

RECEIVED JUN 08 2018
Chemung County Planning Board

Durkin Donuts

Chemung County Planning Board

Chemung County Commerce Center
400 East Church Street
P.O. Box 588
Elmira, NY 14902-0588
607-737-5510

www.chemungcountyny.gov/planning

planning@co.chemung.ny.us

Chemung County Planning Board Municipal Referral Form

Instructions For Filling Out This Form:

To begin, click on each of the tabs below (Referral Information, Petitioners, etc.) to enter your information. When done, click on the Preview Your Form button (in the "Full Statement" Checklist tab), and when satisfied, click the Submit Your Form button. You will receive a confirmation email of your Municipal Referral Form for your records.

*** = Required Field**

Referral Information

Referring Municipality: *
Town

City/Village/Town: *
Big Flats

Referring Official: *
Tom Whispel

Title: *

Code Enforcement Officer

Address: *

476 Maple Street
Big Flats
NY
14814

Phone Number: *

(607) 562-8443

Email Address: *

twhispel@bigflatsny.gov

Referring Board: *

Planning Board

Petitioners**How Many Petitioners? (up to 4): ***

1

Petitioner 1 Name: *

Manish Patel

Petitioner 1 Address: *

2750 Westinghouse Road
Horseheads
NY
14845

Petitioner 1 Phone Number: *

(585) 409-0527

Property Information**Location of Property: ***

3317 Chambers Road

Tax Map Parcel Number(s): *

57.04-1-2

Current Zoning District: *

Business Regional (BR)

Proposed Action

Please select the proposed action(s) from the drop-down menu below.

Proposed Action(s): *

Site Plan Review

Description of proposed action (attach detailed narrative if available):

New layout of front parking lot to provide better access, traffic flow and increased parking.

Upload Detailed Narrative?

No

The proposed action applies to real property within five hundred feet (500') of the following:

(please identify by filling in the appropriate blank after each item)

(c) Right-of-way of any existing or proposed (County) or (State Parkway), (Thruway), (Expressway), (Road) or (Highway); (Include (County) or (State Route) # and name of (Road):

Chambers Road (CR35)

Hearings/Meeting Schedules

Please Select Which Board(s): *

Planning Board/Planning Commission

Planning Board/Planning Commission

Board: Planning Board/Planning Commission

Planning Board/Planning Commission Public Hearing Date:

08/07/2018

How many Prior and Future Meeting Dates?

1

Prior/Future Meeting Date 1:

09/04/2018

Action Taken on This Application (reviewed, approved, discussed, etc.):

Preliminary Approval

"Full Statement" Checklist

As defined in NYS General Municipal Law §239-m (1)(c), please make sure you have attached the following required information with your referral, as appropriate.

There is nothing to be filled out on this tab.

For All Actions:

Chemung County Planning Board – Municipal Referral Form

All application materials required by local law/ordinance to be considered a "complete application" at the local level (PDF preferred).

Part 1 Environmental Assessment Form (EAF) or Environmental Impact Statement (EIS) for State Environmental Quality Review (SEQR). If Type II Action, provide a statement to that effect.

Agricultural Data Statement, for site plan review, special/conditional use permit, use variances, or subdivision review located in an Agricultural District or within 500 feet of a farm operation located in an Agricultural District, per Ag. Districts Law Article 25AA §305-a, Town Law §283-a, and Village Law §7-739.

Municipal board meeting minutes on the proposed action (PDF preferred).

For Proposing or Amending Zoning Ordinances or Local Laws: The above requirements AND

Report/minutes from Town Board, Village Board or Trustees or Planning Board (PDF preferred)

Zoning Map

Complete text of proposed law, comprehensive plan, or ordinance (PDF preferred)

Form Submission

Please submit this form (along with attachments) by the close of business [10 days prior to the Chemung County Planning Board meeting.](#)



July 30, 2018

Town of Big Flats Planning Board
Attn: Brenda Belmonte
476 Maple Street
Big Flats, NY 14814

Preliminary Site Plan Review

Re: Dunkin Donuts
3317 Chambers Road
Tax ID: 57.04-1-2

Application Materials Received – July 20, 2018
Planning Board Meeting – August 7, 2018

Project Description

The applicant has submitted a Preliminary Site Plan application to modify the parking lot to provide better access, traffic flow. No changes to the existing building is proposed.

The parcel is located within the Business Regional (BR) and the existing use is permitted use under Site Plan approval in the BR Zone.

The applicant has submitted the following materials:

- Site Plan Application
- Short Form EAF
- Engineering Drawings for Dunkin Donuts Site Plan, consisting of 6 sheets prepared by HUNT Engineering dated June 2018.

Applicable References to Town Code & Comments

(The references to the Town Code are merely summaries and are not inclusive. If uncertainty arises, refer to the appropriate section of the Town Code for clarification.)

17.12.010

Use Requirements

Comment: The existing use is permitted through site plan approval in the Business Regional (BR) Zone

17.32.070 and 17.32.090 Site Plan Requirements

Many of the items required under this section have not been included in the Site Plan Application Package. The Board should determine if they are willing to waive the submission of these items and render the application completed. Section 17.32.050 provides the Planning Board at its discretion, to waive any requirements of this Chapter deemed not necessary for review of an application for site plan review and approval. The following are items that are required to be submitted by code but have not been provided.



- (A)(2) An area map of the site topography, at a scale of not less than one inch to two thousand (2,000) feet, showing the entire proposed site area and the location of the lots for the proposed development;
- (D)(13) Location, design, and size of outdoor lighting,
- (D)(16) Grading plan and erosion control plan, including the description and location of control measures,
- (D)(17) Location and design of a stormwater management system

General Plan Comments:

- A. Applicant provided zoning information table. The zoning district is incorrectly shown as BN2- Business Neighborhood 2, the correct zone for the project is BR- Business Regional. The current lot coverage, as provided by the applicant is 77.96% with a proposed coverage of 82.6%. The maximum lot coverage for the BR District is 70%. As a result, the site is an existing nonconformity. The applicant will need to obtain an area variance to increase the lot coverage from the existing conditions. However, as recommended in comment B below, we believe the layout of the site can be adjusted to reduce the lot coverage to be at or below the existing lot coverage.
- B. The driveway in front of the existing store is proposed to be 25.5' wide but is proposed to be only one way, with a curbside service lane located to the East. The purpose of this curbside service lane is unknown. A recommendation would be to eliminate this curbside service and lane and provide a landscape island in this space with a dedicated parking space in front of the store for curbside pick-up. By removing the curbside service lane, the drive-aisle in front of the store can be widened and the landscaped island along Chambers Road can be reconfigured and increased in size. This will allow for a reduction in lot coverage potential to existing levels. As we have recommended previously, the northern most driveway on Chambers Road is poorly configured to direct the flow of traffic. By removing the curbside service lane, the driveway can be modified to allow for safer and more direct traffic circulation patterns into the site.
- C. The applicant is proposing to reconfigure parking lot islands, which will change the flow of runoff for this site. Grading and Drainage information should be provided for review. As noted above, the amount of greenspace is being reduced for this site. The applicant shall provide calculations to show that the perforated pipe system is adequate to handle the amount of runoff being directed to this system.
- D. The project is planned to remove existing pavement and landscape islands. The disturbance will be under 1 acre, but the applicant should prepare an erosion and sediment control plan to denote BMPs that will be used to prevent sediment transport during construction.
- E. Applicant to provide ADA access route slope from the parking areas to the building to ensure compliance with ADA requirements.
- F. A detail shall be provided at the joint between the existing pavement and the new pavement at the sawcut lines.
- G. A photometric plan shall be provided to reflect the new light pole locations to ensure compliance with lighting requirements outlined in the code.



- H. A landscaping plan shall be provided to show proposed landscaping. It appears that all of the existing landscaping within the parking lot will be removed as part of the improvements. Per Section 17.48.010 (O)(10), one (1) shade tree of not less than three inches caliper for each six parking spaces is required. As a result, the applicant will need to provide 5 shade trees or request a variance.
- I. The improvements appear to extend onto Chambers Road. Any improvements within the County ROW will required approval from the County Public Works.
- J. The applicant provided a truck turning plan utilizing a 30' box truck approaching from the North. It is anticipated the truck delivers will come to the site from the Interstate 86 and Chambers Road intersection to the south of the site. As a result, the truck should be shown entering and exit from that direction. The largest possible delivery truck should be used to demonstrate access. The existing use will have full size tractor trailer deliveries. The ability for an emergency vehicle to access the front of the building from either direction is unknown.

State Environmental Quality Review

The proposed development would be classified as an Unlisted action with an uncoordinated review. As a result, the Planning Board must complete the environmental review for this project. The applicant has provided Part 1 of the Short Environmental Assessment Form.

County Review

The site plan application must be referred to the Chemung County Planning Board for a review of potential intermunicipal impacts because the site meets at least one of the criteria for referral found in the General Municipal Law (GML) of New York State:

- The site meets the criteria of within five hundred feet of the right-of-way of an existing or proposed county or state parkway, thruway, expressway, road or highway. [GML 239-m(b)(iii)]

Recommendation

The Board must first determine if the information submitted is sufficient for the application to be deemed complete. As noted above, there are several comments on the proposed layout and relevant information that is required as part of the Preliminary Site Plan that has not been included. If the Board deems the application complete, they should waive the site plan requirements outlined in Sections 17.32.070 and 17.32.090.

Should the Board determine that this application is complete; it shall declare itself lead agency and complete Part 2 of the EAF by finding no impact or small impact for all possible impacts, the complete Part 3 by making a determination that there will be no significant adverse impact on the environment (issuing a negative declaration).

The Planning Board must refer the application to the Chemung County Planning Board for review.

We do not recommend that the Planning Board take action on the Preliminary Site Plan at this time. We would like the opportunity to work with the applicant to develop some adjustments to the parking to provide for a more efficient and safe layout for this property.



If you have any questions regarding this review letter, please contact me by phone at (607) 333-3120 or via email at rswitala@bergmannpc.com.

Best Regards,
BERGMANN ASSOCIATES

Robert Switala, PE, CPESC, CPSWQ
Principal

July 6, 2018

Big Flats Planning Board Members
476 Maple St
Big Flats, NY 14814

Re: Site Plan Approval For 3317 Chambers Road **Dunkin Donuts Restaurant**

Dear Planning Board Members

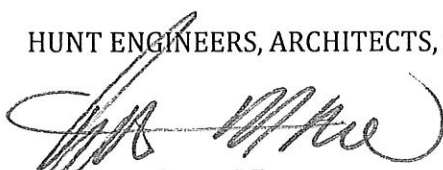
The owner of the 3317 Chambers Road Dunkin Donuts business is planning to reconfigure the front parking lot to help alleviate traffic flow through their existing site. The new owner of the establishment has not been allowed to let traffic exist out of the drive through and onto the adjacent property to the south. The current layout of the parking lot and drive through was designed to use the adjacent southern property as an exit point and now that the use of the adjacent property is no longer available there has been problems with traffic flow into and out of the parking lot. The new proposed layout was presented to the planning board in May of this year and has been revised according to the comment letter from the town's engineer. This project is requesting to be placed on the August planning board agenda and referred to the Chemung County Planning Board for the July meeting per the request of the last Big Flats Planning Board meeting in May.

If there are any questions or needs of additional information, please contact me.

Thank you

Sincerely,

HUNT ENGINEERS, ARCHITECTS, LAND SURVEYORS & LANDSCAPE ARCHITECT, DPC



Robert M. Drew, PE
Principal

Short Environmental Assessment Form

Part 1 - Project Information

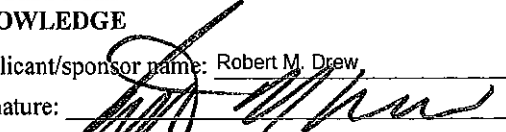
Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.

Part 1 - Project and Sponsor Information			
Robert M Drew			
Name of Action or Project: Site plan Approval			
Project Location (describe, and attach a location map): 3317 Chambers Road Horseheads NY			
Brief Description of Proposed Action: New layout for existing front parking area. Work will include removal of some concrete curb islands, new curb cut access onto Chambers Road, installation of stormwater structure, replacement of asphalt in areas removed, new curb side service lane, and new painted striping of parking lot.			
Name of Applicant or Sponsor: Robert M. Drew		Telephone: 6073581000 E-Mail: drewr@hunt-eas.com	
Address: 100 Hunt Center,			
City/PO: Horseheads		State: NY	Zip Code: 14845
1. Does the proposed action only involve the legislative adoption of a plan, local law, ordinance, administrative rule, or regulation? If Yes, attach a narrative description of the intent of the proposed action and the environmental resources that may be affected in the municipality and proceed to Part 2. If no, continue to question 2.		NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other governmental Agency? If Yes, list agency(s) name and permit or approval: Chemung County Planning and Chemung County Highway Dept road work permit.		NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
3.a. Total acreage of the site of the proposed action?		0.88 acres	
b. Total acreage to be physically disturbed?		0.35 acres	
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?		0.88 acres	
4. Check all land uses that occur on, adjoining and near the proposed action. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input checked="" type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban) <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Parkland			

5. Is the proposed action, a. A permitted use under the zoning regulations?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area? If Yes, identify: _____	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
b. Are public transportation service(s) available at or near the site of the proposed action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
c. Are any pedestrian accommodations or bicycle routes available on or near site of the proposed action?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
9. Does the proposed action meet or exceed the state energy code requirements? If the proposed action will exceed requirements, describe design features and technologies: _____	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply? If No, describe method for providing potable water: _____ Business is currently connected and new action will not change the existing connection	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities? If No, describe method for providing wastewater treatment: _____ Business is currently connected and new action will not change the existing connection	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
12. a. Does the site contain a structure that is listed on either the State or National Register of Historic Places?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
b. Is the proposed action located in an archeological sensitive area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
13. a. Does any portion of the site of the proposed action, or lands adjoining the proposed action, contain wetlands or other waterbodies regulated by a federal, state or local agency?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody? If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
14. Identify the typical habitat types that occur on, or are likely to be found on the project site. Check all that apply: <input type="checkbox"/> Shoreline <input type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input checked="" type="checkbox"/> Urban <input type="checkbox"/> Suburban			
15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
16. Is the project site located in the 100 year flood plain?	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>	
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes, a. Will storm water discharges flow to adjacent properties? <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>	
b. Will storm water discharges be directed to established conveyance systems (runoff and storm drains)? If Yes, briefly describe: <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES New stormwater structure has been installed for the existing area. Currently there is no stormwater collection at this site.			

18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? If Yes, explain purpose and size: _____ New underground storm water system will collect and infiltrate runoff to ground water.	NO <input type="checkbox"/>	YES <input checked="" type="checkbox"/>
19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? If Yes, describe: _____	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? If Yes, describe: _____	NO <input checked="" type="checkbox"/>	YES <input type="checkbox"/>
I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor name: Robert M. Drew Date: 7/6/2018 Signature: 		

Project:

Date:

Short Environmental Assessment Form
Part 2 - Impact Assessment

Part 2 is to be completed by the Lead Agency.

Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

	No, or small impact may occur	Moderate to large impact may occur
1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations?	<input type="checkbox"/>	<input type="checkbox"/>
2. Will the proposed action result in a change in the use or intensity of use of land?	<input type="checkbox"/>	<input type="checkbox"/>
3. Will the proposed action impair the character or quality of the existing community?	<input type="checkbox"/>	<input type="checkbox"/>
4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)?	<input type="checkbox"/>	<input type="checkbox"/>
5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway?	<input type="checkbox"/>	<input type="checkbox"/>
6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities?	<input type="checkbox"/>	<input type="checkbox"/>
7. Will the proposed action impact existing:	<input type="checkbox"/>	<input type="checkbox"/>
a. public / private water supplies?	<input type="checkbox"/>	<input type="checkbox"/>
b. public / private wastewater treatment utilities?	<input type="checkbox"/>	<input type="checkbox"/>
8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources?	<input type="checkbox"/>	<input type="checkbox"/>
9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)?	<input type="checkbox"/>	<input type="checkbox"/>
10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage problems?	<input type="checkbox"/>	<input type="checkbox"/>
11. Will the proposed action create a hazard to environmental resources or human health?	<input type="checkbox"/>	<input type="checkbox"/>

Project: Date:

Short Environmental Assessment Form

Part 3 Determination of Significance

For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

- ☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.
- ☐ Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.

 Name of Lead Agency

 Date

 Print or Type Name of Responsible Officer in Lead Agency

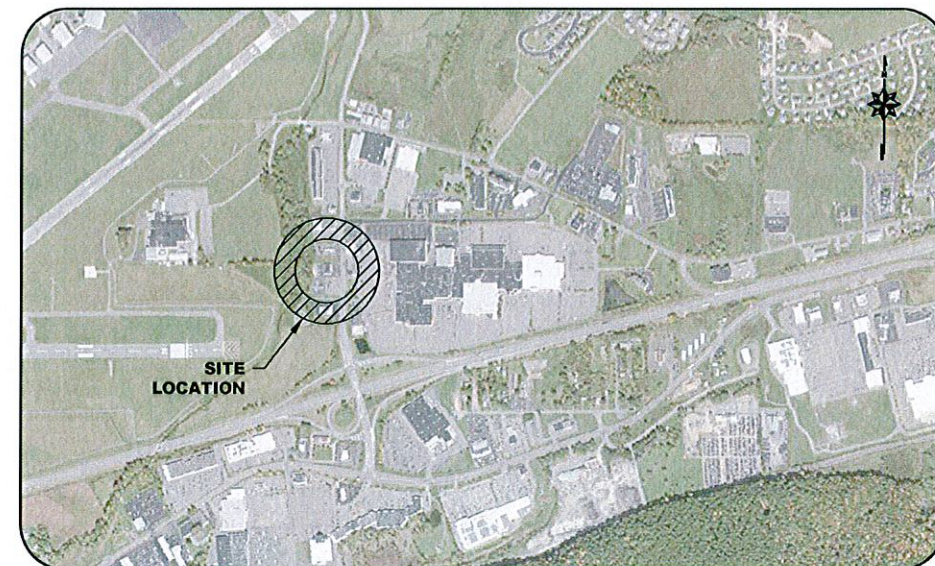
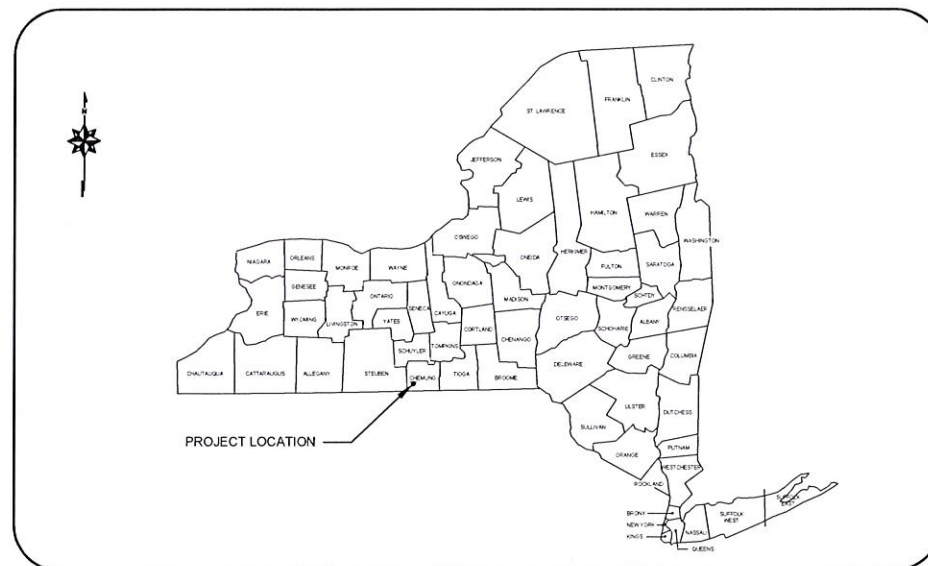
 Title of Responsible Officer

 Signature of Responsible Officer in Lead Agency

 Signature of Preparer (if different from Responsible Officer)

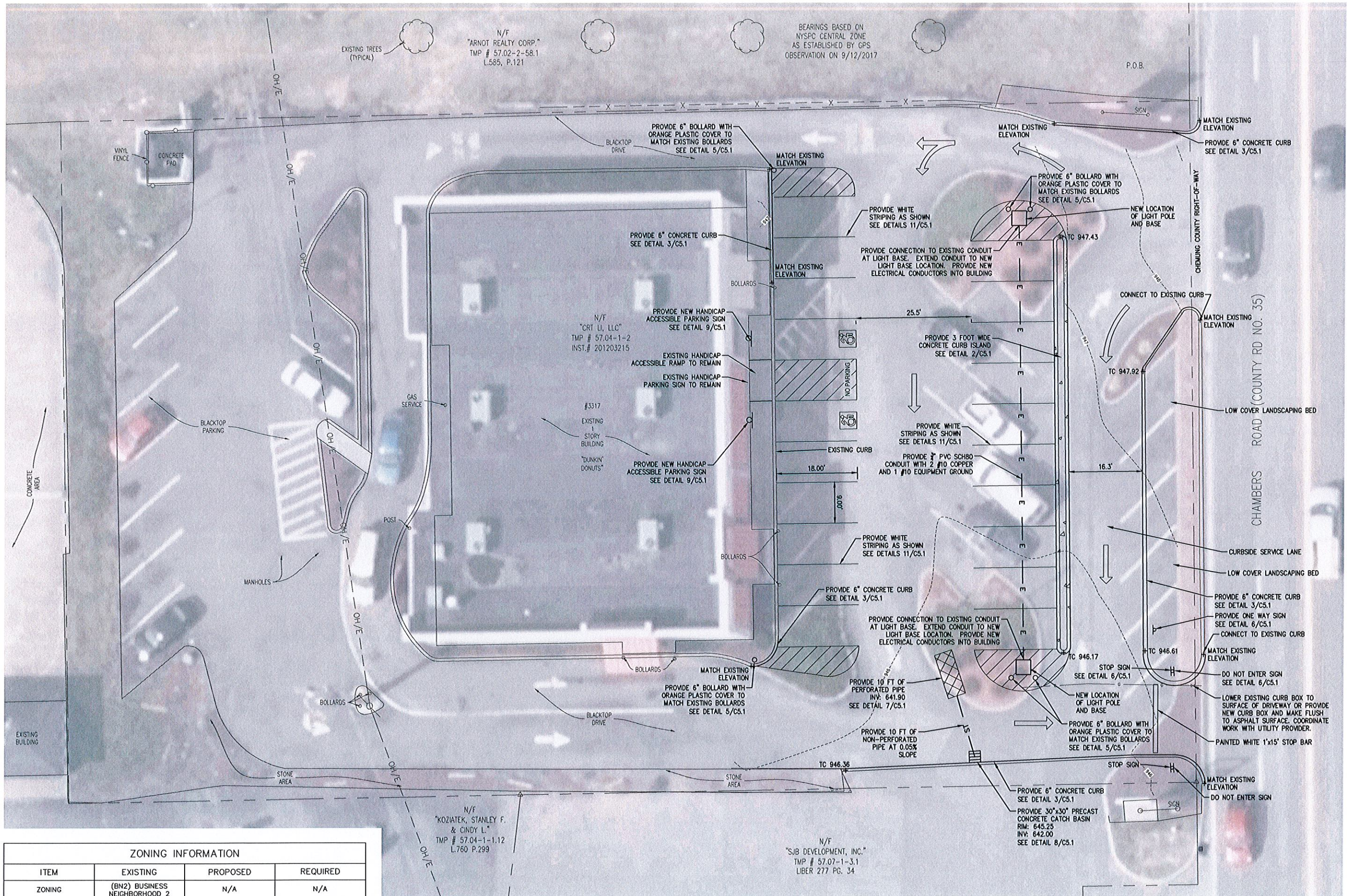
PRINT FORM

ENGINEERING DRAWINGS FOR CHAMBERS ROAD SITE DESIGN PATEL NETWORKS CHEMUNG COUNTY, NEW YORK



DEVELOPER:
MANISH PATEL - CEO
1020 CENTER STREET
HORSEHEADS, NY 14845

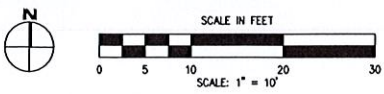
HUNT NO. 3013-007
JUNE 2018



ZONING INFORMATION

ITEM	EXISTING	PROPOSED	REQUIRED
ZONING	(BN2) BUSINESS NEIGHBORHOOD 2	N/A	N/A
PARKING	30	29	25
LOT COVERAGE	77.9%	82.6%	70.0%

1 SITE IMPROVEMENT PLAN
SCALE: 1"=10'



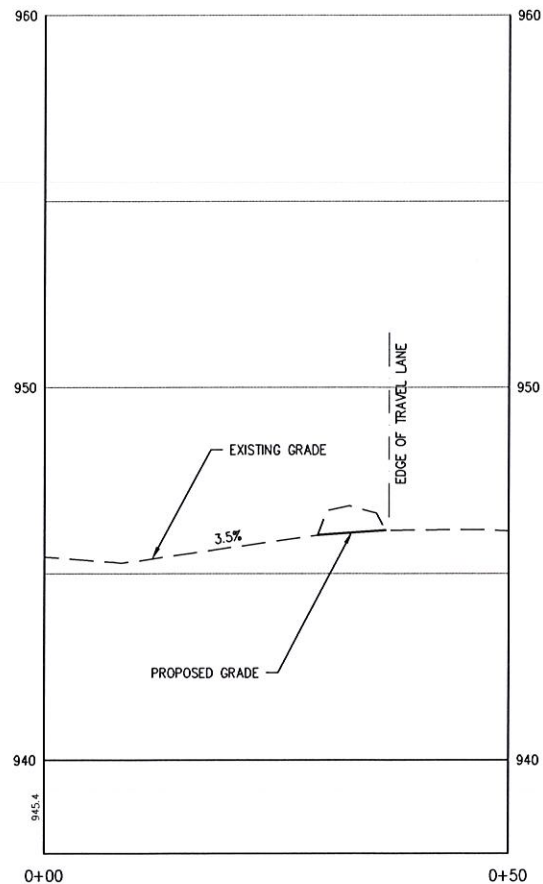
DRAWN BY :	MCR
CHECKED BY :	RMD
DATE :	JUNE 2018
SCALE :	AS SHOWN
BY :	
DATE :	
DESCRIPTION OF REVISION:	
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HUNT ENGINEERS ARCHITECTS | SURVEYORS
100 Hunt Center, Horseheads, New York 14845 Ph: 607-388-1000 Fx: 607-388-1800
Offices Rochester / Hornellsville / Tonawanda

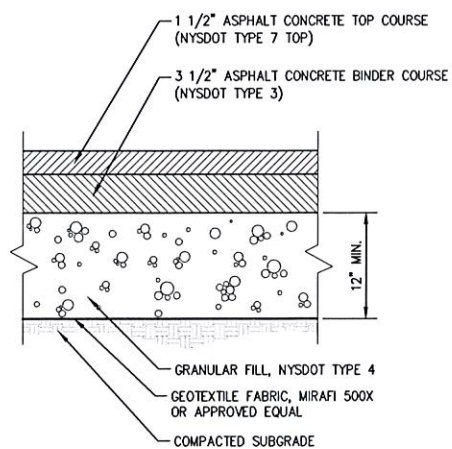
SITE IMPROVEMENT PLAN
CHAMBERS ROAD SITE DESIGN
PATEL NETWORKS
3317 CHAMBERS ROAD HORSEHEADS, NEW YORK 14845

C2.1
PROJECT NO: 3013.007

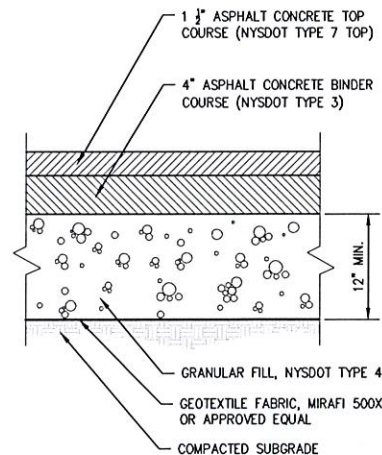
Copyright: 2018
Unauthorized Alteration Or Addition To Plans Violates A Licensed Engineer's Or Architect's Seal
Is A Violation Of Section 7209 Of The New York State Education Law.



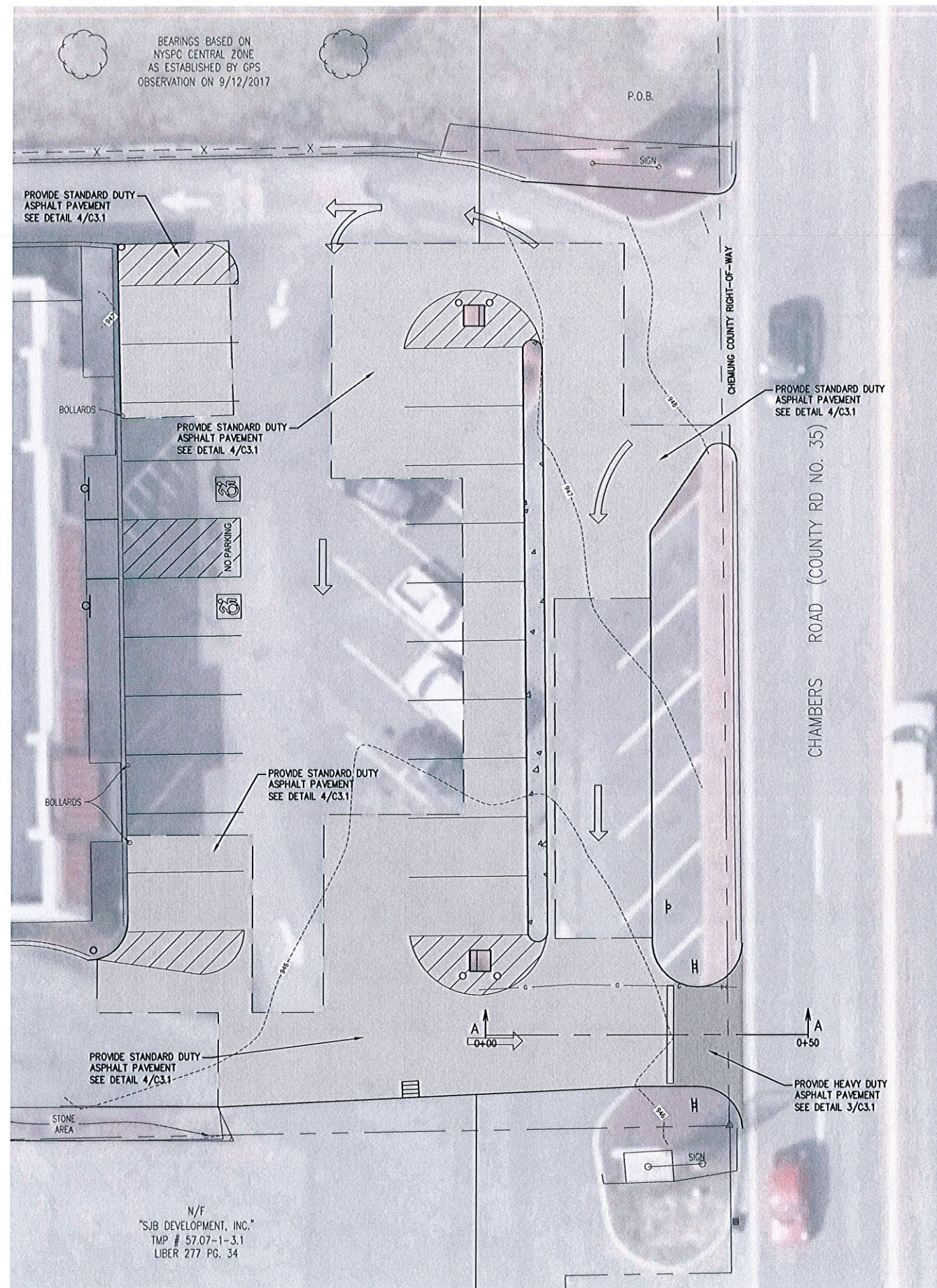
2 DRIVEWAY PROFILE SECTION A:A
SCALE: HORIZ: 1"=10' - VERT: 1"=2.5'



4 STANDARD DUTY ASPHALT PAVEMENT
SCALE: N.T.S.



3 HEAVY DUTY ASPHALT PAVEMENT
SCALE: N.T.S.



1 ASPHALT REPLACEMENT PLAN
SCALE: 1"=10'

DRAWN BY :	MCR
CHECKED BY :	RMD
DATE :	JUNE 2018
SCALE :	AS SHOWN
BY :	
DATE :	
DESCRIPTION OF REVISION:	
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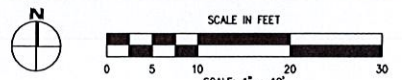
HUNT ENGINEERS | ARCHITECTS | SURVEYORS
100 Hunt Center, Horseheads, New York 14845 P: 607-358-1000 F: 607-358-1800
Office: Rochester/Horseheads/Townsend
Unauthorized Alteration Or Addition To Plans Bearing A Licensed Engineer's Or Architect's Seal Is A Violation Of Section 2209 Of The New York State Education Law.
Copyright: 2018

ASPHALT REPLACEMENT PLAN
CHAMBERS ROAD SITE DESIGN
PATEL NETWORKS
3317 CHAMBERS ROAD HORSEHEADS, NEW YORK 14845

C3.1
PROJECT NO: 3013.007



1 TRUCK MOVEMENT PLAN
SCALE: 1"=10'



DRAWN BY : MCR
CHECKED BY : RMD
DATE : JUNE 2018
SCALE : AS SHOWN

BY :
DATE:
DESCRIPTION OF REVISION:
1
2
3
4
5
6
7

HUNT ENGINEERS | ARCHITECTS | SURVEYORS
100 Hunt Center, Horseheads, New York 14845 Ph 607-338-1000 Fx 607-338-1000
Offices Rochester | Elmira | Tonawanda

TRUCK MOVEMENT PLAN
CHAMBERS ROAD SITE DESIGN
PATEL NETWORKS
3317 CHAMBERS ROAD HORSEHEADS, NEW YORK 14845

C4.1
PROJECT NO: 3013.007

RECEIVED JUL 08 2018
Chemung County Planning Board
Chemung County Planning Board



Chemung County Commerce Center
400 East Church Street
P.O. Box 588
Elmira, New York 14902-0588

(607) 737-5510
www.chemungcountyny.gov
planning@co.chemung.ny.us

Referral Number

For office use only

Chemung County Planning Board – Municipal Referral Form

(Please complete all information on both pages)

Referring Municipality: ☐ City ☒ Town ☐ Village of Big Flats

Referring Official: Tom Whispel Title: Code Enforcement

Address: 476 Maple St.

Phone Number: 562-8443 E-mail: twhispel@bigflatsny.gov

Referring Board (check appropriate box): ☐ Legislative Board ☐ ZBA ☒ Planning Board

Petitioner(s): Ferrario / Fagan Engineers Phone: 734-2165

Petitioner's Mailing Address: 113 E. Chemung Pl, Elmira 14904 E-mail: tom.dobrydney@faganengineer.com

Location of Property: Fisherville Rd

Tax Map Parcel Number(s): 58.03-1-13.2, 58.03-1-14.1 through 58.03-1-23

Current Zoning District: Business Regional (BR)

Proposed Action: (check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Area Variance | <input type="checkbox"/> Subdivision Review |
| <input type="checkbox"/> Use Variance | <input type="checkbox"/> Rezoning |
| <input checked="" type="checkbox"/> Site Plan Review | <input type="checkbox"/> Zoning Text Amendment |
| <input type="checkbox"/> Special/Conditional Use Permit | <input type="checkbox"/> Zoning Map Amendment |
| <input type="checkbox"/> Comprehensive Plan Adoption / Amendment | <input type="checkbox"/> Moratorium |
| <input type="checkbox"/> Other (please specify): _____ | |

Description of the proposed action (attach detailed narrative if available):

New car dealership

The proposed action applies to real property within five hundred feet (500') of the following

(Please identify each item by filling in the appropriate blank after each item)

- ☐ (a) Boundary of the (City), (Village) or (Town) of: _____
- ☐ (b) Boundary of any existing or proposed (County) or (State Park) or any (Other Recreation Area): _____
- ☐ (c) Right-of-way of any existing or proposed (County) or (State Parkway), (Thruway), (Expressway), (Road) or (Highway); (Include (County) or (State Route) # and name of (Road): County Rte 64
- ☐ (d) Existing or proposed right-of-way of any stream or drainage channel owned by the (County) or for which the county has established channel lines: _____
- ☐ (e) Existing or proposed boundary of any (County) or (State) owned land on which a public building or institution is situated: _____
- ☐ (f) The boundary of a farm operation located in an agricultural district, as defined by article twenty-five-AA of the agriculture and markets law (this subparagraph shall not apply to the granting of area variances: _____

Hearings/Meetings Schedule

Board	Public Hearing Date	Meeting Dates (prior and future)
Town Board/Village Board of Trustees		
Zoning Board of Appeals		
Planning Board/Planning Commission		8/7/2018, 9/4/2018
City Council		

Action taken on this application (reviewed, approved, discussed, etc.) _____

"Full Statement" Checklist

As defined in NYS General Municipal Law §239-m (1)(c)

Please make sure you have enclosed the following required information with your referral, as appropriate.

For All Actions:

- _____ Chemung County Planning Board – Municipal Referral Form
- _____ All application materials required by local law/ordinance to be considered a "complete application" at the local level (PDF preferred).
- _____ Part 1 Environmental Assessment Form (EAF) or Environmental Impact Statement (EIS) for State Environmental Quality Review (SEQR). If Type II Action, provide a statement to that effect.
- _____ Agricultural Data Statement, for site plan review, special/conditional use permit, use variances, or subdivision review located in an Agricultural District or within 500 feet of a farm operation located in an Agricultural District, per Ag. Districts Law Article 25AA §305-a, Town Law §283-a, and Village Law §7-739.
- _____ Municipal board meeting minutes on the proposed action (PDF preferred).

For Proposing or Amending Zoning Ordinances or Local Laws: The above requirements AND

- _____ Report/minutes from Town Board, Village Board or Trustees or Planning Board (PDF preferred)
- _____ Zoning Map
- _____ Complete text of proposed law, comprehensive plan, or ordinance (PDF preferred)

Deadline: Please submit completed referrals by close of business 10 business days prior to the Chemung County Planning Board meeting.



July 20, 2018

Mr. Tom Whispel, Code Enforcement Officer
Town of Big Flats
476 Maple Street
Big Flats, NY 14814

RE: Ferrario Fisherville Road Master Plan
Submission for Final Subdivision Review
FE Project #2017-077

Dear Mr. Whispel:

As you may be aware, Fagan Engineers & Land Surveyors, PC (FE) is working with Don Ferrario, of Ferrario Realty NY, Inc. (the Applicant) on the development of a Master Plan for a phased commercial development on Fisherville Road, with Phase 1 being a new auto sales facility. Part of the project includes a subdivision of the existing parcels down to two properties. Parcel A will be associated with Phase 1 (auto dealership). Parcel B will be associated with the future phase(s).

As part of this submission, please find the following documents for your review and distribution:

- Two (2) copies of Final Subdivision Plat (Full-size);
- Ten (10) copies of Final Subdivision Plat (Half-size);

We look forward to presenting this application at the next regularly scheduled Town Planning Board meeting. If you have any questions or comments, please feel free to contact me.

Sincerely,

FAGAN ENGINEERS & LAND SURVEYORS, P.C.

Thomas M. Dobrydney
Staff Planner

CC: Applicant



M:\Job Data Directory\2017\2017-077\TownPB\Whispel 2018-07-20.doc

Town of Big Flats
Department of Planning

476 Maple Street
Big Flats, NY 14814
T: 607-562-8443
<http://www.bigflatsny.gov>



Subdivision Application

This application form is required as part of any request to process a planning action involving the review of a proposed subdivision. In addition, the Town of Big Flats Municipal Code requires specific material to be submitted with this form. A copy of the applicable sections of the code are available upon request. It is the applicants responsibility to ensure that application package is complete and accurate.

NOTE: AN INCOMPLETE APPLICATION CANNOT BE SCHEDULED FOR REVIEW

Application Date: 06/15/18

Name of Proposed Subdivision: FERRARIO FISHERVILLE ROAD MASTER PLAN

Applicant:

Name FERRARIO REALTY NY INC
Address 2472 CORNING ROAD
ECMIRA NY 14903
Telephone _____

Plans Prepared by:

Name FAGAN ENGINEERS
Address 113 EAST CHEMUNG PLACE
ECMIRA NY 14904
Telephone (607) 734-2165

Owner (If Different):

Name -SAME-
Address _____
Telephone _____

Actions Requested

- ☒ Subdivision Review
☒ Re-subdivision
☐ Area Variance Requested (Additional Fees Apply)

Project Location:

Parcel ID: (SEE DRAWINGS)
Address: EAST END OF FISHERVILLE ROAD
COUNTY ROUTE 64C

Other Permits Needed: ☐ Dept. of Health - Water/Septic
(all may not be applicable) ☒ Town of Big Flats DPW- Water

☒ Chemung County Sewer District

☐ NYSDEC- Sewer

☒ NYSDEC- SPDES

☐ NYS/ACOE-Wetlands

☐ NYSDOT

☒ Chemung County DPW-Driveway

☐ Town of Big Flats DPW-Driveway

☐ Town of Big Flats Building Permit

☐ Other: _____

Current Zoning: BR

Variance(s) Requested: N/A

Existing number of parcels: 13

Proposed number of parcels: 2

Are the proposed parcels for residential use? NO If so, how many dwelling units? ✓

Department Use Only:

Number of dwelling units, by type:

Single Family _____ Condominiums _____

Duplex _____ Townhouses _____

Senior Housing _____ Other* _____

Multi Family _____ Total Units _____

*Explain Other _____

Current Use of Site (be specific): RESIDENTIAL & COMMERCIAL

Current Land-Use of Neighborhood: COMMERCIAL / SUBURBAN
(agricultural, commercial, business/office, industrial, residential, vacant)

Project Narrative: Explain the overall intention of this proposal (Use a separate sheet if needed)

COMBINATION OF EXISTING PARCELS AS PART OF APPLICANT'S
MASTER PLAN. PHASE 1 (PARCEL A) TO CONSIST OF AN
AUTO DEALERSHIP. PHASE 2 (PARCEL B) TO REMAIN UNDEVELOPED,
UNCHANGED AT THIS TIME.

APPLICATIONS WILL NOT BE ACCEPTED WITHOUT SIGNATURE OF LEGAL OWNER OR OFFICIAL AGENT

Check one:

☒

- ☐ Owner
☐ Power of Attorney*
☐ Contract to Purchase*
☒ Official Agent*
☐ Other: _____

*Attach evidence

FEE SCHEDULE

2 Lots or less: \$200.00*

3 Lots or more: \$500.00**

Concept Plat: \$200.00 (Fee goes toward review)

*add \$50.00 per lot

**add \$100.00 per lot

I hereby certify that the above information and accompanying documents are truthful and accurate to the best of my knowledge and acknowledge that the processing of this application may require additional fees and expenses, at my expense, for preparation of necessary environmental, engineering and planning studies.

[Signature]
Legal Owner/Official Agent

06/15/18
Date

Legal Owner/Official Agent

Date

Applicant (If Different)

Date

Department Use (only)

Lead Agency: _____ Environmental Determination: _____

☐ Type I ☐ Type II ☐ Unlisted

Preliminary Plat Approval Date: _____ Final Plat Approval Date: _____

Conditions ☐ Yes ☐ No

Public Hearing Advertised _____ Public Hearing Held _____

Approval Expiration Date: _____ Plans Filed with County Clerk: _____

Director of Planning _____ Date _____



July 29, 2018

Town of Big Flats Planning Board
Attn: Brenda Belmonte
476 Maple Street
Big Flats, NY 14814

Subdivision & Preliminary Site Plan Review

Re: Ferrario Fisherville Road Master Plan
Fisherville Road
Tax ID: 58.03-1-13.2, 14.1, 14.2, 15, 16, 17, 18, 19, 20, 21, 22.1, 22.2 and 23

Revised Application Materials Received – July 20, 2018
Planning Board Meeting – August 7, 2018

Project Description

The applicant has previously submitted a Subdivision, Site Plan and Zoning application to construct a new 21,000 square foot automobile dealership and associated parking and utilities. The site is located off Fisherville Road at the intersection of Sears Road and is a combination of 14 parcels resulting in 12.5 acres. Included in the consolidation is a parcel owned by the County. Per the application, the individual lots will be consolidated and then divided into two individual parcels. Parcel A is now proposed to be 5.45 acres and will included the development of the automobile dealership. Parcel B is now proposed to be 7.06 acres and is conceptual with three additional buildings. The northern building is approximately 5,750 square feet and the middle building is 9,900 square feet. Uses or tenants of those buildings have not been determined at this time. The southern-most building appears to be a vehicle fueling facility.

This application is only for the development of Parcel A.

The project is within the Business Regional (BR) Zone. Vehicle sales and lease are a permitted use under Site Plan approval and upon grant of a special permit by the Town Board in the Business Regional Zone.

The applicant has submitted the following revised application materials

- Existing Conditions Plan (Sheet C1) and Subdivision Plat (Sheet C2), prepared by Fagan Engineers & Land Surveyors, last revised July 20, 2018.

The applicant appeared before the Zoning Board on May 22, 2018 and obtained an area variance from Section 17.36.190 (B)(4) and Section 17.48.010 (K)(2) to permit vehicles offered for rent or sale shall be placed, stored, or parked 3.4 feet from the Interstate 86 Right-of-Way.

A Public Hearing required for the Special Use Permit was initiated by the Planning Board on May 1, 2018 and was closed at the June 5, 2018 Planning Board meeting.

The County has reviewed the applicant and recommend Planning Board approval with comments regarding a redesign of the existing and new roads in relation to the two entrance driveways; and removal of the asphalt at the



extension of Fisherville Road. The applicant has indicated they are continuing to coordinate directly with the County to pursue the applicant driveway permits. The applicant has also indicated that the County DPW has retracted their request for the applicant to remove the existing asphalt. We would request that the applicant provide written documentation of this request.

Subdivision Review & Comments

A draft subdivision plat has been provided to consolidate all of the individual lots and divide into two proposed lots. The applicant has previously submitted a Subdivision Application.

Note: The Final Subdivision plat shall be signed and sealed by a licensed Professional Surveyor in the State of New York.

16.04.020 General Requirements

The Planning Board shall be guided in its consideration of an application for the subdivision of land by the following general requirements:

- A. The physical characteristics of the land to be subdivided shall be such that it can be used for building purposes without the danger to health and safety, property, or peril from fire, flood or other menace.

Comment: There will be no danger to the health and safety, property, or peril from fire, flood or other menace as the result of this subdivision.

- B. Proper provisions shall be made for drainage, water supply, sewage, utilities and other needed improvements.

Comment: All utilities improvements, drainage and other improvements are being addressed as part of the site plan application review.

- C. All parcel developments shall meet town, county, state and federal health requirements.

Comment: The proposed subdivision does not appear to be in violation of any local, state or federal requirements.

- D. Natural and historic features shall be preserved. Insofar as possible, all existing features of the landscape such as large trees, rock outcrops, unusual glacial formations, water and flood courses, historic sites and other such irreplaceable assets shall be preserved.

Comment: The project is located is not located in an archeological sensitive area as defined on the Long EAF Form.

- E. Final plats shall conform to the town comprehensive plan and the zoning law.

Comment: The proposed subdivision is consistent with the town comprehensive plan and zoning law.

- F. Roads, drives and driveways shall be of such width, grade and location as to accommodate the prospective traffic, account for topographic relief and to facilitate fire protection access.



Comment: All proposed improvements are being addressed as part of the site plan application review.

- G. Road shall be constructed in accordance with the town highway specifications.

Comment: Not applicable. No roads are proposed.

- H. Public parks or playground of suitable location, size and character for recreational purposes shall be shown on the final plat in proper cases when required by the planning board.

Comment: Not applicable.

- I. In general, lot lines shall be laid out so not to cross municipal boundary lines.

Comment: Not applicable. Lot lines are all within the Town of Big Flats.

- J. Whenever road to access a subdivision is proposed to be from the land in another municipality, the planning board shall request assurance from the official having jurisdiction over the roads in the other municipality that the proposed road access is adequate. The applicant for a subdivision with access from another municipality shall provide documentation from the other municipality that the design of the proposed road is adequate and acceptable to the other municipality. The planning board may disapprove such subdivision if access is not determined to be adequate in the other municipality.

Comment: Not applicant, no roads are proposed.

- K. For a resubdivision, the same procedure shall apply as for a subdivision. If the proposed resubdivision consists solely of the simple alteration of lot lines with no major changes in lot sizes, access, proposed roads, sewage disposal systems and/or public facilities, then normal subdivision procedures may be waived at the discretion of the planning board.

Comment: Not applicable.

- L. Where the strict enforcement of this chapter would result in practical difficulty, unnecessary hardship, conflict with other requirements due to topography or other conditions affecting the land being subdivided and such subdivision is deemed to be of greater benefit or importance, the planning board may vary the application of the requirements specified in this chapter in harmony with this chapter's general purpose and intent. The planning board in any plat approval by resolution stating the planning board's reasons for granting such a waiver.

Comment: Not applicable.

- M. Notwithstanding any provisions of NYS Town Law and this chapter to the contrary, where a plat contains one or more lots that do not comply with the BFZL regulations, and application may be made to the zoning board of appeals for an area variance without the necessity of a decision or determination made by the code enforcement officer. Such application to the zoning board of appeals shall be made in accordance with the rules of the zoning board of appeals and in accordance with the zoning law.

Comment: Not applicable. The proposed subdivision and lots comply with the Big Flats Zoning regulations.

**Site Plan Review & Comments**

The applicant has addressed a majority of the comments from the previous review letters. The following comments remain.

1. Section 17.36.240 (E)(4) states that under no circumstances shall the light level at any lot line exceed 0.2-foot-candle, measure at ground level. The lighting plan provided with the applicant indicates that there will be foot-candle levels exceeding 0.2 along the display area along the I-86 property line. Lighting levels in this area range for 0.2 to 8.0 foot-candles. The applicant has indicated that the lighting plan is being revised to be brought into compliance with this section of the ordinance.
2. This project will disturb over 1 acre, will require an NOI for coverage under the SPDES program, and will require the preparation of the SWPPP. The Chemung County Stormwater Coalition will be required to review and approve the SWPPP. The applicant has indicated that a full SWPPP has been developed and has been submitted to the Chemung County Stormwater Coalition for review.
3. Runoff from the northern portion of the site appears to be directed into the building. Two catch basins are proposed that are only about 3 inches below the proposed finished floor elevation. The slope in this area is about 5% and will be almost entirely paved area. There appear to be two bay style doors along this side of the building. Runoff entering into the building may be a concern at this location. The applicant has acknowledged this comment and is considering options to minimize runoff impacts at this location.
4. The County DPW shall review and approve the stormwater design as it relates to the driveways along Fisherville Road.
5. It appears there are breaks in the curb in the customer parking area in front of the dealership in which there are catch basins located. However, the site plan does not indicate any breaks in the island. The applicant has indicated that this area is not a curbed island but a gravel/stone area to allow for the collection of stormwater runoff from the south side of the building. The site plan and landscaping plan give the impression that this area is grass. This should be updated on the plans. In addition, if the pipe in this area is proposed to be perforated, this shall be reflected on the Utility Plan.
6. The site is located within the Aquifer Protection Area and the design shall be compliant with Section 17.24.020.
7. The width of the striped islands shall be denoted on the plans to confirm compliance with Section 17.48.010 (O)(2).
8. The applicant has provided a landscape plan but it appears to be the same plan as the master plan. The applicant has indicated smaller landscaped areas throughout Phase 1 but has not denoted these on the landscape plan. In addition, any plantings for the stormwater basins shall be included and denoted on the landscape plan. There is large red lettering with the word "display" showing up across the plan. This is recommended to be removed.
9. The plans shall be revised to show a depressed curb or similar structure to allow for access to the display area along Interstate 86.



10. A snow storage/removal area shall be noted on the plans per Section 17.48.010(O)(9). The applicant has indicated that it is called out on the landscape plan but it does not appear to be shown on the print that our office received. This area should be reflected on the site plan as well.
11. A demolition plan has been provided but it is the same plan as the existing conditions plan and does not show existing features that will be removed as part of this project.
12. The applicant has indicated a monument sign to be located along the entrance on Fisherville Road. The sign is proposed to have a maximum sign area of 50 square feet and a max height of 12 feet. However, the monument sign is denoted to be located within the road right of way and this is not permitted.
13. The applicant has indicated that the sign package is currently being developed and a sign application will be submitted in the future as a separate application.
14. The applicant will need review and approval from the Town of Big Flats Water Department and Chemung County Sewer for the proposed water and sewer services.
15. The building elevations provided indicate a total building height of 28 feet; however, the table on Sheet C5 shows the proposed building height at 25 feet. This shall be updated.

State Environmental Quality Review

Per Section 17.33.030 (B), since this project requires a Special Use Permit and involves involved agencies (Planning Board, Town Board and Zoning Board), the action shall undergo coordinated review. At the June 5, 2018 Planning Board meeting the Board provide notification of intent to be lead agency to all involved agencies. The coordinated agencies have 30 days to dispute lead agency status or to provide any comments. The Planning Board completed Part 2 and Part 3 noting that this project will result in no significant adverse impacts on the environment, and therefore, an environmental impact statement need not be prepared. Accordingly, a negative declaration was issued at the July 3, 2018 Planning Board meeting.

County Review:

The site plan and zoning application has been referred to the Chemung County Planning Board for a review. The County recommended Planning Board approval of the proposed site plan along with comments submitted by Andrew Avery regarding a redesign of existing and new roads in relation to the two entrance driveways, and removal of the asphalt at the extension of Fisherville Road.

Recommendation

The following actions need to be completed by the Planning Board:

1. Subdivision Approval

Per the requirements of Section 16.08.030 (D), the Planning Board will hold a public hearing at the August 7, 2018 meeting. Within sixty-two (62) days after the public hearing on the preliminary plat, the Planning Board shall act upon it. After receiving approval with or without modifications, or approval of a preliminary plat from the planning board, the applicant may prepare the final plat and submit ten (10) copies to the



Code Enforcement Officer for Planning Board approval of the final plat. **A licensed land surveyor in the State of New York shall certify the final plat.**

We recommend the Planning Board grant subdivision approval with the following conditions:

- A. The final subdivision plat shall be signed and sealed by a licensed land surveyor in the State of New York.
- B. An easement document shall be prepared and recorded to provide both parcels shared access, utility and drainage rights.

2. Take action on site plan application:

The Planning Board previously declared this application completed and accepted it as Preliminary Site Plan. The Planning Board has completed SEQR and can now take action on this application. Upon completion of SEQR, we recommend any approvals include the following conditions:

- A. The applicant obtain all necessary and required permits from the Chemung County DPW for utility crossings and driveways
- B. The applicant obtain all necessary and required permits from the Town of Big Flats Water Department
- C. The applicant obtain all necessary and required permits from the Chemung County Sewer District.
- D. The applicant obtain SWPPP approval from the Chemung County Stormwater Coalition and obtain authorization under the SPDES General Permit with the issuance of a Notice of Intent (NOI).
- E. The applicant address all remaining comments outlined in this review letter
- F. The applicant obtain and record subdivision plan prior to the issuance of a building permit.
- G. The applicant obtain the required Special Use Permit from the Town Board.

3. Special Use Permit:

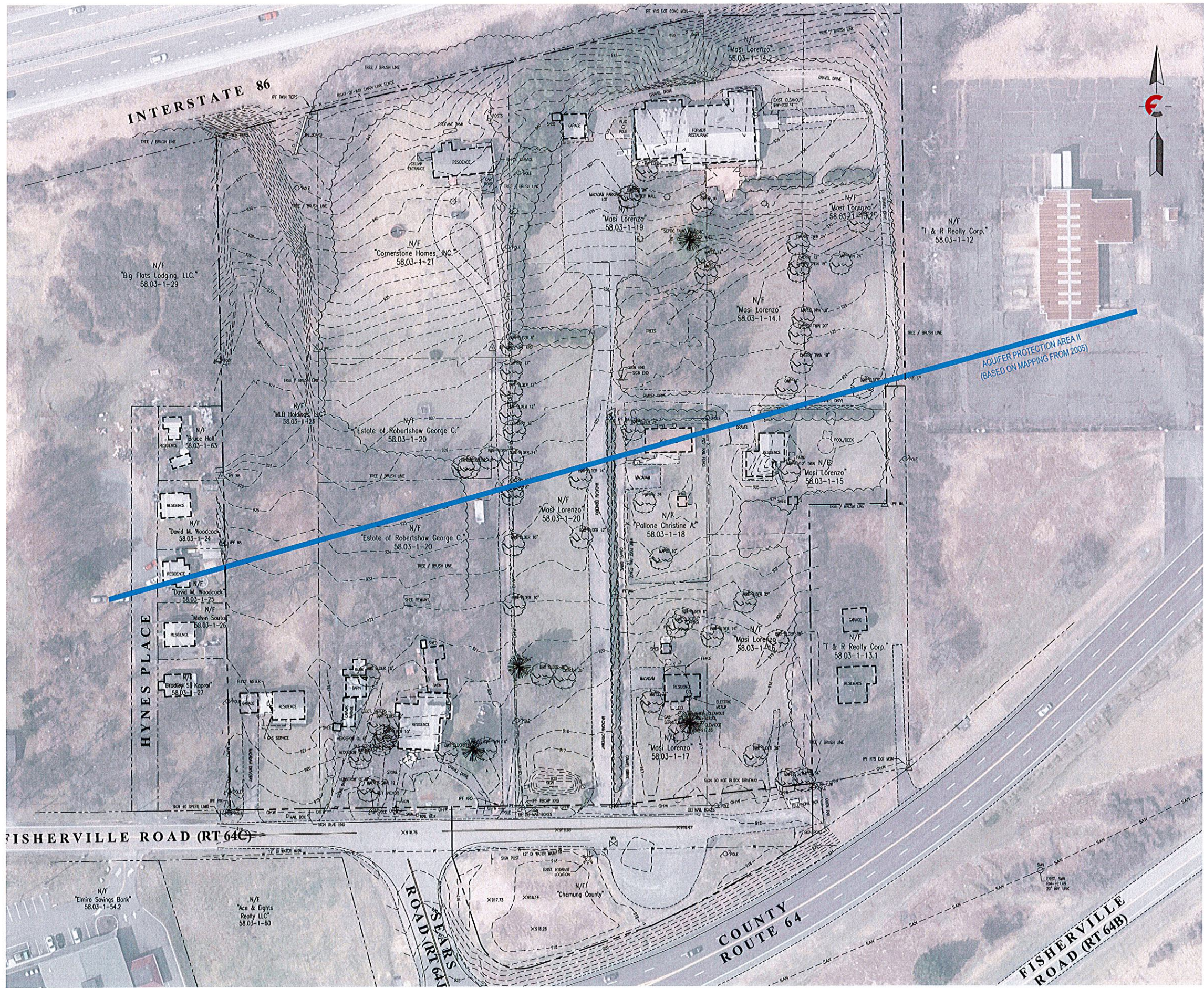
A public hearing for the Special Use Permit has been completed by the Planning Board. Upon completion of SEQR and Site Plan approval, the Town Board may review and issue the Special Use Permit. We recommend the Planning Board recommend granting of the Special Use Permit to the Town Board subject to the same conditions as noted above for the site plan application.

If you have any questions regarding this review letter, please contact me by phone at (607) 333-3120 or via email at rswitala@bergmannpc.com.

Best Regards,

BERGMANN ASSOCIATES

Robert Switala, PE, CPESC, CPSWQ
Principal



LEGEND

- PROPERTY LINE
- EXISTING EASEMENT
- EXISTING EDGE OF ROADWAY
- EXISTING CURB LINE
- EXISTING SANITARY SEWER
- EXISTING GAS MAIN
- EXISTING UTILITY LINE
- EXISTING FENCE LINE
- EXISTING WATER LINE
- EXISTING CONTOUR LINE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CONTOUR LINE
- PROPOSED EASEMENT
- PROPOSED STORM SEWER
- PROPOSED EDGE OF ROADWAY
- PROPOSED CURB LINE
- PROPOSED SANITARY SEWER
- PROPOSED GAS LINE
- PROPOSED UTILITY LINE
- PROPOSED WATER LINE
- PROPOSED SILT FENCE
- PROPOSED COMPOST SOCK
- EXISTING SANITARY MANHOLE
- EXISTING FIRE HYDRANT ASSEMBLY
- EXISTING CLEANOUT
- EXISTING SPOT ELEVATION
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER VALVE
- PROPOSED THRUST BLOCK
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED CLEANOUT
- PROPOSED LIGHTING FIXTURE
- PROPOSED SPOT ELEVATION
- PROPOSED DRYWELL
- PROPOSED CATCH BASIN
- PROPOSED INLET PROTECTION

Note:
Utility information has been plotted from available sources and their locations and size should be considered approximate only. The contractor is responsible for determining exact utility locations, sizes, and elevations prior to commencing construction. If uncharted or misplotted utilities are encountered, the contractor is required to notify the owner immediately.

New York State law requires excavators to contact the one-call notification system prior to digging to prevent damage to buried facilities.

IT'S THE LAW!
Call three days before you dig!
1-800-952-7962
Dig Safely New York
(non-members must be contacted separately)

FINAL PRINT
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Revised Subdivision Plat	Town Board Submission	Planning Board Submission	Concept San. Sewer Connection	For Planning Board Submission	Revision Description
7/20/2018	7/15/2018	6/15/2018	5/18/2018	4/03/2018	1.
8.	5.	4.	3.	2.	Rev. Date



**FERRARIO FISHERVILLE
ROAD AUTOMOBILE
DEALERSHIP**

TOWN OF BIG FLATS, COUNTY OF CHEMUNG, N.Y.

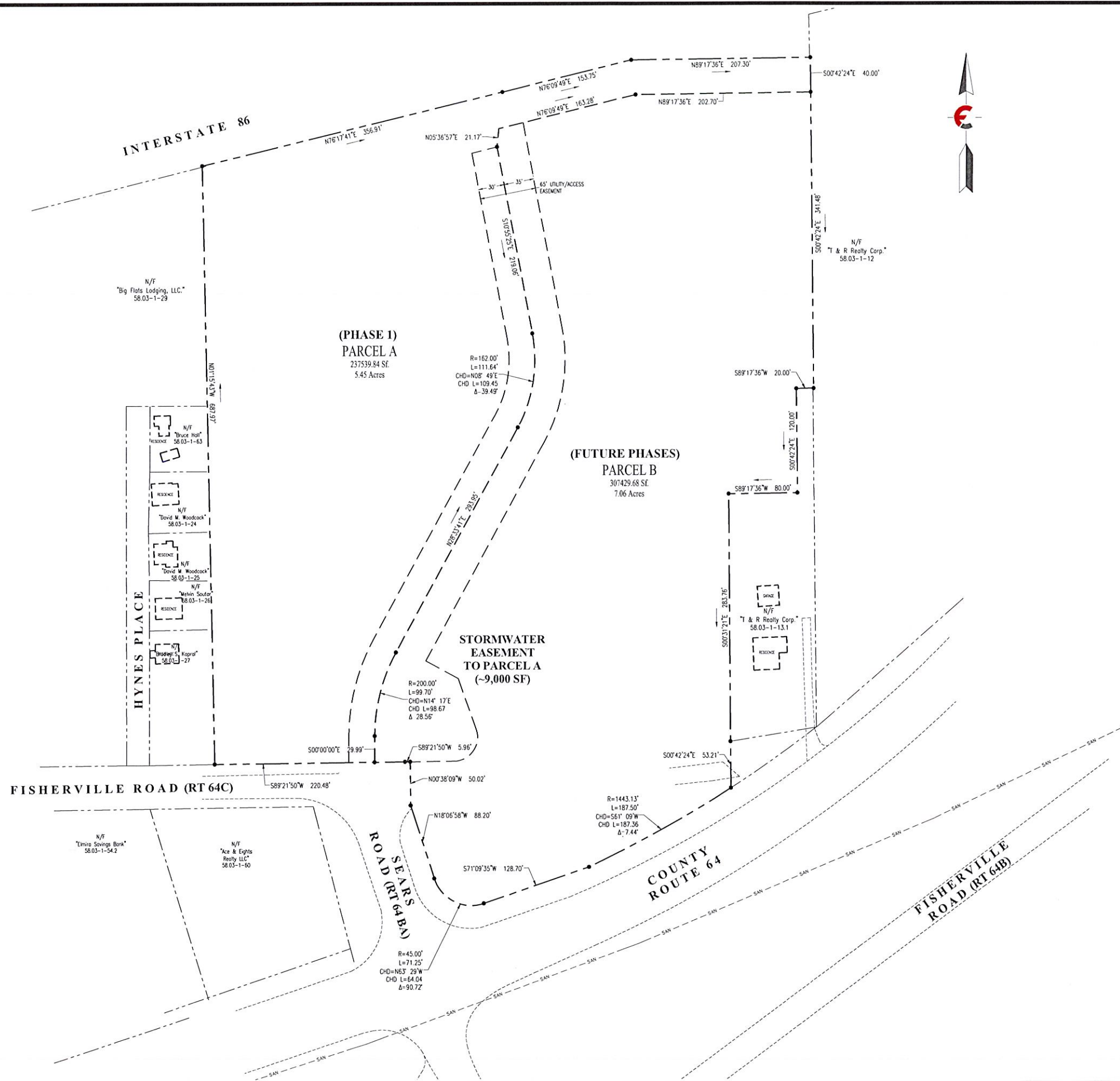
**FAGAN
ENGINEERS**
S. LAND SURVEYORS P.C.

113 East Chemung Place
Elmira N.Y. 14904
Phone (607) 734-2165
Fax (607) 734-2169
www.faganengineers.com

Scale: 1" = 50'
11x17 Prints are 1/2 Size
Date: JANUARY 19, 2018
Design By: TMD, RSN
Drawn By: RSN
Checked By: JBG
Project No.: 2017.077
Drawing Name: 17077.dwg

**EXISTING
CONDITIONS**

C1



LEGEND	
	PROPERTY LINE
	EXISTING EASEMENT
	EXISTING EDGE OF ROADWAY
	EXISTING CURB LINE
	EXISTING SANITARY SEWER
	EXISTING GAS MAIN
	EXISTING UTILITY LINE
	EXISTING FENCE LINE
	EXISTING WATER LINE
	EXISTING CONTOUR LINE
	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED CONTOUR LINE
	PROPOSED EASEMENT
	PROPOSED STORM SEWER
	PROPOSED EDGE OF ROADWAY
	PROPOSED CURB LINE
	PROPOSED SANITARY SEWER
	PROPOSED GAS LINE
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	EXISTING CLEANOUT
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IT'S THE LAW!
Call three days before you dig!
1-800-952-7962
Dig Safely New York
(non-members must be contacted separately)

FINAL PRINT
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Revised Subdivision Plat	Town Board Submission	Planning Board Submission	Concept San. Sewer Connection	For Planning Board Submission	Revision Description
8.	5.	4.	3.	2.	1.
7/20/2018	7/15/2018	6/15/2018	5/18/2018	4/03/2018	3/16/2018
Rev.	Date				

It is a Violation Of The New York Education Law, Article 145 Section 7209, For Any Person, Unless He Is Acting Under The Direction Of A Licensed Professional Engineer Or Land Surveyor To Alter An Item In Any Way, If An Item Bearing The Seal Of An Engineer Or Land Surveyor Is Altered, The Altering Engineer Or Land Surveyor Shall Affix To The Item His Seal And The Notation "Altered By" Followed By His Signature And The Date. Of Such Alteration, And A Specific Description Of The Alteration.

DRAFT

SEAL

FERRARIO FISHERVILLE
ROAD AUTOMOBILE
DEALERSHIP

TOWN OF BIG FLATS, COUNTY OF CHEMUNG, N.Y.

FAGAN
ENGINEERS
& LAND SURVEYORS PC

113 East Chemung Place
Elmira N.Y. 14904
Phone (607) 734-2165
Fax (607) 734-2169
www.faganengineers.com

Scale: 1" = 60'
11x17 Prints are 1/2 Size

Date: JANUARY 19, 2018

Design By: TMD, RSN

Drawn By: RSN

Checked By: JBG

Project No.: 2017.077

Drawing Name: 17077.dwg

SUBDIVISION PLAT

C2



RECEIVED JUL 20 2019
Chemung County Planning Board

Chemung County Commerce Center
400 East Church Street
P.O. Box 588
Elmira, New York 14902-0588

(607) 737-5510
www.chemungcountyny.gov
planning@co.chemung.ny.us

Referral Number

For office use only

Chemung County Planning Board – Municipal Referral Form

(Please complete all information on both pages)

Referring Municipality: ☐ City ☒ Town ☐ Village of Big Flats

Referring Official: Tom Whispe Title: Code Enforcement

Address: 476 Maple St

Phone Number: 562-8443 E-mail: twhispe@bigflatsny.gov

Referring Board (check appropriate box): ☐ Legislative Board ☐ ZBA ☒ Planning Board

Petitioner(s): J. Clark Constr. / Fagan Engineers Phone: 734-2165

Petitioner's Mailing Address: 113 E. Chemung Pl E-mail: james.gensel@fagahengineers.com

Location of Property: Hibbard Road

Tax Map Parcel Number(s): ~~66.02-31.171~~ 66.02-2-31.171

Current Zoning District: Rural & Business Neighborhood 2

Proposed Action: (check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Area Variance | <input checked="" type="checkbox"/> Subdivision Review |
| <input type="checkbox"/> Use Variance | <input type="checkbox"/> Rezoning |
| <input checked="" type="checkbox"/> Site Plan Review | <input type="checkbox"/> Zoning Text Amendment |
| <input type="checkbox"/> Special/Conditional Use Permit | <input type="checkbox"/> Zoning Map Amendment |
| <input type="checkbox"/> Comprehensive Plan Adoption / Amendment | <input type="checkbox"/> Moratorium |
| <input type="checkbox"/> Other (please specify): _____ | |

Description of the proposed action (attach detailed narrative if available):

~~subdivision & planned unit development~~
SHALEROCK PUD.

The proposed action applies to real property within five hundred feet (500') of the following

(Please identify each item by filling in the appropriate blank after each item)

- ☐ (a) Boundary of the (City), (Village) or (Town) of: _____
- ☐ (b) Boundary of any existing or proposed (County) or (State Park) or any (Other Recreation Area): _____
- ☐ (c) Right-of-way of any existing or proposed (County) or (State Parkway), (Thruway), (Expressway), (Road) or (Highway); (Include (County) or (State Route) # and name of (Road): Hibbard Rd. - CR 17
- ☐ (d) Existing or proposed right-of-way of any stream or drainage channel owned by the (County) or for which the county has established channel lines: _____
- ☐ (e) Existing or proposed boundary of any (County) or (State) owned land on which a public building or institution is situated: _____
- ☐ (f) The boundary of a farm operation located in an agricultural district, as defined by article twenty-five-AA of the agriculture and markets law (this subparagraph shall not apply to the granting of area variances: _____

Hearings/Meetings Schedule

Board	Public Hearing Date	Meeting Dates (prior and future)
Town Board/Village Board of Trustees		
Zoning Board of Appeals		
Planning Board/Planning Commission	<u>9/4/2018</u>	<u>8/7/2018, 9/4/2018</u>
City Council		

Action taken on this application (reviewed, approved, discussed, etc.) _____

"Full Statement" Checklist

As defined in NYS General Municipal Law §239-m (1)(c)

Please make sure you have enclosed the following required information with your referral, as appropriate.

For All Actions:

- _____ Chemung County Planning Board – Municipal Referral Form
- _____ All application materials required by local law/ordinance to be considered a "complete application" at the local level (PDF preferred).
- _____ Part 1 Environmental Assessment Form (EAF) or Environmental Impact Statement (EIS) for State Environmental Quality Review (SEQR). If Type II Action, provide a statement to that effect.
- _____ Agricultural Data Statement, for site plan review, special/conditional use permit, use variances, or subdivision review located in an Agricultural District or within 500 feet of a farm operation located in an Agricultural District, per Ag. Districts Law Article 25AA §305-a, Town Law §283-a, and Village Law §7-739.
- _____ Municipal board meeting minutes on the proposed action (PDF preferred).

For Proposing or Amending Zoning Ordinances or Local Laws: The above requirements AND

- _____ Report/minutes from Town Board, Village Board or Trustees or Planning Board (PDF preferred)
- _____ Zoning Map
- _____ Complete text of proposed law, comprehensive plan, or ordinance (PDF preferred)

Deadline: Please submit completed referrals by close of business 10 business days prior to the Chemung County Planning Board meeting.



July 19, 2018

Mr. Tom Whispel, Code Enforcement Officer
Town of Big Flats
476 Maple Street
PO Box 449
Big Flats, NY 14814



RE: Shalerock Planned Unit Development (PUD)
Submission for Concept Site Plan Review
FE Project #2018-006

Dear Mr. Whispel:

We would like to thank the Town Staff for meeting with us on this Project. As a result of this meeting, the Applicant has decided to apply for a Planned Unit Development for the entire parcel.


The project will be predominantly residential with a mix of densities ranging from single-family homes to duplexes to zero-lot line town homes. The Applicant is also proposing additional self-storage units on the portion of the property located in the BN2 zone that will be accessed via Palmer Road. In accordance with Section 17.21.060-1 of the Town Zoning, please find the following documents as part of our Pre-Application conference submission:

- Ten (10) copies of the Site Plan Application,
- Two (2) prints of Concept Plan Drawings (Full-size),
- Ten (10) prints of Concept Plan Drawings (Half-size), and
- Ten (10) copies of a draft SEQR EAF Long Form.

We look forward to working with the Planning Board at a Pre-Application Conference either at a workshop or the regular August meeting. If you have any questions or comments, please feel free to contact me.

Sincerely,

FAGAN ENGINEERS & LAND SURVEYORS, P.C.



James B. Gensel, P.E., CPESC
President

Cc: Jim Clark, J. Clark Construction

L:\PROJECTS\2018\2018-006\Town PB\BFPB 07-19-2018.doc

Town of Big Flats
Department of Planning

476 Maple Street
Big Flats, NY 14814
T: 607-562-8443
<http://www.bigflatsny.gov>



Site Plan Application

This application form is required as part of any request to process a planning action involving the review of a proposed Site Plan. In addition, the Town of Big Flats Municipal Code requires specific material to be submitted with this form. A copy of the applicable sections of the code are available upon request. It is the applicants responsibility to ensure that application package are complete and accurate.

NOTE: AN INCOMPLETE APPLICATION CANNOT BE SCHEDULED FOR REVIEW

Preliminary Acceptance Date: _____
Final Approval Date: _____ **Conditions** ☐ Yes ☐ No

Department Use Only:

Name of Proposed Development: Hibbard PMRD

Applicant:

Plans Prepared by:

Name J. Clark Construction
Address 923 W Broad Street
Horsehead, NY 14845
Telephone 607-739-3883

Name Fagan Engineers & Land Surveyors, P.C.
Address 113 E. Chemung Place
Elmira, NY 14904
Telephone (607) 734-2165

Owner (If Different):

Name Jerry & Carol Welliver
Address 107 Lyons Drive Ext
Horseheads, NY 14845
Telephone _____

Actions Requested

- ☒ Site Plan Review
- ☐ Site Plan Amendment
- ☐ Area/Use Variance Requested (Additional Fees Apply)
- ☐ Special Use/RLO Permit Required (Additional Fees Apply)

Ownership Intentions: ☒ Purchase ☐ Lease ☐ Other: _____

Project Location:

Parcel ID: 66.02-2-31.171
Address: TBD

Other Permits Needed: ☐ Dept. of Health -Water/Septic
(all may not be applicable) ☒ Town of Big Flats DPW- Water

- ☒ Chemung County Sewer District
- ☒ NYSDEC- SPDES
- ☐ NYS/ACOE-Wetlands
- ☐ FAA
- ☐ NYSDOT
- ☒ Chemung County DPW-Driveway
- ☒ Town of Big Flats DPW-Driveway
- ☒ Town of Big Flats Building Permit
- ☐ Other: _____

Current Zoning: RU & BN2

Variance(s) Requested: None

Proposed Use(s) of Site: Various Residential

Anticipated Construction Start Date: TBD

Anticipated Completion Date: TBD **Will Construction be Phased:** Yes

Current Land Use of Site (agricultural, commercial, residential, etc.): Vacant Rural

Character of Surrounding Lands (agricultural, residential, wetlands, etc.): Vacant, Medium Density Res, Commercial

Estimated Cost of Proposed Improvement: \$ TBD

Estimated/Projected number of daily customers, employees, residents, etc.:

Approximately 200+ Residents

Estimate/Projected Hours of Operation: N/A

Describe proposed use, including primary and secondary uses; ground floor area; height; and number of stories for each building:

- for residential buildings include number of dwelling units by size (efficiency, one-bedroom, two-bedroom, three- or more bedrooms) and number of parking spaces to be provided.
- for non-residential buildings, include total floor area and total sales area; number of automobile and truck parking spaces.
- other proposal structures.

The proposed project is a mix of commercial and residential uses including self-storage, single-family homes, duplexes and townhomes. The actual mix will be determined during the planning process. The proposal includes the development of a Planned Unit Development zone on a 49.6 +/- parcel.

Check one: ☒

- ☐ Owner
☐ Power of Attorney*
☐ Contract to Purchase*
☒ Official Agent*
☐ Other: _____

FEE SCHEDULE

Residential: \$250.00*

Non-Residential: \$500.00**

Concept: \$200.00 (Fee goes toward full review)

***add \$50.00 per 1,000 Sq. Ft. Gross Floor Area**

****add \$150.00 per 2,500 Sq. Ft. Gross Floor Area**

I hereby certify that the above information and accompanying documents are truthful and accurate to the best of my knowledge and acknowledge that the processing of this application may require additional fees and expenses, at my expense, for preparation of necessary environmental, engineering and planning studies.

[Signature] July 20, 2018
Legal Owner/Official Agent Date

Legal Owner/Official Agent Date

Applicant (If Different) Date

Department Use (only)

Lead Agency: _____ Environmental Determination: _____

☐ Type I ☐ Type II ☐ Unlisted

Final Plans Signed and Filed: _____
Director of Planning Date

Application Closeout Date: _____

Public Hearing: ☐ Yes ☐ No Date Advertised: _____ Date Conducted: _____

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either "Yes" or "No". If the answer to the initial question is "Yes", complete the sub-questions that follow. If the answer to the initial question is "No", proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project: Shalerock Planned Unit Development		
Project Location (describe, and attach a general location map): Northwest of the intersection of Hibbard Road and Daniel Zenker Drive		
Brief Description of Proposed Action (include purpose or need): The proposed project is a mix of commercial and residential uses including self-storage, single-family homes, duplexes and townhomes. The actual mix will be determined during the planning process. The proposal includes the development of a Planned Unit Development zone on a 49.6 +/- parcel.		
Name of Applicant/Sponsor: J. Clark Construction		Telephone: 607-739-3883
		E-Mail: jclark328gts@aol.com
Address: 923 W Broad Street		
City/PO: Horseheads	State: NY	Zip Code: 14845
Project Contact (if not same as sponsor; give name and title/role): Fagan Engineers & Land Surveyors, P.C.		Telephone: 607-734-2165
		E-Mail: James.Gensel@FaganEngineers.com
Address: 113 E. Chemung Place		
City/PO: Elmira	State: NY	Zip Code: 14904
Property Owner (if not same as sponsor): Jerry & Carol Welliver		Telephone:
		E-Mail:
Address: 107 Lyons Drive Ext.		
City/PO: Horseheads	State: NY	Zip Code: 14845

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. ("Funding" includes grants, loans, tax relief, and any other forms of financial assistance.)		
Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No or Village Board of Trustees	Town Board - PUD	August 2018
b. City, Town or Village <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Planning Board or Commission	Planning Board - PUD	Concept - July 2018
c. City Council, Town or <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Village Zoning Board of Appeals		
d. Other local agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
e. County agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	County PB Referral	August 2018 (TBD)
f. Regional agencies <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Chemung County Health Department	August 2018
g. State agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	NYSDOH NYSDEC	August 2018
h. Federal agencies <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	USACE	Only if Wetland Permit is Necessary (TBD)
i. Coastal Resources. i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No iii. Is the project site within a Coastal Erosion Hazard Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		

C. Planning and Zoning

C.1. Planning and zoning actions.	
Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No • If Yes, complete sections C, F and G. • If No, proceed to question C.2 and complete all remaining sections and questions in Part 1	
C.2. Adopted land use plans.	
a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, identify the plan(s): NYS Major Basins: Upper Susquehanna _____ _____ _____	
c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, identify the plan(s): _____ _____ _____	

C.3. Zoning	
a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. If Yes, what is the zoning classification(s) including any applicable overlay district?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
<u>RU and BN2</u>	
b. Is the use permitted or allowed by a special or conditional use permit?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
c. Is a zoning change requested as part of the proposed action?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If Yes, i. What is the proposed new zoning for the site? <u>Planned Unit District (PUD)</u>	
C.4. Existing community services.	
a. In what school district is the project site located?	<u>Horseheads</u>
b. What police or other public protection forces serve the project site?	<u>Chemung County Sheriff</u>
c. Which fire protection and emergency medical services serve the project site?	<u>Big Flats Fire Department</u>
d. What parks serve the project site?	<u>Town of Big Flats</u>

D. Project Details

D.1. Proposed and Potential Development	
a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)? <u>Residential and Commercial</u>	
b. a. Total acreage of the site of the proposed action?	<u>49.656</u> acres
b. Total acreage to be physically disturbed?	<u>40.000</u> acres
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor?	<u>49.656</u> acres
c. Is the proposed action an expansion of an existing project or use? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____	
d. Is the proposed action a subdivision, or does it include a subdivision? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes, i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types) <u>Residential and Commercial</u>	
ii. Is a cluster/conservation layout proposed? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
iii. Number of lots proposed? <u>TBD -- ~75</u>	
iv. Minimum and maximum proposed lot sizes? Minimum <u>0.2 acres</u> Maximum <u>1.0 acres</u>	
e. Will proposed action be constructed in multiple phases? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
i. If No, anticipated period of construction: _____ months	
ii. If Yes:	
• Total number of phases anticipated	<u>6</u>
• Anticipated commencement date of phase 1 (including demolition)	<u>3</u> month <u>2019</u> year
• Anticipated completion date of final phase	<u>10</u> month <u>2025</u> year
• Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: <u>TBD - However phasing will accommodate all access and utility services.</u>	

f. Does the project include new residential uses? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No				
If Yes, show numbers of units proposed.				
	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	4	16		
At completion of all phases	~71	~16		15-20 Townhomes

g. Does the proposed action include new non-residential construction (including expansions)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes,	
i. Total number of structures <u>2</u>	
ii. Dimensions (in feet) of largest proposed structure: <u>15</u> height; <u>80</u> width; and <u>300</u> length	
iii. Approximate extent of building space to be heated or cooled: <u>48,000</u> square feet	

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes,	
i. Purpose of the impoundment: _____	
ii. If a water impoundment, the principal source of the water: <input type="checkbox"/> Ground water <input type="checkbox"/> Surface water streams <input type="checkbox"/> Other specify: _____	
iii. If other than water, identify the type of impounded/contained liquids and their source. _____	
iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres	
v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length	
vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____	

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
(Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite)	
If Yes:	
i. What is the purpose of the excavation or dredging? _____	
ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site?	
<ul style="list-style-type: none"> • Volume (specify tons or cubic yards): _____ • Over what duration of time? _____ 	
iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____	
iv. Will there be onsite dewatering or processing of excavated materials? <input type="checkbox"/> Yes <input type="checkbox"/> No	
If yes, describe. _____	
v. What is the total area to be dredged or excavated? _____ acres	
vi. What is the maximum area to be worked at any one time? _____ acres	
vii. What would be the maximum depth of excavation or dredging? _____ feet	
viii. Will the excavation require blasting? <input type="checkbox"/> Yes <input type="checkbox"/> No	
ix. Summarize site reclamation goals and plan: _____	

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
If Yes:	
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): <u>Size of existing man-made pond will increase for stormwater mitigation.</u>	

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:
Increase in size.

iii. Will proposed action cause or result in disturbance to bottom sediments?

☐ Yes ☒ No

If Yes, describe:

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation?

☒ Yes ☐ No

If Yes:

- acres of aquatic vegetation proposed to be removed: Minimal

- expected acreage of aquatic vegetation remaining after project completion: _____

- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____

- proposed method of plant removal: _____

- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water?

☒ Yes ☐ No

If Yes:

i. Total anticipated water usage/demand per day: 30,000 gallons/day

ii. Will the proposed action obtain water from an existing public water supply?

☒ Yes ☐ No

If Yes:

- Name of district or service area: Big Flats Water District

- Does the existing public water supply have capacity to serve the proposal?

☒ Yes ☐ No

- Is the project site in the existing district?

☒ Yes ☐ No

- Is expansion of the district needed?

☐ Yes ☒ No

- Do existing lines serve the project site?

☒ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project?

☒ Yes ☐ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____

TBD through discussions with the District

- Source(s) of supply for the district: Wells

iv. Is a new water supply district or service area proposed to be formed to serve the project site?

☐ Yes ☒ No

If, Yes:

- Applicant/sponsor for new district: _____

- Date application submitted or anticipated: _____

- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes?

☒ Yes ☐ No

If Yes:

i. Total anticipated liquid waste generation per day: 30,000 gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

Domestic Sanitary

iii. Will the proposed action use any existing public wastewater treatment facilities?

☒ Yes ☐ No

If Yes:

- Name of wastewater treatment plant to be used: Chemung County Sewer District

- Name of district: Chemung County Sewer District #1

- Does the existing wastewater treatment plant have capacity to serve the project?

☒ Yes ☐ No

- Is the project site in the existing district?

☐ Yes ☒ No

- Is expansion of the district needed?

☒ Yes ☐ No

- Do existing sewer lines serve the project site? ☒ Yes ☐ No
- Will line extension within an existing district be necessary to serve the project? ☒ Yes ☐ No

If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
TBD - Potential connections on Daniel Zenker Drive at two locations

- iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? ☐ Yes ☒ No

If Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- What is the receiving water for the wastewater discharge? _____

- v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans):

- vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____

- e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? ☒ Yes ☐ No

If Yes:

- i. How much impervious surface will the project create in relation to total size of project parcel?

_____ Square feet or _____ TBD acres (impervious surface)

_____ Square feet or _____ TBD acres (parcel size)

- ii. Describe types of new point sources. _____ None. Utilize existing stormwater drainage ways

- iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)?

Existing Stormwater Basin that will be improved.

- If to surface waters, identify receiving water bodies or wetlands: _____
On-site stormwater pond

- Will stormwater runoff flow to adjacent properties? ☒ Yes ☐ No

- iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? ☒ Yes ☐ No

- f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? ☐ Yes ☒ No

If Yes, identify:

- i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles)

- ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers)

- iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation)

- g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? ☐ Yes ☒ No

If Yes:

- i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) ☐ Yes ☐ No

- ii. In addition to emissions as calculated in the application, the project will generate:

- _____ Tons/year (short tons) of Carbon Dioxide (CO₂)
- _____ Tons/year (short tons) of Nitrous Oxide (N₂O)
- _____ Tons/year (short tons) of Perfluorocarbons (PFCs)
- _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆)
- _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydrofluorocarbons (HFCs)
- _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs)

h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? ☐ Yes ☒ No

If Yes:

i. Estimate methane generation in tons/year (metric): _____

ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____

i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? ☐ Yes ☒ No

If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____

j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? ☐ Yes ☒ No

If Yes:

i. When is the peak traffic expected (Check all that apply): ☐ Morning ☐ Evening ☐ Weekend
☐ Randomly between hours of _____ to _____.

ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____

iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____

iv. Does the proposed action include any shared use parking? ☐ Yes ☐ No

v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____

vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? ☐ Yes ☐ No

vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? ☐ Yes ☐ No

viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? ☐ Yes ☐ No

k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? ☒ Yes ☐ No

If Yes:

i. Estimate annual electricity demand during operation of the proposed action: _____
Typical residential _____

ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____
Grid/Local Utility _____

iii. Will the proposed action require a new, or an upgrade to, an existing substation? ☐ Yes ☒ No

l. Hours of operation. Answer all items which apply.

i. During Construction:	ii. During Operations:
• Monday - Friday: _____	• Monday - Friday: _____
• Saturday: _____	• Saturday: _____
• Sunday: _____	• Sunday: _____
• Holidays: _____	• Holidays: _____

<p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p>	
<p>n. Will the proposed action have outdoor lighting? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>_____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p>	
<p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p>	
<p>p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally describe proposed storage facilities: _____</p>	
<p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action use Integrated Pest Management Practices? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> • Construction: _____ tons per _____ (unit of time) • Operation : _____ tons per _____ (unit of time) <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> • Construction: _____ • Operation: _____ <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> • Construction: _____ • Operation: _____ 	

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☒ No

If Yes:

i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____

ii. Anticipated rate of disposal/processing:

- _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
- _____ Tons/hour, if combustion or thermal treatment

iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☒ No

If Yes:

i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

iii. Specify amount to be handled or generated _____ tons/month

iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No

If Yes: provide name and location of facility: _____

If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility: _____

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site

a. Existing land uses.

i. Check all uses that occur on, adjoining and near the project site.

- ☐ Urban ☒ Industrial ☒ Commercial ☒ Residential (suburban) ☐ Rural (non-farm)
- ☒ Forest ☐ Agriculture ☐ Aquatic ☐ Other (specify): _____

ii. If mix of uses, generally describe:

b. Land uses and covertypes on the project site.

Land use or Covertype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces	0.0	20.0	20.0
• Forested	13.4	4.2	-9.2
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)	31.7	0	-31.7
• Agricultural (includes active orchards, field, greenhouse etc.)	0	0	0
• Surface water features (lakes, ponds, streams, rivers, etc.)	2.5	4.0	1.5
• Wetlands (freshwater or tidal)	2.0	2.0	0
• Non-vegetated (bare rock, earth or fill)	0	0	0
• Other Describe: <u>Lawns</u>	0	19.4	19.4

c. Is the project site presently used by members of the community for public recreation? ☐ Yes ☒ No
i. If Yes: explain: _____

d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? ☒ Yes ☐ No
If Yes,
i. Identify Facilities:
Adjacent Daycare Facility

e. Does the project site contain an existing dam? ☐ Yes ☒ No
If Yes:
i. Dimensions of the dam and impoundment:
• Dam height: _____ feet
• Dam length: _____ feet
• Surface area: _____ acres
• Volume impounded: _____ gallons OR acre-feet
ii. Dam's existing hazard classification: _____
iii. Provide date and summarize results of last inspection: _____

f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? ☐ Yes ☒ No
If Yes:
i. Has the facility been formally closed? ☐ Yes ☐ No
• If yes, cite sources/documentation: _____
ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____
iii. Describe any development constraints due to the prior solid waste activities: _____

g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? ☐ Yes ☒ No
If Yes:
i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____

h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? ☐ Yes ☒ No
If Yes:
i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: ☐ Yes ☐ No
☐ Yes – Spills Incidents database Provide DEC ID number(s): _____
☐ Yes – Environmental Site Remediation database Provide DEC ID number(s): _____
☐ Neither database
ii. If site has been subject of RCRA corrective activities, describe control measures: _____
iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? ☐ Yes ☒ No
If yes, provide DEC ID number(s): _____
iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): _____

v. Is the project site subject to an institutional control limiting property uses? ☐ Yes ☒ No

- If yes, DEC site ID number: _____
- Describe the type of institutional control (e.g., deed restriction or easement): _____
- Describe any use limitations: _____
- Describe any engineering controls: _____
- Will the project affect the institutional or engineering controls in place? ☐ Yes ☐ No
- Explain: _____

E.2. Natural Resources On or Near Project Site

a. What is the average depth to bedrock on the project site? _____ >10 feet

b. Are there bedrock outcroppings on the project site? ☐ Yes ☒ No
If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %

c. Predominant soil type(s) present on project site:

Wallington	_____	46 %
Unadilla	_____	24 %
Chenango	_____	14 %

d. What is the average depth to the water table on the project site? Average: _____ >6 feet

e. Drainage status of project site soils: ☐ Well Drained: _____ % of site
☒ Moderately Well Drained: 75 % of site
☒ Poorly Drained: 25 % of site

f. Approximate proportion of proposed action site with slopes: ☒ 0-10%: 100 % of site
☐ 10-15%: _____ % of site
☐ 15% or greater: _____ % of site

g. Are there any unique geologic features on the project site? ☐ Yes ☒ No
If Yes, describe: _____

h. Surface water features.

i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? ☒ Yes ☐ No

ii. Do any wetlands or other waterbodies adjoin the project site? ☒ Yes ☐ No
If Yes to either i or ii, continue. If No, skip to E.2.i.

iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? ☒ Yes ☐ No

iv. For each identified regulated wetland and waterbody on the project site, provide the following information:

- Streams: Name 811-47 Classification C
- Lakes or Ponds: Name _____ Classification _____
- Wetlands: Name Federal Waters, Federal Waters, Federal Waters,... Approximate Size _____
- Wetland No. (if regulated by DEC) _____

v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? ☐ Yes ☒ No
If yes, name of impaired water body/bodies and basis for listing as impaired: _____

i. Is the project site in a designated Floodway? ☐ Yes ☒ No

j. Is the project site in the 100 year Floodplain? ☐ Yes ☒ No

k. Is the project site in the 500 year Floodplain? ☒ Yes ☐ No

l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? ☒ Yes ☐ No
If Yes:

i. Name of aquifer: Principal Aquifer, Primary Aquifer

<p>m. Identify the predominant wildlife species that occupy or use the project site:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border-bottom: 1px solid black;">Deer</td> <td style="width: 33%; border-bottom: 1px solid black;">Fox</td> <td style="width: 33%; border-bottom: 1px solid black;">Rabbits</td> </tr> <tr> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> <td style="border-bottom: 1px solid black;"></td> </tr> </table>			Deer	Fox	Rabbits			
Deer	Fox	Rabbits						
<p>n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p>ii. Source(s) of description or evaluation: _____</p> <p>iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 								
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>								
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>								
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p>								
<p>E.3. Designated Public Resources On or Near Project Site</p>								
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes, provide county plus district name/number: _____</p>								
<p>b. Are agricultural lands consisting of highly productive soils present? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>i. If Yes: acreage(s) on project site? 49.6</p> <p>ii. Source(s) of soil rating(s): 2018 NY Ag Land Classification - Chemung</p>								
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p>ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p>								
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>If Yes:</p> <p>i. CEA name: _____</p> <p>ii. Basis for designation: _____</p> <p>iii. Designating agency and date: _____</p>								

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District ii. Name: _____ iii. Brief description of attributes on which listing is based: _____ 	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
g. Have additional archaeological or historic site(s) or resources been identified on the project site?	
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
If Yes: <ul style="list-style-type: none"> i. Describe possible resource(s): _____ ii. Basis for identification: _____ 	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> i. Identify resource: _____ ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____ iii. Distance between project and resource: _____ miles. 	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If Yes: <ul style="list-style-type: none"> i. Identify the name of the river and its designation: _____ ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666? <input type="checkbox"/> Yes <input type="checkbox"/> No 	

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

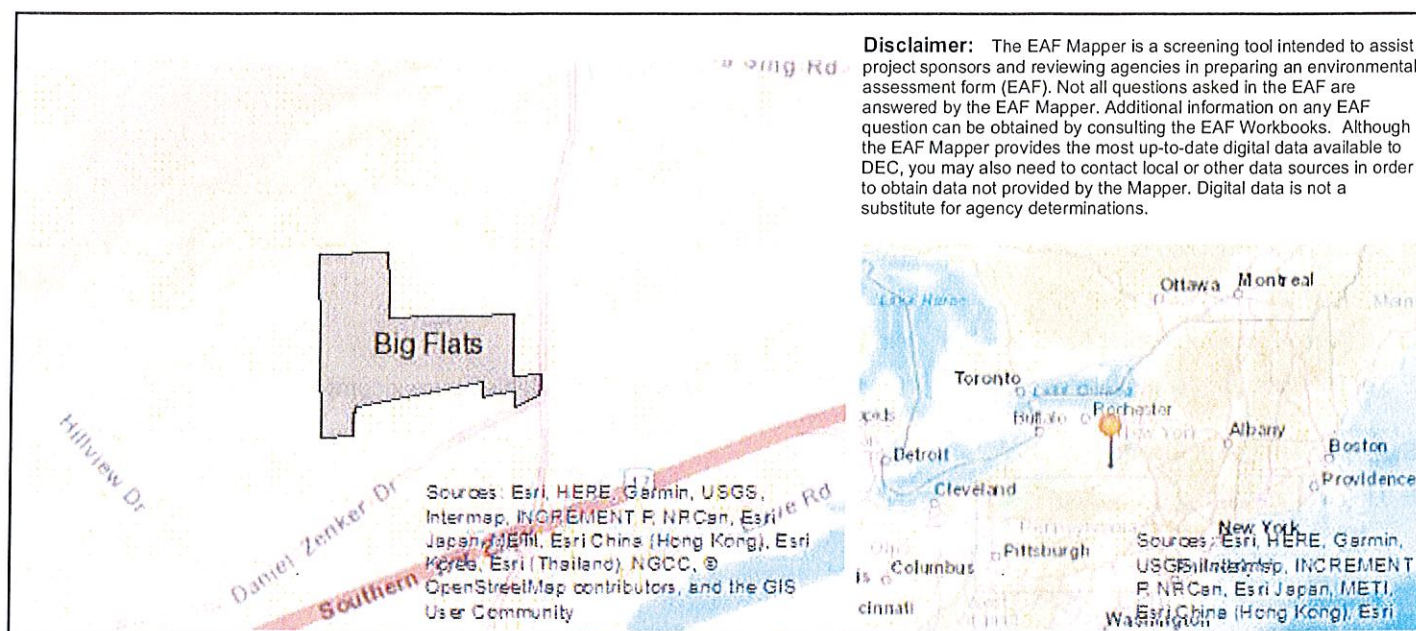
G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name James B. Gensel, P.E., CPESC Date July 20, 2018

Signature  Title Engineer for Applicant

PRINT FORM



B.i.i [Coastal or Waterfront Area]	No
B.i.ii [Local Waterfront Revitalization Area]	No
C.2.b. [Special Planning District]	Yes - Digital mapping data are not available for all Special Planning Districts. Refer to EAF Workbook.
C.2.b. [Special Planning District - Name]	NYS Major Basins: Upper Susquehanna
E.1.h [DEC Spills or Remediation Site - Potential Contamination History]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Listed]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.i [DEC Spills or Remediation Site - Environmental Site Remediation Database]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.1.h.iii [Within 2,000' of DEC Remediation Site]	No
E.2.g [Unique Geologic Features]	No
E.2.h.i [Surface Water Features]	Yes
E.2.h.ii [Surface Water Features]	Yes
E.2.h.iii [Surface Water Features]	Yes - Digital mapping information on local and federal wetlands and waterbodies is known to be incomplete. Refer to EAF Workbook.
E.2.h.iv [Surface Water Features - Stream Name]	811-47
E.2.h.iv [Surface Water Features - Stream Classification]	C
E.2.h.iv [Surface Water Features - Wetlands Name]	Federal Waters
E.2.h.v [Impaired Water Bodies]	No
E.2.i. [Floodway]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.

E.2.j. [100 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.k. [500 Year Floodplain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.2.l. [Aquifers]	Yes
E.2.l. [Aquifer Names]	Principal Aquifer, Primary Aquifer
E.2.n. [Natural Communities]	No
E.2.o. [Endangered or Threatened Species]	No
E.2.p. [Rare Plants or Animals]	No
E.3.a. [Agricultural District]	No
E.3.c. [National Natural Landmark]	No
E.3.d [Critical Environmental Area]	No
E.3.e. [National Register of Historic Places]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
E.3.f. [Archeological Sites]	Yes
E.3.i. [Designated River Corridor]	No



BERGMANN

ARCHITECTS ENGINEERS PLANNERS

July 29, 2018

Town of Big Flats Planning Board
Attn: Brenda Belmonte
476 Maple Street
Big Flats, NY 14814

Preliminary PUD Plan Review

Re: Shalerock Planned Unit Development
Hibbard Road
Tax ID: 66.02-2-31.171

Application Materials Received – July 20, 2018
Planning Board Meeting – August 7, 2018

Project Description

The applicant has submitted a Site Plan application to construct a Planned Unit Development (PUD) consisting of single-family homes, multifamily units consisting of duplexes and apartments and commercial facilities. The site is located in the northwest corner of the intersection of Hibbard Road and Daniel Zenker Drive. The property is approximately 49.656 acres in area and is located within the Rural (RU) District and Business Neighborhood 2 (BN2) District.

The applicant has submitted the concept plan to initiate the Planned Unit Development (PUD) review and approval process. The PUD and require public water and sewer to be available on-site. Currently there is public water to this site but there is no public sewer. The applicant will need to extend from Daniel Zenker Drive and will need to provide documentation from the Chemung County Sewer District on the ability to extend the sewer to the site.

We have reviewed this Concept Plan with the assumption that sewer can be extended to the site and the project would fall under Chapter 17.21 Planned Unit Development (PUD) District regulations. The PUD provides a mean by which different land uses within an area covered by a single development plan may be combined to achieve compatibility among uses.

The applicant has met with Town staff to review the initial concept plan and gain feedback and information to incorporate into the proposed project.

Chapter 17.21 PUD - Concept Plan Review Comments

As the applicant advances to preliminary PUD plan, the following are initial comments to be considered. These comments are not inclusive and Bergmann reserves the right to provide additional comments upon submission of future applications.

- A. Use - The single family, multi-family and commercial uses are permitted uses through Site Plan and Special Use Permit. The applicant is proposed 37 single family residences as part of Shalerock Reserve, 34 single family residences as part of Shalerock Villas, and 25 Townhome units as part of Shalerock Townhomes. Two



(2) storage facilities, each being 24,000 square feet are proposed in the southwest corner of the development.

- B. Minimum Area for a PUD Designation is 10 contiguous acres of land. This parcel would qualify for the PUD since it is approximately 49 acres.
- C. Density – The land use intensity and dwelling unit intensity shall be determined by the Planning Board. The applicant is proposing the following max density:
- Villas – 4 units per acre with minimum lot size of 8,700 SF
 - Reserve – 2 units per acre with a minimum lot size of 14,000 SF
 - Townhomes – 5 units per acres with a minimum lot size of 14,000 SF
- D. Open Space – a minimum of 30% open space is required. The applicant has not provided a calculation but several areas have been reserved for open space and appears to meet this requirement.
- E. Lot Coverage – Maximum lot coverage is 50% for the Villas and Townhomes with 35% for the Reserve homes.
- F. Lot Width – The proposed width of the lots for the Villas are 60 feet and 100 feet from the Reserve and Townhomes.
- G. Setbacks – The front, side and rear yard setbacks for individual structures within the PUD will be determined in conjunction with the final approval of the planned unit development plan. The applicant is proposing the following:

Type	Front Setback	Rear Setback	Side Setback
Reserve	25 feet	30 feet	10 feet
Villas	20 feet	25 feet	5 feet
Townhomes	25 feet	25 feet	10 feet

These setbacks are similar to what was established by the Planning Board for the other PUD application currently under review. Our only recommendation would be to have a 30-foot front setback for the Reserve units as this would be consistent with the front setback established with the other application. This would also keep the setbacks for the Reserves to be consistent with the density established in the R1 District. Both the Villas and Townhomes are more dense developments with smaller lots so it is anticipated that the setbacks would need to be reduced. We recommend the side setback from the Villas be increased to 10 feet to be consistent with the R2 District which is a comparable zone to compare these units with.

- H. Height – no information has been provided on the proposed heights of the buildings.
- I. Parking – any parking areas for the commercial facilities will need to be compliant with Chapter 17.48 of the Town Code.
- J. Streets – The streets will need to be designed and comply with Chapter 16 and 17 of the Town Code.



- K. Recreation Requirements – A PUD containing a residential component shall have a minimum of 5% of the entire PUD lot, exclusive of open space areas, set aside and developed, for recreational use. The applicant is proposing an enclosed dog park along with a walking trail throughout the development.
- L. Procedure (see Section 17.21.060 for detailed procedure instructions):
 - a. Planning Board will perform a pre-application meeting – at the August 7th Planning Board meeting
 - b. Applicant prepares a Preliminary Planned Unit Development Plan Submission.
 - c. Planning Board reviews Preliminary Planned Unit Development Plan.
 - d. Planning Board provides recommendation to the Town Board within 62 days of a complete application.
 - e. Town Board reviews Preliminary Planned Unit Development Plan.
 - f. Town Board holds public hearing within 62 days of receiving findings and recommendation from Planning Board.
 - g. Town Board within 62 days of holding public hearing will render decision on application and forward to Planning Board.
 - h. If approved, applicant submits Final Planned Unit Development Plan.
 - i. Planning Board reviews Final Planned Unit Development Plan and provides recommendation to Town Board.
 - j. Town Board issues Planned Unit Development Final Plan approval.

General Concept Plan Review Comments:

- The applicant is also proposed development near and on the existing natural gas pipeline easement. It appears the trail system will cross the easement. The applicant will need to provide correspondence from the gas company providing authorization if they plan to encroach the ROW.
- There is an existing wetland on the western part of the parcel. A formal wetland delineation will be required to be submitted as part of this project. The applicant should provide documentation to indicate that no environmental resources (i.e. wetland or streams) will be impacted with the proposed development. Any impacts may require permitting.
- The applicant should provide information on if the single-family units will be managed by a Home Owners Association and how the infrastructure and common areas will be maintained.
- Stormwater Management – This project will require a SWPPP as it will disturb more than 1 acre. There is an existing drainage ditch and retention pond within the project area.
- Roads – Road Plans and Profiles will need to be prepared.
- The project will require referral to the Chemung County Planning Board.
- The project will require review and approval by the Chemung County Department of Public Works for the proposed driveway off of Hibbard Road. There was some initial concern from the County as to the close proximity to the Hibbard Road and Daniel Zenker Drive intersection.



- The Planning Board shall decide if a traffic impact study is warranted as part of their review. Due to the scale of this development, we recommend a trip generation study be required by the Town as part of the SEQR review to determine potential impacts related to increase traffic.

State Environmental Quality Review

Per the Planned Unit Development regulations, all PUD applications shall be considered a Type I action under SEQRA requiring coordinated review. We applicant has provided a Long EAF with the application. We recommend the Planning Board process SEQR as part of the Preliminary PUD Submission.

County Review

The site plan submission must be referred to the Chemung County Planning Board for a review of potential intermunicipal impacts because the site meets at least one of the criteria for referral found in the General Municipal Law (GML) of New York State:

- The site borders the right-of-way of Daniel Zenker Drive meeting the criteria of within five hundred feet of the right-of-way of an existing or proposed county or state parkway, thruway, expressway, road or highway. [GML 239-m(b)(iii)]

We recommend referral be performed as part of the Preliminary PUD Submission and Review

Recommendation

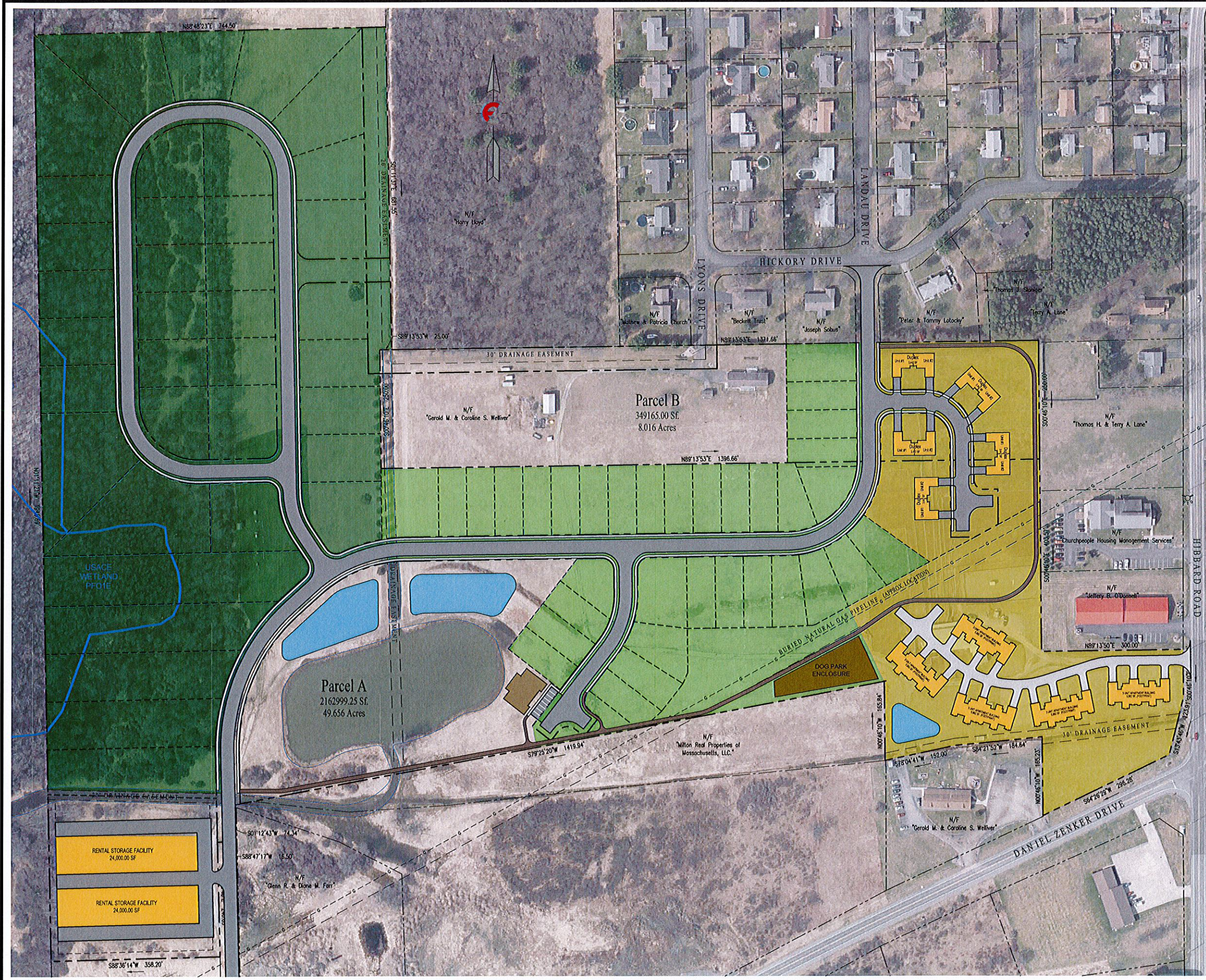
The Planning Board does not need to take any action on the Concept Plan application and should only provide feedback on what is being proposed. We do not recommend any actions on SEQR or referrals to the County at this time. The Planning Board shall give some further direction and comments to allow the applicant to proceed forward with a Preliminary Planned Unit Development Master Plan.

If you have any questions regarding this review letter, please contact me by phone at (607) 333-3120 or via email at rswitala@bergmannpc.com.

Best Regards,

BERGMANN ASSOCIATES

Robert Switala, PE, CPESC, CPSWQ
Principal



LEGEND		
---	PROPERTY LINE	
---	EXISTING EASEMENT	
---	EXISTING EDGE OF ROADWAY	
---	EXISTING CURB LINE	
---	EXISTING SANITARY SEWER	
---	EXISTING GAS MAIN	
---	EXISTING UTILITY LINE	
---	EXISTING FENCE LINE	
---	EXISTING WATER LINE	
---	EXISTING CONTOUR LINE	
---	PROPOSED LIMIT OF DISTURBANCE	
---	PROPOSED CONTOUR LINE	
---	PROPOSED EASEMENT	
---	PROPOSED STORM SEWER	
---	PROPOSED EDGE OF ROADWAY	
---	PROPOSED CURB LINE	
---	PROPOSED SANITARY SEWER	
---	PROPOSED GAS LINE	
---	PROPOSED UTILITY LINE	
---	PROPOSED WATER LINE	
---	PROPOSED SILT FENCE	
---	PROPOSED COMPOST SOCK	
---	EXISTING SANITARY MANHOLE	
---	EXISTING FIRE HYDRANT ASSEMBLY	
---	EXISTING CLEANOUT	
---	EXISTING SPOT ELEVATION	
---	PROPOSED SANITARY MANHOLE	
---	PROPOSED WATER VALVE	
---	PROPOSED THRUST BLOCK	
---	PROPOSED FIRE HYDRANT ASSEMBLY	
---	PROPOSED CLEANOUT	
---	PROPOSED LIGHTING FIXTURE	
---	PROPOSED SPOT ELEVATION	
---	PROPOSED DRYWELL	
---	PROPOSED CATCH BASIN	
---	PROPOSED INLET PROTECTION	

ZONING INFORMATION	
RU - RURAL	
BN2 - BUSINESS NEIGHBORHOOD 2	
TAX MAP # 66.02-2-31.171	
49.656 Acres	
1.9 Units/Acre	
SHALEROCK RESERVE	
23.6 Acres	
38 Single Family Residence	
1.6 Units/Acre	
SHALEROCK VILLAS	
11.0 Acres	
34 Single Family Residence	
3.1 Units/Acre	
SHALEROCK TOWNHOMES	
8.6 Acres	
25 Townhome Units	
2.9 Units/Acre	

Note:
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Revision Description	
1.	Rev. Date

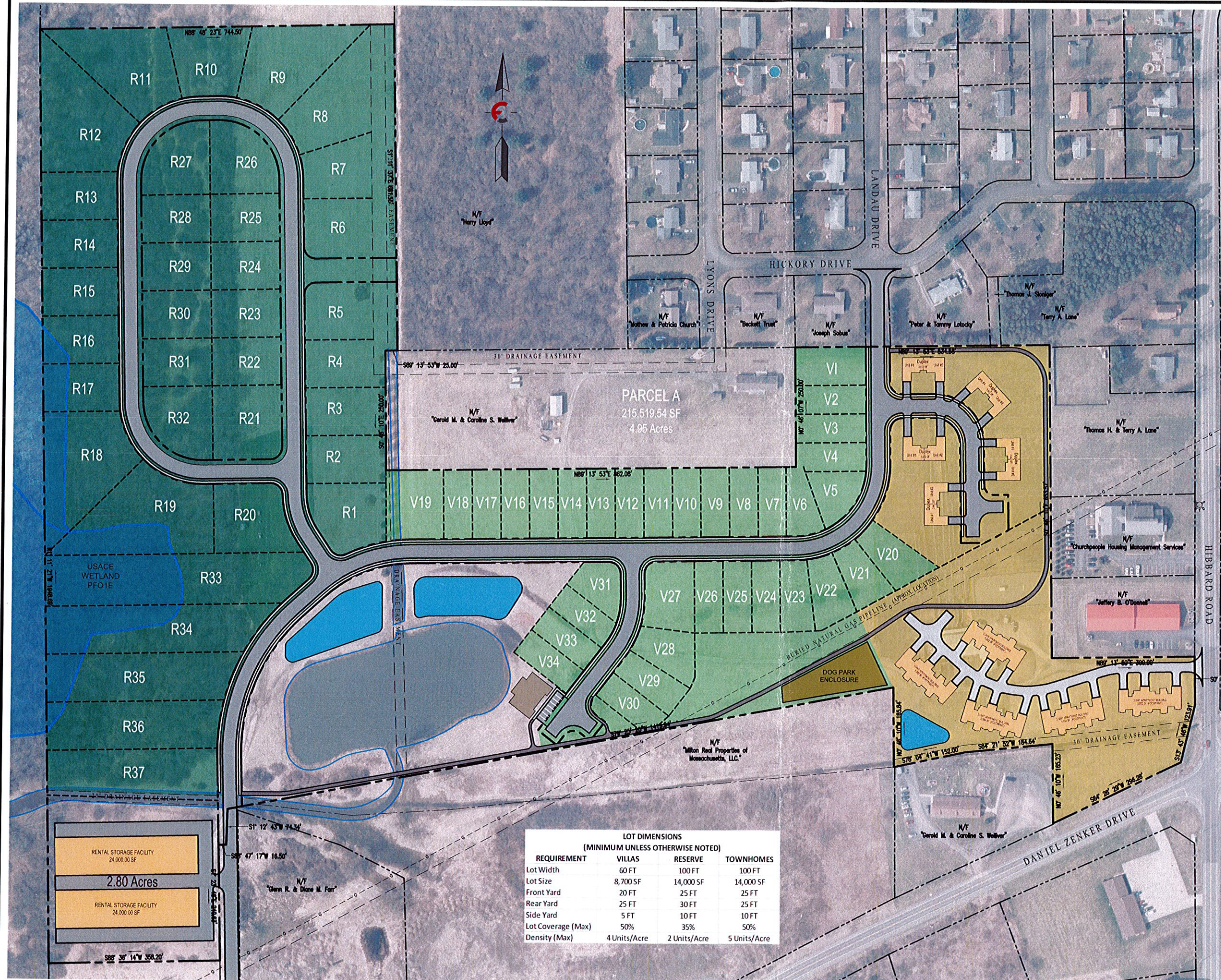
SEAL

SHALEROCK PUD
TOWN OF BIG FLATS, CHEMUNG COUNTY, NEW YORK

FAGAN ENGINEERS
S & LAND SURVEYORS PC
113 East Chemung Place
Elmira N.Y. 14904
Phone (607) 734-2165
Fax (607) 734-2169
www.FaganEngineers.com

Scale: 1" = 100'
11x17 Prints are 1/2 Size
Date: January 23, 2018
Design By: RSN
Drawn By: RSN
Checked By: JBG
Project No.: 2018.006
Drawing Name: 18006-sk.dwg

CONCEPT PLAN
SK-1



LEGEND

- PROPERTY LINE
- EXISTING EASEMENT
- EXISTING EDGE OF ROADWAY
- EXISTING CURB LINE
- EXISTING SANITARY SEWER
- EXISTING GAS MAIN
- EXISTING UTILITY LINE
- EXISTING FENCE LINE
- EXISTING WATER LINE
- EXISTING CONTOUR LINE
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CONTOUR LINE
- PROPOSED EASEMENT
- PROPOSED STORM SEWER
- PROPOSED EDGE OF ROADWAY
- PROPOSED CURB LINE
- PROPOSED SANITARY SEWER
- PROPOSED GAS LINE
- PROPOSED UTILITY LINE
- PROPOSED WATER LINE
- PROPOSED SILT FENCE
- PROPOSED COMPOST SOCK
- EXISTING SANITARY MANHOLE
- EXISTING FIRE HYDRANT ASSEMBLY
- EXISTING CLEAOUT
- EXISTING SPOT ELEVATION
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER VALVE
- PROPOSED THRUST BLOCK
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED CLEAOUT
- PROPOSED LIGHTING FIXTURE
- PROPOSED SPOT ELEVATION
- PROPOSED DRYWELL
- PROPOSED CATCH BASIN
- PROPOSED INLET PROTECTION

ZONING INFORMATION

TOWN OF BIG FLATS
PLANNED UNIT DEVELOPMENT
BN2 - BUSINESS NEIGHBORHOOD 2
TAX MAP # 66.02-2-31.171
49.656 Acres
1.9 Units/Acre

SHALEROCK RESERVE
23.6 Acres
37 Single Family Residence
1.6 Units/Acre

SHALEROCK VILLAS
11.0 Acres
34 Single Family Residence
3.1 Units/Acre

SHALEROCK TOWNHOMES
8.6 Acres
25 Townhome Units
2.9 Units/Acre

LOT DIMENSIONS (MINIMUM UNLESS OTHERWISE NOTED)

REQUIREMENT	VILLAS	RESERVE	TOWNHOMES
Lot Width	60 FT	100 FT	100 FT
Lot Size	8,700 SF	14,000 SF	14,000 SF
Front Yard	20 FT	25 FT	25 FT
Rear Yard	25 FT	30 FT	25 FT
Side Yard	5 FT	10 FT	10 FT
Lot Coverage (Max)	50%	35%	50%
Density (Max)	4 Units/Acre	2 Units/Acre	5 Units/Acre

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TOWN OF BIG FLATS
PLANNED UNIT DEVELOPMENT

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Rev.	Date	Revision Description
1.		

It is a Violation Of The New York Education Law, Article 141 Section 7209, For Any Person, Unless He is Acting Under The Direction Of A Licensed Professional Engineer Or Land Surveyor To Alter An Item In Any Way, If An Item Bearing The Seal Of An Engineer Or Land Surveyor Is Altered The Altering Engineer Or Land Surveyor Shall Affix To The Item His Seal And The Notation "Altered By" Followed By His Signature And The Date Of Such Alteration, And A Specific Description Of The Alteration.

