisions.

**LOCATION:**

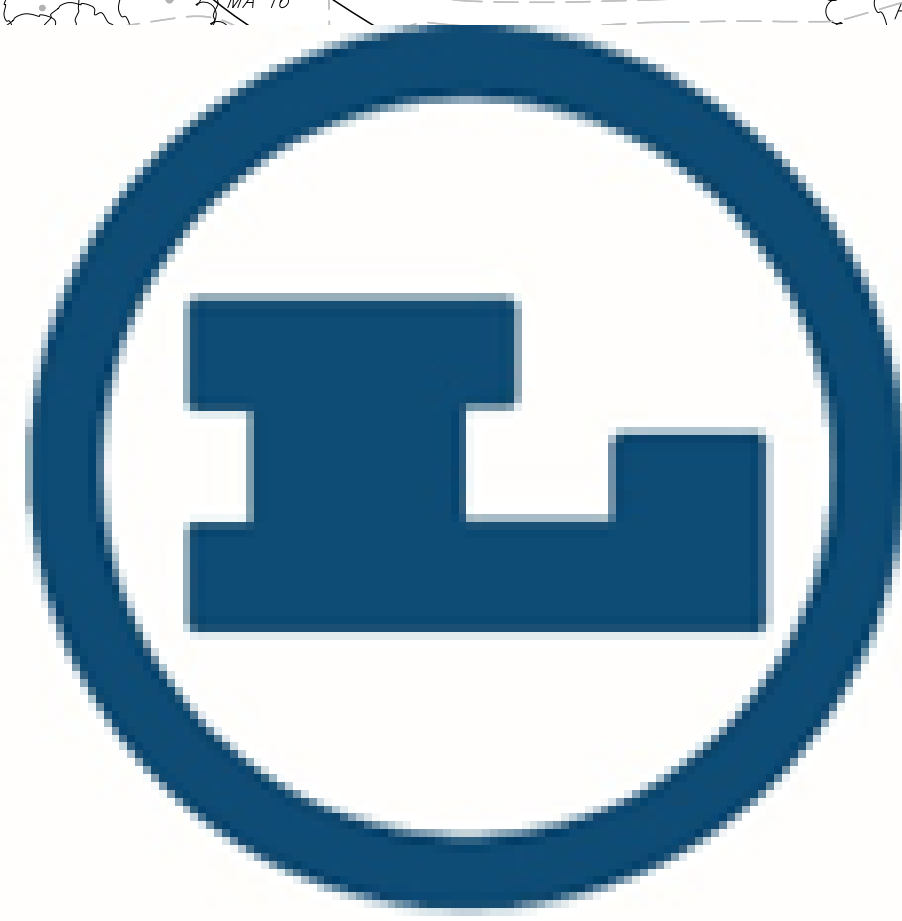
Rock crushing will occur in close proximity to where rock removal is conducted, and approximately as depicted on the attached "Preliminary Rock Crushing Plan" dated 10-21-22.

**DURATION AND HOURS OF OPERATION:**

Rock crushing shall be conducted between the hours of 8:00 AM and 5:00 PM Monday through Saturday. No rock crushing shall take place on Sunday or federal holidays. The duration of the rock crushing activity shall be further defined upon receipt of additional sub surface information.

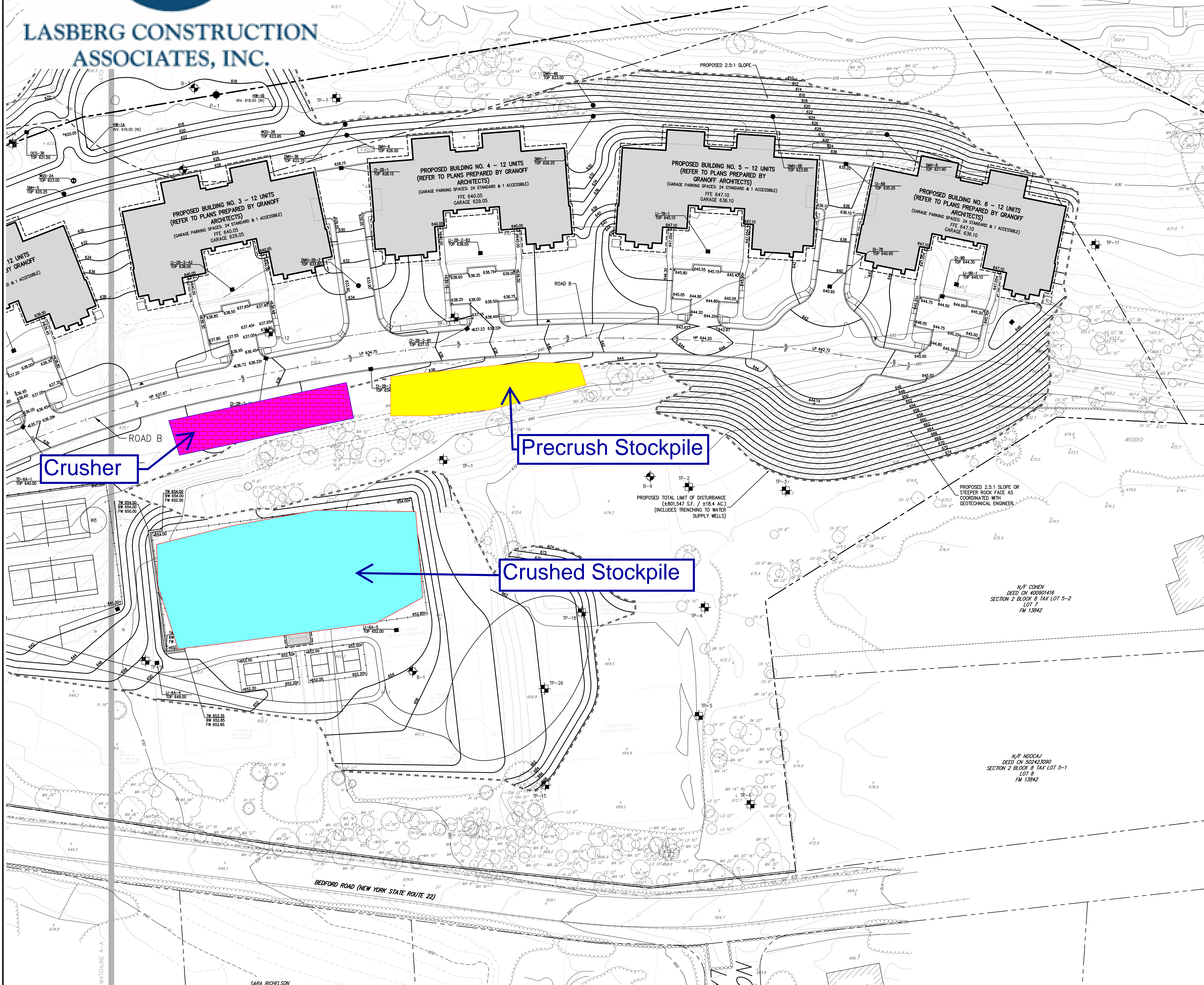
**PROCEDURES:**

Blasted rock shall be stockpiled in a segregated area near the crusher. Once process through the crusher, the processed rock shall be neatly stockpile for future use. During the crushing operation, the site contractor shall use dust containment measures to limit the amount of dust dispersed into the air.



**LASBERG CONSTRUCTION ASSOCIATES, INC.**

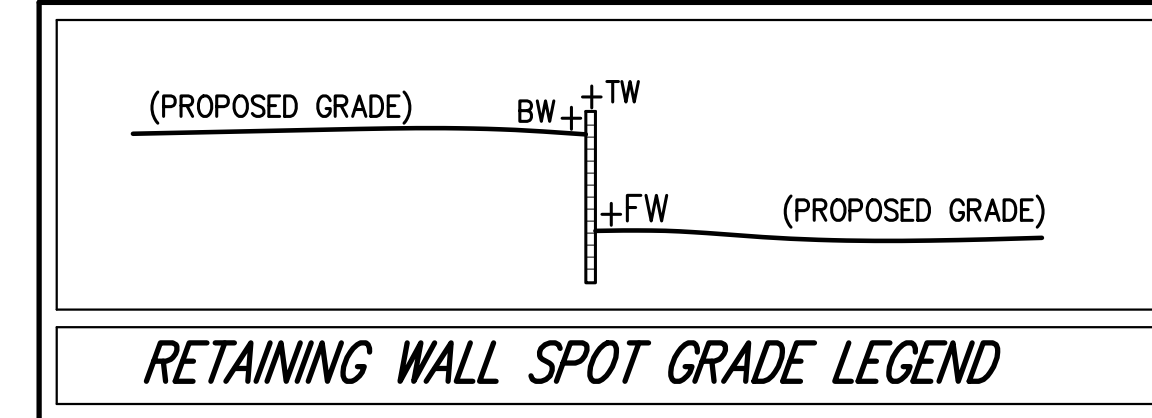
# SUMMIT CLUB Armonk, New York PRELIMINARY ROCK CRUSHING PLAN



**LEGEND**

|  |   |
|--|---|
|  | EXISTING PROPERTY LINE                                |
|  | ADJACENT PROPERTY LINE                                |
|  | EXISTING EASEMENT LINE                                |
|  | EXISTING WETLAND LINE AND DELINEATION                 |
|  | EXISTING BUILDING OVERHANG                            |
|  | EXISTING BUILDING LINE                                |
|  | EXISTING PAVEMENT EDGE                                |
|  | EXISTING CURB LINE                                    |
|  | EXISTING CONTOUR                                      |
|  | EXISTING INDEX CONTOUR                                |
|  | EXISTING STONE WALL                                   |
|  | EXISTING RETAINING WALL                               |
|  | EXISTING FENCE RAIL                                   |
|  | EXISTING GUIDE  |
|  | EXISTING DRAIN INLET                                  |
|  | EXISTING MANHOLE                                      |
|  | EXISTING UTILITY POLE                                 |
|  | EXISTING LIGHT POLE                                   |
|  | EXISTING SIGN   |
|  | PROPOSED BUILDING LINE                                |
|  | PROPOSED CONCRETE CURB                                |
|  | PROPOSED CONCRETE SIDEWALK                            |
|  | PROPOSED DROP CURB AND RAMP                           |
|  | PROPOSED FINISHED GRADE                               |
|  | PROPOSED SPOT GRADE                                   |
|  | PROPOSED SANITARY SEWER MANHOLE                       |
|  | PROPOSED STORM DRAIN MANHOLE                          |
|  | PROPOSED TYPE CI DRAIN INLET                          |
|  | PROPOSED TYPE DI DRAIN INLET                          |
|  | PROPOSED HEADWALL                                     |
|  | PROPOSED SUBSURFACE DRAINAGE OUTLET CONTROL STRUCTURE |
|  | PROPOSED RETAINING WALL (DESIGN BY OTHERS)            |
|  | BORING LOCATION AND DESIGNATION                       |
|  | PROPOSED LIMIT OF DISTURBANCE                         |

- NOTES:**
- EXISTING CONDITIONS DEPICTED ON THIS PLAN HAVE BEEN TAKEN FROM SURVEY TITLED, "TOPOGRAPHIC MAP," PREPARED BY JMC, LAST REVISED 03/06/2013, SUPPLEMENTED WITH AN UPDATED SURVEY LAST REVISED 01/17/2022. PORTIONS OF EXISTING TOPOGRAPHY HAVE BEEN PROVIDED BY WESTCHESTER COUNTY GIS.
  - GEOTECHNICAL BORING/TEST PIT LOCATIONS DEPICTED ON THIS PLAN WERE TAKEN FROM THE GEOTECHNICAL REPORT ENTITLED, "REPORT ON SUBSURFACE SOIL AND FOUNDATION INVESTIGATION," DATED 10/16/2013, PREPARED BY CARLIN-SIMPSON & ASSOCIATES.
  - ALL STORMWATER MANAGEMENT PRACTICES SHALL REMAIN UNDISTURBED AND BE PROTECTED FROM HEAVY MACHINERY TRAFFIC DURING CONSTRUCTION. HOWEVER DURING CONSTRUCTION OF THE PRACTICE THE CONTRACTOR SHALL MINIMIZE AND AVOID HEAVY MACHINERY TRAFFIC TO THE MAXIMUM EXTENT PRACTICABLE. THERE SHALL BE NO STORAGE OF MATERIALS WITHIN AREAS TO BE USED FOR STORMWATER MANAGEMENT PRACTICES. THE CONTRACTOR SHALL INSTALL CONSTRUCTION FENCE AROUND THE PRACTICE TO DISCOURAGE VEHICLE TRAFFIC.



**CUT & FILL ANALYSIS**

|         | REQUIRED CUT (CUBIC YARDS) | REQUIRED FILL (CUBIC YARDS) |
|---------|----------------------------|-----------------------------|
| OVERALL | 52,900                     | 48,000                      |
| PHASE 1 | 29,200                     | 35,400                      |
| PHASE 2 | 17,000                     | 11,400                      |
| PHASE 3 | 6,700                      | 1,200                       |

**10/21/22**

APPROVED BY TOWN OF NORTH CASTLE PLANNING BOARD RESOLUTION, DATED \_\_\_\_\_ DATE: \_\_\_\_\_

CHRISTOPHER CARRY, CHAIRMAN, TOWN OF NORTH CASTLE PLANNING BOARD  
 ENGINEERING DRAWINGS REVIEWED BY TOWN CONSULTING ENGINEER

JOSEPH M. CERNIELE, P.E.  
 KELLARD SESSIONS CONSULTING, P.C.  
 CONSULTING TOWN ENGINEER

**APPLICANT/OWNER:** SUMMIT CLUB PARTNERS, LLC  
 568 BEDFORD ROAD (NY-22)  
 ARMONK, NY 10504

**ARCHITECT:** GRANOFF ARCHITECTS  
 330 RAILROAD AVENUE  
 GREENWICH, CT 06850

**JMC Planning, Engineering, Landscape Architecture & Land Surveying, PLLC**  
 120 BEDFORD ROAD - ARMONK, NY 10504  
 PH: 914.333.3232 - FAX: 914.233.2102  
 www.jmcpc.com

**SITE GRADING PLAN (NORTH)**  
 THE SUMMIT CLUB AT ARMONK (RESIDENTIAL PHASE)  
 568 & 570 BEDFORD ROAD (NY-22)  
 TOWN OF NORTH CASTLE, NEW YORK

ANY ALTERATION OF PLANS, SPECIFICATIONS, PLATS AND REPORTS BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER OR LICENSED LAND SURVEYOR IS A VIOLATION OF SECTION 7209 OF THE NEW YORK STATE EDUCATION LAW, EXCEPT AS PROVIDED FOR BY SECTION 7209. SUBSECTION 2.

DATE: 11/23/2020  
 Project No: 20101  
 2010-0006 - GRAD NORTH - 09/03/22  
 Drawing No: \_\_\_\_\_

**C-201**

NOT FOR CONSTRUCTION

SARA RICHELSON  
 11/23/2022 DWG



**CARLIN • SIMPSON & ASSOCIATES, LLC**  
Consulting Geotechnical and Environmental Engineers

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61 Main Street, Sayreville, New Jersey 08872  
Tel. (732) 432-5757  
Fax. (732) 432-5717

Principal:  
Robert B. Simpson, P.E.

Associates:  
Meredith R. Anke, P.E.  
Stephen Rossi, P.E.  
Catherine Andersen, P.E.  
Michal Wroblewski, P.E.  
Kurt W. Anke  
Eric J. Shaw

31 May 2023

Summit Club Partners, LLC  
16 Hobby Farm Drive  
Armonk, NY

Attn: Mr. Jeffrey B Mendell

Re: Report on Subsurface Soil and Foundation Investigation  
Proposed Development  
568 & 570 Bedford Rd.  
North Castle, NY (CSA Job #22-85)

Dear Mr. Mendell:

In accordance with our proposal dated 23 May 2022, our supplemental proposal dated 4 August 2022, and your subsequent authorization, we have completed a Subsurface Soil and Foundation Investigation for the referenced site. The purpose of this study was to determine the nature and engineering properties of the subsurface soil and groundwater conditions for the new development, to recommend a practical foundation scheme, to determine the allowable bearing capacity of the site soils, and to preliminary determine the site soils permeability.

We understand that the planned construction will consist of six (6) multi-family residential buildings, an amenities building, and a new wastewater and water treatment facility. To guide us in our study, you have provided us with a site plan that indicates the location of the proposed construction.

Our scope of work for this project included the following:

1. Reviewed the proposed layout, the existing site conditions, the expected soil conditions, and planned this study.
2. Reviewed our subsurface investigation performed at the subject site in 2012 and 2013.
3. Retained Environmental Technical Drilling Inc. to advance thirty five (35) soil borings at the subject site.

4. Retained Trafficante Excavating to excavate seventeen (17) test pits at the subject site.
5. Performed five (5) infiltration tests at the subject site, to preliminarily determine the site soils permeability.
6. Laid out the boring and test pit locations in the field, provided full time inspection of the explorations, obtained soil samples, and prepared detailed logs and a Boring & Test Pit Location Plan.
7. Performed soil identification tests on selected soil samples in our laboratory.
8. Analyzed the field and laboratory test data and prepared this report containing the results of this study.

## **1.0 SITE DESCRIPTION**

The project site is located on the Summit Club at Armonk property on Bedford Road in North Castle, Westchester County, New York. The subject property is currently occupied by a golf club with a clubhouse building, tennis courts, and a few smaller out-structures. The proposed development area is also occupied by an asphalt paved parking lot and driveways as well as grass lawn areas and wooded areas. There are numerous existing underground utilities located throughout the property.

The existing site grades generally slope down from northeast to southwest and vary from approximately elevation +675.0 to +420.0.

## **2.0 PROPOSED CONSTRUCTION**

We understand that the planned construction will consist of six (6) multi-family residential buildings, an amenities building, and a new wastewater and water treatment facility. The proposed multi-family residential building finished floor elevations range from +647.5 to +639.5. Each multi-family building will have below grade parking garage with a finished garage floor elevation ranging from +636.5 to +628.5. Existing site grades in the area of the proposed residential buildings range from +650.0 to +620.0. We anticipate that cuts and fills ranging up to 14 feet will be required to achieve the proposed garage finished floor elevations.

The proposed amenities building is located to the south of the planned multi-family residential buildings. The planned finished floor elevation is +633.65. Based on the plans the amenities building will have a walk out basement on to the pool deck. The proposed basement elevation of the amenities building is approximately +620.0. The pool deck will also have a finished elevation of +620.0. Existing site grades in the area of the proposed amenities building range from +630.0 to +617.0. We anticipate that fills up to 3 feet and cuts up to 10 feet will be required to achieve the proposed basement and pool deck elevation.



The proposed construction will also include a new wastewater and water treatment facility. This proposed facility will include an above-ground 105,000-gallon potable water tank, a maintenance building, a water treatment building, a sewage treatment building, and several small structures. The finished floor elevations of these proposed structures were unknown at the time of writing this report. However, the provided proposed grading plan has spot grades that are located at the door of each building. We anticipate that the finished floor elevations will be close to these spot elevations.

In order to achieve the planned site grades, retaining walls and soil/rock slopes are planned throughout the site. The new site retaining walls will range up to approximately six (6) feet in height. The soil/rock slopes will range up to approximately 38 feet in height. Site development will also include stormwater management areas, new utilities, a new pool and new paved driveways and parking areas.

The following evaluation is based on information that has been provided to our office as of the date of this report. Once the construction plans have been further developed, a copy of the plans should be forwarded to our office so that we can review them along with the recommendations in this report. At that time, any changes or additional recommendations can be provided, if required.

### **3.0 SUBSURFACE CONDITIONS**

To determine the subsurface soil and groundwater conditions at the site thirty-five (35) borings (R-1 through R-7, ST-1, ST-2, ST-4, B-101 through B-121, and B-201 through B-203) and seventeen (17) test pits (DH-A through DH-D, TP-E through TP-H, DH-I through DH-P, and INF-C) were performed for the referenced project. The borings were performed by Environmental Technical Drilling, Inc. using hollow stem augers and split spoon sampling. The test pits were excavated by Traficante Excavating, Inc. Detailed boring and test pit logs have been prepared and are included in this report.

The borings and test pits were completed during several site visits conducted from August 2022 through March 2023. All test pit and boring operations were performed under the full-time inspection of Carlin-Simpson & Associates. Our field engineer visually identified all of the soil samples obtained during the boring operations and selected samples were tested in our laboratory. The results of these tests are also included in this report.

As part of this study, we also reviewed the subsurface investigation performed by this office in 2012 and 2013. The boring and test pit locations can be found on the attached Boring and Test Pit Location Plan and the summary table is also included at the end of this report.

#### **3.1 Soil and Rock**

The soil descriptions shown on the boring and test pit logs are based on the Burmister Classification System. In this system, the soil is divided into three components: Sand (S), Silt (\$) and Gravel (G). The major component is indicated in all capital letters, the lesser in lower case letters.

The following modifiers indicate the quantity of each lesser component:

| <u>Modifier</u> | <u>Quantity</u> |
|-----------------|-----------------|
| trace (t)       | 0 - 10%         |
| little (l)      | 10% - 20%       |
| some (s)        | 20% - 35%       |
| and (a)         | 35% - 50%       |

When the site soils are plastic, the following indicators are used:

| <u>Plasticity</u> | <u>Plasticity Index</u> | <u>Indicator</u> |
|-------------------|-------------------------|------------------|
| None              | 0 - 1                   | SILT             |
| Slight            | 1 - 5                   | Clayey SILT      |
| Low               | 5 - 10                  | SILT & CLAY      |
| Medium            | 10 - 20                 | CLAY & SILT      |
| High              | 20 - 40                 | Silty CLAY       |
| Very High         | 40+                     | CLAY             |

The subsurface soil and rock conditions encountered in the borings and test pits can be summarized as follows:

**Stratum 1A** Topsoil The surface layer in 29 of the 35 borings and each of the test pits consists of topsoil that ranges from approximately 1 to 15 inches in thickness.

**Stratum 1B** Asphalt The surface layer in 2 borings is asphalt that ranges from 2 to 6 inches in thickness.

**Stratum 2** Existing Fill At the surface in 4 borings and beneath the surface layers in 21 of the 35 borings and 13 of the 17 test pits is existing fill that generally consists of loose to medium dense brown, dark brown coarse to fine SAND, trace (to some) Silt, trace (to some) coarse to fine Gravel. Debris (i.e. wood, brick, asphalt, and roots) was noted within this stratum in portions of the site. The existing fill extends to depths ranging from 1'3" to 10'0" below existing ground surface at the boring and test pit locations.

**Stratum 3** Silty Sand or Sandy Silt Below the surface layers in 14 of the 35 borings and 4 of the 17 test pits and underlying the existing fill in the remaining test pits and borings is medium dense to dense brown, gray coarse to fine SAND, trace (to some) Silt, trace (to and) coarse to fine Gravel or medium stiff to stiff brown SILT some (to and), coarse to fine Sand, trace (to little) coarse to fine Gravel.

**Stratum 4** Completely Weathered Gneiss Underlying the Silty Sand or Sandy Silt is highly to completely weathered Gneiss. This layer is soil like in state, however, there could be denser pockets that cannot be conventionally excavated. The completely weathered Gneiss was encountered at depths ranging from about 2'6" to 14'0" below the existing ground surface and transitions to hard Gneiss bedrock with depth.

**Stratum 5** Auger or bucket refusal on probable Gneiss bedrock was encountered in each of the borings and 16 of the 17 test pits at depths ranging from 0'10" to 17'6" below the existing ground surface.

Gneiss  
Bedrock

The upper 5'0" of the Gneiss bedrock was cored at boring locations B-101, R-2, and R-3A starting at depths ranging from 10'0" to 11'2" below the existing ground surface. The rock core recovery ranged from 0% to 97% and the rock quality designation (RQD) of the recovered cores ranged from 0% to 67%. Based on the RQD and visual inspection, the upper portion of the bedrock ranges from very poor quality in a crushed condition to fair quality in a blocky and seamy condition.

### **3.2 Bedrock**

Based on our experience and the boring and test pit observations, the in-situ bedrock at the site will range from completely weathered rock in a soil-like state, to block and seamy in a fair condition. The rock generally transitions into harder bedrock with increasing depth. The completely weathered rock was encountered at depths ranging from 2'6" to 14'0" below the ground surface (elevations +639.5 to +461.5). Auger or bucket refusal on harder bedrock was encountered at depths ranging from 0'10" to 17'6" below the existing ground surface (elevation +669.5 to +461.3). The bedrock observations are summarized in Tables 1 through 3 and Table 10 below.

We anticipate that bedrock will be encountered when excavating for the basement subgrade elevations in Building 1 and Building 6. In addition, there is large cut up to 20 foot located to the east of Building 6. This area is highlighted on the attached Boring and Test Pit Location Plan (Figure 2). There is limited subsurface data in the referenced area. We recommend that additional borings or test pits be performed in this area to further evaluate the amount of rock to be excavated.

Penetration into the bedrock and completely weathered rock with excavation equipment will depend on the degree of weathering and fracturing in the rock. The upper few feet of rock may be "rippable" by using large construction equipment, but we anticipate that the "rippability" of the bedrock will be variable and limited. It should not be assumed that the completely weathered rock (very dense material in a soil-like state) can be excavated with conventional equipment. Harder rock will be encountered in the completely weathered rock stratum, and the use of hydraulic hammers and/or rock blasting will be required to excavate the harder bedrock. Additional recommendations related to rock removal are discussed in Section 5.1 of this report.

### **3.3 Groundwater**

During this investigation, groundwater was encountered in 7 of the 35 borings and 4 of the 17 test pits at depths ranging from 3'0" to 10'0" below the existing ground surface (elevations +621.0 to +467.0). Trapped water was encountered within the existing fill stratum in borings B-104, B-106, B-202, and B-203 at depths ranging from 2'0" and 9'0" below the existing ground surface (approximate elevation +620.0 and +543.0).

In addition, evidence of seasonal high groundwater, i.e. mottling, was encountered in borings B-109, B-112, R-1 and test pits TP-I and TP-J at depths ranging from 1'3" to 7'0" below the existing ground surface (approximate elevations +624.0 to +470.0). The groundwater observations are summarized in Tables 1 through 3, and Table 10 below.

During construction, we expect that perched or trapped water may be encountered within the existing fill and/or along the soil/rock interface, especially during wet periods. Groundwater on the subject site will be controlled by the topography and the underlying bedrock surface. Groundwater may daylight through the cut rock face during construction. Proper groundwater control measures will be required in the event that water is encountered in site excavations. Groundwater may also be diverted with the use of cutoff drains if needed.

The amenities building has a finished basement floor and pool deck elevation of +620.0. Trapped groundwater was encountered in borings B-104 and B-106 at a depth of 3'0" and 2'0" below the existing ground surface (approximate elevation +619.0 and +620.0), respectively. Groundwater will likely be encountered during construction of the pool and utilities in this area.

The proposed maintenance building has a walkout basement at approximately +556.0. Trapped water was encountered in boring B-202 at a depth of 9'0" below the existing ground surface (approximate elevation +556.0). Water may likely be encountered during the construction of this building.

Variations in the location of the long-term water table may occur as a result of changes in precipitation, evaporation, surface water runoff, and other factors not immediately apparent at the time of this exploration.

#### **4.0 SUMMARY OF DESIGN RECOMMENDATIONS**

Below is a summary of the major design and construction considerations for this project. Additional recommendations are provided in the following sections of this report.

- *Subsurface Conditions (Section 3.0)*
  - Existing fill was encountered in portions of the site to depths ranging from 1'3" to 10'0" below the existing ground surface (elevations +671.5 to +471.5).
  - Groundwater was encountered in 7 of the 35 borings and 4 of the 17 test pits at depths ranging from 3'0" to 10'0" below the existing ground surface (elevations +621.0 to +467.0).
  - Completely weathered Gneiss was at depths ranging from 2'6" to 14'0" below the ground surface (elevations +639.5 to +461.5).
  - Harder Gneiss bedrock was encountered at depths ranging from 0'10" to 17'6" below the existing ground surface (elevation +669.5 to +461.3).
  - A summary of the subsurface observations is provided in Tables 1 through 3 and Table 10, below.

- *Building Area Preparation (Section 5.1)*
  - Surface materials (i.e. topsoil) must be stripped from proposed building areas.
  - Use of hydraulic hammers and/or blasting will be required in order to achieve the bottom of the building excavations in portions of the site.
  - When the exposed building subgrade consists of soil, it shall be densified with several passes of a large vibratory roller prior to placing compacted fill or once the planned building subgrade has been achieved in cut areas.
  - In the event that water infiltrates the building excavation, preparation of wet and sensitive subgrades with geotextile fabric and clean stone may also be necessary.
  - The existing fill is not suitable for support of the proposed building foundations or floor slabs.
  - Where the existing fill is encountered it shall be completely removed and replaced with new structural fill.
  - New backfill shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D1557).
  
- *Building Foundation Recommendations (Section 5.2)*
  - Special construction procedures must be employed if the building foundation bears on dissimilar material (i.e. soil and rock).
  - The new foundations may be designed as spread footing type foundations bearing on virgin soil, engineer-approved compacted fill, completely weathered rock or bedrock.
  - Net design bearing pressures are as follows:
    - Virgin Soil or Engineer-approved structural fill is 4,000 psf.
    - Transition Zones in Soil/Rock is 4,000 psf.
    - Completely Weathered Rock/ Gneiss Bedrock is 10,000 psf.
  - Minimum depth for frost protection is 42 inches.
  - Seismic Site Class is D or Stiff Soil Profile.
  
- *Building Floor Slab Recommendations (Section 5.3)*
  - The virgin soil, new compacted fill, and bedrock can be used for support of the proposed floor slabs.
  - The floor slabs may be designed as slab on grade.
  - Modulus of subgrade reaction is 200 pci.
  
- *Additional Site Recommendations (Section 6.0)*
  - *Stormwater Management Systems (Section 6.1)*
    - Several stormwater management areas are proposed for this site.
    - Infiltration testing was performed in the stormwater management areas and can be found in Section 6.1 below.
  - *New Retaining Walls (Section 6.2)*
    - Existing fill is not suitable for support of the proposed retaining walls in its current state. Where existing fill is encountered it shall be partially removed and replaced with new structural fill.
    - A cast-in-place steel reinforced concrete wall, a mechanically stabilized earth (MSE) wall are good alternatives for this project.

- *Pavement (Section 6.5)*
  - Densified existing fill, virgin soil, new compacted fill, and weathered rock may be used to support the pavement.
  - The use of hydraulic hammers and/or blasting will be required in areas to achieve proposed site grades.

## 5.0 NEW BUILDING EVALUATION

We understand that the planned construction will consist of six (6) multi-family residential buildings, an amenities building, and a new wastewater and water treatment facility.

### Multi-Family Residential Buildings

The proposed construction will consist of six (6) multi-family residential buildings. The proposed multi-family residential building finished floor elevations range from +647.5 to +639.5. Each multi-family building will have below grade parking garage with a finished garage floor elevation ranging from +636.5 to +628.5. We anticipate that cuts and fills ranging up to 14 feet will be required to achieve the proposed garage finished floor elevations. A summary of the borings performed for the proposed multi-family buildings is provided in Table 1 below.

**Table 1 – Summary of Boring Observations for the Residential Buildings**

| Boring No. | Applicable Structure | Approx Ground Surface Elevation | Depth to Groundwater (Elevation)          | Depth to Bottom of Existing Fill (Elevation) | Depth to Bedrock (Elevation)               |
|------------|----------------------|---------------------------------|---|--|--|
| B-115      | Building 2           | +627.0                          | NE to 7'3"                                | NE   | CWR @ 6'6" (+620.5)<br>AR @ 7'3" (+619.8)  |
| B-116      | Building 1           | +632.0                          | NE to 4'0"                                | NE   | CWR @ 2'6" (+629.5)<br>AR @ 4'0" (+621.0)  |
| B-118      | Building 4           | +629.0                          | NE to 17'6"                               | NE   | CWR @ 8'0" (+623.0)<br>AR @ 17'6" (+611.5) |
| B-119      | Building 5           | +625.0                          | NE to 6'3"                                | NE   | AR @ 6'3" (+618.8)                         |
| B-120      | Building 6           | +647.5                          | NE to 9'0"                                | 7'0" (+640.5)                                | CWR @ 8'0" (+639.5)<br>AR @ 9'2" (+638.3)  |
| R-1        | Building 1           | +631.0                          | 10'0" (+621.0)<br>SHGW @ 7'0"<br>(+624.0) | 2'0" (+629.0)                                | CWR @ 14'0"<br>(+617.0)                    |
| R-2        | Building 2           | +628.0                          | NE to 10'0"                               | 2'0" (+626.0)                                | C @ 10'0" (+618.0)                         |
| R-3        | Building 3           | +627.0                          | NE to 3'6"                                | NE   | AR @ 3'6" (+623.5)                         |
| R-3A       | Building 3           | +626.0                          | NE to 10'0"                               | -  | CWR @ 7'0" (+619.0)<br>C @ 10'0" (+616.0)  |
| R-4        | Building 4           | +626.0                          | NE to 9'6"                                | NE   | CWR @ 6'6" (+619.5)<br>AR @ 9'6" (+616.5)  |
| R-5        | Building 5           | +638.0                          | NE to 11'6"                               | 8'0" (+630.0)                                | CWR @ 9'0" (+629.0)                        |
| R-6        | Building 6           | +640.0                          | NE to 7'6"                                | 2'6" (+637.5)                                | CWR @ 2'6" (+637.5)                        |

NE – Not Encountered, (-) – Auger through Existing Fill, C – Cored Bedrock, AR – Auger Refusal on Probable Bedrock, CWR – Completely to Highly Weathered Rock, SHGW – Evidence of Seasonal High Groundwater (i.e. Mottling)

Existing fill was encountered in Buildings 1, 2, 5, and 6 to depths ranging from 2'0" to 8'0" (elevations +640.5 to +626.0) below the existing ground surface. In addition as indicated on the existing conditions drawing, in the southwest corner of Building 1 and southeast portion of Building 3 were previously demolished infrastructure. If any debris remains, it shall also be completely removed, this is further discussed in Section 5.1 of this report.

Existing fill is not a suitable bearing material for the proposed multi-family buildings. The consistency and density of the soil fill are not predictable. Certain areas may contain clean dense soil while other areas may contain loose material, void spaces, and/or debris. The existing soil fill creates the possibility of intolerable differential settlements under loading. We anticipate that the majority of the existing fill will be removed when excavating to the garage subgrade elevation. Where existing fill is encountered below the garage subgrade elevation it must be completely removed. This is further discussed in Section 5.1, "Removal of Existing Fill".

Once the existing fill and any other construction debris is completely removed, the new residential buildings may be designed as shallow spread footings bearing on virgin soil, new structural fill, or bedrock. Recommendations for preparation of the building areas are provided in Section 5.1. Foundation recommendations can be found in Section 5.2. In addition, the new building floor slabs may be designed as a slab on grade bearing on virgin soil, new structural fill, or bedrock. Recommendations for building slab on grades can be found in Section 5.3.

### Amenities Building

The proposed amenities building is located to the south of the planned multi-family residential buildings. The planned finished floor elevation is +633.65. Based on the spot elevations on the plans the amenities building will have a walk out basement on to the pool deck at elevation +620.0. We anticipate that cuts up to 3 feet will be required to achieve the proposed basement finished floor elevation and pool deck elevation. A summary of the borings performed for the proposed amenities building provided in Table 2 below.

**Table 2 – Summary of Boring Observations for the Amenities Building**

| Boring No. | Approx Ground Surface Elevation | Depth to Groundwater (Elevation) | Depth to Bottom of Existing Fill (Elevation) | Depth to Bedrock (Elevation)              |
|------------|---------------------------------|----------------------------------|--|---|
| B-103      | +623.0                          | NE to 8'0"                       | 5'0" (+618.0)                                | CWR @ 6'6" (+616.5)<br>AR @ 8'0" (+615.0) |
| B-104      | +622.0                          | ** 3'0" (+619.0)                 | 5'0" (+617.0)                                | CWR @ 6'0" (+616.0)<br>AR @ 7'0" (+615.0) |
| B-105      | +620.0                          | NE to 9'3"                       | 5'0" (+615.0)                                | CWR @ 7'0" (+613.0)<br>AR @ 9'0" (+611.0) |
| B-106      | +622.0                          | ** 2'0" (+620.0)                 | 5'0" (+617.0)                                | CWR @ 6'6" (+615.5)<br>AR @ 7'6" (+614.5) |
| R-7        | +630.0                          | NE to 9'0"                       | 5'0" (+625.0)                                | CWR @ 7'0" (+623.0)<br>C @ 9'0" (+621.0)  |

NE – Not Encountered, AR – Auger Refusal on Probable Bedrock, CWR – Completely to Highly Weathered Rock, (\*\*) – Trapped Groundwater

Existing fill was encountered throughout the proposed amenities building and pool deck area to a depth of 5'0" (elevations +625.0 to +615.0) below the existing ground surface. In addition as indicated on the existing conditions drawing, along the eastern portion of proposed building was a previously demolished building. If any debris remains, it shall be completely removed, this is further discussed in Section 5.1 of this report.

As discussed above in the Residential Buildings section, existing fill is not suitable material for support of the new amenities building. Where the existing fill is encountered below the basement amenities subgrade elevation, it must be completely removed and replaced with new structural fill.

Once the existing fill and any other construction debris is completely removed, the new amenities building may be designed as shallow spread footings bearing on virgin soil, new structural fill, or bedrock. Recommendations for preparation of the building areas are provided in Section 5.1. Foundation recommendations can be found in Section 5.2 of this report. In addition, the new building floor slabs may be designed as a slab on grade bearing on virgin soil, new structural fill, or bedrock. Recommendations for building slab on grades can be found in Section 5.3 of this report.

The amenities building has a finished basement floor and pool deck elevation of +620.0. Trapped groundwater was encountered in borings B-104 and B-106 at a depth of 3'0" and 2'0" below the existing ground surface (approximate elevation +619.0 and +620.0), respectively. Groundwater will likely be encountered during construction of the pool and utilities in this area. Where groundwater is encountered proper groundwater control measures (i.e. sumps and pumps) will be required. This is further discussed in Section 5.1 "Handling Groundwater and Wet Subgrades."

#### Wastewater and Water Treatment Facility

The proposed construction will also include a new wastewater and water treatment facility. The new facility will be located to the west of the proposed residential development. The new facility will consist of a new 105,000-gallon potable water tank, a new maintenance building, a water treatment building, and a new wastewater treatment building. A summary of the borings performed for the proposed wastewater and water treatment facility is provided in Table 3 below.

**Table 3 – Summary of Boring Observations for the Wastewater/ Water Treatment Facility**

| Boring No. | Applicable Structure | Approx Ground Surface Elevation | Depth to Groundwater (Elevation) | Depth to Bottom of Existing Fill (Elevation) | Depth to Bedrock (Elevation)              |
|------------|----------------------|---------------------------------|----------------------------------|--|---|
| B-101      | Tank                 | +563.0                          | NE to 11'2"                      | 5'0" (+558.0)                                | CWR @ 7'0" (+556.0)<br>C @ 11'2" (+551.8) |
| B-102      | Tank                 | +565.0                          | NE to 9'6"                       | 5'0" (+560.0)                                | CWR @ 8'0" (+557.0)<br>AR @ 9'6" (+555.5) |



| Boring No. | Applicable Structure     | Approx Ground Surface Elevation | Depth to Groundwater (Elevation) | Depth to Bottom of Existing Fill (Elevation) | Depth to Bedrock (Elevation)                |
|------------|--------------------------|---------------------------------|----------------------------------|--|---|
| B-107      | Tank                     | +564.0                          | NE to 8'6"                       | 5'0" (+559.0)                                | CWR @ 7'6" (+556.5)<br>AR @ 8'6" (+555.5)   |
| B-108      | Tank                     | +564.0                          | NE to 8'6"                       | 3'6" (+560.5)                                | CWR @ 7'0" (+567.0)<br>AR @ 8'6" (+555.5)   |
| ST-1       | Wastewater Building      | +579.0                          | NE to 11'6"                      | NE   | CWR @ 5'0" (+572.0)<br>AR @ 11'6" (+567.50) |
| ST-2       | Wastewater Building      | +587.0                          | NE to 11'0"                      | NE   | CWR @ 8'0" (+579.0)<br>AR @ 11'0" (+576.0)  |
| ST-4       | Water Treatment Building | +563.0                          | NE to 16'6"                      | 8'0" (+555.0)                                | CWR @ 11'6" (+551.5)<br>AR @ 16'6" (+546.5) |
| B-201      | Water Treatment Building | +563.0                          | NE to 12'0"                      | 10'0" (+553.0)                               | AR @ 12'0" (+551.0)                         |
| B-202      | Maintenance Building     | +565.0                          | **9'0" (+556.0)                  | 4'0" (+561.0)                                | AR @ 16'6" (+548.5)                         |

NE – Not Encountered, (\*\*) – Trapped Groundwater, AR – Auger Refusal on Probable Bedrock, CWR – Completely to Highly Weathered Rock

The finished floor elevations of these proposed structures were unknown at the time of writing this report. However, the proposed grading has spot grades that are located at the door of each building. We anticipate that the finished floor elevations will be close to these elevations.

Therefore the finished floor elevation for the new maintenance building will be approximately elevation +568.0 with a walkout basement elevation of +556.0. The water treatment building will have finished floor elevation of approximately +562.0. The wastewater treatment building will have a finished floor elevation of approximately +577.5.

Based on the boring observations, existing fill was encountered throughout the proposed wastewater and water treatment structure areas to depth ranging from 3'6" to 10'0" (approximately elevations +561.0 to +553.0) below the existing ground surface. As discussed above, the existing fill is not suitable for support of the new structures. Where existing fill is encountered within the area of the proposed buildings, it shall be completely removed and replaced with new structural fill as described in Section 5.1 of this report.

In our opinion, if the wastewater and water treatment building subgrades are prepared as outlined in this report, each of the building foundations may be designed as a shallow spread foundation bearing on virgin soil, new structural fill, or bedrock. Recommendations for preparation of the building areas are provided in Section 5.1. Foundation recommendations can be found in Section 5.2 of this report. In addition, the new building floor slabs may be designed as a slab on grade bearing on virgin soil, new structural fill, or bedrock. Recommendations for building slab on grades can be found in Section 5.3 of this report.

We also anticipate that the proposed above-ground 105,000-gallon potable water tank will be constructed with a ring-wall foundation. The ring-wall foundation may be lowered to bear below the existing fill on the virgin soil or bedrock strata. Ringwall foundation recommendations can be found in Section 5.2 of this report.

### **5.1 Building Area Preparation**

In order to prepare the site for construction, all surface materials such as vegetation and topsoil shall be removed from the planned building areas, extending at least ten (10) feet beyond the new construction limits, where practical.

As part of the site development, the existing structures will also be or already have been demolished. All debris resulting from the demolition of these structures must be completely removed from the new building footprints, extending at least ten (10) feet beyond the new building limits, where practical. This shall include the complete removal of all foundations, floor slabs, utilities, pavement, and miscellaneous debris. Where the removal of existing structures or associated materials extends below the planned building, the resulting excavations shall be backfilled with new compacted fill as described below.

Existing utilities, where they are encountered within the planned building areas, should be either abandoned or rerouted around the new structures. Once the utility has been rerouted or abandoned, the section of pipe and any associated structure within the building areas should be completely removed. The removal of the pipe and structure must also include any loose fill around the pipe or structure. After the pipe, associated structure, and associated loose backfill have been removed, the resulting excavation shall be backfilled with new controlled fill as described below.

#### **Rock Removal - Blasting**

In order to develop the site, rock or weathered rock cuts will be required. Based on our experience, the in-situ bedrock and weathered bedrock will be variable, ranging from completely weathered to block and seamy bedrock. To excavate the rock or weathered rock strata, the top 1 to 5 feet of rock may be “rippable” by using large construction equipment. We anticipate that the “rippability” of the bedrock will be variable and limited. The use of hydraulic hammers and/or blasting will be required to excavate the harder, blocky and seamy rock.

The blasting operation shall be monitored by a seismologist using a seismograph. The maximum peak particle velocity on any one component of an instrument measuring three-component motion shall not exceed the limits indicated in Table 4 below.

**Table 4 – Distance Versus Peak Particle Velocity Method**

| <b>Distance from Blast<br/>in Feet</b> | <b>Peak Particle Velocity of any One-<br/>Component in Inches per Second</b> |
|--|--|
| 0 to 100                               | 1.50   |
| 100 to 200                             | 1.25   |
| 200 to 500                             | 1.00   |
| 500 to 1,000                           | 0.50   |
| Over 1,000                             | 0.25   |

Each blast will be monitored independently to insure that this criterion is not exceeded. The monitoring results shall be provided to the blasting contractor as soon as possible so that the blasting program can be modified if necessary.

We recommend that a minimum of four (4) monitoring points be established, to the north, east, south and west of the planned blast area. The seismograph sensors should be placed near the closest structure and at any structures identified during the pre-blast survey that are considered to be susceptible to vibration damage. Where possible, the seismograph sensors should be placed on the bedrock surface. This will require shallow excavations through the overburden soils in the monitoring areas.

