



GENESEE COUNTY PLANNING BOARD REFERRALS NOTICE OF FINAL ACTION

GCDP Referral ID **T-09-BAT-6-22**
Review Date **6/9/2022**

Municipality
Board Name
Applicant's Name
Referral Type
Variance(s)
Description:

BATAVIA, T.
PLANNING BOARD
Rochester MHP Portfolio LLC
Site Plan Review
Site Plan Review to expand an existing manufactured home community with 76 additional lots.

Location
Zoning District

5121 Clinton Street Rd. (NYS Rt. 33), Batavia
Mobile Home Park (MHP) District

PLANNING BOARD RECOMMENDS:

APPROVAL WITH MODIFICATION(S)

EXPLANATION:

The required modification is that the applicant work with the Town to provide a road or emergency access point between Stringham Dr. and the proposed Briarwood Terrace extension to improve emergency response access to the lots in this area of the manufactured home facility. It is also recommended that the applicant submits the enclosed application for 9-1-1 Address Verification to the Genesee County Sheriff's Office to ensure that the addresses and roads of the proposed expansion meet Enhanced 9-1-1 standards.

Director

June 9, 2022

Date

If the County Planning Board disapproved the proposal, or recommends modifications, the referring agency shall NOT act contrary to the recommendations except by a vote of a majority plus one of all the members and after the adoption of a resolution setting forth the reasons for such contrary action. Within 30 days after the final action the referring agency shall file a report of final action with the County Planning Board. An action taken form is provided for this purpose and may be obtained from the Genesee County Planning Department.

SEND OR DELIVER TO:

GENESEE COUNTY DEPARTMENT OF PLANNING
3837 West Main Street Road
Batavia, NY 14020-9404
Phone: (585) 343-1729

Clear Form

DEPARTMENT USE ONLY:

GCDP Referral # T-09-BAT-6-22



*** GENESEE COUNTY *
PLANNING BOARD REFERRAL**

**RECEIVED
Genesee County
Dept. of Planning
6/2/2022**

Required According to:
GENERAL MUNICIPAL LAW ARTICLE 12B, SECTION 239 L, M, N
(Please answer ALL questions as fully as possible)

1. REFERRING BOARD(S) INFORMATION

Board(s) Town of Batavia Planning Board
Address 3833 West Main Street Road
City, State, Zip Batavia, NY, 14020
Phone (585) 343-1729 Ext. _____

2. APPLICANT INFORMATION

Name Rochester MHP Portfolio LLC
Address 5121 Clinton Street Rd
City, State, Zip Batavia, NY, 14020
Phone (585) 233-4699 Ext. _____ Email jeffcook@cookpropertiesny.

MUNICIPALITY: City Town Village of Batavia

3. TYPE OF REFERRAL: (Check all applicable items)

- | | | |
|------------------------------------------------------|----------------------------------------------------|-----------------------------------------------|
| <input type="checkbox"/> Area Variance | <input type="checkbox"/> Zoning Map Change | <input type="checkbox"/> Subdivision Proposal |
| <input type="checkbox"/> Use Variance | <input type="checkbox"/> Zoning Text Amendments | <input type="checkbox"/> Preliminary |
| <input type="checkbox"/> Special Use Permit | <input type="checkbox"/> Comprehensive Plan/Update | <input type="checkbox"/> Final |
| <input checked="" type="checkbox"/> Site Plan Review | <input type="checkbox"/> Other: _____ | |

4. LOCATION OF THE REAL PROPERTY PERTAINING TO THIS REFERRAL:

A. Full Address 5121 Clinton Street Road
B. Nearest intersecting road Stringham Drive
C. Tax Map Parcel Number 9.-1-33.11
D. Total area of the property 75.2 Area of property to be disturbed Not Listed SWPPP Provided
E. Present zoning district(s) MHP

5. REFERRAL CASE INFORMATION:

A. Has this referral been previously reviewed by the Genesee County Planning Board?
 NO YES If yes, give date and action taken _____
B. Special Use Permit and/or Variances refer to the following section(s) of the present zoning ordinance and/or law

C. Please describe the nature of this request Construction of 76 new Mobile Homes

6. ENCLOSURES – Please enclose copy(s) of all appropriate items in regard to this referral

- | | | |
|-------------------------------------------------------|-----------------------------------------------------------------|------------------------------------------------------------|
| <input checked="" type="checkbox"/> Local application | <input type="checkbox"/> Zoning text/map amendments | <input type="checkbox"/> New or updated comprehensive plan |
| <input checked="" type="checkbox"/> Site plan | <input checked="" type="checkbox"/> Location map or tax maps | <input type="checkbox"/> Photos |
| <input type="checkbox"/> Subdivision plot plans | <input type="checkbox"/> Elevation drawings | <input type="checkbox"/> Other: _____ |
| <input checked="" type="checkbox"/> SEQR forms | <input checked="" type="checkbox"/> Agricultural data statement | |

7. CONTACT INFORMATION of the person representing the community in filling out this form (required information)

Name Daniel Lang Title CEO/ZEO Phone (585) 343-1729 Ext. 222
Address, City, State, Zip 3833 West Main St. Rd. Batavia NY 14020 Email dlang@townofbatavia.com

May 17, 2022

Mr. Dan Lang, Code Enforcement Officer
Town of Batavia
3833 West Main Road
Batavia, NY 14020

Re: Application for Site Plan Approval
Country Meadows Manufactured Home Community Expansion
5121 Clinton Street Road, Town of Batavia, NY

Dear Mr. Lang:

Thornton Engineering LLP, as engineer for the applicant, hereby submits the following materials comprising the Application for Site Plan Approval for the proposed Country Meadows Manufactured Home Community Expansion at 5121 Clinton Street Road in the Town of Batavia.

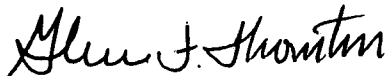
- Building and Zoning Application Form
- Short Environmental Assessment Form
- Application fee of \$200.00 (check payable to Town of Batavia)
- 3 full size sets and 1 reduced size (11" x 17") set of the Site Plans consisting of Sheets 1 to 19
- flash drive containing PDF's of all plan sheets
- Floor Plans and Elevations of the proposed manufactured homes
- Engineer's Report
- Genesee County Application for Water Hookup Authorization (Smart Growth)
- one copy of the Stormwater Pollution Prevention Plan (SWPPP)

We hope that this application can be included on next available Planning Board meeting agenda. Please do not hesitate to contact me at 585-624-4810 or glenn@thorntoneng.com if you have any questions or comments or need additional information.

Please be aware that the previously submitted (November 27, 2021) application for zoning area variances can be dismissed as the currently designed expansion project is believed to be fully compliant with Town zoning regulations.

Sincerely,

THORNTON ENGINEERING LLP



Glenn F. Thornton, P.E.
Partner

cc: S. Mountain, Town of Batavia (letter only, via email)
J. Cook, Rochester MHP Portfolio, LLC

Building and Zoning Application Permit No. _____

Town of Batavia 3833 West Main Rd. Batavia NY 14020 PH. 585-343-1729

Date 5 / 16 / 22 Zone MHP Flood Zone _____ Wellhead Protection _____ Corner Lot _____

New Construction Fence Pond Sign Alteration(s) Addition Demolition

Accessory Bldg. Mobile Home Fill Permit Home Occupation Land Separation Site Plan Approval

Special Use Permit Temporary Use Subdivision Zoning Variance Request Other Specify: _____

Tax Map No. 9.00-1-33.11

Owners Name Rochester MHP Portfolio, LLC Phone No. (585) 233-4699

Address 90 Airpark Drive, Suite 400, Rochester, NY 14624 Project Road Width 20 ft

Applicants Name Jeffrey Cook Project Address 5121 Clinton Street Road

E Mail Address jeffcook@cookpropertiesny.com Phone No (585) 233-4699

Description of Project: Expansion of the existing manufactured home community to create an additional 76 lots.

Existing Use Mobile Home Park Proposed Use Mobile Home Park

Estimated Cost Building _____ Plumbing _____ Mechanical _____ Miscellaneous \$1M

SEQR CLASSIFICATION Type 1 Type 2 Unlisted

Review completed by Planning Board Zoning Board of Appeals

Permit Fee \$ _____ Application Date ___/___/___ Permit Expires On ___/___/___

Issuing Officer _____ Date ___/___/___

IN SIGNING THIS DOCUMENT I HEARBY GIVE THE RIGHT OF AN ON SITE INSPECTION TO THE TOWN OF BATAVIA CODE ENFORCEMENT OFFICIAL OR THEIR DESIGNE. ALL PROVISIONS OF LAWS AND ORDINANCES GOVERNING THIS TYPE OF WORK WILL BE COMPLIED WITH WHETHER SPECIFIED HEREIN OR NOT. THE GRANTING OF A PERMIT DOES NOT PRESUME TO GIVE AUTHORITY TO VIOLATE OR CANCEL THE PROVISIONS OF ANY OTHER STATE OR LOCAL LAW REGULATING CONSTRUCTION OR THE PREFORMANCE OF CONSTRUCTION.

I, JEFFREY COOK, as Owner or Authorized Agent hereby declare that the statements and information on the foregoing application are true and accurate, to the best of my knowledge.

Signature of Owner or Authorized Agent Date 5-17-22

Short Environmental Assessment Form

Part 1 - Project Information

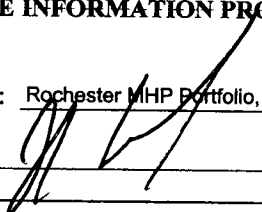
Instructions for Completing

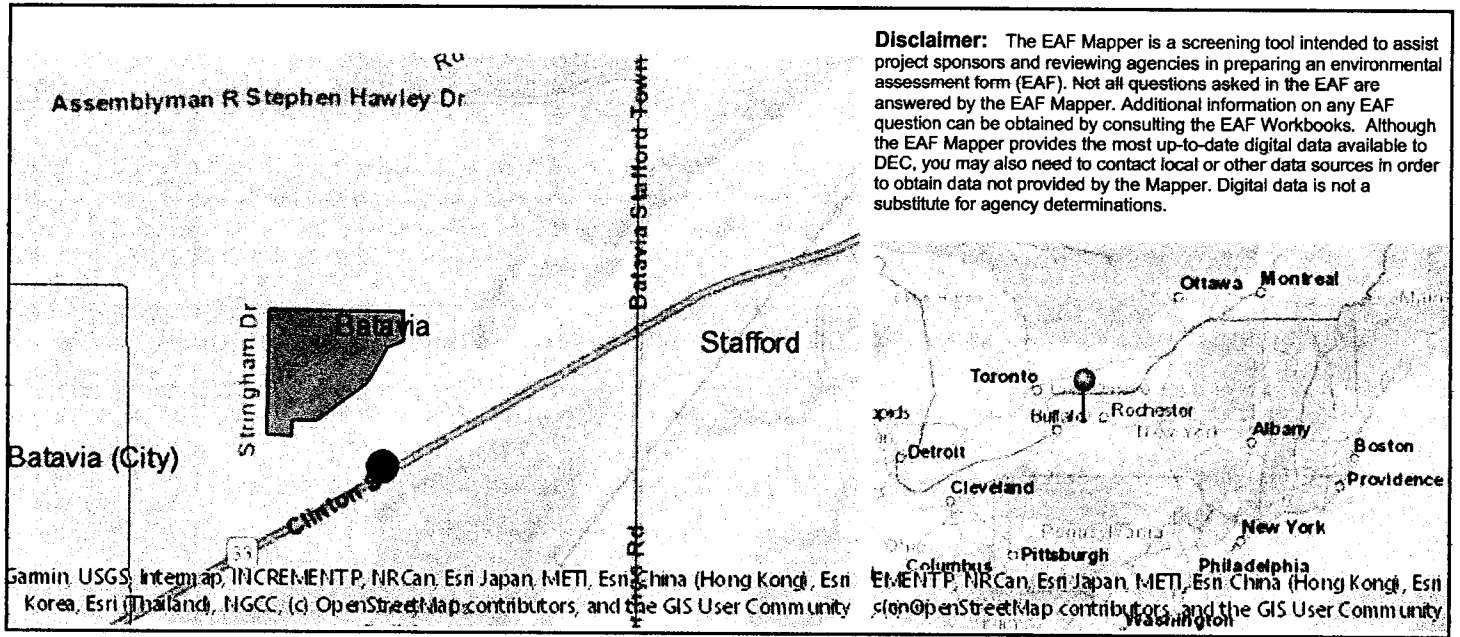
Part 1 – Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. 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			
Name of Action or Project: Country Meadows Manufactured Home Community Expansion			
Project Location (describe, and attach a location map): 5121 Clinton Street Road, Town of Batavia, NY			
Brief Description of Proposed Action: Construction of 76 new mobile home lots within the existing Country Meadows Manufactured Home Community. Project also involves construction of internal private roads, utilities, and stormwater management areas.			
Name of Applicant or Sponsor: Rochester MHP Portfolio, LLC (Jeffrey Cook)		Telephone: 585-233-4699 E-Mail: jeffcook@cookpropertiesny.com	
Address: 90 Airpark Drive, Suite 400			
City/PO: Rochester		State: NY	Zip Code: 14624
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 type="checkbox"/>
			YES <input type="checkbox"/>
2. Does the proposed action require a permit, approval or funding from any other government Agency? If Yes, list agency(s) name and permit or approval:			NO <input type="checkbox"/>
			YES <input checked="" type="checkbox"/>
3. a. Total acreage of the site of the proposed action? _____ 75.2 acres			
b. Total acreage to be physically disturbed? _____ x.x acres			
c. Total acreage (project site and any contiguous properties) owned or controlled by the applicant or project sponsor? _____ 75.2 acres			
4. Check all land uses that occur on, are adjoining or near the proposed action:			
5. <input type="checkbox"/> Urban <input type="checkbox"/> Rural (non-agriculture) <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Commercial <input checked="" type="checkbox"/> Residential (suburban)			
<input checked="" type="checkbox"/> Forest <input checked="" type="checkbox"/> Agriculture <input type="checkbox"/> Aquatic <input type="checkbox"/> Other(Specify):			
<input type="checkbox"/> Parkland			

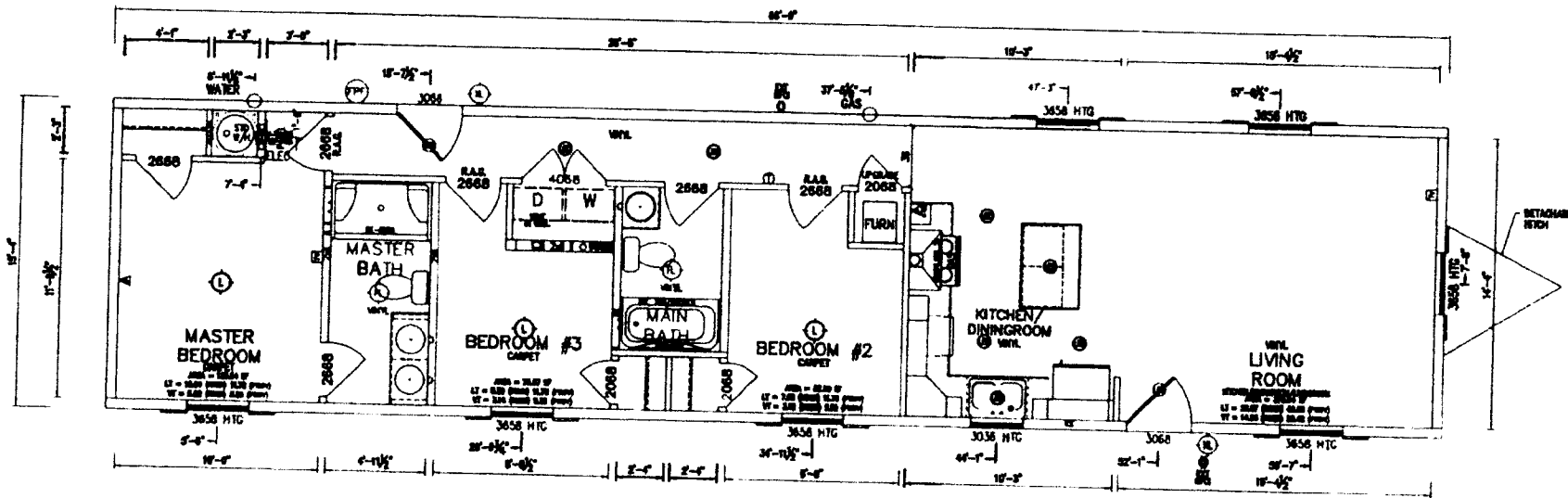
5. Is the proposed action,	NO	YES	N/A
a. A permitted use under the zoning regulations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Consistent with the adopted comprehensive plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Is the proposed action consistent with the predominant character of the existing built or natural landscape?	NO	YES	
	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
7. Is the site of the proposed action located in, or does it adjoin, a state listed Critical Environmental Area?	NO	YES	
If Yes, identify: _____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
8. a. Will the proposed action result in a substantial increase in traffic above present levels?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Are public transportation services 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 the 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?	NO	YES	
If the proposed action will exceed requirements, describe design features and technologies: _____ _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
10. Will the proposed action connect to an existing public/private water supply?	NO	YES	
If No, describe method for providing potable water: _____ _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
11. Will the proposed action connect to existing wastewater utilities?	NO	YES	
If No, describe method for providing wastewater treatment: _____ _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
12. a. Does the project site contain, or is it substantially contiguous to, a building, archaeological site, or district which is listed on the National or State Register of Historic Places, or that has been determined by the Commissioner of the NYS Office of Parks, Recreation and Historic Preservation to be eligible for listing on the State Register of Historic Places?	NO	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. 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"/>	<input 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	YES	
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
b. Would the proposed action physically alter, or encroach into, any existing wetland or waterbody?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
If Yes, identify the wetland or waterbody and extent of alterations in square feet or acres: _____ _____ _____			

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 checked="" type="checkbox"/> Forest <input type="checkbox"/> Agricultural/grasslands <input checked="" type="checkbox"/> Early mid-successional <input type="checkbox"/> Wetland <input type="checkbox"/> Urban <input checked="" 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	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
16. Is the project site located in the 100-year flood plan?	NO	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
17. Will the proposed action create storm water discharge, either from point or non-point sources? If Yes,	NO	YES
	<input type="checkbox"/>	<input checked="" type="checkbox"/>
a. Will storm water discharges flow to adjacent properties?	<input type="checkbox"/>	<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"/>	<input checked="" type="checkbox"/>
Stormwater discharges will be routed into three new stormwater management areas.		
18. Does the proposed action include construction or other activities that would result in the impoundment of water or other liquids (e.g., retention pond, waste lagoon, dam)? If Yes, explain the purpose and size of the impoundment:	NO	YES
Three stormwater management ponds will be constructed to mitigate stormwater runoff from the project.	<input type="checkbox"/>	<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	YES
	<input checked="" type="checkbox"/>	<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	YES
	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I CERTIFY THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE Applicant/sponsor/name: <u>Rochester MHP Portfolio, LLC (Jeffrey Cook)</u> Date: <u>5-17-22</u> Signature: <u></u> Title: <u>Owner</u>		



Part 1 / Question 7 [Critical Environmental Area]	No
Part 1 / Question 12a [National or State Register of Historic Places or State Eligible Sites]	No
Part 1 / Question 12b [Archeological Sites]	No
Part 1 / Question 13a [Wetlands or Other Regulated Waterbodies]	No
Part 1 / Question 15 [Threatened or Endangered Animal]	No
Part 1 / Question 16 [100 Year Flood Plain]	Digital mapping data are not available or are incomplete. Refer to EAF Workbook.
Part 1 / Question 20 [Remediation Site]	No

A →



APPROVED

DATE: 10-30-2001

INITIAL: RL

SINGLE HUNG WINDOWS

ROOM	BASE (N)	ON (R)
KITCHEN	11	13
ISLAND	4	0
MAIN BATH	2	0
MASTER BATH	5	0
UTIL	—	—

COM NO. 2880321

Ritz-Craft
Custom Building Simplified

1175-8888.com

DATE DESCRIPTION BY
10/29/01 CONFIRM CM

BLUNDER CMH HOMES INC. BALLSTON SPA
CUSTOMER HANSON HUDSON, NY
DESIGNER JUD LONG
MODEL MOSS PANE
TITLE 1ST FLOOR PLAN
SCALE 3/8" = 1'-0"
SHEET FP1



TOWN VILLAGE CITY OF Batavia

(circle one)

Application # _____

Agricultural Data Statement

Date 06/02/2022

Instructions: This form must be completed for any application for a special use permit, site plan approval, use variance or a subdivision approval requiring municipal review that would occur on property within 500 feet of a farm operation located in a NYS Dept. of Ag & Markets certified Agricultural District.

Applicant	Owner if Different from Applicant
Name: <u>Jeffery Cook</u> Address: <u>5121 Clinton Street Rd</u> <u>Batavia NY 14020</u>	Name: _____ Address: _____ _____

1. Type of Application: Special Use Permit; Site Plan Approval; Use Variance;
 (circle one or more) Subdivision Approval
2. Description of proposed project: Adding 76 Mobile homes to existing park

3. Location of project: Address: 5121 Clinton Street Road Batavia NY 14020
 Tax Map Number (TMP) 9.-1-33.11

4. Is this parcel within an Agricultural District? NO YES (Check with your local assessor if
 5. If YES, Agricultural District Number _____ you do not know)
6. Is this parcel actively farmed? NO YES
7. List all farm operations within 500 feet of your parcel. Attach additional sheets if necessary.

Name: <u>Jeffery Thompson</u> Address: <u>8212 Batavia Stafford Townline Rd</u> <u>Batavia NY 14020</u> Is this parcel actively farmed? <input type="checkbox"/> NO <input checked="" type="checkbox"/> YES	Name: _____ Address: _____ Is this parcel actively farmed? <input type="checkbox"/> NO <input type="checkbox"/> YES
Name: _____ Address: _____ Is this parcel actively farmed? <input type="checkbox"/> NO <input type="checkbox"/> YES	Name: _____ Address: _____ Is this parcel actively farmed? <input type="checkbox"/> NO <input type="checkbox"/> YES

Signature of Applicant

Signature of Owner (if other than applicant)

Reviewed by: 6-2-22
Signature of Municipal Official Date

NOTE TO REFERRAL AGENCY: County Planning Board review is required. A copy of the Agricultural Data Statement must be submitted along with the referral to the County Planning Department.

1. Project Description

The Country Meadows Manufactured Home Community (CMMHC), located at 5121 Clinton Street Road in the Town of Batavia, operates under a NYS Department of Health permit authorizing 178 manufactured home lots meeting health department standards. Currently 174 of the currently permitted 178 lots within the 75 acre manufactured home community property are occupied.

The manufactured home community is served with sanitary sewers that discharge into the Town of Batavia sanitary sewer that is routed through the parcel within a wide sewer easement, and along the north property line within the adjacent land parcel. The community is also served with domestic water supply and fire protection watermains that connect to the Town's watermain at Shady Lane in the middle of the property. Numerous private asphalt surfaced roads provide access to all homes with maintenance responsibilities for private roads assumed by the CMMHC owner. It is noted that the utilities within the property are also owned and maintained by the CMMHC owner.

CMMHC proposes to create additional manufactured home lots within the undeveloped western portion of the property which is also situated with the MHP Mobile Home Park zoning district. Each of the 76 proposed new home lots will be compliant with Town code, with none of the lots being less than 6,000 s.f. in area or less than 60 feet in width. The new internal private roadways will be asphalt surfaced, 20 feet wide, with appropriate geometry and gradient to accommodate fire equipment. The manufactured home placement within each lot will comply with Town zoning requirements for separation and setbacks.

2. Water Supply

Domestic water and fire protection water to the expansion area will be supplied from the existing 6 inch diameter metered water supply line from Shady Lane. The existing watermains within the community will be extended through the currently proposed 76 lot expansion area to complete a looped system within a portion of the property. However, the proposed 29 lot expansion area in the northwest corner of the property will be supplied with a dead end watermain since looping is not possible due to the presence of an apparent wetland area. Additional fire hydrants and isolation valves will be installed along all new watermains.

Past quarterly master water meter readings for CMMHC were reviewed and an average of 124 gallons per day (gpd) water usage per home was determined. The projected additional water demand to supply the 76 new lots is 10,640 gpd, calculated at a conservative average water usage rate of 140 gpd for each of the new homes (see Appendix A, Water Supply Calculations for additional data). It is understood that the Town of Batavia's water system has adequate capacity to supply the additional homes.