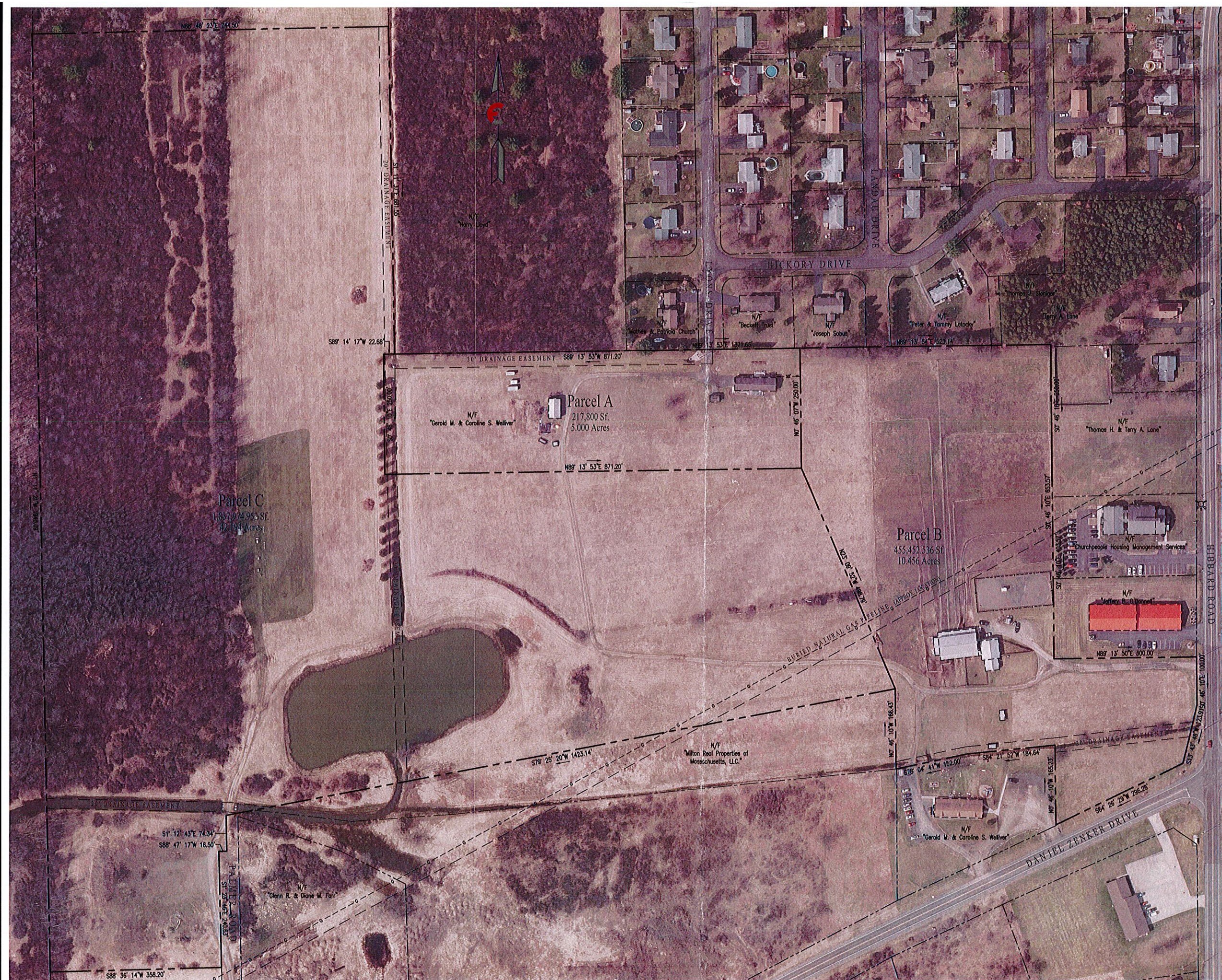
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SHALEROCK
PLANNED UNIT DEVELOPMENT
TOWN OF BIG FLATS, CHEMUNG COUNTY, NEW YORK

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LAND SURVEYORS P.C.
113 East Chemung Place
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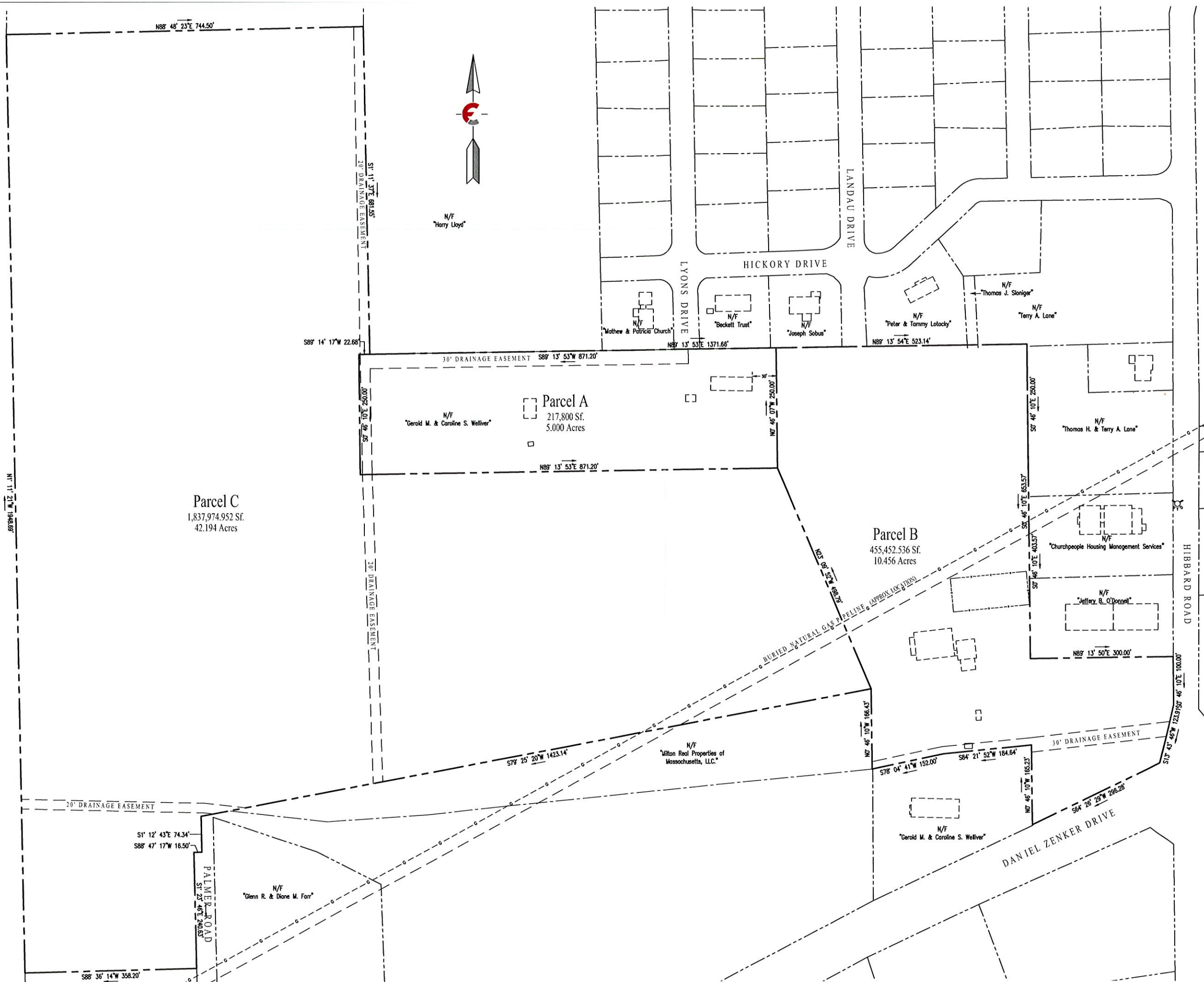
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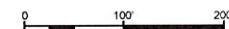


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Chemung County Planning Board

Chemung County Commerce Center
400 East Church Street
P.O. Box 588
Elmira, New York 14902-0588

(607) 737-5510

www.chemungcountyny.gov
planning@co.chemung.ny.us

Referral Number

For office use only



Chemung County Planning Board – Municipal Referral Form

(Please complete all information on both pages)

Referring Municipality: ☐ City ☒ Town ☐ Village of Big Flats

Referring Official: Tom Whispe Title: Code Enforcement

Address: 476 Maple St

Phone Number: 607-562-8443 E-mail: twhispe1@bigflatsny.gov

Referring Board (check appropriate box): ☐ Legislative Board ☐ ZBA ☒ Planning Board

Petitioner(s): Randy Williams/Marc Maser Phone: 377-7990

Petitioner's Mailing Address: 112 N Main St E-mail: maser@maser-engineering.net

Location of Property: 1068 Co. Rte 64

Tax Map Parcel Number(s): 58.03-1-3, 58.03-1-7, 58.03-1-8

Current Zoning District: Business Regional (BR)

Proposed Action: (check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Area Variance | <input type="checkbox"/> Subdivision Review |
| <input type="checkbox"/> Use Variance | <input type="checkbox"/> Rezoning |
| <input checked="" type="checkbox"/> Site Plan Review | <input type="checkbox"/> Zoning Text Amendment |
| <input type="checkbox"/> Special/Conditional Use Permit | <input type="checkbox"/> Zoning Map Amendment |
| <input type="checkbox"/> Comprehensive Plan Adoption / Amendment | <input type="checkbox"/> Moratorium |
| <input type="checkbox"/> Other (please specify): _____ | |

Description of the proposed action (attach detailed narrative if available):

New car dealership

The proposed action applies to real property within five hundred feet (500') of the following

(Please identify each item by filling in the appropriate blank after each item)

☐ (a) Boundary of the (City), (Village) or (Town) of: _____

☐ (b) Boundary of any existing or proposed (County) or (State Park) or any (Other Recreation Area): _____

☒ (c) Right-of-way of any existing or proposed (County) or (State Parkway), (Thruway), (Expressway), (Road) or (Highway);
(Include (County) or (State Route) # and name of (Road): Co Rte 64

☐ (d) Existing or proposed right-of-way of any stream or drainage channel owned by the (County) or for which the county has established channel lines: _____

☐ (e) Existing or proposed boundary of any (County) or (State) owned land on which a public building or institution is situated: _____

☐ (f) The boundary of a farm operation located in an agricultural district, as defined by article twenty-five-AA of the agriculture and markets law (this subparagraph shall not apply to the granting of area variances: _____)

Hearings/Meetings Schedule

Board	Public Hearing Date	Meeting Dates (prior and future)
Town Board/Village Board of Trustees		
Zoning Board of Appeals		
Planning Board/Planning Commission		8/7/2018, 9/4/2018
City Council		

Action taken on this application (reviewed, approved, discussed, etc.) _____

"Full Statement" Checklist

As defined in NYS General Municipal Law §239-m (1)(c)

Please make sure you have enclosed the following required information with your referral, as appropriate.

For All Actions:

- _____ Chemung County Planning Board – Municipal Referral Form
- _____ All application materials required by local law/ordinance to be considered a "complete application" at the local level (PDF preferred).
- _____ Part 1 Environmental Assessment Form (EAF) or Environmental Impact Statement (EIS) for State Environmental Quality Review (SEQR). If Type II Action, provide a statement to that effect.
- _____ Agricultural Data Statement, for site plan review, special/conditional use permit, use variances, or subdivision review located in an Agricultural District or within 500 feet of a farm operation located in an Agricultural District, per Ag. Districts Law Article 25AA §305-a, Town Law §283-a, and Village Law §7-739.
- _____ Municipal board meeting minutes on the proposed action (PDF preferred).

For Proposing or Amending Zoning Ordinances or Local Laws: The above requirements AND

- _____ Report/minutes from Town Board, Village Board or Trustees or Planning Board (PDF preferred)
- _____ Zoning Map
- _____ Complete text of proposed law, comprehensive plan, or ordinance (PDF preferred)

Deadline: Please submit completed referrals by close of business 10 business days prior to the Chemung County Planning Board meeting.



July 30, 2018

Town of Big Flats Planning Board
Attn: Brenda Belmonte
476 Maple Street
Big Flats, NY 14814

Preliminary Site Plan Review

Re: Williams Auto Group
951 County Road 64
Tax ID: 58.03-1-3, 58.03-1-7, and 58.03-1-8

Revised Application Materials Received – July 20, 2018
Planning Board Meeting – August 7, 2018

Project Description

The applicant has submitted a Site Plan and Zoning Variance application to construct a new 37,337 square foot Toyota car dealership and associated parking and utilities. The site is located at 951 County Road 64. Parcel 58.03-1-3 is approximately 5.10 acres and includes land on both sides of County Road 64. The applicant is proposing to acquire two adjacent residential parcels (58.03-1-7 and 58.03-1-8) to the west of the site to be developed for use of additional inventory parking. The applicant is now showing a small parking area to the west of Kaman Industrial Technologies on the south side of County Road 64. This parcel and is part of the Dandy Mini Mart projects currently under review by the Planning Board. The applicants will need to coordinate on the development of this parcel.

The property is located on the border of the Town of Big Flats and Town of Horseheads and is within the Business Regional (BR) Zone. Vehicle sales and lease are a permitted use under Site Plan approval in the Business Regional Zone.

The applicant has submitted a letter dated June 14, 2018 to the Chemung County Planning Board to address some of their comments and concerns. At the May 24, 2018 Chemung County Planning Board meeting, the County made a motion recommending tabling of proposed site plan for receipt of SEQR, peak hour trip generation, status of Sears Road discussion with the County, crosswalk, removal of parking spaces from the north of CR 64, and consideration of the fence line. The County also made a motion recommended tabling of zoning area variances for receipt of complete site plan for County Planning Board review. As part of the submission to the County, the applicant provided information on the estimated traffic volume, status of Fisherville Road Acquisition and updates to the site plan. The applicant has modified the display area to the north side of County Road 64 to remove all of the parking spaces per the County's request and to place a hedgerow and large rock slope on the front face of the development to deter foot traffic from crossing from the south side of County Road 64.

The applicant has provided an alternate site layout plan with the acquisition of Fisherville Road for the Planning Board review. At the July 3, 2018 Planning Board meeting, the Planning Board set the public hearing for the August 7, 2018 meeting. The applicant will need to update the remainder of the plans once the acquisition of the Fisherville Road has been completed.



All comments submitted as part of the previous reviews need to be addressed by the applicant.

State Environmental Quality Review

The Planning Board completed Part 2 and Part 3 noting that this project will result in no significant adverse impacts on the environment, and therefore, an environmental impact statement need not be prepared. Accordingly, a negative declaration was issued at the July 3, 2018 Planning Board meeting.

County Review:

The site plan and zoning application has been referred to the Chemung County Planning Board for a review of potential intermunicipal impacts.

Recommendation

At the August 7, 2018 Planning Board we recommend that the Planning Board open the public hearing but keep the public hearing open since additional information is forthcoming upon resolution of Fisherville Road.

If you have any questions regarding this review letter, please contact me by phone at (607) 333-3120 or via email at rswitala@bergmannpc.com.

Best Regards,

BERGMANN ASSOCIATES

Robert Switala, PE, CPESC, CPSWQ
Principal



Chemung County Planning Board

Chemung County Commerce Center
400 East Church Street
P.O. Box 588
Elmira, New York 14902-0588

(607) 737-5510

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Referral Number

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(Please complete all information on both pages)

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Referring Official: Tom Whispe Title: Code Enforcement

Address: 476 Maple St

Phone Number: 562-8443 E-mail: twhispe1@bigflatsny.gov

Referring Board (check appropriate box): ☐ Legislative Board ☐ ZBA ☒ Planning Board

Petitioner(s): Josh Real Est./mase, Eng. Phone: 425-6477

Petitioner's Mailing Address: 112 N main St, Hshds 14845 E-mail: mase@mase-engineering.net

Location of Property: 161 Sing Sing Rd

Tax Map Parcel Number(s): 57-03-2-4

Current Zoning District: Rural

Proposed Action: (check all that apply)

- | | |
|--|--|
| <input type="checkbox"/> Area Variance | <input type="checkbox"/> Subdivision Review |
| <input type="checkbox"/> Use Variance | <input type="checkbox"/> Rezoning |
| <input checked="" type="checkbox"/> Site Plan Review | <input type="checkbox"/> Zoning Text Amendment |
| <input type="checkbox"/> Special/Conditional Use Permit | <input type="checkbox"/> Zoning Map Amendment |
| <input type="checkbox"/> Comprehensive Plan Adoption / Amendment | <input type="checkbox"/> Moratorium |
| <input type="checkbox"/> Other (please specify): _____ | |

Description of the proposed action (attach detailed narrative if available):

Planned Unit Development (PUD)

The proposed action applies to real property within five hundred feet (500') of the following

(Please identify each item by filling in the appropriate blank after each item)

☐ (a) Boundary of the (City), (Village) or (Town) of: _____

☐ (b) Boundary of any existing or proposed (County) or (State Park) or any (Other Recreation Area): _____

☒ (c) Right-of-way of any existing or proposed (County) or (State Parkway), (Thruway), (Expressway), (Road) or (Highway);
(Include (County) or (State Route) # and name of (Road): Co. Rte 17 / Sing Sing Rd

☐ (d) Existing or proposed right-of-way of any stream or drainage channel owned by the (County) or for which the county has established channel lines: _____

☐ (e) Existing or proposed boundary of any (County) or (State) owned land on which a public building or institution is situated: _____

☐ (f) The boundary of a farm operation located in an agricultural district, as defined by article twenty-five-AA of the agriculture and markets law (this subparagraph shall not apply to the granting of area variances: _____)

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Action taken on this application (reviewed, approved, discussed, etc.) _____

"Full Statement" Checklist

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- _____ Zoning Map
- _____ Complete text of proposed law, comprehensive plan, or ordinance (PDF preferred)

Deadline: Please submit completed referrals by close of business 10 business days prior to the Chemung County Planning Board meeting.

Full Environmental Assessment Form
Part 1 - Project and Setting

Instructions for Completing Part 1

Part 1 is to be completed by the applicant or project sponsor. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification.

Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information; indicate whether missing information does not exist, or is not reasonably available to the sponsor; and, when possible, generally describe work or studies which would be necessary to update or fully develop that information.

Applicants/sponsors must complete all items in Sections A & B. In Sections C, D & E, most items contain an initial question that must be answered either “Yes” or “No”. If the answer to the initial question is “Yes”, complete the sub-questions that follow. If the answer to the initial question is “No”, proceed to the next question. Section F allows the project sponsor to identify and attach any additional information. Section G requires the name and signature of the project sponsor to verify that the information contained in Part 1 is accurate and complete.

A. Project and Sponsor Information.

Name of Action or Project:		
Project Location (describe, and attach a general location map):		
Brief Description of Proposed Action (include purpose or need):		
Name of Applicant/Sponsor:		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Project Contact (if not same as sponsor; give name and title/role):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:
Property Owner (if not same as sponsor):		Telephone:
		E-Mail:
Address:		
City/PO:	State:	Zip Code:

B. Government Approvals

B. Government Approvals, Funding, or Sponsorship. (“Funding” includes grants, loans, tax relief, and any other forms of financial assistance.)

Government Entity	If Yes: Identify Agency and Approval(s) Required	Application Date (Actual or projected)
a. City Council, Town Board, or Village Board of Trustees <input type="checkbox"/> Yes <input type="checkbox"/> No		
b. City, Town or Village Planning Board or Commission <input type="checkbox"/> Yes <input type="checkbox"/> No		
c. City Council, Town or Village Zoning Board of Appeals <input type="checkbox"/> Yes <input type="checkbox"/> No		
d. Other local agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
e. County agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
f. Regional agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
g. State agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
h. Federal agencies <input type="checkbox"/> Yes <input type="checkbox"/> No		
i. Coastal Resources.		
i. Is the project site within a Coastal Area, or the waterfront area of a Designated Inland Waterway?		<input type="checkbox"/> Yes <input type="checkbox"/> No
ii. Is the project site located in a community with an approved Local Waterfront Revitalization Program?		<input type="checkbox"/> Yes <input type="checkbox"/> No
iii. Is the project site within a Coastal Erosion Hazard Area?		<input type="checkbox"/> Yes <input type="checkbox"/> No

C. Planning and Zoning

C.1. Planning and zoning actions.

Will administrative or legislative adoption, or amendment of a plan, local law, ordinance, rule or regulation be the only approval(s) which must be granted to enable the proposed action to proceed? ☐ Yes ☐ No

- If Yes, complete sections C, F and G.
- If No, proceed to question C.2 and complete all remaining sections and questions in Part 1

C.2. Adopted land use plans.

a. Do any municipally- adopted (city, town, village or county) comprehensive land use plan(s) include the site where the proposed action would be located? ☐ Yes ☐ No

If Yes, does the comprehensive plan include specific recommendations for the site where the proposed action would be located? ☐ Yes ☐ No

b. Is the site of the proposed action within any local or regional special planning district (for example: Greenway Brownfield Opportunity Area (BOA); designated State or Federal heritage area; watershed management plan; or other?) ☐ Yes ☐ No

If Yes, identify the plan(s):

c. Is the proposed action located wholly or partially within an area listed in an adopted municipal open space plan, or an adopted municipal farmland protection plan? ☐ Yes ☐ No

If Yes, identify the plan(s):

C.3. Zoning

a. Is the site of the proposed action located in a municipality with an adopted zoning law or ordinance. ☐ Yes ☐ No
If Yes, what is the zoning classification(s) including any applicable overlay district?

b. Is the use permitted or allowed by a special or conditional use permit? ☐ Yes ☐ No

c. Is a zoning change requested as part of the proposed action? ☐ Yes ☐ No

If Yes,

i. What is the proposed new zoning for the site? _____

C.4. Existing community services.

a. In what school district is the project site located? _____

b. What police or other public protection forces serve the project site?

c. Which fire protection and emergency medical services serve the project site?

d. What parks serve the project site?

D. Project Details

D.1. Proposed and Potential Development

a. What is the general nature of the proposed action (e.g., residential, industrial, commercial, recreational; if mixed, include all components)?

b. a. Total acreage of the site of the proposed action? _____ acres
b. Total acreage to be physically disturbed? _____ acres
c. Total acreage (project site and any contiguous properties) owned
or controlled by the applicant or project sponsor? _____ acres

c. Is the proposed action an expansion of an existing project or use? ☐ Yes ☐ No
i. If Yes, what is the approximate percentage of the proposed expansion and identify the units (e.g., acres, miles, housing units, square feet)? % _____ Units: _____

d. Is the proposed action a subdivision, or does it include a subdivision? ☐ Yes ☐ No

If Yes,

i. Purpose or type of subdivision? (e.g., residential, industrial, commercial; if mixed, specify types)

ii. Is a cluster/conservation layout proposed? ☐ Yes ☐ No

iii. Number of lots proposed? _____

iv. Minimum and maximum proposed lot sizes? Minimum _____ Maximum _____

e. Will proposed action be constructed in multiple phases? ☐ Yes ☐ No

i. If No, anticipated period of construction: _____ months

ii. If Yes:

- Total number of phases anticipated _____
- Anticipated commencement date of phase 1 (including demolition) _____ month _____ year
- Anticipated completion date of final phase _____ month _____ year
- Generally describe connections or relationships among phases, including any contingencies where progress of one phase may determine timing or duration of future phases: _____

f. Does the project include new residential uses? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, show numbers of units proposed.				
	<u>One Family</u>	<u>Two Family</u>	<u>Three Family</u>	<u>Multiple Family (four or more)</u>
Initial Phase	_____	_____	_____	_____
At completion	_____	_____	_____	_____
of all phases	_____	_____	_____	_____

g. Does the proposed action include new non-residential construction (including expansions)? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes,	
i. Total number of structures _____ ii. Dimensions (in feet) of largest proposed structure: _____ height; _____ width; and _____ length iii. Approximate extent of building space to be heated or cooled: _____ square feet	

h. Does the proposed action include construction or other activities that will result in the impoundment of any liquids, such as creation of a water supply, reservoir, pond, lake, waste lagoon or other storage? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes,	
i. Purpose of the impoundment: _____ ii. If a water impoundment, the principal source of the water: <input type="checkbox"/> Ground water <input type="checkbox"/> Surface water streams <input type="checkbox"/> Other specify: _____ iii. If other than water, identify the type of impounded/contained liquids and their source. _____ iv. Approximate size of the proposed impoundment. Volume: _____ million gallons; surface area: _____ acres v. Dimensions of the proposed dam or impounding structure: _____ height; _____ length vi. Construction method/materials for the proposed dam or impounding structure (e.g., earth fill, rock, wood, concrete): _____	

D.2. Project Operations

a. Does the proposed action include any excavation, mining, or dredging, during construction, operations, or both? <input type="checkbox"/> Yes <input type="checkbox"/> No (Not including general site preparation, grading or installation of utilities or foundations where all excavated materials will remain onsite) If Yes:	
i. What is the purpose of the excavation or dredging? _____ ii. How much material (including rock, earth, sediments, etc.) is proposed to be removed from the site? • Volume (specify tons or cubic yards): _____ • Over what duration of time? _____ iii. Describe nature and characteristics of materials to be excavated or dredged, and plans to use, manage or dispose of them. _____ _____ _____ iv. Will there be onsite dewatering or processing of excavated materials? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, describe. _____ _____ _____ v. What is the total area to be dredged or excavated? _____ acres vi. What is the maximum area to be worked at any one time? _____ acres vii. What would be the maximum depth of excavation or dredging? _____ feet viii. Will the excavation require blasting? <input type="checkbox"/> Yes <input type="checkbox"/> No ix. Summarize site reclamation goals and plan: _____ _____ _____ _____	

b. Would the proposed action cause or result in alteration of, increase or decrease in size of, or encroachment into any existing wetland, waterbody, shoreline, beach or adjacent area? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes:	
i. Identify the wetland or waterbody which would be affected (by name, water index number, wetland map number or geographic description): _____ _____ _____	

ii. Describe how the proposed action would affect that waterbody or wetland, e.g. excavation, fill, placement of structures, or alteration of channels, banks and shorelines. Indicate extent of activities, alterations and additions in square feet or acres:

iii. Will proposed action cause or result in disturbance to bottom sediments? ☐ Yes ☐ No
If Yes, describe: _____

iv. Will proposed action cause or result in the destruction or removal of aquatic vegetation? ☐ Yes ☐ No
If Yes:

- acres of aquatic vegetation proposed to be removed: _____
- expected acreage of aquatic vegetation remaining after project completion: _____
- purpose of proposed removal (e.g. beach clearing, invasive species control, boat access): _____
- proposed method of plant removal: _____
- if chemical/herbicide treatment will be used, specify product(s): _____

v. Describe any proposed reclamation/mitigation following disturbance: _____

c. Will the proposed action use, or create a new demand for water? ☐ Yes ☐ No
If Yes:

i. Total anticipated water usage/demand per day: _____ gallons/day

ii. Will the proposed action obtain water from an existing public water supply? ☐ Yes ☐ No
If Yes:

- Name of district or service area: _____
- Does the existing public water supply have capacity to serve the proposal? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No
- Do existing lines serve the project site? ☐ Yes ☐ No

iii. Will line extension within an existing district be necessary to supply the project? ☐ Yes ☐ No
If Yes:

- Describe extensions or capacity expansions proposed to serve this project: _____
- Source(s) of supply for the district: _____

iv. Is a new water supply district or service area proposed to be formed to serve the project site? ☐ Yes ☐ No
If, Yes:

- Applicant/sponsor for new district: _____
- Date application submitted or anticipated: _____
- Proposed source(s) of supply for new district: _____

v. If a public water supply will not be used, describe plans to provide water supply for the project: _____

vi. If water supply will be from wells (public or private), maximum pumping capacity: _____ gallons/minute.

d. Will the proposed action generate liquid wastes? ☐ Yes ☐ No
If Yes:

i. Total anticipated liquid waste generation per day: _____ gallons/day

ii. Nature of liquid wastes to be generated (e.g., sanitary wastewater, industrial; if combination, describe all components and approximate volumes or proportions of each): _____

iii. Will the proposed action use any existing public wastewater treatment facilities? ☐ Yes ☐ No
If Yes:

- Name of wastewater treatment plant to be used: _____
- Name of district: _____
- Does the existing wastewater treatment plant have capacity to serve the project? ☐ Yes ☐ No
- Is the project site in the existing district? ☐ Yes ☐ No
- Is expansion of the district needed? ☐ Yes ☐ No

<ul style="list-style-type: none"> • Do existing sewer lines serve the project site? _____ • Will line extension within an existing district be necessary to serve the project? _____ <p>If Yes:</p> <ul style="list-style-type: none"> • Describe extensions or capacity expansions proposed to serve this project: _____ _____ _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>iv. Will a new wastewater (sewage) treatment district be formed to serve the project site? _____</p> <p>If Yes:</p> <ul style="list-style-type: none"> • Applicant/sponsor for new district: _____ • Date application submitted or anticipated: _____ • What is the receiving water for the wastewater discharge? _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>v. If public facilities will not be used, describe plans to provide wastewater treatment for the project, including specifying proposed receiving water (name and classification if surface discharge, or describe subsurface disposal plans): _____ _____ _____</p>		
<p>vi. Describe any plans or designs to capture, recycle or reuse liquid waste: _____ _____ _____</p>		
<p>e. Will the proposed action disturb more than one acre and create stormwater runoff, either from new point sources (i.e. ditches, pipes, swales, curbs, gutters or other concentrated flows of stormwater) or non-point source (i.e. sheet flow) during construction or post construction? _____</p> <p>If Yes:</p> <p>i. How much impervious surface will the project create in relation to total size of project parcel?</p> <p style="padding-left: 40px;">_____ Square feet or _____ acres (impervious surface)</p> <p style="padding-left: 40px;">_____ Square feet or _____ acres (parcel size)</p> <p>ii. Describe types of new point sources. _____ _____</p> <p>iii. Where will the stormwater runoff be directed (i.e. on-site stormwater management facility/structures, adjacent properties, groundwater, on-site surface water or off-site surface waters)? _____ _____</p> <ul style="list-style-type: none"> • If to surface waters, identify receiving water bodies or wetlands: _____ _____ • Will stormwater runoff flow to adjacent properties? _____ 	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>iv. Does proposed plan minimize impervious surfaces, use pervious materials or collect and re-use stormwater? _____</p>		
<p>f. Does the proposed action include, or will it use on-site, one or more sources of air emissions, including fuel combustion, waste incineration, or other processes or operations? _____</p> <p>If Yes, identify:</p> <p>i. Mobile sources during project operations (e.g., heavy equipment, fleet or delivery vehicles) _____</p> <p>ii. Stationary sources during construction (e.g., power generation, structural heating, batch plant, crushers) _____</p> <p>iii. Stationary sources during operations (e.g., process emissions, large boilers, electric generation) _____</p>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No	
<p>g. Will any air emission sources named in D.2.f (above), require a NY State Air Registration, Air Facility Permit, or Federal Clean Air Act Title IV or Title V Permit? _____</p> <p>If Yes:</p> <p>i. Is the project site located in an Air quality non-attainment area? (Area routinely or periodically fails to meet ambient air quality standards for all or some parts of the year) _____</p> <p>ii. In addition to emissions as calculated in the application, the project will generate:</p> <ul style="list-style-type: none"> • _____ Tons/year (short tons) of Carbon Dioxide (CO₂) • _____ Tons/year (short tons) of Nitrous Oxide (N₂O) • _____ Tons/year (short tons) of Perfluorocarbons (PFCs) • _____ Tons/year (short tons) of Sulfur Hexafluoride (SF₆) • _____ Tons/year (short tons) of Carbon Dioxide equivalent of Hydroflourocarbons (HFCs) • _____ Tons/year (short tons) of Hazardous Air Pollutants (HAPs) 		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> No

<p>h. Will the proposed action generate or emit methane (including, but not limited to, sewage treatment plants, landfills, composting facilities)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Estimate methane generation in tons/year (metric): _____</p> <p>ii. Describe any methane capture, control or elimination measures included in project design (e.g., combustion to generate heat or electricity, flaring): _____</p>			
<p>i. Will the proposed action result in the release of air pollutants from open-air operations or processes, such as quarry or landfill operations? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes: Describe operations and nature of emissions (e.g., diesel exhaust, rock particulates/dust): _____</p>			
<p>j. Will the proposed action result in a substantial increase in traffic above present levels or generate substantial new demand for transportation facilities or services? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. When is the peak traffic expected (Check all that apply): <input type="checkbox"/> Morning <input type="checkbox"/> Evening <input type="checkbox"/> Weekend <input type="checkbox"/> Randomly between hours of _____ to _____.</p> <p>ii. For commercial activities only, projected number of semi-trailer truck trips/day: _____</p> <p>iii. Parking spaces: Existing _____ Proposed _____ Net increase/decrease _____</p> <p>iv. Does the proposed action include any shared use parking? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>v. If the proposed action includes any modification of existing roads, creation of new roads or change in existing access, describe: _____</p> <p>vi. Are public/private transportation service(s) or facilities available within ½ mile of the proposed site? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>vii. Will the proposed action include access to public transportation or accommodations for use of hybrid, electric or other alternative fueled vehicles? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>viii. Will the proposed action include plans for pedestrian or bicycle accommodations for connections to existing pedestrian or bicycle routes? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>			
<p>k. Will the proposed action (for commercial or industrial projects only) generate new or additional demand for energy? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Estimate annual electricity demand during operation of the proposed action: _____</p> <p>ii. Anticipated sources/suppliers of electricity for the project (e.g., on-site combustion, on-site renewable, via grid/local utility, or other): _____</p> <p>iii. Will the proposed action require a new, or an upgrade to, an existing substation? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>			
<p>l. Hours of operation. Answer all items which apply.</p> <table style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ </td> <td style="width: 50%; vertical-align: top;"> <p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ </td> </tr> </table>		<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____
<p>i. During Construction:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 	<p>ii. During Operations:</p> <ul style="list-style-type: none"> • Monday - Friday: _____ • Saturday: _____ • Sunday: _____ • Holidays: _____ 		

<p>m. Will the proposed action produce noise that will exceed existing ambient noise levels during construction, operation, or both? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes:</p> <p>i. Provide details including sources, time of day and duration:</p> <p>_____</p> <p>_____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a noise barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p>	
<p>n.. Will the proposed action have outdoor lighting? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes:</p> <p>i. Describe source(s), location(s), height of fixture(s), direction/aim, and proximity to nearest occupied structures:</p> <p>_____</p> <p>_____</p>	
<p>ii. Will proposed action remove existing natural barriers that could act as a light barrier or screen? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>Describe: _____</p> <p>_____</p>	
<p>o. Does the proposed action have the potential to produce odors for more than one hour per day? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, describe possible sources, potential frequency and duration of odor emissions, and proximity to nearest occupied structures: _____</p> <p>_____</p> <p>_____</p>	
<p>p. Will the proposed action include any bulk storage of petroleum (combined capacity of over 1,100 gallons) or chemical products 185 gallons in above ground storage or any amount in underground storage? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Product(s) to be stored _____</p> <p>ii. Volume(s) _____ per unit time _____ (e.g., month, year)</p> <p>iii. Generally describe proposed storage facilities: _____</p> <p>_____</p>	
<p>q. Will the proposed action (commercial, industrial and recreational projects only) use pesticides (i.e., herbicides, insecticides) during construction or operation? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe proposed treatment(s):</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>ii. Will the proposed action use Integrated Pest Management Practices? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>r. Will the proposed action (commercial or industrial projects only) involve or require the management or disposal of solid waste (excluding hazardous materials)? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe any solid waste(s) to be generated during construction or operation of the facility:</p> <ul style="list-style-type: none"> • Construction: _____ tons per _____ (unit of time) • Operation : _____ tons per _____ (unit of time) <p>ii. Describe any proposals for on-site minimization, recycling or reuse of materials to avoid disposal as solid waste:</p> <ul style="list-style-type: none"> • Construction: _____ _____ • Operation: _____ _____ <p>iii. Proposed disposal methods/facilities for solid waste generated on-site:</p> <ul style="list-style-type: none"> • Construction: _____ _____ • Operation: _____ _____ 	

s. Does the proposed action include construction or modification of a solid waste management facility? ☐ Yes ☐ No
 If Yes:
 i. Type of management or handling of waste proposed for the site (e.g., recycling or transfer station, composting, landfill, or other disposal activities): _____
 ii. Anticipated rate of disposal/processing:
 • _____ Tons/month, if transfer or other non-combustion/thermal treatment, or
 • _____ Tons/hour, if combustion or thermal treatment
 iii. If landfill, anticipated site life: _____ years

t. Will proposed action at the site involve the commercial generation, treatment, storage, or disposal of hazardous waste? ☐ Yes ☐ No
 If Yes:
 i. Name(s) of all hazardous wastes or constituents to be generated, handled or managed at facility: _____

 ii. Generally describe processes or activities involving hazardous wastes or constituents: _____

 iii. Specify amount to be handled or generated _____ tons/month
 iv. Describe any proposals for on-site minimization, recycling or reuse of hazardous constituents: _____

 v. Will any hazardous wastes be disposed at an existing offsite hazardous waste facility? ☐ Yes ☐ No
 If Yes: provide name and location of facility: _____

 If No: describe proposed management of any hazardous wastes which will not be sent to a hazardous waste facility:

E. Site and Setting of Proposed Action

E.1. Land uses on and surrounding the project site			
a. Existing land uses. i. Check all uses that occur on, adjoining and near the project site. <input type="checkbox"/> Urban <input type="checkbox"/> Industrial <input type="checkbox"/> Commercial <input type="checkbox"/> Residential (suburban) <input type="checkbox"/> Rural (non-farm) <input type="checkbox"/> Forest <input type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other (specify): _____ ii. If mix of uses, generally describe: _____ _____			
b. Land uses and coverytypes on the project site.			
Land use or Coverytype	Current Acreage	Acreage After Project Completion	Change (Acres +/-)
• Roads, buildings, and other paved or impervious surfaces			
• Forested			
• Meadows, grasslands or brushlands (non-agricultural, including abandoned agricultural)			
• Agricultural (includes active orchards, field, greenhouse etc.)			
• Surface water features (lakes, ponds, streams, rivers, etc.)			
• Wetlands (freshwater or tidal)			
• Non-vegetated (bare rock, earth or fill)			
• Other Describe: _____ _____			

<p>c. Is the project site presently used by members of the community for public recreation? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>i. If Yes: explain: _____</p>	
<p>d. Are there any facilities serving children, the elderly, people with disabilities (e.g., schools, hospitals, licensed day care centers, or group homes) within 1500 feet of the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes,</p> <p>i. Identify Facilities: _____</p> <p>_____</p>	
<p>e. Does the project site contain an existing dam? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Dimensions of the dam and impoundment:</p> <ul style="list-style-type: none"> • Dam height: _____ feet • Dam length: _____ feet • Surface area: _____ acres • Volume impounded: _____ gallons OR acre-feet <p>ii. Dam's existing hazard classification: _____</p> <p>iii. Provide date and summarize results of last inspection: _____</p> <p>_____</p>	
<p>f. Has the project site ever been used as a municipal, commercial or industrial solid waste management facility, or does the project site adjoin property which is now, or was at one time, used as a solid waste management facility? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Has the facility been formally closed? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <ul style="list-style-type: none"> • If yes, cite sources/documentation: _____ <p>ii. Describe the location of the project site relative to the boundaries of the solid waste management facility: _____</p> <p>_____</p> <p>iii. Describe any development constraints due to the prior solid waste activities: _____</p> <p>_____</p>	
<p>g. Have hazardous wastes been generated, treated and/or disposed of at the site, or does the project site adjoin property which is now or was at one time used to commercially treat, store and/or dispose of hazardous waste? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Describe waste(s) handled and waste management activities, including approximate time when activities occurred: _____</p> <p>_____</p>	
<p>h. Potential contamination history. Has there been a reported spill at the proposed project site, or have any remedial actions been conducted at or adjacent to the proposed site? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p>i. Is any portion of the site listed on the NYSDEC Spills Incidents database or Environmental Site Remediation database? Check all that apply: <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Yes – Spills Incidents database <input type="checkbox"/> Yes – Environmental Site Remediation database <input type="checkbox"/> Neither database </div> <div> Provide DEC ID number(s): _____ Provide DEC ID number(s): _____ </div> </div> <p>ii. If site has been subject of RCRA corrective activities, describe control measures: _____</p> <p>_____</p> <p>iii. Is the project within 2000 feet of any site in the NYSDEC Environmental Site Remediation database? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, provide DEC ID number(s): _____</p> <p>iv. If yes to (i), (ii) or (iii) above, describe current status of site(s): _____</p> <p>_____</p>	

v. Is the project site subject to an institutional control limiting property uses? <input type="checkbox"/> Yes <input type="checkbox"/> No <ul style="list-style-type: none"> If yes, DEC site ID number: _____ Describe the type of institutional control (e.g., deed restriction or easement): _____ Describe any use limitations: _____ Describe any engineering controls: _____ Will the project affect the institutional or engineering controls in place? <input type="checkbox"/> Yes <input type="checkbox"/> No Explain: _____ _____ 	
E.2. Natural Resources On or Near Project Site	
a. What is the average depth to bedrock on the project site? _____ feet	
b. Are there bedrock outcroppings on the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, what proportion of the site is comprised of bedrock outcroppings? _____ %	
c. Predominant soil type(s) present on project site: _____ % _____ % _____ %	
d. What is the average depth to the water table on the project site? Average: _____ feet	
e. Drainage status of project site soils: <input type="checkbox"/> Well Drained: _____ % of site <input type="checkbox"/> Moderately Well Drained: _____ % of site <input type="checkbox"/> Poorly Drained _____ % of site	
f. Approximate proportion of proposed action site with slopes: <input type="checkbox"/> 0-10%: _____ % of site <input type="checkbox"/> 10-15%: _____ % of site <input type="checkbox"/> 15% or greater: _____ % of site	
g. Are there any unique geologic features on the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, describe: _____ _____	
h. Surface water features. i. Does any portion of the project site contain wetlands or other waterbodies (including streams, rivers, ponds or lakes)? <input type="checkbox"/> Yes <input type="checkbox"/> No ii. Do any wetlands or other waterbodies adjoin the project site? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes to either <i>i</i> or <i>ii</i> , continue. If No, skip to E.2.i. iii. Are any of the wetlands or waterbodies within or adjoining the project site regulated by any federal, state or local agency? <input type="checkbox"/> Yes <input type="checkbox"/> No iv. For each identified regulated wetland and waterbody on the project site, provide the following information: <ul style="list-style-type: none"> Streams: Name _____ Classification _____ Lakes or Ponds: Name _____ Classification _____ Wetlands: Name _____ Approximate Size _____ Wetland No. (if regulated by DEC) _____ 	
v. Are any of the above water bodies listed in the most recent compilation of NYS water quality-impaired waterbodies? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, name of impaired water body/bodies and basis for listing as impaired: _____ _____	
i. Is the project site in a designated Floodway? <input type="checkbox"/> Yes <input type="checkbox"/> No	
j. Is the project site in the 100 year Floodplain? <input type="checkbox"/> Yes <input type="checkbox"/> No	
k. Is the project site in the 500 year Floodplain? <input type="checkbox"/> Yes <input type="checkbox"/> No	
l. Is the project site located over, or immediately adjoining, a primary, principal or sole source aquifer? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes: <ul style="list-style-type: none"> Name of aquifer: _____ 	

<p>m. Identify the predominant wildlife species that occupy or use the project site:</p> <p>_____</p> <p>_____</p> <p>_____</p>	
<p>n. Does the project site contain a designated significant natural community? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Describe the habitat/community (composition, function, and basis for designation): _____</p> <p style="margin-left: 20px;">ii. Source(s) of description or evaluation: _____</p> <p style="margin-left: 20px;">iii. Extent of community/habitat:</p> <ul style="list-style-type: none"> • Currently: _____ acres • Following completion of project as proposed: _____ acres • Gain or loss (indicate + or -): _____ acres 	
<p>o. Does project site contain any species of plant or animal that is listed by the federal government or NYS as endangered or threatened, or does it contain any areas identified as habitat for an endangered or threatened species? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>p. Does the project site contain any species of plant or animal that is listed by NYS as rare, or as a species of special concern? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>q. Is the project site or adjoining area currently used for hunting, trapping, fishing or shell fishing? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If yes, give a brief description of how the proposed action may affect that use: _____</p> <p>_____</p>	
<p>E.3. Designated Public Resources On or Near Project Site</p>	
<p>a. Is the project site, or any portion of it, located in a designated agricultural district certified pursuant to Agriculture and Markets Law, Article 25-AA, Section 303 and 304? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes, provide county plus district name/number: _____</p>	
<p>b. Are agricultural lands consisting of highly productive soils present? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p style="margin-left: 20px;">i. If Yes: acreage(s) on project site? _____</p> <p style="margin-left: 20px;">ii. Source(s) of soil rating(s): _____</p>	
<p>c. Does the project site contain all or part of, or is it substantially contiguous to, a registered National Natural Landmark? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. Nature of the natural landmark: <input type="checkbox"/> Biological Community <input type="checkbox"/> Geological Feature</p> <p style="margin-left: 20px;">ii. Provide brief description of landmark, including values behind designation and approximate size/extent: _____</p> <p>_____</p> <p>_____</p>	
<p>d. Is the project site located in or does it adjoin a state listed Critical Environmental Area? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>If Yes:</p> <p style="margin-left: 20px;">i. CEA name: _____</p> <p style="margin-left: 20px;">ii. Basis for designation: _____</p> <p style="margin-left: 20px;">iii. Designating agency and date: _____</p>	

e. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on, or has been nominated by the NYS Board of Historic Preservation for inclusion on, the State or National Register of Historic Places?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If Yes:	
i. Nature of historic/archaeological resource: <input type="checkbox"/> Archaeological Site <input type="checkbox"/> Historic Building or District	
ii. Name: _____	
iii. Brief description of attributes on which listing is based: _____	
f. Is the project site, or any portion of it, located in or adjacent to an area designated as sensitive for archaeological sites on the NY State Historic Preservation Office (SHPO) archaeological site inventory?	<input type="checkbox"/> Yes <input type="checkbox"/> No
g. Have additional archaeological or historic site(s) or resources been identified on the project site?	
If Yes:	
i. Describe possible resource(s): _____	
ii. Basis for identification: _____	
h. Is the project site within five miles of any officially designated and publicly accessible federal, state, or local scenic or aesthetic resource?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If Yes:	
i. Identify resource: _____	
ii. Nature of, or basis for, designation (e.g., established highway overlook, state or local park, state historic trail or scenic byway, etc.): _____	
iii. Distance between project and resource: _____ miles.	
i. Is the project site located within a designated river corridor under the Wild, Scenic and Recreational Rivers Program 6 NYCRR 666?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If Yes:	
i. Identify the name of the river and its designation: _____	
ii. Is the activity consistent with development restrictions contained in 6NYCRR Part 666?	
<input type="checkbox"/> Yes <input type="checkbox"/> No	

F. Additional Information

Attach any additional information which may be needed to clarify your project.

If you have identified any adverse impacts which could be associated with your proposal, please describe those impacts plus any measures which you propose to avoid or minimize them.

G. Verification

I certify that the information provided is true to the best of my knowledge.

Applicant/Sponsor Name _____ Date _____

Signature Maur Maser _____ Title _____

OWNER, MASER ENGINEERING
SITE CIVIL/ENVIRONMENTAL ENGINEER



July 30, 2018

Town of Big Flats Planning Board
Attn: Brenda Belmonte
476 Maple Street
Big Flats, NY 14814

Preliminary PUD Review

Re: Josh Real Estate Dev., LLC
161 Sing Sing Road
Tax ID: 57.03-2-4

Revised Application Materials Received – July 20, 2018
Planning Board Meeting – August 7, 2018

Project Description

The applicant has submitted a Preliminary Planned Unit Development Plan to construct a mixed-use residential development with a combination of single-family homes, multifamily units and commercial lots. The site is located north of the intersection of Sing Sing Road and Kahler Road. The property is over 77 acres in area and is located within the Rural Zone (RU).

The proposed development will require this site to be created as a Planned Unit Development (PUD). The PUD requires public water and sewer to be available on-site. Currently there is public water to this site but there is no public sewer. The applicant has provided a will serve letter from the Chemung County Sewer District stating that the project can be served by the public sewer.

The applicant has provided the following application materials:

1. Site Plan Application for the Planned Unit Development
2. Full Environmental Assessment Form – Part 1
3. Revised Planned Unit Development Plans prepared by Maser Engineering, last revised 7/20/18 and consisting of forty-two (42) sheets.
4. Engineer's Report for the Planned Unit Development of 161 Sing Sing Road prepared by Maser Engineering dated July 2018
5. Stormwater Pollution Prevention Plan (SWPPP) for the Planned Unit Development of 161 Sing Sing Road prepared by Maser Engineering dated July 2018.

The applicant appeared before the Planning Board on December 21, 2017 and March 6, 2018 to review the Conceptual Plan with the Planning Board. The applicant also met with members of the Planning Board and Town Board at a work session meeting on April 6, 2018 to provide the applicant with some directions related to lot size, setbacks and discuss other areas of concern for the proposed development. A pre-application meeting with the Planning Board was held at the May 1, 2018 meeting.



At the May 1, 2018, pre-application meeting the applicant proposed an average lot size of 15,000 square feet with the minimum lot area of 14,000 square feet and the maximum is 40,600 square feet. The revised plans now show an average lot size of 17,404 square feet with minimum lot area of 12,287 square feet and a maximum lot area of 47,100 square feet. The applicant has provided lot area for each of the individual lots. **The Planning Board shall review to confirm that the proposed lot sizes are acceptable.** The applicant is proposing a front and rear setback of 30 feet and a side setback of 10 feet. This is consistent with preliminary discussions and recommendation of the Planning Board.

Some additional design characteristics that are being proposed as part of the Preliminary Planned Unit Development Plan:

Single Family Homes:

- 98 units
- Density is 0.79 acres/home
- Approximately 2,000 – 2,200 square feet
- 3 bedroom, 2 bathroom
- Two-story with no basement
- 1.5-2 car garage attached
- Lots will be offered for sale to other builders, deed restrictions will be enforced with details to be determined

Commercial Multi-Family:

- 12 Buildings with 8 units per building = 96 total units
- Density is 0.09 acres/unit
- Average of 1,000 – 1,200 square feet per unit
- Six (6) 2-Bedroom units and Two (2) 1-Bedroom units
- Two-story (20 to 25 feet tall) with no basement
- No garages and utilize on-site parking
- Units will be owned and maintained by the developer

Commercial Retail/Professional:

- Two buildings each with a total footprint of approximately 22,000 square feet
- Multi-story up to three stories with total height not to exceed 40 feet tall.
- Potential use would be professional, medical, office or retail

Infrastructure:

- Road Right of Way is proposed to be 40 feet with road pavement width of 30 feet.
- All roads to cross dominion gas easement at 90 degrees
- One entrance off of Sing Sing Road
- Approximately 4.24 acres (5.7%) of development dedicated for recreational and stormwater areas

As noted above, the applicant has provided documentation from Chemung County Sewer that they have the ability to serve the proposed development. The applicant has also provided documentation from Dominion Energy Transmission allowing for crossing of the pipeline right of way with conditions. **To date, nothing has been received by NYSEG and this issue remains a point of concern on the overall development of this project.**

We have reviewed this Preliminary PUD Plan with the assumption that sewer can be extended to the site and the project would fall under Chapter 17.21 Planned Unit Development (PUD) District regulations. As the applicant



advances the Planned Unit Development Plan, the following are initial comments to be considered. These comments are not inclusive, and Bergmann reserves the right to provide additional comments upon submission of future applications.

Section 17.21.040 PUD General Requirements

- Use - The single family, multi-family and commercial uses are permitted uses through Site Plan and Special Use Permit.
- Minimum Area for a PUD Designation is 10 contiguous acres of land. This parcel would qualify for the PUD since it is approximately 77 acres.
- Density – The land use intensity and dwelling unit intensity shall be determined by the Planning Board. The applicant has indicated 98 single-family residential lots with an average lot size of 17,404 SF. The applicant has not indicated the single-family units will be approximately 2,000 – 2,200 square feet in area. In calculating the density, we have removed the 13.04 acres of conservation area to the north that cannot be developed on. The result is a density of 1.5 units per acre, which is less than the R1 Zone. It is our opinion that the density of this development is consistent with applicable developments. The multi-family will be comprised of 12 buildings with 96 total units. The commercial will be two (2) buildings with a total footprint of 25,000 square feet with associated parking areas. It should be noted that the density of all three uses have been reduced by the applicant as part of the conceptual discussions with the Town.
- Open Space – a minimum of 30% open space is required. With a combination of the recreational areas, conservation easements and landscape areas, the applicant meets the open space requirement.
- Lot Coverage – Maximum lot coverage is 70%. The single-family units will be well under the maximum lot coverage. The applicant shall provide calculations to show that the multi-family and commercial lots meet the lot coverage requirements.
- Setbacks – The applicant is proposing setbacks consistent with the R1 Zone. The front and rear yard setbacks proposed are 30 feet and the side yard setback are 10 feet.
- Height – the height of the single family and multi-unit buildings is consistent with the 2-story maximum for the R1 and R2 zone. The commercial office space is proposed to be three stories maximum.
- Parking – areas have been noted and adherence to Chapter 17.48 and the PUD Performance Standards in Chapter 17.21.080 is detailed in the Performance Standard section below.
- Streets – applicant has indicated a road right of way of 40' with a road pavement width of 30'. The streets will need to be designed and comply with Chapter 16 and 17 of the Town Code. A road profile and cross sections shall be provided.
- Recreation Requirements – A PUD containing a residential component shall have a minimum of 5% of the entire PUD lot, exclusive of open space areas, set aside and developed, for recreational use. The applicant is proposing 5/1% of recreational area. The applicant should confirm that the recreational/stormwater space is permitted within the Dominion Gas Pipeline and NYSEG Right-of-Ways.



Section 17.21.080 Performance Standards

Section 17.21.060 (3) states that the planning board shall review the application for compliance with the performance standards set forth in Section 17.21.080.

- A. No use shall be permitted that causes or results in dissemination of dust, smoke, gas or fumes odor, noise, vibration or excessive light under standards set forth in the performance criteria in this section.

Comment: The proposed uses should not produce dust, smoke, gas or fumes odor, noise, or vibration. There may be temporary impacts during construction but the proposed uses will not produce these items long term. A lighting plan has been provided that includes a series of LED roadway lights, parking lot lights and wall pack lights. The lighting plan is compliant and will not result in excessive light. The applicant has indicated the street lights throughout will be dark sky compliant light fixtures. The developer will bear the cost of labor, equipment and materials to install the street lighting system. The Town has indicated that a lighting district will be established.

- B. Any other performance standards of the town shall apply to the PUD in addition to these.

Comment: The application is missing the grading and drainage plans, erosion and sediment control plans and the stormwater management plans. Additional information on adherence to performance standards have been denoted within the Engineer's Report.

Correspondence from the New York State Office of Parks, Recreation and Historic Preservation (OPRHP) recommends a Phase I archaeological survey as the project is on an archaeologically sensitive landform.

- C. Access and Traffic Impacts:

1. Traffic and safety impacts to the existing and proposed roads shall be minimized.

Comment: The applicant has provided estimated traffic counts as part of the Engineer's Report. The estimated average daily traffic volume is approximately 1,100 vehicles. The estimated peak hourly flow would be approximately 110 vehicles. **The Planning Board shall review and determine if additional traffic studies are warranted and if what is provided is acceptable to meet this performance standard.**

2. Access shall be provided to the extent feasible through an existing side street or a shared driveway or shared access; curb cuts shall be limited.

Comment: Access for this site is only feasible from Sing Sing Road. The applicant is only proposing a single curb cut.

3. Pedestrian and vehicular traffic shall be separated; walkways shall be provided for access to adjacent properties and between businesses

Comment: The applicant is not proposing any sidewalks along the roadway to connect the single-family homes. Sidewalks are proposed in the multi-family and commercial developments to connect the parking lot to the individual buildings. It does not appear there is any pedestrian connectivity to the adjacent businesses from the residential units. **The Planning Board shall review and determine if this is acceptable to meet this performance standard.**



4. For public convenience, a pedestrian and/or bicycle way shall connect various uses and otherwise provided appropriate circulation or continuity to an existing pedestrian or bicycle circulation system. These uses included, but are not limited to residential, parking, transit, bicycling, industrial, recreation, and commercial.

Comment: See comment to #3 above. The applicant is not proposing any off-site connectivity. There are no existing pedestrian and/or bicycle ways within the proximity to the development.

5. Walkways must conform to requirements of the American with Disabilities Act (ADA).

Comment: Grading details have not been provided, but curb ramp and striping details have been provided.

D. Parking and Loading, and Shared Parking Requirements.

1. Minimum number of spaces required for all development shall comply with the parking standards provided in Section 17.48.010.

Comment: The number of parking spaces for a one-unit dwelling is two spaces for the first four bedrooms. The applicant is proposing a garage and driveway that will provide sufficient parking for the single-family units. Multi-unit dwellings shall have two spaces per dwelling unit up to the first four bedrooms. Each building has eight units all under four bedrooms. As a result, 16 spaces are required per building. Twelve (12) buildings are proposed so the total number of spaces required for the multi-family development is 192 spaces. The applicant is proposing 193 parking spaces; however, some parking spaces may be lost to account for the required ADA parking spaces, striping and parking lot landscaping. The number of parking spaces required for an office, general business or professional use is 2.5 spaces for each one thousand square feet of gross floor dedicated to the use. The applicant has indicated that each building is proposed to have a gross floor area of 32,000 square feet. Therefore 80 parking spaces are required for each building for a total of 160 spaces. The applicant is proposing 170 parking spaces; however, some parking spaces may be lost to account for the required ADA parking spaces, striping and parking lot landscaping. **The applicant shall provide a parking analysis on the plans to confirm compliant with Section 17.48.010.**

2. Parking shall be located to the side or rear of buildings. In no case shall parking be allowed in the planting strip adjacent to the sidewalk or within the front setback of any lot.

Comment: The applicant has provided parking for the single-family residential uses in the front, which we feel, is appropriate. The parking for the commercial and multi-family residential uses are located on the side or rear so not visible from the interior road network. **We feel that this is appropriate and would recommend the Planning Board grant a deviation from this performance standard for the single-family uses.**

3. Parking spaces may be located either on or off the lot. Applicant must show proof of space, its location in relation to the dwelling unit or non-residential uses, and indicate if the space is owned or leased.

Comment: Not applicable, the application is proposing all parking to be located on the lot.



4. Buildings that do not have frontage on a street must provide access for emergency and service vehicles through the layout and design of driveways, interior service roads, or pedestrian and bicycle circulation corridors.

Comment: All single-family units have frontage on the proposed street network. **The applicant shall provide a truck turning template so show that emergency and service vehicles can access the multi-family and commercial units. We also recommend that the applicant review the proposed development with the fire department for their review and comment.** The applicant has indicated in the Engineer's Report that the project site is accessible by fire apparatus, delivery truck, garbage trucks and snow plows. However, it is noted that a portion of the site cannot be accessed by tractor-trailers because of the turning radius and it is noted signs will be posted to reflect this. **On the truck turning template, the applicant should indicate areas that will be posted for no tractor trailers.**

5. In no circumstances will cul-de-sacs be permitted pursuant to Section 12.04.050 (5) of the Town of Big Flats Municipal Code.

Comment: The applicant is not proposing any cul-de-sacs.

6. Where there is more than one category of use, then the number of spaces shall be 70 percent of the sum of required spaces for each category of use.

Comment: Not applicable as the applicant is proposing a single use for each of the individual lots.

7. The planning board may reduce the number of required parking spaces for general business or professional office building/industrial portion of the building by 50 percent.

Comment: The applicant has provided the required amount of parking spaces for the general business/professional office building. The Planning Board shall decide if it is warranted to reduce the amount of parking proposed.

E. Noise

Comment: The applicant has provided information in the Engineer's Report to show conformance with the noise standards outlined in this section. Any potential impacts will be temporary in nature and may occur during construction operations.

F. Vibration, Smoke, Heat, Glare and Odor

Comment: We do not anticipate that the proposed development will result in any vibrations, smoke, heat, glare or odor. Any potential impacts will be temporary in nature and may occur during construction operations.

G. Lighting

Comment: The applicant has provided a lighting plan and information in the Engineer's Report to show that they will be in conformance with the lighting standards outlined in this section.

H. Storage



Comment: The applicant has noted that all materials, supplies, and equipment will be stored in accordance with the Fire Code of New York State and Property Maintenance Code of New York State. The applicant has indicated that all exterior storage areas will be screened from view by a solid fence or solid vegetative plantings. No storage is being proposed in the front or side year setbacks.

I. Waste Disposal

Comment: The applicant has indicated that the storage of all waste will be screened from public view. Dumpster areas are proposed for the multi-family and commercial developments. The dumpsters are proposed to be screened with decorative privacy fence. This section requires that the applicant submit a signed annual contract for rubbish removal. The applicant has indicated that each homeowner will be responsible for entering into an agreement for trash removal. The developer will be responsible for removal of refuse for the multi-family and commercial units. **It is our opinion that requiring a signed annual contract for rubbish removal is not an appropriate requirement for this type of project. The Planning Board shall issue a deviation from this performance standard.**

J. Loading/Unloading

Comment: The applicant has noted that no tractor-trailers or other large multi-axel trucks are proposed for the development. Only local deliveries and box trailer type trucks are anticipated. As a result, loading and unloading is not required.

K. Signs

Comment: The applicant has indicated that a monument sign is shown for each commercial property with a typical detail. The multi-family units will have a similar monument sign or wood sign. The applicant has noted that all signs will be in accordance with Section 17.52 of the Town Code. **The location and detail of the signage is not included on the plans. Locations of all street signs shall also be included on the plans. The applicant shall include this information.**

L. Landscaping Requirements

Comments: A landscape plan has been provided for the development. Per the PUD performance standards, the landscaping plans should specifically address streetscape aesthetics, so that as development occurs, an attractive streetscape will be ensured along the main roads and large expanses of parking will be broken up and hidden from view at all times. **The landscape plans indicate that the single-family units will have a mix of large deciduous trees, ornamental trees and miscellaneous landscaping along the street frontage which will be the homeowner's responsibility to install. The Planning Board shall comment on this item. It is our opinion that if the responsibility is placed with the homeowner, the intent of this section may be compromised by the opinion or preference of each individual homeowner.**

The plans shall indicate that the landscape perimeter area is at a minimum 5 feet wide. The plans show adequate screening for mechanical equipment and trash enclosures. All other performance standards of this section have been met.

M. Maintenance of Landscaping and Screening



Comment: The applicant has not provided information to confirm compliance with this section. A Landscape Maintenance Plan shall be incorporated into the landscaping plans to ensure compliance with this section.

N. Appearance/Architectural/Site Design

Comment: The applicant has not provided any details on the architectural design or other information to show compliance with this section.

General Review Comments:

1. The drawing list on sheet G-101 denotes Grading and Drainage Plans and Erosion & Sediment Control Plans. These have not been provided as part of the preliminary plan set and therefore have not been reviewed.
2. The drawing list on Sheet G-101 is not consistent with the actual drawing numbers. This needs to be updated accordingly.
3. The Engineer's Report and Sheet G-101 indicate approval of zoning variances from the Town of Big Flats Zoning Board. We do not believe that any variances are required for this project. This can be removed from the list of required approvals.
4. A parking tabulation showing compliance with Section 17.48.010 shall be provided.
5. It is recommended that the lot labels be carried onto the detailed Site Improvement Plans.
6. It is recommended that the existing NYSEG poles and wires be shown on the Site Improvement Plans. The applicant will need to show how these items will be protected during construction.
7. There are three existing utility poles with an underground service that appear to service the adjacent property to the east as well as utility poles along Sing Sing Road. The applicant shall provide additional information on the ability to remove this infrastructure or if it will need to be relocated. The existing underground electric main appears to go right through several of the single-family homes.
8. There appears to be a utility pole very close to the proposed driveway on Sing Sing Road. The applicant shall confirm if this pole is outside the proposed driveway or if it will need to be relocated.
9. There is an existing swale that runs through the eastern portion of the site. The applicant has indicated that this will be maintained and protected during demolition and clearing. The swale directions runoff from the hillside to the north towards Sing Sing Road. The applicant has not indicated how that swale will remain or how the runoff will be directed in the developed condition.
10. It is recommended that the parking counts, parking stall dimensions, drive-aisle dimensions and applicable signage and striping be added to the detailed Site Improvement Plans
11. The parking layout for the southwestern cluster of multi-family units does not provide an acceptable means of circulation. The parking at the end of the dead-end rows does not provide proper turn around area. These spaces shall be adjusted to provide more traditional bullnose islands.
12. The parking layout for the southeastern cluster of multi-family units does not provide an acceptable means of circulation. The eastern most spots adjacent to the building would need to back up into the row of parking to exit the parking stall. These spaces need to be adjusted to provide proper circulation within the parking area.
13. The location of the ADA parking spaces and applicable signed and striping shall be denoted on the multi-family unit and commercial developments.
14. There are areas on the detailed Site Improvement Plans where the hatching appears to be missing or is offset from the actual area to be hatched.
15. The applicant shall ensure there is a minimum of 10 foot of separation between the proposed water line and the sanitary sewer line.



16. Stormwater infrastructure shall be provided including location of catch basins, storm pipe and any other drainage structures.
17. The Engineer's Report references 11 multi-family buildings are proposed under the Parking/Loading/Shared Parking section. The plans proposed 12 buildings. This section shall be updated accordingly.
18. The Overall Landscape Plan (Sheet L-100) does not contain any information on landscaping materials, call-outs or landscape quantity table. It is recommended that this information be added to this sheet.
19. The detailed landscape plans shall indicate that the landscape perimeter area is at a minimum 5 feet wide.
20. Road profiles and cross sections are required to be submitted as part of the Final Planned Unit Development Plans.
21. Sanitary sewer profiles are required to be submitted as part of the Final Planned Unit Development Plans.
22. Utility tables to be provided as part of the Final Planned Unit Development Plans.
23. Prior to Final Planned Unit Development Plan approval, the applicant will need to file with the town clerk, in the amount to be set by the town board, a certified check to cover the full cost of all required improvements or a performance bond to cover the full cost of all improvements. Development assurances shall adhere to the requirements in Section 17.21.040.
24. Prior to Final Planned Unit Development, a copy of the Homeowners Agreement including any covenants and restrictions shall be provided for review by the Town to ensure compliance with the PUD Performance Standards, requirements and all said conditions of approval.

State Environmental Quality Review

Per the Planned Unit Development regulations, all PUD applications shall be considered a Type I action under SEQRA requiring coordinated review. We applicant previously provided a Long EAF; however, we request that an updated form be provided to reflect the current proposal. Once received we recommend the Planning Board declare its intent to be lead agency and submit the SEQR material to the following parties: Town of Big Flats Town Board, Chemung County Planning Board, Chemung County Department of Public Works, New York State Department of Environmental Conservation, and New York State Historic Preservation Office. The coordinated agencies have 30 days to dispute lead agency status or to provide any comments. The Planning Board will need to complete Part 2 and Part 3 of the EAF after the 30-day review period is completed prior to taking any final action on this project.

County Review

The site plan submission must be referred to the Chemung County Planning Board for a review of potential intermunicipal impacts because the site meets at least one of the criteria for referral found in the General Municipal Law (GML) of New York State:

- The site borders the right-of-way of Sing Sing Road meeting the criteria of within five hundred feet of the right-of-way of an existing or proposed county or state parkway, thruway, expressway, road or highway. [GML 239-m(b)(iii)]

The project will also require review and approval from the Chemung County Public Works for the proposed driveway locations onto Sing Sing Road.

Stormwater Management Review

This project will require a SWPPP as it will disturb more than 1 acre. A SWPPP has been provided as part of the application materials. Several areas have been reserved from stormwater infrastructure areas. There is an existing swale on the eastern edge of the property that directs flow from the hillside to the north that will need to be



accounted for as part of the overall development and the stormwater management plan. At this time, we will defer further review of the stormwater management to the Chemung County Stormwater Coalition. We recommend that the Coalition review and approve of the project prior to issuance of the Final PUD approval

Utility Review

The project will require review and approval from the Town of Big Flats Water Department and the Chemung County Sewer District for the proposed water and sewer improvements. These approvals shall be obtained prior to the issuance of the Final PUD approval.

Planned Unit Development Procedure

(See Section 17.21.060 for detailed procedure instructions):

- A. Planning Board will perform a pre-application meeting – **held at May 1, 2018 Planning Board meeting**
- B. Applicant prepares a Preliminary Planned Unit Development Plan Submission. – **submitted on July 20, 2018**
- C. Planning Board reviews Preliminary Planned Unit Development Plan.
- D. Planning Board provides recommendation to the Town Board within 62 days of a complete application.
- E. Town Board reviews Preliminary Planned Unit Development Plan.
- F. Town Board holds public hearing within 62 days of receiving findings and recommendation from Planning Board.
- G. Town Board within 62 days of holding public hearing will render decision on application and forward to Planning Board.
- H. If approved, applicant submits Final Planned Unit Development Plan.
- I. Planning Board reviews Final Planned Unit Development Plan and provides recommendation to Town Board.
- J. Town Board issues Planned Unit Development Final Plan approval.

Recommendation

- We recommend the applicant first update the Board on the approval from NYSEG on the ability to cross the existing right of way.
- We recommend that the Planning Board accept the application as a complete Preliminary Planned Unit Development plan.
- We recommend that applicant provide an updated Long Form EAF and the Planning Board declare its intent to be lead agency and refer SEQR to the applicable parties noted above.
- We recommend that the Planning Board refer this project to the County Planning Board for review.
- Should the Planning Board feel that sufficient information has been provided to show compliance with the performance standards outlined in this letter, the Planning Board shall prepare an itemized list of written findings of fact which supports a recommendation of approval, approval with conditions, or denial of the proposed Planned Unit Development. The written findings and recommendation of the Planning Board shall be forwarded to the Town Board within 62 days from the date at which the Planning Board deems the application complete.



If you have any questions regarding this review letter, please contact me by phone at (607) 333-3120 or via email at rswitala@bergmannpc.com.

Best Regards,

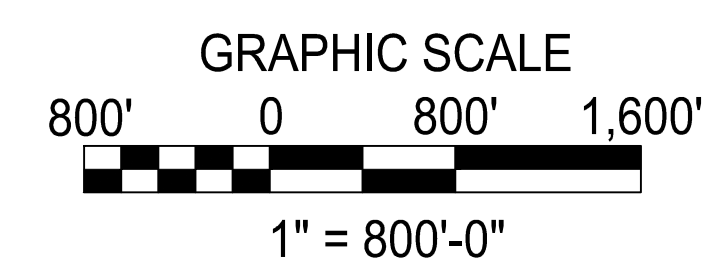
BERGMANN ASSOCIATES

Robert Switala, PE, CPESC, CPSWQ
Principal

161 SING SING ROAD PLANNED UNIT DEVELOPMENT

161 SING SING ROAD, TOWN OF BIG FLATS, COUNTY OF CHEMUNG, NEW YORK

PROJECT AREA



DEVELOPER:

J.O.S.H. DEVELOPMENT LLC
MR. ANDREW HARDING, AIA, NCARB
PARTNER, PROJECT REPRESENTATIVE
111 EAST 14TH STREET
ELMIRA HEIGHTS, NY 14903
607-425-6477

ENGINEER:

MASER ENGINEERING
MARC MASER, P.E., PMP
OWNER/ENGINEER
112 N. MAIN ST.
HORSEHEADS, NY 14845
607-377-7990

ISSUED/REVISIONS	DATE
0 PRELIMINARY P&U SUBMISSION	04/20/18
1 PRELIMINARY P&U SUBMISSION	07/20/18
2	
3	
4	
5	
6	

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112 N. MAIN ST. | HORSEHEADS, NY 14845 | 607-377-7990

OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

PROJECT SING SING ROAD PLANNED UNIT DEVELOPMENT 161 Sing Sing Road Big Flats, NY 14814	TITLE OF DRAWING COVER SHEET
DRAWING SCALE AS NOTED FIRST ISSUE DATE: MAY 21, 2018 PROJECT NO. 17-024 DRAWING NO. G-000	

I. GENERAL

- A. PLANNED UNIT DEVELOPMENT (PUD) APPLICANT INFORMATION:
JOSH DEVELOPMENT LLC
111 EAST 14TH ST.
ELMIRA HEIGHTS, NEW YORK 14903
- B. BASE MAPPING AND HORIZONTAL DATUM BASED ON BOUNDARY SURVEY FROM FAGAN ENGINEERS DATED NOVEMBER 13, 2013, UPDATED JULY 29, 2014. GROUND ELEVATION DATA WAS OBTAINED FROM THE 2005 CHEMUNG COUNTY LIDAR DATA MAPPED USING ARC GIS.
- C. THE PROJECT SITE DOES NOT CONTAIN FEMA DELINEATED FLOODPLAINS OR FLOODWAYS.
- D. THE PROJECT SITE DOES NOT CONTAIN WETLANDS ON-SITE.
- E. PUBLIC WATER SERVICE SHALL BE PROVIDED BY THE TOWN OF BIG FLATS WATER DEPARTMENT.
- F. PUBLIC SEWER SERVICE SHALL BE PROVIDED BY THE CHEMUNG COUNTY SEWER DISTRICT. A SEWER DISTRICT EXTENSION IS REQUIRED TO BRING SEWER SERVICE TO THIS SITE. A "WILL SERVE" LETTER HAS BEEN PREPARED BY THE CHEMUNG COUNTY SEWER DISTRICTS, SIGNED BY MICHAEL G. SOPINSKI, P.E., SENIOR WASTEWATER ENGINEER.
- G. THE CONTRACTOR'S SURVEYOR SHALL CHECK ALL HORIZONTAL AND VERTICAL CONTROL PRIOR TO CONSTRUCTION. ANY DISCREPANCIES SHALL BE PROMPTLY BROUGHT TO THE ATTENTION OF THE ENGINEER.
- H. THE CONTRACTOR SHALL KEEP THEIR OPERATIONS WITHIN THE PROJECT PROPERTY, DESIGNATED EASEMENTS, AND RIGHT OF WAY LIMITS.
- I. ALL DAMAGE TO PRIVATE PROPERTY AND/OR UTILITIES (UNDER OR ABOVE GROUND) SHALL BE REPORTED TO THE TOWN OF BIG FLATS AT ONCE.
- J. CONSTRUCTION ALONG COUNTY, AND/OR TOWN ROADS SHALL CONFORM TO SPECIFICATIONS LISTED ON THE PERMITS ISSUED BY THE APPROPRIATE AGENCIES.
- K. SAFE AND CONTINUOUS THROUGH TRAFFIC, INGRESS AND EGRESS FOR ADJACENT OWNER DRIVEWAYS, SERVICE ROADS, PUBLIC STREETS, AND SIDEWALKS SHALL BE MAINTAINED THROUGHOUT THE PERIOD OF CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE TO THE APPROPRIATE AGENCY AN ACCEPTABLE MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR CONSTRUCTION IN/ALONG/NEAR ROADWAYS
- L. HIGHWAY DRAINAGE, SIDE STREET DRAINAGE, SWALES, DITCHES, AND OTHER EXISTING DRAINAGE FACILITIES SHALL BE PROTECTED AND MAINTAINED IN ADEQUATE WORKING CONDITION DURING CONSTRUCTION. THE CONTRACTOR SHALL RESTORE ANY OF SUCH FACILITIES THAT ARE DAMAGED DURING CONSTRUCTION TO THE SATISFACTION OF THE COUNTY ENGINEER.
- M. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS
- N. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS NOT TO DISTURB AND/OR DAMAGE PROPERTY CORNERS (IRON PINS, HUBS, ETC.) ANY DISTURBED OR DAMAGED PROPERTY CORNERS SHALL BE REPLACED BY THE CONTRACTORS LICENSED LAND SURVEYOR AT THE CONTRACTORS EXPENSE.
- O. ALL EXISTING UTILITIES SUCH AS ELECTRIC, GAS MAINS, AND TELEPHONE SHALL BE STAKED OUT BY THE UTILITY COMPANY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL CALL NEW YORK STATE DIG SAFELY (1-800-962-7962) PRIOR TO CONSTRUCTION AND NOTIFY UTILITY COMPANIES FOR STAKEOUT.
- P. THE CONTRACTOR SHALL PROTECT EXISTING SEWERS AND WATERMAINS. IF EXISTING SEWER OR WATERMAINS ARE DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPAIR THESE TO THE SATISFACTION OF THE TOWN OR COUNTY ENGINEER.
- Q. EXISTING WATERMAIN LOCATIONS AND DEPTHS SHOWN ARE APPROXIMATE. EXISTING INDIVIDUAL WATER SERVICES ARE NOT SHOWN ON DRAWINGS.
- R. THE CONTRACTOR SHALL NOTIFY THE TOWN OF BIG FLATS WATER DEPARTMENT, THE RESIDENT ENGINEER, AND THE FIRE DEPARTMENT 48 HOURS IN ADVANCE PRIOR TO CONSTRUCTION ON AND INTERRUPTION OF SERVICE OF ANY WATERMAINS. THE CONTRACTORS SHALL PROTECT ALL WATER SERVICE LINES AND PRIVATE WELLS. THE CONTRACTOR SHALL HAVE AMPLE SUPPLY OF REPAIR CLAMPS, COUPLINGS, AND PIPING FOR EMERGENCY REPAIRS.
- S. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING CONTINUAL SEWER SERVICE DURING CONSTRUCTION AND SHALL NOTIFY, 24 HOURS IN ADVANCE, THE USERS WHOSE SANITARY LATERAL WILL BE DISRUPTED. A SANITARY LATERAL SHALL BE UNOPERATIONAL FOR NO LONGER THAN A (2) HOUR PERIOD.
- T. IN AREAS WHERE THE CONTRACTOR IS EXCAVATING NEAR ANY UTILITY POLES, THE CONTRACTOR SHALL BRACE AND/OR HOLD IN PLACE UNTIL EXCAVATED AREA IS BACKFILLED AND COMPACTED.
- U. THE CONTRACTOR SHALL PROVIDE AN ADEQUATE DEWATERING SYSTEM THAT WILL DRAW DOWN AND HAVE CONTROL ON THE GROUNDWATER TABLE AT ALL TIMES DURING CONSTRUCTION.
- V. THE CONTRACTOR IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL REMOVED VEGETATION, SOIL AND OTHER DISTURBED DEBRIS.
- W. THE CONTRACTOR SHALL CONDUCT HIS ACTIVITIES IN THE VICINITY OF TREES AND BUSHES IN STRICT COMPLIANCE WITH THE APPROPRIATE SPECIFICATIONS. ANY TREE REMOVAL SHALL BE LIMITED TO THE DIRECT PATH OF CONSTRUCTION.
- X. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING APPROPRIATE EROSION CONTROL MEASURES TO PREVENT SEDIMENT FROM MIGRATING OFF SITE, TO STROM SEWERS, OR ADJACENT ROADWAYS.
- Y. ALL EXCAVATIONS SHALL PROVIDE PROTECTION TO THE WORK FORCE AS PER THE CURRENT O.S.H.A. REQUIREMENTS, AS WELL AS ANY STATE AGENCY REQUIREMENTS.
- Z. THE CONTRACTOR SHALL OBSERVE O.S.H.A. AND OTHER APPLICABLE SAFETY REQUIREMENTS. THE CONTRACTORS SHALL ASSUME RESPONSIBILITY FOR CONSTRUCTION SAFETY AT ALL TIMES.
- AA. CONTRACTOR SHALL REVIEW SOIL BORING AND TESTING REPORTS TO DETERMINE SPECIAL CONDITIONS REQUIRED FOR CONSTRUCTION, SUITABILITY OF ON-SITE SOILS FOR FILL MATERIAL, AND GROUNDWATER DEPTHS.

II. SANITARY SEWAGE DISPOSAL

- A. SANITARY SEWERS, MANHOLES, CLEANOUTS, AND OTHER APPURTENANCES SHALL BE CONSTRUCTED AND TESTED IN ACCORDANCE WITH THE CHEMUNG COUNTY SEWER DISTRICTS SPECIFICATIONS. PER THE CHEMUNG COUNTY SEWER DISTRICT SEWER USE LAW:
- BUILDING AND STREET LATERAL PIPE MATERIALS SHALL BE POLYVINYL CHLORIDE (PVC) PIPE AND FITTINGS CONFORMING TO ASTM D-3034-73.
 - PIPE SHALL BE SUITABLE FOR GRAVITY SEWER SERVICE. MINIMUM "PIPE STIFFNESS" (F/Y) AT FIVE PERCENT (5%) DEFLECTION SHALL BE 46 PSI WHEN TESTED IN ACCORDANCE WITH ASTM D-2412
 - ANY PART OF THE BUILDING OR STREET LATERAL LOCATED WITHIN FIVE (5) FEET OF A WATERMAIN OR WATER SERVICE, OR IS OTHERWISE REQUIRED BY THE DIRECTOR, SHALL BE CONSTRUCTED OF CAST IRON SOIL PIPE.
 - THE DISTANCE BETWEEN CONSECUTIVE JOINTS, AS MEASURED ALONG THE CENTERLINE OF THE INSTALLED PIPE, SHALL NOT BE LESS THAT TEN (10) FEET, EXCEPT UNDER ABNORMAL CIRCUMSTANCES, SUBJECT TO APPROVAL BY THE DIRECTOR.
- B. SANITARY SEWERS SHALL BE SDR-35 PVC PIPE CONFORMING TO ASTM D3034, WITH RUBBER GASKETED JOINTS CONFORMING TO ASTM D3212 AND ASTM F-477.
- C. TESTED SANITARY SEWERS SHALL HAVE AN INFILTRATION RATE OF LESS THAN 100 GALLONS PER MILE PER INCH OF DIAMETER OF PIPE PER DAY.
- D. AS PER THE CHEMUNG COUNTY SEWER DISTRICT SEWER USE LAW, THE CONNECTION OF THE BUILDING LATERAL TO AN EXISTING STREET LATERAL SHALL BE MADE AT THE PROPERTY LINE. IF A STREET LATERAL HAS NOT PREVIOUSLY PROVIDED, THE STREET LATERAL WILL BE CONSTRUCTED FROM THE EXISTING PUBLIC SEWER TO THE PROPERTY LINE, BY A LICENSED PLUMBER, AT THE OWNERS' EXPENSE. (ALL SUBSEQUENT COSTS AND EXPENSE INCIDENTAL TO THE INSTALLATION AND CONNECTION OF THE BUILDING LATERAL SHALL BE BORNE BY THE OWNER.) THE STREET LATERAL SHALL BE INSTALLED WITH A PROPERLY SEALED AND COVERED CLEAN-OUT TO GRADE LOCATED AT THE PROPERTY LINE. THE CLEAN OUT SHALL TERMINATED IN A METAL BOX IMBEDDED IN CONCRETE.
- E. THE OWNER SHALL INDEMNIFY THE CHEMUNG COUNTY SEWER DISTRICT FROM ANY LOSS OR DAMAGE THAT MAY DIRECTLY OR INDIRECTLY BE OCCASIONED BY THE INSTALLATION OF THE BUILDING LATERAL. IT SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER TO MAINTAIN, REPAIR, OR REPLACE THE BUILDING LATERAL, AS NEEDED.
- F. THE METHOD OF CONNECTION OF THE BUILDING LATERAL TO THE STREET LATERAL WILL BE DEPENDENT UPON THE TYPE OF SEWER PIPE MATERIAL. AND, IN ALL CASES, SHALL BE APPROVED BY THE DIRECTOR. AFTER INSTALLATION OF THE STREET LATERAL HAS BEEN APPROVED BY THE DIRECTOR, THE NEW STREET LATERAL SHALL BECOME THE PROPERTY OF THE CHEMUNG COUNTY SEWER DISTRICT. ANY SUBSEQUENT REPAIRS TO THE NEW STREET LATERALS SHALL BE MADE NY THE CHEMUNG COUNTY SEWER DISTRICT AT THE CHEMUNG COUNTY SEWER DISTRICTS EXPENSE.

III. STORM SEWERS

- A. STORM SEWERS SHALL BE ADVANCED DRAINAGE SYSTEM'S ADS N-12 CORRUGATED, SMOOTH INTERIOR, HIGH DENSITY POLYETHYLENE (HDPE) PIPE. ADS N-12 STORM SEWER SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS AND ASTM D2321. ALL JOINTS SHALL BE WATER TIGHT.
- B. ALL FLARED -END SECTIONS SHALL BE GALVANIZED METAL END SECTIONS UNLESS OTHERWISE SPECIFIED.
- C. EROSION PROTECTION AT THE DISCHARGE POINTS OF STORM SEWERS SHALL CONSIST OF LIGHT STONE FILL RIP-RAP APRONS.
- D. WHERE SPECIFIED, STORM SEWERS SHALL BE SCH. 80 PVC SOLVENT WELDED PIPE.

IV. ACCESS ROADS AND PARKING AREA

- A. SIGNAGE, PAVEMENT MARKINGS AND OTHER TRAFFIC CONTROL DEVICES SHALL BE IN CONFORMANCE TO THE NYSDOT'S MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
- B. EXCAVATION: EXCAVATE SUBSOIL TO THE DEPTH REQUIRED TO PROVIDE A UNIFORM SURFACE OF SOLID UNDISTURBED GROUND FOR THE PLACEMENT OF AGGREGATE SUBBASE COURSE.
- C. FILL, SUBGRADE, AND SUBBASE SHALL BE COMPACTED TO OR ABOVE 95 PERCENT 'MODIFIED PROCTOR' DENSITY WITH A SMOOTH DRUM ROLLER, OR OTHER SUFFICIENT COMPACTION EQUIPMENT, WEIGHING AT LEAST 15 TONS. OPERATE COMPACTOR IN THE STATIC MODE FOR COMPACTION OF SILTY SOILS AND IN THE VIBRATORY MODE FOR ALL OTHER MATERIALS.
- D. SUBBASE MATERIAL SHALL BE PLACED IN MAXIMUM 6 INCH AND MINIMUM 3 INCH HORIZONTAL LIFTS. MAINTAIN OPTIMUM MOISTURE CONTENT FOR COMPACTION.
- E. WHEREVER GROUNDWATER SEEPAGE IS ENCOUNTERED, INSTALL UNDERDRAINS BELOW THE SUBBASE. LAP UNDERDRAIN FABRIC WITH SUBBASE FABRIC.
- F. BELOW THE SUBBASE, PROVIDE A SOIL STABILIZATION GEOTEXTILE FABRIC WITH THE FOLLOWING CERTIFIABLE PROPERTY VALUES: MINIMUM PUNCTURE STRENGTH OF 125 LBS., MINIMUM MULLEN BURST STRENGTH OF 430 PSI, MINIMUM GRAB TENSILE STRENGTH OF 220 LBS., AND MAXIMUM APPARENT OPENING SIZE OF 40-80 SIEVE.

V. WATER MAINS

- A. WATER MAINS, WATER SERVICES, FIRE HYDRANTS, AND OTHER APPURTENANCES SHALL BE CONSTRUCTED, TESTED, AND DISINFECTED IN ACCORDANCE WITH THE TOWN OF BIG FLATS SPECIFICATIONS FOR WATERMAIN EXTENSIONS. WATERMAIN AND APPURTENANCE MATERIALS AND INSTALLATION SHALL COMPLY WITH NYSDOH STANDARDS AND AWWA STANDARD C600-93.
- B. DUCTILE IRON PIPE SHALL BE CLASS 52 AND SHALL CONFORM IN ALL RESPECTS TO AWWA C-151. FITTINGS SHALL CONFORM IN ALL RESPECTS TO AWWA C-110 OR TO COMPACT FITTINGS, AWWA C-153. ALL SHALL BE FURNISHED WITH CEMENT MORTAR LINING IN CONFORMANCE WITH AWWA C-104. PIPES SHALL HAVE GASKETED, PUSH-ON, JOINTS CONFORMING TO AWWA C-111.
- C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER AND SEWER (SANITARY AND STORM) UTILITIES SHALL BE 10 FEET, MEASURED FROM OUTSIDE WALL TO OUTSIDE WALL OF THE MAINS. AT THE POINT OF CROSSING, THE MINIMUM VERTICAL SEPARATION DISTANCE BETWEEN WATER AND SEWER (SANITARY AND STORM) LINES SHALL BE 18 INCHES, MEASURED FROM OUTSIDE WALL TO OUTSIDE WALL OF THE MAINS.
- D. SAMPLING REQUIREMENTS FOR THE DISINFECTION OF WATERMAINS SHALL BE CONSISTENT WITH AWWA STANDARD C651-92, SECTION 5.2 CONTINUOUS FEED METHOD, DISINFECTING WATERMAINS. AFTER FINAL FLUSHING AND BEFORE THE NEW WATERMAIN IS IN OPERATION, TWO CONSECUTIVE SAMPLES TAKEN 24 HOURS APART, SHALL BE COLLECTED FROM THE NEW WATERMAIN. AT LEAST ONE SET OF SAMPLES SHALL BE COLLECTED FROM EVERY 1200 LINEAR FEET OF WATERMAIN, PLUS ONE SET FROM THE END OF LINES AND EACH BRANCH.
- E. MAIN VALVES SHALL BE MECHANICAL JOINTS, RESILIENT SEAT, GATE, 2" OPERATING NUT, OPEN LEFT, WITH STAINLESS STEEL BONNET AND PACKING BOLTS AND NUTS. THE VALVES SHALL CONFORM TO AWWA C-509
- F. ALL NEW AND ALTERED EXISTING WATERMAINS SHALL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH THE LATEST REVISION OF AWWA STANDARD C-600-93 (LATEST REVISION)
- G. THE FOLLOWING MINIMUM SEPARATION DISTANCES BETWEEN GAS LINES AND WATER LINES ARE RECOMMENDED. OTHER MORE STRINGENT SEPARATION DISTANCES MAY APPLY.
HORIZONTAL - 5 FEET
VERTICAL - 2 FEET
- H. TEST PRESSURE SHALL BE 120 PSI UNLESS DIRECTED OTHERWISE BY THE ENGINEER. TESTING WILL BE DONE UNDER THE OBSERVATION OF A REPRESENTATIVE OF THE TOWN OF BIG FLATS WATER DEPARTMENT. DURING NORMAL WORK HOURS. TEST RESULTS WILL BE DOCUMENTED ON THE CONTRACTORS LETTERHEAD AND FORWARDED TO THE TOWN OF BIG FLATS WATER DEPARTMENT. ALL TESTS AND MATERIALS, INCLUDING PIPE AND FITTINGS, METERS AND GAUGES, WILL BE FURNISHED BY THE CONTRACTOR.

IV. DRAWING LIST

- G000 COVER SHEET
- G100 GENERAL NOTES
- V100 PROJECT LOCATION MAP
- V101 EXISTING CONDITIONS PLAN OVERALL
- V102 EXISTING CONDITIONS PLAN NORTH
- V103 EXISTING CONDITIONS PLAN CENTER
- V104 EXISTING CONDITIONS PLAN SOUTH
- C100 SITE DEMOLITION & CLEARING PLAN OVERALL
- C101 SITE DEMOLITION & CLEARING PLAN NORTH
- C102 SITE DEMOLITION & CLEARING PLAN CENTER
- C103 SITE DEMOLITION & CLEARING PLAN SOUTH
- C104 SITE DEMOLITION & CLEARING PLAN OFFSITE
- C105 OVERALL SITE IMPROVEMENT PLAN
- C106 SITE IMPROVEMENT PLAN NORTH
- C107 SITE IMPROVEMENT PLAN CENTER
- C108 SITE IMPROVEMENT PLAN SOUTH
- C109 PROJECT PHASING PLAN
- C110 GRADING AND DRAINAGE PLAN OVERALL
- C111 GRADING AND DRAINAGE PLAN NORTH
- C112 GRADING AND DRAINAGE PLAN CENTER
- C113 GRADING AND DRAINAGE PLAN SOUTH
- C114SITE UTILITIES PLAN OVERALL
- C115 SITE UTILITIES PLAN NORTH
- C116 SITE UTILITIES PLAN CENTER
- C117 SITE UTILITIES PLAN SOUTH
- C118 OFF-SITE UTILITIES PLAN
- C119 EROSION AND SEDIMENT CONTROL PLAN OVERALL
- C120 EROSION AND SEDIMENT CONTROL PLAN NORTH
- C121 EROSION AND SEDIMENT CONTROL PLAN CENTER
- C122 EROSION AND SEDIMENT CONTROL PLAN SOUTH
- C123 MAINTENANCE AND PROTECTION OF TRAFFIC
- C500 SITE DETAILS
- C501 SITE DETAILS
- C502 SITE DETAILS
- C503 SITE DETAILS
- C504 SITE DETAILS
- C600 EROSION AND SEDIMENT CONTROL NOTES
- C601 EROSION AND SEDIMENT CONTROL DETAILS
- E100 SITE LIGHTING PLAN OVERALL
- E101 SITE LIGHTING PLAN NORTH
- E102 SITE LIGHTING PLAN CENTER
- E103 SITE LIGHTING PLAN SOUTH

IV. DRAWING LIST CONT'D

- L100 LANDSCAPE PLAN OVERALL
- L101 LANDSCAPE PLAN NORTH
- L102 LANDSCAPE PLAN CENTER
- L103 LANDSCAPE PLAN SOUTH

V. SITE, ZONING AND PROJECT DATA

GENERAL SITE AND ZONING DATA	
	PARCEL "A"
TAX MAP NO.	57.03-2-4
EXISTING ZONING	RURAL
EXISTING USE	VACANT LOT
PROPOSED USE	PLANNED UNIT DEVELOPMENT
TOTAL SITE AREA	77.535 AC

AREA AND BULK REGULATIONS	
	PROPOSED PUD
LOT AREA MIN.	12,287 SF
LOT WIDTH MIN.	60 FT.
SETBACKS	
FRONT	30 FT. (SEE L-200)
SIDE	10 FT. (SEE L-200)
REAR	30 FT. (SEE L-200)
MAX. LOT COVERAGE	70.0% (SEE L-104)
BUILDING	
HEIGHT (STORIES)	3 STORIES
HEIGHT (FEET)	45 FT. - 0 IN.

UTILITIES	
PUBLIC SEWER	CHEMUNG COUNTY
WATER SERVICE	TOWN OF BIG FLATS
GAS SERVICE	NYSEG
ELECTRIC SERVICE	NYSEG
COMMUNICATION	VERIZON

PERMITS REQUIRED	
PERMIT REQUIRED	AUTHORITY
BUILDING PERMIT	TOWN OF BIG FLATS
SPDES PERMIT	NYSDEC
FIVE ACRE DISTURBANCE	NYSDEC
DRIVEWAY PERMIT	CHEMUNG COUNTY DPW
RIGHT OF WAY PERMIT	CHEMUNG COUNTY DPW

APPROVALS REQUIRED	
APPROVAL	AUTHORITY
PLANNED UNIT DEVELOPMENT	TOWN OF BIG FLATS TOWN BOARD AND PLANNING BOARD
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)	CHEMUNG COUNTY STORMWATER COALITION, NYSDEC
SITE PLAN REVIEW	TOWN OF BIG FLATS AND CHEMUNG COUNTY PLANNING BOARDS
ZONING VARIANCES	TOWN OF BIG FLATS ZONING BOARD
WATER SERVICE TIE-IN	TOWN OF BIG FLATS WATER DEPARTMENT
SEWER SERVICE TIE-IN	CHEMUNG COUNTY SEWER DISTRICT
BACKFLOW PREVENTER	NYSDOH, TOWN OF BIG FLATS
ELECTRIC/GAS TIE-IN	NYSEG
TELECOMMUNICATIONS TIE-IN	VERIZON

DATE

04/20/24

ISSUED/REVISIONS

0 PRELIMINARY PUD SUBMISSION

1 PRELIMINARY PUD SUBMISSION

2

3

4

5

6

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112 N. MAIN ST. | HORSEHEADS, NY 14845 | 607-377-7990

OWNER/CLIENT

J.O.S.H. DEVELOPMENT LLC

PROJECT

SING SING ROAD PLANNED UNIT DEVELOPMENT

161 Sing Sing Road

Big Flats, NY 14814

TITLE OF DRAWING

GENERAL NOTES

DRAWING SCALE

AS NOTED

FIRST ISSUE DATE:

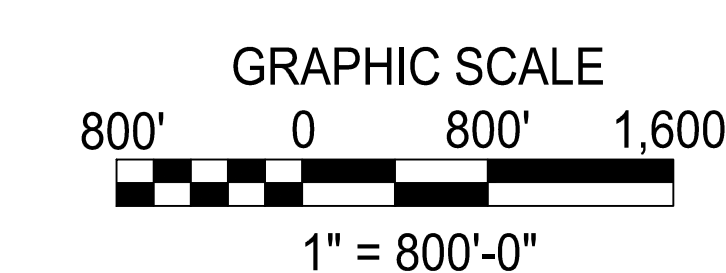
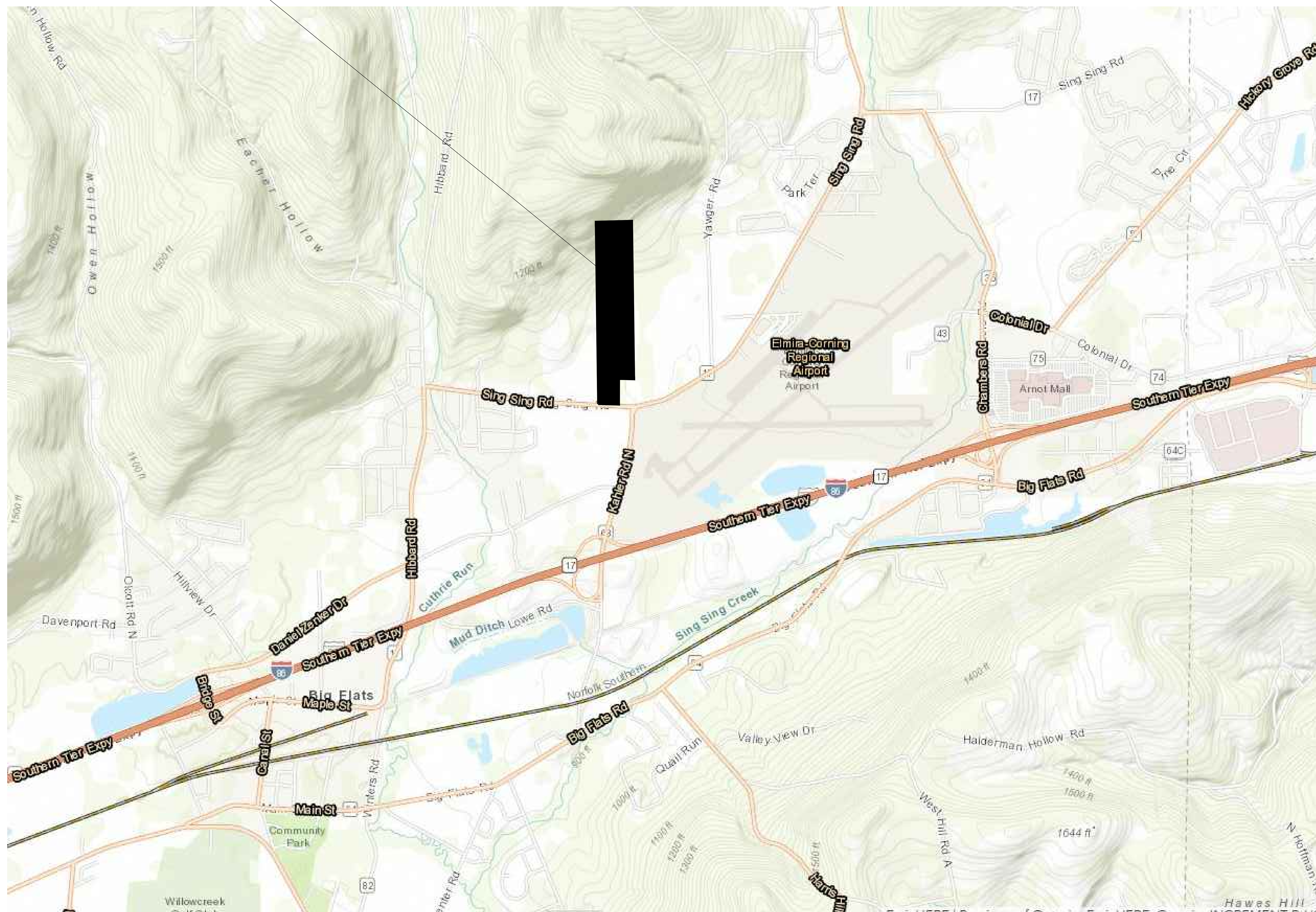
MAY 21, 2018

PROJECT NO:

17-024

DRAWING NO.

G-101



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0	PRELIMINARY PUD SUBMISSION	06/16/2018
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OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018

PROJECT NO.
17-024
DRAWING NO.

DRAWING NO.
V-100

TITLE OF DRAWING

PROJECT LOCATION MAP

EXISTING 70-FT. WIDE DOMINION EASEMENT
EXISTING 150-FT. WIDE NYSEG EASEMENT
EXISTING GRADING IS AVAILABLE FOR THIS PORTION OF THE PARCEL BUT IT IS TOO STEEP (GRADES ~70%) AND THE CONTOURS WERE LEFT OUT FOR CLARITY SAKE. FOR PURPOSES OF THE PLAN, ALL CONTOURS ARE ALIGNED THE SAME AS THOSE SHOWN IMMEDIATELY DOWNHILL

JONATHAN J. BYRSKI
Parcel #57.01-1-28.143
Inst. #200702925

CORNING BIG FLATS L.L.C.
GLADSTONE COMMERCIAL CORPORATION
Parcel #57.03-2-6
Inst. #200503561

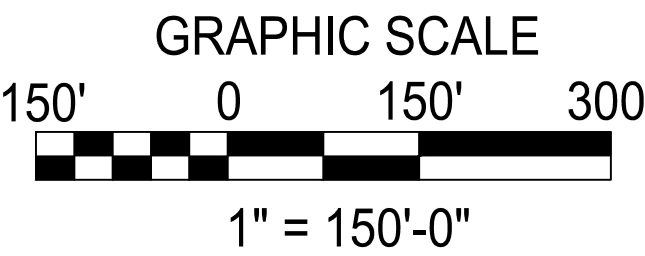
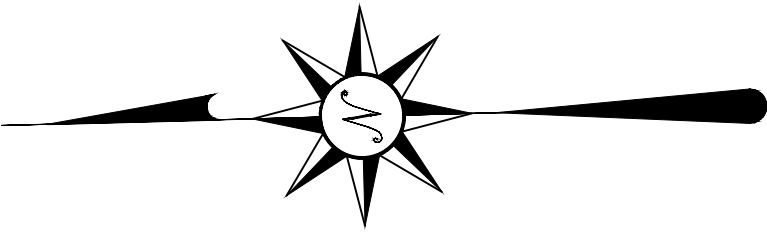
Parcel #57.03-2-4
77.535 Acres

MICHAEL J. LEROSE III
Parcel #57.03-2-3.1
Inst. #200701531

EDDY DANIEL
Parcel #57.03-2-5
Inst. #200601262

KAHLER ROAD

SING SING ROAD



- PROPERTY LINE
- EXISTING EASEMENT
- EXISTING EDGE OF ROADWAY
- EXISTING CURB LINE
- EXISTING SANITARY SEWER
- EXISTING GAS MAIN
- EXISTING UTILITY LINE
- EXISTING FENCE LINE
- EXISTING WATER LINE
- EXISTING CONTOUR LINE
- PROPOSED LIMIT OF INTERFERENCE
- PROPOSED CONTOUR LINE
- PROPOSED EASEMENT
- PROPOSED STORM SEWER
- PROPOSED EDGE OF ROADWAY
- PROPOSED CURB LINE
- PROPOSED SANITARY SEWER
- PROPOSED GAS LINE
- PROPOSED UTILITY LINE
- PROPOSED WATER LINE
- PROPOSED SUT FENCE
- PROPOSED COMPOST SOD
- EXISTING SANITARY MANHOLE
- EXISTING FIRE HYDRANT ASSEMBLY
- EXISTING CLEAINT
- EXISTING SPOT ELEVATION
- PROPOSED SANITARY MANHOLE
- PROPOSED WATER VALVE
- PROPOSED THROST BLOCK
- PROPOSED FIRE HYDRANT ASSEMBLY
- PROPOSED CLEAINT
- PROPOSED LIGHTING FEATURE
- PROPOSED SPOT ELEVATION
- PROPOSED DRYWELL
- PROPOSED CATCH BASIN
- PROPOSED INLET PROTECTION

I. GENERAL NOTES

A. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS. CONTOURS ARE FROM ESRI ARCMAP AND ARE CHEMUNG COUNTY LIDAR DATA.

SHEET V-102 EXISTING CONDITIONS PLAN - NORTH
SHEET V-103 EXISTING CONDITIONS PLAN - CENTER
SHEET V-104 EXISTING CONDITIONS PLAN - SOUTH

SHEET V-103 EXISTING CONDITIONS PLAN - CENTER
SHEET V-104 EXISTING CONDITIONS PLAN - SOUTH

ISSUE/REVISIONS	DATE
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OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
V-101


TITLE OF DRAWING
EXISTING CONDITIONS PLAN OVERALL

I. GENERAL NOTES


A. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS. CONTOURS ARE FROM ESRI ARCMAP AND ARE CHEMUNG COUNTY LIDAR DATA.

GRAPHIC SCALE

50' 0 50' 100'



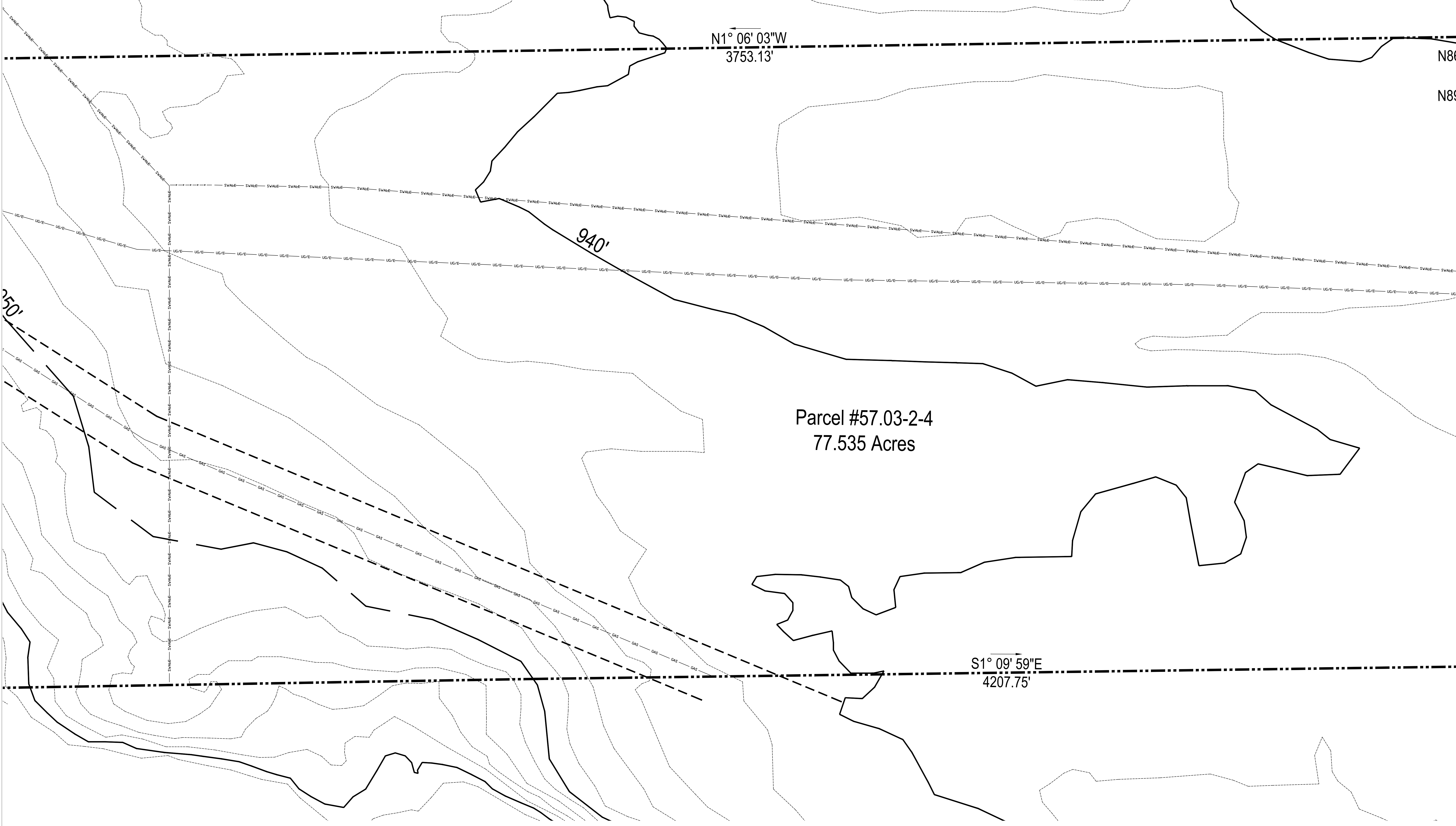
1" = 50'-0"

 <p>MASER ENGINEERING CIVIL ENVIRONMENTAL TRANSPORTATION STRUCTURAL 112 N. MAIN ST. HORSEHEADS, NY 14845 607-377-7990</p>	OWNER/CLIENT		<p>J.O.S.H. DEVELOPMENT LLC</p>
<p>SING SING ROAD PLANNED UNIT DEVELOPMENT 161 Sing Sing Road Big Flats, NY 14814</p>			<p>EXISTING CONDITIONS PLAN - NORTH</p>
<p>DRAWING SCALE AS NOTED FIRST ISSUE DATE: MAY 21, 2018 PROJECT NO. 17-024 DRAWING NO. V-102</p>			

CORNING BIG FLATS L.L.C.
GLADSTONE COMMERCIAL CORPORATION
Parcel #57.03-2-6
Inst. #200503561

ISSUE/REVISIONS		DATE
0	PRELIMINARY AND SUBMISSION	06/01/2018
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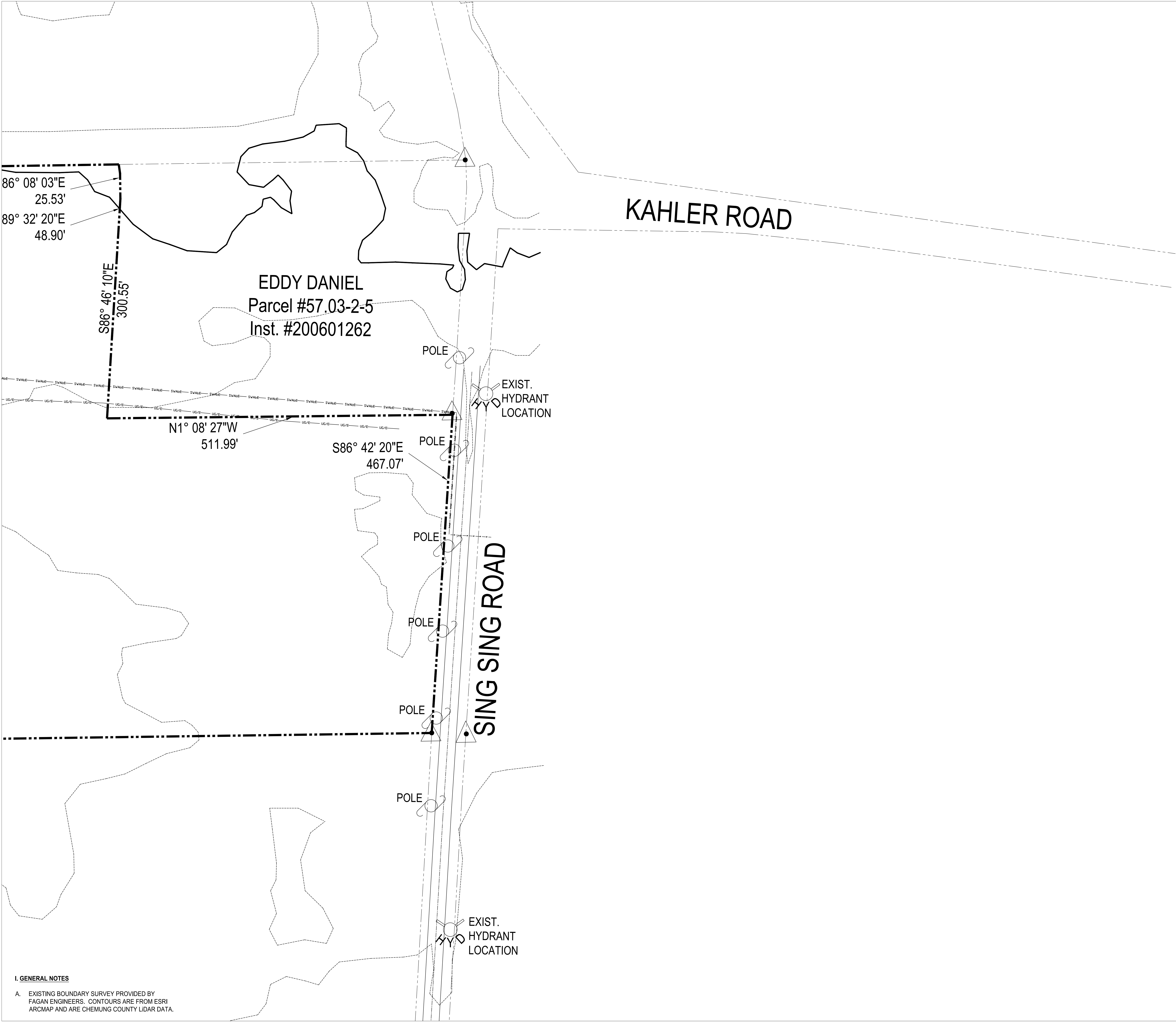
PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
EXISTING CONDITIONS PLAN - CENTER

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
V-103

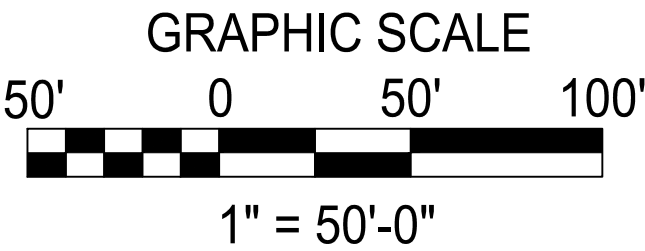
I. GENERAL NOTES

A. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS. CONTOURS ARE FROM ESRI ARCMAP AND ARE CHEMUNG COUNTY LIDAR DATA.




I. GENERAL NOTES

- A. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS. CONTOURS ARE FROM ESRI ARCMAP AND ARE CHEMUNG COUNTY LIDAR DATA.



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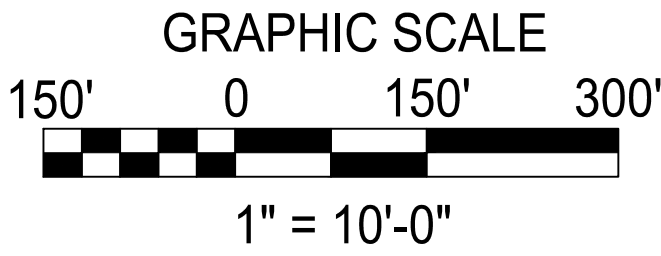
MASER ENGINEERING
CIVIL | ENVIRONMENTAL | TRANSPORTATION | STRUCTURAL
112 N. MAIN ST. | HORSEHEADS, NY 14845 | 607-377-7990

OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
EXISTING CONDITIONS PLAN - SOUTH

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
V-104



I. GENERAL NOTES

A. AERIAL IMAGE FROM GOOGLE MAPS.

PROJECT

SING SING ROAD PLANNED UNIT DEVELOPMENT

161 Sing Sing Road

Big Flats, NY 14814

DRAWING SCALE

AS NOTED

FIRST ISSUE DATE:

MAY 21, 2018

PROJECT NO.

17-024

DRAWING NO.

V-105

OWNER/CLIENT

J.O.S.H. DEVELOPMENT LLC

TITLE OF DRAWING

EXISTING CONDITIONS PLAN - OFFSITE

DATE

ISSUE/REVISIONS

0 PRELIMINARY PUD SUBMISSION

09/10/2018

1 PRELIMINARY PUD SUBMISSION

07/20/2018

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JONATHAN J. BYRSKI
Parcel #57.01-1-28.143
Inst. #200702925

844.25'
S88° 55' 43"W

DOUBLED HATCHED AREA INDICATES THE
TYPICAL CLEARING AREA FOR THE ENTIRE
PROJECT. SEE DRAWING C-105 FOR THE
PHASING PLAN. FOR MUCH OF THE SITE, ONLY
THE TOPSOIL WILL BE STRIPPED AND
STOCKPILED, NO MAJOR GRADING IS PLANNED

EXISTING 70-FT. WIDE DOMINION EASEMENT.
SEE NOTES THIS SHEET FOR REQUIREMENTS
ON WORKING IN THIS AREA

EXISTING 200-FT. WIDE NYSEG EASEMENT FOR
OVERHEAD LINES. THE CONTRACTOR IS
RESPONSIBLE FOR COORDINATING THEIR
WORK WITH NYSEG TO DETERMINE IF
PROTECTIVE MEASURES NEED TO BE
INSTALLED ON THE LINES BEFORE EQUIPMENT
WORKS UNDERNEATH

EXISTING STEEP, FORESTED AREA TO REMAIN
UNDEVELOPED

EXISTING GRADING IS AVAILABLE FOR THIS
PORTION OF THE PARCEL BUT IT IS TOO STEEP
(GRADES ~70%) AND THE CONTOURS WERE
LEFT OUT FOR CLARITY SAKE. FOR PURPOSES
OF THE PLAN, ALL CONTOURS ARE ALIGNED
THE SAME AS THOSE SHOWN IMMEDIATELY
DOWNHILL

POLE

POLE

POLE

POLE

POLE

POLE

POLE

POLE

GRAPHIC SCALE
50' 0 50' 100'
1" = 50'-0"

I. GENERAL NOTES

- A. EXISTING BOUNDARY SURVEY PROVIDED BY
FAGAN ENGINEERS. CONTOURS ARE FROM ESRI
ARCMAP AND ARE CHEMUNG COUNTY LIDAR DATA.

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PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.

C-101

TITLE OF DRAWING
SITE DEMO & CLEARING PLAN - NORTH

CORNING BIG FLATS L.L.C.
GLADSTONE COMMERCIAL CORPORATION
Parcel #57.03-2-6
Inst. #200503561

EXISTING 70-FT. WIDE DOMINION EASEMENT.
SEE NOTES THIS SHEET FOR REQUIREMENTS
ON WORKING IN THIS AREA

EXISTING DRAINAGE WAYS SHALL BE
MAINTAINED AND PROTECTED DURING
DEMOLITION AND CLEARING

EXISTING UNDERGROUND NYSEG POWER
LINES. EXACT EASEMENT LOCATION AND
REQUIREMENTS IS FORTHCOMING

DOUBLED HATCHED AREA INDICATES THE
TYPICAL CLEARING AREA FOR THE ENTIRE
PROJECT. SEE DRAWING C-105 FOR THE
PHASING PLAN. FOR MUCH OF THE SITE, ONLY
THE TOPSOIL WILL BE STRIPPED AND
STOCKPILED, NO MAJOR GRADING IS PLANNED

N1° 06' 03"W
3753.13'

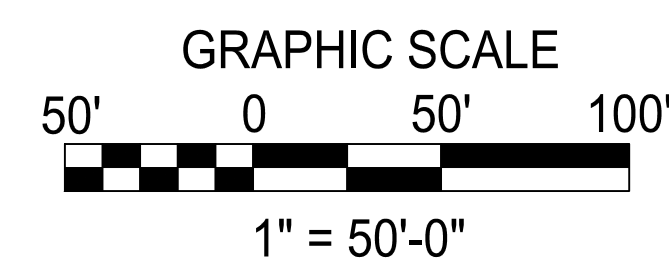
940'

Parcel #57.03-2-4
77.535 Acres

S1° 09' 59"E
4207.75'

I. GENERAL NOTES

- A. EXISTING BOUNDARY SURVEY PROVIDED BY
FAGAN ENGINEERS. CONTOURS ARE FROM ESRI
ARCMAP AND ARE CHEMUNG COUNTY LIDAR DATA.



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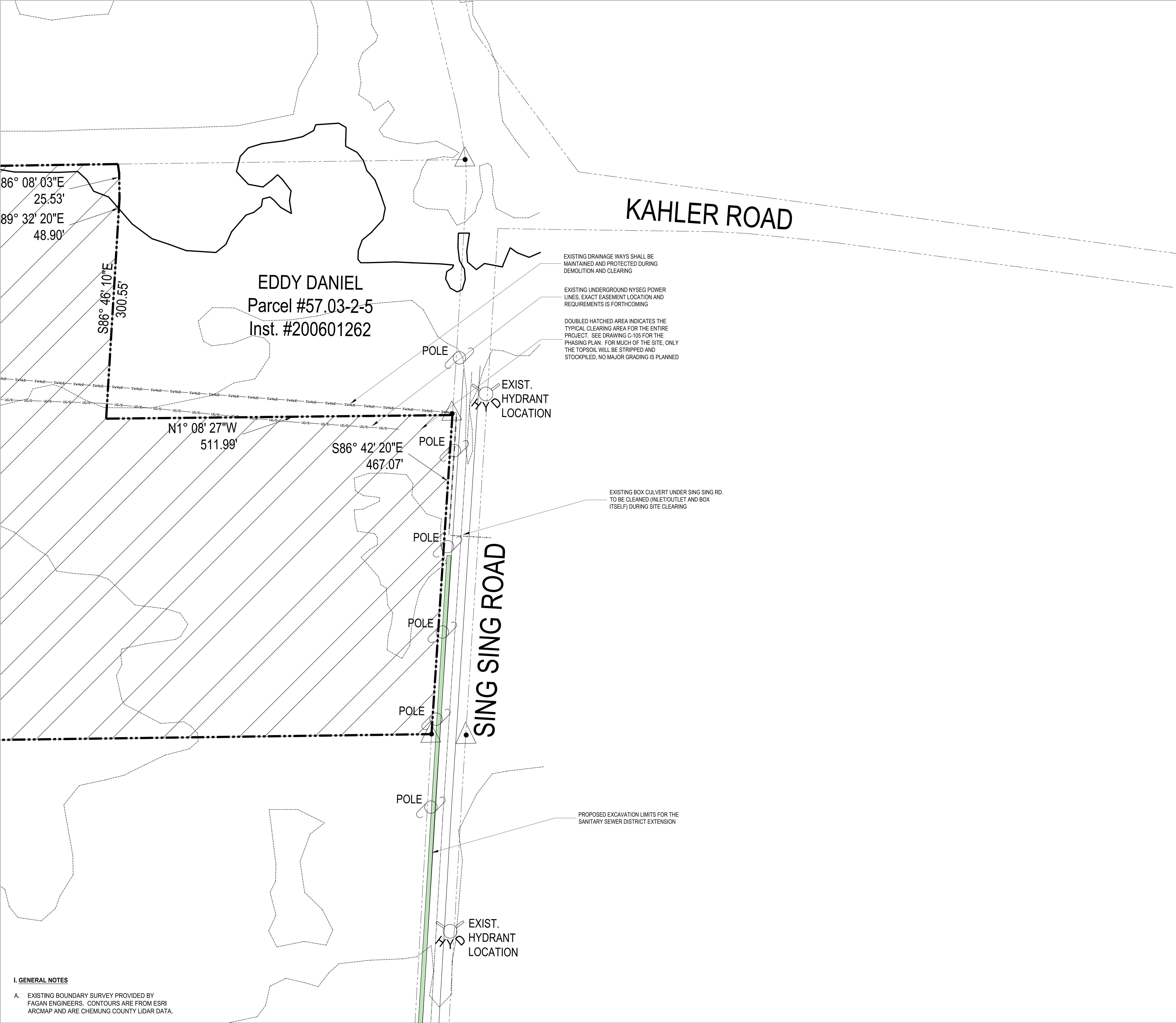
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PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE DEMO & CLEARING PLAN - CENTER

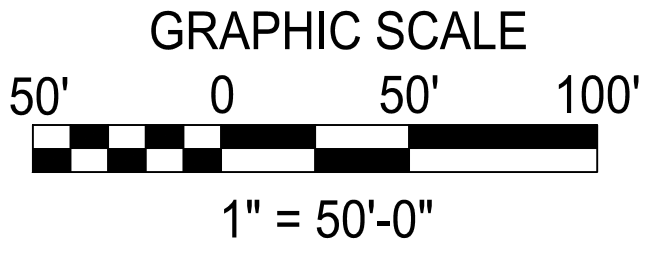
DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.

C-102



I. GENERAL NOTES

A. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS. CONTOURS ARE FROM ESRI ARCMAP AND ARE CHEMUNG COUNTY LIDAR DATA.