Prior to the start of any construction, a Blasting Management Plan shall be prepared by the blasting contractor for this project. This plan shall be in accordance with State regulations and the Explosive Materials Code, NFPA No. 495, National Fire Prevention Association. Additionally, all blasting should adhere to the provisions of 29 CFR Ch. XVII Section 1910.109 for explosives and blasting agents, the Town of North Castle Municipal Code, and any other local requirements.

Prior to any blasting work being done, a licensed professional engineer shall be retained to perform a detailed pre-blast condition survey of existing structures located within 500 feet of the planned blast area. The pre-blast condition survey shall be conducted in accordance with the requirements of local authorities. A copy of all reports prepared by the licensed engineer shall be submitted to the Town Engineer and the owner's representative in a timely manner. In addition, the permit holder shall request a pre-blast meeting with the Fire Inspector to review and finalize the proposed blasting plan. No blasting shall be conducted unless a pre-blast meeting has been held with the Fire Inspector and the Fire Inspector is satisfied that the proposed blasting plan is reasonable.

Prior to the beginning of blasting, a notice will be sent to all residential and commercial property owners within a 500-foot radius of the blast area. This notification will be given at least 3 days before blasting takes place. A contact person will be established and named in this notice to respond to all concerns raised by nearby residents during the blasting phase of the project. The contact person will respond to any inquiries within 24 hours. In addition, prior to each blast, the blaster or his designee shall be responsible for notifying all persons in the general area that blasting operations are scheduled to begin within a specified period of time. In addition, the blaster shall sound a recognized whistle, siren or horn loud enough to be heard throughout the

designated blast zone approximately three minutes prior to blasting and again 30 seconds prior to blasting, warning all persons that blasting is imminent.

The blasting contractor should avoid over-blasting the rock. Over-blasting will disturb the deeper intact rock that will be used as bearing material for the proposed foundations and floor slabs. Any material that is over-blasted will have to be removed and replaced with new structural fill under the full-time inspection of Carlin-Simpson & Associates. Carlin-Simpson & Associates will be responsible for determining what material is to be removed and will direct the contractor during the excavation.

#### Removal of Existing Fill (Where Required)

As discussed above, the existing fill is not a suitable bearing material for the new building foundations and floor slabs. Where existing fill is encountered in the building areas, it must be completely removed and replaced as described below.

Based on the boring and test pit observations and the proposed construction, we anticipate that some of the existing fill will be removed during the excavation to the planned subgrade elevations. If existing fill remains below the planned subgrade elevation, the excavation shall extend through the existing fill down to the virgin soil. At the bottom of the excavation, the removal of the unsuitable material shall extend horizontally beyond the building limits a minimum distance of 1'0" plus a distance equal to the depth of the excavation below the planned foundation bearing elevation. For example, if the removal of the existing fill extends vertically 3'0" below the planned foundation bearing elevation, the excavation must extend horizontally a minimum of 4'0" (1'0" plus 3'0") beyond the new building limits at that location.

The removal of the existing fill from the proposed building areas shall be performed under the full time inspection of Carlin-Simpson & Associates. The on-site representative from Carlin-Simpson & Associates shall direct the contractor during this operation to ensure that all of the unsuitable material has been removed from the proposed building areas.

During the removal of the unsuitable material, the contractor should segregate the potentially re-usable existing soil/fill material from the non-reusable fill (i.e. debris and topsoil). The on-site representative from Carlin-Simpson & Associates shall evaluate the suitability of the excavated materials for use as compacted fill during the excavation and prior to its re-use. Potentially usable fill should be stockpiled and covered with tarps or plastic sheeting for protection from excess moisture. Any fill material that is or becomes wet must be dried prior to its re-use.

#### Densification of Subgrade Soils (Proofrolling)

After the surface materials and existing fill have been removed and prior to the placement of new structural fill, the exposed subgrade soil must be graded level and proofrolled by several passes of a vibratory drum roller. Where existing fill is not present within the building area, the existing soil subgrades that are either at or below the planned subgrade elevation shall be densified by several passes of a large vibratory drum roller. The proofrolling is necessary to

densify the underlying soils. Proofrolling must be performed prior to the excavation for new foundations and/or the installation of new compacted fill.

A representative from Carlin-Simpson & Associates shall observe the proofrolling operation. If any excessive movement is noted during the proofrolling, the soft soil shall be removed and replaced with new compacted fill. The Carlin-Simpson & Associates representative shall be responsible for determining what material, if any, is to be removed and will direct the contractor during this operation. The proofrolling may be eliminated, if in the opinion of the geotechnical engineer, the proofrolling will cause pumping or otherwise disturb the stability of the subgrade or if the subgrade consists of bedrock.

#### Handling Groundwater and Wet Subgrades

The amenities building has a finished basement floor and pool deck elevation of +620.0. Trapped groundwater was encountered in borings B-104 and B-106 at a depth of 3'0" and 2'0" below the existing ground surface (approximate elevation +619.0 and +620.0), respectively. Groundwater will likely be encountered during construction of the pool and utilities in this area. Where groundwater is encountered proper groundwater control measures (i.e. sumps and pumps) will be required.

The proposed maintenance building has a walkout basement at approximately +556.0. Trapped water was encountered in boring B-202 at a depth of 9'0" below the existing ground surface (approximate elevation +556.0). Water may likely be encountered during the construction of this building.

During this investigation, groundwater was encountered in 7 of the 35 borings and 4 of the 17 test pits at depths ranging from 3'0" to 10'0" below the existing ground surface (elevations +621.0 to +467.0). For most building areas, groundwater is not expected to be encountered during construction. However, perched or trapped groundwater may be present in the existing fill, silty site soils, along the soil/rock interface, and/or in the bedrock fractures. Groundwater may also daylight through the cut rock face during construction. In the event that perched or trapped groundwater is encountered, dewatering will be required to construct the foundations and to prepare the subgrade.

Proper groundwater control measures (i.e. sumps and pumps) will be required in the event that water is encountered in the building excavations. Where required, temporary groundwater control measures shall consist of one (1) or more sumps and pumps. The sumps shall consist of a perforated pipe at least eight (8) inches in diameter, surrounded by crushed stone and filter fabric. The sump pits must be installed just outside the planned excavation area and at least two (2) feet below the lowest anticipated subgrade elevation. The sumps and pumps must be set and in operation prior to excavating below the water table. The pumps shall be used to temporarily lower the surrounding groundwater level and keep the building excavation relatively dry.

In the event that the exposed subgrade soil within the planned building areas becomes wet or soft, stabilizing the subgrade surface may be required in order to construct the foundations

and floor slab. The subgrade may be stabilized with geotextile filter fabric and crushed stone. The geotextile filter fabric shall consist of Mirafi 500X or equivalent. Adjacent layers of geotextile filter fabric should be overlapped a minimum of 6 inches. As necessary, approximately 12 inches of 3/4-inch clean crushed stone will be installed on top of the filter fabric layer to provide a firm working surface, provide protection for the geotextile filter fabric, minimize pumping, and to stabilize the subgrade soil. Carlin Simpson and Associates will determine the need for stabilization and will direct the contractor during construction.

### Installation of New Structural Fill

New fill required to achieve final grades shall consist of either engineer-approved on-site soil or imported sand and gravel. The new fill shall be placed in layers not exceeding one (1) foot in thickness and each layer shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D1557). Each layer must be compacted, tested, and approved by the Carlin-Simpson & Associates field representative prior to placing subsequent layers. The suitability of the on-site soil and rock for reuse as compacted fill is discussed in Section 6.7 below.

If imported structural fill will be required during construction, the imported structural fill shall meet the following specified gradation:

| <u>US Standard Sieve Size</u> | <u>Percent Finer By Weight</u> |
|-------------------------------|--------------------------------|
| 3-inch                        | 100                            |
| No. 4                         | 30-80                          |
| No. 40                        | 10-50                          |
| No. 200                       | 0-20                           |

## **5.2 New Building Foundations**

Once the planned building areas have been prepared as described in Section 5.1 above, the new foundations may be constructed on the virgin site soils, new compacted fill, and bedrock.

### Bedrock Special Construction Procedures

Where rock and soil is encountered in the foundation excavations, “Special Construction Procedures” must be employed. When continuous wall footings or closely spaced column footings (20 feet or less) bear on dissimilar material (i.e. rock and soil) the potential for differential movement exists. A footing bearing in rock will not move, whereas a footing bearing on soil will settle slightly due to the compressive nature of all soils when subjected to new loads. The area between movement and non-movement will develop a (shear) stress point. Cracks in foundations and walls will be the result from such movement. Therefore, continuous wall footings must bear either entirely on rock or entirely on soil for any individual structure. Alternatively, for larger structures, transition zones can be constructed to create a gradual transition from a soil to a rock bearing subgrade.

Where rock and soil both exist at the bearing elevation in a foundation excavation, the footings must either be lowered to bear entirely on rock, or a minimum of 18 inches of rock must be removed from below planned footing bottom. The over-excavated 18 inches must then be filled with a granular material having a maximum particle size of 1/2-inch and containing at least 10% but not more than 30% material by weight passing a No. 200 sieve. The fill shall be placed in six (6) inch layers and each layer shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D-1557). This procedure will create a “cushion” atop the rock and reduce the potential for differential movement. For soft, rippable rock, this procedure will not be required.

Adjacent column footings greater than 20 feet apart may bear on dissimilar material (i.e. soil and rock). Any individual column footing must bear entirely on the same type bearing material (i.e. all soil or all rock). In addition, new footings constructed on sloping bedrock must be keyed into the bedrock surface.

If during the excavation for continuous foundations, the transition from soil to rock is gradual (i.e. from medium dense soil to dense weathered rock to very dense rock) over a distance of 20 feet or more, the “Special Construction Procedures” may not be required. This would have to be evaluated in the field on a case-by-case basis by the representative from Carlin-Simpson & Associates at the time of construction.

Where the transition from rock to soil is abrupt within the excavation for continuous wall foundations, transition zones can be constructed by over-excavating the rock in steps and increasing the “soil cushion” thickness over a distance of 24 feet or more. To construct the transition zone, the bedrock is over-excavated in a series of steps, each step being six (6) inches in depth and at least eight (8) feet in length. The first step is six (6) inches deep, the second step is 12 inches deep, and the final step is 18 inches deep. The over-excavation is then backfilled with the soil cushion material described above. Conformation of transition zones must be performed under the full-time inspection of Carlin-Simpson and Associates. A detail of transition zones, Figure 3, can be found at the end of this report.

#### Foundation Design Parameters

All new building foundations may be designed as shallow spread footings using net design bearing pressures as listed in Table 5 below. All of the exterior footings shall bear at the minimum depth listed below for protection from frost. Interior column footings may bear on the virgin soil, new structural fill, completely weathered rock or bedrock just below the floor slabs provided the structure is heated during winter. The footings shall have minimum dimensions as listed below.

**Table 5 – Building Foundation Design Parameters**

| <b>Description</b>                               | <b>Value</b>  |
|--|---|
| Foundation Bearing Material                      | Virgin Soil, New Compacted Fill, Completely Weathered Rock, Bedrock |
| Net Design Bearing Pressure                      |   |
| <i>Virgin Soil/New Compacted Fill</i>            | 4,000 psf   |
| <i>Transition Zones in Soil/Rock</i>             | 4,000 psf   |
| <i>Completely Weathered Rock/ Gneiss Bedrock</i> | 10,000 psf  |
| Minimum Frost Depth                              | 42 inches   |
| Minimum Column Dimension                         | 30 inches   |
| Minimum Wall Dimension                           | 18 inches   |

The excavations for the new foundations shall be performed under the full-time inspection of Carlin-Simpson & Associates. The on-site representative shall confirm that the foundation bearing material is capable of supporting the design bearing pressure.

Prior to the placement of formwork, reinforcement steel, and concrete, the bearing subgrade soil shall be cleaned of all loose soil and where soil is encountered at the subgrade elevation, it shall be compacted with several passes of a small vibratory drum trench compactor (i.e. Wacker Model RT560), a heavy vibratory plate tamper (i.e. Wacker BPU 3545A or equivalent), or “jumping jack” style tamper (i.e. Wacker Model BS 600). This must be performed under the observation of Carlin-Simpson & Associates. If instability is observed during the compaction of the bearing subgrade, the soft soil shall be removed and replaced with new compacted fill.

#### Ring Wall Foundation – Above Grade Water Tank

We understand that the new above grade 105,000-gallon water tank foundation will likely be designed utilizing a ring-wall foundation. The new tank foundations may be designed as a shallow spread foundation lowered to bear directly on virgin soil, completely weathered rock, or bedrock using the net design bearing pressures in Table 5 below.

Alternatively, where lowering the footings to bear on virgin soil or bedrock is not practical, the existing fill can be completely removed from beneath the “zone of influence” of the new tank foundations and replaced with new structural fill. At the bottom of the excavation, the removal of the existing fill shall extend horizontally beyond the foundation a minimum distance of 1’0” plus a distance equal to the depth of the excavation below the planned foundation bearing elevation on each side of the foundation. Once the existing fill is completely removed as described, the excavation can then be backfilled to the planned subgrade elevation as described above. The foundation design parameters in Table 5 above shall be used for design.

The ringwall foundation design must also consider the potential overturning of the tank caused by wind loads. The movement of the tank under wind loading must be computed and the foundation must be designed to withstand that load. For a ringwall foundation, the resistance to overturning is provided by the weight of the footing and the soil above the footing. The backfill



placed above the new footings must consist of a dense graded aggregate (DGA). This backfill shall be installed in loose layers not exceeding one (1) foot in thickness and each layer shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D-1557). The DGA shall meet the following gradation:

| <u>US Standard Sieve Size</u> | <u>Percent Finer By Weight</u> |
|-------------------------------|--------------------------------|
| 1 ½ inch                      | 100                            |
| ¾ inch                        | 55-90                          |
| No. 40                        | 25-50                          |
| No. 50                        | 5-20                           |
| No. 200                       | 3-10                           |

The proper placement of new fill within the tank area and adjacent to the ringwall foundation is critical to the performance of the tank and for minimizing settlement. Carlin-Simpson & Associates must be retained to monitor and test the placement of fill within the tank area and adjacent to the ringwall foundations.

The soil within the tank area, adjacent to the ringwall, will exert a horizontal pressure against the ringwall. This pressure is based on the soil density and coefficient of earth pressure at rest ( $k_o$ ), which is applicable to non-yielding walls. Values for these parameters can be found in Table 6 below.

**Table 6 – Ringwall Foundation Earth Pressures Design Parameters**

| <b>Soil Type</b>                                | <b>On-Site Soils</b> |
|---|----------------------|
| Moist Unit Weight ( $\gamma$ )                  | 130 pcf              |
| Friction Angle ( $\phi$ , deg)                  | 30                   |
| Cohesion (c, psf)                               | 0                    |
| Coefficient of Earth Pressure at Rest ( $k_o$ ) | 0.5                  |
| Coefficient of Passive Earth Pressure ( $k_p$ ) | 3.0                  |
| Equivalent Fluid Pressure*                      | 162.5 psf/ft         |
| Foundation Sliding Coefficient                  |                      |
| <i>Virgin Soil/ New Compacted Fill</i>          | 0.45                 |
| <i>Completely Weathered/ Bedrock</i>            | 0.55                 |

(\*) – A factor of safety of 2.5 is applied.

### **5.3 Floor Slabs on Grade**

New fill for the floor slabs shall consist of either suitable on-site soil or imported sand and gravel. In the event that backfill soil is imported; it shall meet the gradation in Section 5.1 “Installation of New Structural Fill”. The new fill shall be placed in layers not exceeding one (1) foot in loose thickness and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D1557). Fill layers shall be compacted, tested, and approved before placing subsequent layers.

The floor slabs may be designed as a slab on grade bearing on densified virgin soil, new engineer-approved structural fill, completely weathered rock, or bedrock. Floor slab design parameters are provided in Table 7 below. A layer of 3/4-inch crushed stone is recommended beneath the concrete slab for additional support and drainage. For buildings with basements, additional crushed stone and sump pits and pumps are required.

**Table 7 – Building Floor Slab Design Parameters**

| <b>Description</b>   | <b>Value</b>  |
|--|---|
| Slabs Subgrade Material  | Densified Virgin Soil/ New Structural Fill/<br>Completely Weathered Rock/ Bedrock |
| Modulus of Subgrade Reaction (k)   | 200 pci   |
| Crushed Stone Cushion Thickness:<br><i>New Structural Fill / Virgin Soil/<br/>Building without Basements</i> | 6 inches  |
| <i>Completely Weathered/ Bedrock/<br/>Building with Basements</i>  | 12 inches   |

#### **5.4 Lower Levels Below Grade – Foundation Walls**

We understand that all of the multi-family buildings will have a lower level (i.e. basement or walkout basement). The soil adjacent to these building walls will exert a horizontal pressure against the walls. This pressure is based on the soil density and Coefficient of Earth Pressure at Rest ( $k_0$ ), which is applicable to non-yielding building walls. Lower-level foundation wall design parameters are listed in Table 8 below.

**Table 8 – Foundation Wall Design Parameters**

| <b>Soil Type</b>   | <b>On-Site Soils</b> |
|--|----------------------|
| Moist Unit Weight ( $\gamma$ )   | 130 pcf              |
| Friction Angle ( $\phi$ , deg)   | 30                   |
| Cohesion (c, psf)  | 0                    |
| Coefficient of Earth Pressure at Rest ( $k_0$ )                          | 0.5                  |
| Equivalent Fluid Pressure  | 65 psf/ft            |
| Foundation Sliding Coefficient<br><i>Virgin Soil/ New Compacted Fill</i> | 0.45                 |
| <i>Completely Weathered/ Bedrock</i>                                     | 0.55                 |

Where lower-level foundation walls are required, we recommend that a footing drain be placed around the exterior of the new building to prevent water from accumulating against the foundation wall. This drain may consist of a minimum 4-inch diameter, rigid wall perforated PVC pipe surrounded by at least 12 inches of 3/4-inch clean crushed stone. The stone shall be wrapped in a geotextile fabric, such as Mirafi 140N or equivalent. The foundation drainpipe should be extended to daylight, if possible, or to the stormwater collection system. The foundation drainpipe should not be connected to the interior sub slab drainage system. The

outside face of the foundation wall, where it extends below grade, must be dampproofed or waterproofed.

Outside the building, the backfill placed adjacent to the foundation walls and above the footing drain shall consist of either clean crushed stone or an imported sand and gravel mixture containing less than 10% by weight passing a No. 200 sieve and placed in layers not exceeding 12 inches in thickness. This clean sand and gravel or crushed stone backfill shall extend a minimum of 12 inches horizontally from the back face of the foundation walls, and shall extend vertically up the wall face to 2 feet below the finished ground surface elevation. Where retained soils are not covered by concrete or pavement and are exposed to weather, the top 2 feet of backfill should consist of low permeable soil. This will help to minimize water infiltration behind the wall. Surface grades should be sloped away from the building to prevent water from accumulating adjacent to the wall.

Beyond this point, the foundation walls should be backfilled with suitable soil placed in layers up to 12 inches in thickness. The suitability of the on-site soil for reuse as compacted fill is discussed in a separate section below. The new fill should be compacted with a vibratory drum trench compactor (i.e. Wacker Model RT560), a heavy vibratory plate tamper (i.e. Wacker BPU 3545A or equivalent), or “jumping jack” style tamper (i.e. Wacker Model BS 600) to at least 92% of its Maximum Modified Dry Density (ASTM D1557). Heavy equipment should not be operated near the building walls as damage to the walls could occur.

## **5.5 Settlement**

Settlement of individual footings, designed in accordance with recommendations presented in this report, is expected to be within tolerable limits for the proposed structure. For footings placed on natural soils or new compacted fill approved by Carlin-Simpson & Associates and constructed in accordance with the requirements outlined in this report, maximum total settlement is expected to be on the order of 1-inch or less. Maximum differential settlement between adjacent columns or load bearing walls is expected to be ½-inch.

The above settlement values are based on our engineering experience with similar soil conditions and the anticipated structural loading. These estimated settlements are intended to guide the structural engineer with their design. It is critical that Carlin-Simpson & Associates be retained to observe the foundation bearing surfaces and to confirm the recommended bearing pressures during construction.

## **5.6 Seismic Design Considerations**

From site-specific test boring data, the Site Class was determined from New York State Building Code. The site-specific data used to determine the Site Class typically includes soil test borings to determine Standard Penetration resistances (N-values). Based on estimated average N-values in the upper 100 feet of soil profile, the site can be classified as Site Class D – Stiff Soil Profile.

New structures should be designed to resist stress produced by lateral forces computed in accordance with Section 1613 of the New York State Building Code. The values in Table 9 shall be used for this project.

**Table 9 – Seismic Design Values**

| <b>Description</b>   | <b>Value</b>    |
|--|-----------------|
| Mapped Spectral Response Acceleration for Short Periods, [Fig 1613.2.1 (1)]  | $S_S=0.280g$    |
| Mapped Spectral Response Acceleration at 1-Second Period, [Fig 1613.2.1 (2)] | $S_1=0.060g$    |
| Site Coefficient [Table 1613.2.3 (1)]  | $F_a= 1.58$     |
| Site Coefficient [Table 1613.2.3 (2)]  | $F_v= 2.40$     |
| Max Considered Earthquake Spectral Response for Short Periods [Eq 16-36]     | $S_{MS}=0.441g$ |
| Max Considered Earthquake Spectral Response at 1-Second Period [Eq 16-37]    | $S_{M1}=0.145g$ |
| Design Spectral Response Acceleration for Short Periods [Eq 16-38]           | $S_{DS}=0.294g$ |
| Design Spectral Response Acceleration for 1-Second Period [Eq 16-39]         | $S_{D1}=0.096g$ |

We expect that the proposed buildings will be a multi-family residential buildings and amenities building with a Risk Category of II. All proposed wastewater and water treatment buildings are essential buildings with a Risk Category of IV. Based on this assumption and the above Seismic Design Values, the Seismic Design Category (SDC) is for the multi-family residential buildings and amenities building is B and the wastewater and water treatment buildings SDC is C. The Risk Category and SDC should be verified by the project structural engineer. In the event that the structure has a different Risk Category, the SDC should be updated in accordance with Section 1613 of the New York State Building Code.

## **6.0 SITE EVALUATION**

Our recommendations for the proposed site development including new stormwater management areas, soil and rock slopes, retaining walls, new underground utilities, pavement for new driveways and parking areas, temporary construction excavations, and the suitability of the existing site soils for reuse as structural fill are provided below. A summary of the boring and test pit observations for the site are provided in Table 1, 2 and 3 above and in Table 10 below.

**Table 10 – Summary of Boring and Test Pit Observations for Site Development**

| <b>Boring/<br/>Test Pit<br/>No.</b> | <b>Approx<br/>Ground<br/>Surface<br/>Elevation</b> | <b>Depth to Groundwater<br/>(Elevation)</b> | <b>Depth to<br/>Bottom of<br/>Existing Fill<br/>(Elevation)</b> | <b>Depth to Bedrock<br/>(Elevation)</b>     |
|-------------------------------------|--|---|---|---|
| B-109                               | +475.0   | 8'0" (+467.0)<br>SHGW @ 5'0" (+470.0)       | 2'0" (+473.0)   | CWR @ 13'6" (+461.5)<br>AR @ 13'9" (+461.3) |
| B-110                               | +474.0   | 3'6" (+470.5)                               | 2'6" (+471.5)   | CWR @ 9'6" (+464.5)<br>AR @ 11'0" (+463.0)  |
| B-111                               | +482.0   | 3'6" (+478.5)                               | 1'6" (+480.5)   | CWR @ 8'6" (+473.5)<br>AR @ 10'6" (+471.5)  |

| Boring/<br>Test Pit<br>No. | Approx<br>Ground<br>Surface<br>Elevation | Depth to Groundwater<br>(Elevation)       | Depth to<br>Bottom of<br>Existing Fill<br>(Elevation) | Depth to Bedrock<br>(Elevation)             |
|----------------------------|--|---|---|---|
| B-112                      | +481.0                                   | 4'0" (+477.0)<br>SHGW @ 3'0" (+478.0)     | 1'6" (+479.5)   | CWR @ 11'0" (+470.0)<br>AR @ 12'6" (+468.5) |
| B-113                      | +472.0                                   | NE to 9'10"                               | NE  | CWR @ 5'6" (+466.5)<br>AR @ 9'10" (+462.2)  |
| B-114                      | +622.0                                   | NE to 3'6"                                | NE  | AR @ 3'6" (+618.5)                          |
| B-117                      | +624.0                                   | NE to 7'9"                                | NE  | CWR @ 6'6" (+617.5)<br>AR @ 7'9" (+616.25)  |
| B-121                      | +674.0                                   | NE to 4'6"                                | 2'6" (+671.5)   | AR @ 4'6" (+669.5)                          |
| B-203                      | +552.0                                   | **9'0" (+543.0)                           | 10'0" (+542.0)  | CWR @ 10'0" (+542.0)<br>AR @ 10'2" (+541.8) |
| DH-A                       | +500.0                                   | 3'0" (+497.0)                             | 2'3" (+497.75)  | CWR @ 6'6" (+493.5)<br>AR @ 8'6" (+491.5)   |
| DH-B                       | +500.0                                   | 4'0" (+596.0)                             | 2'6" (+597.5)   | CWR @ 4'9" (+495.25)<br>AR @ 5'6" (+494.5)  |
| DH-C                       | +563.0                                   | NE to 6'6"                                | 1'3" (+651.75)  | CWR @ 5'6" (+557.5)<br>AR @ 6'6" (+556.5)   |
| DH-D                       | +563.0                                   | NE to 7'6"                                | NE  | CWR @ 7'0" (+556.0)<br>AR @ 7'6" (+555.5)   |
| TP-E                       | +618.0                                   | NE to 1'6"                                | 1'6" (+616.0)   | AR @ 1'6" (+616.0)                          |
| TP-F                       | +621.0                                   | NE to 2'3"                                | 2'3" (+618.75)  | AR @ 2'3" (+618.75)                         |
| TP-G                       | +618.0                                   | NE to 1'3"                                | 1'3" (+616.75)  | AR @ 1'3" (+616.75)                         |
| TP-H                       | +619.0                                   | NE to 3'6"                                | NE  | CWR @ 3'0" (+616.0)<br>AR @ 3'6" (+615.5)   |
| DH-I                       | +493.2                                   | 7'6" (+485.7)<br>SHGW @ 2'6" (+490.0)     | NE  | NE to 9'0"                                  |
| DH-J                       | +492.5                                   | 7'6" (+485.0)<br>SHGW @ 1'3"<br>(+491.25) | 2'9" (+489.75)  | CWR @ 6'9" (+485.75)<br>AR @ 9'3" (+483.25) |
| DH-K                       | +624.0                                   | NE to 3'0"                                | 2'9" (+621.25)  | AR @ 3'0" (+621.0)                          |
| DH-L                       | +623.0                                   | NE to 8'3"                                | 2'3" (+620.75)  | CWR @ 4'9" (+618.25)<br>AR @ 8'3" (+614.75) |
| DH-M                       | +624.5                                   | NE to 5'9"                                | 2'3" (+622.25)  | AR @ 5'9" (+618.75)                         |
| DH-N                       | +623.1                                   | NE to 2'9"                                | 2'9" (+620.35)  | AR @ 2'9" (+620.35)                         |
| DH-O                       | +618.8                                   | NE to 0'10"                               | NE  | AR @ 0'10" (+617.9)                         |
| DH-P                       | +620.5                                   | NE to 5'0"                                | 2'0" (+618.5)   | CWR @ 3'3" (+617.25)<br>AR @ 5'0" (+615.5)  |
| INF-C                      | +560.5                                   | NE to 4'0"                                | 1'3" (+559.25)  | AR @ 4'0" (+556.5)                          |

NE – Not Encountered

(\*\*) – Trapped Groundwater

AR – Auger Refusal on Probable Bedrock

CWR – Completely to Highly Weathered Rock

SHGW – Evidence of Seasonal High Groundwater (i.e. Mottling)

## 6.1 Stormwater Management System

It is our understanding that three stormwater management areas will be constructed at the site. Two of the three stormwater management areas will consist of detention basins and are located to the west of Building #2 and Building #3. The southern basin will have a bottom of basin elevation of +621.75 and the northern basin will have a bottom of basin elevation of +618.5.

During this study, test pits TP-E through TP-H, and DH-K through DH- P were performed in the area of the proposed basins located west of Building #2 and #3. The locations are shown on the attached Boring and Test Pit Location Plan. Based on the test pits performed in the proposed basins, below the topsoil in most of the test pits is existing fill that extends to depths ranging from 1'3" to 2'9" (approximate elevation +621.25 to +616.75). Underlying the existing fill is the virgin silty sand or sandy silt. Bucket refusal on probable bedrock was encountered in each of the test pits performed for the stormwater management areas at depths ranging from 0'10" to 8'3" (approximate elevations +620.35 to +615.5). Groundwater was not encountered in any of the test pits above the bedrock surface.

The third stormwater management area is located to the south of the proposed 105,000-gallon water storage tank. The type of stormwater management and invert or bottom of basin elevation was also unknown at the time of this report. Test pits DH-C, DH-D, and INF-C were performed in the area of the proposed stormwater management. The locations are shown on the attached Boring and Test Pit Location Plan. Based on the test pits performed in the proposed basins, below the topsoil in DH-C and INF-C is 1'3" of existing fill. Below the existing fill and topsoil in each of the test pits is silty sand or sandy silt. Bucket refusal on probable bedrock rock was encountered in each of the test pits at depths ranging from 4'0" to 7'6" (approximate elevations +556.5 to +555.5) below the exiting ground surface. Groundwater was not encountered in any of the test pits above the bedrock surface.

During this study five (5) infiltration tests were conducted at the site. The infiltration tests were performed based on the testing requirements provided in Appendix D of the Stormwater Management Design Manual (January 2015). In addition, the mean permeability coefficient ( $K_m$ ) was computed for each field infiltration performed at the site. The equation for  $K_m$  is provided below. The results are provided below in Table 11.

**Table 11 – Summary of Infiltration Test Results**

| Test Pit No. | Existing Ground Surface Elevation | Test Depth Below Existing Ground Surface (Elevation) | Field Infiltration Rate (in/hr) | Mean Permeability Coefficient, $K_m$ (in/hr) |
|--------------|-----------------------------------|--|---------------------------------|--|
| INF-C        | +560.5                            | *3'0" (+557.5)                                       | 6.75                            | 0.49   |
| INF-D        | +560.7                            | *5'3" (+555.5)                                       | 22.5                            | 4.18   |
| DH-L         | +623.0                            | *3'9" (+619.3)                                       | 3.75                            | 0.25   |
| DH-M         | +624.5                            | *4'9" (+619.8)                                       | 9.75                            | 0.78   |
| DH-P         | +620.5                            | *3'3" (+617.3)                                       | 46.5                            | 9.3  |

(\*) – Test depth is the bottom of the infiltration test.

$$K_m = 1.142R_t \times \frac{\left[ \text{Ln} \left( \frac{h_1}{h_2} \right) \right]}{(t_2 - t_1)}$$

Stormwater management areas should be a minimum of three (3) feet above confining layers (i.e. rock), seasonal high groundwater, or the existing groundwater table. Should stormwater management areas be planned in other portions of the site, they should be evaluated on a case-by-case basis. The stormwater management systems must be designed in accordance with the applicable New York State Department of Environmental Conservation (NYSDEC) regulations and the New York State Stormwater Management Design Manual (January 2015). The testing requirements are outlined in Appendix D of the manual.

## **6.2 New Site Retaining Walls**

We understand that several site retaining walls will be required to achieve the planned site grades throughout the site. The types of retaining walls for this project were unknown at the time of this report. However, design options for this site could include cast-in-place steel reinforced concrete walls, mechanically stabilized earth (MSE) walls, or segmental gravity block retaining walls (i.e. redi-rock). The MSE wall consists of segmental concrete block units with geogrid reinforcement.

The following retaining wall recommendations are preliminary and meant to give guidance during the design process. Once the types of walls have been determined, additional recommendations can be provided.

### **Preparation of Wall Areas**

In order to prepare the retaining wall areas for construction, all surface materials including asphalt, concrete, topsoil, and surface vegetation must be completely removed from the new retaining wall areas. The removal of the surface materials shall extend at least 5 feet beyond the proposed construction limits, where practical.

The exposed subgrade at the bottom of the excavation shall then be compacted by several passes with a vibratory drum trench compactor (i.e. Wacker Model RT560) or a vibratory drum roller (i.e. Wacker Model RD-25 Roller). The densification of the subgrade shall be inspected by a representative from Carlin-Simpson & Associates. In the event that soft or unsuitable soil is identified during the densification, the unsuitable material shall be removed, as directed by the Carlin-Simpson & Associates representative and replaced with new compacted fill.

Once the subgrade has been approved by Carlin-Simpson & Associates, the excavation can be backfilled to the planned subgrade elevation with new structural fill. New compacted fill shall consist of either suitable on-site soil or imported sand and gravel. In the event that backfill soil is imported, it shall meet the gradation in Section 5.1 "Installation of New Structural Fill". The fill shall be placed in 12 inch thick loose layers and compacted to at least 95% of its Maximum Modified Dry Density (ASTM D1557). Each layer must be compacted, tested, and

approved before placing subsequent layers. The footings or base of the walls can be designed using a net design bearing pressure as outlined in Table 13 below.

#### Drainage and Drainage Backfill

Drains must be provided behind the retaining walls to prevent the buildup of hydrostatic pressure against the walls. The drain should consist of a 4-inch perforated pipe surrounded by 12 inches of clean 3/4-inch crushed stone. The pipe and crushed stone shall be wrapped in a geotextile filter fabric (Mirafi 140N or equivalent). The drain pipe should be installed behind the base or foundation of the retaining walls to collect the water behind the walls and be connected into the site stormwater collection system or extended to daylight beyond the wall areas.

Behind the walls, the backfill placed adjacent to the walls and above the footing drain shall consist of freely draining aggregate meeting the requirements of AASHTO No. 57 or 67 Aggregate. This drainage fill shall extend horizontally a minimum of 12 inches from the back of the walls and shall extend vertically to at least 2 feet below final grade behind the walls. The crushed stone shall be separated from the surrounding soil using a geotextile filter fabric (Mirafi 140N or equivalent).

#### Retaining Wall Backfill

Fill material used as backfill beyond the drainage zone shall consist of suitable on-site soil approved by Carlin-Simpson & Associates or an imported sand and gravel mixture containing less than 20% material by weight passing a No. 200 sieve. Backfill placed behind the retaining wall shall be placed in 12-inch loose layers. Each layer shall be compacted using a hand guided mechanical tamper to 92% of its Maximum Modified Dry Density (ASTM D1557). Excessive compaction adjacent to the retaining wall must be avoided. Layers shall be tested and approved before placing subsequent layers. Large compaction equipment must not be used within 10 feet of the new wall to prevent potential damage to the wall.

For a MSE retaining wall, fill material used to construct the reinforced soil zone of MSE walls shall consist of one of the following soil types according to their USCS designations (GP, GW, SW, SP, SM). The fill material must also meet the gradation in Table 12 below. The material passing the No. 200 sieve must be either non-plastic or of low plasticity. The maximum particle size shall be limited to 1.5 inches. Materials outside of these criteria, including on-site soils, require approval of the Wall Design Engineer and Carlin-Simpson & Associates.

**Table 12 – Gradation Requirements for MSE Wall Reinforcement Zone**

| Sieve Size | Percent Passing |
|------------|-----------------|
| 1.5 inch   | 100             |
| 3/4 inch   | 75-100          |
| No. 4      | 20-90           |
| No. 40     | 0-60            |
| No. 200    | 0-30            |



The contractor shall be responsible for providing soil samples and completing all necessary laboratory testing, as required by Carlin-Simpson & Associates, to determine soil design parameters for any imported fill used in the construction of the walls. The wall design engineer must approve the fill to be utilized in the reinforced zone.

### Wall Design Considerations

The retaining wall bases shall bear on virgin soil, new compacted fill, completely weathered rock or bedrock. For segmental block walls (MSE), the wall bases must be adequately embedded for internal and global stability. In addition, the soil adjacent to the site retaining walls will exert a horizontal pressure against the walls. This pressure is based on the soil density and the Coefficient of Active Earth Pressure ( $k_a$ ). The values listed in Table 13 below shall be used for design of the new retaining walls.

**Table 13 – Reinforced Concrete and MSE Retaining Wall Design Parameters**

| <b>Description</b>  | <b>Value</b>                      |
|---|-----------------------------------|
| Foundation Bearing Material   | Virgin Soil or New Compacted Fill |
| Net Design Bearing Pressure   | 4,000 psf                         |
| Backfill Moist Unit Weight  | 130 pcf                           |
| Backfill Friction Angle   | 30 degrees                        |
| Cohesion  | 0 psf                             |
| Active Earth Pressure Coefficient ( $k_a$ )<br><i>Level Backslope Behind Wall</i> | 0.33                              |
| <i>2.5H:1V Backslope Behind Wall</i>  | 0.43                              |
| Equivalent Fluid Pressure (EFP)<br><i>Level Backslope Behind Wall</i>             | 42.9 pcf                          |
| <i>2.5H:1V Backslope Behind Wall</i>  | 55.9 pcf                          |
| Friction Coefficient  | 0.45                              |
| Minimum Roadway Surcharge   | 250 psf                           |

Where applicable, additional surcharge loads, such as driveways, parking areas, structures, construction equipment, temporary materials storage, etc. must also be incorporated into the wall design. In Table 13 above, the active earth pressure coefficient ( $k_a$ ) has been provided for both a level back slope and a 2.5H:1V backslope behind the wall. If the back slope is a different slope the  $k_a$  must be recalculated accordingly.

The Wall Design Engineer shall prepare a complete wall design (i.e. drawings, specifications, and calculations), which shall be designed and sealed by a Professional Engineer registered in the State of New York and submitted to Carlin-Simpson & Associates for review. MSE retaining walls shall be designed in accordance with the recommendations of the NCMA Design Manual for Segmental Retaining Walls (Current Edition) and in accordance with AASHTO standards. Carlin-Simpson & Associates can prepare an MSE wall design as an additional service upon request.

The design shall consider the internal stability of the reinforced soil mass and shall be in completed accordance with acceptable engineering practice. In addition, external stability, including sliding, overturning, and bearing, as well as global stability shall be evaluated in accordance with acceptable engineering practice.

The wall design engineer shall be responsible for determining the required geogrid reinforcement lengths and elevations based on his stability analysis (including global stability) and the properties of the geogrid reinforcement used in the design.

### **6.3 Soil and Rock Slopes**

Based on the provided site plan, we understand that soil and/or rock slopes are planned throughout the site. Based on the preliminary grading plan, the slopes on the site will range from approximately 8 to 38 feet in height.

Based on the grading plan that was provided to this office, the proposed slopes are 2.5 horizontal to 1.0 vertical (2.5H:1V) or flatter. Based on the boring and test pit observations, slopes will consist of a combination of soil, completely weathered rock, and rock. Cuts and fills are expected to construct these slopes. Steeper slopes could be considered for rock slopes, in the event that the extent of the poor rock quality is present, soil and/or rock nails and shotcrete would be required.

#### **Soil Slopes**

For slopes constructed in soil or completely weathered rock, we recommend a slope angle of 2.5H:1V or flatter. Soil slopes up to 2H:1V are feasible with further evaluation and with stabilization. Steeper soil slopes will be prone to instability (i.e. sloughing or sliding) if not designed and constructed properly and if surface water and groundwater seepage are not properly controlled. Design of the soil slopes at the site is beyond the scope of this investigation.

All new slope construction must be overseen by a qualified geotechnical engineer (Carlin-Simpson & Associates), to ensure that they are properly constructed, surface water and groundwater infiltration is directed away from the top of slope, groundwater seepage exiting the slope is properly mitigated, and appropriate vegetation is established on the completed slope.

New soil slope embankments shall be constructed from the bottom up. End dumping from the top of the slope shall not be permitted. Each fill layer must be benched into the existing embankment for slope stability. In order to prepare the new slope area for construction, the existing surface materials (i.e. topsoil and surface vegetation) shall be completely removed from the planned slopes areas receiving new fill. The removal of the topsoil and vegetation shall extend at least 5 feet beyond the construction limits of the new slope, including in front of the toe of the slope and within the areas to be filled.

After the topsoil, surface vegetation, and unsuitable materials have been removed and prior to the placement of new fill, the exposed subgrade shall be proofrolled by several overlapping passes of a large vibratory drum roller (i.e. Dynapac CA 250 or equivalent). Where

the existing subgrade is on a slope, the area shall be leveled to permit proper compaction of the subgrade prior to filling. The proofrolling is required to densify the underlying soils. If any soft or otherwise unsuitable soils are noted, the unsuitable material shall be removed and replaced with new compacted fill. Carlin-Simpson & Associates shall be responsible for determining what material, if any, is to be removed and will direct the contractor during this operation.

The subgrade receiving new fill must be firm and non-yielding prior to the placement of the next fill layer. Fill placed on existing slopes must be keyed or benched into the existing slope for slope stability. For existing slopes 4H:1V or flatter, the existing ground surface should be deeply scarified. For existing slopes steeper than 4H:1V, the ground surface should be benched. Benches into the existing slope should be a minimum width of 8 feet (typical small dozer blade width). The depth of the benches will be dictated by the existing embankment conditions.

The new fill used to construct the slopes shall consist of either engineer-approved on-site soil or imported sand and gravel. Imported sand and gravel shall contain less than 20% by weight passing a No. 200 sieve. The fill shall be placed in layers up to 12 inches in loose thickness and each layer shall be compacted to at least 95% of its Maximum Modified Dry Density (ASTM D1557). Fill layers shall be compacted, tested, and approved before placing subsequent layers.

Erosion control blankets or permanent turf reinforcement mats (TRM) should be used on all slopes steeper than 3H:1V to protect the slope from surface erosion. Vegetation should be established as soon as possible after construction to help stabilize the slope and to minimize surface erosion. A landscape architect should be consulted for recommendations regarding the best type of vegetation for the slopes. The top of slope must be graded to redirect surface water away from the slope and to prevent sheet flow directly over the top of the slope. This can be achieved by constructing swales at the top of slope to redirect the water. Near roadways, curbs and catch basins should be used.

### Rock Slopes

We understand that a permanent rock slope is being considered to the east of Building # 5 and Building #6. Based on the grading plans, cuts up to 20 feet will be required to achieve the proposed grades. This area has been highlighted on the attached Boring and Test Pit Location Plan (Figure 2). Very limited boring and test pit information in this area suggests that the overburden extend 2'0" to greater than 6'0" below the existing ground surface followed by completely weathered to slightly weathered Gneiss bedrock. ***Additional borings or test pits must be performed to finalize the design of a rock slope in this area.***

For this site, we anticipate that a rock slope of approximately 1.0 horizontal to 1.0 vertical (1H:1V) or 1.0 horizontal to 1.5 vertical (1H:1.5V) may be achieved with proper anchoring and stabilization methods. In rock, the stability of a slope is dependent upon the quality of the rock, the jointing and shear zones in the rock, the strike and dip of the rock, and groundwater seepage.

### General Rock Slope Excavation Procedures

The excavation of the soil and rock slopes shall be carefully advanced in stages. The general procedure for constructing the proposed slopes shall be as follows:

1. The soil slope and bench at the top of the slope shall be constructed first. The soil slope above the top of the rock slope shall be graded on a 3H:1V slope or flatter angle.
2. A pre-split line shall be drilled along the proposed rock slope face line. The spacing shall be determined by the blasting contractor and submitted to Carlin-Simpson & Associates for review.
3. The removal of rock can then begin. The rock at the planned slope face shall be removed in stages of about 10 feet vertically.
4. Carlin-Simpson & Associates will inspect the exposed face of each stage and a rock-anchoring plan will be prepared (if required). The plan will outline anchor locations inclinations and lengths.
5. The required rock anchors will be installed prior to removing the next stage of rock.
6. The process will continue in stages until the excavation is completed.

The blasting contractor should avoid over-blasting the rock. Over-blasting will disturb the deeper intact rock that will be used as bearing material for the proposed foundations and floor slabs. Any material that is over-blasted will have to be removed and replaced with new structural fill under the full-time inspection of Carlin-Simpson & Associates. Carlin-Simpson & Associates will be responsible for determining what material is to be removed and will direct the contractor during the excavation.

Carlin-Simpson & Associates can prepare specifications for the construction of soil and rock slopes and for the removal of bedrock as an additional service upon request.

#### **6.4 Utilities**

New utilities may bear in the densified existing fill, virgin site soils, new compacted fill, completely weathered rock, or bedrock. The bottom of all trenches should be excavated clean and shaped so a hard bottom is provided for the pipe support. If any soft or unsuitable soil conditions are encountered during construction, the unsuitable materials must be removed and replaced with new compacted fill.

Trench hammering or blasting may be required to install the new utilities in portions of the site where weathered rock is encountered above the planned utility invert elevation. Where rock is encountered in the utility excavations, it must be removed to at least six (6) inches below planned pipe invert. The over-excavated six (6) inches shall then be filled with new sandy fill

and compacted to at least 92% of its Maximum Modified Dry Density (ASTM D-1557) to act as a cushion on the rock.