The Town of Batavia has determined that the water supply to CMMHC must be equipped with a reduced pressure zone backflow prevention device (BPD) and a new meter to replace the existing meter that is housed within a vault at Shady Lane. The BPD and meter should be sized to serve the existing home and the proposed new homes within the expanded 254 home community.

The peak domestic water demand to supply the proposed 254 homes has been determined to be 77 gpm (refer to Appendix A for calculations). Peak fire demand has been determined to be 500 gpm at 20 pounds per square inch (psi) minimum pressure per American Water Works Association's "AWWA Manual M31, Distribution System Requirements for Fire Protection".

The 6 inch diameter combined domestic and fire protection water service will be backflow protected with a 6 inch diameter Watts Series LF909 OSY reduced pressure zone backflow prevention device placed immediately downstream from a new 6 inch Omni Compound meter and strainer. The Watts Series LF909 is a lead free device compliant with NYSDOH regulations. Both devices will be placed within an aboveground heated HotBox enclosure with access hatches, concrete floor slab, and alarms as depicted on Drawings BPD-1 and BPD-2. Manufacturers' information pertaining to the selected RPZ and meter are included in Appendix A.

With a static water pressure of 84 pounds psi reported in the Town watermain along Clinton Street Road, the following water service pressures have been calculated. Calculations are included in Appendix A.

Domestic Water Supply at 77 gpm Peak Demand

Pressure at main =	84.0 psi
Pressure loss through 8" water supply pipe (frictional) =	negligible
Pressure loss due to elevation =	-7.4 psi
Pressure loss through meter =	negligible
Pressure loss through BPD =	<u>-10.0 psi</u>
Available Pressure after BPD	66.6 psi
Pressure loss through 3,600 l.f. of 6" dia. dist. pipe to most remote home =	negligible
Pressure gain due to elevation =	<u>+5.4 psi</u>
Available Pressure at Most Remote Home =	72.0 psi

Fire Water Supply at 500 gpm Peak Demand

Pressure at main =	84.0 psi
Pressure loss through 8" dia. water supply pipe (frictional) =	-1.6 psi
Pressure loss due to elevation =	-7.4 psi
Pressure loss through meter =	-1.0 psi
Pressure loss through BPD =	<u>-10.0 psi</u>
Available Pressure after BPD	64.0 psi
Pressure loss through 3,650 l.f. of 6" dia. dist. pipe to most remote hydrant =	-31.3 psi
Pressure gain due to elevation =	<u>+5.4 psi</u>
Available Pressure at Hydrant	38.1 psi

The new water meter, backflow prevention device, and watermain extension will supply domestic water to the most remote new home lot at a pressure exceeding 70 psi. The minimum 500 gpm fire flow rate at 20 psi minimum pressure will be satisfied with 500 gpm delivered to the most remote hydrant at a pressure of 38.1 psi.

Miscellaneous Information

- The backflow prevention device will not be installed within a 100 year floodplain.
- Dual backflow prevention devices are not needed for the water service to the manufactured home community.
- The HotBox drain ports are adequately sized to drain the full RPZ relief valve discharge (see Appendix A for calculations)

3. Sanitary Sewers

The manufactured home expansion area will be served with two 8 inch diameter PVC pipe sanitary trunk sewers that will discharge into two existing Town of Batavia sanitary sewer manholes located within the property or within an easement on the adjoining property to the north. The sanitary trunk sewers and all sanitary laterals to individual manufactured homes will be gravity lines satisfying Ten States Standards and will remain privately owned and maintained by CMMHC. It is understood that the Town of Batavia's gravity sewer system, downstream pump station and force main have adequate reserve capacity to accept the estimated 10,640 gpd additional sewage loading from the proposed 76 home expansion.

4. Stormwater

Storm runoff from the expansion area will be routed into three stormwater ponds for attenuation prior to controlled release with the CMMHC property. Stormwater will continue to drain from the property into the swale on the adjacent property to the north. A Storm Water Pollution Prevention Plan that satisfies all requirements of the New York State Department of Environmental Conservation (NYSDEC) SPDES General Permit for Stormwater Discharges from Construction Activity, Permit No. GP-0-20-001 has been prepared for this project. A Notice of Intent will be submitted to the NYSDEC prior to commencement of construction in order to obtain coverage under the General Permit.

5. Traffic Impacts

The existing 178 lot manufactured home community is served with three driveways from Clinton Street Road. Although traffic counts have not been obtained, it is expected that residents would typically use the driveway offering the most direct access to their home. With the majority of homes located within the western portion of the property, it is estimated that 60% of vehicles entering and leaving the community utilize the western driveway.

The Institute of Transportation Engineers Trip Generation Manual estimates that a mobile home park containing 178 homes generates 900 vehicular trips per day with 50% entering and 50% leaving. The Trip Generation Manual further estimates that a park of this size will

**Engineer's Report
Country Meadows Manufactured Home Community Expansion
5121 Clinton Street Road, Town of Batavia, NY**

May 2022

yield 59 vehicles exiting the park and 15 vehicles entering the park during the morning peak hour of traffic on Clinton Street Road. During the afternoon peak hour there would be 65 vehicles entering and 40 vehicles exiting. It is noted that according the NYS Department of Transportation online traffic data, Clinton Street Road carries 5,638 vehicles per day with 438 vehicles during the morning peak hour and 370 vehicles during the afternoon peak hour.

The proposed 76 additional manufactured homes will result in 275 additional vehicle trips per day, 19 additional vehicle trips during the morning peak hour, and 42 additional vehicle trips during the afternoon peak hour. The majority of these additional vehicle trips will likely be assigned to the more convenient western driveway. This driveway can easily accommodate the additional vehicular trips without a significant impact on traffic operations

at the Clinton Street Road intersection



5-17-2022

Appendix A

Water Supply Calculations

CLIENT

PROJECT

SUBJECT



MADE

CHK

REV

JOB NO.

SHEET NO. 1

WATER SUPPLY

MASTER METER READINGS (174 HOMES)

4TH QTR 2020	2,006,000 GAL
1ST QTR 2021	1,814,000 GAL
2ND QTR 2021	2,229,000 GAL
3RD QTR 2021	1,821,000 GAL

7,870,000 GAL / YR

21,562 GAL / DAY

124 GAL / DAY / HOME

SAY 140 GPD / HOME

PROPOSED FUTURE WATER USE = (178 CURRENTLY PERMITTED HOMES + 76 ADDITIONAL HOMES) x 140 GPD / HOME = 35,560 GPD

PEAK DOMESTIC DEMAND FOR 254 HOMES = 776 PM (SEE TABLE 4-3)

CLIENT

PROJECT

SUBJECT

MADE

CHK

REV

JOB NO.

SHEET NO.

BACKFLOW PREVENTION

PRESSURE AT TOWN WATERMAIN = 84 psi
 ELEV. AT TOWN WATERMAIN = 867

ELEV. AT NEW METER AND BPD = 884

DOMESTIC WATER PEAK DEMAND = 77 GPM

PRESSURE LOSS IN 700' OF 8" WATERMAIN ON SHADY LANE
 PRECEDING METER = NEGLIGIBLE (SEE TABLE C-24)

ELEV. PRESSURE LOSS FROM MAIN TO METER = $(884 - 867) 0.433 = -7.4 \text{ psi}$

PRESSURE LOSS THRU METER (6") = NEGLIGIBLE (SEE CAT. CUT)

PRESSURE LOSS THRU LF909 RPZ (6") = -10 psi (SEE CAT. CUT)

FIRE FLOW PEAK DEMAND = 500 GPM

PRESSURE LOSS IN 800' OF 8" WATERMAIN ON SHADY LANE
 PRECEDING METER = $(0.53' / 100' \times 700') 0.433 = -1.6 \text{ psi}$ (SEE TABLE C-24)

ELEV. PRESSURE LOSS FROM MAIN TO METER = $(884 - 867) 0.433 = -7.4 \text{ psi}$

PRESSURE LOSS THRU METER = -1.0 psi (SEE CAT. CUT)

PRESSURE LOSS THRU LF909 RPZ (6") = -10.0 psi (SEE CAT. CUT)

FIRE FLOW TO MOST REMOTE HYDRANT AT NEW LOT 76 @ 500 GPM

AVAILABLE PRESSURE AFTER BPD = 64.0 psi

PRESSURE LOSS THRU 3650 LF OF 6" DIST. PIPE = $(1.98' / 100' \times 3650') (0.433) = -31.3 \text{ psi}$

PRESSURE GAIN DUE TO ELEV. = $(884 - 871.5) 0.433 = +5.4 \text{ psi}$

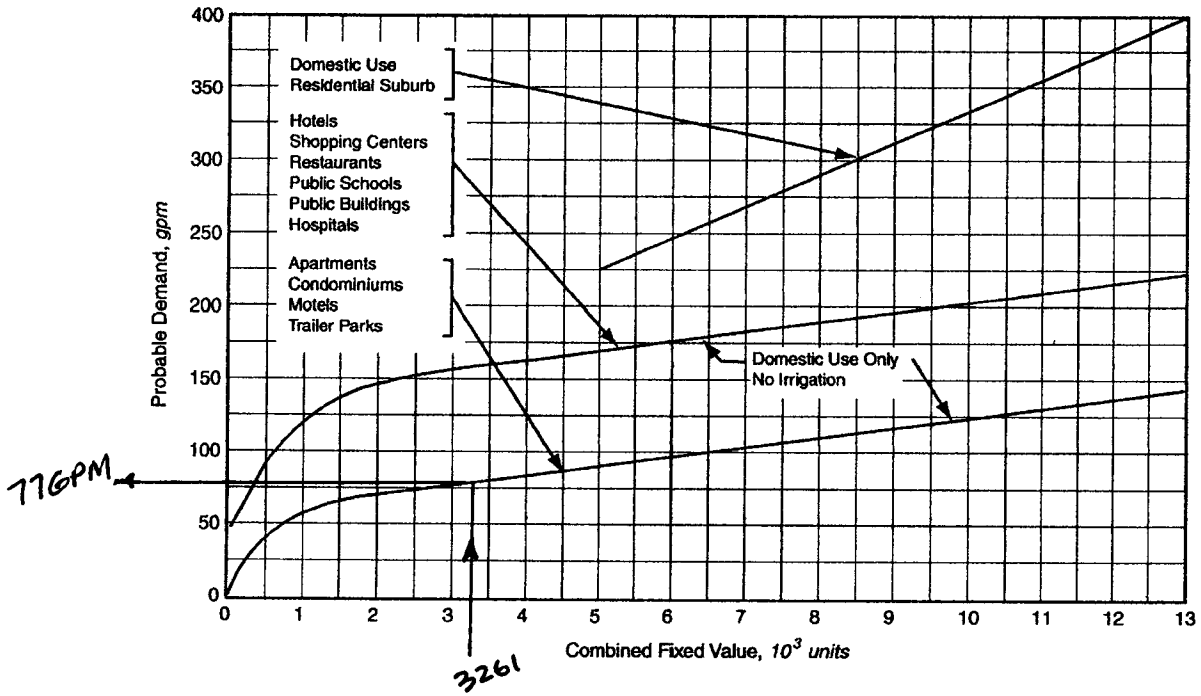


Figure 4-3 Water flow demand per fixture value—high range

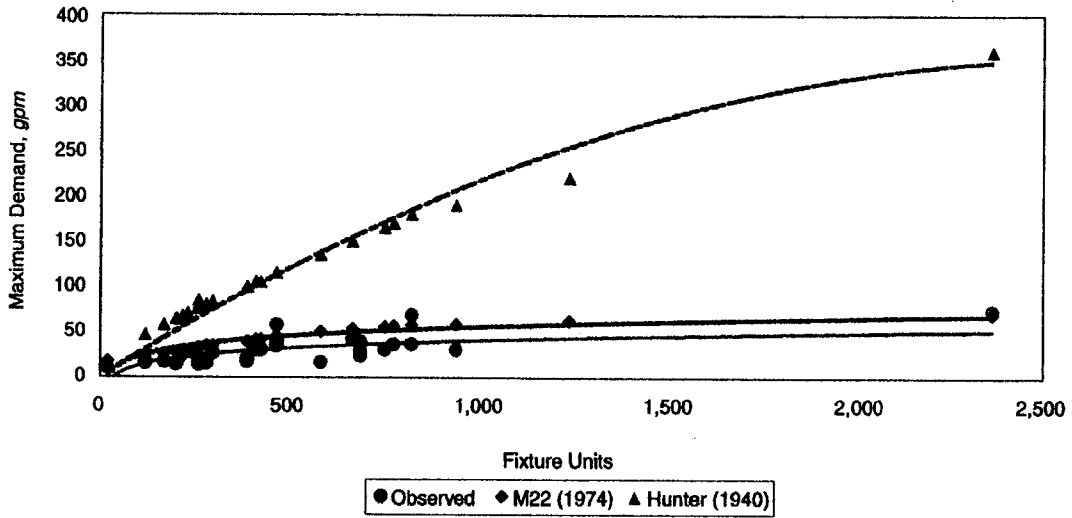


Figure 4-4 Fixture units versus maximum demand multifamily housing: Observed data and data predicted by M22 (1975) and Hunter (1940)

CITY OF _____

Water Customer Data Sheet

Customer CMMHP Address _____

Building Address _____ Zip Code _____

Subdivision _____ Lot No. _____ Blk. No. _____

Type of Occupancy _____

Fixture	Fixture Value 60 psi	No. of Fixtures	Fixture Value
Bathtub	8	x <u>85</u>	= <u>680</u>
Bedpan Washers	10	x _____	= _____
Bidet	2	x _____	= _____
Dental Unit	2	x _____	= _____
Drinking Fountain – Public	2	x _____	= _____
Kitchen Sink	2.2	x <u>254</u>	= <u>559</u>
Lavatory	1.5	x <u>254</u>	= <u>381</u>
Showerhead (Shower Only)	2.5	x <u>169</u>	= <u>423</u>
Service Sink	4	x _____	= _____
Toilet – Flush Valve	35	x _____	= _____
– Tank Type	4	x <u>254</u>	= _____
Urinal – Pedestal Flush Valve	35	x _____	= _____
– Wall Flush Valve	16	x _____	= _____
Wash Sink (Each Set of Faucets)	4	x _____	= _____
Dishwasher	2	x <u>254</u>	= <u>508</u>
Washing Machine	6	x <u>85</u>	= <u>510</u>
Hose (50 ft Wash Down) – 1/2 in.	5	x <u>40</u>	= <u>200</u>
– 5/8 in.	9	x _____	= _____
– 3/4 in.	12	x _____	= _____
Combined Fixture Value Total			<u>3261</u>
Customer Peak Demand From Fig. 4 – 2 or 4 – 3 × Press. Factor			= <u>77</u> gpm
Add Irrigation – _____ Sections* × 1.16 or 0.40†			= _____ gpm
– _____ Hose Bibs × Fixture Value × _____ Press. Factor			= _____ gpm
Added Fixed Load			= _____ gpm
TOTAL FIXED DEMAND			= _____ gpm

*100 ft² area = 1 section
 †Spray systems – Use 1.16; Rotary systems – Use 0.40

Figure 4-5 Water customer data sheet

Table C-24 Friction loss in pipe—C=130—8-in. polyvinyl chloride pipe

C=130	SDR14 ID* = 7.602		SDR18 ID = 7.924		SDR25 ID = 8.24	
	Flow gpm	Head Loss ft/100 ft	Velocity ft/s	Head Loss ft/100 ft	Velocity ft/s	Head Loss ft/100 ft
130	0.05	0.92	0.04	0.85	0.04	0.78
140	0.06	0.99	0.05	0.91	0.04	0.84
150	0.07	1.06	0.06	0.98	0.05	0.90
160	0.08	1.13	0.06	1.04	0.05	0.96
170	0.09	1.20	0.07	1.11	0.06	1.02
180	0.10	1.27	0.08	1.17	0.07	1.08
190	0.11	1.34	0.09	1.24	0.07	1.14
200	0.12	1.41	0.10	1.30	0.08	1.20
220	0.14	1.56	0.12	1.43	0.10	1.32
240	0.17	1.70	0.14	1.56	0.11	1.44
260	0.19	1.84	0.16	1.69	0.13	1.56
280	0.22	1.98	0.18	1.82	0.15	1.68
300	0.25	2.12	0.21	1.95	0.17	1.80
350	0.33	2.47	0.27	2.28	0.23	2.11
400	0.43	2.83	0.35	2.60	0.29	2.41
450	0.53	3.18	0.44	2.93	0.36	2.71
<i>FIVE FLOW</i> 500	0.65	3.53	0.53	3.25	0.44	3.01
550	0.77	3.89	0.63	3.58	0.52	3.31
600	0.91	4.24	0.74	3.90	0.61	3.61
650	1.05	4.59	0.86	4.23	0.71	3.91
700	1.21	4.95	0.99	4.55	0.82	4.21
<i>FIRE FLOW</i> 750	1.37	5.30	1.12	4.88	0.93	4.51
800	1.55	5.65	1.26	5.20	1.04	4.81
850	1.73	6.01	1.41	5.53	1.17	5.11
900	1.92	6.36	1.57	5.86	1.30	5.41
950	2.12	6.72	1.74	6.18	1.43	5.72
1,000	2.34	7.07	1.91	6.51	1.58	6.02
1,100	2.79	7.78	2.28	7.16	1.88	6.62
1,200	3.27	8.48	2.68	7.81	2.21	7.22
1,300	3.80	9.19	3.10	8.46	2.57	7.82
1,400	4.36	9.90	3.56	9.11	2.94	8.42
1,500	4.95	10.60	4.04	9.76	3.34	9.02
1,600			4.56	10.41	3.77	9.63
1,700					4.22	10.23

*ID=inside diameter—ASTM D2241

NOTE: To convert psi to kPa: psi × 6.89476; to convert gpm to m³/hr: gpm × 0.227



OMNI+ Compound (C²) Water Meter

1-1/2", 2", 3", 4", 6", 8" and 10"

The OMNI™+ Compound (C²) Water Meter operation is based on advanced Floating Ball Technology (FBT).

Performance

The patented measurement principles of the OMNI+ C² meter ensure greater accuracy, expanded accuracy range and longer service life than any other comparable class meter. The OMNI+ C² meter has no restrictions on sustained flow rates within its continuous range. The floating ball measurement technology allows installation in any orientation and flows up to maximum rated capacity without undue wear or accuracy degradation.

Construction

The OMNI+ C² meter consists of two basic assemblies; the maincase and the measuring chamber. The measuring chamber assembly includes the "floating ball" impeller with a coated titanium shaft, hybrid axial bearings, integral flow straightener and an all electronic programmable register with protective bonnet. The maincase is made from industry proven Ductile Iron with an approved NSF epoxy coating. Maincase features are; easily removable measuring chamber, unique chamber seal to the maincase using a high pressure o-ring, testing port and an AWWA compliant strainer.

OMNI+ Electronic Register

The OMNI+ electronic register is hermetically sealed with an electronic pickup containing no mechanical gearing. The OMNI+ register features a programmable totalizer registration, an optional digital pulse signal, AMI/ AMR reading digits, and a resettable test totalizer. The large, easy-to-read LCD also displays both forward and reverse flow directions. The OMNI+ tamper-proof security cover can be positioned in any of 270 degrees of rotation, with indexing points at each of the 90-degree customary register viewing positions.

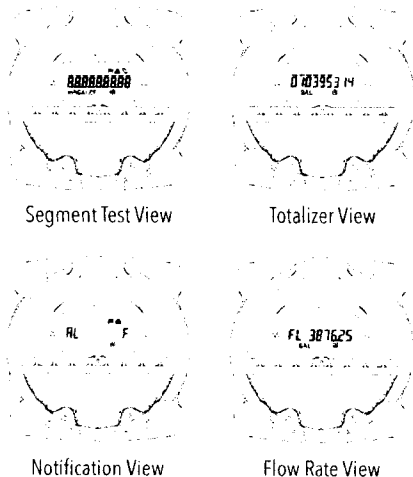
Magnetic Drive

Meter registration is achieved by utilizing a fully magnetic pickup system. This is accomplished by the magnetic actions of the embedded rotor magnets and the ultra sensitive register pickup probe. The only moving component in water is the "floating ball" impeller.

Measuring Element

The hydro-dynamically balanced impeller floats between the bearings. The Floating Ball Technology (FBT) allows the measuring element to operate virtually without friction or wear, thus creating the extended upper and lower flow ranges capable on only the OMNI+ C² meter.

OMNI™+ REGISTER DISPLAY



Conformance to Standards

The OMNI+ C² meter meets and far exceeds the most recent revision of AWWA Standard C701 and C702 class II. Additionally, the meter does not require a valve to meet these standards. Each meter is performance tested to ensure compliance. All OMNI meters are NSF/ANSI Standard 61, Annex F and G approved latest standards.

OMNI+ Compound (C²) Water Meter

1-1/2", 2", 3", 4", 6", 8" and 10"

Strainer

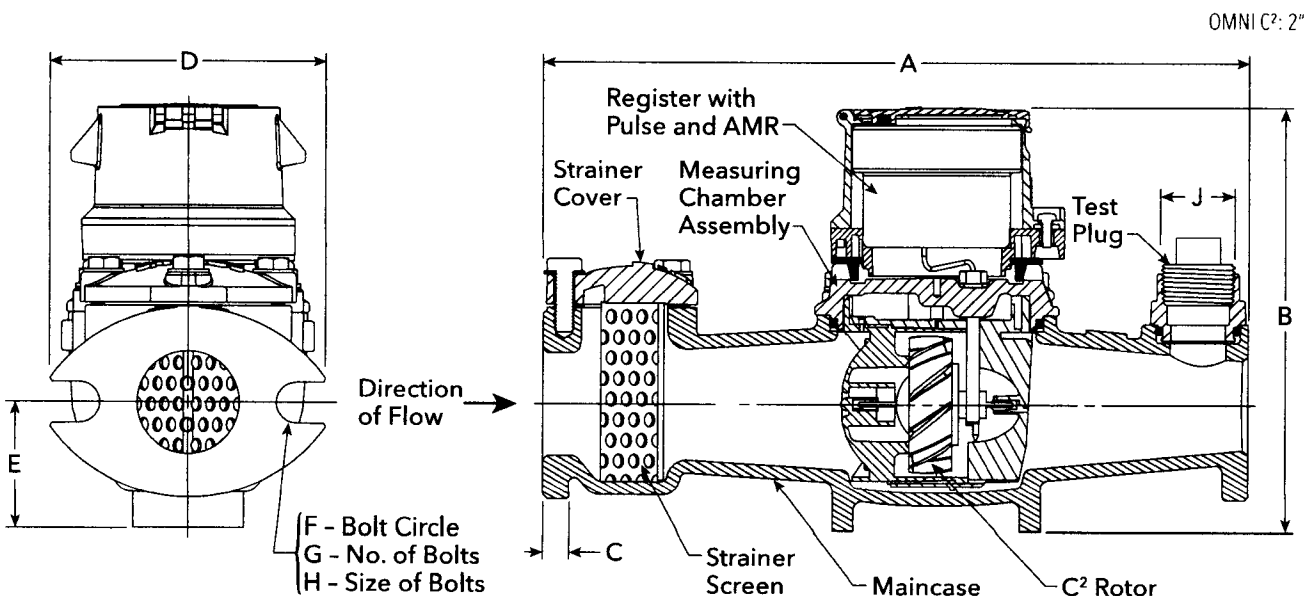
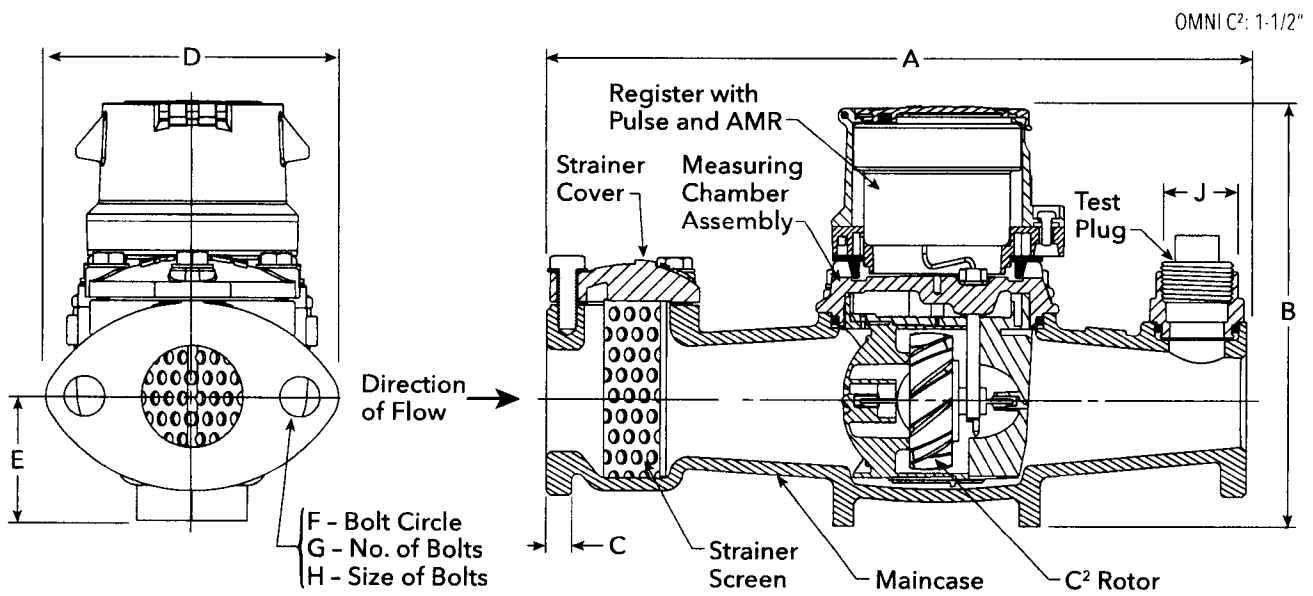
The OMNI+ C² with the AWWA compliant "V" shaped strainer uses a stainless steel screen along with Floating Ball Technology (FBT). This creates a design that greatly improves accuracy, even in difficult settings. A removable strainer cover permits easy access to the screen for routine maintenance.