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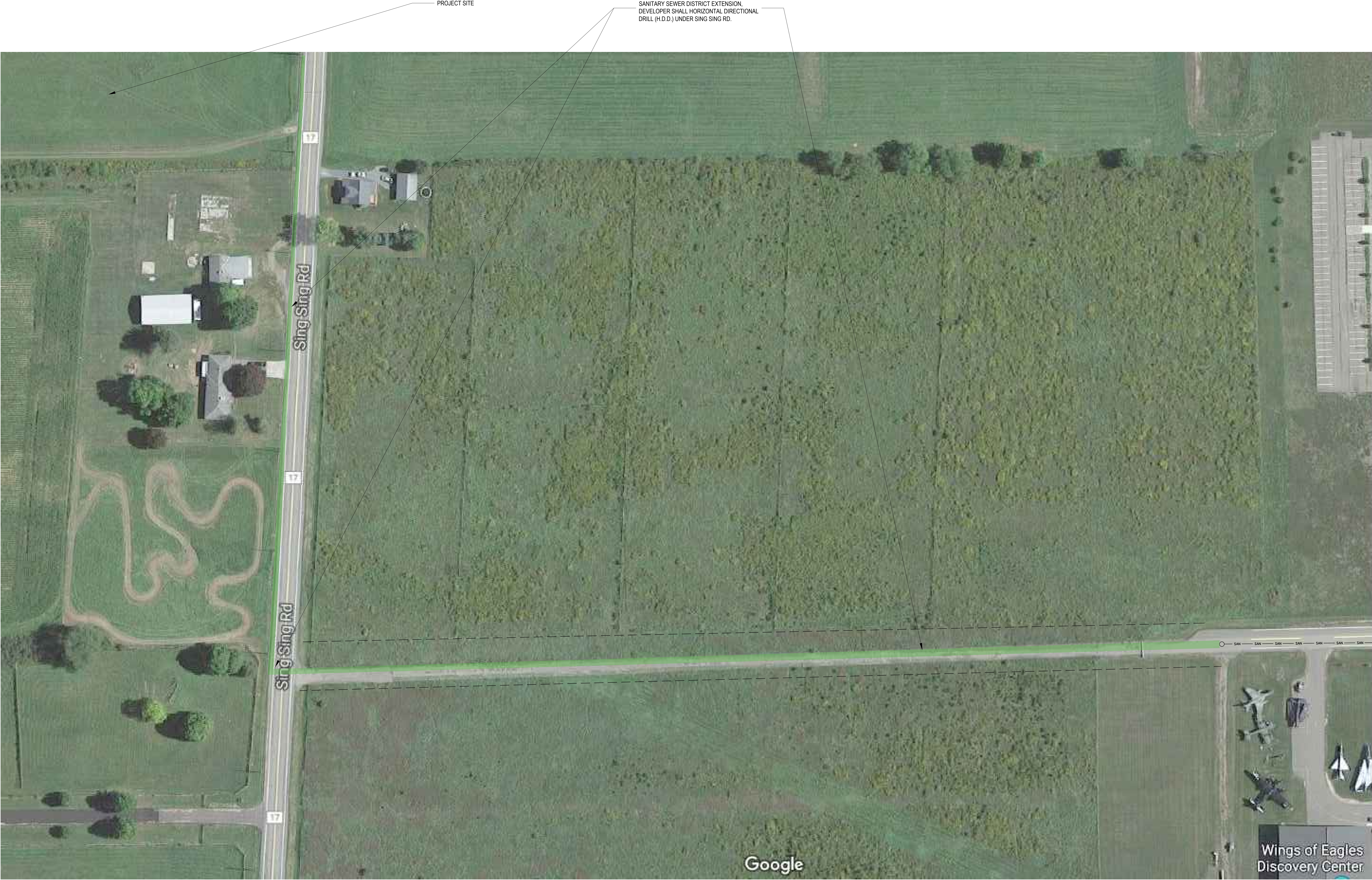
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OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE DEMO & CLEARING PLAN - SOUTH

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO:
17-024
DRAWING NO.
C-103



I. GENERAL NOTES

A. AERIAL IMAGE FROM GOOGLE MAPS.

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J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE DEMO & CLEARING PLAN - OFFSITE

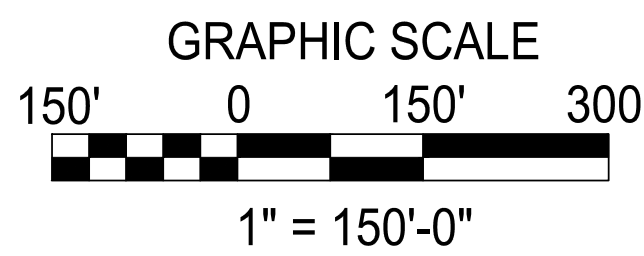
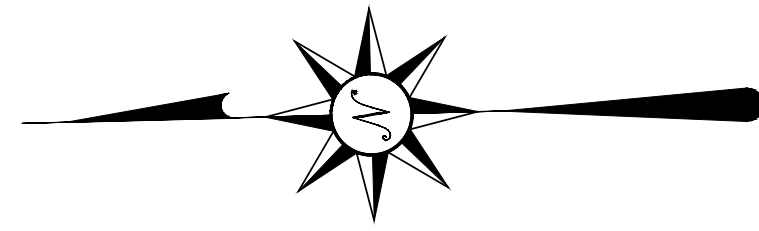
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MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.

C-104

DOMINION ENERGY EASEMENT (70'-0")
NYSEG EASEMENT (150'-0")
TYPICAL PARCEL PROPERTY BOUNDARY
TYPICAL ROAD RIGHT OF WAY LINE (40'-0" WIDE)
TYPICAL PROPERTY SETBACK LINE
TYPICAL PROPERTY BOUNDARY LINE
CONSERVATION OF NATURAL AREA (FOR
STORMWATER RUNOFF REDUCTION) & FOR A
DIVERSION SWALE

SHEET V-102 EXISTING CONDITIONS PLAN - NORTH
SHEET V-103 EXISTING CONDITIONS PLAN - CENTER

SHEET V-103 EXISTING CONDITIONS PLAN - CENTER
SHEET V-104 EXISTING CONDITIONS PLAN - SOUTH



- GENERAL PUD NOTES:**
1. AVERAGE LOT SIZE IS 17,404 SQ.-FT.
 - 1.1. MINIMUM IS 12,287 SQ.-FT.
 - 1.2. MAXIMUM IS 47,110 SQ.-FT.
 2. FRONT YARD SETBACK = 30'-0"
 3. REAR YARD SETBACK = 30'-0"
 4. SIDE YARD SETBACK = 10'-0"
 5. LANDSCAPING SETBACK = 10'-0"
 6. ROAD PAVEMENT WIDTH = 30'-0"
 7. ROAD RIGHT OF WAY WIDTH = 40'-0"
 8. ACCESS DRIVE WIDTH = 22'-0"
 9. REQUIRED RECREATIONAL AREA IS 5% OF THE TOTAL PARCEL SIZE
 - 9.1. REQUIRED = 77.535-ACRES * 5% = 3.88-ACRES
 - 9.2. PROVIDED = 3.93-ACRES = 5.1%
 10. ONE EGRESS ROAD PROVIDED
 11. TOTAL ROAD LENGTH IS 10,035-FEET (1.90-MILES)

KEY:

SINGLE FAMILY HOUSE

- TOTAL # OF LOTS = 98
- AVERAGE OF 2,000 - 2,200 SQ.-FT. PER UNIT
- 3-BEDROOM, 2-BATHROOM
- TWO-STORY
- NO BASEMENT (SLAB ON GRADE)
- 1.5 - 2 CAR GARAGE
- SELL RANGE \$250,000 - \$300,000 (2018 DOLLARS)
- LOTS WILL BE OFFERED FOR SALE TO OTHER BUILDERS
- DEED RESTRICTIONS WILL BE ENFORCED, DETAILS TBD
- DENSITY IS 0.79 ACRES PER HOUSE (77.535-AC / 98 HOMES)

MULTI-FAMILY UNITS

- EIGHT UNITS PER BUILDING @ 12 BUILDINGS = 96-UNITS
- AVERAGE OF 1,000 - 1,200 SQ.-FT. PER UNIT
- (6) 2-BEDROOM, (2) 1-BEDROOM UNITS PER BUILDING
- TWO-STORY (20 - 25-FEET TALL)
- NO BASEMENT (SLAB ON GRADE)
- NO GARAGES, PARKING AS SHOWN (2 SPACES PER UNIT)
- DEED RESTRICTIONS WILL BE ENFORCED, DETAILS TBD
- MULTI-FAMILY UNITS WILL BE OWNED AND MAINTAINED BY THE DEVELOPER
- DENSITY IS ABOUT 0.09-ACRES PER UNIT (8.55-AC / 96-UNITS)

COMMERCIAL RETAIL/PROFESSIONAL

- ONE-BUILDING HAS A FOOTPRINT OF ABOUT 11,000 SQ.-FT.
- MULTI-UNIT (UP TO THREE STORIES - 35 - 40-FEET TALL)
- EXACT LAYOUT TO BE DETERMINED AND PRESENTED DURING SITE PLAN REVIEW OF THAT RESPECTIVE PHASE
- NO GARAGES, PARKING AS SHOWN
- INTENDED USE IF PROFESSIONAL/MEDICAL OFFICE/RETAIL TO SUPPORT SURROUNDING PUD
- DEED RESTRICTIONS WILL BE ENFORCED, DETAILS TBD
- MAY BE OWNED AND MAINTAINED BY THE DEVELOPER OR SOLD TO BUSINESS

RECREATIONAL/GREEN SPACE/STORMWATER INFILTRATION BASINS

- STORMWATER INFILTRATION BASINS ARE PROPOSED TO SPLIT THE PROJECT UP INTO SMALLER WATERSHEDS. SEE THE GRADING AND DRAINAGE PLANS FOR MORE DETAILS
- RECREATIONAL AREA WILL INCLUDE PLAYGROUNDS, PICNIC AREAS, BENCHES
- AREAS WILL BE OWNED AND MAINTAINED BY THE DEVELOPER
- AREAS WILL BE ACCESSED BY GRAVEL ACCESS PATHWAYS

LOT DATA

LOT NUMBER	LOT SIZE	LOT TYPE
C-1	1.909-AC	COMMERCIAL
C-2	1.764-AC	COMMERCIAL
MF-1	2.420-AC	MULTI-FAMILY
MF-2	4.326-AC	MULTI-FAMILY
MF-3	1.804-AC	MULTI-FAMILY
R-1	16,408 SQ.-FT	RESIDENTIAL
R-2	15,744 SQ.-FT	RESIDENTIAL
R-3	13,810 SQ.-FT	RESIDENTIAL
R-4	15,249 SQ.-FT	RESIDENTIAL
R-5	16,234 SQ.-FT	RESIDENTIAL
R-6	16,778 SQ.-FT	RESIDENTIAL
R-7	19,249 SQ.-FT	RESIDENTIAL
R-8	19,361 SQ.-FT	RESIDENTIAL
R-9	20,206 SQ.-FT	RESIDENTIAL
R-10	28,812 SQ.-FT	RESIDENTIAL
R-11	22,084 SQ.-FT	RESIDENTIAL
R-12	34,721 SQ.-FT	RESIDENTIAL
R-13	21,160 SQ.-FT	RESIDENTIAL
R-14	15,055 SQ.-FT	RESIDENTIAL
R-15	15,082 SQ.-FT	RESIDENTIAL
R-16	15,196 SQ.-FT	RESIDENTIAL
R-17	15,577 SQ.-FT	RESIDENTIAL
R-18	15,071 SQ.-FT	RESIDENTIAL
R-19	15,550 SQ.-FT	RESIDENTIAL
R-20	17,165 SQ.-FT	RESIDENTIAL
R-21	38,016 SQ.-FT	RESIDENTIAL
R-22	29,272 SQ.-FT	RESIDENTIAL
R-23	16,645 SQ.-FT	RESIDENTIAL

LOT DATA

LOT NUMBER	LOT SIZE	LOT TYPE
R-24	16,334 SQ.-FT	RESIDENTIAL
R-25	16,541 SQ.-FT	RESIDENTIAL
R-26	16,437 SQ.-FT	RESIDENTIAL
R-27	16,386 SQ.-FT	RESIDENTIAL
R-28	16,378 SQ.-FT	RESIDENTIAL
R-29	17,974 SQ.-FT	RESIDENTIAL
R-30	16,651 SQ.-FT	RESIDENTIAL
R-31	16,527 SQ.-FT	RESIDENTIAL
R-32	16,265 SQ.-FT	RESIDENTIAL
R-33	16,062 SQ.-FT	RESIDENTIAL
R-34	16,171 SQ.-FT	RESIDENTIAL
R-35	41,115 SQ.-FT	RESIDENTIAL
R-36	19,760 SQ.-FT	RESIDENTIAL
R-37	20,827 SQ.-FT	RESIDENTIAL
R-38	13,853 SQ.-FT	RESIDENTIAL
R-39	17,377 SQ.-FT	RESIDENTIAL
R-40	16,902 SQ.-FT	RESIDENTIAL
R-41	15,795 SQ.-FT	RESIDENTIAL
R-42	14,900 SQ.-FT	RESIDENTIAL
R-43	13,607 SQ.-FT	RESIDENTIAL
R-44	13,155 SQ.-FT	RESIDENTIAL
R-45	20,264 SQ.-FT	RESIDENTIAL
R-46	17,599 SQ.-FT	RESIDENTIAL
R-47	20,296 SQ.-FT	RESIDENTIAL
R-48	16,187 SQ.-FT	RESIDENTIAL
R-49	12,287 SQ.-FT	RESIDENTIAL
R-50	14,529 SQ.-FT	RESIDENTIAL
R-51	15,329 SQ.-FT	RESIDENTIAL

LOT DATA

LOT NUMBER	LOT SIZE	LOT TYPE
R-52	15,557 SQ.-FT	RESIDENTIAL
R-53	18,218 SQ.-FT	RESIDENTIAL
R-54	16,864 SQ.-FT	RESIDENTIAL
R-55	12,701 SQ.-FT	RESIDENTIAL
R-56	15,374 SQ.-FT	RESIDENTIAL
R-57	15,957 SQ.-FT	RESIDENTIAL
R-58	16,016 SQ.-FT	RESIDENTIAL
R-59	18,615 SQ.-FT	RESIDENTIAL
R-60	19,797 SQ.-FT	RESIDENTIAL
R-61	15,046 SQ.-FT	RESIDENTIAL
R-62	14,547 SQ.-FT	RESIDENTIAL
R-63	13,818 SQ.-FT	RESIDENTIAL
R-64	14,355 SQ.-FT	RESIDENTIAL
R-65	14,095 SQ.-FT	RESIDENTIAL
R-66	14,045 SQ.-FT	RESIDENTIAL
R-67	23,773 SQ.-FT	RESIDENTIAL
R-68	14,744 SQ.-FT	RESIDENTIAL
R-69	18,714 SQ.-FT	RESIDENTIAL
R-70	15,771 SQ.-FT	RESIDENTIAL
R-71	15,285 SQ.-FT	RESIDENTIAL
R-72	13,771 SQ.-FT	RESIDENTIAL
R-73	14,209 SQ.-FT	RESIDENTIAL
R-74	14,072 SQ.-FT	RESIDENTIAL
R-75	14,903 SQ.-FT	RESIDENTIAL
R-76	15,478 SQ.-FT	RESIDENTIAL
R-77	14,923 SQ.-FT	RESIDENTIAL
R-78	13,724 SQ.-FT	RESIDENTIAL
R-79	12,937 SQ.-FT	RESIDENTIAL

LOT DATA

LOT NUMBER	LOT SIZE	LOT TYPE
R-80	13,696 SQ.-FT	RESIDENTIAL
R-81	13,036 SQ.-FT	RESIDENTIAL
R-82	13,285 SQ.-FT	RESIDENTIAL
R-83	13,631 SQ.-FT	RESIDENTIAL
R-84	15,311 SQ.-FT	RESIDENTIAL
R-85	47,110 SQ.-FT	RESIDENTIAL
R-86	16,207 SQ.-FT	RESIDENTIAL
R-87	16,330 SQ.-FT	RESIDENTIAL
R-88	16,086 SQ.-FT	RESIDENTIAL
R-89	16,184 SQ.-FT	RESIDENTIAL
R-90	16,205 SQ.-FT	RESIDENTIAL
R-91	15,400 SQ.-FT	RESIDENTIAL
R-92	15,629 SQ.-FT	RESIDENTIAL
R-93	14,945 SQ.-FT	RESIDENTIAL
R-94	18,943 SQ.-FT	RESIDENTIAL
R-95	19,128 SQ.-FT	RESIDENTIAL
R-96	15,806 SQ.-FT	RESIDENTIAL
R-97	15,787 SQ.-FT	RESIDENTIAL
R-98	17,587 SQ.-FT	RESIDENTIAL
ROAD-1	9.215-AC	ROAD R.O.W.
REC-1	0.130-AC	RECREATION
REC-2	0.924-AC	RECREATION
REC-3	1.085-AC	RECREATION
REC-4	0.431-AC	RECREATION
REC-5	0.287-AC	RECREATION
REC-6	0.403-AC	RECREATION
REC-7	0.672-AC	RECREATION
CON-1	13.04-AC	CONSERVATION

KAHLER ROAD

SING SING ROAD

TYPICAL 5'-0" WIDE CAST-IN-PLACE CONCRETE
SIDEWALK WITH 6-INCH CAST-IN-PLACE
CONCRETE CURB

TYPICAL GARBAGE/RECYCLING STORAGE -
AREA TO INCLUDE PRIVACY FENCE AROUND
PERIMETER WITH GATE

MF-1 AND MF-2 AREAS WILL INCLUDE A
SEPARATE BUILDING FOR GARBAGE/RECYCLING
STORAGE IN LIEU OF A FENCED AREA

SANITARY SEWER WILL BE EXTENDED TO THIS
COUNTY RIGHT OF WAY AND CONNECTED TO
AN EXISTING MANHOLE IN THE ROAD AT THE
WINGS OF EAGLES DISCOVERY CENTER

ISSUED/REVISIONS	DATE
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J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018

PROJECT NO.
17-024

DRAWING NO.

C-105

TITLE OF DRAWING
SITE IMPROVEMENT PLAN - OVERALL

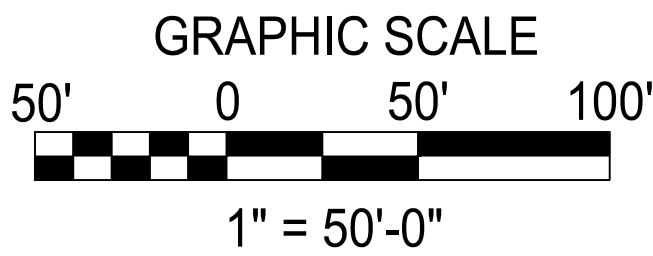
I. GENERAL NOTES

- A. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS.

CONSERVATION OF NATURAL AREA (FOR STORMWATER RUNOFF REDUCTION) & FOR A DIVERSION SWALE

EXISTING 70-FT. WIDE DOMINION EASEMENT. SEE NOTES THIS SHEET FOR REQUIREMENTS ON WORKING IN THIS AREA

EXISTING 150-FT. WIDE NYSEG EASEMENT FOR OVERHEAD LINES. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THEIR WORK WITH NYSEG TO DETERMINE IF PROTECTIVE MEASURES NEED TO BE INSTALLED ON THE LINES BEFORE EQUIPMENT WORKS UNDERNEATH



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DRAWING NO.

C-106

TITLE OF DRAWING
SITE IMPROVEMENT PLAN - NORTH

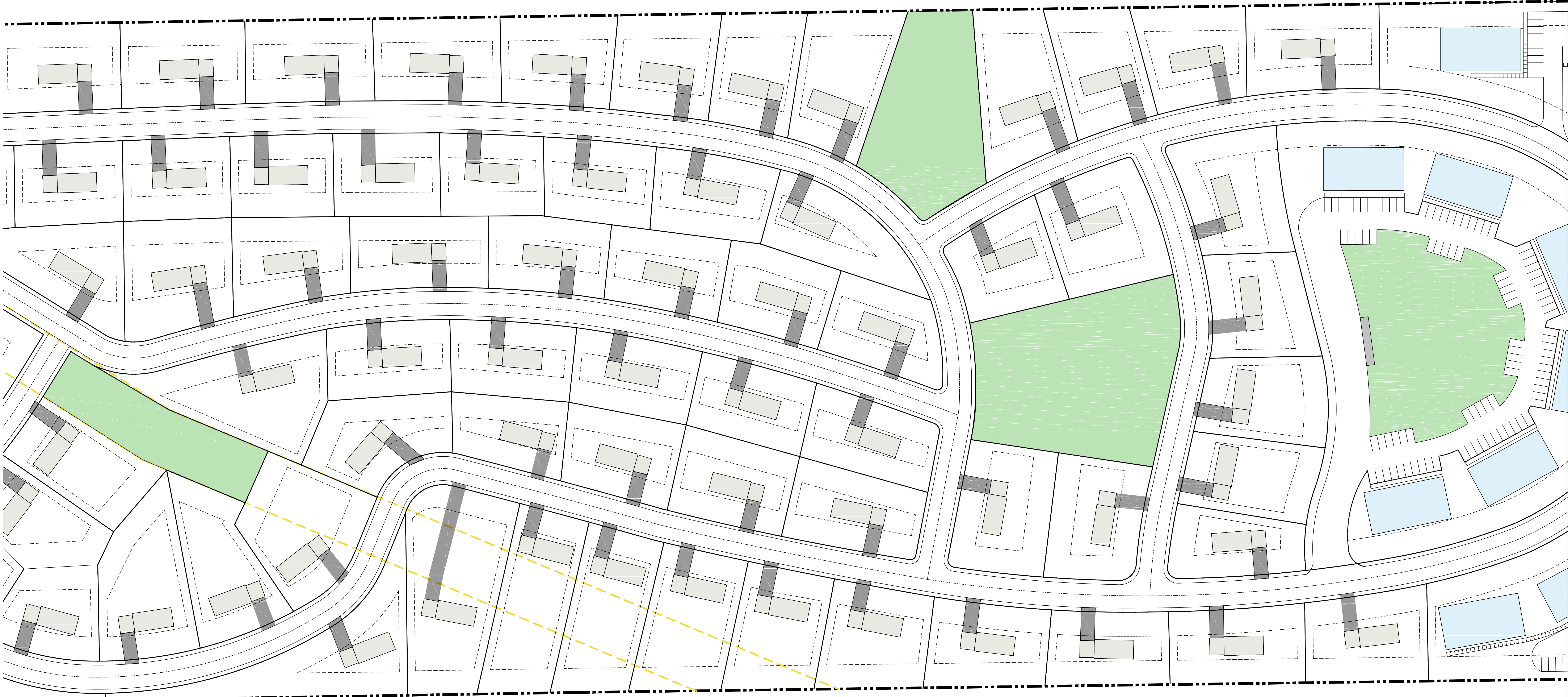


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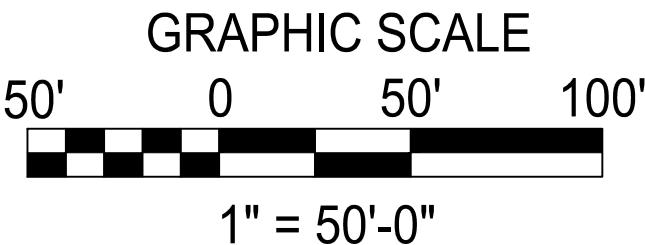
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I. GENERAL NOTES

- A. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS. CONTOURS ARE FROM ESRI ARCMAP AND ARE CHEMUNG COUNTY LIDAR DATA.



PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
C-107

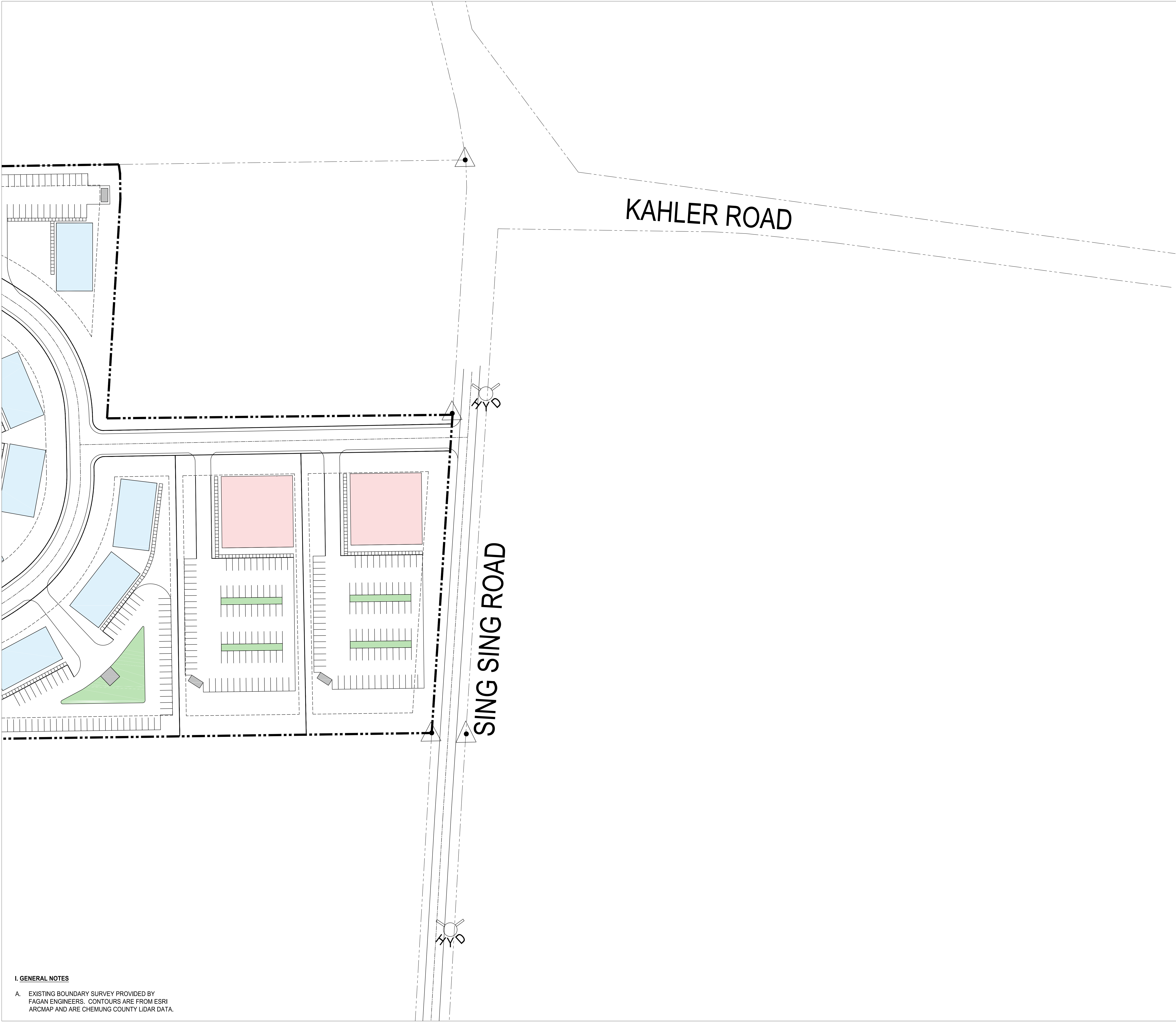
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SITE IMPROVEMENT PLAN - CENTER

OWNER/CLIENT
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ISSUE/REVISIONS

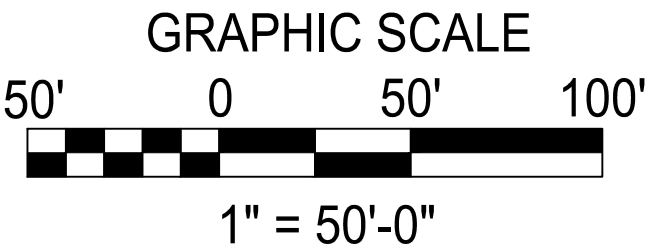
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I. GENERAL NOTES

- A. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS. CONTOURS ARE FROM ESRI ARCMAP AND ARE CHEMUNG COUNTY LIDAR DATA.



PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.

C-108

TITLE OF DRAWING
SITE IMPROVEMENT PLAN - SOUTH



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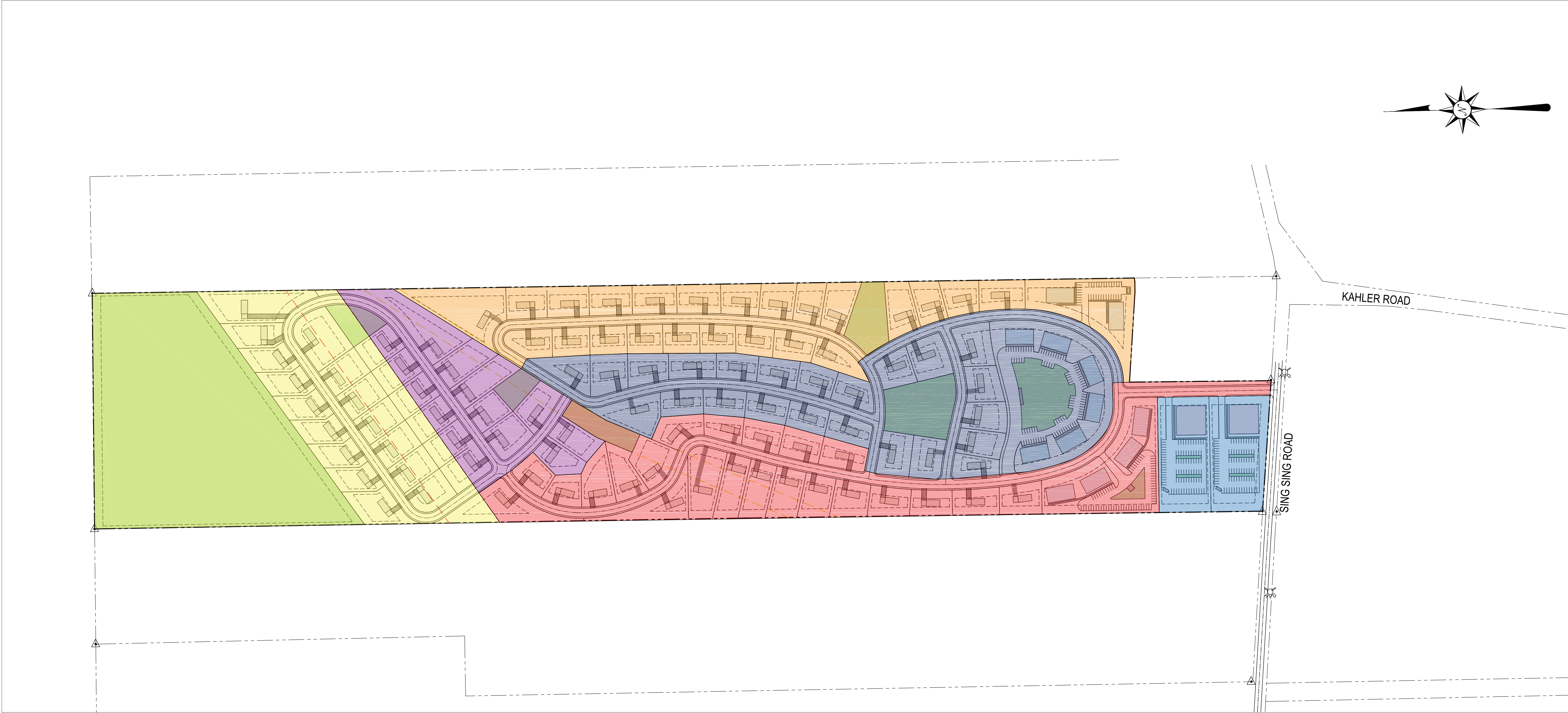
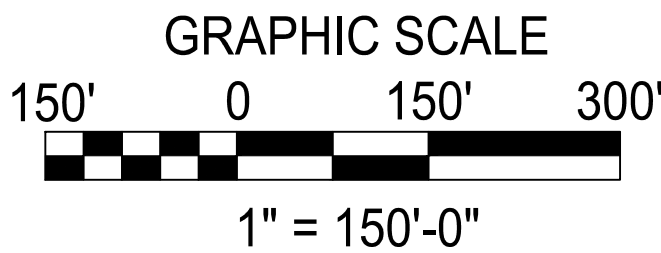
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PHASING KEY:

- PHASE 1A - 2019 - 2020
- PHASE 1B - 2021 - 2022
- PHASE 1C - 2023 - 2024
- PHASE 1D - 2025 - 2026
- PHASE 2 - 2027 - 2028
- PHASE 3 - 2029 - 2030



PROJECT

SING SING ROAD PLANNED UNIT DEVELOPMENT

161 Sing Sing Road

Big Flats, NY 14814

DRAWING SCALE

AS NOTED

FIRST ISSUE DATE:

MAY 21, 2018

PROJECT NO.

17-024

DRAWING NO.

C-109

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TITLE OF DRAWING

PROJECT PHASING PLAN

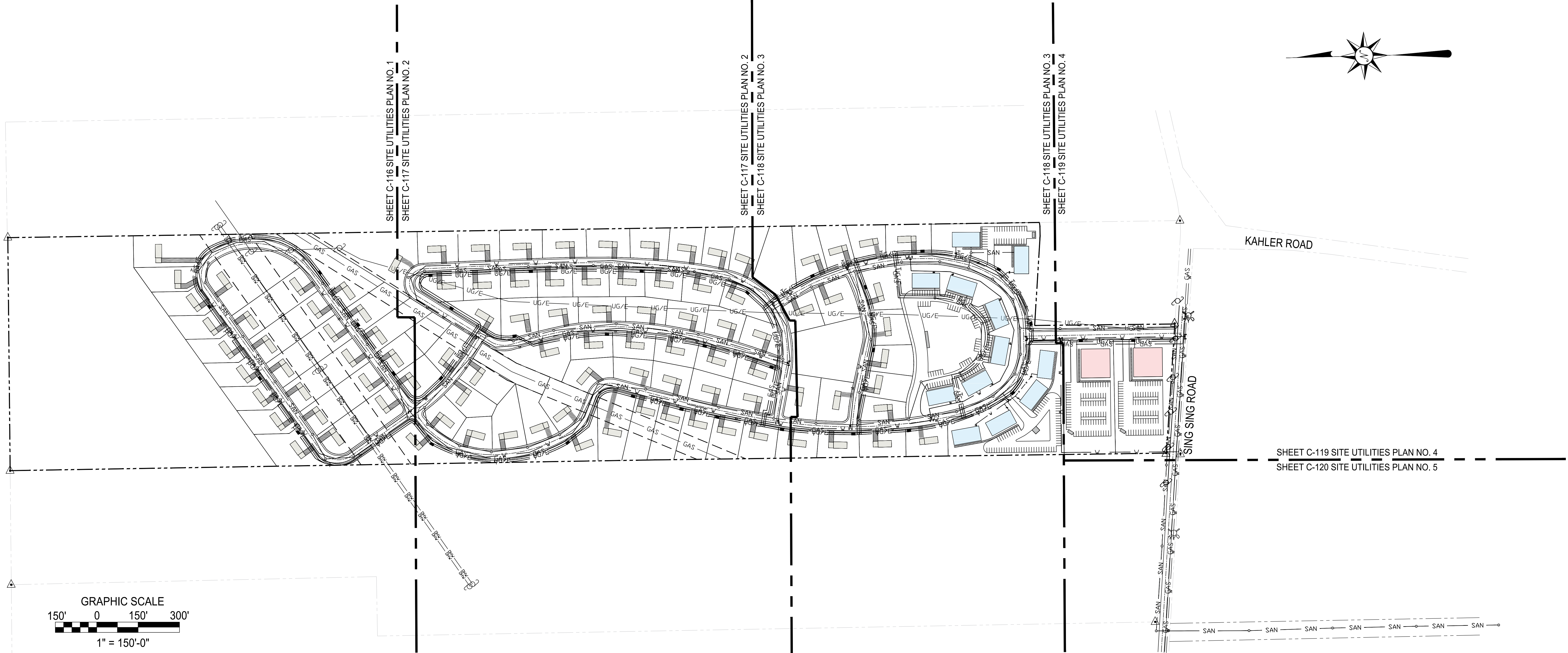
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SITE UTILITIES LEGEND:

- PROPOSED TRANSFORMER
- PROPOSED DOMESTIC WATER GATE VALVE
- PROPOSED DOMESTIC WATER HYDRANT
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY UTILITY
- PROPOSED DOMESTIC WATER UTILITY
- PROPOSED GAS UTILITY
- PROPOSED UNDERGROUND ELECTRIC UTILITY
- PROPOSED TELECOMMUNICATIONS UTILITY

GENERAL DRAWING NOTES:

- SERVICE LINES FOR WATER, SANITARY, GAS, ELECTRIC AND TELECOMMUNICATIONS TO THE PROPOSED STRUCTURES WILL BE ADDED ONCE THE DESIGN TABLES ARE ADDED. THIS INCLUDES THE WATER LINES TO THE PROPOSED HYDRANTS.

GENERAL SEWER SERVICE NOTES:

- UTILITY TABLES WILL BE PROVIDED WHICH WILL INCLUDE INFRASTRUCTURE TYPE, SIZE LOCATION (STATION AND OFFSET).
- NO OPEN CUTTING OF SING SING RD. IS PERMITTED, ALL UTILITY CROSSINGS MUST BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
- PVC PIPE WILL BE USED BOTH OFFSITE AND THROUGHOUT THE ENTIRE PROJECT.
- AN 8-IN. DIA. MAIN THROUGHOUT THE DEVELOPMENT IS REQUIRED AT A MINIMUM.
- SERVICE LINES TO EACH SINGLE FAMILY HOME SHALL BE 4-IN. DIA. PVC.
- A HYDRAULIC ANALYSIS FOR THE SYSTEM WILL BE PREPARED AND SUBMITTED TO CHEMUNG COUNTY AND THE TOWN FOR FUTURE REFERENCE.
- PER THE "WILL-SERVE" LETTER FROM THE CHEMUNG COUNTY SEWER DISTRICTS DATED MARCH 23, 2018, THE FOLLOWING IS REQUIRED:
 - A SEWER DISTRICT EXTENSION TO THE PROJECT AREA.
 - A DISTRICT EXTENSION FEASIBILITY STUDY.
 - FACILITIES PROPOSED OUTSIDE OF THE SUBJECT PROPERTY REQUIRE SEWER USE AND MAINTENANCE EASEMENTS.
 - A CHEMUNG COUNTY HIGHWAY PERMIT FOR UTILITIES WITHIN THE SING SING ROAD RIGHT OF WAY.
 - DESIGN AND CONSTRUCTION STANDARDS ARE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES" (10-STATE STANDARDS)

GENERAL WATER SERVICE NOTES:

- UTILITY TABLES WILL BE PROVIDED WHICH WILL INCLUDE INFRASTRUCTURE TYPE, SIZE LOCATION (STATION AND OFFSET).
- NO OPEN CUTTING OF SING SING RD. IS PERMITTED, ALL UTILITY CROSSINGS MUST BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
- A LOOP IS REQUIRED AND SHOWN ON THESE PLANS AT THE SOUTHWEST CORNER OF THE SITE; THIS INCLUDES TWO TAPS AT THE ROAD MAIN (PRIMARY AND SECONDARY LOOP TAP).
- HDPE PIPE IS SATISFACTORY UNDER SING SING RD. TO THE TAP AND THEN MUST TRANSITION TO DUCTILE IRON PIPE THROUGH THE ENTIRE PROJECT.
- AN 8-IN. DIA. MAIN THROUGHOUT THE DEVELOPMENT IS REQUIRED AT A MINIMUM.
- SERVICE LINES TO EACH SINGLE FAMILY HOME SHALL BE 3/4-IN. DIA. COPPER.
- A 3-VALVE CLUSTER IS REQUIRED UNDER SING SING RD. AT THE LOCATION OF THE TAP.
- GATE VALVES ARE REQUIRED AT EVERY INTERSECTION (RIGHT CLOSE/LEFT OPEN).
- HYDRANTS ARE REQUIRED TO BE SPACED EVERY 500-FEET.
- HYDRANTS MUST MEET THE FOLLOWING:
 - K810 KENNEDY HYDRANTS
 - PAINTED YELLOW
 - RIGHT CLOSE/LEFT OPEN
 - 6-IN. DIA. DIP SERVICE
- THE MULTI-FAMILY AND COMMERCIAL PROPERTIES WILL MOST LIKELY BE SPRINKLED AND THE FIRE FLOWS FOR THOSE PROPERTIES WILL BE CALCULATED WHEN SITE PLAN REVIEW FOR THOSE PHASES IS UNDERWAY.
- THE TOWN WILL SUPPLY THE METER, SERVICE VALVES AND BACKFLOW PREVENTORS AND THE CONTRACTOR SHALL REIMBURSE THE TOWN FOR THE MATERIALS.
- WE WILL ALSO PREPARE A FULL WATER SYSTEM DISTRIBUTION MODEL AND SUBMIT IT TO THE TOWN FOR FUTURE REFERENCE.

ISSUE/REVISIONS	DATE
0 PRELIMINARY P&ID SUBMISSION	04/10/2018
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OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT 161 Sing Sing Road Big Flats, NY 14814
DRAWING NO.
C-115

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

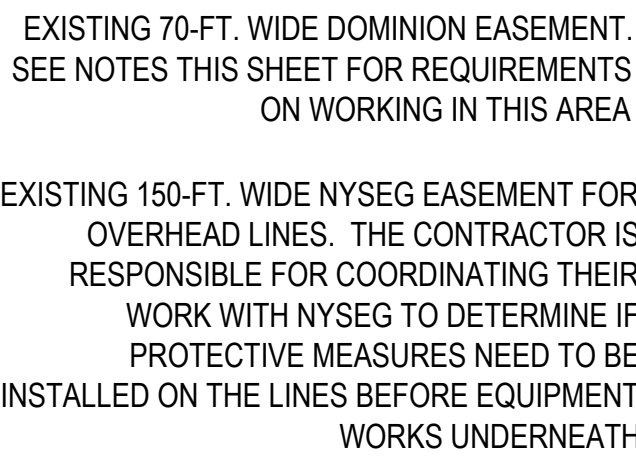
TITLE OF DRAWING
SITE UTILITIES PLAN - OVERALL

DRAWING SCALE
AS NOTED

FIRST ISSUE DATE:
MAY 21, 2018

PROJECT NO.
17-024

DRAWING NO.
C-115



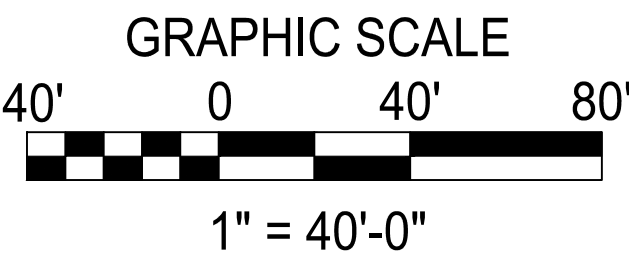
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PROPOSED TELECOMMUNICATIONS UTILITY

PROPOSED PRECAST 4'-0" DIA. SANITARY MANHOLE
WITH CAST IRON FRAME AND COVER (TYP.)

1. UTILITY TABLES WILL BE PROVIDED WHICH WILL INCLUDE INFRASTRUCTURE TYPE, SIZE LOCATION (STATION AND OFFSET).
2. NO OPEN CUTTING OF SING SING RD. IS PERMITTED, ALL UTILITY CROSSINGS MUST BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
3. PVC PIPE WILL BE USED BOTH OFFSITE AND THROUGHOUT THE ENTIRE PROJECT.
4. AN 8-IN. DIA. MAIN THROUGHOUT THE DEVELOPMENT IS REQUIRED AT A MINIMUM.
5. SERVICE LINES TO EACH SINGLE FAMILY HOME SHALL BE 4-IN. DIA. PVC.
6. A HYDRAULIC ANALYSIS FOR THE SYSTEM WILL BE PREPARED AND SUBMITTED TO CHEMUNG COUNTY AND THE TOWN FOR FUTURE REFERENCE.
7. PER THE "WILL-SERVE" LETTER FROM THE CHEMUNG COUNTY SEWER DISTRICTS DATED MARCH 23, 2018, THE FOLLOWING IS REQUIRED:
 - 7.1. A SEWER DISTRICT EXTENSION TO THE PROJECT AREA.
 - 7.2. A DISTRICT EXTENSION FEASIBILITY STUDY.
 - 7.3. FACILITIES PROPOSED OUTSIDE OF THE SUBJECT PROPERTY REQUIRE SEWER USE AND MAINTENANCE EASEMENTS.
 - 7.4. A CHEMUNG COUNTY HIGHWAY PERMIT FOR UTILITIES WITHIN THE SING SING ROAD RIGHT OF WAY.
 - 7.5. DESIGN AND CONSTRUCTION STANDARDS ARE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES" (10-STATE STANDARDS)

1. UTILITY TABLES WILL BE PROVIDED WHICH WILL INCLUDE INFRASTRUCTURE TYPE, SIZE LOCATION (STATION AND OFFSET).
2. NO OPEN CUTTING OF SING SING RD. IS PERMITTED. ALL UTILITY CROSSINGS MUST BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
3. A LOOP IS REQUIRED AND SHOWN ON THESE PLANS AT THE SOUTHWEST CORNER OF THE SITE; THIS INCLUDES TWO TAPS AT THE ROAD MAIN (PRIMARY AND SECONDARY LOOP TAP).
4. HDPE PIPE IS SATISFACTORY UNDER SING SING RD. TO THE TAP AND THEN MUST TRANSITION TO DUCTILE IRON PIPE THROUGH THE ENTIRE PROJECT.
5. AN 8-IN. DIA. MAIN THROUGHOUT THE DEVELOPMENT IS REQUIRED AT A MINIMUM.
6. SERVICE LINES TO EACH SINGLE FAMILY HOME SHALL BE 3/4-IN. DIA. COPPER.
7. A 3-VALVE CLUSTER IS REQUIRED UNDER SING SING RD. AT THE LOCATION OF THE TAP.
8. GATE VALVES ARE REQUIRED AT EVERY INTERSECTION (RIGHT CLOSE/LEFT OPEN).
9. HYDRANTS ARE REQUIRED TO BE SPACED EVERY 500-FEET.
10. HYDRANTS MUST MEET THE FOLLOWING:
 - 10.1. K81D KENNEDY HYDRANTS
 - 10.2. PAINTED YELLOW
 - 10.3. RIGHT CLOSE/LEFT OPEN
 - 10.4. 6-IN. DIA. DIP SERVICE
11. THE MULTIFAMILY AND COMMERCIAL PROPERTIES WILL MOST LIKELY BE SPRINKLED AND THE FIRE FLOWS FOR THOSE PROPERTIES WILL BE CALCULATED WHEN SITE PLAN REVIEW FOR THOSE PHASES IS UNDERWAY.
12. THE TOWN WILL SUPPLY THE METER, SERVICE VALVES AND BACKFLOW PREVENTORS AND THE CONTRACTOR SHALL REIMBURSE THE TOWN FOR THE MATERIALS.
13. WE WILL ALSO PREPARE A FULL WATER SYSTEM DISTRIBUTION MODEL AND SUBMIT IT TO THE TOWN FOR FUTURE REFERENCE.



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J.O.S.H. DEVELOPMENT LLC

SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE UTILITIES PLAN NO. 1

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
C 11

SHEET C-116 SITE UTILITIES PLAN NO. 1

SHEET C-118 SITE UTILITIES PLAN NO. 3

SITE UTILITIES LEGEND:

- PROPOSED TRANSFORMER
- PROPOSED DOMESTIC WATER GATE VALVE
- PROPOSED DOMESTIC WATER HYDRANT
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY UTILITY
- PROPOSED DOMESTIC WATER UTILITY
- PROPOSED GAS UTILITY
- PROPOSED UNDERGROUND ELECTRIC UTILITY
- PROPOSED TELECOMMUNICATIONS UTILITY

GENERAL DRAWING NOTES:

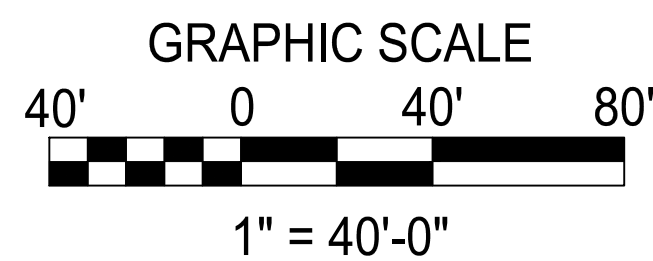
1. SERVICE LINES FOR WATER, SANITARY, GAS, ELECTRIC AND TELECOMMUNICATIONS TO THE PROPOSED STRUCTURES WILL BE ADDED ONCE THE DESIGN TABLES ARE ADDED. THIS INCLUDES THE WATER LINES TO THE PROPOSED HYDRANTS.

GENERAL SEWER SERVICE NOTES:

1. UTILITY TABLES WILL BE PROVIDED WHICH WILL INCLUDE INFRASTRUCTURE TYPE, SIZE LOCATION (STATION AND OFFSET).
2. NO OPEN CUTTING OF SING SING RD. IS PERMITTED, ALL UTILITY CROSSINGS MUST BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
3. PVC PIPE WILL BE USED BOTH OFFSITE AND THROUGHOUT THE ENTIRE PROJECT.
4. AN 8-IN. DIA. MAIN THROUGHOUT THE DEVELOPMENT IS REQUIRED AT A MINIMUM.
5. SERVICE LINES TO EACH SINGLE FAMILY HOME SHALL BE 4-IN. DIA. PVC.
6. A HYDRAULIC ANALYSIS FOR THE SYSTEM WILL BE PREPARED AND SUBMITTED TO CHEMUNG COUNTY AND THE TOWN FOR FUTURE REFERENCE.
7. PER THE "WILL-SERVE" LETTER FROM THE CHEMUNG COUNTY SEWER DISTRICTS DATED MARCH 23, 2018, THE FOLLOWING IS REQUIRED:
- 7.1. A SEWER DISTRICT EXTENSION TO THE PROJECT AREA.
- 7.2. A DISTRICT EXTENSION FEASIBILITY STUDY.
- 7.3. FACILITIES PROPOSED OUTSIDE OF THE SUBJECT PROPERTY REQUIRE SEWER USE AND MAINTENANCE EASEMENTS.
- 7.4. A CHEMUNG COUNTY HIGHWAY PERMIT FOR UTILITIES WITHIN THE SING SING ROAD RIGHT OF WAY.
- 7.5. DESIGN AND CONSTRUCTION STANDARDS ARE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES" (10-STATE STANDARDS)

GENERAL WATER SERVICE NOTES:

1. UTILITY TABLES WILL BE PROVIDED WHICH WILL INCLUDE INFRASTRUCTURE TYPE, SIZE LOCATION (STATION AND OFFSET).
2. NO OPEN CUTTING OF SING SING RD. IS PERMITTED, ALL UTILITY CROSSINGS MUST BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
3. A LOOP IS REQUIRED AND SHOWN ON THESE PLANS AT THE SOUTHWEST CORNER OF THE SITE; THIS INCLUDES TWO TAPS AT THE ROAD MAIN (PRIMARY AND SECONDARY LOOP TAP).
4. HDPE PIPE IS SATISFACTORY UNDER SING SING RD. TO THE TAP AND THEN MUST TRANSITION TO DUCTILE IRON PIPE THROUGH THE ENTIRE PROJECT.
5. AN 8-IN. DIA. MAIN THROUGHOUT THE DEVELOPMENT IS REQUIRED AT A MINIMUM.
6. SERVICE LINES TO EACH SINGLE FAMILY HOME SHALL BE 3/4-IN. DIA. COPPER.
7. A 3-WAY VALVE CLUSTER IS REQUIRED UNDER SING SING RD. AT THE LOCATION OF THE TAP.
8. GATE VALVES ARE REQUIRED AT EVERY INTERSECTION (RIGHT CLOSE/LEFT OPEN).
9. HYDRANTS ARE REQUIRED TO BE SPACED EVERY 500-FEET.
10. HYDRANTS MUST MEET THE FOLLOWING:
- 10.1. K81D KENNEDY HYDRANTS
- 10.2. PAINTED YELLOW
- 10.3. RIGHT CLOSE/LEFT OPEN
- 10.4. 6-IN. DIA. DIP SERVICE
11. THE MULTI-FAMILY AND COMMERCIAL PROPERTIES WILL MOST LIKELY BE SPRINKLED AND THE FIRE FLOWS FOR THOSE PROPERTIES WILL BE CALCULATED WHEN SITE PLAN REVIEW FOR THOSE PHASES IS UNDERWAY.
12. THE TOWN WILL SUPPLY THE METER, SERVICE VALVES AND BACKFLOW PREVENTORS AND THE CONTRACTOR SHALL REIMBURSE THE TOWN FOR THE MATERIALS.
13. WE WILL ALSO PREPARE A FULL WATER SYSTEM DISTRIBUTION MODEL AND SUBMIT IT TO THE TOWN FOR FUTURE REFERENCE.



- PROPOSED 8-INCH KENNEDY, PAINTED YELLOW, RIGHT CLOSE/LEFT OPEN CONNECTED TO WATER MAIN WITH A 6-INCH. DIP
- PROPOSED 3/4-INCH COPPER WATER SERVICE (TYP.) WITH SHUTOFF VALVE, TAPPED TO WATER MAIN, NOT SHOWN NOW FOR CLARITY SAKE
- PROPOSED 8-INCH DIA. WATER MAIN, DUCTILE IRON PIPE (DIP)
- PROPOSED GAS MAIN
- PROPOSED UNDERGROUND ELECTRIC MAIN WITH UNDERGROUND SERVICE EXTENSIONS TO EACH HOUSE (SERVICES NOT SHOWN FOR CLARITY SAKE); 200-AMP SERVICE
- PROPOSED TRANSFORMER AND JUNCTION BOX FOR UNDERGROUND ELECTRIC AND TELECOMMUNICATION UTILITIES
- PROPOSED UNDERGROUND TELECOMMUNICATIONS MAIN AND SERVICE EXTENSIONS TO EACH HOUSE (SERVICES NOT SHOWN FOR CLARITY SAKE); INCLUDES INTERNET, TELEVISION AND PHONE
- PROPOSED 8-INCH PVC SDR 35 SANITARY MAIN; INVERTS, LENGTH AND SLOPE DATA FORTHCOMING AND WILL BE PRESENTED IN A TABLE ON THIS SHEET, SERVICES NOT SHOWN FOR CLARITY SAKE
- PROPOSED PRECAST 4'-0" DIA. SANITARY MANHOLE WITH CAST IRON FRAME AND COVER (TYP.)
- EXISTING UNDERGROUND ELECTRIC MAIN

DATE	ISSUED/REVISIONS
01/10/2018	0 PRELIMINARY P&ID SUBMISSION
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OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE UTILITIES PLAN NO. 2

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
C-117

SITE UTILITIES LEGEND:

- PROPOSED TRANSFORMER
- PROPOSED DOMESTIC WATER GATE VALVE
- PROPOSED DOMESTIC WATER HYDRANT
- PROPOSED SANITARY MANHOLE
- PROPOSED SANITARY UTILITY
- PROPOSED DOMESTIC WATER UTILITY
- PROPOSED GAS UTILITY
- PROPOSED UNDERGROUND ELECTRIC UTILITY
- PROPOSED TELECOMMUNICATIONS UTILITY

GENERAL DRAWING NOTES:

- SERVICE LINES FOR WATER, SANITARY, GAS, ELECTRIC AND TELECOMMUNICATIONS TO THE PROPOSED STRUCTURES WILL BE ADDED ONCE THE DESIGN TABLES ARE ADDED. THIS INCLUDES THE WATER LINES TO THE PROPOSED HYDRANTS.

GENERAL SEWER SERVICE NOTES:

- UTILITY TABLES WILL BE PROVIDED WHICH WILL INCLUDE INFRASTRUCTURE TYPE, SIZE LOCATION (STATION AND OFFSET).
- NO OPEN CUTTING OF SING SING RD. IS PERMITTED. ALL UTILITY CROSSINGS MUST BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
- PVC PIPE WILL BE USED BOTH OFFSITE AND THROUGHOUT THE ENTIRE PROJECT.
- AN 8-IN. DIA. MAIN THROUGHOUT THE DEVELOPMENT IS REQUIRED AT A MINIMUM.
- SERVICE LINES TO EACH SINGLE FAMILY HOME SHALL BE 4-IN. DIA. PVC.
- A HYDRAULIC ANALYSIS FOR THE SYSTEM WILL BE PREPARED AND SUBMITTED TO CHEMUNG COUNTY AND THE TOWN FOR FUTURE REFERENCE.
- PER THE "WILL-SERVE" LETTER FROM THE CHEMUNG COUNTY SEWER DISTRICTS DATED MARCH 23, 2018, THE FOLLOWING IS REQUIRED:
 - A SEWER DISTRICT EXTENSION TO THE PROJECT AREA.
 - A DISTRICT EXTENSION FEASIBILITY STUDY.
 - FACILITIES PROPOSED OUTSIDE OF THE SUBJECT PROPERTY REQUIRE SEWER USE AND MAINTENANCE EASEMENTS.
 - A CHEMUNG COUNTY HIGHWAY PERMIT FOR UTILITIES WITHIN THE SING SING ROAD RIGHT OF WAY.
 - DESIGN AND CONSTRUCTION STANDARDS ARE IN ACCORDANCE WITH THE "RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES" (10-STATE STANDARDS)

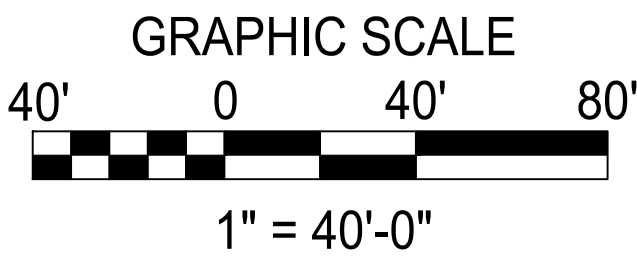
GENERAL WATER SERVICE NOTES:

- UTILITY TABLES WILL BE PROVIDED WHICH WILL INCLUDE INFRASTRUCTURE TYPE, SIZE LOCATION (STATION AND OFFSET).
- NO OPEN CUTTING OF SING SING RD. IS PERMITTED. ALL UTILITY CROSSINGS MUST BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
- A LOOP IS REQUIRED AND SHOWN ON THESE PLANS AT THE SOUTHWEST CORNER OF THE SITE; THIS INCLUDES TWO TAPS AT THE ROAD MAIN (PRIMARY AND SECONDARY LOOP TAP).
- HDPE PIPE IS SATISFACTORY UNDER SING SING RD. TO THE TAP AND THEN MUST TRANSITION TO DUCTILE IRON PIPE THROUGH THE ENTIRE PROJECT.
- AN 8-IN. DIA. MAIN THROUGHOUT THE DEVELOPMENT IS REQUIRED AT A MINIMUM.
- SERVICE LINES TO EACH SINGLE FAMILY HOME SHALL BE 3/4-IN. DIA. COPPER.
- A 3-VALVE CLUSTER IS REQUIRED UNDER SING SING RD. AT THE LOCATION OF THE TAP.
- GATE VALVES ARE REQUIRED AT EVERY INTERSECTION (RIGHT CLOSE/LEFT OPEN).
- HYDRANTS ARE REQUIRED TO BE SPACED EVERY 500-FEET.
- HYDRANTS MUST MEET THE FOLLOWING:
 - K81D KENNEDY HYDRANTS
 - PAINTED YELLOW
 - RIGHT CLOSE/LEFT OPEN
 - 6-IN. DIA. DIP SERVICE
- THE MULTI-FAMILY AND COMMERCIAL PROPERTIES WILL MOST LIKELY BE SPRINKLED AND THE FIRE FLOWS FOR THOSE PROPERTIES WILL BE CALCULATED WHEN SITE PLAN REVIEW FOR THOSE PHASES IS UNDERWAY.
- THE TOWN WILL SUPPLY THE METER, SERVICE VALVES AND BACKFLOW PREVENTORS AND THE CONTRACTOR SHALL REIMBURSE THE TOWN FOR THE MATERIALS.
- WE WILL ALSO PREPARE A FULL WATER SYSTEM DISTRIBUTION MODEL AND SUBMIT IT TO THE TOWN FOR FUTURE REFERENCE.

- PROPOSED HYDRANT, K81D KENNEDY, PAINTED YELLOW, RIGHT CLOSE/LEFT OPEN CONNECTED TO WATER MAIN WITH A 6-INCH. DIP
- PROPOSED 3/4-INCH COPPER WATER SERVICE (TYP.) WITH SHUTOFF VALVE, TAPPED TO WATER MAIN, NOT SHOWN NOW FOR CLARITY SAKE
- PROPOSED 8-INCH DIA. WATER MAIN, DUCTILE IRON PIPE (DIP)
- PROPOSED GAS MAIN
- PROPOSED UNDERGROUND ELECTRIC MAIN WITH UNDERGROUND SERVICE EXTENSIONS TO EACH HOUSE (SERVICES NOT SHOWN FOR CLARITY SAKE); 200-AMP SERVICE
- PROPOSED TRANSFORMER AND JUNCTION BOX FOR UNDERGROUND ELECTRIC AND TELECOMMUNICATION UTILITIES
- PROPOSED UNDERGROUND TELECOMMUNICATIONS MAIN AND SERVICE EXTENSIONS TO EACH HOUSE (SERVICES NOT SHOWN FOR CLARITY SAKE); INCLUDES INTERNET, TELEVISION AND PHONE
- PROPOSED 8-INCH PVC SDR 35 SANITARY MAIN: INVERTS, LENGTH AND SLOPE DATA FORTHCOMING AND WILL BE PRESENTED IN A TABLE ON THIS SHEET, SERVICES NOT SHOWN FOR CLARITY SAKE
- PROPOSED PRECAST 4'-0" DIA. SANITARY MANHOLE WITH CAST IRON FRAME AND COVER (TYP.)

SHEET C-117 SITE UTILITIES PLAN NO. 2

SHEET C-119 SITE UTILITIES PLAN NO. 4



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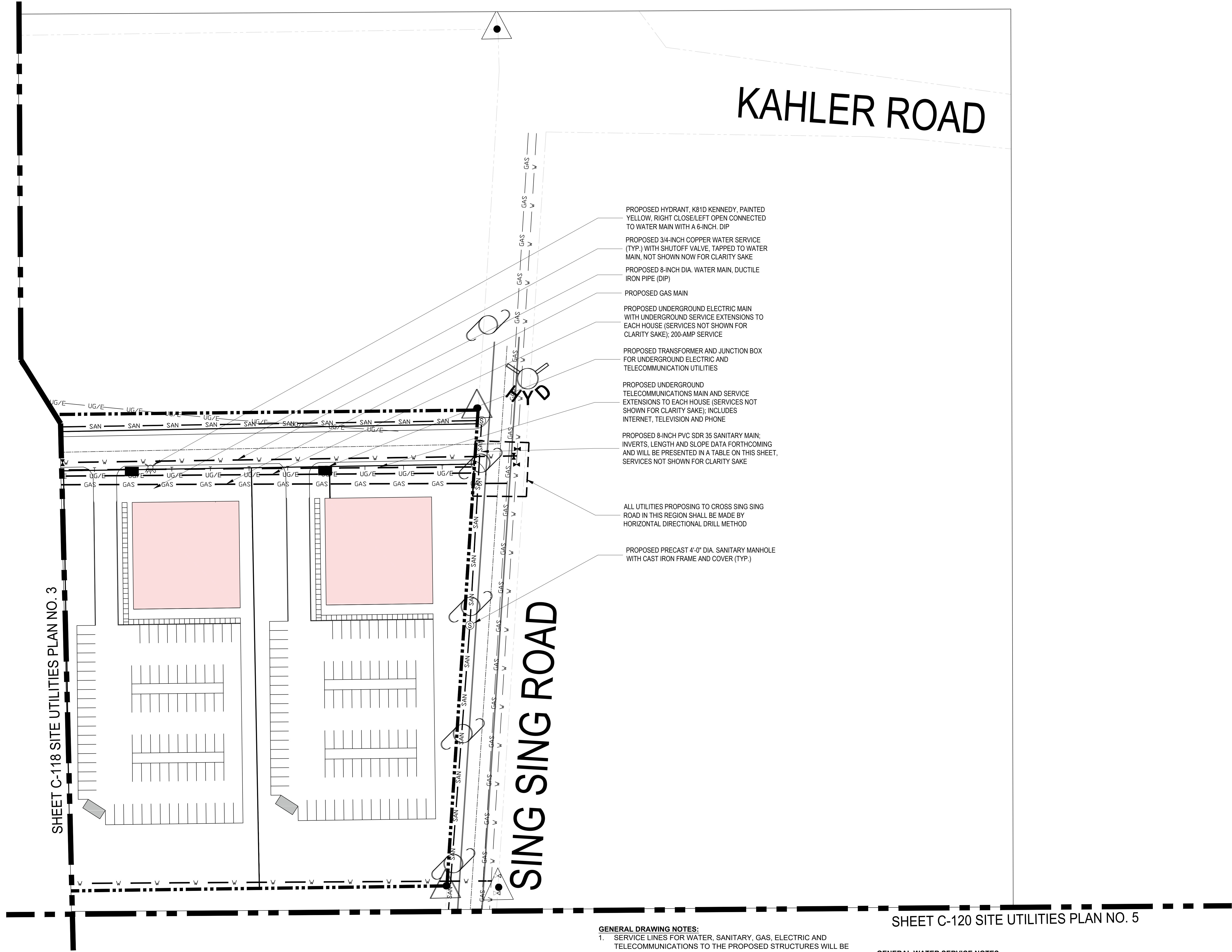
PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE UTILITIES PLAN NO. 3

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
C-118

SITE UTILITIES LEGEND:

-  PROPOSED TRANSFORMER
-  PROPOSED DOMESTIC WATER GATE VALVE
-  PROPOSED DOMESTIC WATER HYDRANT
-  PROPOSED SANITARY MANHOLE
-  PROPOSED SANITARY UTILITY
-  PROPOSED DOMESTIC WATER UTILITY
-  PROPOSED GAS UTILITY
-  PROPOSED UNDERGROUND ELECTRIC UTILITY
-  PROPOSED TELECOMMUNICATIONS UTILITY



GENERAL DRAWING NOTES:

- SERVICE LINES FOR WATER, SANITARY, GAS, ELECTRIC AND TELECOMMUNICATIONS TO THE PROPOSED STRUCTURES WILL BE ADDED ONCE THE DESIGN TABLES ARE ADDED. THIS INCLUDES THE WATER LINES TO THE PROPOSED HYDRANTS.

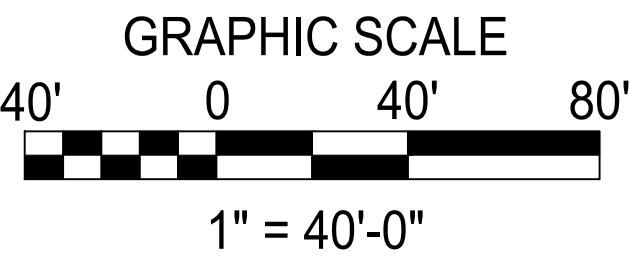
GENERAL SEWER SERVICE NOTES:

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- NO OPEN CUTTING OF SING SING RD. IS PERMITTED. ALL UTILITY CROSSINGS MUST BE INSTALLED BY HORIZONTAL DIRECTIONAL DRILLING.
- PVC PIPE WILL BE USED BOTH OFFSITE AND THROUGHOUT THE ENTIRE PROJECT.
- AN 8-IN. DIA. MAIN THROUGHOUT THE DEVELOPMENT IS REQUIRED AT A MINIMUM.
- SERVICE LINES TO EACH SINGLE FAMILY HOME SHALL BE 4-IN. DIA. PVC.
- A HYDRAULIC ANALYSIS FOR THE SYSTEM WILL BE PREPARED AND SUBMITTED TO CHEMUNG COUNTY AND THE TOWN FOR FUTURE REFERENCE.
- PER THE "WILL-SERVE" LETTER FROM THE CHEMUNG COUNTY SEWER DISTRICTS DATED MARCH 23, 2018, THE FOLLOWING IS REQUIRED:
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SHEET C-120 SITE UTILITIES PLAN NO. 5

GENERAL WATER SERVICE NOTES:

- UTILITY TABLES WILL BE PROVIDED WHICH WILL INCLUDE INFRASTRUCTURE TYPE, SIZE LOCATION (STATION AND OFFSET).
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- GATE VALVES ARE REQUIRED AT EVERY INTERSECTION (RIGHT CLOSE/LEFT OPEN).
- HYDRANTS ARE REQUIRED TO BE SPACED EVERY 500-FEET.
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 - PAINTED YELLOW
 - RIGHT CLOSE/LEFT OPEN
 - 6-IN. DIA. DIP SERVICE
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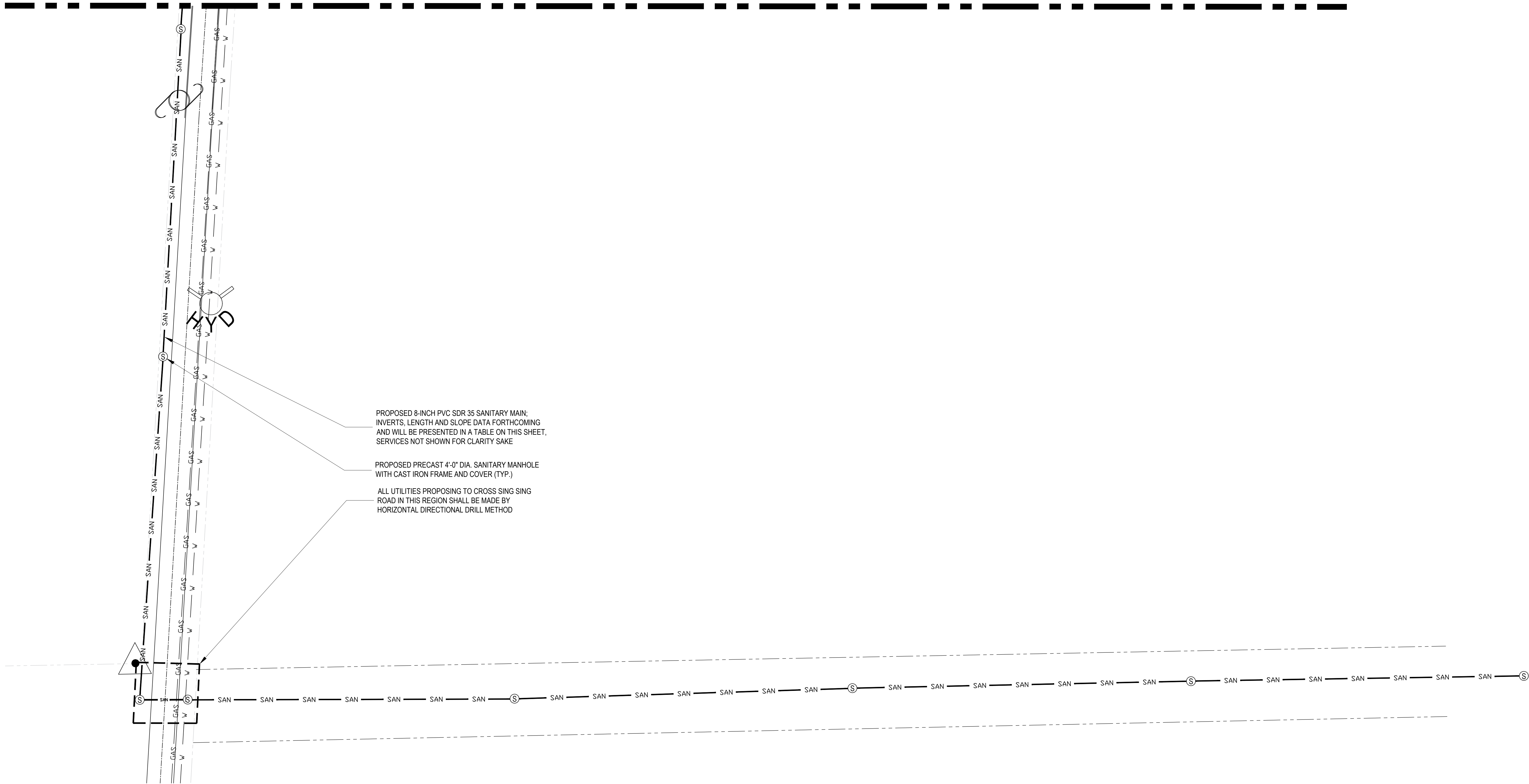
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OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE UTILITIES PLAN NO. 4

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
C-119



SITE UTILITIES LEGEND:	
	PROPOSED TRANSFORMER
	PROPOSED DOMESTIC WATER GATE VALVE
	PROPOSED DOMESTIC WATER HYDRANT
	PROPOSED SANITARY MANHOLE
	PROPOSED SANITARY UTILITY
	PROPOSED DOMESTIC WATER UTILITY
	PROPOSED GAS UTILITY
	PROPOSED UNDERGROUND ELECTRIC UTILITY
	PROPOSED TELECOMMUNICATIONS UTILITY

GENERAL DRAWING NOTES:

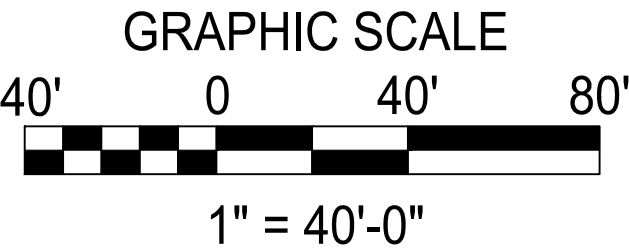
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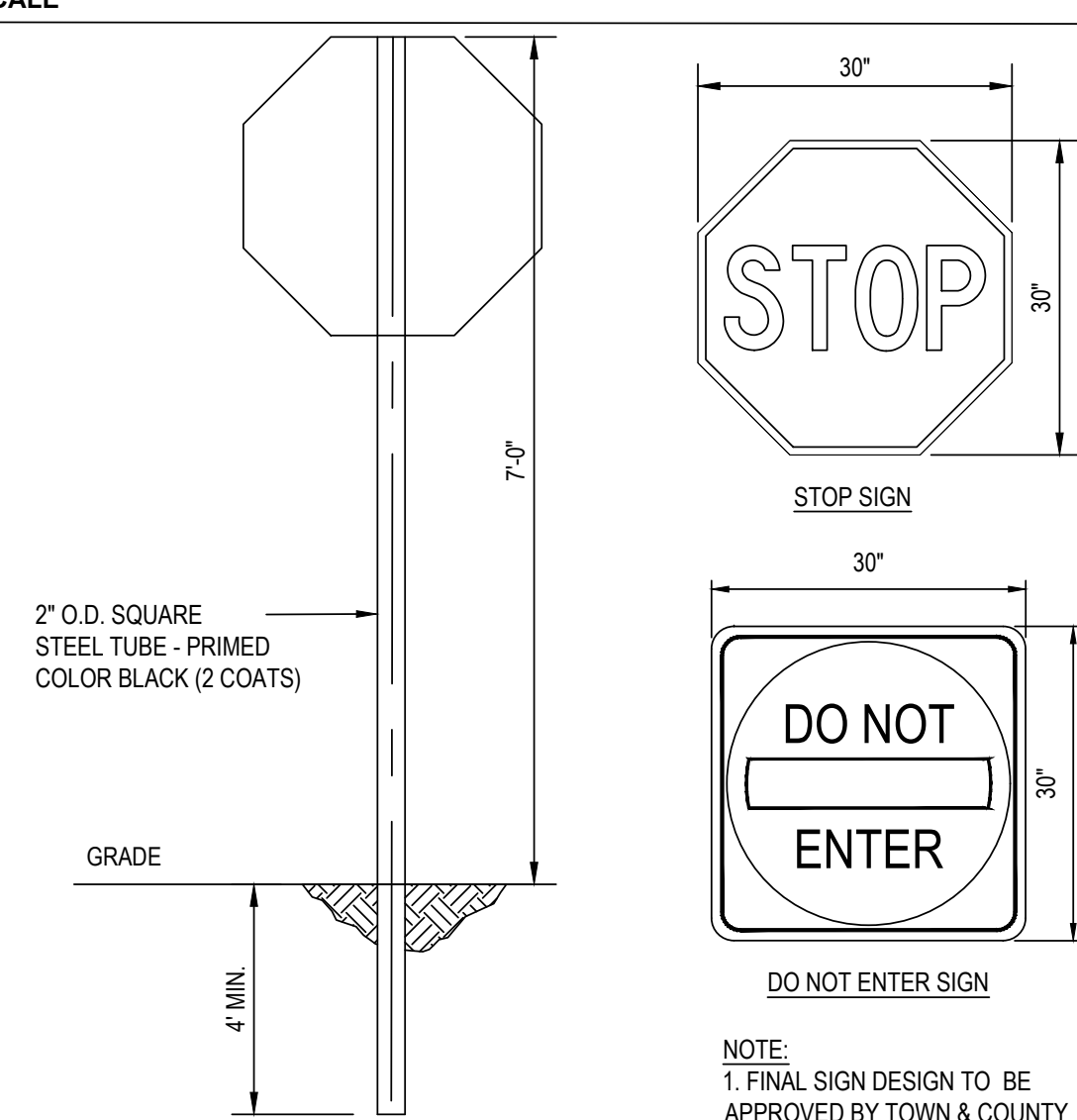
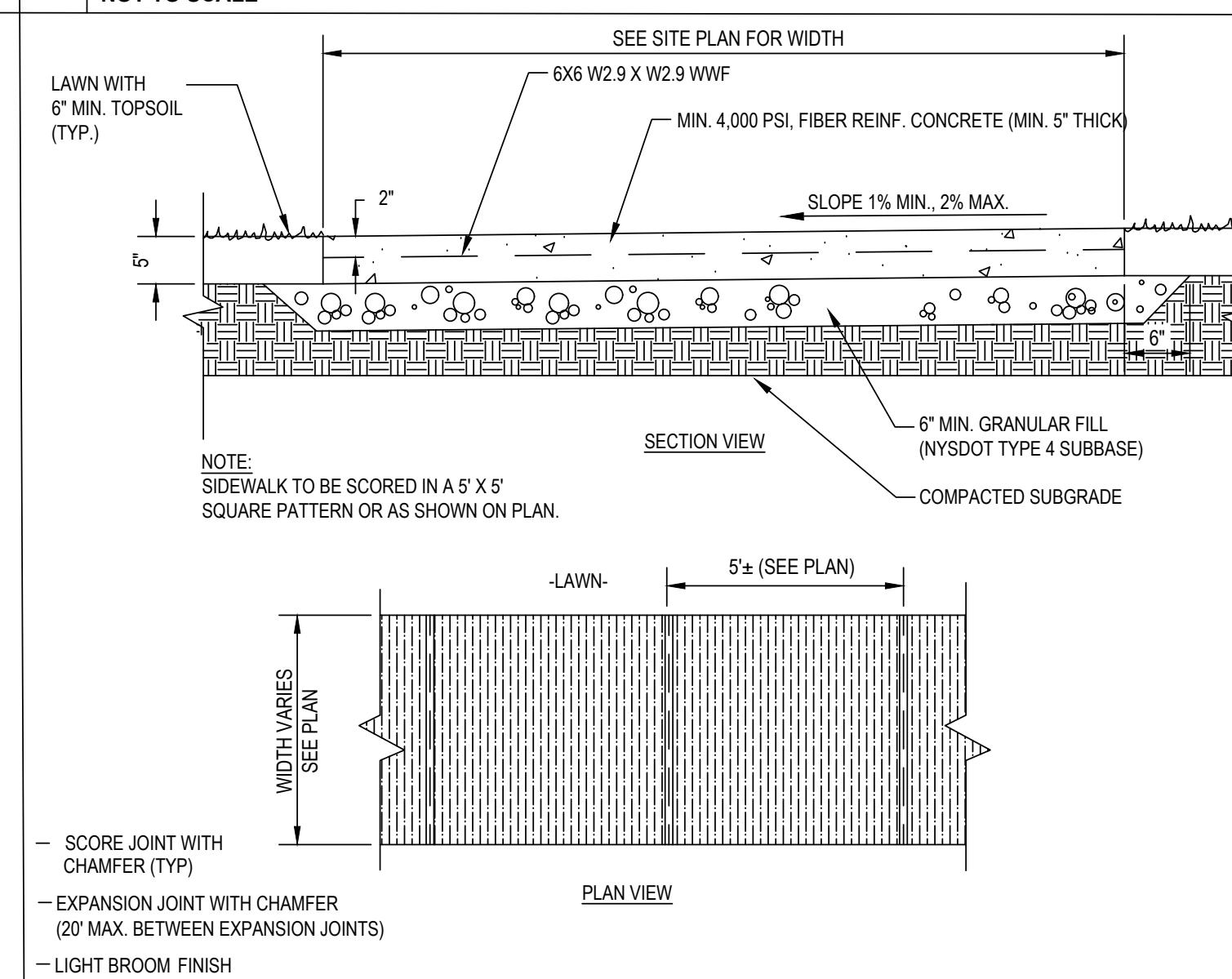
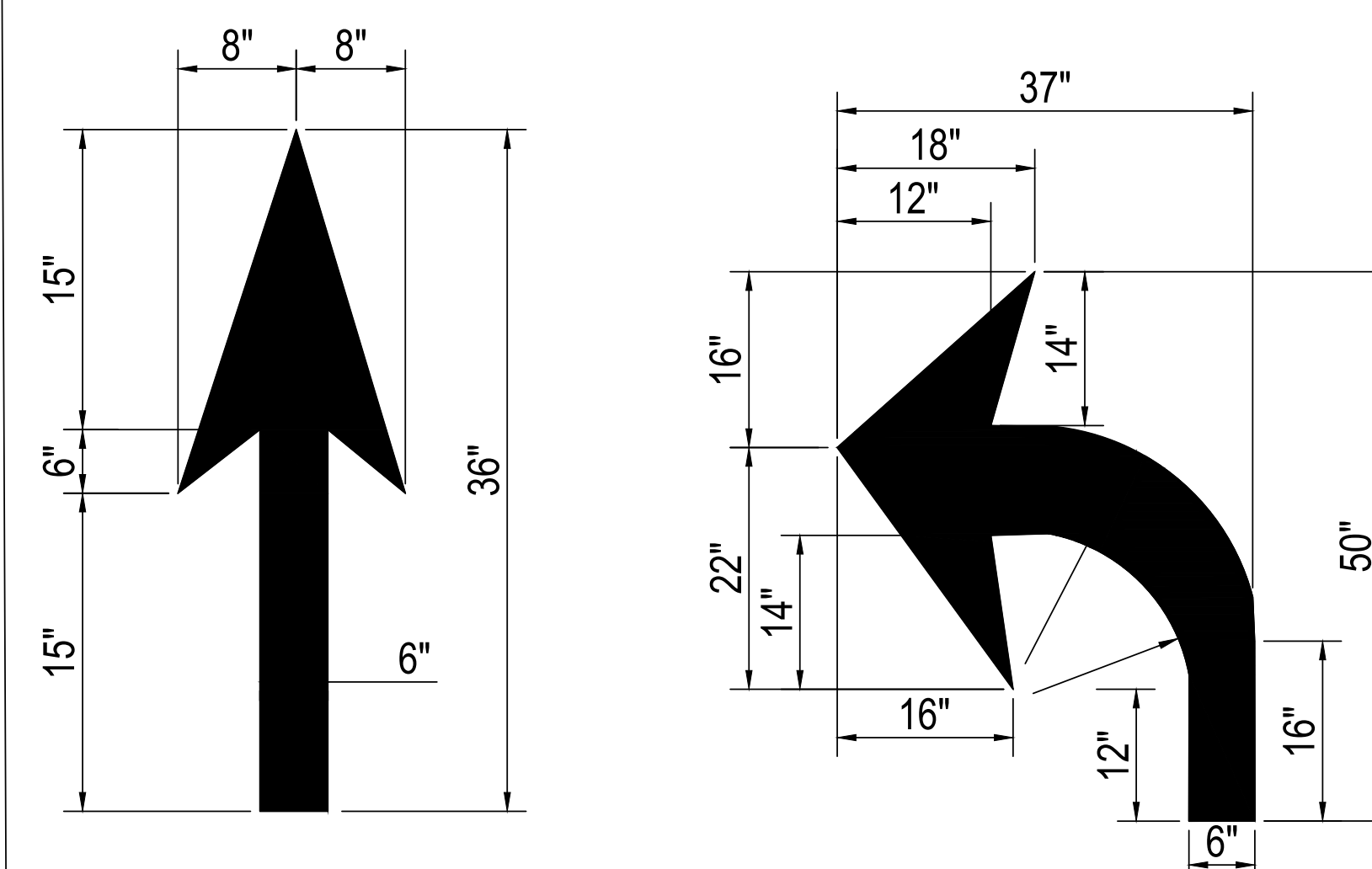
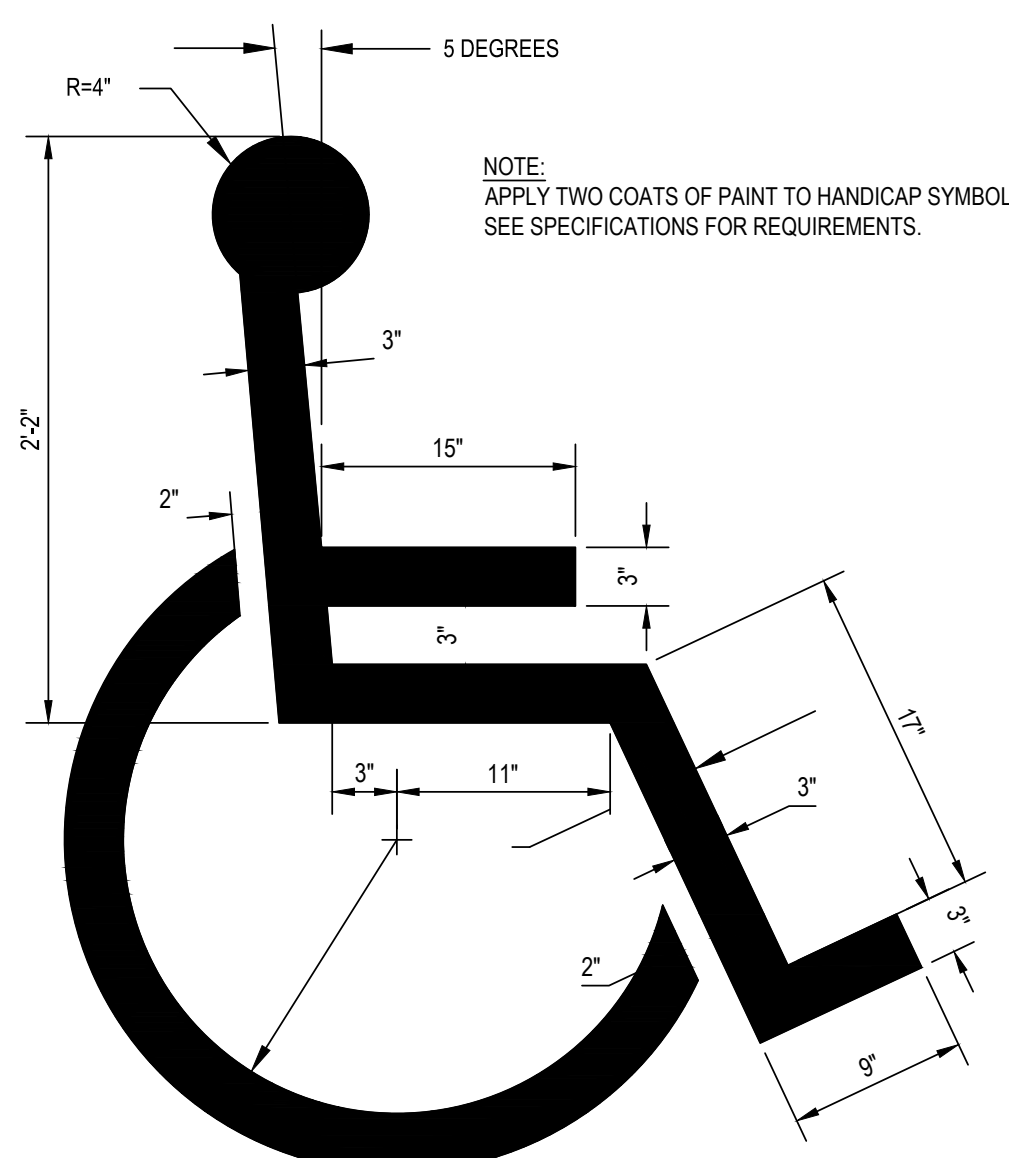
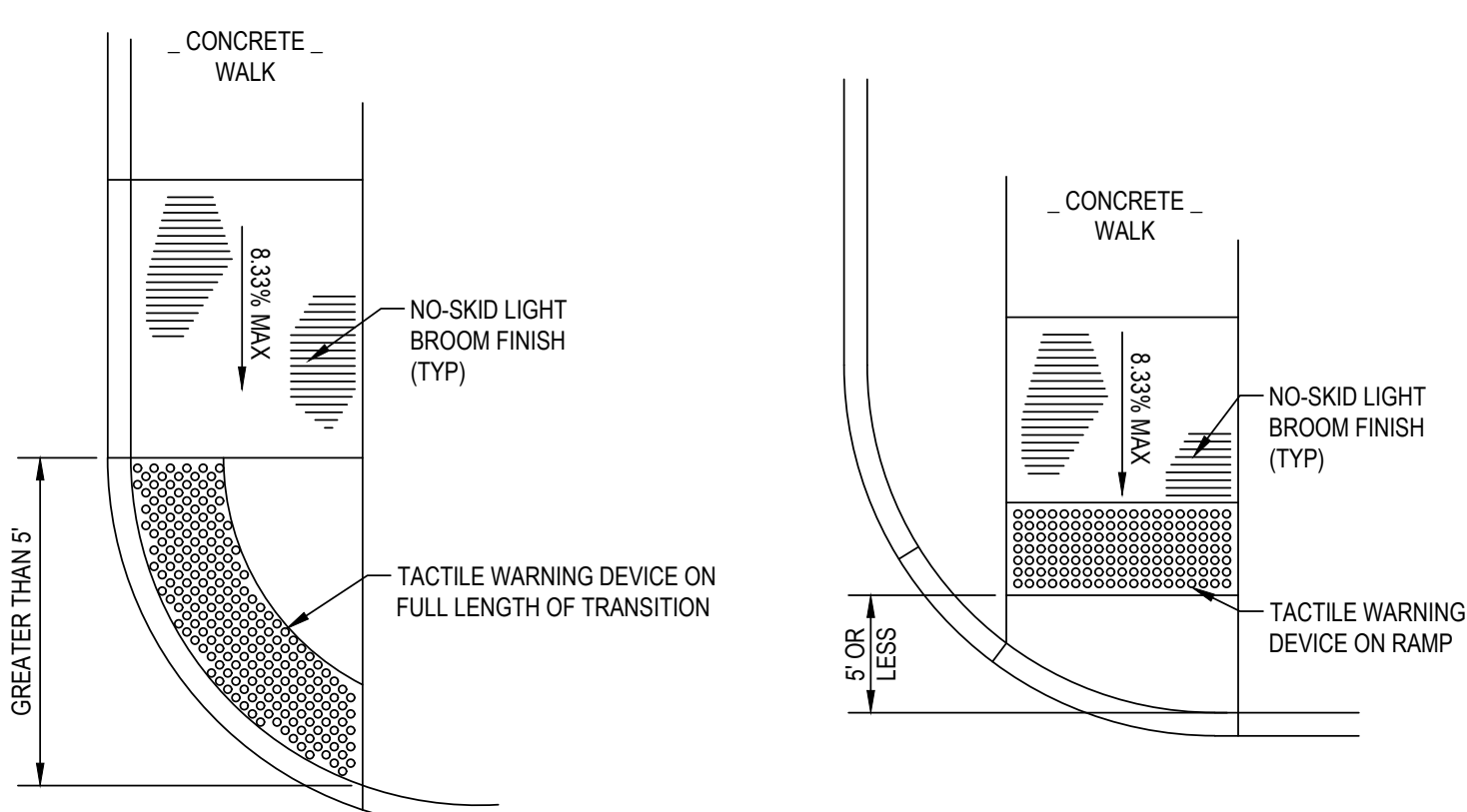
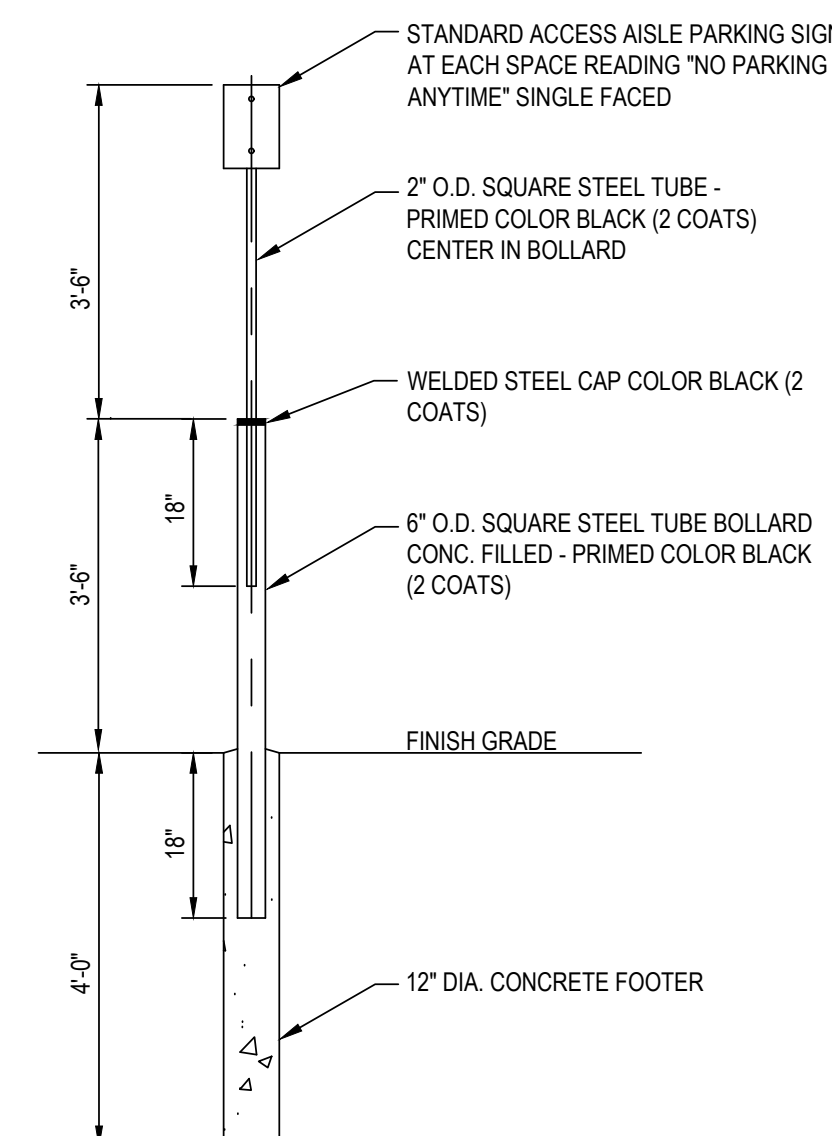
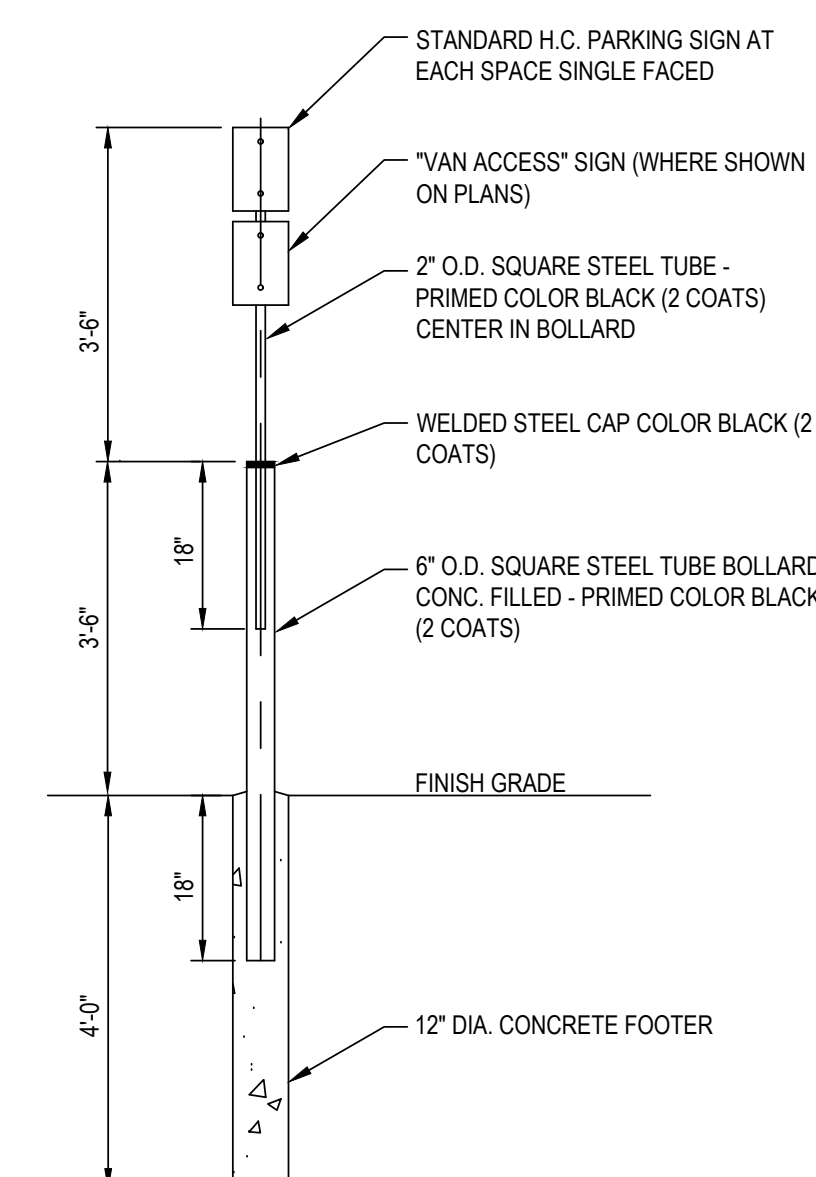
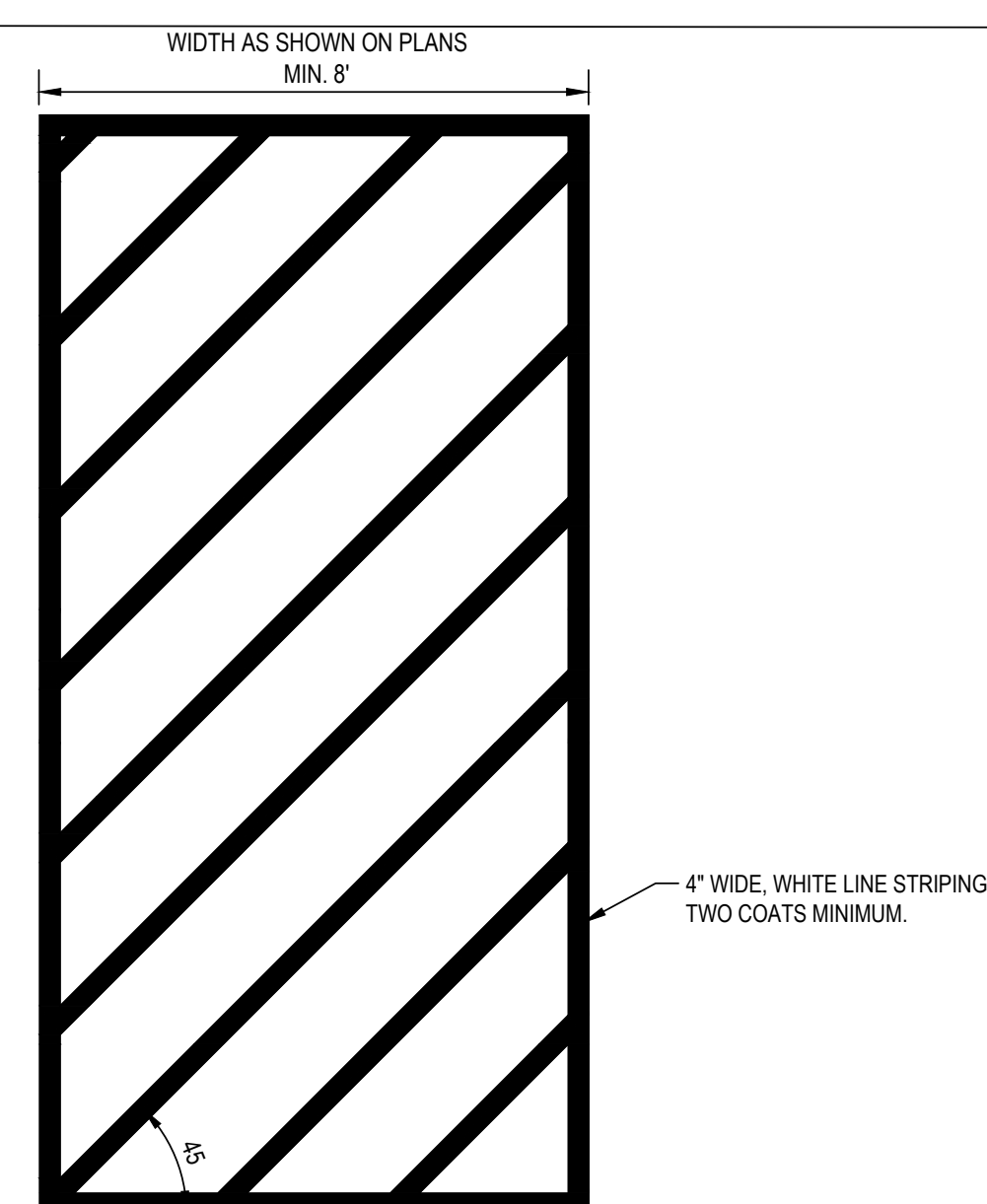
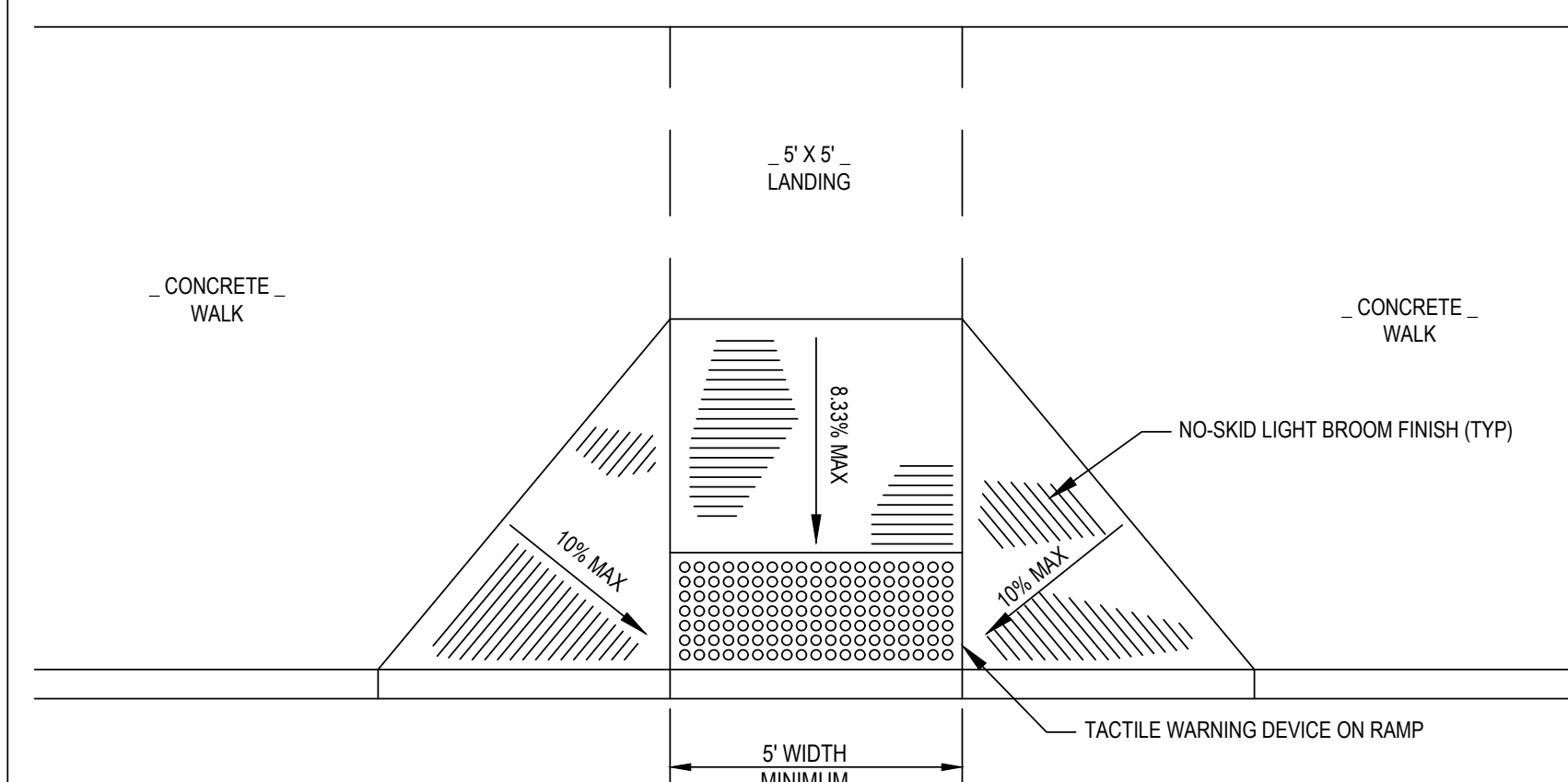
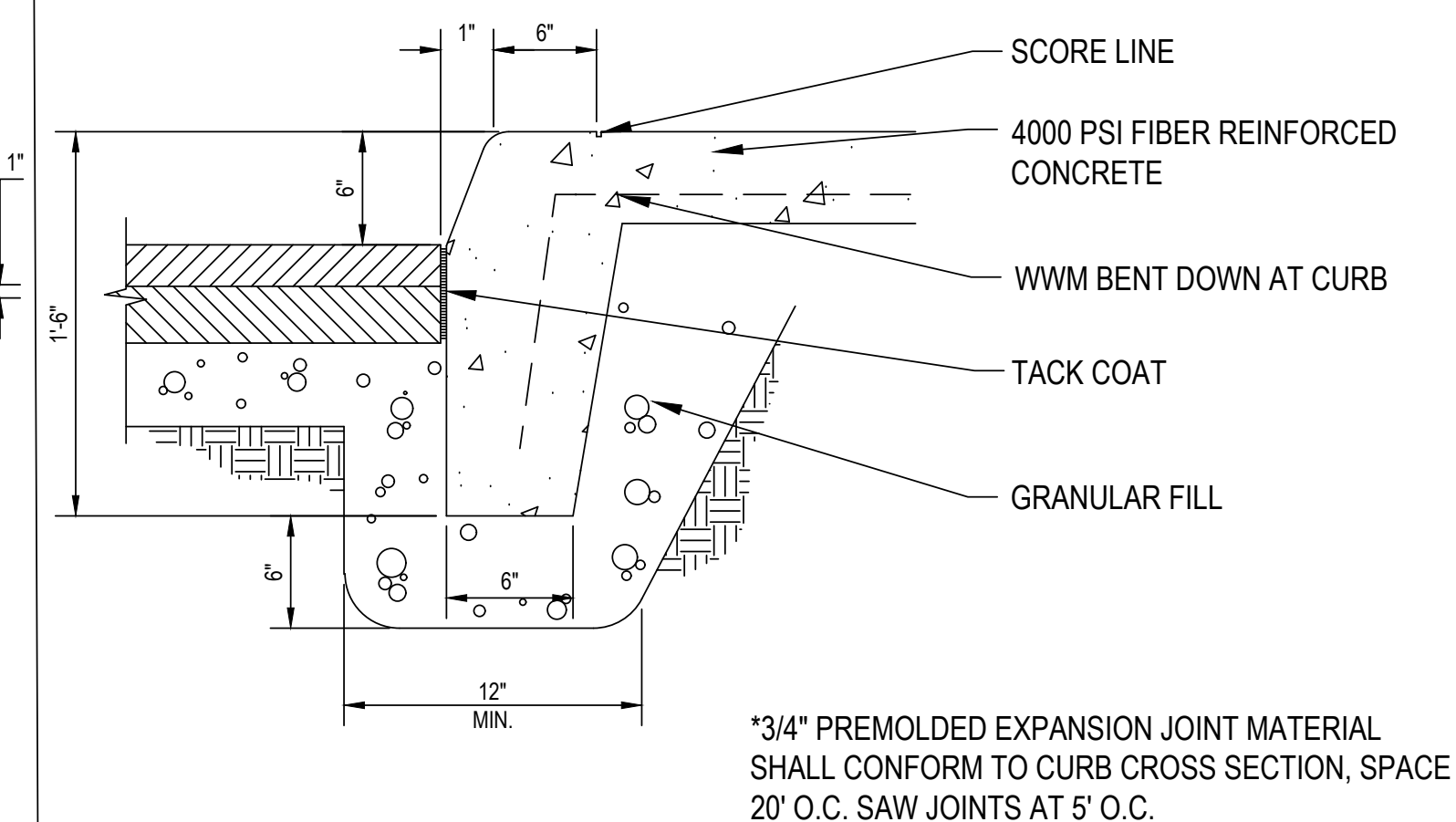
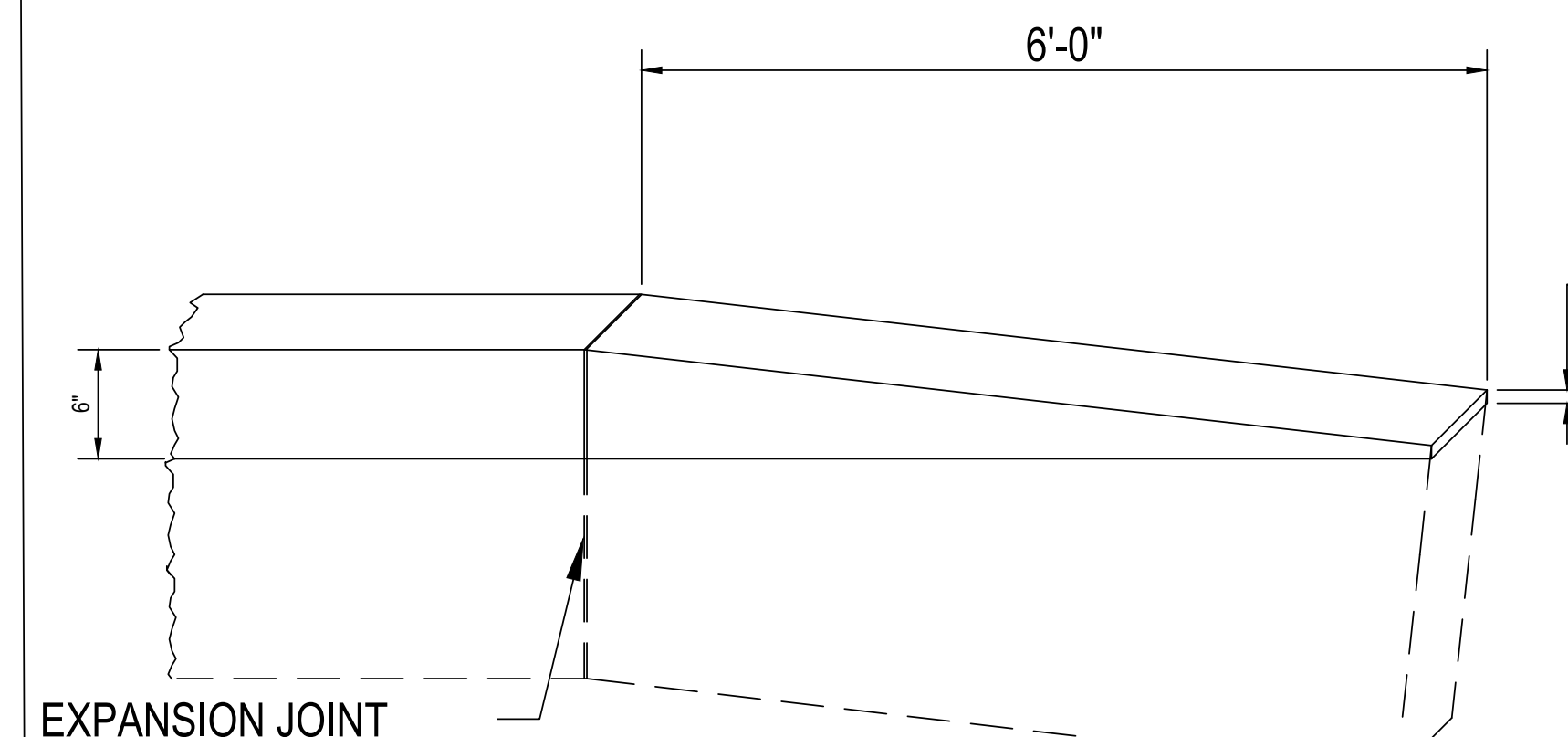
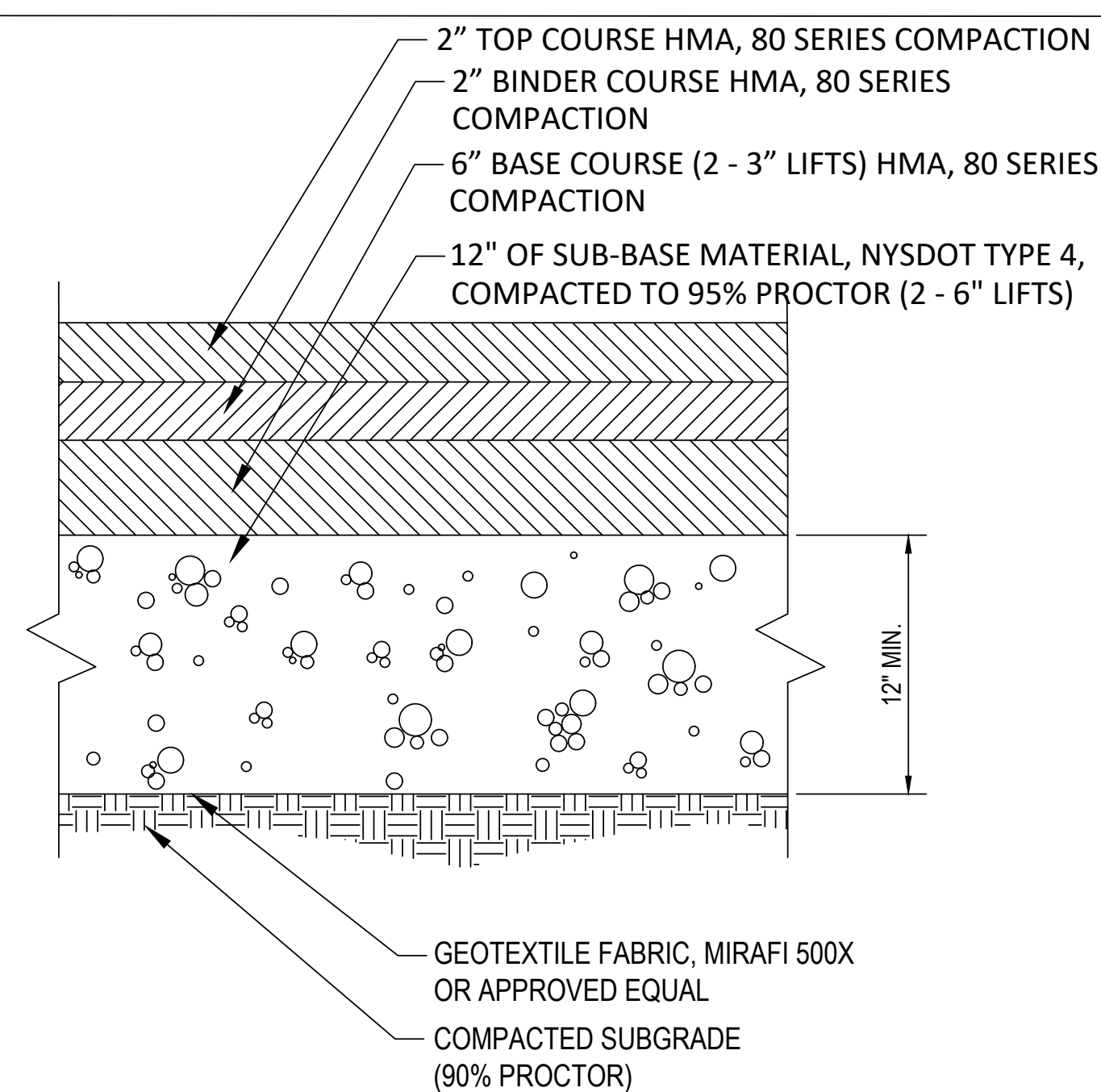
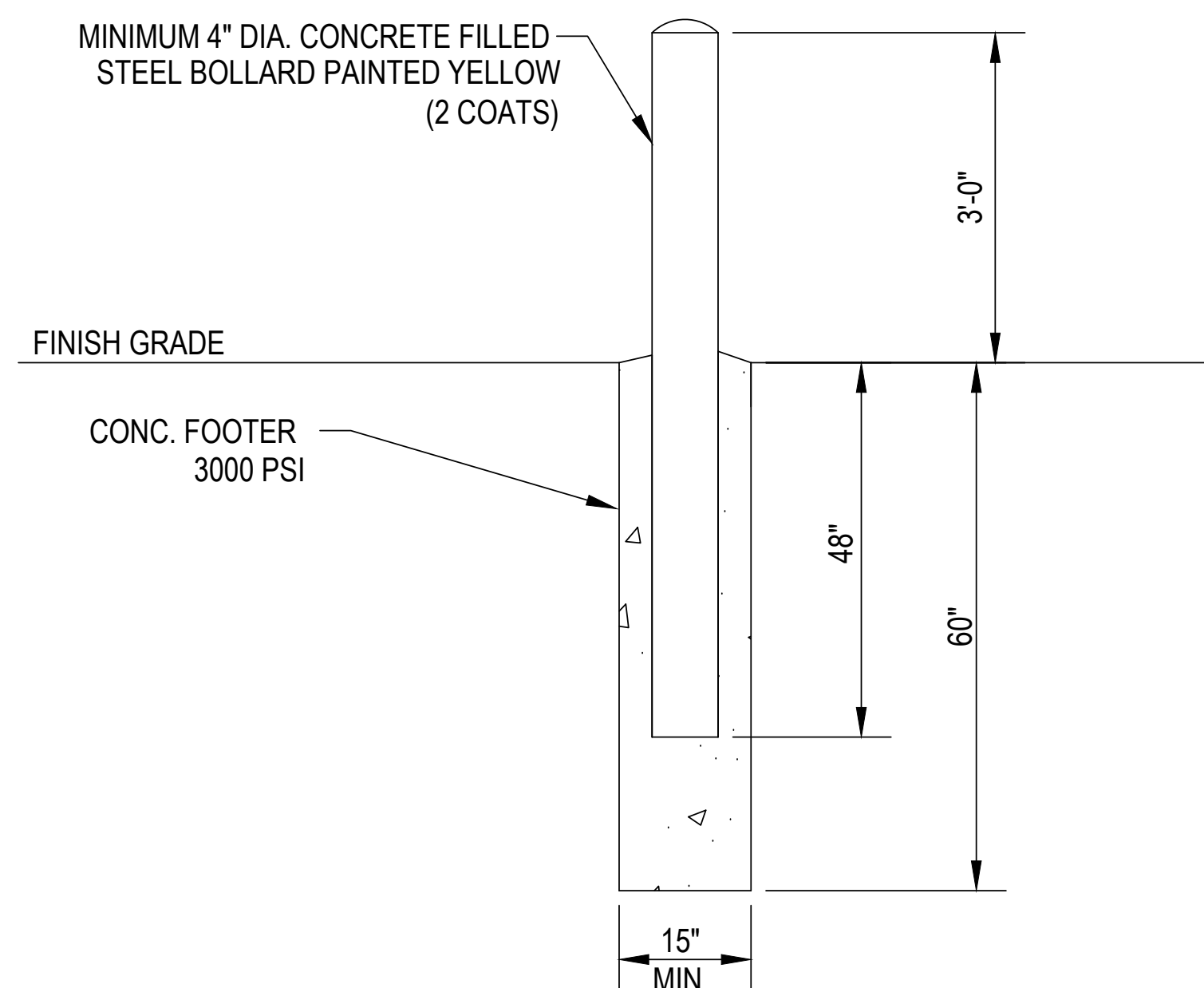
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J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE UTILITIES PLAN NO. 5

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
C-120



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15	RESERVED NOT TO SCALE
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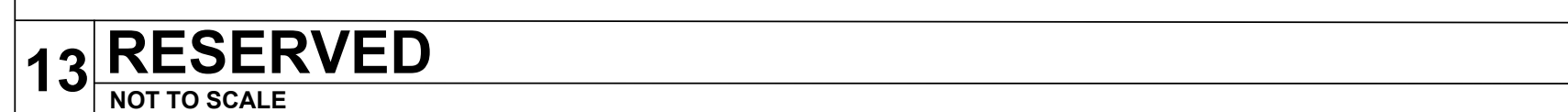
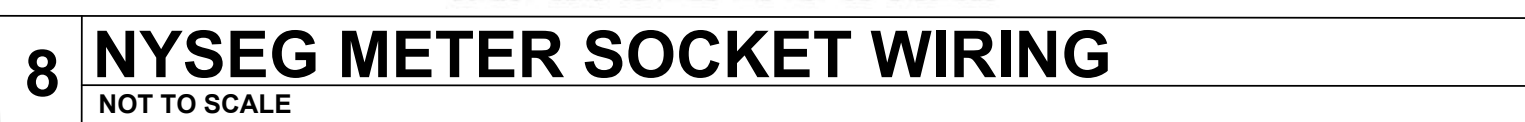
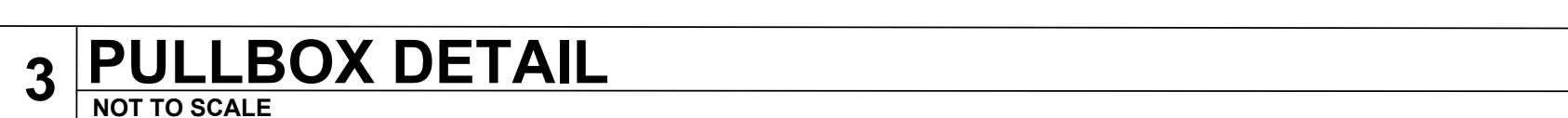
J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
GENERAL SITE DETAIL S

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
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PROJECT NO.
17-024
DRAWING NO.