For areas where existing fill is encountered within the utility excavations, the subgrade at bottom of the utility excavation shall be compacted in place with a vibratory drum trench compactor or “jumping jack” style tamper. Carlin-Simpson & Associates must evaluate these areas for the presence of soft or unsuitable material within the existing fill matrix. If instability is observed, portions of this fill may have to be removed and replaced with new compacted fill. Carlin-Simpson & Associates will determine this during construction.

In the event that the trench bottom becomes soft due to the inflow of surface or trapped water, the soft soil shall be removed and the excavation filled with a minimum of six (6) inches of 3/4-inch clean crushed stone to provide a firm base for support of the pipe. Sump pits and pumps should be adequate to keep the excavations dry.

After the utility is installed, the trench must be backfilled with compacted fill. The fill shall consist of suitable on-site soil or imported sand and gravel. Imported fill shall contain less than 20% by weight passing a No. 200 sieve. Large rock fragments and boulders must not be placed directly against the pipe. Controlled compacted fill shall be placed in one (1) foot loose layers and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D-1557). The backfill must be free of topsoil, debris, and large boulders or rock fragments.

## **6.5 Pavement**

We understand that the proposed construction will also include new paved roads and parking areas. Densified existing fill, virgin soil, completely weathered bedrock, bedrock, and new compacted fill may be used to support the pavement.

To prepare the new pavement areas, the existing surface materials (i.e. topsoil, vegetation, etc.) must be removed from the planned pavement areas. In the proposed pavement areas, the existing structures and debris resulting from the demolition of these structures must be completely removed from the new pavement area, extending at least five (5) feet beyond the new paving limits, where practical. After all debris has been removed, the exposed subgrade soil that is either at or below the planned subgrade elevation shall be proofrolled with a large vibratory drum roller (i.e. Dynapac 250 or equivalent) to densify the underlying soils. The on-site representative from Carlin-Simpson & Associates shall witness the proofrolling operation. If any excessive movement is noted during the proofrolling, the soft or unsuitable soil shall be removed and replaced with new compacted fill.

Areas where existing fill is encountered shall be compacted in place. Carlin-Simpson & Associates must evaluate these areas for the presence of soft or unsuitable material within the existing fill matrix. Portions of this fill may have to be removed and replaced with new compacted fill. Carlin-Simpson & Associates will determine this during construction.

Where new fill is required to achieve final grades, it shall consist of either suitable on-site soil or imported sand and gravel. Imported sand and gravel shall contain less than 20% by weight

passing a No. 200 sieve. New fill shall be placed in layers not exceeding one (1) foot in loose thickness and each layer shall be compacted to at least 92% of its Maximum Modified Dry Density (ASTM D-1557).

### Asphalt Pavement Section

After the planned subgrade has been proofrolled and new compacted fill has been placed as required, the new pavement subbase may be placed on the existing site soils, bedrock, and new compacted fill. Dense graded aggregate (DGA) is recommended for the subbase layer for drainage and additional pavement support.

Where rock is encountered at the subgrade elevation in the cut areas, the subgrade stone should be increased to a depth of 12-inches. In addition to providing supplementary drainage, finger drains extending from the catch basin may be required. This must be evaluated by Carlin-Simpson & Associates at the time of construction. A typical finger drain section consists of an 18 to 24-inch-wide trench excavated 12-18 inches below the subgrade surface. Each drain should extend 20-30 feet from the catch basin. A six-inch layer of ¾" clean crushed stone is placed at the bottom of the trench. A 4-inch diameter perforated PVC pipe is then placed on the stone and the trench is backfilled with ¾" clean crushed stone. A minimum of six (6) inches of ¾-inch clean crushed stone should be provided around the pipe. The subgrade should be pitched toward the drainage trench to facilitate drainage. The drainpipes should be sloped toward and connected to finger drain stormwater basins.

We recommend that the following pavement section be used for the parking lots and driveways. This pavement section is subject to local government approval.

#### Light Duty – Parking Lots

|      |  |                 |
|------|--|-----------------|
| 1.5" | Asphalt Top Course                             | NYSDOT, Type 6F |
| 2.5" | Asphalt Base Course                            | NYSDOT, Type 3  |
| 6"   | Stone Subbase (DGA)                            | NYSDOT, Type 1  |
|      | Approved Compacted Subgrade (Minimum CBR = 10) |                 |

#### Medium Duty – Driveways/Roadways

|    |  |                 |
|----|--|-----------------|
| 2" | Asphalt Top Course                             | NYSDOT, Type 6F |
| 3" | Asphalt Base Course                            | NYSDOT, Type 3  |
| 8" | Stone Subbase (DGA)                            | NYSDOT, Type 1  |
|    | Approved Compacted Subgrade (Minimum CBR = 10) |                 |

Based on the boring data, we anticipate that the densified existing site soils, weathered bedrock, and new compacted fill will provide a CBR value that is equal to or greater than 10, which can adequately support the above pavement sections.

### Rigid (Concrete) Pavement

We expect that the proposed construction may also include rigid concrete pavement in portions of the site. The new concrete pavement should be designed for light vehicles (autos, pickup trucks, vans) and occasional delivery or trash pick-up truck traffic. This pavement section is subject to local government approval.

|      |  |               |
|------|--|---------------|
| 5.5" | Concrete Section                               | 4,000 psi     |
| 6"   | Gravel Subbase Course                          | NYSDOT Type 4 |
|      | Approved Compacted Subgrade (Minimum CBR = 10) |               |

The rigid concrete pavement should be reinforced with welded wire fabric or reinforcing steel bars for crack control. Contraction joints should also be provided with a maximum spacing of 10 feet. The project structural engineer or the site engineer shall determine the type, size, and spacing of the reinforcement based on the anticipated loading.

### **6.6 Temporary Construction Excavations and Excavation Protection**

Temporary construction excavations shall be conducted in accordance with the most recent OSHA guidelines or applicable federal, state or local codes. A qualified person should evaluate the excavations at the time of construction to determine the appropriate soil or rock type and the allowable slope configuration. Based on the boring data, we believe the site soil and bedrock would have the following classifications as defined by the OSHA guidelines.

| <u>Soil/ Rock Type</u>    | <u>Possible Classification</u> | <u>Maximum Slope or Bench</u> |
|---------------------------|--------------------------------|-------------------------------|
| Existing Fill             | "C"                            | 1½H:1V                        |
| Virgin Soil               | "B" or "C"                     | 1H:1V or 1½H:1V               |
| Completely Weathered Rock | "B"                            | 1H:1V                         |
| Bedrock                   | "A"                            | ¾H:1V                         |

Temporary support (i.e. trench boxes, sheeting and shoring, etc.) should be used for any excavation that cannot be sloped or benched in accordance with the applicable regulations, where necessary to protect adjacent utilities and structures, or where saturated soils or water seepage is encountered within the excavation.

A New York State licensed professional engineer must design all temporary and permanent support systems. The contractor will select the shoring type and submit design calculations for the proposed shoring method to Carlin-Simpson & Associates for review. The soil adjacent to the temporary support system will exert a horizontal pressure against the system. This pressure is based on the soil unit weight, coefficient of active earth pressure, and depth of the excavation. Support of Excavation design parameters are listed in Table 14 below.

**Table 14 – Temporary Sheet piling and Shoring Design Parameters**

| Description   | Soil | Completely Weathered Rock |
|---|------|---------------------------|
| Moist Unit Weight (pcf)                                   | 130  | 140                       |
| Friction Angle ( $\phi$ , deg)                            | 30   | 36-38                     |
| Cohesion (c, psf)   | 0    | 0                         |
| Active Earth Pressure Coefficient ( $k_a$ ) <sup>1</sup>  | 0.33 | 0.26-0.24                 |
| Equivalent Fluid Pressure (pcf)                           | 42.9 | 36.4-33.6                 |
| Passive Earth Pressure Coefficient ( $k_p$ ) <sup>1</sup> | 3.0  | 3.9-4.2                   |

### 6.7 **Suitability of the In-Situ Soil and Rock for Use as Compacted Fill**

The suitability of each stratum for use as compacted fill is discussed below.

**Stratum 1A** Topsoil is not suitable for use as structural fill. During construction, it shall be stripped from the construction areas. The topsoil may be reused in non-structural, non-sloped landscape areas or hauled offsite.  
Topsoil

**Stratum 1B** Asphalt is not suitable for use as compacted fill in the proposed building areas. However, the existing asphalt pavement may be reused as subgrade material and mixed with soil for use as in the parking lot and driveway areas. The asphalt should be stripped from the work area and stockpiled if to be reused or hauled off site for disposal. Prior to using the asphalt for compacted fill, the material shall be crushed into pieces smaller than 4 inches and mixed with soil. In pavement fill areas, the existing asphalt may be broken up into 4-inch sized pieces and left in place.  
Asphalt

**Stratum 2** The existing fill generally consists of brown, dark brown coarse to fine SAND, trace (to some) Silt, trace (to some) coarse to fine Gravel. Debris (i.e. wood, brick, asphalt, and roots) was noted within this stratum in portions of the site. The existing fill is generally suitable for reuse as compacted fill provided that it remains relatively dry for optimum compaction and that any debris has been removed prior to its reuse.  
Existing Fill

**Stratum 3** The virgin soils consist of brown, gray coarse to fine SAND, trace (to some) Silt, trace (to and) coarse to fine Gravel or brown SILT some (to and), coarse to fine Sand, trace (to little) coarse to fine Gravel. The higher silt content soils will be moisture sensitive. However, this stratum is generally suitable for reuse as compacted fill, as long as it remains relatively dry for optimum compaction.  
Silty Sand  
or Sandy Silt



**Stratum 4/5** Excavated rock or completely weathered rock may be used as fill material provided that the material is well graded and has been approved prior to use by Carlin-Simpson & Associates.

Weathered  
Gneiss  
Bedrock or  
Gneiss  
Bedrock

All rock fill (including large cobbles and boulders) must be well blended with smaller rock fragments and/or soil. Gradation limits, i.e. maximum particle size for rock placed, will depend on the location of placement as shown in Table 15 below. Excavated rock (and boulders) that are too large for use as structural fill should be processed through a crusher to provide suitable fill material.

Rock fill shall be placed in maximum 12 inch thick layers and compacted with multiple passes of a large vibratory roller to a firm and non-yielding state as determined by the on-site representative from Carlin-Simpson & Associates. Rock fill should not be used where it will interfere with the installation of foundations, utilities, or geogrid reinforcement. Also, it shall not be used as backfill directly against concrete walls or utilities.

The boring data indicates that the on-site soils contain a varying percentage of silt (10% to greater than 50%). The higher silt content soils will be moisture sensitive. If the soil becomes too wet, it will be difficult to achieve adequate compaction. In addition, the site soils that extend below the groundwater table are completely saturated and therefore, unsuitable for reuse.

Proper moisture conditioning of the soil will be required. New compacted fill should be within 2% (+/-) of its optimum moisture content at the time of placement. In the event that the on-site material is too wet at the time of placement and cannot be adequately compacted, the soil should be aerated and allowed to dry or the material removed and a drier cleaner fill material used. In the event that the on-site material is too dry at the time of placement and cannot be adequately compacted, water may be needed to increase the soil moisture content for proper compaction.

The in-situ soils which exist throughout the site may become soft and weave if exposed to excessive moisture and construction traffic. The instability will occur quickly when exposed to these elements and it will be difficult to stabilize the subgrade. We recommend that adequate site drainage be implemented early in the construction schedule and if the subgrade becomes wet, the contractor should limit construction activity until the soil has dried.

Excavated boulders, weathered rock, and rock may be used as fill material in designated areas, provided that the material conforms to the required gradation, is well graded, and has been approved prior to use by Carlin-Simpson & Associates. All rock fill must be well blended with smaller rock fragments and/or soil. The recommended maximum particle size for rock placed as fill is shown in Table 15 below. Excavated rock, too large for use as structural fill, should be processed through a crusher to provide suitable fill material.

**Table 15 – Rock Fill Gradation Limitations**

| <b>Location</b>  |  | <b>Maximum Particle Size</b> |
|--|--|------------------------------|
| Building Area  | Within 2 feet of Finished Floor          | 3 inches                     |
|  | More than 2 feet below Finished Floor    | 6 inches                     |
|  | More than 6 feet below Finished Floor    | 12 inches                    |
| Outside Building Area (i.e. Pavement and Sidewalk Areas) | Within 18 inches of Finished Grade       | 3 inches                     |
|  | More than 18 inches below Finished Grade | 6 inches                     |
|  | More than 3 feet below Finished Grade    | 12 inches                    |

The minimum compaction requirements for the various areas of the site are summarized in Table 16 below.

**Table 16 – Minimum Compaction Requirements**

| <b>Area</b>                  | <b>Maximum Modified Dry Density (ASTM D-1557)</b> |
|------------------------------|---|
| Below Foundations            | 95%   |
| Below Floor Slabs            | 92%   |
| Retaining Wall Subgrade      | 95%   |
| Retaining Wall Backfill      | 92%   |
| Soil Slopes                  | 95%   |
| Pavement Areas               | 92%   |
| Exterior Slabs and Sidewalks | 92%   |
| Utility Trenches             | 92%   |
| Landscape Areas – Non-Sloped | 90%   |

## **7.0 GENERAL**

The findings, conclusions and recommendations presented in this report represent our professional opinions concerning subsurface conditions at the site. The opinions presented are relative to the dates of our sitework and should not be relied on to represent conditions at later dates or at locations not explored. The opinions included herein are based on information provided to us, the data obtained at specific locations during the study and our past experience. If additional information becomes available that might impact our geotechnical opinions, it will be necessary for Carlin-Simpson & Associates to review the information, reassess the potential concerns, and re-evaluate our conclusions and recommendations.

Regardless of the thoroughness of a geotechnical exploration, there is the possibility that conditions between borings and test pits will differ from those encountered at specific boring or test pit locations, that conditions are not as anticipated by the designers and/or the contractors, or that either natural events or the construction process have altered the subsurface conditions. These variations are an inherent risk associated with subsurface conditions in this region and the approximate methods used to obtain the data. These variations may not be apparent until construction.

The professional opinions presented in this geotechnical report are not final. Field observations and foundation installation monitoring by the geotechnical engineer, as well as soil density testing and other quality assurance functions associated with site earthwork and foundation construction, are an extension of this report. Therefore, Carlin-Simpson & Associates should be retained by the Owner to observe all earthwork and foundation construction, to document that the conditions anticipated in this study actually exist, and to finalize or amend our conclusions and recommendations. Carlin-Simpson & Associates is not responsible or liable for the conclusions and recommendations presented in this report if Carlin-Simpson & Associates does not perform the observation and testing services.

Therefore, in order to preserve continuity in this project, the Owner shall retain the services of Carlin-Simpson & Associates to provide full time geotechnical related monitoring and testing during construction. At a minimum, this shall include the observation and testing of the following: 1) the removal of existing fill and unsuitable soil, where required; 2) the proofrolling of the subgrade soil prior to the placement of new compacted fill; 3) the placement and compaction of controlled fill; 4) the excavation for the new foundations; 5) the construction of retaining walls; (6) the construction of soil and rock slopes; and 7) the preparation of the subgrade for the floor slabs and pavement areas.

This report has been prepared in accordance with generally accepted geotechnical engineering practice. No other warranty is expressed or implied. The evaluations and recommendations presented in this report are based on the available project information, as well as on the results of the exploration. Carlin-Simpson & Associates should be given the opportunity to review the final drawings and site plans for this project to determine if changes to the recommendations outlined in this report are needed. Should the nature of the project change, these recommendations should be re-evaluated.

This report is provided for the exclusive use of Summit Club Partners, LLC and the project specific design team and may not be used or relied upon in connection with other projects or by other third parties. Carlin-Simpson & Associates disclaims liability for any such third-party use or reliance without express written permission. Use of this report or the findings, conclusions or recommendations by others will be at the sole risk of the user. Carlin-Simpson & Associates is not responsible or liable for the interpretation by others of the data in this report, nor their conclusions, recommendations or opinions.

If the conditions encountered during construction vary significantly from those stated in this report, this office should be notified immediately so that additional recommendations can be made.

Thank you for allowing us to assist you with this project. Should you have any questions or comments, please contact this office.

Very truly yours,

CARLIN-SIMPSON & ASSOCIATES, LLC



CATHERINE K. ANDERSEN, P.E.  
Project Engineer



ROBERT B. SIMPSON, P.E.  
Principal



| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                         |                       |               |                              | TEST BORING LOG<br><b>DRAFT</b> |   |        |                   | BORING NUMBER<br>R-1                   |  |
|---|-----------------------|---------------|------------------------------|---------------------------------|---|--------|-------------------|--|--|
| Project: Proposed Development, 568 & 570 Bedford Rd, North Castle, NY |                       |               |                              |                                 |   |        | SHEET NO.: 1 of 1 |  |  |
| Client: Summit Club Partners, LLC                                     |                       |               |                              |                                 |   |        | JOB NUMBER: 22-85 |  |  |
| Drilling Contractor: Environmental Technical Drilling                 |                       |               |                              |                                 |   |        | ELEVATION: +631.0 |  |  |
| GROUNDWATER   |                       |               |                              | CASING                          | SAMPLE  | CORE   | TUBE              | DATUM: Topo                            |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE                            | HSA   | SS     |                   | START DATE: 1/Aug/22                   |  |
| 1/Aug/22  | 1530                  | 10'0"         | HSA                          | DIA.                            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 1/Aug/22                  |  |
| Mottling @ 7'0"   |                       |               |                              | WGHT                            |   | 140#   |                   | DRILLER: MK                            |  |
|   |                       |               |                              | FALL                            |   | 30"    |                   | INSPECTOR: JP                          |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m                           | IDENTIFICATION  |        |                   | REMARKS                                |  |
| 1   |                       | S-1           | 1                            |                                 | <u>Topsoil</u> 0'2"   |        |                   | Rec = 15"<br>moist                     |  |
| 2   |                       |               | 7                            |                                 | <u>FILL (Brown coarse to fine SAND, little (+) Silt, little coarse to fine Gravel)</u>  |        |                   |  |  |
|   |                       |               | 6                            |                                 | FILL (Br cf S, 1 (+) \$, 1 cf G) 2'0"   |        |                   |  |  |
| 3   |                       | S-2           | 5                            |                                 | Br cf S, t \$, a cf G   |        |                   | Rec = 13"<br>moist                     |  |
| 4   |                       |               | 3                            |                                 |   |        |                   |  |  |
| 5   |                       |               | 2                            |                                 |   |        |                   |  |  |
| 6   |                       | S-3           | 6                            |                                 | same, 1 (+) cf G  |        |                   | Rec = 19"<br>moist                     |  |
| 7   |                       |               | 7                            |                                 | <u>Brown coarse to fine SAND, trace Silt, little coarse to fine Gravel</u>              |        |                   |  |  |
| 8   |                       | S-4           | 4                            |                                 | same, slightly mttled br, gr, or a \$, 1 (-) cf G                                       |        |                   | Rec = 19"<br>moist<br>slightly mottled |  |
| 9   |                       |               | 5                            |                                 |   |        |                   |  |  |
| 10  |                       |               |                              |                                 |   |        |                   |  |  |
| 11  |                       | S-5           | 10                           |                                 | same, br  |        |                   | Rec = 24"<br>wet                       |  |
| 12  |                       |               | 11                           |                                 |   |        |                   |  |  |
| 13  |                       |               | 15                           |                                 |   |        |                   |  |  |
| 14  |                       |               |                              |                                 | 14'0"   |        |                   |  |  |
| 15  |                       |               |                              |                                 | <u>Brown, orange, gray coarse to fine SAND, little Silt, some coarse to fine Gravel</u> |        |                   | Rec = 10"<br>wet                       |  |
| 16  |                       | S-6           | 30                           |                                 | Br, or ,gr cf S, 1 \$, s cf G)  |        |                   |  |  |
| 17  |                       |               | 50/3"                        |                                 | (Decomposed rock) 17'0"   |        |                   |  |  |
| 18  |                       |               |                              |                                 | <u>End of Boring @ 17'0"</u>  |        |                   |  |  |
| 19  |                       |               |                              |                                 |   |        |                   |  |  |
| 20  |                       |               |                              |                                 |   |        |                   |  |  |
| 21  |                       |               |                              |                                 |   |        |                   |  |  |
| 22  |                       |               |                              |                                 |   |        |                   |  |  |

| CARLIN - SIMPSON & ASSOCIATES<br>Sayreville, N.J.                     |                       |               |                              | TEST BORING LOG<br><b>DRAFT</b>   |        |        |      | BORING NUMBER<br>R-2                                  |  |
|---|-----------------------|---------------|------------------------------|---|--------|--------|------|---|--|
| Project: Proposed Development, 568 & 570 Bedford Rd, North Castle, NY |                       |               |                              | SHEET NO.: 1 of 1   |        |        |      | JOB NUMBER: 22-85                                     |  |
| Client: Summit Club Partners, LLC                                     |                       |               |                              | ELEVATION: +628.0   |        |        |      | Drilling Contractor: Environmental Technical Drilling |  |
| GROUNDWATER   |                       |               |                              | CASING  | SAMPLE | CORE   | TUBE | DATUM: Topo   |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE  | Case   | SS     |      | START DATE: 02 Aug 22                                 |  |
|   |                       |               |                              | DIA.  | 4"     | 1 3/8" |      | FINISH DATE: 02 Aug 22                                |  |
|   |                       |               |                              | WGHT  |        | 140#   |      | DRILLER: MK   |  |
|   |                       |               |                              | FALL  |        | 30"    |      | INSPECTOR: JP   |  |
| Depth (ft.)   | Casing Blows pre Foot | Sample Number | Blows on Sample Spoon per 6" | IDENTIFICATION  |        |        |      | REMARKS   |  |
| 1   |                       | S-1           | 8                            | Topsoil   |        |        |      | 0'1"  |  |
|   |                       |               | 15                           | FILL (Brown, gray coarse to fine SAND, little Silt, some coarse to fine Gravel) |        |        |      | Rec = 13" moist                                       |  |
| 2   |                       |               | 13                           | FILL (Br, gr cf S, l \$, s cf G)  |        |        |      | 2'0"  |  |
| 3   |                       | S-2           | 6                            | Br cf S, s \$, l cf G   |        |        |      | Rec = 18" moist                                       |  |
|   |                       |               | 7                            |   |        |        |      |   |  |
|   |                       |               | 11                           |   |        |        |      |   |  |
| 4   |                       |               | 17                           |   |        |        |      |   |  |
|   |                       |               | 14                           |   |        |        |      |   |  |
| 5   |                       | S-3           | 15                           | same  |        |        |      | Rec = 20" moist                                       |  |
|   |                       |               | 15                           | Brown coarse to fine SAND, some Silt, little coarse to fine Gravel              |        |        |      |   |  |
| 6   |                       |               | 15                           |   |        |        |      |   |  |
|   |                       |               | 18                           |   |        |        |      |   |  |
| 7   |                       | S-4           | 17                           | same, s (+) \$, t (-) cf G  |        |        |      | Rec = 17" moist                                       |  |
|   |                       |               | 14                           |   |        |        |      |   |  |
| 8   |                       |               | 19                           |   |        |        |      | set casing  |  |
|   |                       |               | 8                            |   |        |        |      |   |  |
| 9   |                       | S-5           | 26                           | same, br, dk gr   |        |        |      | Rec = 9" moist  |  |
|   |                       |               | 50/3"                        |   |        |        |      | 9'3"  |  |
| 10  |                       |               |                              |   |        |        |      | rollerbit refusal 10'0"                               |  |
| 11  |                       |               |                              |   |        |        |      |   |  |
| 12  |                       |               |                              |   |        |        |      |   |  |
| 13  |                       | Run #1        |                              | Gray Gneiss with intrusive quartz blocky and seamy, moderately weathered rock   |        |        |      | Run #1 10'0"-15'0"                                    |  |
| 14  |                       |               |                              |   |        |        |      | Run = 60"   |  |
| 15  |                       |               |                              |   |        |        |      | Rec = 55" = 92%                                       |  |
|   |                       |               |                              |   |        |        |      | RQD = 34" = 57%                                       |  |
| 16  |                       |               |                              | End of Boring @ 15'0"   |        |        |      |   |  |
| 17  |                       |               |                              |   |        |        |      |   |  |
| 18  |                       |               |                              |   |        |        |      |   |  |
| 19  |                       |               |                              |   |        |        |      |   |  |
| 20  |                       |               |                              |   |        |        |      |   |  |
| 21  |                       |               |                              |   |        |        |      |   |  |
| 22  |                       |               |                              |   |        |        |      |   |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                         |                       |               |                              | TEST BORING LOG<br><b>DRAFT</b> |   |        |                   | BORING NUMBER<br>R-3  |  |
|---|-----------------------|---------------|------------------------------|---------------------------------|---|--------|-------------------|---|--|
| Project: Proposed Development, 568 & 570 Bedford Rd, North Castle, NY |                       |               |                              |                                 |   |        | SHEET NO.: 1 of 1 |   |  |
| Client: Summit Club Partners, LLC                                     |                       |               |                              |                                 |   |        | JOB NUMBER: 22-85 |   |  |
| Drilling Contractor: Environmental Technical Drilling                 |                       |               |                              |                                 |   |        | ELEVATION: +627.0 |   |  |
| GROUNDWATER   |                       |               |                              | CASING                          | SAMPLE  | CORE   | TUBE              | DATUM: Topo   |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE                            | HSA   | SS     |                   | START DATE: 1/Aug/22  |  |
|   |                       |               |                              | DIA.                            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 1/Aug/22   |  |
|   |                       |               |                              | WGHT                            |   | 140#   |                   | DRILLER: MK   |  |
|   |                       |               |                              | FALL                            |   | 30"    |                   | INSPECTOR: JP   |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m                           | IDENTIFICATION  |        |                   | REMARKS   |  |
| 1   |                       | S-1           | 2                            |                                 | <u>Topsoil</u> 0'4"   |        |                   | Rec = 18"<br>moist  |  |
|   |                       |               | 3                            |                                 | Br cf S, s (-) \$, 1 cf G   |        |                   |   |  |
| 2   |                       |               | 7                            |                                 | <u>Brown coarse to fine SAND, some (-) Silt, little coarse to fine Gravel</u> |        |                   | Rec = 12"<br>moist<br>auger refusal 3'6"<br>moved 10' north<br>auger refusal 3'6" |  |
|   |                       |               | 8                            |                                 |   |        |                   |   |  |
| 3   |                       | S-2           | 6                            |                                 | same, br, gr  |        |                   |   |  |
|   |                       |               | 27                           |                                 | 3'6"  |        |                   |   |  |
| 4   |                       |               | 50/1"                        |                                 | <u>End of Boring @ 3'6"</u>   |        |                   |   |  |
| 5   |                       |               |                              |                                 |   |        |                   |   |  |
| 6   |                       |               |                              |                                 |   |        |                   |   |  |
| 7   |                       |               |                              |                                 |   |        |                   |   |  |
| 8   |                       |               |                              |                                 |   |        |                   |   |  |
| 9   |                       |               |                              |                                 |   |        |                   |   |  |
| 10  |                       |               |                              |                                 |   |        |                   |   |  |
| 11  |                       |               |                              |                                 |   |        |                   |   |  |
| 12  |                       |               |                              |                                 |   |        |                   |   |  |
| 13  |                       |               |                              |                                 |   |        |                   |   |  |
| 14  |                       |               |                              |                                 |   |        |                   |   |  |
| 15  |                       |               |                              |                                 |   |        |                   |   |  |
| 16  |                       |               |                              |                                 |   |        |                   |   |  |
| 17  |                       |               |                              |                                 |   |        |                   |   |  |
| 18  |                       |               |                              |                                 |   |        |                   |   |  |
| 19  |                       |               |                              |                                 |   |        |                   |   |  |
| 20  |                       |               |                              |                                 |   |        |                   |   |  |
| 21  |                       |               |                              |                                 |   |        |                   |   |  |
| 22  |                       |               |                              |                                 |   |        |                   |   |  |

| CARLIN - SIMPSON & ASSOCIATES<br>Sayreville, N.J.                     |                       |               |                              | TEST BORING LOG<br><b>DRAFT</b>            |        |                   |      | BORING NUMBER<br>R-3A     |  |   |  |  |  |  |  |
|---|-----------------------|---------------|------------------------------|--|--------|-------------------|------|---------------------------|--|---|--|--|--|--|--|
| Project: Proposed Development, 568 & 570 Bedford Rd, North Castle, NY |                       |               |                              |  |        | SHEET NO.: 1 of 1 |      |                           |  |   |  |  |  |  |  |
| Client: Summit Club Partners, LLC                                     |                       |               |                              |  |        | JOB NUMBER: 22-85 |      |                           |  |   |  |  |  |  |  |
| Drilling Contractor: Environmental Technical Drilling                 |                       |               |                              |  |        | ELEVATION: +626.0 |      |                           |  |   |  |  |  |  |  |
| GROUNDWATER   |                       |               |                              | CASING                                     | SAMPLE | CORE              | TUBE | DATUM: Topo               |  |   |  |  |  |  |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE                                       | HSA    | SS                | DBL  | START DATE: 02 Aug 22     |  |   |  |  |  |  |  |
|   |                       |               |                              | DIA.                                       | 4"     | 1 3/8"            | 2"   | FINISH DATE: 02 Aug 22    |  |   |  |  |  |  |  |
|   |                       |               |                              | WGHT                                       |        | 140#              |      | DRILLER: MK               |  |   |  |  |  |  |  |
|   |                       |               |                              | FALL                                       |        | 30"               |      | INSPECTOR: JP             |  |   |  |  |  |  |  |
| Depth (ft.)   | Casing Blows pre Foot | Sample Number | Blows on Sample Spoon per 6" | IDENTIFICATION                             |        |                   |      | REMARKS                   |  |   |  |  |  |  |  |
| 1   |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 2   |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 3   |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 4   |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 5   |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 6   |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 7   |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 8   |                       |               |                              | <b>Highly to completely weathered rock</b> |        |                   |      | 7'0" Start weathered rock |  |   |  |  |  |  |  |
| 9   |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 10  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 11  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 12  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 13  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 14  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 15  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 16  |                       |               |                              |  |        |                   |      |                           |  | Wt, rd br, or cf S, l \$, a cf G<br>(Decomposed rock) |  |  |  | Run #1<br>10'0"-15'0"<br>Run = 60"<br>Rec = 0"<br>RQD = 0" |  |
| 17  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 18  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 19  |                       |               |                              | same                                       |        |                   |      | 15'0"                     |  |   |  |  |  |  |  |
| 20  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 21  |                       |               |                              |  |        |                   |      |                           |  |   |  |  |  |  |  |
| 22  |                       |               |                              | <b>End of Boring @ 23'0"</b>               |        |                   |      | 23'0" Rollerbit refusal   |  |   |  |  |  |  |  |



| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                         |                       |               |                              | TEST BORING LOG<br><b>DRAFT</b> |   |        |                   | BORING NUMBER<br>R-4    |  |
|---|-----------------------|---------------|------------------------------|---------------------------------|---|--------|-------------------|-------------------------|--|
| Project: Proposed Development, 568 & 570 Bedford Rd, North Castle, NY |                       |               |                              |                                 |   |        | SHEET NO.: 1 of 1 |                         |  |
| Client: Summit Club Partners, LLC                                     |                       |               |                              |                                 |   |        | JOB NUMBER: 22-85 |                         |  |
| Drilling Contractor: Environmental Technical Drilling                 |                       |               |                              |                                 |   |        | ELEVATION: +626.0 |                         |  |
| GROUNDWATER   |                       |               |                              | CASING                          | SAMPLE  | CORE   | TUBE              | DATUM: Topo             |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE                            | HSA   | SS     |                   | START DATE: 1/Aug/22    |  |
|   |                       |               |                              | DIA.                            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 1/Aug/22   |  |
|   |                       |               |                              | WGHT                            |   | 140#   |                   | DRILLER: MK             |  |
|   |                       |               |                              | FALL                            |   | 30"    |                   | INSPECTOR: JP           |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m                           | IDENTIFICATION  |        |                   | REMARKS                 |  |
|   |                       |               | 1                            |                                 | <u>Topsoil</u>  |        |                   | 0'4"                    |  |
| 1   |                       | S-1           | 11                           |                                 | Br, or cf S, a \$, l (+) cf G   |        |                   | Rec = 7" moist          |  |
|   |                       |               | 18                           |                                 |   |        |                   |                         |  |
| 2   |                       |               | 5                            |                                 |   |        |                   |                         |  |
|   |                       |               | 4                            |                                 |   |        |                   |                         |  |
| 3   |                       | S-2           | 5                            | same                            |   |        |                   | Rec = 15" moist         |  |
|   |                       |               | 10                           |                                 | <u>Brown, orange coarse to fine SAND, and Silt, little (+) coarse to fine Gravel</u>    |        |                   |                         |  |
| 4   |                       |               | 15                           |                                 |   |        |                   |                         |  |
| 5   |                       |               |                              |                                 |   |        |                   |                         |  |
|   |                       |               | 11                           |                                 |   |        |                   |                         |  |
| 6   |                       | S-3           | 13                           | same                            |   |        |                   | Rec = 19" moist         |  |
|   |                       |               | 15                           |                                 |   |        |                   | 6'6"                    |  |
| 7   |                       |               | 33                           |                                 | Dk gr, br cf S, l \$, a (-) cf G  |        |                   |                         |  |
|   |                       |               | 25                           |                                 | (Decomposed rock)   |        |                   |                         |  |
| 8   |                       | S-4           | 30                           |                                 | <u>Dark gray, brown coarse to fine SAND, little Silt, and (-) coarse to fine Gravel</u> |        |                   | Rec = 11" moist         |  |
|   |                       |               | 28                           |                                 |   |        |                   |                         |  |
| 9   |                       |               | 50/5"                        |                                 |   |        |                   |                         |  |
| 10  |                       |               |                              |                                 |   |        |                   | 9'6" Auger refusal 9'6" |  |
|   |                       |               |                              |                                 | <u>End of Boring @ 9'6"</u>   |        |                   |                         |  |
| 11  |                       |               |                              |                                 |   |        |                   |                         |  |
| 12  |                       |               |                              |                                 |   |        |                   |                         |  |
| 13  |                       |               |                              |                                 |   |        |                   |                         |  |
| 14  |                       |               |                              |                                 |   |        |                   |                         |  |
| 15  |                       |               |                              |                                 |   |        |                   |                         |  |
| 16  |                       |               |                              |                                 |   |        |                   |                         |  |
| 17  |                       |               |                              |                                 |   |        |                   |                         |  |
| 18  |                       |               |                              |                                 |   |        |                   |                         |  |
| 19  |                       |               |                              |                                 |   |        |                   |                         |  |
| 20  |                       |               |                              |                                 |   |        |                   |                         |  |
| 21  |                       |               |                              |                                 |   |        |                   |                         |  |
| 22  |                       |               |                              |                                 |   |        |                   |                         |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                         |                       |               |                              | TEST BORING LOG<br><b>DRAFT</b> |  |        |                   | BORING NUMBER<br>R-5                  |  |
|---|-----------------------|---------------|------------------------------|---------------------------------|--|--------|-------------------|---------------------------------------|--|
| Project: Proposed Development, 568 & 570 Bedford Rd, North Castle, NY |                       |               |                              |                                 |  |        | SHEET NO.: 1 of 1 |                                       |  |
| Client: Summit Club Partners, LLC                                     |                       |               |                              |                                 |  |        | JOB NUMBER: 22-85 |                                       |  |
| Drilling Contractor: Environmental Technical Drilling                 |                       |               |                              |                                 |  |        | ELEVATION: +638.0 |                                       |  |
| GROUNDWATER   |                       |               |                              | CASING                          | SAMPLE   | CORE   | TUBE              | DATUM: Topo                           |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE                            | HSA  | SS     |                   | START DATE: 1/Aug/22                  |  |
|   |                       |               |                              | DIA.                            | 3 1/4"   | 1 3/8" |                   | FINISH DATE: 1/Aug/22                 |  |
|   |                       |               |                              | WGHT                            |  | 140#   |                   | DRILLER: MK                           |  |
|   |                       |               |                              | FALL                            |  | 30"    |                   | INSPECTOR: JP                         |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m                           | IDENTIFICATION   |        |                   | REMARKS                               |  |
|   |                       |               | 1                            |                                 | <u>Topsoil</u>   |        |                   | 0'2"                                  |  |
| 1   |                       | S-1           | 1                            |                                 | FILL (Br cf S, 1 (+) \$, 1 cf G)   |        |                   | Rec = 19"<br>moist                    |  |
|   |                       |               | 4                            |                                 |  |        |                   |                                       |  |
| 2   |                       |               | 3                            |                                 |  |        |                   |                                       |  |
|   |                       |               | 4                            |                                 |  |        |                   |                                       |  |
| 3   |                       | S-2           | 4                            |                                 | FILL (same, t (+) \$)  |        |                   | Rec = 17"<br>moist                    |  |
|   |                       |               | 9                            |                                 |  |        |                   |                                       |  |
| 4   |                       |               | 5                            |                                 | <u>FILL (Brown coarse to fine SAND, little (+) Silt, little coarse to fine Gravel)</u> |        |                   |                                       |  |
| 5   |                       |               |                              |                                 |  |        |                   |                                       |  |
|   |                       |               | 4                            |                                 |  |        |                   |                                       |  |
| 6   |                       | S-3           | 3                            |                                 | FILL (same)  |        |                   | Rec = 10"<br>moist                    |  |
|   |                       |               | 2                            |                                 |  |        |                   |                                       |  |
| 7   |                       |               | 1                            |                                 |  |        |                   |                                       |  |
|   |                       |               | 3                            |                                 |  |        |                   |                                       |  |
| 8   |                       | S-4           | 6                            |                                 |  |        |                   | 8'0" Rec = 11"<br>moist               |  |
|   |                       |               | 12                           |                                 | <u>Brown coarse to fine SAND, little (+) Silt, some coarse to fine Gravel</u>          |        |                   | 9'0"                                  |  |
| 9   |                       |               | 35                           |                                 |  |        |                   |                                       |  |
| 10  |                       |               |                              |                                 | <u>Gray coarse to fine SAND, little Silt, some coarse to fine Gravel</u>               |        |                   | Auger refusal 9'6"<br>moved 10' south |  |
|   |                       |               | 33                           |                                 |  |        |                   |                                       |  |
| 11  |                       | S-5           | 50/4"                        |                                 | Gr cf S, 1 \$, s cf G<br>(Decomposed rock)   |        |                   | 11'6" Rec = 7"<br>moist               |  |
| 12  |                       |               |                              |                                 | <u>End of Boring @ 11'6"</u>   |        |                   | Auger refusal 11'6"                   |  |
| 13  |                       |               |                              |                                 |  |        |                   |                                       |  |
| 14  |                       |               |                              |                                 |  |        |                   |                                       |  |
| 15  |                       |               |                              |                                 |  |        |                   |                                       |  |
| 16  |                       |               |                              |                                 |  |        |                   |                                       |  |
| 17  |                       |               |                              |                                 |  |        |                   |                                       |  |
| 18  |                       |               |                              |                                 |  |        |                   |                                       |  |
| 19  |                       |               |                              |                                 |  |        |                   |                                       |  |
| 20  |                       |               |                              |                                 |  |        |                   |                                       |  |
| 21  |                       |               |                              |                                 |  |        |                   |                                       |  |
| 22  |                       |               |                              |                                 |  |        |                   |                                       |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                         |                       |               |                              | TEST BORING LOG<br><b>DRAFT</b> |   |        |                   | BORING NUMBER<br>R-6  |  |
|---|-----------------------|---------------|------------------------------|---------------------------------|---|--------|-------------------|-----------------------|--|
| Project: Proposed Development, 568 & 570 Bedford Rd, North Castle, NY |                       |               |                              |                                 |   |        | SHEET NO.: 1 of 1 |                       |  |
| Client: Summit Club Partners, LLC                                     |                       |               |                              |                                 |   |        | JOB NUMBER: 22-85 |                       |  |
| Drilling Contractor: Environmental Technical Drilling                 |                       |               |                              |                                 |   |        | ELEVATION: +640.0 |                       |  |
| GROUNDWATER   |                       |               |                              | CASING                          | SAMPLE  | CORE   | TUBE              | DATUM: Topo           |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE                            | HSA   | SS     |                   | START DATE: 1/Aug/22  |  |
|   |                       |               |                              | DIA.                            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 1/Aug/22 |  |
|   |                       |               |                              | WGHT                            |   | 140#   |                   | DRILLER: MK           |  |
|   |                       |               |                              | FALL                            |   | 30"    |                   | INSPECTOR: JP         |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m                           | IDENTIFICATION  |        |                   | REMARKS               |  |
| 1   |                       | S-1           | 2                            |                                 | <u>Topsoil</u> 0'10"  |        |                   | Rec = 20"<br>moist    |  |
|   |                       |               | 2                            |                                 |   |        |                   |                       |  |
| 2   |                       | S-2           | 4                            |                                 | <u>FILL (Brown coarse to fine SAND, some (+) Silt, trace (+) coarse to fine Gravel)</u> 2'6"          |        |                   | Rec = 10"<br>moist    |  |
|   |                       |               | 4                            |                                 |   |        |                   |                       |  |
| 3   |                       | S-2           | 2                            |                                 | Gr, br cf S, l \$, s (+) cf G<br>(Decomposed rock)  |        |                   | Rec = 10"<br>moist    |  |
|   |                       |               | 14                           |                                 |   |        |                   |                       |  |
| 4   |                       |               | 30                           |                                 |   |        |                   |                       |  |
| 5   |                       | S-3           | 50                           |                                 | <u>Gray, brown coarse to fine SAND, little Silt, some (+) coarse to fine Gravel (Decomposed rock)</u> |        |                   | Rec = 10"<br>moist    |  |
| 6   |                       |               | 20                           |                                 |   |        |                   |                       |  |
|   |                       |               | 47                           | same                            |   |        |                   |                       |  |
| 7   |                       |               | 50/3"                        |                                 | <u>End of Boring @ 7'6"</u>   |        |                   | Auger refusal 7'6"    |  |
| 8   |                       |               |                              |                                 |   |        |                   |                       |  |
| 9   |                       |               |                              |                                 | <u>End of Boring @ 7'6"</u>   |        |                   |                       |  |
| 10  |                       |               |                              |                                 |   |        |                   |                       |  |
| 11  |                       |               |                              |                                 |   |        |                   |                       |  |
| 12  |                       |               |                              |                                 |   |        |                   |                       |  |
| 13  |                       |               |                              |                                 |   |        |                   |                       |  |
| 14  |                       |               |                              |                                 |   |        |                   |                       |  |
| 15  |                       |               |                              |                                 |   |        |                   |                       |  |
| 16  |                       |               |                              |                                 |   |        |                   |                       |  |
| 17  |                       |               |                              |                                 |   |        |                   |                       |  |
| 18  |                       |               |                              |                                 |   |        |                   |                       |  |
| 19  |                       |               |                              |                                 |   |        |                   |                       |  |
| 20  |                       |               |                              |                                 |   |        |                   |                       |  |
| 21  |                       |               |                              |                                 |   |        |                   |                       |  |
| 22  |                       |               |                              |                                 |   |        |                   |                       |  |