AMR/AMI Systems

Meters and Electronic Registers are compatible with current Sensus AMR/AMI systems and other AMI communication systems that use the Sensus UI1203 protocol.

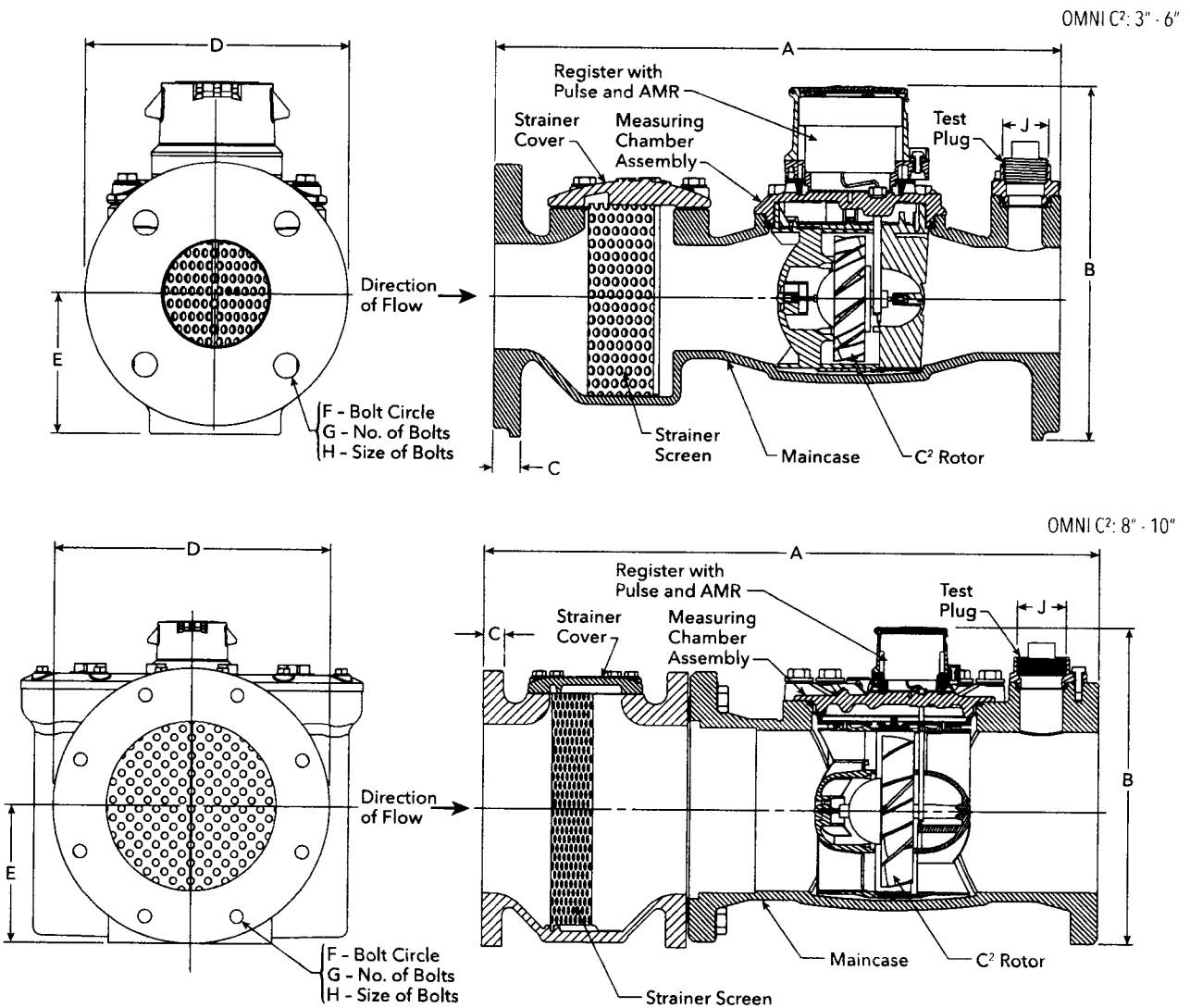
Maintenance

The OMNI+ C² meter is designed for easy maintenance. Should any maintenance be required, the measuring chamber and/or strainer cover can be removed independently. Replacement parts or complete measuring chambers are available for repairs. OMNI+ C² replacement measuring chambers may also be utilized to upgrade some third-party meters to achieve increased accuracy and extended service life.



OMNI+ Compound (C²) Water Meter

1-1/2", 2", 3", 4", 6", 8" and 10"



DIMENSIONS AND NET WEIGHTS

Meter and Pipe Size	Normal Operating Range	Connections	A	B	C	D	E	F	G	H	J	Net Weight	Shipping Weight
1-1/2" DN 40mm	.5 gpm 200 gpm .11 m ³ /hr 45 m ³ /hr	Flanged	13" 330mm	7-7/8" 200mm	15/16" 24mm	5-7/16" 138mm	2-5/16" 59mm	4" 102mm	2	5/8" 16mm	1" 25mm	18.8 lbs. 8.53 kg.	22.5 lbs. 10.20 kg.
2" DN 50mm	.5 gpm 200 gpm .11 m ³ /hr 45 m ³ /hr	Flanged	15-1/4" 387mm	7-7/8" 200mm	1" 25mm	5-3/4" 146mm	2-5/16" 59mm	4-1/2" 114mm	2	3/4" 19mm	1" 25mm	25.4 lbs. 11.5 kg.	32.5 lbs. 14.74 kg.
3" DN 80mm	1 gpm 500 gpm .23 m ³ /hr 114 m ³ /hr	Flanged	17" 432mm	8-3/4" 225mm	3/4" 19mm	7-7/8" 200mm	4-1/8" 105mm	6" 152mm	4	5/8" 16mm	1" 25mm	45 lbs. 20.41 kg.	48.0 lbs. 21.8 kg.
4" DN 100mm	1.5 gpm 1000 gpm .34 m ³ /hr 227 m ³ /hr	Flanged	20" 508mm	11-3/16" 284mm	15/16" 24mm	9-1/8" 232mm	4-3/4" 121mm	7-1/2" 191mm	8	5/8" 16mm	1-1/2" 38mm	64.9 lbs. 29.44 kg.	72.8 lbs. 33.02 kg.
6" DN 150mm	3 gpm 2000 gpm .68 m ³ /hr 454 m ³ /hr	Flanged	24" 610mm	13-1/4" 337mm	15/16" 24mm	11" 279mm	5-3/4" 146mm	9-1/2" 241mm	8	3/4" 19mm	1-1/2" 38mm	130 lbs. 59.0 kg.	155 lbs. 70.3 kg.
8" DN 200mm	4 gpm 2700 gpm .91 m ³ /hr 614 m ³ /hr	Flanged	30-1/8" 765mm	15" 381mm	11/16" 17mm	13-1/2" 343mm	6-3/4" 172mm	11-3/4" 298mm	8	3/4" 19mm	2" 51mm	471 lbs. 214 kg.	521 lbs. 236 kg.
10" DN 250mm	5 gpm 4000 gpm 1.1 m ³ /hr 908 m ³ /hr	Flanged	41-1/8" 1045mm	19" 483mm	11/16" 17mm	16" 406mm	8-1/2" 216mm	14-1/4" 362mm	12	7/8" 22mm	2" 51mm	685 lbs. 311 kg.	745 lbs. 338 kg.

OMNI+ Compound (C²) Water Meter

1-1/2", 2", 3", 4", 6", 8" and 10"

SPECIFICATIONS

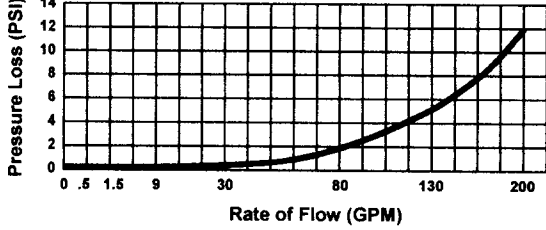
Service	Measurement of potable and reclaim water. Storage temperature: -22F (-30C) to 155F (68.3C)	Operating temperatures: Air: -22F (-30C) to 150F (65.6C) Water: 33F (0.6C) to 80F (26.7C)
Operating Range (100% ± 1.5%)	1-1/2": 0.5 - 200 GPM (0.11 - 45 m3/hr) 2": 0.5 - 200 GPM (0.11 - 45 m3/hr) 3": 1.0 - 500 GPM (0.23 - 114 m3/hr) 4": 1.5 - 1000 GPM (0.34 - 227 m3/hr)	6": 3 - 2000 GPM (0.68 - 454 m3/hr) 8": 4 - 2700 GPM (0.91 - 614 m3/hr) 10": 5 - 4000 GPM (1.1 - 908 m3/hr)
Low flow (95% - 101.5%)	1-1/2": 0.25 GPM (.06 m3/hr) 2": 0.25 GPM (.06 m3/hr) 3": 0.5 GPM (0.11 m3/hr) 4": 0.75 GPM (0.17 m3/hr)	6": 1.5 GPM (0.34 m3/hr) 8": 2.5 GPM (0.57 m3/hr) 10": 3.5 GPM (0.8 m3/hr)
Maximum Continuous Operation	1-1/2": 160 GPM (36 m3/hr) 2": 160 GPM (36 m3/hr) 3": 400 GPM (91 m3/hr) 4": 800 GPM (182 m3/hr)	6": 1600 GPM (363 m3/hr) 8": 2700 GPM (614 m3/hr) 10": 4000 GPM (908 m3/hr)
Maximum Intermittent Operation	1-1/2": 200 GPM (45 m3/hr) 2": 200 GPM (45 m3/hr) 3": 500 GPM (114 m3/hr) 4": 1000 GPM (227 m3/hr)	6": 2000 GPM (454 m3/hr) 8": 3400 GPM (773 m3/hr) 10": 5000 GPM (1136 m3/hr)
Pressure Loss	1-1/2": 6.9 psi @ 160 GPM (0.48 bar @ 36 m3/hr) 2": 4.3 psi @ 160 GPM (0.30 bar @ 36 m3/hr) 3": 3.2 psi @ 400 GPM (0.22 bar @ 91 m3/hr) 4": 6.4 psi @ 800 GPM (0.44 bar @ 182 m3/hr)	6": 5.5 psi @ 1600 GPM (0.38 bar @ 363 m3/hr) 8": 4 psi @ 2700 GPM (0.28 bar @ 614 m3/hr) 10": 4.5 psi @ 4000 GPM (0.31 bar @ 908 m3/hr)
Maximum Operating Pressure	200 PSI (13.8 bar)	
Flange Connections	U.S. ANSI B16.1 / AWWA Class 125	
Test Ports	NPT	
Register	Fully electronic sealed register with programmable registration (Gal. /Cu.Ft. / Cu. Mtr. / Imp. Gal. / Acre Ft.)	Programmable AMR/AMI reading and pulse outputs Guaranteed 10-year battery life
NSF Approved Materials	Maincase: Coated Ductile Iron Measuring Chamber: Thermoplastic Rotor "Floating Ball": Thermoplastic Radial Bearings: Hybrid Thermoplastic Thrust Bearings: Sapphire/Ceramic Jewel	Magnets: Ceramic Strainer Screen: Stainless Steel Strainer Cover: Coated Ductile Iron Test Plug: Stainless Steel

OMNI+ Compound (C²) Water Meter

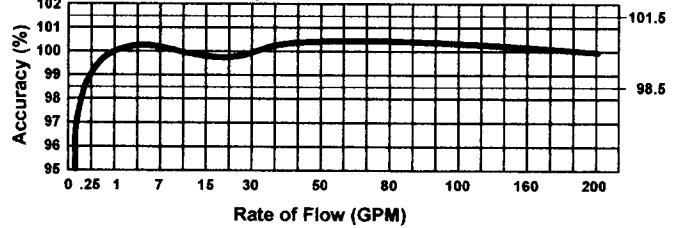
1-1/2", 2", 3", 4", 6", 8" and 10"

Headloss Curves

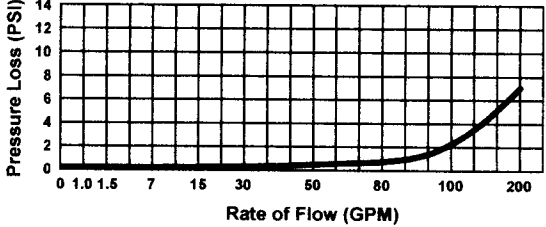
1.5" C² Pressure Loss Curve with Strainer



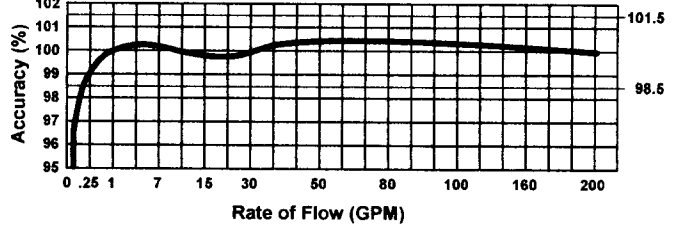
1.5" C² Accuracy Curve



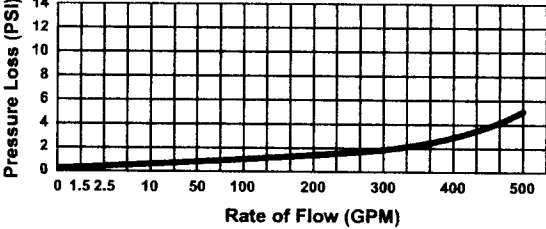
2" C² Pressure Loss Curve with Strainer



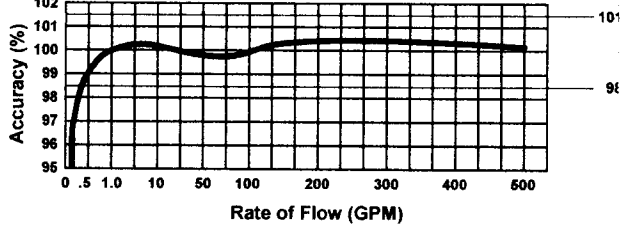
2" C² Accuracy Curve



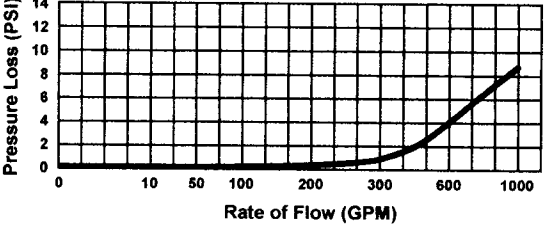
3" C² Pressure Loss Curve with Strainer



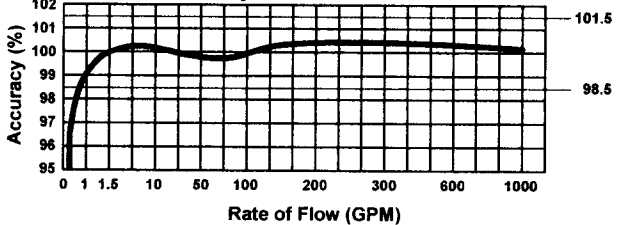
3" C² Accuracy Curve



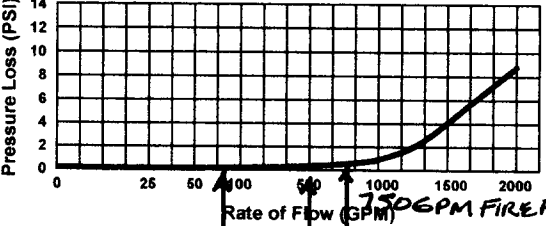
4" C² Pressure Loss Curve with Strainer



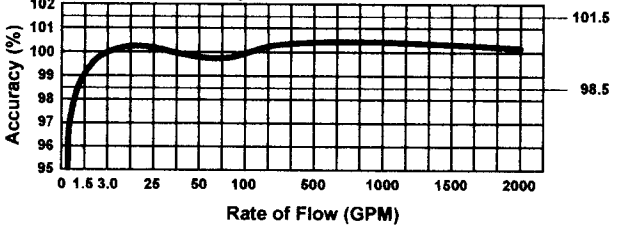
4" C² Accuracy Curve



6" C² Pressure Loss Curve with Strainer



6" C² Accuracy Curve

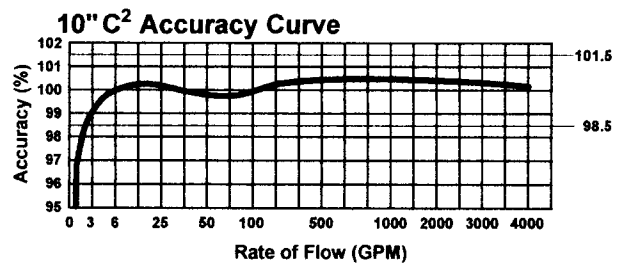
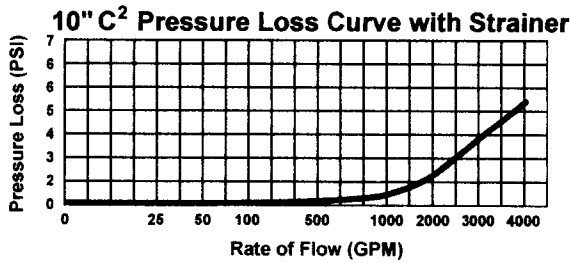
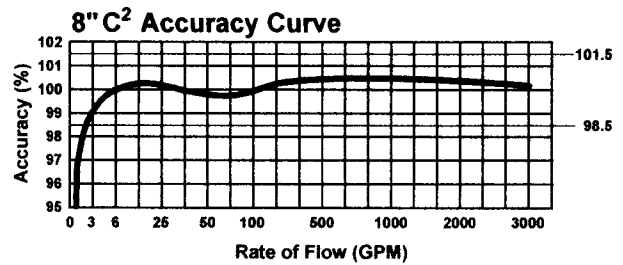
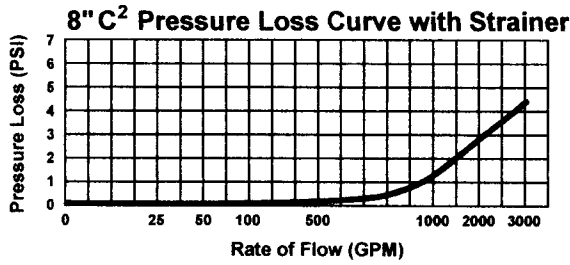


77GPM DOMESTIC FLOW
 500GPM FIRE FLOW
 750GPM FIRE FLOW

OMNI+ Compound (C²) Water Meter

1-1/2", 2", 3", 4", 6", 8" and 10"

Headloss Curves



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Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

LEAD FREE*

Series LF909

Reduced Pressure Zone Assemblies

Sizes: 2½" – 10"

Series LF909 Reduced Pressure Zone Assemblies are designed to provide cross-connection control protection of the potable water supply in accordance with national plumbing codes. This series can be utilized in a variety of installations, including health hazard cross-connections in plumbing systems or for containment at the service line entrance. With its exclusive relief valve design incorporating the "air-in/water-out" principle, it provides substantially improved relief valve discharge performance during the emergency conditions of combined backsiphonage and backpressure with both checks fouled. The LF909 features Lead Free* construction to comply with Lead Free* installation requirements.

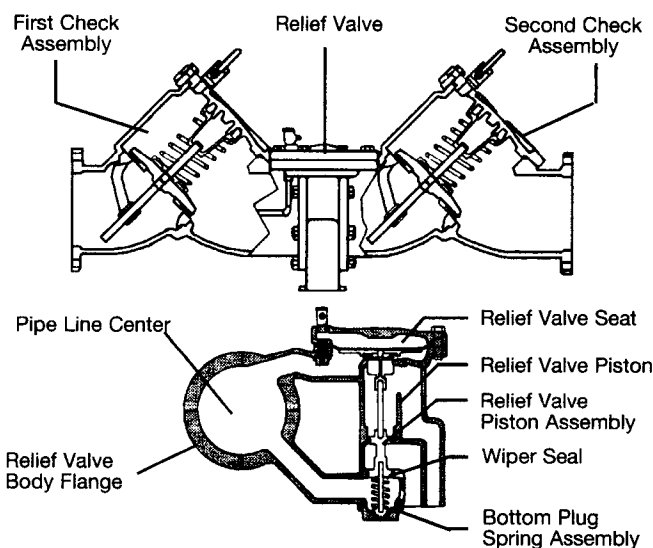
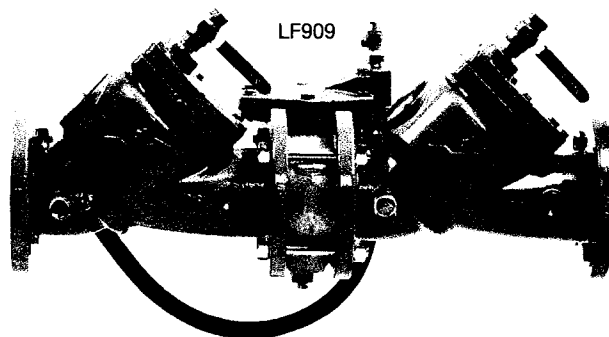
Series LF909 is also available with SentryPlus™ Alert technology to detect catastrophic relief valve discharge that could potentially cause flooding, and issue a multi-channel alert (call, e-mail, text) to selected users so they can take action to avoid potentially costly flooding.

Features

- Replaceable seats
- Stainless steel internal parts
- No special tools required for servicing
- Captured spring check assemblies
- Fused epoxy coated & lined checks
- Industrial strength sensing hose
- Field reversible relief valve
- Air-in/water-out relief valve design provides maximum capacity during emergency conditions

Specifications

A Reduced Pressure Zone Assembly shall be installed at each cross-connection to prevent backsiphonage and backpressure backflow of hazardous materials into the potable water supply. The assembly shall consist of a pressure differential relief valve located in a zone between two positive seating check valves and captured springs. Backsiphonage protection shall include provision to admit air directly into the reduced pressure zone via a separate channel from the water discharge channel. The assembly shall include two tightly closing shutoff valves before and after the valve and test cocks. The Lead Free* Reduced Pressure Zone Assembly shall comply with state codes and standards, where applicable, requiring reduced lead content. The assembly shall meet the requirements of ASSE Std. 1013; AWWA Std. C511-92; CSA B64.5; and UL Classified File No. EX3185. Listed by IAPMO (UPC). Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California. The assembly shall be a Watts Series LF909.



Now Available WattsBox Insulated Enclosures.

For more information, send for literature ES-WB.

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

NOTICE

Inquire with governing authorities for local installation requirements

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Watts product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Watts Technical Service. Watts reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Watts products previously or subsequently sold.

WATTS®

Available Models & Options

Suffix:

LF –	without shutoff valves
NRS –	non-rising stem resilient seated gate valves
OSY -	UL/FM outside stem & yoke resilient seated gate valves
S-FDA –	FDA epoxy coated strainer
ALERT	with SentryPlus™ Alert flood detection system

Note: The installation of a drain line is recommended. When installing a drain line, an air gap is necessary.