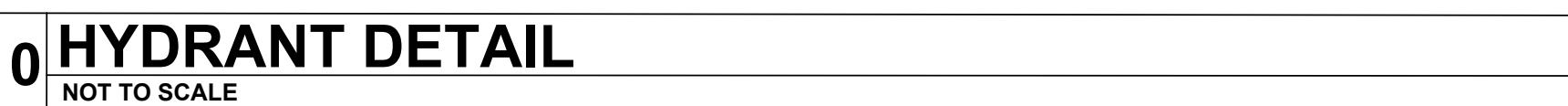
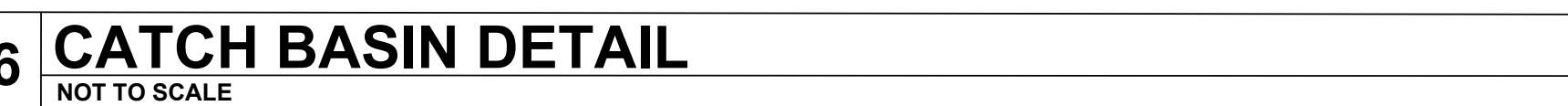
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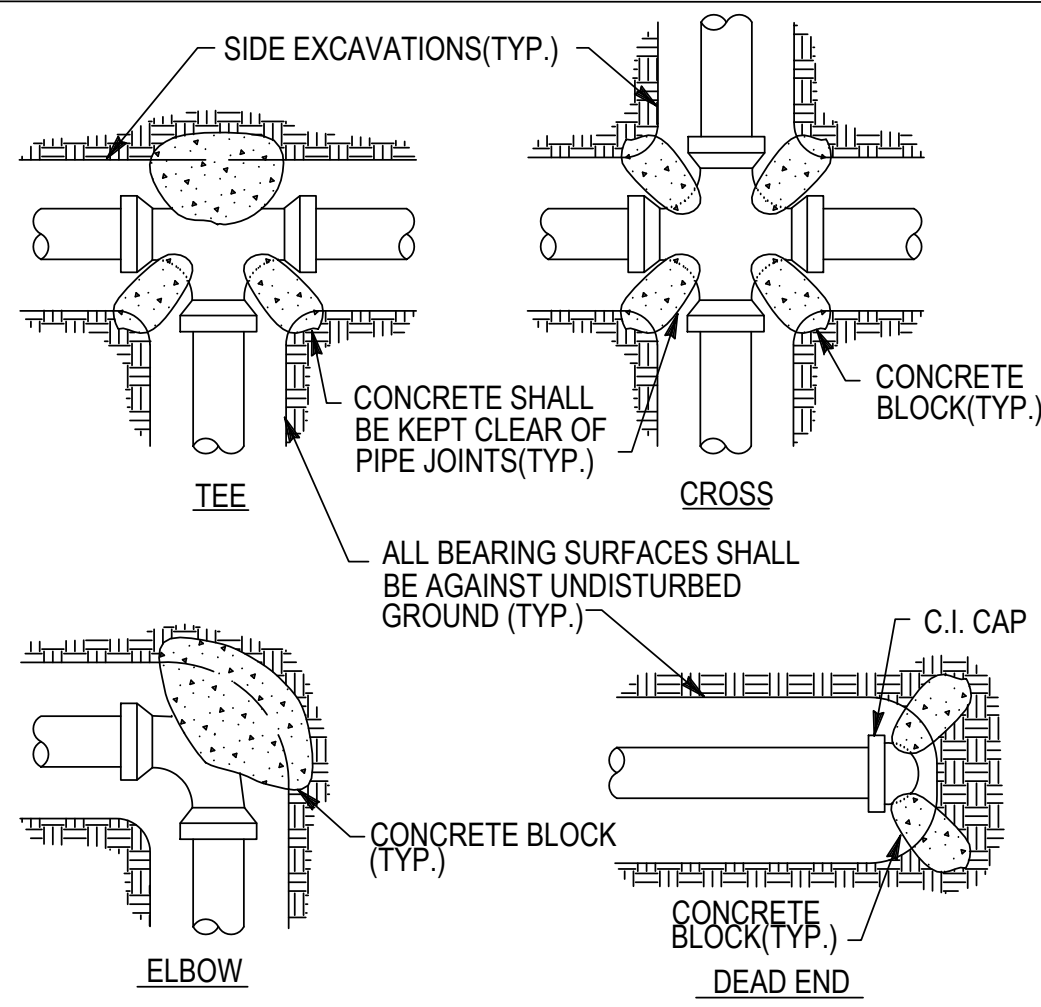


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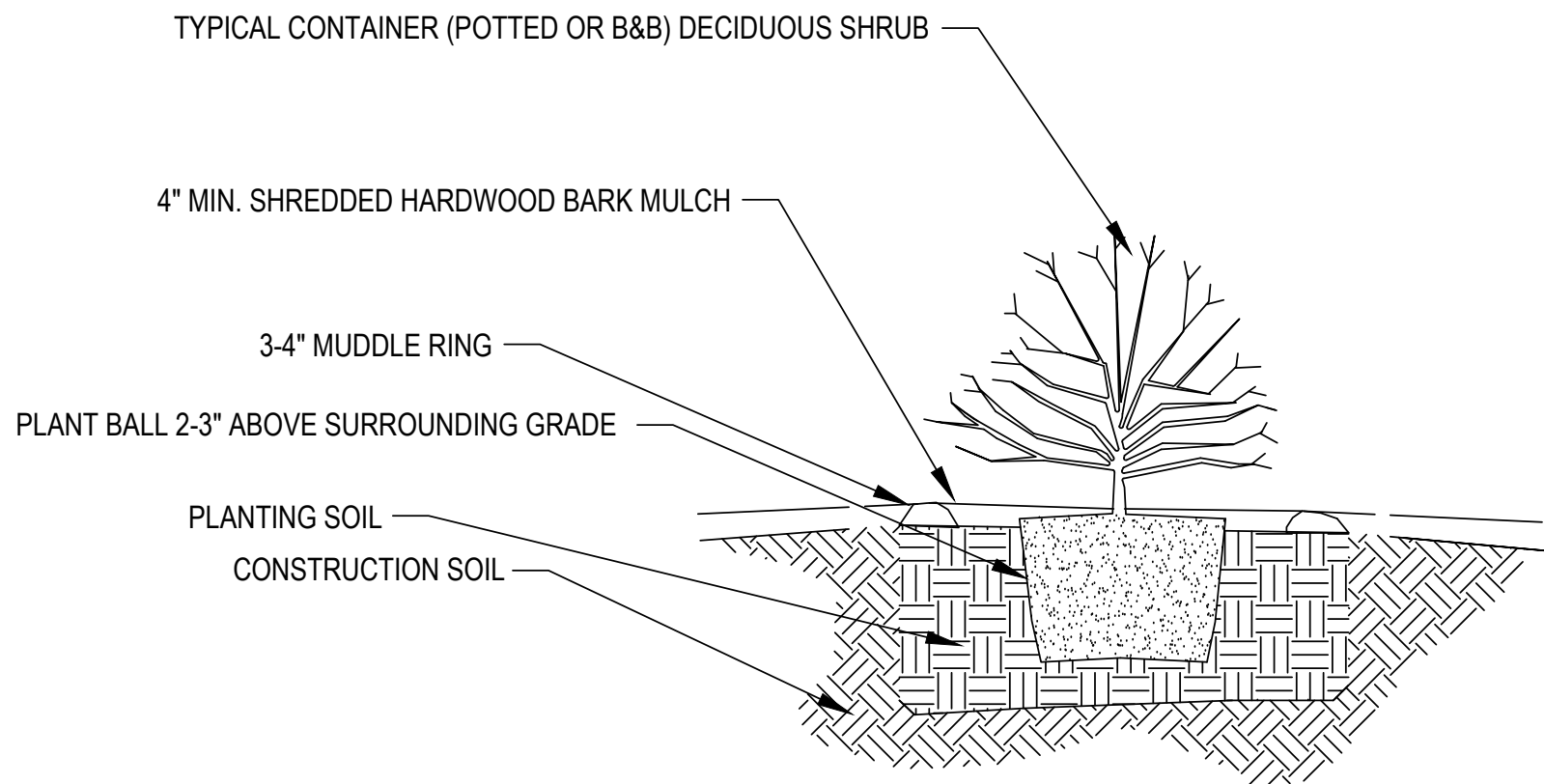
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PIPE SIZE	TEES & DEADENDS	90° ELBOWS	45° ELBOW CROSSES IN DIRECTION OF FLOW	22-1/2° ELBOWS
6"	4.0	5.5	3.0	2.0
8"	7.0	9.5	5.0	3.0
10"	9.5	13.5	7.0	4.0
12"	13.5	19.0	10.0	5.0
14"	18.0	23.5	14.0	7.0
16"	23.0	33.0	18.0	9.0

1 THRUST BLOCK INSTALLATION DETAIL

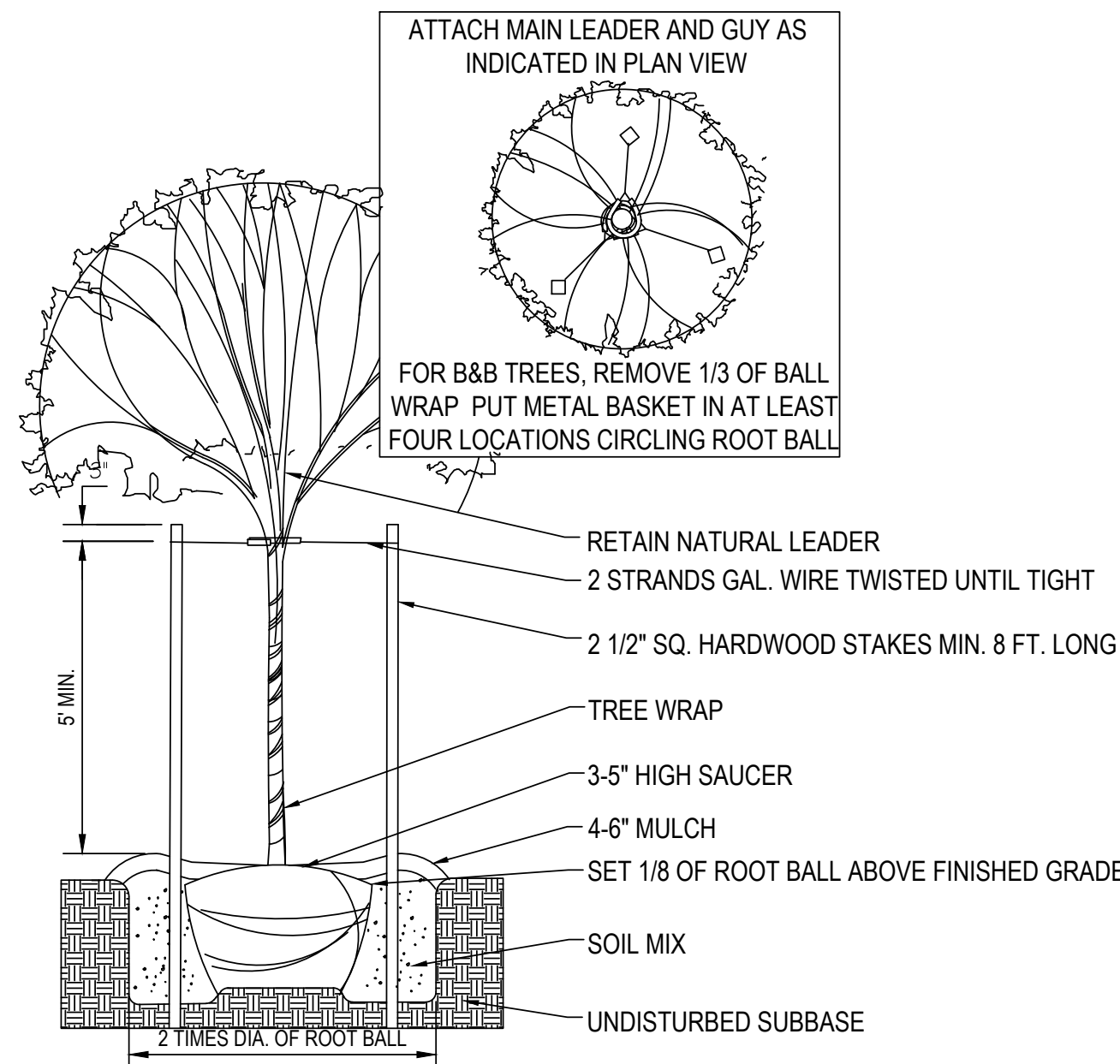
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NOTE: PRUNE SHRUB AS RECOMMENDED BY GROWER ONLY AFTER THE PLANT HAS BEEN WATERED IN TO THE PLANTING SOIL.

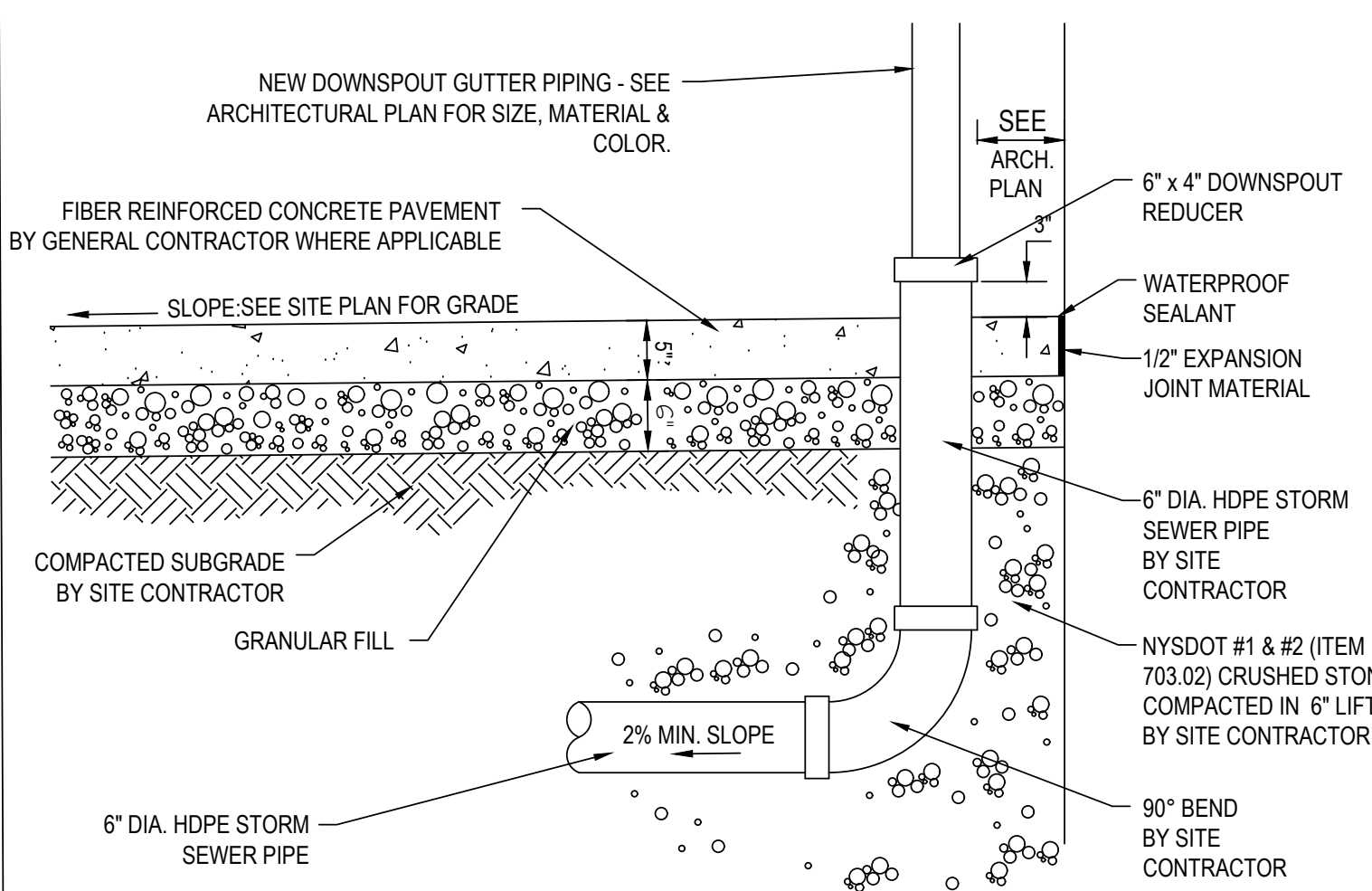
2 DECIDUOUS SHRUB PLANTING DETAIL

NOT TO SCALE



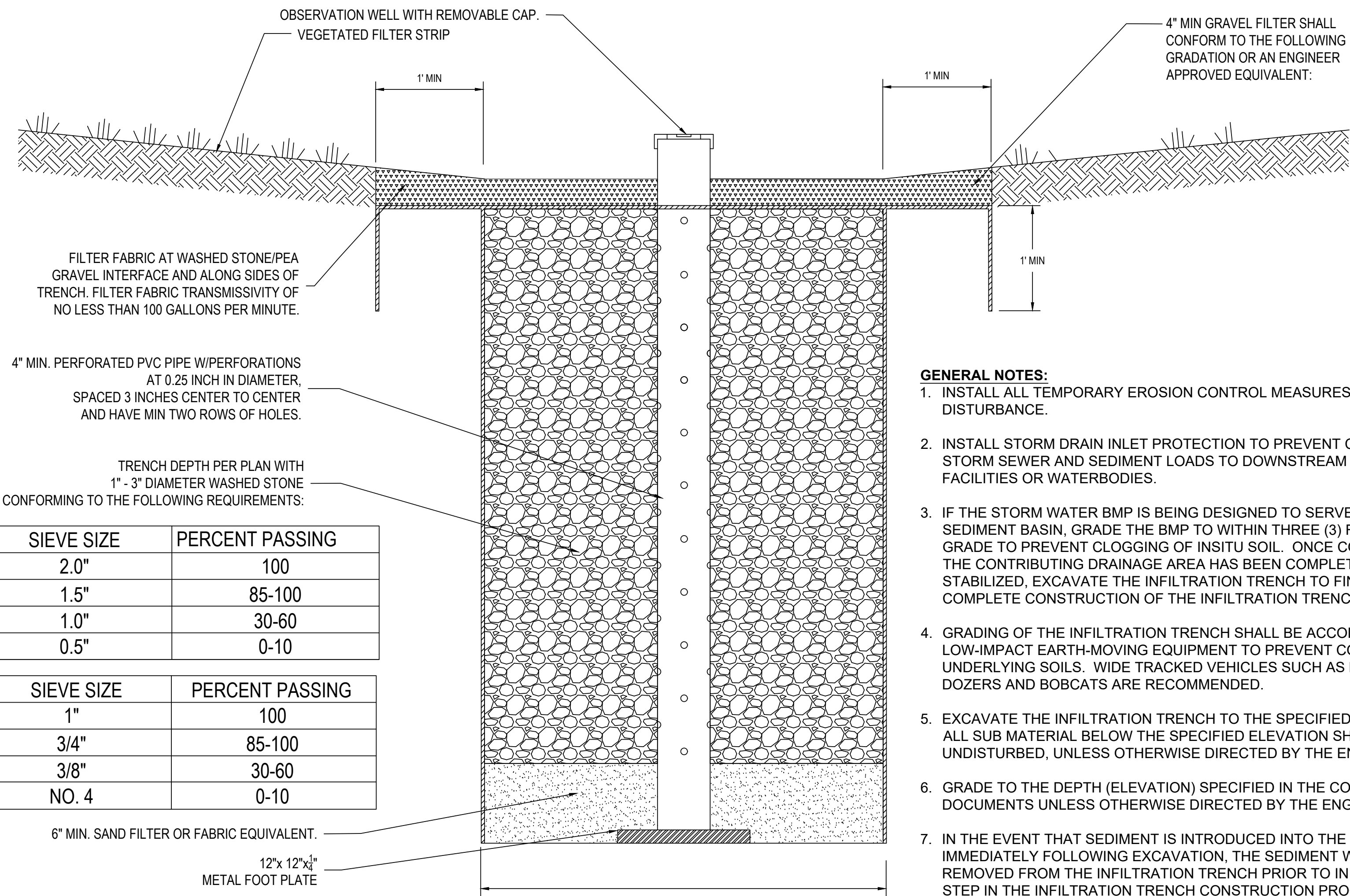
3 DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE



4 ROOF DRAIN CLEANOUT DETAIL

NOT TO SCALE



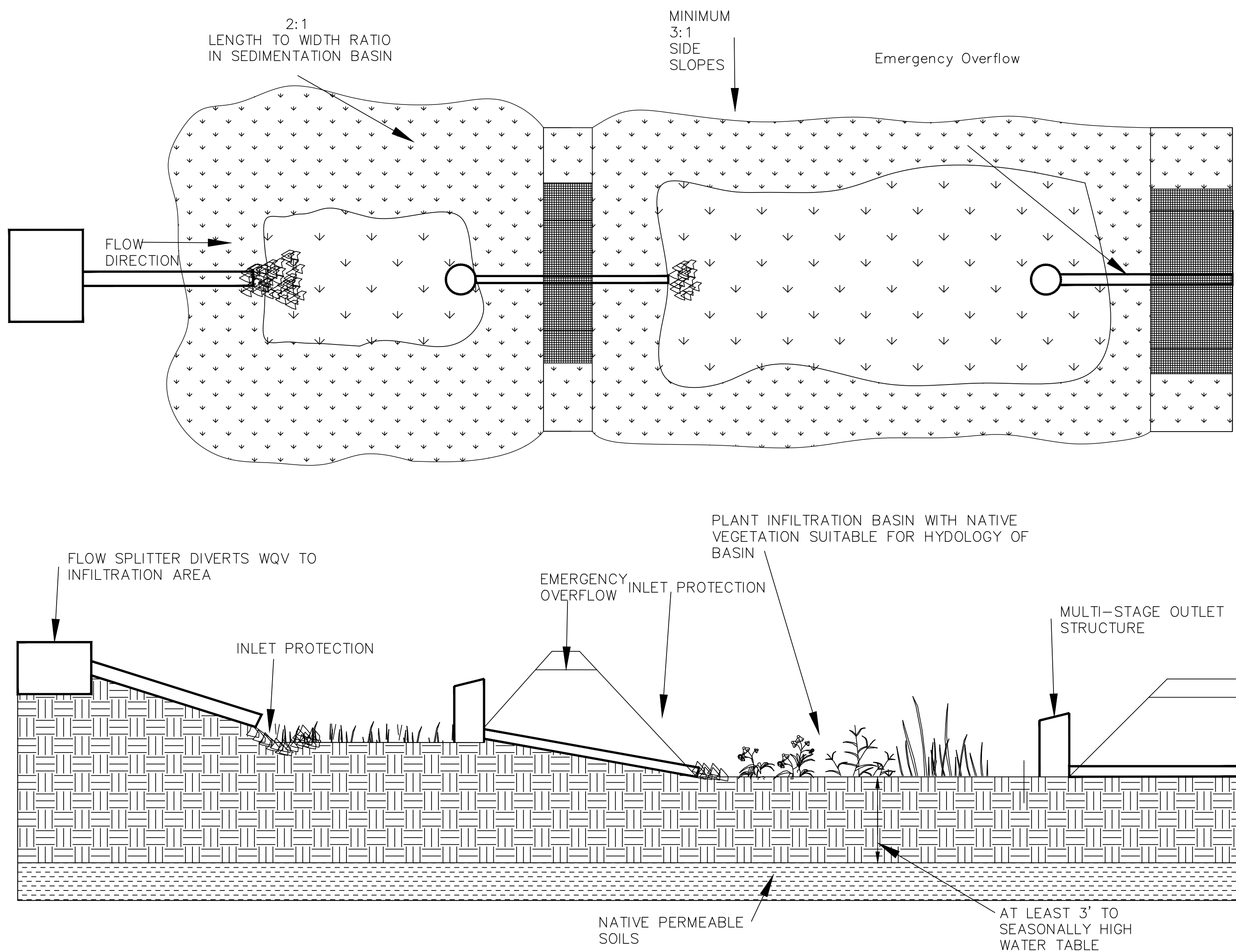
SIEVE SIZE	PERCENT PASSING
2.0"	100
1.5"	85-100
1.0"	30-60
0.5"	0-10

SIEVE SIZE	PERCENT PASSING
1"	100
3/4"	85-100
3/8"	30-60
NO. 4	0-10

- GENERAL NOTES:**
- INSTALL ALL TEMPORARY EROSION CONTROL MEASURES PRIOR TO SITE DISTURBANCE.
 - INSTALL STORM DRAIN INLET PROTECTION TO PREVENT CLOGGING OF THE STORM SEWER AND SEDIMENT LOADS TO DOWNSTREAM STORM WATER FACILITIES OR WATERBODIES.
 - IF THE STORM WATER BMP IS BEING DESIGNED TO SERVE AS A TEMPORARY SEDIMENT BASIN, GRADE THE BMP TO WITHIN THREE (3) FEET OF FINAL GRADE TO PREVENT CLOGGING OF INSITU SOIL. ONCE CONSTRUCTION IN THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETED AND THE SITE IS STABILIZED, EXCAVATE THE INFILTRATION TRENCH TO FINAL GRADE AND COMPLETE CONSTRUCTION OF THE INFILTRATION TRENCH.
 - GRADING OF THE INFILTRATION TRENCH SHALL BE ACCOMPLISHED USING LOW-IMPACT EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF THE UNDERLYING SOILS. WIDE TRACKED VEHICLES SUCH AS BACK HOES, SMALL DOZERS AND BOBCATS ARE RECOMMENDED.
 - EXCAVATE THE INFILTRATION TRENCH TO THE SPECIFIED DEPTH (ELEVATION). ALL SUB MATERIAL BELOW THE SPECIFIED ELEVATION SHALL BE LEFT UNDISTURBED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - GRADE TO THE DEPTH (ELEVATION) SPECIFIED IN THE CONSTRUCTION DOCUMENTS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THE SEDIMENT WILL NEED TO BE REMOVED FROM THE INFILTRATION TRENCH PRIOR TO INITIATING THE NEXT STEP IN THE INFILTRATION TRENCH CONSTRUCTION PROCESS.
 - MATERIAL EXCAVATED FROM THE INFILTRATION TRENCH SHALL BE DISPOSED OF ON-SITE AT LOCATIONS (TEMPORARY STOCKPILE AREAS) DESIGNATED BY ENGINEER.
 - CLEAN, WASHED 1 TO 3-INCH GRAVEL SHALL BE PLACED IN THE BOTTOM OF THE INFILTRATION TRENCH TO THE DEPTH SPECIFIED IN THE CONSTRUCTION DOCUMENTS. GRAVEL SHOULD BE PLACED IN LIFTS AND LIGHTLY COMPACTED WITH PLATE COMPACTORS.

5 INFILTRATION TRENCH DETAIL

NOT TO SCALE



- GENERAL NOTES:**
- INSTALL ALL TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE START OF ANY CONSTRUCTION OPERATION THAT MAY CAUSE ANY SEDIMENTATION AT THE SITE.
 - INSTALL STORM DRAIN INLET PROTECTION TO PREVENT CLOGGING OF THE STORM SEWER AND SEDIMENT LOADS TO DOWNSTREAM STORM WATER FACILITIES OR WATERBODIES.
 - IF THE STORMWATER BMP IS BEING DESIGNED TO SERVE AS A TEMPORARY SEDIMENT BASIN, GRADE THE BMP TO WITHIN THREE (3) FEET OF FINAL GRADE TO PROTECT THE UNDERLYING MATERIAL FROM CLOGGING. ONCE CONSTRUCTION IN THE CONTRIBUTING DRAINAGE AREA HAS BEEN COMPLETED AND THE SITE IS STABILIZED, EXCAVATE THE INFILTRATION BASIN TO FINAL GRADE AND COMPLETE CONSTRUCTION OF THE BMP.
 - GRADING OF THE INFILTRATION BASIN SHALL BE ACCOMPLISHED USING LOW-IMPACT EARTH-MOVING EQUIPMENT TO PREVENT COMPACTION OF THE UNDERLYING SOILS. SMALL TRACKED DOZERS AND BOBCATS WITH RUNNER TRACKS ARE RECOMMENDED.
 - EXCAVATE THE INFILTRATION BASIN TO THE SPECIFIED DEPTH (ELEVATION). IT IS RECOMMENDED THAT ALL SUB MATERIAL BELOW THE SPECIFIED ELEVATION SHALL BE LEFT UNDISTURBED, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - GRADE TO THE DEPTH (ELEVATION) SPECIFIED IN THE CONSTRUCTION DOCUMENTS UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
 - IN THE EVENT THAT SEDIMENT IS INTRODUCED INTO THE BMP DURING OR IMMEDIATELY FOLLOWING EXCAVATION, THIS MATERIAL WILL NEED TO BE REMOVED FROM THE BASIN PRIOR TO INITIATING THE NEXT STEP IN THE CONSTRUCTION PROCESS. SEDIMENT THAT HAS BEEN WASHED INTO THE BASIN DURING THE EXCAVATION PROCESS CAN SEAL THE PERMEABLE MATERIAL, SIGNIFICANTLY REDUCING THE INFILTRATION CAPACITY OF THE SOILS.
 - SEEDING AND INSTALLATION OF EROSION CONTROL BLANKET SHALL BE COMPLETED WITHIN 48 HOURS OF FINAL GRADING.
 - INFILTRATION AREA SHALL BE STAKED OFF DURING CONSTRUCTION TO RESTRICT HEAVY EQUIPMENT TRAFFIC FROM COMPACTING NATIVE SOILS.

7 INFILTRATION BASIN DETAIL

NOT TO SCALE

6 RESERVED

NOT TO SCALE

	ISSUED/REVISIONS	DATE
0	PRELIMINARY PUD SUBMISSION	06/16/2018
1	PRELIMINARY PUD SUBMISSION	07/20/2018
2		
3		
4		
5		
6		

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MASER ENGINEERING
OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
C-503

TITLE OF DRAWING
STORMWATER & LANDSCAPING DETAILS

I. GENERAL REQUIREMENTS:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING EROSION AND SEDIMENT CONTROL TO PROTECT SURROUNDING WATER BODIES.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION CONTROL AND MAINTENANCE OF SOIL EROSION AND SEDIMENT CONTROL FACILITIES TO ENSURE PROPER FUNCTIONING OF SAID FACILITIES (DURING CONSTRUCTION).
- AFTER THE PROJECT HAS BEEN COMPLETED, THE CONTRACTOR SHALL HAVE THE RESPONSIBILITY FOR ENSURING THAT ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN REMOVED OR REPLACED BY PERMANENT CONTROLS.
- THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP), WHICH INCLUDES THE E&S PLANS, DEFINES AND MEETS THE REQUIREMENTS OF THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION (NYSDEC) PHASE II STORMWATER REGULATIONS.
- EROSION CONTROL MEASURES INSTALLED AND MAINTAINED BY THE SITE WORK CONTRACTOR ARE SUBJECT TO THE REVIEW AND APPROVAL NYSDEC, DESIGN ENGINEER AND OWNERS REPRESENTATIVE. IMMEDIATE ACTION BY THE CONTRACTOR SHALL BE TAKEN IF ADDITIONAL OR CORRECTIVE MEASURES ARE REQUIRED BY ANY ONE OF THESE CITED REVIEWERS. EROSION CONTROL MEASURES NOT SPECIFICALLY SHOWN ON CONTRACT DRAWINGS, SHALL BE INSTALLED AS WARRANTED BY FIELD CONDITIONS AND AS DIRECTED BY THE FOREMENTIONED REVIEWERS.
- AS DESIGN ENGINEER, OUR OFFICE HAS NOTIFIED THE OWNER OF THE INSPECTION REQUIREMENTS UNDER THE GENERAL PERMIT. DISTURBANCES OF ONE ACRE OR GREATER REQUIRE THAT THE OWNER FILE A NOTICE OF INTENT AND A SWPPP WITH THE NYSDEC UNDER STATE POLLUTANT DISCHARGE ELIMINATION SYSTEM (SPDES). THE REGULATIONS REQUIRE THAT A LICENSED PROFESSIONAL COMPLETE A WEEKLY INSPECTION THROUGHOUT THE PERIOD OF LAND DISTURBANCE AND AN INSPECTION AFTER EVERY EVENT OF $\frac{1}{2}$ INCH OR MORE OF RAIN.
- ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR MORE THAN 5 DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF 2.5 - 3.0 TONS PER ACRE, ACCORDING TO STATE STANDARDS.
- PERMANENT VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN FIVE (5) DAYS AFTER FINAL GRADING. MULCH AS NECESSARY FOR SEED PROTECTION AND ESTABLISHMENT. LIME AND FERTILIZE SEED BED PRIOR TO PERMANENT SEEDING.
- EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES AND PRACTICES, UTILIZED IN THE CONSTRUCTION OF THE PROJECT, SHALL BE CONSISTENT WITH THE LATEST EDITIONS OF THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, THE NEW YORK STATE STORMWATER MANAGEMENT DESIGN MANUAL, AND THE NEW YORK STATE SPDES GENERAL PERMIT FOR STORMWATER DISCHARGES.
- NATURAL VEGETATION SHALL BE RETAINED, PROTECTED, AND SUPPLEMENTED, AS FEASIBLE PRIOR TO AND DURING CONSTRUCTION.
- CUT AND FILL SLOPES SHALL BE BROUGHT TO FINAL PROPOSED GRADES AS SOON AS POSSIBLE IN THE CONSTRUCTION SEQUENCES, AND SEEDED AND MULCHED IMMEDIATELY.
- EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES (STONE CHECK DAMS, FILTER FABRIC FENCING, STABILIZED CONSTRUCTION ENTRANCES, AND OTHER ACCEPTABLE FACILITIES) SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION UNTIL COMPLETE SITE STABILIZATION.
- HEAVY CONSTRUCTION EQUIPMENT SHALL BE KEPT AS CLOSE TO THE WORK AREA AS PRACTICED TO MINIMIZE DISTURBANCE OF SOIL ALREADY STABILIZED OR UNDISTURBED.
- TOPSOIL AND OTHER SOIL REMOVED DURING CONSTRUCTION SHALL BE STOCKPILED IN A SUITABLE LOCATION CLEAR FROM ANY STORMWATER DRAINAGE COURSES. STOCKPILES WHICH ARE INACTIVE FOR MORE THAN 5 DAYS SHALL BE SEEDED.
- VEGETATIVE STABILIZATION SHALL BE PERIODICALLY INSPECTED FOR SUFFICIENT GROWTH AND PROGRESS. AREAS NOT RESPONDING SHALL BE PROMPTLY RESEEDED AND REMULCHED AS SOON AS POSSIBLE. AREAS SHOWING SIGNS OF EROSION PRIOR TO STABILIZATION SHALL BE GRADED, RESEEDED, AND REMULCHED AS SOON AS POSSIBLE. SOD OR EROSION CONTROL FABRIC SHALL BE UTILIZED WHERE ADEQUATE STABILIZATION IS NOT OCCURRING
- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED BEFORE BEGINNING EARTH MOVING ACTIVITIES, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
- A STABILIZED CONSTRUCTION ENTRANCE PAD OF 1.5' TO 2' CLEAN STONE WILL BE PLACED AT ALL CONSTRUCTION DRIVEWAYS IMMEDIATELY AFTER INITIAL SITE DISTURBANCE.
- THE APPLICATION OF TOPSOIL, LIMING, FERTILIZING, SEEDING, AND MULCHING FOR DISTURBED AREAS SHALL BE CONSISTENT WITH THE STANDARD GENERAL PRACTICES FOR CONSTRUCTION.
- IMMEDIATELY FOLLOWING INITIAL DISTURBANCES OF ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E., STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF 2.5 - 3.0 TONS PER ACRE.
- AT THE TIME WHEN SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS TO BE ESTABLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER.
- IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN EROSION AND SEDIMENT CONTROL MEASURES UNTIL ALL AREAS HAVE BEEN PERMANENTLY STABILIZED.

II. MAINTENANCE AND REPAIR OF EROSION AND SEDIMENT FACILITIES

- PROPER MAINTENANCE AND REPAIR OF EROSION AND SEDIMENT CONTROL FACILITIES ARE NECESSARY TO THE EFFECTIVENESS OF THE EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES.
- A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE ENTRANCE OF EACH CONSTRUCTION INGRESS AND EGRESS ONTO PUBLIC THOROUGHFARES AND STABILIZED ROADWAYS.
- DISTURBED GROUND SURFACES SHALL BE SPRINKLED WITH WATER, AS NEEDED, TO LIMIT THE FORMATION AND MIGRATION OF AIRBORNE DUST.
- OPERATIONAL MEASURES SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT THE SPILLS OF FUELS AND LUBRICANTS. IF A SPILL OCCURS, IT SHALL BE CONTROLLED IMMEDIATELY TO PREVENT ITS ENTRY INTO OFF-SITE AREAS INCLUDING ADJACENT STORM SEWER.
- ANY TEMPORARY EROSION CONTROL FACILITY SHALL REMAIN FUNCTIONAL UNTIL VEGETATIVE COVER IS SUFFICIENTLY ESTABLISHED WITHIN THE RESPECTIVE TRIBUTARY DRAINAGE AREA.

II. MAINTENANCE AND REPAIR OF EROSION AND SEDIMENT FACILITIES CONTINUED

- PROPER MAINTENANCE AND REPAIR OF EROSION AND SEDIMENT CONTROL FACILITIES ARE NECESSARY TO THE EFFECTIVENESS OF THE EROSION AND SEDIMENT POLLUTION CONTROL FACILITIES.
- A STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE ENTRANCE OF EACH CONSTRUCTION INGRESS AND EGRESS ONTO PUBLIC THOROUGHFARES AND STABILIZED ROADWAYS.
- DISTURBED GROUND SURFACES SHALL BE SPRINKLED WITH WATER, AS NEEDED, TO LIMIT THE FORMATION AND MIGRATION OF AIRBORNE DUST.
- OPERATIONAL MEASURES SHALL BE EMPLOYED DURING CONSTRUCTION TO PREVENT THE SPILLS OF FUELS AND LUBRICANTS. IF A SPILL OCCURS, IT SHALL BE CONTROLLED IMMEDIATELY TO PREVENT ITS ENTRY INTO OFF-SITE AREAS INCLUDING ADJACENT STORM SEWER.
- ANY TEMPORARY EROSION CONTROL FACILITY SHALL REMAIN FUNCTIONAL UNTIL VEGETATIVE COVER IS SUFFICIENTLY ESTABLISHED WITHIN THE RESPECTIVE TRIBUTARY DRAINAGE AREA.

III. MULCHING AND SEEDING REQUIREMENTS

TEMPORARY SEED REQUIREMENTS

- SEEDBED PREPARATION:
 - APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT (50%) CALCIUM PLUS MAGNESIUM OXIDES) AT A RATE OF 90 POUNDS PER 1,000 SQUARE FEET. APPLY FERTILIZER AT A RATE OF 600 POUNDS PER ACRE OR 14 POUNDS PER 1,000 SQUARE FEET USING 10-20-10 OR EQUIVALENT.
 - WORK LIME AND FERTILIZER INTO SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC. SPRINGTOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED.
 - INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACT, THE AREA MUST BE RETILLED AS ABOVE
- SEEDING:
 - APPLY LAWN MIX AT A RATE (SEE SPECIFICATIONS)
 - APPLY SEED WITH MECHANICAL SEEDER. OPTIMUM SEEDING DEPTH IS ONE INCH (EXCEPT SANDY SOILS, 2 INCHES).
 - WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPAKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHALL BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG. SEEDING OPERATIONS SHOULD BE ON THE CONTOUR.
 - TEMPORARY SEED MIX: 50% TALL FESCUE, 30% ANNUAL RYEGRASS, 20% CREEPING RED FESCUE.
- APPLICATION:
 - APPLY SEED MIX AT 8 LBS PER 1,000 S.F.
 - APPLY SEED WITH A MECHANICAL SEEDER. OPTIMUM SEEDING DEPTH IS ONE INCH (EXCEPT SANDY SOILS, TWO INCHES).
 - WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHALL BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
- MULCHING
 - MULCH MATERIALS SHALL BE UNROTTED SALT HAY OR SMALL GRAIN STRAW AT A RATE OF 2-1/2 TO 3 TONS PER ACRE, OR 70 TO 90 POUNDS PER 1,000 SQUARE FEET. MULCH SHOULD NOT BE GROUND OR CHOPPED INTO SHORT PIECES.
 - SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75 PERCENT TO 95 PERCENT OF THE SOIL SURFACE WILL BE COVERED.
 - MULCH ANCHORING SHALL BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. 1. MULCHING NETTINGS - STAPLE, JUTE OR COTTON NETTINGS TO THE SOIL SURFACE. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.

PERMANENT SEED REQUIREMENTS

- SEEDBED PREPARATION
 - USE THE SAME PROCEDURE AS TEMPORARY SEEDING.
- FERTILIZING:
 - APPLY FERTILIZER AT APPLICATION RATE RECOMMENDED BY SOIL ANALYSIS.
 - APPLY AFTER SMOOTH RAKING OF TOPSOIL AND PRIOR TO ROLLER COMPACTION.
 - DO NOT APPLY FERTILIZER AT THE SAME TIME OR WITH THE SAME MACHINE USED TO APPLY SEED.
 - MIX FERTILIZER THOROUGHLY INTO UPPER ONE INCH OF THE TOPSOIL.
 - LIGHTLY WATER THE SOIL TO AID DISSIPATION OF FERTILIZER.
- SEEDING:
 - PERMANENT SEED MIX: 40% PERENNIAL RYEGRASS, 25% KENTUCKY BLUEGRASS, 20% CREEPING RED FESCUE, 15% ANNUAL RYEGRASS.
- APPLICATION RATE:
 - APPLY SEED MIX AT 6 LBS. PER 1,000 S.F., RAKE IN LIGHTLY
 - DO NOT SEED AREAS IN EXCESS OF THAT WHICH CAN BE MULCHED IN THE SAME DAY.
 - DO NOT SOW IMMEDIATELY FOLLOWING RAIN, WHEN GROUND IS TOO DRY OR WHEN WINDS ARE OVER 12 M.P.H.
 - ROLL SEEDED AREA WITH FILLER NOT EXCEEDING 112 LBS/LINEAR FOOT.
- MULCHING
 - FOLLOW THE SAME PROCEDURE AS TEMPORARY SEEDING.
- SEED PROTECTION:
 - COVER SEEDED SLOPES WHERE GRADE IS FOUR INCHES PER FOOT OR GREATER WITH EROSION CONTROL FABRIC. ROLL FABRIC ONTO SLOPES WITHOUT STRETCHING OR PULLING.
 - LAY FABRIC SMOOTHLY ON SURFACE. BURY TOP END OF EACH SECTION IN SIX INCH DEEP EXCAVATED TOPSOIL TRENCH. OVERLAP EDGES OF ADJACENT ROLLS A MINIMUM OF 12-INCHES. BACKFILL TRENCH AND RAKE SMOOTH, LEVEL WITH ADJACENT SOIL.
 - SECURE OUTSIDE EDGES AND OVERLAPS AT 36-INCH INTERVALS WITH STAKES.
 - LIGHTLY DRESS SLOPES WITH TOPSOIL TO ENSURE CLOSE CONTACT WITH FABRIC AND SOIL.
 - AT SIDES OF DITCHES, LAY FABRIC LAPS IN DIRECTION OF WATERFLOW. LAP ENDS OF EDGES A MINIMUM OF SIX INCHES.
- MAINTENANCE
 - MOW GRASS AT REGULAR INTERVALS TO MAINTAIN A MAXIMUM HEIGHT OF 2-1/2". DO NOT CUT MORE THAN $\frac{3}{4}$ OF GRASS BLADE AT EACH MOWING. PERFORM FIRST MOWING WHEN SEEDLINGS ARE 40% HIGHER THAN DESIRED HEIGHT.
 - IMMEDIATELY REMOVE CLIPPINGS AFTER MOWING; DO NOT LET CLIPPINGS LAY IN CLUMPS.
 - WATER TO PREVENT GRASS AND SOIL FROM DRYING OUT.
 - IMMEDIATELY RE-SEED AREAS SHOWING BARE SPOTS.
 - REPAIR WASHOUT AND GULLIES.
- LOW MAINTENANCE GRASS
 - MIX SHALL BE ERNMX 126 OR APPROVED EQUIVALENT.
 - APPLICATION RATE SHALL BE 1 LB PER EVERY 100 SQ. FT.

IV. CONSTRUCTION SEQUENCING (FOR A TYPICAL PHASE)

- PRE-CONSTRUCTION MEETING.
- DELINEATE DISTURBED AREAS AND INSTALL ORANGE CONSTRUCTION FENCE FOR PROTECTED AREAS.
- CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE, STAGING AREA LAYOUT, CONCRETE WASHOUT AREA.
- INSTALL SILT FENCE.
- SETUP PERIMETER CONTROLS WITH LIMITED CLEARING.
- CONSTRUCT DIVERSION SWALES WITH STABILIZATION.
- CONSTRUCT SEDIMENT TRAPS WITH STABILIZATION.
- CONSTRUCT TEMPORARY CULVERTS AND SWALES TO THE SEDIMENT TRAPS.
- CLEAR AND GRUB WITH DISPOSAL OF MATERIAL.
- REMOVE, STOCKPILE AND STABILIZE TOPSOIL.
- PERFORM ROUGH GRADING AND TEMPORARILY STABILIZATION MEASURES AND DURATIONS TO KEEP OPEN.
- CONSTRUCT UTILITIES, DRAINAGE AND INLET-OUTLET PROTECTION.
- CONSTRUCT THE ROADS.
- CONSTRUCT THE BUILDINGS.
- PERFORM FINAL GRADING.
- PERFORM SOIL RESTORATION.
- PERFORM FINAL STABILIZATION (PAVING, LAWN, LANDSCAPING)
- CONSTRUCT PERMANENT STORMWATER PRACTICES.
- REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROLS ONCE 80% STABILIZATION HAS BEEN ACHIEVED.

V. MATERIALS HANDLING AND SPILL PREVENTION

THE CONTRACTOR SHALL FOLLOW ALL FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO MATERIAL HANDLING, SPILL PREVENTION AND SPILL CLEANUP. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE AGENCIES WHEN A SPILL OCCURS. THE FOLLOWING ARE RECOMMENDED GUIDELINES FOR THE CONTRACTOR AND SHALL NOT REPLACE GOVERNMENT REGULATIONS:

- CONCRETE WASHOUT STRUCTURE:
 - A CONCRETE WASHOUT STRUCTURE IS USED TO CONTAIN CONCRETE AND LIQUIDS WHEN THE CHUTES OF CONCRETE MIXERS AND HOPPERS OF CONCRETE PUMPS ARE RINSED OUT AFTER DELIVERY.
 - THE WASH-OUT FACILITIES CAN BE CONSTRUCTED OR READY-MADE.
 - ALL WASH-OUT FACILITIES CONSOLIDATE SOLIDS FOR EASIER DISPOSAL AND PREVENT RUNOFF OF LIQUIDS.
 - THE WASH WATER IS ALKALINE AND CONTAINS HIGH LEVELS OF CHROMIUM, WHICH CAN LEACH INTO THE GROUND AND CONTAMINATE GROUNDWATER. IT CAN ALSO MIGRATE TO A STORM DRAIN WHICH CAN INCREASE THE pH OF NEARBY WATERWAYS AND HARM AQUATIC LIFE.
 - THE CONTRACTOR SHALL DESIGNATE A CONCRETE WASH-OUT AREA AND SHALL INSTALL THE WASH-OUT A MINIMUM OF 100-FEET UPSTREAM FROM A STORM DRAIN, STREAM, POND, OR WATERWAY.
 - THE FACILITIES SHALL BE CLEANED OUT ONCE THEY ARE TWO-THIRDS FULL OR NEW FACILITIES BEING CONSTRUCTED TO PROVIDE ADDITIONAL STORAGE.
 - ADDING SOLVENTS, FLOCCULENT, OR ACID TO WASH-WATER IS PROHIBITED.
 - PERMANENT DISPOSAL OF CONCRETE WASH-OUT WASTE ON THE CONSTRUCTION SITE IS PROHIBITED. DISPOSAL OF WASTE SHALL BE IN A LEGAL MANNER TO A NEARBY LANDFILL AS REGULAR C&D.
- CONSTRUCTION SITE LIQUID AND SOLID WASTE MANAGEMENT:
 - BUILDING MATERIALS AND OTHER CONSTRUCTION SITE WASTES, INCLUDING SANITARY WASTES MUST BE PROPERLY MANAGED AND DISPOSED OF TO REDUCE THE RISK OF POLLUTION.
 - PRACTICES SUCH AS TRASH DISPOSAL, RECYCLING, PROPER SANITARY FACILITY MAINTENANCE, SPILL PREVENTION AND CLEANUP MEASURES CAN REDUCE THE POTENTIAL FOR STORMWATER RUNOFF TO MOBILIZE CONSTRUCTION SITE WASTES AND CONTAMINATE SURFACE OR GROUNDWATER.
 - THE CONTRACTOR SHALL DESIGNATE ONE AREA FOR CONSTRUCTION VEHICLE REFUELING THAT IS AT LEAST 100-FEET UPSTREAM FROM A STORM DRAIN, STREAM, POND, OR WATERWAY.
 - TEMPORARY SANITARY FACILITIES SHALL BE LOCATED AT LEAST 50-FEET AWAY FROM DRAINAGEWAYS, STORM DRAINS, RECEIVING WATERS, AREAS OF HIGH TRAFFIC, AND AREAS SUSCEPTIBLE TO FLOODING.
 - WASTEWATER GENERATED FROM TEMPORARY SANITARY FACILITIES SHALL NOT BE ALLOWED TO FLOW INTO STORM SEWERS AND DRAINAGEWAYS.
 - ONLY LICENSED HAULERS SHALL BE AUTHORIZED TO DISPOSE OF WASTE.
 - FACILITIES SHALL BE SECURED TO PREVENT OVER TURNING DURING HIGH WINDS.
 - CONSTRUCTION WASTE SHALL BE SEPARATED PROPERLY INTO VARIOUS CATEGORIES SUCH AS HAZARDOUS MATERIALS, TOXIC LIQUIDS, AND CONSTRUCTION AND DEBRIS.
 - CONTAINERS OF LIQUIDS SHALL HAVE SECONDARY CONTAINMENT AND BE STORED AWAY FROM DRAINAGE WAYS, STORM DRAINS, RECEIVING WATERS, AREAS OF HIGH TRAFFIC, AND AREAS SUSCEPTIBLE TO FLOODING. CONTAINERS SHALL ALSO BE PROPERLY LABELED.
- SPILL PREVENTION AND CONTROL
 - SPILL PREVENTION AND COUNTER CONTROL PLAN (SPCCP) SHALL CLEARLY STATE MEASURES TO STOP THE SOURCE OF A SPILL, CONTAIN THE SPILL, CLEAN UP THE SPILL, DISPOSE OF CONTAMINATED MATERIALS, AND TRAIN PERSONNEL TO PREVENT AND CONTROL FUTURE SPILLS.
 - SPCCPs ARE APPLICABLE TO CONSTRUCTION SITES WHERE HAZARDOUS WASTE IS STORED OR USED. HAZARDOUS WASTE INCLUDES PESTICIDES, PAINTS, CLEANERS, PETROLEUM PRODUCTS, FERTILIZERS AND SOLVENTS.
 - THE CONTRACTOR SHALL DEVELOP AND IMPLEMENT AN SPCCP IN CONFORMANCE TO FEDERAL, STATE AND LOCAL REGULATIONS.
 - SPILLS SHALL BE CONTAINED AND CLEANED UP AS SOON AS POSSIBLE.
 - RESIDUALS LEFTOVER FROM THE CLEANUP ACTIVITY, SUCH AS ABSORBENT PADS OR CONTAINERS OF SPILL MATERIAL, SHALL BE DISPOSED OF PROPERLY.
 - PROPER SPILL AND ILLICIT DISCHARGE REPORTING PROCEDURES INCLUDING CALLING THE NYSDEC SPILL HOTLINE SHALL BE FOLLOWED FOR BOTH HAZARDOUS AND NON-HAZARDOUS MATERIALS.
 - SPILLS SHALL NOT BE WASHED DOWN THE STORM DRAIN OR BURIED.
 - THE CONTRACTOR SHALL REFER TO NYSDEC REGULATIONS FOR ADDITIONAL REQUIREMENTS.

VI. SOIL RESTORATION REQUIREMENTS

- AERATION AND THE APPLICATION OF 6 INCHES OF TOPSOIL IS REQUIRED IN ANY PROPOSED LAWN AREA WHERE TOPSOIL HAS BEEN DISTURBED.
- FULL SOIL RESTORATION IS REQUIRED IN HEAVY TRAFFIC AREAS ON SITE, ESPECIALLY BETWEEN 5 AND 25 FEET AROUND THE PROPOSED BUILDING, BUT NOT WITHIN A 5 FOOT PERIMETER AROUND FOUNDATION WALLS.
- FULL SOIL RESTORATION REQUIREMENTS ARE AS FOLLOWS:
 - SOIL RESTORATION IS TO TAKE PLACE DURING PERIODS OF RELATIVELY LOW TO MODERATE SUBSOIL MOISTURE, FOLLOWING ROUGH GRADING OF THE DISTURBED SUBSOILS
 - APPLY 3 INCHES OF COMPOST OVER SUBSOIL
 - TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT-MOUNTED RIPPER, TRACTOR-MOUNTED DISC, OR TILLER, MIXING, AND CIRCULATING AIR AND COMPOST INTO SUBSOILS
 - ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE
 - APPLY TOPSOIL TO A DEPTH OF 6 INCHES
 - VEGETATE AS SPECIFIED ON PLANS
- AT THE END OF THE PROJECT AN INSPECTOR SHOULD BE ABLE TO PUSH A 3/8 INCH METAL BAR 12 INCHES INTO THE SOIL JUST WITH BODY WEIGHT.
- TILLING SHOULD NOT BE PERFORMED WITHIN THE DRIP LINE OF ANY EXISTING TREES OR OVER UTILITY INSTALLATIONS THAT ARE WITHIN 24 INCHES OF THE SURFACE.
- ADDITIONAL INFORMATION AND GUIDANCE MAY BE FOUND IN "DEEP-RIPPING AND DECOMPACTION" PUBLISHED BY NYSDEC DIVISION OF WATER 2008 WHICH IS INCLUDED IN THE SWPPP AS A REFERENCE.

VII. INFILTRATION BASIN NOTES

- INITIAL EXCAVATION SHOULD BE CARRIED TO WITHIN ONE FOOT OF THE FINAL ELEVATION. FINAL EXCAVATION TO THE FINISHED GRADE SHOULD BE DEFERRED UNTIL ALL DISTURBED AREAS ON THE WATERSHED HAVE BEEN STABILIZED OR PROTECTED. THE FINAL PHASE OF EXCAVATION SHOULD REMOVE ALL ACCUMULATED SEDIMENT.
- TRACK EQUIPMENT SHOULD BE USED OVER ALL INFILTRATION FACILITY LOCATIONS.
- ORANGE CONSTRUCTION FENCE SHALL BE INSTALLED AROUND THE INFILTRATION LOCATIONS DURING INACTIVITY TO PROTECT FROM UNNECESSARY COMPACTION.
- DENSE VEGETATION SHOULD BE ESTABLISHED ON THE SIDE SLOPES AND FLOOR.
- IF THE TRENCH DOES NOT DE-WATER WITHIN 24-HOURS, THE CONTRACTOR IS TO FOLLOW THE NYSDEC "DEEP RIPPING AND DECOMPACTION" MANUAL FOR GUIDANCE ON HOW TO RESTORE THE SOIL PERMEABILITY.

VIII. FIVE-ACRE DISTURBANCE PLAN (NYSDEC WAIVER)

- IF AT ANY POINT IN TIME, GREATER THAN FIVE ACRES OF AREA IS DISTURBED ALL AT ONCE, THE FOLLOWING ADDITIONAL GUIDELINES SHALL BE FOLLOWED:
- A MINIMUM OF TWO INSPECTION WILL BE PERFORMED BY A QUALIFIED INSPECTOR AT LEAST EVERY SEVEN CALENDAR DAYS, FOR AS LONG AS GREATER THAN FIVE ACRES OF LAND REMAINS DISTURBED.
- AREAS WHERE SOIL DISTURBANCE ACTIVITY WILL BE TEMPORARILY CEASED SHALL BE STABILIZED WITHIN FIVE DAYS FROM WEHN SOIL DISTURBANCE CEASES.
- THE CONTRACTOR WILL PREPARE A PHASING PLAN THAT DEFINES THE MAXIMUM DISTURBED AREAS PER PHASE AND SHOWS THE REQUIRED CUTS AND FILLS.
- THE CONTRACTOR WILL SUBMIT ELEVATION DATA ON THE SEDIMENT BASINS TO THE ENGINEER TO CONFIRM ADEQUATE SIZING.
- ANY SWALES ARE TO BE LINED WITH EROSION PROTECTION MATTING.
- TEMPORARY DIVERSION SWALES SHALL HAVE CHECK DAM WATTLES INSTALLED EVERY 100-FEET TO REDUCE FLOW VELOCITIES.
- TEMPORARY SEED AND MULCH WILL BE INSTALLED IN THE SEDIMENT BASINS PER THE NOTES ON THIS SHEET.

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PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT 161 Sing Sing Road Big Flats, NY 14814
TITLE OF DRAWING
EROSION & SEDIMENT CONTROL NOTES

DRAWING SCALE
AS NOTED

FIRST ISSUE DATE:
MAY 21, 2018

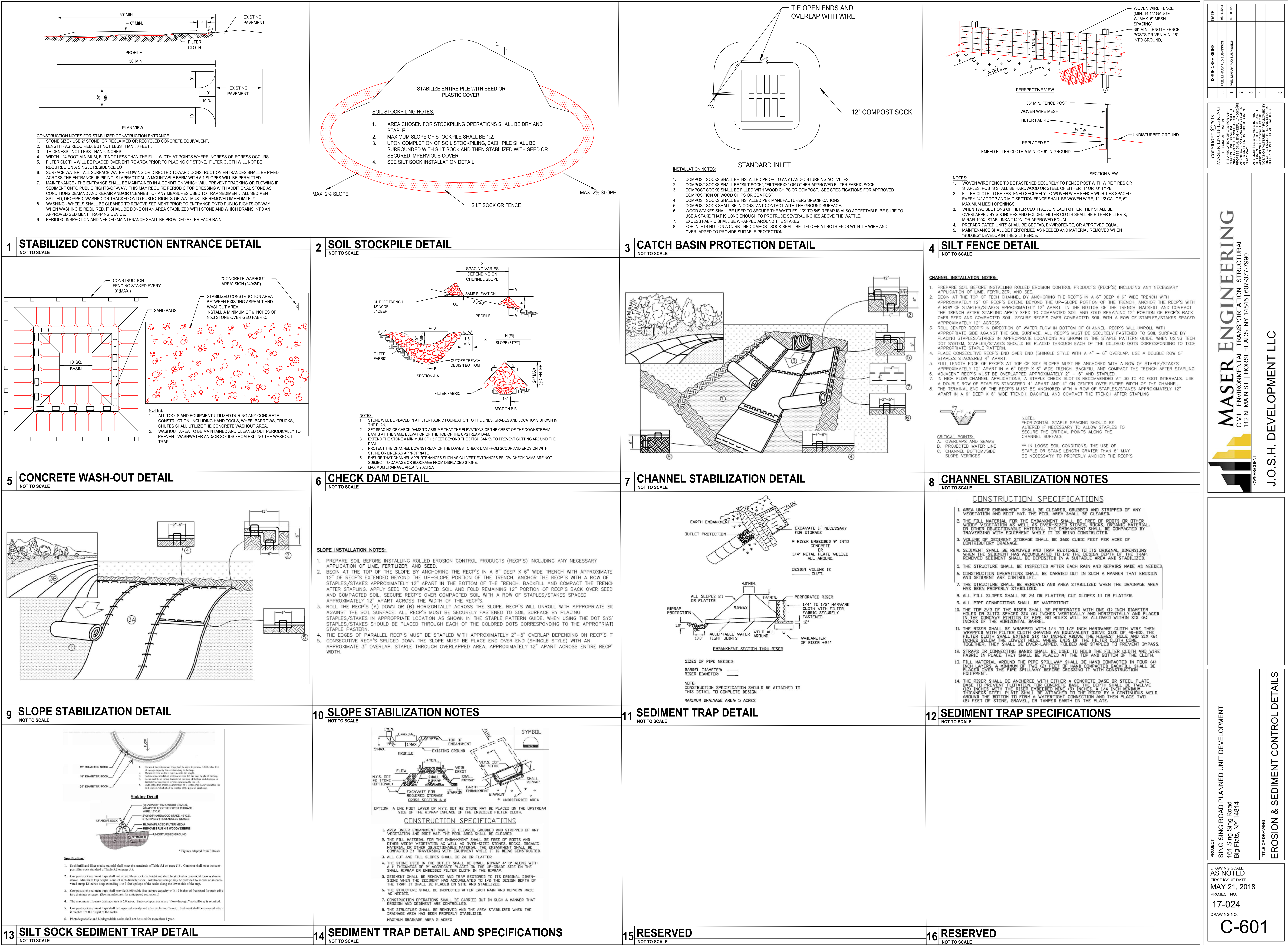
PROJECT NO:
17-024

DRAWING NO.
C-600

SING SING ROAD PLANNED UNIT DEVELOPMENT

161 Sing Sing Road
Big Flats, NY 14814

EROSION & SEDIMENT CONTROL NOTES



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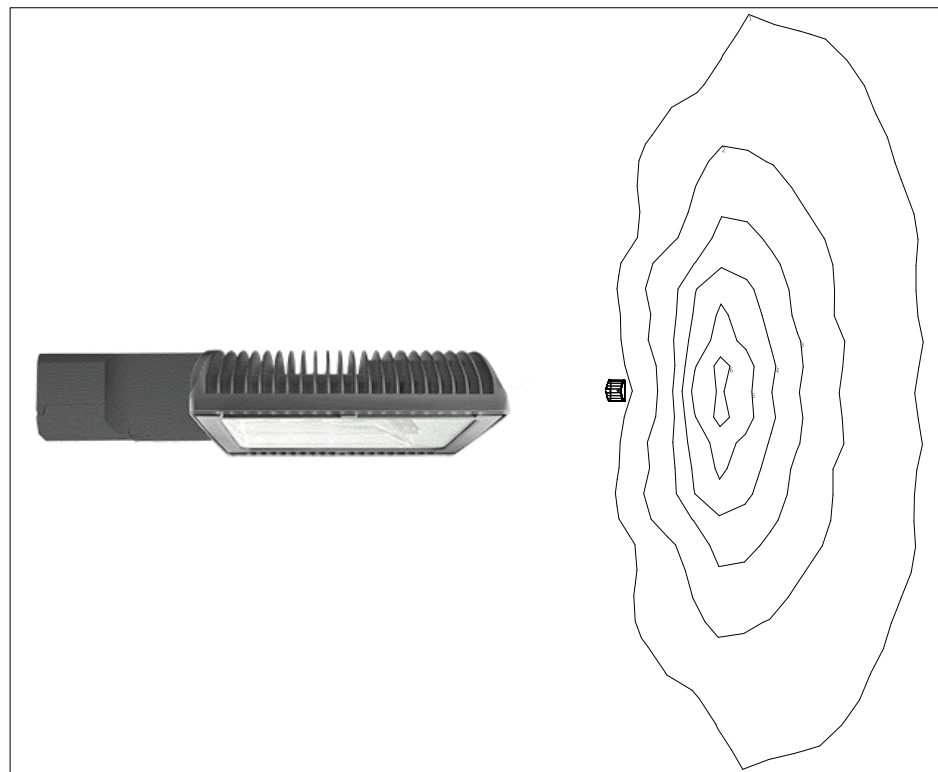
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PROJECT NO.
17-024

DATE
17-024

C-601

LIGHTING FIXTURE KEY:



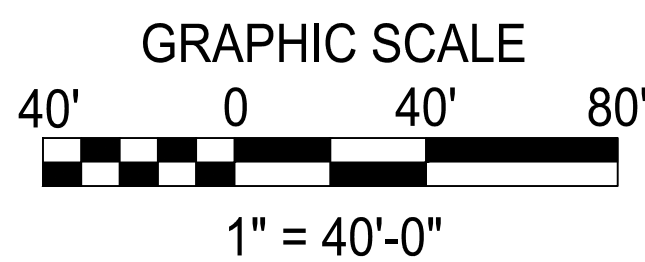
- ROADWAY LIGHTS**
- RAB LIGHTING - LROAD 150W LED ROADWAY LIGHTS
 - DARK SKY COMPLIANT
 - REPLACES TYPICAL 400W METAL HALIDE ROADWAY FIXTURES
 - MAXIMUM SPREAD IS 88'-0"
 - MAXIMUM DEPTH IS 35'-0"
 - DATA BASED ON A 15'-0" MOUNTING HEIGHT
 - QUANTITY SHOWN IS 147

I. GENERAL NOTES

1. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS.

II. LIGHTING GENERAL NOTES:

1. MANUFACTURER SHOWN IS RAB LIGHTING, HOWEVER, ANOTHER MANUFACTURER MAY BE SELECTED FOR FINAL SITE PLAN APPROVAL
2. THOUGH THE MANUFACTURER MAY CHANGE, THE PHOTOMETRIC PLANS ARE SHOWN FOR REFERENCE TO GIVE THE REVIEWING BOARDS AN IDEA OF PROPOSED LIGHT SPILL ON ALL PROPERTIES
3. PROPOSED LIGHTING ON HOUSES IS NOT SHOWN, WHICH WOULD INCLUDE A SMALL FRONT PORCH LIGHT AND REAR PORCH/FLOOD LIGHTS. EACH HOME WILL HAVE A DIFFERENT FIXTURE, THEREFORE, WE LEFT THEM OUT OF THE PLANS.
4. DATA SHEETS FOR THE PROPOSED FIXTURES CAN BE FOUND IN THE ENGINEERING REPORT.
5. LIGHTING SOFTWARE USED WAS AGI32 VERSION 19.2



TYPICAL 150W LED ROADWAY LIGHT, SPACED
APPROXIMATELY 88'-0" O.C.

SHEET E-102 LIGHTING PLAN NO. 2

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

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AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024

DRAWING NO.
E-101



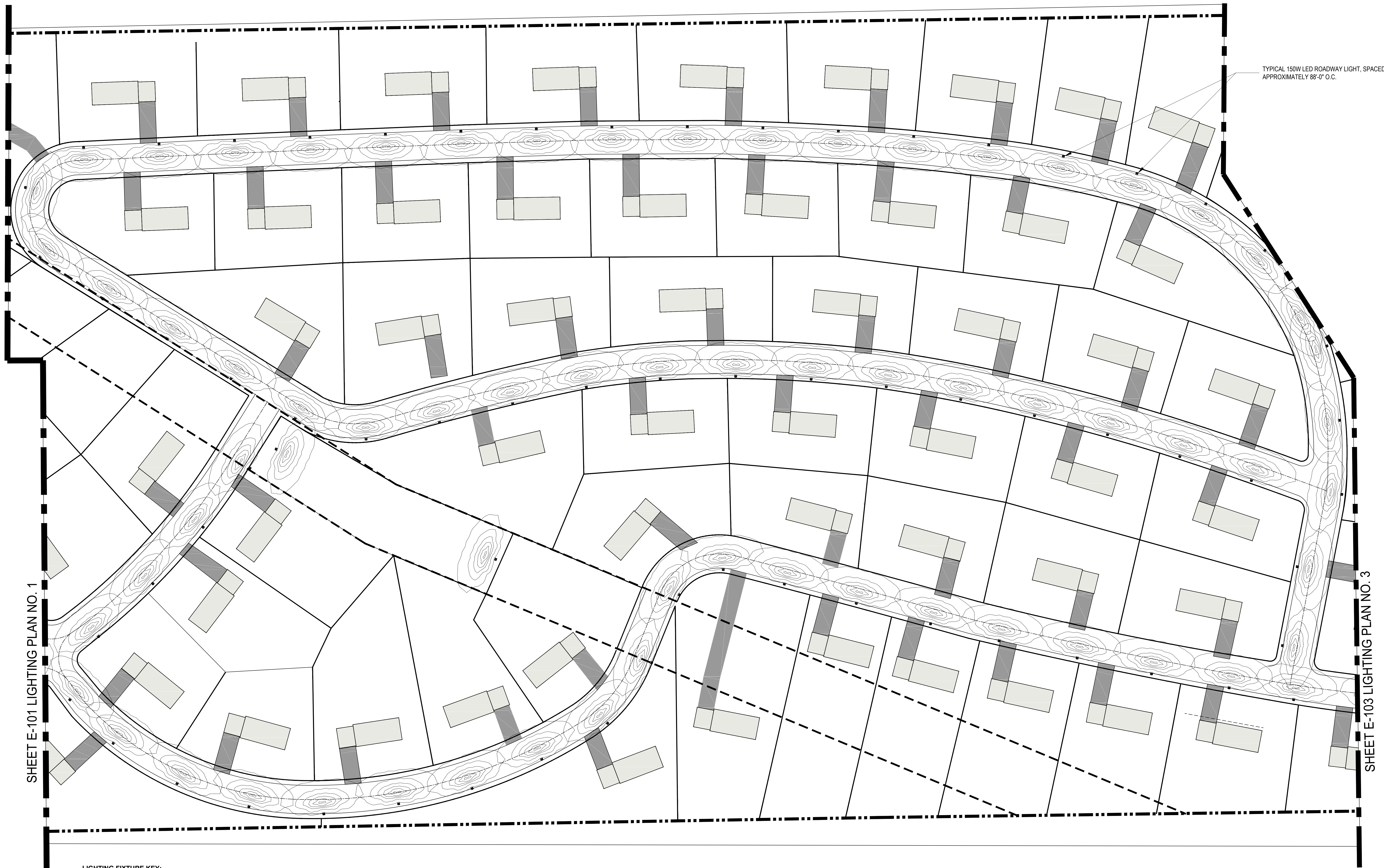
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TITLE OF DRAWING
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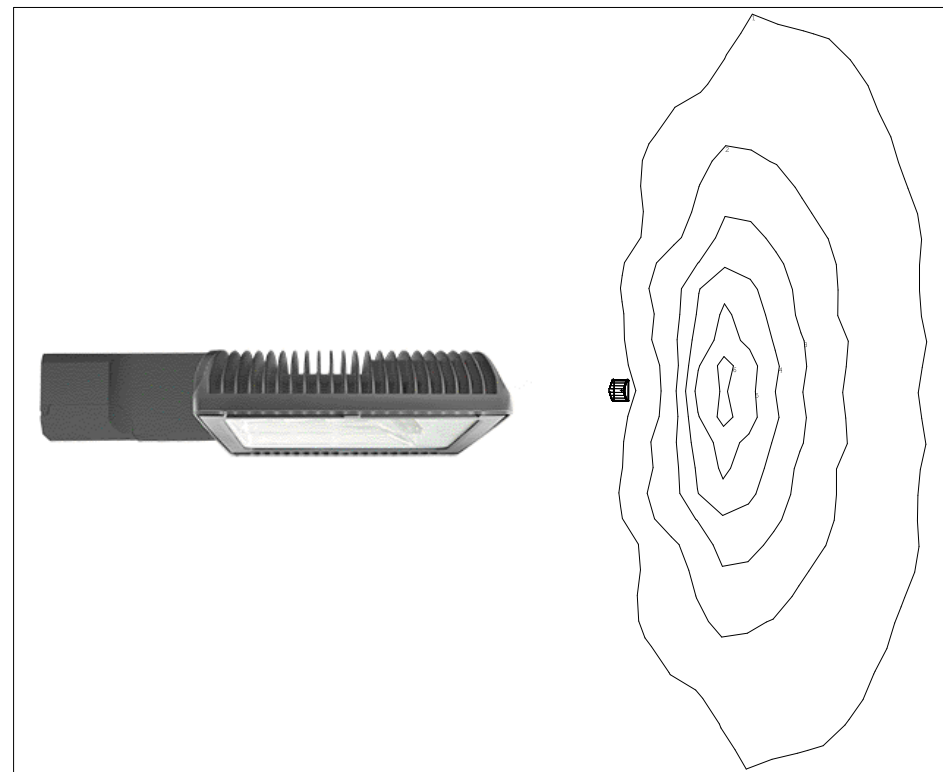
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TYPICAL 150W LED ROADWAY LIGHT, SPACED
APPROXIMATELY 88'-0" O.C.

LIGHTING FIXTURE KEY:



ROADWAY LIGHTS

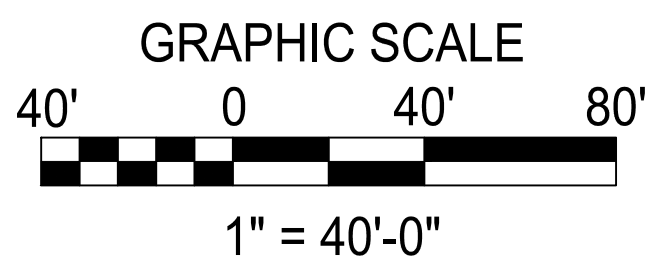
- RAB LIGHTING - LROAD 150W LED ROADWAY LIGHTS
- DARK SKY COMPLIANT
- REPLACES TYPICAL 400W METAL HALIDE ROADWAY FIXTURES
- MAXIMUM SPREAD IS 88'-0"
- MAXIMUM DEPTH IS 35'-0"
- DATA BASED ON A 15'-0" MOUNTING HEIGHT
- QUANTITY SHOWN IS 147

I. GENERAL NOTES

1. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS.

II. LIGHTING GENERAL NOTES:

1. MANUFACTURER SHOWN IS RAB LIGHTING. HOWEVER, ANOTHER MANUFACTURER MAY BE SELECTED FOR FINAL SITE PLAN APPROVAL.
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4. DATA SHEETS FOR THE PROPOSED FIXTURES CAN BE FOUND IN THE ENGINEERING REPORT.
5. LIGHTING SOFTWARE USED WAS AGI32 VERSION 19.2



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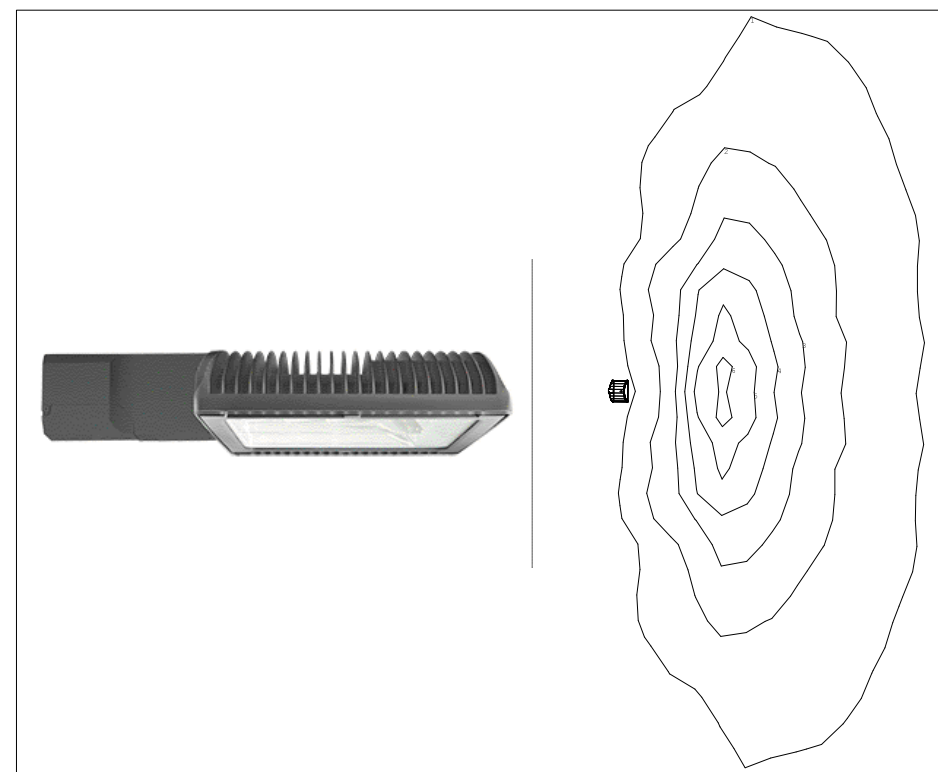
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PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

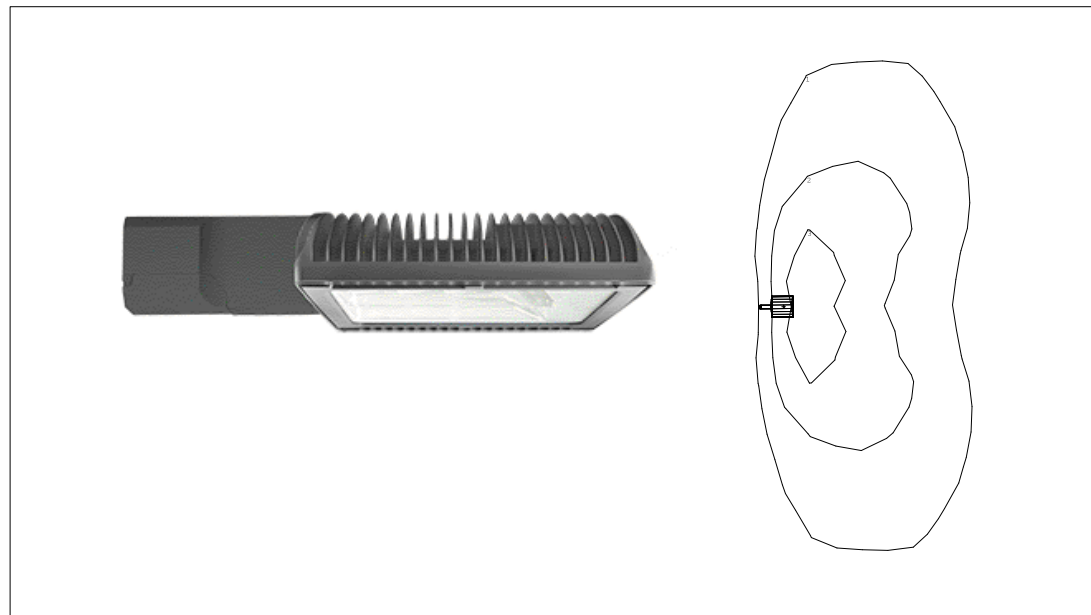
TITLE OF DRAWING
SITE LIGHTING PLAN NO. 2

DRAWING SCALE
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PROJECT NO.
17-024
DRAWING NO.
E-102

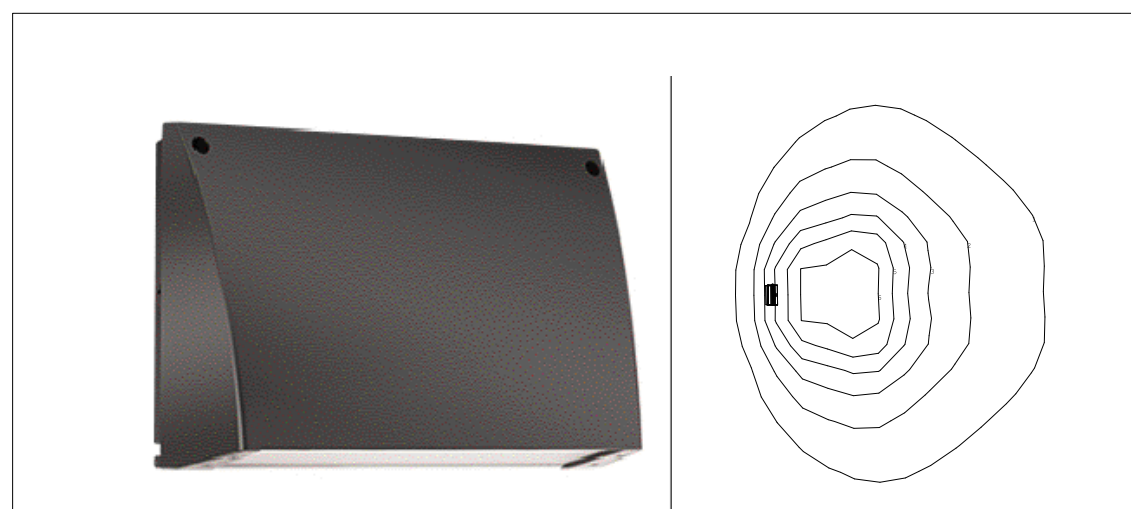
LIGHTING FIXTURE KEY:



- ROADWAY LIGHTS**
- RAB LIGHTING - LROAD 150W LED ROADWAY LIGHTS
 - DARK SKY COMPLIANT
 - REPLACES TYPICAL 400W METAL HALIDE ROADWAY FIXTURES
 - MAXIMUM SPREAD IS 88'-0"
 - MAXIMUM DEPTH IS 35'-0"
 - DATA BASED ON A 15'-0" MOUNTING HEIGHT
 - QUANTITY SHOWN IS 147



- PARKING LOT LIGHTS**
- RAB LIGHTING - LROAD 50W LED ROADWAY LIGHTS
 - DARK SKY COMPLIANT
 - REPLACES TYPICAL 200W METAL HALIDE ROADWAY FIXTURES
 - MAXIMUM SPREAD IS 58'-0"
 - MAXIMUM DEPTH IS 25'-0"
 - DATA BASED ON A 15'-0" MOUNTING HEIGHT
 - QUANTITY SHOWN IS 46



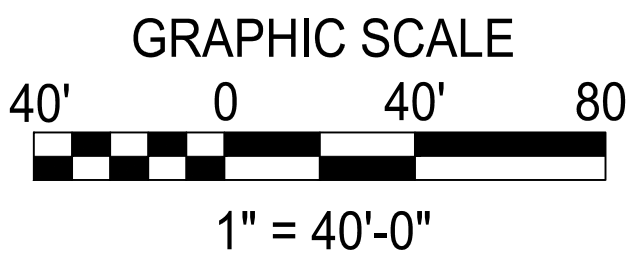
- BUILDING WALL PACKS**
- RAB LIGHTING - 62W LED SLIM MEDIUM/LARGE WALL PACKS
 - DARK SKY COMPLIANT
 - REPLACES TYPICAL 320W HID FIXTURES
 - MAXIMUM SPREAD IS 44'-0"
 - MAXIMUM DEPTH IS 36'-0"
 - DATA BASED ON A 20'-0" MOUNTING HEIGHT
 - QUANTITY SHOWN IS 126

I. GENERAL NOTES

1. EXISTING BOUNDARY SURVEY PROVIDED BY FAGAN ENGINEERS.

II. LIGHTING GENERAL NOTES:

1. MANUFACTURER SHOWN IS RAB LIGHTING, HOWEVER, ANOTHER MANUFACTURER MAY BE SELECTED FOR FINAL SITE PLAN APPROVAL
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4. DATA SHEETS FOR THE PROPOSED FIXTURES CAN BE FOUND IN THE ENGINEERING REPORT.
5. LIGHTING SOFTWARE USED WAS AGI32 VERSION 19.2



SHEET E-102 LIGHTING PLAN NO. 2

SHEET E-104 LIGHTING PLAN NO. 4

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161 Sing Sing Road
Big Flats, NY 14814

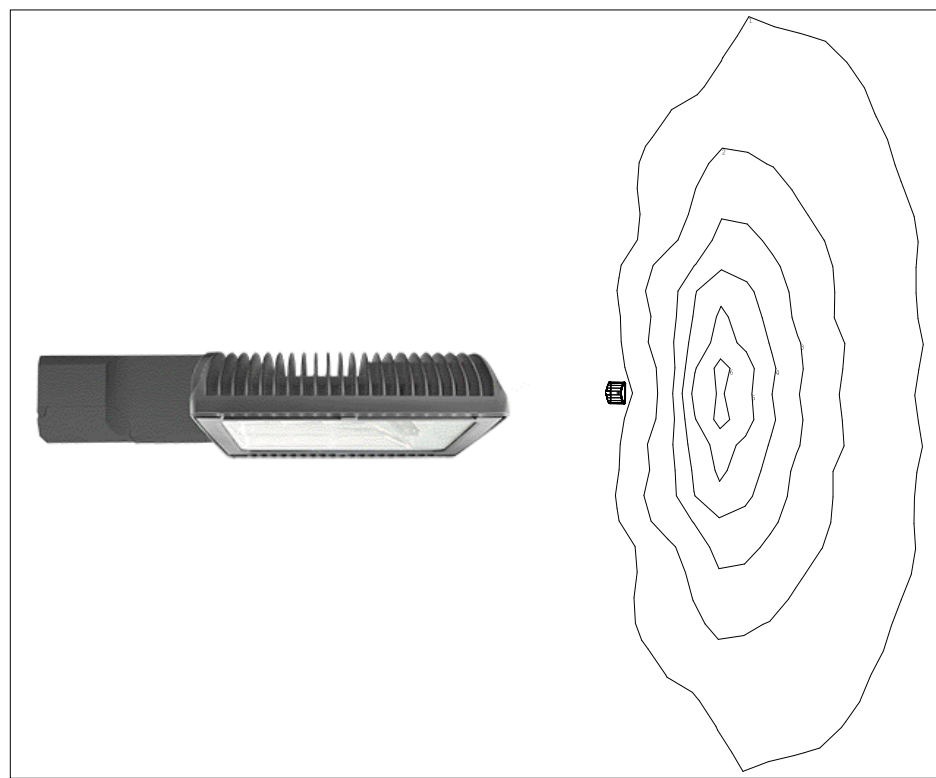
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DRAWING NO.
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TITLE OF DRAWING
SITE LIGHTING PLAN NO. 3

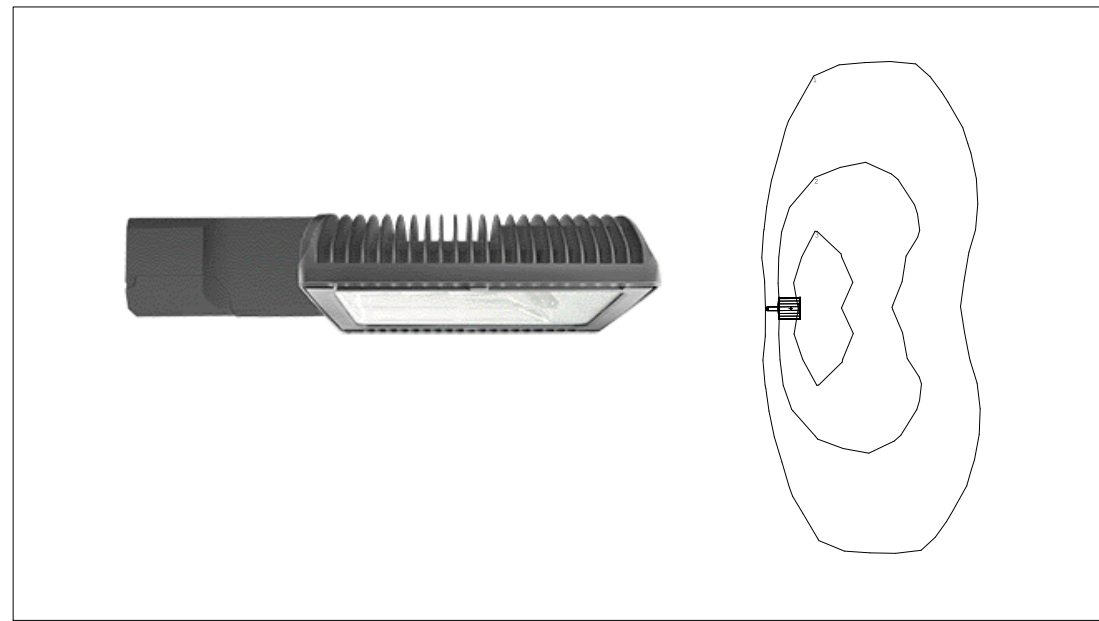
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LIGHTING FIXTURE KEY:



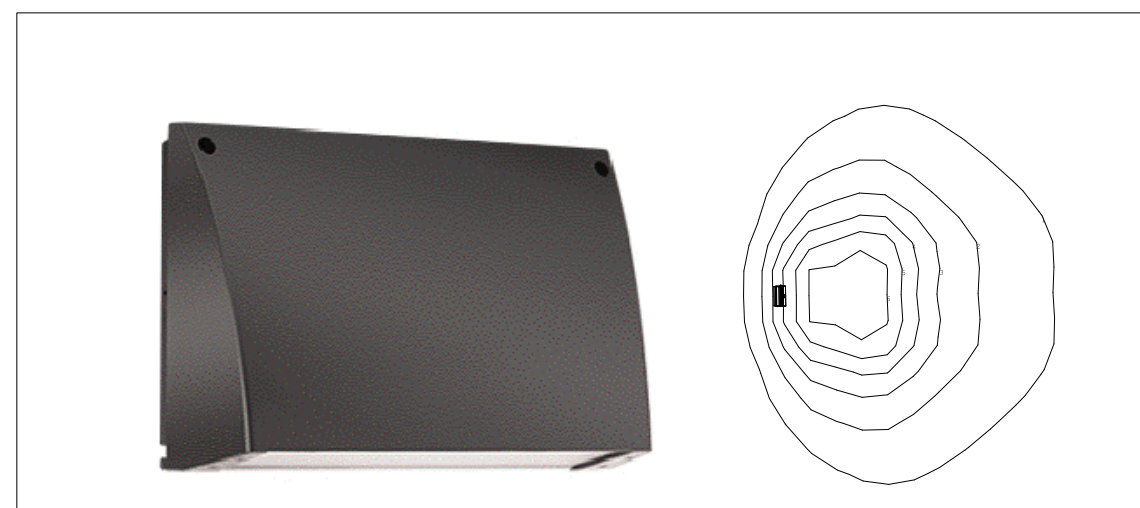
ROADWAY LIGHTS

- RAB LIGHTING - L ROAD 150W LED ROADWAY LIGHTS
- DARK SKY COMPLIANT
- REPLACES TYPICAL 400W METAL HALIDE ROADWAY FIXTURES
- MAXIMUM SPREAD IS 88'-0"
- MAXIMUM DEPTH IS 35'-0"
- DATA BASED ON A 15'-0" MOUNTING HEIGHT
- QUANTITY SHOWN IS 147



PARKING LOT LIGHTS

- RAB LIGHTING - L ROAD 50W LED ROADWAY LIGHTS
- DARK SKY COMPLIANT
- REPLACES TYPICAL 200W METAL HALIDE ROADWAY FIXTURES
- MAXIMUM SPREAD IS 58'-0"
- MAXIMUM DEPTH IS 25'-0"
- DATA BASED ON A 15'-0" MOUNTING HEIGHT
- QUANTITY SHOWN IS 46



BUILDING WALL PACKS

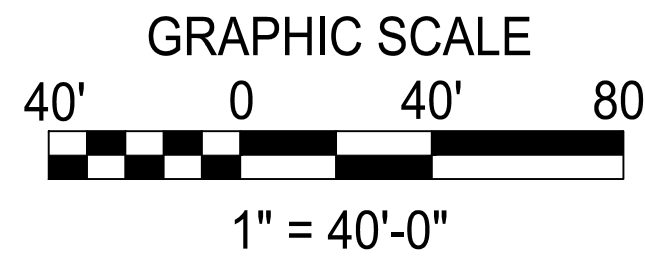
- RAB LIGHTING - 62W LED SLIM MEDIUM/LARGE WALL PACKS
- DARK SKY COMPLIANT
- REPLACES TYPICAL 320W HID FIXTURES
- MAXIMUM SPREAD IS 44'-0"
- MAXIMUM DEPTH IS 36'-0"
- DATA BASED ON A 20'-0" MOUNTING HEIGHT
- QUANTITY SHOWN IS 126

I. GENERAL NOTES

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II. LIGHTING GENERAL NOTES:

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4. DATA SHEETS FOR THE PROPOSED FIXTURES CAN BE FOUND IN THE ENGINEERING REPORT.
5. LIGHTING SOFTWARE USED WAS AGI32 VERSION 19.2



SHEET E-103 LIGHTING PLAN NO. 3

SING SING ROAD

KAHLER ROAD

TYPICAL 150W LED ROADWAY LIGHT, SPACED
APPROXIMATELY 88'-0" O.C.

TYPICAL 62W SLIM LED WALL PACK FOR
BUILDINGS

TYPICAL 50W LED ROADWAY LIGHT FOR
PARKING AREAS

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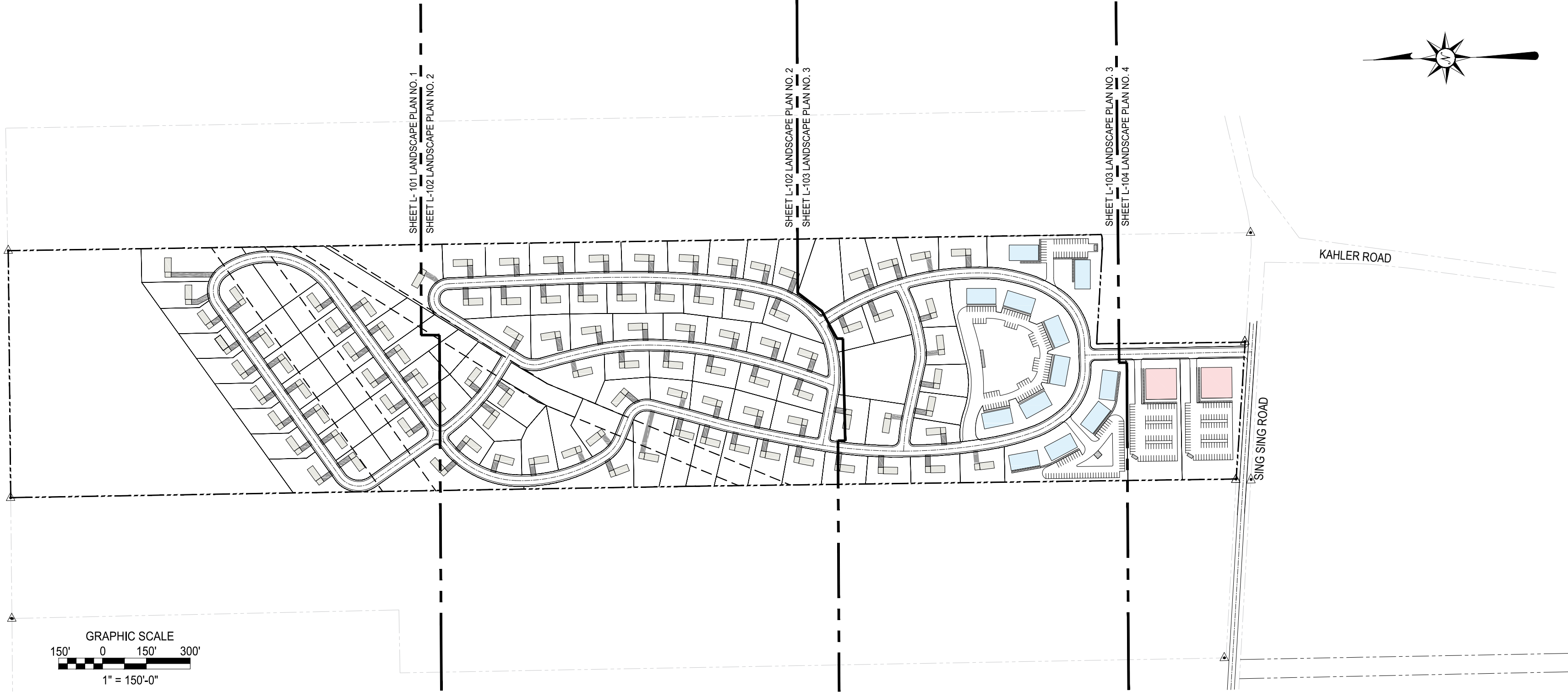
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161 Sing Sing Road
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TITLE OF DRAWING
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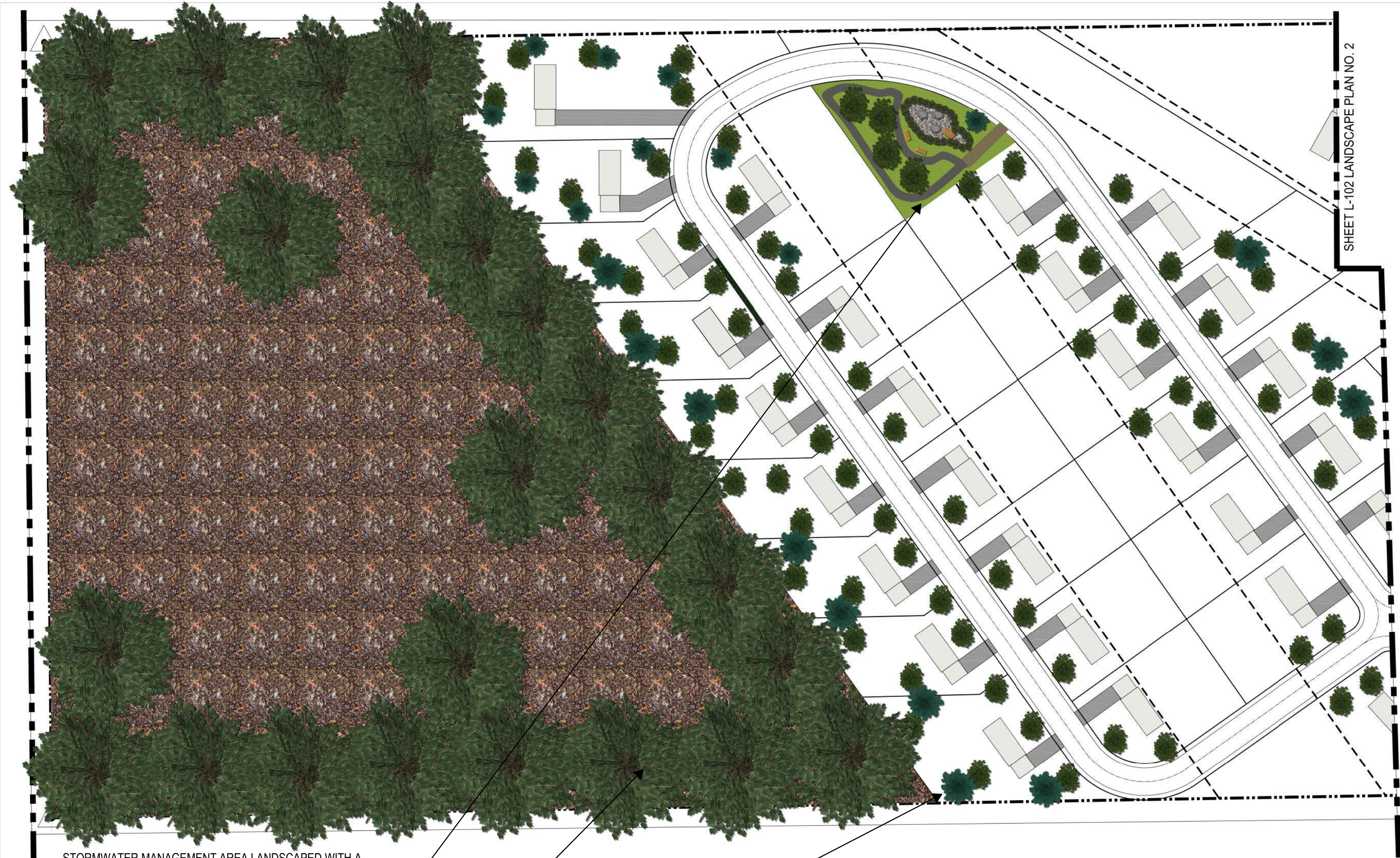
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DRAWING NO.
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GRAPHIC SCALE
150' 0 150' 300'
1" = 150'-0"



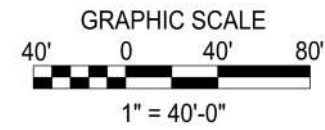
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MAY 21, 2018		17-024	
DRAWING NO.		L-100	
TITLE OF DRAWING		SHEET LANDSCAPE PLAN LAYOUT	
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STORMWATER MANAGEMENT AREA LANDSCAPED WITH A WALKING TRAIL, BENCHES AND A MIX OF ORNAMENTAL, DECIDUOUS AND CONIFEROUS TREES. THE PARCEL WILL HAVE A 12-FT. WIDE GRAVEL DRIVEWAY TO PROVIDE MAINTENANCE ACCESS TO THE INFILTRATION BASIN. ADDITIONALLY, THE BASIN WILL BE LANDSCAPED WITH 5-6-FT. SHRUBS AROUND THE PERIMETER TO DETER ENTRANCE BUT ALSO TO PROVIDE AN AESTHETICALLY PLEASING ENVIRONMENT

THIS REGION WILL REMAIN UNDISTURBED. THE SLOPES ARE 30-70% AND THE AREA IS HEAVILY WOODED WITH A LIGHT UNDERBRUSH

THE NEIGHBORHOOD WILL HAVE A MIX OF LARGE DECIDUOUS TREES, ORNAMENTAL TREES AND MISCELLANEOUS LANDSCAPING WHICH WILL BE THE HOMEOWNER'S RESPONSIBILITY TO INSTALL



SHEET L-102 LANDSCAPE PLAN NO. 2

PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
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PROJECT NO.
17-024
DRAWING NO.

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TITLE OF DRAWING
SITE LANDSCAPE PLAN NO. 1

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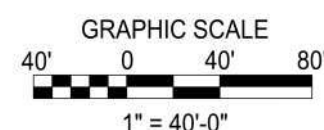
SHEET L-101 LANDSCAPE PLAN NO. 1

SHEET L-103 LANDSCAPE PLAN NO. 3

THE NEIGHBORHOOD WILL HAVE A MIX OF LARGE DECIDUOUS TREES, ORNAMENTAL TREES AND MISCELLANEOUS LANDSCAPING WHICH WILL BE THE HOMEOWNER'S RESPONSIBILITY TO INSTALL

STORMWATER MANAGEMENT AREA LANDSCAPED WITH A MIX OF ORNAMENTAL, DECIDUOUS AND CONIFEROUS TREES. THE PARCEL WILL HAVE A 12-FT. WIDE GRAVEL DRIVEWAY TO PROVIDE MAINTENANCE ACCESS TO THE INFILTRATION BASIN. ADDITIONALLY, THE BASIN WILL BE LANDSCAPED WITH 5-6-FT. SHRUBS AROUND THE PERIMETER TO DETER ENTRANCE BUT ALSO TO PROVIDE AN AESTHETICALLY PLEASING ENVIRONMENT

TYPICAL PARCEL LANDSCAPED BORDER, SHOWN CURRENTLY WITH AMERICAN ABORVITAE SHRUBS TO PROVIDE A NATURAL SCREEN



PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE LANDSCAPE PLAN NO. 2

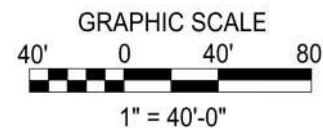
DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
L-102

MASER ENGINEERING
CIVIL | ENVIRONMENTAL | TRANSPORTATION | STRUCTURAL
112 N. MAIN ST. | HORSEHEADS, NY 14845 | 607-377-7990

OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

ISSUE/REVISIONS	DATE
0 PRELIMINARY P&ID SUBMISSION	05/20/18
1 PRELIMINARY P&ID SUBMISSION	05/20/18
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ISSUED/REVISIONS	DATE
0 PRELIMINARY AND SUBMITTAL	07/20/2018
1 PRELIMINARY AND SUBMITTAL	07/20/2018
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MASER ENGINEERING
 CIVIL | ENVIRONMENTAL | TRANSPORTATION | STRUCTURAL
 112 N. MAIN ST. | HORSEHEADS, NY 14845 | 607-377-7990

OWNER: J.O.S.H. DEVELOPMENT LLC

PROJECT: SING SING ROAD PLANNED UNIT DEVELOPMENT
 161 Sing Sing Road
 Big Flat, NY 14814

DRAWING SCALE: AS NOTED
 FIRST ISSUE DATE: MAY 21, 2018
 PROJECT NO: 17-024
 DRAWING NO: L-103

TITLE OF DRAWING: SITE LANDSCAPE PLAN NO. 3



SHEET L-103 LANDSCAPE PLAN NO. 3

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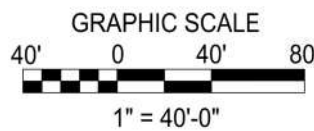
TYPICAL PARCEL LANDSCAPED BORDER, SHOWN CURRENTLY WITH AMERICAN ABORVITAE SHRUBS TO PROVIDE A NATURAL SCREEN

THE COMMERCIAL LOTS WILL HAVE A MIX OF LARGE DECIDUOUS TREES, ORNAMENTAL TREES AND MISCELLANEOUS LANDSCAPING WHICH WILL BE THE BUILDING OWNER'S RESPONSIBILITY TO INSTALL

TYPICAL STORMWATER MANAGEMENT AREA WILL INCLUDE A GRASSED/LANDSCAPED FILTER STRIP AROUND THE PERIMETER FOR PRE-TREATMENT AND AESTHETIC PURPOSES

TYPICAL SCREENED DUMPSTER AREA; SCREEN SHALL BE A SLAT OR PRIVACY FENCE WITH A DOUBLE GATE

TYPICAL REAR PATIO FOR LUNCH/BREAK FOR THE BUILDING WORKERS. PATIO AND TABLES ARE SHOWN FOR REFERENCE; ACTUAL LAYOUT AND MATERIALS WILL BE SPECIFIED DURING THE SITE PLAN REVIEW IN A FUTURE PHASE



PROJECT
SING SING ROAD PLANNED UNIT DEVELOPMENT
161 Sing Sing Road
Big Flats, NY 14814

TITLE OF DRAWING
SITE LANDSCAPE PLAN NO. 4

DRAWING SCALE
AS NOTED
FIRST ISSUE DATE:
MAY 21, 2018
PROJECT NO.
17-024
DRAWING NO.
L-104

OWNER/CLIENT
J.O.S.H. DEVELOPMENT LLC

112 N. MAIN ST. | HORSEHEADS, NY 14845 | 607-377-7990

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ISSUED/REVISIONS

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Engineering Report

for the

PLANNED UNIT DEVELOPMENT

OF

161 SING SING ROAD

**Town of Big Flats
Chemung County, New York**

July 2018

Prepared By:



112 N. Main St.
Horseheads, New York 14845
Phone: (607) 377-7990

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- Table 7: Maximum Permissible Exterior Continuous Sound Pressure Level Limits

I. Introduction

This Engineering Report has been prepared to provide a comprehensive technical and administrative background of the proposed Planned Unit Development (PUD). Per Section 17.04.060 of the Town of Big Flats Municipal Code, the definition of a Planned Unit Development is, *'an independent, freestanding zoning district, wherein the zoning regulations need not be uniform for each class or type of land use, but where the use of land shall be in accordance with a preliminary planned unit development plan approved by the town board.'*

II. Engineering Report Objectives

The purpose of this Engineering Report is to provide a comprehensive review of the planning, design and construction of the proposed PUD. The objectives of this report are as follows:

- A. Present existing site information such as:
 - 1. Soils
 - 2. Flood Plain
 - 3. Environmental
 - 4. Historical
- B. Present applicable sections of the Town of Big Flats Municipal Code related to a PUD.
- C. Present the procedure for obtaining PUD approval.
- D. Present proposed project information such as:
 - 1. Stormwater Management
 - i. Erosion and Sediment Control
 - ii. Temporary Management
 - iii. Permanent Management
 - 2. Utilities
 - i. Wastewater Management
 - ii. Domestic Water Service
 - iii. Electrical Service
 - iv. Gas Service
 - v. Telecommunications Service
 - 3. Access/Traffic
 - i. Site Access
 - ii. Truck Access
 - iii. Vehicular Traffic
 - iv. Pedestrian Traffic
 - v. Parking/Loading/Shared Parking
 - 4. Site Lighting
 - 5. Environmental
 - i. Noise
 - ii. Vibrations, Smoke, Heat, Glare, Odors
 - iii. Visibility
 - iv. Lighting
 - v. Wetlands/Waterways
 - vi. Endangered Species
 - vii. Historical
 - 6. Storage
 - 7. Waste Disposal
 - 8. Signs

9. Landscaping
10. Lot
 - i. Setbacks
 - ii. Areas
 - iii. Lot Coverage
 - iv. Density
 - v. Open Space
 - vi. Height
11. Recreation

III. Project Background

A. Location of Project:

This project is located at 161 Sing Sing Rd. in the Town of Big Flats in Chemung County, New York.

<i>Approximate Coordinate Position @ Center of Project</i>	
<i>Latitude</i>	<i>42° 9' 45.17" N</i>
<i>Longitude</i>	<i>76° 54' 28.95" W</i>

Table 1 – Project Location

The parcel has access from Sing Sing Rd. on the south end. The USGS map indicating the location of the project can be found in Appendix A.

B. Parcel Information:

The parcel, rectangular in configuration, is bounded by Sing Sing Road on the south, vacant rural land on the west, steep woods to the north and two parcels to the east, one of which is residential and another which is a storage warehouse.

The parcel is 77.535-acres and has a tax map number of 57.03-2-4. Approximately 65-acres of the parcel can be developed while the remaining is wooded cover with slopes that exceed 70%.

C. Project Description:

The proposed project will construct a mixed-use residential neighborhood consisting of single family homes, multi-family buildings and commercial properties on a single, vacant parcel of land in the Town of Big Flats, Chemung County, New York.

D. Scope of Work:

The proposed work for the site will be phased and will be discussed in this report. In general, the scope of work is as follows:

1. **Phase One: Infrastructure (2018-2019)**
 - a. Develop and execute a sewer district extension per the Chemung County Sewer Districts standards. Physically extend the sanitary sewer from offsite to the site.
 - b. Construct the site entrance road.
 - c. Construct all site utilities: gas service, water service, sanitary sewer service, telecommunications, and electric.

2. **Phase Two: Single Family Homes and Multi-Family Units (South of West-East NYSEG Easement) (2019 – 2025)**
 - a. Strip and stockpile topsoil, dispose of brush, shrubs and trees.
 - b. Construct the roads.
 - c. Construct the single-family homes and multi-family buildings in tandem. A portion of the single-family homes will be constructed first, followed by a portion of the multi-family units and then back and forth until all units are complete.
 - d. Construct stormwater management facilities such as water quality treatment infrastructure and infiltration facilities.
 - e. Construct recreational areas.
 - f. Install roadway signs.
 - g. Construct street lighting.
 - h. Construct landscaping and final site stabilizations.
3. **Phase Three: Single Family Homes (North of West-East NYSEG Easement) (2025 – 2027)**
 - a. Strip and stockpile topsoil, dispose of brush, shrubs and trees.
 - b. Construct the roads.
 - c. Construct the single-family homes.
 - d. Construct exterior post signs.
 - e. Construct street lighting.
 - f. Construct landscaping and final site stabilizations.
4. **Phase Four: Commercial Lots (2027 – 2029)**
 - a. Construct the commercial buildings, parking lots and walkways.
 - b. Construct site lighting.
 - c. Construct landscaping and final site stabilizations.

E. Application Information:

The Site Plan Review Application will be used to formally apply for the PUD to the Town of Big Flats. As the project is passed around all state, county and local entities, the following information will be used as the formal applicant (though there are more partners):

Mr. Andrew Harding, AIA, NCARB
Partner
J.O.S.H. Development LLC
111 East 14th St.
Elmira Heights, NY 14903
607-425-6477
aharding@ajh-design.com

IV. Pre-Development Site Conditions

A. Existing Soils:

A review of the soil conditions of the site reveals the following soils and characteristics are located within the project site. The NRCS Soil Map showing the soil types and locations found at the project site can be found in Appendix B. In addition, we also included the list of soils in Chemung County from the NRCS website.

Symbol	Name	% Slope Range	Area (Acres)	Hydrologic Group (HSG)
ChB	Chippewa Silt Loam	3% - 8%	10.3	D
ChC	Chippewa Silt Loam	8% - 15%	6.8	D
HoA	Howard Gravelly Silt Loam	0% - 3%	7.4	A
LnD	Lordstown Channery Silt Loam	15% - 25%	9.9	C
LoE	Lordstown and Arnot, Very Rocky	25% - 35%	0.2	D
LoF	Lordstown and Arnot, Very Rocky	35% - 70%	2.9	C
UnA	Unadilla Silt Loam	0% - 3%	16.4	B
WaA	Wallington Silt Loam, Gravelly Substratum	0% - 3%	16.1	D
WaB	Wallington Silt Loam, Gravelly Substratum	3% - 8%	0.1	D
WIA	Williamson Silt Loam, Gravelly Substratum	0% - 3%	9.5	D

Table 2 – Soil Types

According to this survey, most of the site is suitable for development. The rocky soils of the Lordstown and Arnot soils with steep slopes will not be developed. We are encouraged by the large areas with well drained soils and plan on using those features to infiltrate the majority of the stormwater onsite to meet the post-construction stormwater events.

To use infiltration techniques for stormwater management, percolation tests are required. Appendix C will highlight the infiltration test locations, values, and photographs.

The process for completing the infiltration tests were according to the process outlined in Appendix C of the NYSDEC Stormwater Management Design Manual. The tests were performed by a NYS Professional Engineer. The following from the Design Manual was completed:

Test Pit/Boring Requirements

1. Excavated a test pit to a depth of 4-feet below the proposed facility bottom elevation.
2. Determined depth to groundwater table (if within 4 feet of proposed bottom) upon initial digging or drilling, and again 24 hours later.
3. Determined USDA or Unified Soil Classification System textures at the proposed bottom and 4 feet below the bottom of the SMP
4. Determined depth to bedrock (if within 4 feet of proposed bottom)
5. The soil description included all soil horizons.
6. The location of the test pit or boring corresponded to the SMP location; test pit/soil boring stakes were left in the field for inspection purposes and were clearly labeled as such.

Infiltration Testing Requirements

1. Installed plastic casing (solid 6-inch diameter, 30" length) to 24" below proposed SMP bottom.
2. Removed any smeared soiled surfaces and provided a natural soil interface into which water may

percolate. Removed all loose material from the casing. Filled the casing with clean water to a depth of 24" and allowed to pre-soak for twenty-four hours.

3. Twenty-four hours later, refilled casing with another 24" of clean water and monitored water level (measured drop from the top of the casing).
4. Was completed with an open excavation.
5. The location of the tests corresponded to the SMP location.
6. Upon completion of the testing, the casings were immediately pulled, and the test pit was back-filled.

A test location map is included in Appendix C. The following is a narrative of each test location:

1. Infiltration Test Hole #1

Test hole #1 was located at the proposed infiltration trench area in the parking lot of the proposed commercial development. Specifically, the location is measured 197-ft. east and 68-ft. north of the southwest property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 36 inches per hour and the second test averaging 28.75 inches per hour. From this, the design infiltration rate for this location is 32 inches per hour.

2. Infiltration Test Hole #2

Test hole #2 was located at the proposed infiltration trench area in the parking lot of the proposed commercial development. Specifically, the location is measured 130-ft. east and 68-ft. north of the southwest property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 36 inches per hour and the second test averaging 28.75 inches per hour. From this, the design infiltration rate for this location is 32 inches per hour.

3. Infiltration Test Hole #3

Test hole #3 was located at the proposed infiltration trench area in the parking lot of the proposed commercial development. Specifically, the location is measured 130-ft. east and 266-ft. north of the southwest property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 48 inches per hour and the second test averaging 32 inches per hour. From this, the design infiltration rate for this location is 40 inches per hour.

4. Infiltration Test Hole #4

Test hole #4 was located at the proposed infiltration trench area in the parking lot of the proposed commercial development. Specifically, the location is measured 197-ft. east and 266-ft. north of the southwest property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 48 inches per hour and the second test averaging 32 inches per hour. From this, the design infiltration rate for this location is 40 inches per hour.

5. Infiltration Test Hole #5

Test hole #5 was located at the proposed infiltration basin area in the parking lot of the proposed west side multi-family complex. Specifically, the location is measured 75-ft. east and 455-ft. north of the southwest property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 34 inches per hour and the second test averaging 27.25 inches per hour. From this, the design infiltration rate for this location is 30.50 inches per hour.

6. Infiltration Test Hole #6

Test hole #6 was located at the proposed infiltration basin area in the parking lot of the proposed center multi-family complex. Specifically, the location is measured 387-ft. east and 820-ft. north of the southwest property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 4.00 inches per hour and the second test averaging 3.25 inches per hour. From this, the design infiltration rate for this location is 3.50 inches per hour.

7. Infiltration Test Hole #7

Test hole #7 was located at the proposed infiltration basin area in the recreational area among the single-family homes. Specifically, the location is measured 417-ft. east and 1,313-ft. north of the southwest property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 48 inches per hour and the second test averaging 43.25 inches per hour. From this, the design infiltration rate for this location is 45.50 inches per hour.

8. Infiltration Test Hole #8

Test hole #8 was located at the proposed infiltration basin area in the recreational area among the single-family homes on the east side of the parcel. Specifically, the location is measured 140-ft. west and 952-ft. north of the east most property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 72 inches per hour and the second test averaging 61 inches per hour. From this, the design infiltration rate for this location is 66.50 inches per hour.

9. Infiltration Test Hole #9

Test hole #9 was located at the proposed infiltration basin area in the recreational area among the single-family homes. Specifically, the location is measured 335-ft. east and 2,407-ft. north of the southwest property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 12.25 inches per hour and the second test averaging 9.75 inches per hour. From this, the design infiltration rate for this location is 11 inches per hour.

10. Infiltration Test Hole #10

Test hole #10 was located at the proposed infiltration basin area in the recreational area among the single-family homes. Specifically, the location is measured 480-ft. east and 2,676-ft. north of the southwest property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 2.25 inches per hour and the second test averaging 2.00 inches per hour. From this, the design infiltration rate for this location is 2.00 inches per hour.

11. Infiltration Test Hole #11

Test hole #11 was located at the proposed infiltration basin area in the recreational area among the single-family homes on the north side of the parcel. Specifically, the location is measured 120-ft. west and 2,751-ft. north of the east most property corner pin.

No groundwater was detected, and no mottling was discovered to a depth of six-feet. Two tests were conducted with the first test averaging 2.25 inches per hour and the second test averaging 2.00 inches per hour. From this, the design infiltration rate for this location is 2.00 inches per hour.

TEST HOLE #	TEST #1 (in./hr.)	TEST #2 (in./hr.)	AVERAGE RATE (in./hr.)
Test Hole #1	36.00	28.75	32.00
Test Hole #2	36.00	28.75	32.00
Test Hole #3	48.00	32.00	40.00
Test Hole #4	48.00	32.00	40.00
Test Hole #5	34.00	27.25	30.50
Test Hole #6	4.00	3.25	3.50
Test Hole #7	48.00	43.25	45.50
Test Hole #8	72.00	61.00	66.50
Test Hole #9	12.25	9.75	11.00
Test Hole #10	2.25	2.00	2.00
Test Hole #11	2.25	2.00	2.00

Table 3– Infiltration Test Summary

B. Environmental Review:

The maps in Appendix D highlight the existing environmental specific areas related to the project. Figure 2 (Appendix D-1) shows the NYSDEC Stormwater Mapper and physically shows the project area is just outside the automatic MS4 designation. However, the project is in the Town of Big Flats which is an MS4 community. Therefore, MS4 requirements govern for this project.

Figure 3 (Appendix D-2) shows the NYSDEC Environmental Resource Mapper which depicts a riverine flowing through the site. This is the natural drainageway found on site that will be maintained and is discussed at length in the Stormwater Pollution Prevention Plan. It appears the project does not impact any state or federal wetlands, nor are there any rare plants or animals in or around the site.

Figure 4 (Appendix D-3) backchecks the analysis of Figure 3 and presents the National Wetlands Inventory. Again, the riverine is shown on the site and no other wetlands are near the site. There is a freshwater pond to the west of the site that may drain into the existing drainage way that bisects the site near the center and that is discussed in the SWPPP.

Figure 5 (Appendix D-4) shows the US EPA Sole Source Aquifer Map and presents the site outside of the

sole source aquifer.

Figure 6 (Appendix D-5) shows the NYSDEC Primary and Principal Aquifers of New York State and presents the site within both a principal and primary aquifer.

Figure 7 (Appendix D-6) presents the Chemung River Watershed and sub-watersheds for informational purposes only.

A portion of the north end of the site is located within the "Ridgeline Overlay District (RLO)" of the Town of Big Flats. The requirements for the RLO district are found in Appendix D-7. No development is proposed within this district since this is the steep section of the parcel. However, this area and the requirements will need to be considered if this area is ever cleared for any purpose.

C. Existing Utilities:

The site contains utilities and easements prior to development which will significantly impact the planning of the project. Specifically, the utilities on the site are as follows:

Electric:

There are several NYSEG easements on the property. The largest is the overhead transmission lines to the north of the parcel. The easement width is currently unknown but approximately 150-feet wide and bisects the site from the northeast corner to the southwest. The developer is currently working with the New York State Electric and Gas Corporation (NYSEG) to determine the exact easement width as no structures can be built within the easement. Information regarding that easement will be provided in Appendix E once we receive it.

There is another electric main that runs underground parallel to the north-south drainage way. Easement information for this area is unknown and is also being obtained from NYSEG and will also be provided in Appendix E once we receive it.

Gas:

There is an existing gas main owned, operated and maintained by Dominion Energy Transmission, Inc. (DETI). The easement width is 70-feet and no structures can be constructed over the easement. All roads entering the easement must do so and 90-degrees. An acknowledgement letter and requirements from DETI is provided in Appendix E.

Underground Storage:

There is no evidence of underground storage tanks as we don't see any visible vent pipes coming from the earth or access manholes.

Other Utilities:

There are no other known utilities on the site. Domestic water service and telecommunications exist under Sing Sing Road and will be extended to the site for service. Sanitary service will be extended to the site from an off-site location and will require a sewer district extension from the County to do so.

D. Floodplain Review

The northern end of the parcel is very steep and grade eventually levels off to an average of 0-3 percent slopes. Appendix F shows Figure 8, the FEMA Flood Insurance Rate Map (FIRM) for the project area and we can conclude this development is in Zone X which is outside the zone of the 500-year flood. Therefore, there are no flooding concerns with this parcel, nor this development.

E. Archeological Review

Figure 9 in Appendix G shows the NYS Office of Parks, Recreation and Historic Preservation (OPRHP) map which shows the site is adjacent to several previously reviewed areas. Those areas are listed below:

USN	Name	Status
1503	Private Residence - 183 Sing Sing Rd	Eligible
1503	Judy Janowski - 243 Hibbard Rd 14845	Not Eligible
1503	Sikorsky Military Derivatives Completion Center - 276 Sing Sing Road 14814	Undetermined
1503	Elmira Corning Regional Airport - 276 Sing Sing Road	Not Eligible

PROJECTS

Number	Name	Status
16PR06656	Elmira Corning Regional Airport Terminal Area Revitalization	Closed
15PR05065	ECRA Parking Expansion Project	Closed
16PR04130	Elmira ASR-8 Replacement	Closed
15PR01369	Guthrie Creek crossing for Dominion Transmission	Closed
15PR00156	Emhart Glass Building Addition, 276 Sing Song Road	Closed
16PR02643	Ln-31 Recoat	Closed
16PR06903	Elmira Corning Regional Airport Taxiway E1 Project	Closed
15PR06302	Janowski Project	Closed
16PR03307	ECRA Terminal Parking Lot Expansion & Access Improvements	Closed
17PR08745	ECRA - Relocation of Taxilane - T	Closed

Table 4 – NYS OPRHP Initial Project Review

Specifically, 183 Sing Sing Rd. is located just east of the proposed project and it is noted on the site to be eligible. As part of the design process we will consult with the NYS Office of Historic Preservation for their comments on the project and any correspondence will reside in Appendix G.

V. Planned Unit Development Basis of Design

This section presents the basis of design for the entire project. We'll begin by presenting the requirements from the Town of Big Flats for a PUD.

A. Town of Big Flats Municipal Code Requirements

A PUD is a type of development that doesn't occur too often in the Southern Tier. It has a very different type of process and includes very different requirements than a typical site plan review. Many of the requirements such as lot sizes, setback widths, parking, etc. are determined as part of the PUD process. Sections of the Town Code are utilized to inform the development of the PUD by taking the current zoning of the parcel and surrounding parcels and comparing them to other developments in the Town to come up with a basis of design for the PUD. This section of the report provides that basis of design based on the Concept PUD plan that was accepted by the Town Planning Board at the May 2018 meeting as well as other executive meetings that were held between the applicant and the Town.

The Town of Big Flats does have ample information in the Town Code for PUDs in Title 17 – Zoning; specifically, in Chapter 17.21 – Planned Unit Development District. Appendix H includes the narrative from the Town Code for the PUD District that we'll be required to follow.

B. Town of Big Flats Procedure for PUD Approval

The following list presents the summary of the administrative procedure required for obtaining PUD approval. Section 17.21.060 in Appendix H presents the detailed procedure instructions.

1. Town of Big Flats Planning Board performs a pre-application meeting.
2. Applicant prepares a Preliminary Planned Unit Development Plan Submission and submits it to the Town.
3. Town Planning Board reviews the Preliminary Planned Unit Development Plan.
4. Town Planning Board provides recommendation to the Town Board within 62 days of a complete application.
5. Town Board reviews the Preliminary Planned Unit Development Plan.
6. Town Board holds a public hearing within 62 days of receiving findings and recommendation from the Planning Board.
7. Town Board, within 62 days of holding public hearing, will render decision on application and forward it to the Planning Board.
8. If approved, the applicant submits Final Planned Unit Development Plan.
9. Planning Board reviews Final Planned Unit Development Plan and provides recommendation to the Town Board.
10. Town Board issues Planned Unit Development Final Plan approval.

The County Planning Board also weighs in at their monthly meeting during this process.

This process only provides approval for the PUD and does not allow the developer to begin physical development. A site plan review/approval is required for each phase of the PUD execution. It is allowed, however, to combine the PUD process with the site plan review process of Phase One to save time and allow the developer to begin after all said approvals are in hand.

C. Other Entity Required Reviews

There are several other entities that need to review the project documents and provide comments/approval/permits before work can commence. The summary of those required permits and reviews are as follows:

1. Permits Required:

The following table presents the site permits required for the project, the associated approval authority and individual:

Permit Required	Approval Authority	Approval Individual
Building Permit	Town of Big Flats	Tom Whispel, CEO
SPDES Permit	NYS Department of Environmental Conservation	Toni Cioffi, Bureau of Water Permits
Right of Way Permit	Chemung County Highway Department	Andrew Avery, P.E., County Highway Superintendent
Driveway Permit	Chemung County Highway	Andrew Avery, P.E., County

	Department	Highway Superintendent
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Table 5 – Permits Required

2. Project Approvals:

The following table presents the approvals required for the project, the associated approval authority and individual (note that other building specific approvals such as sprinkler, fire alarm, electrical, and structural are not shown):

Approval Required	Approval Authority	Approval Individual
SWPPP	Chemung County Stormwater Coalition	Jimmie Joe Carl, P.E.
Planned Unit Development	Town of Big Flats Planning Board and Town Board	Town of Big Flats Planning Board and Town Board
Site Plan Review	Town of Big Flats Planning Board	Town of Big Flats Planning Board
Area Variances (if any)	Town of Big Flats Zoning Board of Appeals	Town of Big Flats Zoning Board of Appeals
Five Acre Disturbance Waiver	NYS Department of Environmental Conservation, Region 8 Office	Scott Rodabaugh, P.E. or Regional Sub-Office Engineer
Water Service Tie-In	Town of Big Flats Water Department	Shawn Crater, Water Systems Supervisor
Sewer Service District Extension	Chemung County Sewer District	Matthew Hourihan, P.E., Executive Director
Backflow Preventer	NYS Department of Health & Elmira Water Board	Rochester Office & Mark LaDouce, P.E., General Manager
Electric/Gas Service Tie-In	NYSEG	TBD
Telecommunications Tie-In	Verizon	TBD

Table 6 – Approvals Required

D. Basis of Design

The following section presents the basis of design for the project and how it relates to the Town Code previously presented.

