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**TOWN OF NEWBURGH
PLANNING BOARD
TECHNICAL REVIEW COMMENTS**

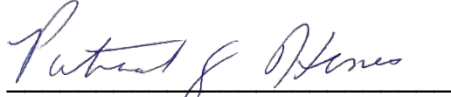
PROJECT: HAMMOND 5 LOT SUBDIVISION
PROJECT NO.: 20-08
PROJECT LOCATION: SECTION 1, BLOCK 1, LOT 63.23
REVIEW DATE: 12 MARCH 2021
MEETING DATE: 18 MARCH 2021
PROJECT REPRESENTATIVE: JONATHAN CELLA, P.E.

1. The project contains two (2) proposed duplex residences. Architectural drawings on the duplex residences have been provided. Board approval of the ARB is required.
2. Private roadway will require a road name approved by the Town Board.
3. The stormwater management system from the private roadway has been revised based on previous comments. Stormwater will be conveyed to the rear of proposed Lot #2, and ultimately discharge to the NYSDEC regulated wetlands.
4. The private road grading has been revised to identify swales on either side of the private roadway conveying runoff to the rear of the parcels. Previous comments had a concern regarding runoff to adjacent properties.
5. A cost estimate should be provided by the applicant's representative for the private roadway and stormwater improvements.
6. Private road access and maintenance agreement should be approved by Planning Board Attorney. This private road access and maintenance agreement should include operation and maintenance of the stormwater facilities.
7. Coverage under the NYSDEC construction stormwater permit is required prior to final signing of the plans.
8. Several of the lots identify shallow absorption trench systems proposed. The detail Sheet 6 of 7 identifies the shallow absorption trench details only for Lot #1. Conventional septic system designs are shown for Lots #2 & #3. Lots #4 and #5 are not addressed, and appear to require shallow absorption trench systems based on soil testing provided.

9. A Public Hearing is required for the subdivision. The Planning Board may wish to schedule a Public Hearing at next available date. This office would recommend a Negative Declaration based on a review of the environmental data submitted to date and a review of the SWPPP and plan sheets.

Respectfully submitted,

**McGoey, Hauser and Edsall
Consulting Engineers, D.P.C.**

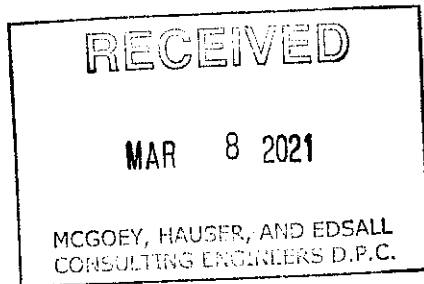


Patrick J. Hines
Principal

PJH/dns

March 4, 2021

Town of Newburgh Planning Board
Mr. John Ewasutyn, Chairman, and Members of the Planning Board
308 Gardnertown Road, Newburgh, New York 12550



c/o: Mr. Pat Hines
McGoey, Hauser, & Edsall Consulting Engineers, DPC
33 Airport Center Drive, Suite 202, New York 12553

Re: Letter of Transmittal
Town of Newburgh Planning Board Proj. No. 2020-08
Proposed Minor Residential Subdivision
for John and Carmen Hammond
Cronk Road (S/B/L: 1-1-63.23),
Town of Newburgh, Orange County, New York

Dear Chairman Ewasutyn and Members of the Planning Board:

For the above referenced residential subdivision in the Town of Newburgh please find the following enclosed:

1. Project plans titled "Minor Residential Subdivision for John and Carmen Hammond." The plans are seven (7) sheets and have a latest revision date of March 4, 2021.
2. Architectural Renderings for Two Family residence proposed on Lots 2 and 3. These plans are two (2) sheets dated March 4, 2021.
3. Cover letter dated March 4, 2021 describing proposed minor residential subdivision
4. SWPPP for John and Carmen Hammond dated March 4, 2021

At this time we respectfully request that the above referenced application be placed on the next available Planning Board agenda. Please do not hesitate to contact me with any questions and/or concerns related to this matter. Thank you.

Sincerely:

A handwritten signature in black ink, appearing to read "Jonathan Cella". The signature is fluid and cursive, written over a faint, illegible stamp or watermark.

Jonathan Cella, R.E.
51 Hunt Road, Wallkill, New York 12589
845-741-0363 -- jonathancellahotmail.com

March 4, 2021

To: Town of Newburgh Planning Board
John P. Ewasutyn, Chairman, and Planning Board Members
308 Gardnertown Road
Newburgh, New York 12550

Re.: **Town of Newburgh Planning Board Proj. No. 2020-08**
Proposed Minor Residential Subdivision
for John and Carmen Hammond
Cronk Road (S/B/L: 1-1-63.23),
Town of Newburgh, Orange County, New York

Dear Chairman and Planning Board Members:

Enclosed please find revised plans and submission letter for the above referenced project. These plans have been revised as follows per the initial Planning Board meeting and comment letter from MHE dated November 11, 2020:

1. The licensed land surveyor of record will sign the next submission.
2. Roadside drainage including a defined swale and catch basins has been added to the beginning of the roadway. The swale has been shown along the entire length of the roadway with the first catch basins at roadway station 200.
3. The entire storm drainage system has been revised such that the point discharge to the adjacent property has been eliminated and the drainage system has been extended to transport runoff to a proposed dry swale at the rear of lot 2.
4. Pipe sizes and slopes have been added to the subdivision plan on sheet 3. A table summarizing all storm water structures and piping have also been added to sheet 3.
5. Septic systems labeling have been expanded on sheet 3 such that SDS fields and septic tank sizes have been identified. A table has also been added that includes all inverts of SDS components. Fields on lots 2 and 3 have been revised to Eljen systems and therefore siphon chambers are no longer required for these lots.
6. INSTALLATION NOTE has been added to sheet 3 of project drawings requiring a design professional certify installation of the sewage disposal system.
7. Septic tank sizes have been added to the plan on sheet 3 so that they are clear t any developer.
8. The SWPPP has been revised to now include a summary of stormwater flows (Section 3.8) and stormwater calculations (Appendix).
9. Same response as number 3 above.

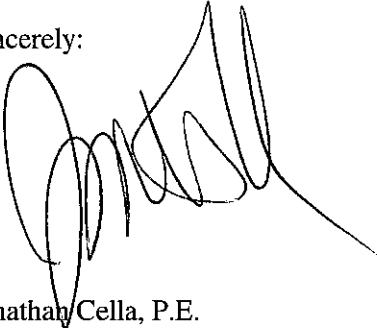
Cover Letter

Proposed Minor Residential Subdivision
for John and Carmen Hammond
Cronk Road (S/B/L: 1-1-63.23),
Town of Newburgh, Orange County, N.Y.
March 4, 2021
Page 1 of 2

10. Plans have been revised so that stormwater from the roadway and properties are collected and transported to a proposed dry swale on lot # 2.
11. This private road maintenance agreement will be provided in future submissions.
12. Roofing and siding materials for construction of the two family residences have been identified on the renderings of the proposed homes.

At this time we respectfully request that the submitted material be reviewed and the application be considered for the next available Town of Newburgh Planning Board agenda. Please do not hesitate to contact me with any questions or concerns related to this matter. Thank you.

Sincerely:

A handwritten signature in black ink, appearing to read 'Jonathan Cella', written over a large, faint circular stamp or watermark.

Jonathan Cella, P.E.
Project Engineer
51 Hunt Road, Wallkill, New York 12589
845-741-0363, jonathancella@hotmail.com

STORM WATER POLLUTION PREVENTION PLAN

PREPARED FOR

PROPOSED FIVE (5) LOT RESIDENTIAL
SUBDIVISION FOR
JOHN AND CARMEN HAMMOND
CRONK ROAD
TOWN OF NEWBURGH, ORANGE COUNTY NEW YORK

REPORT PREPARED BY:

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845 -741-0363

DATE PREPARED:

March 4, 2021



Table of Contents

1.0 PERMIT OVERVIEW AND REQUIREMENTS	4
1.1 P _{ERMIT} O _{VERVIEW}	4
2.0 SWPPP REVIEW, UPDATE.....	5
2.1 SWPPP R _{EVIEW}	5
2.2 SWPPP U _{PDATE}	5
3.0 SITE ASSESSMENT, EVALUATION AND PLANNING	6
3.1 P _{ROJECT} L _{OCATION}	6
3.2 P _{RE-DEVELOPMENT} C _{ONDITIONS}	6
3.3 P _{ROJECT} T _{YPE}	6
3.4 P _{ROJECT} S _{COPE}	6
3.5 H _{ISTORIC} P _{RESERVATION} D _{ETERMINATION}	6
3.6 R _{ECEIVING} W _{ATERS}	7
3.7 S _{OILS}	7
3.8 S _{TORMWATER} M _{ANAGEMENT}	7
4.0 EROSION AND SEDIMENT CONTROL.....	8
4.1 E _{ROSION} AND S _{EDIMENT} C _{ONTROL} P _{RACTICES}	8
4.2 E _{ROSION} AND S _{EDIMENT} C _{ONTROL} D _{RAWINGS}	9
4.3 C _{ONSTRUCTION} P _{HASING} P _{LAN} AND S _{EQUENCE} OF O _{PERATIONS}	9
4.4 E _{ROSION} AND S _{EDIMENT} C _{ONTROL} P _{RACTICE} I _{NSPECTION} S _{CHEDULE}	11
4.5 C _{ONTRACTOR} S _{EQUENCE} F _{ORM}	11
5.0 POST CONSTRUCTION STORMWATER MANAGEMENT PRACTICES	12
6.0 CONSTRUCTION WASTE	12
7.0 OFFSITE VEHICLE TRACKING	13
8.0 EROSION AND SEDIMENT CONTROL INSPECTION.....	13
9.0 TEMPORARY STABILIZATION FOR FROZEN CONDITIONS	15

10.0 STORMWATER MAINTENANCE PROCEDURES.....	16
11.0 SPILL PREVENTION PRACTICES.....	17
12.0 CERTIFICATIONS.....	16

Appendices

A Stormwater Management Calculations

B Location Map

C SWPPP Inspection Forms –SWPPP Inspection Report

D Other SWPPP Forms – Construction Sequence, SWPPP Plan Changes, Spill Response Form

1.0 PERMIT OVERVIEW AND REQUIREMENTS

1.1 Permit Overview

This Stormwater Pollution Prevention Plan (SWPPP) is prepared to inform the landowner and construction personnel of the measures to be implemented for controlling runoff and pollutants from the site during and after construction activities. The objective of this plan is to comply with the New York Department of Environmental Conservation (NYSDEC) State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Construction Activities, Permit No. GP-0-20-001 requirements. Any material conflicts between this plan and the site plans, specification or instructions, must be brought to the attention of the design professional. The project may have other permits and it is the responsibility of the owner and contractor to know and understand all permits.

The operator will be issued a bill from New York State for an annual fee for the open GP-0-20-001 permit. The operator will also be billed by New York State for a one time fee for the proposed disturbed soil area listed in the NOI, and finally a per acre fee for the proposed increased impervious area listed in the NOI.

The operator is responsible to maintain onsite in a secure location that is accessible during normal working hours to an individual performing a compliance inspection, the following information:

- ✓ the Notice of Intent (NOI),
- ✓ the NYS Department of Environmental Conservation NOI Acknowledgement Letter,
- ✓ the SWPPP,
- ✓ General Permit (included in the SWPPP),
- ✓ MS4 SWPPP Acceptance Form (where applicable), and ü All inspection reports.

Technical standards are detailed in the "New York State Standards and Specifications for Sediment and Erosion and Sediment Control", as well as illustrated on the Erosion and Sediment Control Plan Map included project drawings. The design of post-

construction stormwater control practices follow the guidance provided by “New York State Stormwater Management Design Manual.”

2.0 SWPPP REVIEW, UPDATE

2.1 SWPPP Review

Applicable Federal, State, and local regulatory agencies that have jurisdiction may elect to review this SWPPP and notify the permittee in writing that the SWPPP does not meet the requirements of their regulations. If the SWPPP needs to be revised, the permittee and the site contractor will make the required modifications within seven days of such notification and submit written certification to the notifying agency that the changes have been implemented. A copy of the SWPPP will be kept available on site for review by regulatory agencies, engineers, and subcontractors.

The Town of Newburgh is a MS4 Community.

2.2 SWPPP Update

The permittee identified in this SWPPP shall amend the SWPPP when there is a change in one or more of the following project components which has an effect on the potential for discharge of pollutants from stormwater runoff associated with construction activities:

- ✓ Design
- ✓ Construction
- ✓ Operation
- ✓ Maintenance

The SWPPP shall also be updated or amended under the following conditions:

- ✓ If measures identified in the SWPPP become ineffective in eliminating or minimizing pollutants from sources identified, or in achieving the general objectives of controlling stormwater pollution from permitted construction activity.
- ✓ To identify a new subcontractor that will implement any part of the SWPPP.

3.0 SITE ASSESSMENT, EVALUATION AND PLANNING

3.1 Project Location

This site is located on the north side of Cronk Road just east of the intersection of Madre Cristo Road and Cronk Road in the Town of Newburgh, Orange County, New York. The north side and north east side of the property are adjacent to the Town of Plattekill, Ulster County, New York.

See **Appendix C** for a general site location map.

3.2 Pre-Development Conditions

Currently, the site is a forested property with gently rolling topography. The subject property contains NYSDEC wetland NB-30 on its northern side and there are also off site federal wetlands just west of the subject property. The existing property is a total of 44.94 acres.

3.3 Project Type

This Project is a residential subdivision for single family and two family homes that will be serviced by individual wells and sewage disposal systems. All disturbance will be on site and will not require the expansion of any utilities including, water, sewer, or electric. Construction also includes a 650 linear foot (LF) private road starting at the property's frontage on Cronk Road. All driveways will be accessed by the private road.

3.4 Project Scope

This Project is for construction of five residential buildings that will include two family and single family residences serviced by individual wells and sewage disposal systems. The construction also includes a 650 LF private road. The private road will have minimal slopes and will be installed per Town private road standards.

3.5 Historic Preservation Determination

This project has no impact on historically significant lands and/or structures..

3.6 Receiving Waters

The closest receiving waters for the Project Site are NYSDEC wetland NB-30 which is on the northern end of this property and also a small ACOE wetland offsite to the west of the property, which also drains back to the subject property and directly to NB-30.

3.7 Soils

The USDA/NRCS soil survey for Orange County shows the soils in the Project Site are mixture of BnB (Bath-Nassau channery silt loams), ErB (Erie gravelly silt loam), ESB (Erie extremely stony soils), MdB (Mardin gravelly silt loam), NcA (Natchaug muck), and SXC (Swartswood and Mardin soils). Per investigation of the site, the developed area is moderately well drained, and the northern undeveloped wetland area of the site being poorly drained.

3.8 Stormwater Management

This project is a five (5) lot minor residential subdivision. Proposed development includes construction of a 600 L.F.

The total land disturbance associated with construction of the private road, all five (5) homes (including but not limited to their sewage disposal systems, wells, lawn areas, driveways, etc.), and stormwater management facilities disturbs a total of 4.8 acres. As this total development is less than five (5) acres and the entire property drains to NYSDEC wetland NB-30 a dry swale has been designed per NYSDEC guidelines to provide adequate storage for the entire Water Quality Volume.

To capture and transport the stormwater runoff to the proposed dry swale a series of open swales, catch basins, manholes, and underground piping has been provided along the roadway. The project only includes 8.67 acres of usable land that is not wetlands or wetland buffer. The Water Quality Volume required for this area is 0.16 acre feet and the dry swale provides 0.34 acre feet of storage volume.

Though storage volume for water quantity control is not required as the project disturbs less than five (5) acres of property the dry swale provides 1.5 ft of freeboard and therefore 1.5 ' of volume that will provide quantity control prior to

discharging to the wetlands. Per analysis it is determined that no downstream properties will be impacted by the minor increase in stormwater runoff rates as the wetland NB-30 provides adequate quantity controls.

4.0 EROSION AND SEDIMENT CONTROL

4.1 Erosion and Sediment Control Practices

If any elements of the design are not in conformance with the technical standard, identify them and include the reason for the deviation and provide information, which demonstrates that it is equivalent to the technical standards.

Temporary Structural Practices

- ✓ Topsoil Stockpile
- ✓ Silt Fence
- ✓ Stabilized Construction Entrance

Permanent Structural Controls

- ✓ Land Grading

Temporary Stabilization Practices (including vegetative practices)

- ü Seed and mulch bare soil areas within 14 days of disturbance unless construction will resume in that area within 21 days.

Permanent Stabilization Practices (including vegetative practices)

- ü Seed and mulch all disturbed areas. Slopes that are 3:1 or steeper should receive a Rolled Erosion Control Product (RECP), sodding, and or hydroseeding a homogenous mixture of wood fiber mulch with tackifying agent.

Refer to Grading Plans and the Erosion and Sedimentation Control Plan included in Project Plans which are a part of this report for detailed information on each practice.

4.2 Erosion and Sediment Control Drawings

Erosion and Sediment Control drawings are included in **Project Plans**.

Erosion and Sediment Control drawings must include the following:

- ü Total site area
- ✓ All improvements
- ✓ Areas of disturbance
- ✓ Areas that will not be disturbed
- ✓ Existing vegetation
- ✓ On-site and adjacent off-site surface waters
- ✓ Wetlands and drainage patterns affected by construction
- ✓ Existing and final slopes
- ✓ Material, waste, borrow or equipment storage areas located on adjacent properties
- ✓ Location of stormwater discharges
- ✓ Specific locations, sizes, and lengths of each erosion and sediment control practice
- ✓ Details of erosion and sediment control practices shall include dimensions, material specifications, installation details, operation and maintenance requirements. Include location and sizing of any temporary sediment basins and structural practices used to divert flows.

4.3 Construction Phasing Plan and Sequence of Operations

The Construction Phasing Plan is included in **Appendix C**.

- ✓ Temporary structural erosion controls will be installed prior to earthwork as per the attached plans.
- ✓ Areas to be undisturbed for more than 14 days will be temporarily stabilized by seeding.
- ✓ Disturbed areas will be reseeded and mulched immediately after final contours are re-established and no more than 14 days after the completion of construction at that site.
- ✓ Temporary erosion control devices will not be removed until the area served is stabilized by the growth of vegetation and the area is certified as being stabilized by the Erosion Control Superintendent.

Construction Activities	Reference Sheet Number	Start à Stop
<p>Sequence must include major items such as, but not limited to, clearing and grubbing, excavation and grading, utility and infrastructure installation and any other activity resulting in soil disturbance. Include installation of erosion and sediment control practices and timing of installation.</p>		
<p>Install erosion and sediment controls, staging area and construction fencing.</p>		<p>1 Week</p>
<p>Remove existing asphalt, curbs, signs, trees and relocate utilities.</p>		<p>3 Weeks</p>
<p>Excavate for building and perform site earthwork</p>		<p>3-4 Weeks</p>
<p>Building construction</p>		<p>18 months</p>
<p>Complete utility and stormwater installation</p>		<p>2 weeks</p>
<p>Install pavement, curbing and site utilities</p>		<p>2 weeks</p>
<p>Stabilize site, complete final punch list</p>		<p>2 weeks</p>

4.4 Erosion and Sediment Control Practice Inspection Schedule

- ✓ Silt fence – maintenance shall be performed as needed and material removed when “bulges” develop in the silt fence.
- ✓ Check dams – should be inspected after each rain event. Correct all damage immediately. If significant erosion has occurred between structures, a liner of stone or other suitable material should be installed. Remove sediment accumulated behind the dam as needed to allow channel to drain through the check dam and prevent large flows over the dam.
- ✓ Storm drain inlet protection (not including silt sacks) – inspect after each storm event. Remove sediment when 50 percent of the storage volume is achieved.
- ✓ Sediment trap – sediment shall be removed and the trap restored to the original dimensions when the sediment has accumulated to ½ of the design depth.
- ✓ Stabilized construction entrance – entrance shall be maintained in a condition which shall prevent tracking. This may require periodic top dressing with additional aggregate. All sediment tracked onto or spilled on public rights of way shall be removed immediately. When necessary, wheels must be cleaned to remove sediment prior to entrance on public rights of way. When washing is required, it shall be done in an area stabilized with aggregate.
- ✓ Rock outlet protection – once a riprap outlet has been installed, the maintenance needs are very low. It should be inspected after high flows for evidence of scour beneath the riprap. Repair should be immediate.

4.5 Contractor Sequence Form

The operator shall prepare a summary of construction status using the Construction Sequence Form (included in **Appendix E**) once every month. Significant deviations to the sequence and reasons for those deviations (i.e. weather, subcontractor availability, etc.), shall be noted by the contractor. The schedule shall be used to record the dates for initiation of construction, implementation of erosion control measures, stabilization, etc. A copy of this table will be maintained at the construction site and updated.

5.0 POST CONSTRUCTION STORMWATER MANAGEMENT PRACTICES

5.1 Stormwater Management Controls

If any elements of the design are not in conformance with the technical standard, identify them and include the reason for the deviation and provide information, which demonstrates that it is equivalent to the technical standards.

5.2 Post Construction Stormwater Management Drawings

Post construction stormwater management drawings are included in **Appendix C**.

Post construction stormwater management drawings must include the following:

- ✓ Specific locations, sizes, and lengths of each post construction stormwater management practice
- ✓ Details of post construction stormwater management practices shall include dimensions, material specifications, installation details, operation and maintenance requirements.

5.3 Hydraulic and Hydrologic Analysis

The proposed development is for residential development and disturbs less than 5 acres of land. Therefore, stormwater runoff modeling is not required for this project.

6.0 CONSTRUCTION WASTE

Waste Materials: All waste materials generated during construction will be disposed at a suitable landfill, or transfer station.

Hazardous Waste: The project will not be a generator of hazardous waste and it is not anticipated that any hazardous waste will be generated during construction. If there are any materials generated, a licensed hazardous waste carrier will be contracted to

dispose the hazardous material at a suitable disposal site. If hazardous materials are discovered during construction, the work will be stopped until the issue is resolved.

Waste: Portable sanitary facilities will be made available to construction personnel and will be serviced regularly.

7.0 OFFSITE VEHICLE TRACKING

Excavation equipment involved with the construction will remain on the project site and will not regularly egress or ingress the site. Any trucks used to bring in materials or remove materials via municipal paved roads will do so over a stabilized construction entrance. If any off-site vehicle tracking occurs, the contractor will be directed to initiate, street sweeping program in the immediate vicinity of the site.

8.0 EROSION AND SEDIMENT CONTROL INSPECTION

These are the inspection items that will be used to maintain erosion and sediment controls. The practices listed herein shall be implemented in accordance with the attached maintenance schedule.

A maintenance inspection report will be made after each inspection. The report form to be completed by the inspector is attached in **Appendix D**. Reports should be compiled and maintained on-site. All inspection materials are included in Appendix D of the onsite 3-ring binder.

- It is recommended that a rain gage be installed at the site.
- A qualified professional shall conduct an assessment of the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment controls described in the SWPPP and required by GP-0-10-001 have been adequately installed to ensure overall preparedness of the site for commencement of construction.
- ***Structural erosion controls and non-stabilized areas shall be inspected at least once every seven (7) days.*** The Inspection Form is located at the end of this report and shall be completed in full for every inspection performed.

- The day-to-day erosion control activities on the site will be monitored by the construction manager. The qualified inspector (as defined by the NYS DEC SPDES regulations) and his crews will make *at least one inspection every seven (7) days* of erosion control devices.
- All measures will be maintained in good working order; if repair is necessary, it will be initiated within 24 hours of report.
- Silt fence will be inspected for depth of sediment, ripped fabric, to see if the fabric is securely attached to the fence posts, and to see that the fence posts are firmly in ground.
- All temporary sediment basins should be inspected for stability and integrity *at least once every seven (7) days*. Any structural failure in sediment basins or trenches that serve them will be repaired within 24 hours after detection. All temporary sediment basins or trenches shall be cleaned out when one foot of sediment or half the design depth of the trap has accumulated. All spoils shall be removed to a stabilized upland area.
- Seeded and planted areas will be inspected for bare spots, washouts, and healthy growth. If necessary, spot reseeded or sodding will be implemented.
- Trained Contractor will be responsible for the implementation of the SWPPP. This person will be onsite when any soil disturbing activities are being conducted. This trained contractor cannot conduct the regular SWPPP compliance inspections. This trained contractor must have received 4 hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity. After receiving the initial training, the *trained contractor* shall receive 4 hours of training every 3 years. It can also mean an employee from the contracting (construction) company, that meets the *qualified inspector* qualifications (e.g. licensed Professional Engineer, Certified Professional in Erosion and Sediment Control

(CPESC), Registered Landscape Architect, or someone working under the direct supervision of, and at the same company as, the licensed Professional Engineer or Registered Landscape Architect, provided they have received 4 hours of Department endorsed training in proper erosion and sediment control principles from a Soil and Water Conservation District, or other Department endorsed entity).

9.0 TEMPORARY STABILIZATION FOR FROZEN CONDITIONS

The following temporary stabilization measures **MUST** be performed when construction is occurring during winter/frozen ground conditions. The following requirements do not supercede any other requirements of this SWPPP as they apply to non-frozen ground conditions.

- Perimeter erosion control **MUST** still be installed prior to earthwork disturbance as per this SWPPP.
- Any areas that cannot be seeded to turf by October 1 or earlier will receive a temporary seeding. The temporary seeding will consist of winter rye seeded at the rate of 120 pounds per acre (2.5 pounds per 1,000 square feet) or stabilized as per the temporary stabilization for winter construction/frozen conditions.
- Any area of disturbance that will remain inactive for a period of 14 consecutive days **MUST** be mulched. This includes any previously disturbed areas that are covered with snow.
- Mulch **MUST** consist of loose straw applied at the rate of 2 to 3 bales (90 to 100 pounds) per thousand square feet.
- Mulch **MUST** be applied uniformly over the area of bare soil or bare soil that is covered with snow. For the latter condition, mulch **MUST** be applied on top of snow.