Materials

Check Valve Bodies: FDA epoxy coated cast iron

Seats: Stainless steel

Trim: Stainless steel

Relief Valve Body: 2½"-3" Lead Free* cast copper silicon alloy
4"-10" FDA epoxy coated cast iron

Test Cocks: Lead Free* copper silicon alloy

Pressure – Temperature

Temperature Range: 33°F-110°F (0.5°C-43°C) continuous,
140°F (60°C) intermittent

Maximum Working Pressure: 175psi (12.06 bar)

Standards

AWWA C511-92

IAPMO PS 31, SBCCI (Standard Plumbing Code)

USC manual for Cross-Connection Control, 8th Edition

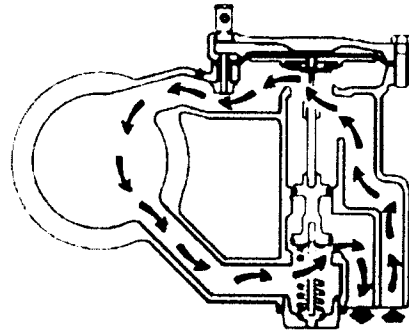
Approvals



Approved by the Foundation for Cross-Connection Control and Hydraulic Research at the University of Southern California.

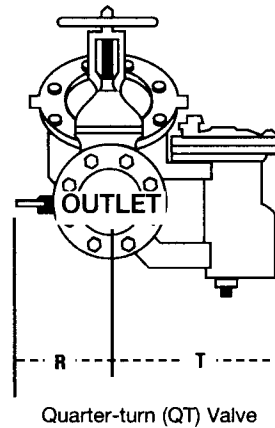
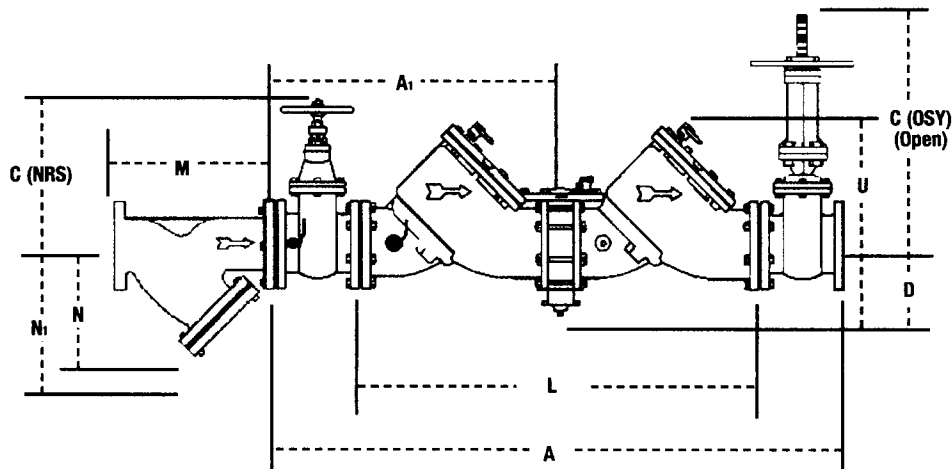
How It Operates

The unique relief valve construction incorporates two channels: one for air, one for water. When the relief valve opens, as in the accompanying air-in/water-out diagram, the right-hand channel admits air to the top of the reduced pressure zone, relieving the zone vacuum. The channel on the left then drains the zone to atmosphere. Therefore, if both check valves foul, and simultaneous negative supply and positive backpressure develops, the relief valve uses the air-in/water-out principle to stop potential backflow.



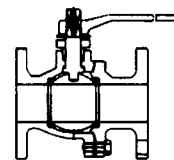
Water Air
Out In

Dimensions – Weights



Quarter-turn (QT) Valve

Watts G-4000 Series
Ball Valves
Send for F-G4000



NOTE: Valve may be furnished with (2) OSY or (2) NRS Shutoffs.

NOTE: Relief valve section is reversible, therefore, can be on either side and is furnished standardly as shown. Carla.Long@wattswater.com

SIZE		DIMENSIONS														WEIGHT										
in.	A		A1		C clearance for check				D		L		U		R		R (QT)		T		NRS		OSY		QT	
	in.	mm	in.	mm	(OSY)*		(NRS)		in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs.	kgs.	lbs.	kgs.	lbs.	kgs.
2½	41½	1053	20¾	527	16¾	416	9¾	238	5¼	133	26¾	669	11	279	4	102	16	406	9½	230	195	88.4	198	89.8	182	82.6
3	42½	1079	21¼	539	18¾	479	10¼	260	5¼	133	26¾	669	11	279	5	127	16	406	9½	230	225	102	230	104	190	86
4	55¾	1405	27¾	702	22¾	578	12¾	310	6	152	37¾	944	14	356	6	152	19¾	502	14¾	365	455	206	470	213	352	160
6	65½	1672	33	836	30¾	765	16	406	6	152	44½	1134	16	406	11	279	26	660	14¾	365	718	326	798	362	762	346
8	78¾	1995	39½	998	37¾	959	19¾	506	9¾	248	55¾	1404	21	533	11¼	286	11¼	286	19¼	489	1350	612	1456	660	2286	1037
10	93¾	2376	46¾	1188	45¾	1162	23¾	605	9¾	248	67¾	1709	21	533	12½	318	12½	318	21	533	2160	980	2230	1011	3716	1685

*UL, FM approved backflow preventers must include UL/FM approved OSY gate valves.

Strainer Dimensions

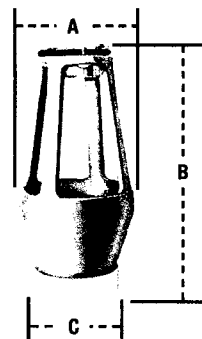
SIZE		DIMENSIONS						WEIGHT	
in.	M		N1†		N		lbs.	kgs.	
	in.	mm	in.	mm	in.	mm			
2½	10	254	10	254	6½	165	28	12.7	
3	10½	257	10	254	7	178	34	15.4	
4	12½	308	12	305	8¼	210	60	27	
6	18½	470	20	508	13½	343	133	60	
8	21¾	549	22¾	578	15½	394	247	112	
10	26	660	28	711	18½	470	370	168	

† – Dimension required for screen removal

Air Gap Dimensions

When installing a drain line on Series 909 backflow preventers that are installed horizontally, use 909 AG series air gaps.

IRON BODY MODEL NO.	ORDERING CODE	SERIES/SIZES	DIMENSIONS			WEIGHT				
			A	B	C	lbs	kgs			
			in.	mm	in.	mm	in.	mm	lbs	kgs
909AG-F	881378	1¼" – 3" 009/909 1¼" – 2" 009 M1 2" 009 M2	4¾	111	6¾	171	2	51	3.25	1.47
909AG-K	881385	4" – 6" 909 8" – 10" 909 M1	6¾	162	9¾	244	3	76	6.25	2.83
909AG-M	881387	8" – 10" 909	7¾	187	11¼	286	4	102	15.5	7.03

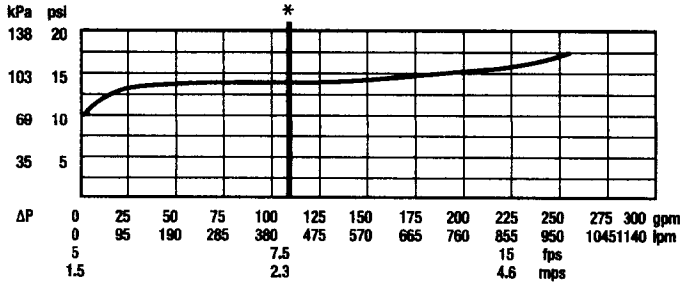


For flange size backflow preventers installed vertically (flow down), a fabricated air gap is recommended.

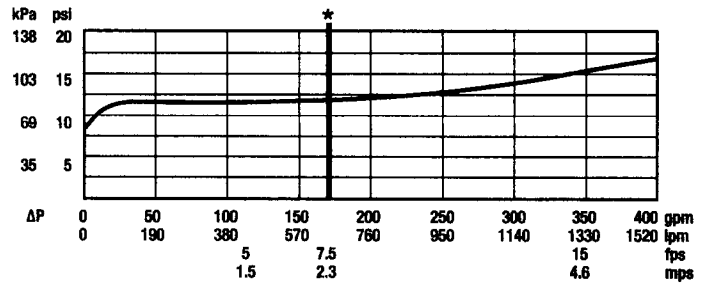
Capacity

*Typical maximum flow rate (7.5 feet/sec.)

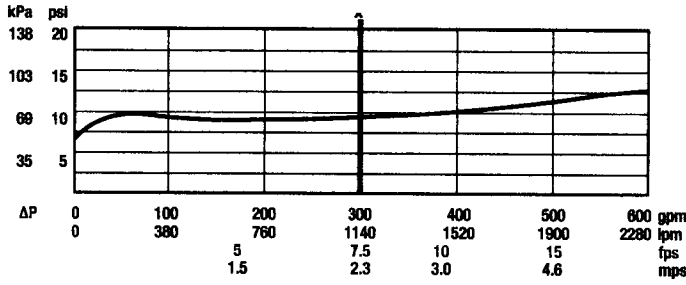
2 1/2"



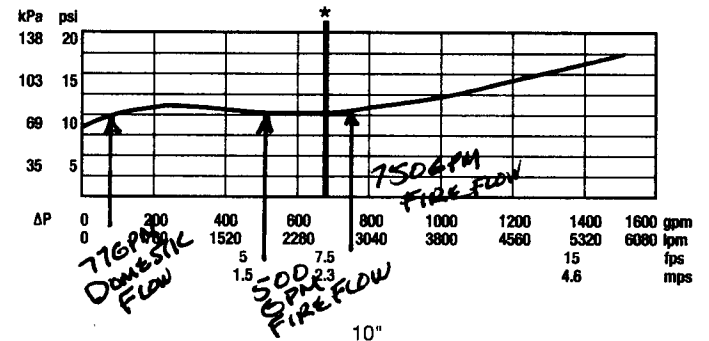
3"



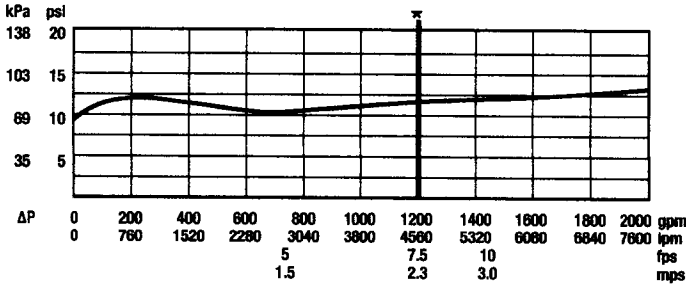
4"



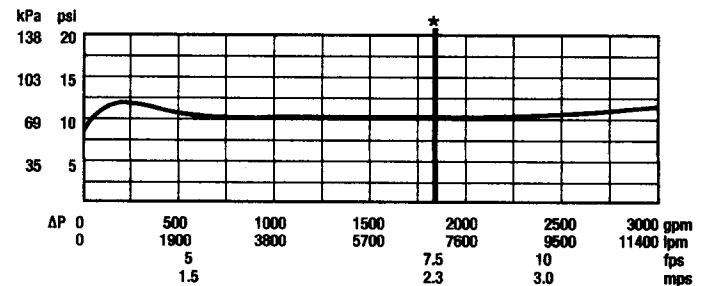
6"



8"



10"



USA: Tel: (978) 689-6066 • Fax: (978) 975-8350 • Watts.com
 Canada: Tel: (888) 208-8927 • Fax: (905) 332-7068 • Watts.ca
 Latin America: Tel: (52) 55-4122-0138 • Watts.com

Table C-23 Friction loss in pipe—C=130—6-in. polyvinyl chloride pipe

Flow gpm	SDR14		SDR18		SDR25	
	ID* = 5.796		ID = 6.042		ID = 6.282	
	Head Loss ft/100 ft	Velocity ft/s	Head Loss ft/100 ft	Velocity ft/s	Head Loss ft/100 ft	Velocity ft/s
50	0.03	0.61	0.03	0.56	0.02	0.52
60	0.05	0.73	0.04	0.67	0.03	0.62
70	0.06	0.85	0.05	0.78	0.04	0.72
80	0.08	0.97	0.07	0.90	0.06	0.83
90	0.10	1.09	0.08	1.01	0.07	0.93
100	0.12	1.22	0.10	1.12	0.08	1.04
120	0.17	1.46	0.14	1.34	0.12	1.24
140	0.23	1.70	0.19	1.57	0.16	1.45
160	0.29	1.95	0.24	1.79	0.20	1.66
180	0.37	2.19	0.30	2.01	0.25	1.86
200	0.44	2.43	0.36	2.24	0.30	2.07
220	0.53	2.68	0.43	2.46	0.36	2.28
240	0.62	2.92	0.51	2.69	0.42	2.48
260	0.72	3.16	0.59	2.91	0.49	2.69
280	0.83	3.40	0.68	3.13	0.56	2.90
300	0.94	3.65	0.77	3.36	0.64	3.11
320	1.06	3.89	0.87	3.58	0.72	3.31
340	1.19	4.13	0.97	3.80	0.80	3.52
360	1.32	4.38	1.08	4.03	0.89	3.73
380	1.46	4.62	1.19	4.25	0.99	3.93
400	1.60	4.86	1.31	4.48	1.08	4.14
450	2.00	5.47	1.63	5.04	1.35	4.66
FIRE FLOW 500	2.43	6.08	1.98	5.59	1.64	5.18
550	2.89	6.69	2.36	6.15	1.96	5.69
600	3.40	7.30	2.78	6.71	2.30	6.21
650	3.94	7.90	3.22	7.27	2.66	6.73
700	4.52	8.51	3.69	7.83	3.06	7.25
FIRE FLOW 750	5.14	9.12	4.20	8.39	3.47	7.76
800	5.79	9.73	4.73	8.95	3.91	8.28
850	6.48	10.34	5.29	9.51	4.38	8.80
900			5.88	10.07	4.87	9.32
950					5.38	9.83
1,000					5.92	10.35

*ID=inside diameter—ASTM D2241

NOTE: To convert psi to kPa: psi × 6.89476; to convert gpm to m³/hr: gpm × 0.227

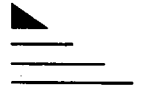
CLIENT

COUNTRY MEADOWS MHC

PROJECT

THORNTON

ENGINEERING LLP



SUBJECT

BACKFLOW PREVENTION

MADE

CHK

REV

JOB NO.

SHEET NO.

THE HOTBOX IS EQUIPPED WITH 4 DRAIN PORTS - EACH IS 10" WIDE
AND 6 1/2" TALL

WITH 6 1/2" OF WATER ON THE FLOOR, EACH DRAIN PORT WILL DISCHARGE
RELIEF VALVE WATER DETERMINED BY THE WEIR EQUATION

$$Q = C L H^{3/2} = 3.1 (10 \frac{1}{12}) (6.5 \frac{1}{12})^{3/2} = 1.03 \text{ CFS / DRAIN PORT}$$

4 DRAIN PORTS CAN DISCHARGE $1.03 \text{ CFS} \times 4 = 4.12 \text{ CFS}$ OR 1849 GAL./MIN

THE 6" WATS LF909 RELIEF VALVE WILL DISCHARGE 530 GPM
@ 55psi (SEE ATTACHED DATA SHEETS)

OK

THE 6" WATS LF909 RELIEF VALVE WILL DISCHARGE 650 GPM
@ 85psi (SEE ATTACHED DATA SHEETS)

OK

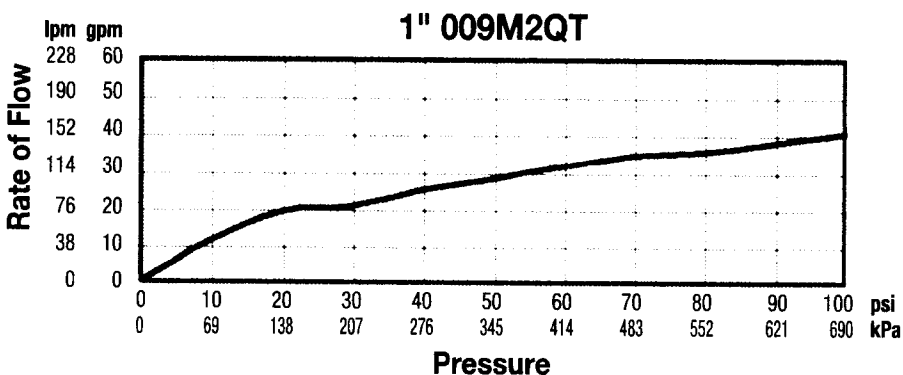
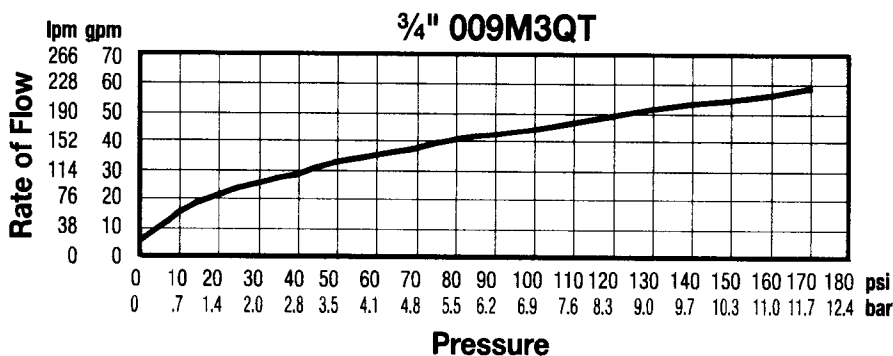
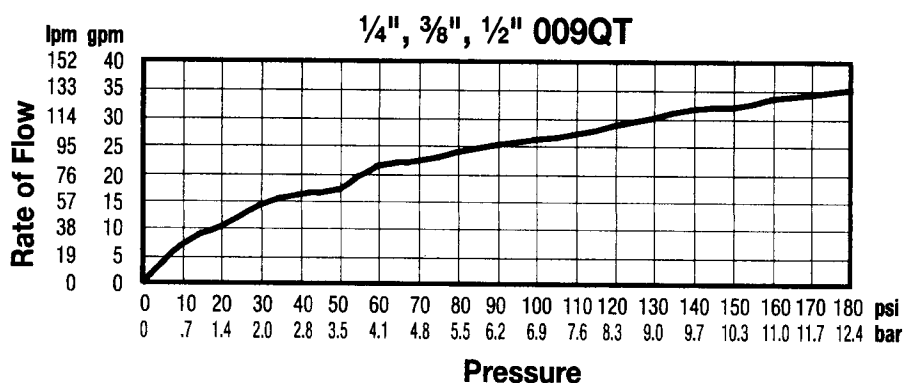
Job Name _____
 Job Location _____
 Engineer _____
 Approval _____

Contractor _____
 Approval _____
 Contractor's P.O. No. _____
 Representative _____

Series 009, 909, 919, 957 and 994

Reduced Pressure Zone Assemblies

Relief Valve Discharge Rates

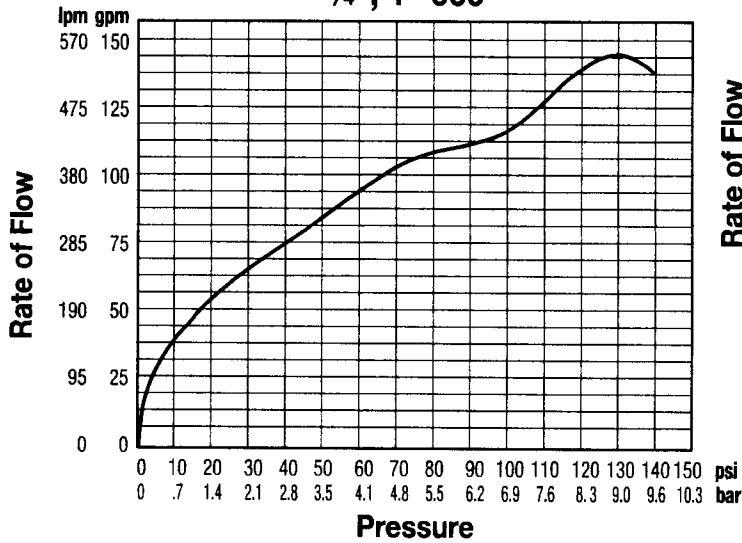


Note: These curves represent catastrophic or worst case discharge rates. These curves were developed by pressurizing the outlet of the backflow preventer with the second check valve's internals removed from the body.

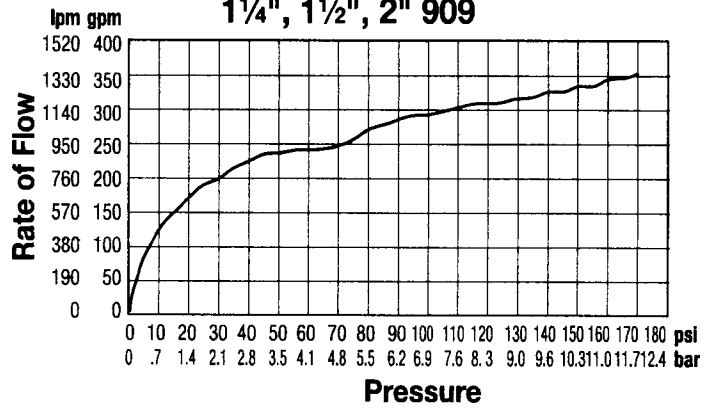
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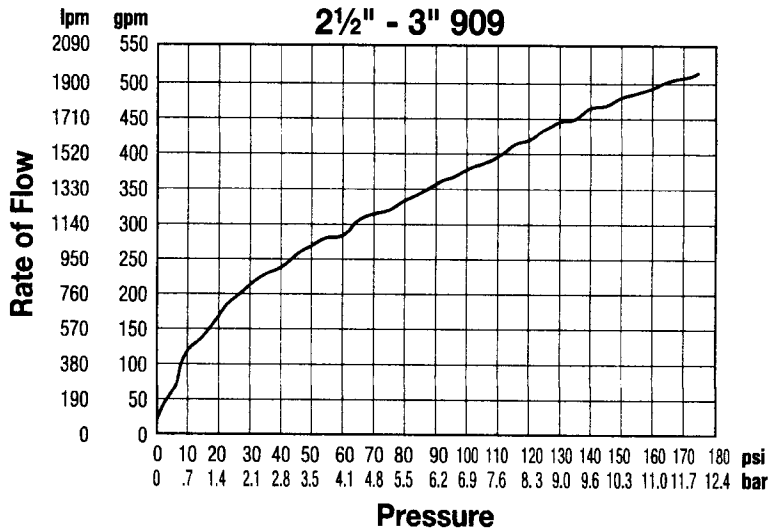
3/4", 1" 909



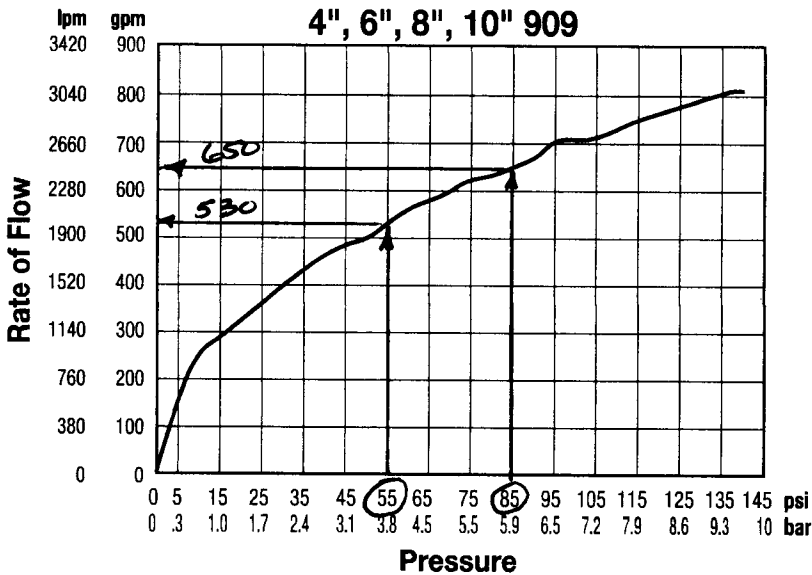
1 1/4", 1 1/2", 2" 909



2 1/2" - 3" 909



4", 6", 8", 10" 909



Note: These curves represent catastrophic or worst case discharge rates. These curves were developed by pressurizing the outlet of the backflow preventer with the second check valve's internals removed from the body.