| CARLIN - SIMPSON & ASSOCIATES<br>Sayreville, N.J.                     |                       |               |                              | TEST BORING LOG<br><b>DRAFT</b>  |     |        |  | BORING NUMBER<br>R-7 |  |
|---|-----------------------|---------------|------------------------------|--|-----|--------|--|----------------------|--|
| Project: Proposed Development, 568 & 570 Bedford Rd, North Castle, NY |                       |               |                              | SHEET NO.: 1 of 1  |     |        |  | JOB NUMBER: 22-85    |  |
| Client: Summit Club Partners, LLC                                     |                       |               |                              | ELEVATION: +630.0  |     |        |  | DATUM: Topo          |  |
| Drilling Contractor: Environmental Technical Drilling                 |                       |               |                              | CASING   |     |        |  | SAMPLE               |  |
| GROUNDWATER   |                       |               |                              | CORE   |     |        |  | TUBE                 |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE   | Cas | SS     |  |                      |  |
|   |                       |               |                              | DIA.   |     | 1 3/8" |  |                      |  |
|   |                       |               |                              | WGHT   |     | 140#   |  |                      |  |
|   |                       |               |                              | FALL   |     | 30"    |  |                      |  |
| Depth (ft.)   | Casing Blows pre Foot | Sample Number | Blows on Sample Spoon per 6" | IDENTIFICATION   |     |        |  | REMARKS              |  |
| 1   |                       | S-1           | 5                            | Topsoil  |     |        |  | 0'3"                 |  |
|   |                       |               | 6                            | FILL (Br, gr cf S, s (-) \$, l (+) cf G)   |     |        |  | Rec = 17"            |  |
|   |                       |               | 6                            |  |     |        |  | moist                |  |
| 2   |                       |               | 7                            |  |     |        |  |                      |  |
|   |                       |               | 4                            |  |     |        |  |                      |  |
| 3   |                       | S-2           | 7                            | FILL (same, gr)  |     |        |  | Rec = 4"             |  |
|   |                       |               | 9                            | <b>FILL (Brown, gray coarse to fine SAND, some (-) Silt, little (+) coarse to fine Gravel)</b> |     |        |  | moist                |  |
| 4   |                       |               | 5                            |  |     |        |  |                      |  |
|   |                       |               | 6                            |  |     |        |  |                      |  |
| 5   |                       | S-3           | 8                            |  |     |        |  | 5'0"                 |  |
|   |                       |               | 13                           | Br cf S, s \$, l cf G  |     |        |  | Rec = 10"            |  |
|   |                       |               | 10                           | <b>Brown coarse to fine SAND, some Silt, little coarse to fine Gravel</b>                      |     |        |  | moist                |  |
| 6   |                       |               | 8                            |  |     |        |  |                      |  |
| 7   |                       | S-4           | 6                            | same   |     |        |  | 7'0"                 |  |
|   |                       |               | 10                           | Br, gr cf S, l \$, l cf G  |     |        |  | Rec = 15"            |  |
|   |                       |               | 10                           | <b>Brown, gray coarse to fine SAND, little Silt, little coarse to fine Gravel</b>              |     |        |  | moist                |  |
| 8   |                       |               | 15                           |  |     |        |  |                      |  |
| 9   |                       | S-5           | 50/6"                        | <b>(Decomposed rock)</b>   |     |        |  | 9'0"                 |  |
|   |                       |               |                              |  |     |        |  | Rec = 1"             |  |
|   |                       |               |                              |  |     |        |  | moist                |  |
| 10  |                       |               |                              |  |     |        |  |                      |  |
| 11  |                       |               |                              |  |     |        |  |                      |  |
| 12  |                       | Run #1        |                              | <b>Gray Gneiss with pegmatite intrusion blocky and seamy, moderately weathered rock</b>        |     |        |  | Run #1               |  |
|   |                       |               |                              |  |     |        |  | 9'0"-14'0"           |  |
|   |                       |               |                              |  |     |        |  | Run = 60"            |  |
| 13  |                       |               |                              |  |     |        |  | Rec = 57" = 95%      |  |
|   |                       |               |                              |  |     |        |  | RQD = 40" = 67%      |  |
| 14  |                       |               |                              |  |     |        |  | 14'0"                |  |
|   |                       |               |                              | <b>End of Boring @ 14'0"</b>   |     |        |  |                      |  |
| 15  |                       |               |                              |  |     |        |  |                      |  |
| 16  |                       |               |                              |  |     |        |  |                      |  |
| 17  |                       |               |                              |  |     |        |  |                      |  |
| 18  |                       |               |                              |  |     |        |  |                      |  |
| 19  |                       |               |                              |  |     |        |  |                      |  |
| 20  |                       |               |                              |  |     |        |  |                      |  |
| 21  |                       |               |                              |  |     |        |  |                      |  |
| 22  |                       |               |                              |  |     |        |  |                      |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                               |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>ST-1                                  |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|--|--|
| Project: Prop Sewage Treatment & Maintenance Facilities, 568&570 Bedford Rd |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |  |  |
| Client: Summit Club Partners, LLC   |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |  |  |
| Drilling Contractor: Environmental Technical Drilling                       |                       |               |                              |                 |   |        | ELEVATION: +579.0 |  |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo  |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | CAS   | SS     |                   | START DATE: 29/Aug/22                                  |  |
| No Groundwater Encountered  |                       |               |                              | DIA.            | 4"  | 1 3/8" |                   | FINISH DATE: 29/Aug/22                                 |  |
|   |                       |               |                              | WGHT            |   | 140#   |                   | DRILLER: Mike  |  |
|   |                       |               |                              | FALL            |   | 30"    |                   | INSPECTOR: JP  |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | Sym             | IDENTIFICATION  |        |                   | REMARKS  |  |
|   |                       |               | 4                            |                 | <u>Topsoil</u>  |        |                   | 0'3"   |  |
| 1   |                       | S-1           | 10                           |                 | Br cf S, s (-) \$, s cf G   |        |                   | Rec = 12"<br>moist                                     |  |
|   |                       |               | 13                           |                 |   |        |                   |  |  |
| 2   |                       |               | 50/3"                        |                 | <u>Brown coarse to fine Sand, some (-) Silt, some coarse to fine Gravel</u> |        |                   | moved 7', spoon refusal at 9'<br>Boulder               |  |
| 3   |                       |               |                              |                 |   |        |                   |  |  |
|   |                       |               | 5                            |                 |   |        |                   |  |  |
| 4   |                       | S-2           | 6                            |                 | same, 1 (-) \$, a cf G  |        |                   | Rec = 8"<br>moist                                      |  |
|   |                       |               | 6                            |                 |   |        |                   |  |  |
| 5   |                       |               | 12                           |                 |   |        |                   | 5'0"   |  |
|   |                       |               | 23                           |                 |   |        |                   |  |  |
| 6   |                       | S-3           | 21                           |                 | Completely weathered rock   |        |                   | Rec = 13"<br>moist                                     |  |
|   |                       |               | 16                           |                 |   |        |                   |  |  |
| 7   |                       |               | 20                           |                 | <u>Gneiss, Completely Weathered</u>   |        |                   |  |  |
|   |                       |               | 35                           |                 |   |        |                   |  |  |
| 8   |                       | S-4           | 37                           |                 | same, weathered rock  |        |                   | Rec = 18"<br>moist                                     |  |
|   |                       |               | 19                           |                 |   |        |                   |  |  |
| 9   |                       |               | 23                           |                 |   |        |                   |  |  |
| 10  |                       |               |                              |                 |   |        |                   |  |  |
|   |                       |               | 28                           |                 | same, weathered rock  |        |                   | Rec = 7"<br>moist                                      |  |
| 11  |                       | S-5           | 50/3"                        |                 |   |        |                   | 11'6"  |  |
| 12  |                       |               |                              |                 | <u>End of Boring @ 11'6"</u>  |        |                   | Rollerbit refusal at 11'6"<br>on likely harder bedrock |  |
| 13  |                       |               |                              |                 |   |        |                   |  |  |
| 14  |                       |               |                              |                 |   |        |                   |  |  |
| 15  |                       |               |                              |                 |   |        |                   |  |  |
| 16  |                       |               |                              |                 |   |        |                   |  |  |
| 17  |                       |               |                              |                 |   |        |                   |  |  |
| 18  |                       |               |                              |                 |   |        |                   |  |  |
| 19  |                       |               |                              |                 |   |        |                   |  |  |
| 20  |                       |               |                              |                 |   |        |                   |  |  |
| 21  |                       |               |                              |                 |   |        |                   |  |  |
| 22  |                       |               |                              |                 |   |        |                   |  |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                               |                       |               |                              | TEST BORING LOG |   |        |      |   | BORING NUMBER<br>ST-2 |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|------|---|-----------------------|--|
| Project: Prop Sewage Treatment & Maintenance Facilities, 568&570 Bedford Rd |                       |               |                              | SHEET NO.:      |   |        |      |   | 1 of 1                |  |
| Client: Summit Club Partners, LLC   |                       |               |                              | JOB NUMBER:     |   |        |      |   | 22-85                 |  |
| Drilling Contractor: Environmental Technical Drilling                       |                       |               |                              | ELEVATION:      |   |        |      |   | +587.0                |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE | DATUM: Topo                                       |                       |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |      | START DATE: 29/Aug/22                             |                       |  |
| No Groundwater Encountered  |                       |               |                              | DIA.            | 3 1/4"  | 1 3/8" |      | FINISH DATE: 29/Aug/22                            |                       |  |
|   |                       |               |                              | WGHT            |   | 140#   |      | DRILLER: Mike                                     |                       |  |
|   |                       |               |                              | FALL            |   | 30"    |      | INSPECTOR: JP                                     |                       |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |        |      | REMARKS   |                       |  |
|   |                       |               | 5                            |                 | <u>Topsoil</u>  |        |      | 0'2"  |                       |  |
| 1   |                       | S-1           | 22                           |                 | Br cf S, s \$, l (-) cf G   |        |      | Rec = 4"<br>moist<br>Boulder                      |                       |  |
| 2   |                       |               | 50/2"                        |                 |   |        |      |   |                       |  |
| 3   |                       |               |                              |                 |   |        |      |   |                       |  |
| 4   |                       | S-2           | 14                           |                 | same  |        |      | Rec = 15"<br>moist                                |                       |  |
| 5   |                       |               | 14                           |                 | <u>Brown coarse to fine SAND, some Silt, little (-) coarse to fine Gravel</u> |        |      |   |                       |  |
| 6   |                       | S-3           | 19                           |                 | same  |        |      | Rec = 8"<br>moist<br>Spoon walked<br>Boulder      |                       |  |
| 7   |                       |               | 50/3"                        |                 |   |        |      |   |                       |  |
| 8   |                       |               |                              |                 |   |        |      | 8'0"  |                       |  |
| 9   |                       | S-4           | 19                           |                 | Completely weathered rock   |        |      | Rec = 13"<br>moist                                |                       |  |
| 10  |                       |               | 21                           |                 | <u>Gneiss, Completely Weathered</u>   |        |      |   |                       |  |
| 11  |                       | S-5           | 49                           |                 | same, weathered rock  |        |      | Rec = 4"<br>moist                                 |                       |  |
| 12  |                       |               | 50/1"                        |                 |   |        |      |   |                       |  |
| 13  |                       |               | 50/4"                        |                 |   |        |      | 11'0"   |                       |  |
| 14  |                       |               |                              |                 | <u>End of Boring @ 11'0"</u>  |        |      | Auger refusal @ 11'0"<br>on likely harder bedrock |                       |  |
| 15  |                       |               |                              |                 |   |        |      |   |                       |  |
| 16  |                       |               |                              |                 |   |        |      |   |                       |  |
| 17  |                       |               |                              |                 |   |        |      |   |                       |  |
| 18  |                       |               |                              |                 |   |        |      |   |                       |  |
| 19  |                       |               |                              |                 |   |        |      |   |                       |  |
| 20  |                       |               |                              |                 |   |        |      |   |                       |  |
| 21  |                       |               |                              |                 |   |        |      |   |                       |  |
| 22  |                       |               |                              |                 |   |        |      |   |                       |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                               |                       |               |                              | TEST BORING LOG |   |                   |      | BORING NUMBER<br>ST-4  |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|-------------------|------|--|--|
| Project: Prop Sewage Treatment & Maintenance Facilities, 568&570 Bedford Rd |                       |               |                              |                 |   | SHEET NO.: 1 of 1 |      |  |  |
| Client: Summit Club Partners, LLC   |                       |               |                              |                 |   | JOB NUMBER: 22-85 |      |  |  |
| Drilling Contractor: Environmental Technical Drilling                       |                       |               |                              |                 |   | ELEVATION: +563.0 |      |  |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE              | TUBE | DATUM: Topo  |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS                |      | START DATE: 29/Aug/22  |  |
| No Groundwater Encountered  |                       |               |                              | DIA.            | 3 1/4"  | 1 3/8"            |      | FINISH DATE: 29/Aug/22   |  |
|   |                       |               |                              | WGHT            |   | 140#              |      | DRILLER: Mike  |  |
|   |                       |               |                              | FALL            |   | 30"               |      | INSPECTOR: JP  |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |                   |      | REMARKS  |  |
| 1   |                       | S-1           | 9                            |                 | FILL (Gr, bk cf S, t (+) \$, s (-) cf G, w/wood, asphalt)   |                   |      | Rec = 20" moist  |  |
|   |                       |               | 9                            |                 |   |                   |      |  |  |
|   |                       |               | 14                           |                 |   |                   |      |  |  |
| 2   |                       |               | 16                           |                 |   |                   |      |  |  |
| 3   |                       |               |                              |                 | <b><u>FILL (Gray, black coarse to fine SAND, trace (+) Silt, some (-) coarse to fine Gravel, with wood, brick, asphalt)</u></b> |                   |      | Boulder to 4'-6'   |  |
| 4   |                       |               |                              |                 |   |                   |      |  |  |
| 5   |                       |               |                              |                 |   |                   |      |  |  |
| 6   |                       | S-2           | 5                            |                 |   |                   |      |  |  |
|   |                       |               | 8                            |                 |   |                   |      |  |  |
| 7   |                       |               | 4                            |                 | FILL (same, s \$, l cf G, w/wood, brick)  |                   |      | Rec = 20" moist  |  |
|   |                       |               | 5                            |                 |   |                   |      |  |  |
| 8   |                       | S-3           | 9                            |                 | FILL (same, s \$, l cf G, w/wood, brick)  |                   |      | 8'0" Rec = 15" moist   |  |
|   |                       |               | 10                           |                 |   |                   |      |  |  |
| 9   |                       |               | 14                           |                 | Br cf S, l (+) \$, l (+) cf G   |                   |      | Boulder  |  |
|   |                       |               | 50/3"                        |                 |   |                   |      |  |  |
| 10  |                       |               |                              |                 |   |                   |      |  |  |
| 11  |                       | S-4           | 4                            |                 | <b><u>Brown coarse to fine SAND, little (+) Silt, little (+) coarse to fine Gravel</u></b>                                      |                   |      | Rec = 15" moist  |  |
|   |                       |               | 11                           | same            |   |                   |      |  |  |
| 12  |                       |               | 11                           |                 | Br cf S, l \$, l cf G, Gneiss, completely weathered   |                   |      | 11'6" moist  |  |
|   |                       |               | 30                           |                 |   |                   |      |  |  |
| 13  |                       |               |                              |                 | <b><u>Gneiss, Completely Weathered</u></b>  |                   |      | Dense  |  |
| 14  |                       |               |                              |                 |   |                   |      |  |  |
| 15  |                       |               |                              |                 |   |                   |      |  |  |
| 16  |                       | S-5           | 50/6"                        | same            |   |                   |      |  |  |
|   |                       |               |                              |                 |   |                   |      |  |  |
| 17  |                       |               |                              |                 | <b><u>End of Boring @ 16'6"</u></b>   |                   |      | 16'6" Rec = 6" moist<br>Auger refusal @ 16'6" on likely harder bedrock |  |
| 18  |                       |               |                              |                 |   |                   |      |  |  |
| 19  |                       |               |                              |                 |   |                   |      |  |  |
| 20  |                       |               |                              |                 |   |                   |      |  |  |
| 21  |                       |               |                              |                 |   |                   |      |  |  |
| 22  |                       |               |                              |                 |   |                   |      |  |  |

| CARLIN - SIMPSON & ASSOCIATES<br>Sayreville, N.J.               |                       |               |                              | TEST BORING LOG  |     |        |  | BORING NUMBER<br>B-101 |  |
|---|-----------------------|---------------|------------------------------|--|-----|--------|--|------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              | SHEET NO.: 1 of 1  |     |        |  | JOB NUMBER: 22-85      |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              | ELEVATION: +563.0  |     |        |  | DATUM: Topo            |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              | CASING   |     |        |  | SAMPLE                 |  |
| GROUNDWATER   |                       |               |                              | CORE   |     |        |  | TUBE                   |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE   | Cas | SS     |  |                        |  |
| No groundwater encountered                                      |                       |               |                              | DIA.   | 4"  | 1 3/8" |  |                        |  |
|   |                       |               |                              | WGHT   |     | 140#   |  |                        |  |
|   |                       |               |                              | FALL   |     | 30"    |  |                        |  |
| START DATE:   |                       |               |                              | 07 Nov 22  |     |        |  | FINISH DATE: 07 Nov 22 |  |
|   |                       |               |                              | DRILLER: M Kane  |     |        |  | INSPECTOR: JP          |  |
| Depth (ft.)   | Casing Blows pre Foot | Sample Number | Blows on Sample Spoon per 6" | IDENTIFICATION   |     |        |  | REMARKS                |  |
| 1   |                       | S-1           | 3                            | FILL (Br cf S, s (-) \$, l (-) cf G)   |     |        |  | Rec = 10"<br>moist     |  |
|   |                       |               | 5                            |  |     |        |  |                        |  |
|   |                       |               | 4                            |  |     |        |  |                        |  |
| 2   |                       |               | 4                            |  |     |        |  |                        |  |
|   |                       |               | 2                            | FILL (same, w/roots)   |     |        |  | Rec = 13"<br>moist     |  |
| 3   |                       | S-2           | 2                            |  |     |        |  |                        |  |
|   |                       |               | 4                            | <b><u>FILL (Brown coarse to fine SAND, some (-) Silt, little (-) coarse to fine Gravel with roots)</u></b>                       |     |        |  |                        |  |
| 4   |                       |               | 8                            |  |     |        |  |                        |  |
|   |                       |               |                              |  |     |        |  | 5'0"                   |  |
|   |                       |               | 8                            | Br cf S, s (-) \$, s (-) cf G  |     |        |  | Rec = 11"<br>moist     |  |
| 6   |                       | S-3           | 18                           |  |     |        |  |                        |  |
|   |                       |               | 14                           | <b><u>Brown coarse to fine SAND, some (-) Silt, some (-) coarse to fine Gravel</u></b>   |     |        |  | 7'0"                   |  |
| 7   |                       |               | 18                           |  |     |        |  |                        |  |
|   |                       |               | 25                           | Br cf G a (-), cf S, t \$  |     |        |  | Rec = 10"<br>moist     |  |
| 8   |                       | S-4           | 30                           |  |     |        |  |                        |  |
|   |                       |               | 30                           | <b><u>Gneiss, Completely Weathered</u></b><br><b><u>Brown coarse to fine GRAVEL and (-), coarse to fine Sand, trace Silt</u></b> |     |        |  |                        |  |
| 9   |                       |               | 30                           |  |     |        |  |                        |  |
|   |                       |               | 12                           | same, weathered rock   |     |        |  | Rec = 8"<br>moist      |  |
| 11  |                       | S-5           | 43                           |  |     |        |  |                        |  |
|   |                       |               | 50/2"                        |  |     |        |  | 11'2"                  |  |
| 12  |                       |               |                              |  |     |        |  |                        |  |
| 13  |                       |               |                              |  |     |        |  |                        |  |
| 14  |                       |               |                              |  |     |        |  | <u>Run #1</u>          |  |
| 15  |                       | Run #1        |                              | <b><u>Gray, white Gneiss with granite intrusions blocky and seamy, moderately weathered</u></b>                                  |     |        |  | 12'6"-17'6"            |  |
| 16  |                       |               |                              |  |     |        |  | Run = 60"              |  |
| 17  |                       |               |                              |  |     |        |  | Rec = 95%              |  |
|   |                       |               |                              |  |     |        |  | RQD = 67%              |  |
|   |                       |               |                              |  |     |        |  | 17'6"                  |  |
| 18  |                       |               |                              | <b><u>End of Boring @ 17'6"</u></b>  |     |        |  |                        |  |
| 19  |                       |               |                              |  |     |        |  |                        |  |
| 20  |                       |               |                              |  |     |        |  |                        |  |
| 21  |                       |               |                              |  |     |        |  |                        |  |
| 22  |                       |               |                              |  |     |        |  |                        |  |



| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |  |        |                   | BORING NUMBER<br>B-102                   |  |
|---|-----------------------|---------------|------------------------------|-----------------|--|--------|-------------------|--|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |  |        | SHEET NO.: 1 of 1 |  |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |  |        | JOB NUMBER: 22-85 |  |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |  |        | ELEVATION: +565.0 |  |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE   | CORE   | TUBE              | DATUM: Topo                              |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA  | SS     |                   | START DATE: 7/Nov/22                     |  |
| No groundwater encountered                                      |                       |               |                              | DIA.            | 3 1/4"   | 1 3/8" |                   | FINISH DATE: 7/Nov/22                    |  |
|   |                       |               |                              | WGHT            |  | 140#   |                   | DRILLER: M Kane                          |  |
|   |                       |               |                              | FALL            |  | 30"    |                   | INSPECTOR: JP                            |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION   |        |                   | REMARKS                                  |  |
|   |                       |               | 1                            |                 | <u>Topsoil</u>   |        |                   | 0'1"                                     |  |
| 1   |                       | S-1           | 2                            |                 | FILL (Dk br cf S, s \$, t cf G)  |        |                   | Rec = 10" moist                          |  |
|   |                       |               | 5                            |                 |  |        |                   |  |  |
| 2   |                       |               | 3                            |                 | <u>FILL (Dark brown coarse to fine SAND, some Silt, trace coarse to fine Gravel)</u> |        |                   |  |  |
|   |                       |               | 3                            |                 |  |        |                   |  |  |
| 3   |                       | S-2           | 2                            |                 | FILL (same)  |        |                   | Rec = 7" moist                           |  |
|   |                       |               | 3                            |                 |  |        |                   |  |  |
| 4   |                       |               | 5                            |                 |  |        |                   |  |  |
| 5   |                       |               |                              |                 |  |        |                   | 5'0"                                     |  |
|   |                       |               | 10                           |                 |  |        |                   |  |  |
| 6   |                       | S-3           | 7                            |                 | Br cf S, s \$, l (-) cf G  |        |                   | Rec = 24" moist                          |  |
|   |                       |               | 9                            |                 | <u>Brown coarse to fine SAND, some Silt, little (-) coarse to fine Gravel</u>        |        |                   |  |  |
| 7   |                       |               | 9                            |                 |  |        |                   |  |  |
|   |                       |               | 12                           |                 |  |        |                   |  |  |
| 8   |                       | S-4           | 11                           |                 | same   |        |                   | 8'0" Rec = 10" moist                     |  |
|   |                       |               | 33                           |                 | <u>Gneiss, Completely Weathered</u>  |        |                   |  |  |
| 9   |                       |               | 50/2"                        |                 | <u>Brown, gray coarse to fine SAND, little Silt, and (-) coarse to fine Gravel</u>   |        |                   | 9'6" Auger refusal 9'6" Probable bedrock |  |
| 10  |                       |               |                              |                 | <u>End of Boring @ 9'6"</u>  |        |                   |  |  |
| 11  |                       |               |                              |                 |  |        |                   |  |  |
| 12  |                       |               |                              |                 |  |        |                   |  |  |
| 13  |                       |               |                              |                 |  |        |                   |  |  |
| 14  |                       |               |                              |                 |  |        |                   |  |  |
| 15  |                       |               |                              |                 |  |        |                   |  |  |
| 16  |                       |               |                              |                 |  |        |                   |  |  |
| 17  |                       |               |                              |                 |  |        |                   |  |  |
| 18  |                       |               |                              |                 |  |        |                   |  |  |
| 19  |                       |               |                              |                 |  |        |                   |  |  |
| 20  |                       |               |                              |                 |  |        |                   |  |  |
| 21  |                       |               |                              |                 |  |        |                   |  |  |
| 22  |                       |               |                              |                 |  |        |                   |  |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |  |        |                   | BORING NUMBER<br>B-103 |  |
|---|-----------------------|---------------|------------------------------|-----------------|--|--------|-------------------|------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |  |        | SHEET NO.: 1 of 1 |                        |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |  |        | JOB NUMBER: 22-85 |                        |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |  |        | ELEVATION: +623.0 |                        |  |
| GROUNDWATER   |                       |               |                              |                 | CASING   | SAMPLE | CORE              | TUBE                   | DATUM: Topo                            |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA  | SS     |                   |                        | START DATE: 7/Nov/22                   |
| No groundwater encountered                                      |                       |               |                              |                 | DIA.   | 3 1/4" | 1 3/8"            |                        | FINISH DATE: 7/Nov/22                  |
|   |                       |               |                              | WGHT            |  | 140#   |                   |                        | DRILLER: M Kane                        |
|   |                       |               |                              | FALL            |  | 30"    |                   |                        | INSPECTOR: JP                          |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION   |        |                   |                        | REMARKS                                |
| 1   |                       | S-1           | 1                            |                 | <u>Topsoil</u> 0'1"  |        |                   |                        | Rec = 2"<br>moist                      |
|   |                       |               | 2                            |                 | FILL (Br cf S, 1 \$, 1 cf G)   |        |                   |                        |  |
|   |                       |               | 3                            |                 |  |        |                   |                        |  |
| 2   |                       |               | 2                            |                 | <u>FILL (Brown coarse to fine SAND, little Silt, little coarse to fine Gravel)</u> |        |                   |                        | Rec = 13"<br>moist                     |
|   |                       | S-2           | 2                            |                 | FILL (same, br, gr w/c pkts)   |        |                   |                        |  |
| 3   |                       |               | 3                            |                 |  |        |                   |                        |  |
|   |                       |               | 4                            |                 |  |        |                   |                        |  |
| 4   |                       |               | 2                            |                 |  |        |                   |                        | Auger refusal 5'0"<br>move 5 feet west |
| 5   |                       |               |                              |                 | 5'0"   |        |                   |                        |  |
| 6   |                       | S-3           | 7                            |                 | <u>Brown coarse to fine SAND, little (+) Silt, little coarse to fine Gravel</u>    |        |                   |                        | Rec = 9"<br>moist                      |
|   |                       |               | 10                           |                 | Br cf S, 1 (+) \$, 1 cf G 6'6"   |        |                   |                        |  |
| 7   |                       |               | 15                           |                 |  |        |                   |                        | Auger refusal 8'0"<br>Probable bedrock |
|   |                       | S-4           | 23                           |                 | <u>Gneiss, Completely Weathered</u>  |        |                   |                        |  |
| 8   |                       |               | 50/3"                        |                 | <u>Gray coarse to fine GRAVEL some, coarse to fine Sand, little (-) Silt</u> 8'0"  |        |                   |                        |  |
|   |                       |               |                              |                 | <u>End of Boring @ 8'0"</u>  |        |                   |                        |  |
| 9   |                       |               |                              |                 |  |        |                   |                        |  |
| 10  |                       |               |                              |                 |  |        |                   |                        |  |
| 11  |                       |               |                              |                 |  |        |                   |                        |  |
| 12  |                       |               |                              |                 |  |        |                   |                        |  |
| 13  |                       |               |                              |                 |  |        |                   |                        |  |
| 14  |                       |               |                              |                 |  |        |                   |                        |  |
| 15  |                       |               |                              |                 |  |        |                   |                        |  |
| 16  |                       |               |                              |                 |  |        |                   |                        |  |
| 17  |                       |               |                              |                 |  |        |                   |                        |  |
| 18  |                       |               |                              |                 |  |        |                   |                        |  |
| 19  |                       |               |                              |                 |  |        |                   |                        |  |
| 20  |                       |               |                              |                 |  |        |                   |                        |  |
| 21  |                       |               |                              |                 |  |        |                   |                        |  |
| 22  |                       |               |                              |                 |  |        |                   |                        |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |  |        |                   | BORING NUMBER<br>B-104 |   |
|---|-----------------------|---------------|------------------------------|-----------------|--|--------|-------------------|------------------------|---|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |  |        | SHEET NO.: 1 of 1 |                        |   |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |  |        | JOB NUMBER: 22-85 |                        |   |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |  |        | ELEVATION: +622.0 |                        |   |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE   | CORE   | TUBE              | DATUM: Topo            |   |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA  | SS     |                   | START DATE: 8/Nov/22   |   |
| Trapped water in existing fill at 3'0"                          |                       |               |                              | DIA.            | 3 1/4"   | 1 3/8" |                   | FINISH DATE: 8/Nov/22  |   |
|   |                       |               |                              | WGHT            |  | 140#   |                   | DRILLER: M Kane        |   |
|   |                       |               |                              | FALL            |  | 30"    |                   | INSPECTOR: JP          |   |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION   |        |                   |                        | REMARKS   |
|   |                       |               | 3                            |                 | <u>Topsoil</u> 0'2"  |        |                   |                        |   |
| 1   |                       | S-1           | 8                            |                 | FILL (Br cf S, 1 (+) \$, 1 (-) cf G)   |        |                   |                        | Rec = 12"<br>moist                                |
|   |                       |               | 8                            |                 |  |        |                   |                        |   |
| 2   |                       |               | 5                            |                 | <u>FILL (Brown coarse to fine SAND, little (+) Silt, little (-) coarse to fine Gravel)</u> |        |                   |                        |   |
|   |                       | S-2           | 3                            |                 | FILL (same, br, gr a (-) \$)   |        |                   |                        | Rec = 14"<br>moist - wet<br>trapped water in Fill |
| 3   |                       |               | 6                            |                 |  |        |                   |                        |   |
|   |                       |               | 6                            |                 |  |        |                   |                        |   |
| 4   |                       |               | 9                            |                 |  |        |                   |                        |   |
|   |                       |               |                              |                 | 5'0"   |        |                   |                        |   |
| 5   |                       |               |                              |                 |  |        |                   |                        |   |
|   |                       | S-3           | 3                            |                 | <u>Brown coarse to fine SAND, some Silt, little (-) coarse to fine Gravel</u> 6'0"         |        |                   |                        | Rec = 11"<br>moist                                |
| 6   |                       |               | 4                            |                 |  |        |                   |                        |   |
|   |                       |               | 50/6"                        |                 |  |        |                   |                        |   |
| 7   |                       |               |                              |                 | <u>Gneiss, Completely Weathered</u> 7'0"   |        |                   |                        | Auger refusal 7'0"                                |
|   |                       |               |                              |                 | <u>End of Boring @ 7'0"</u>  |        |                   |                        | Probable bedrock                                  |
| 8   |                       |               |                              |                 |  |        |                   |                        |   |
| 9   |                       |               |                              |                 |  |        |                   |                        |   |
| 10  |                       |               |                              |                 |  |        |                   |                        |   |
| 11  |                       |               |                              |                 |  |        |                   |                        |   |
| 12  |                       |               |                              |                 |  |        |                   |                        |   |
| 13  |                       |               |                              |                 |  |        |                   |                        |   |
| 14  |                       |               |                              |                 |  |        |                   |                        |   |
| 15  |                       |               |                              |                 |  |        |                   |                        |   |
| 16  |                       |               |                              |                 |  |        |                   |                        |   |
| 17  |                       |               |                              |                 |  |        |                   |                        |   |
| 18  |                       |               |                              |                 |  |        |                   |                        |   |
| 19  |                       |               |                              |                 |  |        |                   |                        |   |
| 20  |                       |               |                              |                 |  |        |                   |                        |   |
| 21  |                       |               |                              |                 |  |        |                   |                        |   |
| 22  |                       |               |                              |                 |  |        |                   |                        |   |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |      |                       | BORING NUMBER<br>B-105 |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|------|-----------------------|------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        |      | SHEET NO.: 1 of 1     |                        |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        |      | JOB NUMBER: 22-85     |                        |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        |      | ELEVATION: +620.0     |                        |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE | DATUM: Topo           |                        |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |      | START DATE: 8/Nov/22  |                        |  |
| No groundwater encountered                                      |                       |               |                              | DIA.            | 3 1/4"  | 1 3/8" |      | FINISH DATE: 8/Nov/22 |                        |  |
|   |                       |               |                              | WGHT            |   | 140#   |      | DRILLER: M Kane       |                        |  |
|   |                       |               |                              | FALL            |   | 30"    |      | INSPECTOR: JP         |                        |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | Sym             | IDENTIFICATION  |        |      | REMARKS               |                        |  |
|   |                       |               | 3                            |                 | <u>Topsoil</u>  |        |      | 0'1"                  |                        |  |
| 1   |                       | S-1           | 5                            |                 | FILL (Br cf S, s \$, t (+) cf G)  |        |      | Rec = 9"<br>moist     |                        |  |
|   |                       |               | 5                            |                 |   |        |      |                       |                        |  |
| 2   |                       |               | 5                            |                 | <u>FILL (Brown coarse to fine SAND, some Silt, trace (+) coarse to fine Gravel)</u>   |        |      |                       |                        |  |
|   |                       | S-2           | 4                            |                 | FILL (same, gr, br a (-) \$)  |        |      | Rec = 18"<br>moist    |                        |  |
| 3   |                       |               | 3                            |                 |   |        |      |                       |                        |  |
| 4   |                       |               | 3                            |                 |   |        |      |                       |                        |  |
| 5   |                       |               |                              |                 |   |        |      | 5'0"                  |                        |  |
|   |                       | S-3           | 14                           |                 | Br, gr cf S, t (+) \$, a (-) cf G   |        |      |                       |                        |  |
| 6   |                       |               | 20                           |                 | <u>Brown, gray coarse to fine SAND, trace (+) Silt, and (-) coarse to fine Gravel</u> |        |      | Rec = 10"<br>moist    |                        |  |
|   |                       |               | 16                           |                 |   |        |      |                       |                        |  |
| 7   |                       |               | 19                           |                 |   |        |      | 7'0"                  |                        |  |
|   |                       | S-4           | 39                           |                 | Br cf S, l \$, s (-) cf G   |        |      |                       |                        |  |
| 8   |                       |               | 30                           |                 | <u>Gneiss, Completely Weathered</u>   |        |      | Rec = 15"<br>moist    |                        |  |
|   |                       |               | 18                           |                 |   |        |      |                       |                        |  |
| 9   |                       |               | 20                           |                 | <u>Brown coarse to fine SAND, little Silt, some (-) coarse to fine Gravel</u>         |        |      | Lots of Mica          |                        |  |
|   |                       | S-5           | 50/3"                        |                 | <u>End of Boring @ 9'3"</u>   |        |      | Rec = 2"<br>moist     |                        |  |
| 10  |                       |               |                              |                 |   |        |      | Auger refusal 9'0"    |                        |  |
| 11  |                       |               |                              |                 |   |        |      | probable bedrock      |                        |  |
| 12  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 13  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 14  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 15  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 16  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 17  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 18  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 19  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 20  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 21  |                       |               |                              |                 |   |        |      |                       |                        |  |
| 22  |                       |               |                              |                 |   |        |      |                       |                        |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |  |        |                   | BORING NUMBER<br>B-106 |                           |
|---|-----------------------|---------------|------------------------------|-----------------|--|--------|-------------------|------------------------|---------------------------|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |  |        | SHEET NO.: 1 of 1 |                        |                           |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |  |        | JOB NUMBER: 22-85 |                        |                           |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |  |        | ELEVATION: +622.0 |                        |                           |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE   | CORE   | TUBE              | DATUM: Topo            |                           |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA  | SS     |                   | START DATE: 8/Nov/22   |                           |
| Trapped water in existing fill at 2'0"                          |                       |               |                              | DIA.            | 3 1/4"   | 1 3/8" |                   | FINISH DATE: 8/Nov/22  |                           |
|   |                       |               |                              | WGHT            |  | 140#   |                   | DRILLER: M Kane        |                           |
|   |                       |               |                              | FALL            |  | 30"    |                   | INSPECTOR: JP          |                           |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION   |        |                   |                        | REMARKS                   |
|   |                       |               | 2                            |                 | <u>Topsoil</u> 0'1"  |        |                   |                        |                           |
| 1   |                       | S-1           | 1                            |                 | FILL (Br cf S, s \$, l (-) cf G, w/wood, root)   |        |                   |                        | Rec = 7"                  |
|   |                       |               | 3                            |                 | <u>FILL (Brown coarse to fine SAND, some Silt, little (-) Gravel, with wood, root)</u> |        |                   |                        | moist                     |
| 2   |                       |               | 3                            |                 |  |        |                   |                        |                           |
|   |                       | S-2           | 8                            |                 | FILL (same, l (+) cf G)  |        |                   |                        | Rec = 15"                 |
| 3   |                       |               | 10                           |                 |  |        |                   |                        | moist                     |
| 4   |                       |               | 15                           |                 |  |        |                   |                        | wet @ 2'0", trapped water |
| 5   |                       |               |                              |                 | 5'0"   |        |                   |                        |                           |
|   |                       | S-3           | 17                           |                 | <u>Brown coarse to fine SAND, little (+) Silt, little coarse to fine Gravel</u>        |        |                   |                        | Rec = 15"                 |
| 6   |                       |               | 14                           |                 | Br cf S, l (+) \$, l cf G 6'6"   |        |                   |                        | moist                     |
| 7   |                       |               | 50/5"                        |                 | <u>Gneiss, Completely Weathered</u>  |        |                   |                        |                           |
| 8   |                       |               |                              |                 | <u>Light gray, white coarse to fine GRAVEL</u>   |        |                   |                        | Auger refusal 7'6"        |
|   |                       |               |                              |                 | <u>some, coarse to fine Sand, little (-) Silt</u> 7'6"                                 |        |                   |                        | probable bedrock          |
|   |                       |               |                              |                 | <u>End of Boring @ 7'6"</u>  |        |                   |                        |                           |
| 9   |                       |               |                              |                 |  |        |                   |                        |                           |
| 10  |                       |               |                              |                 |  |        |                   |                        |                           |
| 11  |                       |               |                              |                 |  |        |                   |                        |                           |
| 12  |                       |               |                              |                 |  |        |                   |                        |                           |
| 13  |                       |               |                              |                 |  |        |                   |                        |                           |
| 14  |                       |               |                              |                 |  |        |                   |                        |                           |
| 15  |                       |               |                              |                 |  |        |                   |                        |                           |
| 16  |                       |               |                              |                 |  |        |                   |                        |                           |
| 17  |                       |               |                              |                 |  |        |                   |                        |                           |
| 18  |                       |               |                              |                 |  |        |                   |                        |                           |
| 19  |                       |               |                              |                 |  |        |                   |                        |                           |
| 20  |                       |               |                              |                 |  |        |                   |                        |                           |
| 21  |                       |               |                              |                 |  |        |                   |                        |                           |
| 22  |                       |               |                              |                 |  |        |                   |                        |                           |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-107              |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|-------------------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |                                     |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |                                     |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        | ELEVATION: +564.0 |                                     |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo                         |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   | START DATE: 8/Nov/22                |  |
| No groundwater encountered                                      |                       |               |                              | DIA.            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 8/Nov/22               |  |
|   |                       |               |                              | WGHT            |   | 140#   |                   | DRILLER: M Kane                     |  |
|   |                       |               |                              | FALL            |   | 30"    |                   | INSPECTOR: JP                       |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |        |                   | REMARKS                             |  |
| 1   |                       | S-1           | 3                            |                 | <u>Topsoil</u> 0'2"   |        |                   | Rec = 8" moist                      |  |
| 2   |                       |               | 2                            |                 | FILL (Dk br cf S, s \$, l cf G)   |        |                   |                                     |  |
|   |                       |               | 4                            |                 |   |        |                   |                                     |  |
| 2   |                       |               | 4                            |                 | <u>FILL (Dark brown coarse to fine SAND, some Silt, little coarse to fine Gravel)</u> |        |                   |                                     |  |
| 3   |                       | S-2           | 3                            |                 | FILL (same, br)   |        |                   | Rec = 11" moist                     |  |
| 4   |                       |               | 3                            |                 |   |        |                   |                                     |  |
|   |                       |               | 6                            |                 |   |        |                   |                                     |  |
| 4   |                       |               | 5                            |                 |   |        |                   |                                     |  |
| 5   |                       |               |                              |                 | 5'0"  |        |                   |                                     |  |
| 6   |                       | S-3           | 5                            |                 | Br cf S, l (+) \$, l cf G   |        |                   | Rec = 17" moist                     |  |
|   |                       |               | 7                            |                 | <u>Brown coarse to fine SAND, little (+) Silt, little coarse to fine Gravel</u>       |        |                   | Mica                                |  |
| 7   |                       |               | 11                           |                 |   |        |                   |                                     |  |
|   |                       |               | 18                           |                 |   |        |                   |                                     |  |
| 8   |                       | S-4           | 20                           |                 | 7'6"  |        |                   | Rec = 6" moist                      |  |
|   |                       |               | 33                           |                 | <u>Gneiss, Completely Weathered</u> 8'6"  |        |                   | Auger refusal 8'6" Probable bedrock |  |
| 9   |                       |               | 50/2"                        |                 | <u>End of Boring @ 8'6"</u>   |        |                   |                                     |  |
| 10  |                       |               |                              |                 |   |        |                   |                                     |  |
| 11  |                       |               |                              |                 |   |        |                   |                                     |  |
| 12  |                       |               |                              |                 |   |        |                   |                                     |  |
| 13  |                       |               |                              |                 |   |        |                   |                                     |  |
| 14  |                       |               |                              |                 |   |        |                   |                                     |  |
| 15  |                       |               |                              |                 |   |        |                   |                                     |  |
| 16  |                       |               |                              |                 |   |        |                   |                                     |  |
| 17  |                       |               |                              |                 |   |        |                   |                                     |  |
| 18  |                       |               |                              |                 |   |        |                   |                                     |  |
| 19  |                       |               |                              |                 |   |        |                   |                                     |  |
| 20  |                       |               |                              |                 |   |        |                   |                                     |  |
| 21  |                       |               |                              |                 |   |        |                   |                                     |  |
| 22  |                       |               |                              |                 |   |        |                   |                                     |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-108 |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |                        |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |                        |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        | ELEVATION: +564.0 |                        |  |
| GROUNDWATER   |                       |               |                              |                 | CASING  | SAMPLE | CORE              | TUBE                   | DATUM: Topo                            |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   |                        | START DATE: 8/Nov/22                   |
| No groundwater encountered                                      |                       |               |                              |                 | DIA.  | 3 1/4" | 1 3/8"            |                        | FINISH DATE: 8/Nov/22                  |
|   |                       |               |                              | WGHT            |   | 140#   |                   |                        | DRILLER: M Kane                        |
|   |                       |               |                              | FALL            |   | 30"    |                   |                        | INSPECTOR: JP                          |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |        |                   |                        | REMARKS                                |
| 1   |                       | S-1           | 1                            |                 | <u>Topsoil</u> 0'3"   |        |                   |                        | Rec = 9"<br>moist                      |
|   |                       |               | 3                            |                 | FILL (Dk br cf S, s \$, l (-) cf G)   |        |                   |                        |  |
| 2   |                       |               | 4                            |                 | <u>FILL (Dark brown coarse to fine SAND, some Silt, little (-) coarse to fine Gravel)</u> |        |                   |                        | Rec = 15"<br>moist                     |
| 3   |                       | S-2           | 4                            |                 | FILL (same, br)   |        |                   |                        |  |
| 4   |                       |               | 5                            |                 | Br cf S, l (+) \$, l cf G   |        |                   |                        | Auger walking                          |
| 5   |                       |               | 9                            |                 | 3'6"  |        |                   |                        |  |
| 6   |                       | S-3           | 15                           |                 | <u>Brown coarse to fine SAND, little (+) Silt, little coarse to fine Gravel</u>           |        |                   |                        | Rec = 18"<br>moist                     |
| 7   |                       |               | 16                           | same            | 7'0"  |        |                   |                        |  |
| 8   |                       | S-4           | 10                           |                 | <u>Gneiss, Completely Weathered</u>   |        |                   |                        | Rec = 6"<br>moist                      |
| 9   |                       |               | 22                           |                 | 8'6"  |        |                   |                        |  |
| 10  |                       |               | 53                           |                 | <u>End of Boring @ 8'6"</u>   |        |                   |                        | Auger refusal 8'6"<br>probable bedrock |
| 11  |                       |               | 50/5"                        |                 |   |        |                   |                        |  |
| 12  |                       |               |                              |                 |   |        |                   |                        |  |
| 13  |                       |               |                              |                 |   |        |                   |                        |  |
| 14  |                       |               |                              |                 |   |        |                   |                        |  |
| 15  |                       |               |                              |                 |   |        |                   |                        |  |
| 16  |                       |               |                              |                 |   |        |                   |                        |  |
| 17  |                       |               |                              |                 |   |        |                   |                        |  |
| 18  |                       |               |                              |                 |   |        |                   |                        |  |
| 19  |                       |               |                              |                 |   |        |                   |                        |  |
| 20  |                       |               |                              |                 |   |        |                   |                        |  |
| 21  |                       |               |                              |                 |   |        |                   |                        |  |
| 22  |                       |               |                              |                 |   |        |                   |                        |  |





| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-110   |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|--------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |                          |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |                          |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        | ELEVATION: +474.0 |                          |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo              |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   | START DATE: 9/Nov/22     |  |
| 9/Nov/22  | 1000                  | 3'6"          | Open                         | DIA.            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 9/Nov/22    |  |
|   |                       |               |                              | WGHT            |   | 140#   |                   | DRILLER: M Kane          |  |
|   |                       |               |                              | FALL            |   | 30"    |                   | INSPECTOR: JP            |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | Sym             | IDENTIFICATION  |        |                   | REMARKS                  |  |
|   |                       |               | 3                            |                 | <u>Topsoil</u>  |        |                   | 0'6"                     |  |
| 1   |                       | S-1           | 4                            |                 | FILL (Br cf S, l (+) \$, t cf G)  |        |                   | Rec = 12"                |  |
|   |                       |               | 9                            |                 | <u>FILL (Brown coarse to fine SAND, little (+) Silt, trace coarse to fine Gravel)</u> |        |                   | moist                    |  |
| 2   |                       |               | 3                            |                 |   |        |                   |                          |  |
|   |                       |               | 4                            |                 |   |        |                   | 2'6"                     |  |
| 3   |                       | S-2           | 5                            |                 | Gr cf S, s (+) \$, l cf G   |        |                   | Rec = 16"                |  |
|   |                       |               | 5                            |                 |   |        |                   | moist - wet              |  |
| 4   |                       |               | 7                            |                 |   |        |                   |                          |  |
| 5   |                       |               |                              |                 | <u>Gray coarse to fine SAND, some (+) Silt, little coarse to fine Gravel</u>          |        |                   |                          |  |
|   |                       |               | 3                            |                 |   |        |                   |                          |  |
| 6   |                       | S-3           | 2                            |                 | No Rec  |        |                   | Rec = 0"                 |  |
|   |                       |               | 2                            |                 |   |        |                   | wet                      |  |
| 7   |                       |               | 1                            |                 |   |        |                   |                          |  |
|   |                       |               | 1                            |                 |   |        |                   |                          |  |
| 8   |                       | S-4           | 1                            |                 | same, gr, br  |        |                   | Rec = 24"                |  |
|   |                       |               | 1                            |                 |   |        |                   | wet                      |  |
| 9   |                       |               | 2                            |                 |   |        |                   |                          |  |
|   |                       |               |                              |                 |   |        |                   | 9'6"                     |  |
| 10  |                       |               |                              |                 |   |        |                   |                          |  |
|   |                       | S-5           | 50/5"                        |                 | <u>Gneiss, Completely Weathered</u>   |        |                   | Rec = 1"                 |  |
| 11  |                       |               |                              |                 |   |        |                   | wet                      |  |
|   |                       | S-6           | 50/0"                        |                 | <u>End of Boring @ 11'0"</u>  |        |                   | 11'0"                    |  |
| 12  |                       |               |                              |                 |   |        |                   | Auger walked, moved 5' N |  |
|   |                       |               |                              |                 |   |        |                   | Auger refusal 11'0"      |  |
| 13  |                       |               |                              |                 |   |        |                   |                          |  |
| 14  |                       |               |                              |                 |   |        |                   |                          |  |
| 15  |                       |               |                              |                 |   |        |                   |                          |  |
| 16  |                       |               |                              |                 |   |        |                   |                          |  |
| 17  |                       |               |                              |                 |   |        |                   |                          |  |
| 18  |                       |               |                              |                 |   |        |                   |                          |  |
| 19  |                       |               |                              |                 |   |        |                   |                          |  |
| 20  |                       |               |                              |                 |   |        |                   |                          |  |
| 21  |                       |               |                              |                 |   |        |                   |                          |  |
| 22  |                       |               |                              |                 |   |        |                   |                          |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-111                 |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|--|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |  |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |  |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        | ELEVATION: +482.0 |  |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo                            |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   | START DATE: 9/Nov/22                   |  |
| 9/Nov/22  | 1145                  | 3'6"          | HSA                          | DIA.            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 9/Nov/22                  |  |
|   |                       |               |                              | WGHT            |   | 140#   |                   | DRILLER: M Kane                        |  |
|   |                       |               |                              | FALL            |   | 30"    |                   | INSPECTOR: JP                          |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | Sym             | IDENTIFICATION  |        |                   | REMARKS                                |  |
| 1   |                       | S-1           | 1                            |                 | <u>Topsoil</u> 0'4"   |        |                   | Rec = 8"<br>moist                      |  |
|   |                       |               | 2                            |                 | <u>FILL (Brown coarse to fine SAND, little (+) Silt, little coarse to fine Gravel)</u> 1'6" |        |                   |  |  |
| 2   |                       |               | 3                            |                 | Gr cf S, s (-) \$, l (+) cf G   |        |                   |  |  |
|   |                       |               | 13                           |                 | Gr cf S, s (-) \$, l (+) cf G   |        |                   | Boulder<br>Rec = 13"<br>moist - wet    |  |
| 3   |                       | S-2           | 8                            |                 |   |        |                   |  |  |
|   |                       |               | 10                           |                 | same  |        |                   | Boulder<br>Rec = 13"<br>moist - wet    |  |
| 4   |                       |               | 12                           |                 |   |        |                   |  |  |
| 5   |                       |               |                              |                 | <u>Gray coarse to fine SAND, some (-) Silt, little (+) coarse to fine Gravel</u>            |        |                   |  |  |
|   |                       |               | 14                           |                 | same, br l (+) \$   |        |                   | Rec = 9"<br>wet                        |  |
| 6   |                       | S-3           | 11                           |                 |   |        |                   |  |  |
|   |                       |               | 8                            |                 | same, br, gr s \$   |        |                   | Rec = 19"<br>wet                       |  |
| 7   |                       |               | 4                            |                 |   |        |                   |  |  |
|   |                       |               | 3                            |                 | same, br, gr s \$   |        |                   | Rec = 19"<br>wet                       |  |
| 8   |                       | S-4           | 5                            |                 |   |        |                   |  |  |
|   |                       |               | 4                            |                 | 8'6"  |        |                   | Rec = 3"<br>wet<br>Auger refusal 10'6" |  |
| 9   |                       |               | 25                           |                 |   |        |                   |  |  |
| 10  |                       |               |                              |                 | <u>Gneiss, Completely Weathered</u>   |        |                   | Rec = 3"<br>wet<br>Auger refusal 10'6" |  |
|   |                       |               |                              |                 | CWR 10'6"   |        |                   |  |  |
| 11  |                       | S-5           | 50/6"                        |                 | <u>End of Boring @ 10'6"</u>  |        |                   |  |  |
| 12  |                       |               |                              |                 |   |        |                   |  |  |
| 13  |                       |               |                              |                 |   |        |                   |  |  |
| 14  |                       |               |                              |                 |   |        |                   |  |  |
| 15  |                       |               |                              |                 |   |        |                   |  |  |
| 16  |                       |               |                              |                 |   |        |                   |  |  |
| 17  |                       |               |                              |                 |   |        |                   |  |  |
| 18  |                       |               |                              |                 |   |        |                   |  |  |
| 19  |                       |               |                              |                 |   |        |                   |  |  |
| 20  |                       |               |                              |                 |   |        |                   |  |  |
| 21  |                       |               |                              |                 |   |        |                   |  |  |
| 22  |                       |               |                              |                 |   |        |                   |  |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-112 |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |                        |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |                        |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        | ELEVATION: +481.0 |                        |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo            |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   | START DATE: 9/Nov/22   |  |
| 9/Nov/22  |                       | 4'0"          | HSA                          | DIA.            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 9/Nov/22  |  |
| Seasonal high groundwater at 3'0"                               |                       |               |                              | WGHT            |   | 140#   |                   | DRILLER: M Kane        |  |
|   |                       |               |                              | FALL            |   | 30"    |                   | INSPECTOR: JP          |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |        |                   | REMARKS                |  |
| 1   |                       | S-1           | 1                            |                 | <u>Topsoil</u>  |        |                   | 0'6"                   | Rec = 8" moist                             |
|   |                       |               | 3                            |                 | <u>FILL (Dark brown coarse to fine SAND, some (-) Silt, little coarse to fine Gravel)</u> |        |                   | 1'6"                   |  |
| 2   |                       |               | 6                            |                 | Br, gr cf S, l (+) \$, l cf G   |        |                   |                        | Rec = 18" moist slightly mottled           |
|   |                       |               | 12                           |                 | same, slightly mttld  |        |                   |                        |  |
| 3   |                       | S-2           | 7                            |                 | same  |        |                   |                        | Rec = 13" moist- wet                       |
|   |                       |               | 9                            |                 | same  |        |                   |                        |  |
| 4   |                       |               | 11                           |                 | <u>Brown, gray coarse to fine SAND, little (+) Silt, little coarse to fine Gravel</u>     |        |                   |                        | Rec = 15" moist - wet                      |
|   |                       |               | 11                           |                 | same  |        |                   |                        |  |
| 5   |                       | S-3           | 15                           |                 | same  |        |                   |                        | Rec = 10" wet Lots of Mica decomposed rock |
|   |                       |               | 12                           |                 | same  |        |                   |                        |  |
| 6   |                       |               | 12                           |                 | same  |        |                   |                        | Rec = 11" wet                              |
|   |                       |               | 10                           |                 | same, s \$  |        |                   |                        |  |
| 7   |                       | S-4           | 9                            |                 | same  |        |                   | 9'0"                   | Rec = 3" moist probable bedrock            |
|   |                       |               | 9                            |                 | Dk br, gr cf S, l \$, l cf G  |        |                   |                        |  |
| 8   |                       |               | 6                            |                 | <u>Dark brown, gray coarse to fine SAND, little Silt, little coarse to fine Gravel</u>    |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               | 9                            |                 | same  |        |                   |                        |  |
| 9   |                       | S-5           | 7                            |                 | same  |        |                   | 11'0"                  | Rec = 3" moist probable bedrock            |
|   |                       |               | 5                            |                 | Dk br, gr cf S, l \$, l cf G  |        |                   |                        |  |
| 10  |                       |               | 7                            |                 | <u>Gneiss, Completely Weathered</u>   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               | 4                            |                 | same  |        |                   |                        |  |
| 11  |                       | S-6           | 13                           |                 | CWR   |        |                   | 12'6"                  | Rec = 3" moist probable bedrock            |
|   |                       |               | 28                           |                 | CWR   |        |                   |                        |  |
| 12  |                       | S-7           | 33                           |                 | <u>End of Boring @ 12'6"</u>  |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               | 50/6"                        |                 | CWR   |        |                   |                        |  |
| 13  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |
| 14  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |
| 15  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |
| 16  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |
| 17  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |
| 18  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |
| 19  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |
| 20  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |
| 21  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |
| 22  |                       |               |                              |                 |   |        |                   |                        | Rec = 3" moist probable bedrock            |
|   |                       |               |                              |                 |   |        |                   |                        |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-113 |                       |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|------------------------|-----------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |                        |                       |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |                        |                       |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        | ELEVATION: +472.0 |                        |                       |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo            |                       |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   |                        | START DATE: 9/Nov/22  |  |
| No groundwater encountered                                      |                       |               |                              | DIA.            | 3 1/4"  | 1 3/8" |                   |                        | FINISH DATE: 9/Nov/22 |  |
|   |                       |               |                              | WGHT            |   | 140#   |                   |                        | DRILLER: M Kane       |  |
|   |                       |               |                              | FALL            |   | 30"    |                   |                        | INSPECTOR: JP         |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |        |                   |                        | REMARKS               |  |
|   |                       |               | 2                            |                 | <u>Topsoil</u>  |        |                   |                        | 0'4"                  |  |
| 1   |                       | S-1           | 3                            |                 | Br cf S, s (-) \$, 1 cf G   |        |                   |                        | Rec = 18" moist       |  |
|   |                       |               | 5                            |                 |   |        |                   |                        |                       |  |
| 2   |                       |               | 5                            |                 | <u>Brown coarse to fine SAND, some (-) Silt, little coarse to fine Gravel</u> |        |                   |                        |                       |  |
|   |                       |               | 5                            |                 |   |        |                   |                        |                       |  |
| 3   |                       | S-2           | 11                           |                 | same, 1 \$  |        |                   |                        | Rec = 15" moist       |  |
|   |                       |               | 16                           |                 |   |        |                   |                        | 3'6"                  |  |
| 4   |                       |               | 28                           |                 | Gr, or cf G s, cf S, 1 (-) \$   |        |                   |                        |                       |  |
|   |                       |               | 20                           |                 | <u>Gray, orange coarse to fine GRAVEL</u>                                     |        |                   |                        |                       |  |
| 5   |                       | S-3           | 40                           |                 | <u>some, coarse to fine Sand, little (-) Silt</u>                             |        |                   |                        | Rec = 16" moist       |  |
|   |                       |               | 30                           |                 |   |        |                   |                        | 5'6"                  |  |
| 6   |                       |               | 35                           |                 | Gneiss, Completely Weathered  |        |                   |                        |                       |  |
|   |                       |               | 17                           |                 |   |        |                   |                        |                       |  |
| 7   |                       | S-4           | 19                           |                 | same  |        |                   |                        | Rec = 12" moist       |  |
|   |                       |               | 58                           |                 |   |        |                   |                        |                       |  |
| 8   |                       |               | 52                           |                 | <u>Gneiss, Completely Weathered</u>   |        |                   |                        |                       |  |
|   |                       |               | 60                           |                 |   |        |                   |                        |                       |  |
| 9   |                       | S-5           | 39                           |                 | same,   |        |                   |                        | Rec = 11" moist       |  |
|   |                       |               | 35                           |                 |   |        |                   |                        |                       |  |
| 10  |                       |               | 50/4"                        |                 |   |        |                   |                        | 9'10"                 |  |
|   |                       |               |                              |                 | <u>End of Boring @ 9'10"</u>  |        |                   |                        |                       |  |
| 11  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 12  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 13  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 14  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 15  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 16  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 17  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 18  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 19  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 20  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 21  |                       |               |                              |                 |   |        |                   |                        |                       |  |
| 22  |                       |               |                              |                 |   |        |                   |                        |                       |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |  |        |                   | BORING NUMBER<br>B-114 |                                     |
|---|-----------------------|---------------|------------------------------|-----------------|--|--------|-------------------|------------------------|-------------------------------------|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |  |        | SHEET NO.: 1 of 1 |                        |                                     |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |  |        | JOB NUMBER: 22-85 |                        |                                     |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |  |        | ELEVATION: +622.0 |                        |                                     |
| GROUNDWATER   |                       |               |                              |                 | CASING   | SAMPLE | CORE              | TUBE                   | DATUM: Topo                         |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA  | SS     |                   |                        | START DATE: 10/Nov/22               |
| No groundwater encountered                                      |                       |               |                              |                 | DIA.   | 3 1/4" | 1 3/8"            |                        | FINISH DATE: 10/Nov/22              |
|   |                       |               |                              | WGHT            |  | 140#   |                   |                        | DRILLER: M Kane                     |
|   |                       |               |                              | FALL            |  | 30"    |                   |                        | INSPECTOR: JP                       |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION   |        |                   |                        | REMARKS                             |
| 1   |                       | S-1           | 1                            |                 | <u>Topsoil</u> 0'8"  |        |                   |                        | Rec = 9" moist                      |
|   |                       |               | 2                            |                 | Br cf S, s \$, t cf G, w/roots (tree)  |        |                   |                        |                                     |
| 2   |                       | S-2           | 1                            |                 | <u>Brown coarse to fine SAND, some Silt, trace coarse to fine Gravel, with roots, tree</u> |        |                   |                        | Rec = 5" moist                      |
|   |                       |               | 2                            |                 | same   |        |                   |                        |                                     |
| 3   |                       |               | 4                            |                 | <u>Gray, orange coarse to fine SAND, trace Silt, and coarse to fine Gravel</u>             |        |                   |                        | Auger refusal 3'6" probable bedrock |
| 4   |                       |               | 50/3"                        |                 | <u>End of Boring @ 3'6"</u>  |        |                   |                        |                                     |
| 5   |                       |               |                              |                 |  |        |                   |                        |                                     |
| 6   |                       |               |                              |                 |  |        |                   |                        |                                     |
| 7   |                       |               |                              |                 |  |        |                   |                        |                                     |
| 8   |                       |               |                              |                 |  |        |                   |                        |                                     |
| 9   |                       |               |                              |                 |  |        |                   |                        |                                     |
| 10  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 11  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 12  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 13  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 14  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 15  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 16  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 17  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 18  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 19  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 20  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 21  |                       |               |                              |                 |  |        |                   |                        |                                     |
| 22  |                       |               |                              |                 |  |        |                   |                        |                                     |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |  |        |      |                        | BORING NUMBER<br>B-115 |  |
|---|-----------------------|---------------|------------------------------|-----------------|--|--------|------|------------------------|------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |  |        |      | SHEET NO.: 1 of 1      |                        |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |  |        |      | JOB NUMBER: 22-85      |                        |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |  |        |      | ELEVATION: +627.0      |                        |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE                                       | CORE   | TUBE | DATUM: Topo            |                        |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA  | SS     |      | START DATE: 10/Nov/22  |                        |  |
| No groundwater encountered                                      |                       |               |                              | DIA.            | 3 1/4"                                       | 1 3/8" |      | FINISH DATE: 10/Nov/22 |                        |  |
|   |                       |               |                              | WGHT            |  | 140#   |      | DRILLER: M Kane        |                        |  |
|   |                       |               |                              | FALL            |  | 30"    |      | INSPECTOR: JP          |                        |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION                               |        |      | REMARKS                |                        |  |
|   |                       |               | 1                            |                 | <u>Topsoil</u>                               |        |      | 0'4"                   |                        |  |
| 1   |                       | S-1           | 3                            |                 | Br cf S, s \$, 1 (-) cf G                    |        |      | Rec = 10"<br>moist     |                        |  |
|   |                       |               | 2                            |                 |  |        |      |                        |                        |  |
| 2   |                       |               | 4                            |                 |  |        |      |                        |                        |  |
|   |                       |               | 7                            |                 |  |        |      |                        |                        |  |
| 3   |                       | S-2           | 10                           |                 | same, 1 (+) \$, 1 (+) cf G                   |        |      | Rec = 18"<br>moist     |                        |  |
|   |                       |               | 10                           |                 | <u>Brown coarse to fine SAND, some Silt,</u> |        |      |                        |                        |  |
| 4   |                       |               | 29                           |                 | <u>little (-) coarse to fine Gravel</u>      |        |      |                        |                        |  |
|   |                       |               |                              |                 |  |        |      |                        |                        |  |
| 5   |                       |               |                              |                 |  |        |      |                        |                        |  |
|   |                       |               | 7                            |                 |  |        |      |                        |                        |  |
| 6   |                       | S-3           | 12                           |                 | same   |        |      | Rec = 19"<br>moist     |                        |  |
|   |                       |               | 23                           |                 |  |        |      | 6'6"                   |                        |  |
| 7   |                       |               | 23                           |                 |  |        |      |                        |                        |  |
|   |                       |               |                              |                 |  |        |      |                        |                        |  |
| 8   |                       | S-4           | 50/3"                        |                 | <u>Gneiss, Completely Weathered</u>          |        |      | Rec = 2"<br>moist      |                        |  |
|   |                       |               |                              |                 | <u>End of Boring @ 7'3"</u>                  |        |      | Auger Refusal @ 7'3"   |                        |  |
| 9   |                       |               |                              |                 |  |        |      |                        |                        |  |
| 10  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 11  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 12  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 13  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 14  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 15  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 16  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 17  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 18  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 19  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 20  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 21  |                       |               |                              |                 |  |        |      |                        |                        |  |
| 22  |                       |               |                              |                 |  |        |      |                        |                        |  |



| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |  |        |                   | BORING NUMBER<br>B-117 |                        |
|---|-----------------------|---------------|------------------------------|-----------------|--|--------|-------------------|------------------------|------------------------|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |  |        | SHEET NO.: 1 of 1 |                        |                        |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |  |        | JOB NUMBER: 22-85 |                        |                        |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |  |        | ELEVATION: +624.0 |                        |                        |
| GROUNDWATER   |                       |               |                              |                 | CASING   | SAMPLE | CORE              | TUBE                   | DATUM: Topo            |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA  | SS     |                   |                        | START DATE: 10/Nov/22  |
| No groundwater encountered                                      |                       |               |                              |                 | DIA.   | 3 1/4" | 1 3/8"            |                        | FINISH DATE: 10/Nov/22 |
|   |                       |               |                              | WGHT            |  | 140#   |                   |                        | DRILLER: M Kane        |
|   |                       |               |                              | FALL            |  | 30"    |                   |                        | INSPECTOR: JP          |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION   |        |                   |                        | REMARKS                |
|   |                       |               | 2                            |                 | <u>Topsoil</u> 0'2"  |        |                   |                        |                        |
| 1   |                       | S-1           | 2                            |                 | Br cf S, l (+) \$, l (-) cf G  |        |                   |                        | Rec = 4" moist         |
|   |                       |               | 2                            |                 |  |        |                   |                        |                        |
| 2   |                       |               | 2                            |                 |  |        |                   |                        |                        |
|   |                       |               | 1                            |                 | <u>Brown coarse to fine SAND, little (+) Silt, little (-) coarse to fine Gravel</u>      |        |                   |                        |                        |
| 3   |                       | S-2           | 2                            | same            |  |        |                   |                        | Rec = 10" moist        |
|   |                       |               | 4                            |                 |  |        |                   |                        |                        |
| 4   |                       |               | 6                            |                 |  |        |                   |                        |                        |
|   |                       |               | 10                           |                 |  |        |                   |                        |                        |
| 5   |                       | S-3           | 11                           |                 | 5'0"   |        |                   |                        | Rec = 10" moist        |
|   |                       |               | 26                           |                 | Br, gr cf S, l \$, s (-) cf G  |        |                   |                        |                        |
| 6   |                       |               | 39                           |                 | <u>Brown, gray coarse to fine SAND, little Silt, some (-) coarse to fine Gravel</u> 6'6" |        |                   |                        |                        |
|   |                       |               | 25                           |                 |  |        |                   |                        |                        |
| 7   |                       | S-4           | 28                           |                 |  |        |                   |                        | Rec = 15" moist        |
|   |                       |               | 45                           |                 | <u>Gneiss, Completely Weathered</u>  |        |                   |                        |                        |
| 8   |                       |               | 50/3"                        |                 | 7'9"   |        |                   |                        |                        |
|   |                       |               |                              |                 | <u>End of Boring @ 7'9"</u>  |        |                   |                        |                        |
| 9   |                       |               |                              |                 |  |        |                   |                        |                        |
| 10  |                       |               |                              |                 |  |        |                   |                        |                        |
| 11  |                       |               |                              |                 |  |        |                   |                        |                        |
| 12  |                       |               |                              |                 |  |        |                   |                        |                        |
| 13  |                       |               |                              |                 |  |        |                   |                        |                        |
| 14  |                       |               |                              |                 |  |        |                   |                        |                        |
| 15  |                       |               |                              |                 |  |        |                   |                        |                        |
| 16  |                       |               |                              |                 |  |        |                   |                        |                        |
| 17  |                       |               |                              |                 |  |        |                   |                        |                        |
| 18  |                       |               |                              |                 |  |        |                   |                        |                        |
| 19  |                       |               |                              |                 |  |        |                   |                        |                        |
| 20  |                       |               |                              |                 |  |        |                   |                        |                        |
| 21  |                       |               |                              |                 |  |        |                   |                        |                        |
| 22  |                       |               |                              |                 |  |        |                   |                        |                        |



| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-118               |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|--------------------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |                                      |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |                                      |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        | ELEVATION: +629.0 |                                      |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo                          |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   | START DATE: 11/Nov/22                |  |
| No Water Encountered  |                       |               |                              | DIA.            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 11/Nov/22               |  |
|   |                       |               |                              | WGHT            |   | 140#   |                   | DRILLER: M Kane                      |  |
|   |                       |               |                              | FALL            |   | 30"    |                   | INSPECTOR: JP                        |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | Sym             | IDENTIFICATION  |        |                   | REMARKS                              |  |
|   |                       |               | 2                            |                 | <u>Topsoil</u>  |        |                   | 0'4"                                 |  |
| 1   |                       | S-1           | 2                            |                 | Br cf S, s \$, t cf G   |        |                   | Rec = 9"<br>moist                    |  |
|   |                       |               | 2                            |                 |   |        |                   |                                      |  |
| 2   |                       |               | 4                            |                 |   |        |                   |                                      |  |
|   |                       |               | 3                            |                 |   |        |                   |                                      |  |
| 3   |                       | S-2           | 11                           |                 | same, 1 (+) \$, s (-) cf G  |        |                   | Rec = 15"<br>moist                   |  |
|   |                       |               | 15                           |                 |   |        |                   |                                      |  |
| 4   |                       |               | 15                           |                 | <u>Brown coarse to fine SAND, some Silt, trace coarse to fine Gravel</u>                    |        |                   |                                      |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 5   |                       |               |                              |                 |   |        |                   |                                      |  |
|   |                       |               | 13                           |                 |   |        |                   |                                      |  |
| 6   |                       | S-3           | 8                            |                 | same, s \$  |        |                   | Rec = 5"<br>moist                    |  |
|   |                       |               | 8                            |                 |   |        |                   |                                      |  |
| 7   |                       |               | 9                            |                 |   |        |                   | 7'0"                                 |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 8   |                       | S-4           | 11                           |                 | <u>Orange, brown, white coarse to fine SAND, trace (-) Silt, some coarse to fine Gravel</u> |        |                   | 8'0" Rec = 16"<br>moist              |  |
|   |                       |               | 22                           |                 | Decomposed rock   |        |                   |                                      |  |
| 9   |                       |               | 35                           |                 |   |        |                   |                                      |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 10  |                       |               |                              |                 |   |        |                   |                                      |  |
|   |                       |               | 20                           |                 |   |        |                   |                                      |  |
| 11  |                       | S-5           | 36                           |                 | same, a cf G, decomposed rock   |        |                   | Rec = 13"<br>moist                   |  |
|   |                       |               | 42                           |                 |   |        |                   |                                      |  |
| 12  |                       |               | 50/3"                        |                 |   |        |                   |                                      |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 13  |                       |               |                              |                 | <u>Gneiss, Completely Weathered</u>   |        |                   |                                      |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 14  |                       |               |                              |                 |   |        |                   |                                      |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 15  |                       |               |                              |                 |   |        |                   |                                      |  |
|   |                       |               | 27                           |                 |   |        |                   |                                      |  |
| 16  |                       | S-6           | 60                           |                 | same, decomposed rock   |        |                   | Rec = 15"<br>moist                   |  |
|   |                       |               | 50/3"                        |                 |   |        |                   |                                      |  |
| 17  |                       |               |                              |                 |   |        |                   |                                      |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 18  |                       |               |                              |                 | <u>End of Boring @ 17'6"</u>  |        |                   | 17'6" Auger refusal 17'6"<br>bedrock |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 19  |                       |               |                              |                 |   |        |                   |                                      |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 20  |                       |               |                              |                 |   |        |                   |                                      |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 21  |                       |               |                              |                 |   |        |                   |                                      |  |
|   |                       |               |                              |                 |   |        |                   |                                      |  |
| 22  |                       |               |                              |                 |   |        |                   |                                      |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |  |        |                   | BORING NUMBER<br>B-119             |  |
|---|-----------------------|---------------|------------------------------|-----------------|--|--------|-------------------|------------------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |  |        | SHEET NO.: 1 of 1 |                                    |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |  |        | JOB NUMBER: 22-85 |                                    |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |  |        | ELEVATION: +625.0 |                                    |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE   | CORE   | TUBE              | DATUM: Topo                        |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA  | SS     |                   | START DATE: 11/Nov/22              |  |
| No Groundwater Encountered                                      |                       |               |                              | DIA.            | 3 1/4"   | 1 3/8" |                   | FINISH DATE: 11/Nov/22             |  |
|   |                       |               |                              | WGHT            |  | 140#   |                   | DRILLER: M Kane                    |  |
|   |                       |               |                              | FALL            |  | 30"    |                   | INSPECTOR: JP                      |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION                                   |        |                   | REMARKS                            |  |
| 1   |                       | S-1           | 1                            |                 | <u>Topsoil</u> 0'4"                              |        |                   | Rec = 8"<br>moist                  |  |
|   |                       |               | 1                            |                 | Br cf S, s \$, t cf G                            |        |                   |                                    |  |
| 2   |                       |               | 6                            |                 |  |        |                   |                                    |  |
| 3   |                       | S-2           | 3                            |                 |  |        |                   |                                    |  |
|   |                       |               | 4                            | same            | <u>Brown coarse to fine SAND, some Silt,</u>     |        |                   | Rec = 13"<br>moist<br>Lots of Mica |  |
| 4   |                       |               | 6                            |                 | <u>trace coarse to fine Gravel</u>               |        |                   |                                    |  |
|   |                       |               | 21                           |                 |  |        |                   |                                    |  |
| 5   |                       |               |                              |                 |  |        |                   |                                    |  |
| 6   |                       | S-3           | 12                           | same            | 6'0"   |        |                   | Rec = 8"<br>moist                  |  |
|   |                       |               | 50/3"                        |                 | <u>Gray coarse to fine GRAVEL little, coarse</u> |        |                   |                                    |  |
| 7   |                       |               |                              |                 | <u>to fine Sand, trace Silt</u> 6'3"             |        |                   |                                    |  |
|   |                       |               |                              |                 | <u>End of Boring @ 6'3"</u>                      |        |                   |                                    |  |
| 8   |                       |               |                              |                 |  |        |                   |                                    |  |
| 9   |                       |               |                              |                 |  |        |                   |                                    |  |
| 10  |                       |               |                              |                 |  |        |                   |                                    |  |
| 11  |                       |               |                              |                 |  |        |                   |                                    |  |
| 12  |                       |               |                              |                 |  |        |                   |                                    |  |
| 13  |                       |               |                              |                 |  |        |                   |                                    |  |
| 14  |                       |               |                              |                 |  |        |                   |                                    |  |
| 15  |                       |               |                              |                 |  |        |                   |                                    |  |
| 16  |                       |               |                              |                 |  |        |                   |                                    |  |
| 17  |                       |               |                              |                 |  |        |                   |                                    |  |
| 18  |                       |               |                              |                 |  |        |                   |                                    |  |
| 19  |                       |               |                              |                 |  |        |                   |                                    |  |
| 20  |                       |               |                              |                 |  |        |                   |                                    |  |
| 21  |                       |               |                              |                 |  |        |                   |                                    |  |
| 22  |                       |               |                              |                 |  |        |                   |                                    |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |      |                        | BORING NUMBER<br>B-120 |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|------|------------------------|------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        |      | SHEET NO.: 1 of 1      |                        |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        |      | JOB NUMBER: 22-85      |                        |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        |      | ELEVATION: +647.5      |                        |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE | DATUM: Topo            |                        |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |      | START DATE: 11/Nov/22  |                        |  |
| No Groundwater Encountered                                      |                       |               |                              | DIA.            | 3 1/4"  | 1 3/8" |      | FINISH DATE: 11/Nov/22 |                        |  |
|   |                       |               |                              | WGHT            |   | 140#   |      | DRILLER: M Kane        |                        |  |
|   |                       |               |                              | FALL            |   | 30"    |      | INSPECTOR: JP          |                        |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |        |      |                        | REMARKS                |  |
|   |                       |               | 1                            |                 | <u>Topsoil</u>  |        |      |                        | 0'6"                   |  |
| 1   |                       | S-1           | 2                            |                 | FILL (Br cf S, s \$, t cf G)  |        |      |                        | Rec = 8" moist         |  |
|   |                       |               | 2                            |                 |   |        |      |                        |                        |  |
| 2   |                       |               | 3                            |                 |   |        |      |                        |                        |  |
|   |                       |               | 2                            |                 |   |        |      |                        |                        |  |
| 3   |                       | S-2           | 3                            |                 | FILL (same)   |        |      |                        | Rec = 10" moist        |  |
|   |                       |               | 1                            |                 |   |        |      |                        |                        |  |
| 4   |                       |               | 2                            |                 | <u>FILL (Brown coarse to fine SAND, some Silt, trace coarse to fine Gravel)</u> |        |      |                        |                        |  |
|   |                       |               |                              |                 |   |        |      |                        |                        |  |
| 5   |                       |               |                              |                 |   |        |      |                        |                        |  |
|   |                       |               | 2                            |                 |   |        |      |                        |                        |  |
| 6   |                       | S-3           | 2                            |                 | FILL (same, l (+) \$)   |        |      |                        | Rec = 10" moist        |  |
|   |                       |               | 4                            |                 |   |        |      |                        |                        |  |
| 7   |                       |               | 3                            |                 |   |        |      |                        | 7'0"                   |  |
|   |                       |               | 2                            |                 | <u>Brown coarse to fine SAND, little Silt, little (+) coarse to fine Gravel</u> |        |      |                        | 8'0"                   |  |
| 8   |                       | S-4           | 2                            |                 | Or, wt, gr cf G l (+), cf S, t (+) \$   |        |      |                        | Rec = 6" moist         |  |
|   |                       |               | 32                           |                 |   |        |      |                        |                        |  |
| 9   |                       |               | 50/2"                        |                 |   |        |      |                        |                        |  |
|   |                       |               |                              |                 |   |        |      |                        |                        |  |
| 10  |                       | S-5           | 50/2"                        |                 | <u>Gneiss, Completely Weathered</u>   |        |      |                        | Rec = 1" moist         |  |
|   |                       |               |                              |                 | <u>End of Boring @ 9'2"</u>   |        |      |                        | Auger refusal 9'0"     |  |
| 11  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 12  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 13  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 14  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 15  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 16  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 17  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 18  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 19  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 20  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 21  |                       |               |                              |                 |   |        |      |                        |                        |  |
| 22  |                       |               |                              |                 |   |        |      |                        |                        |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                   |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-121               |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|--------------------------------------|--|
| Project: Proposed Development, 568 Bedford Ave, North Castle NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |                                      |  |
| Client: Summit Club Partners, LLC                               |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |                                      |  |
| Drilling Contractor: Environmental Technical Drilling           |                       |               |                              |                 |   |        | ELEVATION: +674.0 |                                      |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo                          |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   | START DATE: 11/Nov/22                |  |
| No groundwater encountered                                      |                       |               |                              | DIA.            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 11/Nov/22               |  |
|   |                       |               |                              | WGHT            |   | 140#   |                   | DRILLER: M Kane                      |  |
|   |                       |               |                              | FALL            |   | 30"    |                   | INSPECTOR: JP                        |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |        |                   | REMARKS                              |  |
| 1   |                       | S-1           | 3                            |                 | FILL (Br cf S, s (-) \$, l (+) cf G)<br><b><u>FILL (Brown coarse to fine SAND, some (-) Silt, little (+) coarse to fine Gravel)</u></b> |        |                   | Rec = 14"<br>moist                   |  |
|   |                       |               | 7                            |                 |   |        |                   |                                      |  |
|   |                       |               | 10                           |                 |   |        |                   |                                      |  |
| 2   |                       |               | 14                           |                 |   |        |                   |                                      |  |
|   |                       |               | 13                           |                 |   |        |                   | 2'6"                                 |  |
| 3   |                       | S-2           | 10                           |                 | Gr cf G s, cf S, t (+) \$   |        |                   | Rec = 5"<br>moist                    |  |
|   |                       |               | 7                            |                 | <b><u>Gray coarse to fine GRAVEL some, coarse to fine Sand, trace (+) Silt</u></b>  |        |                   |                                      |  |
| 4   |                       |               | 10                           |                 |   |        |                   |                                      |  |
|   |                       | S-3           | 50/6"                        | same            |   |        |                   | Rec = 2"<br>moist                    |  |
| 5   |                       |               |                              |                 | <b><u>End of Boring @ 4'6"</u></b>  |        |                   | Auger refusal 4'6"<br>Likely bedrock |  |
| 6   |                       |               |                              |                 |   |        |                   |                                      |  |
| 7   |                       |               |                              |                 |   |        |                   |                                      |  |
| 8   |                       |               |                              |                 |   |        |                   |                                      |  |
| 9   |                       |               |                              |                 |   |        |                   |                                      |  |
| 10  |                       |               |                              |                 |   |        |                   |                                      |  |
| 11  |                       |               |                              |                 |   |        |                   |                                      |  |
| 12  |                       |               |                              |                 |   |        |                   |                                      |  |
| 13  |                       |               |                              |                 |   |        |                   |                                      |  |
| 14  |                       |               |                              |                 |   |        |                   |                                      |  |
| 15  |                       |               |                              |                 |   |        |                   |                                      |  |
| 16  |                       |               |                              |                 |   |        |                   |                                      |  |
| 17  |                       |               |                              |                 |   |        |                   |                                      |  |
| 18  |                       |               |                              |                 |   |        |                   |                                      |  |
| 19  |                       |               |                              |                 |   |        |                   |                                      |  |
| 20  |                       |               |                              |                 |   |        |                   |                                      |  |
| 21  |                       |               |                              |                 |   |        |                   |                                      |  |
| 22  |                       |               |                              |                 |   |        |                   |                                      |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                       |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-201 |                             |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|------------------------|-----------------------------|
| Project: Proposed Development, 568&570 Bedford Rd, North Castle, NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |                        |                             |
| Client: Summit Club Partners, LLC                                   |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |                        |                             |
| Drilling Contractor: Environmental Technical Drilling               |                       |               |                              |                 |   |        | ELEVATION: +563.0 |                        |                             |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo            |                             |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   |                        | START DATE: 21/Mar/23       |
|   |                       |               |                              | DIA.            | 3 1/4"  | 1 3/8" |                   |                        | FINISH DATE: 21/Mar/23      |
|   |                       |               |                              | WGHT            |   | 140#   |                   |                        | DRILLER: M Kane             |
|   |                       |               |                              | FALL            |   | 30"    |                   |                        | INSPECTOR: JP               |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |        |                   |                        | REMARKS                     |
|   |                       |               | 29                           |                 | <b>Asphalt</b>  |        |                   |                        | 0'6"                        |
| 1   |                       | S-1           | 13                           |                 | FILL (Br cf S, l \$, s (-) cf G)  |        |                   |                        | Rec = 4" moist              |
|   |                       |               | 14                           |                 |   |        |                   |                        |                             |
| 2   |                       |               | 15                           |                 |   |        |                   |                        |                             |
|   |                       |               | 21                           |                 |   |        |                   |                        |                             |
| 3   |                       | S-2           | 20                           |                 | FILL (same, gr)   |        |                   |                        | Rec = 10" moist             |
|   |                       |               | 11                           |                 |   |        |                   |                        |                             |
| 4   |                       |               | 10                           |                 |   |        |                   |                        |                             |
| 5   |                       |               |                              |                 | <b><u>FILL (Brown coarse to fine SAND, little Silt, some (-) coarse to fine Gravel with wood)</u></b> |        |                   |                        |                             |
|   |                       |               | 4                            |                 |   |        |                   |                        |                             |
| 6   |                       | S-3           | 6                            |                 | FILL (same, br, l cf G)   |        |                   |                        | Rec = 6" moist              |
|   |                       |               | 26                           |                 |   |        |                   |                        |                             |
| 7   |                       |               | 8                            |                 |   |        |                   |                        |                             |
|   |                       |               | 7                            |                 |   |        |                   |                        |                             |
| 8   |                       | S-4           | 5                            |                 | FILL (same, dk br, w/wood)  |        |                   |                        | Rec = 11" moist             |
|   |                       |               | 7                            |                 |   |        |                   |                        |                             |
| 9   |                       |               | 7                            |                 |   |        |                   |                        |                             |
| 10  |                       |               |                              |                 |   |        |                   |                        | 10'0"                       |
|   |                       |               | 8                            |                 |   |        |                   |                        |                             |
| 11  |                       | S-5           | 11                           |                 | Br cf S, l (-) \$, a cf G   |        |                   |                        | Rec = 8" moist              |
|   |                       |               | 13                           |                 | <b><u>Brown coarse to fine SAND, little (-) Silt, and coarse to fine Gravel</u></b>                   |        |                   |                        |                             |
| 12  |                       |               | 50/2"                        |                 |   |        |                   |                        | 12'0" Auger refusal @ 12'0" |
|   |                       |               |                              |                 | <b><u>End of Boring @ 12'0"</u></b>   |        |                   |                        |                             |
| 13  |                       |               |                              |                 |   |        |                   |                        |                             |
| 14  |                       |               |                              |                 |   |        |                   |                        |                             |
| 15  |                       |               |                              |                 |   |        |                   |                        |                             |
| 16  |                       |               |                              |                 |   |        |                   |                        |                             |
| 17  |                       |               |                              |                 |   |        |                   |                        |                             |
| 18  |                       |               |                              |                 |   |        |                   |                        |                             |
| 19  |                       |               |                              |                 |   |        |                   |                        |                             |
| 20  |                       |               |                              |                 |   |        |                   |                        |                             |
| 21  |                       |               |                              |                 |   |        |                   |                        |                             |
| 22  |                       |               |                              |                 |   |        |                   |                        |                             |

| CARLIN - SIMPSON & ASSOCIATES<br>Sayreville, N.J.                   |                       |               |                              | TEST BORING LOG  |  |       |  | BORING NUMBER<br>B-202  |  |
|---|-----------------------|---------------|------------------------------|--|--|-------|--|-------------------------|--|
| Project: Proposed Development, 568&570 Bedford Rd, North Castle, NY |                       |               |                              | SHEET NO.: 1 of 1  |  |       |  | JOB NUMBER: 22-85       |  |
| Client: Summit Club Partners, LLC                                   |                       |               |                              | ELEVATION: +565.0  |  |       |  | DATUM: Topo             |  |
| Drilling Contractor: Environmental Technical Drilling               |                       |               |                              | GROUNDWATER  |  |       |  | DATE: 3/21/2023         |  |
| CASING  |                       |               |                              | SAMPLE   |  | CORE  |  | TUBE                    |  |
| DATE  |                       |               |                              | TIME   |  | DEPTH |  | CASING                  |  |
| 3/21/2023   |                       |               |                              |  |  | 9'0"  |  | HSA                     |  |
|   |                       |               |                              |  |  |       |  | TYPE                    |  |
|   |                       |               |                              |  |  |       |  | HSA                     |  |
|   |                       |               |                              |  |  |       |  | SS                      |  |
|   |                       |               |                              |  |  |       |  | 140#                    |  |
|   |                       |               |                              |  |  |       |  | 30"                     |  |
|   |                       |               |                              |  |  |       |  | WGHT                    |  |
|   |                       |               |                              |  |  |       |  | FALL                    |  |
|   |                       |               |                              |  |  |       |  | START DATE: 21 Mar 23   |  |
|   |                       |               |                              |  |  |       |  | FINISH DATE: 21 Mar 23  |  |
|   |                       |               |                              |  |  |       |  | DRILLER: M Kane         |  |
|   |                       |               |                              |  |  |       |  | INSPECTOR: JP           |  |
| Depth (ft.)   | Casing Blows pre Foot | Sample Number | Blows on Sample Spoon per 6" | IDENTIFICATION   |  |       |  | REMARKS                 |  |
| 1   |                       | S-1           | 41                           | Asphalt  |  |       |  | 0'2"                    |  |
|   |                       |               | 16                           | FILL (Br cf S, 1 \$, s (-) cf G)   |  |       |  | Rec = 8" moist          |  |
|   |                       |               | 21                           |  |  |       |  |                         |  |
| 2   |                       |               | 26                           | <u>FILL (Brown coarse to fine SAND, little Silt, some (-) coarse to fine Gravel)</u> |  |       |  |                         |  |
|   |                       | S-2           | 17                           | FILL (same, gr l (+) \$, 1 cf G)   |  |       |  | Rec = 24" moist         |  |
| 3   |                       |               | 12                           |  |  |       |  |                         |  |
|   |                       |               | 9                            |  |  |       |  |                         |  |
| 4   |                       |               | 9                            |  |  |       |  | 4'0"                    |  |
| 5   |                       |               |                              |  |  |       |  |                         |  |
|   |                       | S-3           | 43                           | Gr cf S, 1 (-) \$, a cf G  |  |       |  | Rec = 6" moist          |  |
| 6   |                       |               | 29                           |  |  |       |  |                         |  |
|   |                       |               | X                            |  |  |       |  |                         |  |
| 7   |                       |               | X                            |  |  |       |  |                         |  |
| 8   |                       |               |                              |  |  |       |  |                         |  |
| 9   |                       |               |                              | <u>Gray coarse to fine SAND, little (-) Silt, and coarse to fine Gravel</u>          |  |       |  |                         |  |
|   |                       | S-4           | 11                           | same, br, gr   |  |       |  | Rec = 18" wet           |  |
| 10  |                       |               | 39                           |  |  |       |  |                         |  |
|   |                       |               | 37                           |  |  |       |  |                         |  |
| 11  |                       |               | 10                           |  |  |       |  |                         |  |
| 12  |                       |               |                              |  |  |       |  |                         |  |
| 13  |                       |               |                              |  |  |       |  |                         |  |
|   |                       | S-5           | 11                           | same, br, wt   |  |       |  | Rec = 15" wet           |  |
| 14  |                       |               | 9                            |  |  |       |  |                         |  |
|   |                       |               | 49                           |  |  |       |  |                         |  |
| 15  |                       |               | 40                           |  |  |       |  |                         |  |
| 16  |                       |               |                              |  |  |       |  |                         |  |
|   |                       |               |                              |  |  |       |  | 16'6"                   |  |
| 17  |                       |               |                              | <u>End of Boring @ 16'6"</u>   |  |       |  | Rollerbit refusal 16'6" |  |
| 18  |                       |               |                              |  |  |       |  |                         |  |
| 19  |                       |               |                              |  |  |       |  |                         |  |
| 20  |                       |               |                              |  |  |       |  |                         |  |
| 21  |                       |               |                              |  |  |       |  |                         |  |
| 22  |                       |               |                              |  |  |       |  |                         |  |

| CARLIN-SIMPSON & ASSOCIATES<br>Sayreville, NJ                       |                       |               |                              | TEST BORING LOG |   |        |                   | BORING NUMBER<br>B-203     |  |
|---|-----------------------|---------------|------------------------------|-----------------|---|--------|-------------------|----------------------------|--|
| Project: Proposed Development, 568&570 Bedford Rd, North Castle, NY |                       |               |                              |                 |   |        | SHEET NO.: 1 of 1 |                            |  |
| Client: Summit Club Partners, LLC                                   |                       |               |                              |                 |   |        | JOB NUMBER: 22-85 |                            |  |
| Drilling Contractor: Environmental Technical Drilling               |                       |               |                              |                 |   |        | ELEVATION: +552.0 |                            |  |
| GROUNDWATER   |                       |               |                              | CASING          | SAMPLE  | CORE   | TUBE              | DATUM: Topo                |  |
| DATE  | TIME                  | DEPTH         | CASING                       | TYPE            | HSA   | SS     |                   | START DATE: 21/Mar/23      |  |
| 21/Mar/23   |                       | 9'0"          | HSA                          | DIA.            | 3 1/4"  | 1 3/8" |                   | FINISH DATE: 21/Mar/23     |  |
|   |                       |               |                              | WGHT            |   | 140#   |                   | DRILLER: M Kane            |  |
|   |                       |               |                              | FALL            |   | 30"    |                   | INSPECTOR: JP              |  |
| Depth (ft.)   | Casing Blows per Foot | Sample Number | Blows on Sample Spoon per 6" | S y m           | IDENTIFICATION  |        |                   | REMARKS                    |  |
| 1   |                       | S-1           | .WOH                         | 2               | FILL (Br cf S, s \$, l cf G, w/brick)   |        |                   | Rec = 16"<br>moist         |  |
| 2   |                       |               | 3                            |                 |   |        |                   |                            |  |
| 3   |                       | S-2           | 11                           | 11              | FILL (same, gr, br l \$, s cf G)  |        |                   | Rec<br>moist               |  |
| 4   |                       |               | 13                           |                 |   |        |                   |                            |  |
| 5   |                       |               | 8                            |                 | <b><u>FILL (Brown coarse to fine SAND, some Silt, little coarse to fine Gravel, with brick)</u></b> |        |                   |                            |  |
| 6   |                       | S-3           | 7                            | 4               |   |        |                   | FILL (same)                |  |
| 7   |                       |               | 16                           |                 |   |        |                   |                            |  |
| 8   |                       | S-4           | 4                            | 3               | FILL (same, dk br s \$, l cf G, w/wood)   |        |                   | Rec = 10"<br>wet at bottom |  |
| 9   |                       |               | 5                            |                 |   |        |                   |                            |  |
| 10  |                       |               | 35                           |                 |   |        |                   |                            |  |
| 11  |                       | S-5           | 50/2"                        |                 | <b><u>Gneiss, Completely Weathered</u></b>  |        |                   | Rec = 1"<br>wet            |  |
| 12  |                       |               |                              |                 | <b><u>End of Boring @ 10'2"</u></b>   |        |                   | auger refusal 10'0"        |  |
| 13  |                       |               |                              |                 |   |        |                   |                            |  |
| 14  |                       |               |                              |                 |   |        |                   |                            |  |
| 15  |                       |               |                              |                 |   |        |                   |                            |  |
| 16  |                       |               |                              |                 |   |        |                   |                            |  |
| 17  |                       |               |                              |                 |   |        |                   |                            |  |
| 18  |                       |               |                              |                 |   |        |                   |                            |  |
| 19  |                       |               |                              |                 |   |        |                   |                            |  |
| 20  |                       |               |                              |                 |   |        |                   |                            |  |
| 21  |                       |               |                              |                 |   |        |                   |                            |  |
| 22  |                       |               |                              |                 |   |        |                   |                            |  |