- Using a tracked vehicle, mulch **MUST** be crimped into the bare soil/snow. The tracked vehicle **MUST** be driven across the mulched areas in at least two directions to maximize crimping of mulch into the soil/snow.
- If mulch gets blown off an area to a significant degree, the site inspector **WILL** require that an area be re-mulched in accordance with Items 2 through 5 above, and this area **WILL** be included on the inspection checklist for the next inspection.
- If a particular area repeatedly experiences loss of mulch due to wind, then the inspector **WILL** require that an alternative method be used to secure the mulch in place. Such alternatives may include the use of netting, tackifier or other methods deemed appropriate by the inspector.
- During periods when snow is melting and/or surface soils are thawing during daytime hours, mulched areas **MUST** be re-tracked (crimped) as per Item 5 above at least once every seven days, more frequently if directed by the inspector. Additional mulch may be required to obtain complete coverage of an area. Biodegradable erosion control matting may be required on steeper slopes.
- Additional stabilization measures for non-frozen ground conditions described in this SWPPP **WILL** be implemented at the time deemed appropriate by the inspector.

During the winter season, if a site has been stabilized and soil disturbing activities have been suspended for the winter, weekly inspections can be suspended. However, monthly inspections must still be conducted. All normal weekly inspections must resume when soil disturbing activities resume.

10.0 STORMWATER MAINTENANCE PROCEDURES

Temporary erosion and sediment controls and practices will need to be maintained frequently. It is the responsibility of the operator to inspect, and maintain the temporary controls so that they are working efficiently. The operator needs to pay

close attention to SWPPP Inspection Reports that will advise of needed maintenance. Captured sediment will have to be removed periodically from each practice in order for the control to function properly. It is likely that if temporary controls are not maintained properly, controls will fail creating a mass discharge of sedimentation to the water body previously protected. Periodically remove sediment from silt fences, check dams, silt sacks, inlet protections, and sediment traps. Replace top-soil, mulch and seed where seeding has been disturbed.

Post-construction maintenance for this project will consist of annual inspections of permanent stormwater management facilities and steep slopes. The following procedures must be performed twice annually on the appropriate structural stormwater management practice. These maintenance procedures are essential to assure continual performance of the stormwater management practices on your site.

Catch Basins and Drywells

- Sediment removal with a vacuum truck should be done at least once a year, preferably after spring runoff and then in early fall, or when they are at 50% capacity, whichever comes first.
- Any mechanical valves should be operated for inspection every two months.

11.0 SPILL PREVENTION PRACTICES

Good Housekeeping and Material Management Practices

The following good housekeeping and material management practices will be followed on site during the construction project to reduce the risk of spills or other accidental exposure of materials and substances to stormwater runoff.

- Materials will be brought on site in the minimum quantities required.

- All materials stored on site will be stored in a neat, orderly manner in their appropriate containers, and if possible, under a roof or other enclosure.
- Products will be kept in their original containers with the original manufacturer's label.
- Substances will not be mixed with one another unless recommended by the manufacturer.
- Whenever possible, all of a product will be used up before disposal.
- Manufacturer's recommendations for proper use and disposal will be followed.
- The construction manager or his designee will inspect regularly to ensure proper use and disposal of materials on site.
- The contractor shall prohibit washing of tools, equipment, and machinery in or within 100 feet of any watercourse or wetland.
- All above grade storage tanks are to be protected from vehicle damage by temporary barriers.

Inventory for Pollution Prevention Plan

The materials and substances listed below are expected to be on-site during construction.

- Petroleum for fueling vehicles will be stored in above ground storage tanks. Tanks will either be steel with an enclosure capable of holding 110% of the storage tank volume or of a Con-Store, concrete encased type typically employed by NYSDOT. Hydraulic oil and other oils will be stored in their original containers. Concrete and asphalt will be stored in the original delivery trucks.

- Fertilizer may be stored on site in its original container for a short period of time prior to seeding. Original containers will be safely piled on pallets or similar devices to protect from moisture.
- Paints and other similar materials will be stored in their original containers and all empty containers will be disposed of in accordance with label directions.
- Portable sanitary facilities, which contain chemical disinfectants (deodorants) will be located on-site, with the disinfectants held in the tank of the toilet.

Hazardous Products

These practices are used to reduce the risks associated with hazardous materials.

- Products will be kept in original containers unless they are not re-sealable.
- Original labels and material safety data sheets will be retained; they contain important product information.
- If surplus product must be disposed of, manufacturers' or local and State recommended methods for proper disposal will be followed.

Spill Prevention

The following product specific practices will be followed on site.

Petroleum Products:

- Construction personnel should be made aware that emergency telephone numbers are located in this SWPPP.
- The contractor shall immediately contact NYSDEC in the event of a spill, and shall take all appropriate steps to contain the spill, including construction of a dike around the spill and placing absorbent material over this spill.

- The contractor shall instruct personnel that spillage of fuels, oils, and similar chemicals must be avoided and will have arranged with a qualified spill remediation company to serve the site.
- Fuels, oils, and chemicals will be stored in appropriate and tightly capped containers. Containers shall not be disposed of on the project site.
- Fuels, oils, chemicals, material, equipment, and sanitary facilities will be stored/located away from trees and at least 100 feet from streams, wells, wet areas, and other environmentally sensitive sites.
- Dispose of chemical containers and surplus chemicals off the project site in accordance with label directions.
- Use tight connections and hoses with appropriate nozzles in all operations involving fuels, lubricating materials or chemicals.
- Use funnels when pouring fuels, lubricating materials or chemicals.
- Refueling and cleaning of construction equipment will take place in parking areas to provide rapid response to emergency situations.
- All on-site vehicles will be monitored for leaks and receive regular preventative maintenance to reduce the chance of leakage. Any vehicle leaking fuel or hydraulic fuel will be immediately scheduled for repairs and use will be discontinued until repairs are made.

Fertilizers:

- Fertilizer will be stored in its original containers on pallets with water resistant coverings.
- Proper delivery scheduling will minimize storage time.

- Any damaged containers will be repaired immediately upon discovery and any released fertilizer recovered to the fullest extent practicable.

Paints:

- All containers will be tightly sealed and stored when not required for use.
- Excess paint will not be discharged to the storm water system or wastewater system, but will be properly disposed of according to manufacturers' instructions or State and local regulations.

Concrete Trucks:

- Concrete trucks will be allowed to wash out or discharge surplus concrete or drum wash water only at designated locations on site.

Asphalt Trucks:

- Asphalt trucks shall not discharge surplus asphalt on the site.

Spill Control Practices

In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup. The construction manager responsible for the day-to-day site operations will be the spill prevention and cleanup coordinator. He will designate at least three other site personnel who will receive spill prevention and cleanup training. These individuals will each become responsible for a particular phase of prevention and cleanup. The names of responsible spill personnel will be posted in the material storage area and in the onsite construction office or trailer.

- Manufacturers' recommended methods for spill cleanup will be clearly posted and site personnel will be made aware of the procedures and the location of the information and cleanup supplies. Any spill in excess or suspected to be in excess of two gallons will be reported to the NYSDEC Regional Spill Response Unit.

Notification to the NYSDEC (1-800-457-7362) must be completed within two hours of the discovery of the spill.

- Materials and equipment necessary for spill cleanup will be kept in the material storage area onsite. Equipment and materials will include but not be limited to absorbent pads, brooms, dust pans, mops, rags, gloves, goggles, activated clay, sand, sawdust, and plastic and metal trash containers specifically for this purpose.
- All spills will be cleaned up immediately after discovery.
- The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contact with spilled substance.
- Spills of toxic or hazardous material will be reported to the appropriate State or local government agency, regardless of the size

Contractor and Subcontractor Certification

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

Name _____ Title _____

Signature _____ Date _____

Company Name _____
Address _____
City, State, Zip _____
Phone Number _____

SWPPP Components You Are Responsible For

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Name of Trained Individual Responsible for SWPPP Implementation _____ Title _____

Signature of Trained Individual Responsible for SWPPP Implementation _____ Date _____

Contractor and Subcontractor Certification

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

Name _____ Title _____

Signature _____ Date _____

Company Name _____
Address _____
City, State, Zip _____
Phone Number _____

SWPPP Components You Are Responsible For

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Name of Trained Individual Responsible for SWPPP Implementation _____ Title _____

Signature of Trained Individual Responsible for SWPPP Implementation _____ Date _____

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Name _____ Title _____

Signature _____ Date _____

Company Name _____
Address _____
City, State, Zip _____
Phone Number _____

SWPPP Components You Are Responsible For
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Name of Trained Individual Responsible for SWPPP Implementation _____ Title _____

Signature of Trained Individual Responsible for SWPPP Implementation _____ Date _____

Contractor and Subcontractor Certification

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

Name _____ Title _____

Signature _____ Date _____

Company Name _____

Address _____

City, State, Zip _____

Phone Number _____

SWPPP Components You Are Responsible For

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Name of Trained _____

Individual Responsible for SWPPP Implementation _____ Title _____

Signature of Trained _____

Individual Responsible for SWPPP Implementation _____ Date _____

Contractor and Subcontractor Certification

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

Name _____ Title _____

Signature _____ Date _____

Company Name _____
Address _____
City, State, Zip _____
Phone Number _____

SWPPP Components You Are Responsible For

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Name of Trained Individual Responsible for SWPPP Implementation _____ Title _____

Signature of Trained Individual Responsible for SWPPP Implementation _____ Date _____

Appendix A
Stormwater Calculations

Hammond Residential Subdivision:

The following are calculations for water quality volume to be provided on site for stormwater runoff prior to runoff discharging to the on site NYSDEC wetland NB-30 and its adjacent on the northern side of the property.

The below calculations have been prepared per Chapter 4 of the New York State Stormwater Management Design Manual (January 2015).

Water Quality Volume (WQv)

A = Site (contributory) area in acres = 8.67 acres

I = Impervious Cover (percent) = 12%

$R_v = 0.05 + 0.009I = 0.16$

P = 90 % Rainfall event per figure 4.1 = 1.4 inches

$WQv \text{ (acre feet)} = [(P)(R_v)(A)] / 12 = 0.16 \text{ acre feet}$

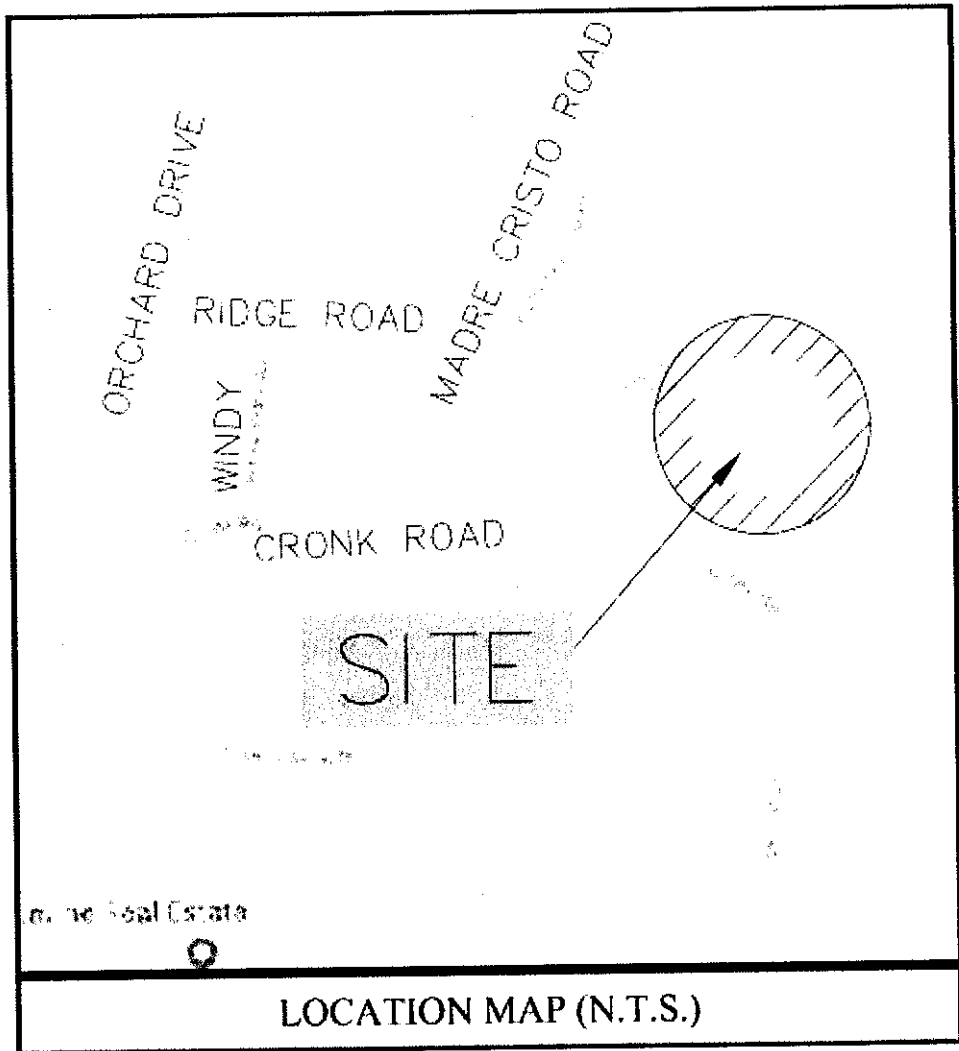
Dry Swale Volume Calculations

ELEV	AREA (SF)	AVERAGE AREA (SF)	HEIGHT (FT)	VOLUME (ACFT)	CUM. VOLUME (ACFT)
532	1190				0
		1877.5	1	0.04	
533	2565				0.04
		3252.5	1	0.07	
534	3940				0.12
		4377.5	1	0.10	
535	4815				0.22
		5252.5	1	0.12	
536	5690				0.34

WQv provided at Elevation 534.5 (Cumulative Volume = 0.17 ACFT)

Therefore 1.5' freeboard is provided above WQv Elevation

Appendix B
Location Map



LOCATION MAP (N.T.S.)

Appendix C
SWPPP INSPECTION FORM

**HAMMOND RESIDENTIAL SUBDIVISION
WEEKLY SWPPP INSPECTION REPORT**

Inspector Name:	Date:
Signature (required):	Time:
Weather:	Inspection #:
Soil Conditions (dry, saturated, etc):	

Note: Digital photos, with date stamp required for all practices requiring corrective action, before and after, to be attached to the inspection report.

YES NO N/A

- 1.** Routine Inspection. Date of last inspection: _____
- 2.** Inspection following rain event. Date/time of storm ending: _____
Rainfall amount: _____
Recorded by: _____
- 3.** Is this a final site inspection?
- 4.** Has site undergone final stabilization?

If so, have all temporary erosion and sediment controls been removed?

Site Disturbance (Indicate Locations on Plan)

YES NO N/A

- 1.** Areas previously disturbed, but have not undergone active site work in the last 14 days?
- 2.** Areas disturbed within last 14 days?
- 3.** Areas expected to be disturbed in next 14 days? **4.** Do areas of steep slopes or complex stabilization issues exist?
If "YES" explain:
- 5.** Are there currently more than 5 acres of disturbed soil at the site? If so make sure there is an approval letter from NYS DEC.

Additional Comments: _____

Inspection of Erosion and Sediment Control Devices

	Type of Control Device	Accumulation (if any) in %	Repairs/Maintenance Needed
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

Stabilization/Runoff

YES NO N/A

- 1. Are all existing disturbed areas contained by control devices? Type of devices:
- 2. Are there areas that require stabilization within the next 14 days? Specify Area:
- 3. Have stabilization measures been initiated in inactive areas?
- 4. Is there current snow cover or frozen ground conditions?
- 5. Rills or gullies?
- 6. Slumping/deposition?
- 7. Loss of vegetation?
- 8. Lack of germination? 9. Loss of mulching?
-

Receiving Structures/Water Bodies (Indicate locations where runoff leaves the project site on the site plan)

YES NO N/A

- 1. Surface water swale or natural surface waterbody? If natural waterbody:
Is waterbody located onsite, or adjacent to property boundary?
- 2. Municipal or community system?
Inspect locations where runoff from project site enters the receiving waters and indicate if there is evidence of:
 - Rills or gullies?
 - Slumping/deposition?
 - Loss of vegetation?
 - Undermining of structures?
 - Was there a discharge into the receiving water on the day of inspection?
 - Is there evidence of turbidity, sedimentation, or oil in the receiving waters?

Additional Comments: _____

Description of condition: _____

- a.
- b.
- c.
- d.
- e.
- f.

Inspection of Post-Construction Stormwater Management Control Devices

	Type of Control Device	Phase of Construction	Repairs/Maintenance Needed
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____

General Site Condition

YES NO N/A

- 1.** Have action items from previous reports been addressed?
- 2.** Does routine maintenance of protection components occur on a regular basis?
- 3.** Does cleaning and/or sweeping affected roadways occur, at minimum, daily?
- 4.** Is debris and litter removed on a monthly basis, or as necessary?
- 5.** Is the site maintained in an orderly manner?

Contractors progress over last 7 days: _____

Anticipated work to be begun in the next 7 days: _____

Additional Comments:

Visual Observations

YES NO N/A

- 1.** All erosion and sediment control measures have been installed/constructed?
- 2.** All erosion and sediment control measures are being maintained properly?

SUMMARY OF ACTION ITEMS TO REPAIR/REPLACE/MAINTAIN/CORRECT DEFICIENCIES

Action Reported To (no signature required):

Company:

Appendix D

Other SWPPP Forms

The operator shall prepare a summary of construction status using the Construction Sequence Form below once every month. Significant deviations to the sequence and reasons for those deviations (i.e. weather, subcontractor availability, etc.), shall be noted by the contractor. The schedule shall be used to record the dates for initiation of construction, implementation of erosion control measures, stabilization, etc. A copy of this table will be maintained at the construction site and updated in addition to the individual Inspection Reports completed for each inspection.

Construction Sequence Form

Construction Activities (Identify name of planned practices)	Date Complete
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	

12.

**STORM WATER POLLUTION PREVENTION PLAN PLAN CHANGES,
AUTHORIZATION, AND CHANGE CERTIFICATION**

CHANGES REQUIRED TO THE POLLUTION PREVENTION PLAN:

REASONS FOR CHANGES:

REQUESTED BY: _____

DATE: _____

AUTHORIZED BY: _____

DATE: _____

CERTIFICATION OF CHANGES:

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

SIGNATURE: _____

DATE: _____

SPILL RESPONSE REPORT

Within 1 hour of a spill discovery less than 2 gallons in volume the following must be notified:

Steve Cowan
518-629-7356

Within 1 hour of a spill discovery greater than 2 gallons the following must be notified:

Steve Cowan 518-629-7356
NYSDEC Spill Response Hotline 1-800-457-7362
Spill Response Contractor

Material Spilled:

Approximate Volume: _____

Location:

Distance to nearest down gradient drainage:

Distance to nearest down gradient open water:

Temporary control measures in place:

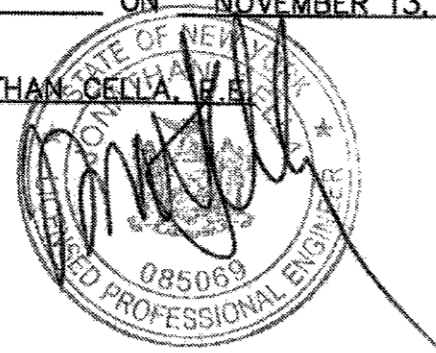
NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION

THE FRESHWATER WETLAND BOUNDARY AS REPRESENTED ON THESE PLANS ACCURATELY DEPICTS THE LIMITS OF FRESHWATER WETLAND NB-30 AS DELINEATED BY MICHAEL NOWICKI ON NOVEMBER 13, 2019

DEC STAFF: Michael J. 2/24/20

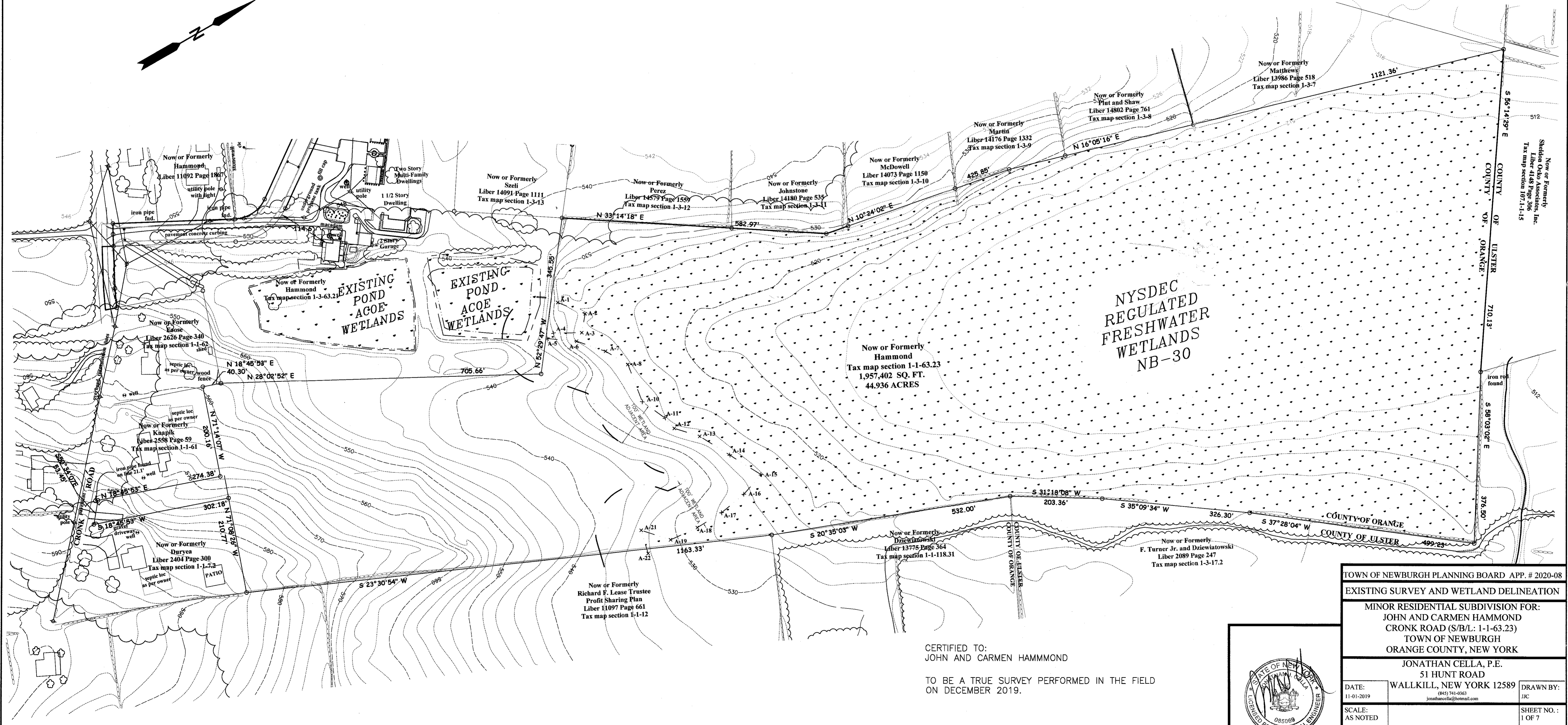
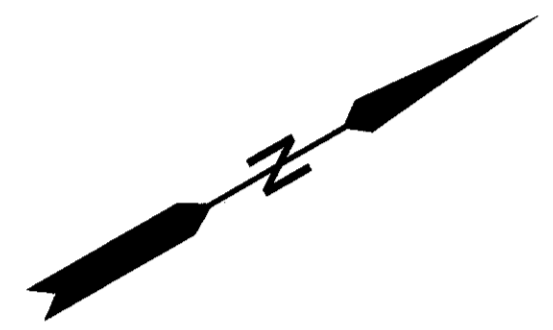
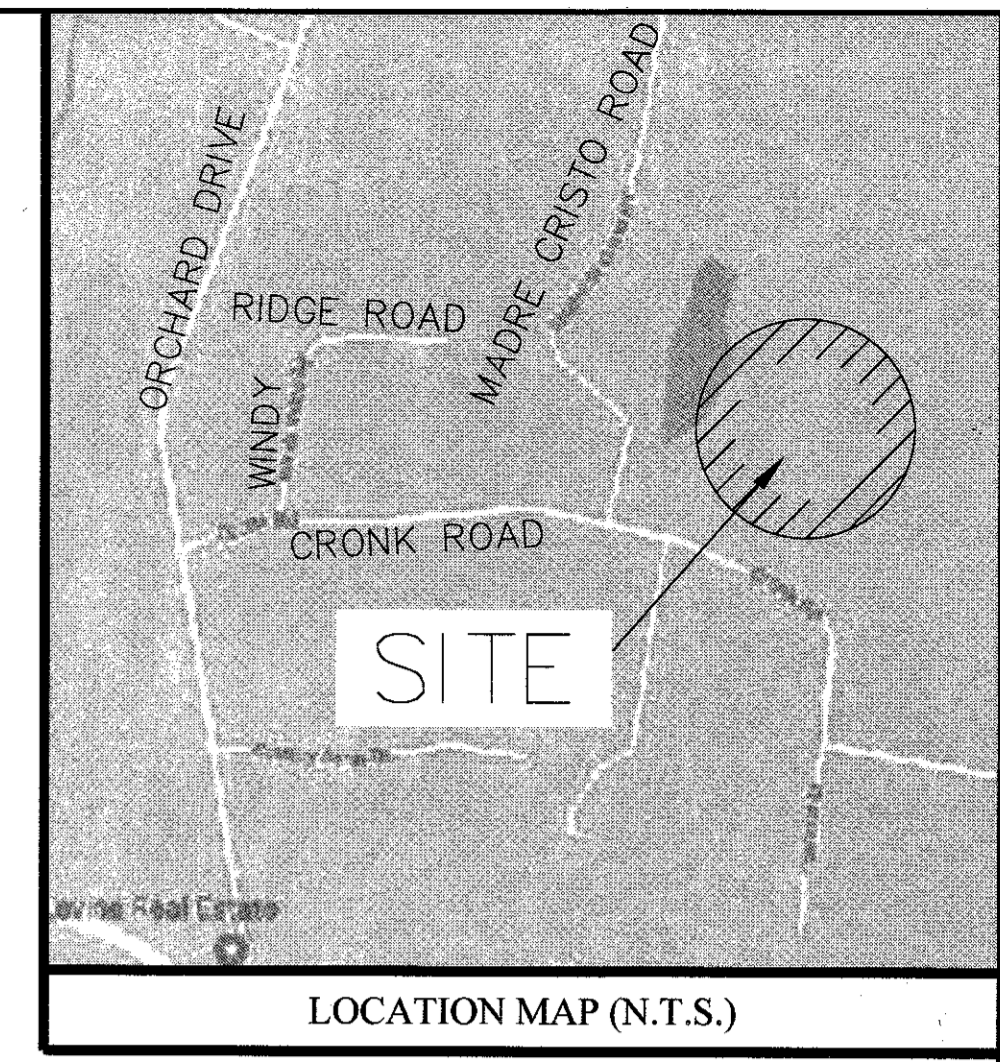
ENGINEER: JONATHAN CELLA, P.E.