1. Stormwater Management

The PUD package will include a full Stormwater Pollution Prevention Plan (SWPPP) design according to the New York State Department of Environmental Conservation Stormwater Management Design Manual, dated January 2015. The project SWPPP has been kept separate from this document because of its size.

The project will also need to meet the requirements of the NYSDEC SPDES General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-0-15-002. Additionally, since the Town of Big Flats is a regulated MS4, the project will need to meet the requirements of the NYSDEC SPDES General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s), Permit No. GP-0-15-003.

i. Erosion and Sediment Control

The project will be required to provide a full erosion and sediment control plan for every phase of the project. In addition, since development is likely over the winter months, an

enhanced erosion and sediment control plan is required. All practices used will be according to the NYSDEC Standards and Specifications for Erosion and Sediment Control, July 2016.

Erosion and sediment control inspections will be required by a person trained in the NYSDEC 4-hour course, a Professional Engineer or a Certified Professional of Erosion and Sediment Control (CPESC). These inspections are required once every seven calendar days or 24-hours after a rainfall. Above this, per the SPDES Permit for Construction Discharges, a five-acre waiver is required to be obtained from the NYSDEC Regional Office to disturbed more than five-acres at any given time. It is expected this will occur on this development. This waiver requires two inspections every seven calendar days for the duration five acres or more is disturbed.

The project will utilize the following erosion and sediment control techniques for development:

- Erosion Control - Runoff Control
 - Check Dam
 - Construction Ditch
 - Diversion
 - Rock Outlet Protection
- Erosion Control – Soil Stabilization
 - Anchored Stabilization Matting
 - Mulching
 - Permanent Construction Area Planting
 - Recreation Area Seeding
 - Soil Restoration
 - Temporary Construction Area Seeding
 - Topsoiling
 - Trees, Shrubs, Vines
 - Vegetating Waterways
- Sediment Control
 - Buffer Filter Strip
 - Rock Dam
 - Sediment Basin or Trap
 - Silt Fence
 - Storm Drain Inlet Protection

The detailed erosion and sediment control plan and five-acre waiver documents can be found in the project SWPPP.

ii. Permanent Management

Since this project will disturb greater than one-acre of land, permanent, post construction stormwater management controls are required to be provided to detain the 1-year Channel Protection Volume, 10-year Overbank Flood Protection and 100-year Extreme Flood Protection events to ensure post-development discharges are at or below current discharges (as well as provide storage requirements).

Soil infiltration is relatively good in various areas around the site and the project plans to use infiltration basins to provide the 1, 10 and 100-year storage requirements for the project.

Green infrastructure techniques for runoff reduction are also required to provide necessary water quality for the project prior to entering any post-construction stormwater management facility. Green infrastructure techniques proposed for this project are:

- Disconnection of rooftop runoff
- Grass filter strips
- Vegetated swales
- Tree plantings

The project also has large drainageways on the site that will need to be maintained. These drainageways collect water from upstream and convey it to an existing box culvert under Sing Sing Rd. at the entrance to the site. Subsequently, there are two major issues to address when it comes to stormwater management. The first is offsite runoff from the hillside and the second is the management of the parcel stormwater runoff. Our approach presented in the SWPPP is to divert all the hillside water around the site using the existing drainageways and manage the site stormwater on the site itself.

The sizing calculations and the design narrative can be found in the SWPPP.

2. Utilities:

i. Wastewater Management

As previously discussed, sanitary sewer does not service the site, nor is it present under Sing Sing Road south of the development. There are sanitary sewers to the south of the development, but these areas are offsite. To bring sanitary sewer service to the site, a feasibility study was performed by our office to determine the best location to connect and if the gravity system could be used without proposing a pump station. The feasibility study we performed can be found in Appendix I of this report.

The study presented several options to bring sanitary sewer service to the site and it was determined that the most feasible option was to connect to an existing manhole in front of the Wings of Eagles Discovery Center. Service would extend north from this manhole through a Chemung County easement, then under Sing Sing Rd. by horizontal directional drilling, and then east down Sing Sing Road (in the ditch line), to the site. Manholes are required every 300-feet and approximately 2,200-feet of pipe would need to be installed to bring the main to the entrance of the site. This yielded an average slope of 0.20% which is typical of sanitary sewer.

Once it was determined a pump was not needed, the applicant consulted with the Chemung County Sewer Districts to determine if they were willing to serve the site. A "WILL SERVE" letter was issued to the applicant and is provided in Appendix I for reference.

ii. Domestic Water Service

There is an existing water main under Sing Sing Road that passes by the site along with existing hydrants. Per the Town of Big Flats Water Systems Supervisor, the pressure in the pipe is approximately 90psi and flow is adequate. We are currently working with the Water Supervisor to obtain accurate flow rate data so we can determine the pressure loss within the site as we increase elevation northward.

We met with the Water Supervisor to obtain the design standards we need to meet and they

are as follows:

- No open cutting of Sing Sing Road
- Loops are required so if one trunk needs to be shutoff for maintenance or repair, the other trunk continues to supply the neighborhood.
- HDPE pipe is satisfactory under the road to the tap and then transition to ductile iron pipe (DIP) as it enters the site.
- 3-Valve cluster is required under Sing Sing Rd. for the horizontal directional drill.
- Valve is needed at every intersection (right close/left open)
- Hydrants are required every 500-feet
 - K81D Kennedy Hydrants
 - Painted Yellow
 - Right Close/Left Open
 - 6-in. dia. DIP
- 8-Inch DIP for the water main throughout the development.
- Commercial and multi-family developments will probably be sprinklered so we need to account for that when those site designs are prepared.
- Service lines to each home are to be $\frac{3}{4}$ " copper
- The Town supplies the meter and service valves and the backflow preventers and the contractor reimburses the Town for the materials.

These requirements are provided in the project plans and details.

iii. Electrical Service

The project will tie into existing overhead transmission lines along Sing Sing Rd. (on the project side of the road) which are owned and maintained by NYSEG. Service for the site will be entirely underground and will connect to one of the poles nearest to the entrance of the site. Step down transformers will be required throughout the project site to deliver power to each residence and building.

NYSEG has their own design and construction standards for developments and they can be found in Appendix J of this report. In addition to researching the parcel electrical easements, the applicant is working with NYSEG to obtain a "WILL SERVE" letter which will be provided.

iv. Gas Service

The project will tie into an existing gas main (size currently unknown) under Sing Sing Rd. by horizontal directional drilling. This line is owned and maintained by NYSEG. Appendix K of this report includes NYSEG distributions standards manual. In addition to researching the parcel electrical easements, the applicant is working with NYSEG to obtain a "WILL SERVE" letter which will be provided.

v. Telecommunications Service

Telecommunications for television, internet and telephone are currently installed along Sing Sing Rd. and service for these utilities will be tied into that existing infrastructure. More information will follow on this item.

3. Access/Traffic

The proposed development is substantial in size and therefore, consideration of access and traffic

for both pedestrians and vehicles are a major component of the development of this PUD. The following narrative provides the components of access/traffic considerations for the site:

i. Roads

All roads in the development are required to have a right-of-way width of 40'-0" and a pavement width of 30'-0". This is reflected in the plans and details.

Highway work permits are required from the County for the proposed driveway (entry to the site) and any horizontal directional drilling (utilities).

Wye intersections are not allowed, and all roads shall intersect at a 90-degree angle.

Landscaping or planting is not allowed in the roadside swales. We did mention that we propose to use vegetated swales as a runoff reduction technique, but this will only be a special seed mix for the swales only and not include specific plantings.

The total length of road to be constructed is approximately 10,250-feet (1.94-miles). The cross section for the road will be as follows:

- 2" Asphalt Top Course (NYSDOT Item No. 403.198902)
- 2" Binder Material (NYSDOT Item No. 403.138902)
- 6" Base Material (NYSDOT Item No. 403.118902)
- 15" Subbase Course, Type 4 (NYSDOT Item No. 304.14) compacted to 95% proctor

The roads will not be curbed and will have normal crown (2% cross slope, crowned at the centerline). Stormwater will runoff to roadside swales.

The developer wishes to turn the maintenance of the proposed road ways over to the Town of Big Flats. Therefore, all maintenance, including snow plowing, pot hole filling and resurfacing will be the responsibility of the Town of Big Flats Highway Department.

ii. Site Access

The site will be accessed from Sing Sing Road at a single driveway curb cut. The pavement width at this point is 30'-0" and the distance to the nearest intersection (Kahler Rd and Sing Sing Rd.) is approximately 360-feet.

iii. Truck Access

The proposed development will need to be accessed by fire apparatus, snow plows, garbage trucks, delivery trucks, and tractor trailers for residence relocation. The project plans present truck turning diagrams to show that all the project site is accessible by fire apparatus, delivery trucks, garbage trucks and snow plows. However, there are portions of the site that cannot be accessed by tractor-trailers because of turning radius and therefore, signs will be posted to note this.

iv. Vehicular Traffic

There are no proposed one-way streets in the development. Similarly, no cul-de-sacs are proposed as they are forbidden in the Town of Big Flats.

a. Estimated Traffic Counts:

Full development, which is proposed over the course of 10+-years is estimated to provide the following number of vehicles in the development:

- Single Family Homes: 95-units
- Multi-Family Units: 88-Units (66) 2-BR, (22) 1-BR
- Total number of residential units is 183

According to the Transportation Energy Data Book: Edition 36.1 dated April 2018, Chapter 8 – Household Vehicles and Characteristics (Appendix L), the average vehicles per household in 2015 is 2.10. In 2005 it was 2.10 as well and 1995 was 1.95. Therefore, we'll use 2.10 to estimate the average number of vehicles per household over the course of the development and in 2029 when development is proposed to be complete. It will likely increase over time, but we will use this same number for households as we do for one-bedroom apartments to be conservative.

Therefore, the approximate total number of vehicles residing in the neighborhood upon development completion is $(183 \times 2.10 = 385 \text{ vehicles (rounded up)})$.

A total of 65-acres will be developed and this yields 5.92 cars per acre. The peak estimated

We'll use this number This analysis goes on to address the average number of vehicles per household depending on the number of licensed drivers and the household size.

The commercial development, if both properties are developed with 30,000 SQ-FT. office buildings each, will likely have 100+ parking spaces. However, this count will not affect the entire neighborhood since these developments will be out front. They will impact the main driveway with the entry and exit of vehicles, especially if most people working there work the same hours, say 8am – 5pm.

Additionally, the peak hours or traffic will likely be Monday-Friday between 7am and 9am and 4pm and 6pm. Based on the numbers above, and assuming each commercial development will be an office building with up to 100 parking spaces each, the estimated daily one-way trips either into or out of the development is:

- 383 Residential Vehicles
- 160 Commercial Development Vehicles
- Total = 543 vehicle one-way trips per day, or 1,086 two-way trips per day

To summarize, the estimated average daily traffic volume (ADT) is 1,086 (or 1,100) vehicles. Per section 2.3.2 Volume under Peak-Hour Traffic in the Policy on Geometric Design of highways and Streets (2011 6th Edition), two-way design hourly volume (DHV) may be obtained by using a percentage of the ADT, which is suggested at 8-12%. In this case, the DHV would be about 110 vehicles. Therefore, we estimate the peak hourly flow at 110 vehicles (10%).

b. Speed Limit Determination:

The Policy on Geometric Design of highways and Streets (2011 6th Edition), Chapter Five, Section 5.2 Local Rural Roads, Section 5.2.1, General Design Considerations, Table 5-1 (Minimum Design Speeds for Local Rural Roads), for level terrain, and an

average volume of 1,200 vehicles per day, the minimum speed limit is 50 MPH. Obviously, this is too high for a local neighborhood and it is recommended that the speed limit throughout the development be 30 MPH which is similar to other communities in the Town of Big Flats.

c. Grade Determination:

The Policy on Geometric Design of highways and Streets (2011 6th Edition), Chapter Five, Section 5.2 Local Rural Roads, Section 5.2.1, General Design Considerations, Table 5-2 (Maximum Grades for Local Rural Roads), for level terrain, and a speed limit of 30 MPH, the maximum grade is 7% and is reflected in the plans and details.

v. Pedestrian Traffic/Walkways

Per the Town Code, pedestrian and vehicular traffic shall be separated; walkways shall be provided for access to adjacent properties and between businesses. Additionally, for public convenience, a pedestrian and/or bicycle way shall connect various uses and otherwise provide appropriate circulation or continuity to an existing pedestrian or bicycle circulation system. These uses include, but are not limited to, residential, parking transit, bicycling, industrial, recreation and commercial.

There are no proposed sidewalks for the development between the single-family homes and the road. There are many sub-divisions in the Town of Big Flats that do not have designated pedestrian access in residential neighborhoods. However, there are sidewalks proposed in the multi-family and commercial developments to transport pedestrians from the parking areas to the buildings. Where sidewalks are proposed, they will be five feet wide cast-in-place concrete with expansion joints scored every five feet.

Sidewalks in these areas will include ADA standard curb ramps and these are shown on the plans and details.

The recreational areas proposed will have asphalt paved bike/walking paths within them and access to these areas from the roadway will also have paved pathways.

There are no existing designated pedestrian or bicycle access ways offsite that lead past the development. Sing Sing Road is a rural collector road with speeds in this area of 45 MPH. The existing shoulder width is only two feet and not appropriate for pedestrians.

vi. Parking/Loading/Shared Parking

a. Number of Parking Spaces Required

The minimum number of spaces required for all development shall comply with the parking standards provided in Section 17.48.010 of the Town Code.

All designated parking spaces are required to be 9'-0" wide x 18'-0" long. All ADA spaces will be the same size and all ADA loading zones will be at least 8'-0" wide.

Off-road parking areas for a residential use will be restricted to non-commercial vehicles only (no tractor-trailers or other large multi-axel trucks).

The number of parking spaces for a one-unit dwelling (single family home) is two spaces for up to the first four bedrooms. All single-family homes will be four bedrooms

or less and will include a driveway and two car garage, thereby meeting this requirement.

The number of parking spaces for multi-unit dwellings are two spaces per dwelling unit up to the first four bedrooms. The proposed multi-family units will all be one or two bedrooms. Each building proposes eight units; therefore, 16 spaces are required for each building. As shown on the plans, we provide 16 spaces per building and at 11 buildings, a total of 176 spaces. It should be noted that one ADA accessible space is required for the first 25 spaces. Therefore, one ADA space will be provided for each building in addition to the 16 spaces required.

The number of parking spaces required for an office, general business or professional use is 2.5-spaces for each one thousand square feet of gross floor dedicated to the use. Each building is proposed to be 32,000 square feet; therefore, 80 parking spaces are required for each building for a total of 160 spaces.

b. Parking Location

Per the Code, parking shall be located to the side or rear of buildings. In no case shall parking be allowed in the planting strip adjacent to the sidewalk or within the front setback of any lot.

Our proposed parking for the multi-family units and commercial units are behind all the buildings. For single family homes, it's typical to park vehicles in the front of the house in the driveway which will be the case for this project. We felt this Code requirement was more geared toward the multi-family and commercial developments.

4. Environmental

Environmental information presented in this section does not discuss water, wetlands, historical, etc. data as those items are discussed in the SWPPP.

i. Noise

Per Section 17.21.080 – Performance Standards of the PUD in the Town Code, residential units shall be constructed so that interior noise levels do not exceed an Ldn of 45-decibels in any inhabitable room, which is the equivalent of a quiet household room. A level of 50 would be a moderate rainfall.

Houses will be setback at least 30'-0" from the property line and must be constructed according to the International Building Code of 2015, adopted by New York State. The code specifies materials to be used that include insulation for environmental purposes and provide an acoustical dampening element. Unless interior renovations are underway, it is not likely that 45 dB will be exceeded.

District	7 a.m.— 10 p.m.	10 p.m.— 7 a.m.
General Business or Professional Offices	65	50
Small-scale Light Industrial	65	40
Residential	55	55

Table 7 – Maximum Permissible Exterior Continuous Sound Pressure Level Limits

The proposed commercial developments will be office, medical or professional and will operate during normal business hours. The proposed business operations will not generate any normal noise levels above the limits in the table shown.

The above narrative is for post-development conditions. However, as the development progresses, people will be inhabiting the structures while other structures are being constructed. Therefore, it is likely the levels shown in the table will be exceeded during the construction of other buildings from typical construction equipment and tools. Proposed work hours for construction will be between 7am and 5pm.

ii. Vibrations, Smoke, Heat, Glare, Odors

The proposed finished development will not generate any abnormal vibrations, smoke, heat, glare or odors. Lighting will be discussed in the next section and LED; dark sky compliant fixtures will be used to minimize the glare.

As with noise, construction operations will likely generate vibrations, smoke, heat and odors but only during typical work hours. The will only be during construction operations and is not a permanent situation.

5. Site Lighting

The project requires street lights throughout the development and LED, dark sky compliant light fixtures are the standard. The developer will bear the cost of labor, equipment and materials to install the street lighting system. A special lighting district will be established by the Town to pay for the electricity for the system and the project will seek funding to install LED fixtures from entities such as NYSERDA.

All parking areas will be illuminated as well as the recreational areas according to the lighting plans. All buildings will also contain wall packs or sconces to light the areas around the buildings.

A spill plan has been provided to show that all proposed light fixtures will not spill onto adjacent properties and that reduce glow. All light fixtures used for the development of the lighting and spill plan are RAB lighting fixtures. For presentation purposes, the following fixtures are used:

- Single Family Homes – Front and Rear Sconces:
 - LED Wall Sconce, 18-watt, die-cast aluminum, up to 1,032 lumens
- Multi-Family Units – Wall Packs
 - LED WP3 Wall Packs, 55-watt, up to 15,531 lumens
- Commercial Units – Wall Packs
 - LED WP3 Wall Packs, 55-watt, up to 15,531 lumens
- Street Lights
 - Triboro Roadway Lights, 32-watt, up to 3,686 lumens
- Parking Lot Lights
 - Triboro Roadway Lights, 32-watt, up to 3,686 lumens

All outdoor fixtures will be mounted no higher than 15-feet, directed inward and away from adjoining premises.

All exterior lighting will provide not less than 0.2 average maintained horizontal foot-candles and an illumination ration (brightest to darkest) of not more than 4:1. All this information is presented on the lighting plans and spill plan.

Lights on buildings will not spill onto adjoining properties.

6. Storage

All materials, supplies, and equipment will be stored in accordance with Fire Code of New York State and Property Maintenance Code of New York State. They will be screened from view from public ways and abutting properties. Exterior storage of materials, goods, and equipment will be screened entirely from view by a solid fence, or, alternatively, by solid vegetative plantings as approved by the director of planning or designee. Storage shall not exceed five percent of the total lot area and shall not occur within the front yard or side yard setbacks.

Single Family Homes may have storage sheds for lawn/patio type equipment that follow the parameters above. The multi-family units and commercial units will not have any separate storage areas.

7. Waste Disposal

The storage of all waste will be screened from public view. The multi-family and commercial developments will have dumpster areas for garbage and recycling. These areas are shown for reference on the site plans and are screened with a decorative privacy fence. Each homeowner will be responsible for entering into an agreement with a local trash removal company to meet said requirements.

As the developer will retain ownership of the multi-family units, the developer will be responsible for the removal of refuse on a weekly or twice weekly basis. Similarly, for the commercial development, the owner of the property will be responsible for refuse removal on a regular basis.

8. Signs

All signs for the proposed development shall be in accordance with Section 17.52 of the Town Code. A monument sign is shown for each commercial property with a typical detail. The multifamily units will

have a similar monument sign or wood sign. The houses will not have any proposed signs and under no circumstances will an overhead mono or dual pole sign be erected.

Standard street signs on breakaway posts will be installed. Signs such as STOP, YIELD, SPEED LIMIT 30 MPH, CHILDREN PLAYING, SLOW, etc. are proposed and shown on the plans.

9. Landscaping

The proposed landscaping plans and details addresses streetscape aesthetics so that large expanses of development are screened throughout the parcel.

Any mechanical equipment, trash areas, and loading areas will be screened according to the landscape plans.

Parking lots, recreational areas, and buildings will all be landscaped per the plan. Specifically, parking areas will be landscaped to provide 50% shade within 15-years of plantings.

All houses will have landscaping installed around at least the front of the house and one tree, size per the plan, will be planted for each lot.

10. Lot

i. Setbacks

The proposed setbacks for all lots are as follows:

- Front Yard: 30-Feet
- Side Yard: 10-Feet
- Rear Yard: 30-Feet
- Landscaping: 10-Feet

ii. Areas

The lot area information is as follows:

- Minimum Area: 12,000 SQ-FT.
- Maximum Area: 90,000 SQ-FT.
- Average Area: 15,000 SQ-FT.

The areas for each lot is presented on the site plans.

iii. Lot Coverage

The average coverage for each lot is also presented on the site plans with the lot areas

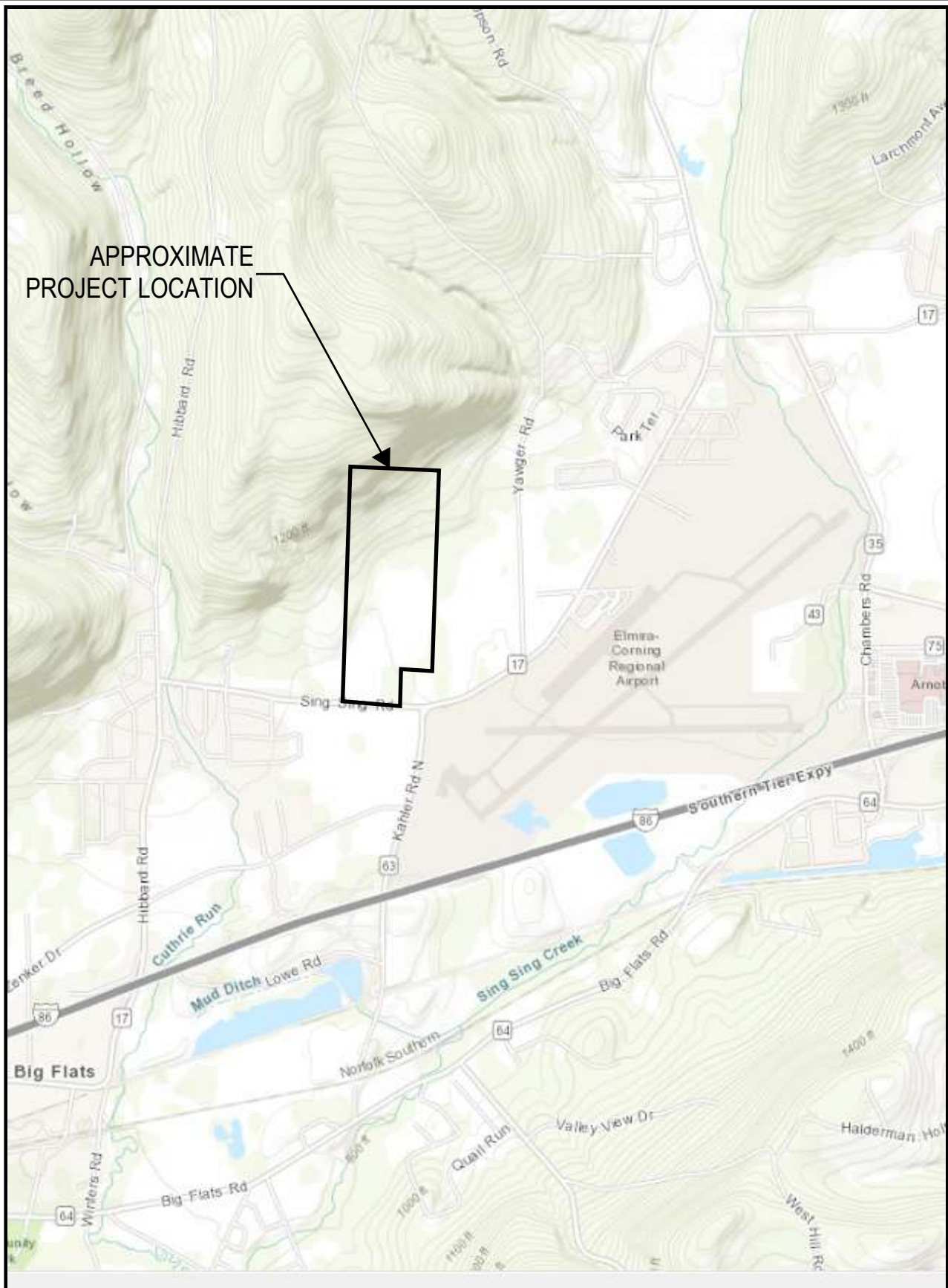
11. Recreation

The total required area for recreational use is 5% of the total parcel size. The total parcel size is 77.535-acres; therefore, the total required recreational area is 3.88-acres. Per th site plan, we have provided 4.03-acres, or 5.2%.

The recreational areas will be vegetated open spaces to facilitate the congregation of people for purposes of participating in recreational activities. Each area will have a paved trail for running, walking, etc. Each area will include picnic areas with benches. One area will include a playground.

APPENDIX A

USGS Map



Source: <http://store.usgs.gov/>



MASER ENGINEERING
DEVELOPING A BETTER WORLD

607-377-7990 | 112 North Main Street, Horseheads, NY 14845
maser@maser-engineering.net | www.maser-engineering.net

USGS Regional Map

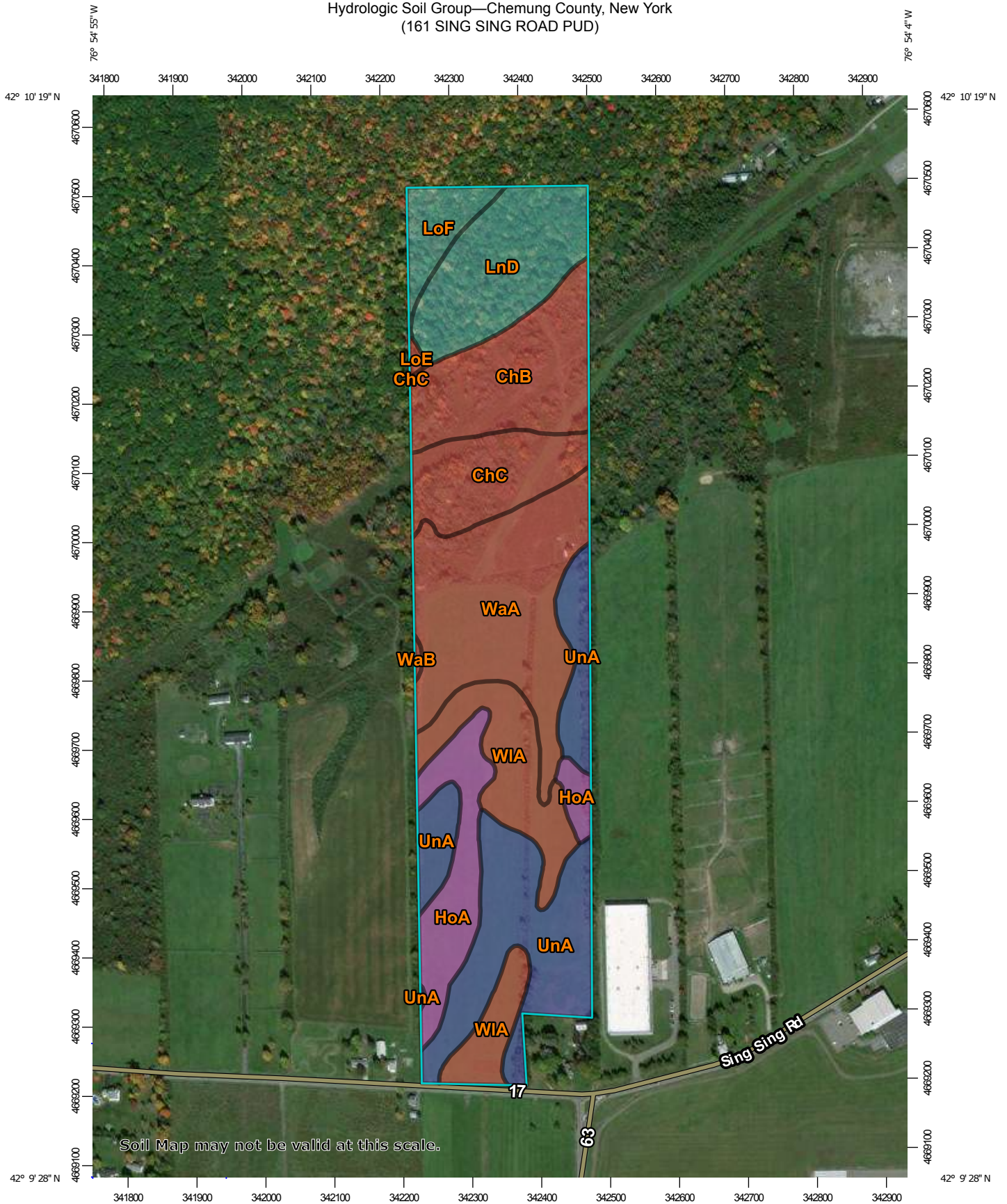
**161 SING SING ROAD
PLANNED UNIT DEVELOPMENT**

Fig.1

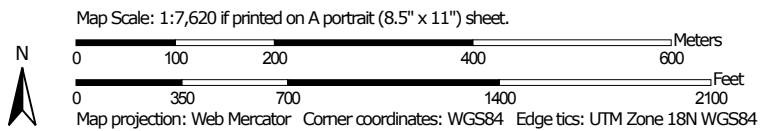
APPENDIX B

NRCS Soils Map

Hydrologic Soil Group—Chemung County, New York (161 SING SING ROAD PUD)



Soil Map may not be valid at this scale.




**Natural Resources
Conservation Service**

Web Soil Survey
National Cooperative Soil Survey

5/15/2018
Page 1 of 4

MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines


 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points






 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available


Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

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

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

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

Soil Survey Area: Chemung County, New York
 Survey Area Data: Version 15, Feb 24, 2018

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 10, 2014—Oct 30, 2016

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

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
ChB	Chippewa silt loam, 3 to 8 percent slopes	D	10.3	12.9%
ChC	Chippewa silt loam, 8 to 15 percent slopes	D	6.8	8.6%
HoA	Howard gravelly silt loam, 0 to 3 percent slopes	A	7.4	9.3%
LnD	Lordstown channery silt loam, 15 to 25 percent slopes	C	9.9	12.4%
LoE	Lordstown and Arnot very rocky soils, 25 to 35 percent slopes	D	0.2	0.3%
LoF	Lordstown and Arnot very rocky soils, 35 to 70 percent slopes	C	2.9	3.7%
UnA	Unadilla silt loam, 0 to 3 percent slopes	B	16.4	20.6%
WaA	Wallington silt loam, gravelly substratum, 0 to 3 percent slopes	D	16.1	20.2%
WaB	Wallington silt loam, gravelly substratum, 3 to 8 percent slopes	D	0.1	0.2%
WIA	Williamson silt loam, gravelly substratum, 0 to 3 percent slopes	D	9.5	11.9%
Totals for Area of Interest			79.7	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Hydrologic Soil Groups

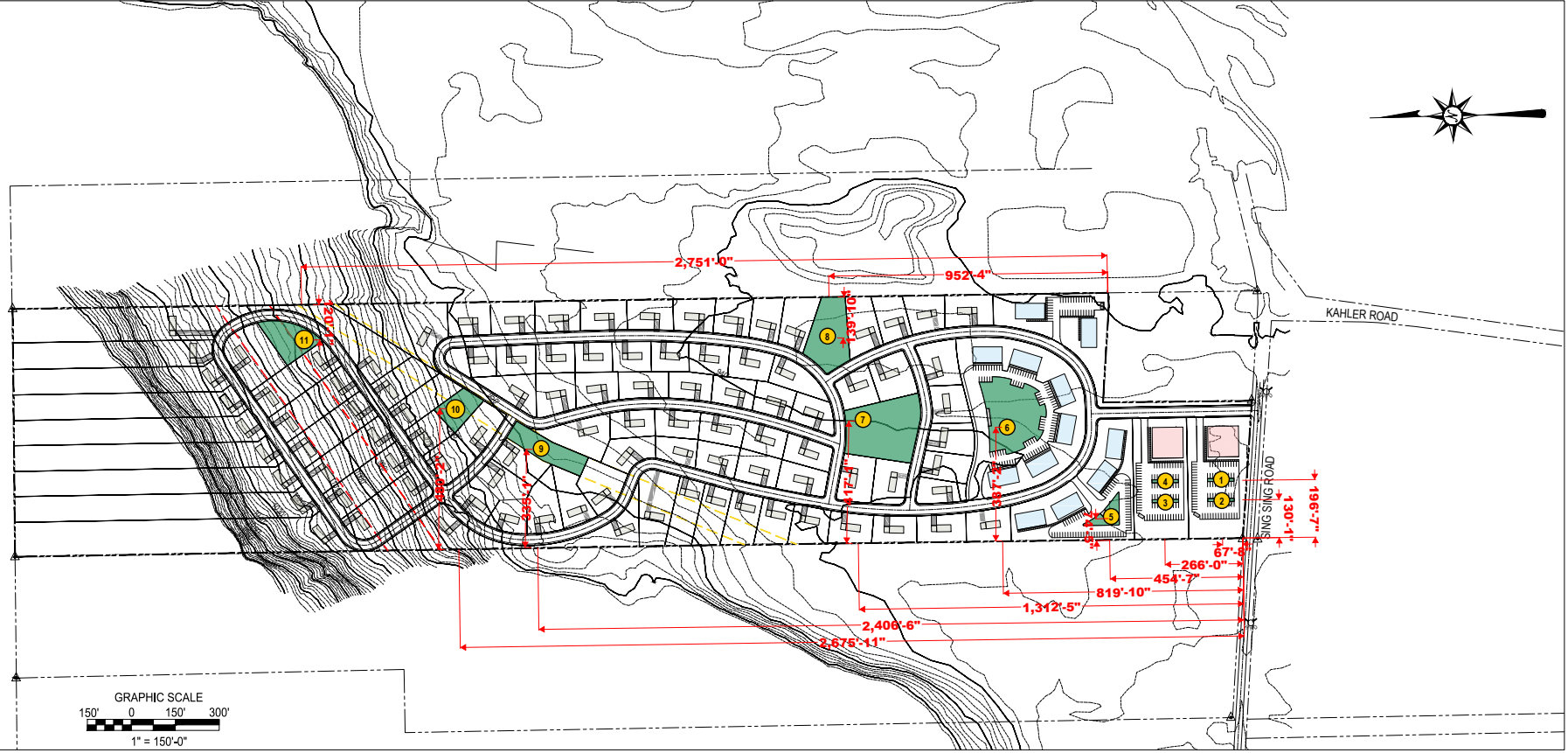
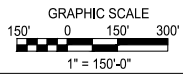
Chemung County, New York

Map Unit Symbol	Map Unit Name	Component Name	Hydrologic Soil Group
Ab	Alluvial land	Fluvaquents	A/D
Ab	Alluvial land	Udifluvents	A
ArB	Arnot channery silt loam, 2 to 8 percent slopes	Arnot	D
At	Atherton mucky silt loam	Atherton	B/D
CeB	Chenango channery silt loam, fans, 0 to 8 percent slopes	Chenango	A
ChA	Chippewa silt loam, 0 to 3 percent slopes	Chippewa	D
ChB	Chippewa silt loam, 3 to 8 percent slopes	Chippewa	D
ChC	Chippewa silt loam, 8 to 15 percent slopes	Chippewa	D
CoA	Collamer silt loam, 0 to 3 percent slopes	Collamer	C/D
CoB	Collamer silt loam, 3 to 8 percent slopes	Collamer	C/D
Hm	Homer silt loam	Homer	B/D
HoA	Howard gravelly silt loam, 0 to 3 percent slopes	Howard	A
HoB	Howard gravelly silt loam, 3 to 8 percent slopes	Howard	A
HoC	Howard gravelly silt loam, 8 to 15 percent slopes	Howard	A
HoD	Howard gravelly silt loam, 15 to 25 percent slopes	Howard	A
HoE	Howard gravelly silt loam, 25 to 45 percent slopes	Howard	A
HsB	Hudson silt loam, gravelly substratum, 2 to 8 percent slopes	Hudson	C/D
HtC3	Hudson silty clay loam, gravelly substratum, 8 to 20 percent slopes, eroded	Hudson	C/D
HtE3	Hudson silty clay loam, gravelly substratum, 20 to 40 percent slopes, eroded	Hudson	C/D
LbB	Lansing gravelly silt loam, 3 to 8 percent slopes	Lansing	B
LbC	Lansing gravelly silt loam, 8 to 15 percent slopes	Lansing	B
LbD	Lansing gravelly silt loam, 15 to 25 percent slopes	Lansing	B
LnB	Lordstown channery silt loam, 2 to 8 percent slopes	Lordstown	C
LnC	Lordstown channery silt loam, 8 to 15 percent slopes	Lordstown	C
LnD	Lordstown channery silt loam, 15 to 25 percent slopes	Lordstown	C
LoE	Lordstown and Arnot very rocky soils, 25 to 35 percent slopes	Arnot	D
LoE	Lordstown and Arnot very rocky soils, 25 to 35 percent slopes	Lordstown	C
LoF	Lordstown and Arnot very rocky soils, 35 to 70 percent slopes	Lordstown	C
LoF	Lordstown and Arnot very rocky soils, 35 to 70 percent slopes	Arnot	D
Ma	Madalin silt loam, gravelly substratum	Madalin	C/D
Mc	Made land	Made land	
MdB	Mardin channery silt loam, 2 to 8 percent slopes	Mardin	D

Map Unit Symbol	Map Unit Name	Component Name	Hydrologic Soil Group
MdC	Mardin channery silt loam, 8 to 15 percent slopes	Mardin	D
MdD	Mardin channery silt loam, 15 to 25 percent slopes	Mardin	D
Me	Middlebury silt loam	Middlebury	B/D
Mu	Muck	Saprists	A/D
Pg	Papakating silt loam	Papakating	C/D
PhA	Phelps gravelly loam, 0 to 4 percent slopes	Phelps	B/D
Pt	Pits, gravel	Pits, gravel	
Qu	Quarries	Quarries	
RhA	Rhinebeck silt loam, gravelly substratum, 0 to 3 percent slopes	Rhinebeck	C/D
RhB	Rhinebeck silt loam, gravelly substratum, 3 to 8 percent slopes	Rhinebeck	C/D
Tf	Tioga fine sandy loam	Tioga	A
Tg	Tioga silt loam	Tioga	A
Th	Tioga silt loam, high bottom	Tioga	A
TuB	Tuller channery silt loam, 0 to 8 percent slopes	Tuller	D
TuB	Tuller channery silt loam, 0 to 8 percent slopes	Tuller	D
UnA	Unadilla silt loam, 0 to 3 percent slopes	Unadilla	B
VaB	Valois gravelly loam, 2 to 8 percent slopes	Valois	B
VaC	Valois gravelly loam, 8 to 15 percent slopes	Valois	B
VaD	Valois gravelly loam, 15 to 25 percent slopes	Valois	B
VaE	Valois gravelly loam, 25 to 40 percent slopes	Valois	B
VoB	Volusia channery silt loam, 2 to 8 percent slopes	Volusia	D
VoC	Volusia channery silt loam, 8 to 15 percent slopes	Volusia	D
VoD	Volusia channery silt loam, 15 to 25 percent slopes	Volusia	D
W	Water	Water	
WaA	Wallington silt loam, gravelly substratum, 0 to 3 percent slopes	Wallington	D
WaB	Wallington silt loam, gravelly substratum, 3 to 8 percent slopes	Wallington	D
WIA	Williamson silt loam, gravelly substratum, 0 to 3 percent slopes	Williamson	D
WIB	Williamson silt loam, gravelly substratum, 3 to 8 percent slopes	Williamson	D

APPENDIX C

Soil Infiltration Tests



DATE	REVISION/NO.
05/21/2018	1
05/21/2018	2
05/21/2018	3
05/21/2018	4
05/21/2018	5
05/21/2018	6

MASER ENGINEERING
CIVIL | ENVIRONMENTAL | TRANSPORTATION | STRUCTURAL
112 N. MAIN ST. | HORSEHEADS, NY 14845 | 807-377-7900

J.O.S.H. DEVELOPMENT LLC

PROJECT	SING SING ROAD PLANNED UNIT DEVELOPMENT
OWNER	J.O.S.H. DEVELOPMENT LLC
DESIGNER	MASER ENGINEERING
DATE	05/21/2018
DRAWN BY	SK-1
CHECKED BY	
IN CHARGE	

INFORMATION TEST LOCATIONS

17-024
SK-1



Maser Engineering

112 N. MAIN ST.

HORSEHEADS, NEW YORK 14845

607-377-7990

Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. 1

OF 12

CALCULATED BY MM

DATE 7/11/2018

CHECKED BY _____

DATE _____

PROJECT: 161 SING SING RD. PUD - BIG FLATS, NY

Infiltration Test Log Summary

(Values are in inches per hour)

	Test #1	Test #2	Avg. Rate
Test Hole #1	36.00	28.75	32.00
Test Hole #2	36.00	28.75	32.00
Test Hole #3	48.00	32.00	40.00
Test Hole #4	48.00	32.00	40.00
Test Hole #5	34.00	27.25	30.50
Test Hole #6	4.00	3.25	3.50
Test Hole #7	48.00	43.25	45.50
Test Hole #8	72.00	61.00	66.50
Test Hole #9	12.25	9.75	11.00
Test Hole #10	2.25	2.00	2.00
Test Hole #11	2.25	2.00	2.00



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **2**

OF **12**

CALCULATED BY **MM**

DATE **7/11/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #1													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #1															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
5.00	4.00	15-seconds													
16.00	12.75	2													
20.50	16.50	3													
23.50	18.75	5													
26.75	21.50	10													
29.25	23.50	15													
32.25	25.75	30													
35.00	28.00	45													
36.00	28.75	60													
36.00	28.75	AVG.													
Projected															
Infiltration Rate:		32 Inches/Hour													
Notes:		The pre-soak saw five gallons of water disappear in five seconds Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 48" Gravel, and then we saw a clay/gravel mixture													



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **3**

OF **12**

CALCULATED BY **MM**

DATE **7/11/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #2													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #2															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
5.00	4.00	15-seconds													
16.00	12.75	2													
20.50	16.50	3													
23.50	18.75	5													
26.75	21.50	10													
29.25	23.50	15													
32.25	25.75	30													
35.00	28.00	45													
36.00	28.75	60													
36.00	28.75	AVG.													
Projected															
Infiltration Rate:		32 Inches/Hour													
Notes:		The pre-soak saw five gallons of water disappear in five seconds Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 48" Gravel, and then we saw a clay/gravel mixture													



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **4**

OF **12**

CALCULATED BY **MM**

DATE **7/11/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #3													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #3															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
6.00	4.75	15-seconds													
17.00	13.50	2													
21.50	17.25	3													
24.50	19.50	5													
27.75	22.25	10													
30.25	24.25	15													
33.25	26.50	30													
36.00	28.75	45													
-	32.00	60													
48.00	32.00	AVG.													
Projected															
Infiltration Rate:		40.00 Inches/Hour													
Notes:		The pre-soak saw five gallons of water disappear in five seconds Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 48" Gravel, and then we saw a clay/gravel mixture													



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **5**

OF **12**

CALCULATED BY **MM**

DATE **7/11/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #4													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #4															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
6.00	4.75	15-seconds													
17.00	13.50	2													
21.50	17.25	3													
24.50	19.50	5													
27.75	22.25	10													
30.25	24.25	15													
33.25	26.50	30													
36.00	28.75	45													
-	32.00	60													
48.00	32.00	AVG.													
Projected															
Infiltration Rate:		40.00 Inches/Hour													
Notes:		The pre-soak saw five gallons of water disappear in five seconds Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 48" Gravel, and then we saw a clay/gravel mixture													



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **6**

OF **12**

CALCULATED BY **MM**

DATE **7/12/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #5													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #5															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
4.00	3.25	15-seconds													
14.75	11.75	2													
17.50	14.00	3													
19.75	15.75	5													
22.25	17.75	10													
24.25	19.50	15													
26.75	21.50	30													
32.00	25.50	45													
34.00	27.25	60													
34.00	27.25	AVG.													
Projected															
Infiltration Rate:		30.50 Inches/Hour													
Notes:		The pre-soak saw five gallons of water disappear in five seconds Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 48" Gravel, and then we saw a clay/gravel mixture													



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **7**

OF **12**

CALCULATED BY **MM**

DATE **7/12/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #6													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #6															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
0.13	0.10	15-seconds													
0.25	0.20	2													
0.38	0.30	3													
0.50	0.40	5													
0.75	0.60	10													
1.00	0.80	15													
1.25	1.00	30													
2.75	2.20	45													
4.00	3.25	60													
4.00	3.25	AVG.													
Projected															
Infiltration Rate:		3.50 Inches/Hour													
Notes:		The pre-soak was much slower than the other holes but the water did disappear in 24-hours Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 24" Gravel, and then 24-36" of clay/gravel mix													



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **8**

OF **12**

CALCULATED BY **MM**

DATE **7/12/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #7													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #7															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
2.00	1.75	15-seconds													
8.00	7.25	2													
8.75	8.00	3													
10.00	9.00	5													
16.00	14.50	10													
24.50	22.00	15													
29.50	26.50	30													
36.00	32.50	45													
-	-	60													
48.00	43.25	AVG.													
Projected															
Infiltration Rate:		45.50 Inches/Hour													
Notes:		The pre-soak saw five gallons of water disappear in five seconds Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 24" fine gravel, and the remaining depth was gravel with larger fines and rocks													



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **9**

OF **12**

CALCULATED BY **MM**

DATE **7/12/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #8													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #8															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
8.00	6.75	15-seconds													
16.00	13.50	2													
20.75	17.50	3													
24.00	20.50	5													
29.25	25.00	10													
32.50	27.50	15													
36.00	30.50	30													
-	-	45													
-	-	60													
72.00	61.00	AVG.													
Projected															
Infiltration Rate:		66.50 Inches/Hour													
Notes:		The pre-soak saw five gallons of water disappear in five seconds Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 24" fine gravel, and the remaining depth was gravel with larger fines and rocks													



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **10**

OF **12**

CALCULATED BY **MM**

DATE **7/13/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log			Note: All measurements were taken at the top of pipe.																
Location:		Test Area #9																	
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')																	
Test Hole #9																			
Depth (Inches)																			
Test #1	Test #2	Duration (Minutes)																	
0.25	0.25	15-seconds																	
0.50	0.50	2																	
1.75	1.50	3																	
2.25	1.75	5																	
4.50	3.50	10																	
6.00	4.75	15																	
8.25	6.50	30																	
10.75	8.50	45																	
12.25	9.75	60																	
12.25	9.75	AVG.																	
Projected																			
Infiltration Rate:		11.00 Inches/Hour																	
Notes:		The pre-soak was much slower than the other holes but the water did disappear in 24-hours Used a 6" dia. PVC pipe, 30" long																	
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 24" Gravel, and then 24-36" of clay/gravel mix																	



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **11**

OF **12**

CALCULATED BY **MM**

DATE **7/13/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #10													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #10															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
0.13	0.12	15-seconds													
0.25	0.25	2													
0.38	0.33	3													
0.50	0.50	5													
0.75	0.75	10													
1.00	0.90	15													
1.25	1.15	30													
1.75	1.50	45													
2.25	2.00	60													
2.25	2.00	AVG.													
Projected															
Infiltration Rate:		2.00 Inches/Hour													
Notes:		The pre-soak was much slower than the other holes but the water did disappear in 24-hours Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 24" Gravel, and then 24-36" of mostly clay (broken bits)													



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Infiltration Test Log for Stormwater Management

JOB NO. **17-024**

SHEET NO. **12**

OF **12**

CALCULATED BY **MM**

DATE **7/13/2018**

CHECKED BY

DATE

PROJECT: **161 SING SING RD. PUD - BIG FLATS, NY**

Infiltration Test Log				Note: All measurements were taken at the top of pipe.											
Location:		Test Area #11													
Depth:		Top of Test Hole = 5' below existing ground (Width 5' x Length 5')													
Test Hole #11															
Depth (Inches)															
Test #1	Test #2	Duration (Minutes)													
0.13	0.12	15-seconds													
0.25	0.25	2													
0.38	0.33	3													
0.50	0.50	5													
0.75	0.75	10													
1.00	0.90	15													
1.25	1.15	30													
1.75	1.50	45													
2.25	2.00	60													
2.25	2.00	AVG.													
Projected															
Infiltration Rate:		2.00 Inches/Hour													
Notes:		The pre-soak was much slower than the other holes but the water did disappear in 24-hours Used a 6" dia. PVC pipe, 30" long													
Soils:		No groundwater detected, no mottling detected 6" Topsoil, 24" Gravel, and then 24-36" of mostly clay (broken bits)													

APPENDIX D

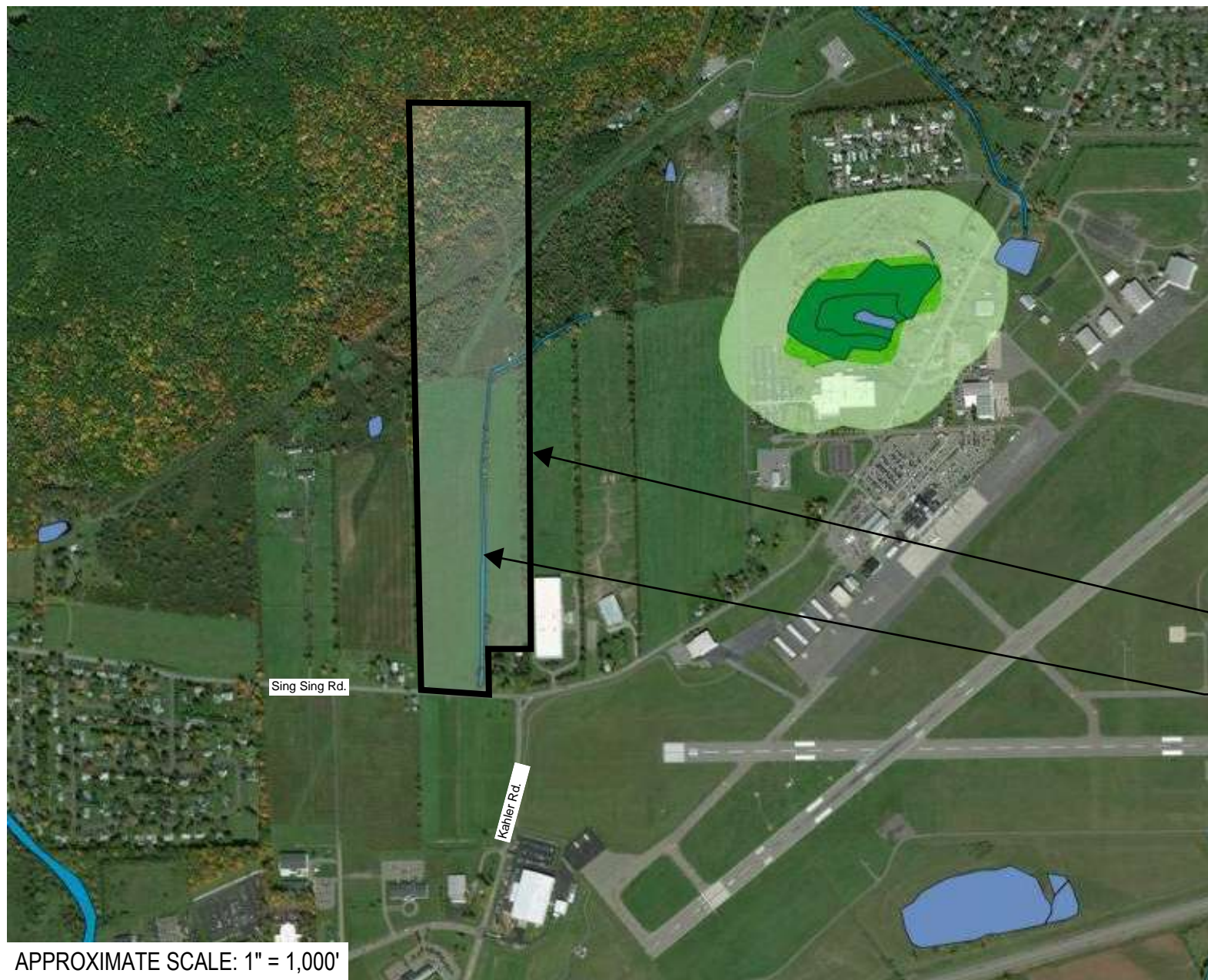
Environmental Review

APPENDIX D-1

NYSDEC Stormwater Mapper

APPENDIX D-2

NYSDEC Environmental Resource Mapper



Key

- ★ Unique Geological Features
- Waterbody Classifications for Rivers/Streams
- Waterbody Classifications for Lakes
- State Regulated Freshwater Wetlands
- State Regulated Wetland Checkzone
- Significant Natural Communities
- Natural Communities Near This Location
- Rare Plants or Animals

National Wetlands Inventory

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

PROJECT LOCATION

NON-CLASSIFIED DRAINAGE
WAY THAT WILL NEED TO BE
MAINTAINED

APPROXIMATE SCALE: 1" = 1,000'



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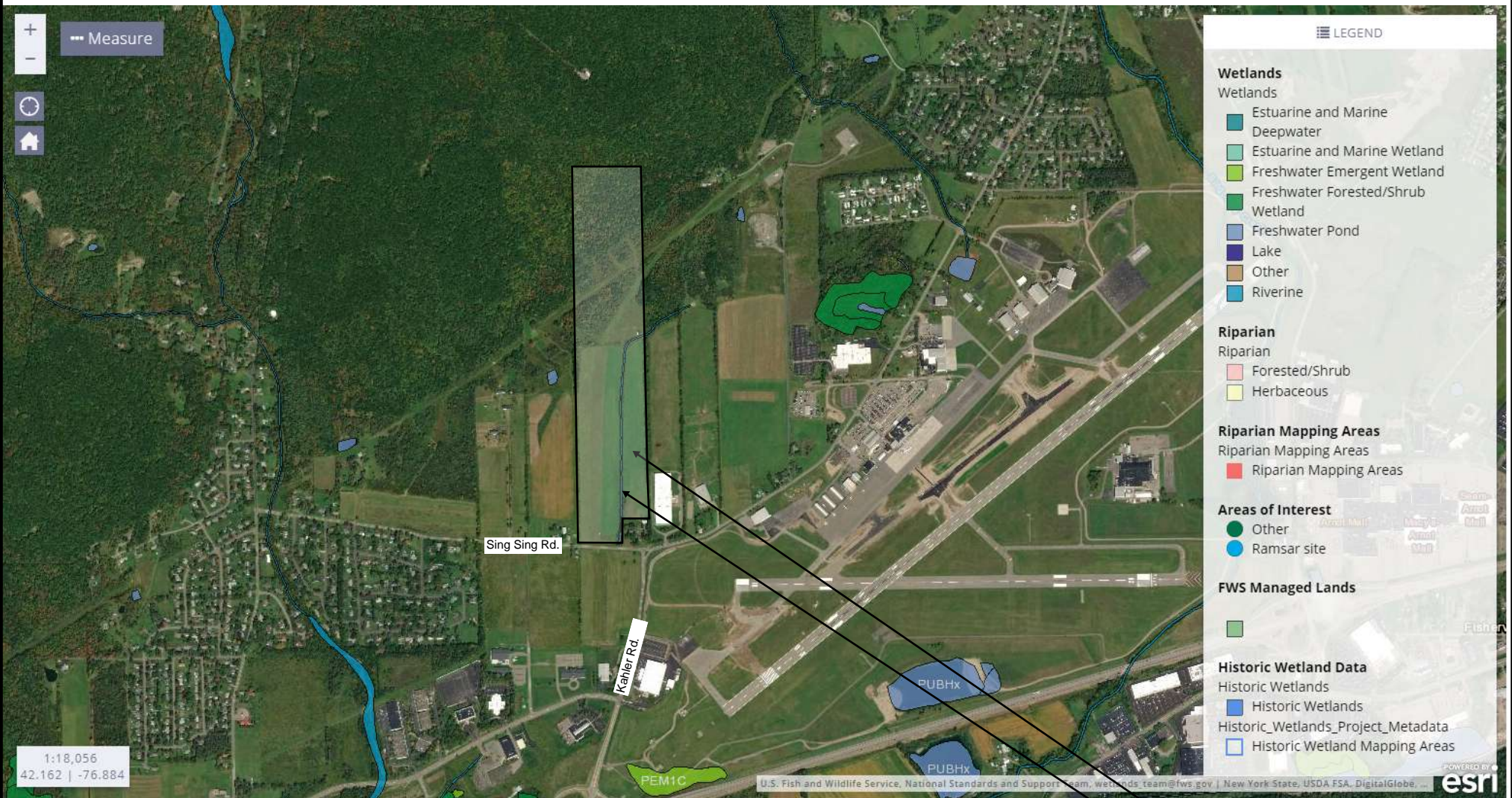
NYSDEC Environmental Resource Mapper

161 SING SING RD. PLANNED UNIT
DEVELOPMENT
TOWN OF BIG FLATS, CHEMUNG COUNTY, NY

Fig. 3

APPENDIX D-3

National Wetlands Inventory Map



PROJECT LOCATION

NON-CLASSIFIED RIVERINE



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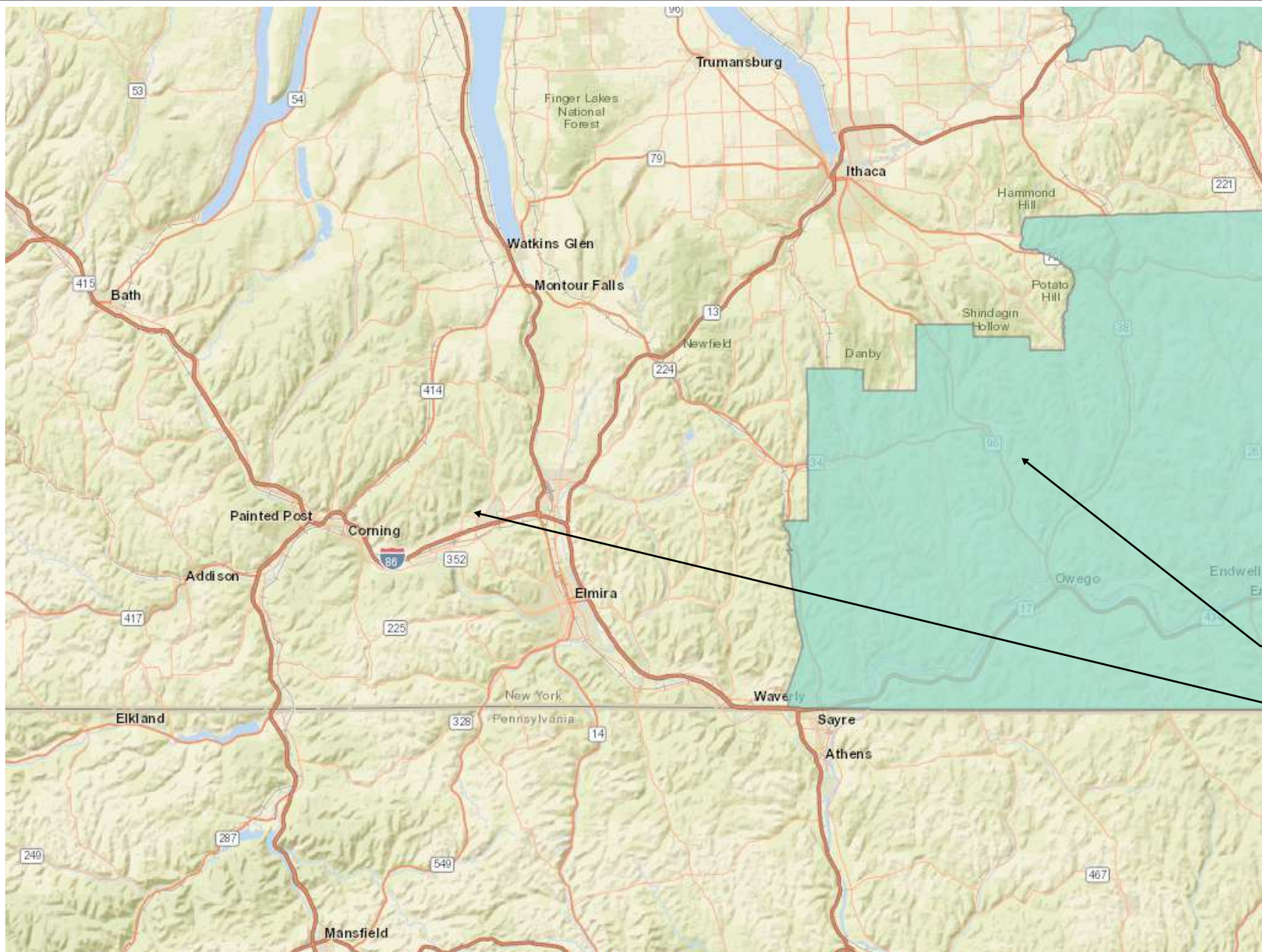
National Wetlands Inventory

161 SING SING RD. PLANNED UNIT
DEVELOPMENT
TOWN OF BIG FLATS, CHEMUNG COUNTY, NY

Fig. 4

APPENDIX D-4

US EPA Sole Source Aquifer Map



SOLE SOURCE
AQUIFER

PROJECT LOCATION



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US EPA Sole Source Aquifer Map

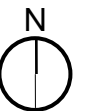
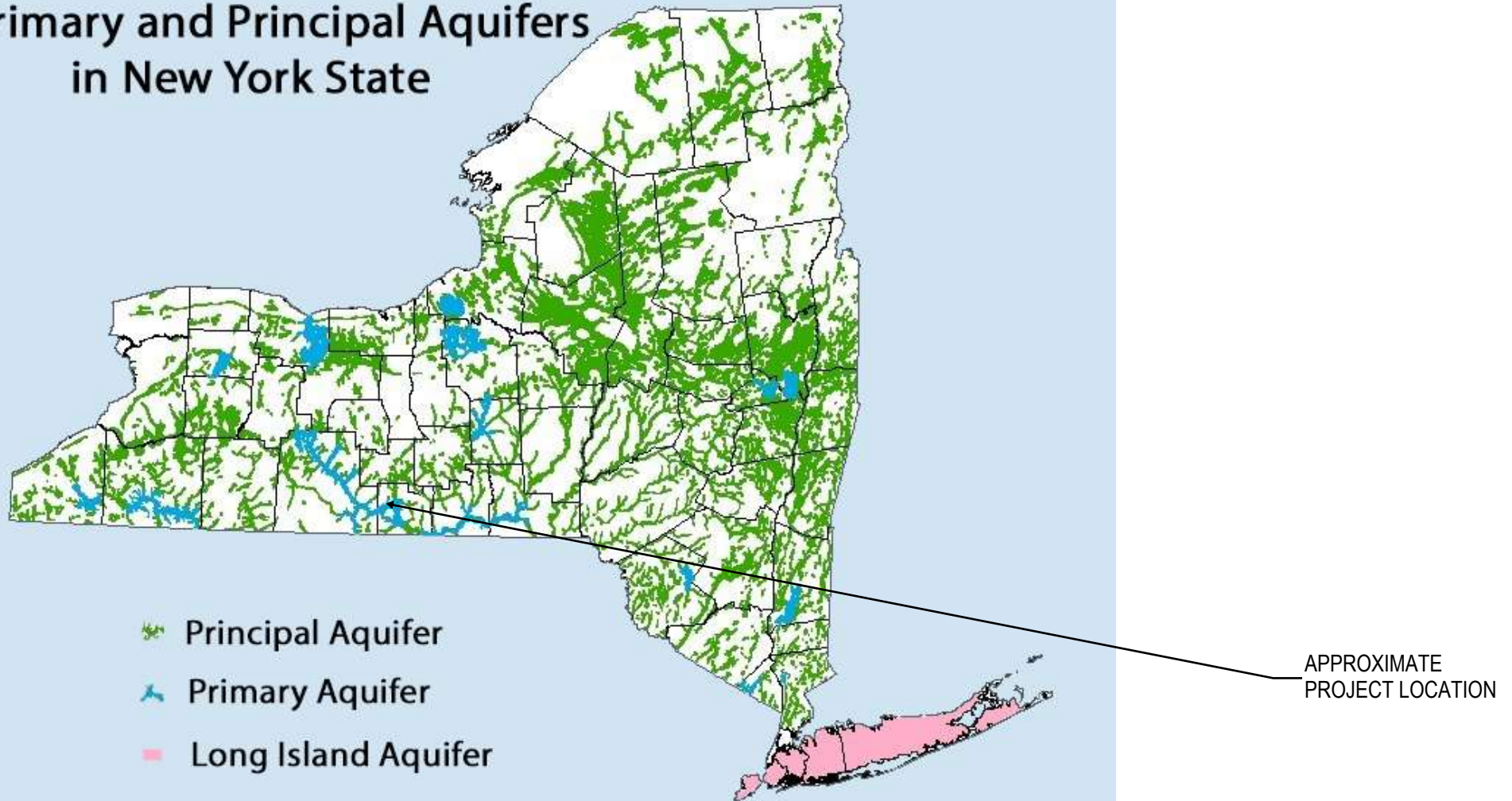
161 SING SING RD. PLANNED UNIT
DEVELOPMENT
TOWN OF BIG FLATS, CHEMUNG COUNTY, NY

Fig. 5

APPENDIX D-5

NYSDEC Primary and Principal Aquifer Map

Primary and Principal Aquifers in New York State



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NYSDEC Principal and Primary Aquifer Map

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DEVELOPMENT
TOWN OF BIG FLATS, CHEMUNG COUNTY, NY

Fig. 6

APPENDIX D-6

Chemung River Watershed Map

APPENDIX D-7

Ridgeline Overlay District

Town of Big Flats Zoning Map



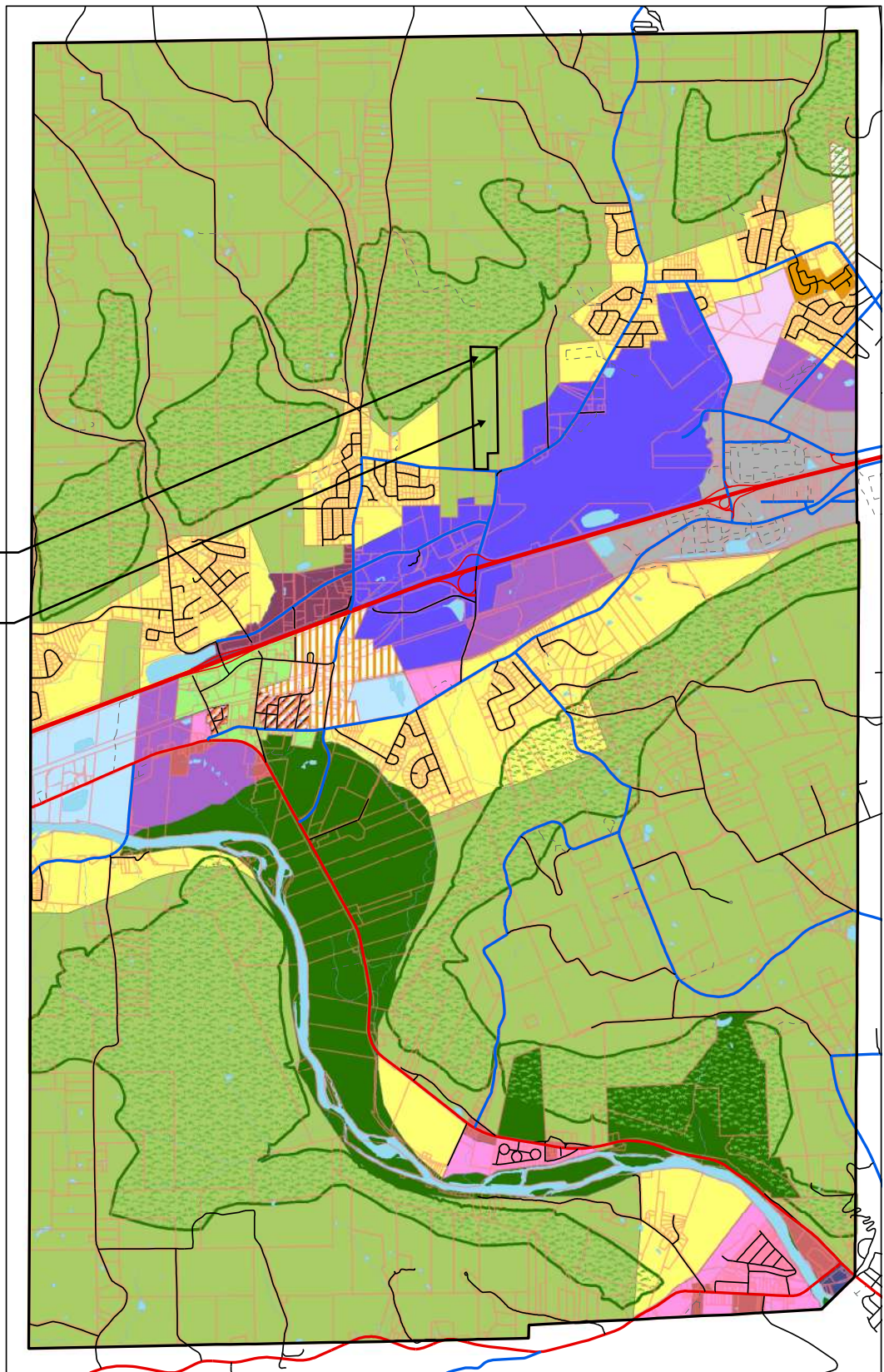
Town of Big Flats
Department of Planning

Last Amended on:
December 9th, 2009

Map produced on:
December 9th, 2009

Schedule A

RIDGELINE
OVERLAY DISTRICT
PROJECT LOCATION



Legend:

Roads

- Local
- County
- State
- Ramp
- - - Private

Lakes, Ponds, & Streams



Parcels - 2009

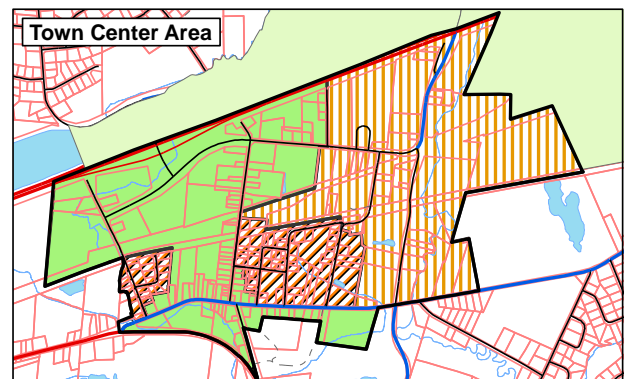


Zoning Districts

- Airport Business Development
- Business Neighborhood
- Business Neighborhood #2
- Business Non-Retail
- Business Regional
- Commercial Light Industrial
- Industrial
- Planned Multi-Res.
- Town Center
- Town Center 2
- Town Center Residential
- Residential 1
- Residential 2
- Senior Planned Multi-Res.
- Rural
- Conservation
- Recreation Conservation

Ridgeline Overlay District

RLO Area



2

0 5,000 10,000 Feet

17.24.030 - Ridgeline Overlay District (RLO).

- A. Findings. The Big Flats town board considers scenic character to be one of the town's most important assets. Therefore, in accordance with the goals, objectives, and strategies laid out in the town of Big Flats Comprehensive Plan (2006), the town board finds that:
1. The natural open character of the town's ridgelines is a critical feature whose conservation enriches and benefits both residents and visitors, as documented in the town's 2006 Comprehensive Plan.
 2. The protection of the scenic character of the town's ridgelines is important to maintaining and protecting rural character, a sense of place, and scenic landscapes, all of which contribute to the town's quality and attractiveness for residential and commercial development, as well as for tourism.
 3. The development of areas covered by this overlay district may be appropriate, but only if such development is carefully planned and designed to maintain, conserve and enhance the scenic features of the area and the views of the landscape from public roadways, and waterforms.
 4. Implementation of the RLO will protect important wildlife habitat and environmentally fragile areas as well as preserve open space (See town of Big Flats Comprehensive Plan (2006), Chapter 5, Section 5.5 Environmental Identified Need; Goal No. 10.1.1 Land Use Development Objectives and Strategies; and Goal No. 10.3.1 Natural Environment Strategies and Objectives).
- B. Purpose. The purpose of the Ridgeline Overlay District (hereafter the "RLO") is to:
1. Establish clear development guidelines so that future development activities do not interfere with the scenic, aesthetic, and recreational uses utilized and enjoyed by residents and visitors;
 2. Protect the town's ridgelines, which are found at higher elevations, and include some of the most environmentally sensitive areas of the town; and
 3. Preserve the town's important scenic features including, but not limited to, individual healthy trees within open fields that are at least eighteen (18) inches in diameter at breast height (DBH), historic structures, wetlands, ponds, hedgerows, public or private unpaved country roads, and stone walls.
- C. Applicability. Any parcel, partially or wholly in one of the RLO areas are included in the RLO. The RLO is comprised of land located in the scenic view-shed with an elevation of one thousand one hundred (1,100) feet or more above mean sea level. The RLO areas are shown on "town of Big Flats Zoning Map" which was prepared by Staff and dated 12-09-2009 and is incorporated by reference and made a part of the town of Big Flats zoning map.
1. For any property wholly or partially in the RLO, prior to the application for a building permit, the applicant or designee shall meet with the director of planning or designee. If it is demonstrated that the proposed construction will not take place within an RLO area, the applicant shall proceed with site plan approval in accordance with Section 17.32 of the Big Flats Municipal Code or building permit application, as applicable.
 2. For any property in the RLO where it is determined that construction will take place within an RLO area, prior to the issuance of any building permit, a RLO special permit and site plan approval must be received from the planning board (board). In the review of an application for a permit, the board must evaluate the potential for unreasonable adverse visual impacts resulting from a proposed activity.
 3. The requirements of this chapter shall not apply to dwelling additions and accessory structures less than three hundred (300) square feet in structure area, provided no new area is cleared. Furthermore, an elevation survey, prepared and stamped by a licensed surveyor, may be submitted to the board to show that no part of the site is in the RLO.

4. Inconsistency. The RLO requirements shall not be used to lessen the underlying zoning district density applicable to the development. The most restrictive requirements under this chapter or the applicable requirements for the development set forth in the town code shall apply to such development. Except as provided herein, if any conflict arises between the provisions of this chapter and any other requirements set forth in the Town Code and BFZL, this chapter shall control.
- D. Scope of Review. The potential impacts of a proposed activity will be determined by the board considering the presence of the scenic resource, the significance of the scenic resource, the existing character of the surrounding area, the expectations of the typical viewer, the extent and intransience of the activity, the project purpose, and the context of the proposed activity. Unreasonable adverse visual impacts are those that are expected to unreasonably interfere with the general public's visual enjoyment and appreciation of a scenic resource, or those that otherwise unreasonably impair the character or quality of such a place. During the RLO special permit process, the planning board will determine whether the proposed development will have an unreasonable adverse effect on the scenic character of the surrounding area.
1. The board shall review the project's visual impact on the scenic viewshed using the Basic Visual Impact Assessment Form and the Visual Impact Analysis Matrix provided in the Appendix to this law.
 2. The board shall consider all relevant evidence to that effect, such as evidence that:
 - a. The design of the proposed development takes into account the scenic character of the surrounding area;
 - b. A development which is not in keeping with the surrounding scenic character will be located, designed and landscaped to minimize its visual impact to the fullest extent possible; and
 - c. Structures will be designed and landscaped to minimize their visual impact on the surrounding area.
 3. If the board finds that the proposed development will have an unreasonable adverse effect on the scenic character of the surrounding area and that effects cannot be mitigated, the board shall deny the project.
 4. If the board finds that the proposed development has an unreasonable adverse effect on the scenic character of the surrounding area, but that the effects can be mitigated, the board may impose any reasonable conditions upon the approval of a development, so long as the conditions fulfill or enhance the overriding findings and purposes of this chapter. Such conditions may include, but are not limited to, limiting illumination of the site, limiting clearing or cutting, requiring architectural or vegetative screening, regulating the use of color and or materials used in construction, or any other reasonable conditions developed during the review of the application. Any condition imposed under this paragraph shall be clearly noted on the final plat, plan, or permit issued for the development and/or filed with the Chemung county clerk.
- E. Application Submissions. Applications for approval of proposed developments shall include evidence that affirmatively demonstrates that there will be no unreasonable adverse effect on the scenic character of the surrounding area. Basic evidence must be provided to ensure that visual concerns have been fully addressed in each application. In addition to a visual impact assessment as described in subsection F of this section, the applicant must submit a complete site plan application and landscaping and lighting plans prepared by a registered landscape architect. Depending on the scope of the project and its potential impact, the board may require a lighting engineer. The applicant must also submit the SEQR Visual Environmental Assessment Form Addendum (V-EAF) pursuant to 6 NYCRR 617.20 Appendix B. The applicant may request a pre-application meeting during which the planning department or a committee of the planning board can provide guidance.
- F. Visual Impact Assessment. The applicant must complete a visual impact assessment (VIA). An applicant's visual impact assessment should visualize the proposed activity and evaluate potential adverse impacts of that activity on existing scenic and aesthetic uses of a protected natural resource within the viewshed of a scenic resource, and to determine effective mitigation strategies, if appropriate. The VIA must be prepared by a design professional trained in visual assessment procedures.

In all visual impact assessments, scenic resources within the viewshed of the proposed activity must be identified and the existing surrounding landscape must be described. The assessment must be completed following standard professional practices to illustrate the proposed change to the visual environment and the effectiveness of any proposed mitigation measures. The radius of the impact area to be analyzed must be based on the relative size and scope of the proposed activity given the specific location. Areas of the scenic resource from which the activity will be visible, including representative and worst-case viewpoints, must be identified. Line-of-sight profiles constitute the simplest acceptable method of illustrating the potential visual impact of the proposed activity from viewpoints within the context of its viewshed. A line-of-sight profile represents the path, real or imagined, that the eye follows from a specific point to another point when viewing the landscape. For activities with more sensitive conditions, photo simulations and computer-generated graphics may be required.

A visual impact assessment must describe the location of the activity and provide an inventory of scenic resources within the viewshed of the proposed activity. It shall include narratives to describe the significance of any potential impacts, the level of use and viewer expectations, measures taken to avoid and minimize visual impacts, and steps that have been incorporated into the activity design that may mitigate any potential adverse visual impacts to scenic resources. It shall also describe the activity relative to its location and scale within the viewshed of any scenic resource, including a description of the existing visual quality and landscape characteristics and it will indicate how the development fits into the scenic character of the area.

- G. Mitigation. In a case where the board determines that the proposed activity will have an adverse visual impact on a scenic resource, applicants may be required to employ appropriate measures to mitigate the adverse impacts to the extent practicable. Mitigation should reduce or eliminate the visibility of the proposed activity or alter the effect of the activity on the scenic or aesthetic use in some way. The board will determine when mitigation should be proposed and whether the applicant's mitigation strategies are reasonable. The board may require mitigation by requesting that the applicant submit a design that includes the required mitigation or by imposing permit conditions consistent with specified mitigation requirements.

In determining whether the projects impact on scenic and aesthetic uses are unreasonable, the board will consider whether the applicant's activity design is visually compatible with its surroundings, incorporating environmentally sensitive design principles and components according to the general strategies described below (specific design standards are listed in subsection I of this section):

1. Planning and Siting. Properly siting an activity may be the most effective way to mitigate potential visual impacts. Applicants are encouraged, and may be required, to site a proposed activity in a location that limits its adverse visual impacts within the viewshed of a scenic resource.
 2. Design. When circumstances do not allow siting to avoid visual impacts on a scenic resource, elements of particular concern should be designed in such a way that reduces or eliminates visual impacts to the area in which an activity is located, as viewed from a scenic resource. Applicants should consider a variety of design methods to mitigate potential impacts, including screening, buffers, earthen berms, camouflage, low profile, downsizing, non-standard materials, lighting, and other alternate technologies.
 3. Offsets. Correction of an existing visual problem identified within the viewshed of the same scenic resource as the proposed activity may qualify as an offset for visual impacts when an improvement may be realized. Offsets may be used in sensitive locations where significant impacts from the proposal are unavoidable or other forms of mitigation might not be practicable. An example of an offset might be the removal of an existing abandoned structure that is in disrepair to offset impacts from a proposal within visual proximity of the same scenic resource. Offsets can also include visual improvements to the affected landscape, such as tree plantings or development of scenic overlooks.
- H. Design Standards. All development subject to this chapter shall comply with the following requirements:
1. Placement of Structures.

- a. To ensure the placement of structures outside of the exposed ridgeline area on proposed building lots, building sites, including areas of cleared vegetation, shall be clearly designated on the site plan. Constructed structures shall not differ in any direction from building site locations shown on an approved subdivision and/or site plan at the time of building permit application.
 - b. Structures shall be sited at the lowest elevation possible to be as visually inconspicuous as possible when seen from a distance and from lower elevations. In no case shall development occur along and/or project above ridgelines when viewed from the locations identified in subsection L of this section.
2. Restrictions on Height. Within the RLO, no principal or accessory structure with a building height of greater than twenty-five (25) feet shall be constructed unless visual cross sections or other appropriate methods demonstrate that the subject structure could be constructed with a building height greater than twenty-five (25) feet, in conformance with the bulk and density control schedule requirements identified within Section 17.16.020 without unduly impacting ridgelines and scenic view sheds.
3. Visibility. All structures shall be sited to avoid, eliminate, or alter the project's effect on the scenic or aesthetic resource, or which occupy or obstruct public views of land within the RLO to the greatest extent practicable. Public views shall be considered to be from any location listed in subsection L of this section. These locations are frequented by the public and offer unobstructed views of the town's ridgeline landscapes. Visibility shall be measured using a condition of no leaves on trees.
4. Colors. Structures should blend in with natural surroundings through preferred use of stone and/or natural wood siding. In all cases, structures shall be constructed and maintained so predominating exterior wall colors (including the colors of basement walls on the downhill side of the structure) and roof surfacing materials repeat the colors found most commonly in the land and vegetation around the building (earth tone) and have a light reflective value of no more than sixty (60) percent.
5. Vegetation. Existing vegetation within ridgeline areas shall be preserved to the maximum extent practicable. Every attempt shall be made to limit cutting necessary for either construction or the opening of views from the subject site so as to maintain native vegetation as a screen for structures, as seen from public roads or parks or other public views. This section is not intended to limit forest management in ridgeline areas when practiced in accordance with environmentally sound and sustainable silvicultural principles.
6. Landscaping. The applicant must submit for approval, a landscape plan prepared by a licensed landscape architect, showing the satisfaction and location of all vegetation requirements on the site. An applicant may request alternative placement of landscaping on certain lots if such placement provides adequate mitigation of the visual impact of the roofline of the principal structure.
 - a. The area around each principal and accessory structure shall include at least one tree of a species with a mature height of at least thirty-five (35) feet for each two thousand five hundred (2,500) square feet of lot; provided, however, that this requirement shall not require any one-unit dwelling lot to contain more than eight trees unless growing naturally on the site.
 - b. Trees installed to meet the requirements of this section must be of coniferous species, shall be a minimum of twelve (12) feet tall when planted, shall be planted a maximum of twenty (20) feet on center, and shall be planted before a certificate of occupancy is issued for the principal structure. If planting is not possible due to planting season or weather conditions, a temporary certificate of occupancy (CO) may issued by the building inspector, however, the temporary CO will expire one month into the planting season when all final planting must occur.
 - c. Shrubs will be planted with a twenty-four (24) inches minimum size for those specified for spread, and thirty-six (36) inches minimum for those specified for height.

- d. Landscaping survivability shall be assured by bond determined by the planning board, for at least two years.
7. Tree Cutting. All timber harvesting in the RLO shall comply with Chapter 5.16 (Timber Harvesting) of the Town Code.
- a. If the regulations of the RLO district conflict with Chapter 5.16, the RLO regulations shall apply.
 - b. Clear-cutting of all trees in a single contiguous area in an RLO district in excess of one-fourth of an acre in area shall be prohibited.
 - c. Exceptions. This section shall not apply to:
 - i. Christmas tree culture or other existing tree plantation;
 - ii. Harvests conducted in accordance with a timber harvesting plan prepared pursuant to Section 480-a of the New York State Real Property Tax Law;
 - iii. Tree clearing for farm purposes within agricultural districts established pursuant to New York State Agriculture and Markets Law;
 - iv. Severe natural disturbances, which include fire, insect infestation, disease, ice and wind;
 - v. Removal of timber stands that, if partially harvested according to accepted silvicultural practice, are at high risk for wind throw due to factors such as soils, rooting depth, crown ratio, or stem quality;
 - vi. Ecologically appropriate improvement or creation of wildlife habitat, with accompanying prescription and justification from a certified wildlife professional, a New York State Department of Environmental Conservation Forester, a member of the New York Institute of Consulting Foresters, or a cooperating consultant forester.
8. Lighting. Exterior lighting in the RLO shall be controlled in both height and intensity and shall be in conformance with the following requirements:
- a. The preparation of a complete lighting plan by a registered landscape architect, or by a lighting engineer if required by the planning board.
 - b. Under no circumstances shall the light level at any lot line exceed 0.2-foot candle, measured at ground level.
 - c. Floodlights shall not be used to light any portion of a principal or accessory structure facade, and all outdoor light sources mounted on poles or buildings or trees to illuminate driveways, sidewalks, walkways, parking lots, or other outdoor areas shall use fully shielded cutoff light fixtures.
 - d. For purposes of this section, a "full cutoff light fixture" is one in which no more than two and one-half percent of the total output is emitted at ninety (90) degrees from the vertical pole or building wall on which it is mounted. All such fixtures shall be installed or shielded so that part of the light bulb or light source is not visible beyond the property boundaries and all such fixtures must come from the directory of fixtures approved by the International Dark Sky Association.
9. Parking.
- a. Parking lots for nonresidential and multi-unit residential uses shall be provided with screened parking wholly at the side and/or rear of the structures, provided such an arrangement does not create a significant visual effect.
 - b. Parking is provided at the side of the structures, at least a ten-foot-wide landscaped area (exclusive of that required for sidewalks or utility easements) shall be provided between the road right-of-way

and the parking lot, to be planted with shade or ornamental trees and at least a three-foot-high evergreen hedge, wall or fence.

- c. At least one tree and three shrubs shall be provided for each eight parking spaces in interior areas of a parking lot, whether such lot is provided at the side or rear of the structures.
 - d. Parking for single-family dwellings shall be provided at the side and/or rear of the principal structure, provided such an arrangement does not create a significant visual effect.
10. Screening. Vegetation, topography and architectural features shall be used to buffer and screen.
- a. Clearing of existing vegetation at the edge of the road shall be minimized, except to create road and driveway entrances with adequate sight distance. Curved driveways shall be used to increase the screening of buildings.
 - b. Buildings shall be sited so that they do not protrude above treetops or the ridgelines of hills as seen from public places and roads. This shall not be interpreted to mean that the buildings should not be seen, only that they should not protrude above the trees or the hilltops.
 - c. All electric, telephone, television, and other communication lines, both main and service connections, servicing new development, shall be provided by underground wiring within easements of dedicated public rights-of-way, installed in accordance with the prevailing standards and practices of the utility or other companies providing such services.
11. Dimensional Regulations. The following dimensional regulations shall apply to development within the RLO:
- a. All subdivisions of land within the RLO, shall, whenever possible, be developed in accordance with the town's Cluster Residential Development regulations, in accordance with this chapter, Chapter 17.28, and New York State Town Law.
 - b. Nonresidential buildings and multi-unit dwellings shall be sited in clusters.
 - c. No building shall exceed seven thousand five hundred (7,500) square feet unless the structure is to be used exclusively for agricultural purposes.
 - d. The maximum lot coverage on any parcel proposed for subdivision or development shall be twenty (20) percent. Such restrictions shall be shown on any subdivision plat.
 - e. Maximum building height requirements shall apply to the peak of the roofline except for cupolas or turrets as well as silos or barns when used in conjunction with agricultural operations, which may exceed the maximum building height.
12. Drainage and Prevention of Soil Erosion. No site plan, building permit, or subdivision plat shall be approved unless such approval includes soil erosion and sediment control measures, prepared in accordance with the standards described in Section(s) 17.36.090 and 99.02.010 Appendix I, Stormwater Management Guidelines for New Developments of the Town Code, or manuals in common usage, such as the New York State Department of Environmental Conservation's Reducing the Impacts of Stormwater Runoff from New Development or the New York State Soil and Water Conservation Committee's New York Guidelines for Urban Erosion and Sediment Control. Landowners shall bear full responsibility for the installation, construction, and maintenance of all erosion control measures required as a condition or approval.
- I. Referral. The town of Big Flats' ridgeline areas contain significant wildlife habitats, including those frequented by endangered and threatened species. To receive assistance in its review of applications, the applicable reviewing board may refer the proposed plan to the New York State Department of Environmental Conservation and/or the New York Natural Heritage Program for its review and recommendations. To receive further

assistance, such reviewing board may refer the proposed plans to any such agencies or officials of the town, county, state, or federal government as the board may deem appropriate.

- J. Waiver. The planning board, may waive some or all of the regulatory requirements of this section in the RLO under any of the following circumstances:
 - a. The structure or area within the RLO is situated so the structure does not create a significant visual impact that needs to be mitigated, when viewed from visually sensitive areas, including public view locations identified as important views in the town of Big Flats Comprehensive Plan or subsection I of this section;
 - b. The work to be done is of a minor nature and is consistent with the design standards set forth herein.
 - c. The use involves commercial agricultural operations and pursuits as defined by the New York State Department of Agriculture and Markets.
- K. Determination. It is the responsibility of the applicant to demonstrate that the proposed design does not unreasonably interfere with existing scenic and aesthetic uses, and thereby diminish the public enjoyment and appreciation of the qualities of a scenic resource, and that any potential impacts have been minimized. The board's determination of impact is based on the following visual elements of the landscape:
 - a. Landscape compatibility, which is a function of the sub-elements of color, form, line, and texture. Compatibility is determined by whether the proposed activity differs significantly from its existing surroundings and the context from which they are viewed such that it becomes an unreasonable adverse impact on the visual quality of a protected natural resource as viewed from a scenic resource;
 - b. Scale contrast, which is determined by the size and scope of the proposed activity given its specific location within the viewshed of a scenic resource; and
 - c. Spatial dominance, which is the degree to which an activity dominates the whole landscape composition or dominates landform, water, or sky backdrop as viewed from a scenic resource.

In making a determination within the context of this rule, the board considers the type, area, and intransience of an activity related to a scenic resource that will be affected by the activity, the significance of the scenic resource, and the degree to which the use or viewer expectations of a scenic resource will be altered, including alteration beyond the physical boundaries of the activity. In addition to the scenic resource, the board also considers the functions and values of the protected natural resource, any proposed mitigation, practicable alternatives to the proposed activity that will have less visual impact, and cumulative effects of frequent minor alterations on the scenic resource. An application may be denied if the activity will have an unreasonable impact on the visual quality of a protected natural resources as viewed from a scenic resource even if the activity has no practicable alternative and the applicant has minimized the proposed alteration and its impacts as much as possible through mitigation. An "unreasonable impact" means that the standards, purpose, and intent of this law will or cannot be met.

- L. Scenic Resources. The following public natural resources and public lands are usually visited by the general public, in part with the purpose of enjoying their visual quality. Under this law, the board considers a scenic resource as the typical point from which an activity in, on, over, or adjacent to a protected natural resource is viewed. This list of scenic resources includes, but is not limited to, locations of national, state, or local scenic significance. A scenic resource visited by large numbers who come from across the country or state is generally considered to have national or statewide significance. A scenic resource visited primarily by people of local origin is generally of local significance. The list of places where the intent of this section is to protect the viewshed includes, but not limited to:
 - 1. The National Soaring Museum and Harris Hill;
 - 2. The Palisades area;
 - 3. The Chemung River and future Chemung River Greenway;
 - 4. Community Park, Miniers' Fields and Sperr Park;

5. Elmira/Corning Regional Airport;
 6. New York State Route 352;
 7. New York State Route 17/Interstate 86;
 8. Tanglewood Nature Center;
 9. Any Rails to Trails areas;
 10. Any National or State Parks located in the town;
 11. A property on or eligible for inclusion in the National Register of Historic Places pursuant to the National Historic Preservation Act of 1966, as amended;
 12. Public natural resources or public lands visited by the general public, in part for the use, observation, enjoyment, and appreciation of natural or cultural visual qualities.
- M. Appeal. Article 78 proceedings:
1. The applicant or any interested person may appeal a decision of the planning board on a RLO permit.
 2. The appeal shall be made to the Supreme Court of New York State for review by a proceeding under Article 78 of the Civil Practice Law and Rules of New York State.
 3. Any such proceeding shall be commenced within thirty (30) days of the approval with or without conditions or denial of the RLO permit that is subject to such review proceeding.

(LL No. 1, 2011; LL No. 6, 2009; LL No. 7, 2007)

APPENDIX E

Existing Utilities



Dominion Energy Transmission
5094 Route 349
Westfield, Pennsylvania 16950
Tel: 814-628-6046 Fax: 814-628-6002

March 13, 2018

Mr. Gary Smith
Bella Faccia Construction Co
2024 Lake Rd
Elmira, NY 14903
BELLAFACCIA4749@GMAIL.COM

Sent via email

RE: LN1 & LN31 Encroachment - Letter of Understanding for Sing Sing Rd Multi-purpose Sub-Division, 161 Sing Sing Rd, Big Flats, NY 14814

Dear Mr. Smith,

Thank you for discussing your plans related to the Sing Sing Rd development. As a prudent and conscientious operator of our pipeline system, Dominion Energy Transmission, Inc. (DETI) has a commitment to maintain the safety and integrity of our high-pressure gas pipeline facility. DETI agrees to allow the crossings with the following conditions:

- As you proceed with the project, keep in mind that you are encroaching on our LN1 & LN31 high pressure natural gas pipelines. Extreme caution must be exercised within our right-of-way.
- As always, prior to your construction activities, please contact the Dig Safely NY system at (800) 962-7962 or 811 to have pipeline companies and other utilities mark their facilities in your work area.
- An encroachment agreement is signed and recorded on the deed prior to subdivision of the property and construction. DETI will send a copy of this agreement.
- Developer and Selling real estate agent shall disclose the proximity of the pipelines to all potential buyers in the development
- Developer to disclose in the development covenant the presence of the pipeline
- Developer to provide a copy of DETI "*Guidelines for Construction Activities on Rights-of-Way And in the Vicinity of Dominion Energy Transmission, Inc. (DETI), Pipelines*" to all property buyers adjacent to the pipeline ROW during closing and buyer
- DETI will retain the right to cut all proposed paved areas for maintenance and operation of its facilities and for the construction of future facilities, and will have no responsibility for the restoration of the pavement, loss of use of the paved area, loss of access road across the paved area, or any other associated costs.
- The crossings will be limited to 2 locations as shown on drawing L-100 Concept Development Plan

- Orange construction fence shall be installed along the ROW to direct construction traffic to designated crossings.
- An air bridge shall be installed over the pipeline
- DETI personal must be onsite during excavation, grading clean-up or seeding and any other work within our ROW.
- A minimum of four feet of cover shall be maintained at the two road crossings. A minimum of three feet of cover shall be maintained in the green space area
- Maximum cover over the line in any location shall be six feet or less
- The following equipment can cross the pipelines during construction at the designated crossings before the new roads are installed (DETI will review other equipment if needed). If rutting occurs timber mat or geo-textile fabric and 6" gravel will need to be installed:
 - Dual or Tri-axle dump trucks
 - Caterpillar D6 dozer or equivalent
 - Caterpillar 336 excavator or equivalent
- The following equipment can cross the pipelines after the road is installed:
 - Dual or Tri-axle dump trucks
 - Caterpillar D6 dozer or equivalent
 - Caterpillar 336 excavator or equivalent
- Site to be restored to the conditions shown on drawing L-100.
- All Utilities that will be crossing the pipeline shall follow the *"Guidelines for Construction Activities on Rights-of-Way And in the Vicinity of Dominion Energy Transmission, Inc. (DETI), Pipelines"* and obtain an encroachment agreement with DETI at DETI's discretion
- Permanent fencing shall be installed along the edge of the ROW to prevent future encroachments
- All excavation within twenty-four (24) inches of DETI's pipeline will be performed by hand or vacuum excavation. At the discretion of DETI's onsite representative, excavators may be required to hand dig beginning at a distance greater than twenty-four (24) inches.
- All crossings of DETI's facilities at an angle of ninety (90) degrees, or as near as possible thereto.
- All vibratory compaction type equipment must be turned off within 5' either side of DETI pipelines;
- Refer to the enclosed *"Guidelines for Construction Activities on Rights-of-Way And in the Vicinity of Dominion Energy Transmission, Inc. (DETI), Pipelines"* for additional guidelines when working in or around our ROW.
- This letter of understanding is signed and returned to my attention at the following address:

Dominion Energy Transmission
 Field Engineering
 5094 Route 349
 Westfield, PA 16950

Approval of this request does not alleviate you or your contractor from responsibility of damages to our facilities. Your company must reimburse DETI for all costs including gas loss, labor, material and equipment and any other costs associated with repairs should any damage occur.

Workers should be instructed that in the event of any unusual conditions, such as suspected natural gas pipeline leaks, call DETI and evacuate personnel to a safe distance and guard against any sparks that could ignite or explode gas. Stay upwind of the leak and beware of calm conditions that could allow the

gas to collect in explosive amounts without dispersing.

Please notify DETI's Operation Supervisor (72-hour notice is requested for scheduling purposes), Pam Burrous, at (814)-628-6004, prior to the start of any activity within 100 feet of the natural gas pipelines. For 24-hour emergencies, call (888) 264-8240. If you have any further questions or comments, please do not hesitate to contact me by email brett.t.warner@domionenergy.com or phone (814) 628-6046.

Sincerely,
Brett Warner
Area Engineer

Acknowledgement of Letter of Understanding:

Signature: _____

Date: _____

Name (printed): _____

Title: _____

Enclosures

CC: LN1 & LN31 Encroachment Files
Hamilton Schoonover, Sabinsville Office
Pam Burrous Sabinsville Office
Jim Hamilton Sabinsville Office
Lucy Morseman, Sabinsville Office
Richard Rivardo, Sabinsville Office

DOMINION ENERGY TRANSMISSION, INC.

Guidelines for Construction Activities on Rights-of-Way And in the Vicinity of Dominion Energy Transmission, Inc. (DETI), Pipelines

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DOMINION ENERGY TRANSMISSION, INC.
Guidelines for Construction Activities on Rights-of-Way
And in the Vicinity of Dominion Energy Transmission, Inc. (DETI), Pipelines

1. NOTIFICATION

- A. Preliminary notification of construction plans should be made as early as possible in the planning process, allowing for accurate location of DETI facilities in the field. In many locations, DETI utilizes the design stage One Call System to initiate this request. DETI will field locate the horizontal alignment of pipelines when requested. When the vertical alignment is required, it will be the responsibility of the requesting party to determine the elevation by excavation with a DETI inspector present. If requested, DETI will determine the depth of cover and will bill the requesting party for all costs incurred. Pipeline depth may be determined utilizing a blunt T-bar only when the pipe is to be exposed. The pipe must be examined and any coating damage repaired and noted in the TFIR report before backfilling. Blunt T-bar probing without excavation to allow repairs is not allowed because this may result in damage to the pipelines protective coating. The preferred method to determine a pipelines depth is hand or vacuum excavation. The field location of any DETI facilities should then be accurately included in development / construction drawings. DETI will not be responsible for others' inaccuracies in transferring those locations into surveys for development / construction drawings. DETI recommends the use of a licensed PLS (Professional Land Surveyor).

Dominion Energy Transmission, Inc. (DETI) shall be notified at least three (3) business days prior to any earth disturbance activities across, on, or within one hundred (100) feet of its facilities. Facilities shall include, but not be limited to, rights-of-way (ROW), fee properties, easements, pipelines, M&R buildings, and valve sites. No equipment shall enter onto DETI Facilities unless a DETI representative is present on location.

An earth disturbance activity is any activity that will result in a disturbance to the surface or subsurface of the earth. It includes but is not limited to excavations formed by cutting, grading, digging or scooping, boring, tunneling, strip mining operations, timber operations, blasting, construction of structures, demolition work, traversing easement with heavy equipment, etc.

- B. No earth disturbance activity shall occur in the vicinity or within the ROW of DETI facilities until:

Proper notification has been made to the appropriate one call system, (various state one call system numbers are listed below) and a DETI inspector is on site to monitor the excavation activities.

DOMINION ENERGY TRANSMISSION, INC.
Guidelines for Construction Activities on Rights-of-Way
And in the Vicinity of Dominion Energy Transmission, Inc. (DETI), Pipelines

State	One Call System	Number
Maryland	Miss Utility	1-800-257-7777
New York	Dig Safely New York	1-800-962-7962
Ohio	Ohio Utilities Protection Service	1-800-362-2764
Pennsylvania	Pennsylvania One Call System	1-800-242-1776
Virginia	Virginia Utility Protection Service	1-800-552-7001
West Virginia	Miss Utility of West Virginia	1-800-245-4848
Federal Common Ground Alliance	One Call System	811

2. DRAWINGS FOR PROPOSED CONSTRUCTION OR MAINTENANCE

All proposed construction or maintenance in the vicinity of DETI's facilities require the submittal of plan and profile drawings for review and approval by DETI. Three (3) copies of these drawings must be submitted to DETI's local office prior to the beginning of any proposed construction or maintenance. All drawings must show, in detail, all DETI facilities and other landmarks that will allow DETI to determine the effects of the proposed construction or maintenance activity on its facilities. (Local office addresses and contact information attached)

3. DETI EASEMENT / REIMBURSEMENT AGREEMENTS

- A. DETI will determine if an Encroachment Agreement will be required for any proposed construction or maintenance within DETI's ROW. The agreement, prepared by DETI, will outline the responsibilities, conditions and liabilities of each party. This agreement shall be fully executed and in DETI's possession prior to any work within the ROW.
- B. DETI will determine if a Reimbursement Agreement will be required for any proposed construction or maintenance within DETI's ROW. This agreement, prepared by DETI, will outline the reimbursement procedure for necessary and appropriate preliminary engineering and actual field inspection work to be completed by DETI. This fully executed agreement, including a check made payable to "Dominion Energy Transmission, Inc." for the estimated cost of DETI's services, shall be in DETI's possession prior to the start of preliminary engineering, field inspection services, or any work within the ROW.

4. INSURANCE COVERAGE

DETI, at its discretion, may request evidence of comprehensive general liability insurance coverage in the minimum amount of \$1,000,000 prior to any construction or maintenance activity in the vicinity of its facilities.

DOMINION ENERGY TRANSMISSION, INC.
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5. CROSSING PIPELINES WITH HEAVY EQUIPMENT

To protect DETI's facilities from external loading, DETI will perform a field survey and an engineering study to determine the effects of any proposed activity over its pipelines. Mats, timber bridges or other protective crossing method materials deemed necessary and appropriate by DETI must be placed over DETI's facilities for the duration of any loading. Protective crossing method materials, including appropriate erosion and sedimentation controls, shall be purchased, placed, and removed at no cost to DETI. Dominion Energy Transmission's ROW shall be restored to its original condition, including proper vegetative cover and removal of erosion and sedimentation controls, upon completion of work.

6. EXCAVATION, CUTS OR FILL IN THE VICINITY OF DETI'S PIPELINES

- A. A DETI representative MUST be on location prior to construction activity or use of heavy equipment of any description within DETI's right-of-way. In order to ensure public safety and to protect its pipeline facilities, DETI personnel must be informed of proposed activity and is to remain on-site to observe all excavation activity occurring within (or that has the potential to be within) ten (10) feet from the outside wall of its pipelines. This policy extends to all foreign line crossings and easement encroachments where excavation activities may result in coating or pipeline damage that is detrimental to the integrity of DETI's pipelines. Direct observation of an excavation or foreign line crossing requires that DETI personnel remain on-site during the construction activity to ensure that the integrity of the pipeline is not compromised. Personnel shall locate the pipeline prior to commencement of construction activities and document their course of action on TFIR (Transmission Field Inspection Report) and respond appropriately to the One Call Ticket where applicable. Personnel shall communicate the potential hazards of working near a natural gas pipeline with the third party (i.e., contractor, developer, or homeowner, etc.) performing the work. Once construction work commences and is located within ten (10) feet of DETI's pipeline, DETI personnel must remain on-site and be able to address any potential concerns by the excavating party.
- B. For excavations, crossings and other construction activities that are greater than ten (10) feet from the outside wall of the pipeline, DETI personnel shall accurately locate and mark the pipeline prior to commencement of construction activities, but are not required to remain on-site for the duration of construction. Personnel will document their course of action on TFIR (Transmission Field Inspection Report) and respond appropriately to the One Call Ticket where applicable. DETI personnel shall periodically check the progress of the construction activity and verify it does not go beyond the initial construction boundaries. DETI personnel shall document revisits on the original TFIR. If the construction activity begins to encroach within ten (10)

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feet of DETI's facilities, the requirements of Section 6A above shall apply and DETI personnel shall remain on-site and able to observe all construction activity until the project is safely completed. If it appears that excavation activities were conducted outside of the initial confines of the proposed activity and encroach within ten (10) feet of DETI's pipeline, DETI personnel shall immediately stop all construction activity and notify their supervisor. DETI shall promptly investigate the potential impact of the encroachment. If deemed necessary, DETI shall excavate the area around the pipeline to ensure its integrity has not been jeopardized and may seek reimbursement of costs from the third party violating the encroachment authorization.

- C. No heavy equipment of any type will be permitted to work directly over DETI's pipelines without prior written approval from DETI. If approved, a limited number of crossings will be designated. Construction safety fencing is required to delineate ROW from construction area for large developmental projects.
- D. All excavation within twenty-four (24) inches of any DETI pipeline will be performed by hand until the pipeline is fully exposed. At the discretion of DETI's onsite representative, excavators may be required to hand dig beginning at a distance greater than twenty-four (24) inches. Once the pipeline is exposed by hand, the excavation company or Developer / Contractor may excavate by mechanical means from the test hole parallel to and on either side of the pipeline. The use of a backing bar on the excavator bucket teeth to protect pipe from potential damage, is recommended. The side cutters on the bucket shall be removed. Parallel excavation and the use of backing bars are at the discretion of the DETI inspector on site. If the complete circumference of the pipe must be exposed, as in a recoat project, excavator bucket may be utilized to push materials from under pipe once parallel excavation is completed, at the discretion of the DETI inspector. A thorough inspection of the pipe and coating must be made once exposed. DETI personnel must complete a Transmission Field Inspection Report (TFIR), and repair any coating damaged by excavation activity before backfilling the pipeline. Any damage resulting from Developer / Contractor negligence will be repaired at their expense.

NOTE: Excavation directly over the pipe with mechanical equipment should be avoided if at all possible, and is permitted only at the discretion of the DETI inspector on site. Under no circumstances shall a DETI Inspector allow an excavator to reach across a pipeline and ditch perpendicular to and toward DETI's pipeline(s). Should perpendicular excavation be allowed, it must always be away from DETI's facilities.

- E. All excavations within the ROW shall be backfilled with a maximum of twelve (12) inch lifts using mechanical compaction equipment. Compaction equal to the existing undisturbed soil must be achieved.
- F. No grade cuts will be permitted within DETI's ROW unless agreed to in advance and in writing by DETI and with DETI's representative on location. If appropriate, DETI may require that an engineering study be performed to ensure

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that the lateral stability of DETI's pipelines is not affected. The cost of this study shall be borne by the Developer/Contractor.

- G. When boring under DETI pipelines, Developer / Contractor shall expose sixty (60) inches below the bottom of each pipeline to ensure maintaining appropriate clearance. Developer / Contractor will be required to verify proper clearance prior to the bore crossing beneath pipeline. This can be accomplished by excavation on the side of the pipeline closest to the bore pit. Plan and profile drawings are required for all proposed borings.
- H. No fill is permitted over DETI's pipelines unless agreed to in advance and in writing by DETI. If appropriate, DETI will perform an engineering study to ensure that the external loading and cathodic protection systems of DETI's pipelines are not adversely affected. The cost of **this** study shall be borne by Developer / Contractor.
- I. A minimum of thirty-six (36) inches of clean backfill over the top of **DETI's** pipelines should be maintained. For landscaping or grading purposes, seventy-two (72) inches is permissible. The minimum earth cover over pipelines at all street and road crossings, including the adjacent ditch line, shall be thirty-six (36) inches. Thirty-six (36) inches of minimum cover shall be maintained at stream and river crossings.
- J. No trash or debris shall be placed in any excavation or left in or on the ROW.

7. ABOVEGROUND STRUCTURES

In order to provide for adequate maintenance and operation of DETI's facilities, no aboveground appurtenances or structures are to be located within DETI's ROW. Unless otherwise specified in the easement, a minimum of twenty-five (25) feet of clearance on each side of the center of the pipeline should be maintained where permanent surface structures are being proposed. Likewise, when two or more pipelines share the same right of-way, structures should not be installed within twenty-five (25) feet of either outside pipeline. Permanent structures must be kept a minimum of one hundred (100) feet from natural gas wells unless otherwise specified in the easement. In the event the easement agreement contains the right for DETI to install additional pipelines, a minimum of twenty-five (25) feet of clearance must be maintained from the location of any possible future pipeline(s). The appurtenances and structures include, but are not limited to, the following: utility poles, steel towers, guy wires, other structures supporting aerial lines, satellite dishes, manholes, catch basins, utility pedestals, transformers, fire hydrants, utility sheds, buildings of any type, etc.

8. PROPOSED PIPE AND UTILITY LINE CROSSINGS OR PARALLEL ENCROACHMENTS

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A. General Requirements

1. All underground utility lines should cross beneath DETI's pipelines (if depth allows) and shall have a minimum of twenty-four (24) inches of vertical clearance. Despite any agreement to allow a foreign line to cross over or under DETI's pipelines, the owner of the foreign line shall bear all costs of removing its line, if at any future date, DETI deems the removal or other accommodations necessary for the operation, maintenance or construction of DETI's facilities.
2. All foreign lines shall cross DETI's facilities at an angle of ninety (90) degrees, or as near as practicable thereto, but not less than forty-five (45) degrees. Buried utility lines must be identified with permanent aboveground markers where the lines enter and exit DETI's ROW. It is the line owner's responsibility to obtain any rights to install the markers, and to maintain the markers. Longitudinal occupancy of DETI's ROW shall not be permitted.
3. No manholes, valves or other appurtenances shall be permitted within DETI's ROW.
4. Vertical or horizontal bends are not permitted within DETI's ROW for any utility line installed.
5. DETI's facilities are cathodically protected. All other cathodically protected facilities that enter or cross DETI's ROW must have test leads installed, at the crossing utilities' expense. All necessary measures (coatings, electrical bonds, etc.) shall be taken to ensure that the proposed pipe or utility is adequately protected from potential interference effects. Any inquiries for cooperative testing should be directed to DETI's local office.
6. All underground utilities (other than residential telephone, cable TV and 24 volt DC power lines) shall have plastic identification tape installed no closer than eighteen (18) inches above the line.

B. Water and Sewer Lines

All water and sewer lines shall be: (1) ductile iron pipe (adequately protected from DETI's Cathodic Protection System), (2) plastic pipe installed in coated rigid steel casing (minimum of schedule 40) for the full width of the right-of-way, or (3) reinforced concrete pipe. No piping connections will be allowed within five (5) feet of any DETI line. A variation to this requirement needs to be reviewed and approved in writing by the area field engineer.

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C. Communication, Power or Combustible Material Lines

1. All buried telephone, television or data cables (other than residential telephone and cable TV) crossing DETI's facilities shall be installed in either (1) coated rigid steel casing (minimum of schedule 40) or (2) PVC pipe (minimum of schedule 80) covered by a minimum of 6" of concrete for the full width of the right-of-way.
2. All buried fiber optic and electrical cables except 24-volt DC power lines (including single residential service drops) crossing DETI's facilities shall be installed in either (1) coated rigid steel casing (minimum of schedule 40) or (2) PVC pipe (minimum of schedule 80) covered by a minimum of 6" of concrete for the full width of the ROW.
3. All buried residential telephone, television and 24-volt DC power lines shall be encased in plastic conduit for the full width of the ROW.
4. All buried plastic combustible material lines (including single residential service drops) crossing DETI's facilities shall either be installed in (1) coated rigid steel casing (minimum of schedule 40) for the full width of the ROW or (2) PVC pipe (minimum of schedule 80) covered by a minimum of 6" of concrete for the full width of the ROW. The Area Engineer can approve the final casing design.
5. All buried steel combustible material lines crossing DETI's facilities shall be coated with an industry standard cathodic protective coating for the full width of the ROW.

NOTE: Additional protection may be required in certain situations.

9. PROPOSED ROADS, STREETS AND COMMERCIAL DRIVEWAYS

- A. Field surveys and engineering studies must be conducted for all roads, streets, driveways, etc. proposed to be constructed on DETI's ROW. Reinforced concrete slabs or other protection required by DETI will be installed at no expense to DETI.
- B. The minimum earth cover over DETI's pipelines will be thirty-six (36) inches at all roads, highways, streets, etc. including adjacent ditch lines. In many cases, additional earthen cover will be required.
- C. Roads and streets crossing over DETI's pipelines shall cross at an angle of 90 degrees, or as near as possible thereto. All crossings must be over straight pipe

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and at locations free of any crossovers. Longitudinal occupancy of the ROW shall not be permitted without an executed encroachment agreement.

- D. Vibratory rollers for compacting road sub-base shall be turned off at pipeline crossing to reduce potential coating damage.
- E. A permanent pipeline marker, supplied by DETI, will be installed at all road crossings.
- F. Paving of any type will necessitate an encroachment agreement. DETI will retain the right to cut all present and proposed paved areas for maintenance and operation of its facilities and for the construction of future facilities, and will have no responsibility for the restoration of the pavement, loss of use of the paved area, loss of access road across the paved area, or any other associated costs.
- G. Access to the earth above each pipeline for leak detection (flame ionization) and cathodic protection surveys must be maintained.

10. DISPOSAL SYSTEMS

No septic tanks, leach fields, liquid disposal systems or hazardous waste disposal systems will be allowed on, to drain across or pool on DETI's right-of-ways. This will include, but not be limited to, effluent from sewage disposal systems, the discharge of any hydrocarbon substance, the discharge or disposal of any regulated waste, or any other discharge that may prove damaging or corrosive to DETI's facilities.

11. IMPOUNDMENT OF WATER

- A. In order to provide for adequate operation and maintenance of DETI's facilities, impoundment of water on DETI's ROW is not permitted.
- B. Temporary soil erosion and sediment control devices and storm water detention basins/traps are not permitted on DETI's ROW unless agreed to in advance and in writing by DETI.

12. BLASTING

- A. No explosive detonations will be permitted within two-hundred (200) feet of DETI's facilities without (1) prior analysis and written approval from DETI and (2) DETI's representative on site during blasting to determine if the detonation stresses will be detrimental to the safety of DETI's facilities. Information required to complete DETI's "Blasting Data Sheet" must be submitted to DETI for evaluation and approval at least two (2) weeks prior to the proposed date of

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blasting activity. The blasting Developer/Contractor will be required to verify, by signature, the proposed blasting plan.

- B. When blasting is used in the vicinity of DETI's facilities, the peak particle velocity (PPV) measurement at the facility shall not exceed two (2) inches per second. When multiple charges are used, the minimum time between detonations shall be eight (8) milliseconds. The seismic shock from any blasting affecting DETI's facilities shall be monitored and recorded at the facility by a seismograph to be furnished by the blasting contractor. Copies of any such readings shall be provided to DETI when requested at no cost to DETI.

13. LANDSCAPING

- A. Trees are not permitted on DETI's right-of-way.
- B. No large, deep-rooted shrubs are permitted on DETI's right-of-way.
- C. On properties subject to easement agreements with undefined right of way widths, trees must be kept a minimum of twenty-five (25) feet from the edge of the outermost pipelines.
- D. With prior approval from DETI, the planting of lawn and shallow-rooted, low growing shrubs (less than five (5) feet in height at maturity) will be permitted provided that the shrubs are located at least five (5) feet from the edge of each pipeline, thus allowing clearance over each pipeline for periodic inspections of DETI's facilities.
- E. Under no circumstances will mechanical equipment, of any type, be permitted in the planting of shrubs.
- F. DETI reserves the right to cut and/or remove landscape plantings placed on DETI's right-of-way as required in the operation, inspection and maintenance of its pipeline facilities; further, DETI assumes no responsibility for any cost involved in the replacement of said cut and/or removed landscape plantings.
- G. DETI will determine if an Encroachment Agreement, outlining the responsibilities, conditions and liabilities of each party, will be required. If it is determined that an encroachment agreement is required, the agreement must be fully executed and in DETI's possession prior to the commencement of any planting.

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14. PIPELINE MARKERS

Developer/Contractor will ensure that all temporary and permanent pipeline markers installed by DETI are protected and maintained at all times during construction. Any permanent markers damaged or removed by the Developer/Contractor will be replaced by DETI at the Developer/Contractor's expense. No work will be allowed to commence until, in the opinion of DETI, sufficient pipeline markers are in place.

15. RIGHT OF INGRESS AND EGRESS

DETI must have unrestricted right of ingress and egress to all of its facilities at all times. DETI, at its discretion, may require that new fences have a twelve (12) foot wide gate installed by the Developer/Contractor where the fence crosses the ROW. The gate shall be installed as to minimize vehicular and equipment travel over DETI's facilities.

16. COMPENSATION FOR DAMAGES

DETI shall be fully and completely compensated for any damage to its facilities resulting from the acts of third parties who are working in the vicinity of DETI's facilities with or without DETI's consent.

17. INDEMNIFICATION

DETI shall be indemnified from and against all claims, losses, demands, damages, causes of action, suits, and liability of every type and character, including all expenses of litigation, court costs, and attorneys fees, for injury to or death of any person, or for damage to any property, arising out of or in connection with work undertaken by or on behalf of the Developer / Contractor in the vicinity of DETI's facilities.

18. STATEMENT REGARDING EXISTING RIGHTS

Nothing contained herein shall be construed to convey, waive, or subordinate any of DETI's existing rights whatsoever.

19. STATEMENT REGARDING REQUIREMENTS FOR CONSTRUCTION OR MAINTENANCE

Some construction and maintenance activities are reviewed and approved at one point in time, and it may be a long period of time before the actual work takes place. Therefore, all construction and maintenance activities are subject to DETI's requirements in effect at

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the time the work actually takes place. In addition, the requirements described in this document represent the minimum acceptable standards regarding third party construction and maintenance activities in the vicinity of DETI's facilities. DETI's review of these proposed activities may require more stringent protective measures.

20. WAIVER OF REQUIREMENTS BY DETI

All provisions contained within these guidelines are required and must be followed by the Developer/Contractor unless DETI provides a written waiver, in advance, of any of these requirements.

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DEVELOPER / CONTRACTOR VERIFICATION

This form serves as formal documentation that I have met with a DETI representative concerning the One-Call notice number _____. Once DETI personnel have approved plans for earth disturbance, any modifications to the approved plan must be re-approved before any earth is disturbed except as originally approved by DETI.

During the course of this meeting the following information was presented and explained to me to allow a full understanding of the below mentioned information. *(Please mark the box indicating understanding.)*

- ☐ Guidelines for Construction Activities
- ☐ Specific notification contacts for coordinating pipeline line encroachments
- ☐ Emergency notification numbers
- ☐ The pipeline(s) in question were marked by the DETI representative.
- ☐ I was made aware that there are separate Dominion Energy companies that operate in the one-call system. Therefore separate notices may be distributed to DETI's interstate transmission pipeline operations, DETI's gathering and production operations, and Dominion Energy Hope with separate identification codes. I understand that all members marked on the one call must have responded before excavation activity can begin.

I hereby acknowledge that I have reviewed the aforementioned information and agree to abide by the terms of the guidelines.

Person Performing Excavation Activity:

(Please print) _____ Date: _____

Signature _____

Title/Position _____

Address _____ Daytime Phone _____

Company you are Representing _____

DETI Representative:

Please Print _____ Date: _____

Signature _____

Facility ID _____ GPS Coordinates _____

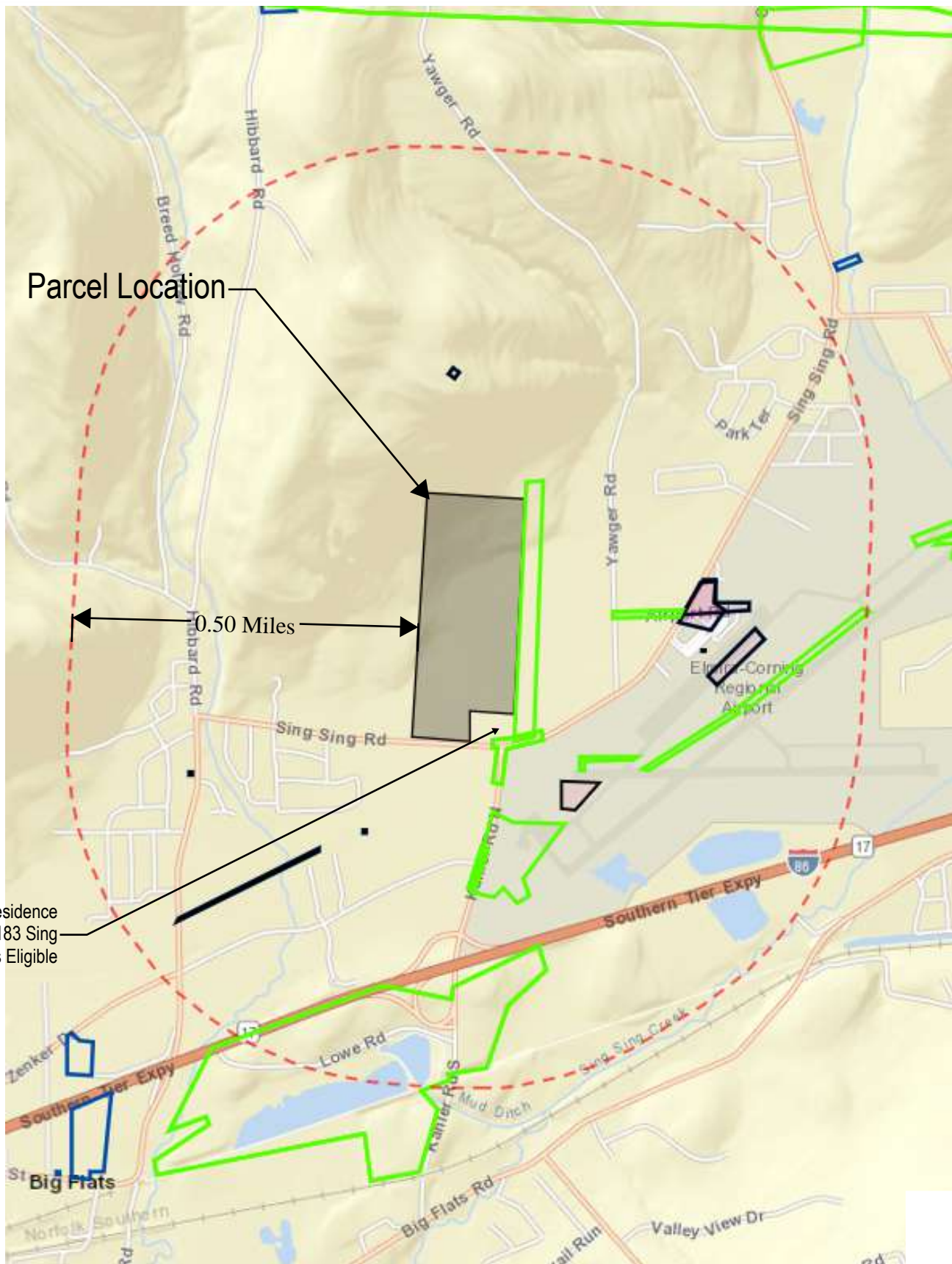
**24-Hour Emergency Number
1-888-264-8240**

APPENDIX F

Floodplain Review

APPENDIX G

Historical Review



Source: <https://cris.parks.ny.gov/Default.aspx>



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NYS OPRHP Map

161 SING SING RD. PLANNED UNIT
DEVELOPMENT
TOWN OF BIG FLATS, CHEMUNG COUNTY, NY

Fig. 9



Parks, Recreation and Historic Preservation

ANDREW M. CUOMO
Governor

ROSE HARVEY
Commissioner

ARCHAEOLOGY COMMENTS

Phase I Archaeological Survey Recommendation 18PR03493 – Planned Unit Development

The project is on an archaeologically sensitive landform. Therefore, the Office of Parks, Recreation and Historic Preservation (OPRHP) recommends a Phase I archaeological survey for all portions of the project that will involve ground disturbance, unless substantial prior ground disturbance can be documented. If you consider the entire project area to be disturbed, documentation of the disturbance will need to be reviewed by OPRHP. Examples of disturbance include mining activities and multiple episodes of building construction and demolition.