# CARLIN-SIMPSON & ASSOCIATES, LLC

Consulting Engineers  
Geotechnical & Environmental

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Proposed Development  
568 & 570 Bedford Rd.  
North Castle, NY  
22-85

13 December 2022

## TEST PIT LOGS

### DH-A (Elev. +500.0)

|           |   |                 |
|-----------|---|-----------------|
| 0'0"-0'8" | Dark brown topsoil  |                 |
| 0'8"-2'3" | FILL (Dark brown coarse to fine SAND, little (+) Silt, little (-) medium to fine Gravel, with mixed topsoil)    | loose, moist    |
| 2'3"-6'6" | Dark brown, gray coarse to fine SAND, some (-) Silt, little (-) coarse to fine Gravel                           | dense, moist    |
| 6'6"-8'6" | Gray brown completely to highly weathered rock, coarse to fine SAND, trace (+) Silt, some coarse to fine Gravel | rippable, moist |
| 8'6"      | Dark Gray Gneiss Bedrock  | unrippable      |
|           | Groundwater encountered at 3'0"   |                 |



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**DH-B (Elev. +500.0)**

|           |  |                 |
|-----------|--|-----------------|
| 0'0"-0'8" | Dark brown topsoil   |                 |
| 0'8"-2'6" | FILL (Dark brown coarse to fine SAND, little (+) Silt, little (-) medium to fine Gravel                            | loose, moist    |
| 2'6"-4'9" | Brown, gray coarse to fine SAND, little (+) Silt, little (+) coarse to fine Gravel, with many cobbles and boulders | dense, moist    |
| 4'9"-5'6" | Gray, brown completely to highly weathered rock, coarse to fine SAND, trace (+) Silt, and coarse to fine Gravel    | rippable, moist |
| 5'6"      | Dark Gray Gneiss Bedrock   | unrippable      |
|           | Groundwater encountered @ 4'0"   |                 |

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**DH-C (Elev. +563.0)**

|           |  |                     |
|-----------|--|---------------------|
| 0'0"-0'8" | Dark brown topsoil   |                     |
| 0'8"-1'3" | FILL (Dark gray coarse to fine SAND, little (+) Silt, little (-) medium to fine Gravel)                          | medium dense, moist |
| 1'3"-4'6" | Brown, gray coarse to fine SAND, some (+) Silt, little medium to fine Gravel, with occasional cobbles            | medium dense, moist |
| 4'6"-5'6" | Brown SILT and (-), coarse to fine Sand, little (-) Medium to fine Gravel  | medium stiff, moist |
| 5'6"-6'6" | Gray, brown highly to completely weathered rock, coarse to fine Sand, trace (+) Silt, some coarse to fine Gravel | rippable, moist     |
| 6'6"      | Dark Gray Gneiss Bedrock   | unrippable          |
|           | No groundwater encountered   |                     |

13 December 2022

**DH-D (Elev. +563.0)**

|            |   |                                   |
|------------|---|-----------------------------------|
| 0'0"-0'10" | Dark brown topsoil  |                                   |
| 0'10"-3'3" | Brown coarse to fine SAND, little (+) Silt,<br>little (+) coarse to fine Gravel, with occasional cobble             | medium dense, moist               |
| 3'3"-4'9"  | Brown SILT and (-), coarse to fine Sand, little (-) coarse<br>to fine Gravel  | medium stiff, moist               |
| 4'9"-7'0"  | Brown coarse to fine SAND, little (-) Silt,<br>some (-) coarse to fine Gravel, with cobbles                         | dense, moist<br>Very dense @ 6'0' |
| 7'0"-7'6"  | Gray, brown highly to completely weathered rock, coarse<br>to fine Sand, trace (+) Silt, some coarse to fine Gravel | rippable, moist                   |
| 7'6"       | Dark Gray Gneiss Bedrock  | unrippable                        |
|            | No groundwater encountered  |                                   |

**TP-E (Elev. +618.0)**

|           |   |                     |
|-----------|---|---------------------|
| 0'0"-0'8" | Dark brown topsoil  |                     |
| 0'8"-1'6" | FILL (Dark brown coarse to fine SAND, little Silt,<br>little (+) medium to fine Gravel) | medium dense, moist |
| 1'6"      | Dark Gray Gneiss Bedrock  | unrippable          |
|           | No groundwater encountered  |                     |

13 December 2022

**TP-F (Elev. +621.0)**

|           |   |                     |
|-----------|---|---------------------|
| 0'0"-0'8" | Dark brown topsoil  |                     |
| 0'8"-2'3" | FILL (Dark gray, brown coarse to fine SAND, little (+) Silt, with many cobbles) | medium dense, moist |
| 2'3"      | Dark Gray Gneiss Bedrock  | unrippable          |
|           | No groundwater encountered  |                     |

**TP-G (Elev. +618.0)**

|           |  |              |
|-----------|--|--------------|
| 0'0"-0'6" | Dark brown topsoil   |              |
| 0'6"-1'3" | FILL (Dark brown coarse to fine SAND, little Silt, little coarse to fine Gravel, with many boulders) | dense, moist |
| 1'3"      | Dark Gray Gneiss Bedrock   | unrippable   |
|           | No groundwater encountered   |              |

**TP-H (Elev. +619.0)**

|           |  |                     |
|-----------|--|---------------------|
| 0'0"-0'8" | Dark brown topsoil   |                     |
| 0'8"-3'0" | Brown coarse to fine SAND, little (+) Silt, little (+) coarse to fine Gravel, with many cobbles and boulders | medium dense, moist |
| 3'0"-3'6" | Dark gray highly weathered rock, coarse to fine SAND, trace Silt, some coarse to fine Gravel                 | rippable, moist     |
| 3'6"      | Dark Gray Gneiss Bedrock   | unrippable          |
|           | No groundwater encountered   |                     |

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**DH-I (Elev. +493.2)**

|           |  |                            |
|-----------|--|----------------------------|
| 0'0"-1'3" | Dark brown topsoil   |                            |
| 1'3"-2'6" | Brown coarse to fine SAND, some (+) Silt,<br>trace fine Gravel   | medium dense, moist to wet |
| 2'6"-4'3" | Mottled light gray, orange brown, red brown coarse<br>to fine SAND, little (+) Silt, little (-) coarse to<br>fine Gravel | medium dense, moist to wet |
| 4'3"-8'0" | Dark gray, brown coarse to fine SAND, little (+) Silt,<br>little (+) coarse to fine Gravel, with occasional cobbles      | medium dense, moist to wet |
| 8'0"-9'0" | Dark gray coarse to fine SAND, little Silt, little (+)<br>medium to fine Gravel, weathered rock                          | medium dense, moist to wet |
|           | Groundwater encountered @ 7'6" (moderate inflow)<br>Evidence of Seasonal High Groundwater (i.e. mottling) @ 2'6"         |                            |

**DH-J (Elev. +492.5)**

|           |  |                            |
|-----------|--|----------------------------|
| 0'0"-1'3" | Dark brown topsoil   |                            |
| 1'3"-3'0" | Mottled light gray, orange brown, red brown coarse to fine<br>SAND, little (+) Silt, little (-) medium to fine Gravel              | medium dense, moist        |
| 3'0"-6'9" | Dark gray, brown coarse to fine SAND, little Silt,<br>little (+) medium to fine Gravel   | medium dense, moist to wet |
| 6'9"-9'3" | Dark gray, orange brown decomposed rock coarse to<br>fine SAND, some (+) Silt, trace (-) fine Gravel<br>(soft for decomposed rock) | medium dense, moist to wet |
|           | Groundwater encountered @ 7'6" (moderate inflow)<br>Evidence of Seasonal High Groundwater (i.e. mottling) @ 1'3"                   |                            |

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**DH-K (Elev. +624.0)**

|           |   |                     |
|-----------|---|---------------------|
| 0'0"-0'6" | Dark brown topsoil  |                     |
| 0'6"-2'9" | FILL (Dark brown coarse to fine SAND, some (-) Silt, little coarse to fine Gravel, with couple cobbles) | loose, moist        |
| 2'9"-3'0" | Brown SILT some (+), coarse to fine Sand, trace fine Gravel   | medium stiff, moist |
| 3'0"      | Gneiss bedrock  | unrippable          |
|           | No groundwater encountered  |                     |

**DH-L (Elev. +623.0)**

|           |   |                     |
|-----------|---|---------------------|
| 0'0"-1'0" | Dark brown topsoil  |                     |
| 1'0"-2'3" | FILL (Dark brown coarse to fine SAND, some (-) Silt, little (+) coarse to fine Gravel, with couple cobbles)           | loose, moist        |
| 2'3"-3'6" | Brown coarse to fine SAND, and (+) Silt, trace (+) medium to fine Gravel  | medium dense, moist |
| 3'6"-4'9" | Brown coarse to fine SAND, little (+) Silt, little medium to fine Gravel, with weathered rock fragments               | medium dense, moist |
| 4'9"-8'3" | Dark gray coarse to fine SAND, little (-) Silt, little (+) coarse to fine Gravel, completely to highly weathered rock | rippable            |
|           | No Groundwater Encountered  |                     |

15 February 2023

**DH-M (Elev. +624.5)**

|           |   |                     |
|-----------|---|---------------------|
| 0'0"-0'4" | Brown topsoil   |                     |
| 0'4"-2'3" | FILL (Dark gray, dark brown coarse to fine SAND, some Silt, little (+) coarse to fine Gravel, with cobbles) | medium dense, moist |
| 2'3"-5'9" | Brown, gray coarse to fine SAND, some (+) Silt, little coarse to fine Gravel                                | medium dense, moist |
| 5'9"      | Dark gray, brown Gneiss   | unrippable          |
|           | No groundwater encountered  |                     |

**DH-N (Elev. + 623.1)**

|           |   |              |
|-----------|---|--------------|
| 0'0"-1'0" | Dark brown topsoil  |              |
| 1'0"-2'9" | FILL (Brown, dark brown coarse to fine SAND, little (+) Silt, little (+) coarse to fine Gravel, with many large boulders) | loose, moist |
| 2'9"      | Gray, brown Gneiss  | unrippable   |
|           | No groundwater encountered  |              |

**DH-O (Elev. +618.8)**

|            |                            |            |
|------------|----------------------------|------------|
| 0'0"-0'10" | Dark brown topsoil         |            |
| 0'10"      | Dark gray Gneiss bedrock   | unrippable |
|            | No groundwater encountered |            |

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**DH-P (Elev. +620.5)**

|           |   |                     |
|-----------|---|---------------------|
| 0'0"-1'3" | Dark brown topsoil  |                     |
| 1'3"-2'0" | FILL (Dark gray, brown coarse to fine SAND, little (+) Silt, little (-) coarse to fine Gravel)                | medium dense, moist |
| 2'0"-3'3" | Dark brown coarse to fine SAND, little Silt, little coarse to fine Gravel, with many weathered rock fragments | medium dense, moist |
| 3'3"-5'0" | Dark gray highly to completely weathered rock   | unrippable          |
|           | No groundwater encountered  |                     |

**INF-C (Elev. +560.5)**

|            |  |                     |
|------------|--|---------------------|
| 0'0"-0'6"  | Dark brown topsoil   |                     |
| 0'6"- 1'3" | FILL (Dark gray, brown coarse to fine SAND, little (+) Silt, little (-) coarse to fine Gravel) | medium dense, moist |
| 1'3"- 4'0" | Brown coarse to fine Sand, and (-) Silt, little medium to fine Gravel                          | medium dense, moist |
| 4'0"       | Dark gray, brown unrippable bedrock  |                     |
|            | No groundwater encountered   |                     |



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| <b>Project:</b> Proposed Renovations, Byrwood Club Development, North Castle, NY | <b>SHEET NO.:</b> 1 of 1  |
| <b>Client:</b> JBM Realty  | <b>JOB NUMBER:</b> 12-175 |
| <b>Drilling Contractor:</b> General Borings, Inc.                                | <b>ELEVATION:</b> +661.0  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE   | DATUM:       |
|----------------------|------|-------|--------|--------|--------|--------|--------|--------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |        | START DATE:  |
| No water encountered |      |       |        |        | DIA.   | 3 1/4" | 1 3/8" | 18 Dec 12    |
|                      |      |       |        | WGHT   |        | 140#   |        | FINISH DATE: |
|                      |      |       |        | FALL   |        | 30"    |        | DRILLER:     |
|                      |      |       |        |        |        |        |        | INSPECTOR:   |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym  | IDENTIFICATION  | REMARKS                        |
|-------------|-----------------------|------------|------------------------------|------|---|--------------------------------|
|             |                       |            | 7                            |      | <u>Clay Tennis Court</u>  |                                |
| 1           |                       | S-1        | 9                            |      | Br \$ a (+), cf S, l (-) mf G   | Rec = 17"                      |
|             |                       |            | 12                           |      |   | moist                          |
| 2           |                       |            | 14                           |      |   |                                |
|             |                       |            | 19                           | same |   |                                |
| 3           |                       | S-2        | 23                           |      | <b><u>Brown SILT and (+), coarse to fine Sand, little (-) medium to fine Gravel</u></b> | Rec = 15"                      |
|             |                       |            | 50/3"                        |      |   | moist                          |
| 4           |                       |            |                              |      |   | possible weathered rock in tip |
|             |                       |            |                              |      |   | 5'0"                           |
| 5           |                       |            |                              |      |   |                                |
|             |                       |            | 29                           |      | Br cf S, l (+) \$ (completely weathered gneiss)   |                                |
| 6           |                       | S-3        | 75/4"                        |      | <b><u>Brown coarse to fine SAND, little (+) Silt (completely weathered Gneiss)</u></b>  | Rec = 6"                       |
|             |                       |            |                              |      |   | moist                          |
| 7           |                       |            |                              |      |   |                                |
|             |                       | S-4        | 70/3"                        |      |   | Rec = 3"                       |
| 8           |                       |            |                              |      |   | moist                          |
|             |                       |            |                              |      | <b><u>End of Boring @ 8'0"</u></b>  | Auger refusal @ 8'0"           |
| 9           |                       |            |                              |      |   |                                |
| 10          |                       |            |                              |      |   |                                |
| 11          |                       |            |                              |      |   |                                |
| 12          |                       |            |                              |      |   |                                |
| 13          |                       |            |                              |      |   |                                |
| 14          |                       |            |                              |      |   |                                |
| 15          |                       |            |                              |      |   |                                |
| 16          |                       |            |                              |      |   |                                |
| 17          |                       |            |                              |      |   |                                |
| 18          |                       |            |                              |      |   |                                |
| 19          |                       |            |                              |      |   |                                |
| 20          |                       |            |                              |      |   |                                |
| 21          |                       |            |                              |      |   |                                |
| 22          |                       |            |                              |      |   |                                |

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| <b>Project:</b> Proposed Renovations, Byrwood Club Development, North Castle, NY | <b>SHEET NO.:</b> 1 of 1  |
| <b>Client:</b> JBM Realty  | <b>JOB NUMBER:</b> 12-175 |
| <b>Drilling Contractor:</b> General Borings, Inc.                                | <b>ELEVATION:</b> +628.0  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE   | DATUM:       |
|----------------------|------|-------|--------|--------|--------|--------|--------|--------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |        | START DATE:  |
| No water encountered |      |       |        |        | DIA.   | 3 1/4" | 1 3/8" | 18 Dec 12    |
|                      |      |       |        | WGHT   |        | 140#   |        | FINISH DATE: |
|                      |      |       |        | FALL   |        | 30"    |        | DRILLER:     |
|                      |      |       |        |        |        |        |        | INSPECTOR:   |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym  | IDENTIFICATION  | REMARKS               |
|-------------|-----------------------|------------|------------------------------|------|---|-----------------------|
|             |                       |            | 2                            |      | <u>Topsoil</u>  |                       |
| 1           |                       | S-1        | 3                            |      | Br \$ a (+), cf S, t mf G   | Rec = 15" moist       |
|             |                       |            | 2                            |      |   |                       |
| 2           |                       |            | 2                            |      | <u>Brown SILT and (+), coarse to fine Sand, trace medium to fine Gravel</u> | Rec = 16" moist       |
| 3           |                       | S-2        | 3                            | same |   |                       |
|             |                       |            | 9                            |      |   |                       |
| 4           |                       |            | 11                           |      |   |                       |
|             |                       |            | 15                           |      |   |                       |
| 5           |                       |            |                              |      |   |                       |
| 6           |                       | S-3        | 10                           | same |   | Rec = 17" moist       |
|             |                       |            | 12                           |      |   |                       |
|             |                       |            | 16                           |      |   |                       |
| 7           |                       |            | 50/3"                        |      | 7'0"  | weathered rock in tip |
| 8           |                       |            |                              |      | <u>End of Boring @ 7'0"</u>   | Auger refusal @ 7'0"  |
| 9           |                       |            |                              |      |   |                       |
| 10          |                       |            |                              |      |   |                       |
| 11          |                       |            |                              |      |   |                       |
| 12          |                       |            |                              |      |   |                       |
| 13          |                       |            |                              |      |   |                       |
| 14          |                       |            |                              |      |   |                       |
| 15          |                       |            |                              |      |   |                       |
| 16          |                       |            |                              |      |   |                       |
| 17          |                       |            |                              |      |   |                       |
| 18          |                       |            |                              |      |   |                       |
| 19          |                       |            |                              |      |   |                       |
| 20          |                       |            |                              |      |   |                       |
| 21          |                       |            |                              |      |   |                       |
| 22          |                       |            |                              |      |   |                       |

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| <b>Project:</b> Proposed Renovations, Byrwood Club Development, North Castle, NY | <b>SHEET NO.:</b> 1 of 1  |
| <b>Client:</b> JBM Realty  | <b>JOB NUMBER:</b> 12-175 |
| <b>Drilling Contractor:</b> General Borings, Inc.                                | <b>ELEVATION:</b> +620.0  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE | DATUM:               |
|----------------------|------|-------|--------|--------|--------|--------|------|----------------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |      | START DATE:          |
| No water encountered |      |       |        |        |        |        |      | 18 Dec 12            |
|                      |      |       |        | DIA.   | 3 1/4" | 1 3/8" |      | 18 Dec 12            |
|                      |      |       |        | WGHT   |        | 140#   |      | DRILLER: T. McGovern |
|                      |      |       |        | FALL   |        | 30"    |      | INSPECTOR: JB        |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym   | IDENTIFICATION  |                             | REMARKS              |
|-------------|-----------------------|------------|------------------------------|-------|---|-----------------------------|----------------------|
|             |                       |            |                              |       |   |                             |                      |
|             |                       |            | 3                            |       | <u>Topsoil</u>  |                             |                      |
| 1           |                       | S-1        | 6                            |       | Br \$ a (-), cf S, t mf G   |                             | Rec = 17"<br>moist   |
| 2           |                       |            | 6                            |       | <u>Brown SILT and (-), coarse to fine Sand, trace medium to fine Gravel</u>                                 |                             |                      |
|             |                       |            | 14                           |       |   |                             |                      |
| 3           |                       | S-2        | 25/5"                        |       | Lt br cf G a, cf S, t \$ (completely weathered gneiss)  |                             | Rec = 5"<br>moist    |
| 4           |                       |            |                              |       | <u>Light brown coarse to fine GRAVEL and, coarse to fine Sand, trace Silt (completely weathered Gneiss)</u> |                             |                      |
| 5           |                       |            |                              |       |   |                             |                      |
| 5           |                       | S-3        | 23                           |       | Br cf G s, cf S, t \$ (completely weathered gneiss)   |                             | Rec = 6"<br>moist    |
| 6           |                       |            |                              | 75/3" |   | <u>End of Boring @ 4'9"</u> |                      |
| 7           |                       |            |                              |       |   |                             | Auger refusal @ 4'9" |
| 8           |                       |            |                              |       |   |                             |                      |
| 9           |                       |            |                              |       |   |                             |                      |
| 10          |                       |            |                              |       |   |                             |                      |
| 11          |                       |            |                              |       |   |                             |                      |
| 12          |                       |            |                              |       |   |                             |                      |
| 13          |                       |            |                              |       |   |                             |                      |
| 14          |                       |            |                              |       |   |                             |                      |
| 15          |                       |            |                              |       |   |                             |                      |
| 16          |                       |            |                              |       |   |                             |                      |
| 17          |                       |            |                              |       |   |                             |                      |
| 18          |                       |            |                              |       |   |                             |                      |
| 19          |                       |            |                              |       |   |                             |                      |
| 20          |                       |            |                              |       |   |                             |                      |
| 21          |                       |            |                              |       |   |                             |                      |
| 22          |                       |            |                              |       |   |                             |                      |

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| <b>Project:</b> Proposed Renovations, Byrwood Club Development, North Castle, NY | <b>SHEET NO.:</b> 1 of 1  |
| <b>Client:</b> JBM Realty  | <b>JOB NUMBER:</b> 12-175 |
| <b>Drilling Contractor:</b> General Borings, Inc.                                | <b>ELEVATION:</b> +628.0  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE | DATUM:               |
|----------------------|------|-------|--------|--------|--------|--------|------|----------------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |      | START DATE:          |
| No water encountered |      |       |        |        |        |        |      | 18 Dec 12            |
|                      |      |       |        | DIA.   | 3 1/4" | 1 3/8" |      | 18 Dec 12            |
|                      |      |       |        | WGHT   |        | 140#   |      | DRILLER: T. McGovern |
|                      |      |       |        | FALL   |        | 30"    |      | INSPECTOR: JB        |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym  | IDENTIFICATION  |       | REMARKS                                    |
|-------------|-----------------------|------------|------------------------------|------|---|-------|--|
|             |                       |            |                              |      |   |       |  |
|             |                       |            | 2                            |      | <u>Topsoil</u>  |       |  |
| 1           |                       | S-1        | 1                            |      | Br cf S, a \$, t f G  | 0'6"  | Rec = 14"<br>moist                         |
| 2           |                       |            | 2                            |      | <u>Brown coarse to fine SAND, and Silt, trace fine Gravel</u>                 | 2'0"  |  |
| 3           |                       | S-2        | 10                           |      | Gr cf S t \$, a cf G (completely weathered gneiss)                            |       | Rec = 13"<br>moist<br>weathered rock 3'-4' |
| 4           |                       |            | 20                           |      |   |       |  |
| 5           |                       |            | 45                           |      |   |       |  |
| 6           |                       | S-3        | 9                            |      | Br cf S, l \$, s (+) cf G (completely weathered gneiss)                       |       | Rec = 17"<br>moist                         |
| 7           |                       |            | 11                           |      |   |       |  |
| 8           |                       |            | 13                           |      | <u>Brown coarse to fine SAND, little Silt, some (+) coarse to fine Gravel</u> |       |  |
| 9           |                       | S-4        | 18                           | same | <u>(completely weathered Gneiss)</u>  |       | Rec = 14"<br>moist                         |
| 10          |                       |            | 26                           |      |   |       |  |
| 11          |                       |            | 30                           |      |   |       |  |
| 12          |                       | S-5        | 43                           |      |   |       | Refusal on spoon @ 10'6"                   |
| 13          |                       |            | 75/6"                        | same |   | 10'6" |  |
| 14          |                       |            |                              |      | <u>End of Boring @ 10'6"</u>  |       |  |
| 15          |                       |            |                              |      |   |       |  |
| 16          |                       |            |                              |      |   |       |  |
| 17          |                       |            |                              |      |   |       |  |
| 18          |                       |            |                              |      |   |       |  |
| 19          |                       |            |                              |      |   |       |  |
| 20          |                       |            |                              |      |   |       |  |
| 21          |                       |            |                              |      |   |       |  |
| 22          |                       |            |                              |      |   |       |  |

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| <b>Project:</b> Proposed Renovations, Byrwood Club Development, North Castle, NY | <b>SHEET NO.:</b> 1 of 1  |
| <b>Client:</b> JBM Realty  | <b>JOB NUMBER:</b> 12-175 |
| <b>Drilling Contractor:</b> General Borings, Inc.                                | <b>ELEVATION:</b> +623.0  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE | DATUM:       |
|----------------------|------|-------|--------|--------|--------|--------|------|--------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |      | START DATE:  |
| No water encountered |      |       |        |        |        |        |      | 18 Dec 12    |
|                      |      |       |        | DIA.   | 3 1/4" | 1 3/8" |      | FINISH DATE: |
|                      |      |       |        | WGHT   |        | 140#   |      | DRILLER:     |
|                      |      |       |        | FALL   |        | 30"    |      | INSPECTOR:   |
|                      |      |       |        |        |        |        |      | JB           |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym | IDENTIFICATION   | REMARKS                               |
|-------------|-----------------------|------------|------------------------------|-----|--|---------------------------------------|
| 1           |                       | S-1        | 2                            |     | Br cf S, s (+) \$, t f G<br><u>Brown coarse to fine SAND, some (+) Silt, trace fine Gravel</u>                                   | Rec = 17" moist                       |
|             |                       |            | 2                            |     |  |                                       |
|             |                       |            | 3                            |     |  |                                       |
| 2           |                       | S-2        | 13                           |     | Br cf S, l \$, s cf G<br><u>Brown coarse to fine SAND, little Silt, some coarse to fine Gravel (completely weathered Gneiss)</u> | Rec = 17" moist weathered rock in tip |
|             |                       |            | 22                           |     |  |                                       |
| 3           |                       |            | 10                           |     |  |                                       |
|             |                       |            | 16                           |     |  |                                       |
| 4           |                       | S-3        | 26                           |     | same, weathered gneiss   | Rec = 18" moist weathered rock        |
|             |                       |            | 23                           |     |  |                                       |
| 6           |                       |            | 62                           |     |  |                                       |
|             |                       |            | 55                           |     |  |                                       |
| 7           |                       |            | 81                           |     |  |                                       |
| 8           |                       |            |                              |     |  |                                       |
| 9           |                       |            |                              |     | <u>End of Boring @ 8'6"</u>  | Auger refusal @ 8'6"                  |
| 10          |                       |            |                              |     |  |                                       |
| 11          |                       |            |                              |     |  |                                       |
| 12          |                       |            |                              |     |  |                                       |
| 13          |                       |            |                              |     |  |                                       |
| 14          |                       |            |                              |     |  |                                       |
| 15          |                       |            |                              |     |  |                                       |
| 16          |                       |            |                              |     |  |                                       |
| 17          |                       |            |                              |     |  |                                       |
| 18          |                       |            |                              |     |  |                                       |
| 19          |                       |            |                              |     |  |                                       |
| 20          |                       |            |                              |     |  |                                       |
| 21          |                       |            |                              |     |  |                                       |
| 22          |                       |            |                              |     |  |                                       |

|   |                           |
|---|---------------------------|
| <b>Project:</b> Proposed Renovations, Byrnwood Club Development, North Castle, NY | <b>SHEET NO.:</b> 1 of 1  |
| <b>Client:</b> JBM Realty   | <b>JOB NUMBER:</b> 12-175 |
| <b>Drilling Contractor:</b> General Borings, Inc.                                 | <b>ELEVATION:</b> +617.0  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE   | DATUM:       |
|----------------------|------|-------|--------|--------|--------|--------|--------|--------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |        | START DATE:  |
| No water encountered |      |       |        |        | DIA.   | 3 1/4" | 1 3/8" | 19 Dec 12    |
|                      |      |       |        | WGHT   |        | 140#   |        | FINISH DATE: |
|                      |      |       |        | FALL   |        | 30"    |        | DRILLER:     |
|                      |      |       |        |        |        |        |        | INSPECTOR:   |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym | IDENTIFICATION   | REMARKS                     |
|-------------|-----------------------|------------|------------------------------|-----|--|-----------------------------|
|             |                       |            | 2                            |     | <u>Topsoil</u>   |                             |
| 1           |                       | S-1        | 6                            |     | FILL (Br cf S, l \$)   | 0'6"                        |
|             |                       |            | 5                            |     | FILL (Brown coarse to fine SAND, little Silt)                              | 1'0"                        |
| 2           |                       |            | 10                           |     |  | Rec = 10" moist             |
|             |                       | S-2        | 12                           |     | Br cf S, s \$, a (-) cf G  |                             |
| 3           |                       |            | 11                           |     | same   |                             |
|             |                       |            | 11                           |     |  | Rec = 11" moist             |
| 4           |                       |            | 52                           |     | <u>Brown coarse to fine SAND, some Silt, and (-) coarse to fine Gravel</u> |                             |
| 5           |                       |            |                              |     |  |                             |
|             |                       | S-3        | 75/2"                        |     |  | 5'6"                        |
| 6           |                       |            |                              |     |  | <u>End of Boring @ 5'6"</u> |
| 7           |                       |            |                              |     |  |                             |
| 8           |                       |            |                              |     |  |                             |
| 9           |                       |            |                              |     |  |                             |
| 10          |                       |            |                              |     |  |                             |
| 11          |                       |            |                              |     |  |                             |
| 12          |                       |            |                              |     |  |                             |
| 13          |                       |            |                              |     |  |                             |
| 14          |                       |            |                              |     |  |                             |
| 15          |                       |            |                              |     |  |                             |
| 16          |                       |            |                              |     |  |                             |
| 17          |                       |            |                              |     |  |                             |
| 18          |                       |            |                              |     |  |                             |
| 19          |                       |            |                              |     |  |                             |
| 20          |                       |            |                              |     |  |                             |
| 21          |                       |            |                              |     |  |                             |
| 22          |                       |            |                              |     |  |                             |

|  |                    |
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| Project: <b>Proposed Renovations, Byrwood Club Development, North Castle, NY</b> | SHEET NO.: 1 of 1  |
| Client: <b>JBM Realty</b>  | JOB NUMBER: 12-175 |
| Drilling Contractor: <b>General Borings, Inc.</b>                                | ELEVATION: +628.0  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE | DATUM:                 |
|----------------------|------|-------|--------|--------|--------|--------|------|------------------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |      | START DATE: 19 Dec 12  |
| No water encountered |      |       |        | DIA.   | 3 1/4" | 1 3/8" |      | FINISH DATE: 19 Dec 12 |
|                      |      |       |        | WGHT   |        | 140#   |      | DRILLER: T. McGovern   |
|                      |      |       |        | FALL   |        | 30"    |      | INSPECTOR: KWA         |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym  | IDENTIFICATION   | REMARKS  |
|-------------|-----------------------|------------|------------------------------|------|--|--|
|             |                       |            | 2                            |      | <u>Topsoil</u>   |  |
| 1           |                       | S-1        | 4                            |      | Br cf S, l \$, l f G   | Rec = 18"<br>moist                               |
|             |                       |            | 4                            |      |  |  |
| 2           |                       |            | 5                            |      | <u>Brown coarse to fine SAND, little Silt, little fine Gravel</u>                              | Rec = 17"<br>moist                               |
|             |                       | S-2        | 13                           | same |  |  |
| 3           |                       |            | 28                           |      |  |  |
|             |                       |            | 21                           |      |  |  |
| 4           |                       |            | 22                           |      |  |  |
| 5           |                       |            |                              |      |  | 5'0"   |
|             |                       | S-3        | 12                           |      | Br cf S, l \$, t f G (completely weathered gniess)   | Rec = 15"<br>moist<br>very dense augering 7'-10' |
| 6           |                       |            | 14                           |      |  |  |
|             |                       |            | 19                           |      |  |  |
| 7           |                       |            | 28                           |      | <u>Brown coarse to fine SAND, little Silt, trace fine Gravel (completely weathered Geniss)</u> |  |
| 8           |                       |            |                              |      |  |  |
| 9           |                       |            |                              |      |  |  |
| 10          |                       |            |                              |      |  |  |
|             |                       | S-4        | 75                           | same |  | Rec = 6"<br>moist<br>very dense augering 10'-15' |
| 11          |                       |            | 50/3"                        |      |  |  |
| 12          |                       |            |                              |      |  |  |
| 13          |                       |            |                              |      |  |  |
| 14          |                       |            |                              |      |  |  |
| 15          |                       |            |                              |      |  |  |
|             |                       | S-4        | 50/2"                        | same | <u>End of Boring @ 15'2"</u>   | No recovery<br>Spoon bouncing @ 15'2"            |
| 16          |                       |            |                              |      |  |  |
| 17          |                       |            |                              |      |  |  |
| 18          |                       |            |                              |      |  |  |
| 19          |                       |            |                              |      |  |  |
| 20          |                       |            |                              |      |  |  |
| 21          |                       |            |                              |      |  |  |
| 22          |                       |            |                              |      |  |  |

|   |                    |
|---|--------------------|
| Project: <b>Proposed Renovations, Byrnwood Club Development, North Castle, NY</b> | SHEET NO.: 1 of 1  |
| Client: <b>JBM Realty</b>   | JOB NUMBER: 12-175 |
| Drilling Contractor: <b>General Borings, Inc.</b>                                 | ELEVATION: +609.0  |

| GROUNDWATER |      |       |        | CASING | SAMPLE | CORE   | TUBE | DATUM:                 |
|-------------|------|-------|--------|--------|--------|--------|------|------------------------|
| DATE        | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |      | START DATE:            |
| 19 Dec 12   | 1130 | 3'3"  | None   | DIA.   | 3 1/4" | 1 3/8" |      | 19 Dec 12              |
|             |      |       |        | WGHT   |        | 140#   |      | FINISH DATE: 19 Dec 12 |
|             |      |       |        | FALL   |        | 30"    |      | DRILLER: T. McGovern   |
|             |      |       |        |        |        |        |      | INSPECTOR: KWA         |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym | IDENTIFICATION  | REMARKS           |
|-------------|-----------------------|------------|------------------------------|-----|---|-------------------|
|             |                       |            | 2                            |     | <u>Brown Topsoil</u>  | 0'6"              |
| 1           |                       | S-1        | 4                            |     | FILL (Br cf S, a \$, t cf G)  | Rec = 4" moist    |
|             |                       |            | 8                            |     |   |                   |
| 2           |                       |            | 7                            |     |   |                   |
|             |                       |            | 10                           |     | FILL (same)   |                   |
| 3           |                       | S-2        | 11                           |     | <b><u>FILL (Brown coarse to fine SAND, and Silt, trace coarse to fine Gravel)</u></b>   | No recovery moist |
|             |                       |            | 11                           |     |   |                   |
| 4           |                       |            | 13                           |     |   |                   |
| 5           |                       |            |                              |     |   |                   |
|             |                       |            | 13                           |     | FILL (same)   | 5'6"              |
| 6           |                       | S-3        | 8                            |     | Mtdl gr, or br Cy \$ s, cf S, w/t roots<br><b><u>Mottled gray, orange brown Clayey SILT some, coarse to fine Sand, with roots</u></b> | Rec = 18" moist   |
|             |                       |            | 7                            |     |   |                   |
| 7           |                       |            | 8                            |     |   |                   |
|             |                       |            | 8                            |     |   | 7'0"              |
| 8           |                       | S-4        | 8                            |     | Gr br cf S, s (+) \$, l cf G<br><br><b><u>Gray brown coarse to fine SAND, some (+) Silt, little coarse to fine Gravel</u></b>         | Rec = 15" wet     |
|             |                       |            | 7                            |     |   |                   |
| 9           |                       |            | 8                            |     |   |                   |
| 10          |                       |            |                              |     |   |                   |
|             |                       |            | 15                           |     | same, l cf G  |                   |
| 11          |                       | S-5        | 25                           |     |   | Rec = 16" wet     |
|             |                       |            | 26                           |     |   |                   |
| 12          |                       |            | 35                           |     |   |                   |
|             |                       |            |                              |     | <b><u>End of Boring @ 12'0"</u></b>   |                   |
| 13          |                       |            |                              |     |   |                   |
| 14          |                       |            |                              |     |   |                   |
| 15          |                       |            |                              |     |   |                   |
| 16          |                       |            |                              |     |   |                   |
| 17          |                       |            |                              |     |   |                   |
| 18          |                       |            |                              |     |   |                   |
| 19          |                       |            |                              |     |   |                   |
| 20          |                       |            |                              |     |   |                   |
| 21          |                       |            |                              |     |   |                   |
| 22          |                       |            |                              |     |   |                   |



|  |                    |
|--|--------------------|
| Project: <b>Proposed Renovations, Byrwood Club Development, North Castle, NY</b> | SHEET NO.: 1 of 1  |
| Client: <b>JBM Realty</b>  | JOB NUMBER: 12-175 |
| Drilling Contractor: <b>General Borings, Inc.</b>                                | ELEVATION: +674.0  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE | DATUM:                 |
|----------------------|------|-------|--------|--------|--------|--------|------|------------------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |      | START DATE: 19 Dec 12  |
| No water encountered |      |       |        | DIA.   | 3 1/4" | 1 3/8" |      | FINISH DATE: 19 Dec 12 |
|                      |      |       |        | WGHT   |        | 140#   |      | DRILLER: T. McGovern   |
|                      |      |       |        | FALL   |        | 30"    |      | INSPECTOR: KWA         |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | SYMBOL | IDENTIFICATION   | REMARKS              |
|-------------|-----------------------|------------|------------------------------|--------|--|----------------------|
| 1           |                       | S-1        | 8                            |        | <u>Clay Tennis Court</u>   |                      |
|             |                       |            | 8                            |        | FILL (Br cf S, s \$, s (+) cf G)   | Rec = 17" moist      |
| 2           |                       |            | 17                           |        |  |                      |
|             |                       |            | 17                           |        | FILL (same)  |                      |
| 3           |                       | S-2        | 12                           |        |  | Rec = 15" moist      |
|             |                       |            | 7                            |        | <u>FILL (Brown coarse to fine Sand, some Silt, some (+) coarse to fine Gravel)</u> |                      |
| 4           |                       |            | 13                           |        |  |                      |
| 5           |                       |            |                              |        |  |                      |
|             |                       |            | 10                           |        | FILL (Br cf S, s \$, l cf G)   |                      |
| 6           |                       | S-3        | 4                            |        |  | Rec = 15" moist      |
|             |                       |            | 5                            |        |  |                      |
| 7           |                       |            | 11                           |        |  | 7'0"                 |
|             |                       | S-4        | 50/3"                        |        | <u>Highly to moderately weathered Gneiss</u>                                       | Rec = 3" moist       |
| 8           |                       |            |                              |        | <u>Eknd of Boring @ 7'6"</u>   | Auger refusal @ 7'0" |
| 9           |                       |            |                              |        |  |                      |
| 10          |                       |            |                              |        |  |                      |
| 11          |                       |            |                              |        |  |                      |
| 12          |                       |            |                              |        |  |                      |
| 13          |                       |            |                              |        |  |                      |
| 14          |                       |            |                              |        |  |                      |
| 15          |                       |            |                              |        |  |                      |
| 16          |                       |            |                              |        |  |                      |
| 17          |                       |            |                              |        |  |                      |
| 18          |                       |            |                              |        |  |                      |
| 19          |                       |            |                              |        |  |                      |
| 20          |                       |            |                              |        |  |                      |
| 21          |                       |            |                              |        |  |                      |
| 22          |                       |            |                              |        |  |                      |

|   |                           |
|---|---------------------------|
| <b>Project:</b> Proposed Renovations, Byrnwood Club Development, North Castle, NY | <b>SHEET NO.:</b> 1 of 1  |
| <b>Client:</b> JBM Realty   | <b>JOB NUMBER:</b> 12-175 |
| <b>Drilling Contractor:</b> General Borings, Inc.                                 | <b>ELEVATION:</b> +638.8  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE | DATUM:       |
|----------------------|------|-------|--------|--------|--------|--------|------|--------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |      | START DATE:  |
| No water encountered |      |       |        |        |        |        |      | 19 Dec 12    |
|                      |      |       |        | DIA.   | 3 1/4" | 1 3/8" |      | FINISH DATE: |
|                      |      |       |        | WGHT   |        | 140#   |      | 19 Dec 12    |
|                      |      |       |        | FALL   |        | 30"    |      | DRILLER:     |
|                      |      |       |        |        |        |        |      | T. McGovern  |
|                      |      |       |        |        |        |        |      | INSPECTOR:   |
|                      |      |       |        |        |        |        |      | JB           |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym | IDENTIFICATION  | REMARKS  |                                |
|-------------|-----------------------|------------|------------------------------|-----|---|--|--------------------------------|
|             |                       |            | 2                            |     | <u>Topsoil</u> 0'1"   |  |                                |
| 1           |                       | S-1        | 3                            |     | Br cf \$ s, cf S, l cf G<br><u>Brown coarse to fine SILT some, coarse to fine Sand, little coarse to fine Gravel</u> 2'0" | Rec = 15" moist<br>Auger refusal @ 2'0"                          |                                |
| 2           |                       |            | 6                            |     |   |  |                                |
|             |                       |            | 50/3"                        |     |   |  |                                |
| 3           |                       | Run #1     |                              |     | <u>Gray, white Gneiss</u>   | Run #1<br>2'0"-7'0"<br>Run = 60"<br>Rec = 52" = 86%<br>RQD = 53% |                                |
| 4           |                       |            |                              |     |   |  |                                |
| 5           |                       |            |                              |     |   |  | 5'0"                           |
| 6           |                       |            |                              |     |   |  | <u>Soil seam</u> 5'8"          |
| 7           |                       |            |                              |     |   |  | <u>Gray, white Gneiss</u> 7'0" |
| 8           |                       |            |                              |     | <u>End of Boring @ 7'0"</u>   |  |                                |
| 9           |                       |            |                              |     |   |  |                                |
| 10          |                       |            |                              |     |   |  |                                |
| 11          |                       |            |                              |     |   |  |                                |
| 12          |                       |            |                              |     |   |  |                                |
| 13          |                       |            |                              |     |   |  |                                |
| 14          |                       |            |                              |     |   |  |                                |
| 15          |                       |            |                              |     |   |  |                                |
| 16          |                       |            |                              |     |   |  |                                |
| 17          |                       |            |                              |     |   |  |                                |
| 18          |                       |            |                              |     |   |  |                                |
| 19          |                       |            |                              |     |   |  |                                |
| 20          |                       |            |                              |     |   |  |                                |
| 21          |                       |            |                              |     |   |  |                                |
| 22          |                       |            |                              |     |   |  |                                |

|  |                           |
|--|---------------------------|
| <b>Project:</b> Proposed Renovations, Byrwood Club Development, North Castle, NY | <b>SHEET NO.:</b> 1 of 1  |
| <b>Client:</b> JBM Realty  | <b>JOB NUMBER:</b> 12-175 |
| <b>Drilling Contractor:</b> General Borings, Inc.                                | <b>ELEVATION:</b> +640.0  |

| GROUNDWATER          |      |       |        | CASING | SAMPLE | CORE   | TUBE   | DATUM:       |
|----------------------|------|-------|--------|--------|--------|--------|--------|--------------|
| DATE                 | TIME | DEPTH | CASING | TYPE   | HSA    | SS     |        | START DATE:  |
| No water encountered |      |       |        |        | DIA.   | 3 1/4" | 1 3/8" | 19 Dec 12    |
|                      |      |       |        | WGHT   |        | 140#   |        | FINISH DATE: |
|                      |      |       |        | FALL   |        | 30"    |        | DRILLER:     |
|                      |      |       |        |        |        |        |        | INSPECTOR:   |

| Depth (ft.) | Casing Blows per Foot | Sample No. | Blows on Sample Spoon per 6" | Sym | IDENTIFICATION                        | REMARKS                   |
|-------------|-----------------------|------------|------------------------------|-----|---------------------------------------|---------------------------|
|             |                       |            | 2                            |     | <u>Topsoil</u>                        |                           |
| 1           |                       | S-1        | 3                            |     |                                       | Rec = 20"                 |
|             |                       |            |                              |     | Br cf S, l (+) \$                     | moist                     |
| 2           |                       |            | 7                            |     |                                       |                           |
|             |                       |            |                              |     | same, dk br                           |                           |
| 3           |                       | S-2        | 6                            |     | <u>Brown coarse to fine SAND,</u>     | Rec = 17"                 |
|             |                       |            | 8                            |     | <u>little (+) Silt</u>                | moist                     |
| 4           |                       |            | 23                           |     |                                       | 4'0"                      |
| 5           |                       |            |                              |     | <u>Completely to highly weathered</u> |                           |
|             |                       |            |                              |     | <u>Gneiss</u>                         |                           |
| 6           |                       |            |                              |     |                                       | 5'6" Auger refusal @ 5'6" |
| 7           |                       |            |                              |     | <u>End of Boring @ 5'6"</u>           |                           |
| 8           |                       |            |                              |     |                                       |                           |
| 9           |                       |            |                              |     |                                       |                           |
| 10          |                       |            |                              |     |                                       |                           |
| 11          |                       |            |                              |     |                                       |                           |
| 12          |                       |            |                              |     |                                       |                           |
| 13          |                       |            |                              |     |                                       |                           |
| 14          |                       |            |                              |     |                                       |                           |
| 15          |                       |            |                              |     |                                       |                           |
| 16          |                       |            |                              |     |                                       |                           |
| 17          |                       |            |                              |     |                                       |                           |
| 18          |                       |            |                              |     |                                       |                           |
| 19          |                       |            |                              |     |                                       |                           |
| 20          |                       |            |                              |     |                                       |                           |
| 21          |                       |            |                              |     |                                       |                           |
| 22          |                       |            |                              |     |                                       |                           |