DATE VALID: 2/24/2020 EXPIRATION DATE: 2/24/2025 SEAL



WETLAND BOUNDARY DELINEATIONS AS VALIDATED BY THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION REMAIN VALID FOR FIVE (5) YEARS UNLESS EXEMPT ACTIVITIES, AREA HYDROLOGY, OR LAND USE PRACTICE CHANGE (e.g., AGRICULTURAL TO RESIDENTIAL) AFTER FIVE (5) YEARS THE BOUNDARY MUST BE REVALIDATED BY DEC STAFF. REVALIDATION MAY INCLUDE A NEW DELINEATION AND SURVEY OF THE WETLAND BOUNDARY. ANY PROPOSED CONSTRUCTION, GRADING, FILLING, EXCAVATING, CLEARING OR OTHER REGULATED ACTIVITY IN THE FRESHWATER WETLAND OR WITHIN 100 FEET OF THE WETLAND BOUNDARY AS DEPICTED ON THIS PLAN REQUIRES A PERMIT FROM THE NYS DEPARTMENT OF ENVIRONMENTAL CONSERVATION UNDER ARTICLE 24 OF THE ENVIRONMENTAL CONSERVATION LAW (FRESHWATER WETLANDS ACT) PRIOR TO COMMENCEMENT OF WORK.

SURVEY REFERENCE
ALL EXISTING WETLAND FLAGS A1 THROUGH A22 HAVE BEEN FIELD SURVEYED BY GARY RICH, L.L.S. ON DECEMBER 2019.



CERTIFIED TO:
JOHN AND CARMEN HAMMOND

TO BE A TRUE SURVEY PERFORMED IN THE FIELD
ON DECEMBER 2019.

GARY RICH, P.L.S.
N.Y.S. LIC. No. 050354



JONATHAN CELLA, P.E.
N.Y.S. P.E. LIC. NO. 085069

TOWN OF NEWBURGH PLANNING BOARD APP. # 2020-08		
EXISTING SURVEY AND WETLAND DELINEATION		
MINOR RESIDENTIAL SUBDIVISION FOR: JOHN AND CARMEN HAMMOND CRONK ROAD (S/B/L: 1-1-63.23) TOWN OF NEWBURGH ORANGE COUNTY, NEW YORK		
JONATHAN CELLA, P.E. 51 HUNT ROAD WALKKILL, NEW YORK 12589		
DATE: 11-01-2019	(845) 741-0563 jonathancell@icloud.com	DRAWN BY: JIC
SCALE: AS NOTED		SHEET NO. : 1 OF 7
REVISIONS: 1. 01/23/2020: PER WETLAND DELINEATION 2. 05/28/2020: IN HOUSE REVISIONS 3. 10/27/2020: PER TOWN COMMENTS 4. 03/04/2021: PER TOWN COMMENTS		

ZONING INFORMATION:
AR DISTRICT
LOTS 1, 4, & 5 SINGLE FAMILY RESIDENTIAL

	MINIMUM REQUIRED	LOT # 1 PROPOSED	LOT # 4 PROPOSED	LOT # 5 PROPOSED
LOT AREA (SQUARE FEET)	40,000 S.F.	78,207 S.F. = 1.80 ACRES	62,870 S.F. = 1.44 ACRES	67,714 S.F. = 1.55 ACRES
LOT WIDTH (FEET)	150	333 ±	302 ±	295 ±
LOT DEPTH (FEET)	150	194 ±	208 ±	210 ±
FRONT YARD (FEET)	50'	50' MIN.	50' MIN.	50' MIN.
REAR YARD (FEET)	50'	50' MIN.	50' MIN.	50' MIN.
1-SIDE YARD (FEET)	30'	30' MIN.	30' MIN.	30' MIN.
BOTH SIDE YARDS (FEET)	80'	80' MIN.	80' MIN.	80' MIN.
HABITABLE FLOOR AREA PER DWELLING UNIT (SQUARE FEET)	900 S.F.	900 S.F. MIN.	900 S.F. MIN.	900 S.F. MIN.
LOT BUILDING COVERAGE (%)	10%	<10%	<10%	<10%
BUILDING HEIGHT (FEET)	35'	<35'	<35'	<35'
LOT SURFACE COVERAGE (%)	20%	<20%	<20%	<20%

ZONING INFORMATION:
AR DISTRICT
LOTS 2 & 3 MULTI-FAMILY RESIDENTIAL W/TWO DWELLING UNITS PER LOT

	MINIMUM REQUIRED	LOT # 2 PROPOSED	LOT # 3 PROPOSED
LOT AREA (SQUARE FEET)	100,000 S.F.	142,506 S.F. = 3.27 ACRES	1,606,105 S.F. = 36.87 ACRES
LOT WIDTH (FEET)	200'	528 ±	2,174 ±
LOT DEPTH (FEET)	150'	175 ±	248 ±
FRONT YARD (FEET)	50'	50' MIN.	50' MIN.
REAR YARD (FEET)	40'	40' MIN.	40' MIN.
1-SIDE YARD (FEET)	30'	30' MIN.	30' MIN.
BOTH SIDE YARDS (FEET)	80'	80' MIN.	80' MIN.
HABITABLE FLOOR AREA PER DWELLING UNIT (SQUARE FEET)	900 S.F.	900 S.F. MIN.	900 S.F. MIN.
LOT BUILDING COVERAGE (%)	20%	<20%	<20%
BUILDING HEIGHT (FEET)	35'	<35'	<35'
LOT SURFACE COVERAGE (%)	40%	<40%	<40%

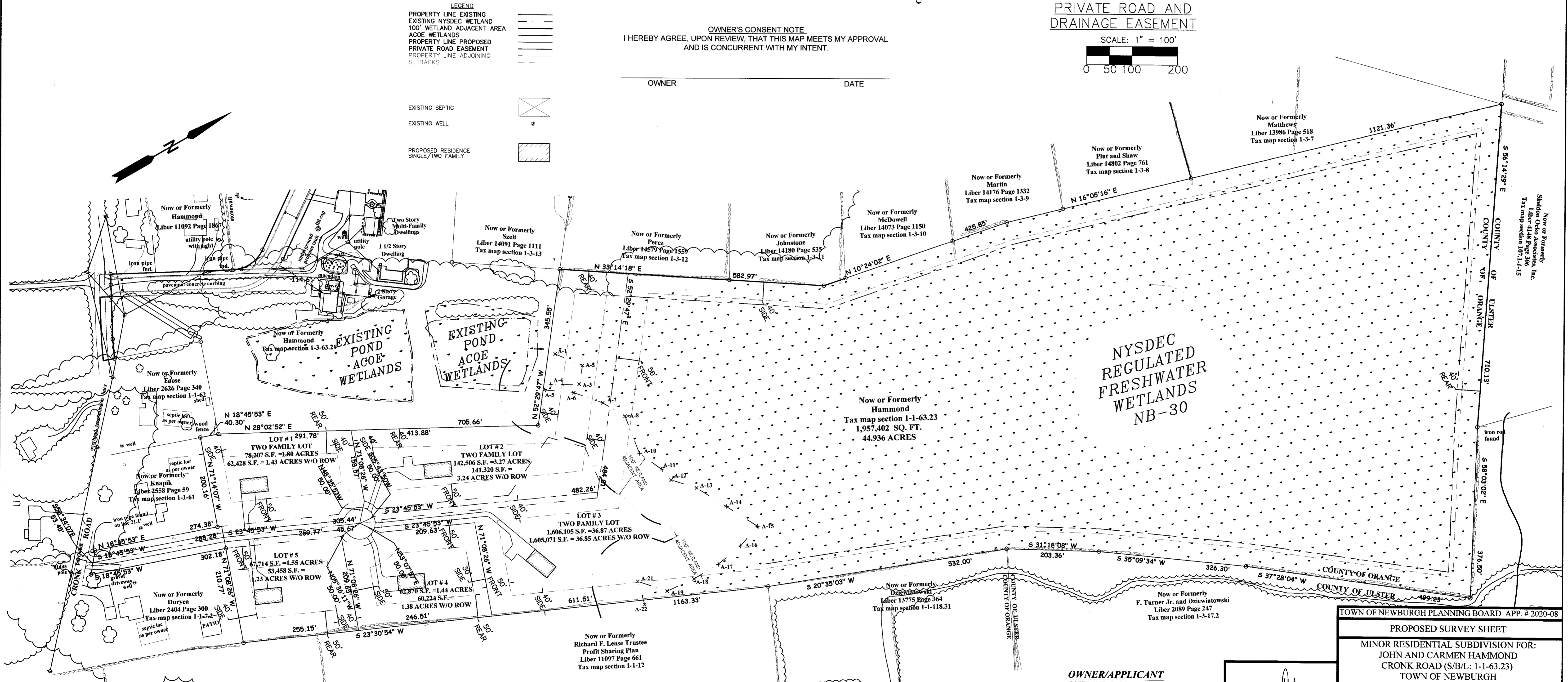
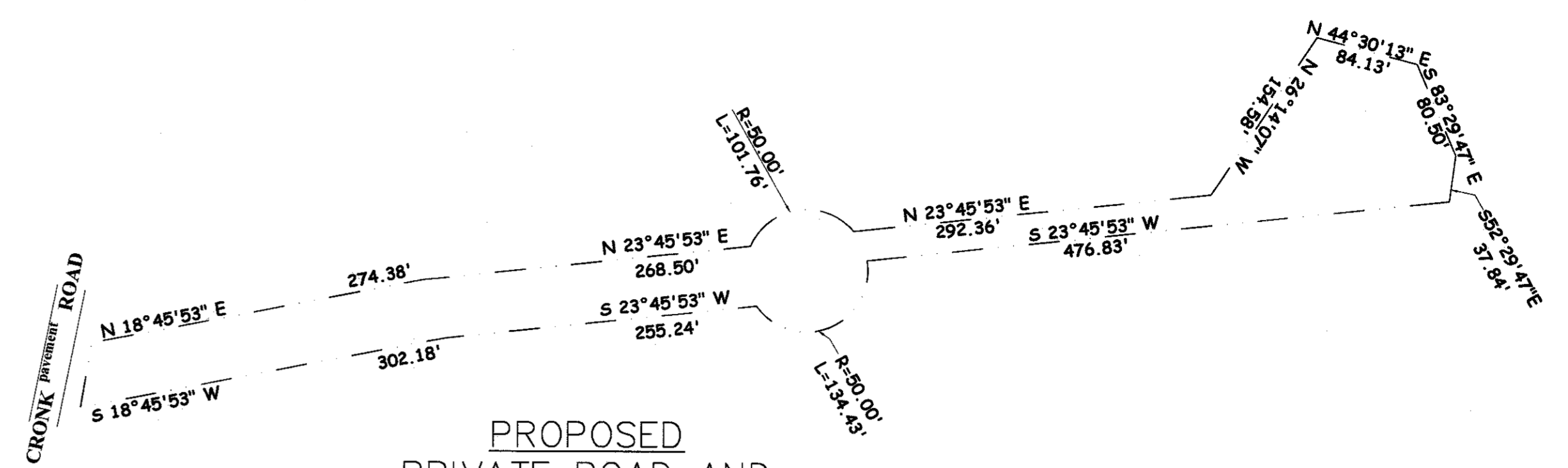
LEGEND

PROPERTY LINE EXISTING	---
EXISTING NYSDEC WETLAND	▨
100' WETLAND ADJACENT AREA	▨
ACOE WETLANDS	▨
PROPERTY LINE PROPOSED	---
PRIVATE ROAD EASEMENT	---
PROPERTY LINE ADJOINING	---
SETBACKS	---

OWNER'S CONSENT NOTE
I HEREBY AGREE, UPON REVIEW, THAT THIS MAP MEETS MY APPROVAL AND IS CONCURRENT WITH MY INTENT.

OWNER _____ DATE _____

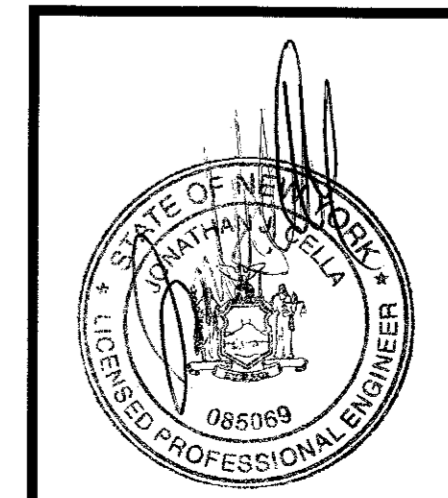
EXISTING SEPTIC	⊗
EXISTING WELL	⊕
PROPOSED RESIDENCE SINGLE/TWO FAMILY	▭



OWNER/APPLICANT
JOHN AND CARMEN HAMMOND
6 MADRE CRISTO ROAD
WALKKILL, NEW YORK 12589

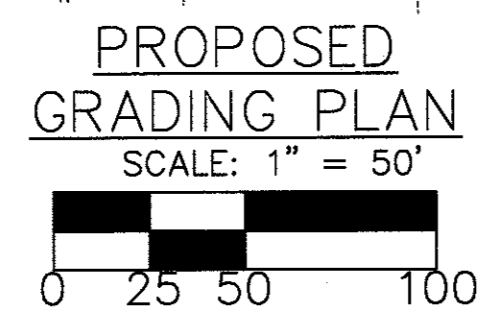
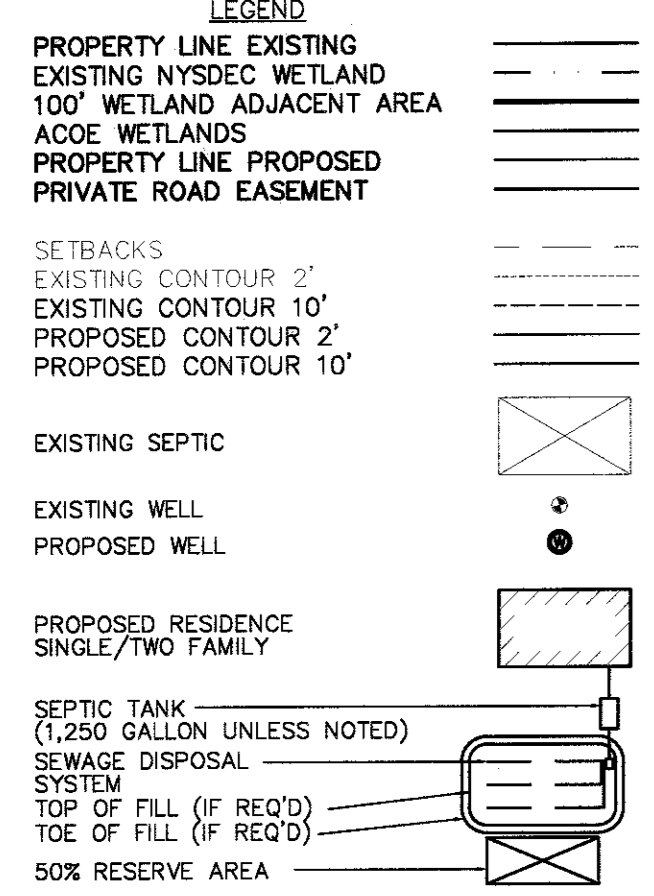
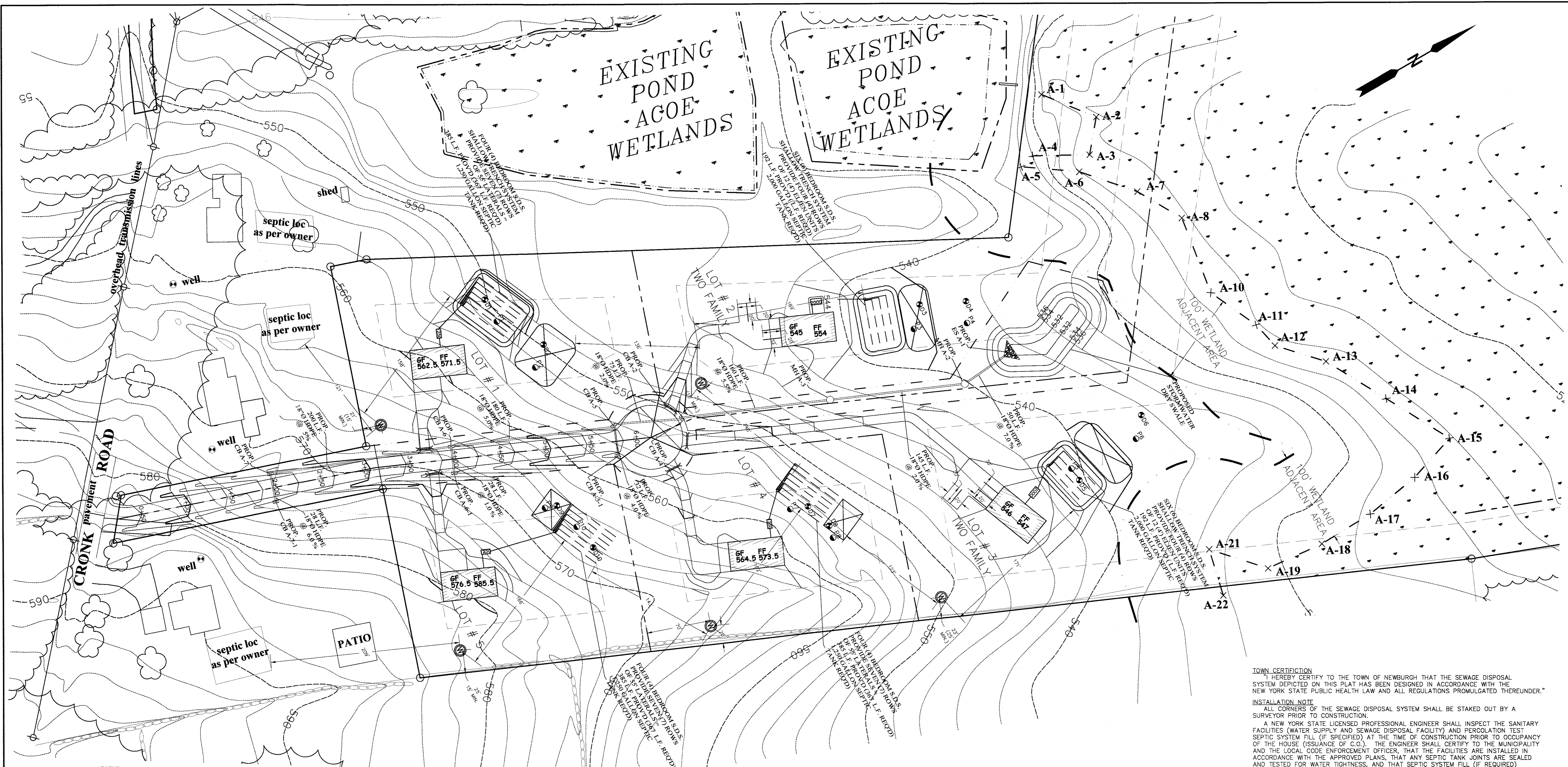
CERTIFIED TO:
JOHN AND CARMEN HAMMOND
TO BE A TRUE SURVEY PERFORMED IN THE FIELD
ON DECEMBER 2019.

GARY RICH, P.L.S.
N.Y.S. LIC. No. 050354



JONATHAN CELLA, P.E.
N.Y.S. P.E. LIC. NO. 085069

TOWN OF NEWBURGH PLANNING BOARD APP. # 2020-08		
PROPOSED SURVEY SHEET		
MINOR RESIDENTIAL SUBDIVISION FOR: JOHN AND CARMEN HAMMOND CRONK ROAD (S/B/L: 1-1-63.23) TOWN OF NEWBURGH ORANGE COUNTY, NEW YORK		
JONATHAN CELLA, P.E. 51 HUNT ROAD WALKKILL, NEW YORK 12589		
DATE: 11-01-2019	(845) 741-0363 jonathancellacella@gmail.com	DRAWN BY: JIC
SCALE: AS NOTED		SHEET NO. : 2 OF 7
REVISIONS: 1. 05/28/2020: IN HOUSE REVISIONS 2. 10/27/2020: PER TOWN COMMENTS 3. 03/04/2021: PER TOWN COMMENTS		



- PRIVATE ROAD NOTES**
1. THE PROPOSED ROAD IS A PRIVATE ROAD.
 2. A PRIVATE ROAD MAINTENANCE AGREEMENT SHALL BE RECORDED WITH THE ORANGE COUNTY CLERK.
 3. NO TOWN SERVICES WILL BE PROVIDED ON THE PRIVATE ROAD.
 4. TOWN BOARD APPROVAL OF THE PRIVATE ROAD NAME IS REQUIRED.
 5. THE DEVELOPER IS RESPONSIBLE FOR FURNISHING AND INSTALLING A STREET SIGN.

STORM WATER STRUCTURES

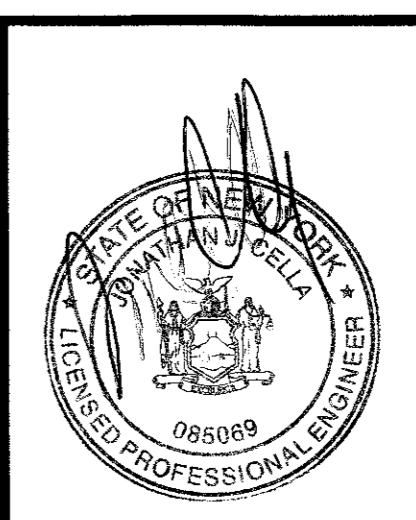
STRUCTURE	RIM.	INV. (IN)	INV. (IN)	INV. (OUT)	PIPE LENGTH	DESTINATION	PIPE SLOPE
CB A-7-1	573.50	--	--	570.50	28 LF	CB A-7-1 to CB A-7	6.0%
CB A-7	572.00	568.82	--	568.82	200 LF	CB A-7 to CB A-6	5.0%
CB A-6-1	564.25	--	--	561.25	28 LF	CB A-6-1 to CB A-6	1.0%
CB A-6	564.25	558.82	560.97	558.82	180 LF	CB A-6 to CB A-5	5.0%
CB A-5-1	555.50	--	--	552.50	32 LF	CB A-5-1 to CB A-5	4.0%
CB A-5	554.50	549.82	551.22	549.82	75 LF	CB A-5 to CB A-4	2.0%
CB A-4	552.00	548.32	--	548.32	160 LF	CB A-4 to MH A-3	5.5%
MH A-3	543.00	539.52	--	539.52	145 LF	MH A-3 to MH A-2	2.0%
MH A-2	540.00	536.62	--	536.62	50 LF	MH A-2 to ES A-1	7.0%
ES A-1	--	533.12	--	--	--	--	--

SEWAGE DISPOSAL SYSTEMS COMPONENT INVERTS

STRUCTURE	LOT # 1	LOT # 2	LOT # 3	LOT # 4	LOT # 5
HOUSE (OUT)	561.00	544.00	545.00	566.00	575.00
SEPTIC TANK (IN)	555.17	542.00	544.00	558.17	573.17
SEPTIC TANK (OUT)	554.81	541.75	543.75	557.81	572.81
SEPTIC TANK GRADE	557.00	544.00	546.00	560.00	575.00
SEPTIC TANK COVERAGE	12"	12"	12"	12"	12"
DISTRIBUTION BOX (IN)	553.67	540.42	542.67	553.67	566.42
DISTRIBUTION BOX (OUT)	553.46	540.21	542.46	553.46	566.21
DISTRIBUTION BOX GRADE	555.00	541.75	544.00	555.00	567.75
DISTRIBUTION BOX COVERAGE	8"	8"	8"	8"	8"

TOWN CERTIFICATION
I HEREBY CERTIFY TO THE TOWN OF NEWBURGH THAT THE SEWAGE DISPOSAL SYSTEM DEPICTED ON THIS PLAT HAS BEEN DESIGNED IN ACCORDANCE WITH THE NEW YORK STATE PUBLIC HEALTH LAW AND ALL REGULATIONS PROMULGATED THEREUNDER.

INSTALLATION NOTE
ALL CORNERS OF THE SEWAGE DISPOSAL SYSTEM SHALL BE STAKED OUT BY A SURVEYOR PRIOR TO CONSTRUCTION.
A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SHALL INSPECT THE SANITARY FACILITIES (WATER SUPPLY AND SEWAGE DISPOSAL FACILITY) AND PERCOLATION TEST SEPTIC SYSTEM FILL (IF SPECIFIED) AT THE TIME OF CONSTRUCTION PRIOR TO OCCUPANCY OF THE HOUSE (ISSUANCE OF C.O.). THE ENGINEER SHALL CERTIFY TO THE MUNICIPALITY AND THE LOCAL CODE ENFORCEMENT OFFICER, THAT THE FACILITIES ARE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS, THAT ANY SEPTIC TANK JOINTS ARE SEALED AND TESTED FOR WATER TIGHTNESS, AND THAT SEPTIC SYSTEM FILL (IF REQUIRED) IS ADEQUATE FOR THE SYSTEM. THIS CERTIFICATION SHALL ALSO INCLUDE A DRAWING PROVIDING AN AS-BUILT LOCATION OF THE SDS, INCLUDING ITS APPURTENANCES AND WELL LOCATION. THIS AS BUILT DRAWING MUST BE SUBMITTED TO THE TOWN PRIOR TO ISSUANCE OF A C.O.