COUNTRY MEADOWS MANUFACTURED HOME COMMUNITY EXPANSION

5121 CLINTON STREET ROAD, TOWN OF BATAVIA, GENESEE CO., NY

MAY 2022

LEGEND

Existing	Proposed	
---	---	Property Line/R.O.W.
---	---	Centerline
○ I.P.	---	Iron Pin
---	---	Lot Line
---538---	---538---	Ground Contour
XFMR □	XFMR □	XFMR
— UGE —	— UGE —	Underground Electric
□	□	Electric Transformer
○	○	Light Pole
— G —	— G —	Gas Main
○ GM	○ GM	Gas Marker
SAN MH ○	SAN MH ●	Sanitary Manhole
— SAN —	— SAN —	Sanitary Sewer
△ Hyd.	△ Hyd.	Hydrant
WV	WV	Water Valve
— W —	— W —	Water Main
— ST —	— ST —	Storm Sewer/Culvert
— D —	— D —	Drainage Ditch
▽	▽	Sign

PROJECT INFORMATION

Owner/Developer: Rochester MHP Portfolio, LLC
90 Airport Drive, Suite 400
Rochester, NY 14624

Parcel Address: 5121 Clinton Street Road

Tax Account Nos.: T.A.N. 9.00-1-33.11
T.A.N. 9.00-1-69 (no development proposed in this parcel)
T.A.N. 9.00-1-33.12 (no development proposed in this parcel)

Parcel Size: 69.791± acres (T.A.N. 9.00-1-33.11 and 9.00-1-69)
5.392± acres (T.A.N. 9.00-1-33.12)

Proposed Development: Construction of 76 new manufactured home lots

Zoning Information

District: MHP Mobile Home Park

Zoning Requirements (per Zoning Law Chapter 150, Mobile Home Parks)

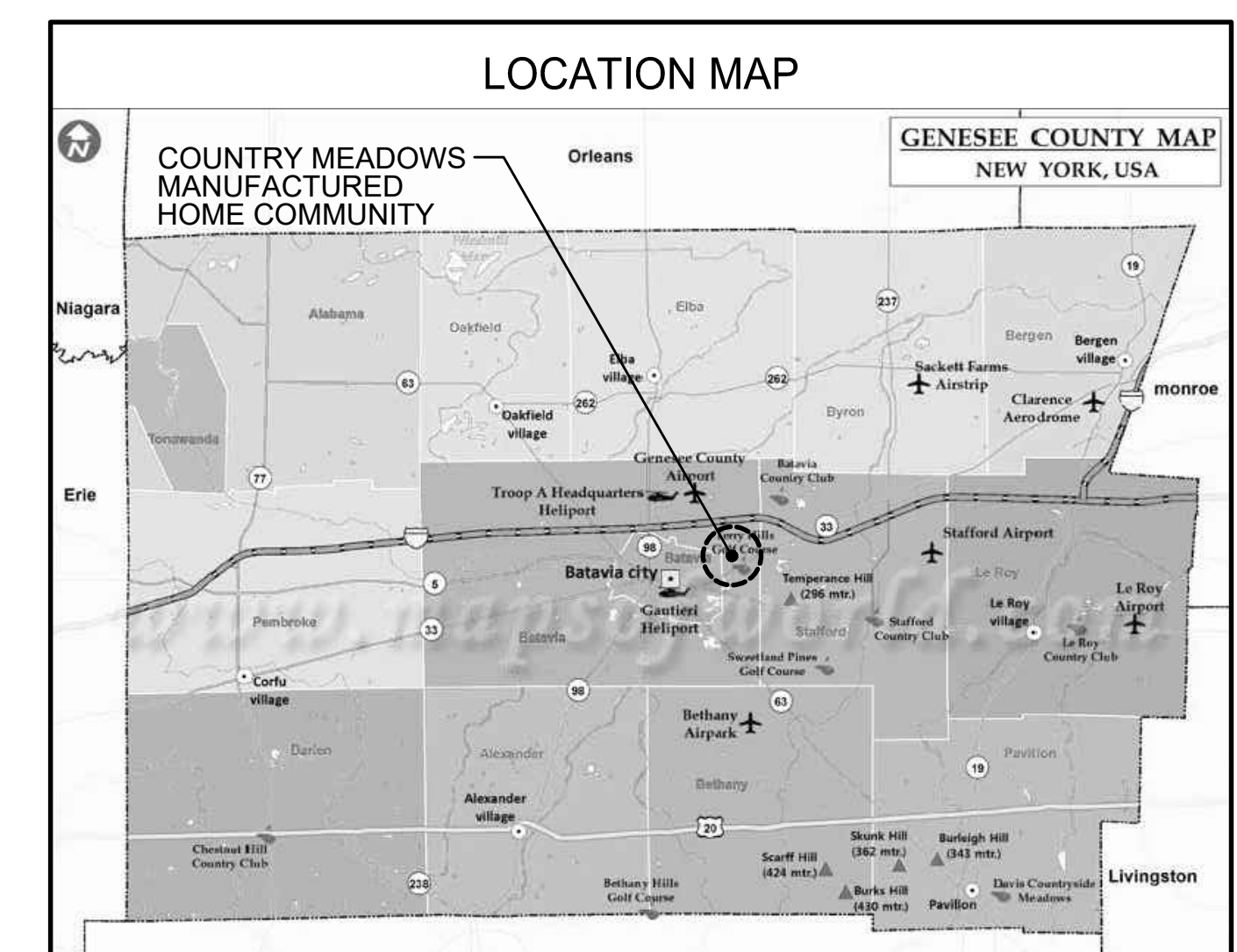
	Required	Proposed
Min. Park Size:	10 acres	75,183± acres (existing)
Min. Lot Size:	6,000 s.f.	6,000 s.f.
Min. Lot Width:	60 feet	60 feet
Min. Distance to Adjacent House:	100 feet	100 feet
Min. Distance to Park Boundary:	35 feet	35 feet
Lateral Sep. Between Homes:	30 feet	30 feet
Longitudinal Sep. Between Homes:	20 feet	20 feet
Perpendicular Sep. Between Homes:	25 feet	30 feet
Roadway Clear Zone:	40 feet	40 feet
Recreation Area:	10%	1.2 acres
Off Street Parking:	1 space/5 lots	17 spaces

MAP AND SURVEY NOTES

1. These plans were prepared from a map entitled "ALTA/NSPS Land Title Survey, Country Meadows MHC", prepared by Gregory W. Townsend, L.S., dated August 6, 2020, from topographic surveys performed by Welch & O'Donoghue Land Surveyors, P.C. in March 2021, from topographic survey data provided by the Town of Batavia, and from field measurements and record mapping obtained by Thornton Engineering in March 2021.

GENERAL NOTES

- All building construction is to be in compliance with the New York State Building Code.
- The Contractor shall locate, mark, safeguard and preserve all survey control monuments and right-of-way monuments in the areas of construction.
- The plans show subsurface structures, aboveground structures and/or utilities from field location and record mapping, exact location of which may vary from locations indicated. In particular, the contractor is warned that the exact or even approximate location of such pipelines, subsurface structures and/or utilities in this area may be different from that shown, or not shown, and it is his responsibility to proceed with great care in executing any work. Call Dig Safely New York, telephone no. 811, 48 hours before you dig, drill or blast.
- The parcel does not contain mapped United States Army Corps of Engineers Jurisdictional Wetlands or New York State Department of Environmental Conservation Freshwater Wetlands or the 100 foot buffer to a wetland. The parcel contains wetland areas delineated by CC Environmental and Planning in May 2020. A determination of Federal jurisdiction has not yet been rendered.
- The parcel is not located within the 100 year floodplain (Flood Zone C per FEMA Flood Insurance Rate Map No. 360278 0015 B, effective date January 17, 1985).
- All improvements shall be in accordance with the most recent standards and specifications of the Town of Batavia.
- Any cost related to the relocation of any utilities necessitated by this project shall be the responsibility of the owner or those requesting the relocation of the utility.
- All proposed utility services (electrical, etc.) shall be installed underground from the source to the proposed building.
- No improvements, fences, plantings, etc. shall be erected within the right of way limits of the highway.
- All driveways and aisles are to be installed to NFPA Standards for ingress and egress by emergency vehicles.
- The property lines and right-of-way lines shown on the plans are for information only, and no warranty is made as to their correctness.
- The Contractor shall maintain in service all existing sewers, culverts, ditches, manholes, and catch basins during construction.
- Construction Stakeout: The Contractor is responsible for all construction stakeout as shown on the plans.
- The Contractor shall be responsible for obtaining and incurring the cost of all required permits, inspections, certificates, etc. and shall comply with all required permits.
- All work shall be done in strict compliance with all applicable National, State, and local codes, standards, ordinances, rules, and regulations.
- Miscellaneous work not specifically shown on the contract drawings such as patching, blocking, trimming, etc. shall be performed as required to make the work complete.
- Unsuitable material shall be removed from the site and properly disposed.
- All site lighting shall be in accordance with the most recent standards and specifications of the Town of Batavia.



INDEX OF DRAWINGS

SHEET NUMBER	DRAWING NUMBER	TITLE
1		COVER SHEET
2	P-1	PROPERTY PLAN
3	G-1	GENERAL PLAN
4 to 5	S-1 to S-2	SITE LAYOUT PLAN
6 to 7	U-1 to U-2	UTILITY PLAN
8 to 9	GR-1 to GR-2	GRADING, DRAINAGE, AND SOIL EROSION/SEDIMENT CONTROL PLAN
10 to 11	PR-1 to PR-2	ROAD AND SANITARY SEWER PROFILES
12	D-1	MISCELLANEOUS DETAILS
13 to 14	D-2 to D-3	WATER SYSTEM DETAILS
15	D-4	SANITARY SEWER DETAILS
16 to 17	D-5 to D-6	STORM SYSTEM DETAILS
18	BPD-1	BACKFLOW PREVENTION DEVICE AND METER INSTALLATION PLAN AND NOTES
19	BPD-2	BACKFLOW PREVENTION DEVICE AND METER INSTALLATION DETAILS

TOWN OF BATAVIA:

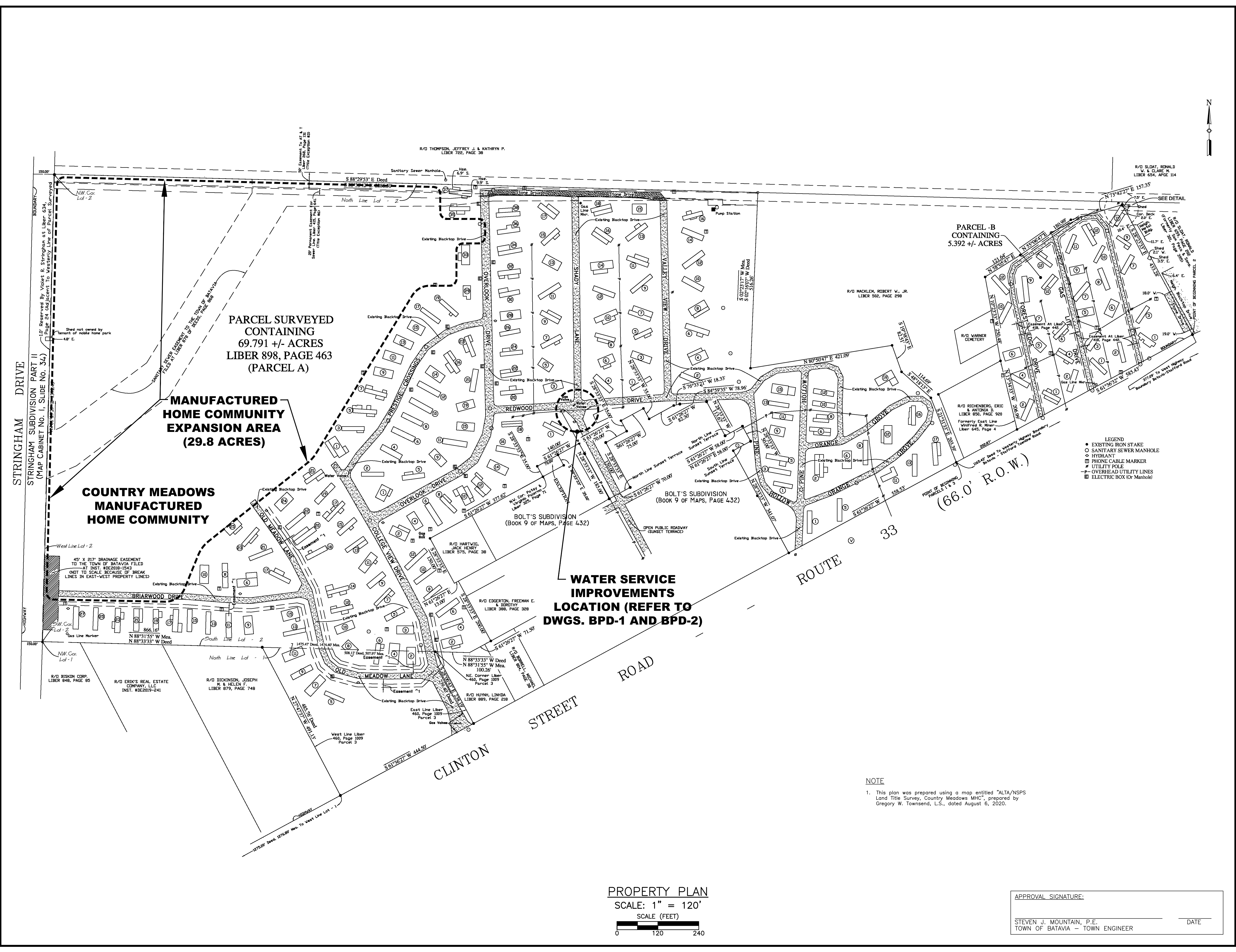
PLANNING BOARD CHAIR _____ DATE _____

TOWN ENGINEER _____ DATE _____



THORNTON
ENGINEERING LLP

30 Assembly Drive, Suite 106
Mendon, New York 14506
Tel. 585-624-4810
Consultant Engineers



REVISIONS			
NO.	DESCRIPTION	DATE	BY

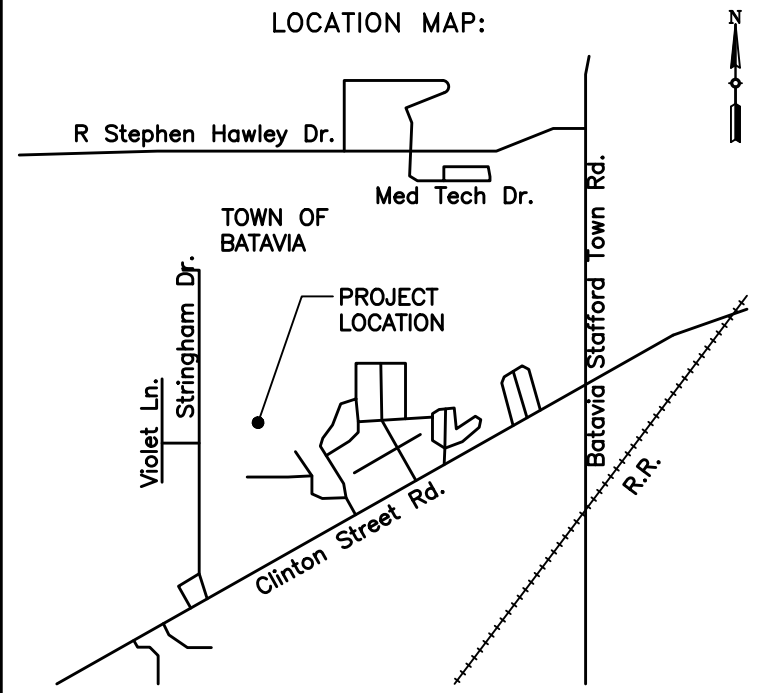
NOT APPROVED FOR CONSTRUCTION

It is a violation of New York State Education Law Article 145 Section 7209 for any person, unless he or she 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 or her seal and the notation "altered by" followed by his or her signature and the date of such alteration, and a specific description of the alteration.

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PROJECT NAME:
**Country Meadows
 Manufactured Home
 Community
 Expansion**

5121 Clinton Street Road
 Town of Batavia
 Genesee County, NY

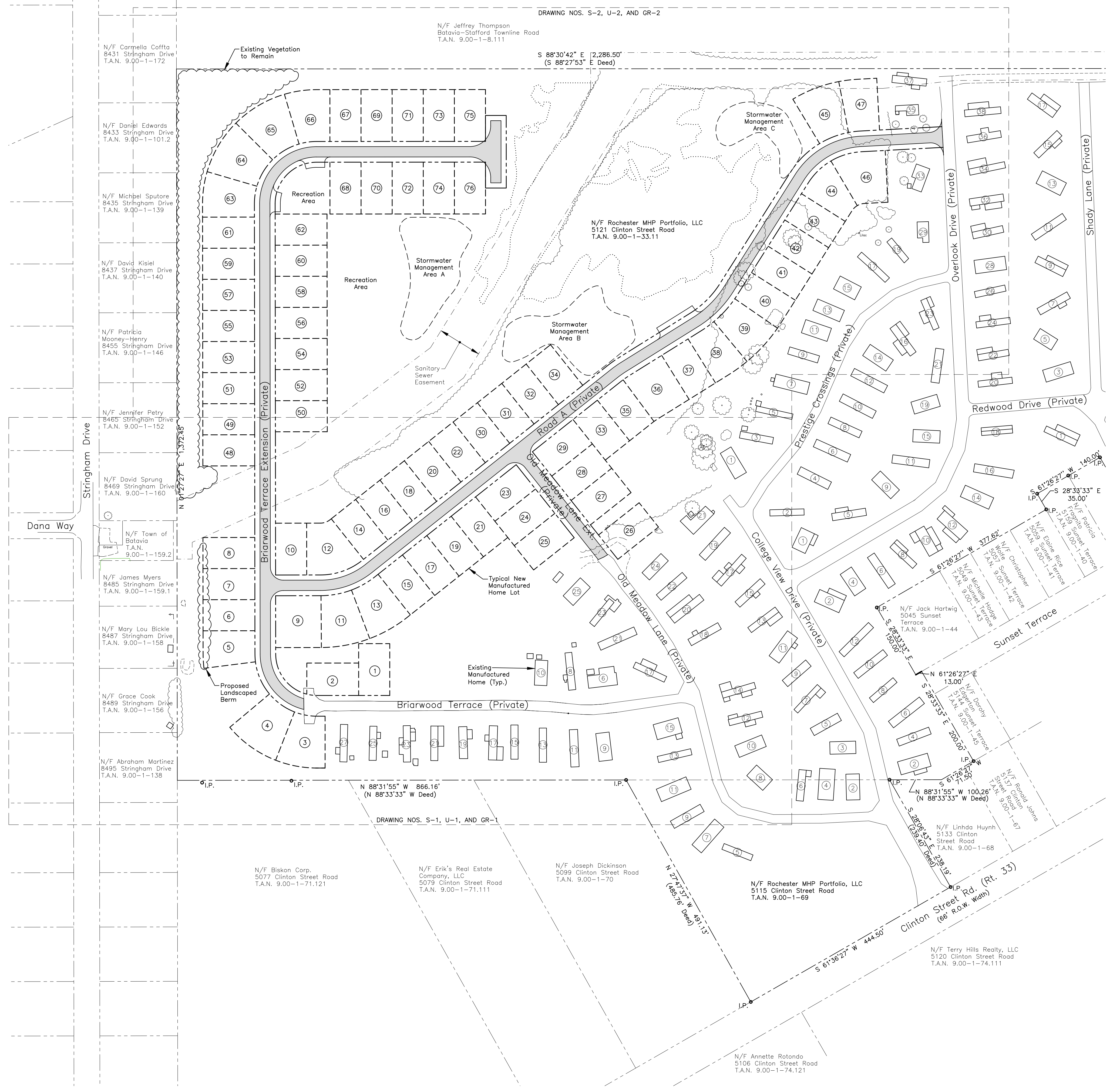
DRAWING TITLE:
Property Plan

FILE NAME: PROPERTYPLAN.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: 1" = 120'	PROJECT NO.: 21-816
SHEET NO.: 2 OF 19	DRAWING NO.: P-1

APPROVAL SIGNATURE:
 STEVEN J. MOUNTAIN, P.E.,
 TOWN OF BATAVIA - TOWN ENGINEER

PROPERTY PLAN
 SCALE: 1" = 120'
 SCALE (FEET)

NOTE
 1. This plan was prepared using a map entitled "ALTA/NSPS Land Title Survey, Country Meadows MHC", prepared by Gregory W. Townsend, L.S., dated August 6, 2020.



GENERAL PLAN
 SCALE: 1" = 100'
 SCALE (FEET)
 0 50 100

APPROVAL SIGNATURE: _____ DATE _____
 STEVEN J. MOUNTAIN, P.E.
 TOWN OF BATAVIA - TOWN ENGINEER

REVISIONS			
NO.	DESCRIPTION	DATE	BY

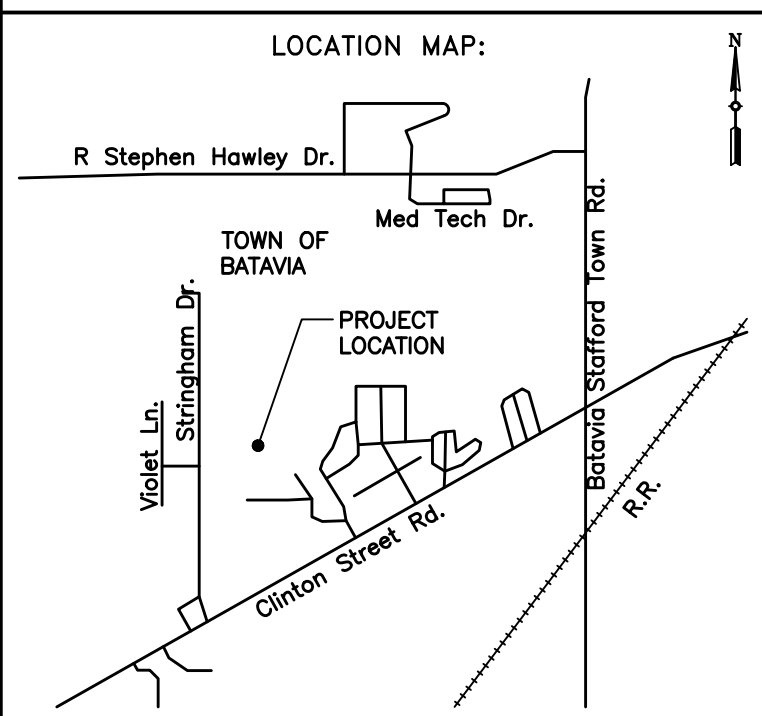
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PROJECT NAME:
**Country Meadows
 Manufactured Home
 Community
 Expansion**
 5121 Clinton Street Road
 Town of Batavia
 Genesee County, NY

DRAWING TITLE:
General Plan

FILE NAME: GENERALPLAN.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: 1" = 100'	PROJECT NO.: 21-816
SHEET NO.: 3 OF 19	DRAWING NO.: G-1

ROADWAY HORIZONTAL ALIGNMENT GEOMETRY						
Curve No.	C Radius	Curve Length	Δ	Tangent Length	P.C. Station	P.T. Station
Curve BT1	100'	156.96'	89.93°	99.88'	BT10+15.27	BT11+72.23
Curve BT2	100'	157.15'	90.04°	100.07'	BT20+41.07	BT21+98.22
Curve A1	150'	100.51'	38.39°	52.22'	A11+06.51	A12+7.02
Curve A2	200'	22.69'	6.50°	11.36'	A18+11.51	A18+34.20
Curve A3	200'	89.71'	25.70°	45.62'	A19+97.81	A20+87.52
Curve A4	150'	142.93'	54.60°	77.41'	A23+43.26	A24+86.19