Documentation of ground disturbance should include a description of the disturbance with confirming evidence. Confirmation can include current photographs and/or older photographs of the project area which illustrate the disturbance (approximately keyed to a project area map), past maps or site plans that accurately record previous disturbances, or current soil borings that verify past disruptions to the land. Agricultural activity is not considered to be substantial ground disturbance.

Please note that in areas with alluvial soils or fill archaeological deposits may exist below the depth of superficial disturbances such as pavement or even deeper disturbances, depending on the thickness of the alluvium or fill. Evaluation of the possible impact of prior disturbance on archaeological sites must consider the depth of potentially culture-bearing deposits and the depth of planned disturbance by the proposed project.

A Phase I survey is designed to determine the presence or absence of archaeological sites or other cultural resources in the project's area of potential effect. The OPRHP can provide standards for conducting cultural resource investigations upon request. Cultural resource surveys and survey reports that meet these standards will be accepted and approved by the OPRHP.

Our office does not conduct archaeological surveys. A 36 CFR 61 qualified archaeologist should be retained to conduct the Phase I survey. Many archaeological consulting firms advertise their availability in the yellow pages. The services of qualified archaeologists can also be obtained by contacting local, regional, or statewide professional archaeological organizations. Phase I surveys can be expected to vary in cost per mile of right-of-way or by the number of acres impacted. We encourage you to contact a number of consulting firms and compare examples of each firm's work to obtain the best product.

Please also be aware that a Section 233 permit from the New York State Education Department (SED) may be necessary before archaeological fieldwork is conducted on State-owned land. If any portion of the project includes the lands of New York State you should contact the SED before initiating survey activities. The SED contact is Christina Rieth and she can be reached at (518) 402-5975. Section 233 permits are not required for projects on private land.

If you have any questions concerning archaeology, please contact Tim Lloyd at 518-268-2186 or Timothy.Lloyd@parks.ny.gov

Division for Historic Preservation

P.O. Box 189, Waterford, New York 12188-0189 • (518) 237-8643 • www.nysparks.com

APPENDIX H

PUD District Narrative

Chapter 17.21 - PLANNED UNIT DEVELOPMENT (PUD) DISTRICT

Sections:

17.21.010 - Legislative purpose.

The town of Big Flats hereby finds and determines that:

- A. When coordinated with the town of Big Flats Comprehensive Plan, the town of Big Flats Town Center Strategic Plan, and the town of Big Flats Development Design Guidelines, the creation of planned unit developments can be an effective tool for guiding development in ways that support community goals and priorities.
- B. Planned unit developments provide a means by which different land uses within an area covered by a single development plan may be combined to achieve compatibility among such uses. Unattainable with traditional municipal zoning techniques, planned unit development provides flexibility in the regulation of land use development in order to:
 - 1. Encourage innovation in land use variety and design, in the layout and type of new structures and in their integration with existing structures;
 - 2. Enhance efficiency in the use of land, natural resources, energy, community services, and utilities;
 - 3. Encourage open space preservation and protection of natural resources, historic sites, and structures;
 - 4. Facilitate the provision of housing and improved residential environments;
 - 5. Enhance the ability of municipalities to promote business and employment opportunities;
 - 6. Allowing a diversity of uses in close proximity in the district within a limited area, including residential, institutional, professional office and general business establishments;
 - 7. Preserving and restoring the overall character of the district;
 - 8. Promoting a balance of land uses;
 - 9. Promoting the opportunity for people to work, meet, and utilize services in the vicinity of their residences;
 - 10. Providing opportunities for a mixture of uses in the same building;
 - 11. Promoting a positive pedestrian environment in the district;
 - 12. Facilitating integrated physical design;
 - 13. Promoting a high level of design quality; and
 - 14. Encouraging the development of flexible space for small and emerging businesses;
 - 15. Facilitating development proposals responsive to current and future market conditions.

(LL No. 1, 2011; LL No. 6, 2009)

17.21.020 - Authority.

The power to establish planned unit development is provided for in Section 261-C of Article 16 of the NYS Town Law. In addition to any other powers and authority to plan and regulate by zoning, the town of Big Flats hereby enacts requirements for the review of planned unit development plans and the establishment and simultaneous mapping of a planned unit development district pursuant to the provisions of this local law.

(LL No. 1, 2011; LL No. 6, 2009)

17.21.030 - Use regulations.

A. Permitted Uses.

Small-scale light industrial (Building size not to exceed twenty-five thousand (25,000) square-foot)

Medical facility, to include a health care clinic or hospital

Office, professional

Office, general business

One-unit dwellings

Two-unit dwellings

Multi-unit dwellings

Day care center or nursery school

Assisted living facilities

Convalescent Home

Nursing home

Club, membership

Museum

Government facility

Place of worship

School

Public utility building

Car wash

Fitness Center

Parking lot, commercial

Research facility

Plaza

Restaurant, Standard

Retail, Small Scale

Bakery

Ice Cream Parlor

Hotel/Motel or Conference Center

B. Prohibited Uses.

1. A use not specifically permitted in 17.21.030(A) shall be deemed prohibited except as approved under 17.21.030(C)

C. Uses permitted with Site Plan Approval/Special Permit.

1. Any other use compatible with the above-allowed uses.
2. Application for determination for an approved use shall include a detailed description of the use, approximate number of employees and estimated volume of traffic to be generated, as well as the criteria set forth in the Section 17.21.060 Procedure.
3. Enlargement or expansion of existing buildings whether residential, institutional or professional and general office service establishments.

D. Same-structure/On-site Mixed Use.

1. Within the district, there shall be no restriction on combining different categories of use within the same building except any imposed by the New York State Building Code or other federal, state, or local regulations.
2. Uses must follow the Performance Standards in Section 17.21.080 Performance Standards.

(LL No. 1, 2011; LL No. 6, 2009)

17.21.040 - General requirements.

A. Permitted Uses. Uses within an area designated as a planned unit development district are determined by the provisions of this section as well as the conditions of the approval of any actual planned unit development project.

1. Mixed-use Planned Unit Development. A mixed-use planned unit development may incorporate a variety of housing types, such as detached, attached, one-unit, two-unit, multi-unit, or any combination thereof. Accessory uses, including mixed-use structures, religious institutions, educational facilities, and private and public membership clubs may be allowed as determined appropriate by the planning and town boards. In addition, the mixed-use planned unit development shall permit principally business uses of a variety of types, such as research and development facilities, high-technology assembly, professional offices, commercial recreation facilities and such other uses as may be deemed appropriate by the planning and town board for the area under construction. accessory uses are allowed when exclusively intended and designed for use by the users of the permitted principal use.

B. Minimum Area.

1. In all applicable zoning districts outside of the Town Center Area, the minimum area requirement for consideration of a planned unit development district designation shall be ten (10) contiguous acres of land
2. In the Town Center Area, the minimum area required for a planned unit development district shall be five contiguous acres.

C. Location. The planned unit development district is a floating zone. The planned unit development shall be applicable only in areas of the town of Big Flats where public sewer and water service are available or on parcels immediately adjacent to existing public sewer and water service where sewer and water can be extended to.

- D. Density. Because land is used more efficiently in a planned unit development, improved environmental quality can usually be produced with greater density than is usually permitted in traditional zoning districts. The planning board shall determine in each case the appropriate land use intensity and/or dwelling unit density for individual projects. The determination of land use intensity or dwelling unit density shall be thoroughly documented, including all facts, opinions and judgments justifying the selection.
- E. Open Space. A minimum of thirty (30) percent open space is required for all PUD proposals. Clustering of dwelling units, institutional and general business or professional office uses, and small-scale light industrial uses are strongly encouraged, provided buffers, common open space, and emergency access are adequately planned. Buffers are required in order to eliminate or minimize potential interference and nuisances on adjacent properties. The size of the buffer shall be determined through the PUD review process, based on its ability to achieve appropriate separation and conform to the performance standards contained herein.
- F. Lot Coverage. For all uses, the maximum lot coverage shall be seventy (70) percent.
- G. Setbacks.
 - 1. Unless otherwise expressly provided in this Section, the front, side, and rear yard setbacks for individual structures within the PUD shall be determined in conjunction with the final approval of the planned unit development plan.
- H. Height Restrictions. The height of structures shall be determined in conjunction with the review and approval of the master plan of the planned unit development.
- I. Spacing of Buildings. The location of all structures shall be as shown on the final planned unit development plan. The proposed location and arrangement of structures shall not be detrimental to existing or prospective structures, or existing or prospective neighborhoods. Every one or two unit dwelling shall have access to a public street, court, walkway, or other area dedicated to public use.
- J. Parking. Unless otherwise expressly provided in this Section, PUDs shall be subject to the off-street parking and loading standards of Chapter 17.48.
- K. Street Standards and Modification. The design of public streets within a PUD shall comply with all applicable town standards as provided in Title 12 of the town of Big Flats Municipal Law.
- L. Development Assurances. The planning board may require adequate assurance, in a form and manner that it approves, that the common open space, amenities, and public improvements shown in the final planned unit development plan will be provided and fully developed and shall comply with the provisions below:
- M. Performance Bond. Prior to final planned unit development plan approval, the applicant shall file with the town clerk, in an amount to be set by the town board, a certified check to cover the full cost of all required improvements or a performance bond to cover the full cost of all improvements. The performance or completion bonds shall comply with Section 277 of the Article 16 of the NYS Town Law, and shall be satisfactory to the town board, town attorney, and director of planning as to form, sufficiency, manner of execution and surety, to insure installation of all improvements shown on the final plan. A period of at least one year of filing of the plan, in accordance with the standards and specifications of the town but no more than three years shall be set forth in the bond within which time all required improvements shall be completed. The time limit may be extended by the board, upon written application made not less than sixty-two (62) days prior to the expiration of the period in accordance with NYS Town Law Section 277.
- N. Inspection of Improvements. The applicant shall provide for the inspection of required improvements during and after construction to assure that all town specifications and requirements shall be met during the construction of the required improvements, and to assure satisfactory completion of the improvements and utilities as required by the planning board. The applicant shall pay an inspection fee as set by the town board. Such fee shall be paid to the town prior to final planned unit development plan approval.

- O. As-Built Record Drawings. The applicant shall deliver and file with the town a set of as-built final maps, plans and drawings conforming to those submitted for the final planned unit development plan receiving final planned unit development plan approval, and certified by a duly licensed professional engineer that all construction of improvements was accomplished in accordance with such final plan approval, and the certification shall run specifically in the favor of the town.
- P. Acceptance of Improvements. The applicant shall complete all required improvements to the satisfaction of the director of planning and/or town approval authority with jurisdiction over the improvement, who shall file with the town board a report documenting the satisfactory completion of all required improvements, including all rights-of-way and easements, in the form of an acceptable deed filed with the town clerk.
- Q. Ownership. The tract of land under application for consideration for a planned unit development may be owned, leased, or controlled either by a single person or corporation or by a group of individuals or corporations. An application must be filed by the owner or jointly by the owners or their agent(s) of all property included in the project. In the case of multiple ownership, the approved plan shall be binding upon all property owners, and such owners shall provide written certification of such binding agreements. All land included for the purpose of development within a PUD shall be owned by or be under the complete control of the applicant for such PUD, whether the applicant be an individual, partnership, corporation, or other entity, and shall be planned and developed as a whole in a single development operation or a definitely programmed series of development operations or phases. The applicant shall provide to the director of planning all of the necessary documents and information that may be required by the town attorney to assure the town that the development project may be lawfully completed according to the plans sought to be approved.
- R. Recreation Requirements. A PUD development containing a residential component shall have a minimum of five percent of the entire PUD lot, exclusive of open space areas, set aside and developed, as appropriate, for recreational use in accordance with Section 17.36.100.
- S. Compliance with Development Design Guidelines Development of a planned unit development shall, to the greatest extent practicable, comply with the applicable recommendations included in the town of Big Flats Development Design Guidelines.
- T. Adherence to Town Center Requirements. At the discretion of the planning board, all planned unit developments shall be developed in accordance with Section 17.36.340 (Town Center Requirements).

(LL No. 1, 2015, 4-8-2015; LL No. 1, 2011; LL No. 6, 2009)

17.21.050 - Cooperative planning and design option.

As part of the PUD review process, the planning board may offer the services of its planning and design consultant to assist the applicant in creating a concept plan for the project. The intent of the option is to offer early facilitation of creative design solutions, operating outside of the more rigid process of typical plan review and comment. The option would include coordination with town staff and boards as appropriate. The cost of this option would be borne by the applicant and only upon agreement by the applicant. The option is available as a supplement to typical staff town consultant review services with the goal of creating an enhanced project design, and a more efficient and cost effective review process for the applicant.

(LL No. 1, 2011; LL No. 6, 2009)

17.21.060 - Procedure.

An application for a PUD approval shall consist of a preliminary planned unit development plan and a final planned unit development plan. The PUD review process involves the coordinated review and approval of the planning board (PUD recommendation and site plan approval) and the town board (PUD approval).

- A. Pre-Application Conference. A request for a pre-application conference shall be submitted along with the appropriate application fee to the director of planning in accordance with the requirements set forth in Section 17.64.050. The intent of the pre-application conference is for the applicant to obtain a general awareness of the town's planning rationale, the compatibility of the proposed PUD with existing and anticipated land uses in the vicinity, and a familiarity with the town's PUD procedures. The conference assists the applicant in determining the suitability of a proposed PUD in the proposed location, without incurring the expense of preparation of a PUD conceptual development plan. The conference will be an informal meeting with the planning board at a workshop session or a regularly scheduled meeting, open to the public, and included on their agenda in advance of the meeting. The pre-application meeting is mandatory, but does not require the filing of a preliminary planned unit development plan or plat.
- B. Preliminary Planned Unit Development Plan Submission. A preliminary planned unit development plan is a generalized plan that shows the proposed use and maximum scale, density, and intensity of use for all uses of all lands within the proposed PUD in accordance with the information requirements in subsection D below. An application for approval of the preliminary planned unit development plan shall be submitted along with the appropriate application fee to the director of planning as set forth in the current fee schedule adopted by the town board. The director of planning shall ascertain that all filing requirements have been met, and if so, shall forward the application document to the planning board.
- C. Planning Board Review of Preliminary Planned Unit Development Plan. The planning board shall review the application for compliance with the performance standards set forth in Section 17.21.080 of this chapter. At its first regular meeting after timely submission of application documents, the planning board will entertain a presentation of the project by the applicant, review the application materials and the preliminary planned unit development plan, and review the EAF or DEIS submitted by the applicant. All PUD applications shall be considered Type I actions under SEQRA requiring coordinated review. After evaluating the preliminary planned unit development plan according to the performance standards set forth in Section 17.21.080, the planning board shall prepare an itemized list of written findings of fact which supports a recommendation of approval, approval with conditions, or denial of the preliminary planned unit development district and accept the preliminary planned unit development plan. Upon receipt of a complete application, the written findings and recommendation of the planning board shall be forwarded to the town board within sixty-two (62) days.
- D. town board Review. The town board shall review the preliminary planned unit development district and the written findings of fact from the planning board. It shall conduct a public hearing at its regular or special meeting of the board within sixty-two (62) days after receiving all of the above materials. Public notice shall be required in the same manner as provided in Section 16.08.040(D) of the town of Big Flats Municipal Code. The town board will, within sixty-two (62) days of close of the public hearing, approve, approve with conditions, or deny the preliminary planned unit development district based upon the criteria set forth in Section 17.21.060(A)(4)(a). The decision of the town board shall be final and shall be supported by written findings. The decision of the town board shall be forwarded to the planning board for further action.
 - 1. The town board may approve with or without conditions, provided that it finds that all of the following standards have been met for the proposed district:
 - a. The location, size, and use of any structure(s), nature and intensity of operations involved, size of the site in relation to the proposed structure(s), and the location of the site with respect to roads giving access to it are such that the proposed uses will be in harmony with orderly development of the neighborhood.
 - b. The location, nature and height of buildings, walls and fences will not discourage the appropriate development and use of adjacent land and buildings, or impair their value.
 - c. The proposed use shall not conflict with the intent of the town of Big Flats Comprehensive Plan (2006), or any part thereof.

- d. A use within the proposed district shall not have an adverse effect on the agricultural resources of the area.
 - e. The proposed uses will not result in excessive off-premises noise, dust, odors, solid waste, or glare, or create any public or private nuisances.
 - f. The proposed uses will not cause significant traffic congestion, impair pedestrian safety, or overload existing roads considering their current width, surfacing, condition, and any proposed improvements made to them by the applicant.
 - g. The proposed uses will be suitable for the proposed action considering the property's size, location, topography, vegetation, soils, protected natural habitat, hydrology, and if appropriate, its ability to be buffered or screened from neighboring properties.
 - h. The proposed uses will be subject to such conditions on operation, design, and layout of structures and provision of buffer areas as may be necessary to ensure compatibility with surrounding uses and to protect the natural, historic, and scenic resources of the town.
 - i. Any proposed uses be designed in compliance with the recommendations set forth in the town of Big Flats Development Design Guidelines.
- E. Planning board review of final planned unit development plan. Upon receiving the town board's preliminary planned unit development district approval; with or without conditions, the applicant shall submit a final planned unit development plan to the planning board for approval and recommendation of approval, approval with conditions, or denial of the final planned unit development district to the town board. The final planned unit development plan is a detailed development plan prepared to scale showing accurately and with complete dimensioning the boundaries of a site and the location of all buildings, structures, land uses, and principal site development features. The submittal requirements are set forth in the following section.
- F. Town board PUD district final approval. The town board shall review the final planned unit development district and the written findings of fact from the planning board. The town board will approve, approve with conditions, or deny the final planned unit development district.

(LL No. 1, 2011; LL No. 6, 2009)

17.21.070 - Decisions.

- A. Final approval of a PUD by the town board shall be considered a binding commitment on the applicant and all subsequent owners to develop the property in accordance with the approved final PUD plan and conditions of approval. A final PUD plan approval does not in any way mandate or require performance of the applicant to proceed with the approved developmental plans or project.
- B. A final planned unit development plan shall be approved in the same form and manner as a site plan pursuant to Chapter 17.32, and the provisions therein shall be fully applicable to PUD approvals. Any approval of a PUD shall incorporate the findings required under SEQRA and shall be made in written form that includes each of the following:
 - 1. Identification of each use consistent with the use classifications of this chapter;
 - 2. The maximum scale, density, and intensity of use applicable to each such use;
 - 3. The manner in which the proposed PUD supports and is consistent with the statement of land use policies, principles, and goals in the Comprehensive Plan;
 - 4. The manner in which the site plan development proposed for the PUD is found to be suitable for that particular district;

5. The manner in which the physical improvements will satisfy the site development standards applicable to the district in which the proposed use is located, and to the extent practicable will comply with the performance standards for such district;
 6. The particular elements of the site plan that are subject to planning board approval during site plan review;
 7. Any conditions which shall become restrictions for the approved PUD with the same force as if they were included in the regulations provided in Chapter 17.32;
 8. Any required dedication or reservation, which must include a determination that such dedication or reservation is related both in nature and extent to the impact of the proposed project; and
 9. Modifications of site development elements necessary to ensure that any physical improvements meet the performance standards established in Section 17.21.080 Performance Standards.
- C. Any denial of a PUD district must be in writing and must address the specific reasons for the denial.
- D. Performance standards procedure. An application for a site plan, special use permit, building permit or a certificate of occupancy for a use subject to performance standards procedures shall include a plan of the proposed construction and a description of the proposed machinery, operations and products, and specifications for the mechanisms and techniques to be used in restricting the emission of any dangerous and objectionable elements listed under this section. The applicant shall also file with such plans and specifications an affidavit acknowledging his or her understanding of the applicable performance standards and stating his or her agreement to conform with same at all times. Upon the satisfactory filing of the required plans, specifications and affidavit, the code enforcement officer shall proceed to issue a building permit and/or certificate of occupancy in accordance with the procedures set forth in Section 17.64.020.
- E. Development Phasing Plan Required. For any commercial or institutional use that is proposed to be constructed in phases, the applicant shall submit a development phasing plan that specifies the chronology of development including required land use components, structures, public facilities, and infrastructure. The schedule for the development of such stages or units shall be submitted stating the approximate beginning and completion date for each such stage or unit and the proportion of the total PUD public or common open space and dwelling units to be provided or constructed during each such state and overall chronology of development to be followed from stage to stage. Projects shall be phased so that supporting public facilities and infrastructure will be provided concurrent with their need and completed before occupancy of the structures.
- F. Timely Provision of Infrastructure and Public Services. The construction and provision of all common open space and public facilities that are shown on the development plan must proceed at the same rate or faster as the construction of the other infrastructure improvements.
- G. Substantial Public Benefit. Substantial public benefit shall mean the provision of public facilities that are both unusual in character and serve the needs of an area greater than the immediate development and contributes toward the town and regional jobs/housing balance as well as to address housing demands induced by development adjacent to and within the PUD. Development impact bonuses or credits may be allowed to offset impacts only if public facilities such as street improvements, substantial public transportation improvements, certain park and recreation facilities which currently do not exist or are limited in the town, sewer, water, or utilities are provided that are in excess of those required under the provisions of this code. The infrastructure elements shall be constructed at the time of the initial PUD development, and shall meet the applicable town or county public improvement standards.
- H. Building Permit Required. In the event that the applicant does not request a building permit within one year of the town board approval pursuant to Section 17.21.060(6), the approval granted pursuant to Section 17.21.060(6) is automatically rescinded. If a permit is granted, it shall be subject to all of the terms of Section 17.21.080 Performance Standards.
- I. Expiration. A PUD approval shall be deemed to authorize only the particular uses specified in such approval and shall expire if substantial construction of the PUD is not commenced within two years from the date of the

final signature of the plan maps. The planning board may, at its discretion, after conducting a public hearing, grant an extension to an approved PUD. The applicant shall submit a written request sixty (60) days prior to the date of expiration of the PUD approval, requesting an extension for a specified time and the reason therefore. In granting the extension, the planning board may require revision of the previously approved PUD to comply with current regulations and conditions. The planning board shall render a decision, in writing, to the applicant and the other appropriate agencies within forty-five (45) days of closing the public hearing. The time within which the planning board must render its decision may be extended by mutual consent of the applicant and the planning board.

- J. Termination. Failure of an applicant or developer to comply with any conditions of approval for an approved planned unit development plan shall make the approval null and void.
- K. Abandonment or Failure to Proceed.
 - 1. If the applicant or owner of record chooses to abandon an approved preliminary planned unit development plan or an approved final planned unit development plan, he or she shall so notify the planning board in writing.
 - 2. If the applicant or owner of record fails to submit a final planned unit development plan to the planning board within one year of the approval date of the preliminary planned unit development plan; and has not applied for an extension to the above time limits from the planning board, the planning board shall revoke its approval of the preliminary plan and shall so notify the applicant or owner of record in writing. If within thirty (30) days of receipt of the notice of such revocation, the applicant or owner of record does not present to the planning board an application for reinstatement of the preliminary planned unit development plan, the planning board shall consider that the applicant or owner of record has abandoned the plan and said original petition or application shall be deemed null and void.
 - 3. Following any action to abandon the proposed PUD, whether it be through failure to proceed or through formal notice of abandonment by the applicants, owners of record or their successors, the town board shall take action to rescind their previous preliminary or final planned unit development plan approvals, and to invalidate any related agreements necessary to revert to underlying zoning district(s).
- L. Amendments. Minor changes to a development plan may be approved administratively, as provided in Section 17.32.170. Major changes shall include all modifications and quantities in conflict with the limitations and provisions as reflected in the minor amendment criteria set forth below. Upon initiation of the amendment as established by the original petition, all major amendments to the development shall be submitted to the town board for public hearing and recommendation to the planning board as required for the original application and approval. Provided further, all property owners within the prescribed notification area as set forth in the rules of the planning board shall be notified of said amendments and further the proposed amended plan shall only be approved by the planning board in a like manner as prescribed in Section 17.21.060.
 - 1. Minor Amendment Criteria: Amendments shall not be deemed as minor if the cumulative revisions to the most recent approved final planned unit development plan of record which was considered at a public hearing include:
 - a. A change to the use and character of the development.
 - b. The possible creation of obstacles, barriers and service problems to traffic circulation, fire protection, public safety, and public utility services due to the revision(s).
 - c. A reduction by greater than five percent of the designated open space.
 - d. An increase by greater than five percent in the approved number of residential dwelling units.
 - e. Increase the floor area proposed for non-residential use by more than five percent.
- M. Variances. The board of zoning appeals is solely empowered to grant variances to the provisions of this section under conditions for variances set forth in Chapter 17.60.

(LL No. 1, 2011; LL No. 6, 2009)

17.21.080 - Performance standards.

- A. No use shall be permitted that causes or results in dissemination of dust, smoke, gas or fumes odor, noise, vibration or excessive light under standards set forth in the performance criteria in this section.
- B. Any other performance standards of the town shall apply to the PUD in addition to these.
- C. Access and Traffic Impacts:
 - 1. Traffic and safety impacts to the existing and proposed roads shall be minimized.
 - 2. Access shall be provided to the extent feasible through an existing side street or a shared driveway or shared access; curb cuts shall be limited.
 - 3. Pedestrian and vehicular traffic shall be separated; walkways shall be provided for access to adjacent properties and between businesses.
 - 4. For public convenience, a pedestrian and/or bicycle way shall connect various uses and otherwise provide appropriate circulation or continuity to an existing pedestrian or bicycle circulation system. These uses include, but are not limited to residential, parking, transit, bicycling, industrial, recreation, and commercial.
 - 5. Walkways must conform to requirements of the American with Disabilities Act (ADA).
- D. Parking and Loading, and Shared parking Requirements.
 - 1. Minimum number of spaces required for all development shall comply with the parking standards provided in Section 17.48.010.
 - 2. Parking shall be located to the side or rear of buildings. In no case shall parking be allowed in the planting strip adjacent to the sidewalk or within the front setback of any lot.
 - 3. Parking spaces may be located either on or off the lot. Applicant must show proof of space, its location in relation to the dwelling unit or non-residential uses, and indicate if the space is owned or leased.
 - 4. Buildings that do not have frontage on a street must provide access for emergency and service vehicles through the layout and design of driveways, interior service roads, or pedestrian and bicycle circulation corridors.
 - 5. In no circumstances will cul-de-sacs be permitted pursuant to Section 12.04.050 (5) of the town of Big Flats Municipal Code.
 - 6. Where there is more than one category of use, then the number of spaces required shall be seventy (70) percent of the sum of required spaces for each category of use.
 - 7. The planning board may reduce the number of required parking spaces for the general business or professional office building/industrial portion of the building by fifty (50) percent.
 - 8. Off-street loading requirements are: Small-scale light industrial uses require one bay per every twenty-five thousand (25,000) square feet of floor area; residential or general business, or professional office uses require one bay per every fifty thousand (50,000) square feet of floor area.
- E. Noise:
 - 1. Residential units shall be constructed so that interior noise levels do not exceed an Ldn of forty-five (45) dB in any habitable room.
 - 2. The maximum permissible sound pressure level of any continuous, regular, or frequent source of sound produced by any use or activity shall not exceed the following limits at the property line of the sound source:

District	7 a.m.— 10 p.m.	10 p.m.— 7 a.m.
General Business or Professional Offices	65	50
Small-scale Light Industrial	65	40
Residential	55	55

Source Pressure Level Limits Measured in dB (A's)

3. Sound pressure level shall be measured at all major lot lines, at a height of at least four feet above the ground surface. Noise shall be measured with a sound level meter meeting the standards of the American Standards Institute, ANSI SI.4-1961 "American Standard Specification for General Purpose Sound Level Meters." The instrument shall be set to the A-weighted response scale. Measurements shall be conducted in accordance with ANSI SI.2-1962 "American Standard Meter for the Physical Measurement of Sound."
4. Sound levels specified shall not be exceeded for more than fifteen (15) minutes in any one day, except for temporary construction or maintenance work, agricultural activity, timber harvesting, traffic, church bells, emergency warning devices, parades, or other special circumstances.
5. No person shall engage in or cause very loud construction activities on a site abutting residential use between the hours of 9 p.m. and 7 a.m.
6. General business, professional offices, or small-scale light industrial uses shall be designed and operated, and hours of operation limited where appropriate, so that neighboring residents are not exposed to offensive noise, especially from traffic or late-night activity. No amplified music shall be audible to neighboring residents.
7. Common walls between residential and non-residential uses shall be constructed to minimize the transmission of noise and vibration.
8. Residential buildings to be constructed or rehabilitated shall be designed or retrofitted to filter out noise through construction employing, but not limited to: such techniques as applying soundproofing material between dwelling units laterally and vertically, and between different uses; employing staggered joists, and insulation.

D. Vibration, Smoke, Heat, Glare, and Odor:

1. Vibration shall not be discernible to any human's sense of feeling for three minutes in any one hour or a total of fifteen (15) minutes in any one day, or producing an acceleration of more than 0.1 G.
2. Smoke shall not be visible beyond a shade darker than No. 1 on the Ringelmann Smoke Chart.
3. Heat and glare shall not be discernible from the outside of any structure.
4. Odor, dust, and fumes shall be effectively confined to the premises or so disposed as to avoid air pollution.

E. Lighting:

1. All outdoor lighting shall be designed in accordance with Section 17.36.240 and with the additional requirements set below so as not to adversely impact surrounding uses, while also providing a sufficient

level of illumination for access and security purposes. Such lighting shall not blink, flash, oscillate, or be of unusually high intensity of brightness.

2. Parking areas shall be illuminated to provide appropriate visibility and security during hours of darkness.
 3. Any outdoor lighting fixture that is newly installed or replaced shall be shielded so that it does not produce a strong, direct light beyond the property boundaries, and shall be directed toward the object to be illuminated. Light shall be directed away from residences.
 4. Lighting of the site shall be adequate at ground level for the protection and safety of the public in regard to pedestrian and vehicular circulation. The glare from the installation of outdoor lights and illuminated signs shall be contained on the property and shall be shielded from abutting properties. Lighting structures shall be integrated with the site and surrounding uses.
 5. An exterior lighting plan is required including the following items plus any additional information required by the planning board if needed to determine compliance with these provisions:
 - a. A lighting plan showing existing and proposed exterior lighting, including building and ground lighting; locations, supports, mounting heights, and orientation of all lighting units.
 - b. For all external lighting units, descriptions and diagrams of physical configuration and photometric data, such as those available from manufacturers, indicating fixtures, lamps, reflectors and filters and showing the angle of light cut-off and light distribution patterns.
 6. All parking areas and pedestrian facilities serving non-residential uses and open to the general public shall be provided with illumination during all hours from dusk to dawn that those facilities are open to the general public. Such illumination shall provide not less than 0.2 average maintained horizontal foot-candles, and an illumination ratio (brightest/darkest) of not more than 4:1. However, the planning board may approve alternative arrangements if it determines that, because of special circumstances or alternative provisions, the specified illumination is not necessary or appropriate for the protection of the public safety.
 7. To avoid lighting impacts, outdoor lighting fixtures shall be mounted no higher than fifteen (15) feet, directed inward to the greatest extent feasible, or otherwise oriented and shielded to avoid glare on adjoining premises and plantings or other screening used to block headlight glare from drives and parking lots onto adjacent properties or roadways.
- F. Storage: All materials, supplies, and equipment shall be stored in accordance with Fire Code of New York State and Property Maintenance Code of New York State. They shall be screened from view from public ways and abutting properties. Exterior storage of materials, goods, and equipment shall be screened entirely from view by a solid fence, or, alternatively, by solid vegetative plantings as approved by the director of planning or designee. Storage shall not exceed five percent of the total lot area and shall not occur within the front yard or side yard setbacks.
- G. Waste Disposal:
1. Waste disposal shall follow New York State Department of Health regulations.
 2. Storage of waste and waste facilities shall be screened from view from public ways and neighboring properties.
 3. Appropriate provisions shall be made for the disposal of trash, which may include, but shall not be limited to, the provision of trash compactors within the building or on site, as well as a submission of a signed annual contract for rubbish removal.
- H. Loading/Unloading: The town of Big Flats may require that operations, including loading and unloading shall be limited to weekdays between the hours of 7 am and 9 pm only.
- I. Signs shall conform in accordance to Chapter 17.52.

J. Landscaping Requirements.

1. Landscaping plans should specifically address streetscape aesthetics, so that as development occurs, an attractive streetscape will be ensured along the main roads and large expanses of parking will be broken up and hidden from view at all times
2. Screening of mechanical equipment, trash, and loading areas shall be provided through the use of walls, fences, and/or dense, evergreen plant materials.
3. Parking area landscaping.
 - a. Parking areas shall be screened from adjacent residential uses, streets, and walkways using trees and shrubs adapted to the region, of specimen quality conforming to the American Standard for Nursery Stock, American Standards Institute, Inc., 230 Southern Building, Washington, DC 20005, and shall be planted according to accepted horticultural standards. Berms may be used for screening along the street in conjunction with plant materials.
 - b. The landscaped perimeter area shall be at least five feet wide.
 - c. Landscaping shall be provided for interior vehicular use areas to provide visual and climatic relief from broad expanses of pavement and to channelize and define logical areas for pedestrian and vehicular traffic.
 - d. The parking area shall be landscaped with sufficient shade trees to provide fifty (50) percent shade within fifteen (15) years of installation.
 - e. The use of porous pavement and/or perforated brick or block shall be used to the extent feasible to increase on-site water retention for plant material, groundwater supplies, and to reduce problems associated with runoff.
4. Completion of the landscaping requirements may be postponed due to seasonal weather conditions for a period not to exceed six months from the time of project completion.

K. Maintenance of Landscaping and Screening.

1. All landscaping and screening shall be maintained by the property owner.
2. Landscaping and screening plant materials shall not encroach on the public walkways or roadways in a way that impedes pedestrian or vehicular traffic.
3. Shrubs or trees that die shall be replaced within one growing season.
4. If the property owner fails to do so, the town reserves the right to maintain the landscaping and screening after notifying the owners, agents, renters, or lessees by certified mail at their last known address or at the subject property address, that it shall be removed or trimmed within seven days of the notice by the director of planning or a code enforcement officer.
5. The town shall assess the owners, agents, renters, or lessees for the cost of trimming or removal plus an additional amount of up to twenty (20) percent of the charges for administrative costs, to the owner and to the lessee, agent, occupant, or other person in possession and control of the property.
6. If any property owner fails or refuses to pay when due any charge imposed under this section, the director of planning or a code enforcement officer may, in addition to taking other collection remedies, certify due and unpaid charges, including interest, to the town to be levied against the person's property for collection by the county in the same manner as delinquent general taxes upon such property are collected as provided by town law.

L. Appearance/Architectural/Site Design

1. Architectural design shall be compatible with the character and scale of building in the town of Big Flats and in compliance with the town's development design guidelines through the use of appropriate building materials, screening, breaks in roof and wall lines and techniques.
2. Variation in detail, form, and siting shall be used to provide visual interest and avoid monotony.
3. Proposed buildings shall relate harmoniously to each other with adequate light, air circulation, and separation between buildings.
4. Proposed buildings shall be compatible within the context of the PUD congruent with color, scale and character of the existing natural and built environment.
5. Existing buildings shall remain compatible with the historic character and scale of contiguous buildings within the PUD for the purposes of reconstruction or rehabilitation.
6. Site development plans should address the pedestrian environment for residents, visitors, and employees, creating an outdoor environment where the buildings and open spaces work together to create meaningful public spaces and walkability from one building to another.
7. Designs which integrate and protect existing wetland areas into the landscape without disturbing them are encouraged through the use of trails, public access, or recreation areas. New construction design shall be in harmony with the existing district and surrounding character.
8. Buildings or structures that are listed or eligible for inclusion on the National Register of Historic Places and/or the New York State Register of Historic Places shall be converted, constructed, reconstructed, restored or altered to maintain or promote the status of the building or structure on, or eligibility for inclusion on the State or National Register of Historic Places.

(LL No. 1, 2011; LL No. 6, 2009)

APPENDIX I

Sanitary Sewer Feasibility Study



Chemung County Sewer Districts

607-733-2887

www.ChemungCounty.com

600 Milton Street, Elmira, New York 14904

WILL SERVE

DATE: March 23, 2018

ISSUED FOR: Town of Big Flats, Planning
476 Maple Street
Big Flats, NY 14814

PARCEL: 57.03-2-4

ADDRESS: 161 Sing Sing Rd

PROJECT: Sing Sing Road Multi-Purpose Sub-Division

SUBJECT: PUBLIC SEWER CONNECTION REQUIREMENTS

ITEM I: The subject property can be served by the public sewer.

ITEM II: The subject property is not within the Chemung County Sewer Districts. The District will require a Sewer District Extension.

ITEM III: A District Extension feasibility study is required.

ITEM IV: Any facilities proposed outside of subject property shall require Sewer Use and Maintenance Easements.

ITEM V: A Chemung County Highway permit for utilities within Sing Sing Road Right-Of-Way will be required.

ITEM VI: All design and construction shall be in accordance with "Recommended Standards for Wastewater Facilities" (10 State Standards).

Michael G. Sopinski, P.E.
Senior Wastewater Engineer



112 N. Main St. | Horseheads, New York 14845
m: 607.377.7990 | e: www.maser-engineering.net

December 20, 2017

Mr. Paul Owen
CEO & General Manager

Mr. Harry Smith
Vice President
Bella Faccia LLC
2024 Lake Road
Elmira, New York 14903

Dear Mr. Owen and Mr. Smith:

The following letter and figures present an analysis of options for bringing sanitary sewer to your proposed sub-division on Sing Sing Rd. in the Town of Big Flats, NY.

Background:

Mr. Owen from Bella Faccia LLC contacted Maser Engineering to conduct a feasibility analysis to determine if gravity sanitary sewer could be extended to their proposed sub-division, a 74.90-acre plot of land with a Tax Map No. of 57.03-2-4.

The site, rectangular in configuration, is approximately 850-feet wide and 4,232-feet long. It is relatively flat but drains from the north to the south. Grade starts to increase significantly at the north end of the site. The site has approximately 470-feet of road frontage.

Figure 1 in Appendix A shows the proposed site on a USGS map.

We conducted field investigations with Mr. Smith on December 20, 2017. Our methodology was to find all sanitary manholes around Daniel Zenker Drive, remove the manhole covers and measure the distance from the rim of the manhole to the bottom of the pipe. Rim elevations were estimated from the USGS map and Google Earth. Elevations on the project site were taken from a base survey from Fagan Engineers from a dissolved plan for a different project. The following sections address three feasible options, based on our investigation, to extend the sanitary sewer to the proposed site.

Option No. 1: Existing County Easement

The first option extends the sanitary sewer from the proposed site, runs it west down Sing Sing Road, turns it south down an existing Chemung County Easement which is a paved access road and connects it to an existing sanitary manhole in front of the Wings of Eagles Discovery Center. Figure 2 in Appendix B shows the alignment for this option.

Existing Infrastructure:

The estimated average slope of the sanitary main along the road leading to the Discovery Center is 0.17%. Manholes are spaced every 300-feet and the branch discharges to the main on Daniel Zenker Drive to the south. The pipe is PVC material and is eight inches in diameter.

Proposed Alignment:

Approximately 4,570-feet of pipe and 15 manholes would be required to extend the sanitary service to the rear of the property.

Using an average slope of 0.20%, we show a net drop from the north of the site to the existing manhole to be nine feet. Leaving 4-foot of cover at the upper most manhole, we could achieve an average slope of 0.26%.

It is noted that the rim cover of the “tie-in” manhole couldn’t be removed because sediment was frozen in the pry pockets. Inverts were estimated based on downstream manholes as they all exhibited the same rim to invert distance.

Option No. 2: Directly South from the Site to Daniel Zenker Dr.

The second option extends the sanitary sewer from the proposed site, across Sing Sing Rd. and continues south along the property line of a parcel that is owned by Chemung County. It would continue south into the Wick’s property and then cross Daniel Zenker Drive, connecting to an existing manhole on the south side of Daniel Zenker. An easement would be required to run the line through here. Figure 3 in Appendix C shows the alignment for this option.

Existing Infrastructure:

The estimated average slope of the sanitary main along Daniel Zenker is 0.17%. Manholes are spaced every 300-feet. The pipe is PVC material and is eight inches in diameter.

Proposed Alignment:

Approximately 4,592-feet of pipe and 17 manholes would be required to extend the sanitary service to the rear of the property from this location.

Using an average slope of 0.20%, we show a net drop from the north of the site to the existing manhole to be nine feet. Leaving 4-foot of cover at the upper most manhole, we could achieve an average slope of 0.35%.

Option No. 3: Sing Sing Rd. to Kahler Road

The third option extends the sanitary sewer from the proposed site, runs it east down Sing Sing Road, turns it south down Kahler Rd. and connects to an existing manhole at the intersection of Kahler Rd. and Daniel Zenker Drive, at the entrance of Emhart Glass. Figure 4 in Appendix D shows the alignment for this option.

Existing Infrastructure:

There is a private sanitary main running down Kahler Rd. which services Emhart Glass. It is likely this development would need to connect to the existing manhole (and not this private line) for the public sewer at the intersection.

Proposed Alignment:

Approximately 4,747-feet of pipe and 16 manholes would be required to extend the sanitary service to the rear of the property.

Using an average slope of 0.20%, we show a net drop from the north of the site to the existing manhole to be about nine feet. This leaves about five-feet of cover at the northernmost manhole.

Recommendation:

Option #	Length of Extension (To Rear)	# of Manholes (To Rear)	Pros	Cons
1	4570	15	<ol style="list-style-type: none">1. Easement already in place2. Only need to cross main road once3. Grades work4. Least amount of pipe and manholes required	<ol style="list-style-type: none">1. Must trench down Sing Sing Rd. for 950-ft. (added expense for Maintenance and Protection of Traffic)
2	4592	17	<ol style="list-style-type: none">1. Less trenching down main road alignment2. About the same amount of pipe as Option 13. Could achieve a better grade than the other two options	<ol style="list-style-type: none">1. Need to create an easement for most of the run2. Must cross two main roads3. Need buy-in from Wick's property.
3	4747	16	<ol style="list-style-type: none">1. Length of pipe and # of manholes required are like the other two options	<ol style="list-style-type: none">1. Must trench along main roadways the entire way2. Disruption in front of Emhart Glass to trench and connect to existing manhole

Table No. 1: Pros and Cons of Each Option

After reviewing the options, we recommend Option No. 1 which requires the least amount of pipe and manholes. In addition, you'll be able to use an existing easement from the County and connect to a manhole without disrupting local businesses. You'll only have to cross a main road once and the grades work well. In addition, no pumping is required for any of these options.

If you have any questions or comments regarding this analysis, please give me a call at 607-377-7990 or email at maser@maser-engineering.net. Thank you for the opportunity to help you with the planning phase of your exciting project.

Sincerely,

MASER ENGINEERING

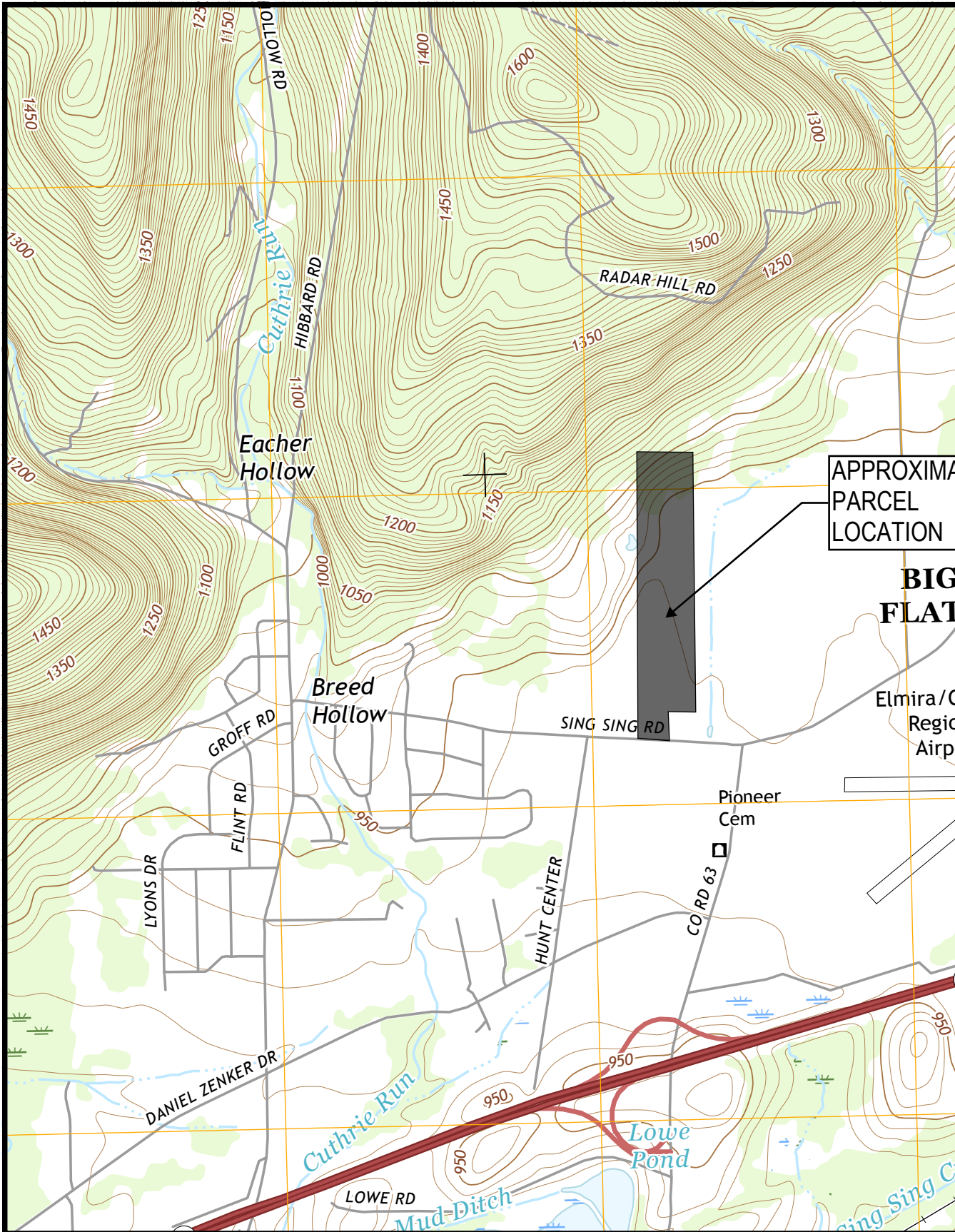


Marc Maser, P.E., PMP
Owner

Enc.

APPENDIX A

FIGURE 1 USGS PROJECT LOCATION MAP



Source: [http://store.usgs.gov/b2c_usgs/b2c/start/\(xcm=r3standardpitrex_prd\)/.do](http://store.usgs.gov/b2c_usgs/b2c/start/(xcm=r3standardpitrex_prd)/.do)



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USGS Regional Map

Proposed Sing Sing Rd.
Sub-Division

Fig.1

APPENDIX B

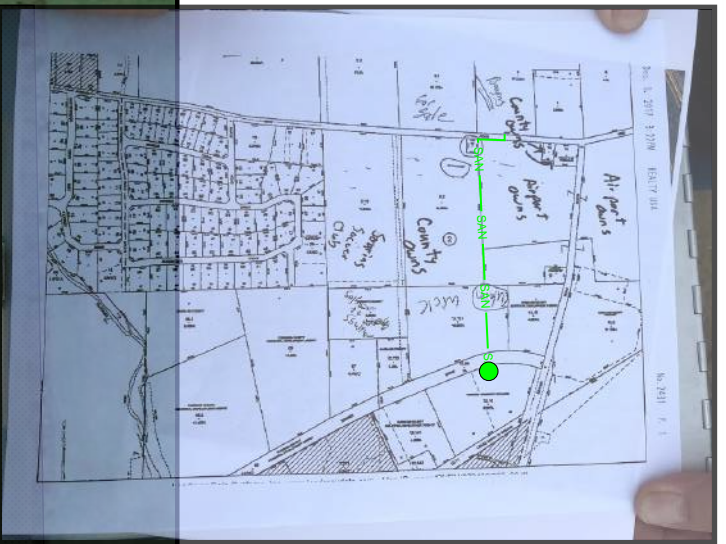
FIGURE 2 OPTION ONE

**EXTEND THROUGH EXISTING
CHEMUNG COUNTY EASEMENT**

APPENDIX C

FIGURE 3 OPTION TWO

EXTEND TO DANIEL ZENKER DRIVE



QUANTITIES:

LENGTH OF MAIN (TO REAR) = 4,592-FEET
 LENGTH OF MAIN (TO FRONT) = 2,181-FEET
 # OF MANHOLES (TO REAR) = 17
 # OF MANHOLES (TO FRONT) = 9

GRADE (ALL GRADES APPROXIMATED):

MH-3:

RIM: 927'-0"
 INV. 919'-9" (N)
 INV. 919'-9" (S)

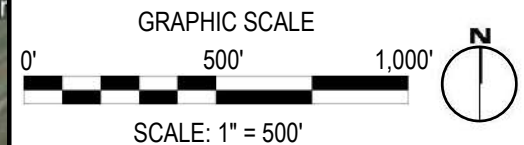
USING A 0.20% SLOPE, THE PROPOSED
 MANHOLES WOULD BE:

MH-8

RIM: 937'-2"
 INV: 924'-1"

MH-9

RIM: 939'-6"
 INV: 928'-10"



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OPTION NO. 2

Extend to
 Daniel Zenker Dr.

Fig. 3

APPENDIX D

FIGURE 4 OPTION THREE

**SING SING RD. TO
KAHLER RD./DANIEL ZENKER DR. INTERSECTION**



QUANTITIES:

LENGTH OF MAIN (TO REAR) = 4,747-FEET
 LENGTH OF MAIN (TO FRONT) = 2,336-FEET
 # OF MANHOLES (TO REAR) = 16
 # OF MANHOLES (TO FRONT) = 9

GRADE (ALL GRADES APPROXIMATED):

MH-1:

RIM: 932'-0"
 INV: 925'-0"

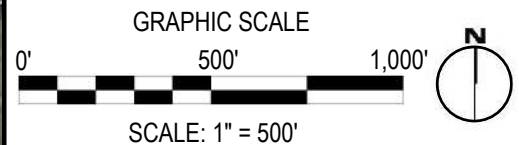
USING A 0.20% SLOPE, THE PROPOSED
 MANHOLES WOULD BE:

MH-8

RIM: 937'-2"
 INV: 929'-8"

MH-9

RIM: 939'-6"
 INV: 934'-4"



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OPTION NO. 3

Sing Sing Rd. to Kahler Rd./Daniel
 Zenker Dr. Intersection

Fig. 4

APPENDIX J

NYSEG Electrical Standards

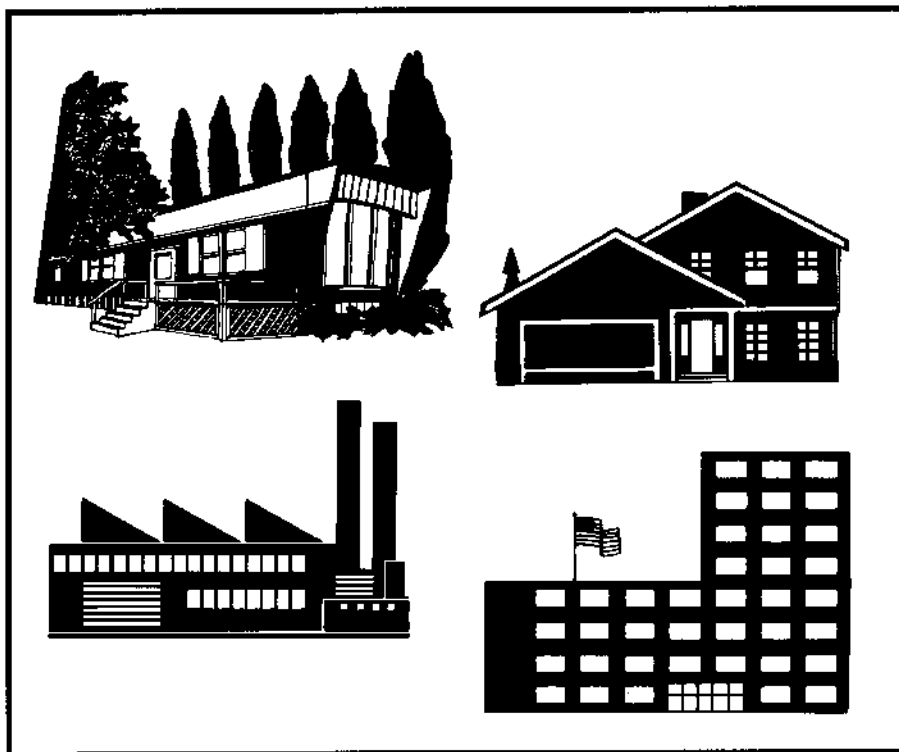


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Requirements for the installation of

Electric Services & Meters

September 8, 2003



Specifications for Electric Installations

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SECTION I INTRODUCTION

Section I - Introduction

1. Purpose. In this booklet, the Company presents information and general specifications relative to the use of electricity supplied from our lines. The booklet is intended as a guide in making electrical installations in order to protect the interests of our customers and to comply with regulations which experience has shown to be necessary for safe, adequate, and satisfactory service.

2. Scope. The information and specifications included in this booklet cover conductors and equipment connecting the Company's electric supply system to the customer's premises, and other subjects of mutual interest to the Company, customer, architect, engineer, and electrical contractor. It is not a complete set of rules governing the installation of electrical wire and equipment nor does it pertain to services above 600 volts (except as referenced in Sections III, IV, VII and IX). For service above 600 volts, the customer shall submit detailed plans and specifications for inspection and review by the Company prior to purchasing equipment or proceeding with the installation. The Company will inform the customer concerning its requirements for electrical insulation, protective equipment, and metering facilities, and will supply additional information such as estimated short circuit data, relay recommendations, etc.

3. Rate Schedule. For Rate Schedules and the rules and Regulations pertaining thereto, reference is made to the Schedule for Electric Service on file with the Public Service Commission. The schedule is available for examination at any business office of the Company.

4. Cooperation. It is the sincere desire of the Company to provide and maintain dependable, safe, and satisfactory electric service in a courteous and efficient manner. Cooperation of customers and their agents is appreciated. PRELIMINARY INFORMATION FURNISHED TO THE COMPANY EARLY IN THE DEVELOPMENT OF PLANS LEADING TO NEW OR INCREASED ELECTRIC SERVICE, WILL AID IN PROPER SCHEDULING OF THE SERVICE WORK. Cooperation of all interested parties and strict adherence to the specifications in this booklet will expedite satisfactory connection of the electric service.

5. Codes. These specifications are a supplement to the National Electrical Code, but they are not a substitute for that code or municipal, county, state and federal codes. The Company requires that the customer's wiring installations be made in accordance with all applicable codes and these specifications. Service may be denied if these codes and specifications are not met.

6. Requests For Information. The Company will assist the customer with any problem relating to the utilization of electric service. Company representatives are available at our offices to receive requests for information regarding the application of these specifications.

SECTION I INTRODUCTION

7. Responsibility. Adequate electrical capacity of the service equipment is the responsibility of the customer. The electrical contractor should assist the customer in determining existing and future needs.

Significant increases or changes in connected electrical loads must be reported to the Company.

The Company will only accept responsibility for equipment that it supplies to the customer to become part of the electrical service and the meter itself. The Company shall not be liable for problems resulting from improper use and installation of said equipment by the customer or customer's agents. See Section 7, "Meters and Meter Boards".

8. Electrical Inspections. To protect the customer's interests as well as its own, the Company requires the customer to furnish an electrical inspection certificate before energizing a new installation or upgrade of service. The Company may also require re-inspection before re-energizing a service.

Inspection certificates will only be accepted from agencies approved by NYSEG for that purpose.

Inspections shall confirm compliance with the latest version of the National Electric Code, any municipal, county, state or federal codes, and any NYSEG specification that may supersede portions of the aforementioned codes. NYSEG reserves the right to challenge the inspection when Company personnel observe deficiencies in the installation at any time prior to energizing the installation.

The Company's local offices maintain lists of electrical inspectors and application forms, and should be contacted on specific questions dealing with electrical inspections.

9. Revisions. These specifications are subject to revision without notice and will be revised or amended as required by developments of the industry to protect the mutual interests of the customer and Company. The latest revisions should always be used. Additional copies of this booklet and any revisions can be obtained at the Company's local offices or online at www.nyseg.com.

SECTION II DEFINITIONS

Section II - Definitions

1. Building. A structure which stands alone or which is separated from adjoining structures by approved fire walls with all openings therein protected by approved fire doors.

2. Company. New York State Electric & Gas Corporation (NYSEG).

3. Cost or Expense. The cost of all materials and equipment, labor and other definite charges applicable thereto, plus a reasonable percentage for engineering, purchasing, the use of construction equipment and other costs of a general character, associated with the work to be performed.

4. Customer. A present or prospective user of the Company's electric service.

5. Easement. A right granted by a property owner for a specific use of a defined area of said owner's property.

6. Ground. A conducting connection between an electrical circuit or equipment and earth, or some conducting body which serves in place of the earth.

7. Line. A system of poles, wires and fixtures, or the equivalent ducts, conduits, cables, etc. (when placed underground), used for general distribution of electricity.

8. Mobile Home. A mobile home is a factory assembled structure or structures equipped with the necessary service connection, made to be readily movable as a unit on its own running gear, and designed to be used as a dwelling unit(s) without a permanent foundation.

9. Permanent Foundation. A foundation structure for a mobile home or building to which the mobile home or building is securely attached and not readily moved.

10. Permanent Sewer System. An installation consisting of an approved septic tank, dry well and/or leach fields, in compliance with local zoning laws, or connection to a municipal sanitary sewer system.

11. Permanent Structure. A structure will be considered permanent when it is connected to an approved permanent sewer and water system and is in compliance with local zoning laws.

12. Permanent Water System. A supply of running water derived from connection to a municipal water piping system, well, or other suitable source.

SECTION II DEFINITIONS

13. Recreational Vehicle. A vehicular type unit primarily designed for recreational, camping or travel use, which has its own motive power or is mounted on or drawn by another vehicle. The basic entities are: travel trailer, camping trailer, truck camper, or motor home.

14. Recreational Vehicle Park or Campgrounds. An accommodation for recreational vehicles or other camping facilities where individual rented site occupancy is normally of short duration (not intended for permanent or year-round living).

15. Right-of-Way. The right of ingress and egress over and/or to the easement.

16. Riser. The portion of a system(secondary or primary wires) which transitions between above grade(pole mounted) and below grade or underground.

17. Service. The conductors and equipment for delivering energy from the electric supply system to the wiring system of the premises served.

18. Service Connection. A service connection is one service drop or lateral and its associated service entrance.

19. Service Drop. The overhead service conductors between the Company's last pole or other aerial support and the customer's first point of attachment to the building or other structure of the premises being served.

20. Service Entrance. That part of the installation from the point of attachment or termination of the service drop or lateral to and including the service equipment on the customer's premises.

21. Service Entrance Conductors. The service conductors or cable which extend from the point of attachment or termination of the service drop or lateral to the terminals of the service equipment.

22. Service Equipment. The necessary equipment, usually consisting of circuit breaker or switch and fuses and their accessories, located near the point of entrance of supply conductors to a building and intended to constitute the main control and means of cutoff for the supply to the premises.

23. Service Lateral. A system of underground conductors and equipment for delivering electricity from the Company's distribution system to the wiring system of a building of premises.

24. Temporary Service. Service to be used for a limited time (normally not to exceed one year) for construction, exhibits, decorative lighting or similar purposes, or service to non-permanent structures.

SECTION II DEFINITIONS

25. UD (Underground Distribution). The terminology used to describe the placement below ground of the Company's electric distribution system.

26. URD (Underground Residential Distribution). The terminology used to describe the placement below ground of the Company's electric distribution system (except transformers and switchgear) and customer's service laterals in residential developments.

27. Wire Size. Where stated, conductor size is in terms of American Wire Gauge (AWG).

SECTION III GENERAL INFO. & REQUIREMENTS

Section III - General Information and Requirements

1. Access to Customer's Premises.

The Company's authorized employees or agents shall have access, at all reasonable times, to its meters and equipment installed on the customer's premises.

2. Identification of Employees.

Employees or representatives of the Company authorized to visit the customer's premises are furnished with identification which they will show upon request. This is done to protect customers from unauthorized persons representing themselves as Company employees.

3. Application for Service.

Application for service may be made by telephone, mail, or by personal application at the Company's offices; however, written application on the Company's forms may be required. Application for service should be made as far as possible in advance of the date electric service is required.

THE CUSTOMER OR HIS CONTRACTOR SHALL CONSULT THE COMPANY REGARDING THE CHARACTER OF SERVICE AVAILABLE BEFORE PLANS ARE COMPLETED, EQUIPMENT PURCHASED OR CONSTRUCTION COMMENCED ON FACILITIES TO BE CONNECTED TO THE COMPANY'S DISTRIBUTION SYSTEM. INFORMATION THE CUSTOMER OR HIS CONTRACTOR FURNISHES THE COMPANY REGARDING THE CUSTOMER'S PROPOSED ELECTRICAL INSTALLATION SHOULD BE IN WRITING. THE COMPANY WILL NOT BE RESPONSIBLE FOR THE ERRORS RESULTING FROM THE ORAL TRANSMISSION OF INFORMATION.

4. Temporary Service.

Examples of temporary service are those supplied to non-permanent structures, during the construction of permanent structures or projects, or for short time service (usually not to exceed one year) to carnivals, exhibits, decorative lighting, etc. The customer may be required to pay charges prior to connection of service(see definition #3 under Section II. Installation judged to be unsafe by the Company will not be energized.

Service entrance, meter and other wiring on temporary installations are to be installed in the same manner as required for permanent installation. Inspections and approval by an authorized inspection organization shall be required prior to the Company making the service connection. The customer shall be required to provide a substantial and adequate support, guyed if necessary (see Section IV, paragraph no. 17).

SECTION III GENERAL INFO. & REQUIREMENTS

5. Insulation Certificate.

An insulation Certificate of Compliance may be required by the Company before a residential electric service will be connected. It certifies conformity with applicable minimum insulation standards adopted by the New York State Public Service Commission and/or by New York State in the Energy Conservation Construction Code. The latter code applies to all buildings (including non-residential) for which application for a building permit is made and plans are filed in this State on or after January 1, 1979. Copies of the Certificate of Compliance form are available from the Company. Contact the Electric Market Services Department regarding specific requirements.

6. Time Of Use (TOU) Service.

For residential and qualifying non-residential customers, the Company offers to meter and bill separately, at a lower TOU rate, all electricity used for all purposes during the applicable hours (Eastern Standard Time). For more information, see the appropriate NYSEG rate schedules. With this service, there is a cost advantage if certain energy using appliances, such as electric water heaters, are "controlled" to operate during all or most of the lower cost time.

7. TOU Controlled Appliances.

An example of this installation is where the heating elements of an electric water heater are "controlled" by a customer-owned time clock that is set to operate only during the residential hours of 11:30 p.m. to 7:00 a.m. EST. (Other times may be applicable-). Various other appliances may be controlled, including Electric Thermal Storage (ETS) heating equipment and swimming pool filtration equipment. The time clocks that control "off-peak" load(s) should be synchronized by the customer to follow the timing of NYSEG's billing meter. An illustration is shown in Figure 6.

The load control timer should have manual override capability to energize the appliance(s) during the non-TOU hours if necessary. The controller must automatically reset at the end of the selected override period. The Electric Market Services Department should be consulted for information in regard to recommended appliance sizes-and heating specifications.

8. TOU Controlled Metering.

New installations of "controlled" appliances, such as electric water heaters and Electric Thermal Storage (ETS) heating equipment, will require the installation of a NYSEG Electronic billing meter.

The electronic meter will have battery backup for continuous time keeping in the event of a power interruption. Customer-owned time clocks, shown in Figure 6, must be programmable to allow synchronization with NYSEG's electronic meter, and must have a carryover capability (minimum 3 hours) for continuous time keeping.

SECTION III GENERAL INFO. & REQUIREMENTS

9. Residential Heating Element Requirements.

Electric resistance heating elements used in equipment such as furnaces, boilers, water heaters, etc., shall not exceed 10KW per element or stage. Heating loads composed of multiple stages shall be automatically controlled. A minimum delay of 10 seconds between operations of stages is allowed.

Some types of electronic control systems may cause noticeable electrical interference. Only full wave type controls are recommended.

10. Residential Electric Space Heating.

The total electric heating system capacity shall not exceed by more than 20 percent the most extreme (coldest day) design heat loss as calculated according to an acceptable method used in the heating industry. For example, ACCA Manual J, NEMA, or ASHRAE. An exception to this is for Electric Thermal Storage (ETS) heating equipment, which must be sized according to manufacturer's specifications. The Company may refuse to accept an oversized system on its lines. In such case, it would be the responsibility of the customer and the contractor or dealer to rectify the situation. The Electric Market Services Department should be consulted for information and recommendations regarding system sizing, installation, and control specifications necessary to provide the customer with adequate and satisfactory service.

11. Special Equipment.

Services for electrical furnaces, welders, X-ray apparatus, large motors and other types of equipment, which may interfere with satisfactory service to other customers, require special consideration (see Section XI).

12. Character of Electric Service.

The Company will designate the character of electric service. The service voltage, number of phases and wires will depend upon available lines, the customer's location, and the size and nature of the proposed service. All types of systems are not available at all locations. Available voltages and characteristics of service are normally considered to be those voltages and types of service that are existing at the customers location. Generally, only one service voltage will be provided to a particular location. To determine the type of service to be supplied, THE CUSTOMER SHALL CONSULT THE COMPANY BEFORE PROCEEDING WITH THE INSTALLATION OF WIRING OR ORDERING OF ELECTRICAL EQUIPMENT.

SECTION III GENERAL INFO. & REQUIREMENTS

SECONDARY OR LOW VOLTAGE SERVICE OF THE FOLLOWING TYPES WILL BE SUPPLIED BY THE COMPANY ONLY WHERE AVAILABLE:

<u>Phase</u>	<u>No. Of Wires</u>	<u>Nominal Voltage</u>	<u>Demand</u>
1	2	120	3kW Max
1	3	120/208	
1	3	120/240	
3	4	120/240	
3	4	120/208	50kW Min
3	4	277/480	50kW Min

Note: Padmount transformer installations for three-phase service are only available in voltages of 120/208 and 277/480 volts. 50kW minimum demand for 277/480 volt service generally applies to new services where NYSEG 277/480 facilities do not exist. *50kW minimum for 120/208 volts recommended for underground areas.

13. Service Above 600 Volts.

Service voltage above 600 volts will be supplied where conditions warrant. It is particularly important that the Company be consulted in advance for these cases. The Company will designate the type of service based on the location, size and nature of the proposed load, and its proximity to the Company's facilities. Reference shall be made to NYSEG publication SP-1099.

14. Service Taps.

All connections between Company and customer facilities will be made and removed exclusively by Company authorized personnel.

The Company reserves the right to make all service connections. The connection of the Company's electric service or any alternative thereof by anyone except Company authorized personnel is PROHIBITED BY THE PENAL LAW AND PUNISHABLE AS A MISDEMEANOR, IF DONE WITH THE INTENT TO INJURE OR DEFRAUD. VIOLATORS OF THIS RULE WILL BE PROSECUTED.

The law provides that the user of such an illegal connection is presumed to have made or consented to the unauthorized connection and is punishable therefore, as well as the party making the unlawful connection, unless proven to the contrary.

15. Load Balance.

The customer shall balance the load so that a minimum of unbalanced current occurs.

16. Customer Owned Generation.

The Company shall be consulted before any generating equipment is connected to circuits which are, or may be supplied from the Company's lines (see Section XIII, Customer Owned Generators - Including Standby Generators).

SECTION III GENERAL INFO. & REQUIREMENTS

17. Objectionable Effects.

The Company reserves the right to discontinue service where equipment used by the customer results in objectionable effects upon or interference with the operation of facilities of the Company, its customers, or another public service company unless the customer discontinues the use of such equipment or installs corrective equipment to overcome the objectionable effect or interference.

18. Unauthorized Attachments to Poles.

The Company forbids any unauthorized attachments to its poles, such as banners, signs, clothes lines, antennas, basketball hoops, lighting fixtures, etc. It forbids the use of its poles for placards, political posters or any advertising matter. The Company will remove any such unauthorized attachments without notice and may prosecute such trespassing.

The Company forbids any work by contractors on its poles or in its manholes without specific written authorization.

SECTION IV SERVICE CONNECTIONS

Section IV. Service Connections

General

1. This section applies to new service installations and to existing installations when changes and/or rearrangements are made. Each case shall be referred to the Company before electrical work is begun.

2. Normally only one type of electrical service will be made available to a customer's building or premises. Exceptions may be by special permission in accordance with the National Electrical Code, Article 230 - Services. These exceptions must be approved by the Company before work is started (see Section II for the definition of "Building").

3. The type of construction and route of the service connection will be determined by the Company and the customer. Services will not be run from building to building. When crossing property, service drop wires should not be carried over buildings and shall not be carried over swimming pools.

4. The customer shall furnish, install, own and maintain all service entrance conductors and service equipment.

5. The Company will furnish, install, own and maintain adequate metering to measure the energy and demand used in accordance with its contracts.

6. To provide for future load growth, the Company recommends that the capacity of service entrance conductors and service equipment be greater than the National Electrical Code's required minimum.

7. Where service in excess of 600 volts is desired, the customer shall consult the Company at an early stage to allow design and coordination of the service connection. In addition, the Company will advise the customer of any additional requirements for electrical insulation, grounding, service equipment and metering facilities. Reference shall be made to NYSEG publication SP-1099. The Company will inform the customer of available short circuit currents. The customer shall submit detailed plans for approval by the Company prior to the purchase of equipment or before proceeding with the installation.

8. Overhead Service Connection. The minimum service entrance and service equipment shall be single phase, three wire, 100 ampere. A variation will be permitted only after the prospective customer assures the Company, in writing, that a smaller service will be adequate for requirements, or when service is to be used solely for supplying loads of less than 3000 watts, such as signs, traffic signals, CATV power supplies or temporary construction.

9. Underground Service Lateral (URD Subdivisions only). The minimum service lateral conductors shall be #2/0 AWG Aluminum (see Section XVI, Specification 1 for details). No variation will be permitted for residential application. Exception shall only

SECTION IV SERVICE CONNECTIONS

be when the service is to be used solely to supply loads of less than 3000 watts, such as signs, traffic signals, etc.

Overhead Service Connections from Overhead Distribution Lines

10. The Company will usually install, own and maintain the overhead service drop. The customer may be required to contribute towards the cost of the excess service length or make other arrangements according to NYSEG policy.

11. The Company reserves the right to designate the location at which its service drop will be attached to the customer's structure. This point will normally be not less than 15 feet nor more than 25 feet above final grade. Where the customer's building is too low to permit the installation of the service bracket at the minimum of 15 feet above grade, the Company may, if local ordinances and field conditions permit, approve the attachment at a point not less than 10 feet above finished grade provided that the minimum heights specified in the National Electrical Code can be obtained (see Fig. No. 31 for Swimming Pool Clearance Specifications).

12. The point of service attachment must be accessible from the ground by ladder.

13. The Customer will furnish and install a suitable attachment for the service drop to be securely bolted to a stud or plate at the point designated by the Company.

14. Where the customer's structure is too low to provide a point of attachment that will assure the minimum required conductor clearance, the customer may be required to install a mast type riser as shown in Figure No. 19.

15. The customer's service weatherhead shall be located above and within 12 inches of the point of attachment of the Company's service drop.

Service entrance conductors shall extend a minimum of 36" beyond the service head to allow for connection to the service drop (see Figure No. 18).

16. On farms or other premises where buildings under a single occupancy or management will be supplied through one meter, it may be desirable to install the meter on a pole (see Figure No. 13, 14). In such cases, the meter pole with necessary guys shall be furnished, installed, owned and maintained by the customer. The Company shall be consulted in all cases for its requirements regarding the poles and guys.

17. Where temporary service is to be supplied, the customer shall provide, at the point of attachment, a substantial and adequate support. The support shall be capable of withstanding a horizontal pull of 1000 pounds at the center of the service bracket. Such a support should be a pressure treated pole (Figure 12) or a pipe riser attached to the framing of a building. The point of attachment to these risers shall be made according to Figure 19. The Company shall be consulted in all cases for required pole sizes, setting depths and guying requirements.

SECTION IV SERVICE CONNECTIONS

Underground Service Connections from Overhead Lines Below 600 Volts

18. General. If a customer desires an underground service lateral where the Company's line is overhead, the customer shall furnish, install, own, and maintain the necessary facilities at the customer's expense. The installation shall be in accordance with NYSEG's specifications (see Figure 20) and the National Electrical Code. The Company shall be consulted in every case before work is started so that it may designate the pole from which the service will be taken, the location of the riser on the pole and meter location. Precautions must be taken when trenching near poles to prevent undermining of the pole. The customer or contractor performing the work will be held responsible for any damage to NYSEG facilities. If multiple service laterals will emanate from the same pole, NYSEG has the option to install and own the pole riser portion and a handhole at the base of the pole to terminate the customer service laterals. (see Paragraph 22)

In some circumstances, the customer may be required to secure a high way occupancy permit for installations within the public right-of-way. In such cases, the customer shall provide the company with proof that the appropriate permits have been obtained prior to starting the installation.

Underground service laterals are difficult and costly to change. The Company emphasizes the need to size the cable to allow for future load additions.

19. Company Pole Replacements or Relocations. If the pole from which a residential underground service (400 Amp or below) originates is replaced or relocated, NYSEG will assume the responsibility to transfer the service lateral and riser to the new pole provided that only reasonable hand excavation is required. NYSEG reserves the right to make this judgment. The customer shall otherwise bear the responsibility to relocate or replace the underground service lateral. All services above 400 Amp will be the sole responsibility of the customer to transfer.

20. Replacement. The replacement and/or installation of additional or larger conductors, due to customer initiated service changes, will be at the customer's expense.

21. Direct Buried Cable. The service cables may be buried directly in the ground. The cable and its installation must be in accordance with the National Electrical Code (see Section XVI, Specification 1 for installation requirements).

22. Conduit at Pole. On Company owned poles, the Customer shall install galvanized rigid steel conduit, or Schedule 80 PVC to a point not less than 8 ft. or more than 12 feet above the ground line and extending at least 18 inches below the ground line to protect the cables. Provided the Customer has utilized materials that are compatible with the Companies stock materials, the Company will furnish and install the protective conduit, u-guard, adapters, and mounting straps above the customer installed portion in order to reach the Company's secondary conductors (see Figure No. 20 for installation details). The Company's stock conduit sizes are 2" and 4" with attachment directly to the pole being the standard installation. If the Customer requires alternate sizes or attachment methods, the Customer may be required to provide the materials or

SECTION IV SERVICE CONNECTIONS

cover the cost of material purchase. Two 4-inch risers or their space equivalent are the maximum permitted on Company owned poles.

On privately owned poles, the customer shall furnish and install the galvanized steel conduit, or schedule 80 PVC conduit adapters, and mounting straps up the pole to a point 12 inches above the Company's secondary conductors. The Company will assist in the installation if the pole supports the Company's energized conductors.

23. Conduit to Meter. When the underground service lateral terminates in a meter enclosure on the outside of a building, the cable shall be protected by a galvanized steel or Schedule 80 PVC conduit up the wall to the meter socket. When direct burial cable is used, the conduit shall extend 18 inches below grade (see Figure No. 20).

24. Where the underground service cable terminates in a building, it shall be protected by a galvanized steel conduit through the wall and 5 feet outside the wall. All conduits entering a building underground shall be sealed at their indoor ends with a suitable compound to prevent the entrance of moisture and gases.

SECTION IV SERVICE CONNECTIONS

25. Grounding. Metallic riser conduits on the outside of a building shall be grounded in accordance with the National Electrical Code. A metallic pole riser shall be grounded to an approved ground clamp at the top of the metal conduit on the pole (see Figure No. 20 for installation details).

26. Length of Lateral. The customer shall install service lateral cable long enough to extend from the terminals of the meter device to a point 48 inches beyond the top of the Company's secondary conductors or transformer secondary terminals. Pending the connection, the cable shall be carefully coiled and fastened to the pole at the top of the conduit and the conduit opening sealed with Duct Seal or equivalent compound (see Figure No. 20). The Company will make final connections to the distribution system.

Underground Service Connections in Underground Network Areas Below 600 Volts

27. General. The Company must be consulted for the location of these areas during the design stage of any project.

28. Conduit. When the Company's low voltage distribution line is underground in a public street adjacent to the customer's building, the Company will furnish, install, own, and maintain at its expense, the conduit to the customer's property line. The conduit on private property (including any necessary adapter) must be furnished, installed, owned, and maintained by the customer. The Company will designate the service lateral location.

29. Junction Box. If the point where the conduit enters the building is within ten feet of the property line, the Company will provide and the customer shall install a junction box on the inside where the conduit enters the building. If the distance from the property line to the point where the conduit enters the building exceeds ten feet, the customer shall furnish, install, own, and maintain a handhole at the property line. The handhole shall be constructed to Company specifications.

30. Cable. The Company will furnish, install, own, and maintain the cable to the customer's property line. If a Junction Box is within ten feet of the property line, the Company will furnish, install, own, and maintain the cable to the Junction Box. The customer will reimburse the Company for the installed cost of the cable on private property. If a handhole is used, the Company will furnish and install the cable to this handhole. The customer will install the cable from this handhole to the service equipment.

31. Relocations. If a service is relocated on an order from a public authority, the customer will be responsible for that portion of the service on private property. If the service is relocated at the customer's request, the customer shall pay the entire cost of the relocation both on private and public property.

32. Company Lines on Private Property. Where the Company's underground low voltage distribution line is on private property, on or adjacent to the customer's property, the division of responsibility will be the customer's outside building line instead of the property line as covered in the previous paragraphs.

SECTION IV SERVICE CONNECTIONS

Exception: Where the Company's underground low voltage distribution line is underground on private property, and where the Company has a right-of-way, one side of which is adjacent to public property, the Company will install all facilities within and up to the edges of this right-of-way. Any facilities on the adjacent public or private property will be installed in accordance with the previous paragraphs.

33. Service Entrance Equipment. An overcurrent device of adequate short circuit and load current interrupting capacity shall be furnished, installed, owned, and maintained by the customer. The customer is cautioned that underground systems generally have high short circuit currents available. The Company will furnish the customer information on equipment short circuit current requirements.

(URD) Underground Service Connections for Residential Developments

34. General. Public Service Commission regulations require that underground electric systems be provided in a government approved subdivision consisting of five or more dwelling units or to a multiple dwelling of four or more units. Any new mobile home development or extension of an existing development to serve five or more sites with a permanent water and sewer connection is considered by NYSEG to be the same as a development of conventionally constructed single-family homes for the purposes of determining if underground facilities must be installed. Information on URD and related costs is available at the Company's local offices.

Because of the special nature of underground systems, the developer must make application to the Company with sufficient lead time for design of the underground electric facilities within the development.

The Company will not install the underground electric facilities until water and sewer are installed and the final grade of the streets has been established. The developer shall rough grade (within six inches of final grade) the electric utility's easement strip, place and maintain construction survey stakes indicating grades, property lines and the locations of other utilities. Curbing and paving shall not be installed until the underground electric facilities are installed.

35. Service Lateral. The service lateral within the lot line and running to a building will be installed by the applicant in accordance with the Company's specifications. The Company shall be consulted in every case before work is started in order to designate the location of the meter and the route of the service. The minimum permitted service lateral for a single family dwelling will be 150 Amps (see Section XVI, Specification #1).

36. Replacement. Where the Company owns and maintains a Company or customer installed URD service, the replacement and/or installation of additional or larger conductors due to customer initiated service changes will be at the customer's expense.

Underground Service Connections for Commercial Developments

37. General. Where the customer applies for underground electric facilities, the Company will install underground distribution in new commercial developments where

SECTION IV SERVICE CONNECTIONS

there is no existing distribution system and the development meets qualifications. Information on undergrounding in commercial developments and related costs to the developer is available at the Company's offices.

38. Because of the special nature of underground systems, the developer must provide the Company with sufficient lead time to design the underground electric facilities within the development.

39. Prior to any installation of electric distribution facilities by the Company, the developer will install sewage and water facilities and will establish final roadway and parking area grades, stake curbs, and drainage within the development and maintain these during construction.

40. The Company shall be consulted in every case before work is started so that it may designate the location from which service will be taken and the metering location.

SECTION V SERVICE EQUIPMENT

Section V. Service Equipment

1. General.

Each service entrance shall be provided with disconnecting means and overcurrent protection.

Service equipment shall conform to the National Electrical Code and local authorities having jurisdiction.

The location of the service equipment and the general electrical arrangement will be agreed upon after mutual consideration of all factors by the customer and the Company. The final location of the service equipment will be determined by an authorized Company representative.

2. Ampere Rating.

Service Connected to Overhead Lines: The capacity of service equipment for an installation of one meter shall not be less than 100 amperes.

Service Connected to Underground Lines: The capacity of service equipment for an installation of one meter shall not be less than 150 amps.

A reduction of the above minimum requirements to 60 amperes may be permitted with Company approval for signs, traffic signals, CATV power supplies, and for temporary construction buildings, etc., where the load will not exceed 3000 watts.

3. Commercial or Industrial.

Because each business establishment has their own particular electrical requirements, it is essential that details of each installation be reviewed with the Company at an early date. The Company will specify the service voltage and general electrical and arrangement, and will guide the customer in the selection of service equipment.

NOTE: The minimum ampere ratings stated above do not apply to individual meters in a group of stores (such as in a mall) where a main service switch exists. In this case a reduction in size of the individual service equipment to 60 amperes is permitted with the provision that #2 aluminum or equivalent conductor is installed on both the line and load side of the meter socket. The company shall be consulted before work is started.

4. Service Less Than 400 Amperes, Less than 600 Volts.

Service equipment shall conform to the requirements of the National Electrical Code. Refer to Section VII - Meters and Meter Boards, to determine when metering transformers are required.

SECTION V SERVICE EQUIPMENT

5. Service 400 Amperes and Above, Less than 600 Volts.

The customer should arrange an early meeting with the Company to review the service equipment and its arrangements. It is important that the customer provide the Company with detailed plans and specifications prior to the purchase of service equipment or proceeding with the installation.

The Company, upon request, will inform the customer concerning the magnitude of the current, which the service equipment may be called upon to interrupt.

Any tap made ahead of the main service equipment for fire pumps, exit lights, control power for the circuit breaker, etc., shall be provided with disconnecting means and overcurrent protection adequate for the duty. Such connections shall be made only where specifically approved by the Company and must be metered, either by the existing or an additional meter.

Services above 800 amperes shall normally be served underground by either a pole mounted or pad mounted transformer installation.

6. Requirements.

The customer shall install service equipment which is UL listed for the intended use, and which will meet the following criteria:

- a) A voltage rating suitable to the service.
- b) An ampere rating which is adequate for the initial and anticipated future load requirements. The device shall be capable of interrupting load current equal to its ampere rating.
- c) A fault current interruption capability at the service voltage of not less than the value specified by the Company.

If a disconnecting switch and fuse combination is utilized, it shall meet the following requirements in addition to those in 6a, b, and c above:

- d) The fuse shall conform to the latest NEMA Standard for Power Fuses.
- e) The customer shall take full responsibility for maintenance of a spare stock of fuses.

If an air breaker is utilized, it shall meet the following requirements in addition to those in items a, b and c:

- f) An operating mechanism of mechanically trip-free construction.
- g) An overcurrent tripping device on each pole arranged for delayed overcurrent protection with instantaneous tripping for currents of fault magnitude.
- h) Conformance with latest NEMA and ANSI Standards for Power Circuit Breakers.

SECTION V SERVICE EQUIPMENT

Notes:

1. The Company recommends that any undervoltage tripping devices required by the customer be arranged to trip individual feeder circuits rather than the main breaker.
2. The customer is responsible for the maintenance of the service equipment.

SECTION VI GROUNDING

Section VI. Grounding

1. General. The grounding conductor and equipment of the service entrance shall be effectively and permanently grounded in accordance with the latest edition of the National Electrical Code as approved by the American National Standards Institute, or in accordance with the requirements of applicable authorities having jurisdiction where any difference occur.

2. AN APPROVED GROUND SHALL BE MADE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE AND COMPANY SPECIFICATIONS (SEE FIGURE 29). NYSEG REQUIRES A MINIMUM OF #4 COPPER GROUNDING CONDUCTOR FOR ALL SERVICE GROUNDS.

NOTE: UNDER NO CIRCUMSTANCES SHALL A GAS OR FUEL OIL PIPING SYSTEM BE USED AS A GROUNDING ELECTRODE.

3. Lightning or Surge Protection Grounding. See Section XII for lightning or surge protection grounding requirements.

SECTION VII METERS AND METER BOARDS

Section VII. Meters and Meter Boards

1. General

These general specifications apply to metered installations rated 600 volts or less. Reference to NYSEG publication SP-1099 has been made in Section III of this booklet for installations above 600 volts. Customer installation of metering equipment shall be in accordance with requirements specified in this publication and NEC Article 312. All metallic equipment used for metering purposes shall be properly bonded and grounded as required by this installation specification and NEC Article 250.

2. Equipment Requirements Through 800 Amps

The Company will furnish and install all meters and auxiliary equipment required for billing. Meters will be located outdoors and shall be accessible to Company personnel.

For 100 ampere and 200 ampere residential services, the Customer will furnish the meter socket(s). The Company will provide meter sockets for all non-residential accounts, and any service greater than 200 amps. In either case, the Customer has the responsibility for installation of meter socket(s). Metering transformers and transformer enclosures through 800 amperes (primary rating of metering current transformer) will be supplied by the Company.

The maximum number of service disconnects is limited to six by NEC Article 230 for one set of service entrance conductors. Where additional meters/disconnects are required, a main service disconnect switch (fully rated for the service size) on the service entrance is required. Contact NYSEG before purchasing and installing any equipment.

3. Equipment Requirements Above 800 Amps

Above 800 amperes, the customer will furnish, install, and maintain metering transformer enclosures or switchgear. The customer will coordinate the requirements for meter installations with the Company prior to the purchase of equipment over 800 amperes. The Company will furnish physical and electrical specifications for metering transformers above 800 amperes upon request. Physical and electrical space requirements and conformance to applicable standards and codes is the customer's responsibility.

4. Meter Sockets

For residential services, the Customer will install, own and maintain all 100 ampere and 200-ampere self-contained, non-lever bypass type meter sockets. Meter sockets supplied by the Customer must meet the following requirements:

Conform to the latest revision of ANSI/UL 414, ANSI C12.7, NEMA 250, NFPA and other relevant standards.

SECTION VII METERS AND METER BOARDS

Must be UL approved and carry the UL label.

Be of a ringless design and include a horn style by-pass mechanism suitable for connecting insulated jumper leads for use in installing or removing the meter. This enables the Company to test or exchange the meter without causing a service interruption.

At minimum, the enclosure of the meter sockets must be of NEMA TYPE 3R design (an enclosure intended for outdoor use to provide a degree of protection against windblown dust and rain). Other NEMA TYPE designs or enclosures with multiple TYPE designs are allowed as long as the minimum environmental requirements of TYPE 3R are met.

Have a sealing mechanism, which allows the socket cover to be sealed to the meter socket body by a Company padlock seal. The sealing mechanism must be made of stainless steel.

Individual meter sockets shall be rated for 100 amperes or 200 amperes continuous load. For a 100 ampere service it is permissible to use a higher rated meter socket up to 200 amperes continuous.

Each position of a ganged meter socket shall be rated for 200 amperes continuous. The design of a ganged meter socket shall allow for the cover to be opened, closed, and sealed individually.

The Company shall furnish all meter sockets for non-residential accounts and for any service greater than 200 amperes. If self-contained, these meter sockets are required to have a single handle, lever operated by-pass, which locks the meter blades in the socket jaws. This by-pass mechanism enables the Company to test or exchange the meter without causing an interruption in service.

Specifications for meter sockets of more than four positions and meter pedestal assemblies shall be submitted to the Company for review and concurrence prior to purchase. Only multi-socket equipment specifically designed for that application will be used to feed additional meter positions. (For example, two, two-position multiple socket assemblies will not be used as a four-position assembly, the second fed from the first.) For additional information on pedestal assemblies, see Figure 25 and adjoining installation specification.

5. Connections

The customer is responsible for providing lugs and making connections to meter socket terminals and current transformer primary connections on the line and load side with the exception of pole mounted or overhead installations. The Company will make all secondary connections to the primary potential tap of current transformers.

Meter installations shall be connected to the load side of service equipment when supplied from an underground network supply.

SECTION VII METERS AND METER BOARDS

Self-contained meters will be used for services up to 400 amperes. A line side disconnect must be provided for each self-contained 277/480 volt meter position.

Metering shall be connected to the line side of service equipment in all other cases unless specified by the Company.

6. Meter Access & Location

The main disconnect, metering transformers, and meters shall be accessible to the Company at all times and located as close together as practical. In the interest of both the customer and the Company, a suitable meter location must be identified. The Company will designate the meter location. The location of all metering equipment must be approved by the Company prior to installation.

Minimum clearances are required between gas and electric meters, and the Company should be consulted where combined services are being installed.

Residential meters, sockets and instrument transformer enclosures are installed outdoors not more than 6 feet or less than 5 feet from permanent ground level. A minimum of 4 feet is allowed for horizontally grouped and pedestal installations. Vertically stacked meters shall be installed with no less than 2 feet between permanent ground level and the center opening of the first position. A minimum of 10 inches is required between the centers of the adjacent positions. The meter must be accessible to the Company at all times, and at least 4 feet of clear work space must be provided in front of the meter. All meter sockets or enclosures shall be mounted in a true vertical position.

Commercial and industrial installations using indoor switchgear instrument transformers may require the meter to be located indoors. The Company preferred location is outdoors, but certain conditions necessitate an indoor location. The customer should consult with the Company to determine the meter location.

If a meter must be installed indoors, it shall be located as close as practical to the point where the service enters the building. It must be accessible to the Company at all times.

There shall be at least 4 feet of clear work space in front of the meter. The meter shall not be installed in stairways, coal bins, bathrooms, bedrooms, attics, store windows, behind shelves, transformer vaults, near moving machinery or other similar inaccessible or dangerous location. The meter shall be protected against exposure to excessive moisture, dust, chemicals, vibration, temperatures, corrosive material, etc. The meter location shall afford protection against vandalism.

The Company will make a reasonable effort to protect the meter. However, if vandalism is severe and all equipment the Company normally provides to protect the

SECTION VII METERS AND METER BOARDS

meter is ineffective, the customer must provide adequate protection or accept billing for damage to the meter installation, estimated loss of revenue, and labor charges.

7. Meter Identification

Whenever there is more than one meter installed on any one premise, each meter socket or enclosure shall be permanently and clearly marked to properly identify the portions of the premises being served. Marking shall be made with paint or permanent marker on the inside and outside of the meter enclosure; not on the cover. Marking shall be the responsibility of the owner/customer.

8. Meter Board

Where meter boards are used, they shall be made of 3/4 inch exterior grade plywood and painted with a good quality flat paint suitable for the location. The meter board shall be large enough to accommodate all metering equipment (connection boxes, switches, meters, etc.) necessary to each particular type of installation. There shall be a minimum of 21 inches clear board space above the meter box where meters are to be mounted above the meter box. A minimum of 6 inches of space shall be maintained between meter boxes and other equipment. No meter board with multiple positions shall be mounted on a single pole. See Figure 26.

Meter sockets may be mounted directly to a masonry wall using Figure 22 as a guide.

9. Relocation

Any change in the location of a meter or service entrance after installation will be made at the expense of the applicant or customer if it has been: (1) requested by an applicant or customer for their accommodation, providing such a change is approved by the Company, or (2) deemed necessary, by the Company, to provide suitable location or adequate protection for the meter. When there is a change by the customer from one service classification to another, such change shall be governed by the requirements applying to a new installation.

A service entrance shall not be left un-metered unless approved by the Company. Connection of any device made ahead of the meter, other than a main disconnect when required, is not permitted.

10. Seals

All meter installations and points of access to unmetered wiring on the customer's premises will be sealed by the Company. All cabinets, and equipment enclosures containing unmetered conductors shall be made sealable before the service is energized.

SECTION VII METERS AND METER BOARDS

11. Tampering Penalties

Breaking of seals or tampering with meters or unmetered wiring by unauthorized persons is prohibited. Attention is called to Section 165.15 of the New York State Penal Law, which makes such unauthorized tampering a misdemeanor punishable by fine or imprisonment or both.

SECTION VIII MOTORS AND CONTROLLERS

Section VIII. Motors and Controllers

1. General.

It is important that the Company be consulted concerning the type of electrical service available to assure correct application (phase and voltage) of the motor to be used.

Starting current limitations are prescribed for conventional motorized equipment rated in horsepower, and air conditioning or heat pump equipment rated in BTUH.

2. Company to be Advised.

The Company shall be advised before any single phase motor rated in excess of 5 HP (equivalent 40,000 BTUH) or any three phase motor rated 10 HP (equivalent 75,000 BTUH) or larger is installed by a customer. The information given to the Company shall include the nameplate data of the motor, the nature of the load and operating characteristics of the proposed installation, such as how frequently the motor will be started and if the load fluctuates rapidly, such as in a sawmill, stone crusher, elevator, etc.

3. Single Phase Motors.

Single phase motors larger than 1/2 HP or with running current exceeding 10 amperes should normally be arranged for operating at 208 or 240 volts. Generally, motors larger than 5 HP should be three phase, but the Company may require the use of single phase motors or appropriate phase converters where three phase service is not readily available.

4. Protection.

All motors should be properly protected against overload, including overloads caused by low voltage conditions. It is the customer's responsibility to protect three phase motors against the possibility of single phase operation. Reverse phase relays, together with circuit breakers, or the equivalent devices should be used on all three phase installations for elevators, cranes and similar applications to protect the installation from phase reversal.

5. No Voltage Release.

Motor controllers are recommended to be arranged so that in the event of sustained interruption the motor will be disconnected from the line, unless it is equipped for automatic starting after such an interruption. Where continuous operation of motorized equipment is essential, motor controllers should be arranged to allow motors to operate through a transient no-voltage condition lasting for 1/2 second (30 cycles). The Company should be consulted where problems of this nature might be encountered.

SECTION VIII MOTORS AND CONTROLLERS

6. Motor Starting Requirements.

Momentary fluctuation of circuit voltage occurs each time a motor is started on the circuit. Where this effect is pronounced, a visual disturbance or lighting flicker may be observed by the customer or other customers served from the same system. In extreme cases, the motor itself may have difficulty in starting.

To avoid objectionable voltage variations and maintain proper service to the customer and neighbors, it is necessary to set a maximum permissible limit to the current drawn from the service during each step of a motor-starting operation, based upon frequency of starts.

7. Motor Starting Currents.

The maximum starting currents permitted for single phase and three phase conventional motorized equipment rated in horsepower and for air conditioning or heat pump equipment rated in BTUH are:

SINGLE PHASE MOTORS

Service Voltage	Max. Starting Current per Step, Max. Four Starts per Hour	Max. Equiv. Rating of Air Conditioner or Heat Pump BTUH
120 Volts	50 Amperes	10,000
208 or 240 Volts	60 Amperes for 2 HP Motor	20,000
208 or 240 Volts	80 Amperes for 3 HP Motor	25,000
208 or 240 Volts	120 Amperes for 5 HP Motor	40,000

THREE PHASE MOTORS

Service Voltage	Max. Starting Current per Step, Max. Four Starts per Hour	Max. Equiv. Rating of Air Conditioner or Heat Pump BTUH
208 or 240 Volts	100 Amperes up to 5 HP Motor	40,000
208 or 240 Volts	130 Amperes for 7½ HP Motor	50,000
208 or 240 Volts	160 Amperes for 10 HP Motor	75,000
208 or 240 Volts	230 Amperes for 15 HP Motor	150,000
480 Volts	50 Amperes up to 5 HP Motor	40,000
480 Volts	65 Amperes for 7½ HP Motor	50,000
480 Volts	80 Amperes for 10 HP Motor	75,000
480 Volts	115 Amperes for 15 HP Motor	150,000

8. Explaining Starting Limits.

The specific motor-starting current limitation stated in Paragraph 7 is the maximum allowable increase in current on the line side of the motor-starting device at any instant during the starting operation.

The limitation does not restrict the total current that can be taken by the motor in starting, but may require that the total be built up gradually, or in steps, each of which does not exceed the specific limitation for the motor. Where a step type starter is used, an appreciable time must be allowed on each step and the current increase of each step shall not exceed the imposed limitation.

SECTION VIII MOTORS AND CONTROLLERS

9. Group Starting.

When motors are started in group instead of individually, the starting current limitations apply to the group and not to the individual motors. In some case sequential starting may be necessary.

10. Favorable Locations.

There are locations on the Company's system where starting currents larger than specified may be permitted. These locations are on network systems or systems which supply large loads or where special conditions exist. The Company shall be consulted whenever larger starting currents are contemplated for a specific installation.

SECTION IX OUTDOOR TRANSFORMERS

Section IX. Transformer Installations and Vaults on Customers Premises

1. Information for primary voltage supply from 2400 volts to 34,500 volts is available at the Company's local offices (refer to Specification SP-1099) or online at www.nyseg.com.

Section X. Mobile Homes, Mobile Home Parks, Recreational Vehicle Parks

1. General Service Requirements

The requirements for electric service and meters for mobile homes, mobile home parks and recreational vehicle parks differ from the requirements for other types of service and, therefore, must be given special consideration. All installations must be in accordance with the National Electrical Code.

The customer shall provide a suitable meter board for support of the Company's meters. WHEN MORE THAN ONE MOBILE HOME IS SERVED, EACH METER POSITION SHALL BE PERMANENTLY MARKED BY THE CUSTOMER TO CLEARLY IDENTIFY THE MOBILE HOME IT SERVES.

The Company shall be consulted in advance for detailed information regarding each installation.

2. Single Mobile Homes Not in a Development or Park.

100 AMP MINIMUM service for a single meter position is required.

- a. When the service is OVERHEAD, the customer shall be required to provide a substantial and adequate support, adjacent to, but not attached to, the mobile home for the attachment of the service drop to serve 100 amp minimum size service equipment. The support shall be capable of withstanding a horizontal pull of 1,000 pounds at the center of the service bracket. The support shall be a preservative pressure treated pole set in solid earth and guyed, if necessary. The pole shall be of sufficient length to provide necessary clearance (see Figure 12). The Company shall be consulted in all cases for required pole sizes, setting depths and guying requirements.
- b. When an UNDERGROUND service to a mobile home is served from an overhead distribution line, 100 amp minimum size service equipment for a single meter position is necessary (150 AMP RECOMMENDED). Where service entrance conductors are underground, the meter may be located on an approved service pedestal (see Figures 24, 25, 26 and 27 for typical methods of installation.)
- c. Mobile Home on a Permanent Foundation (see definition of permanent foundation in Section II.)

A mobile home with all running gear removed and securely mounted to a permanent foundation, can be considered a standard home for service entrance requirements (NEC Article 550 "Service Equipment" A & B), must also comply with NEC Article 230 "Services" & Article 250 "Grounding". The permanent foundation must be a poured concrete or block foundation with a cellar or crawl space, but not a slab on grade with removable skirting. NYSEG will attach a service to a

SECTION X MOBILE HOMES

manufactured home which meets Article 550 if and only if the proper written evidence is provided that the NEC code is being met for permanent installation, service and grounding from the local authority(s) having jurisdiction.

- d. **Mobile Homes Considered as Permanent Structures.** The requirements of a permanent structure are an approved permanent water supply and sewer system, and compliance with municipal zoning requirements. If not met, the service will be considered to be a temporary service. All Company work required for temporary service will be at the customer's expense.

3. Mobile Homes Within A Development or Park.

Mobile home services may be provided with the service equipment sized at 100 amperes minimum for both overhead and underground services. For installations within a development or park 150 ampere service conductors are recommended.

The above also applies to figures 26 and 27, meter board installations, if used for mobile homes.

NOTE: 100 ampere service equipment may not be adequate for some electrically heated mobile homes. 150 ampere service equipment is recommended for developments or parks to provide adequate capacity for future utilization by such mobile homes. It is the responsibility of the development owner to upgrade the service equipment if mobile homes requiring greater than 100 amperes capacity are located at positions constructed for 100 amperes.

Service to mobile homes in which it is planned to install five units or more must comply with Specifications for Direct Buried Installations of Underground Service to Residential Buildings (URD), Section XVI and Section IV, paragraphs 34, 35, and 36.

4. Recreational Vehicles and Recreational Vehicle Parks.

- a. **Service to Individual Recreational Vehicles.** An individual recreational vehicle, not in a recreational vehicle park or campground shall be served with a temporary service (see Figure 12). If it meets the definition of a permanent structure, the service shall be considered as a permanent service.
- b. **Service to Recreational Vehicle Parks.** The service to a recreational vehicle park or campground will be provided through one service to one location in the name of the Park Operator. Individual vehicle sites in a park, or campsites, will not be metered by NYSEG and must meet the requirements of Article 551 of the National Electric Code.

SECTION XI DISTURBANCES

Section XI. Disturbances

1.General

Radio and Television Transmitters, Flashing Signs, Welders, Electric Furnaces. The operation of large flashing signs, welders, arc furnaces, dielectric and induction heaters, inverters, variable voltage and frequency devices, radio and television transmitters, X-ray equipment, reciprocation compressors and similar apparatus having intermittent flow of large current, sometimes interferes with other users of the electric service. The customer shall consult the Company in each case before planning to use such equipment so that the character of electric service that will be supplied, the corrective equipment needed, and other special precautions that must be taken will be mutually known.

2. Radio, TV Interference.

Items above may also be a cause of radio and/or television interference. For further information, refer to the NYSEG booklet "How to Find Radio and TV Interference in Your Home", available at Company offices.

3. Customer Installed Generators.

These items can sometimes cause disturbances to other customers. Consultation with the Company (see Section XIII - 3) is required.

4. Harmonics.

Certain devices installed by the customer such as SCR controllers, large rectifiers, inverters, variable voltage and frequency devices, etc. may cause harmonic waveform distortion. Harmonic voltage distortion on the system shall not cause any applicable ANSI standards for NYSEG equipment connected to the system to be exceeded, shall not exceed 3% for any single frequency or 5% total harmonic distortion, and shall not injuriously affect NYSEG's equipment or its service to others.

NYSEG will endeavor to maintain reasonable limits on the harmonic distortion levels present on its system through proper design and application of related equipment, yet NYSEG cannot guarantee an essentially distortion free waveform.

Those customers whose particular service requirements necessitate such a waveform are encouraged to install, own, and maintain signal conditioning equipment.

SECTION XII SPECIAL PROVISIONS AND EQUIPMENT

Section XII. Special Provisions and Special Equipment

1. Customer Installed Capacitors.

Customers installing capacitors to improve the power factor of their load should contact the Company for advice regarding supply system characteristics and essential coordination details.

2. Electric Fences.

CAUTION! Due to the problems involved in the operation of electric fences, the Company urges extreme care in selection of the electric fence system and close adherence to the standard for electric fence controllers, ANSI/UL 69. A direct electrical connection to a fence, or a connection through resistance, reactance or lamp bulb, without an approved controller is not permitted. For guidance in methods, materials and equipment to construct electric fences, those interested are referred to qualified experts such as your County Cooperative Extension agent, your local NYSEG Agricultural Representative, or the Department of Agricultural Engineering, Cornell University, Ithaca, New York.

3. Swimming Pools.

Swimming pools shall be properly wired in accordance with the National Electrical Code. Circuits serving pools or associated areas shall be protected by Ground Fault interrupters (see Figure 31, for Swimming Pool Clearance specifications).

IMPROPERLY WIRED SWIMMING POOLS ARE HAZARDOUS

4. Lightning or Surge Protection Systems.

The Company recommends the use of secondary surge arresters for protection of customer's equipment, where such additional protection is desired. Arresters shall be connected on the load side of the main disconnect, not at the weatherhead.

Lightning rod systems, if desired, should be installed per NFPA 78 "Lightning Protection Code." A bond between the lightning rod system down ground and the service neutral should not be installed. Refer to National Electric Code Section 250-46 for spacing requirements. Spacing should be so arranged so that the meter enclosure is not bonded to the lightning rod system down ground conductors.

5. Transient Surge Protectors.

Transient surge protectors are available through distributors to help protect particularly sensitive customer equipment from low energy transient surges.

SECTION XIII CUSTOMER OWNED GENERATORS

Section XIII. Customer Owned Generators - Including Stand-by Generators

1. General.

All installations of customer's generating equipment require adherence to fundamental rules for safeguard of all personnel and the Company's equipment.

The Company must be consulted before any generating equipment is connected to any circuit which is or can be supplied from the Company's distribution system. This is to assure against any unanticipated backfeed of electricity into the Company's system. A brochure "Emergency Generator Safety" is available from the company's local offices.

2. Standby Generators.

This type of generator is for emergency supply for lighting and other load and is usually connected in case of loss of the normal supply.

- a. A double throw switch or contactor shall be provided to transfer all ungrounded conductors of an emergency lighting or power load to either the standby generator or the normal supply (see Figure 16 for typical connections). **Automatic transfer systems must be approved by the Company.**
- b. The standby generator should be 60 cycles alternating current.
- c. **Caution.** If a direct current generator is used, the installation must be arranged so that all motors, radios and other equipment that will not operate on direct current are disconnected from circuits before the circuits are energized from the standby generator.

3. Systems Operated in Parallel with NYSEG Supply.

Customers considering the installation of generating equipment to supply all or a portion of their electrical energy requirements and who wish to arrange for, or continue to receive, service from the Company system for their remaining electrical energy requirements and/or for standby service, **must consult with the Company** regarding the design, installation and operation of such generating equipment. This consultation must be done before the customer is committed to a specific system design. NYSEG guidelines and requirements for equipment of this nature are available at Company offices.

SECTION XIV CARRIER CURRENT SYSTEMS

Section XIV. - Carrier Current Systems

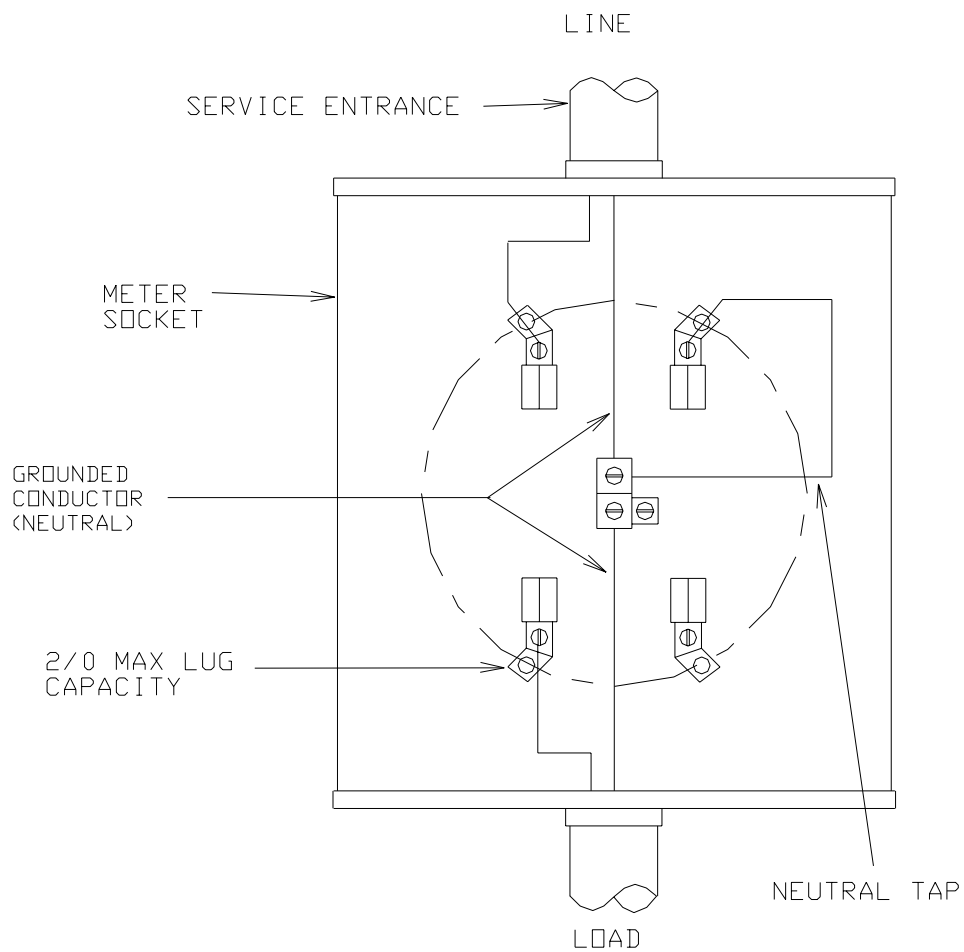
1. If a customer used building wiring for a carrier current system for communication or signaling purposes, the customer shall install suitable filter equipment or make other provisions approved by the Company to keep the Company's distribution facilities free from carrier currents produced by the customer's equipment.

FIG. #	TITLE
1	Typical One Meter Socket Installation Single Phase - 120 V Only
2	Typical One Meter Installation Socket Type Single Phase - 3 Wire - 120/240 Volt / Single Phase - 3 Wire - 120/208 Volt
3	Typical Multi-Meter Installation 120/240 or 120/208 3 Wire - Single Phase
3A	RESERVED FOR FUTURE USE
3B	RESERVED FOR FUTURE USE
4	RESERVED FOR FUTURE USE
5	RESERVED FOR FUTURE USE
6	Wiring Diagram For Two Element Water Heaters
6A	Typical 320 Amp Self Contained Single Phase Meter Socket
7	Typical Self Contained Polyphase Socket Installation 4 Wire - 3 Phase - Wye or Delta 120/240 V
7A	Typical Self Contained Polyphase Socket Installation 4 Wire - 3 Phase - Wye or Delta 277/480 V
8	Typical Single Phase Meter Installation Using Two Current Transformers 100-800 Amp. 120/240 Volts
9	Typical Three Phase 4 Wire Secondary Meter Installation Using Three 2 Wire Current Transformers
10	Typical Layout for Meter Board when Two Meters are Required Active (KWH) and Reactive (RKVAH)
11	Meter Socket Wiring for Underground Services
12	Typical Pole Service
13	Pole Type Metering Self Contained, Capacity 100, 150 or 200 A Single Phase - 3 Wire - 120/240V
14	Overhead Current Transformer Metering - Pole Installation Single or Three Phase - 120/240V, 120/208, 277/480
15	Overhead Current Transformer Metering – Mast Installation
15A	Overhead Current Transformer Metering – Wall Mounted
15B	Typical Trans-Socket Meter

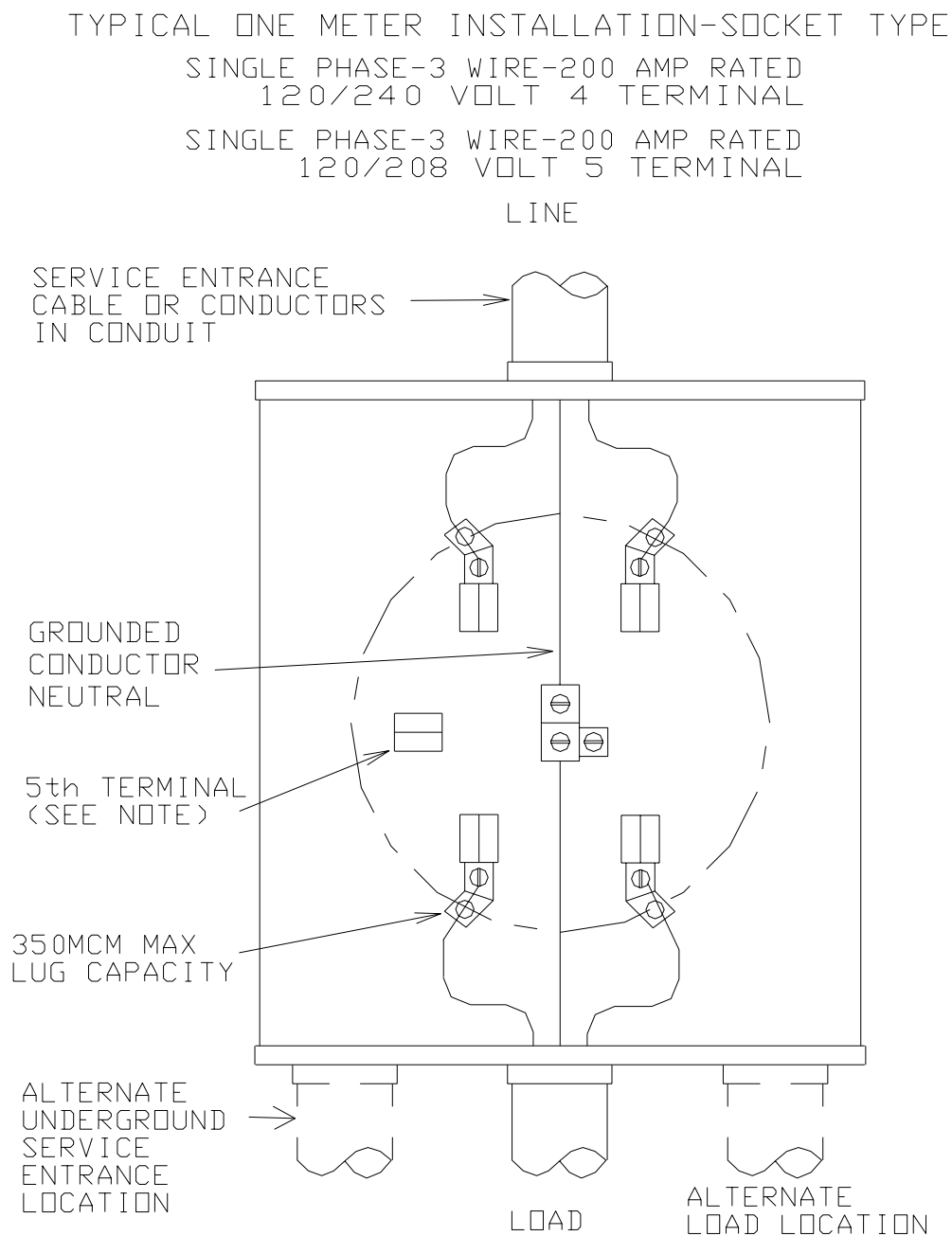
FIG. #	TITLE
16	Pole Type Metering with Disconnected Switch For Emergency Standby Generator
17	Suggested Generator Locations Farms with Outbuildings
18	Service Entrance to Residence or Small Commercial Building
19	Details of Riser and Service Attachment to Low Buildings and Ranch Houses
20	Method of Installing Underground Secondary Service from Overhead Lines at Building or Structure
20A	Method of Installing Underground Secondary Service from Overhead Lines at Building or Structure
21	RESERVED FOR FUTURE USE
22	Meter Socket Installation on Masonry Construction
22a	RESERVED FOR FUTURE USE
23	Method of Installing Underground Service Connections for Residential Customers
24	Typical wiring method Pedestal Mounted Service Equipment
25	Typical Meter Pedestal Installation for Mobile Home Etc.: 120/240 Volt Single Phase (Pre-Assembled Pedestal)
26	Mobile Home Multi-Meter Installation Overhead Service
27	Mobile Home Multi-Meter Installation Underground Service
28	Mobile Home Connections
29	Grounding Illustrations
30	Application of rigid Non-Metallic Conduit for Low Voltage Services (Underground)
31	Page Removed -- Reference Dist UG Stds, Sect 3 Trenching for Joint Metering Locations
31A	Page Removed -- Reference Dist UG Stds, Sect 3 Trenching for Joint Metering Locations
32	Swimming Pool Clearances

FIGURE 1

TYPICAL ONE METER SOCKET INSTALLATION
SINGLE PHASE-100 AMP RATED-120 VOLTS ONLY
4 TERMINAL
MAX DEMAND 3KW OR LESS



ALL CONNECTIONS MUST BE
MADE AS SHOWN BY CONTRACTOR

FIGURE 2

NOTE :

5th TERMINAL WILL BE PROVIDED FOR 120/208 VOLT SERVICE AND MUST BE GROUND.

5th TERMINAL WILL ALSO BE PROVIDED FOR 120/240 VOLT SERVICE WHERE THE 5th TERMINAL IS USED FOR DIRECT LOAD CONTROL AND MUST NOT BE GROUND.