JONATHAN CELLA, P.E.
N.Y.S. P.E. LIC. NO. 085069

TOWN OF NEWBURGH PLANNING BOARD APP. # 2020-08

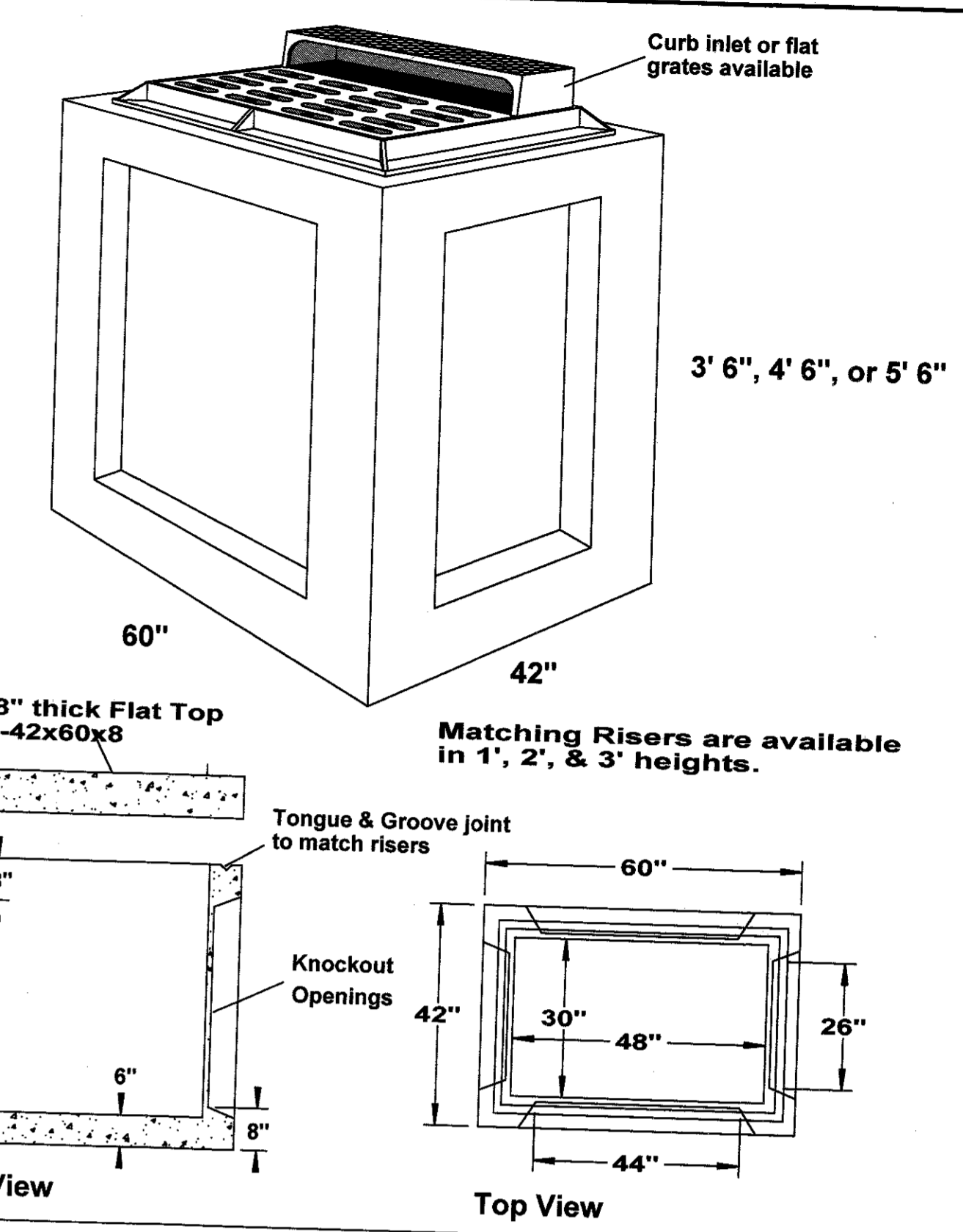
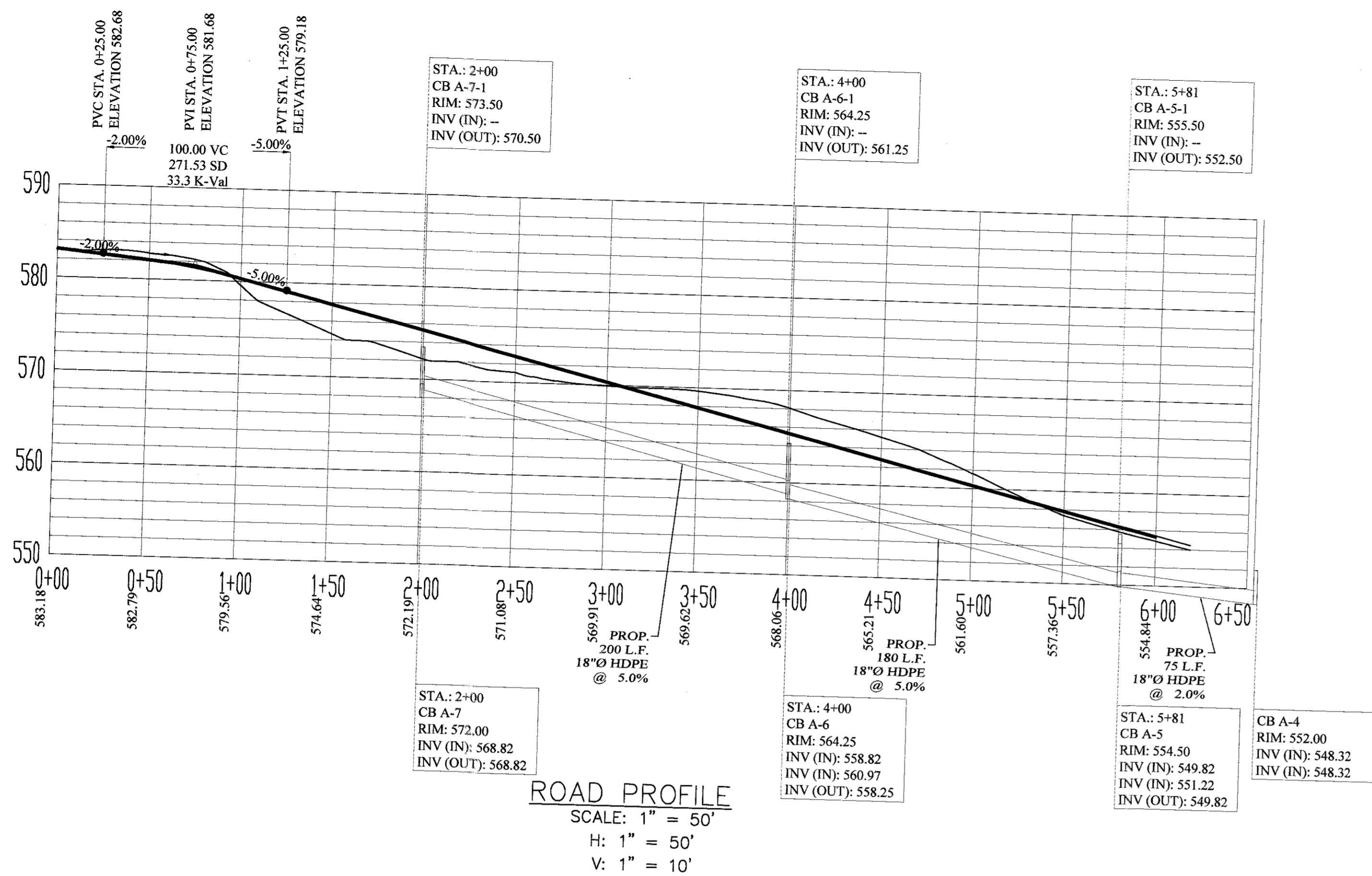
PROPOSED GRADING AND SEPTIC DESIGNS

MINOR RESIDENTIAL SUBDIVISION FOR:
JOHN AND CARMEN HAMMOND
CRONK ROAD (S/B/L: 1-1-63.23)
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

JONATHAN CELLA, P.E.
51 HUNT ROAD
WALKKILL, NEW YORK 12589
(845) 741-0363
jonathancell@icloud.com

DATE: 11-01-2019
SCALE: AS NOTED
DRAWN BY: JJC
SHEET NO.: 3 OF 7

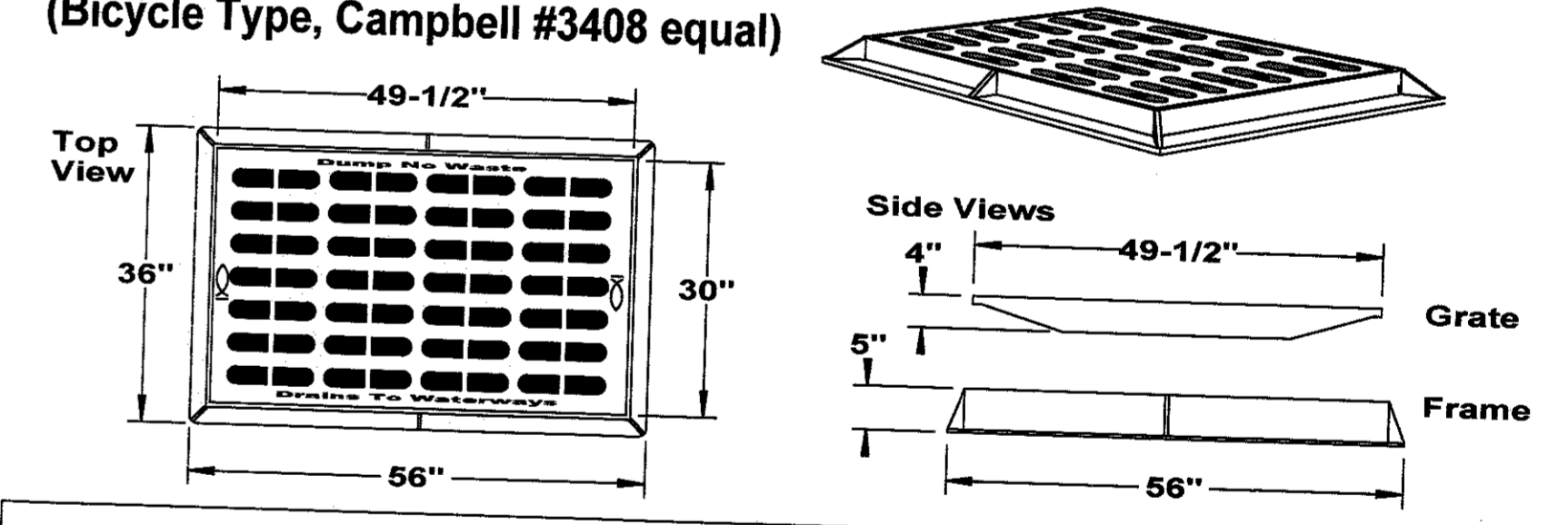
REVISIONS:
1. 05/28/2020: IN HOUSE REVISIONS
2. 10/27/2020: PER TOWN COMMENTS
3. 03/04/2021: PER TOWN COMMENTS



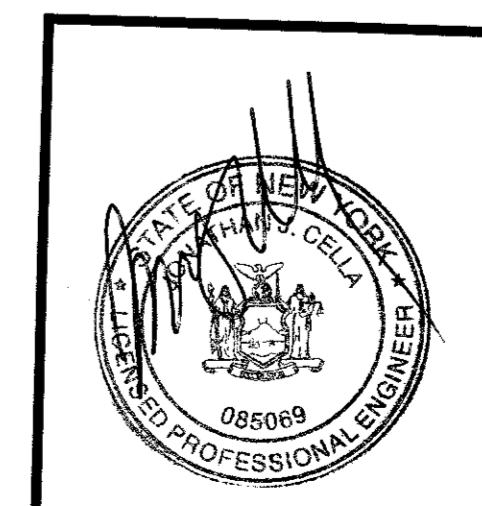
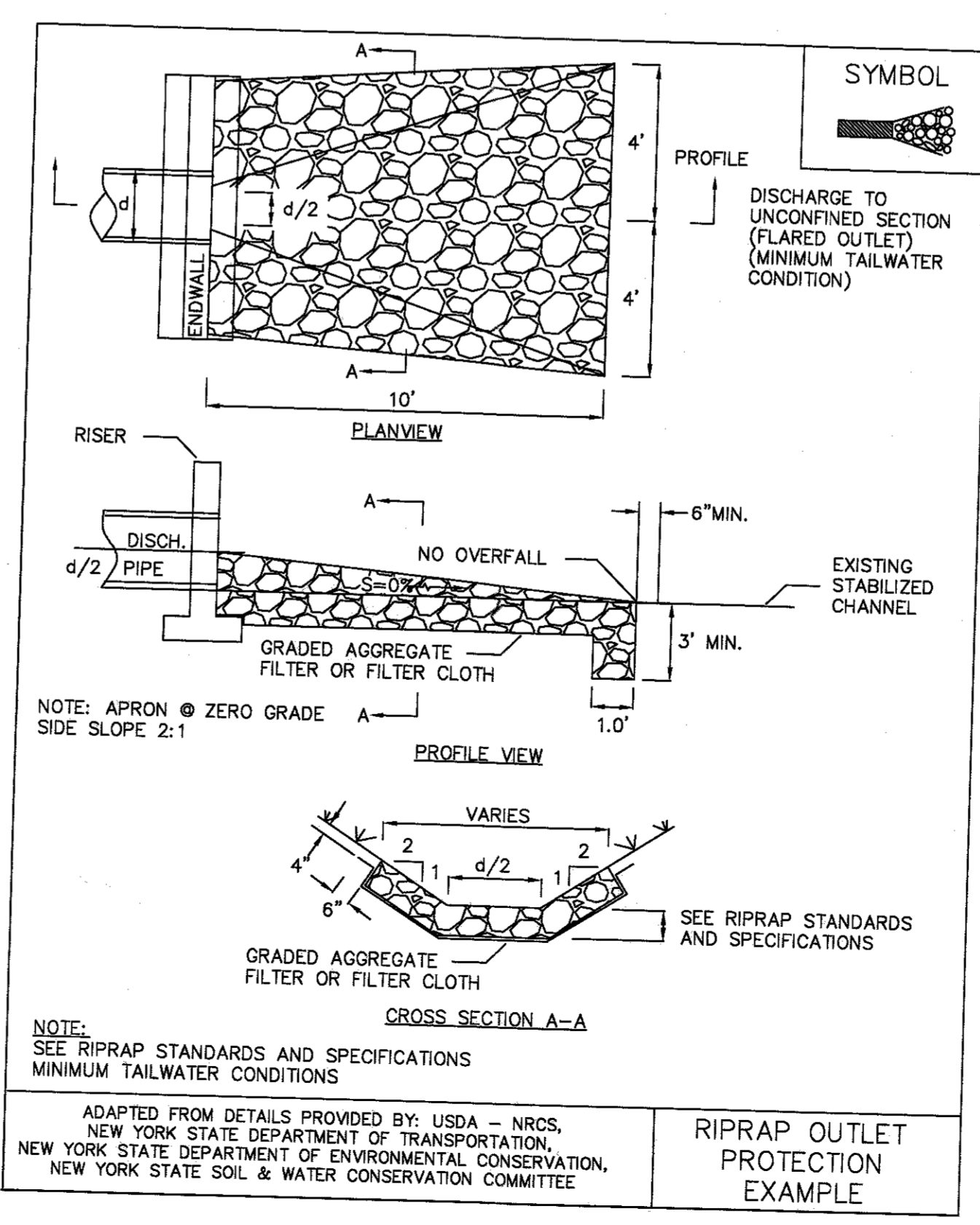
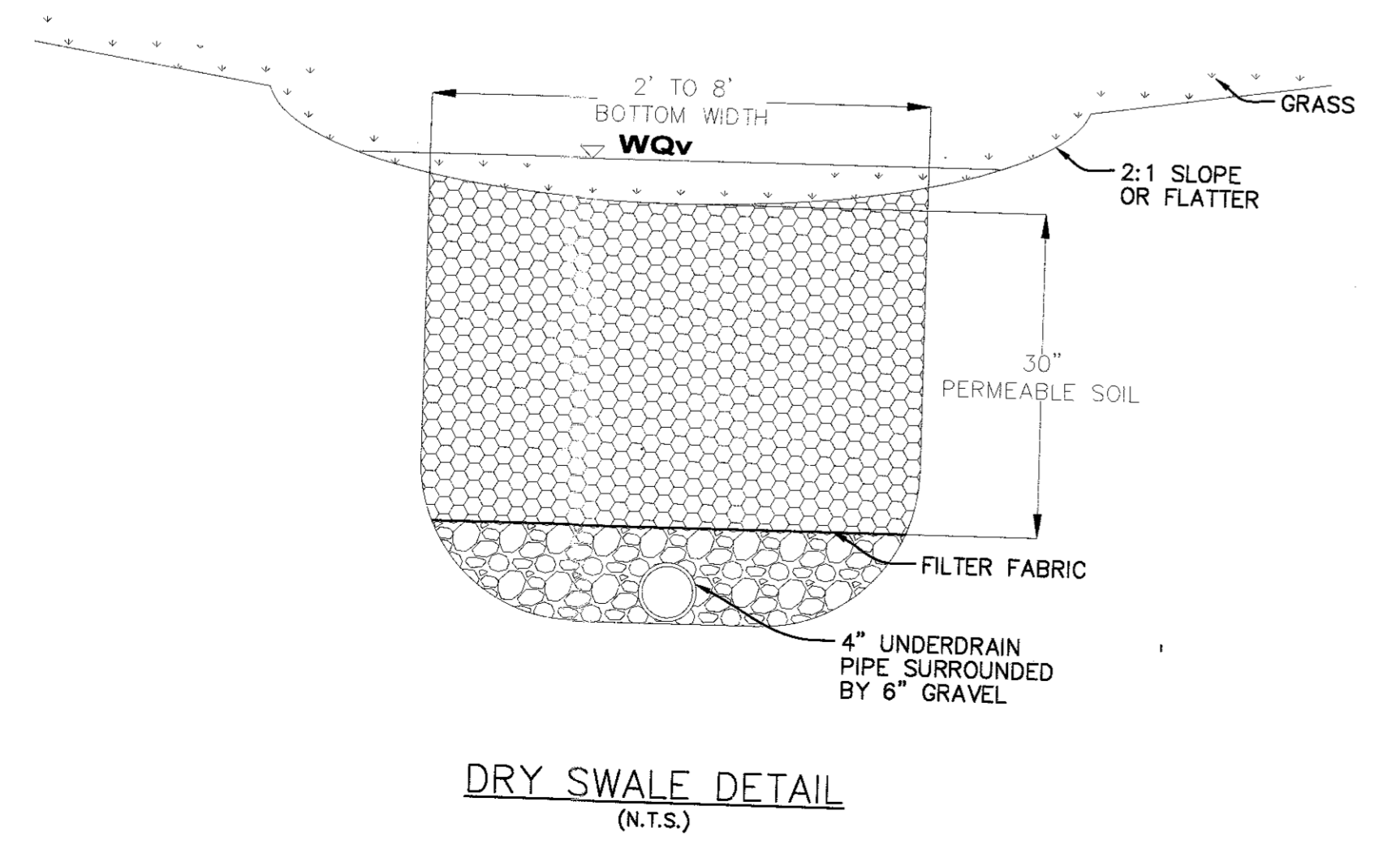
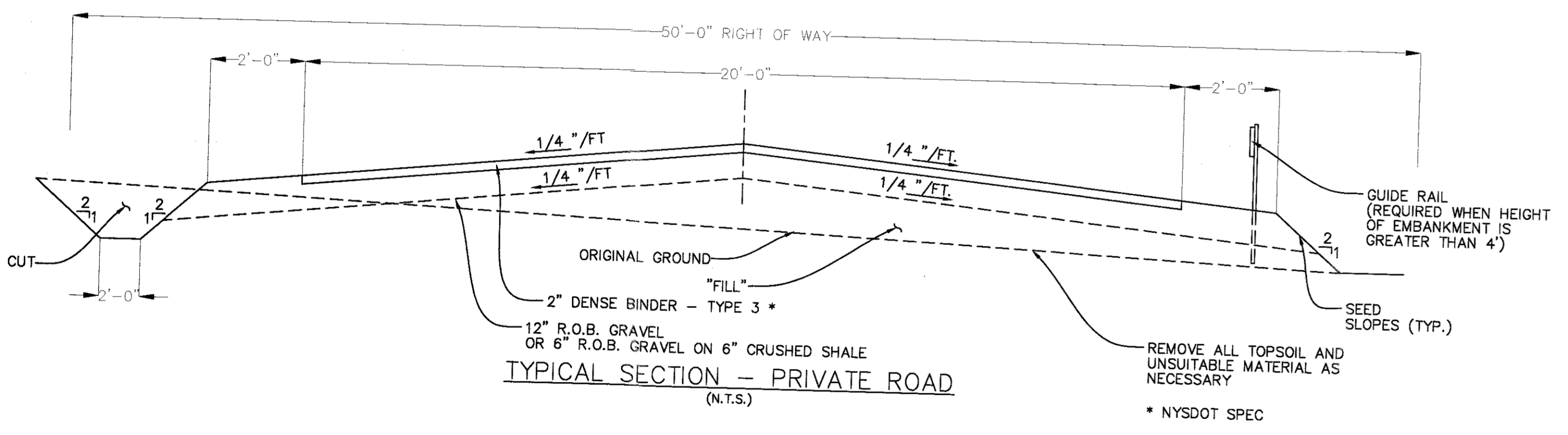
SPECIFICATIONS		PRECAST CATCH BASIN MODEL CB-30X48	
Concrete Min. Strength: 4,000 psi at 28 days	Reinforcement: #4 Rebar / ASTM A615	Woodard's Concrete Products, Inc.	
Air Entrainment: 5%	Construction Joint: Butyl Rubber Sealant	629 Lybolt Road, Bullville, NY 10915	
Weights: 3' Base = 3,400 lbs, 4' Base = 3,900 lbs	Load Rating: H20 + 30% / ASTM C857	(845) 361-3471 / Fax 361-1050	
		Page 10I 2/3/05	

www.woodardsconcrete.com

Model GRATE-30X48
Frame & Flat Grate
(Bicycle Type, Campbell #3408 equal)



SPECIFICATIONS		CAST IRON FRAMES & GRATES GRATE-30x48 / GRATE-CI	
Material: ASTM A48 Class 30B	Load Rating: Heavy Duty, H20	Woodard's Concrete Products, Inc.	
Weight = 500 lbs	Drainage Area = 630 sq. in. for flat grate	629 Lybolt Road, Bullville, NY 10915	
	800 sq. in. for curb inlet	(845) 361-3471 / Fax 361-1050	
		11/21/02	
		www.woodardsconcrete.com	



JONATHAN CELLA, P.E.
N.Y.S. P.E. LIC. NO. 085069

TOWN OF NEWBURGH PLANNING BOARD APP. # 2020-08		
ROAD AND STORMWATER MANAGEMENT DETAILS		
MINOR RESIDENTIAL SUBDIVISION FOR: JOHN AND CARMEN HAMMOND CRONK ROAD (S/B/L: 1-1-63.23) TOWN OF NEWBURGH ORANGE COUNTY, NEW YORK		
JONATHAN CELLA, P.E. 51 HUNT ROAD WALLKILL, NEW YORK 12589		
DATE: 11-01-2019	(845) 741-0363 jcella@woodardsconcrete.com	DRAWN BY: JC
SCALE: AS NOTED		SHEET NO.: 4 OF 7
REVISIONS: 1. 05/28/2020: IN HOUSE REVISIONS 2. 10/27/2020: PER TOWN COMMENTS 3. 03/04/2021: PER TOWN COMMENTS		