REVISIONS			
NO.	DESCRIPTION	DATE	BY

NOT APPROVED FOR CONSTRUCTION

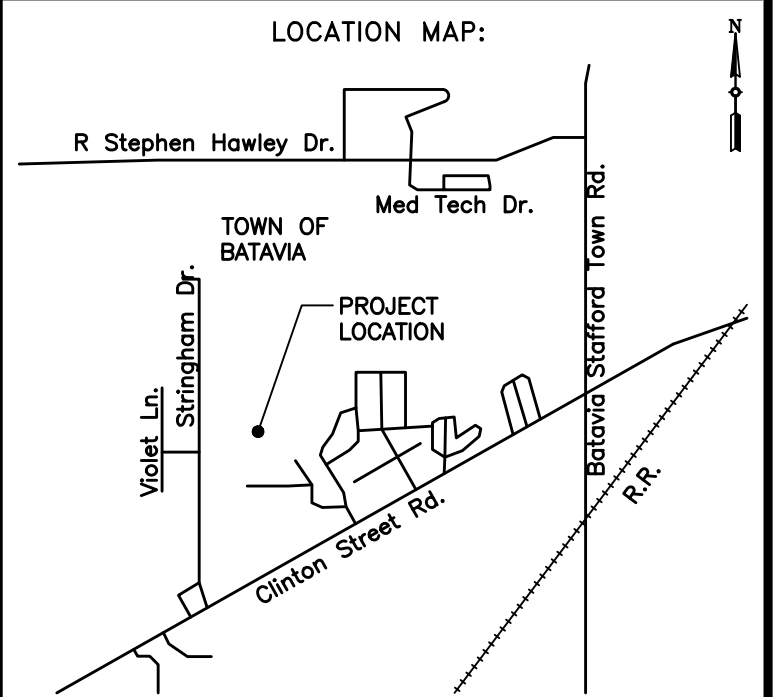
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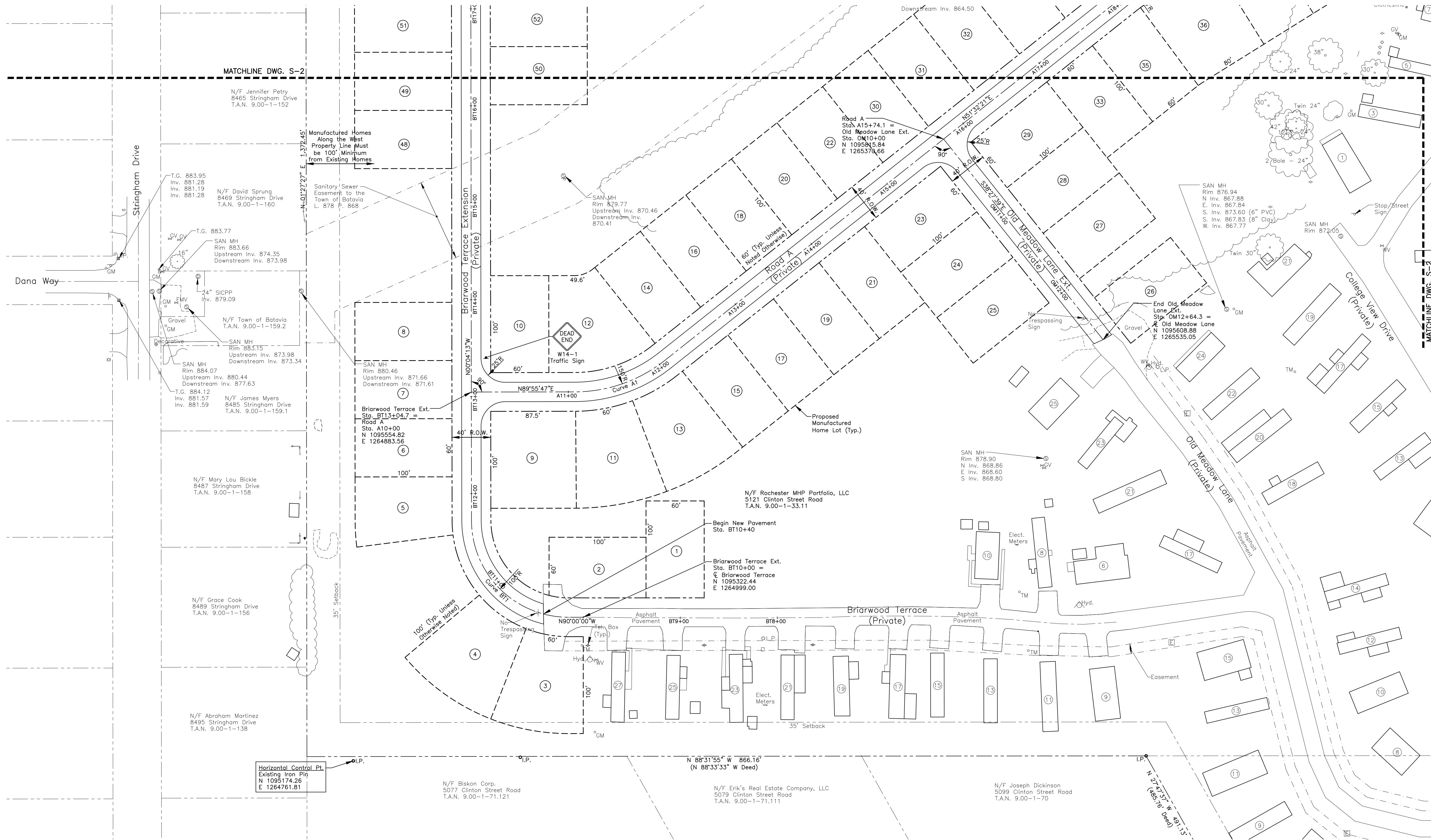


PROJECT NAME:
**Country Meadows
Manufactured Home
Community
Expansion**

5121 Clinton Street Road
Town of Batavia
Genesee County, NY

DRAWING TITLE:
Site Layout Plan

FILE NAME: SITEPLAN.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: 1" = 50'	PROJECT NO.: 21-816
SHEET NO.: 4 OF 19	DRAWING NO.: S-1



SITE LAYOUT PLAN
SCALE: 1" = 50'
SCALE (FEET)

APPROVAL SIGNATURE:
STEVEN J. MOUNTAIN, P.E.
TOWN OF BATAVIA - TOWN ENGINEER

DATE

REVISIONS			
NO.	DESCRIPTION	DATE	BY

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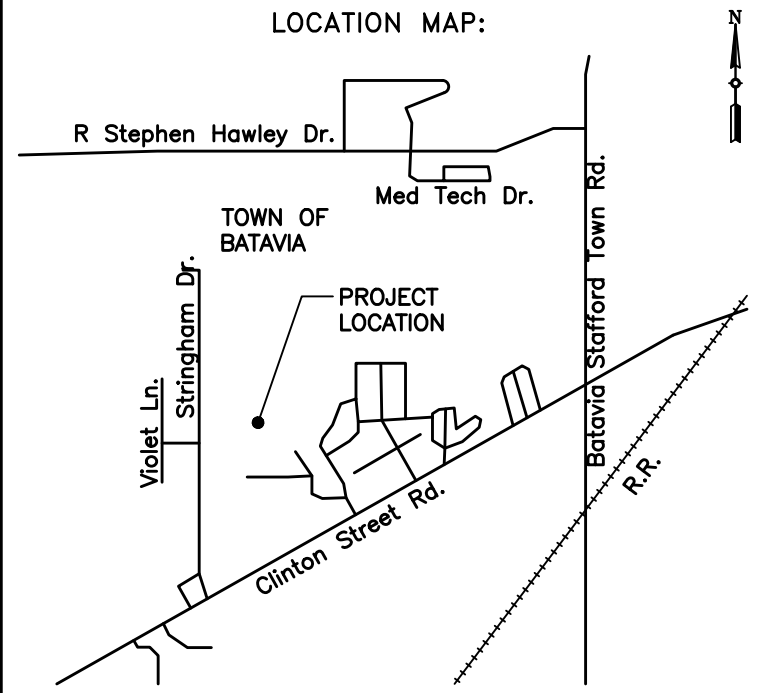
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PROJECT NAME:

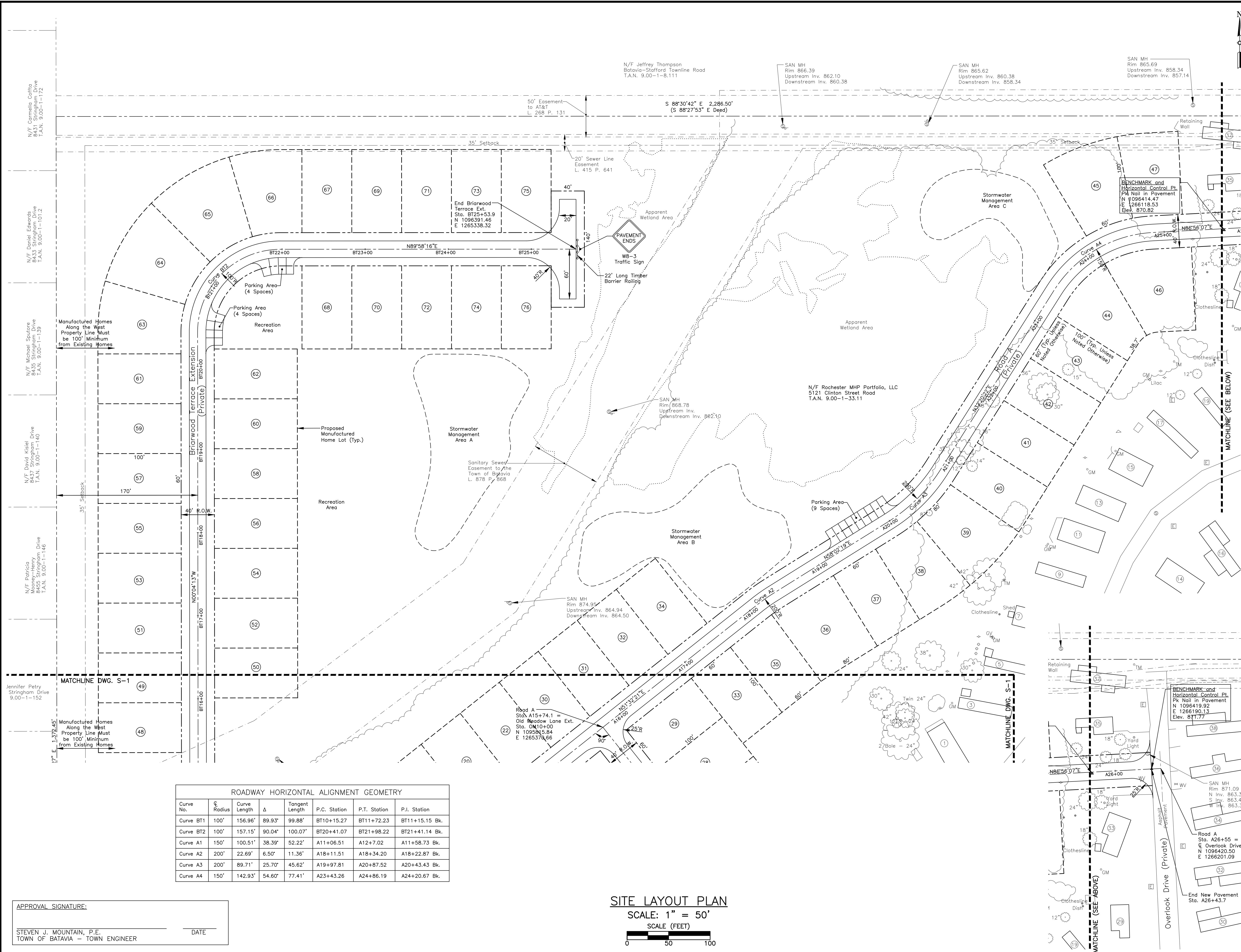
**Country Meadows
Manufactured Home
Community
Expansion**

5121 Clinton Street Road
Town of Batavia
Genesee County, NY

DRAWING TITLE:

Site Layout Plan

FILE NAME: SITEPLAN.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: 1" = 50'	PROJECT NO.: 21-816
SHEET NO.: 5 OF 19	DRAWING NO.: S-2



ROADWAY HORIZONTAL ALIGNMENT GEOMETRY						
Curve No.	Radius	Curve Length	Δ	Tangent Length	P.C. Station	P.T. Station
Curve BT1	100'	156.96'	89.93°	99.88'	BT10+15.27	BT11+72.23
Curve BT2	100'	157.15'	90.04°	100.07'	BT20+41.07	BT21+98.22
Curve A1	150'	100.51'	38.39°	52.22'	A11+06.51	A12+7.02
Curve A2	200'	22.69'	6.50°	11.36'	A18+11.51	A18+34.20
Curve A3	200'	89.71'	25.70°	45.62'	A19+97.81	A20+87.52
Curve A4	150'	142.93'	54.60°	77.41'	A23+43.26	A24+86.19

APPROVAL SIGNATURE:

STEVEN J. MOUNTAIN, P.E.
TOWN OF BATAVIA - TOWN ENGINEER

DATE

SITE LAYOUT PLAN

SCALE: 1" = 50'

SCALE (FEET)

REVISIONS			
NO.	DESCRIPTION	DATE	BY

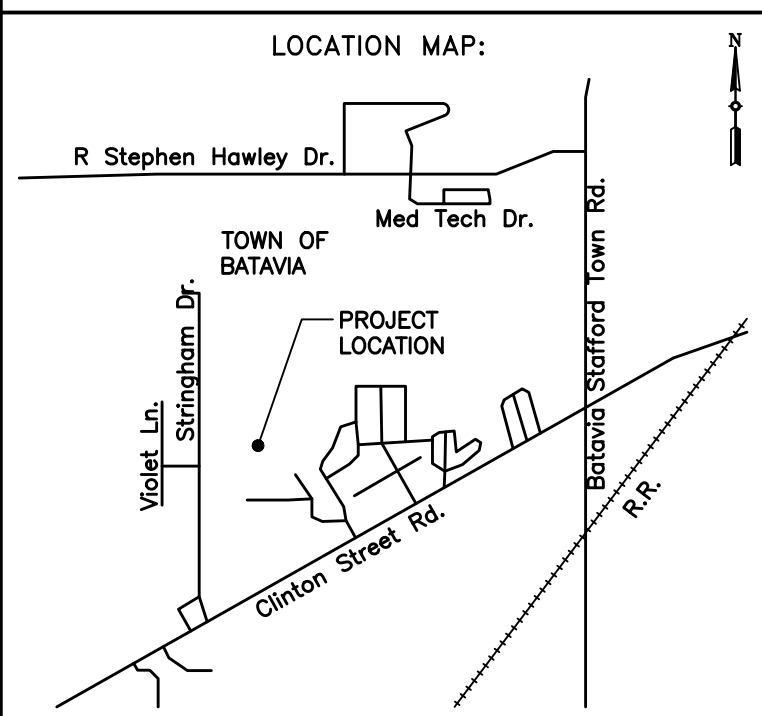
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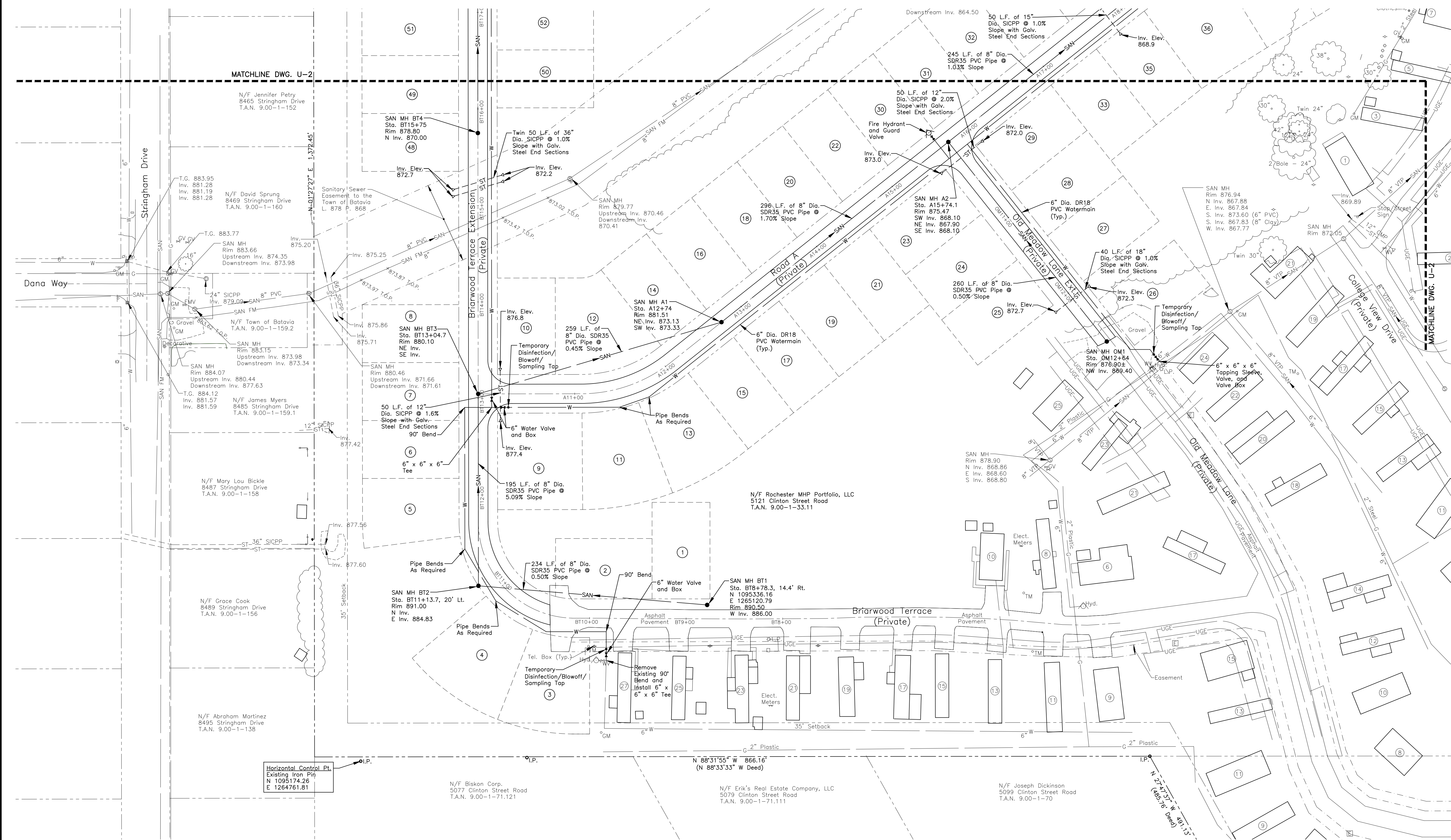
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PROJECT NAME:
**Country Meadows
 Manufactured Home
 Community
 Expansion**
 5121 Clinton Street Road
 Town of Batavia
 Genesee County, NY

DRAWING TITLE:
Utility Plan

FILE NAME: UTILITYPLAN.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: 1" = 50'	PROJECT NO.: 21-816
SHEET NO.: 6 OF 19	DRAWING NO.: U-1



UTILITY PLAN
 SCALE: 1" = 50'
 SCALE (FEET)

APPROVAL SIGNATURE:
 STEVEN J. MOUNTAIN, P.E.
 TOWN OF BATAVIA - TOWN ENGINEER

DATE

REVISIONS			
NO.	DESCRIPTION	DATE	BY

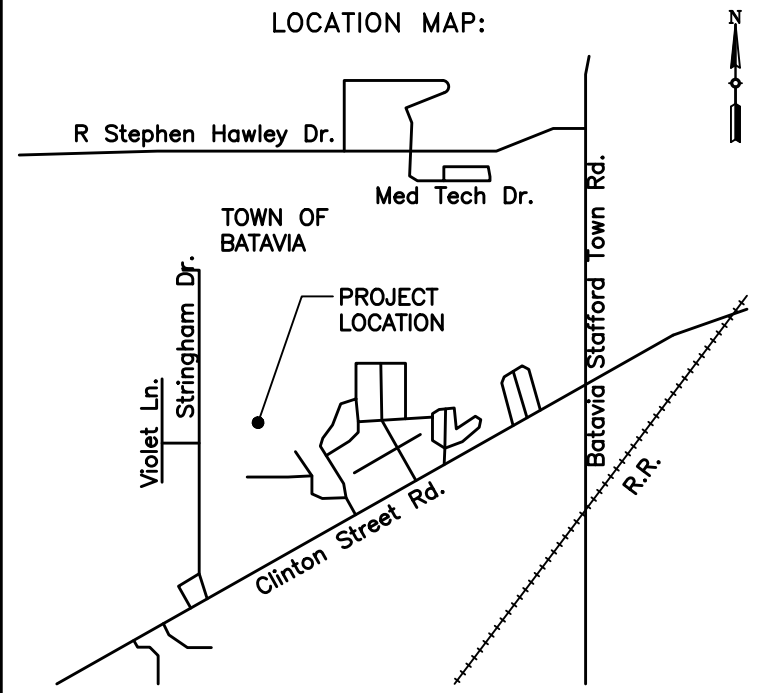
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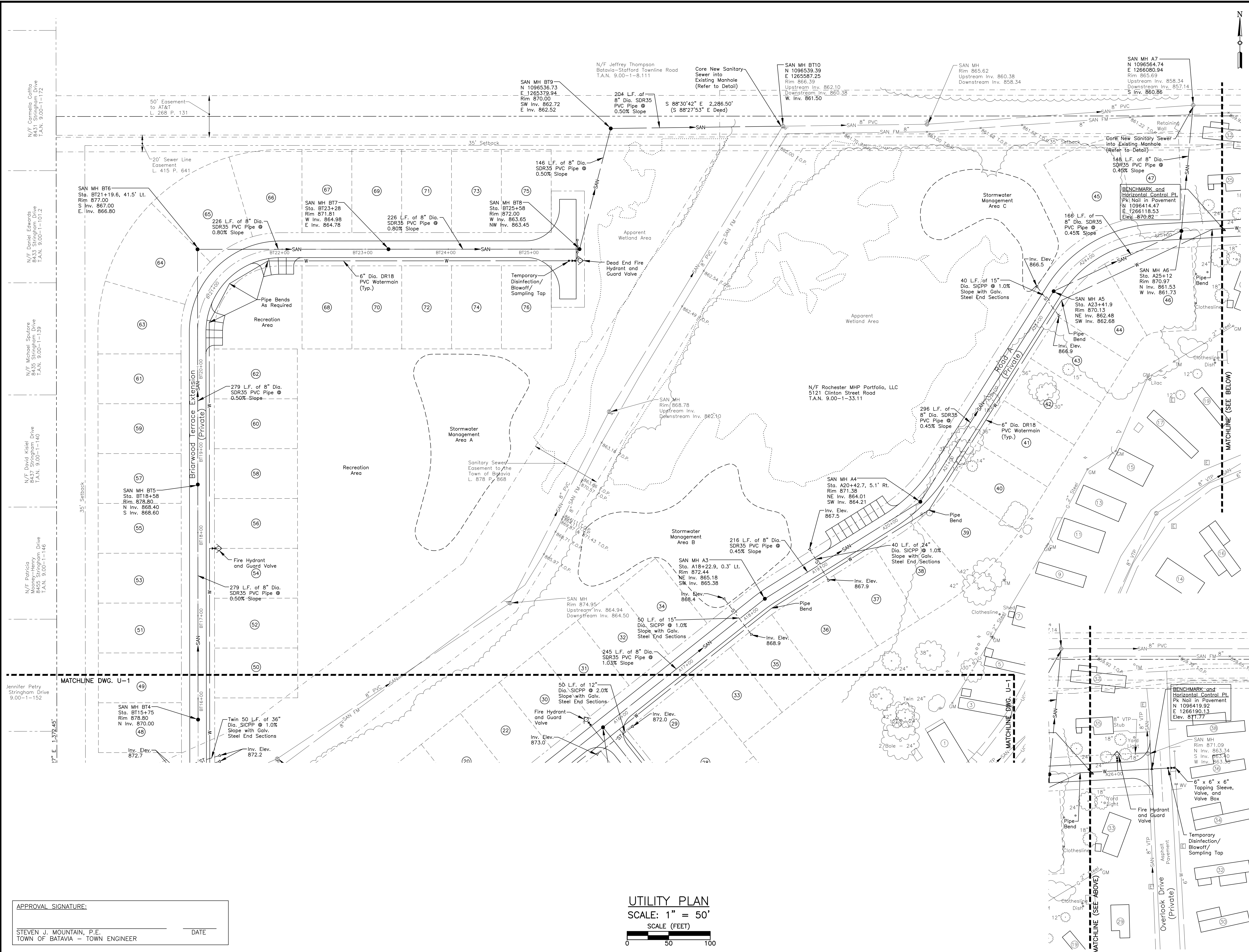
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PROJECT NAME:
**Country Meadows
Manufactured Home
Community
Expansion**
5121 Clinton Street Road
Town of Batavia
Genesee County, NY

DRAWING TITLE:
Utility Plan

FILE NAME: UTILITYPLAN.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: 1" = 50'	PROJECT NO.: 21-816
SHEET NO.: 7 OF 19	DRAWING NO.: U-2



APPROVAL SIGNATURE:
STEVEN J. MOUNTAIN, P.E.
TOWN OF BATAVIA - TOWN ENGINEER

DATE

SOIL EROSION/SEDIMENTATION CONTROL NOTES

- Developer shall install erosion and siltation control measures during construction to prevent off-site transport and deposition of materials. All erosion and siltation control measures shall be in place and approved by the Town or their duly noted representative prior to any construction activities, including clearing.
- The temporary erosion/sedimentation control measures depicted on the site plan shall be supplemented with additional controls if found necessary during construction. Developer is responsible for establishing the controls during construction, and removing the controls following re-establishment of ground cover.
- All sedimentation control structures shall remain in effective operating condition.
- No erosion or sediment control measures may be removed until the upland areas are stabilized and/or approval of their removal has been granted by the Town.
- All access to and from the site shall be via the stabilized construction entrances, which shall be kept clean and free of debris and sediment. Any debris or sediment which makes its way to the public highway shall be immediately removed.
- Any erosion or sediment control measure shall be immediately cleaned, repaired, and/or replaced upon notice of any damage.
- In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be initiated by the end of the next business day and completed within 14 days (7 days if over 5 acres of disturbance, or 3 days if between November 15th and April 1st). The soil stabilization measures selected shall be in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control.
- All erosion and sediment control methods are to be designed and installed in accordance with the latest edition of the New York State Standards and Specifications for Erosion and Sediment Control.