FIGURES 3-5

RESERVED FOR FUTURE USE

FIGURE 6

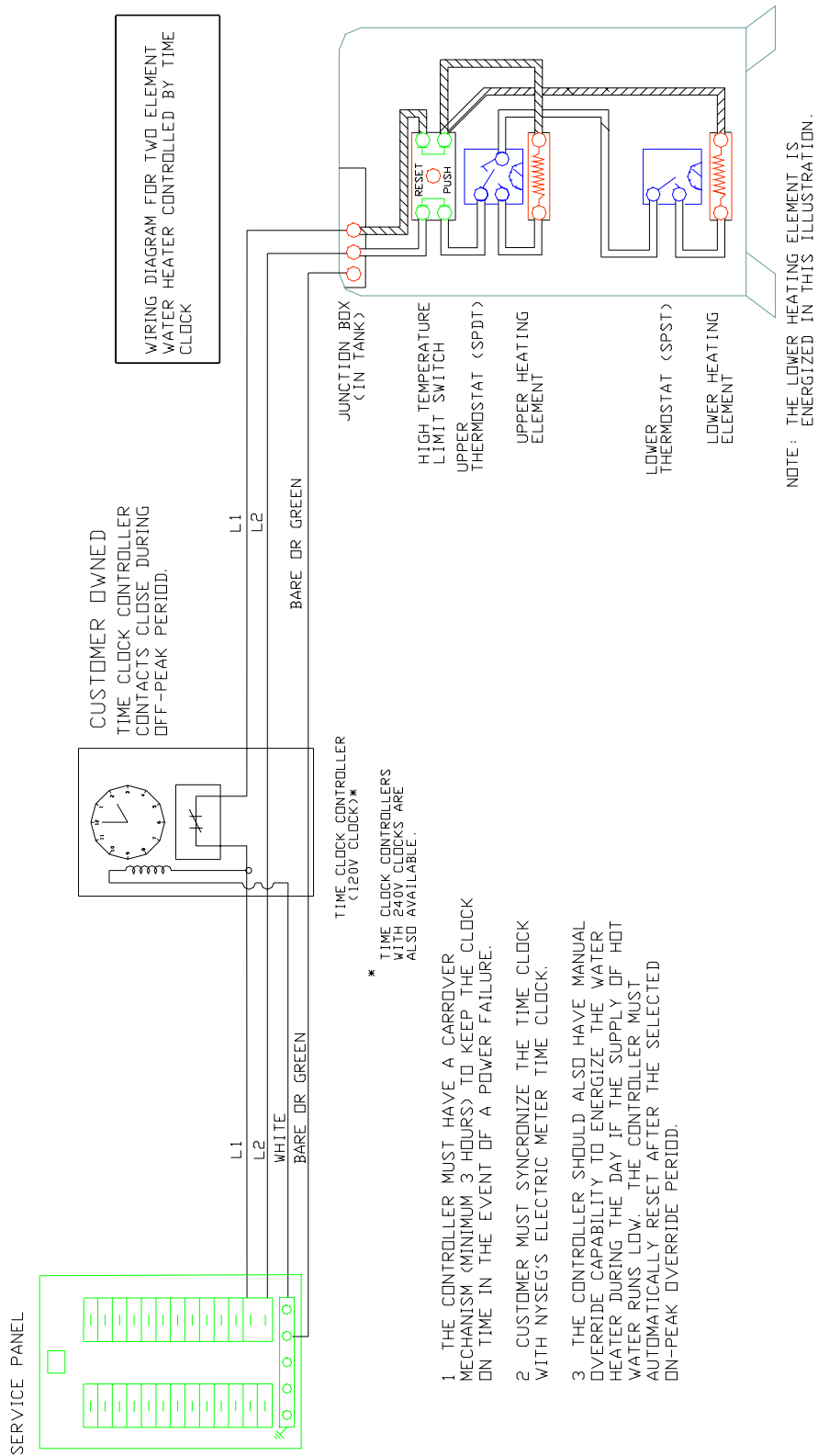


FIGURE 6A

TYPICAL 320 AMP RATED SELF CONTAINED
SINGLE PHASE METER SOCKET

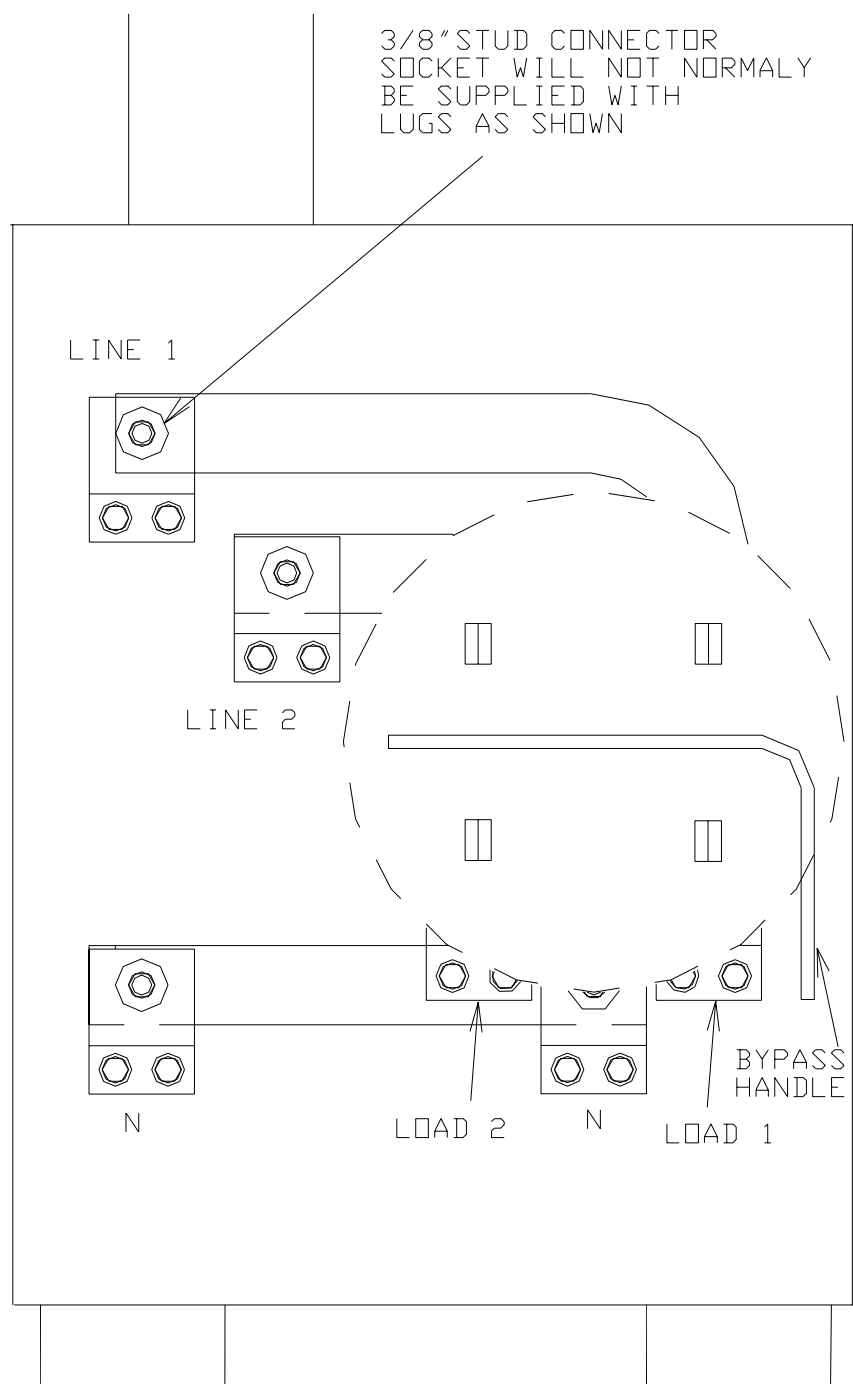
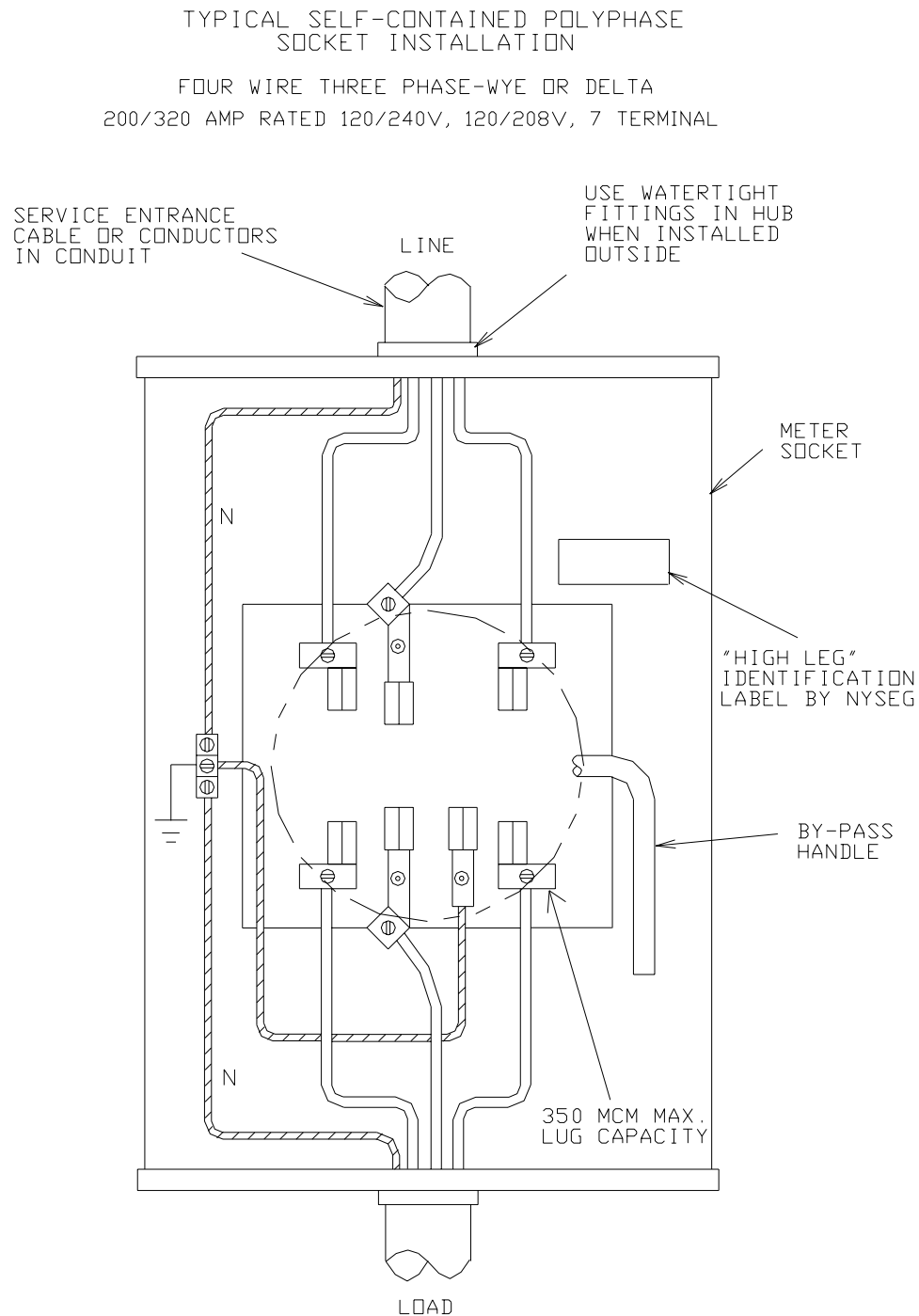
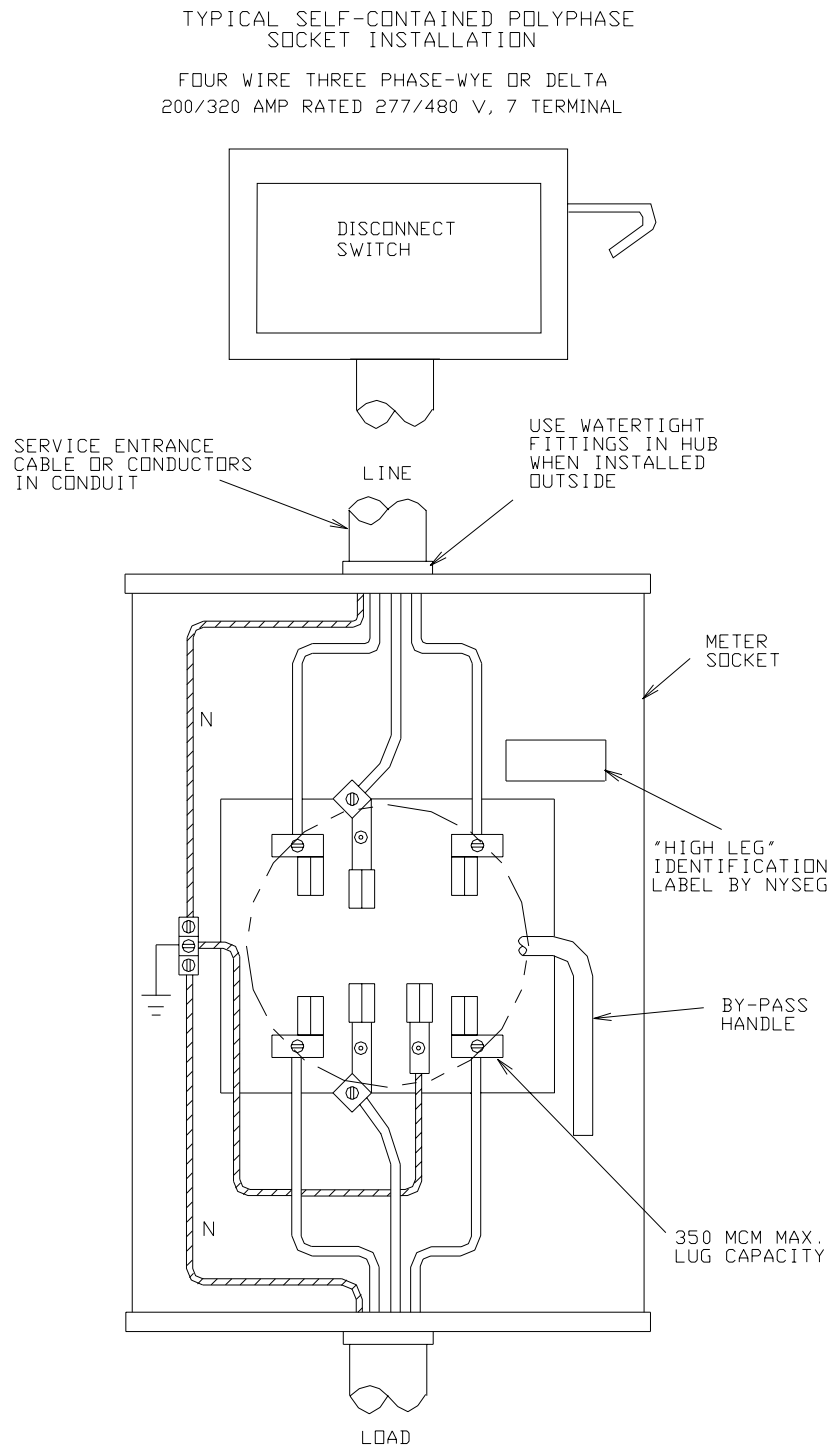


FIGURE 7

DELTA CONNECTED-IS "HIGH LEG" PHASE OR HIGHEST
VOLTAGE TO GROUND, MUST BE CONDUCTOR AT FAR
RIGHT (ORANGE CONDUCTOR)

ALL WIRES TO BE IDENTIFIED AT THE
WEATHERHEAD AND IN METER ENCLOSURE.

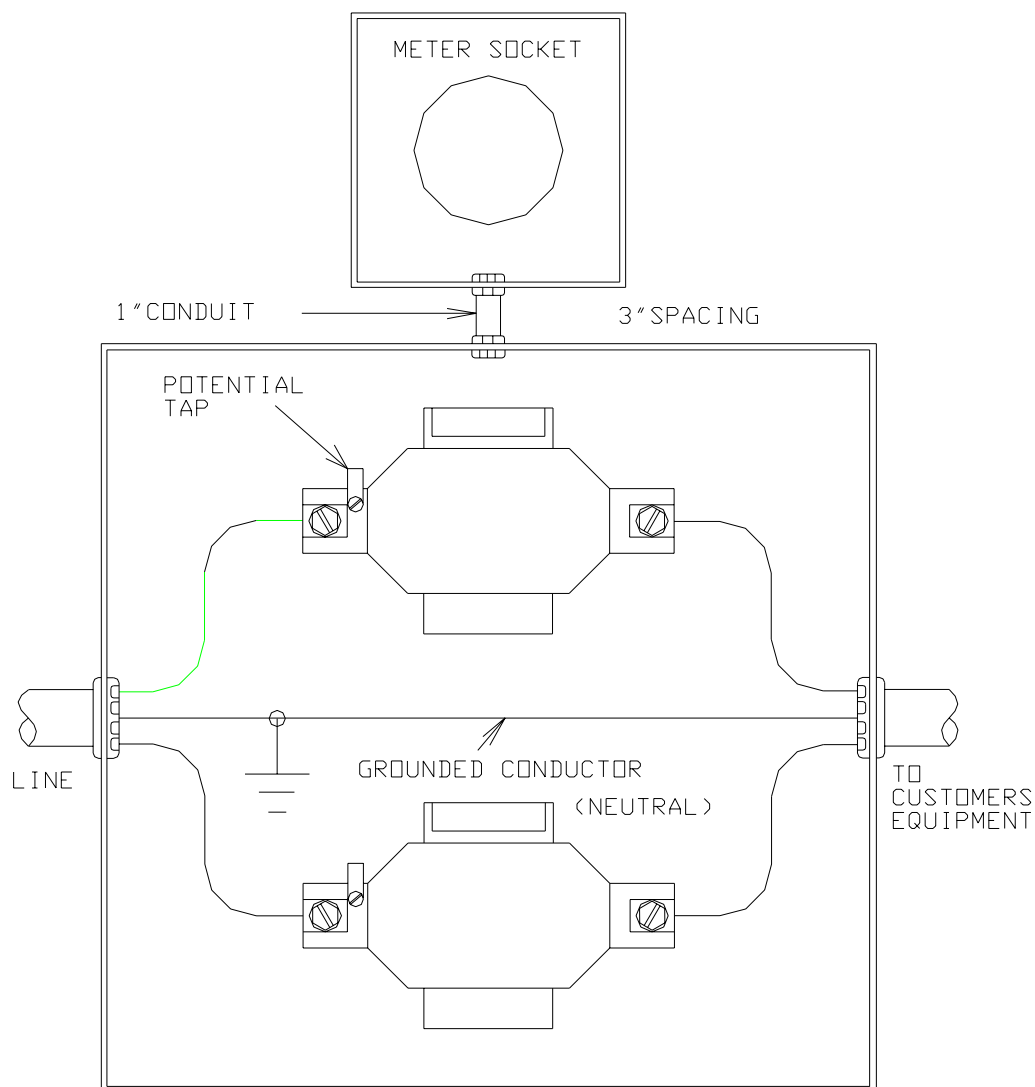
FIGURE 7A

DELTA CONNECTED-IS "HIGH LEG" PHASE OR HIGHEST VOLTAGE TO GROUND, MUST BE CONDUCTOR AT FAR RIGHT (ORANGE CONDUCTOR)

ALL WIRES TO BE IDENTIFIED AT THE WEATHERHEAD AND IN METER ENCLOSURE.

FIGURE 8

TYPICAL SINGLE PHASE METER INSTALLATION
 USING TWO CURRENT TRANSFORMERS
 120/240V
 (FOR INDOOR INSTALLATIONS ONLY)



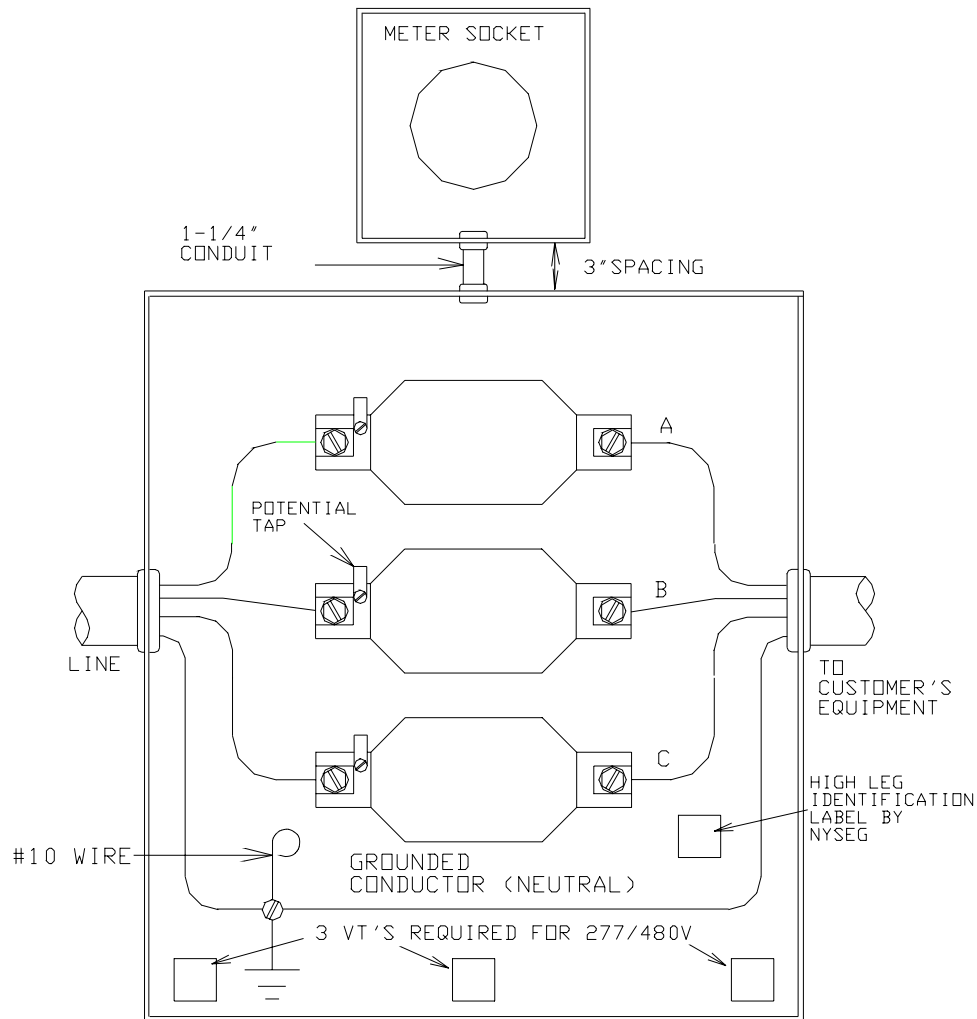
METER TEST SOCKET AND TRANSFORMER CABINET
 MUST BE PROPERLY GROUNDED.

ENCLOSURES ARE AVAILABLE IN THREE NOMINAL SIZES:

30" x 30" x 10"
 36" x 30" x 10"
 42" x 35" x 10"

FIGURE 9

TYPICAL THREE PHASE 4 WIRE WYE OR DELTA
SECONDARY METER INSTALLATION
USING THREE 2 WIRE CURRENT TRANSFORMERS
120/240V, 120/208, 277/480V
(FOR INDOOR INSTALLATIONS ONLY)



DELTA CONNECTED HIGH LEG OR HIGHEST VOLTAGE
TO GROUND, MUST BE BOTTOM PHASE CONDUCTOR
(ORANGE CONDUCTOR)

WHEN WYE CONNECTED ALL PHASES HAVE EQUAL
VOLTAGE TO GROUND. ALL CABINETS TO BE
PROPERLY GROUNDED.

ALL WIRES TO BE IDENTIFIED AT WEATHERHEAD
AND IN THE CT CABINET.

ENCLOSURES ARE AVAILABLE IN THREE NOMINAL SIZES:

30" x 30" x 10"
36" x 30" x 10"
42" x 35" x 10"

FIGURE 10

TYPICAL LAYOUT FOR METER BOARD

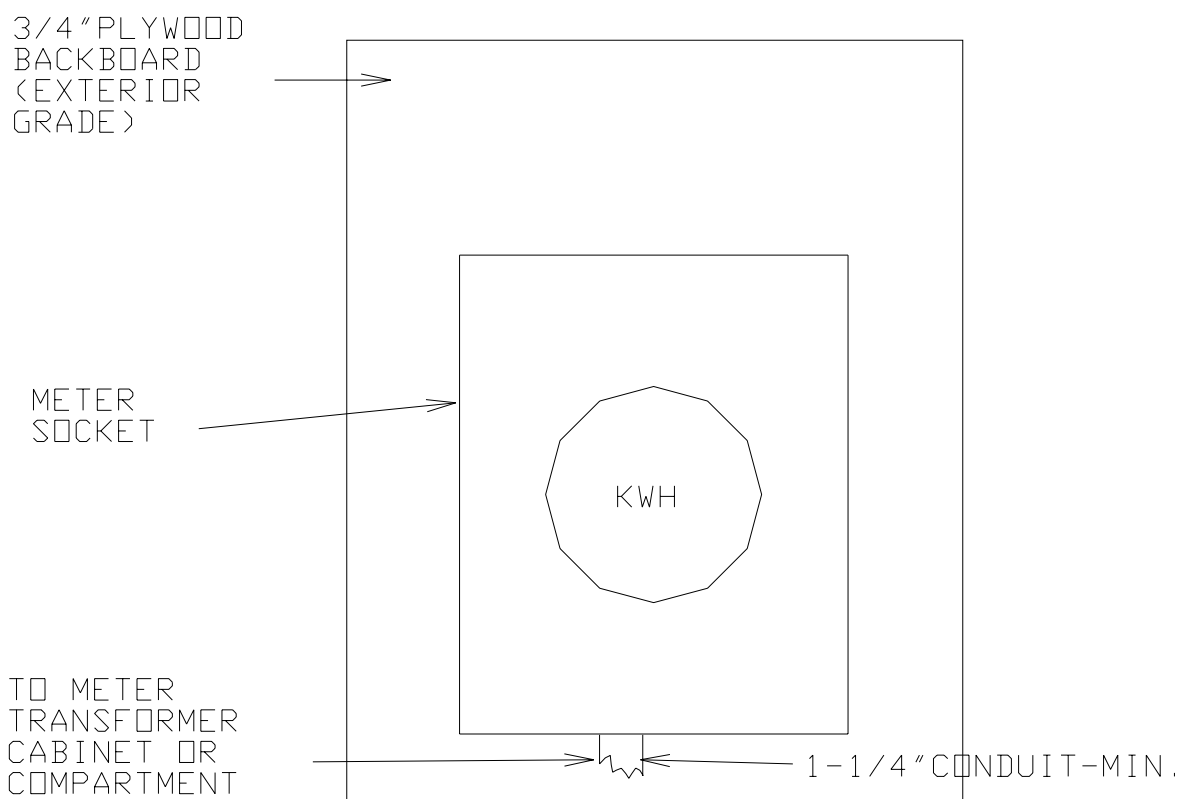
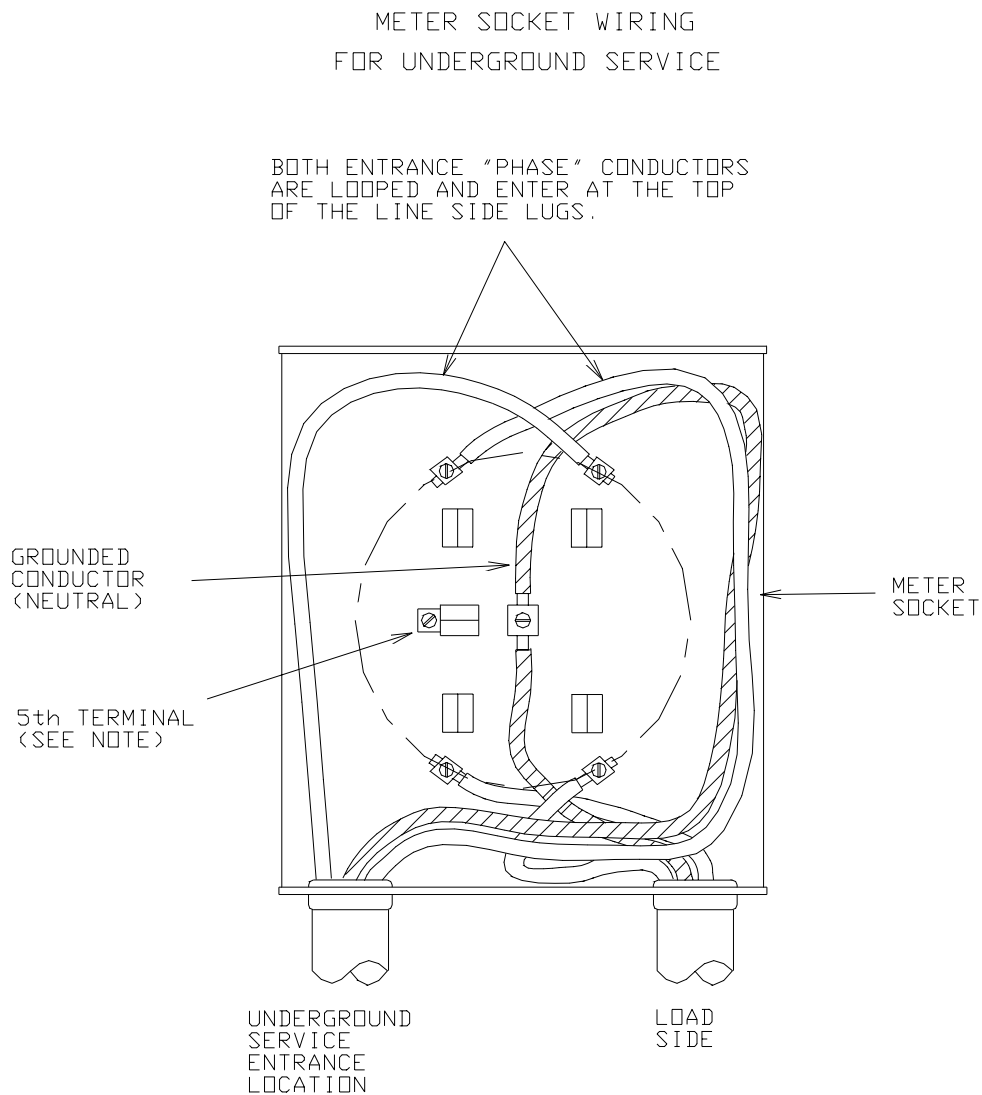


FIGURE 11

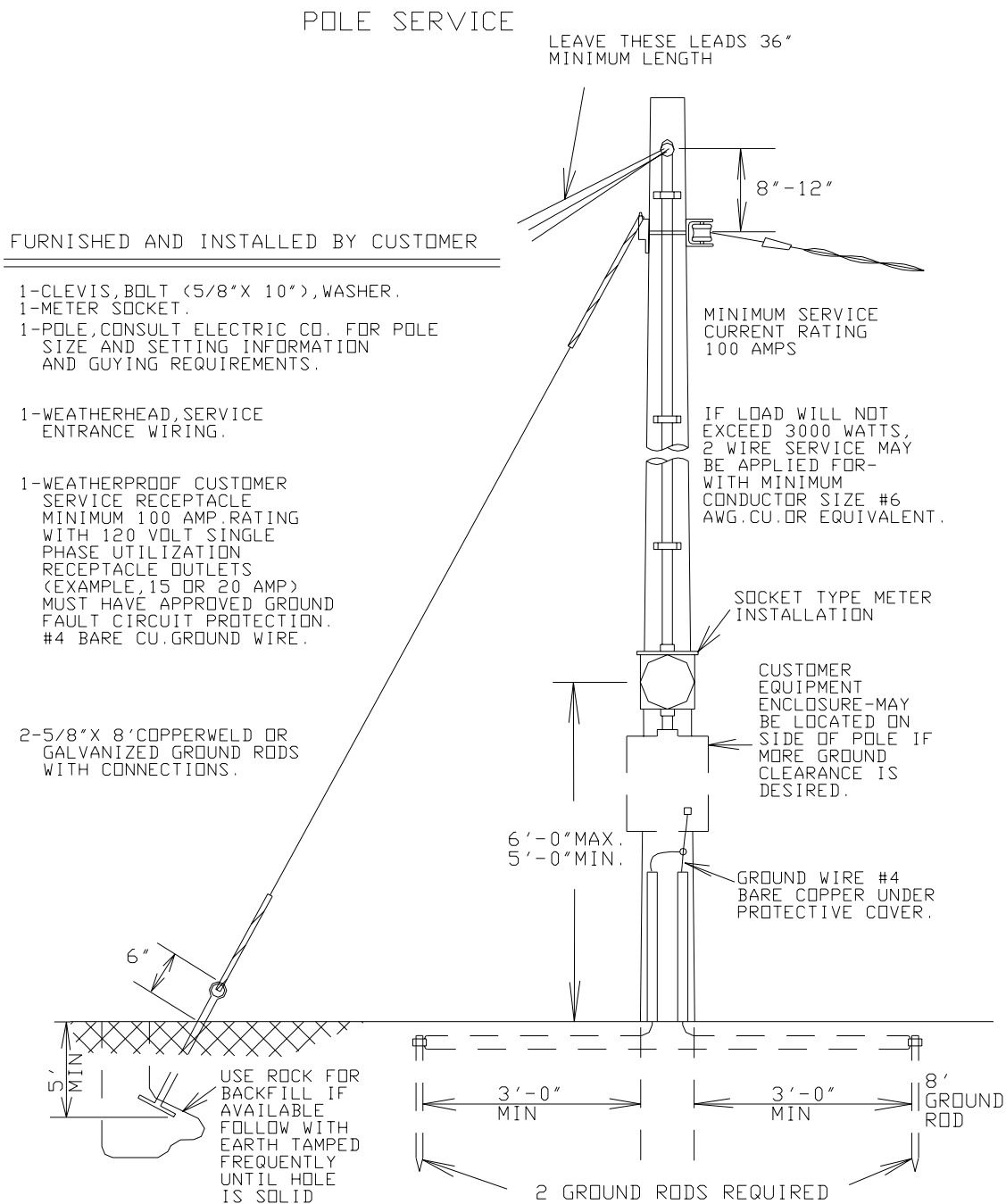
LOOPING OF CONDUCTOR AS SHOWN MINIMIZES
DAMAGE TO CABLE AND STRESS ON CONNECTIONS.

NOTE

5th TERMINAL WILL BE PROVIDED FOR 120/208 VOLT
SERVICE AND MUST BE GROUNDED

5th TERMINAL WILL ALSO BE PROVIDED FOR 120/240
VOLT SERVICE WHERE THE 5th TERMINAL IS USED FOR
DIRECT LOAD CONTROL AND NOT BE GROUNDED

FIGURE 12



INSTALLATION TO BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE

FIGURE 13

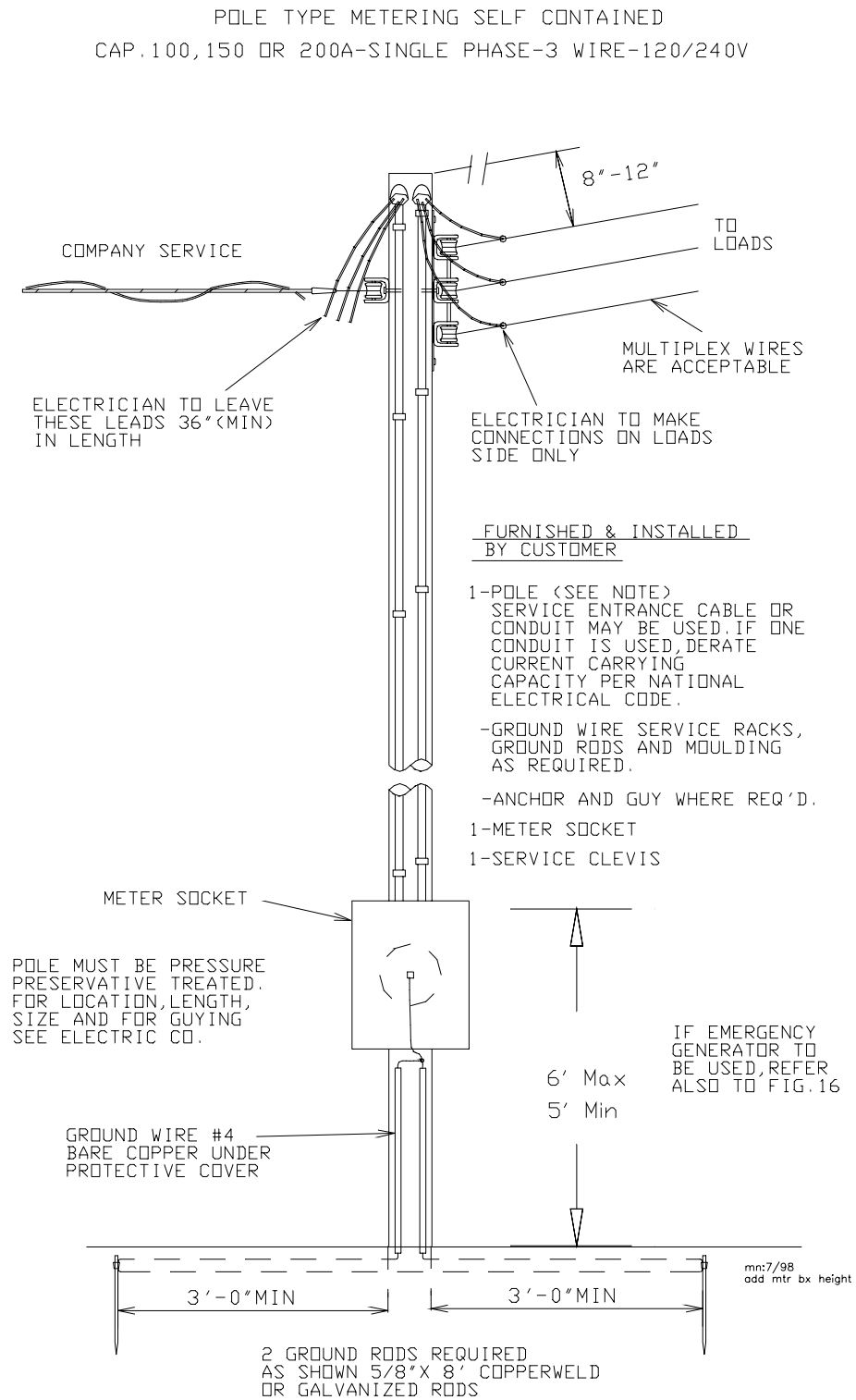
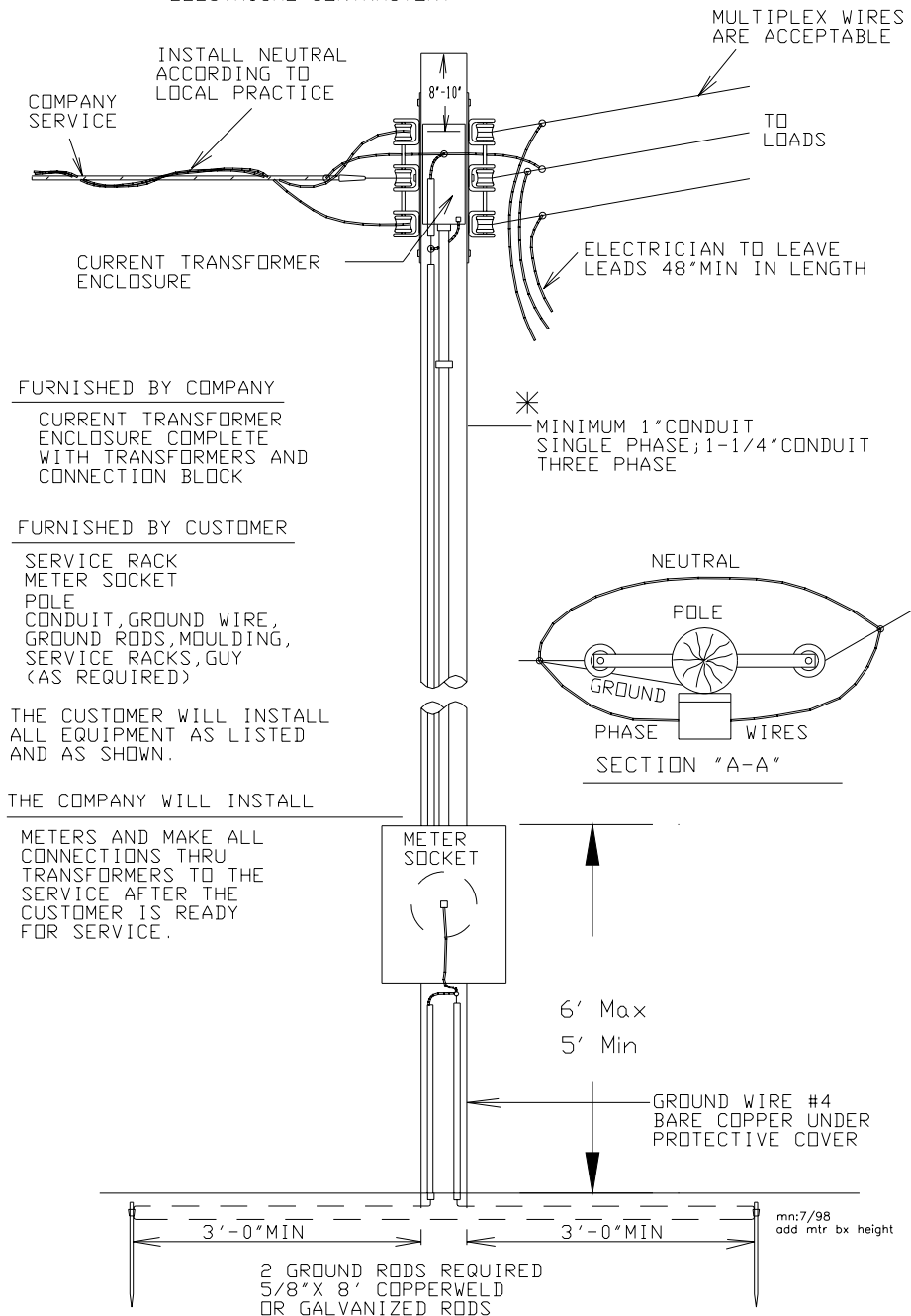


FIGURE 14

FOR SPECIAL APPLICATIONS (SEE FIG 8 & 9) FOR NORMAL INSTALLATIONS

**OVERHEAD CURRENT TRANSFORMER METER - POLE INSTALLATION
SINGLE OR THREE PHASE - 120/240 , 120/208, 277/480 VOLT**

* INSTALLATIONS MUST BE COORDINATED WITH THE DIVISION
METER DEPARTMENT IN CONJUNCTION WITH THE
ELECTRICAL CONTRACTOR.



THIS STANDARD NOT ADAPTABLE TO EMERGENCY GENERATORS

FIGURE 15

FOR SPECIAL APPLICATIONS:

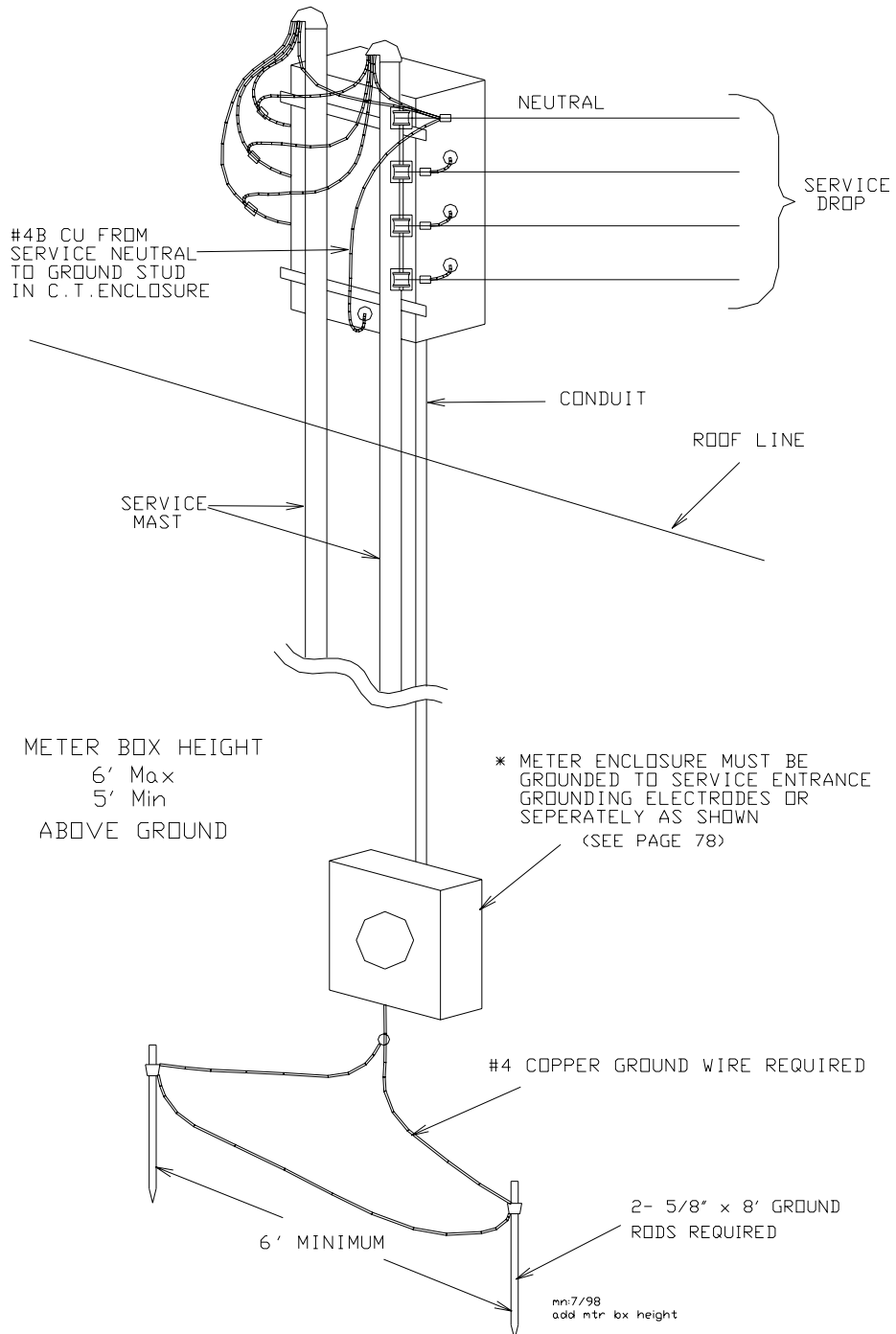
**OVERHEAD CURRENT TRANSFORMER METER - MAST INSTALLATION
SINGLE OR THREE PHASE - 120/240 , 120/208, 277/480 VOLT**INSTALLATIONS MUST BE CO-ORDINATED WITH DIVISION METER
DEPARTMENTS IN CONJUNCTION WITH ELECTRICAL CONTRACTOR

FIGURE 15A

FOR SPECIAL APPLICATIONS:

OVERHEAD CURRENT TRANSFORMER METERING - WALL MOUNTED
SINGLE OR THREE PHASE-120/240;120/208;277/480 VOLT

INSTALLATION MUST BE CO-ORDINATED WITH DIVISION METER DEPARTMENT IN CONJUNCTION WITH ELECTRICAL CONTRACTOR.

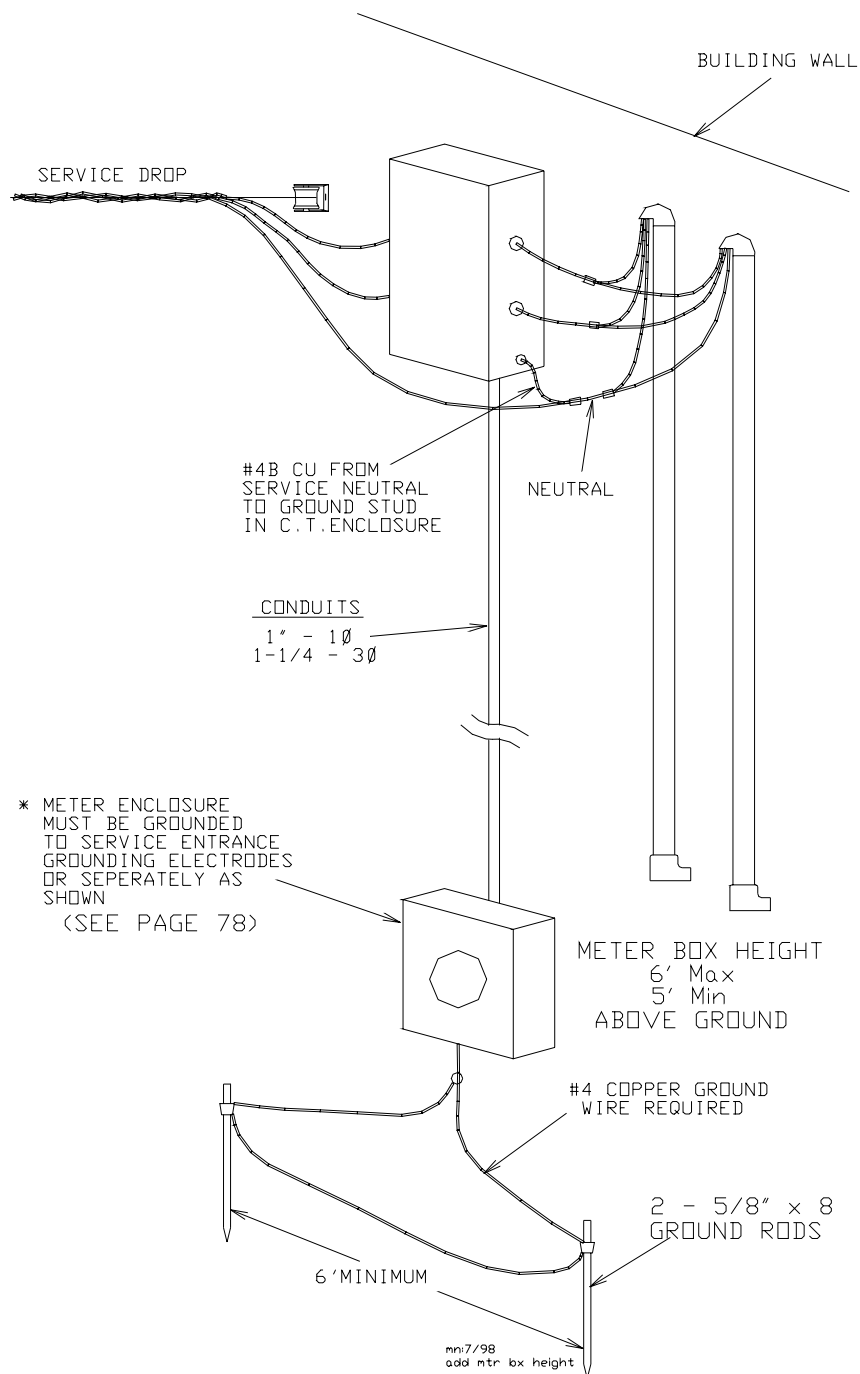


FIGURE 15B

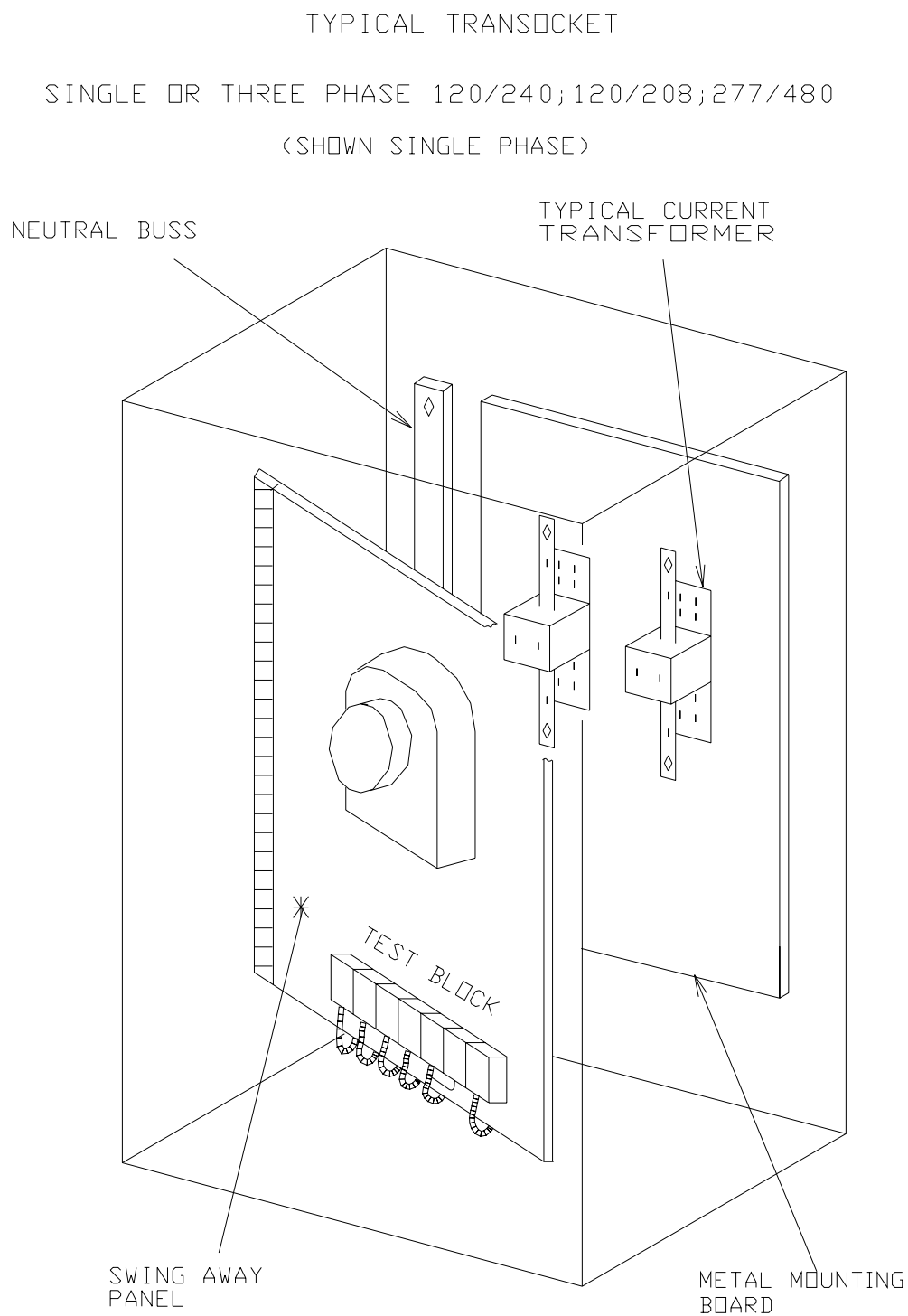
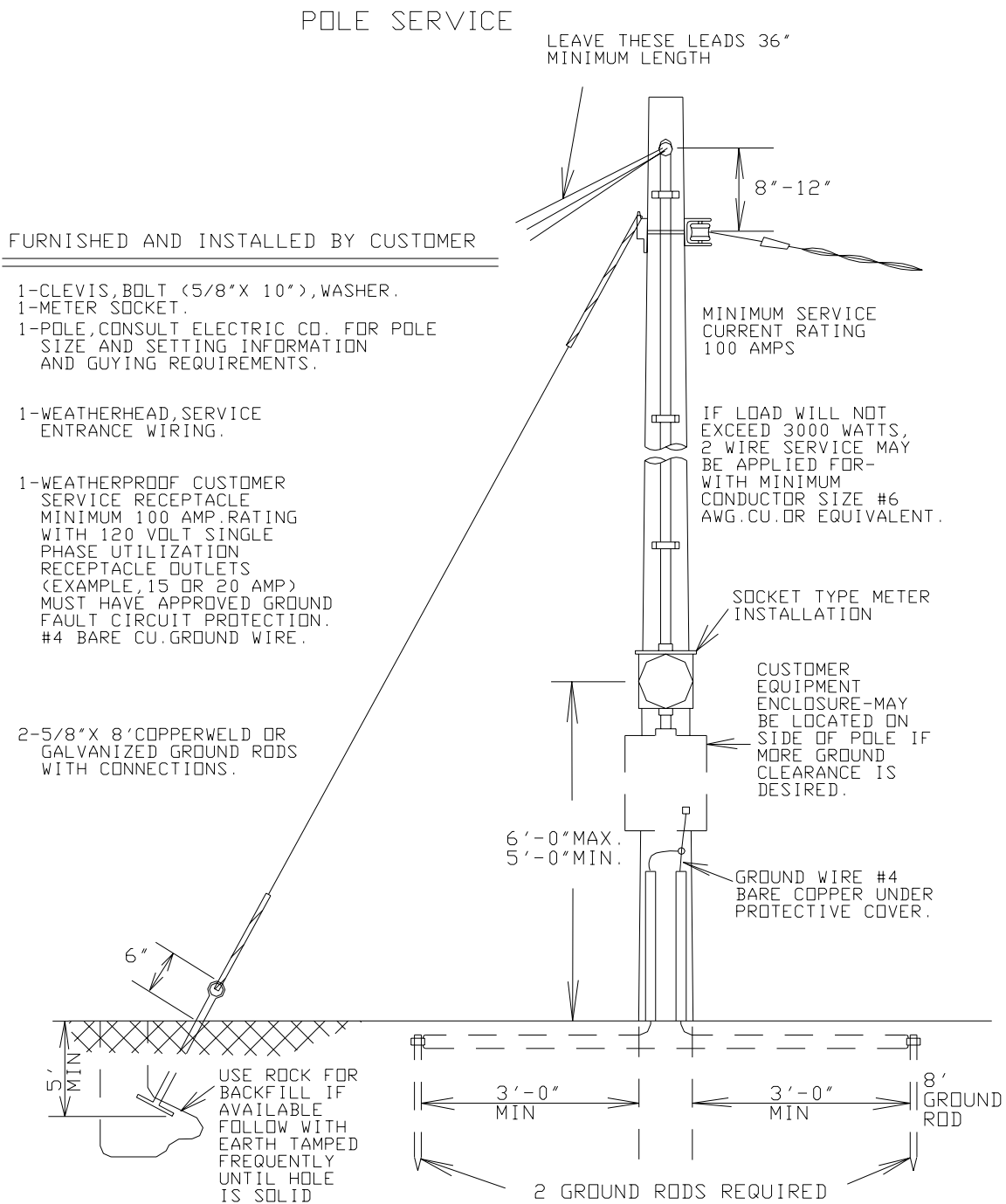


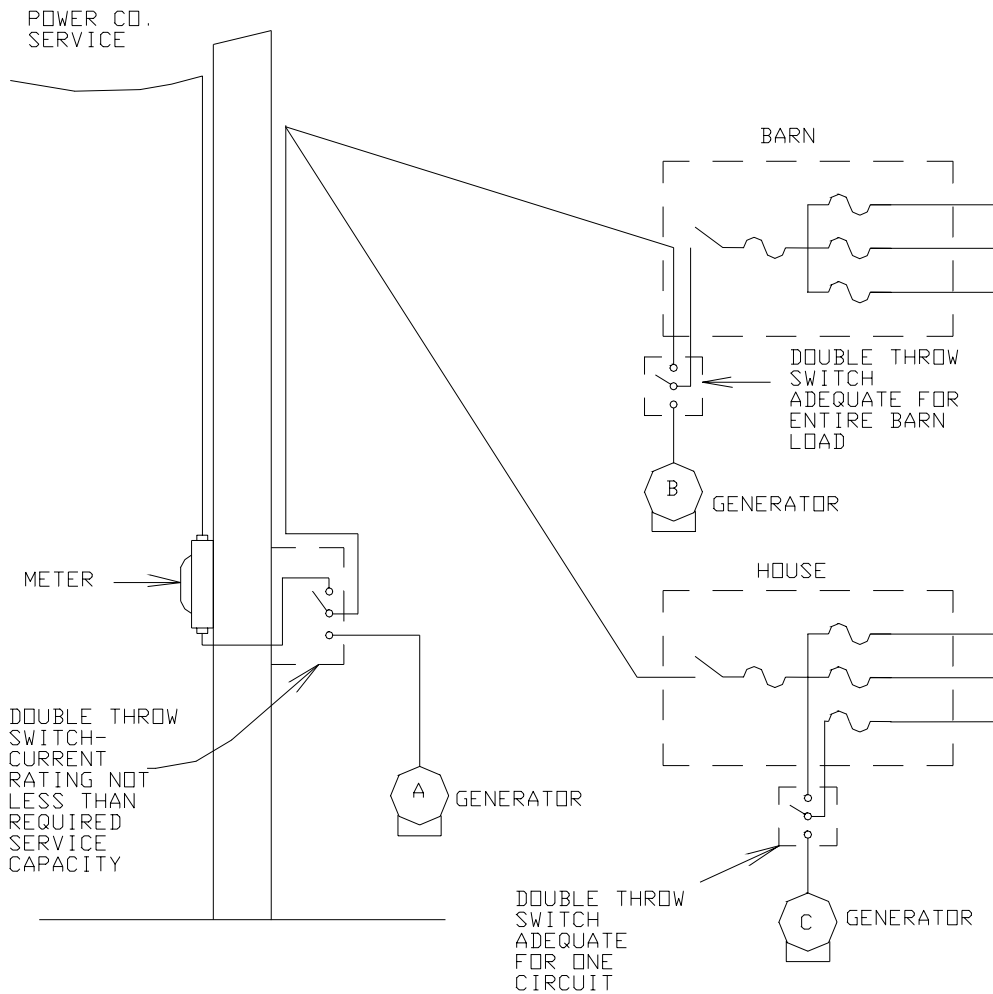
FIGURE 16



INSTALLATION TO BE IN ACCORDANCE WITH THE
NATIONAL ELECTRICAL CODE

FIGURE 17

SUGGESTED GENERATOR LOCATIONS FARMS WITH OUTBUILDINGS



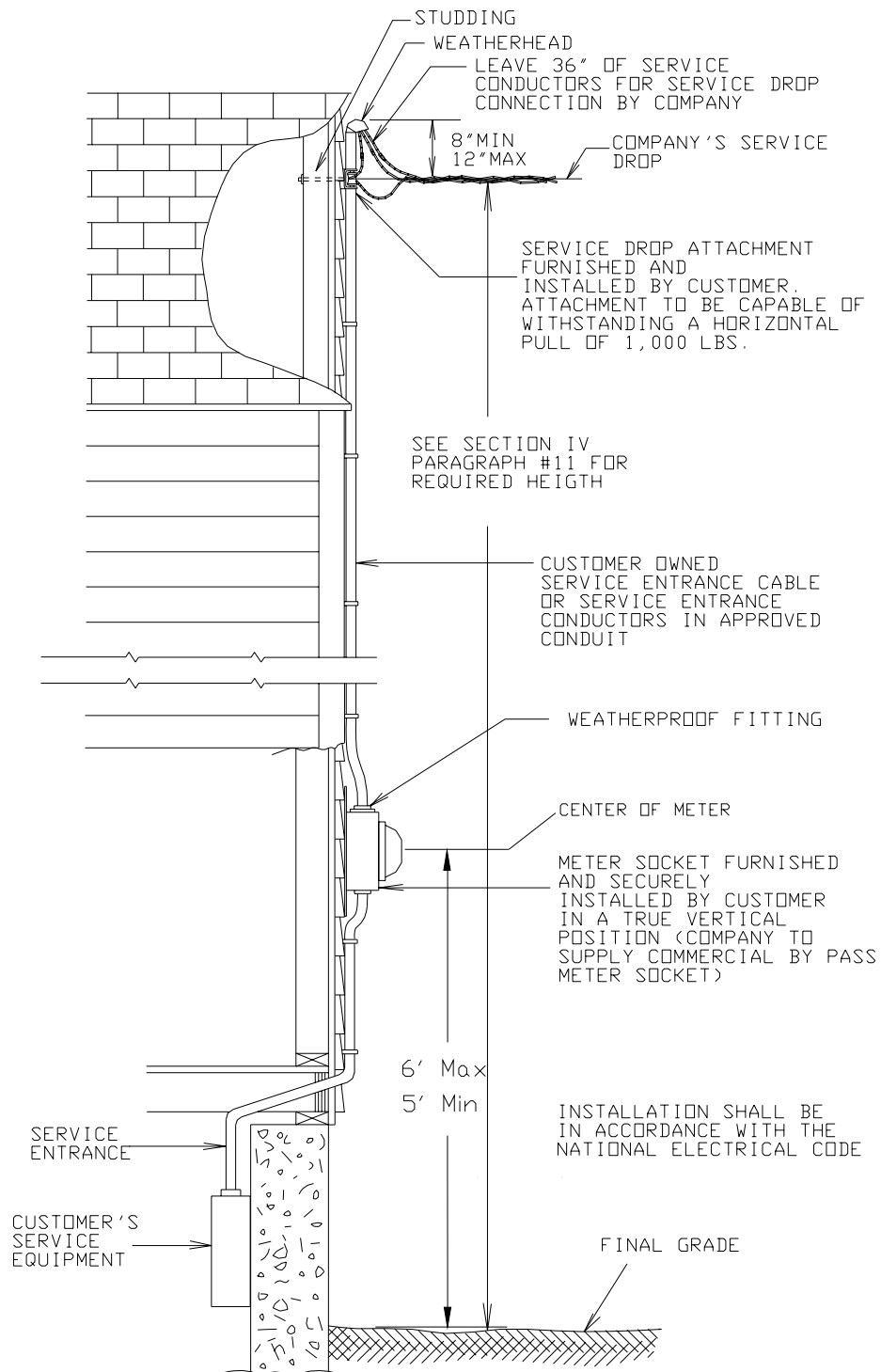
mn:7/98
modified schematic

LOCATION	"A"- ENTIRE SYSTEM CAN BE ENERGIZED OR, ONLY CERTAIN BUILDINGS.
	"B"- ONE BUILDING (BARN) MAY BE SERVED.
	"C"- ONE CIRCUIT FOR CRITICAL EQUIPMENT MAY BE SERVED.

NOTE: IF WATER HEATER CONTROL IS DESIRED, CUSTOMER SHALL OWN, INSTALL AND MAINTAIN SEPARATE TIME SWITCH AT WATER HEATER LOCATION.

FIGURE 18

SERVICE ENTRANCE TO RESIDENCE
OR SMALL COMMERCIAL BUILDING



GROUNDING TO BE AS REQUIRED IN FIGURE 29

FIGURE 19

DETAILS OF RISER AND SERVICE ATTACHMENT
LOW BUILDINGS - RANCH HOUSES

TRIPLEX CONDUCTOR	MAXIMUM UNBRACED LENGTH FROM FLASHING TO CONDUCTOR						
	**			RIGID AL. CONDUIT			
	2"	2-1/2"	3"	2-1/2"	3"	3-1/2"	4"
NO. 2	28"	48"	48"	24"	39"	48"	48"
NO. 1/0		25"	40"	—	18"	25"	34"

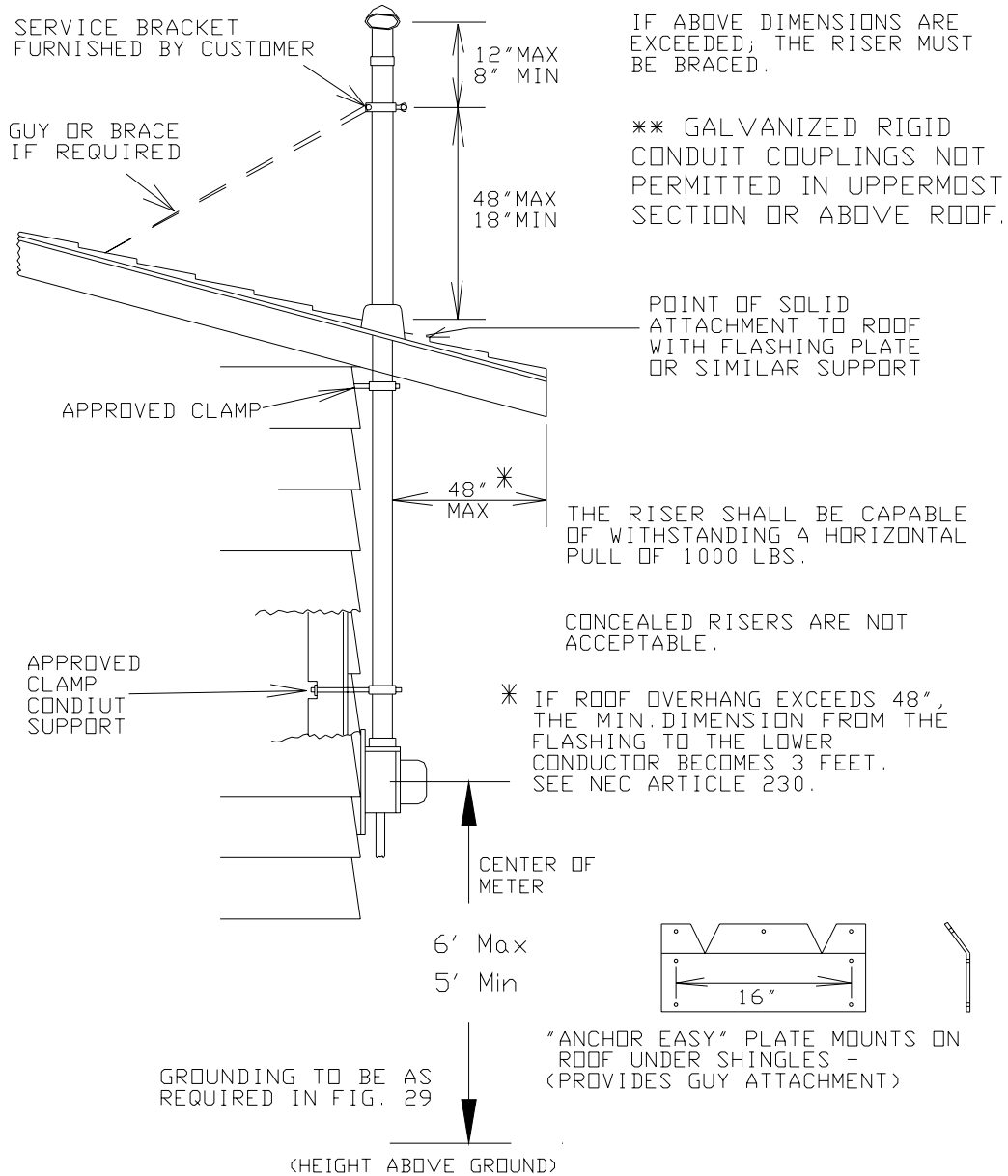
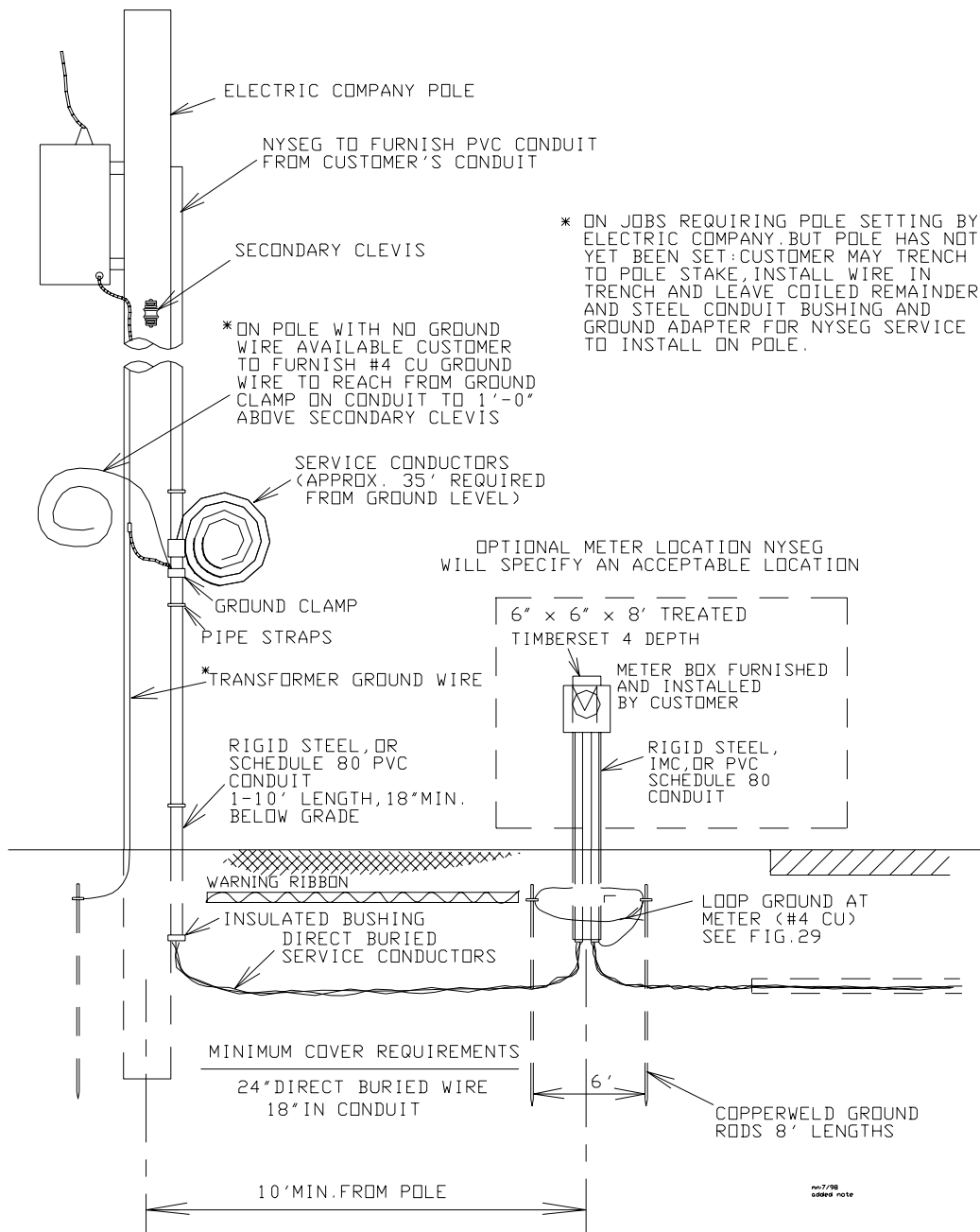


FIGURE 20

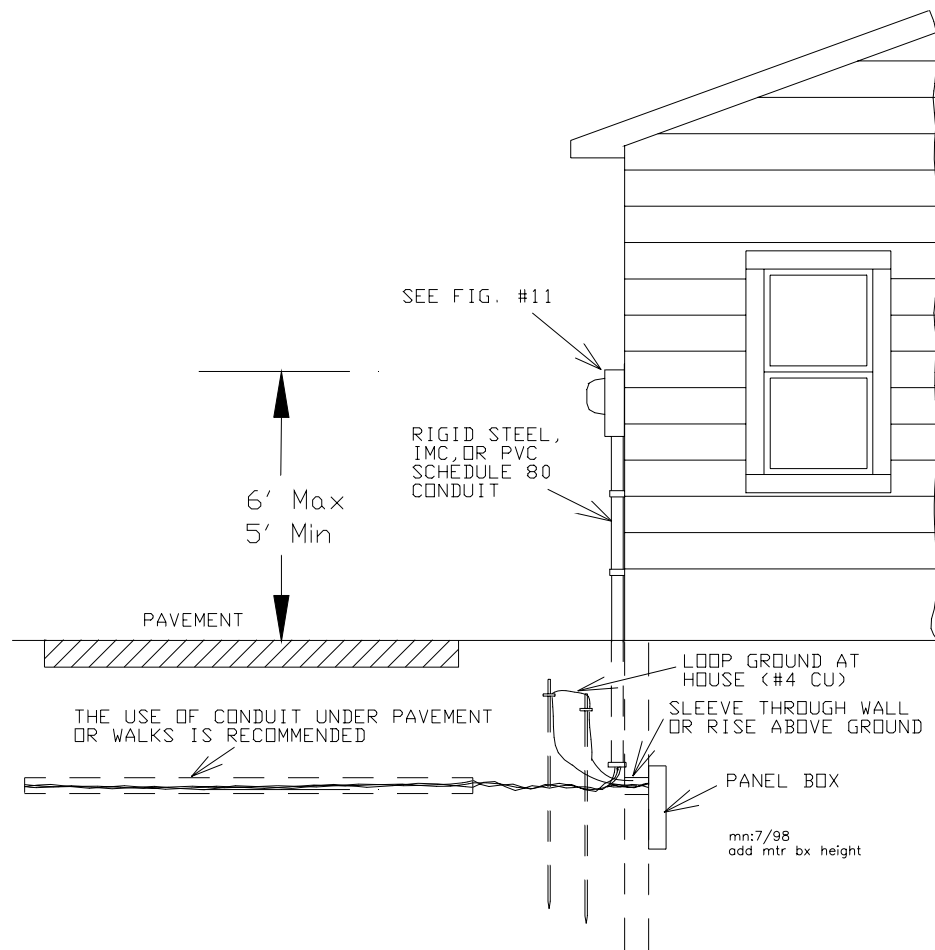
UNDERGROUND SERVICE CONNECTIONS
FROM OVERHEAD LINES
SECT. 4, PARA. 18-26



NOTE: IF SERVICE FROM RISER TO METER BOX IS COMPLETELY IN CONDUIT, DUCT SEAL OR A WEATHERHEAD IS NEEDED.

FIGURE 20A

UNDERGROUND SERVICE CONNECTIONS
FROM OVERHEAD LINES
SECT. 4, PARA. 18-26



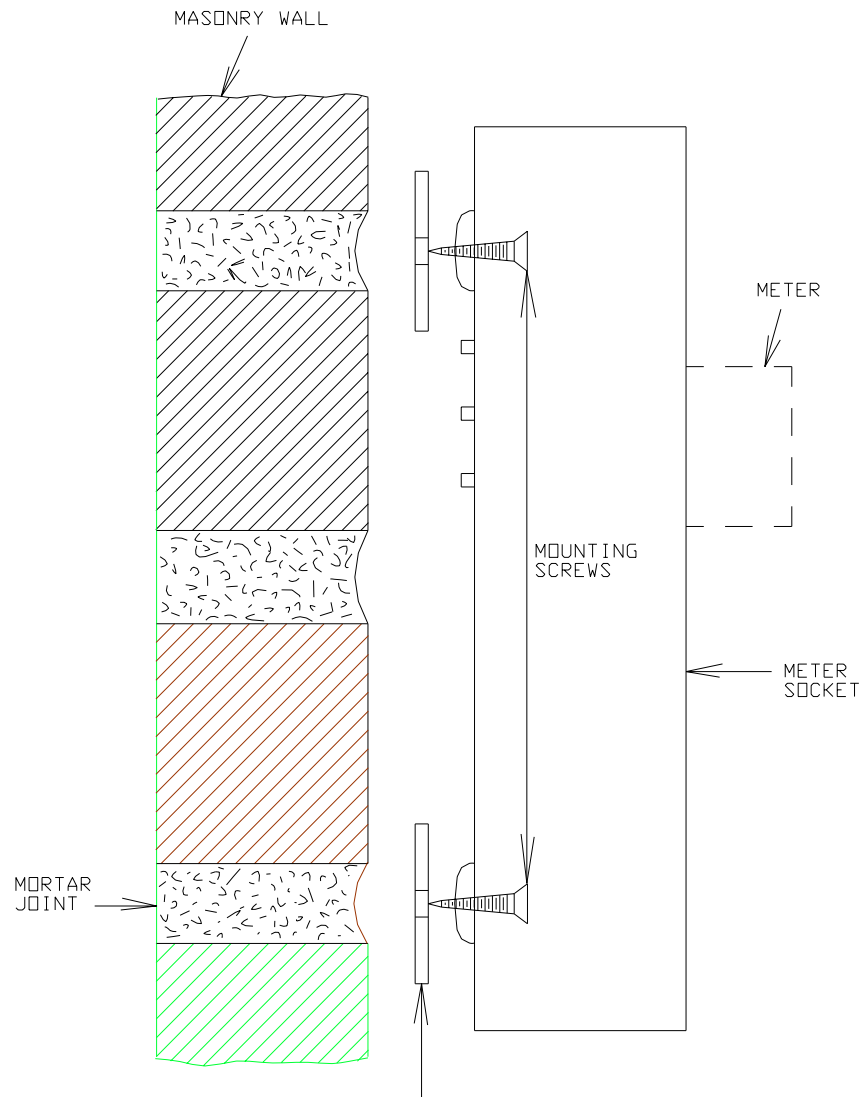
WHERE NECESSARY TO PREVENT PHYSICAL DAMAGE TO DIRECT BURIED CONDUCTORS FROM ROCKS, SLATE, ETC., OR FROM VEHICULAR TRAFFIC ETC., DIRECT BURIED CONDUCTORS SHALL BE PROVIDED WITH SUPPLEMENTARY PROTECTION SUCH AS SAND, SAND AND SUITABLE RUNNING BOARDS, SUITABLE SLEEVES OR OTHER APPROVED MEANS.

RESERVED FOR FUTURE USE

FIGURE 22

MOUNTING OF METER SOCKETS ON
MASONRY CONSTRUCTION

WHEN MOUNTING DIMPLES ON METER SOCKETS ARE INSTALLED
ON RECESSED MASONRY, THE FOLLOWING MOUNTING PROCEDURE
SHALL BE FOLLOWED TO PROVIDE A PLUMB AND LEVEL INSTALLATION.



- WASHER LARGE ENOUGH TO SPAN MORTAR JOINT.
- TOTAL THICKNESS OF WASHER SHIMS IS NOT TO EXCEED 3/16".
- WASHERS ARE TO BE WEATHER RESISTANT PLATED.
- USE APPROPRIATE ANCHORS FOR MASONRY CONSTRUCTION

RESERVED FOR FUTURE USE

FIGURE 23

UNDERGROUND SERVICE CONNECTION
FOR RESIDENTIAL DEVELOPMENTS
SECT. 4, PARA. 34-36

THE SERVICE CABLE AND CONDUIT (IF USED) ARE NOT TO BE INSTALLED CLOSER THAN TWO (2) FEET FROM THE TRANSFORMER OR HANDHOLE LOCATION.

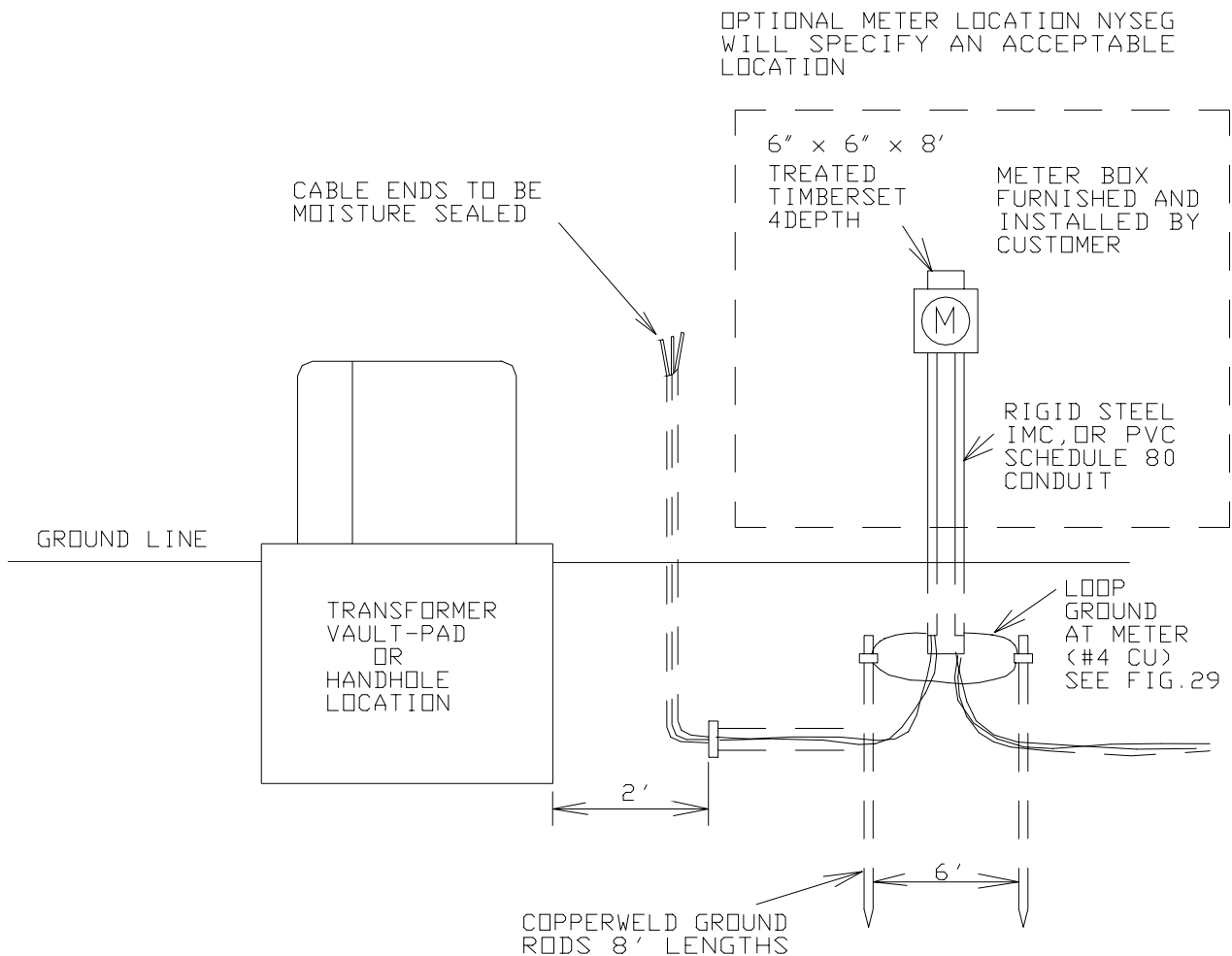
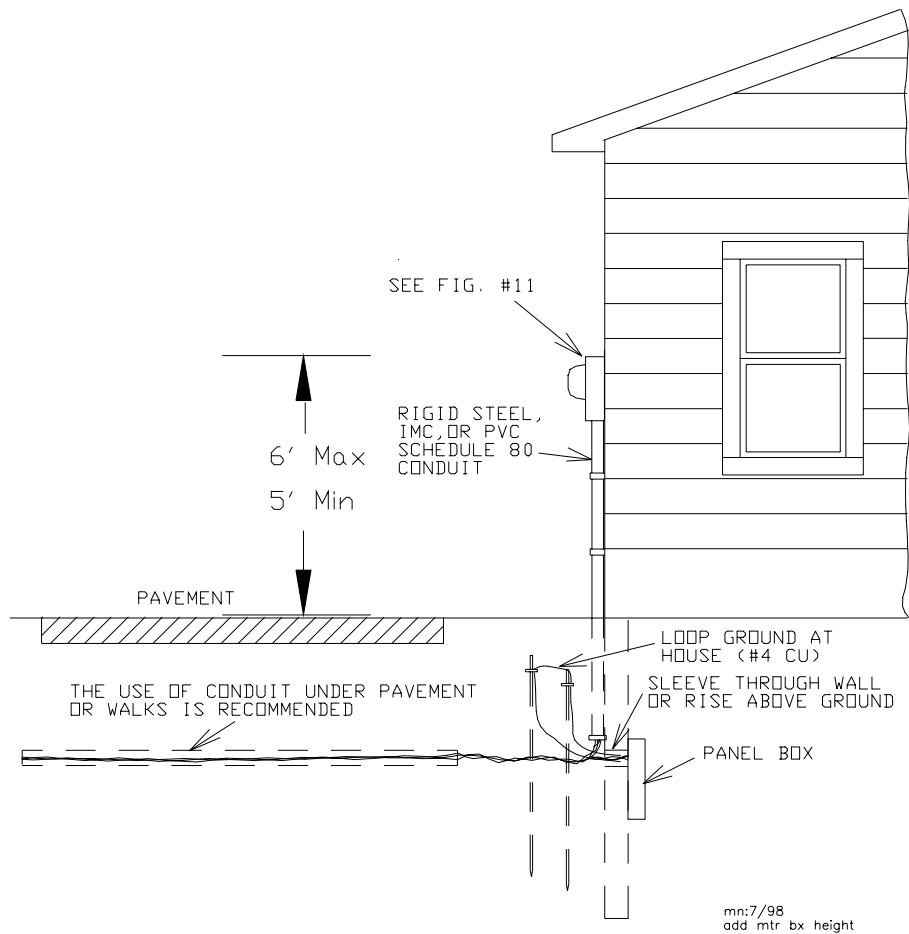


FIGURE 23A

UNDERGROUND SERVICE CONNECTION
FOR RESIDENTIAL DEVELOPMENTS
SECT. 4, PARA. 34-36



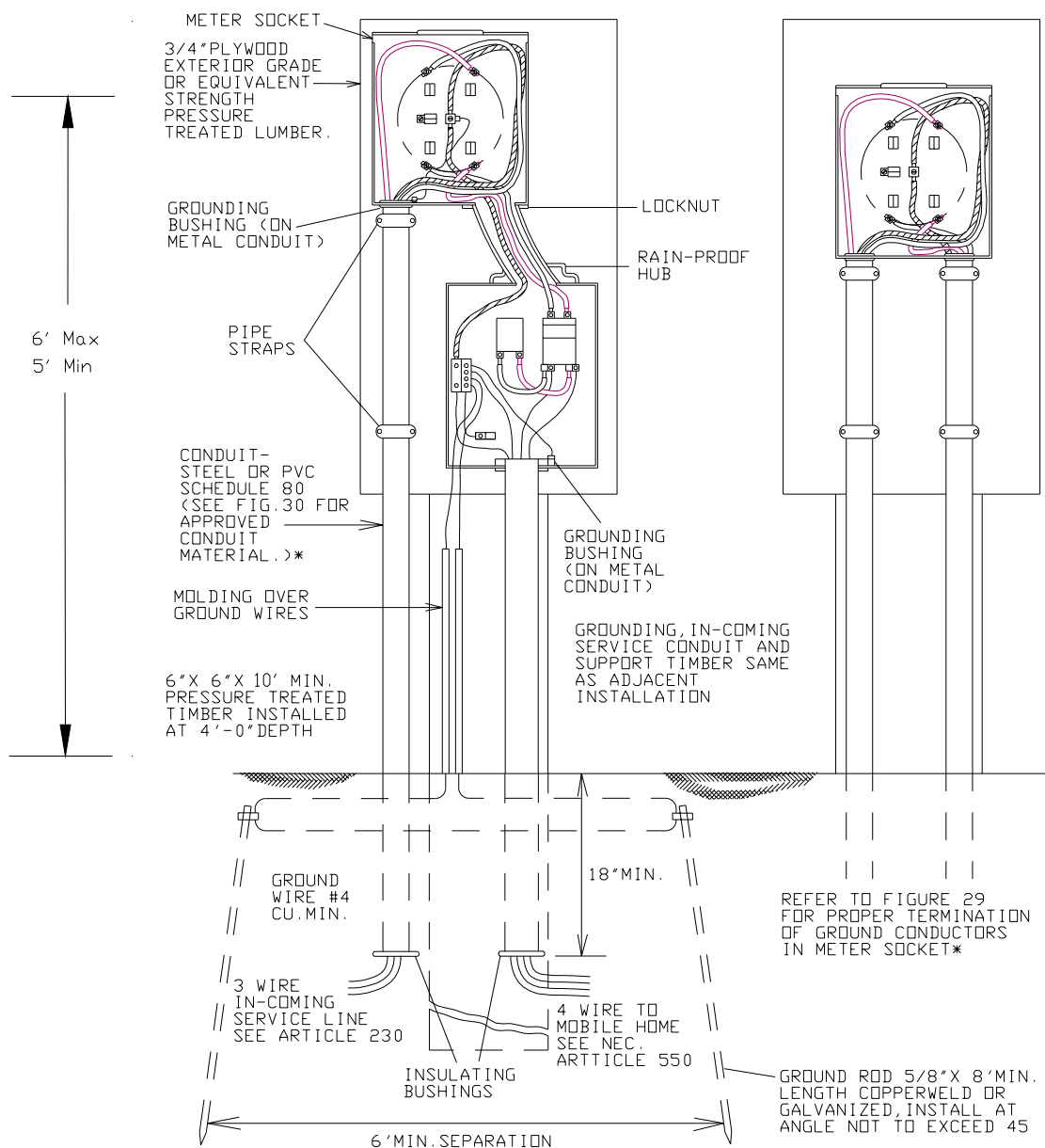
WHERE NECESSARY TO PREVENT PHYSICAL DAMAGE TO DIRECT BURIED CONDUCTORS FROM ROCKS, SLATE, ETC. OR FROM VEHICULAR TRAFFIC ETC. DIRECT BURIED CONDUCTORS SHALL BE PROVIDED WITH SUPPLEMENTARY PROTECTION SUCH AS SAND, SAND AND SUITABLE RUNNING BOARDS. SUITABLE SLEEVES OR OTHER APPROVED MEANS.

FIGURE 24

TYPICAL METER PEDESTAL

**SHOWN WITH TYPICAL SERVICE
EQUIPMENT FOR MOBILE HOME
WITH DIRECT WIRING 100 AMP,
150 AMP OR 200 AMP.**

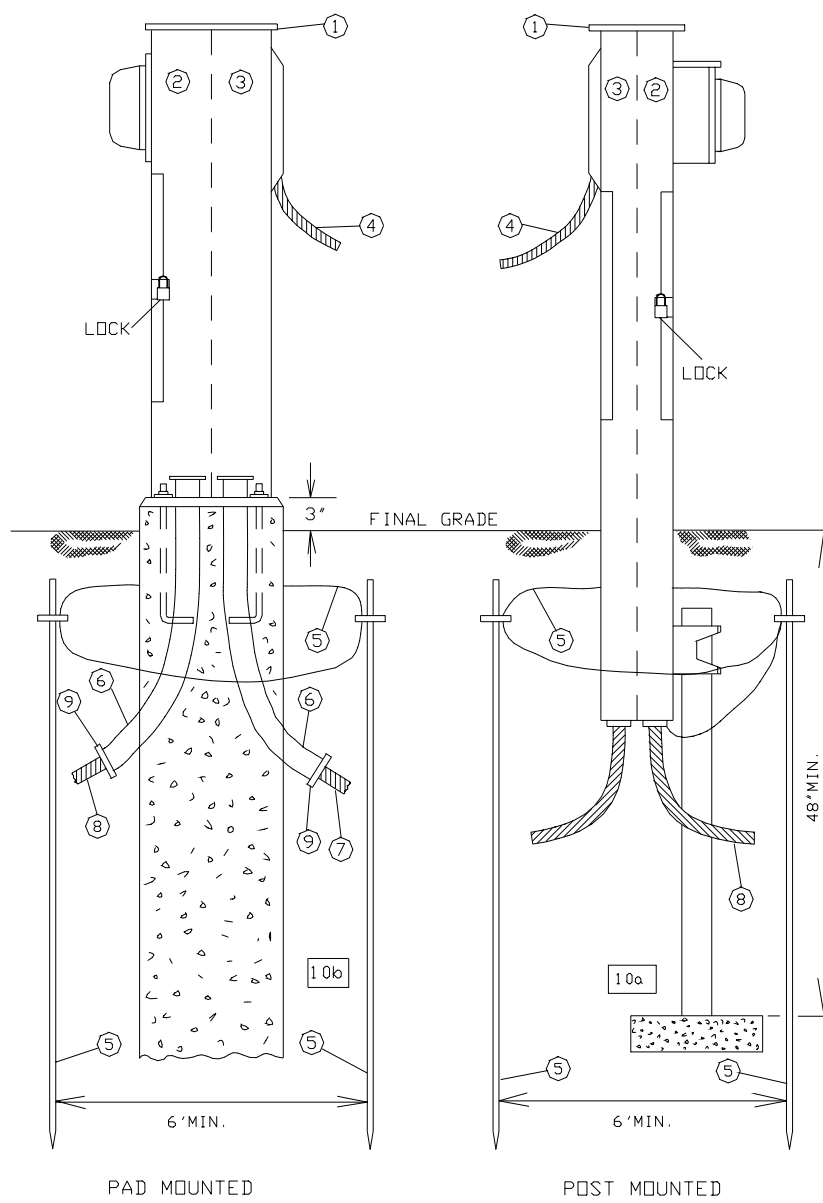
**METER INSTALLATION ONLY.
NOT FOR MOBILE HOME USE.**



*"SPECIFICATIONS FOR ELECTRIC INSTALLATIONS"

FIGURE 25

PRE-ASSEMBLED METER PEDESTAL
INSTALLATION FOR MOBILE HOMES, ETC.
120/240 VOLT SINGLE PHASE
(SEE PAGE 70 FOR SPECS)



**PRE-ASSEMBLED PEDESTAL
INSTALLATION SPECIFICATIONS**

Customer will submit the pedestal specification to the company for review prior to purchase.*

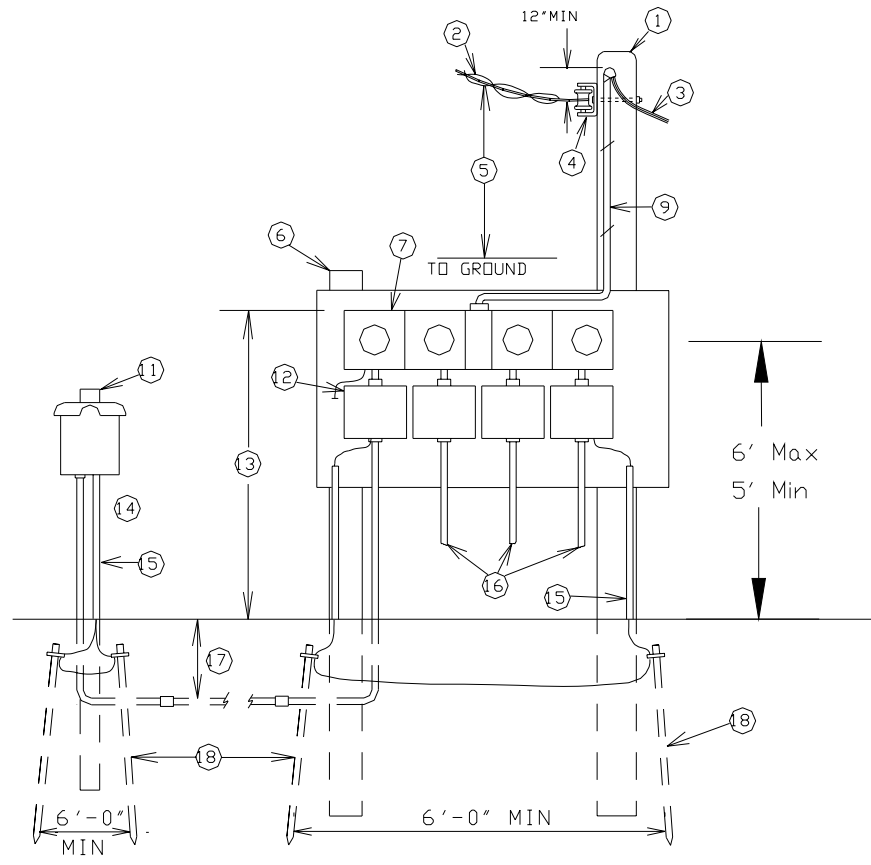
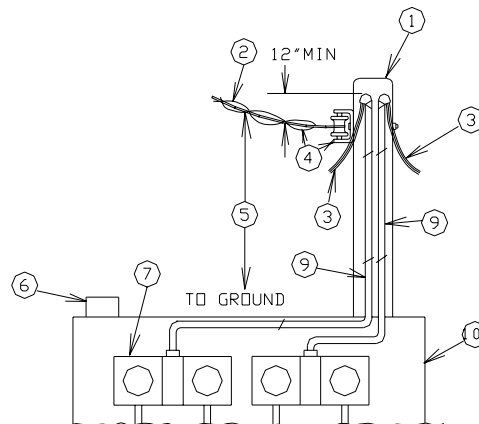
1. Meter Pedestal - Pad or Post Mounted, Top 4'0" min. - 5'6" max. above ground.
2. Line Compartment.
3. Load Compartment - including customer's service equipment, etc.: 150 amp. minimum.
4. Customer power supply cord, if used. See Section XV, Figure 27. (For direct wired service, see Item #7 below.)
5. Continuous #4 soft drawn bare copper ground wire connecting (2) ground rods (6' minimum separation) to ground lug in pedestal.
6. Conduit, size in accordance with the National Electrical Code.
7. Customer supply cable - permanent wiring method. Depth to be 18" minimum if in conduit, 24" minimum if cable is direct buried. (See Section XV, Figure 27.)
8. Service cable, Company's or Customer's.*
9. Insulated Grounding Bushing, if steel conduit is used.
10. Pedestal bases - two types:
 - a. Post mounted to be set a minimum of 4 ft. in ground on a stone or concrete pad.
 - b. Pad mounted to have concrete base poured to depth below frost line (4 feet minimum) and 3" above final grade.

NOTES:

1. Installation and equipment ratings must be adequate for the load to be served.
2. Customer's wiring to be in accordance with the National Electrical Code.
3. All 120 volt single phase utilization receptacle outlets must have approved ground fault circuit protection. Example: 15 or 20 amp. outlets.

*See specification #1 for details of cable.

*See specification #2 for details of pre-assembled meter pedestal

FIGURE 26MOBILE HOME MULT-METER INSTALLATION
OVERHEAD SERVICE-SINGLE ENTRANCE CABLEMOBILE HOME MULTI-METER INSTALLATION
OVERHEAD-DOUBLE SERVICE ENTRANCE

SEE TOP DRAWING FOR INSTALLATION OF CUSTOMER'S
SERVICE EQUIPMENT, PRESERVATION PRESSURE
TREATED WOOD PRODUCTS AND GROUNDING REQUIREMENTS.

**METER BOARD INSTALLATION
SPECIFICATIONS-OVERHEAD SERVICE**

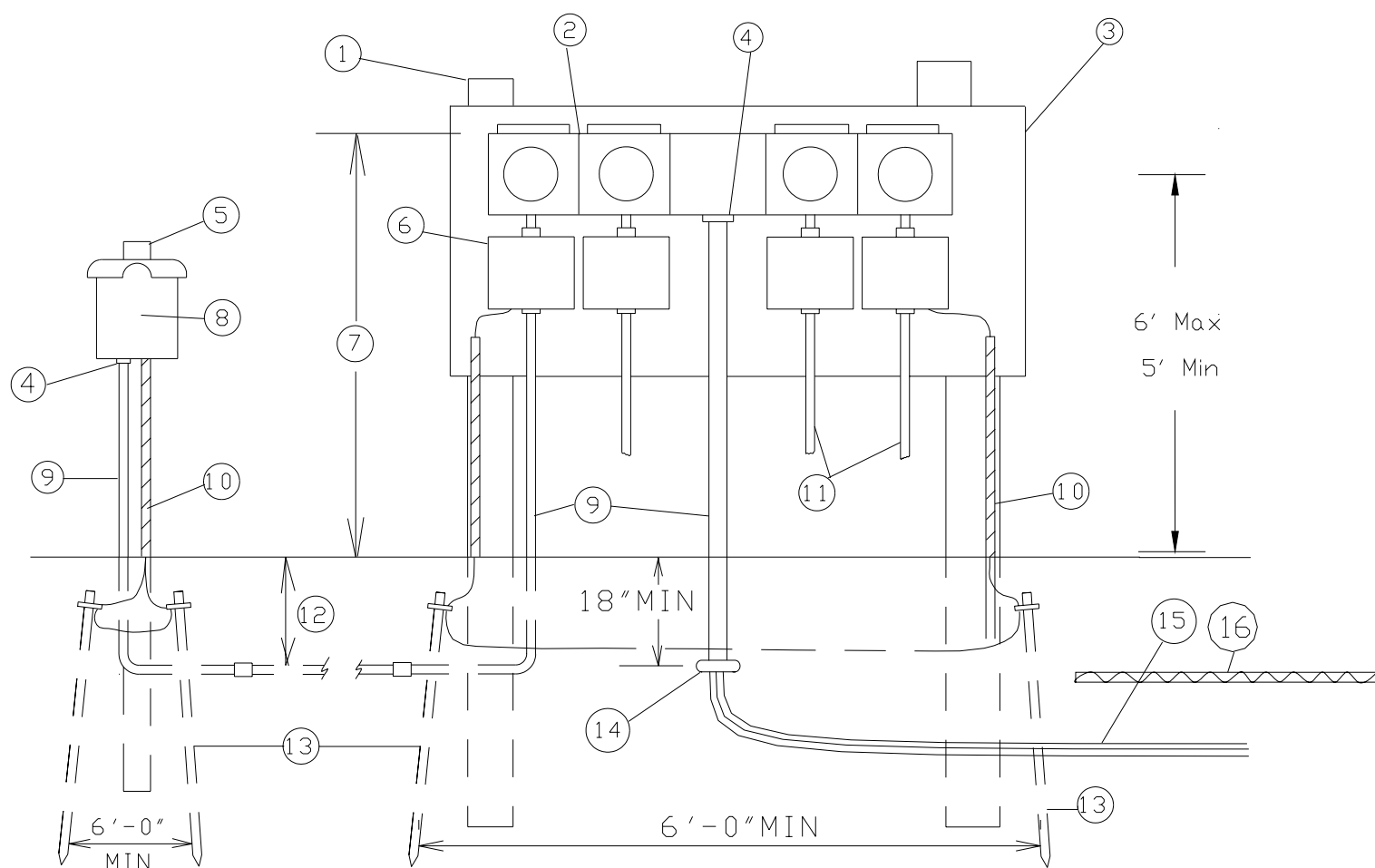
1. Preservative pressure treated pole (furnished and installed by customer). Consult Company for pole size, setting, and guying requirements.
2. Service drop furnished and installed by Company.
3. Electrician to leave leads 36 inches minimum in length.
4. Company will furnish and customer will install the service attachment bracket.
5. Minimum ground clearances shall be specified by NYSEG.
6. Preservative pressure treated pole butts or preservative pressure treated timber.
7. Meter sockets furnished and installed by customer.
8. Insulated grounding bushing.
9. Cable or conduit in accordance with National Electrical Code.
10. Board, 3/4" exterior grade plywood or equivalent pressure treated lumber in strength.
11. Customer's pedestal - 4" x 4" preservative pressure treated post (two 2" x 4" not acceptable) or equal, set a min. of 4 ft. deep.
12. Customer's service equipment in weatherproof enclosure (100 amp. min.; 150 amp. recommended).
13. Height above ground to top of meter enclosure - 4'0" min., 6'0" max.
14. Customer's service equipment as required by the National Electrical Code.
15. Continuous #4 soft drawn bare copper ground wire under protective cover terminated at the meter ground bus connection.
16. Additional service connections as required.
17. Depth to be 18" min. if conduit, 24" min. if cable is direct buried.
18. Approved driven ground rods; 2 required.

NOTES:

1. Installation and equipment ratings must be adequate for the load to be connected. 200 ampere positions may require a different arrangement.
2. A maximum of three (3) meters bussed together where all mobile homes are electrically heated.
3. All 120 volt single phase utilization receptacle outlets must have approved ground fault circuit protection. Example: 15 or 20 amp. outlets.

FIGURE 27

MOBILE HOME MULTI-METER INSTALLATION
UNDERGROUND SERVICE



**METER BOARD INSTALLATION
SPECIFICATIONS UNDERGROUND SERVICE**

1. Preservative pressure treated pole butts or preservative pressure treated timber set below frost level. (4 ft. minimum)
2. Meter sockets furnished and installed by customer.
3. Board - 3/4" exterior grade plywood or equivalent pressure treated lumber in strength.
4. Insulated grounding bushing.
5. Customer's pedestal - 4" x 4" preservative pressure treated post (two 2" x 4" not acceptable) or equal, set a min. of 4' deep.
6. Customer's service equipment in weatherproof enclosure (100 amp. min.; 150 amp. recommended).
7. Height above ground to top a meter enclosure - 4'0" min., 6'0" max.
8. Customer's service equipment enclosure as required by the National Electrical Code.
9. See Figure #30 for approved conduit material - furnished and installed by customer.
10. Continuous #4 soft drawn bare copper under protective cover terminated at the meter ground bus connection.
11. Additional service connections as required.
12. Depth to be 18" min. if in conduit, 24" min. if cable is direct buried.
13. Approved driven ground rods - 2 required.
14. Insulating bushing furnished and installed by customer.
15. Cable by Company or customer, minimum depth of trench 24"* (See Section IV, Paragraph 34 and 35.)
16. Warning ribbon 12" above direct buried conductor.

NOTES:

1. Installation and equipment ratings must be adequate for the load to be connected. 200 ampere positions may require a different arrangement.
2. Customer's wiring to be in accordance with the National Electrical Code.
3. A maximum of three (3) meters bussed together where all mobile homes are electrically heated.
4. All 120 volt single phase utilization receptacle outlets must have approved ground fault circuit protection. Example: 15 or 20 amp.

*See specification #1 for details of cable.

FIGURE 28

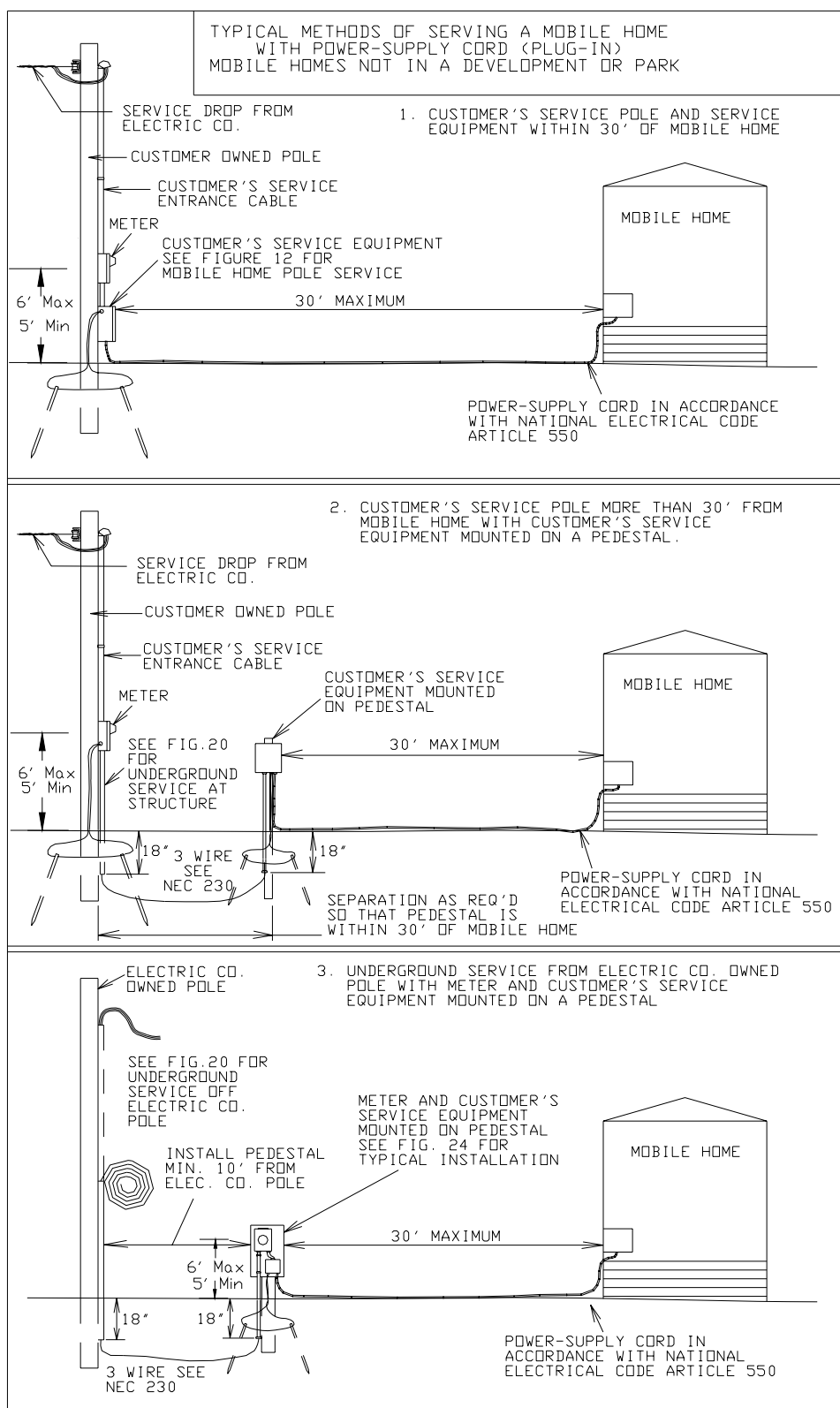


FIGURE 28A

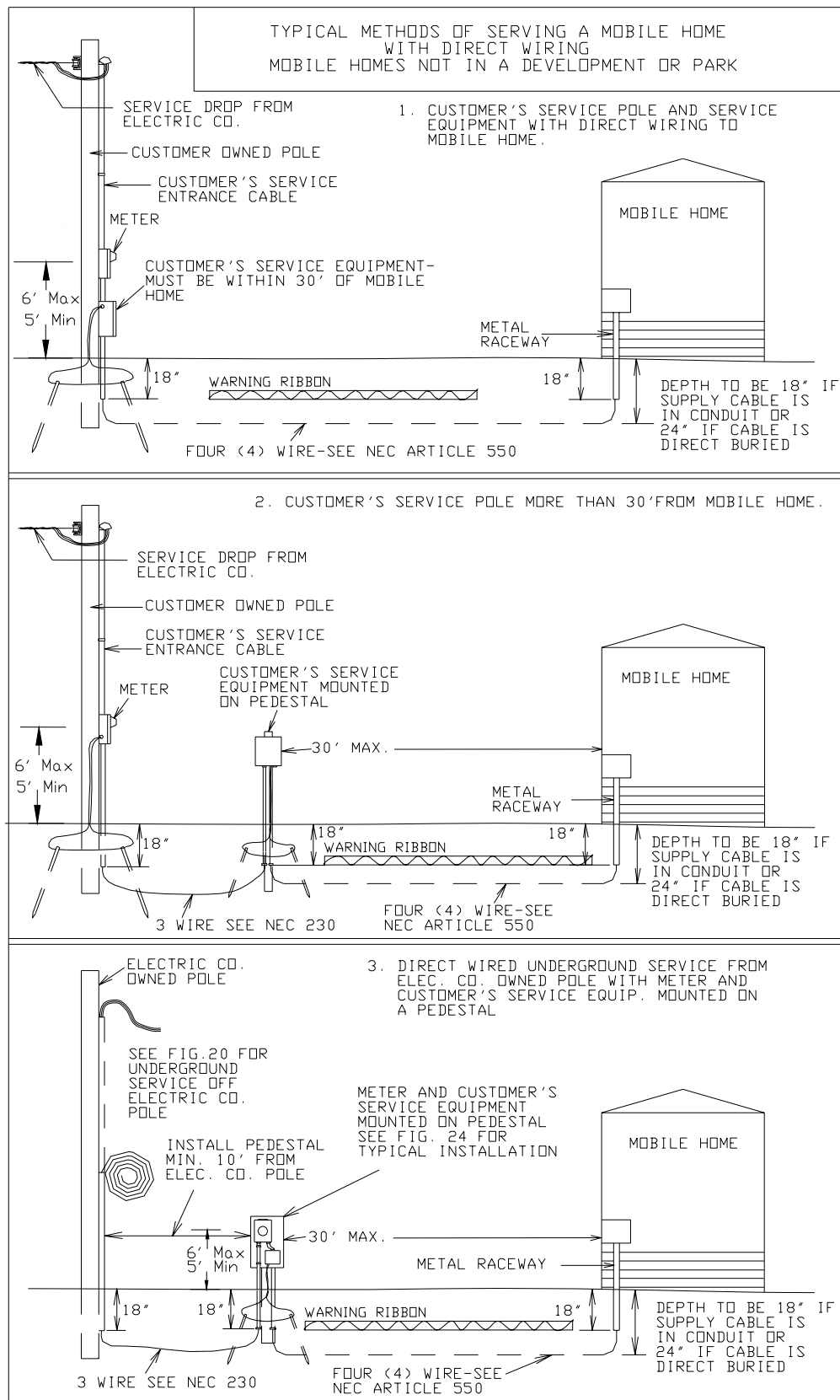


FIGURE 29

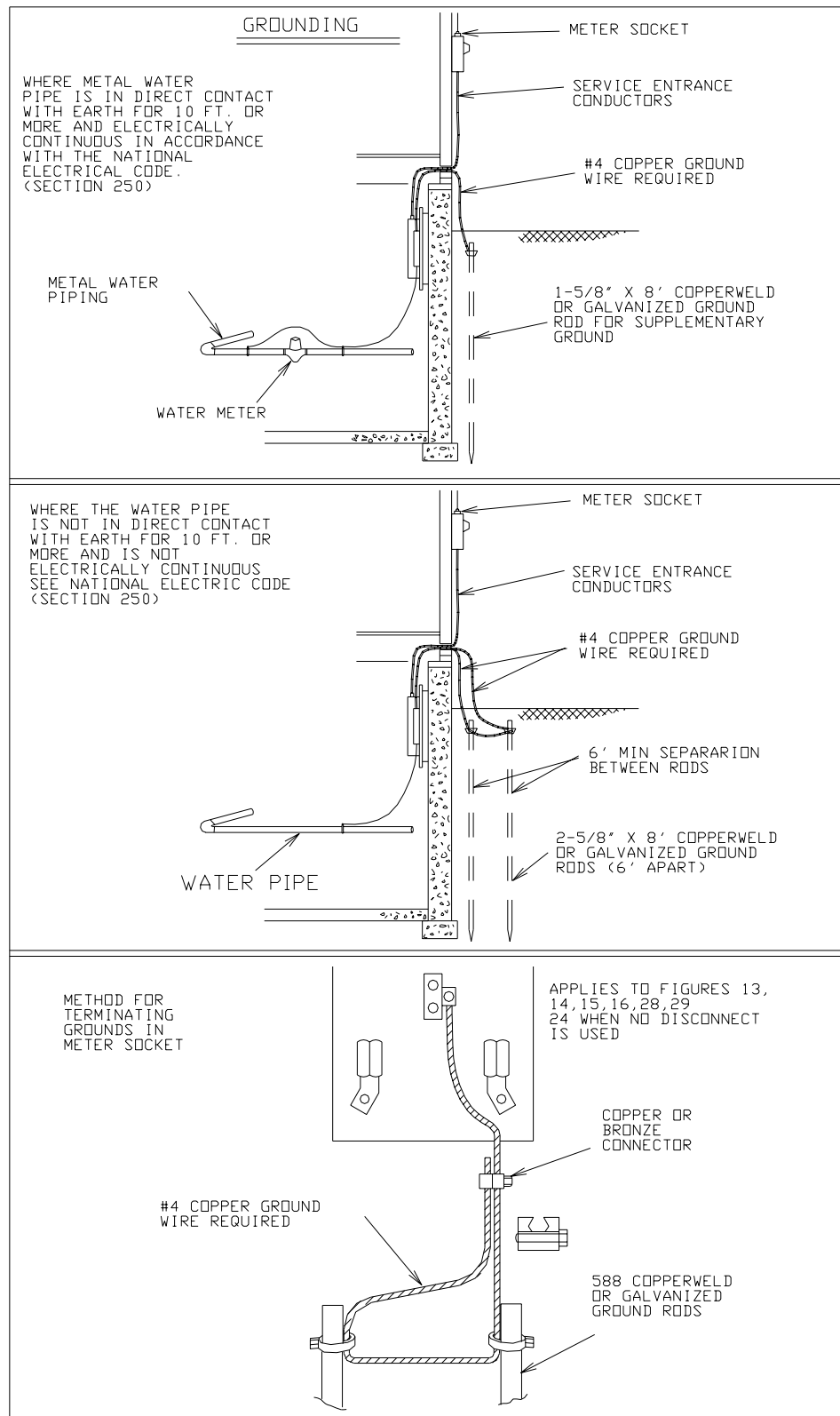
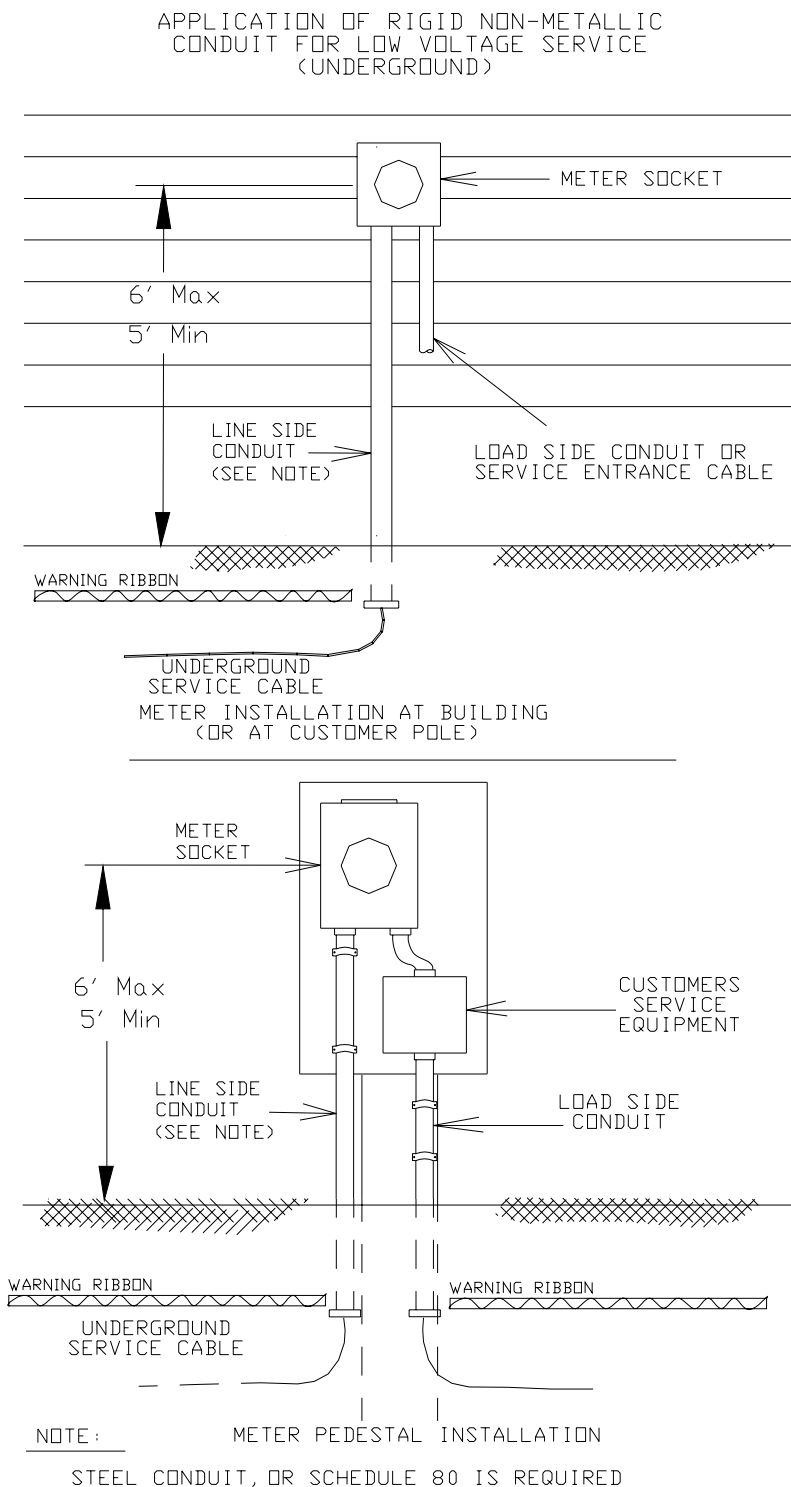


FIGURE 30

JOINT METERING LOCATIONS

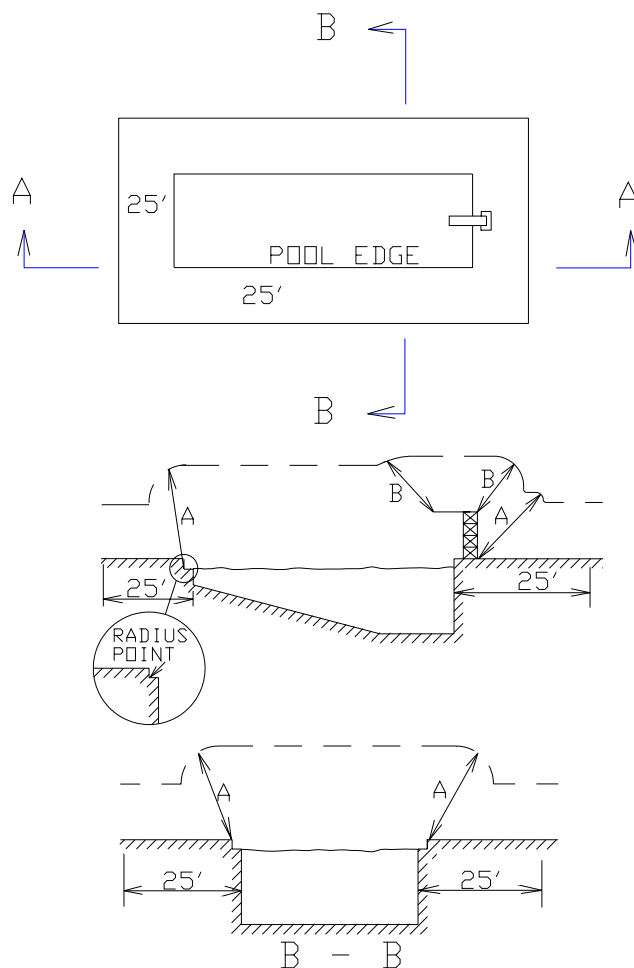
PLEASE REFERENCE THE ELECTRIC DISTRIBUTION
ENGINEERING AND CONSTRUCTION STANDARDS
(UNDERGROUND), SECTION #3-TRENCHING FOR
APPROPRIATE CLEARANCES

FIGURE 31A**JOINT METERING LOCATIONS**

PLEASE REFERENCE THE ELECTRIC DISTRIBUTION
ENGINEERING AND CONSTRUCTION STANDARDS
(UNDERGROUND), SECTION #3-TRENCHING FOR
APPROPRIATE CLEARANCES

FIGURE 32

CLEARANCE REQUIREMENTS FOR CONDUCTORS PASSING OVER THE SWIMMING POOL OR LAND WITHIN 25 FEET OF THE EDGE OF THE SWIMMING POOL.



SUPPLY LINE CONDUCTORS, STREET LIGHTING CONDUCTORS AND SERVICE DROPS

	NEUTRALS AND GUYS	CABLED SUPPLY	OPEN SUPPLY LINE CONDUCTORS		VOLTAGES PHASE TO GROUND
		0 - 750V	0 - 750V	750V TO 22KV	
A. CLEARANCE IN ANY DIRECTION FROM THE EDGE OF POOL. BASE OF DIVING PLATFORM OR ANCHORED RAFT.	22'	22' 6"	23'	25'	
B. CLEARANCE IN ANY DIRECTION TO THE DIVING PLATFORM OR TOWER.	14'	14' 6"	15'	17'	

THE ABOVE CLEARANCES MUST BE MET WHEN NEUTRALS, GUYS AND CABLED SUPPLY CONDUCTORS ARE AT SAGS OF 120°F AND OPEN SUPPLY LINE CONDUCTORS ARE 200°F.

SWIMMING POOL CLEARANCE

It is the policy of the Company that all electric facilities, Company owned or customer owned should be in accordance with applicable codes and local ordinances.

The National Electrical Code and The National Electrical Safety Code provide guidelines for clearance of conductors passing over swimming pools or surrounding land within 25 feet from the edge of the swimming pool.

Customers shall be requested to relocate any swimming pool (above grade pool or proposed below grade pool) to correct any violation created by the improper placement with respect to NYSE&G Corp. overhead lines.

Clearances for Installation of Electrical Facilities Near Pools

Conductor clearances shall be in accordance with Figure #31.

WHEN CUSTOMERS CREATE "POTENTIAL HAZARDS":**The Company Will At Its Own Expense:**

1. Replace or relocate service drop conductors to a new point of attachment established by the customer's electrical contractor to provide adequate clearance.

The Company Will At Customer's Expense:

1. Relocate poles and conductors that are part of a service lateral, including the installation of an additional service support pole in a short span if this will provide adequate clearance.
2. Relocate poles and conductors that are part of a line on easements at a customer's request assuming the customer provides any additional easements necessary.

XVI. SPECIFICATIONS

Specification #1

Specification for Direct Buried Installation of Underground Service
to Residential Buildings (URD-Single Family Dwellings)

Specification #2

Specification for Customer's Preassembled Meter Pedestal

Specification #3

Specification for Customer Supplied 100 Ampere
and 200 Ampere Self-Contained, Non-Bypass Meter
Socket

**SPECIFICATION #1: FOR DIRECT BURIED
INSTALLATION OF UNDERGROUND SERVICE
TO RESIDENTIAL BUILDINGS
(URD-SINGLE FAMILY DWELLINGS)**

The following materials and methods are approved by the New York State Electric & Gas Corporation for use by the applicant when installing a direct buried service lateral to a single family dwelling in a subdivision where the electric distribution facilities are underground.