LOT # 1	LOT # 2	LOT # 3	LOT # 4	LOT # 5																																																									
<p>DEEP TEST INFORMATION</p> <p>D1 6'-0" DEEP 03/19/2020 0-4" TOPSOIL 4"-24" SILTY LOAM 28"-72" SILTY CLAY LOAM NO ROCK WATER @ 40", MOTTLING @ 48"</p> <p>D2 6'-0" DEEP 03/19/2020 0-4" TOPSOIL 4"-28" SILTY LOAM 28"-72" SILTY CLAY LOAM NO ROCK WATER @ 36", MOTTLING @ 42"</p> <p>PERCOLATION TEST INFORMATION</p> <p>P1 12" DEEP 03/20/2020 START 10:08 10:17 10:34 10:52 FINISH 10:17 10:33 10:52 11:10 TIME 0:12 0:16 0:18 0:19 STABILIZED PERC. RATE = 18 MINUTES PER INCH</p> <p>P2 12" DEEP 03/20/2020 START 10:10 10:22 10:41 11:02 FINISH 10:22 10:40 11:01 11:22 TIME 0:12 0:18 0:20 0:20 STABILIZED PERC. RATE = 20 MINUTES PER INCH</p> <p>LOT # 1 SEWAGE DISPOSAL SYSTEM DESIGN CRITERIA</p> <ol style="list-style-type: none"> NUMBER OF BEDROOMS = 4 MAX. DAILY FLOW RATE = 440 GALLONS PER DAY MAX. SEPTIC TANK REQUIRED = 1,250 GALLONS SDS SYSTEM TYPE: SHALLOW TRENCH SYSTEM STABILIZED PERCOLATION RATE = 20 MINUTES PER INCH DESIGN PERCOLATION RATE = 21 TO 30 MINUTES PER INCH REQUIRED LENGTH OF ABSORPTION TRENCHES <table border="1"> <tr> <th>REQUIRED</th> <th>PROVIDED</th> <th>REQUIRED</th> </tr> <tr> <td>3 BEDROOM: 6 LATERALS @ 55" = 330 L.F.</td> <td>275 L.F.</td> <td></td> </tr> <tr> <td>4 BEDROOM: 7 LATERALS @ 55" = 385 L.F.</td> <td>367 L.F.</td> <td></td> </tr> </table>	REQUIRED	PROVIDED	REQUIRED	3 BEDROOM: 6 LATERALS @ 55" = 330 L.F.	275 L.F.		4 BEDROOM: 7 LATERALS @ 55" = 385 L.F.	367 L.F.		<p>DEEP TEST INFORMATION</p> <p>D3 6'-0" DEEP 03/19/2020 0-4" TOPSOIL 4"-28" SILTY LOAM 28"-72" SILTY CLAY LOAM NO ROCK WATER @ 32", MOTTLING @ 40"</p> <p>D4 6'-0" DEEP 03/19/2020 0-4" TOPSOIL 4"-28" SILTY LOAM 28"-72" SILTY CLAY LOAM NO ROCK WATER @ 32", MOTTLING @ 42"</p> <p>PERCOLATION TEST INFORMATION</p> <p>P3 12" DEEP 03/20/2020 START 11:29 11:39 11:55 12:14 FINISH 11:47 12:04 12:21 TIME 0:10 0:16 0:18 0:19 STABILIZED PERC. RATE = 13 MINUTES PER INCH</p> <p>P4 12" DEEP 03/20/2020 START 11:33 11:47 12:04 FINISH 11:47 12:04 12:21 TIME 0:14 0:17 0:17 STABILIZED PERC. RATE = 17 MINUTES PER INCH</p> <p>LOT # 2 SEWAGE DISPOSAL SYSTEM DESIGN CRITERIA</p> <ol style="list-style-type: none"> NUMBER OF BEDROOMS = 6 MAX. DAILY FLOW RATE = 660 GALLONS PER DAY MAX. SEPTIC TANK REQUIRED = 1,750 GAL. REQ'D, 2,000 GAL. PROV'D SDS SYSTEM TYPE: SHALLOW TRENCH SYSTEM W/ ELJEN UNITS STABILIZED PERCOLATION RATE = 17 MINUTES PER INCH DESIGN PERCOLATION RATE = 21 TO 30 MINUTES PER INCH DOSING REQUIRED 6 BEDROOM REQUIRED LENGTH OF ABSORPTION TRENCHES <table border="1"> <tr> <th>REQUIRED</th> <th>PROVIDED</th> <th>REQUIRED</th> </tr> <tr> <td>3 BEDROOM: (2) ROWS OF 12 (4) ELJEN UNITS = 96 L.F. ELJEN UNITS</td> <td>92 L.F.</td> <td></td> </tr> <tr> <td>4 BEDROOM: (3) ROWS OF 12 (4) ELJEN UNITS = 144 L.F. ELJEN UNITS</td> <td>123 L.F.</td> <td></td> </tr> <tr> <td>5 BEDROOM: (4) ROWS OF 11 (4) ELJEN UNITS = 176 L.F. 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RATE = 17 MINUTES PER INCH</p> <p>P6 12" DEEP 03/20/2020 START 12:43 12:55 1:09 1:25 FINISH 12:55 1:09 1:25 1:41 TIME 0:12 0:14 0:16 0:16 STABILIZED PERC. RATE = 16 MINUTES PER INCH</p> <p>LOT # 3 SEWAGE DISPOSAL SYSTEM DESIGN CRITERIA</p> <ol style="list-style-type: none"> NUMBER OF BEDROOMS = 6 MAX. DAILY FLOW RATE = 660 GALLONS PER DAY MAX. SEPTIC TANK REQUIRED = 1,750 GAL. REQ'D, 2,000 GAL. PROV'D SDS SYSTEM TYPE: SHALLOW TRENCH SYSTEM W/ ELJEN UNITS STABILIZED PERCOLATION RATE = 17 MINUTES PER INCH DESIGN PERCOLATION RATE = 21 TO 30 MINUTES PER INCH DOSING REQUIRED 6 BEDROOM REQUIRED LENGTH OF ABSORPTION TRENCHES <table border="1"> <tr> <th>REQUIRED</th> <th>PROVIDED</th> <th>REQUIRED</th> </tr> <tr> <td>3 BEDROOM: (2) ROWS OF 12 (4) ELJEN UNITS = 96 L.F. ELJEN UNITS</td> <td>92 L.F.</td> <td></td> </tr> <tr> <td>4 BEDROOM: (3) ROWS OF 12 (4) ELJEN UNITS = 144 L.F. ELJEN UNITS</td> <td>123 L.F.</td> <td></td> </tr> <tr> <td>5 BEDROOM: (4) ROWS OF 11 (4) ELJEN UNITS = 176 L.F. 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RATE = 14 MINUTES PER INCH</p> <p>P8 24" DEEP 03/20/2020 START 2:07 2:19 2:33 2:39 FINISH 2:19 2:33 2:39 2:55 TIME 0:12 0:14 0:16 0:16 STABILIZED PERC. RATE = 16 MINUTES PER INCH</p> <p>LOT # 4 SEWAGE DISPOSAL SYSTEM DESIGN CRITERIA</p> <ol style="list-style-type: none"> NUMBER OF BEDROOMS = 4 MAX. DAILY FLOW RATE = 440 GALLONS PER DAY MAX. SEPTIC TANK REQUIRED = 1,250 GALLONS SDS SYSTEM TYPE: STANDARD IN GROUND STABILIZED PERCOLATION RATE = 16 MINUTES PER INCH DESIGN PERCOLATION RATE = 21 TO 30 MINUTES PER INCH REQUIRED LENGTH OF ABSORPTION TRENCHES <table border="1"> <tr> <th>REQUIRED</th> <th>PROVIDED</th> <th>REQUIRED</th> </tr> <tr> <td>3 BEDROOM: 6 LATERALS @ 55" = 330 L.F.</td> <td>275 L.F.</td> <td></td> </tr> <tr> <td>4 BEDROOM: 7 LATERALS @ 55" = 385 L.F.</td> <td>367 L.F.</td> <td></td> </tr> </table>	REQUIRED	PROVIDED	REQUIRED	3 BEDROOM: 6 LATERALS @ 55" = 330 L.F.	275 L.F.		4 BEDROOM: 7 LATERALS @ 55" = 385 L.F.	367 L.F.		<p>DEEP TEST INFORMATION</p> <p>D9 6'-0" DEEP 03/19/2020 0-5" TOPSOIL 5"-44" SILTY LOAM 44"-72" SILTY CLAY LOAM NO ROCK, NO WATER, NO MOTTLING</p> <p>D10 6'-0" DEEP 03/19/2020 0-4" TOPSOIL 4"-45" SILTY LOAM 45"-72" SILTY CLAY LOAM NO ROCK, NO WATER, NO MOTTLING</p> <p>PERCOLATION TEST INFORMATION</p> <p>P9 24" DEEP 03/20/2020 START 3:00 3:14 3:32 3:52 FINISH 3:14 3:32 3:52 3:12 TIME 0:14 0:18 0:20 0:20 STABILIZED PERC. RATE = 20 MINUTES PER INCH</p> <p>P10 24" DEEP 03/20/2020 START 3:04 3:20 3:40 4:02 FINISH 3:20 3:40 4:02 4:24 TIME 0:16 0:20 0:22 0:22 STABILIZED PERC. RATE = 22 MINUTES PER INCH</p> <p>LOT # 5 SEWAGE DISPOSAL SYSTEM DESIGN CRITERIA</p> <ol style="list-style-type: none"> NUMBER OF BEDROOMS = 4 MAX. DAILY FLOW RATE = 440 GALLONS PER DAY MAX. SEPTIC TANK REQUIRED = 1,250 GALLONS SDS SYSTEM TYPE: STANDARD IN GROUND STABILIZED PERCOLATION RATE = 22 MINUTES PER INCH DESIGN PERCOLATION RATE = 21 TO 30 MINUTES PER INCH REQUIRED LENGTH OF ABSORPTION TRENCHES <table border="1"> <tr> <th>REQUIRED</th> <th>PROVIDED</th> <th>REQUIRED</th> </tr> <tr> <td>3 BEDROOM: 6 LATERALS @ 55" = 330 L.F.</td> <td>275 L.F.</td> <td></td> </tr> <tr> <td>4 BEDROOM: 7 LATERALS @ 55" = 385 L.F.</td> <td>367 L.F.</td> <td></td> </tr> </table>	REQUIRED	PROVIDED	REQUIRED	3 BEDROOM: 6 LATERALS @ 55" = 330 L.F.	275 L.F.		4 BEDROOM: 7 LATERALS @ 55" = 385 L.F.	367 L.F.	
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STANDARD NOTES

THE DESIGN, CONSTRUCTION, AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH INCLUDE:

"APPENDIX 75-A, WASTE TREATMENT - INDIVIDUAL HOUSEHOLD SYSTEMS, NEW YORK STATE SANITARY CODE."

"WASTE TREATMENT HANDBOOK - INDIVIDUAL HOUSEHOLD SYSTEMS, NEW YORK STATE DEPARTMENT OF HEALTH."

"PLANNING THE SUBDIVISION AS PART OF THE TOTAL ENVIRONMENT. NEW YORK STATE DEPARTMENT OF HEALTH."

"THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND TREATMENT AND WATER SUPPLY FACILITIES."

ALL WELLS AND SEWAGE DISPOSAL SYSTEMS EXISTING R APPROVED WITHIN 200' OF THE PROPOSED WELLS AND SDS ARE SHOWN ON THIS PLAN ALONG WITH ANY OTHER ENVIRONMENTAL HAZARDS IN THE AREA THAT MAY AFFECT THE DESIGN AND FUNCTIONAL ABILITY OF THE SEWAGE DISPOSAL SYSTEM AND WELL.

IT SHALL BE DEMONSTRATED BY THE CONTRACTOR TO THE CERTIFYING ENGINEER THAT THE SEPTIC TANK IS SEALED, WATER TIGHT, AND ACCEPTABLE FOR USE. THIS SHALL REQUIRE AS A MINIMUM, THE FILLING OF THE TANK WITH WATER TO OBSERVE IF IT IS IN FACT SEALED, WATER TIGHT AND ACCEPTABLE FOR USE.

ALL PROPOSED WELLS AND SERVICE LINES ON THIS PLAN ARE ACCESSIBLE FOR INSTALLATION AND PLACEMENT.

INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED FOR HOUSEHOLD PURPOSES WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SYSTEM IS REQUIRED WITHIN 1 YEAR OF AVAILABILITY.

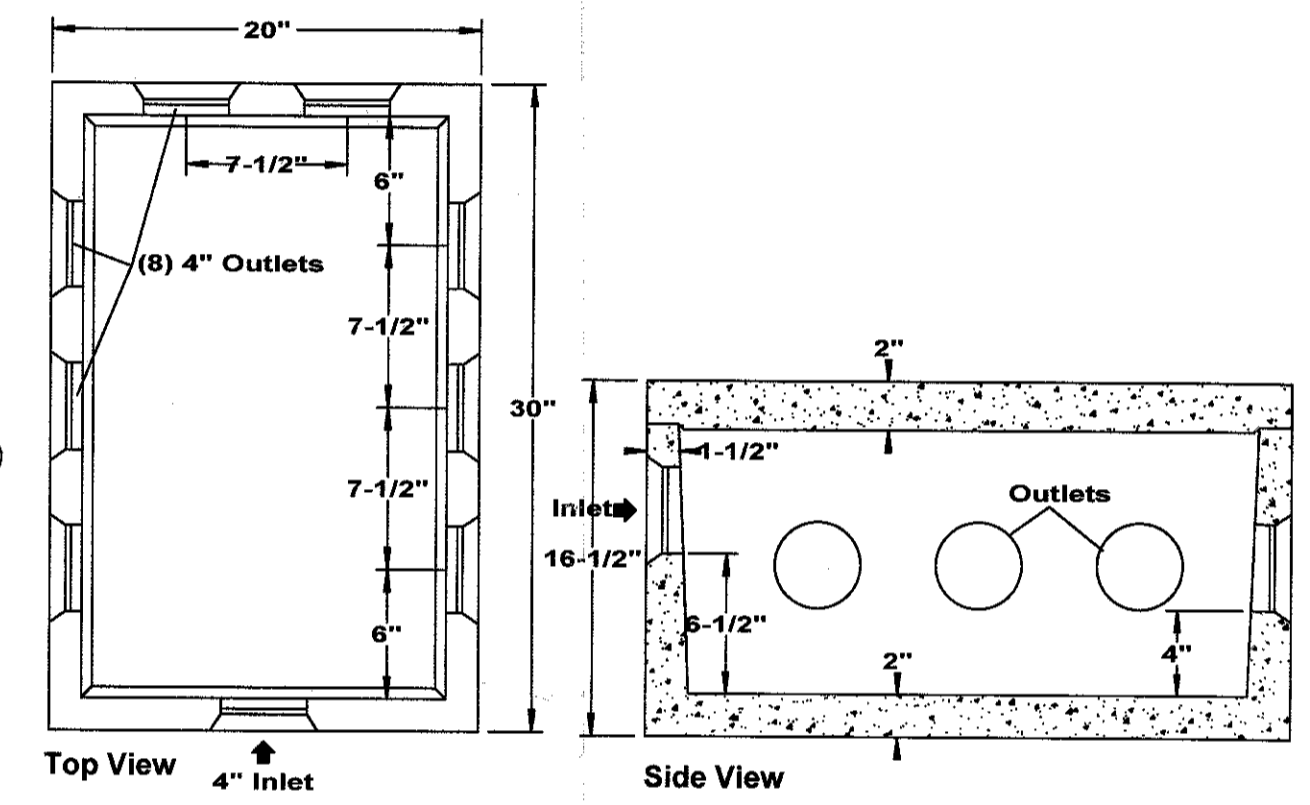
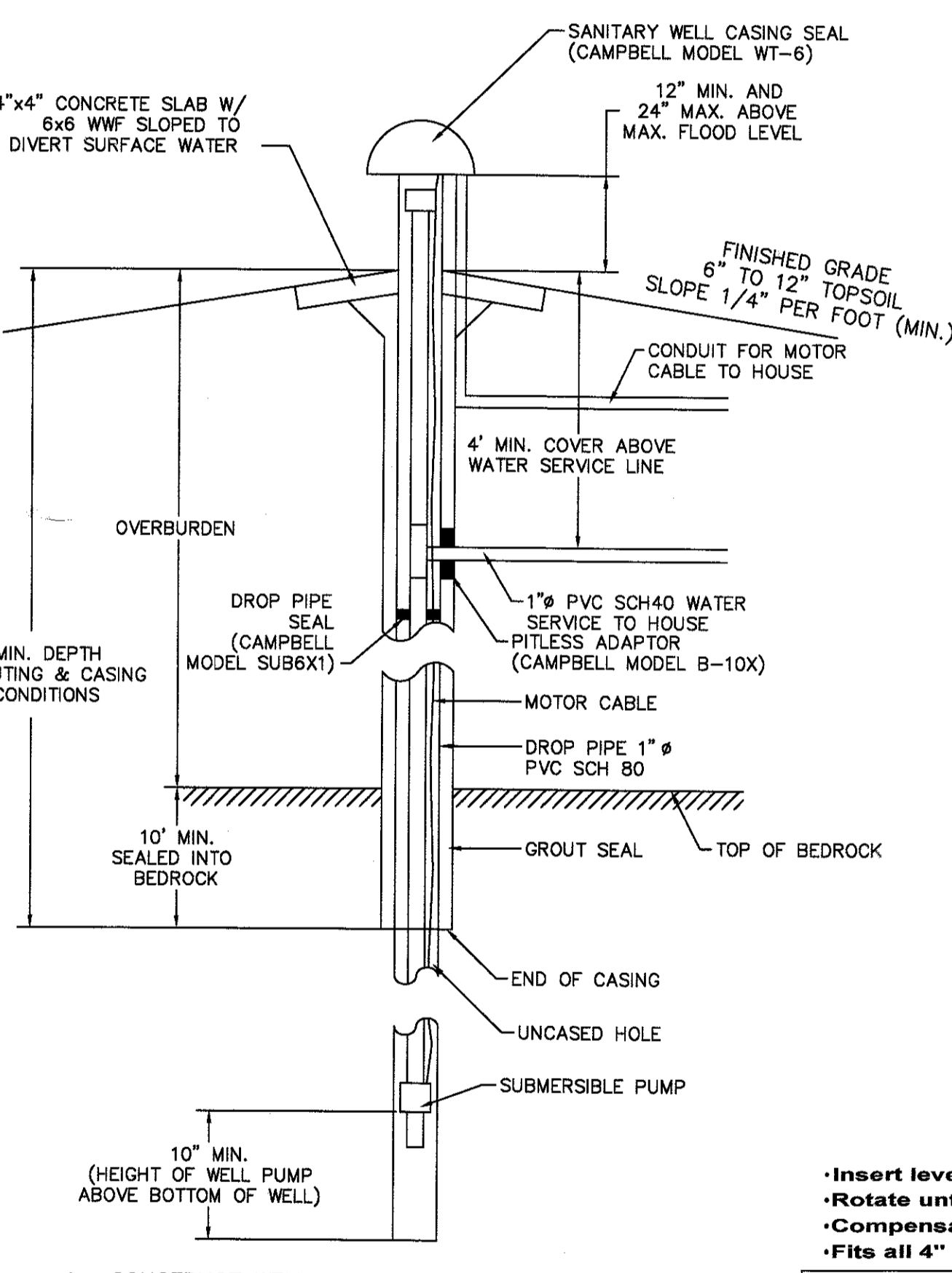
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TOWN CERTIFICATION

"I HEREBY CERTIFY TO THE TOWN OF NEWBURGH THAT THE SEWAGE DISPOSAL SYSTEM DEPICTED ON THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH THE NEW YORK STATE PUBLIC HEALTH LAW AND ALL REGULATIONS PROMULGATED THEREUNDER."

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ALL CORNERS OF THE SEWAGE DISPOSAL SYSTEM SHALL BE STAKED OUT BY A SURVEYOR PRIOR TO CONSTRUCTION.

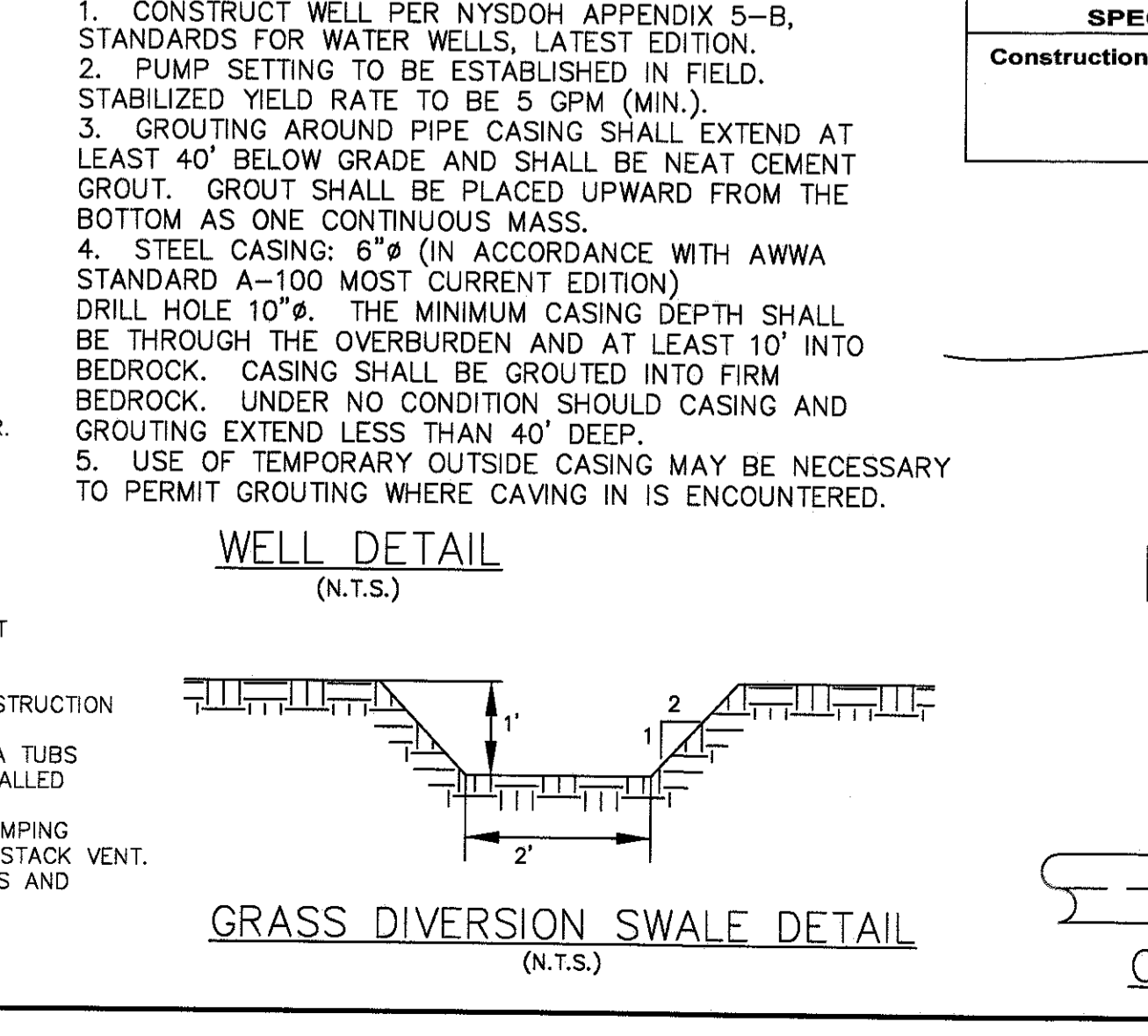
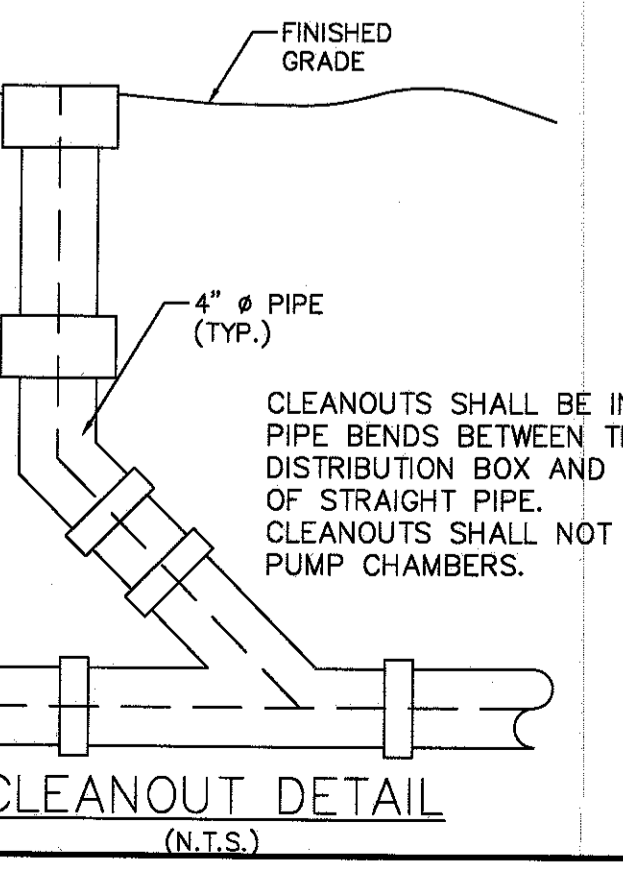
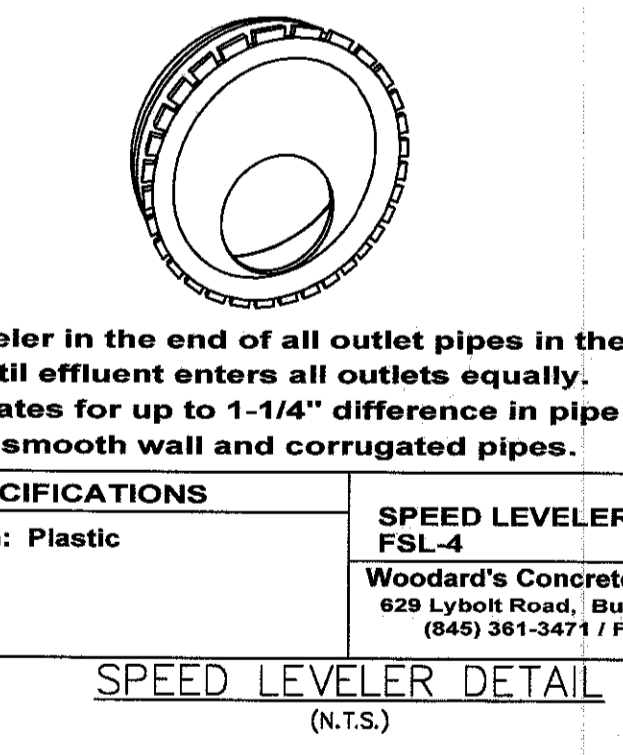


SPECIFICATIONS

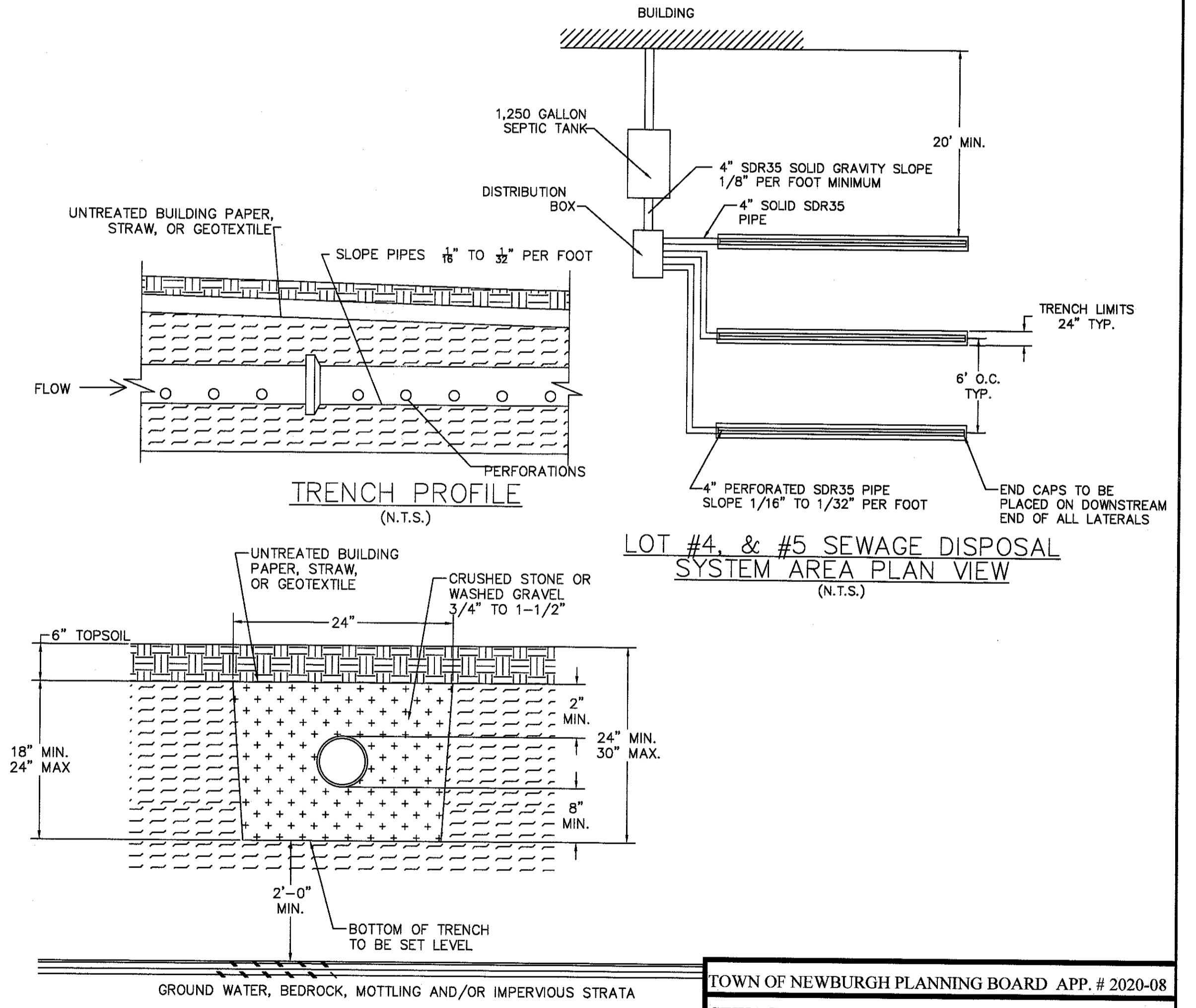
Concrete Min. Strength: 4,000 psi at 28 days
Reinforcement: Fiber, 10ga. wire mesh
Air Entrainment: 5%
Pipe Connection: Polylok Seal (patented)
Load Rating: 300 psf
Weight = 290 lbs

PRECAST DISTRIBUTION BOXES
MODEL DB-9 / 8 OUTLET BOX

Woodard's Concrete Products, Inc.
629 Lybolt Road, Buville, NY 10915
(845) 361-3471 / Fax 361-1050



LOT # 4 & #5 SEWAGE DISPOSAL DETAILS



TRENCH PROFILE
(N.T.S.)