- Pollution prevention practices shall be employed during construction to prevent litter, construction chemicals and construction debris from becoming a pollutant source in stormwater. The following controls shall be implemented:
 - Litter and construction debris shall be picked up on a daily basis and placed within covered trash receptacles.
 - Construction materials that are temporarily stored in the work area shall be secured with straps or anchors, or covered to prevent wind transport.
 - All points of entry into the storm drainage system shall be screened to prevent entry of litter or debris.
 - Construction chemicals and hazardous substances shall be stored in accordance with all applicable environmental regulations. The Contractor shall have appropriate spill containment devices on the jobsite at all times.
- The Contractor shall inspect temporary silt fences and temporary stabilized construction entrances following each 0.5 inch rain event and at not more than seven day intervals.
- Seed Mixes:

Temporary (50 lbs. per acre)	
Annual Ryegrass	50% by Weight (90% Purity)
Tall Fescue	50% by Weight (90% Purity)
Permanent	
Kentucky Bluegrass	45% by Weight (85% Purity)
Red Fescue (Commercial)	40% by Weight (95% Purity)
Common Ryegrass	15% by Weight (95% Purity)

CONSTRUCTION SEQUENCE

- Install stabilized construction entrance.
- Install silt fence at the locations indicated on the plan.
- Clear vegetation within the work limits.
- Strip topsoil and place it within the designated storage areas or remove it from the site.
- Mass grade the development area including the stormwater ponds. This activity must be phased so that no more than 5 acres of unstabilized ground is disturbed at any time.
- Construct diversion swales as required to direct storm runoff into the ponds which will serve as a temporary sediment basin during construction.
- Construct the outlet control structures and encircle with silt fence to prevent offsite transport of suspended sediment.
- Install watermain and sanitary sewers.
- Grade new roadways and immediately place crushed stone subbase material.
- Fine grade pavement areas and adjacent drainage swales.
- Fine grade, topsoil, seed, and mulch all areas that will not require future disturbance.
- Following establishment of a healthy growth of turf within all disturbed areas, remove the silt fence.

ADDITIONAL NYSDEC GP-0-20-001 STORMWATER PERMIT REQ'S:

- All disturbed areas must be restored in accordance with the Soil Restoration Requirements in Table 5.3 of the NYS Stormwater Management Design Manual. In general, areas without a change in grade should be aerated and 6" of topsoil should be applied. Aeration includes the use of machines such as tractor drawn implements with coulters making a narrow slit in the soil, a roller with many spikes making indentation in the soil, or prongs which function like a mini-subsoiler.
- Areas of cut of fill shall receive full restoration in accordance with "Deep-Ripping and Decompaction, April 2008" issued by the NYSDEC. Deep-ripping requires the use of heavy duty agricultural grade implements and machinery to thoroughly decompact (till) the subsoil to a depth of 20" to 24" during the first phase, followed by thoroughly tilling the replaced topsoil and upper 12" of decompact subsoil during the second phase.

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NO.	DESCRIPTION	DATE	BY

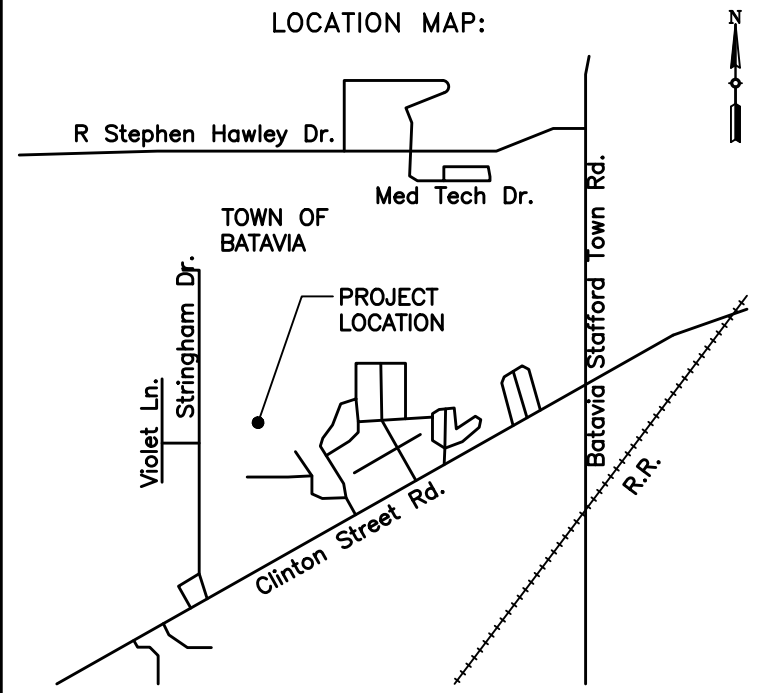
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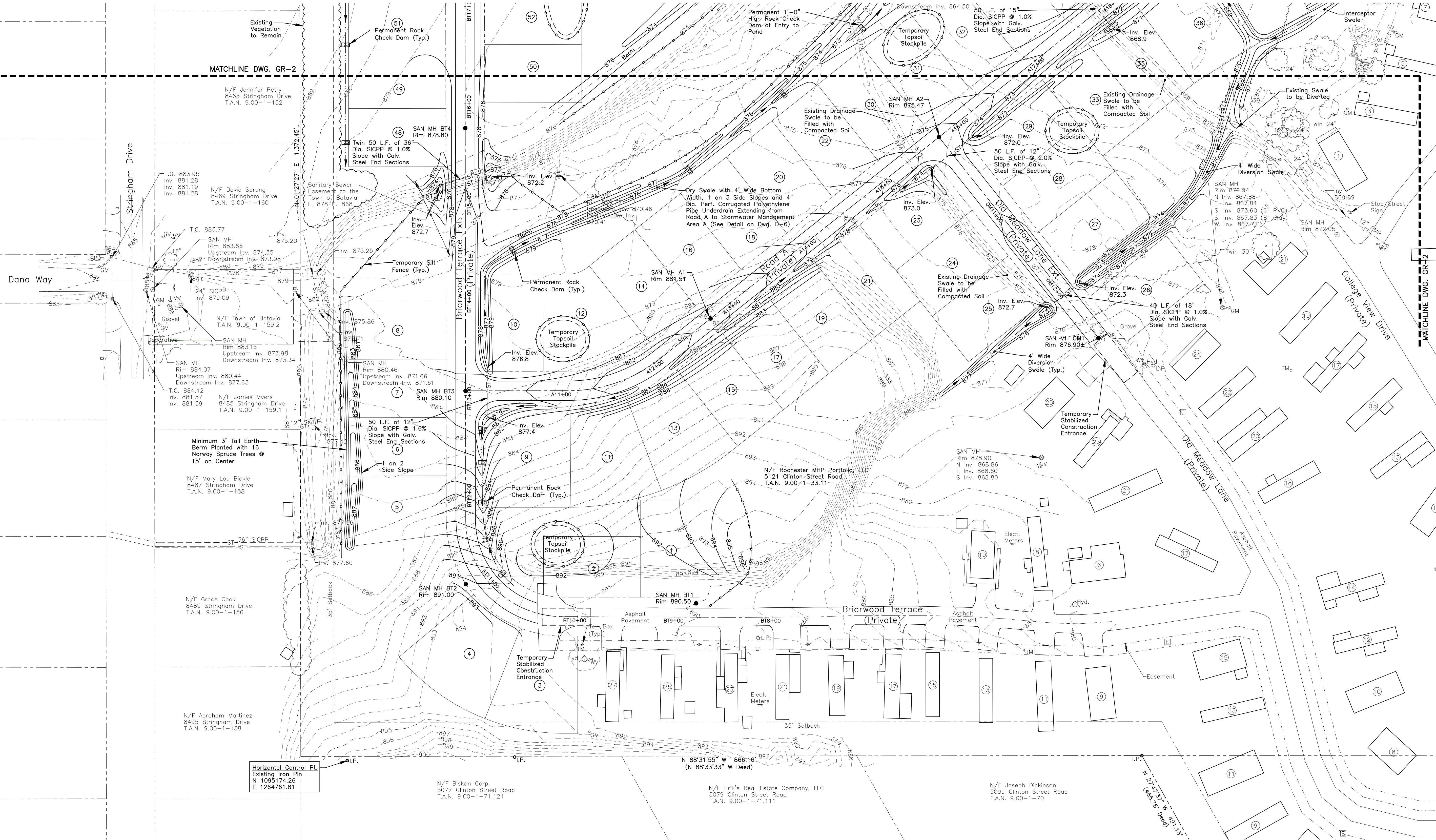
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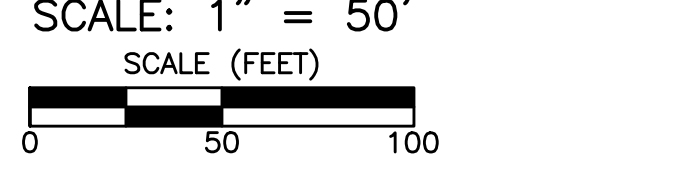
PROJECT NAME:
**Country Meadows
 Manufactured Home
 Community
 Expansion**
 5121 Clinton Street Road
 Town of Batavia
 Genesee County, NY

DRAWING TITLE:
**Grading, Drainage,
 and Soil Erosion/
 Sediment Control
 Plan**

FILE NAME: GRADINGPLAN.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: 1" = 50'	PROJECT NO.: 21-816
SHEET NO.: 8 OF 19	DRAWING NO.: GR-1



GRADING, DRAINAGE, AND SOIL EROSION/SEDIMENT CONTROL PLAN



APPROVAL SIGNATURE:
 STEVEN J. MOUNTAIN, P.E.
 TOWN OF BATAVIA - TOWN ENGINEER

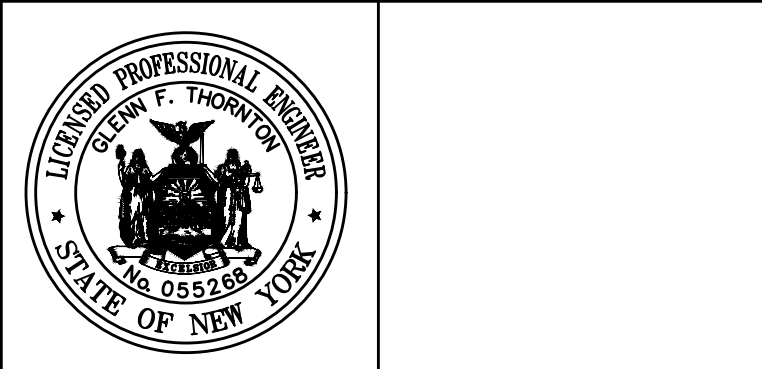
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REVISIONS			
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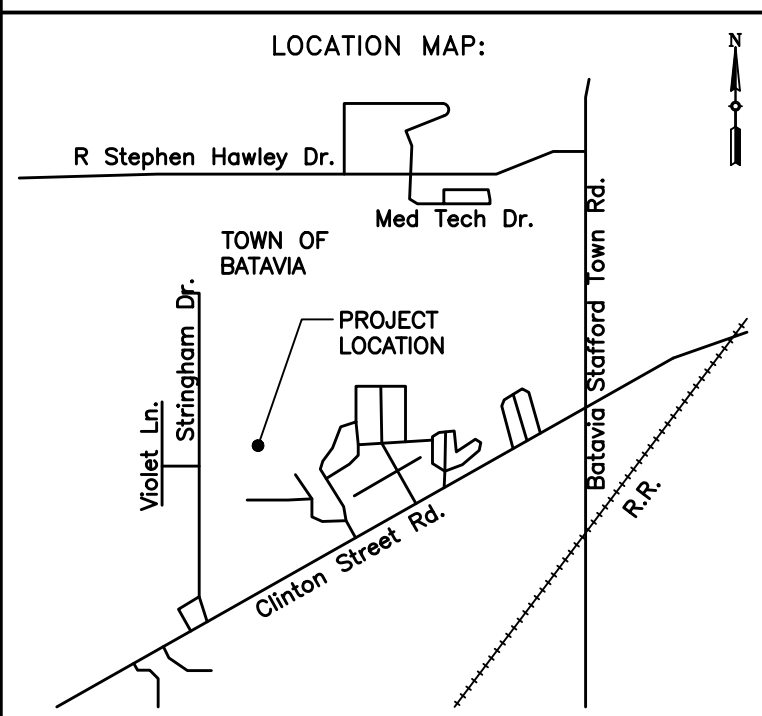
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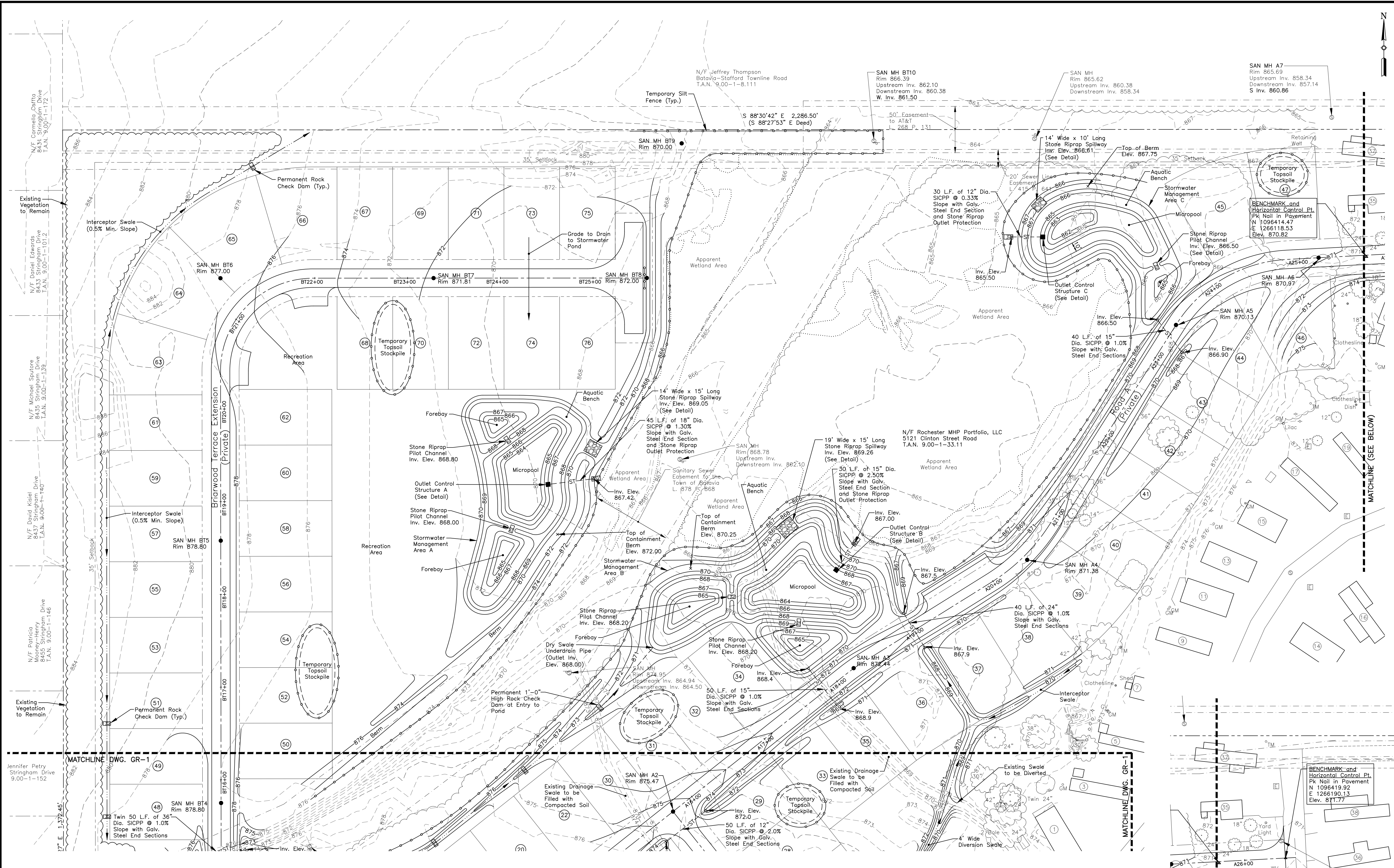
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PROJECT NAME:
Country Meadows Manufactured Home Community Expansion
 5121 Clinton Street Road
 Town of Batavia
 Genesee County, NY

DRAWING TITLE:
Grading, Drainage, and Soil Erosion/Sediment Control Plan

FILE NAME: GRADINGPLAN.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: 1" = 50'	PROJECT NO.: 21-816
SHEET NO.: 9 OF 19	DRAWING NO.: GR-2



STORMWATER MANAGEMENT AREA A

Sizing Criteria	Storage Provided	Water Surface Elev.	Discharge Rate
Water Quality	0.00 acre feet	868.00	---
Channel Protection	0.31 acre feet	868.80	0.16 cfs
Overbank Flood Control	0.39 acre feet	869.00	12.21 cfs
Extreme Flood Control	0.45 acre feet	869.07	27.78 cfs

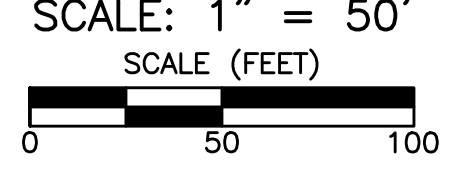
STORMWATER MANAGEMENT AREA B

Sizing Criteria	Storage Provided	Water Surface Elev.	Discharge Rate
Water Quality	0.165 acre feet	868.20	---
Channel Protection	0.25 acre feet	868.81	0.13 cfs
Overbank Flood Control	0.32 acre feet	869.01	10.95 cfs
Extreme Flood Control	0.45 acre feet	869.22	28.50 cfs

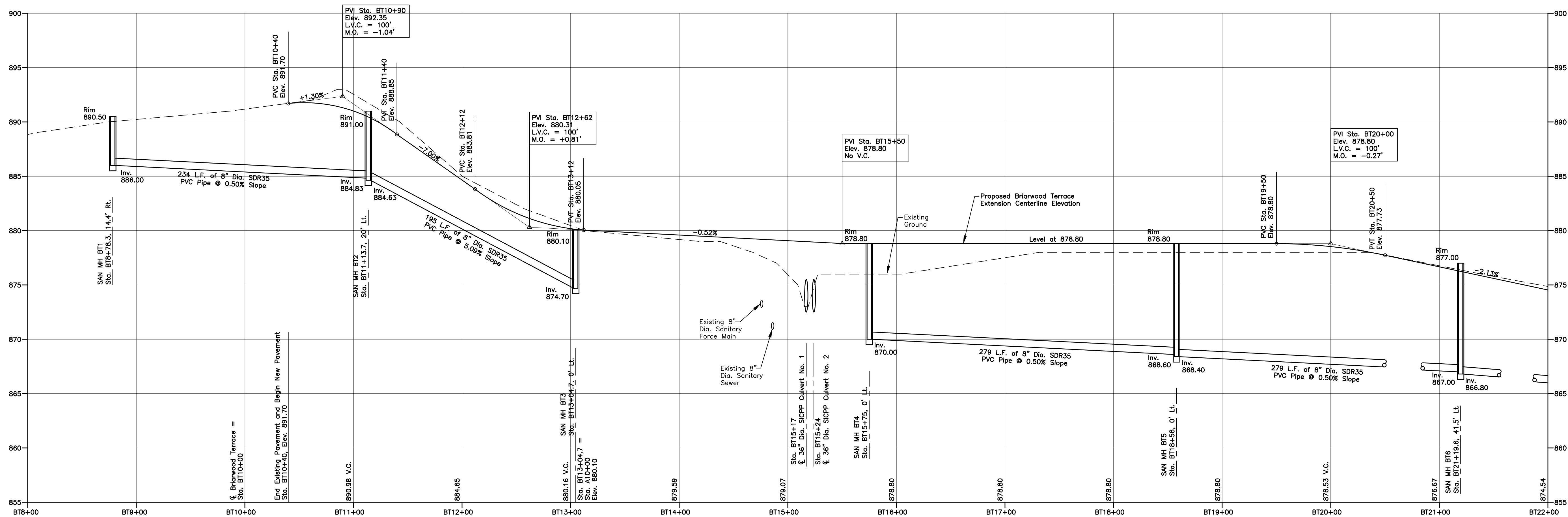
STORMWATER MANAGEMENT AREA C

Sizing Criteria	Storage Provided	Water Surface Elev.	Discharge Rate
Water Quality	0.068 acre feet	865.60	---
Channel Protection	0.12 acre feet	866.21	0.06 cfs
Overbank Flood Control	0.17 acre feet	866.41	5.38 cfs
Extreme Flood Control	0.18 acre feet	866.61	12.40 cfs