3 January 2013

**TEST PIT LOGS**

|                    |   |              |       |
|--------------------|---|--------------|-------|
| <b><u>TP-1</u></b> | Elevation +662  |              |       |
| 0-0'9"             | Brown Topsoil   |              |       |
| 0'9"-2'0"          | Brown coarse to fine SAND, and<br>Silt, trace (+) medium to fine Gravel                           | medium dense | moist |
| 2'0"               | Gneiss bedrock<br>No water encountered  |              |       |
| <b><u>TP-2</u></b> | Elevation +672  |              |       |
| 0-1'10"            | FILL (Brown coarse to fine SAND,<br>some silt, little (-) coarse to fine<br>Gravel, with topsoil) | medium dense | moist |
| 1'10"-4'4"         | Light brown coarse to fine SAND,<br>some (+) Silt   | medium dense | moist |
| 4'4"               | Gneiss bedrock<br>No water encountered  |              |       |
| <b><u>TP-3</u></b> | Elevation +672  |              |       |
| 0-0'9"             | Dark brown Topsoil with surface debris  |              |       |
| 0'9"-2'2"          | Brown coarse to fine SAND, some Silt  | medium dense | moist |
| 2'2"               | Gneiss bedrock<br>No water encountered  |              |       |

3 January 2013

**TEST PIT LOGS**

|                    |  |              |       |
|--------------------|--|--------------|-------|
| <b><u>TP-4</u></b> | Elevation +672   |              |       |
| 0-0'6"             | Brown Topsoil  |              |       |
| 0'6"-3'6"          | Brown coarse to fine SAND, and (-)<br>Silt, some coarse to fine Gravel | medium dense | moist |
| 3'6"               | Gneiss bedrock<br>No water encountered                                 |              |       |
| <b><u>TP-5</u></b> | Elevation +670   |              |       |
| 0-0'7"             | Brown Topsoil  |              |       |
| 0'7"-3'8"          | Light brown coarse to fine SAND,<br>some (+) Silt                      | medium dense | moist |
| 3'8"-4'9"          | Brown coarse to fine SAND, some<br>Silt (completely weathered gneiss)  | dense        | moist |
| 4'9"               | Gneiss bedrock<br>No water encountered                                 |              |       |

3 January 2013

**TEST PIT LOGS**

|                    |  |              |       |
|--------------------|--|--------------|-------|
| <b><u>TP-6</u></b> | Elevation +672   |              |       |
| 0-0'10"            | Brown Topsoil  |              |       |
| 0'10"-2'10"        | Light brown coarse to fine SAND,<br>some (-) Silt, little coarse to fine Gravel                        | medium dense | moist |
| 2'10"-4'7"         | Brown coarse to fine SAND, some Silt,<br>little coarse to fine Gravel (completely<br>weathered gneiss) | dense        | moist |
| 4'7"               | Gneiss bedrock<br>No water encountered   |              |       |
| <br>               |  |              |       |
| <b><u>TP-7</u></b> | Elevation +620   |              |       |
| 0-0'9"             | Brown Topsoil  |              |       |
| 0'9"-2'8"          | Brown coarse to fine SAND, some<br>Silt, trace coarse to fine Gravel                                   | medium dense | moist |
| 2'8"               | Probable Gneiss bedrock<br><br>Test pit abandoned<br>No water encountered                              |              |       |
| <br>               |  |              |       |
| <b><u>TP-8</u></b> | Elevation +614   |              |       |
| 0-0'8"             | Dark brown Topsoil   |              |       |
| 0'8"-5'0"          | Mottled orange brown, gray coarse<br>to fine SAND, and (-) Silt  | medium dense | moist |
|                    | Groundwater encountered @ 4'1"   | slow inflow  |       |

3 January 2013

**TEST PIT LOGS**

|                     |  |              |       |
|---------------------|--|--------------|-------|
| <b><u>TP-9</u></b>  | Elevation +628   |              |       |
| 0-0'4"              | Topsoil  |              |       |
| 0'4"-6'9"           | FILL (Brown coarse to fine SAND,<br>some (+) Silt, some (+) coarse to fine<br>Gravel, with cobbles and boulders) | medium dense | moist |
| 6'9"                | FILL (Gray coarse to fine SAND,<br>trace (+) Silt)   | medium dense | moist |
|                     | Possible cover over for utility<br>Test pit was abandoned  |              |       |
|                     | No water encountered   |              |       |
| <br>                |  |              |       |
| <b><u>TP-10</u></b> | Elevation +625   |              |       |
| 0-0'4"              | Topsoil  |              |       |
| 0'4"-3'0"           | FILL (Boulders with topsoil)   | loose        | moist |
| 3'0"-8'0"           | Brown coarse to fine SAND,<br>some (+) Silt  | medium dense | moist |
|                     | No water encountered   |              |       |

3 January 2013

**TEST PIT LOGS**

|                     |  |              |       |
|---------------------|--|--------------|-------|
| <b><u>TP-11</u></b> | Elevation +642   |              |       |
| 0-0'6"              | Brown Topsoil  |              |       |
| 0'6"-3'9"           | Brown coarse to fine SAND, some Silt, little coarse to fine Gravel, with occasional cobbles and boulders | medium dense | moist |
| 3'9"-6'0"           | Brown coarse to fine SAND, little (+) Silt, some coarse to fine Gravel (completely weathered gneiss)     | dense        | moist |
| 6'0"                | Weathered Gneiss bedrock<br>No water encountered   |              |       |
| <br>                |  |              |       |
| <b><u>TP-12</u></b> | Elevation +635   |              |       |
| 0-0'6"              | Brown Topsoil  |              |       |
| 0'6"-5'0"           | FILL (Brown coarse to fine SAND, some (+) Silt, little (-) coarse to fine Gravel, with trace of debris)  | loose        | moist |
| 5'0"-6'6"           | Orange brown, gray coarse to fine SAND and Silt  | dense        | moist |
|                     | Refusal on boulder<br>No water encountered   |              |       |



4 January 2013

**TEST PIT LOGS**

|                     |   |              |       |
|---------------------|---|--------------|-------|
| <b><u>TP-13</u></b> | Elevation +636  |              |       |
| 0-0'9"              | Brown Topsoil with roots  |              |       |
| 0'9"-6'3"           | Brown coarse to fine SAND, and<br>Silt, little coarse to fine Gravel  | medium dense | moist |
| 6'3"-7'5"           | Brown coarse to fine SAND, some (+)<br>Silt, little (-) coarse to fine Gravel                                   | dense        | moist |
| 7'5"                | Gneiss bedrock  |              |       |
|                     | Groundwater encountered @ 4'10"   | slow inflow  |       |
| <br>                |   |              |       |
| <b><u>TP-14</u></b> | Elevation +625  |              |       |
| 0-0'3"              | Brown Topsoil   |              |       |
| 0'3"-3'4"           | FILL (Gray brown coarse to fine<br>SAND, some Silt, little coarse to fine<br>Gravel, with cobbles and boulders) | loose        | moist |
| 3'4"-5'0"           | FILL (Brown coarse to fine SAND,<br>little Silt)  | medium dense | moist |
| 5'0"                | Gneiss bedrock<br>No water encountered  |              |       |

4 January 2013

**TEST PIT LOGS**

|                     |  |              |       |
|---------------------|--|--------------|-------|
| <b><u>TP-15</u></b> | Elevation +668   |              |       |
| 0-0'3"              | Brown Topsoil  |              |       |
| 0'3"-1'8"           | Brown coarse to fine SAND, some (+)<br>Silt, some (-) coarse to fine Gravel,<br>with occasional cobbles and boulders | medium dense | moist |
| 1'8"                | Gneiss bedrock<br>No water encountered   |              |       |
| <br>                |  |              |       |
| <b><u>TP-16</u></b> | Elevation +651   |              |       |
| 0-0'8"              | Dark brown Topsoil   |              |       |
| 0'8"-1'10"          | FILL (Brown coarse to fine SAND,<br>some (+) Silt, trace medium to fine<br>Gravel, with cobbles)                     | medium dense | moist |
| 1'10"-4'10"         | Brown coarse to fine SAND, some (+)<br>Silt, trace medium to fine Gravel   | medium dense | moist |
| 4'10"               | Gneiss bedrock<br>No water encountered   |              |       |

4 January 2013

**TEST PIT LOGS**

|                     |  |              |       |
|---------------------|--|--------------|-------|
| <b><u>TP-17</u></b> | Elevation +655   |              |       |
| 0-0'3"              | Topsoil  |              |       |
| 0'3"-1'0"           | Brown coarse to fine SAND, some (+)<br>Silt, little coarse to fine Gravel  | medium dense | moist |
|                     | Encountered irrigation pipes<br>Test pit abandoned<br>No water encountered |              |       |
| <b><u>TP-18</u></b> | Elevation +670   |              |       |
| 0-0'10"             | Brown Topsoil  |              |       |
| 0'10"-7'0"          | Brown SILT and, coarse to fine Sand,<br>little (-) medium to fine Gravel   | medium dense | moist |
|                     | No water encountered   |              |       |

Brynwood Club Development  
Bedford Road  
Town of North Castle, NY  
(12-175)

13 September 2013

**TEST PIT LOGS**

**TP-19**

|           |  |              |       |
|-----------|--|--------------|-------|
| 0-2'5"    | FILL (Brown coarse to fine SAND,<br>some Silt, some coarse to fine Gravel,<br>with topsoil, cobbles, boulders) | loose        | moist |
| 2'5"-7'0" | Brown coarse to fine SAND, some<br>Silt, little coarse to fine Gravel  | medium dense | moist |
|           | No water encountered   |              |       |

**TP-20**

|           |  |              |       |
|-----------|--|--------------|-------|
| 0-0'6"    | Brown Topsoil  |              |       |
| 0'6"-4'3" | Brown, orange brown coarse to<br>fine SAND, some Silt, little coarse<br>to fine Gravel                       | medium dense | moist |
| 4'3"-8'0" | Orange brown coarse to fine SAND,<br>little (-) Silt, some coarse to fine<br>Gravel, with occasional cobbles | medium dense | moist |
|           | No water encountered   |              |       |

Brynwood Club Development  
 Bedford Road  
 Town of North Castle, NY  
 (12-175)

13 September 2013

**TEST PIT LOGS**

**TP-21**

|           |  |              |       |
|-----------|--|--------------|-------|
| 0-0'6"    | Dark brown Topsoil   |              |       |
| 0'6"-1'4" | FILL (Brown coarse to fine SAND,<br>some (-) Silt, trace medium to fine<br>Gravel, with few roots)     | medium dense | moist |
| 1'4"-7'0" | Brown coarse to fine SAND, little<br>Silt, trace (+) coarse to fine Gravel,<br>with occasional cobbles | medium dense | moist |
| 7'0"      | Possible weathered bedrock   |              |       |
|           | No water encountered   |              |       |

**TP-22**

|           |   |              |       |
|-----------|---|--------------|-------|
| 0-1'6"    | Dark brown Topsoil, with roots  |              |       |
| 1'6"-2'8" | Mottled gray brown, orange brown<br>Clayey SILT, little medium to fine Sand | medium dense | moist |
| 2'8"-3'6" | Brown coarse to fine SAND, some (+)<br>Silt, little medium to fine Gravel   | medium dense | moist |
| 3'6"-6'0" | Brown coarse to fine SAND, little (+)<br>Silt, come coarse to fine Gravel   | medium dense | wet   |
| 6'0"-7'6" | Gray brown SILT little, coarse to fine<br>Sand, trace medium to fine Gravel | medium dense | wet   |
|           | Groundwater encountered @ 4'6"  | slow inflow  |       |

Brynwood Club Development  
Bedford Road  
Town of North Castle, NY  
(12-175)

13 September 2013

**TEST PIT LOGS**

**TP-23**

|            |  |       |       |
|------------|--|-------|-------|
| 0-0'7"     | Brown Topsoil  |       |       |
| 0'7"-3'10" | Brown coarse to fine SAND, and (-)<br>Silt, little (-) coarse to fine Gravel | dense | moist |
| 3'10"      | Weathered bedrock  |       |       |
|            | No water encountered   |       |       |

**TP-24**

|           |   |              |       |
|-----------|---|--------------|-------|
| 0-0'8"    | Brown Topsoil   |              |       |
| 0'8"-6'8" | Brown coarse to fine SAND, some (+)<br>Silt, little (-) coarse to fine Gravel, with<br>occasional cobbles | medium dense | moist |
| 6'8"      | Possible weathered bedrock or boulder   |              |       |
|           | No water encountered  |              |       |

**TP-25**

|           |   |              |       |
|-----------|---|--------------|-------|
| 0-0'4"    | Brown Topsoil   |              |       |
| 0'4"-3'4" | Brown coarse to fine SAND, and Silt,<br>trace medium to fine Gravel | medium dense | moist |
| 3'4"      | Possible bedrock or boulder   |              |       |
|           | No water encountered  |              |       |

Brynwood Club Development  
Bedford Road  
Town of North Castle, NY  
(12-175)

13 September 2013

**TEST PIT LOGS**

**TP-26**

|           |  |              |       |
|-----------|--|--------------|-------|
| 0-0'6"    | Brown Topsoil  |              |       |
| 0'6"-2'8" | FILL (Brown coarse to fine SAND,<br>some (-) Silt, little coarse to fine<br>Gravel, with cobbles and boulders) | medium dense | moist |
| 2'8"-4'0" | FILL (Brown Topsoil, with trace roots)   |              |       |
| 4'0"-5'6" | FILL (Dark gray brown Clayey SILT,<br>and, coarse to fine Sand, with trace<br>roots, trace debris)             | medium stiff | moist |
| 5'6"-8'0" | Brown coarse to fine SAND, and (-)<br>Silt, trace coarse to fine Gravel  | medium dense | moist |
|           | No water encountered   |              |       |

**TP-27**

|           |  |              |     |
|-----------|--|--------------|-----|
| 0-0'9"    | Brown Topsoil, with roots  |              |     |
| 0'9"-4'4" | Light brown coarse to fine SAND,<br>little Silt, trace coarse to fine Gravel | medium dense | dry |
| 4'4"      | Probable weathered bedrock   |              |     |
|           | No water encountered   |              |     |

Brynwood Club Development  
Bedford Road  
Town of North Castle, NY  
(12-175)

13 September 2013

**TEST PIT LOGS**

**TP-28**

|           |  |              |       |
|-----------|--|--------------|-------|
| 0-0'4"    | Brown Topsoil  |              |       |
| 0'4"-8'6" | FILL (Brown coarse to fine SAND,<br>little Silt, little coarse to fine Gravel,<br>with organics, debris) | loose        | moist |
| 8'6"-9'0" | FILL (Gray coarse to fine SAND, some<br>Silt, little coarse to fine Gravel, with<br>organics)            | medium dense | wet   |
|           | Groundwater encountered @ 8'0"   |              |       |

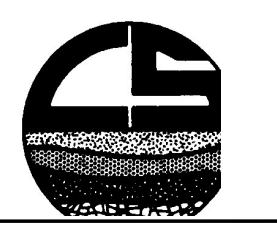




- GENERAL NOTES:**
1. GENERAL LAYOUT WAS OBTAINED FROM A DRAWING PREPARED BY JOHN MEYER CONSULTING, PC ENTITLED "TEST PIT PLAN, BRYNWOOD CLUB, BEDFORD ROAD (NY 22), TOWN OF NORTH CASTLE NEW YORK," DRAWING TP-1, DATED DECEMBER 17, 2012.
  2. BORING, TEST PIT, PERMEABILITY TEST, AND PERCOLATION TEST LOCATIONS WERE LAID OUT IN THE FIELD BY CARLIN-SIMPSON & ASSOCIATES (CSA).
  3. BORINGS (B-1 THROUGH B-11) WERE PERFORMED BY GENERAL BORINGS, INC. ON 18 & 19 DECEMBER 2012 UNDER THE FULL TIME INSPECTION OF CSA.
  4. THE BOREHOLE PERMEABILITY TEST (BP-4) WAS PERFORMED BY CSA ON 18 & 19 DECEMBER 2012.
  5. PERCOLATION TESTS (P-1, P-2, AND P-3) WERE PERFORMED BY CSA ON 3 JANUARY 2013.
  6. TEST PITS (TP-1 THROUGH TP-18) WERE PERFORMED BY TRAFICANTE CONTRACTING, INC ON 3 & 4 JANUARY 2013 UNDER THE FULL TIME INSPECTION OF CSA.
  7. TEST PITS (TP-19 THROUGH TP-28) WERE PERFORMED BY BRYNWOOD CLUB PERSONNEL IN SEPTEMBER 2013 UNDER THE FULL TIME INSPECTION OF CSA.
  8. LOCATIONS ARE APPROXIMATE.

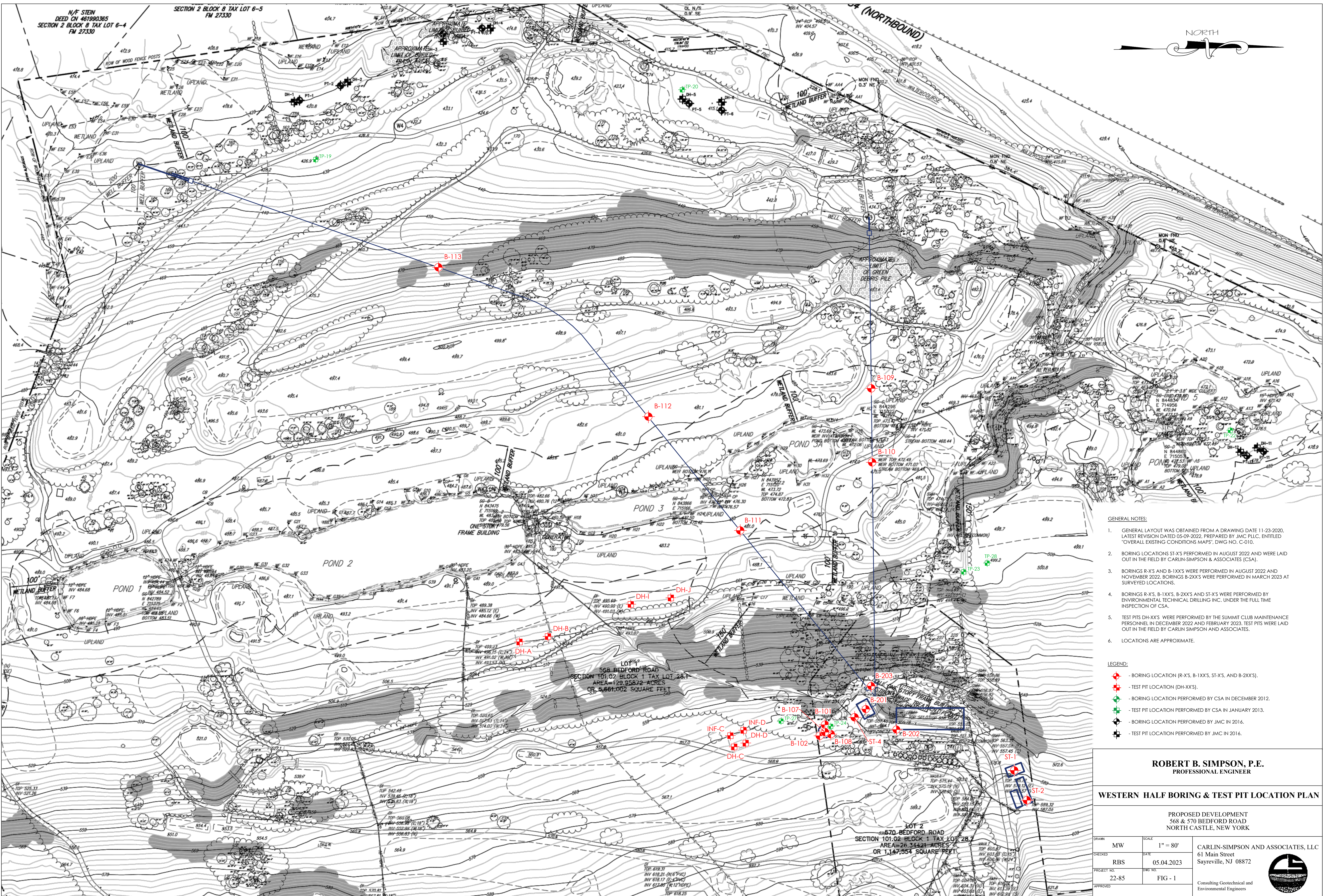
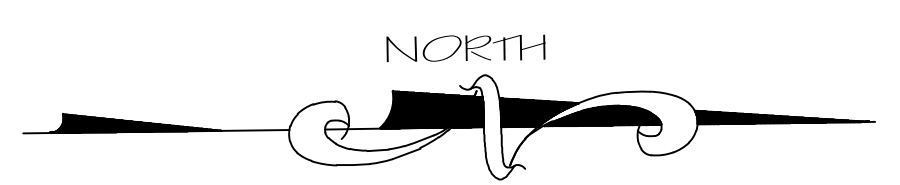
- LEGEND:**
- + - BORING LOCATION (DEC. 2012)
  - + - TEST PIT LOCATION (JAN. 2013)
  - + - TEST PIT LOCATION (SEPT. 2013)
  - + - PERCOLATION TEST LOCATION (JAN. 2013)
  - + - BOREHOLE PERMEABILITY TEST LOCATION (DEC. 2012)

|   |   |
|---|---|
| <b>ROBERT B. SIMPSON, P.E.</b><br>PROFESSIONAL ENGINEER |   |
| LICENSE NO. _____                                       | SIGNATURE _____   |
| <b>BORING &amp; TEST PIT LOCATION PLAN</b>              |   |
| BRYNWOOD CLUB DEVELOPMENT<br>NORTH CASTLE, NEW YORK     |   |
| DRAWN<br>MRA  | SCALE<br>1" = 120'  |
| CHECKED<br>RBS  | DATE<br>16 OCT 13   |
| PROJECT NO.<br>12-175                                   | DWG. NO.<br>FIG -1  |
| APPROVED _____  | CARLIN-SIMPSON AND ASSOCIATES<br>61 Main Street<br>Sayreville, NJ 08872<br><br>Consulting Geotechnical and<br>Environmental Engineers |



N/F STEIN  
DEED ON 46190365  
SECTION 2 BLOCK 8 TAX LOT 6-4  
FM 27330

SECTION 2 BLOCK 8 TAX LOT 6-5  
FM 27330



- GENERAL NOTES:**
- GENERAL LAYOUT WAS OBTAINED FROM A DRAWING DATED 11-23-2020. LATEST REVISION DATED 05-09-2022. PREPARED BY JMC PLLC, ENTITLED "OVERALL EXISTING CONDITIONS MAPS", DWG NO. C-010.
  - BORING LOCATIONS ST-X'S PERFORMED IN AUGUST 2022 AND WERE LAID OUT IN THE FIELD BY CARLIN-SIMPSON & ASSOCIATES (CSA).
  - BORINGS R-X'S AND B-1XX'S WERE PERFORMED IN AUGUST 2022 AND NOVEMBER 2022. BORINGS B-2XX'S WERE PERFORMED IN MARCH 2023 AT SURVEYED LOCATIONS.
  - BORINGS R-X'S, B-1XX'S, B-2XX'S AND ST-X'S WERE PERFORMED BY ENVIRONMENTAL TECHNICAL DRILLING INC. UNDER THE FULL TIME INSPECTION OF CSA.
  - TEST PITS DH-XX'S WERE PERFORMED BY THE SUMMIT CLUB MAINTENANCE PERSONNEL IN DECEMBER 2022 AND FEBRUARY 2023. TEST PITS WERE LAID OUT IN THE FIELD BY CARLIN SIMPSON AND ASSOCIATES.
  - LOCATIONS ARE APPROXIMATE.

- LEGEND:**
- ◆ - BORING LOCATION (R-X'S, B-1XX'S, ST-X'S, AND B-2XX'S).
  - - TEST PIT LOCATION (DH-XX'S).
  - ◆ - BORING LOCATION PERFORMED BY CSA IN DECEMBER 2012.
  - - TEST PIT LOCATION PERFORMED BY CSA IN JANUARY 2013.
  - ◆ - BORING LOCATION PERFORMED BY JMC IN 2016.
  - - TEST PIT LOCATION PERFORMED BY JMC IN 2016.

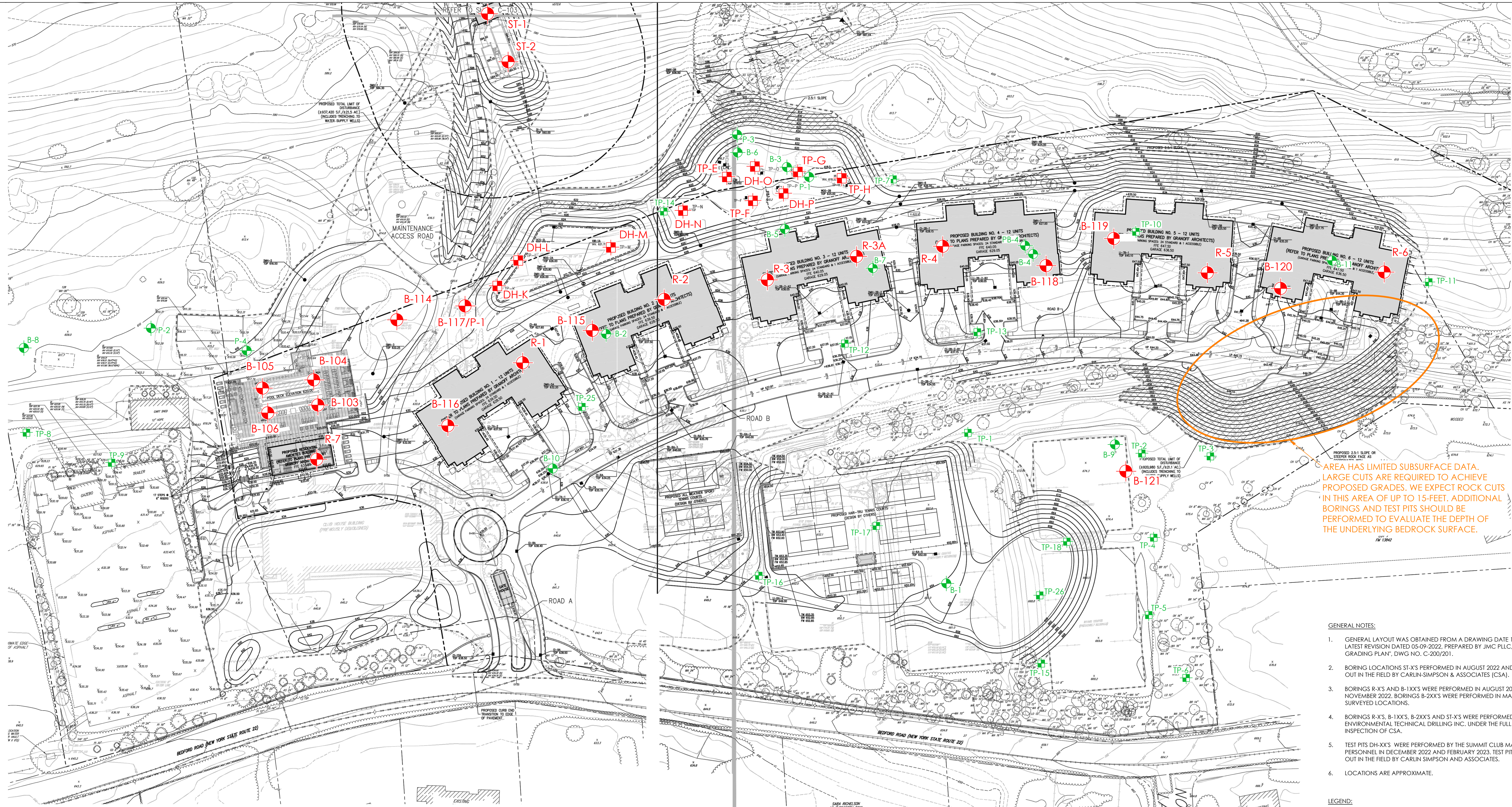
**ROBERT B. SIMPSON, P.E.**  
PROFESSIONAL ENGINEER

**WESTERN HALF BORING & TEST PIT LOCATION PLAN**

PROPOSED DEVELOPMENT  
568 & 570 BEDFORD ROAD  
NORTH CASTLE, NEW YORK

|             |       |         |            |  |
|-------------|-------|---------|------------|--|
| DRAWN       | MW    | SCALE   | 1" = 80'   | CARLIN-SIMPSON AND ASSOCIATES, LLC<br>61 Main Street<br>Sayreville, NJ 08872 |
| CHECKED     | RBS   | DATE    | 05.04.2023 |  |
| PROJECT NO. | 22-85 | DWG NO. | FIG - 1    |  |
| APPROVED    |       |         |            |  |





AREA HAS LIMITED SUBSURFACE DATA. LARGE CUTS ARE REQUIRED TO ACHIEVE PROPOSED GRADES. WE EXPECT ROCK CUTS IN THIS AREA OF UP TO 15-FEET. ADDITIONAL BORINGS AND TEST PITS SHOULD BE PERFORMED TO EVALUATE THE DEPTH OF THE UNDERLYING BEDROCK SURFACE.

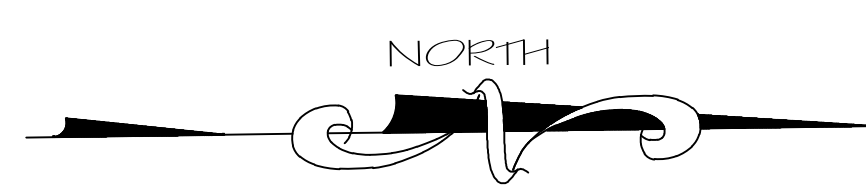
- GENERAL NOTES:**
1. GENERAL LAYOUT WAS OBTAINED FROM A DRAWING DATE 11-23-2020. LATEST REVISION DATED 05-09-2022, PREPARED BY JMC PLLC, ENTITLED 'SITE GRADING PLAN', DWG NO. C-200/201.
  2. BORING LOCATIONS ST-X'S PERFORMED IN AUGUST 2022 AND WERE LAID OUT IN THE FIELD BY CARLIN-SIMPSON & ASSOCIATES (CSA).
  3. BORINGS R-X'S AND B-1XX'S WERE PERFORMED IN AUGUST 2022 AND NOVEMBER 2022. BORINGS B-2XX'S WERE PERFORMED IN MARCH 2023 AT SURVEYED LOCATIONS.
  4. BORINGS R-X'S, B-1XX'S, B-2XX'S AND ST-X'S WERE PERFORMED BY ENVIRONMENTAL TECHNICAL DRILLING INC. UNDER THE FULL TIME INSPECTION OF CSA.
  5. TEST PITS DH-XX'S WERE PERFORMED BY THE SUMMIT CLUB MAINTENANCE PERSONNEL IN DECEMBER 2022 AND FEBRUARY 2023. TEST PITS WERE LAID OUT IN THE FIELD BY CARLIN-SIMPSON AND ASSOCIATES.
  6. LOCATIONS ARE APPROXIMATE.

- LEGEND:**
- - BORING LOCATION (R-X'S, B-1XX'S, ST-X'S, AND B-2XX'S).
  - - TEST PIT LOCATION (DH-XX'S).
  - - BORING LOCATION PERFORMED BY CSA IN DECEMBER 2022.
  - - TEST PIT LOCATION PERFORMED BY CSA IN JANUARY 2013.

**ROBERT B. SIMPSON, P.E.**  
PROFESSIONAL ENGINEER

**EASTERN BORING & TEST PIT LOCATION PLAN**

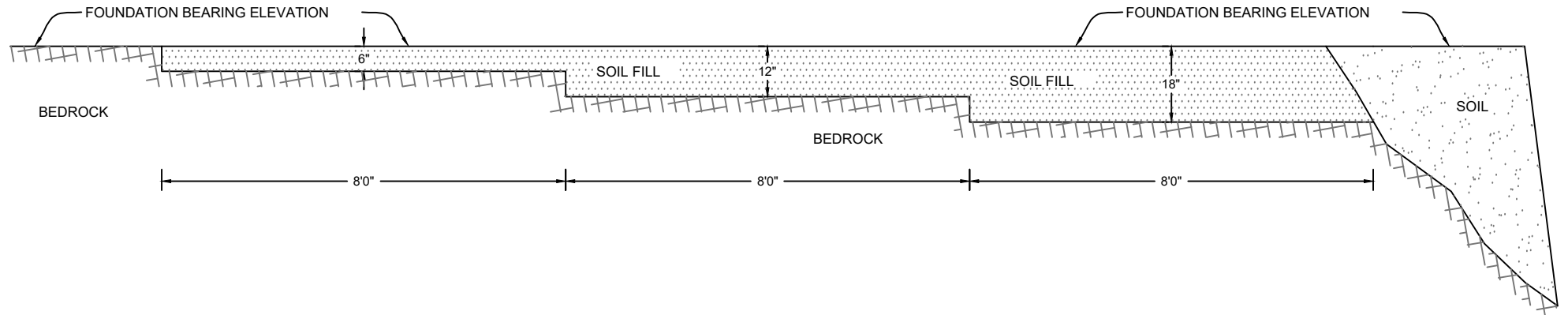
PROPOSED DEVELOPMENT  
568 & 570 BEDFORD ROAD  
NORTH CASTLE, NEW YORK



|             |       |         |            |  |
|-------------|-------|---------|------------|--|
| DRAWN       | MW    | SCALE   | 1" = 60'   | CARLIN-SIMPSON AND ASSOCIATES, LLC<br>61 Main Street<br>Sayreville, NJ 08872 |
| CHECKED     | RBS   | DATE    | 05.04.2023 |  |
| PROJECT NO. | 22-85 | DWG NO. | FIG - 2    |  |
| APPROVED    |       |         |            |  |



Consulting Geotechnical and Environmental Engineers



**NOTES:**

1. EXCAVATE ROCK IN A SERIES OF STEPS. EACH STEP SHALL BE 6-INCHES DEEP AND A MINIMUM OF 8- FEET IN LENGTH, FOR A TOTAL DISTANCE OF 24- FEET FROM EDGE OF SOIL/ROCK INTERFACE.
2. BACKFILL OVER-EXCAVATION WITH SOIL FILL. SOIL FILL SHALL BE PLACED IN MAXIMUM 6-INCH LAYERS AND EACH LAYER SHALL BE COMPACTED TO AT LEAST 95% OF ITS MAXIMUM MODIFIED DRY DENSITY (ASTM D1557).
3. SOIL FILL SHALL HAVE A MAXIMUM PARTICLE SIZE OF 1/2-INCH AND CONTAIN AT LEAST 15% BUT LESS THAN 30% BY WEIGHT PASSING A NO. 200 SIEVE.

**ROBERT B. SIMPSON, P.E.**  
PROFESSIONAL ENGINEER

LICENSE NO. \_\_\_\_\_ SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

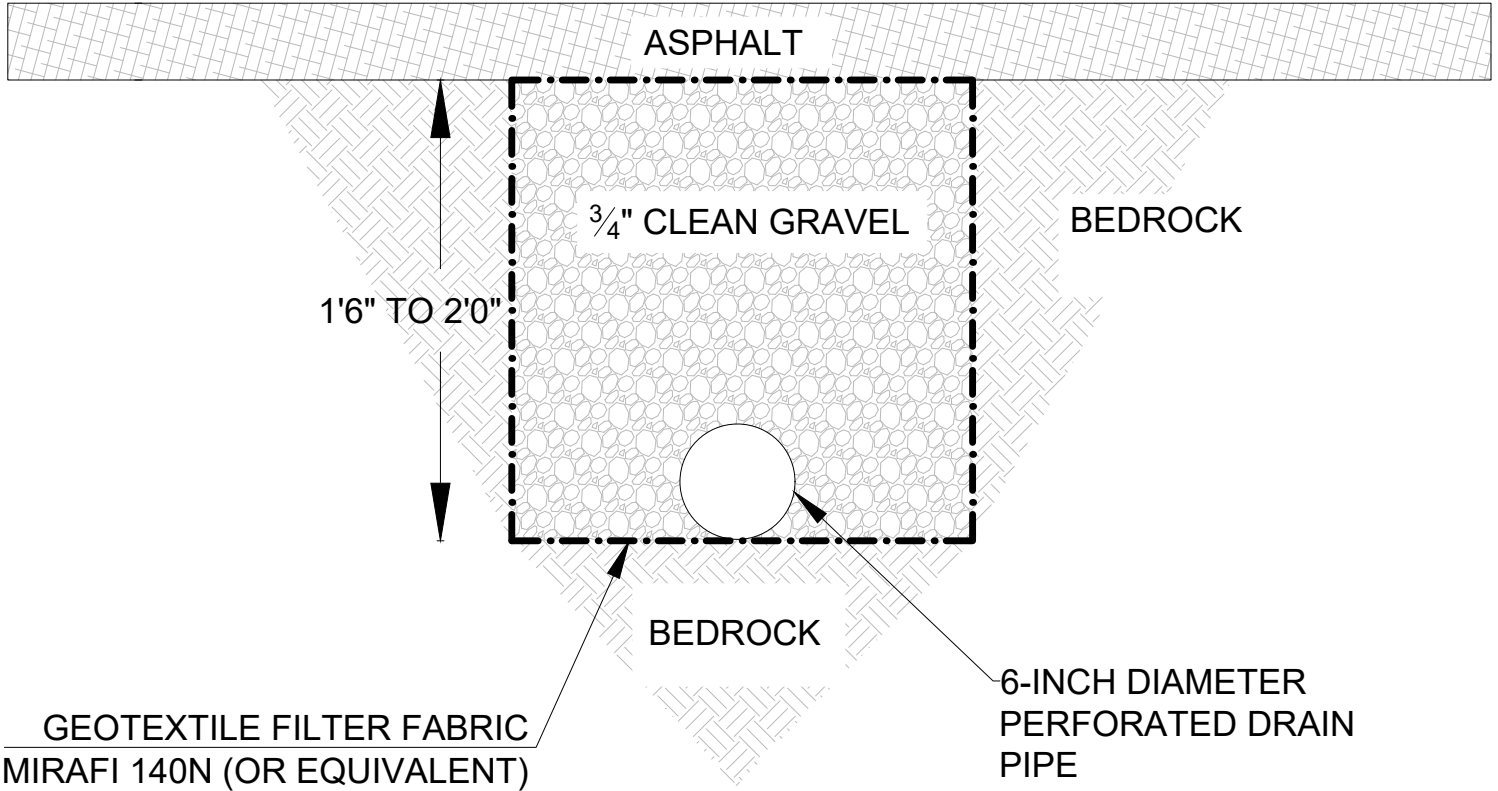
**TRANSITION ZONE DETAIL (ROCK TO SOIL)**

PROPOSED DEVELOPMENT  
568 AND 570 BEDFORD ROAD  
NORTH CASTLE, NEW YORK

|             |       |         |            |
|-------------|-------|---------|------------|
| DRAWN       | SR    | SCALE   | NTS        |
| CHECKED     | RBS   | DATE    | 05.17.2023 |
| PROJECT NO. | 22-85 | DWG NO. | FIG-3      |
| APPROVED    |       |         |            |

CARLIN-SIMPSON AND ASSOCIATES  
61 Main Street  
Sayreville, NJ 08872  
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Environmental Engineers





**ROBERT B. SIMPSON, P.E.**  
PROFESSIONAL ENGINEER

LICENSE NO. \_\_\_\_\_

SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

**TYPICAL UNDERDRAIN PIPE DETAIL**

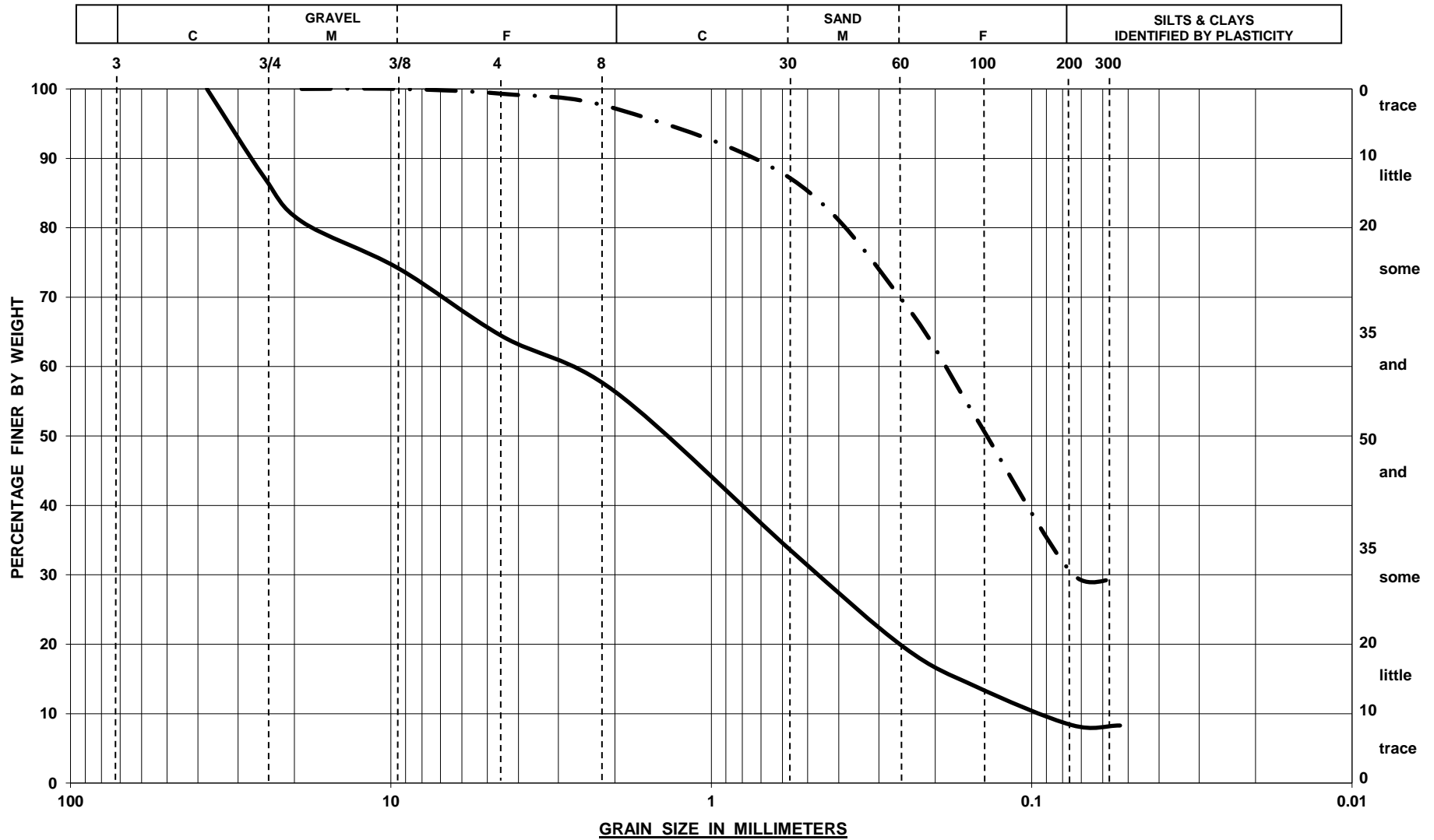
PROPOSED DEVELOPMENT  
568 & 570 BEDFORD ROAD  
NORTH CASTLE, NEW YORK

|             |       |         |            |
|-------------|-------|---------|------------|
| DRAWN       | CKA   | SCALE   | 1" = 10'   |
| CHECKED     | RBS   | DATE    | 05.30.2023 |
| PROJECT NO. | 22-85 | DWG NO. | FIG -4     |
| APPROVED    |       |         |            |