LOT # 4, & #5 SEWAGE DISPOSAL SYSTEM AREA PLAN VIEW
(N.T.S.)

TRENCH DETAIL
(N.T.S.)

NOTES

- TRENCHES SHALL NOT BE INSTALLED IN WET SOIL
- SIDES AND BOTTOM OF TRENCHES SHALL BE RAKED PRIOR TO PLACING GRAVEL
- END OF ALL DISTRIBUTION LINES SHALL BE CAPPED
- BOTTOM OF TRENCHES SHALL BE SET LEVEL

TOWN OF NEWBURGH PLANNING BOARD APP. # 2020-08

SEWAGE DISPOSAL SYSTEM DETAILS AND NOTES

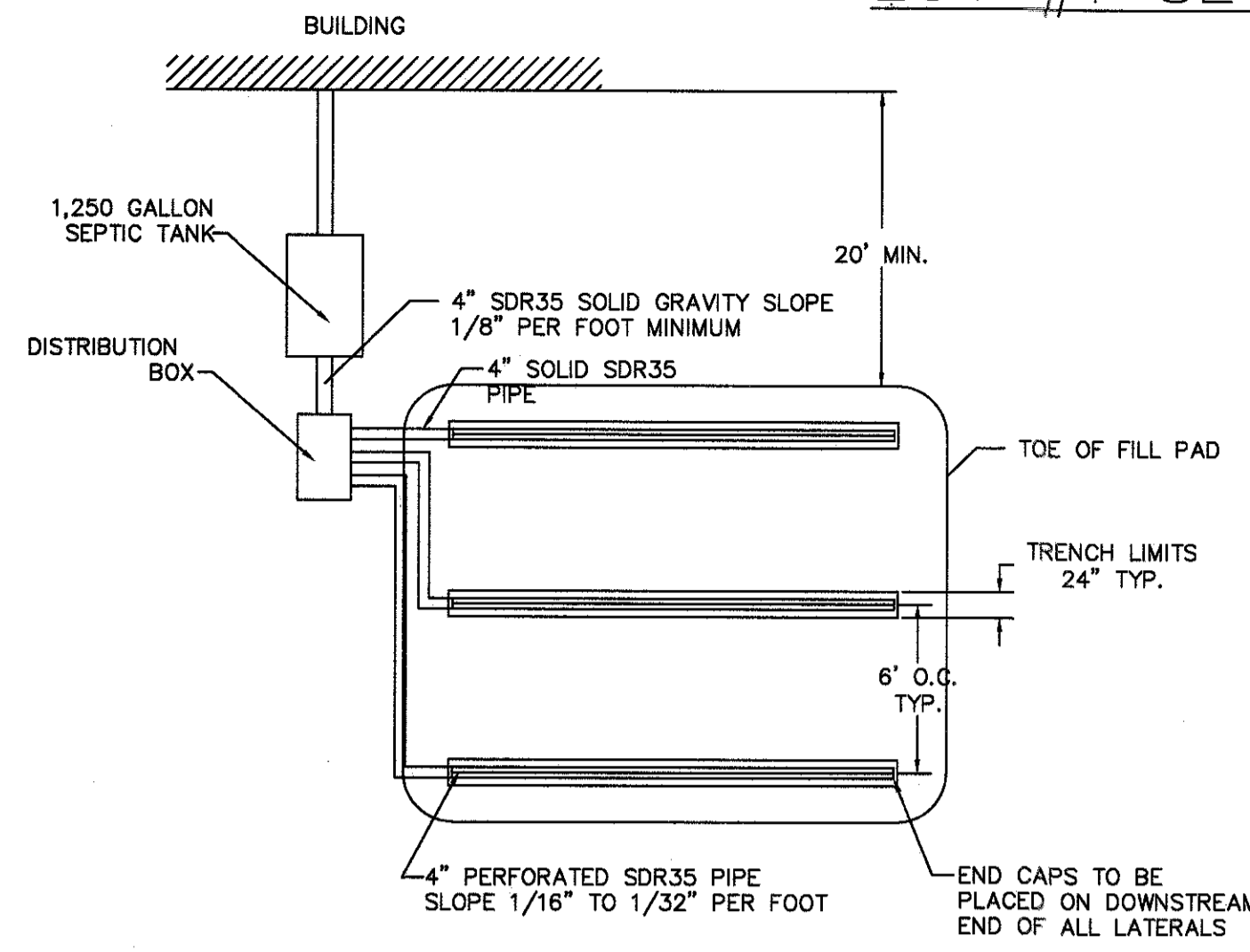
MINOR RESIDENTIAL SUBDIVISION FOR:
JOHN AND CARMEN HAMMOND
CRONK ROAD (S/B/L: 1-1-63.23)
TOWN OF NEWBURGH
ORANGE COUNTY, NEW YORK

JONATHAN CELLA, P.E.
51 HUNT ROAD
WALKKILL, NEW YORK 12589

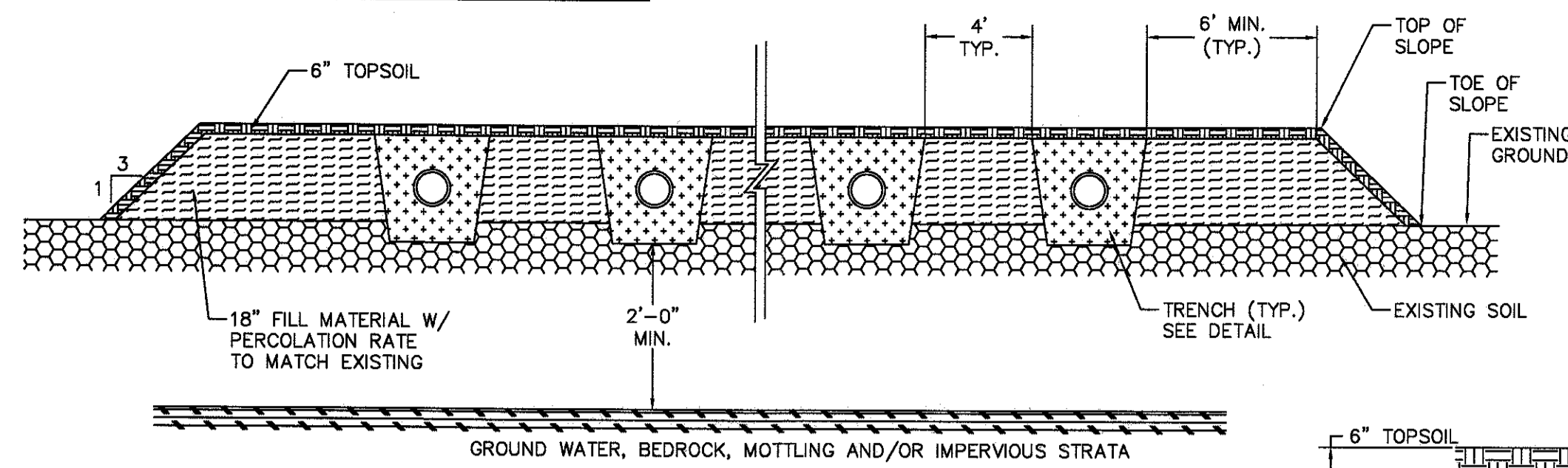
DATE: 11-01-2019
SCALE: AS NOTED
REVISIONS:
1. 05/28/2020: IN HOUSE REVISIONS
2. 10/27/2020: PER TOWN COMMENTS
3. 03/04/2021: PER TOWN COMMENTS

JONATHAN CELLA, P.E.
N.Y.S. P.E. LIC. NO. 085069

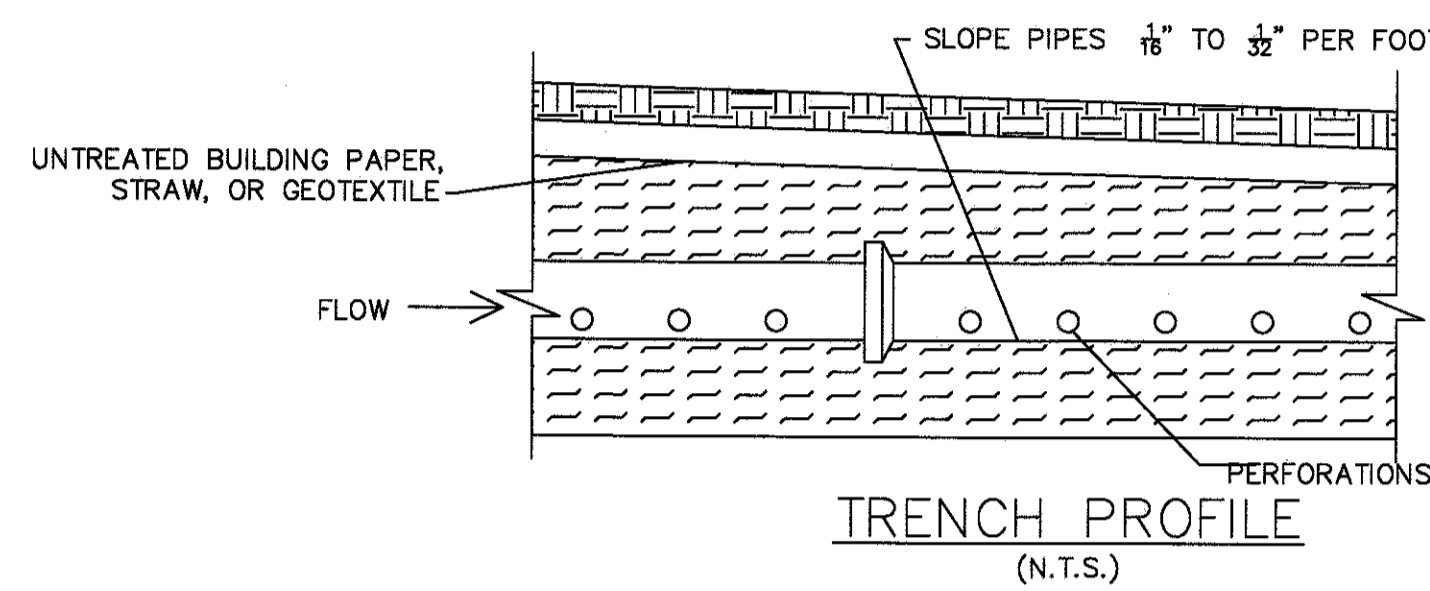
LOT #1 SEWAGE DISPOSAL DETAILS



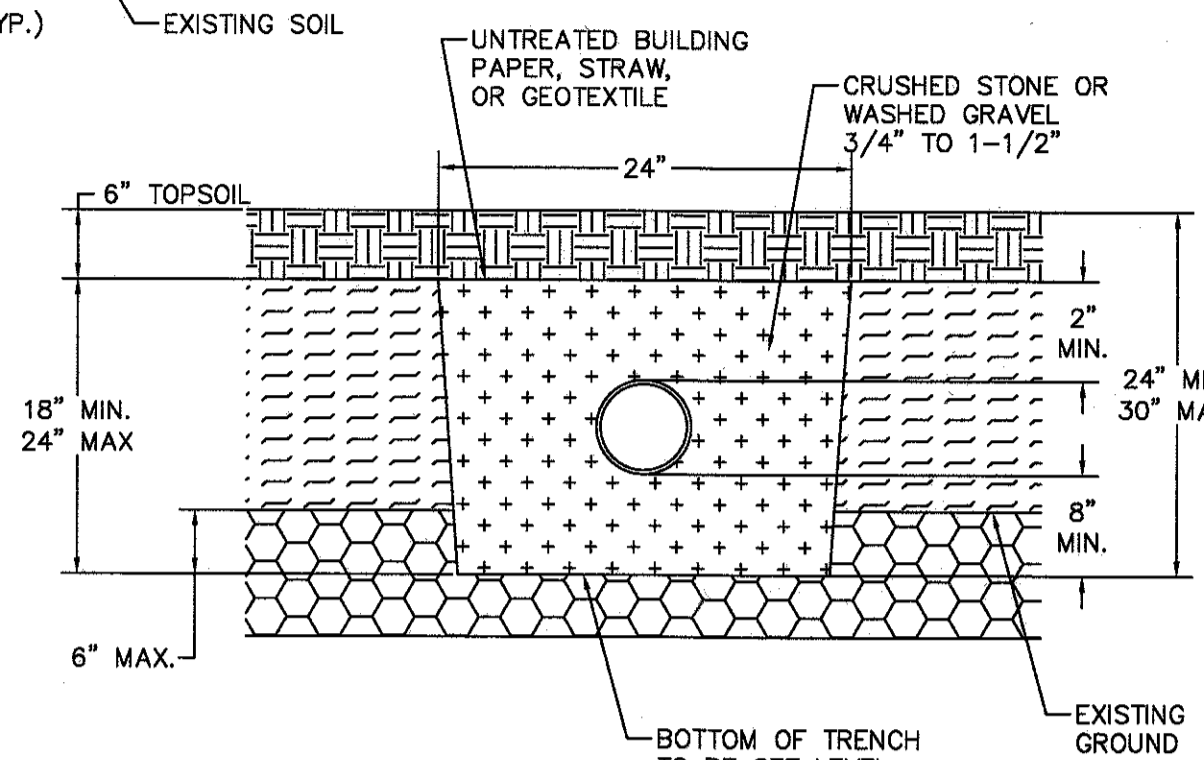
LOT #1 SEWAGE DISPOSAL SYSTEM AREA PLAN VIEW SHALLOW TRENCH SYSTEM (N.T.S.)



SHALLOW FILL SYSTEM DETAIL (LOT #1) (N.T.S.)

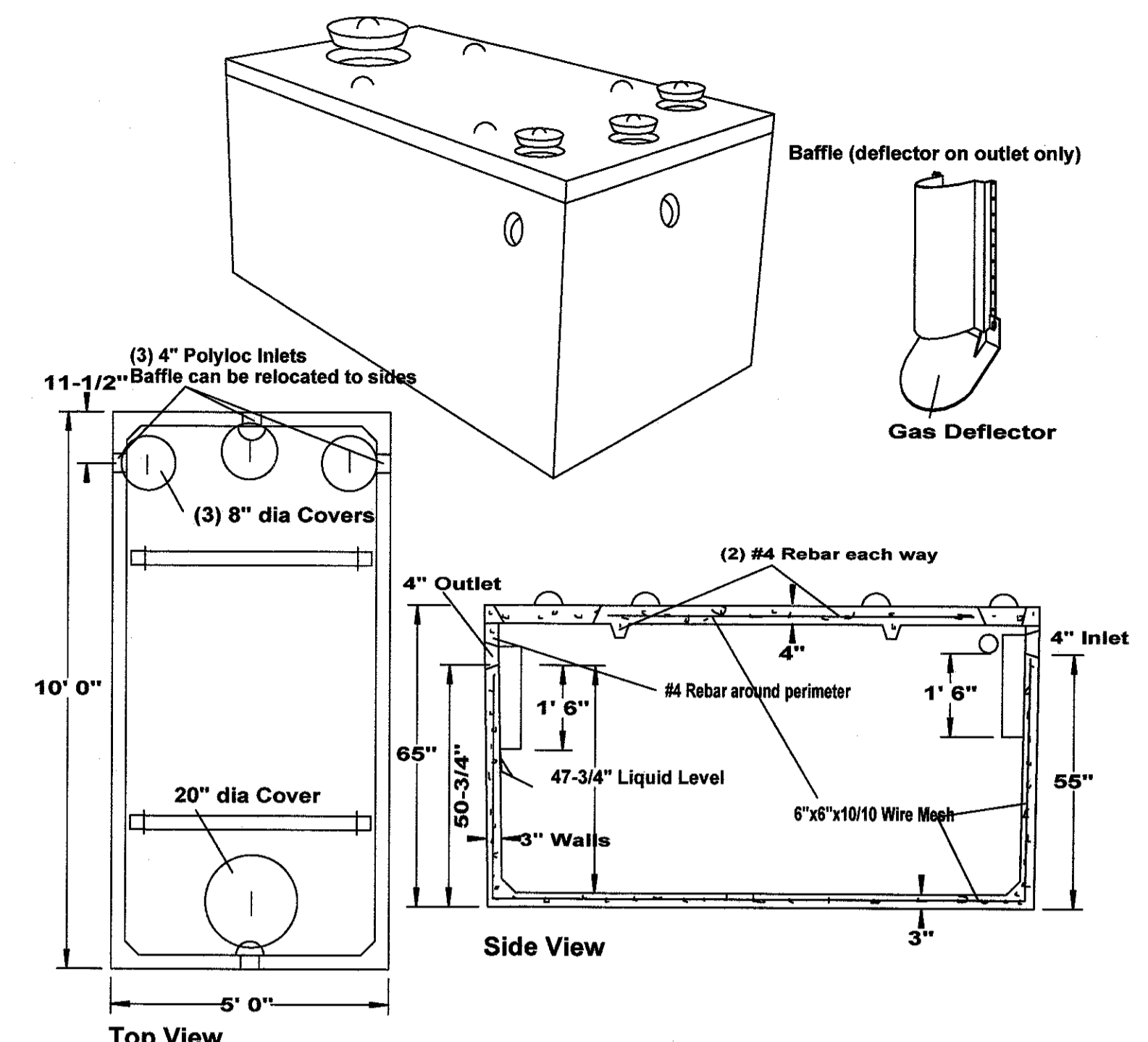


TRENCH PROFILE (N.T.S.)



NOTES
 1. TRENCHES SHALL NOT BE INSTALLED IN WET SOIL.
 2. SIDES AND BOTTOM OF TRENCHES SHALL BE RAKED PRIOR TO PLACING GRAVEL.
 3. END OF ALL DISTRIBUTION LINES SHALL BE CAPPED.
 4. BOTTOM OF TRENCHES SHALL BE SET LEVEL.

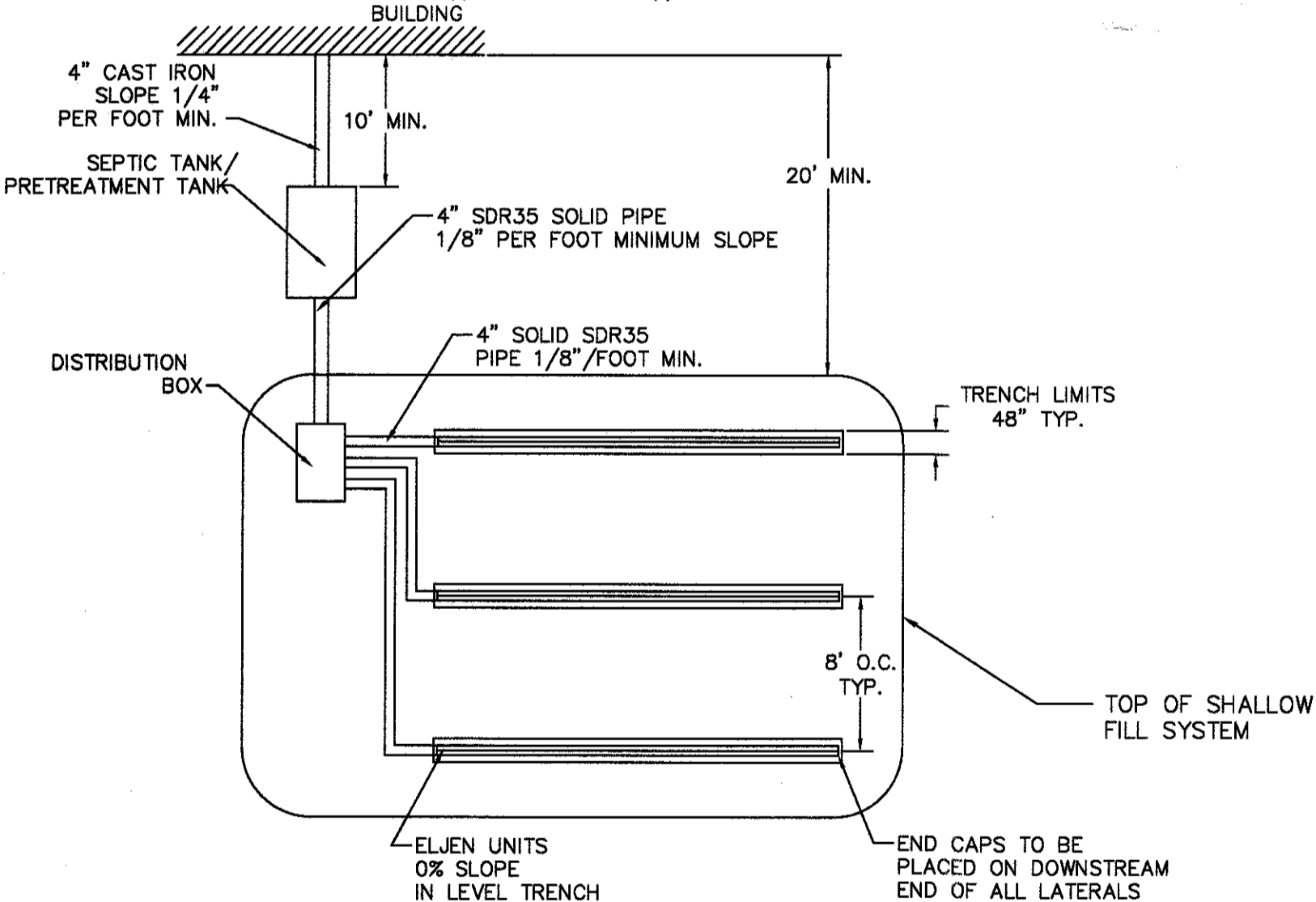
SHALLOW FILL SYSTEM TRENCH DETAIL



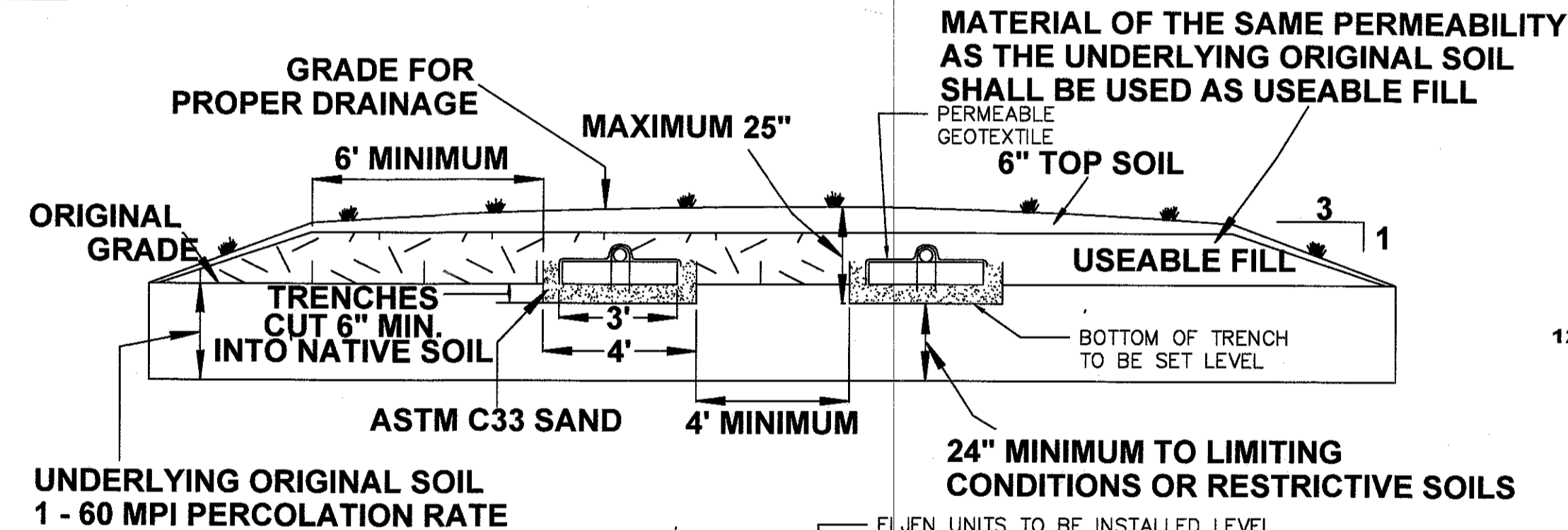
SPECIFICATIONS	
Concrete Min. Strength: 4,000 psi at 28 days	REINFORCEMENT: #4 REBAR, 6x6x10ga. WWM
Reinforcement: #4 Rebar, 6x6x10ga. WWM	AIR ENTRAINMENT: 5%
Air Entrainment: 5%	CONSTRUCTION JOINT: BUTYL RUBBER SEALANT
Construction Joint: Butyl Rubber Sealant	PIPE CONNECTION: POLYLOK SEAL (PATENTED)
Pipe Connection: Polylok Seal (patented)	WEIGHT = 9,500 LBS
Weight = 9,500 lbs	LOAD RATING: 300 PSF
Load Rating: 300 psf	

1,250 GALLON SEPTIC TANK (LOTS # 1, # 4, & # 5) (N.T.S.)