A. Services

1. Material

The service cable assembly shall consist of aluminum or copper phase conductors, insulated with .080 inches black cross-linked polyethylene and a neutral conductor, insulated with .080 inches black cross-linked polyethylene with yellow or yellow striped coloring. The two phase conductors and one neutral conductor are to be triplexed and rated at 600 volts, manufactured and tested in accordance with the specifications of the ICEA publication # S-66-524, NEMA publication # WC7, latest edition or, Underground Service Entrance Cable (USE rated). The conductor shall be sized per the National Electrical Code (NEC) Article 310.

B. Sizes

1. 150 Amp Service – Minimum Size Permitted
2. 200 Amp Service
3. 400 Amp Service

C. Services larger than 400 Amp

For loads requiring installation of a service rated at more than 400 amperes, consult the New York State Electric & Gas Corporation.

D. Service Location

The New York State Electric & Gas Corporation will designate the service connection point at the building and the point the service lateral will connect to the electric distribution lines or equipment.

E. Installation

1. A continuous length of cable, free of splices, shall be direct buried with a minimum of 24 inches of cover from the meter to the point of connection with the utility system.
2. The cable shall be protected with conduit as it enters the meter as shown on Figure 23. Under driveways, sidewalks, patios, and other paved areas the cable must be protected by approved conduit. This conduit may be:
 - a. Fiber, or similar duct material encased in a 3" concrete envelope.
 - b. Galvanized steel conduit. If steel conduit is used, an insulating bushing shall be installed at each end of conduit.
 - c. Non-metallic duct designed and approved for use without a concrete envelope or other covering.
3. Underground service conductors that are not encased in concrete and that are buried 18" or more below grade shall have their location identified by a warning ribbon that is placed in the trench at least 12" above the underground installation.
4. The backfill must be soil, free of rock, stone, or other foreign material.
5. The customer will make all connections in the meter or entrance box, and install service to within 2 ft. of handhole or transformer foundation and leave 10 ft. of cable coiled. (See Figure 23.)
6. Cable ends will be adequately sealed. The cable is to be protected and left for inspection by an authorized inspection organization acceptable to the Company.
7. Upon receipt of a certified inspection, the New York State Electric & Gas Corporation will connect the service cable to its distribution system.

F. Inspection

Service cable which is installed by the applicant must be inspected and approved by an authorized inspection organization acceptable to the Company before the cable trench may be backfilled.

**SPECIFICATION #2: FOR CUSTOMER'S
PREASSEMBLED METER PEDESTAL**

1. The pedestal unit shall be submitted to the Company for review prior to purchase.
2. The pedestal to be constructed of minimum #14 gauge zinc coated steel.
3. Base of pedestal to be suitably corrosion protected for padmounting in outdoor atmosphere or for setting in concrete and earth.
4. The meter compartment **shall not** be of the enclosed or overall enclosure type.
5. At least one side of the pedestal to be hinged or removable for access to the interior, with a provision for padlocking.
6. The line terminals and socket terminals to be prewired and shall be located in a separate wireway from the load terminals or outlets.
7. Access to the line terminals to be possible only through a door or cover with provision for padlocking.
8. The socket terminal blocks to be of porcelain or phenolic and mounted to provide adequate support.
9. Meter sockets to be of the ringless type with a fifth (5th) terminal provided on the meter block and mounted in the 9 o'clock position.
10. Line terminals shall be capable of accepting #1/0 AWG-350 MCM copper or aluminum conductors.
11. Pedestal to be able to withstand without damage a concentrated force of 70 lbs. applied to the meter socket.
12. When supplied with--
 - a. Main breaker--continuous current rating shall be 150 amperes minimum.
 - b. Main breaker--shall have interrupting rating of 10,000 amperes minimum.
 - c. Receptacles--shall have provision for receptacle(s) and a permanent wiring method in accordance with the National Electrical Code.

13. Ground lugs shall be of adequate size to accommodate 2-#4 AWG copper ground wires.
14. Extra care should be taken to install posts, pedestals and meters in a true vertical position.
15. See Figure #25 for drawing and installation specifications.

**SPECIFICATION #3: FOR CUSTOMER SUPPLIED
100 AMPERE AND 200 AMPERE SELF-CONTAINED
NON-BYPASS METER SOCKET**

For residential services, the Customer will install, own and maintain all 100-ampere and 200-ampere self-contained, non-lever bypass type meter sockets. Meter sockets supplied by the Customer must meet the following requirements:

Conform to the latest revision of ANSI/UL 414, ANSI C12.7, NEMA 250, NFPA and other relevant standards.

Must be UL approved and carry the UL label.

Be of a ringless design and include a horn style by-pass mechanism suitable for connecting insulated jumper leads for use in installing or removing the meter. This enables the Company to test or exchange the meter without causing a service interruption.

At minimum, the enclosure of the meter sockets must be of NEMA TYPE 3R design (an enclosure intended for outdoor use to provide a degree of protection against windblown dust and rain). Other NEMA TYPE designs or enclosures with multiple TYPE designs are allowed as long as the minimum environmental requirements of TYPE 3R are met.

Have a sealing mechanism, which allows the socket cover to be sealed to the meter socket body by a Company padlock seal. The sealing mechanism must be made of stainless steel.

Individual meter sockets shall be rated for 100 amperes or 200 amperes continuous load. For a 100 ampere service it is permissible to use a higher rated meter socket up to 200 amperes continuous.

Each position of a ganged meter socket shall be rated for 200 amperes continuous. The design of a ganged meter socket shall allow for the cover to be opened, closed, and sealed individually.

The Company shall furnish all meter sockets for non-residential accounts and for any service greater than 200 amperes. If self-contained, these meter sockets are required to have a single handle, lever operated by-pass, which locks the meter blades in the socket jaws. This by-pass mechanism enables the Company to test or exchange the meter without causing an interruption in service.

Specifications for meter sockets of more than four positions and meter pedestal assemblies shall be submitted to the Company for review and concurrence prior to purchase. Only multi-socket equipment specifically designed for that

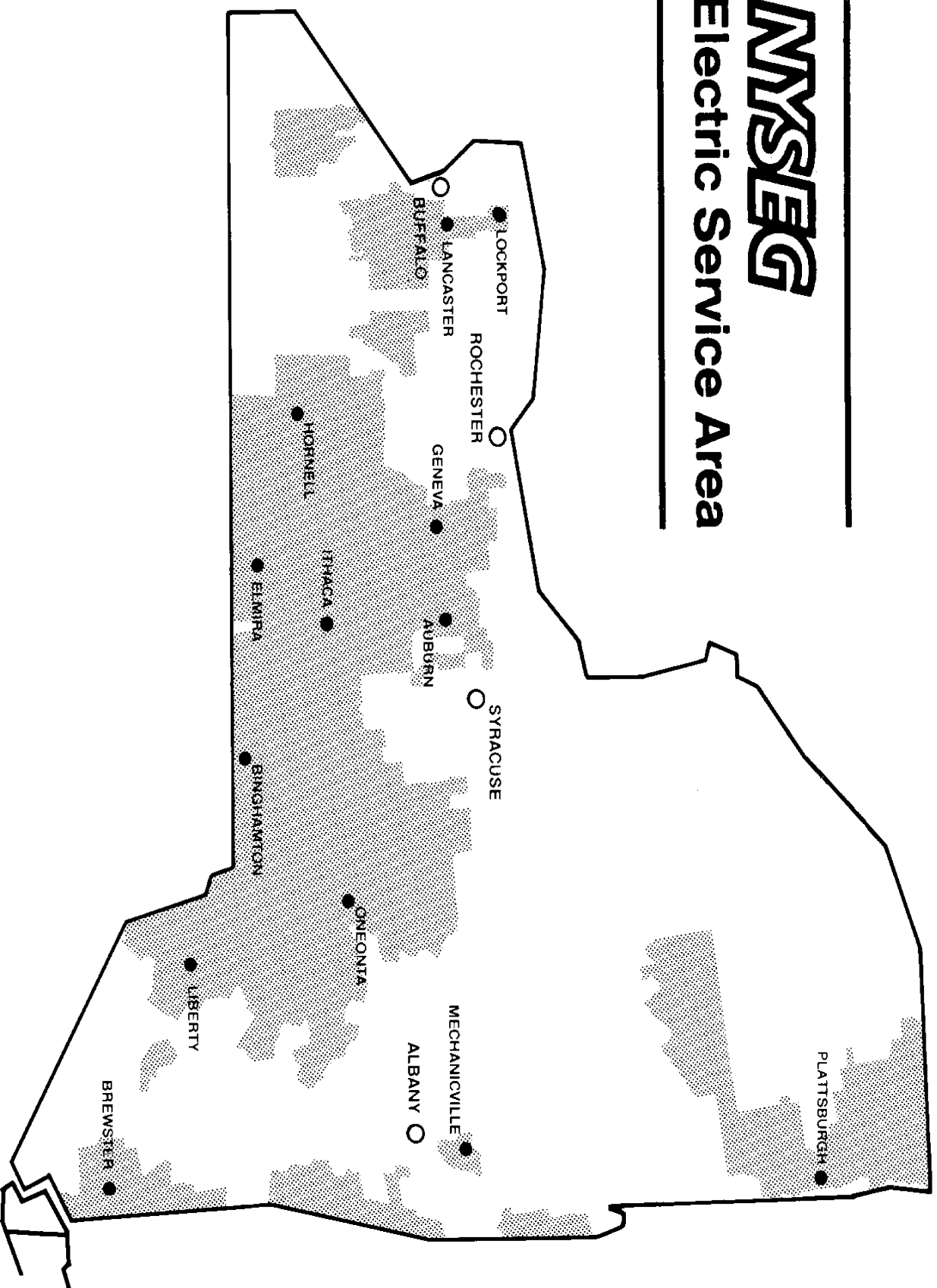
application will be used to feed additional meter positions. (For example, two, two-position multiple socket assemblies will not be used as a four-position assembly, the second fed from the first.) For additional information on pedestal assemblies, see Figure 25 and adjoining installation specification.

UPDATE HISTORY

REVISED SHEETS		MODIFICATION
SECTION	PAGE	
XV	78-79	DATE: 9/8/03 REMOVED FIGURES 31 & 31A REVISED BACK TO EXISTING CLEARANCES FOR APPROPRIATE CLEARANCES: REFERENCE ELECTRIC DISTRIBUTION ENGINEERING AND CONSTRUCTION STANDARDS – UNDERGROUND – SECTION 3

NYSEG

Electric Service Area



APPENDIX K

NYSEG Gas Details

SECTION 3 - TRENCHING

(Underground)

DISTRIBUTION STANDARDS MANUAL

CONTENTS

DIRECT BURIED CONDUCTOR CLEARANCE

FROM OTHER UNDERGROUND STRUCTURES1.1,1.2

TRENCH

SELECT BACKFILL MATERIALS2.1

DIRECT BURIED CABLE SYSTEMS.....2.2

JOINT TRENCH

RANDOM SEPARATION WITHOUT GAS.....3.1

ELECTRIC AND GAS CONSTRUCTION NOTES.....3.2,3.3

ELECTRIC AND GAS ON ROAD-SIDE OF TRANSFORMER.....3.4,3.5

ELECTRIC AND GAS ON HOUSE-SIDE OF TRANSFORMER.....3.6,3.7

GAS & ELECTRIC SERVICE3.8,3.9,3.10,3.11

ELECTRIC AND GAS CROSS SECTION3.12

G51 (TRENCH IN A CONDUIT SYSTEM)

INDEXx1.0

H51 [TRENCHING (FOR CABLES OVER 200 AMPS)]

INDEXx2.0

J51 (TRENCHING)

INDEXx3.0

SECTION 3 - TRENCHING

(Underground)

FROM OTHER UNDERGROUND STRUCTURES

It is NYSEG's preferred construction practice to maintain at least 12" horizontal separation from other underground structures in accordance with NESC Article 352a. This can include other power or communication facilities which are not in agreement with this random separation (NESC 354).

Where 12" horizontal separation cannot be obtained, a vertical separation may be applied as per NESC Article 352c.

NESC Article 352b identifies the vertical clearances for crossing that is generally accepted to be 12".

If gas is a joint party, page 3.12 typifies the installation without consideration for "other structures".

*** CAUTION MUST BE USED AS ALL PARTIES INVOLVED MUST AGREE TO THE METHOD. REFER TO PAGE 1.2 FOR DETAILS.**

DIRECT BURIED CONDUCTOR CLEARANCE

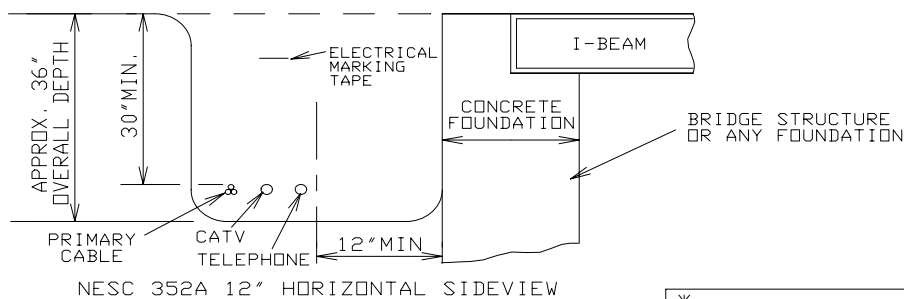
ISSUE NO. 1 DATE: MARCH 1992 DR. MJU CKD. RJN APPR. JAS

SECTION 3 - TRENCHING

(Underground)

FROM OTHER UNDERGROUND STRUCTURES

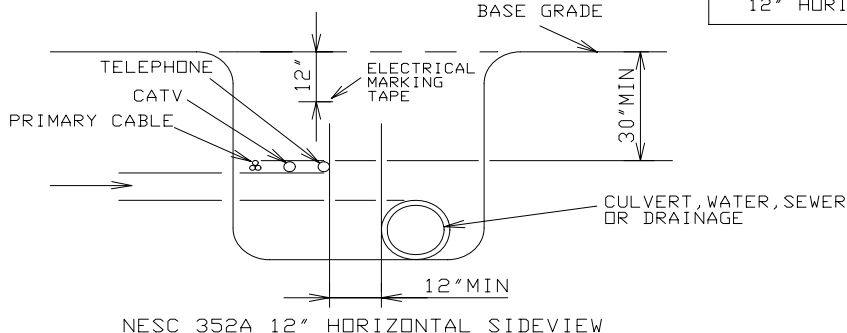
①



②

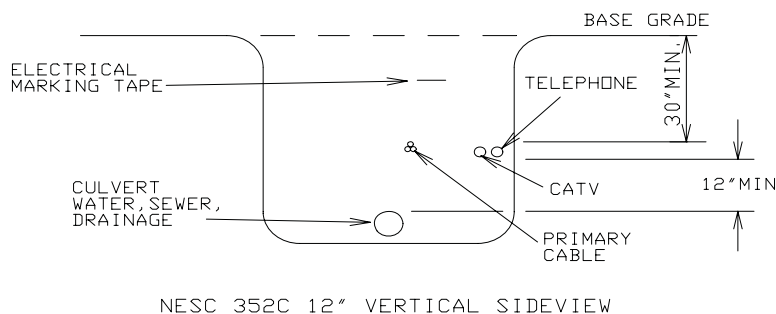
IN RANDOM
SEPARATION
IN ALL
EXAMPLES

NO VERTICAL
SEPARATION
REQ'D BY CODE

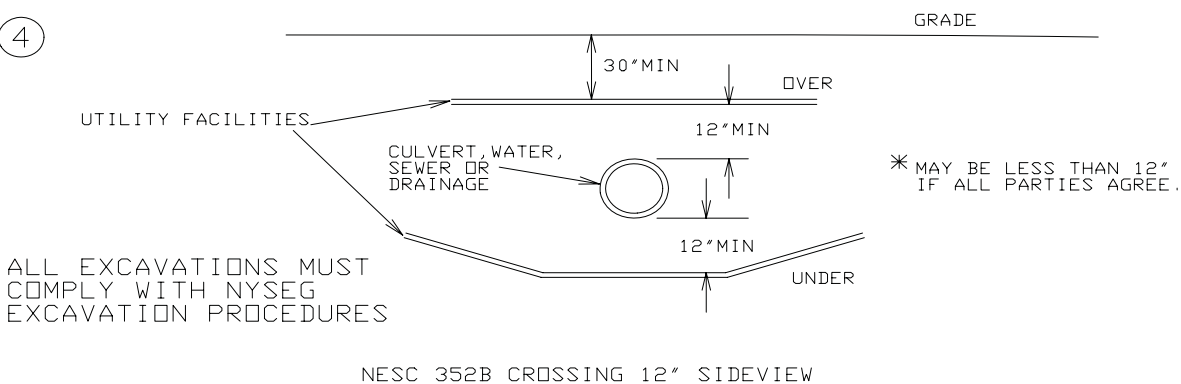


* PREFERRED PRACTICE
12\" HORIZONTAL

③



④



* MAY BE LESS THAN 12\"
IF ALL PARTIES AGREE.

ALL EXCAVATIONS MUST
COMPLY WITH NYSEG
EXCAVATION PROCEDURES

DIRECT BURIED CONDUCTOR CLEARANCE

ISSUE NO. 1 DATE: MARCH 1992 DR. MJU CKD. RJN APPR. JAS

SECTION 3 - TRENCHING

(Underground)

SELECT BACKFILL MATERIALS

USE

Select backfills shall be used to provide mechanical protection for underground distribution cables while not enhancing corrosion activity on bare concentric neutrals. These backfills can be especially useful in areas where a high percentage of rock exists in the soil.

Select backfill does not need to be used in areas where the native backfill is uniform and is clear of material that might damage the cable system.

REQUIREMENTS

The select backfill material shall in all cases be made up of sand particles with grain sizes of which at least 50 percent (by weight) will pass through a No. 200 (mesh per inch) sieve. ASTM Standard D-2487 shall be used as the guide for performing the sieve analysis and for classifying the backfills grain size distribution.

Acceptable ranges for the particle distribution of a backfill are as follows:

Mechanical Analysis

<u>Sieve Size</u>	<u>Particle Distribution</u> (percent finer by weight)
3/8"	100
No. 40	60 to 90
No. 200	50 or more

The grain size distribution of the select backfill shall be checked routinely with at least two (2) samples per supplier taken yearly. Test results from a soil testing laboratory shall be received for each sample. A copy of the test results and any questions concerning the adequacy of a particular select backfill should be forwarded to the Distribution Engineering Section of Power Delivery Operations.

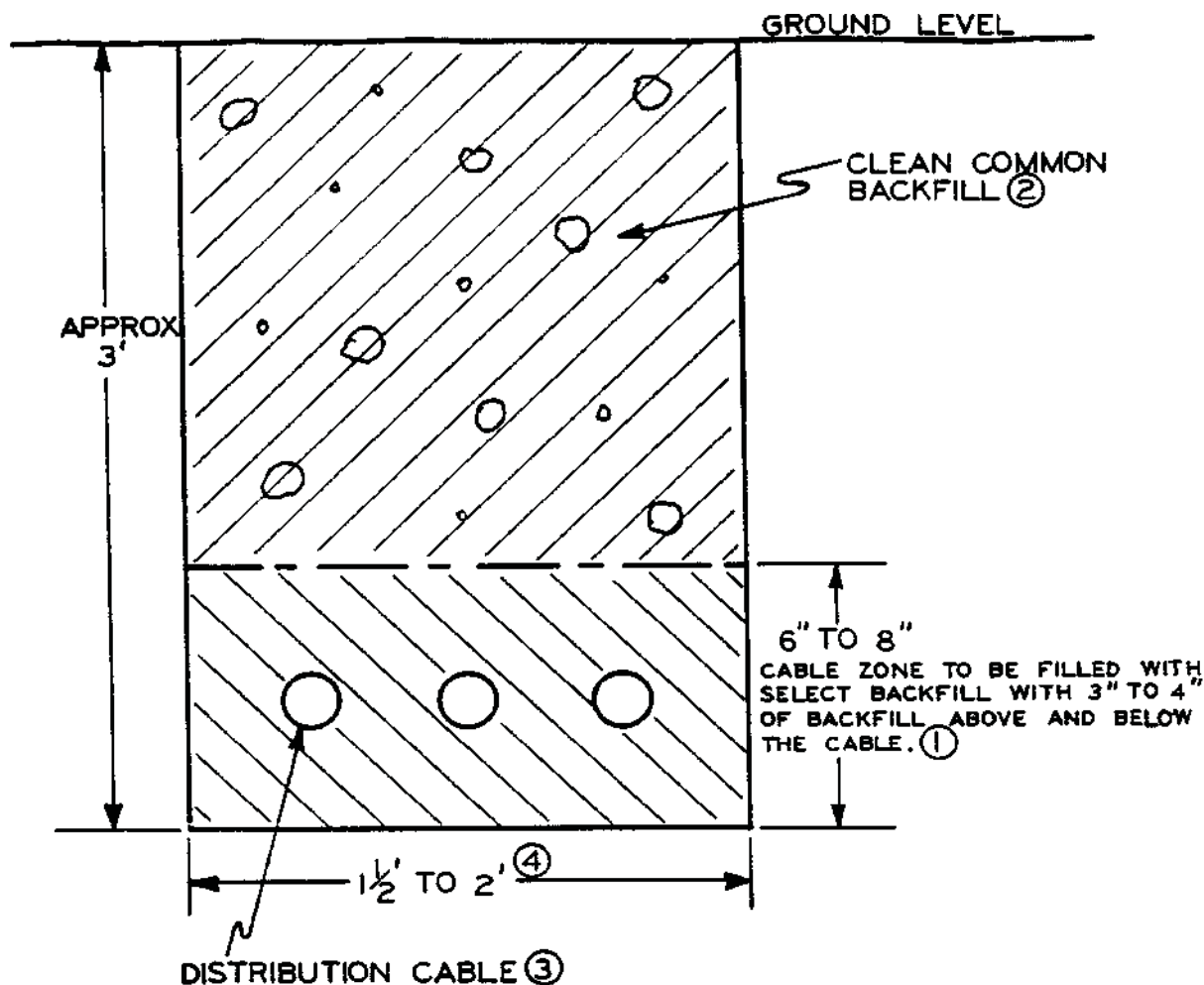
TRENCH

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SECTION 3 - TRENCHING

(Underground)

DIRECT BURIED CABLE SYSTEMS



NOTES:

1. Refer to page 2.1 for the specifications covering the supply of select backfill.
2. Clean common backfill is defined as soil that is free of debris including large (2") stones, or any other objects that might damage the cable system.
3. The trench cross section also applies to single-phase installations.
4. Width may vary to accommodate joint trench installations. Refer to pages 3.1-3.7 for joint trench requirements.

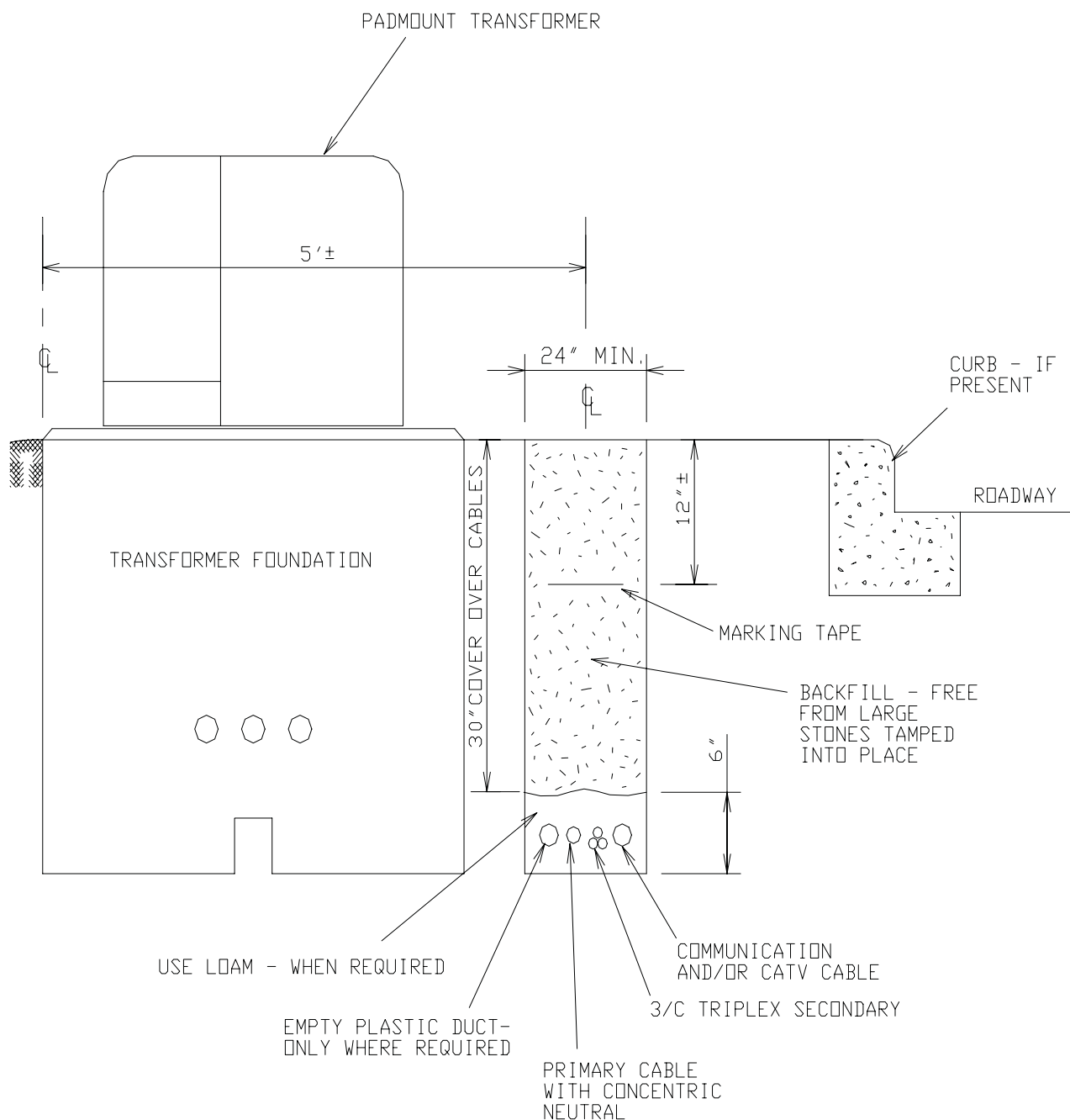
TRENCH

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SECTION 3 - TRENCHING

(Underground)

RANDOM SEPARATION WITHOUT GAS



ALL EXCAVATIONS MUST COMPLY WITH
NYSEG EXCAVATION PROCEDURES.

JOINT TRENCH

ISSUE NO. 2 DATE: MARCH 1992 DR. MJU CKD. RJN APPR. JAS

SECTION 3 - TRENCHING

(Underground)

ELECTRIC AND GAS CONSTRUCTION NOTES

The following notes apply to the installation of gas and electric facilities in joint trench arrangements. These notes apply to Gas Standards 181.6.2 to 181.6.12 and Electric Standards, pages 3.2 -3.12.

1. As always, good coordination between all of the joint trench parties [electric, gas, cable television (CATV), and telephone and the customer or contractor] is essential if cost savings associated with joint trenching are to be maximized.
2. If work in an existing joint trench is necessary, follow all approved company procedures for locating the facilities.
3. Reference the appropriate Section 3 standards for construction details covering gas and electric joint trench installations.
 - a. Separators (spacers) should be spaced, as needed, to maintain a 12-inch separation between gas and random lay facilities (i.e. electric, telephone and CATV).
 - b. Gas service tees should be installed in conjunction with road crossing work.
 - c. The electric meter shall be installed on the front corner on the end of the house. The gas meter shall be installed near the electric meter, but sufficiently toward the rear of the house in order to:
 - 1) Maintain a 12" minimum horizontal separation between the gas meter regulator and the electric meter cabinet.
 - 2) Maintain a 6" minimum horizontal separation between any gas piping and the electric meter cabinet.
 - d. Gas regulator should be located at least 18 inches away from any opening into the structure. Where practical, the gas regulator should not be located under a window capable of being opened.
 - e. Electric lines should be installed below gas facilities at crossings. Vertical separation between electric and gas facilities shall be as follows:

	<u>*PREFERRED</u> <u>VERTICAL CLEARANCE</u>	<u>**ALTERNATE</u> <u>VERTICAL CLEARANCE</u>
Gas Main Line	6" minimum	2" minimum
Gas Service Line	6" minimum	2" minimum

* Backfill should be well-compacted so as to minimize settling such that this separation is maintained.

** Alternate vertical clearances in the above table are allowed if the gas facility is adequately protected from damage that might result from the proximity of another structure. Such protection might consist of a split conduit sleeve placed under the gas facility .

JOINT TRENCH

ISSUE NO. 4 DATE: SEPTEMBER 1992 DR. MJU CKD. RJN APPR. FD

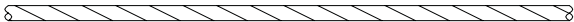
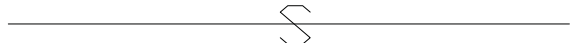




SECTION 3 - TRENCHING

(Underground)

ELECTRIC AND GAS CONSTRUCTION NOTES

- f. THE BOTTOM OF THE TRENCH SHALL BE REASONABLY LEVEL AND FREE OF ALL ROCK AND OTHER SHARP OBJECTS. IF THE FACILITIES ARE TO BE INSTALLED IN EITHER A ROCK EXCAVATION OR SOIL WHICH MAY DAMAGE IT, A BEDDING OF THREE INCHES MINIMUM OF SMALL PARTICLE-SIZE SOIL SHALL BE PLACED IN THE TRENCH PRIOR TO THE INSTALLATION OF THE FACILITIES. AS A RULE, SMALL PARTICLE-SIZE MATERIAL SHALL BE CONSIDERED AS MATERIAL WHICH IS EITHER ROUNDED AND CONTAINS PARTICLES 1/2 INCH OR LESS IN DIAMETER, OR SAND. A SMALL PARTICLE-SIZE SOIL SHALL BE PLACED OVER THE FACILITIES FOR A DEPTH OF 6 INCHES.
- g. IT IS PREFERRED THAT ALL UTILITIES SHALL BE INSTALLED AT THE SAME DEPTH (HORIZONTAL CONSTRUCTION)
- h. IF CATHODIC PROTECTION IS USED ON THE GAS FACILITIES, AND THE ELECTRIC SYSTEM INCLUDES A BARE METALLIC NEUTRAL, THE APPROPRIATE MEASURES (SUCH AS BONDING) SHALL BE TAKEN TO MITIGATE STRAY CURRENT EFFECTS ON THE BARE METALLIC NEUTRAL.
- i. GAS FACILITIES SHOULD BE INSTALLED TO THE RIGHT SIDE (AS FACING THE HOUSE) OF PADMOUNTED EQUIPMENT. A 12" SEPARATION SHOULD BE MAINTAINED BETWEEN GAS FACILITIES AND THE CONCRETE FOUNDATION FOR PADMOUNTED EQUIPMENT.
- j. FACILITY LOCATION IS PREFERRED TO BE ON PRIVATE PROPERTY. THE HIGHWAY EASEMENT CAN BE USED AS AN ALTERNATE LOCATION AS CONDITIONS DICTATE.

4. DRAWING KEY IS AS FOLLOWS:

ELECTRIC PRIMARY	
ELECTRIC SECONDARY	
ELECTRIC SERVICE	
GAS (MAIN & SERVICE)	
CONDUIT	
CATV	

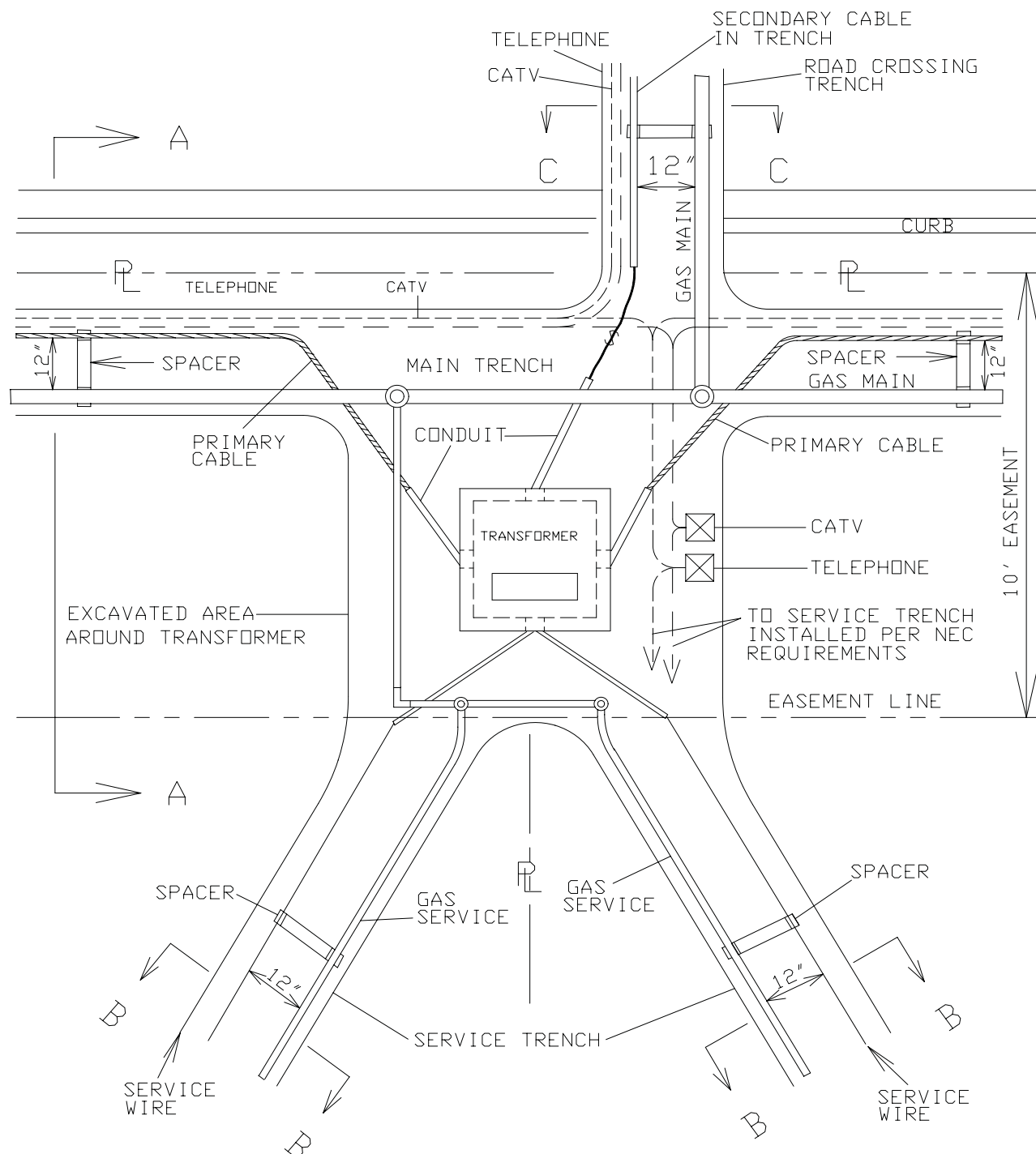
JOINT TRENCH

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SECTION 3 - TRENCHING

(Underground)

ELECTRIC AND GAS ON ROAD-SIDE OF TRANSFORMER



REFER TO PAGE 3.12 FOR SECTION DETAILS.

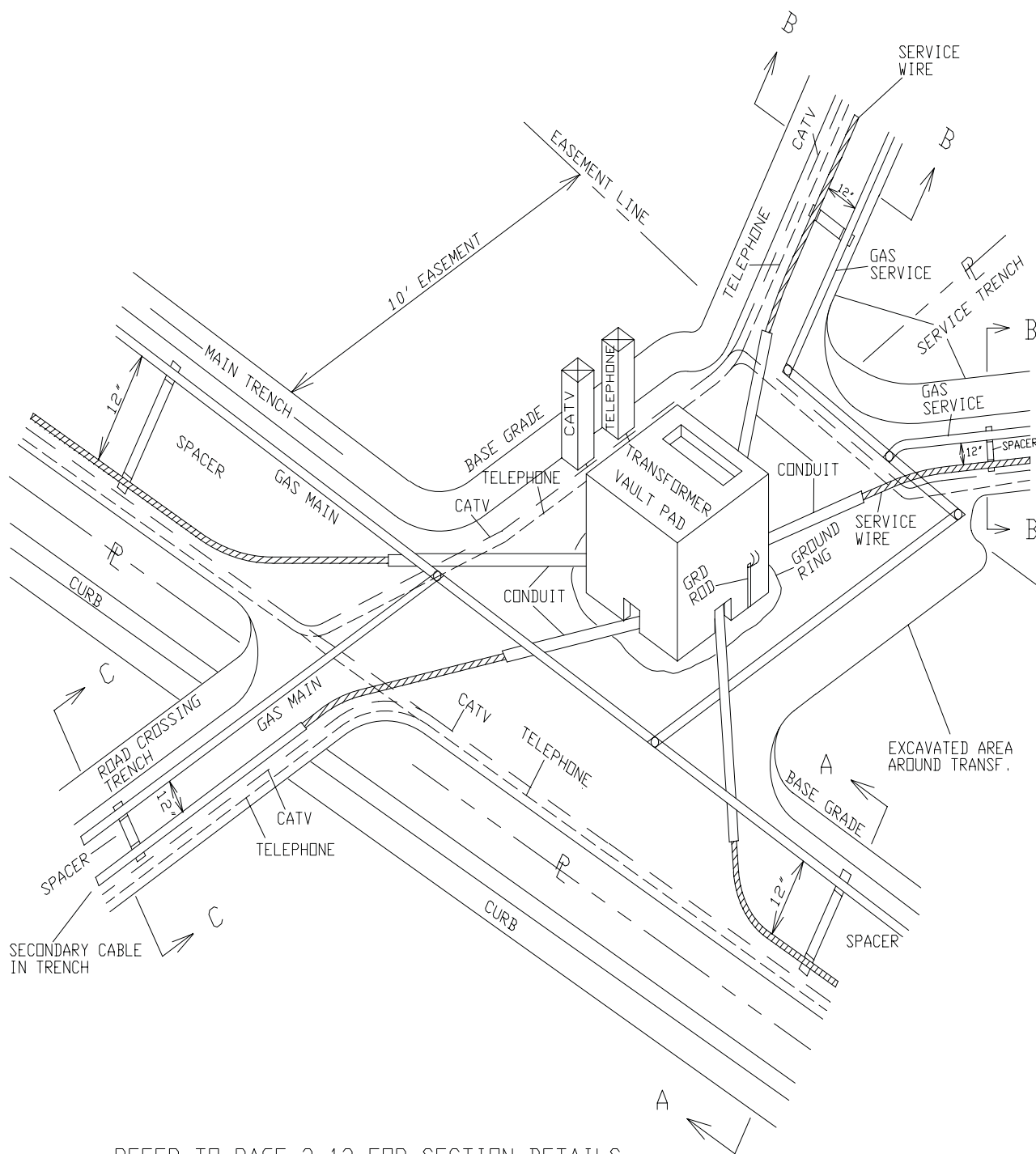
JOINT TRENCH

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SECTION 3 - TRENCHING

(Underground)

ELECTRIC AND GAS ON ROAD-SIDE OF TRANSFORMER



REFER TO PAGE 3.12 FOR SECTION DETAILS

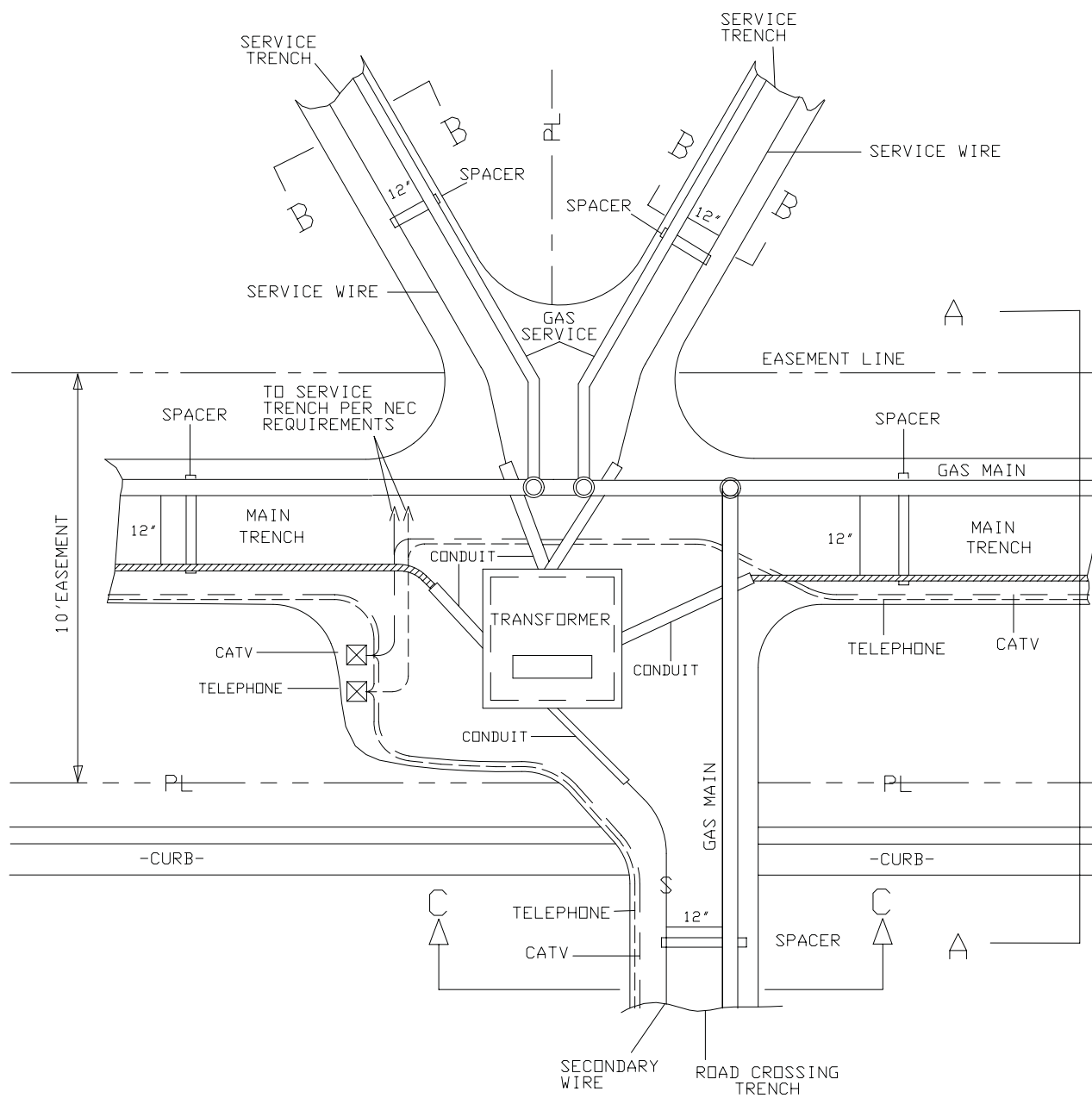
JOINT TRENCH

ISSUE NO. 4 DATE: SEPTEMBER 1992 DR. MJU CKD. RJN APPR. JAS

SECTION 3 - TRENCHING

(Underground)

ELECTRIC AND GAS ON HOUSE-SIDE OF TRANSFORMER



REFER TO PAGE 3.12 FOR SECTION DETAILS

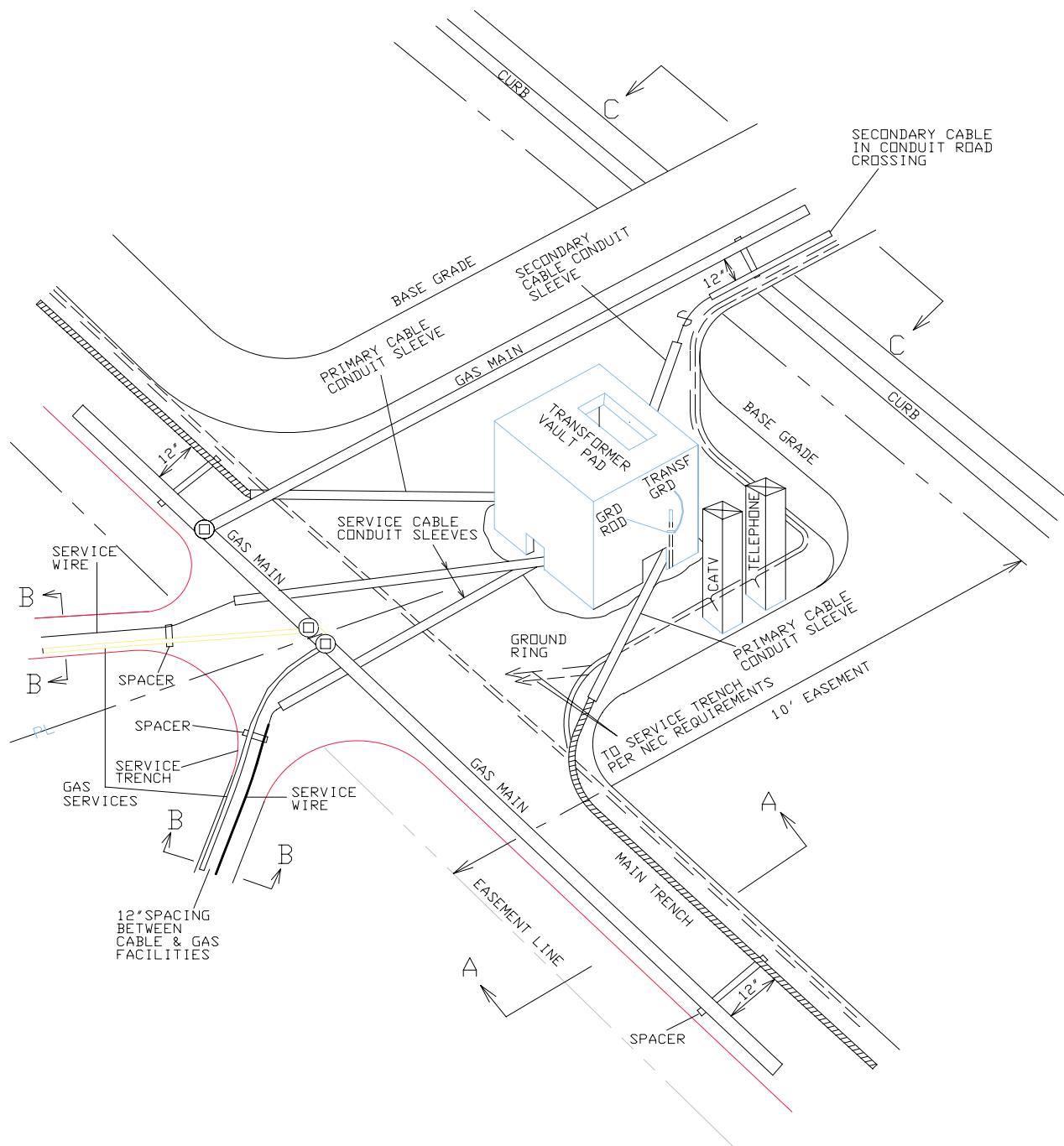
JOINT TRENCH

ISSUE NO. 4 DATE: SEPTEMBER 1992 DR. MJU CKD. RJN APPR. JAS

SECTION 3 - TRENCHING

(Underground)

ELECTRIC AND GAS ON HOUSE-SIDE OF TRANSFORMER



REFER TO PAGE 3.12 FOR SECTION DETAILS

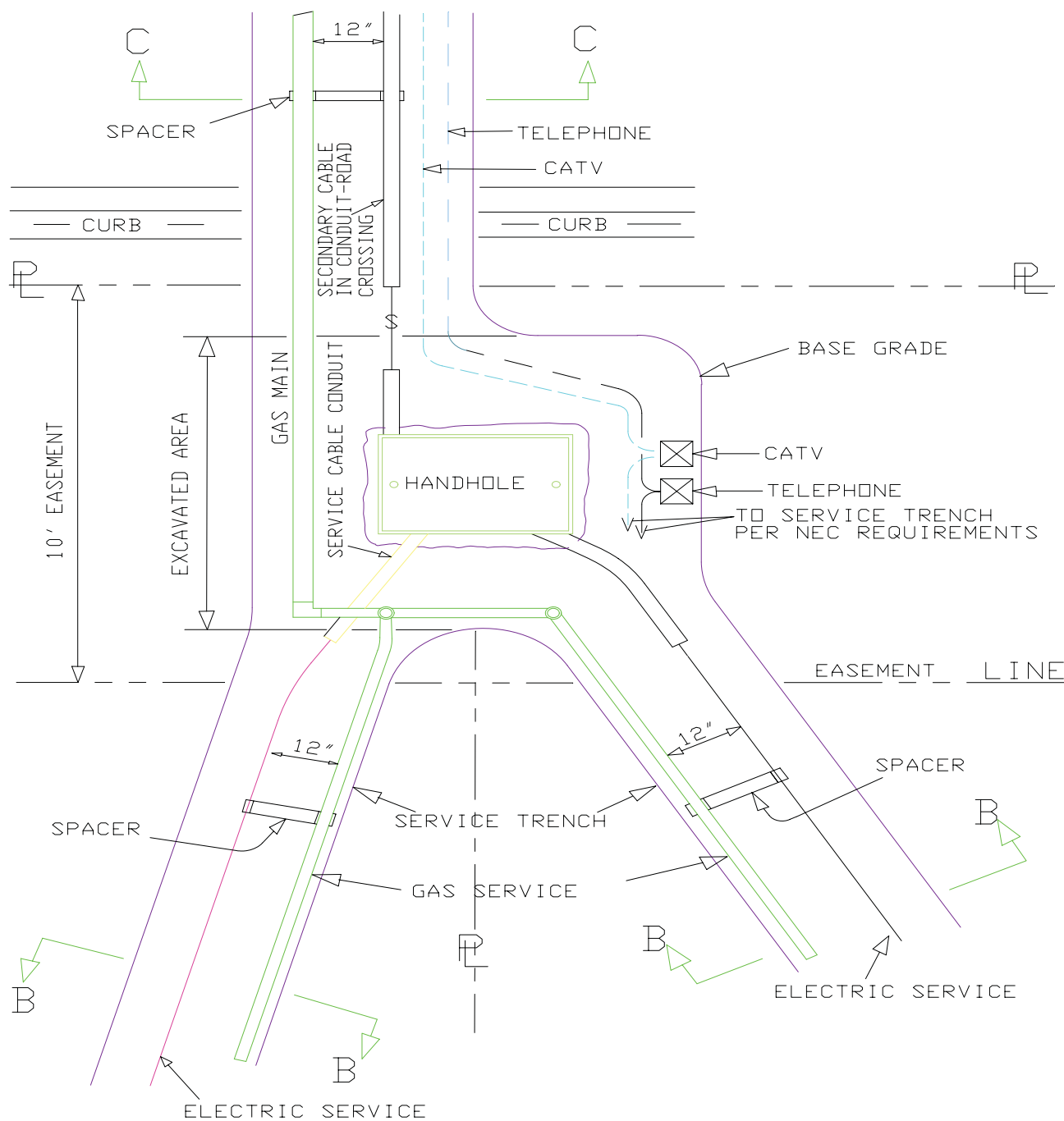
JOINT TRENCH

ISSUE NO. 2 DATE: SEPTEMBER 1992 DR. MJU CKD. RJN APPR. JAS

SECTION 3 - TRENCHING

(Underground)

GAS & ELECTRIC SERVICE



REFER TO PAGE 3.12 FOR SECTION DETAILS

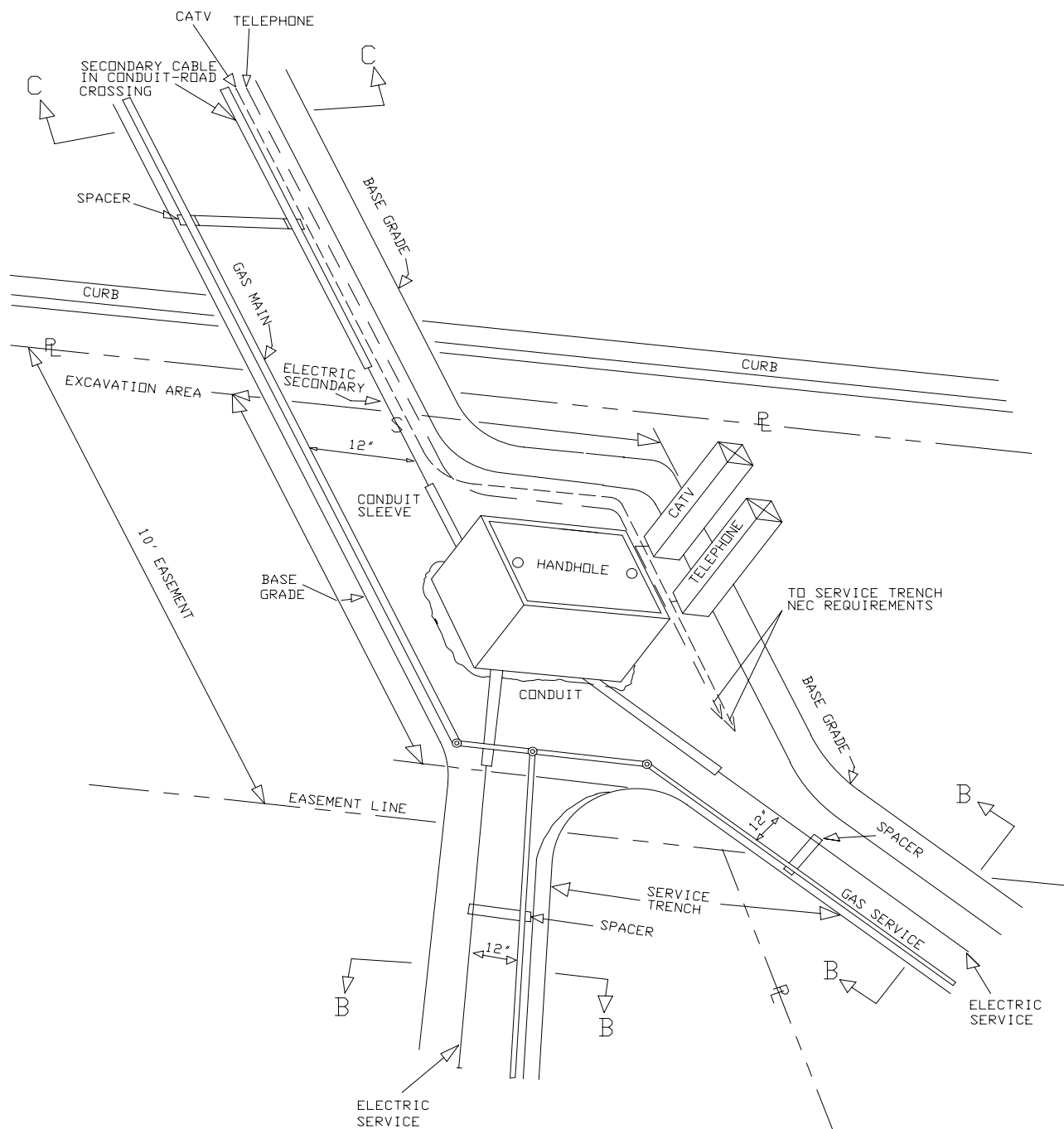
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SECTION 3 - TRENCHING

(Underground)

GAS & ELECTRIC SERVICE



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(Underground)

This diagram illustrates the required clearances and installation details for gas and electric service connections to a house. The components and dimensions shown are:

- REGULATOR VENT:** Located on the wall, with a vertical clearance of 18" from the base grade.
- GAS METER:** Mounted on the wall, with a horizontal clearance of 18" from the regulator vent and a vertical clearance of 6" from the base grade.
- ELECTRIC METER:** Mounted on the wall, with a vertical clearance of 5' OR 6' from the base grade.
- BASE GRADE:** The ground level at the point of entry into the house.
- TRENCH 24" COVER:** A trench with a 24-inch cover is shown for the service lines.
- SPACER:** A 12-inch spacer is used to maintain clearance between the trench and the base of the house.
- HOUSE FRONT:** The exterior wall of the house, featuring a window.
- GAS SERVICE:** The line connecting the gas meter to the house.
- ELECTRIC SERVICE:** The line connecting the electric meter to the house.

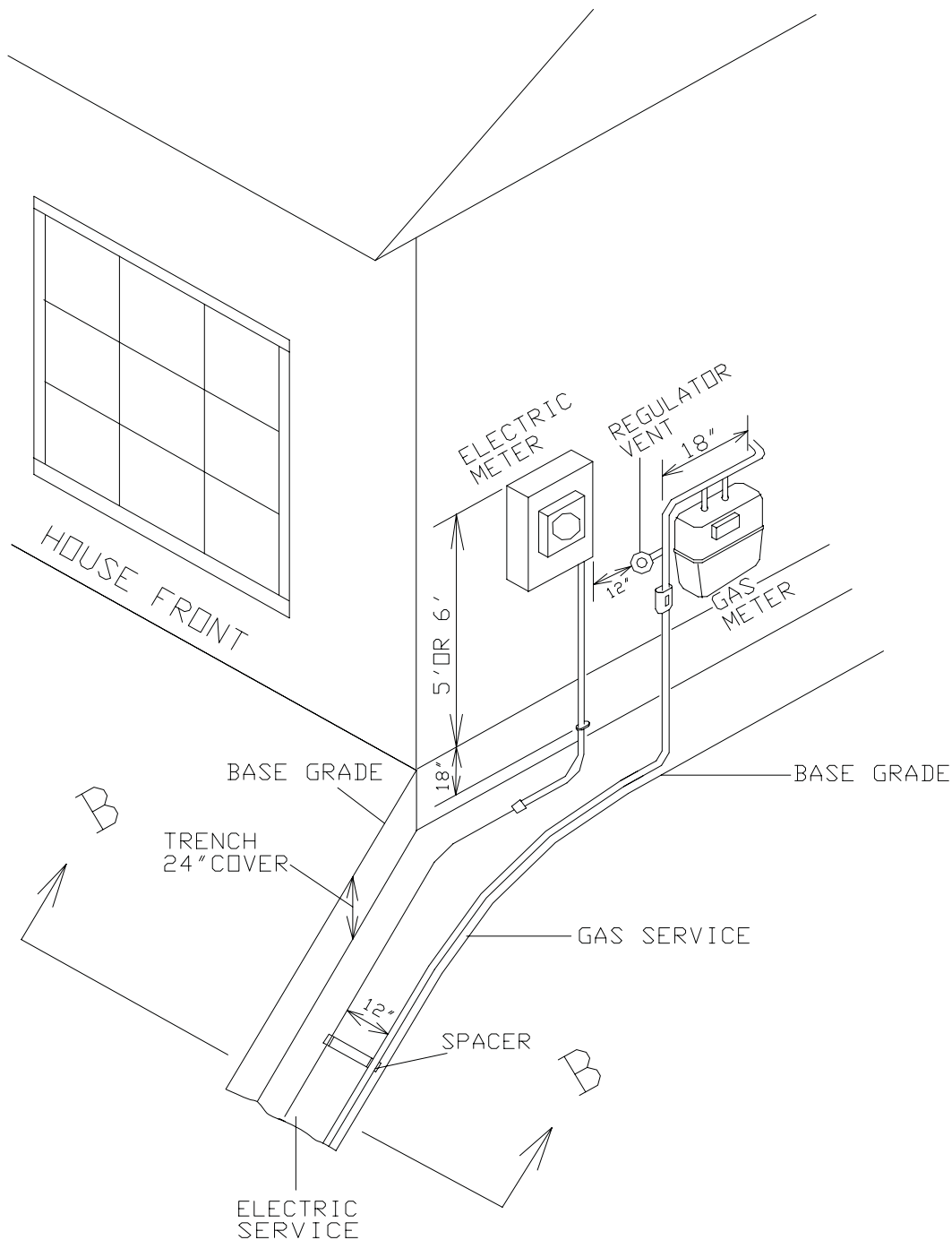
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3.10

SECTION 3 - TRENCHING

(Underground)

GAS & ELECTRIC SERVICE



REFER TO PAGE 3.12 FOR SECTION DETAILS

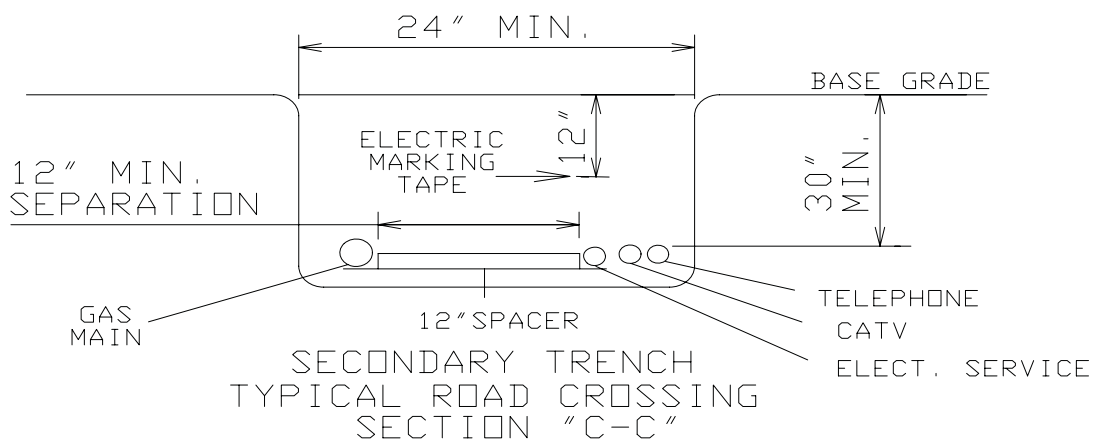
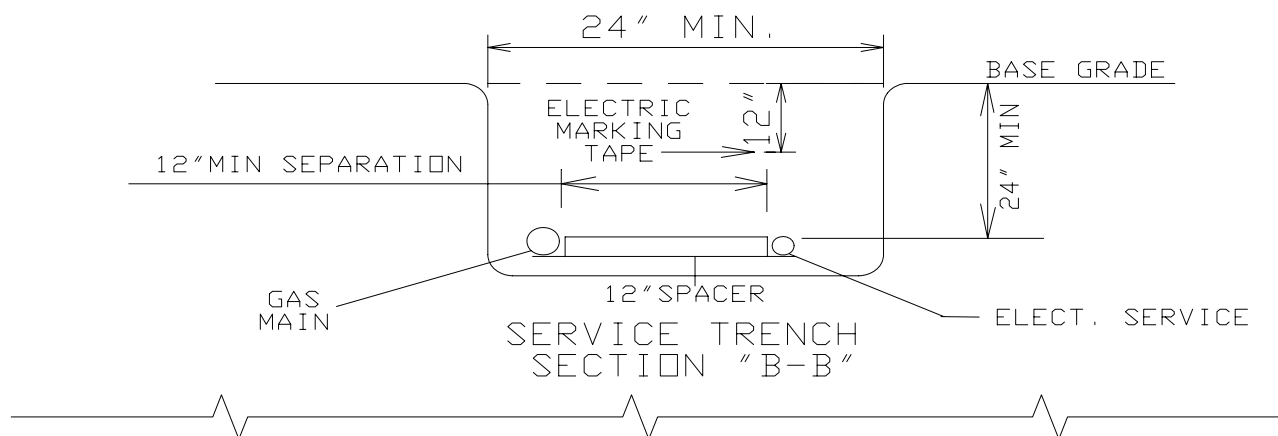
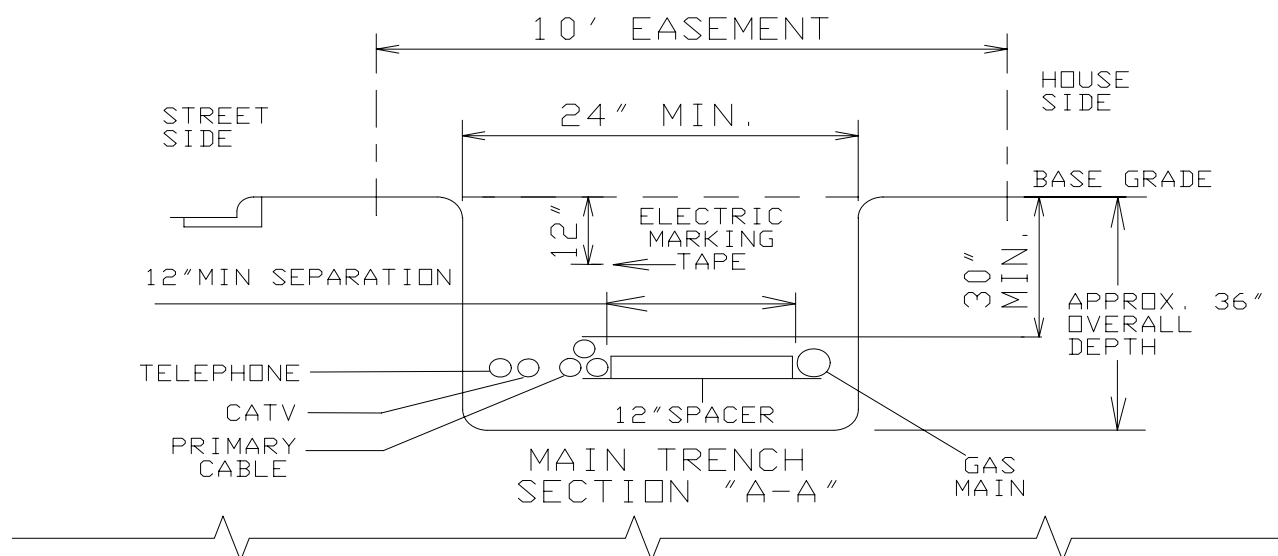
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ISSUE NO. 4 DATE: SEPTEMBER 1992 DR. MJU CKD. RJN APPR. JAS

SECTION 3 - TRENCHING

(Underground)

ELECTRIC AND GAS CROSS SECTION



JOINT TRENCH

ISSUE NO. 2 DATE: SEPTEMBER 1992 DR. MJU CKD. RJN APPR. JAS

APPENDIX L

Vehicular Traffic

Chapter 8

Household Vehicles and Characteristics

Summary Statistics from Tables/Figures in this Chapter (Updated April 2018)

Source		
Table 8.2	Vehicles per capita, 2015	0.823
	Vehicles per licensed driver, 2015	1.21
	Vehicles per household, 2015	2.10
Table 8.3	Share of households owning 3 or more vehicles	
	<i>1960</i>	2.5%
	<i>1970</i>	5.5%
	<i>1980</i>	17.5%
	<i>1990</i>	17.3%
	<i>2000</i>	18.3%
	<i>2010</i>	19.5%
	<i>2016</i>	21.0%
Figure 8.1	Average occupancy rates by vehicle type, 2009	
	<i>Van</i>	2.35
	<i>Sport Utility Vehicle</i>	1.90
	<i>Car</i>	1.55
	<i>Pickup</i>	1.49
Table 8.8	Average annual miles per household vehicle, 2009	11,300
Table 8.14	Share of workers who car pooled, 2016	9.0%
Table 8.19	Long-distance trips in the United States, 2001	
	<i>Person-trips</i>	2,554 million
	<i>Person-miles</i>	1,138 billion

The number of vehicles in the United States is growing faster than the population. The growth in vehicle-miles has slowed to 0.3% from 2005-2015. See Table 8.2 for vehicles per capita and vehicle-miles per capita.

Table 8.1
Population and Vehicle Profile, 1950–2015

Year	Resident population ^a (thousands)	Total households (thousands)	Number of vehicles in operation (thousands)	Total vehicle-miles (millions)	Number of licensed drivers (thousands)	Number of civilian employed persons (thousands)
1950	151,868	43,554	43,501	458,246	62,194	58,920
1955	165,069	47,874	56,540	605,646	74,686	62,171
1960	179,979	52,799	67,906	718,762	87,253	65,778
1965	193,526	57,436	82,066	887,812	98,502	71,088
1970	205,052	63,401	98,136	1,109,724	111,543	78,628
1975	215,973	71,120	120,054	1,327,664	129,791	85,846
1980	227,226	80,776	139,831	1,527,295	145,295	99,303
1985	238,466	86,789	157,048	1,774,826	156,868	107,150
1990	250,132	93,347	179,299	2,144,362	167,015	118,793
1991	253,493	94,312	181,438	2,172,050	168,995	117,718
1992	256,894	95,669	181,519	2,247,151	173,125	118,492
1993	260,255	96,391	186,315	2,296,378	173,149	120,259
1994	263,436	97,107	188,714	2,357,588	175,403	123,060
1995	266,557	98,990	193,441	2,422,696	176,628	124,900
1996	269,667	99,627	198,294	2,485,848	179,539	126,708
1997	272,912	101,018	201,071	2,561,695	182,709	129,558
1998	276,115	102,528	205,043	2,631,522	184,980	131,463
1999	279,295	103,874	209,509	2,691,056	187,170	133,488
2000	282,385	104,705	213,300	2,746,925	190,625	136,891
2001	285,309	108,209	216,683	2,797,287	191,276	136,933
2002	288,105	109,297	221,027	2,855,508	194,296	136,485
2003	290,820	111,278	225,882	2,890,450	196,166	137,736
2004	293,463	112,000	232,167	2,964,788	198,889	139,252
2005	296,186	113,343	238,384	2,989,430	200,549	141,730
2006	298,996	114,384	244,643	3,014,371	202,810	144,427
2007	302,004	116,011	248,701	3,031,124	205,742	146,047
2008	304,798	116,783	249,813	2,976,528	208,321	145,362
2009	307,439	117,181	248,972	2,956,764	209,618	139,877
2010	309,347	117,538	248,231	2,967,266	210,115	139,064
2011	311,719	118,682	248,932	2,950,402	211,875	139,869
2012	314,103	121,084	251,497	2,969,433	211,815	142,469
2013	316,427	122,459	252,715	2,988,280	212,160	143,929
2014	318,907	123,027	258,027	3,025,656	214,092	146,305
2015	320,897	125,819	264,194	3,095,373	218,084	148,834
<i>Average annual percentage change</i>						
1950–2015	1.2%	1.6%	2.8%	3.0%	1.9%	1.4%
2005–2015	0.8%	1.0%	1.0%	0.3%	0.8%	0.5%

Sources:

Resident population and civilian employed persons – U.S. Department of Commerce, Bureau of the Census, Online Data Retrieval, Washington, DC, 2017. (Additional resources: www.census.gov)

Vehicles in operation – IHS Automotive. FURTHER REPRODUCTION PROHIBITED. (Additional resources: <https://www.ihs.com/industry/automotive.html>)

Licensed drivers and vehicle-miles – U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2015*, Tables DL-20 and VM-1, and annual. (Additional resources: www.fhwa.dot.gov)

^a Estimates as of July 1. Includes Armed Forces in the United States.

Vehicle-miles per capita were over 10,000 miles from 2004 to 2007 but were 9,646 miles in 2015. There were 1.78 vehicles for every employed civilian in the United States in 2015.

Table 8.2
Vehicles and Vehicle-Miles per Capita, 1950–2015^a

Year	Vehicles per capita	Vehicle-miles per capita	Licensed drivers per household	Vehicles per household	Vehicles per licensed driver	Vehicles per civilian employed persons
1950	0.286	3,017	1.43	1.00	0.70	0.74
1955	0.343	3,669	1.56	1.18	0.76	0.91
1960	0.377	3,994	1.65	1.29	0.78	1.03
1965	0.424	4,588	1.71	1.43	0.83	1.15
1970	0.479	5,412	1.76	1.55	0.88	1.25
1975	0.556	6,147	1.82	1.69	0.92	1.40
1980	0.614	6,707	1.80	1.73	0.96	1.41
1985	0.659	7,443	1.81	1.81	1.00	1.47
1990	0.717	8,573	1.79	1.92	1.07	1.51
1991	0.716	8,568	1.79	1.92	1.07	1.54
1992	0.707	8,747	1.81	1.90	1.05	1.53
1993	0.716	8,824	1.80	1.93	1.08	1.55
1994	0.716	8,949	1.81	1.94	1.08	1.53
1995	0.726	9,089	1.78	1.95	1.10	1.55
1996	0.735	9,218	1.80	1.99	1.10	1.56
1997	0.737	9,387	1.81	1.99	1.10	1.55
1998	0.743	9,531	1.80	2.00	1.11	1.56
1999	0.750	9,635	1.80	2.02	1.12	1.57
2000	0.755	9,728	1.82	2.04	1.12	1.56
2001	0.759	9,804	1.77	2.00	1.13	1.58
2002	0.767	9,911	1.78	2.02	1.14	1.62
2003	0.777	9,939	1.76	2.03	1.15	1.64
2004	0.791	10,103	1.78	2.07	1.17	1.67
2005	0.805	10,093	1.77	2.10	1.19	1.68
2006	0.818	10,082	1.77	2.14	1.21	1.69
2007	0.824	10,037	1.77	2.14	1.21	1.70
2008	0.820	9,766	1.78	2.14	1.20	1.72
2009	0.810	9,617	1.79	2.12	1.19	1.78
2010	0.802	9,592	1.79	2.11	1.18	1.79
2011	0.799	9,467	1.79	2.10	1.17	1.78
2012	0.801	9,457	1.75	2.08	1.19	1.77
2013	0.799	9,450	1.73	2.06	1.19	1.76
2014	0.810	9,498	1.74	2.09	1.21	1.76
2015	0.823	9,646	1.73	2.10	1.21	1.78
<i>Average annual percentage change</i>						
1950–2015	1.6%	1.8%	0.3%	1.1%	0.8%	1.4%
2005–2015	0.2%	-0.5%	-0.2%	0.0%	0.2%	0.6%

Sources:

Resident population and civilian employed persons – U.S. Department of Commerce, Bureau of the Census, Online Data Retrieval, Washington, DC, 2017. (Additional resources: www.census.gov)

Vehicles in operation – IHS Automotive. FURTHER REPRODUCTION PROHIBITED. (Additional resources: <https://www.ihs.com/industry/automotive.html>)

Vehicle-miles – U.S. Department of Transportation, Federal Highway Administration, *Highway Statistics 2015*, Table VM-1 and annual. (Additional resources: www.fhwa.dot.gov)

^a Includes all vehicles (light and heavy).

Household vehicle ownership shows a dramatic increase from 1960 to 1990. In 1960, nearly 79% of households owned less than two vehicles; by 1990, it declined to 45%. Census data prior to 1990 indicated that the majority of households owned one vehicle; in 1990 that changed to two vehicles. Since 2000, less than 10% of households had no vehicles. The share of households with three or more vehicles has risen each year since 2011. The American Community Survey now collects these data on an annual basis, thus annual data are available after 2010.

Table 8.3 (Updated April 2018)
Household Vehicle Ownership, 1960–2016
 (percentage)

	No vehicles	One vehicle	Two vehicles	Three or more vehicles
1960	21.5%	56.9%	19.0%	2.5%
1970	17.5%	47.7%	29.3%	5.5%
1980	12.9%	35.5%	34.0%	17.5%
1990	11.5%	33.7%	37.4%	17.3%
2000	9.4%	33.8%	38.6%	18.3%
2010	9.1%	33.8%	37.6%	19.5%
2011	9.3%	34.1%	37.5%	19.1%
2012	9.2%	34.1%	37.3%	19.3%
2013	9.1%	33.9%	37.3%	19.7%
2014	9.1%	33.7%	37.3%	19.9%
2015	8.9%	33.5%	37.2%	20.3%
2016	8.7%	33.2%	37.1%	21.0%

Source:

U. S. Department of Transportation, Volpe National Transportation Systems Center, *Journey-to-Work Trends in the United States and its Major Metropolitan Area, 1960–1990*, Cambridge, MA, 1994, p. 2-2.

2000 data – U.S. Bureau of the Census, American Fact Finder, factfinder.census.gov, Table QT-04, August 2001.
 (Additional resources: www.census.gov)

2010-2016 data – U.S. Bureau of the Census, American Community Survey, 1-year estimates, Table CP04, 2018.

2009 National Household Travel Survey Daily Trip Data

The Department of Transportation (DOT) collected data on daily trips in 1969, 1977, 1983, 1990 and 1995 via the Nationwide Personal Transportation Survey (NPTS). For 2001, the DOT combined the collection of long trip and daily trip data into one survey – the 2001 National Household Travel Survey (NHTS). The long trip data were not included in the 2009 NHTS.

The NHTS is the nation's inventory of daily travel. The survey includes demographic characteristics of households, people, vehicles, and detailed information on daily travel for all purposes by all modes. NHTS survey data are collected from a sample of U.S. households and expanded to provide national estimates of trips and miles by travel mode, trip purpose, and a host of household attributes.

The NHTS was designed to continue the NPTS series, but as with all data surveys, caution should be used when comparing statistics from one survey to another due to changes in terminology, survey procedures, and target population. The 2001 and 2009 surveys collected data on trips of children under 5 years of age, while the previous NPTS did not. Improved methodologies first used in the collection of trip information in the 1995 NPTS make it difficult to compare these data with past NPTS survey data. Thus, the 1990 NPTS trip data have been adjusted to make it comparable with the later surveys.

The next NHTS is being conducted in 2016 and data will be available in 2018.

Table 8.4
Demographic Statistics from the 1969, 1977, 1983, 1990, 1995 NPTS and 2001, 2009 NHTS

	1969	1977	1983	1990	1995	2001	2009	Percent change 1969–2009
Persons per household	3.16	2.83	2.69	2.56	2.63	2.58	2.50	-21%
Vehicles per household	1.16	1.59	1.68	1.77	1.78	1.89	1.87	61%
Workers per household	1.21	1.23	1.21	1.27	1.33	1.35	1.34	11%
Licensed drivers per household	1.65	1.69	1.72	1.75	1.78	1.77	1.88	14%
Vehicles per worker	0.96	1.29	1.39	1.40	1.34	1.39	1.40	46%
Vehicles per licensed driver	0.70	0.94	0.98	1.01	1.00	1.06	1.00	42%
Average vehicle trip length (miles)	8.89	8.34	7.90	8.98	9.06	9.87	9.72	9%

Note: Average vehicle trip length for 1990 and 1995 is calculated using only those records with trip mileage information present. The 1969 survey does not include pickups and other light trucks as household vehicles. Data on vehicles per household and licensed drivers per household will not match Table 8.2 because they come from a different source.

Sources:

U.S. Department of Transportation, Federal Highway Administration, *1990 Nationwide Personal Transportation Survey: Summary of Travel Trends*, FHWA-PL-92-027, Washington, DC, March 1992, Table 2. Data for 1995, 2001 and 2009 were generated from the 2009 National Household Travel Survey website nhts.ornl.gov. (Additional resources: www.fhwa.dot.gov)

Due to methodology improvements in collecting trip information, the 2001 and 1995 data should be compared only to the 1990 adjusted data. The original 1990 data are comparable to all previous surveys; however, comparisons should always be made with caution because of differing survey methodologies.

Table 8.5
Average Annual Vehicle-Miles, Vehicle Trips and Trip Length per Household
1969, 1977, 1983, 1990, 1995 NPTS and 2001, 2009 NHTS

	Journey-to-work ^a	All trips
<i>Average annual vehicle-miles per household</i>		
1969	4,183	12,423
1977	3,815	12,036
1983	3,538	11,739
1990 original	4,853	15,100
1990 adjusted	4,853	18,161
1995	6,492	20,895
2001	5,724	21,171
2009	5,513	19,850
<i>Average annual vehicle trips per household</i>		
1969	445	1,396
1977	423	1,442
1983	414	1,486
1990 original	448	1,702
1990 adjusted	448	2,077
1995	553	2,321
2001	479	2,171
2009	457	2,068
<i>Average vehicle trip length (miles)</i>		
1969	9.4	8.9
1977	9.0	8.4
1983	8.5	7.9
1990 original	11.0	9.0
1990 adjusted	11.0	8.9
1995	11.8	9.1
2001	12.2	9.9
2009	12.2	9.7

Sources:

U.S. Department of Transportation, Federal Highway Administration, *1990 Nationwide Personal Transportation Survey: Summary of Travel Trends*, FHWA-PL-92-027, Washington, DC, March 1992, Table 7. 1990 adjusted data – Oak Ridge National Laboratory, Oak Ridge, TN, August 1998. 1995 NPTS, 2001, 2009 NHTS data were generated from the 2009 National Household Travel Survey website nhts.ornl.gov. (Additional resources: www.fhwa.dot.gov, nhts.ornl.gov)

^a It is believed that the methodology changes in the 1995 NPTS did not affect journey-to-work trips; therefore, no adjustment is necessary.

In 2001 and 2009 annual vehicle-miles traveled (vmt) for a three-person household is around 28,000 miles. The number of drivers in a household makes a big difference in vmt, as does the presence of children in the household. Households with children have more than double the vmt of households without children.

Table 8.6
Average Number of Vehicles and Vehicle Travel per Household,
1990 NPTS and 2001 and 2009 NHTS

Number of licensed drivers	Average number of vehicles per household			Average vehicle-miles traveled per household		
	1990	2001	2009	1990	2001	2009
1	1.5	1.2	1.1	15,200	9,700	8,800
2	2.1	2.2	2.2	22,900	25,800	23,500
3	2.9	3.0	3.0	29,400	37,900	37,700
4 or more	3.8	3.8	3.9	40,500	47,200	55,200
Household size						
1 person	1.2	1.0	1.0	11,400	7,500	7,100
2 persons	1.9	2.0	2.0	19,300	21,200	17,500
3 persons	2.2	2.3	2.3	23,700	28,400	27,900
4 persons	2.4	2.4	2.4	25,300	28,600	33,200
5 persons	2.4	2.4	2.4	24,900	33,200	33,700
6 or more persons	2.7	2.5	2.4	29,200	33,800	33,600
Household urban status						
Urban	1.9	1.8	1.7	19,000	19,300	17,600
Rural	2.1	2.3	2.4	22,200	28,400	27,700
Household composition						
With children	2.2	2.2	2.2	24,100	28,300	30,400
Without children	1.8	1.7	1.7	17,600	16,700	14,400
All households	1.8	1.9	1.9	18,300	21,200	19,900

Source:

Generated from the Department of Transportation, Federal Highway Administration, Nationwide Personal Transportation Survey Public Use Files, Washington, DC, 2000 and the 2009 National Household Travel Survey website nhts.ornl.gov. (Additional resources: nhts.ornl.gov)

In 2009, 22% of vehicle trips were traveling to and from work. Another 22% of trips were for shopping. Shopping is done close to home, as the average trip length for shopping was only 6.5 miles.

Table 8.7
Trip Statistics^a by Trip Purpose, 2001 and 2009 NHTS

Trip purpose	Share of trips		Share of vehicle-miles traveled		Trip length (miles)		Trip length (minutes)	
	2001	2009	2001	2009	2001	2009	2001	2009
To/from work	22.1%	22.3%	27.0%	28.7%	12.1	12.2	22.3	22.9
Work-related business	4.1%	3.9%	8.4%	7.2%	20.3	17.2	30.9	27.5
Shopping	21.1%	22.8%	14.5%	15.5%	6.7	6.5	14.4	14.4
Other family/personal business	24.7%	21.9%	18.7%	15.7%	7.5	6.8	15.2	14.8
School/church	4.9%	5.0%	3.7%	4.6%	7.5	8.8	15.8	17.5
Medical/dental	2.2%	2.6%	2.2%	2.6%	9.9	9.9	20.7	21.2
Vacation	0.4%	0.7%	1.8%	2.3%	47.4	31.4	59.6	41.3
Visit friends/relatives	6.3%	5.7%	9.4%	9.4%	14.9	15.7	24.4	24.6
Other social/recreational	13.7%	14.9%	13.2%	13.5%	9.6	8.6	18.2	17.2
Other	0.5%	0.3%	1.0%	0.6%	18.1	19.0	31.4	29.7
All	100.0%	100.0%	100.0%	100.0%	9.9	9.7	18.7	18.6

Note: The "All" category for average trip length and duration includes records for which trip purpose was not identified.

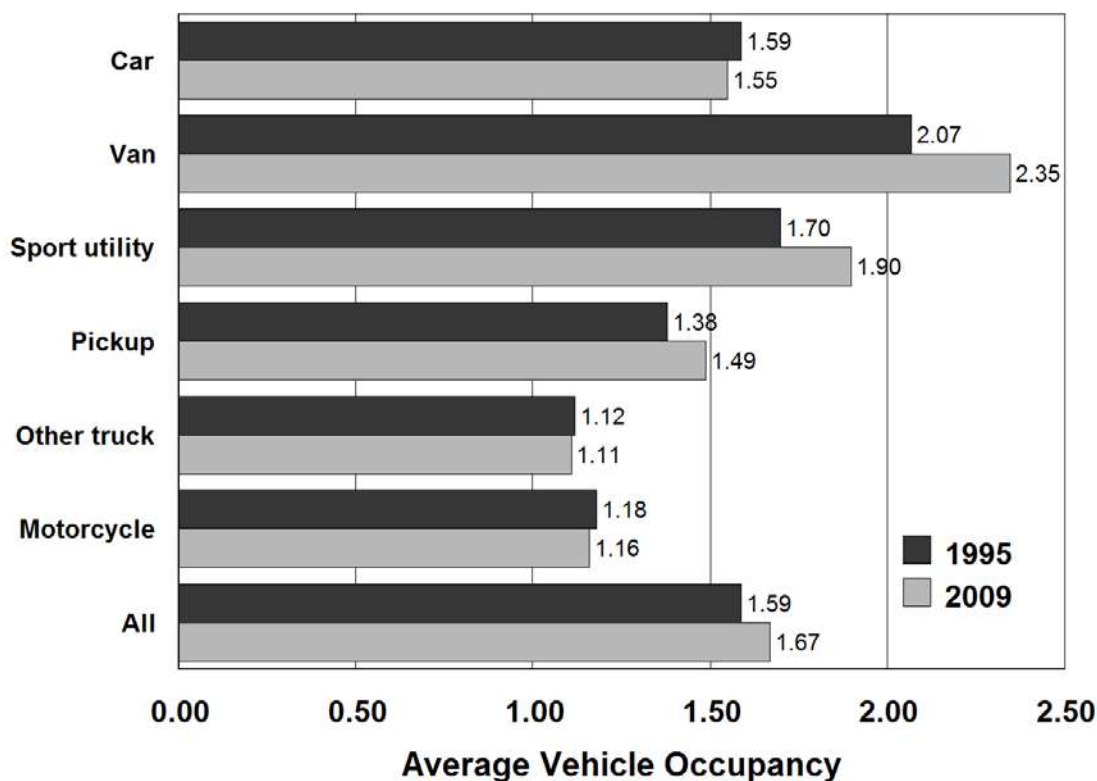
Source:

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

^a Percentages may not sum to totals due to rounding.

While car occupancy stayed nearly constant from 1995 to 2009, most other vehicle types showed increased occupancy. Vans and sport utility vehicles have higher vehicle occupancies than cars.

Figure 8.1. Average Vehicle Occupancy by Vehicle Type, 1995 NPTS and 2009 NHTS

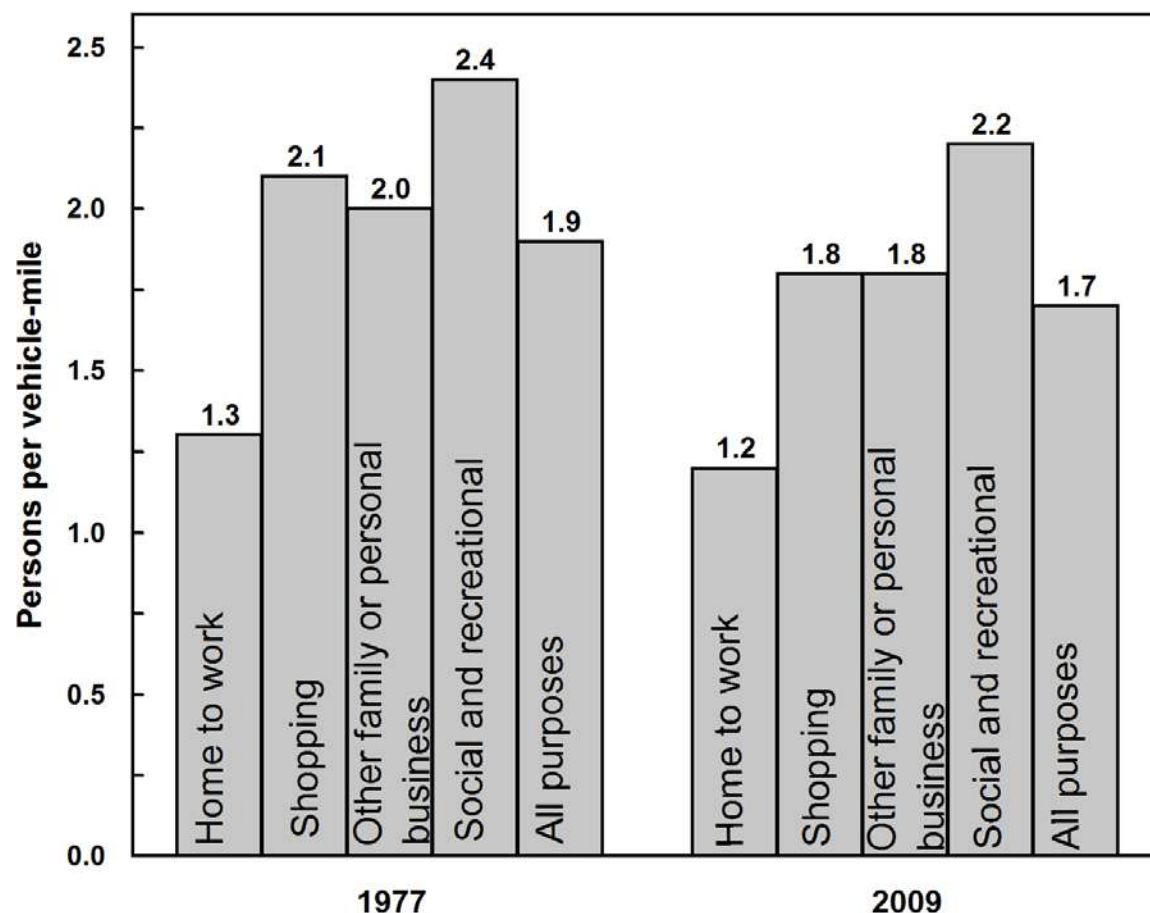


Sources:

U.S. Department of Transportation, Federal Highway Administration, 1995 Nationwide Personal Transportation Survey, Washington, DC, 1997, and 2009 National Household Travel Survey, Washington, DC. (Additional resources: www.fhwa.dot.gov, nhts.ornl.gov)

The average vehicle occupancy, calculated as person-miles per vehicle-mile, is highest for social and recreational purposes. The highest vehicle occupancy levels for all purposes were in 1977. The increase in number of vehicles per household and the decrease in average household size could have contributed to the decline since then.

**Figure 8.2. Average Vehicle Occupancy by Trip Purpose
1977 NPTS and 2009 NHTS**



Sources:

U.S. Department of Transportation, Federal Highway Administration, *1990 Nationwide Personal Transportation Survey: Summary of Travel Trends*, FHWA-PL-92027, Washington, DC, March 1992, Figure 6. Data from 2009 NHTS were generated from the 2009 National Household Travel Survey website nhts.ornl.gov, March 2011. (Additional resources: www.fhwa.dot.gov, nhts.ornl.gov)

The 1990 household survey reports the highest average annual miles per vehicle and the 1983 survey reports the lowest. These data show that younger vehicles are typically driven more miles than older vehicles.

Table 8.8
Average Annual Miles per Household Vehicle by Vehicle Age

Vehicle age (years)	1983 self-reported	1990 self-reported	1995 self-reported	2001 self-reported	2009 self-reported
Under 1	8,200	19,600	15,900	15,500	13,200
1	15,200	16,800	16,800	14,300	14,600
2	16,800	16,600	15,500	14,000	13,900
3	14,500	14,700	14,400	13,100	12,700
4	13,000	13,600	14,100	12,500	12,600
5	12,100	12,900	13,500	12,000	12,800
6	11,300	13,200	13,200	11,800	12,100
7	10,000	12,400	12,800	11,600	11,900
8	9,800	12,600	12,200	10,900	11,500
9	9,000	11,500	12,200	10,800	11,300
10 and older	7,300	9,200	8,900	7,400	9,300
All household vehicles	10,400	12,500	12,200	11,100	11,300

Note: Data include all household vehicles, and have been rounded to the nearest hundred.

Sources:

Nationwide Personal Transportation Study—1983: D. Klinger and J. Richard Kuzmyak, COMSIS Corporation, *Personal Travel in the United States, Volume 1: 1983–84 Nationwide Personal Travel Study*, prepared for the U.S. Department of Transportation, Washington, DC, August 1986, Table 4-22, p. 4-21. 1990: Generated from the *1990 Nationwide Personal Transportation Study Public Use Tape*, March 1992. 1995, 2001 and 2009: Generated from the 2009 NHTS datasets, version 2, February 2011. (Additional resources: nhts.ornl.gov)

Historically, the data from the Nationwide Personal Transportation Survey (NPTS) are based on estimates reported by survey respondents. For the 1995 NPTS and the 2001 National Household Travel Survey (NHTS), odometer data were also collected. The 1995 data indicate that respondents overestimate the number of miles they drive in a year, but the 2001 data do not show that same trend.

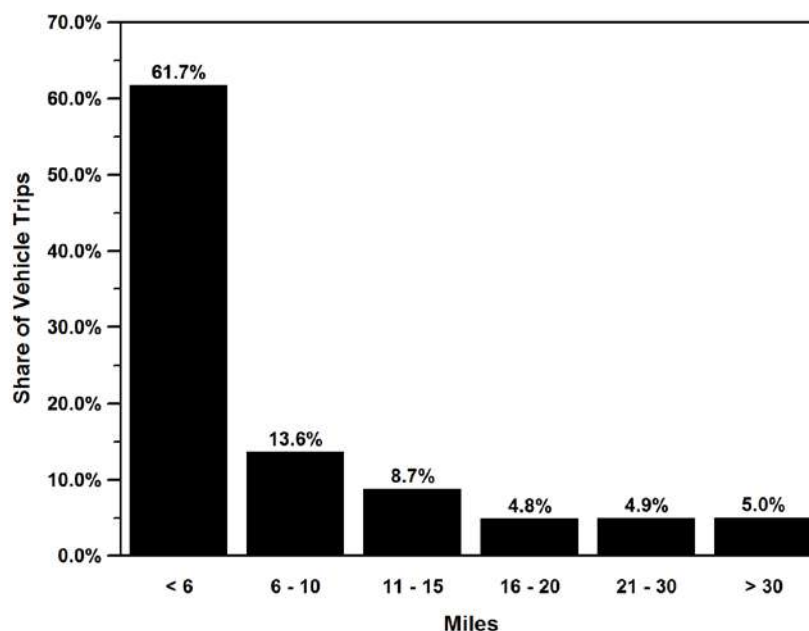
Table 8.9
Self-Reported vs. Odometer Average Annual Miles, 1995 NPTS and 2001 NHTS

Vehicle age (years)	1995 self-reported	1995 odometer	2001 self-reported	2001 odometer
Under 1	15,900	15,600	15,500	14,500
1	16,800	14,500	14,300	14,200
2	15,500	14,800	14,000	13,700
3	14,400	13,800	13,100	14,100
4	14,100	12,900	12,500	13,400
5	13,500	12,700	12,000	12,900
6	13,200	12,400	11,800	12,400
7	12,800	11,600	11,600	12,100
8	12,200	11,300	10,900	11,300
9	12,200	11,200	10,800	10,500
10 and older	8,900	9,000	7,400	8,100
All household vehicles	12,200	11,800	11,000	11,800

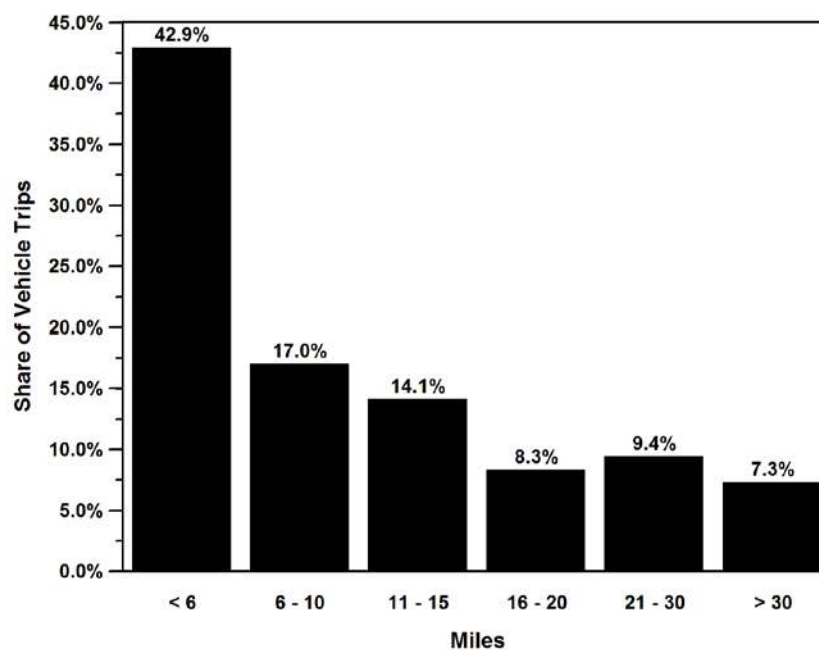
Note: The 2009 NHTS did not collect similar data. Survey methodology on odometer reading data differs from 1995 to 2001 data.

Source:

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov and 2001 NHTS public use file.

Figure 8.3. Share of Vehicle Trips by Trip Distance, 2009 NHTS**Source:**

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

Figure 8.4. Share of Vehicle Trips to Work by Trip Distance, 2009 NHTS**Source:**

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

Nineteen percent of new vehicles (1-year-old and under) travel over 20,000 miles per year. Almost half of the vehicles over 20 years old travel less than 4,000 miles in a year.

Table 8.10
Share of Vehicles by Annual Miles of Travel and Vehicle Age, 2009 NHTS

Annual vehicle miles of travel	Vehicle age (years)						
	1 and under	2	3	4	5	6	7
< 1,000 miles	2%	3%	3%	3%	3%	4%	3%
1 - 2,000 miles	2%	3%	2%	3%	3%	3%	3%
2 - 4,000 miles	5%	6%	7%	7%	6%	7%	9%
4 - 6,000 miles	7%	10%	9%	8%	8%	10%	10%
6 - 8,000 miles	10%	10%	11%	11%	10%	12%	12%
8 - 10,000 miles	11%	11%	11%	11%	11%	12%	12%
10 - 12,000 miles	9%	11%	11%	11%	12%	11%	11%
12 - 15,000 miles	16%	15%	14%	15%	15%	14%	13%
15 - 20,000 miles	18%	15%	17%	17%	16%	14%	14%
20 - 30,000 miles	13%	11%	12%	11%	11%	10%	9%
>30,000 miles	6%	5%	4%	3%	4%	4%	3%
All	100%	100%	100%	100%	100%	100%	100%
	Vehicle age (years)						
	8	9	10	11-15	16-20	Over 20	
< 1,000 miles	4%	4%	4%	6%	9%	19%	
1 - 2,000 miles	4%	4%	4%	5%	7%	8%	
2 - 4,000 miles	9%	9%	10%	11%	16%	19%	
4 - 6,000 miles	11%	12%	12%	14%	14%	14%	
6 - 8,000 miles	12%	12%	11%	14%	13%	12%	
8 - 10,000 miles	13%	11%	12%	12%	10%	7%	
10 - 12,000 miles	11%	11%	11%	10%	8%	6%	
12 - 15,000 miles	13%	13%	12%	10%	8%	5%	
15 - 20,000 miles	12%	13%	14%	9%	7%	5%	
20 - 30,000 miles	9%	8%	7%	7%	4%	3%	
>30,000 miles	3%	3%	3%	3%	2%	2%	
All	100%	100%	100%	100%	100%	100%	

Source:

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov. (Additional resources: nhts.ornl.gov)

The average driver makes three trips per day with an average of 9.7 miles for each trip.

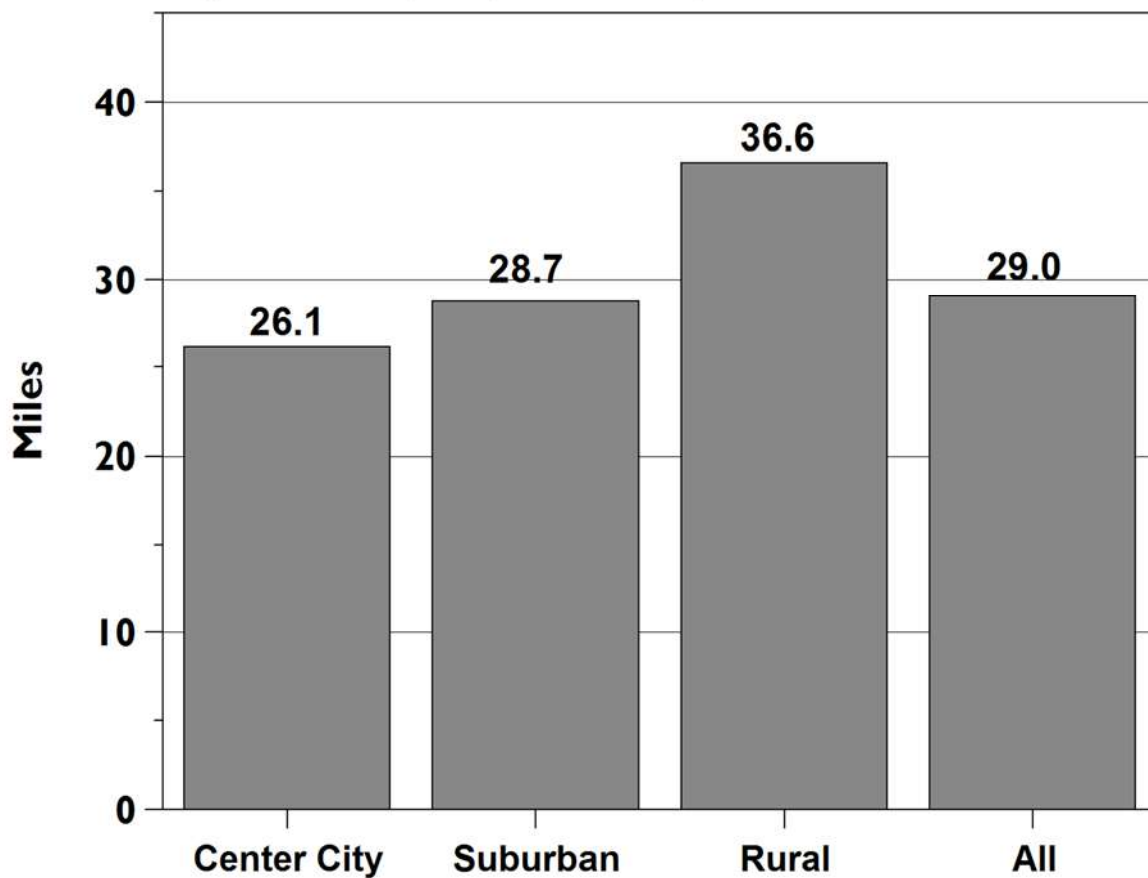
Table 8.11
Household Vehicle Trips, 2009 NHTS

	Number of daily vehicle trips (per driver)	Average vehicle trip length (miles)	Daily vehicle miles of travel (per driver)
1990	3.3	8.9	28.5
1995	3.6	9.1	32.1
2001	3.4	9.9	32.7
2009	3.0	9.7	29.0

Source:

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

Figure 8.5. Average Daily Miles Driven (per Driver), 2009 NHTS



Source:

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

Table 8.12
Daily Vehicle Miles of Travel (per Vehicle) by Number of Vehicles
in the Household, 2009 NHTS

Number of household vehicles	Daily miles per vehicle	
	2001	2009
1	25.6	29.1
2	27.5	32.7
3	24.2	31.3
4	23.0	30.2
5	21.1	27.6
More than 5	18.4	27.2
All	25.2	31.1

Source:

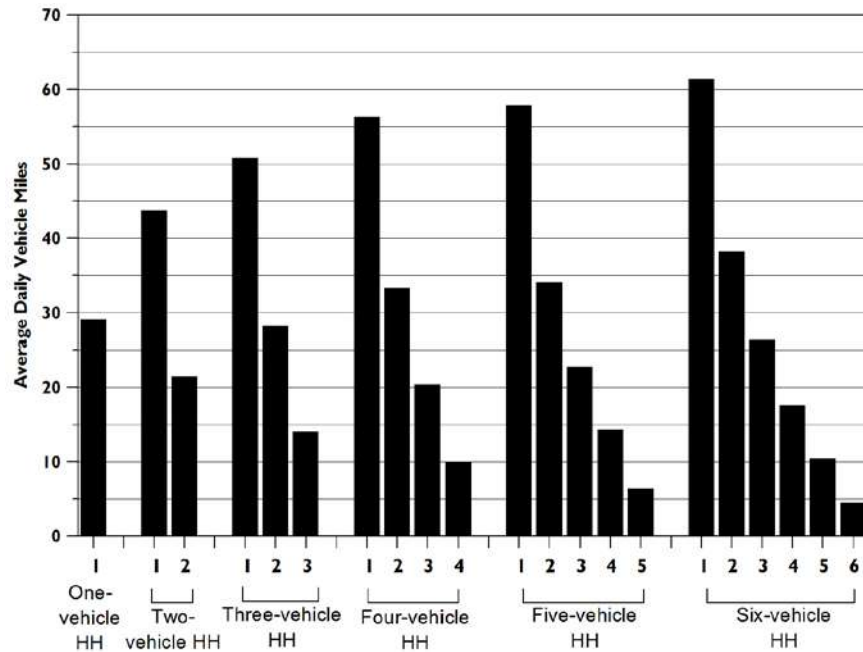
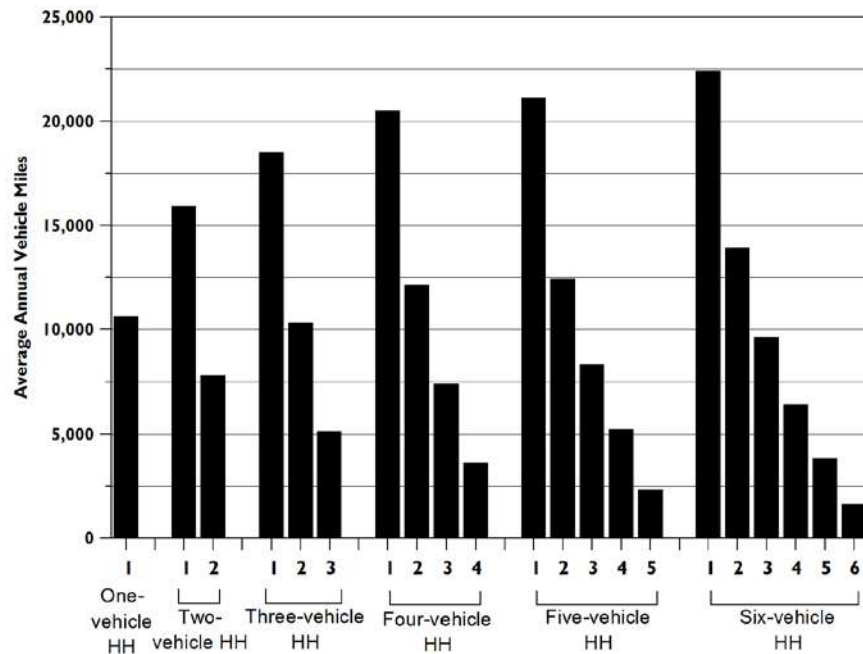
Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

Table 8.13
Daily and Annual Vehicle Miles of Travel and Average Age for
Each Vehicle in a Household, 2009 NHTS

Vehicle number	Average daily miles	Average annual miles	Average age (years)
One-vehicle household			
1	29.0	10,600	9.0
Two-vehicle household			
1	43.6	15,900	7.6
2	21.4	7,800	9.0
Three-vehicle household			
1	50.7	18,500	7.9
2	28.2	10,300	9.1
3	14.0	5,100	11.8
Four-vehicle household			
1	56.2	20,500	8.5
2	33.2	12,100	8.8
3	20.3	7,400	11.4
4	9.9	3,600	13.2
Five-vehicle household			
1	57.8	21,100	8.5
2	34.0	12,400	9.4
3	22.7	8,300	12.3
4	14.2	5,200	12.7
5	6.3	2,300	16.8
Six-vehicle household			
1	61.4	22,400	10.2
2	38.1	13,900	9.8
3	26.3	9,600	12.2
4	17.5	6,400	12.5
5	10.4	3,800	14.5
6	4.4	1,600	17.9

Source:

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

Figure 8.6. Daily Vehicle Miles of Travel for Each Vehicle in a Household, 2009 NHTS**Source:**Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.**Figure 8.7. Annual Vehicle Miles of Travel for Each Vehicle in a Household, 2009 NHTS****Source:**Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

According to the U.S. Census data, the share of workers who car pooled has dropped from 19.7% in 1980 to 9.0% in 2016. The share of workers using public transit declined from 6.2% to 5.4% in the same time period. Those driving alone and those working at home increased. The average travel time increased by 4.4 minutes from 1980 to 2016. The American Community Survey (ACS) now collects journey-to-work data on an annual basis. It shows the average commute time as 26.1 minutes in 2016.

Table 8.14 (Updated April 2018)
Means of Transportation to Work, 1980, 1990, 2000, and 2016

Means of transportation	1980 Census		1990 Census		2000 Census		2016 ACS	
	Number of workers (thousands)	Share	Number of workers (thousands)	Share	Number of workers (thousands)	Share	Number of workers (thousands)	Share
Private vehicle	81,258	84.1%	99,593	86.5%	112,737	87.9%	125,037	85.6%
<i>Drove alone</i>	62,193	64.4%	84,215	73.2%	97,102	75.7%	111,449	76.6%
<i>Car pooled</i>	19,065	19.7%	15,378	13.4%	15,635	12.2%	13,589	9.0%
Public transportation	6,008	6.2%	5,889	5.1%	5,868	4.6%	7,476	5.4%
<i>Bus or trolley bus^a</i>	3,925	4.1%	3,445	3.0%	3,207	2.5%	3,774	2.6%
<i>Streetcar or trolley car^a</i>	^b	^b	78	0.1%	73	0.1%	87	0.1%
<i>Subway or elevated</i>	1,529	1.6%	1,755	1.5%	1,886	1.5%	2,725	1.9%
<i>Railroad</i>	554	0.6%	574	0.5%	658	0.5%	839	0.6%
<i>Ferryboat</i>	^b	^b	37	0.0%	44	0.0%	53	0.0%
Taxicab	167	0.2%	179	0.2%	200	0.2%	179	0.1%
Motorcycle	419	0.4%	237	0.2%	142	0.1%	289	0.2%
Bicycle	468	0.5%	467	0.4%	488	0.4%	878	0.6%
Walked only	5,413	5.6%	4,489	3.9%	3,759	2.9%	4,031	2.8%
Other means	703	0.7%	809	0.7%	901	0.7%	1,309	0.9%
Worked at home	2,180	2.3%	3,406	3.0%	4,184	3.3%	6,662	4.6%
Total workers	96,616	100.0%	115,069	100.0%	128,279	100.0%	145,861	100.0%
Average travel time (minutes)	21.7		22.4		25.5		26.1	

Sources:

1980-1990 data – Provided by the Journey-to-Work and Migration Statistics Branch, Population Division, U.S. Bureau of the Census.

2000 data – U.S. Bureau of the Census, *Journey to Work: 2000*, Tables 1 and 2, 1990-2000, March 2004 (www.census.gov/population/www/socdemo/journey.html).

2016 data – U.S. Bureau of the Census, *2012-2016 American Community Survey Five-Year Estimates*, Tables B08301 and GCT0801. (Additional resources: www.census.gov)

^a This category was "Bus or streetcar" in 1980.

^b Data are not available.

Table 8.15
Characteristics of U.S. Daily per Vehicle Driving vs. Dwelling Unit Type and Density

	Share of vehicles in density type	Hours per vehicle per day	Average vehicle speed (miles/hour)	Miles per vehicle per day
All classes detached single house	77.0%	0.92	32.0	29.6
All classes other	23.0%	0.99	27.7	27.4
<1,000/sq. mile detached single house	81.6%	0.91	34.7	31.6
<1,000/sq. mile all other	18.4%	0.91	32.5	29.5
1,000-4,000/sq. mile detached single house	75.5%	0.94	27.5	26.0
1,000-4,000/sq. mile all other	24.5%	1.03	25.1	25.9
4,000-10,000/sq. mile detached single house	42.5%	0.96	26.1	25.1
4,000-10,000/sq. mile all other	57.5%	1.15	21.5	24.6
10,000-25,000/sq. mile detached single house	17.8%	1.02	18.2	18.5
10,000-25,000/sq. mile all other	82.2%	1.05	21.3	22.3
>25,000/sq. mile detached single house	9.8%	0.72	20.5	14.8
>25,000/sq. mile all other	90.2%	1.23	21.9	26.9

Source:

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

Table 8.16
Housing Unit Characteristics, 2015

	Share of occupied housing units	Percent with garage or carport
Type of housing unit		
New construction (< = 4 years)	3.2%	70.8%
Manufactured/mobile homes	5.9%	33.0%
Geographic location (Census Region)		
Northeast	18.1%	49.3%
Midwest	22.3%	71.9%
South	37.2%	56.0%
West	22.4%	76.3%
Tenure		
Owner	62.7%	78.3%
Renter	37.3%	36.8%
All occupied units	118,290 units	62.9%

Note: The American Housing Survey is updated every two years. The 2015 data are the latest available.

Source:

U.S. Bureau of the Census, *2015 American Housing Survey*, Table Creator, accessed July 28, 2017.
 (Additional information: www.census.gov/programs-surveys/ahs)

The average one-way commute time was 26.1 minutes in 2016. Sixty-three percent of workers traveled less than 30 minutes to work in 2016. In 1990, 32.5% of workers commuted less than 15 minutes; in 2016 that number dropped to 26.7%.

Table 8.17 (Updated April 2018)
Workers by Commute Time, 1990, 2000, 2010, and 2016

Commute time (one-way)	1990	2000	2010	2016
Less than 15 minutes	32.5%	29.4%	28.6%	26.7%
15–29 minutes	37.0%	36.1%	36.2%	36.3%
30–39 minutes	15.2%	15.8%	16.1%	16.6%
40–59 minutes	9.2%	10.7%	11.1%	11.8%
60 minutes or more	6.1%	8.0%	8.0%	8.7%
Average travel time (minutes)	22.4	25.5	25.2	26.1

Sources:

1990-2000 – U.S. Bureau of the Census, *Journey to Work: 2000*, Tables 1 and 2, 1990-2000, March 2004.

2010-2016 – U.S. Bureau of the Census, *2012-2016 American Community Survey, 5-Year Estimates*, Tables S0802 and B08303. (Additional resources: www.census.gov)

Sales of bicycles with wheel sizes of 20 inches and over have grown at an average annual rate of 1.0% from 1981 to 2015. Bicycle sales experienced a large decline in 2009, which brought total sales to 14.9 million—a new low in the 18-year series. Sales in 2015 were 17.4 million.

Table 8.18
Bicycle Sales, 1981–2015
(millions)

	Wheel sizes under 20 inches	Wheel sizes of 20 inches and over	All wheel sizes
1981	^a	8.9	^a
1982	^a	6.8	^a
1983	^a	9.0	^a
1984	^a	10.1	^a
1985	^a	11.4	^a
1986	^a	12.3	^a
1987	^a	12.6	^a
1988	^a	9.9	^a
1989	^a	10.7	^a
1990	^a	10.8	^a
1991	^a	11.6	^a
1992	3.7	11.6	15.3
1993	3.8	13.0	16.8
1994	4.2	12.5	16.7
1995	4.1	12.0	16.1
1996	4.5	10.9	15.4
1997	4.2	11.0	15.2
1998	4.7	11.1	15.8
1999	5.9	11.6	17.5
2000	9.0	11.9	20.9
2001	5.4	11.3	16.7
2002	5.9	13.6	19.5
2003	5.6	12.9	18.5
2004	5.3	13.0	18.3
2005	5.8	14.0	19.8
2006	5.5	12.7	18.2
2007	5.4	12.8	18.2
2008	5.1	13.4	18.5
2009	4.7	10.2	14.9
2010	6.3	13.5	19.8
2011	4.7	11.0	15.7
2012	5.7	13.0	18.7
2013	4.9	11.3	16.2
2014	5.6	12.4	18.0
2015 ^b	4.9	12.5	17.4
<i>Average annual percentage change</i>			
1981–2015	^a	1.0%	^a
2005–2015	-1.7%	-1.1%	-1.3%

Source:

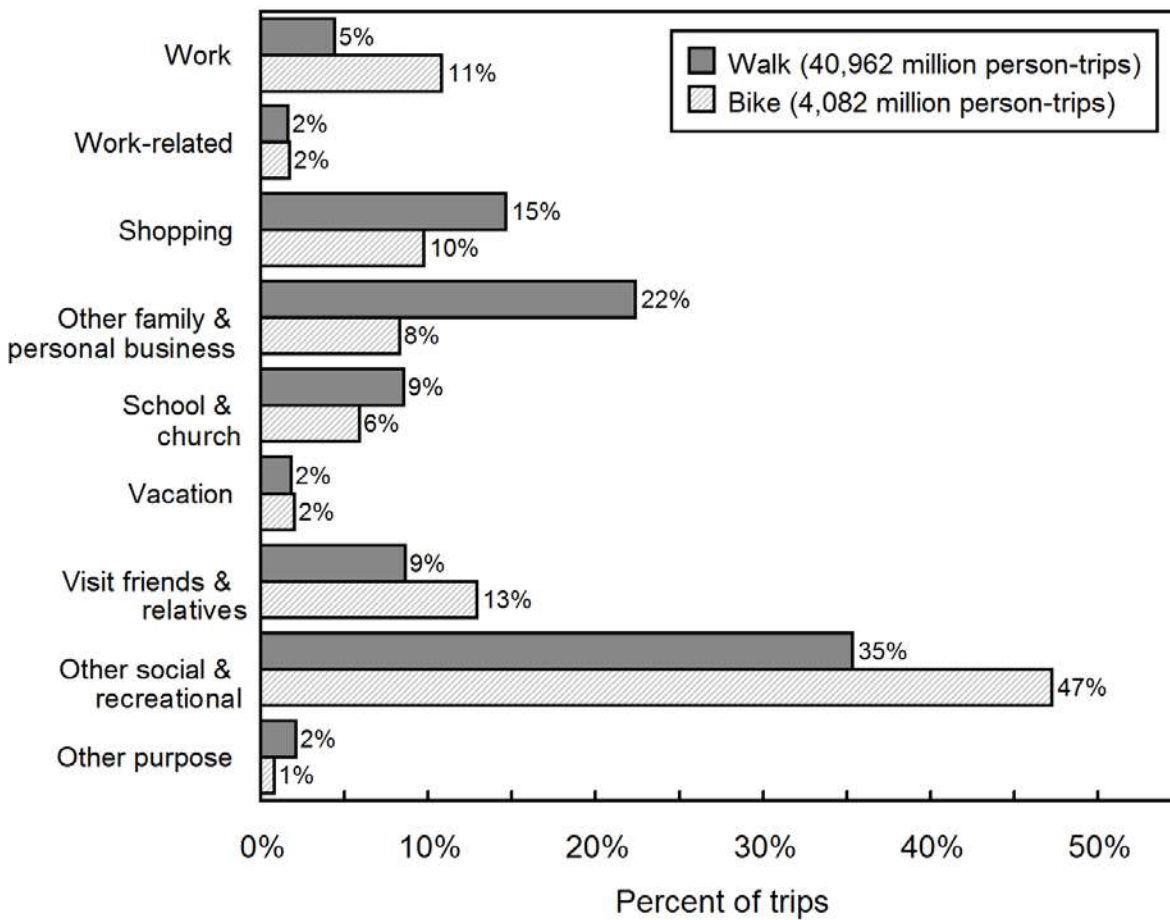
1981–1996: Bicycle Manufacturers Association. 1997–on: National Bicycle Dealers Association. (Additional resources: www.nbda.com)

^a Data are not available.

^b Latest year available.

In 2009, 4.5% of walk trips and 10.9% of bike trips were to/from work. Forty-seven percent of all bike trips were for social/recreational purposes. Nearly 15% of walk trips were shopping trips.

Figure 8.8. Walk and Bike Trips by Trip Purpose, 2009 NHTS



Note: Percentages may not sum to totals due to rounding.

Source:

Generated from the 2009 National Household Travel Survey website nhts.ornl.gov.

After 2001 only data on daily trips were collected in the NHTS. The 2001 data are still the latest available on long-distance trips.

Long Distance Trips – 2001 National Household Travel Survey

The 2001 National Household Travel Survey (NHTS) collected data on long-distance trips as well as everyday travel. The everyday travel data is a continuation of the Nationwide Personal Transportation Survey (NPTS), while the long-distance travel data is a continuation of the American Travel Survey (ATS) which was collected in 1977 and 1985. The survey collected trip-related data such as mode of transportation, duration, distance and purpose of trip. It also gathered demographic, geographic, and economic data for analysis purposes.

A long-distance trip is defined as a trip of 50 miles or more, one-way. Long-trip data from the 2001 NHTS were released in the summer of 2004. For additional information about the 2001 NHTS data, contact the Bureau of Transportation Statistics at 202-366-3282 or visit the following website: nhts.ornl.gov.

Table 8.19
Long-Distance Trip^a Characteristics, 2001 NHTS

Trip characteristic	Person trips		Person miles	
	(thousands)	(percent)	(thousands)	(percent)
Total	2,554,068	100.0	1,138,322,697	100.0
Principal means of transportation:				
Personal use vehicles	2,310,376	90.5	735,882,255	64.7
Airplane	165,039	6.5	367,888,741	32.3
Commercial airplane	158,880	6.2	361,717,015	31.8
Bus ^b	52,962	2.1	23,747,433	2.1
Intercity bus	3,456	0.1	1,765,696	0.2
Charter, tour, or school bus	45,952	1.8	21,019,942	1.9
Train	20,672	0.8	9,266,373	0.8
Round trip distance:				
100 to 300 miles	1,688,358	66.1	284,586,370	25.0
300 to 499 miles	373,550	14.6	143,571,597	12.6
500 to 999 miles	261,802	10.3	180,669,482	15.9
1,000 to 1,999 miles	125,665	4.9	178,629,838	15.7
2,000 miles or more	104,694	4.1	350,865,409	30.8
Mean (miles)	446	^c	^c	^c
Median (miles)	206	^c	^c	^c
Calendar quarter:				
1st quarter	566,502	22.2	246,556,190	21.7
2nd quarter	653,310	25.6	298,154,812	26.2
3rd quarter	734,878	28.8	341,021,290	30.0
4th quarter	599,378	23.5	252,590,405	22.2
Main purpose of trip:				
Commuting	329,395	12.9	65,877,968	5.8
Other business	405,866	15.9	242,353,212	21.3
Personal/leisure	1,406,411	55.1	667,471,358	58.7
Personal business	322,645	12.6	130,020,982	11.4
Other	88,230	3.5	32,031,679	2.8
Nights away from home:				
None	1,454,847	57.0	304,469,524	26.8
1 to 3 nights	808,281	31.7	414,219,147	36.4
4 to 7 nights	214,464	8.4	269,265,597	23.7
8 or more nights	76,475	3.0	150,368,429	13.2
Destination:				
Within Census division	2,077,810	81.4	549,651,116	48.3
Across Census division, within Census	196,890	7.7	134,930,113	11.9
Across Census region	279,367	10.9	453,741,468	39.9

Note: Long-distance trips were not included in the 2009 NHTS.

Source:

U.S. Bureau of Transportation Statistics and the U.S. Federal Highway Administration, *2001 National Household Transportation Survey*. (Additional resources: nhts.ornl.gov)

^a A long-distance trip is defined as a trip of 50 miles or more, one-way.

^b Includes other types of buses.

^c Not applicable.