CARLIN-SIMPSON AND ASSOCIATES  
61 Main Street  
Sayreville, NJ 08872  
Consulting Geotechnical and  
Environmental Engineers

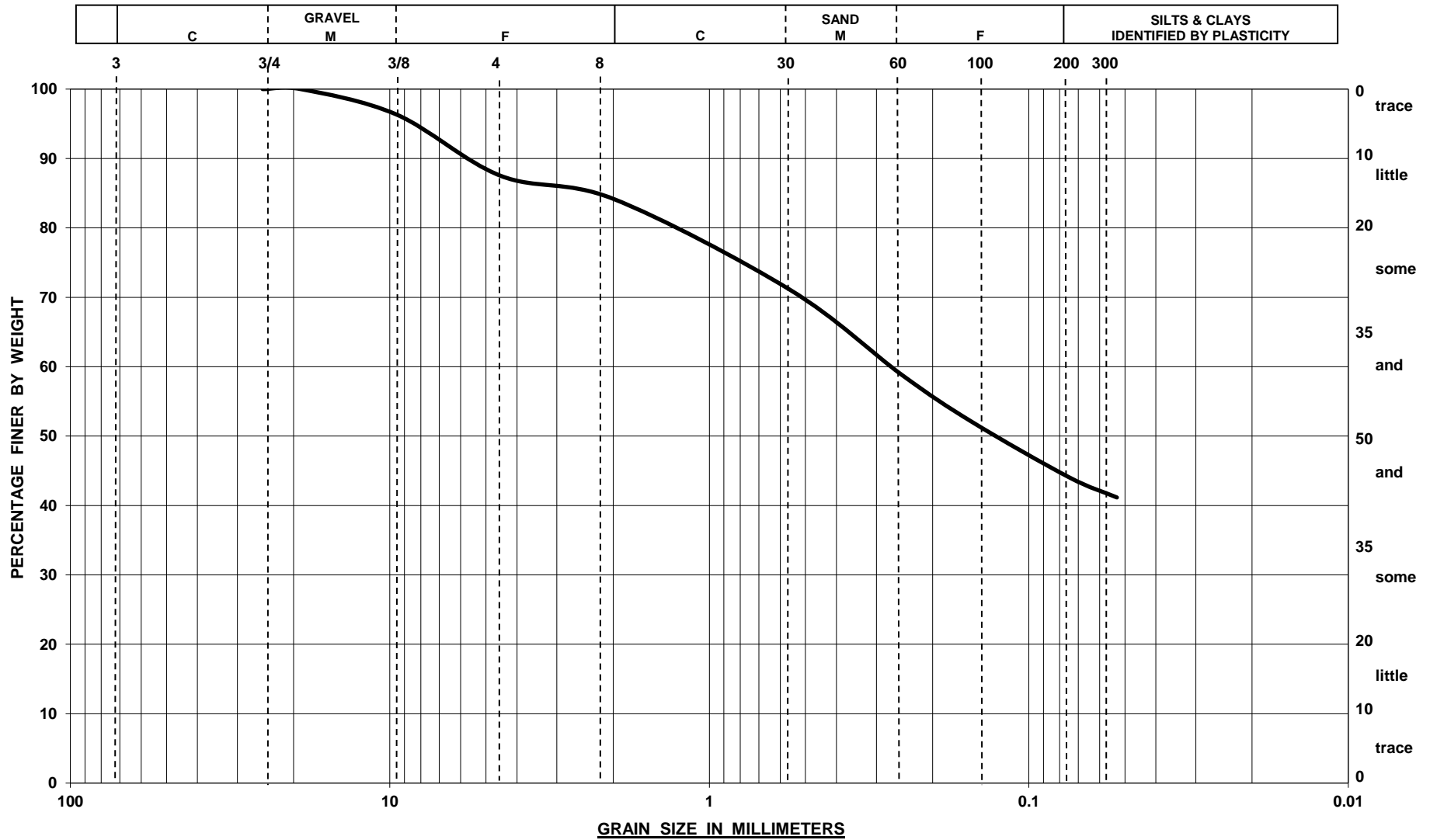


**SIEVE ANALYSIS**



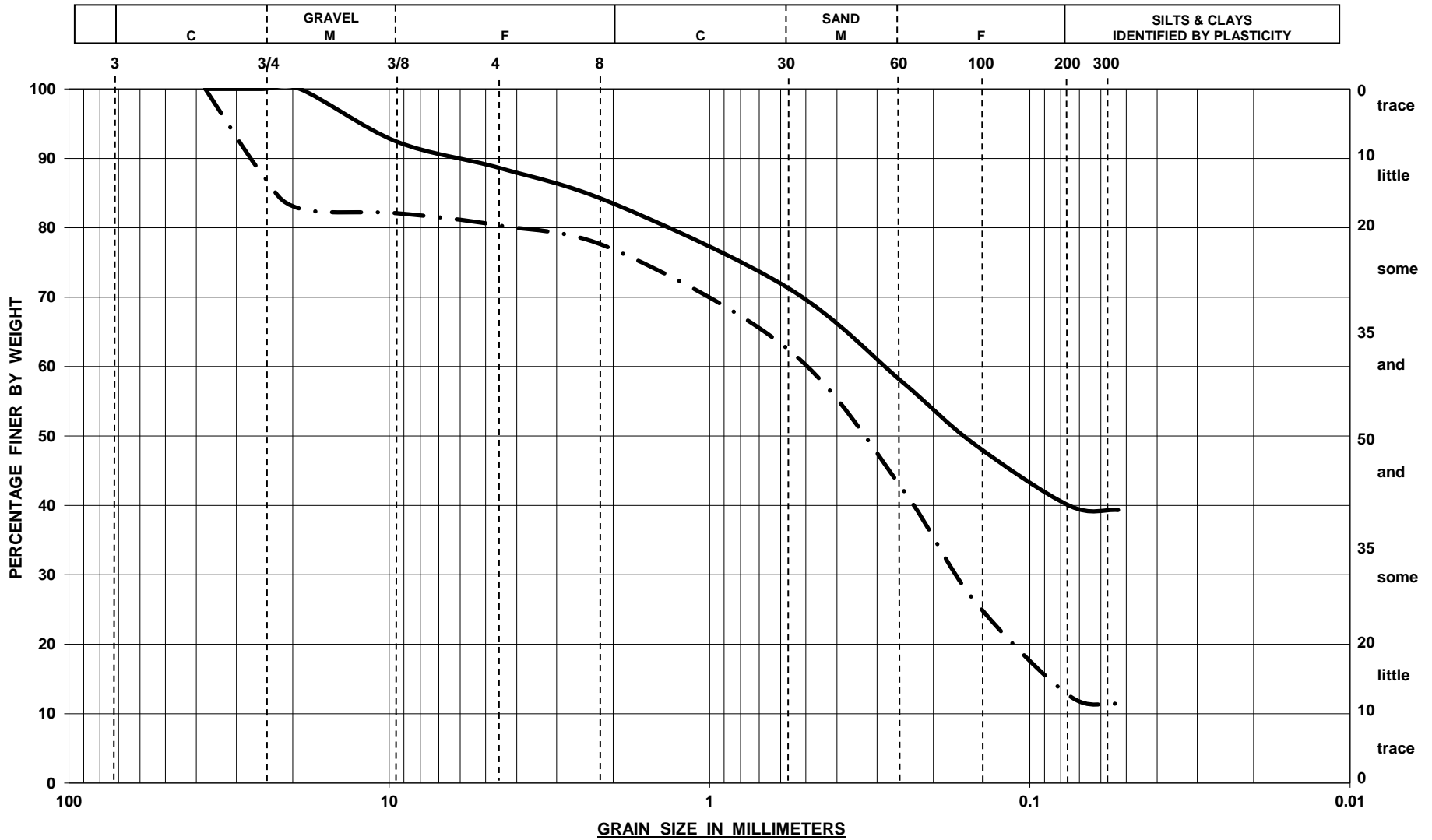
| SYMBOL | BORING | SAMPLE | DEPTH | DESCRIPTION  | NAT MC |
|--------|--------|--------|-------|--|--------|
| —      | R-1    | S-2    | 2'-4' | Brown coarse to fine Sand, trace (+) Silt, and coarse to fine Gravel     | 3.7%   |
| - ·    | R-2    | S-4    | 6'-8" | Brown coarse to fine SAND, some(+) Silt, trace (-) medium to fine Gravel | 7.6%   |

**SIEVE ANALYSIS**



| SYMBOL | BORING | SAMPLE | DEPTH | DESCRIPTION   | NAT MC |
|--------|--------|--------|-------|---|--------|
| —      | R-4    | S-1    | 0'-2' | Brown, orange coarse to fine Sand, and Silt, little medium to fine Gravel | 9.0%   |
|        |        |        |       |   |        |

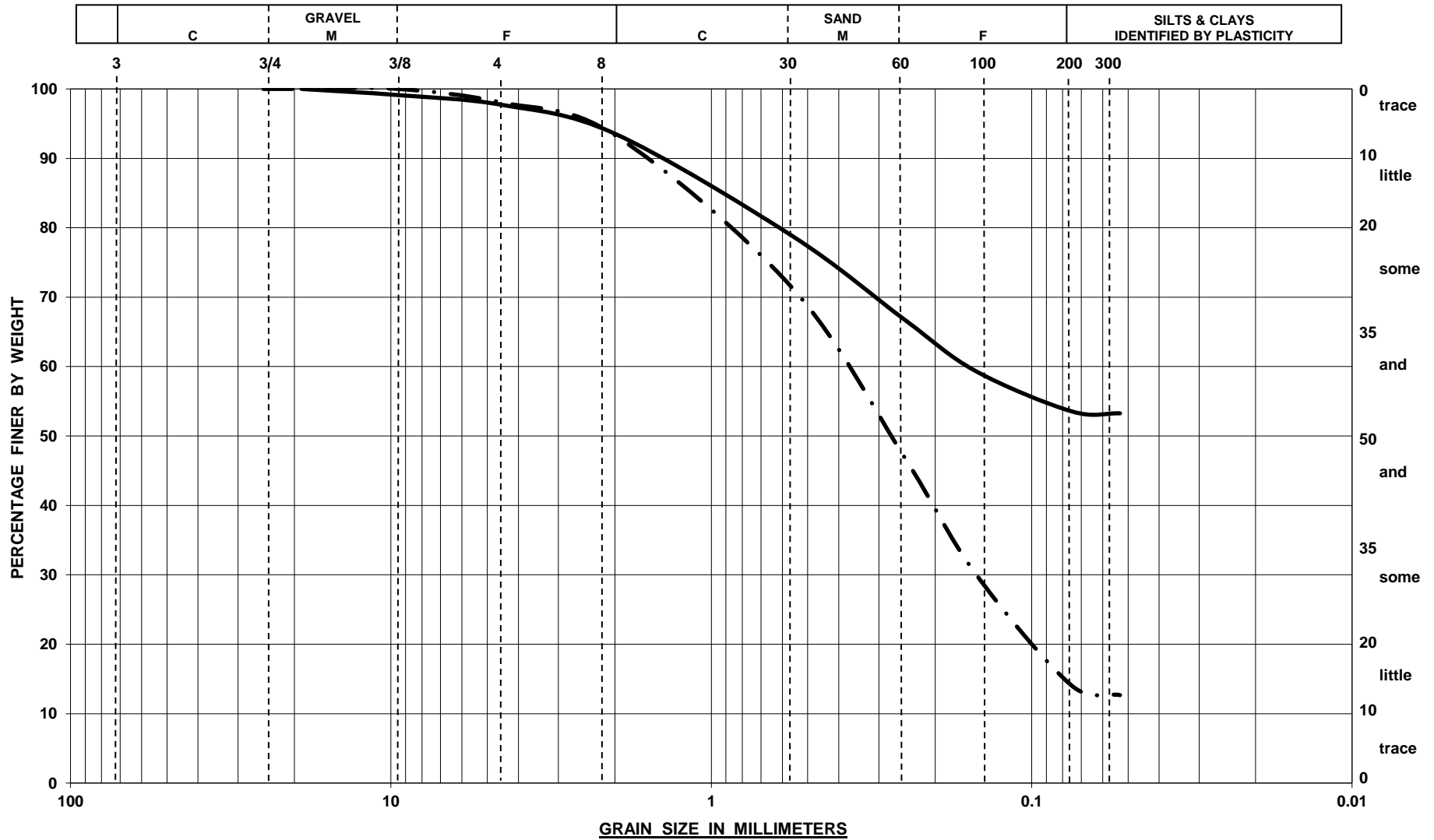
**SIEVE ANALYSIS**



| SYMBOL | BORING | SAMPLE        | DEPTH | DESCRIPTION  | NAT MC |
|--------|--------|---------------|-------|--|--------|
| —      | INF-C  | Perc Material | 3'0"  | Brown coarse to fine Sand, and(-) Silt, little medium to fine Gravel     | 19.5%  |
| - · -  | INF-D  | Perc Material | 5'3"  | Brown coarse to fine SAND, little(-) Silt, some(-) coarse to fine Gravel | 11.7%  |



**SIEVE ANALYSIS**



| SYMBOL | BORING | SAMPLE        | DEPTH | DESCRIPTION   | NAT MC |
|--------|--------|---------------|-------|---|--------|
| —      | DH-L   | Perc Material | 3'9"  | Brown SILT and(+), coarse to fine Sand, trace medium to fine Gravel | 21.0%  |
| - ·    | DH-P   | Perc Material | 3'3"  | Brown coarse to fine SAND, little Silt, trace medium to fine Gravel | 14.4%  |

18 -19 December 2012

**Borehole Permeability Test (B-4)**

Ground Surface Elevation: +628.0

Top of Casing Elevation: +631.5

Bottom of Test Hole Elevation: +621.0

Test Hole Depth from Ground Surface Elevation: 7'0" (84")

**Pre-Soak:**

Start Date: 18 Dec 2012      Time: 1545      Water Level\*: 4'4"

End Date: 19 Dec 2012      Time: 0900      Water Level\*: 7'1"

***33" drop H<sub>2</sub>O in 1035 minutes (17 hr. 15 min.) = 0.03 inches per minute***

**Test:**

Start Date: 19 Dec 2012      Time: 1000      Water Level\*: 4'3"

End Date: 19 Dec 2012      Time: 1515      Water Level\*: 5'3.5"

***12.5" drop H<sub>2</sub>O in 315 minutes (5 hr. 15 min.) = 0.04 inches per minute***

| <b>Time</b> | <b>Water Level*</b> | <b>Interval Water Level Drop (Inches)</b> | <b>Cumulative Water Level Drop (Inches)</b> |
|-------------|---------------------|---|---|
| 1000        | 4'3"                | 0   | 0   |
| 1100        | 4'6"                | 3   | 3   |
| 1200        | 4'8"                | 2   | 5   |
| 1300        | 4'10"               | 2   | 7   |
| 1400        | 5'1"                | 3   | 10  |
| 1515        | 5'3.5"              | 2.5                                       | 12.5  |

Water Level\* - Depth below top of casing (elevation +631.5)

Byrnwood Club Development  
Bedford Road  
Town of New Castle, NY  
(12-175)

3 January 2013

**Percolation Test P-1**  
**(Elevation +620)**

Test hole depth 42" from ground surface elevation

Pre-Soak

0-10 min, 22" drop of H<sub>2</sub>O (pipe drained)  
22" drop H<sub>2</sub>O in 10 minutes = 2.20 inches per minute

Test Run #1

5 min, 15" drop H<sub>2</sub>O (re-filled pipe)

Test Run #2

5 min, 14" drop H<sub>2</sub>O (re-filled pipe)

Test Run #3

5 min, 12" drop H<sub>2</sub>O (re-filled pipe)

Final Test Reading

Start @ 1245, 14" from top of pipe  
Finish @ 1300, 36" drop from top of pipe (pipe drained)  
***22" drop H<sub>2</sub>O in 15 minutes = 1.46 inches per minute***

**Percolation Hole P-2**  
**(Elevation + 612)**

Test hole depth 20" from ground elevation  
Groundwater @ 0'6" below surface  
Percolation test unable to be performed

3 January 2013

**Percolation Test P-3**  
**(Elevation + 616)**

Test hole depth 32" from ground surface elevation

Pre-Soak

0-24 min, 17" drop of H<sub>2</sub>O (pipe drained)  
17" drop H<sub>2</sub>O in 24 minutes = 0.71 inches per minute

Test Run #1

5 min, 5" drop H<sub>2</sub>O (re-filled pipe)

Test Run #2

5 min, 5" drop H<sub>2</sub>O (re-filled pipe)

Test Run #3

5 min, 4" drop H<sub>2</sub>O (re-filled pipe)

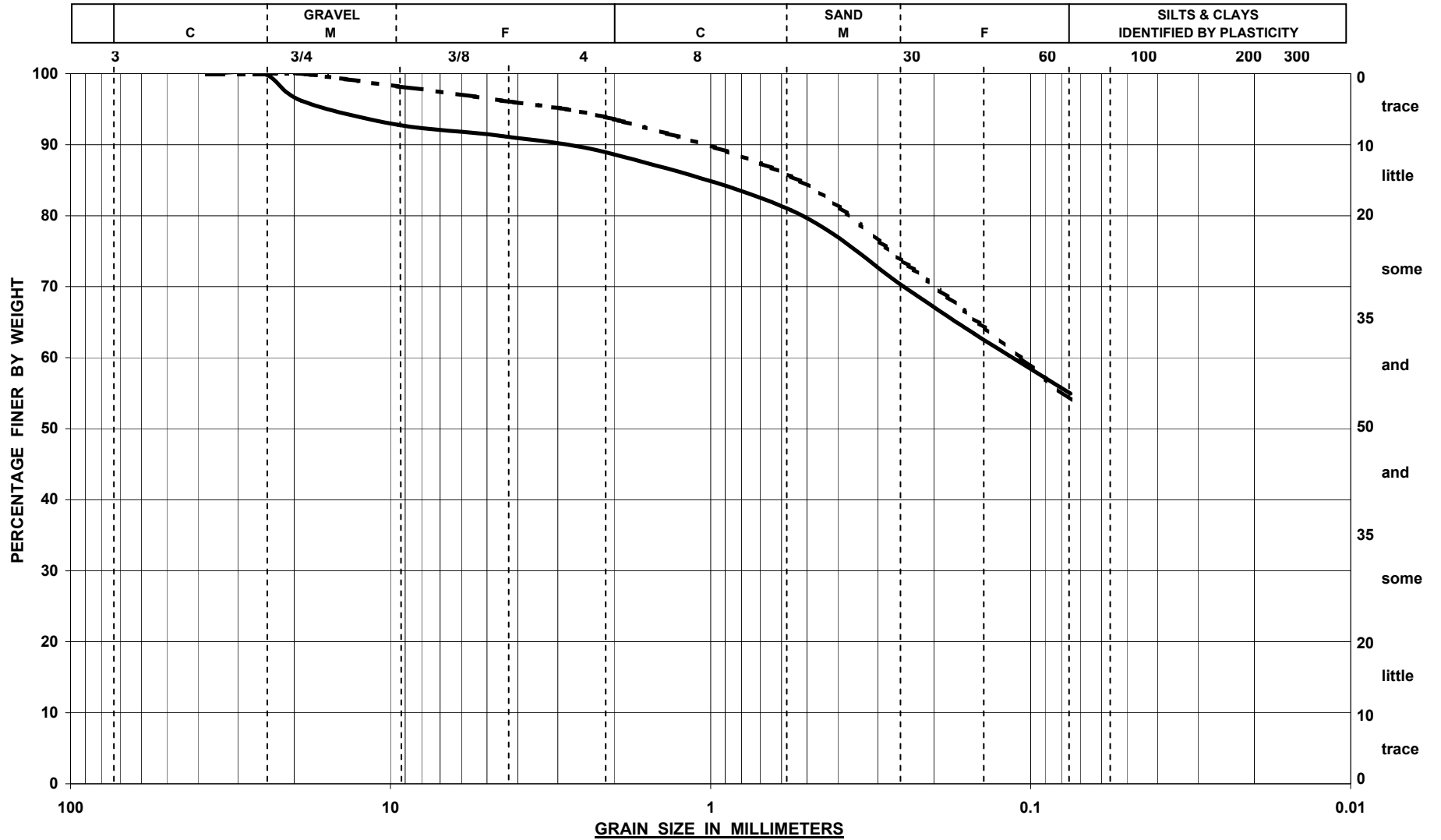
Final Test Reading

Start @ 1535, 15" from top of pipe  
Finish @ 1605, 28" drop from top of pipe  
*13" drop H<sub>2</sub>O in 30 minutes = 0.43 inches per minute*

**Percolation Hole P-4**  
**(Elevation + 615)**

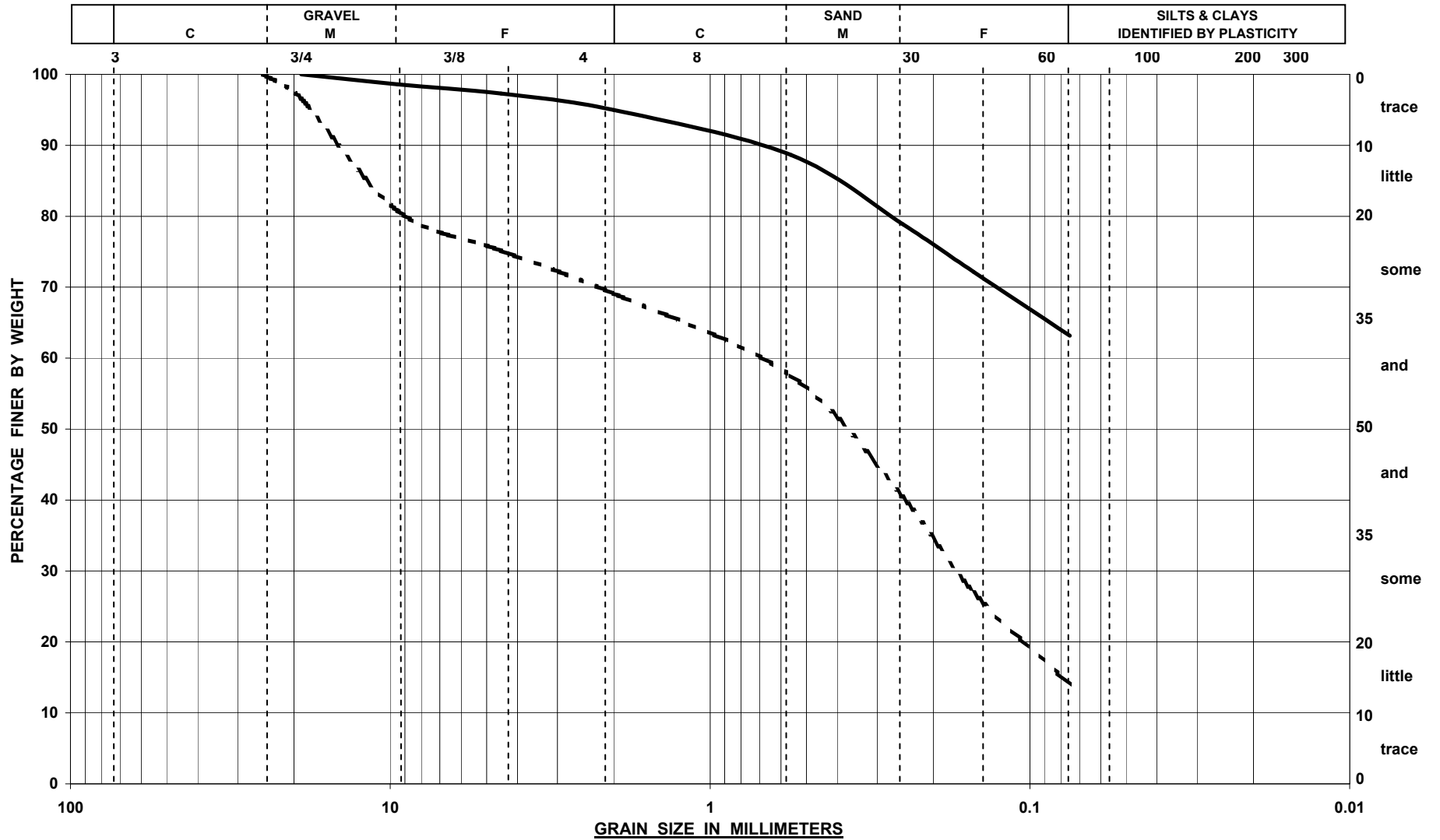
Test hole depth 24" from ground elevation  
Groundwater @ 1'10" below surface  
Percolation test unable to be performed

**SIEVE ANALYSIS**



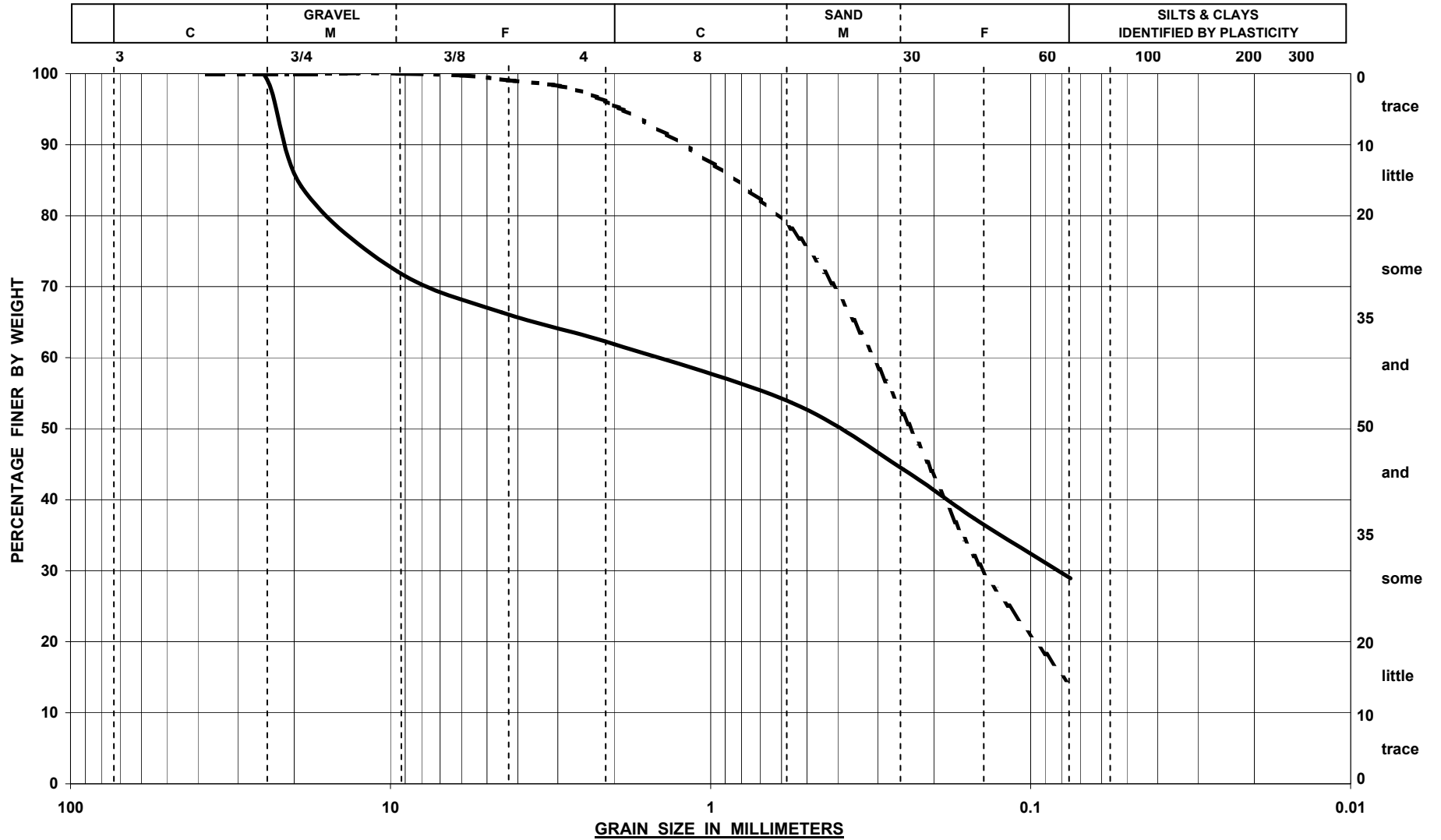
| SYMBOL | BORING | SAMPLE | DEPTH         | DESCRIPTION   | NAT MC |
|--------|--------|--------|---------------|---|--------|
| —      | B-1    | S-1    | 0' 0" - 2' 0" | Brown SILT and (+), coarse to fine Sand, little (-) medium to fine Gravel | 14.0%  |
| - -    | B-2    | S-2    | 2' 0" - 4' 0" | Brown SILT and (+), coarse to fine Sand, trace medium to fine Gravel      | 14.2%  |

**SIEVE ANALYSIS**



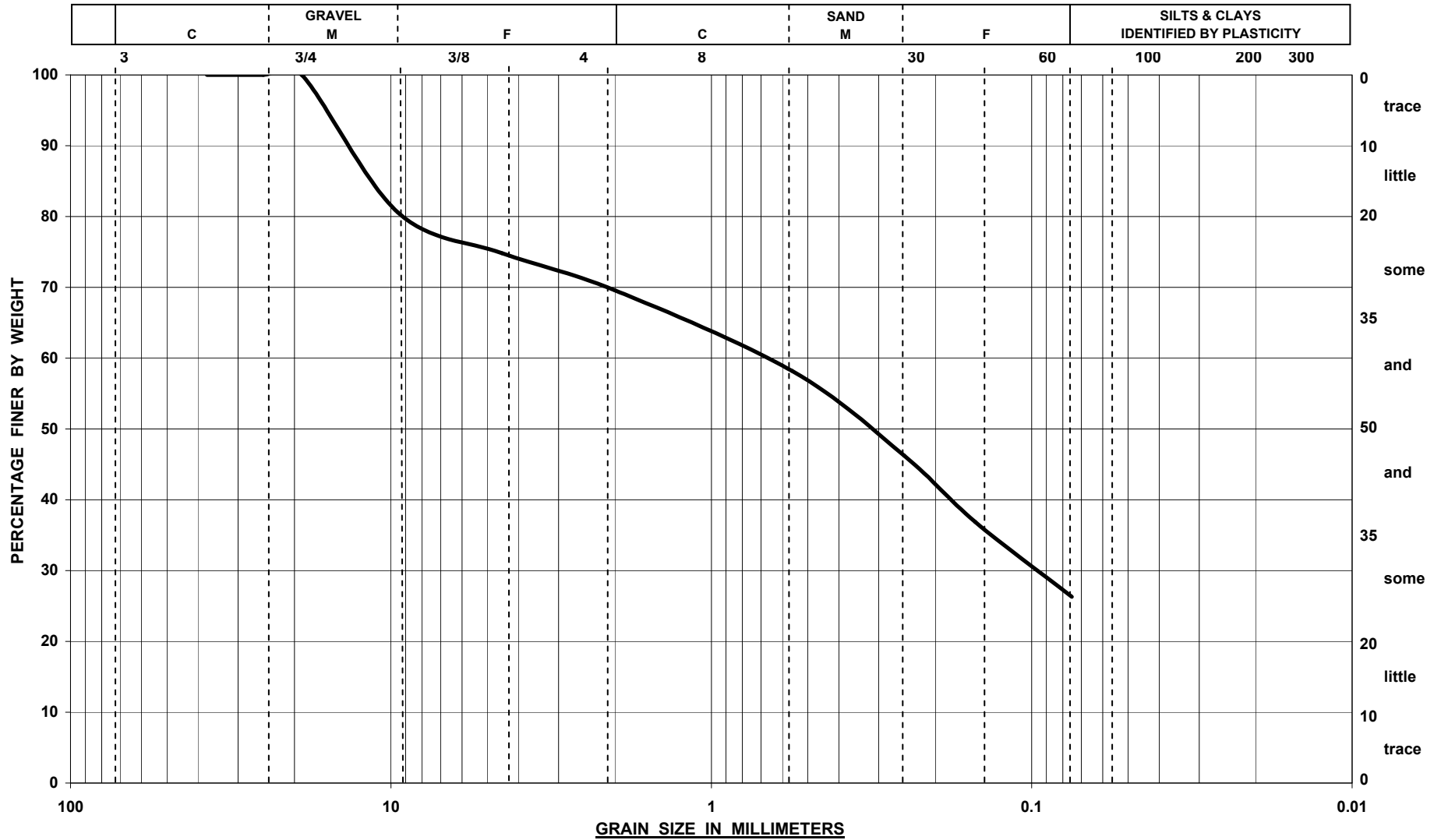
| SYMBOL | BORING | SAMPLE | DEPTH         | DESCRIPTION  | NAT MC |
|--------|--------|--------|---------------|--|--------|
| —      | B-3    | S-1    | 0' 0" - 2' 0" | Brown SILT and (-), coarse to fine Sand, trace medium to fine Gravel   | 24.2%  |
| - -    | B-4    | S-3    | 5' 0" - 7' 0" | Brown coarse to fine SAND, little Silt, some (+) medium to fine Gravel | 12.1%  |

**SIEVE ANALYSIS**



| SYMBOL | BORING | SAMPLE | DEPTH         | DESCRIPTION   | NAT MC |
|--------|--------|--------|---------------|---|--------|
| —      | B-6    | S-2    | 2' 0" - 4' 0" | Brown coarse to fine Sand, some Silt, and (-) coarse to fine Gravel | 9.9%   |
| - -    | B-7    | S-3    | 5' 0" - 7' 0" | Brown coarse to fine SAND, little Silt, trace fine Gravel           | 8.7%   |

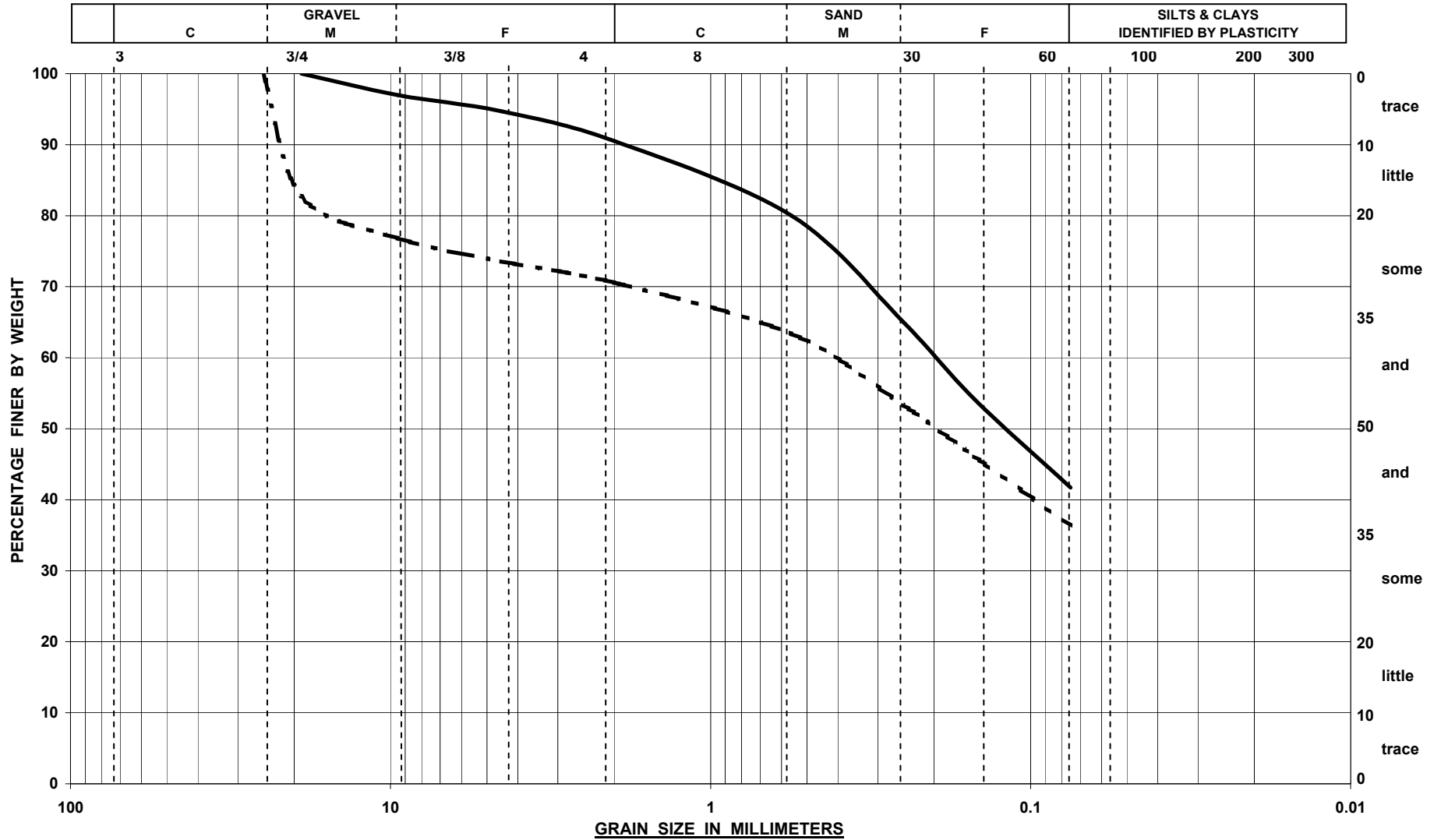
**SIEVE ANALYSIS**



| SYMBOL | BORING | SAMPLE | DEPTH         | DESCRIPTION   | NAT MC |
|--------|--------|--------|---------------|---|--------|
| —      | B-9    | S-2    | 2' 0" - 4' 0" | FILL (brown coarse to fine Sand, some Silt, some (+) medium to fine Gravel) | 15.0%  |
|        |        |        |               |   |        |

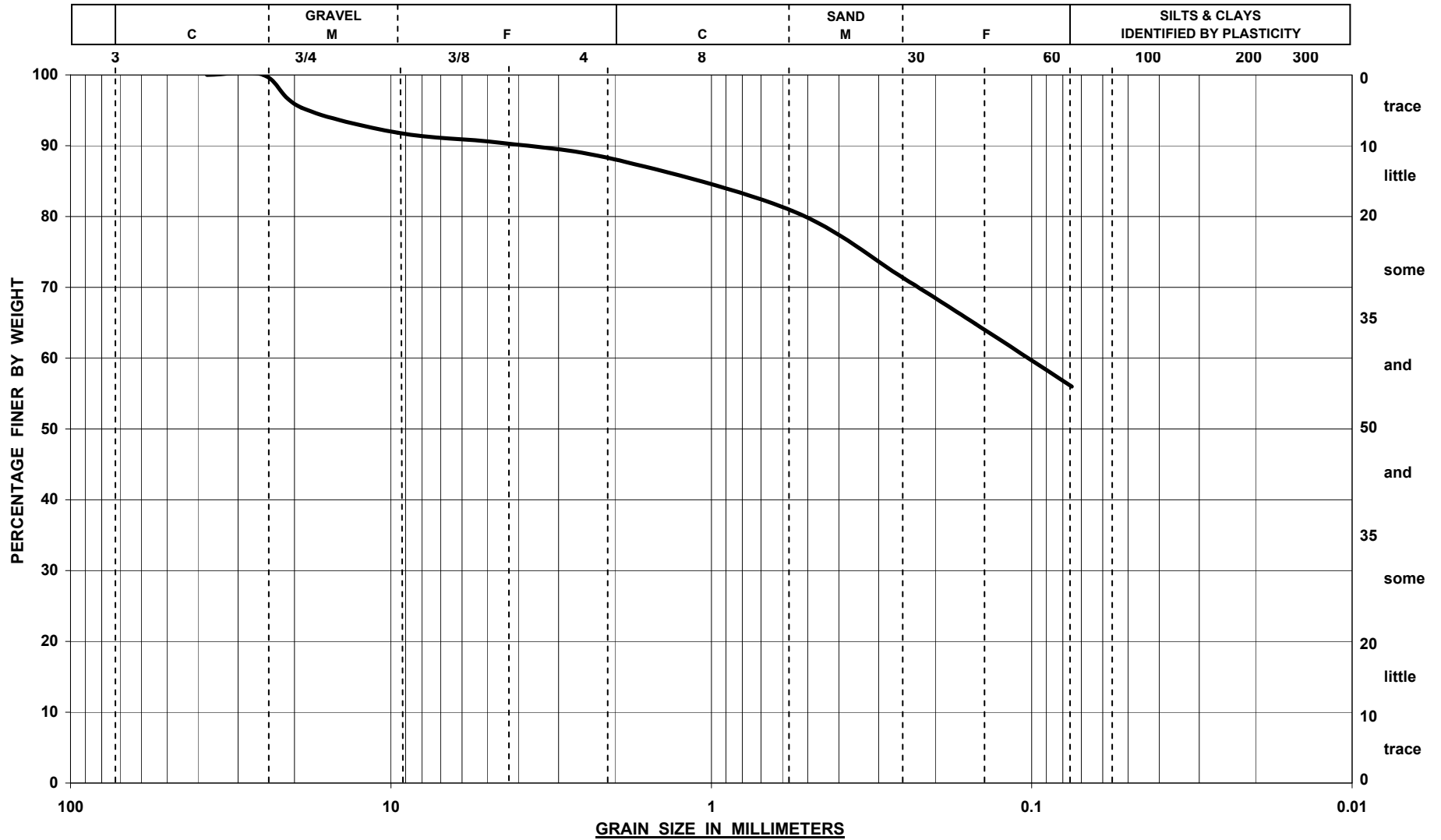


**SIEVE ANALYSIS**



| SYMBOL | Test Pit | SAMPLE | DEPTH | DESCRIPTION  | NAT MC |
|--------|----------|--------|-------|--|--------|
| —      | TP-1     | S-1    |       | Brown coarse to fine SAND, and Silt, trace (+) medium to fine Gravel | 18.2%  |
| - -    | TP-4     | S-1    |       | Brown coarse to fine Sand, and (-) Silt, some coarse to fine Gravel  | 14.0%  |

**SIEVE ANALYSIS**



| SYMBOL | Test Pit | SAMPLE | DEPTH          | DESCRIPTION   | NAT MC |
|--------|----------|--------|----------------|---|--------|
| —      | TP-18    | S-1    | 0' 10" - 7' 0" | Brown SILT and, coarse to fine Sand, little (-) medium to fine Gravel | 18.0%  |
|        |          |        |                |   |        |

**From:** [Paul R. Sysak, RLA, ASLA](#)  
**To:** [Chief@ArmonkFD.com](mailto:Chief@ArmonkFD.com); [Planning External Account](#); [Robert Melillo](#); [John Kellard](#); [Joe Cermele](#); [Danielle Cinguina](#); ["Roland Baroni - Town of North Castle \(rbaroni@sbrilaw.com\)"](#)  
**Cc:** [Jeff Mendell](#); ["Mark P. Weingarten"](#); [Peter J. Wise](#); [Ken Andersen](#); [John Torpy](#); [Jeff Scherr](#); [Anthony Guccione, Jr., RLA](#); [David P. Lombardi, PE](#); [Nick Coppola](#)  
**Subject:** The Summit Club at Armonk-Residential Phase (Armonk Fire Department Review to Satisfy Site Plan Approval Condition)[20101]  
**Date:** Tuesday, July 18, 2023 10:55:00 AM  
**Attachments:** [FW\\_ The Summit Club at Armonk \(Meeting Summary Discussion Emergency Access\)\[20101\].pdf](#)  
[FW\\_ The Summit.pdf](#)  
[image001.png](#)

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07/18/2023

Chief Cano,

Good morning and hope all is well.

We are working on The Summit Club at Armonk Residential Phase project and are writing regarding a condition of Site Plan Approval that requires feedback from the Armonk Fire Department. While we have not made a submission to you directly, we have previously coordinated with Chief Guolet (PDF's of our email correspondence are provided for your reference) who seemed satisfied with the proposal as it related to emergency response, etc.

Accordingly, we respectfully request you review the attached plans to satisfy the following Planning Board Approval condition:

*"The Applicant shall provide written comments from the Armonk Fire Department confirming that the proposed fire hydrant layout is acceptable to the Armonk Fire Department."*

Please click on the following link to access and download PDF's of the current site plans to expedite your review (emergency vehicle turning maneuvering plans are also included):

[2023-07-18\\_ ARMONK FIRE DEPARTMENT SUBMISSION](#)

Thank you in advance for your attention to this matter.

If you have questions or require additional information please contact our office at (914) 273-5225.

Sincerely,

PAUL R. SYSAK, RLA, ASLA  
Project Manager

**JMC**

## SITE DEVELOPMENT CONSULTANTS

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