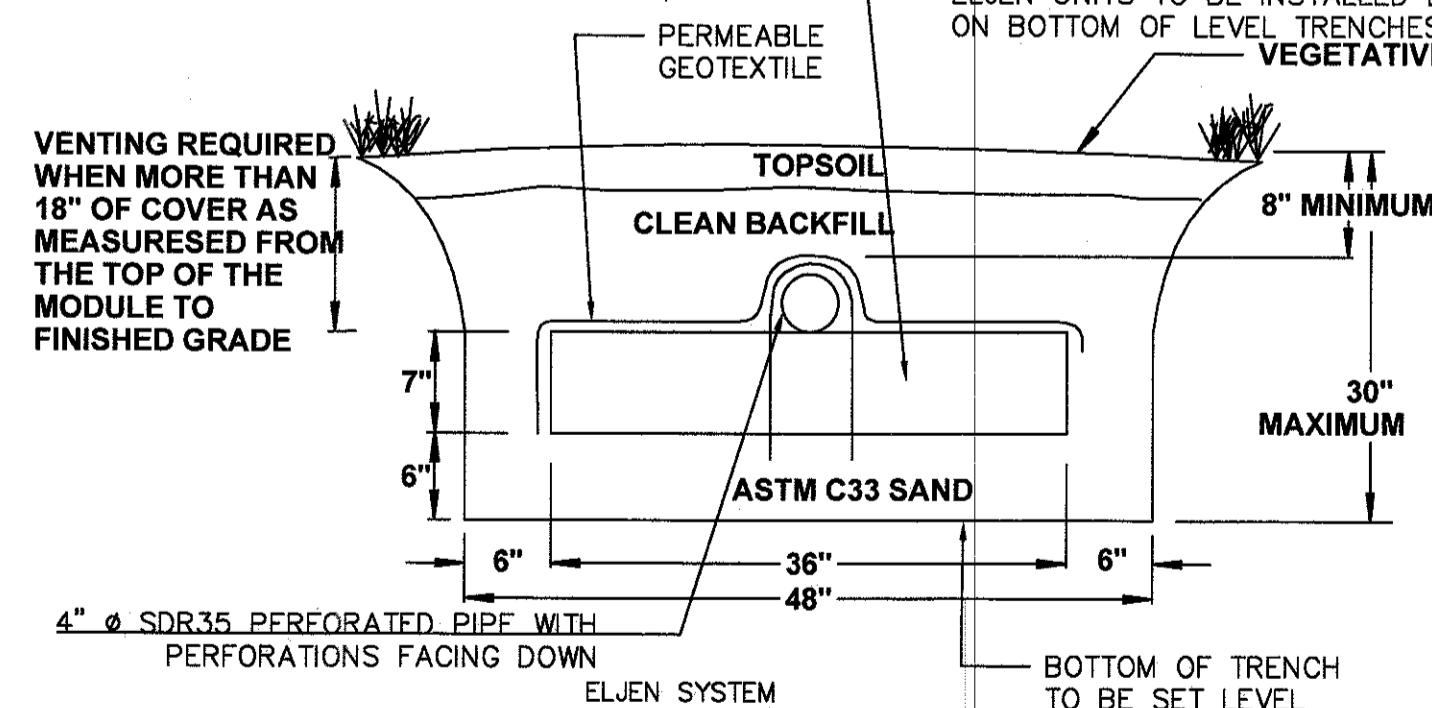
LOT #2 & #3 SEWAGE DISPOSAL DETAILS



LOT # 2 & # 3 SEWAGE DISPOSAL SYSTEM AREA PLAN VIEW SHALLOW TRENCH SYSTEM WITH ELJEN UNITS (N.T.S.)



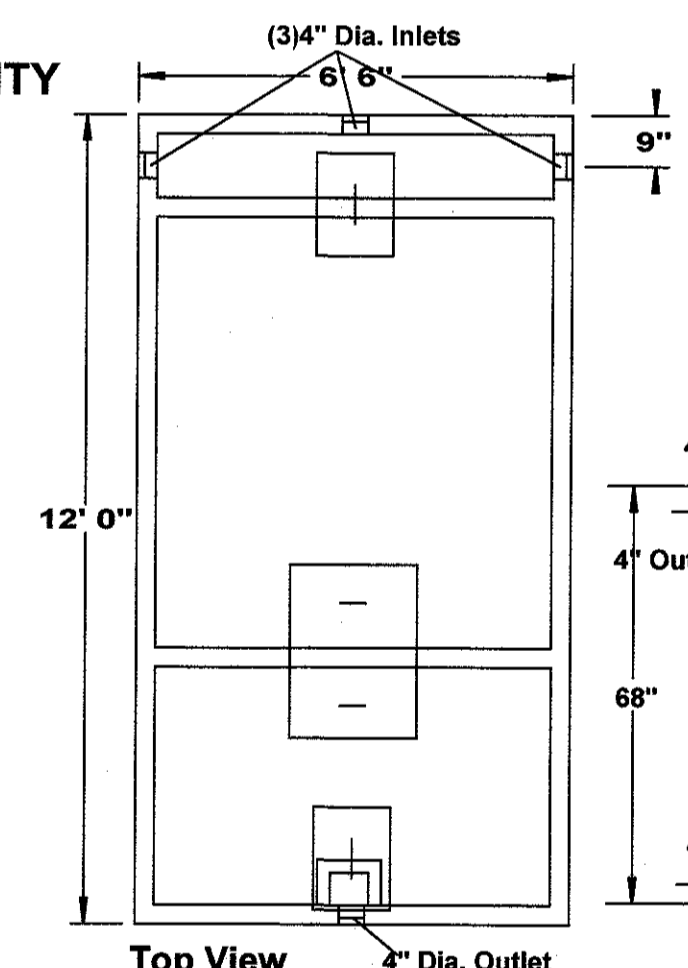
SHALLOW FILL SYSTEM WITH ELJEN DETAILS (LOTS # 2 & # 3) (N.T.S.)



SIEVE SIZE	SIEVE SQUARE OPENING SIZE	SPECIFICATION PERCENT PASSING (WET SIEVE)
0.375"	9.5 mm	100.0 - 100.0
#4	4.75mm	95.0 - 100.0
#8	2.36 mm	80.0 - 100.0
#16	1.18 mm	50.0 - 85.0
#30	600 um	25.0 - 60.0
#50	300 um	5.0 - 30.0
#100	150 um	< 10.0
#200	75 um	< 5.0

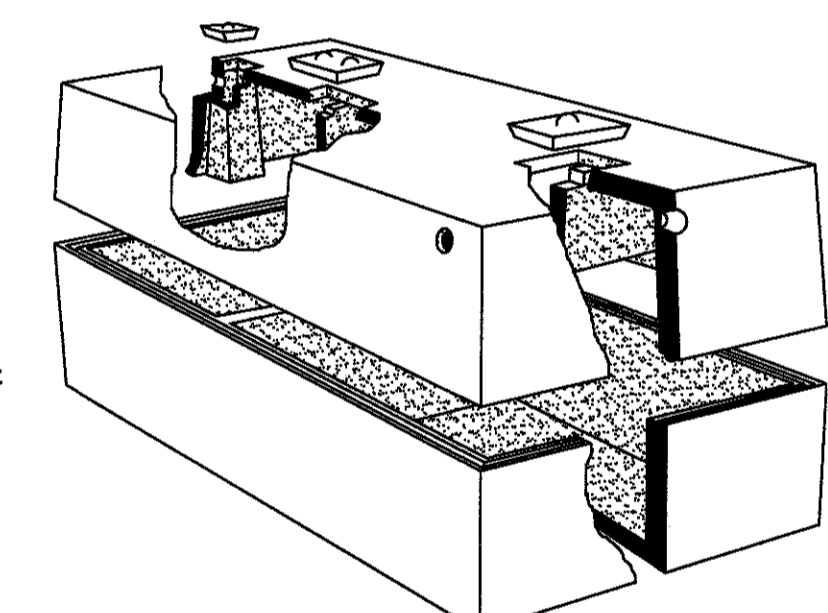
SHALLOW FILL SYSTEM WITH ELJEN DETAILS (LOTS # 2 & # 3) (N.T.S.)

- ELJEN SYSTEM NOTES**
- THIS DESIGN AND CONSTRUCTION REQUIREMENT COMPLIES WITH APPENDIX 75-A AND LOCAL HEALTH DEPARTMENT REGULATIONS.
 - THIS DESIGN COMPLIES WITH AND MUST BE INSTALLED IN ACCORDANCE WITH THE MOST CURRENT ELJEN NEW YORK DESIGN AND INSTALLATION MANUAL.
 - THIS SYSTEM IS NOT DESIGNED FOR USE WITH A GARBAGE DISPOSAL.
 - THIS SYSTEM IS NOT DESIGNED FOR BACKWASH FROM A WATER SOFTENER.
 - ORGANIC MATERIAL THAT CAN RESTRICT FLOW MUST BE REMOVED FOR RAISED BEDS. THE SOIL MUST BE SCARIFIED TO PROVIDE DEEP CHANNELS FOR THE SAND. A PLOWED INTERFACE ON CONTOUR IS RECOMMENDED TO PREPARE THE SOIL FOR FILL PLACEMENT.
 - SCARIFY ANY SMEARED SUBSOIL PRIOR TO FILL PLACEMENT.
 - FILL MATERIAL SHALL MEET OR EXCEED STATE OF NEW YORK CODE REQUIREMENTS. ALL FILL MATERIAL SHALL BE CLEAN BANK RUN SAND, FREE OF TOPSOIL, HUMUS, AND "DREDGING" DIRECTLY BENEATH THE GSF SYSTEM.
 - ASTM C33 SPECIFIED SAND WITH LESS THAN 10% PASSING A #100 SIEVE AND LESS THAN 5% PASSING A #200 SIEVE SHALL BE PLACED BELOW AND AROUND THE GSF MODULES, WITH 6 INCHES MINIMUM UNDERNEATH AND 6 INCHES MINIMUM SURROUNDING THE GSF MODULES IN TRENCH CONFIGURATIONS. IN BED SYSTEMS, USE 6 INCHES MINIMUM UNDERNEATH THE MODULES WITH 12 INCHES MINIMUM BETWEEN MODULE ROWS AND 12 INCHES MINIMUM AROUND THE PERIMETER OF THE MODULES.
 - ELJEN PROVIDED GEOTEXTILE COVER FABRIC SHALL PROVIDE PROPER TENSION AND ORIENTATION OF THE FABRIC AROUND THE SIDES OF THE PERFORATED PIPE ON TOP OF THE GSF MODULES. FABRIC SHOULD BE NEITHER TOO LOOSE, NOR TOO TIGHT. THE CORRECT TENSION OF THE COVER FABRIC IS SET BY:
 - SPREADING THE COVER FABRIC OVER THE TOP OF THE MODULE AND DOWN BOTH SIDES OF THE MODULE WITH THE COVER FABRIC TIGHT OVER THE TOP OF THE PERFORATED DISTRIBUTION PIPE.
 - PLACE SHOVEL FULL'S OF SPECIFIED SAND DIRECTLY OVER THE PIPE AREA ALLOWING THE COVER FABRIC TO FORM A MOSTLY VERTICAL ORIENTATION ALONG THE SIDES OF THE PIPE. REPEAT THIS STEP MOVING DOWN THE PIPE.
 - BACKFILL MATERIAL SHALL BE CLEAN WITH NO ROOTS OR STONES LARGER THAN 2 INCHES IN ANY DIMENSION TO A MINIMUM DEPTH OF 8 INCHES OVER THE GSF MODULES AND FINAL COVER FOR VEGETATION OF 4 INCHES TO 6 INCHES OF CLEAN LOAM.
 - ANY SYSTEM WHICH IS MORE THAN 18 INCHES BELOW FINISH GRADE AS MEASURED FROM THE TOP OF THE MODULE SHALL BE VENTED.



SPECIFICATIONS	
Concrete Min. Strength: 4,000 psi at 28 days	REINFORCEMENT: #4 REBAR gr.60, 6x6x10ga. WWM
Reinforcement: #4 Rebar gr.60, 6x6x10ga. WWM	AIR ENTRAINMENT: 6%
Air Entrainment: 6%	CONSTRUCTION JOINT: BUTYL RUBBER SEALANT
Construction Joint: Butyl Rubber Sealant	PIPE CONNECTION: POLYLOK SEAL (PATENTED)
Pipe Connection: Polylok Seal (patented)	WEIGHT = 15,500 LBS
Weight = 15,500 lbs	LOAD RATING: 300 PSF
Load Rating: 300 psf	

2,000 GALLON SEPTIC TANK (LOTS # 2 & # 3) (N.T.S.)



TOWN OF NEWBURGH PLANNING BOARD APP. # 2020-08
SEWAGE DISPOSAL SYSTEM DETAILS AND NOTES

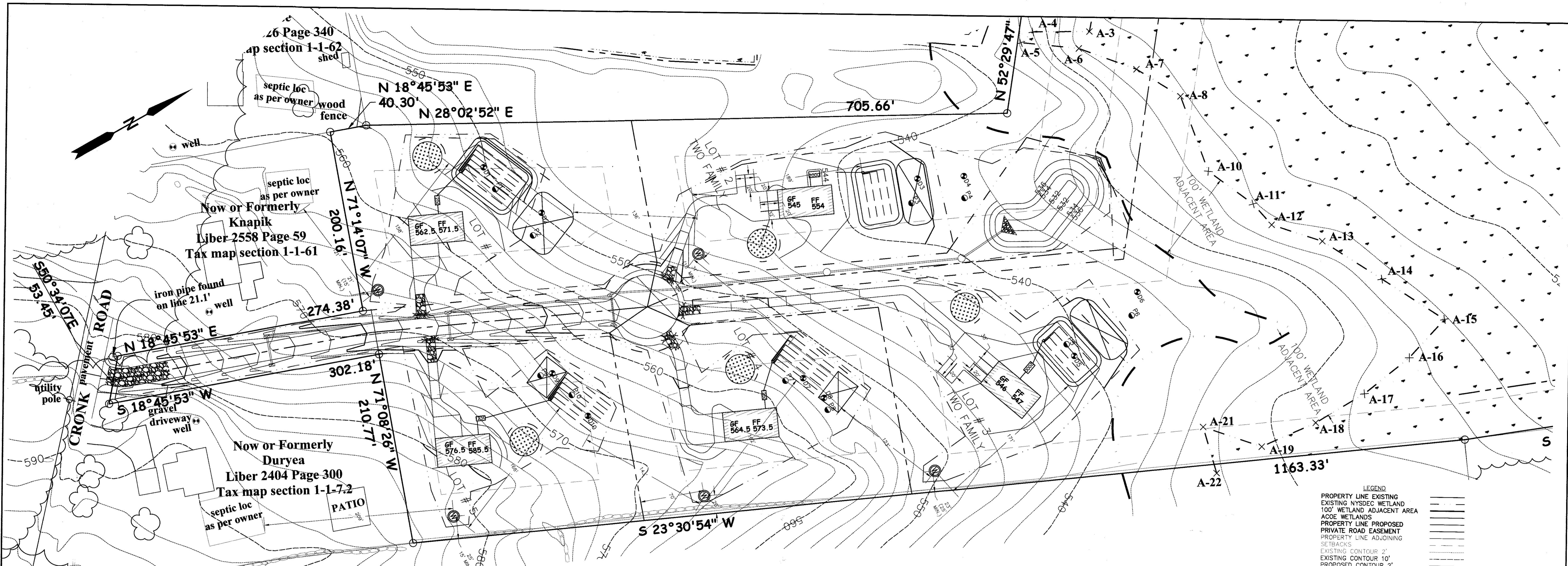
MINOR RESIDENTIAL SUBDIVISION FOR:
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JONATHAN CELLA, P.E.
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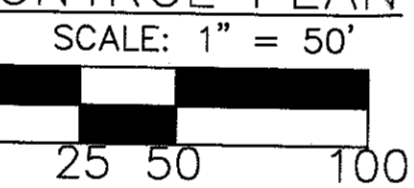
DATE: 11-01-2019
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DRAWN BY: JJC
 SHEET NO.: 6 OF 7

JONATHAN CELLA, P.E.
 N.Y.S. P.E. LIC. NO. 085069



EROSION AND SEDIMENTATION CONTROL PLAN



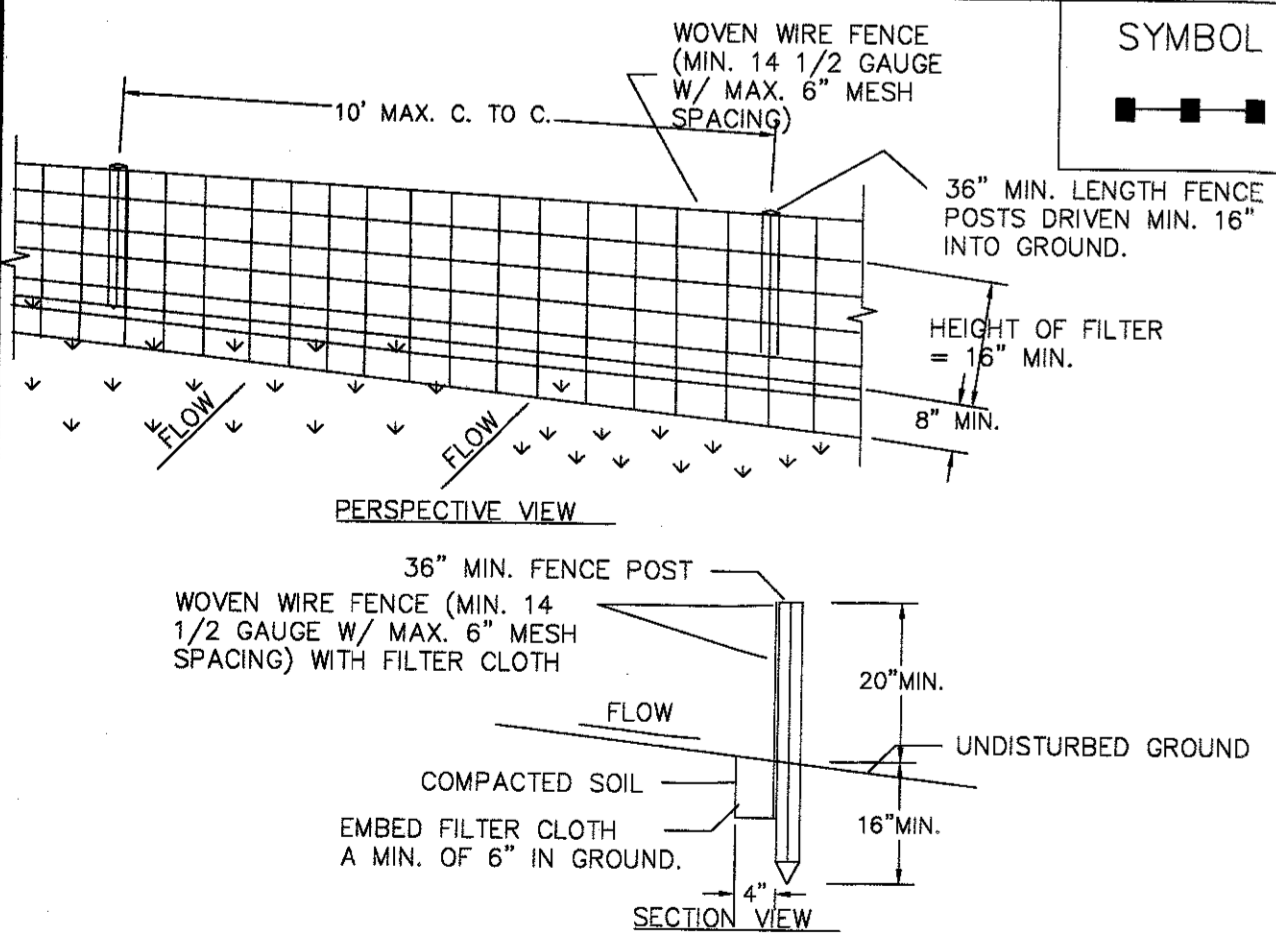
LEGEND

PROPERTY LINE EXISTING	---
EXISTING NYSDC WETLAND	~~~~~
100' WETLAND ADJACENT AREA	-----
ACOE WETLANDS
PROPERTY LINE PROPOSED	---
PRIVATE ROAD EASEMENT	---
PROPERTY LINE ADJOINING SETBACKS	---
EXISTING CONTOUR 2'	---
EXISTING CONTOUR 10'	---
PROPOSED CONTOUR 2'	---
PROPOSED CONTOUR 10'	---

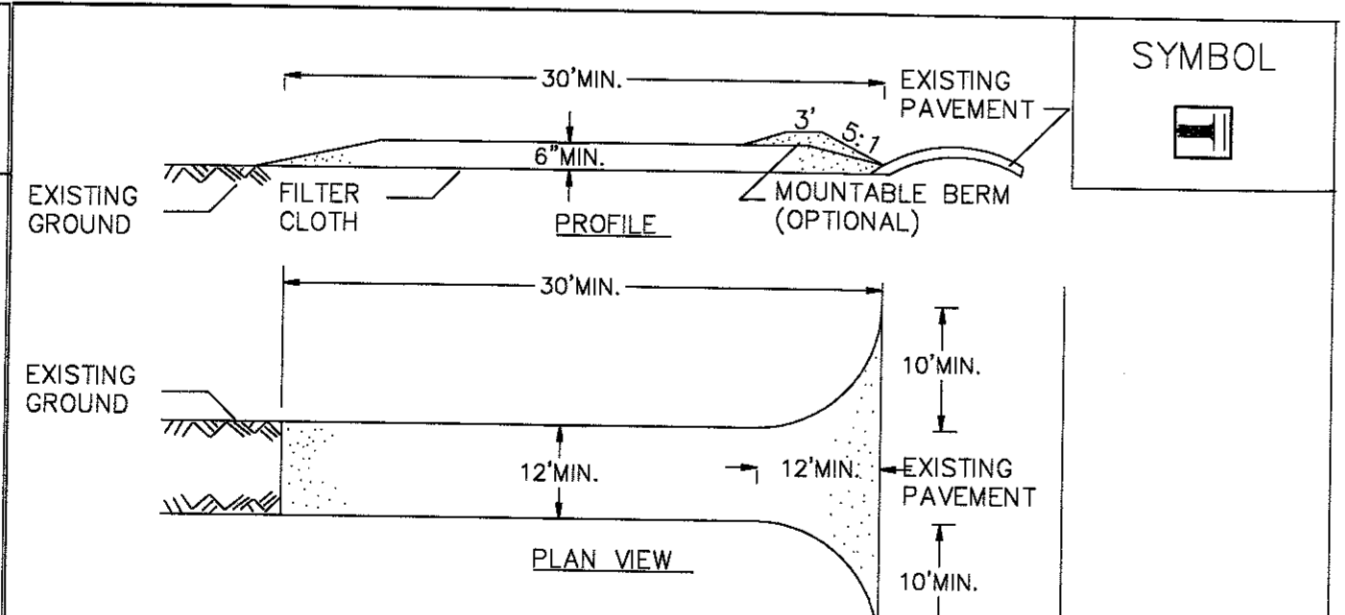
EXISTING SEPTIC	⊗
EXISTING WELL	⊙
PROPOSED WELL	⊙
PROPOSED RESIDENCE SINGLE/TWO FAMILY	▭
SEPTIC TANK (1,250 GALLON UNLESS NOTED)	▭
SEWAGE DISPOSAL SYSTEM	▭
TOP OF FILL (IF REG'D)	▭
TOE OF FILL (IF REG'D)	▭
50% RESERVE AREA	▭
STABILIZED CONSTRUCTION ENTRANCE	▭
SILT FENCE	▭
TOPSOIL STOCKPILE	⊙

TEMPORARY VEGETATION NOTES
 TEMPORARY VEGETATION SHALL BE USED TO PROTECT AREAS IN EXCESS OF 1/2 ACRE EXPOSED FOR PERIODS OF TWO (2) WEEKS BEFORE OR DURING DEVELOPMENT.
 A. FIFTY (50) LBS OF NITROGEN, 50 LBS OF APPROVED GRAIN SEED AND 2 TONS OF HAY MULCH PER ACRE OR
 B. ON AREAS THAT WILL BE EXPOSED FOR SHORT PERIODS OF TIME AND WHERE WEATHER CONDITIONS ARE CONDUCIVE TO AIRBORNE SAND, TRAPS TO CONTROL SUCH SAND SHALL BE INSTALLED AS DIRECTED.
 C. ON AREAS SUCH AS TEMPORARY ROADWAYS, WHEN DRY CONDITIONS PREVAIL, THE CONTRACTOR SHALL BE REQUIRED TO APPLY WATER OR CALCIUM CHLORIDE AS REQUIRED TO PREVENT DUST DURING CONSTRUCTION ACTIVITIES.

EROSION CONTROL STANDARD NOTES
 1. EXCAVATION, FILLING, GRADING, AND STRIPPING ACTIVITIES SHALL BE UNDERTAKEN IN SUCH A MANNER AS TO MINIMIZE THE POTENTIAL OF EROSION AND SEDIMENT AND THE THREAT TO THE HEALTH, SAFETY AND WELFARE OF NEIGHBORING PROPERTY OWNERS AND THE GENERAL PUBLIC.
 2. SITE PREPARATION AND CONSTRUCTION SHALL BE FITTED TO THE VEGETATION, TOPOGRAPHY, AND OTHER NATURAL FEATURES OF THE SITE AND SHALL PRESERVE AS MANY OF THESE FEATURES AS POSSIBLE.
 3. THE CONTROL OF EROSION AND SEDIMENT SHALL BE A CONTINUOUS PROCESS UNDERTAKEN AS NECESSARY PRIOR TO, DURING AND AFTER SITE PREPARATION AND CONSTRUCTION.
 4. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED BY SITE PREPARATION AT ANY GIVEN TIME.
 5. THE EXPOSURE OF AREAS BY SITE PREPARATION SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME PRIOR TO THE CONSTRUCTION OF STRUCTURES OR IMPROVEMENTS OR THE RESTORATION OF THE EXPOSED AREAS TO AN ATTRACTIVE NATURAL CONDITION.
 6. MULCHING OR TEMPORARY VEGETATION SUITABLE TO THE SITE SHALL BE USED WHERE NECESSARY TO PROTECT AREAS EXPOSED BY SITE PREPARATION, AND PERMANENT VEGETATION WHICH IS WELL ADAPTED TO THE SITE SHALL BE INSTALLED AS SOON AS PRACTICAL.
 7. WHERE SLOPES ARE TO BE REVEGETATED IN AREAS EXPOSED BY SITE PREPARATION, THE SLOPES SHALL NOT BE OF SUCH STEEPNESS THAT VEGETATION CANNOT BE READILY ESTABLISHED OR THAT PROBLEMS OF EROSION OR SEDIMENT MAY RESULT.
 8. SITE PREPARATION AND CONSTRUCTION SHALL NOT ADVERSELY AFFECT THE FREE FLOW OF WATER BY ENCROACHING ON, BLOCKING OR RESTRICTING WATERCOURSES.
 9. ALL FILL MATERIAL SHALL BE OF COMPOSITION SUITABLE FOR THE ULTIMATE USE OF THE FILL, FREE OF RUBBISH, AND CAREFULLY RESTRICTED IN ITS CONTENT OF BRUSH, STUMPS, TREE DEBRIS, ROCKS, FROZEN MATERIAL, AND SOFT OR EASILY COMPRESSIBLE MATERIAL.
 10. FILL MATERIAL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT PROBLEMS OF EROSION, AND WHERE THE MATERIAL IS TO SUPPORT STRUCTURES, IT SHALL BE COMPACTED TO A MINIMUM OF NINETY PERCENT (90%) OF STANDARD PROCTOR WITH PROPER MOISTURE CONTROL.
 11. ALL TOPSOIL WHICH IS EXCAVATED FROM A SITE SHALL BE STOCKPILED AND USED FOR THE RESTORATION OF THE SITE, AND SUCH STOCKPILES, WHERE NECESSARY, SHALL BE SEEDED OR OTHERWISE TREATED TO MINIMIZE THE EFFECTS OF EROSION.
 12. PRIOR TO, DURING AND AFTER SITE PREPARATION AND CONSTRUCTION, AN INTEGRATED DRAINAGE SYSTEM SHALL BE PROVIDED WHICH AT ALL TIMES MINIMIZES EROSION, SEDIMENT, HAZARDS OF SLOPE INSTABILITY, AND ADVERSE EFFECTS ON NEIGHBORING PROPERTY OWNERS.
 13. THE NATURAL DRAINAGE SYSTEM SHALL GENERALLY BE PRESERVED IN PREFERENCE TO MODIFICATIONS OF THIS SYSTEM, EXCEPT WHERE SUCH MODIFICATIONS ARE NECESSARY TO REDUCE LEVELS OF EROSION AND SEDIMENT AND ADVERSE EFFECTS ON NEIGHBORING PROPERTY OWNERS.
 14. ALL DRAINAGE SYSTEMS SHALL BE DESIGNED TO HANDLE ADEQUATELY ANTICIPATED FLOWS, BOTH WITHIN THE SITE AND FROM UPSTREAM DRAINAGE BASIN.
 15. SUFFICIENT GRADES AND DRAINAGE FACILITIES SHALL BE PROVIDED TO PREVENT THE PONDING OF WATER, UNLESS SUCH PONDING IS PROPOSED WITHIN SITE PLANS, IN WHICH EVENT THERE SHALL BE SUFFICIENT WATER FLOW TO MAINTAIN PROPOSED WATER LEVELS AND TO AVOID STAGNATION.
 16. THERE SHALL BE PROVIDED WHERE NECESSARY TO MINIMIZE EROSION AND SEDIMENT SUCH MEASURES AS MEASURES AS BENCHES, BERMS, TERRACES, DIVERSIONS AND SEDIMENT, DEBRIS AND RETENTION BASINS.
 17. DRAINAGE SYSTEMS, PLAN TINGS AND OTHER EROSION OR SEDIMENT CONTROL DEVICES SHALL BE MAINTAINED AS FREQUENTLY AS NECESSARY TO PROVIDE ADEQUATE PROTECTION AGAINST EROSION AND SEDIMENT AND TO ENSURE THAT THE FREE FLOW OF WATER IS NOT OBSTRUCTED BY THE ACCUMULATION OF SILT, DEBRIS OR OTHER MATERIAL OR BY STRUCTURAL DAMAGE.



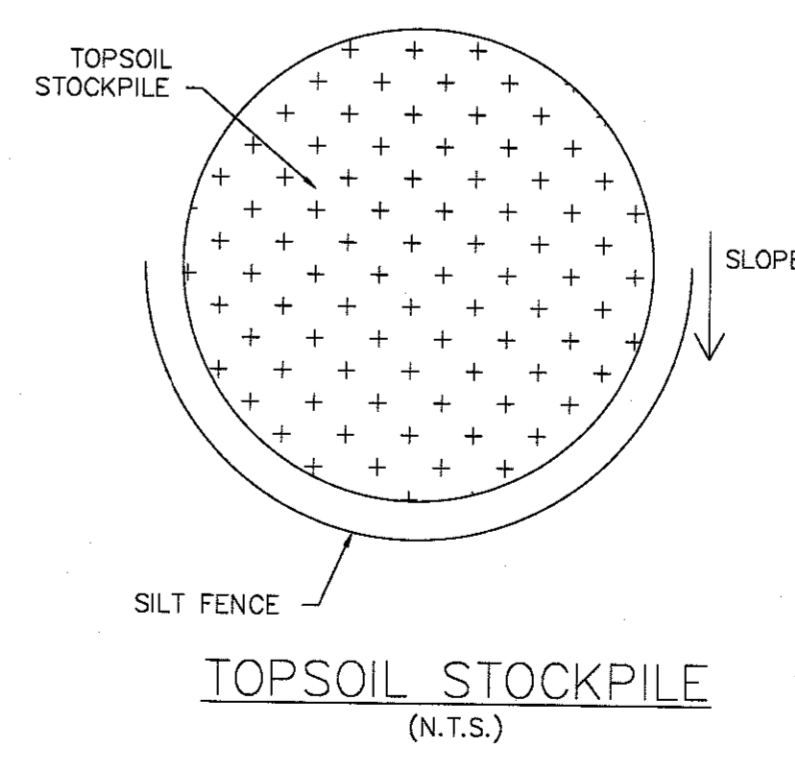
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES. POSTS SHALL BE STEEL EITHER "I" OR "U" TYPE OR HARDWOOD.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE SHALL BE WOVEN WIRE, 12 1/2 GAUGE, 6" MAXIMUM MESH OPENING.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH SHALL BE EITHER FILTER X, MIRAFI 100X, STABILINKA T140N, OR APPROVED EQUIVALENT.
- PREFABRICATED UNITS SHALL BE GEOFAB, ENVIROFENCE, OR APPROVED EQUIVALENT.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.



- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY).
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TWELVE (12) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS. TWENTY-FOUR (24) FOOT IF SINGLE ENTRANCE TO SITE.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY, ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACTED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON A AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

U.S. DEPARTMENT OF AGRICULTURE
 NATURAL RESOURCES CONSERVATION SERVICE
 NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 NEW YORK STATE SOIL & WATER CONSERVATION COMMITTEE

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 NATURAL RESOURCES CONSERVATION SERVICE
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LIMITS OF DISTURBANCE
 THE PROPOSED SINGLE FAMILY RESIDENTIAL DEVELOPMENT WILL DISTURB A TOTAL OF 4.8 ACRES BASED ON NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION SPDES GENERAL PERMIT FOR FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITY PERMIT No. GP-0-10-001 THE PROPOSED DEVELOPMENT DOES NOT REQUIRE A SWPPP SINCE DISTURBANCE IS LESS THAN 5 ACRES. THEREFORE THE PROPOSED DEVELOPMENT DOES NOT REQUIRE ANY PERMANENT STORMWATER MANAGEMENT FACILITIES FOR WATER QUALITY OR PEAK DISCHARGES.

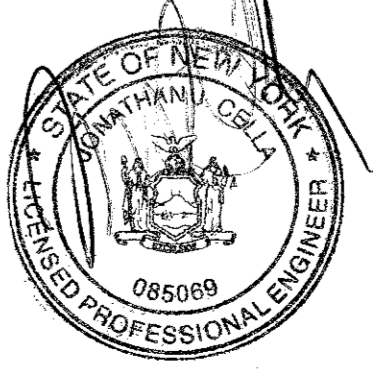
TOWN OF NEWBURGH PLANNING BOARD APP. # 2020-08

EROSION AND SEDIMENTATION CONTROL PLAN
 MINOR RESIDENTIAL SUBDIVISION FOR:
 JOHN AND CARMEN HAMMOND
 CRONK ROAD (S/B/L: 1-1-63.23)
 TOWN OF NEWBURGH
 ORANGE COUNTY, NEW YORK

JONATHAN CELLA, P.E.
 51 HUNT ROAD
 WALLKILL, NEW YORK 12589
 (845) 741-0363
 jonathancellap@gmail.com

DATE: 11-01-2019
 SCALE: AS NOTED
 SHEET NO.: 7 OF 7

DRAWN BY: JJC



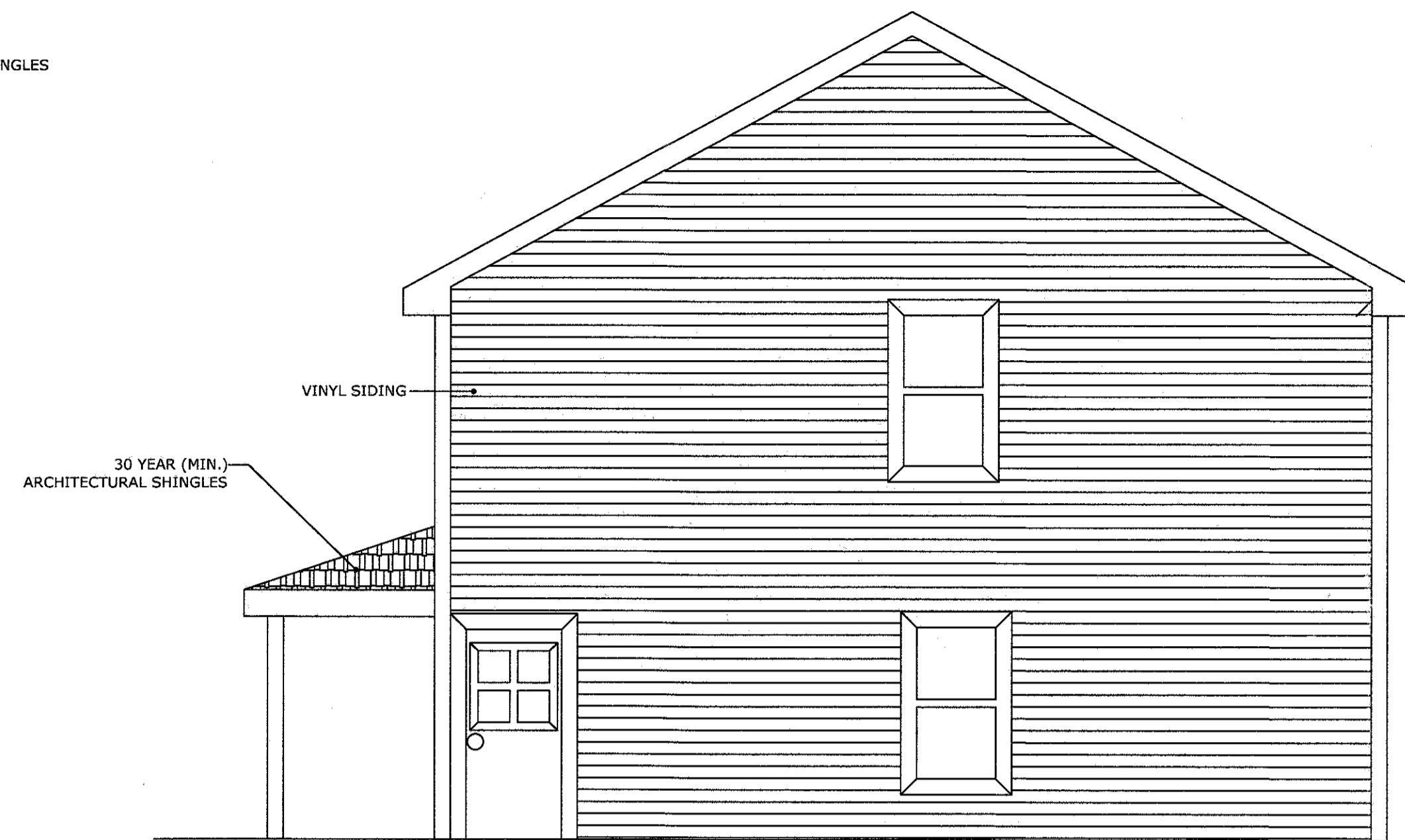
JONATHAN CELLA, P.E.
 N.Y.S. P.E. LIC. NO. 085069

REVISIONS
 1. 05/28/2020: IN HOUSE REVISIONS
 2. 10/27/2020: PER TOWN COMMENTS
 3. 03/04/2021: PER TOWN COMMENTS



PROPOSED FRONT ELEVATION

Scale: 1/4" = 1'-0"



PROPOSED RIGHT SIDE ELEVATION

Scale: 1/4" = 1'-0"



PROPOSED REAR ELEVATION

Scale: 1/4" = 1'-0"

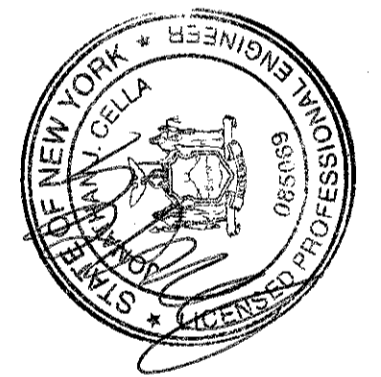


PROPOSED LEFT SIDE ELEVATION

Scale: 1/4" = 1'-0"

Project Title:
 TWO FAMILY RESIDENTIAL
 PLANS FOR:
 HAMMOND SUBDIVISION
 LOT # 2 AND LOT # 3
 CRONK ROAD (S/B/L: 1-1-63.23)
 TOWN OF NEWBURGH,
 ORANGE COUNTY, NEW YORK

Sheet Title:
PROPOSED ELEVATIONS

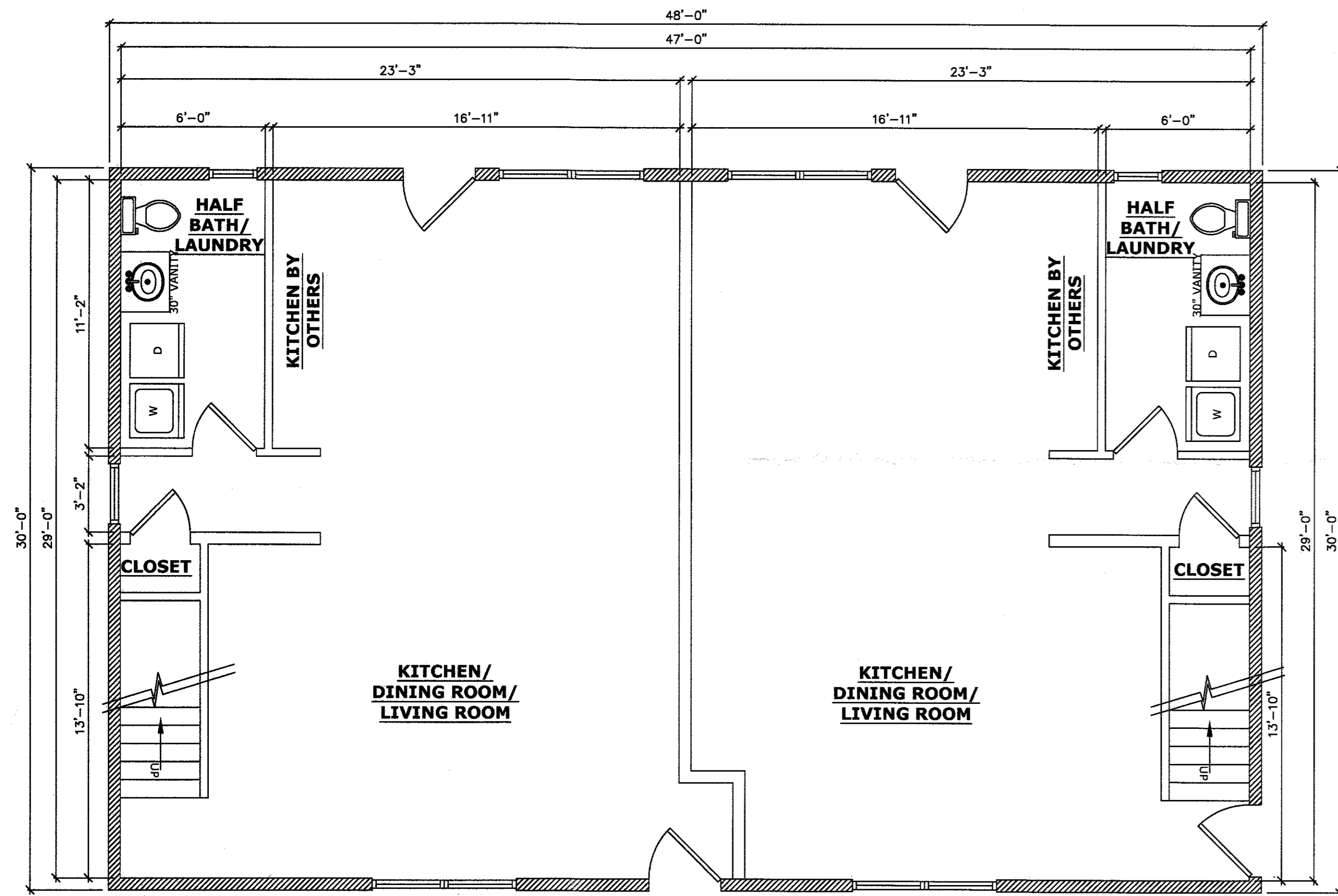


Seal:

Designer/ Engineer:
 Jonathan Cella, P.E.
 51 Hunt Road
 Walkill, New York, 12589
 (845) 741-0363
 N.Y.S. P.E. License #: 085069

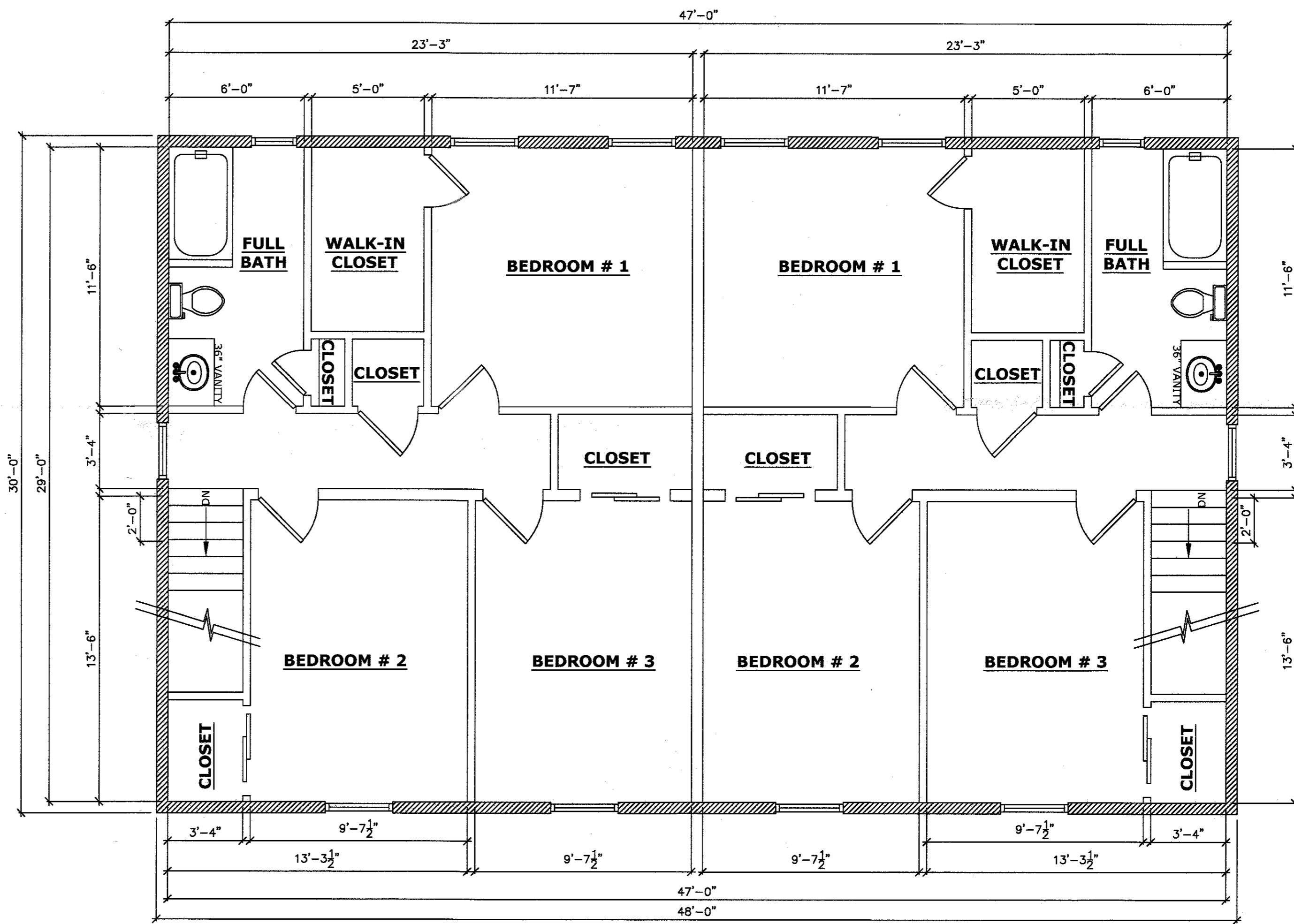
Date: 03/04/2021

Sheet Number: **A-1**



PROPOSED FIRST FLOOR PLAN

Scale: 1/4" = 1'-0"



PROPOSED SECOND FLOOR PLAN

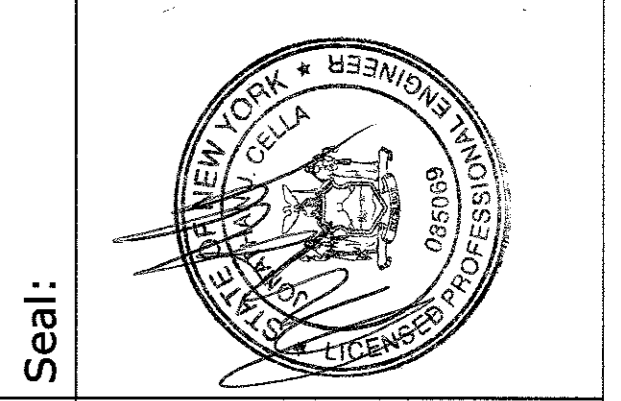
Scale: 1/4" = 1'-0"

LIVABLE AREA SQUARE FOOTAGE

FIRST FLOOR	1,363 S.F.
SECOND FLOOR	1,363 S.F.
TOTAL SQUARE FOOTAGE	2,726 S.F.

Project Title:
**TWO FAMILY RESIDENTIAL
 PLANS FOR:
 HAMMOND SUBDIVISION
 LOT # 2 AND LOT # 3
 CRONK ROAD (S/B/L: 1-1-63.23)
 TOWN OF NEWBURGH,
 ORANGE COUNTY, NEW YORK**

Sheet Title:
PROPOSED FLOOR PLANS



Designer/ Engineer:
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