GRADING, DRAINAGE, AND SOIL EROSION/SEDIMENT CONTROL PLAN

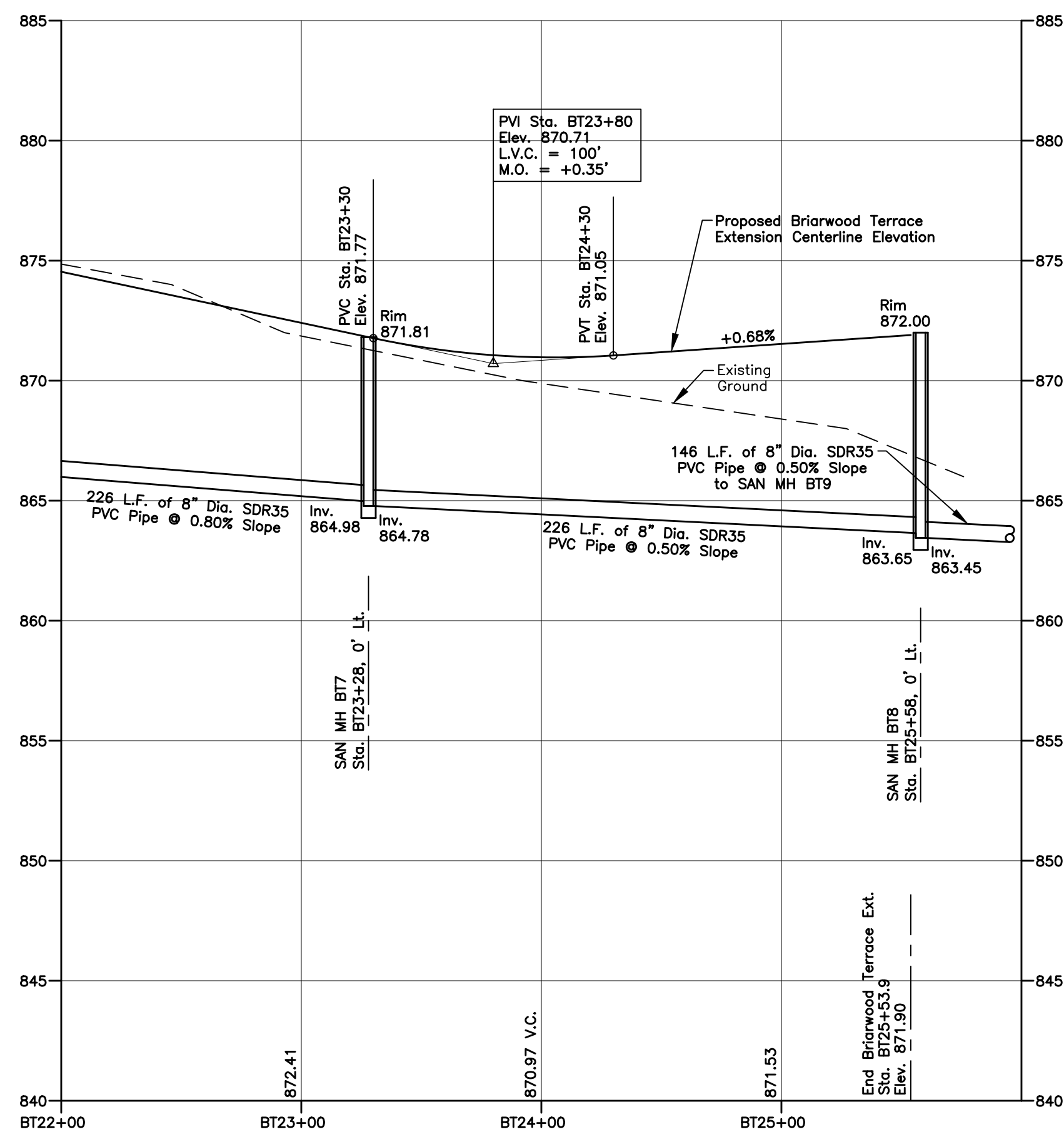


APPROVAL SIGNATURE:
 STEVEN J. MOUNTAIN, P.E.
 TOWN OF BATAVIA - TOWN ENGINEER
 DATE



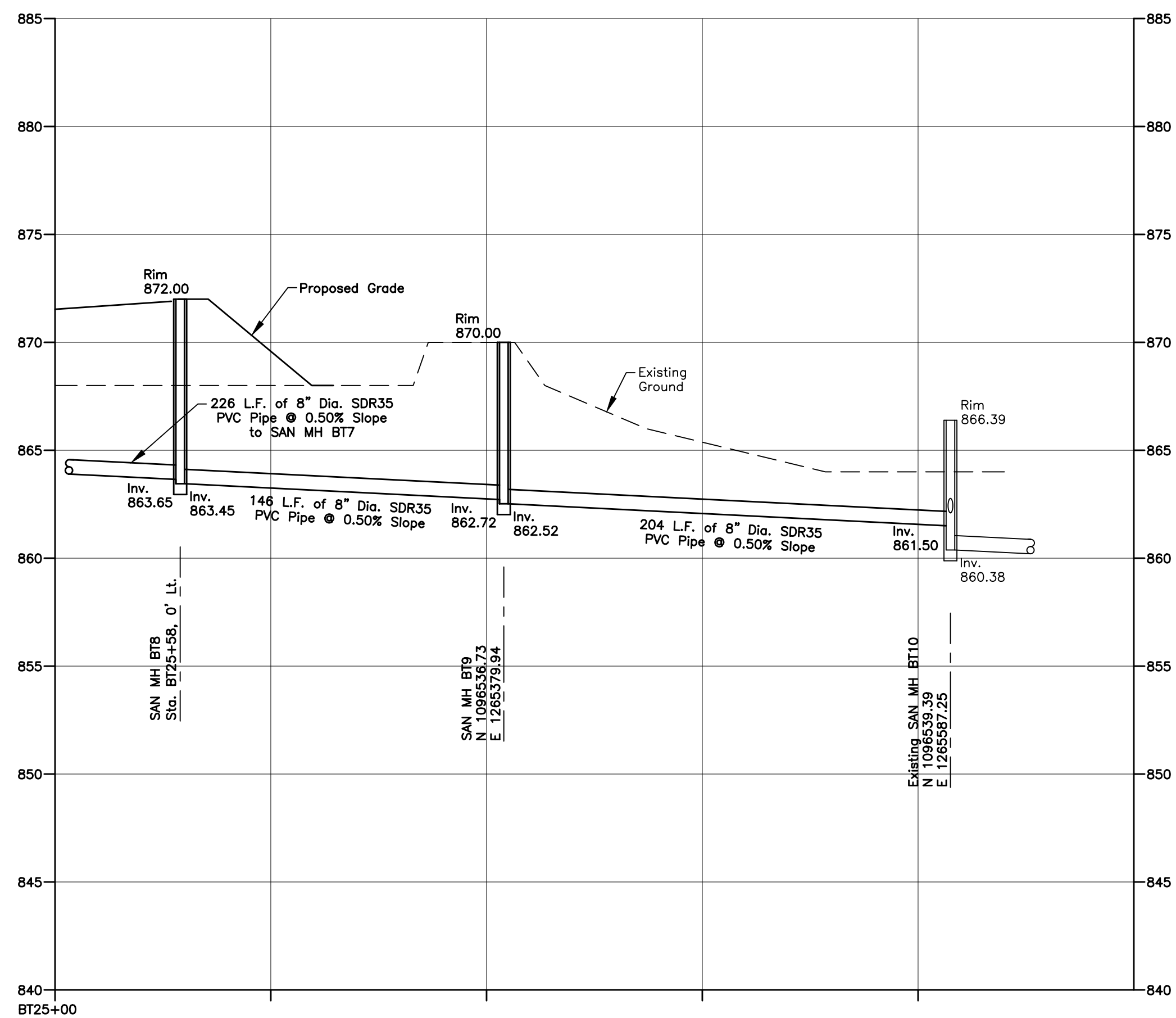
BRIARWOOD TERRACE EXT. CENTERLINE PROFILE STA. BT8+00 TO STA. BT22+00

SCALE: 1" = 50' H.
1" = 5' V.



BRIARWOOD TERRACE EXT. CENTERLINE PROFILE
STA. BT22+00 TO STA. BT25+53.9

SCALE: 1" = 50' H.
1" = 5' V.



SANITARY SEWER PROFILE
SAN MH BT8 TO SAN MH BT10

SCALE: 1" = 50' H.
1" = 5' V.

APPROVAL SIGNATURE:
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TOWN OF BATAVIA - TOWN ENGINEER

REVISIONS			
NO.	DESCRIPTION	DATE	BY

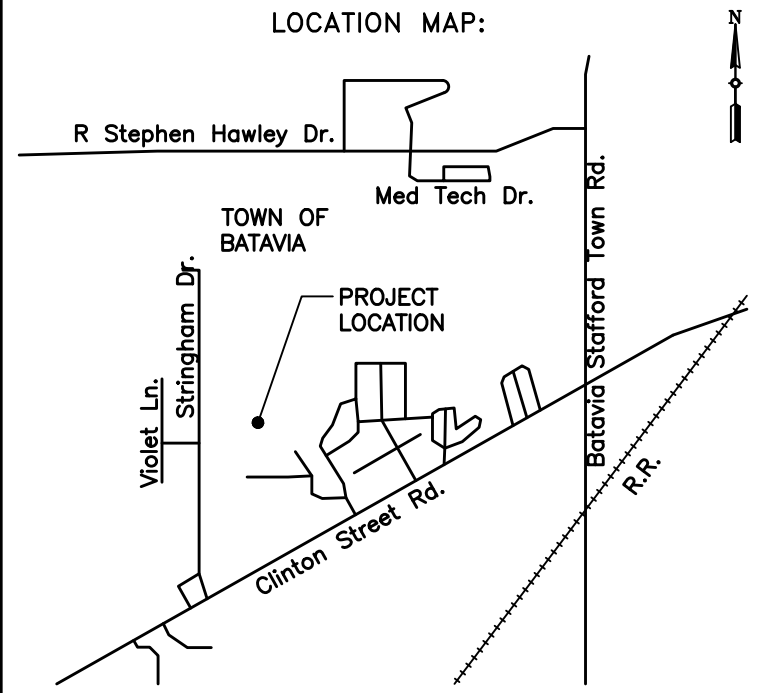
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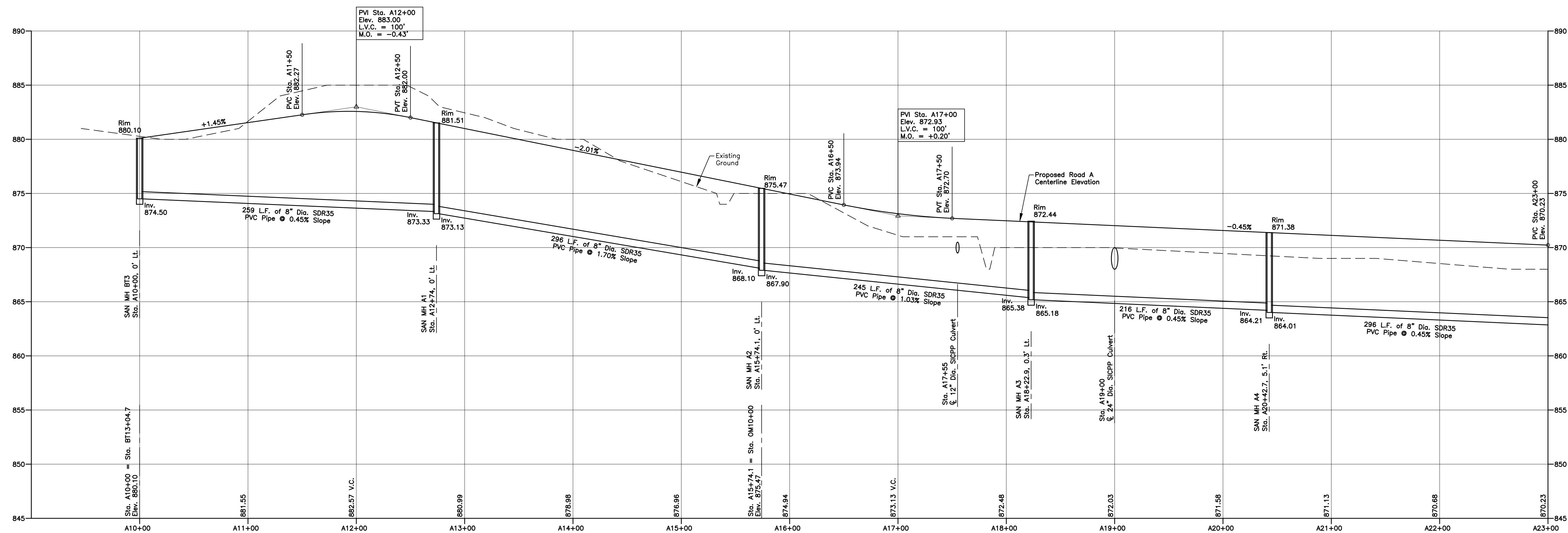
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PROJECT NAME:
**Country Meadows
Manufactured Home
Community
Expansion**
5121 Clinton Street Road
Town of Batavia
Genesee County, NY

DRAWING TITLE:
**Road and Sanitary
Sewer Profiles**

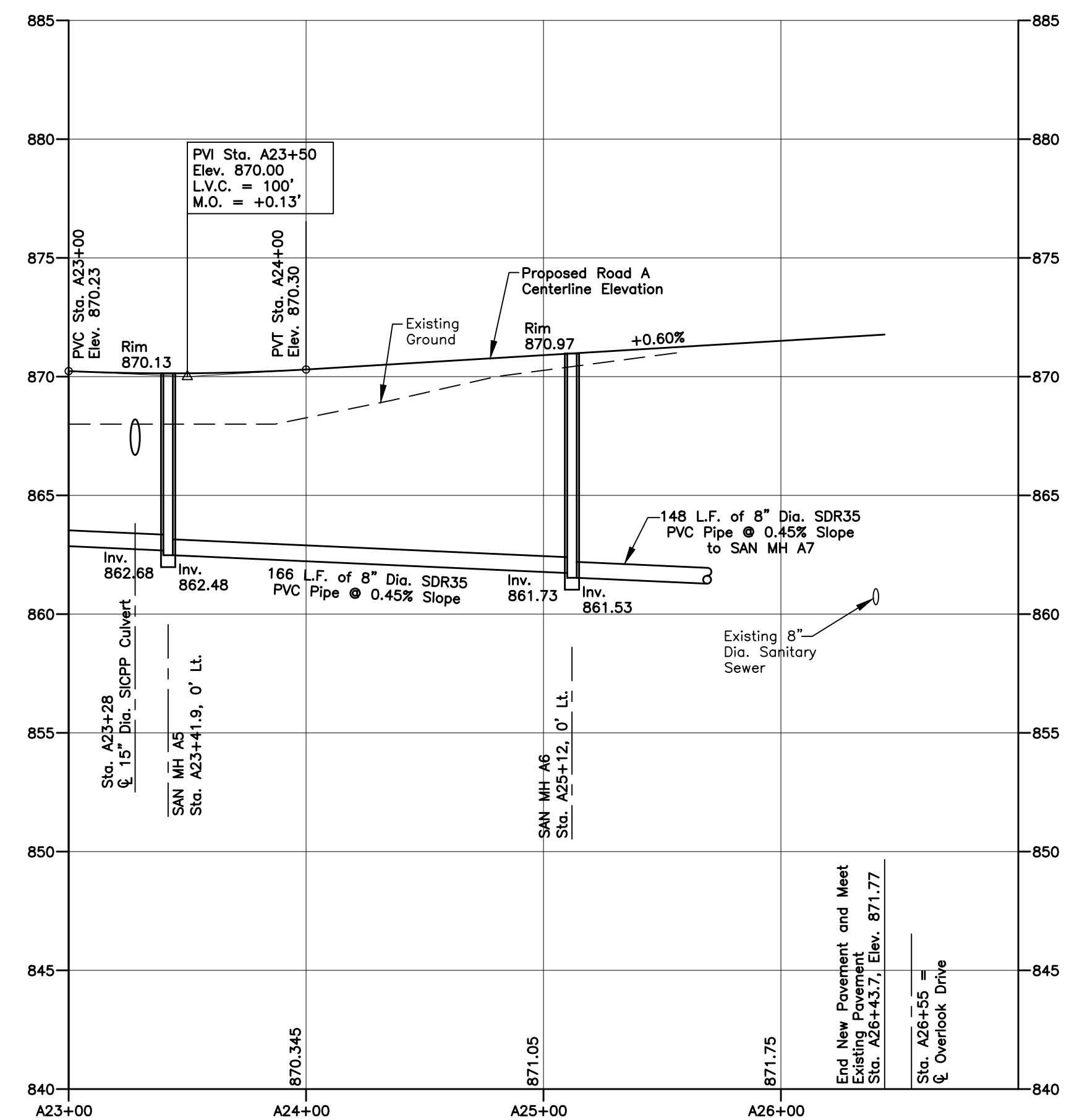
FILE NAME: ROADPROFILESDWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: AS NOTED	PROJECT NO.: 21-816
SHEET NO.: 10 OF 19	DRAWING NO.: PR-1



ROAD A CENTERLINE PROFILE STA. A10+00 TO STA. A23+00

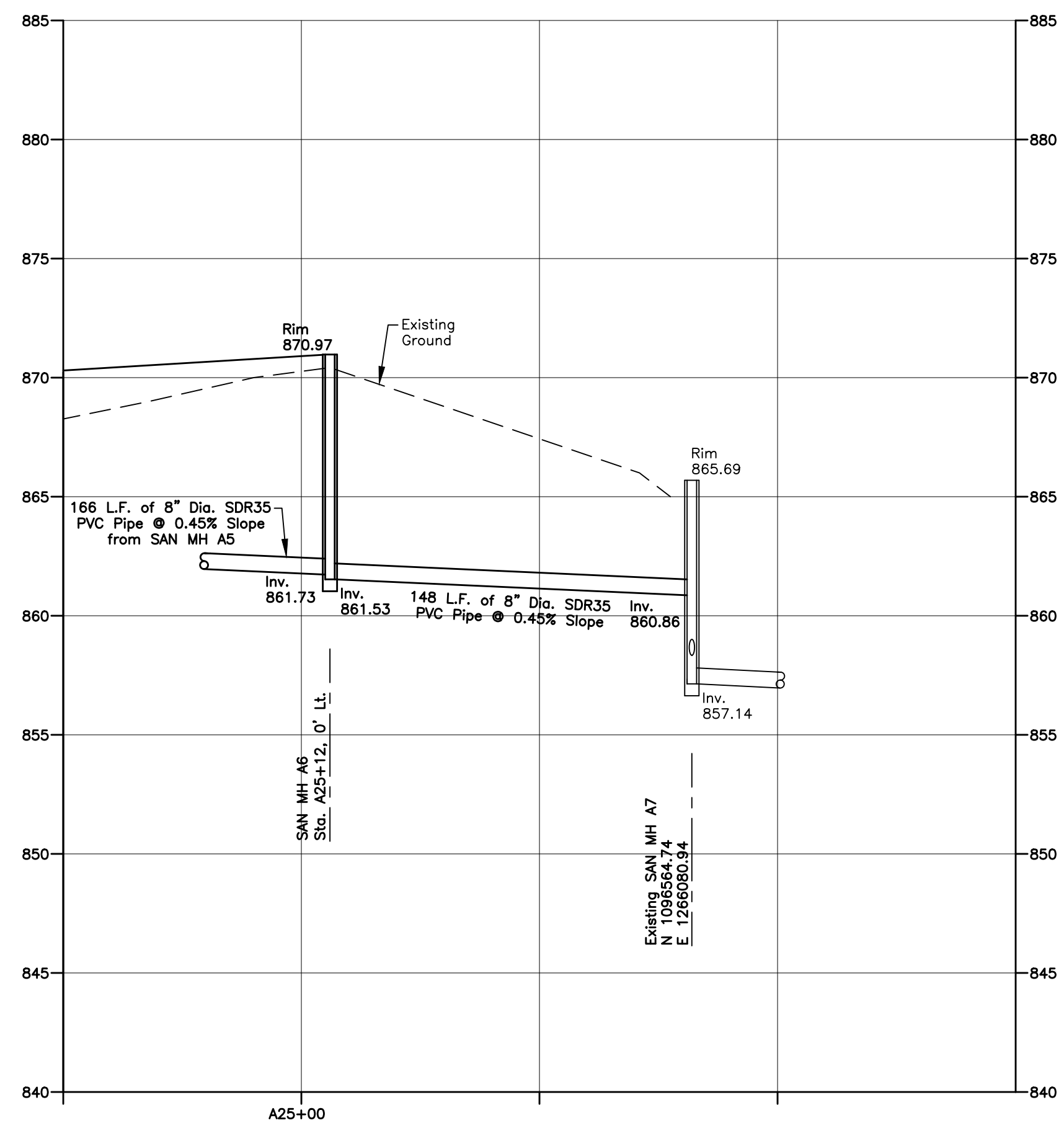
SCALE: 1" = 50' H.
1" = 5' V.

APPROVAL SIGNATURE: _____ DATE _____
STEVEN J. MOUNTAIN, P.E.
TOWN OF BATAVIA - TOWN ENGINEER



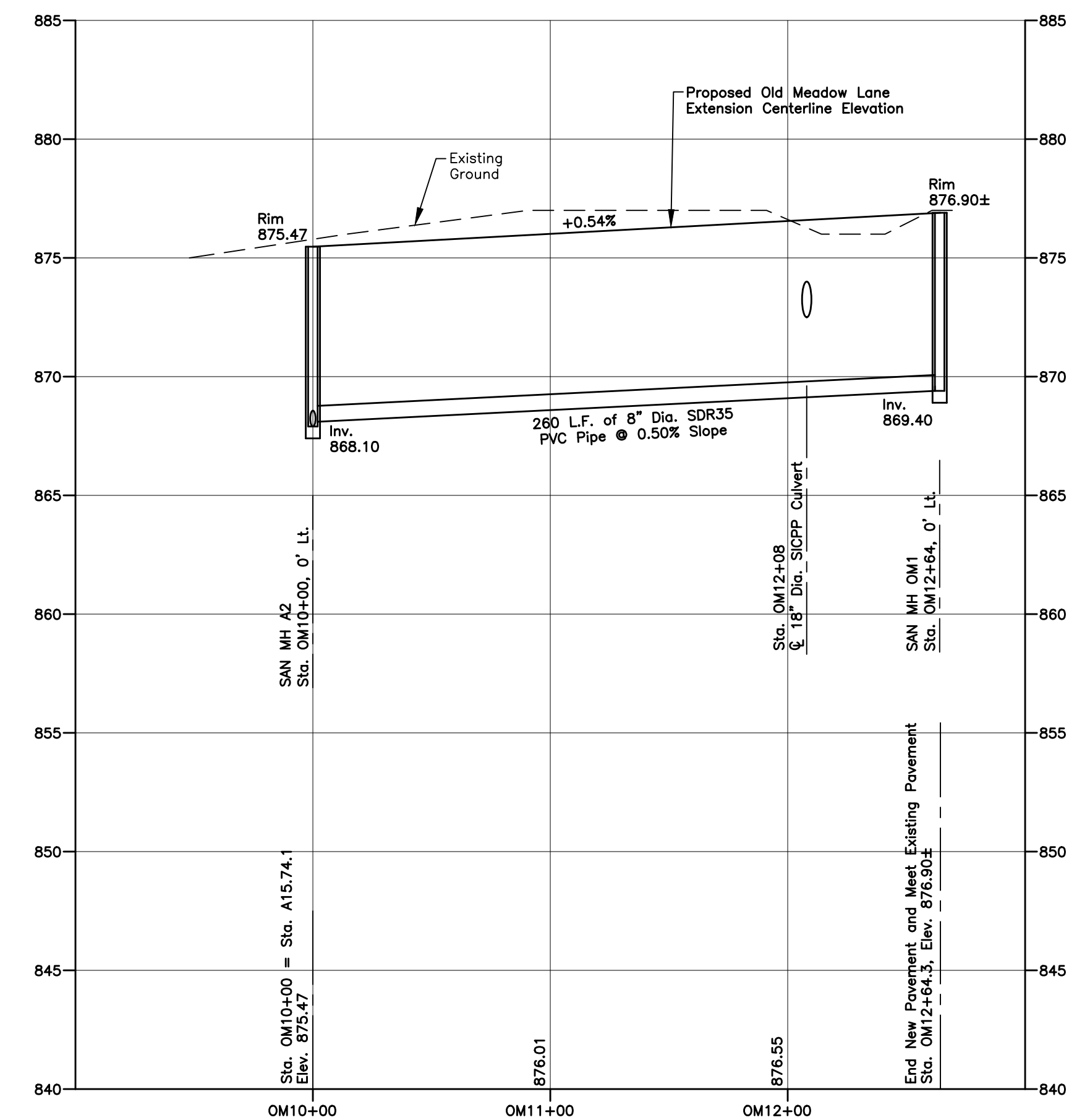
ROAD A CENTERLINE PROFILE
STA. A23+00 TO STA. A26+55

SCALE: 1" = 50' H.
1" = 5' V.



SANITARY SEWER PROFILE
SAN MH A6 TO SAN MH A7

SCALE: 1" = 50' H.
1" = 5' V.



OLD MEADOW LANE EXT. CENTERLINE PROFILE
STA. OM10+00 TO STA. OM12+64.3

SCALE: 1" = 50' H.
1" = 5' V.

REVISIONS			
NO.	DESCRIPTION	DATE	BY

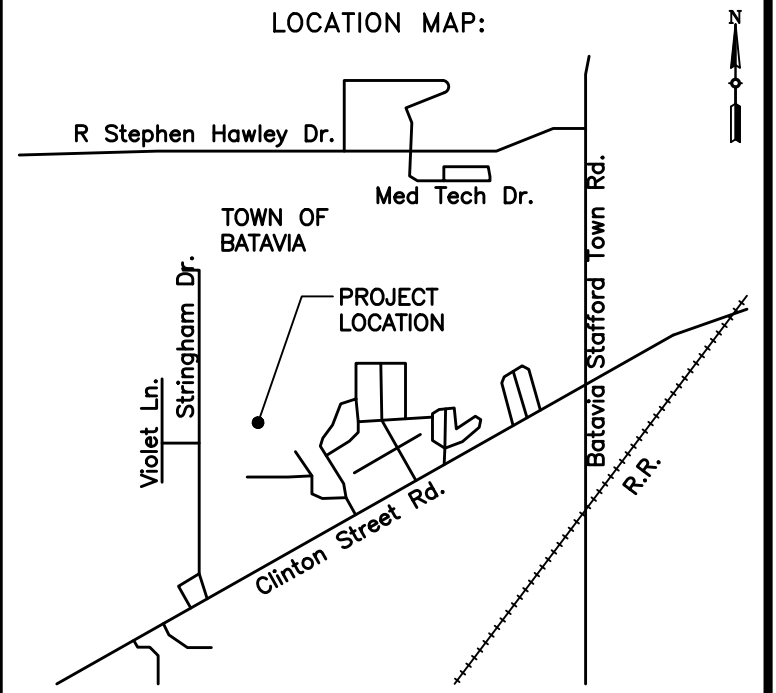
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PROJECT NAME:
**Country Meadows
Manufactured Home
Community
Expansion**
5121 Clinton Street Road
Town of Batavia
Genesee County, NY

DRAWING TITLE:
**Road and Sanitary
Sewer Profiles**

FILE NAME: ROADPROFILESDWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: AS NOTED	PROJECT NO.: 21-816
SHEET NO.: 11 OF 19	DRAWING NO.: PR-2

REVISIONS			
NO.	DESCRIPTION	DATE	BY

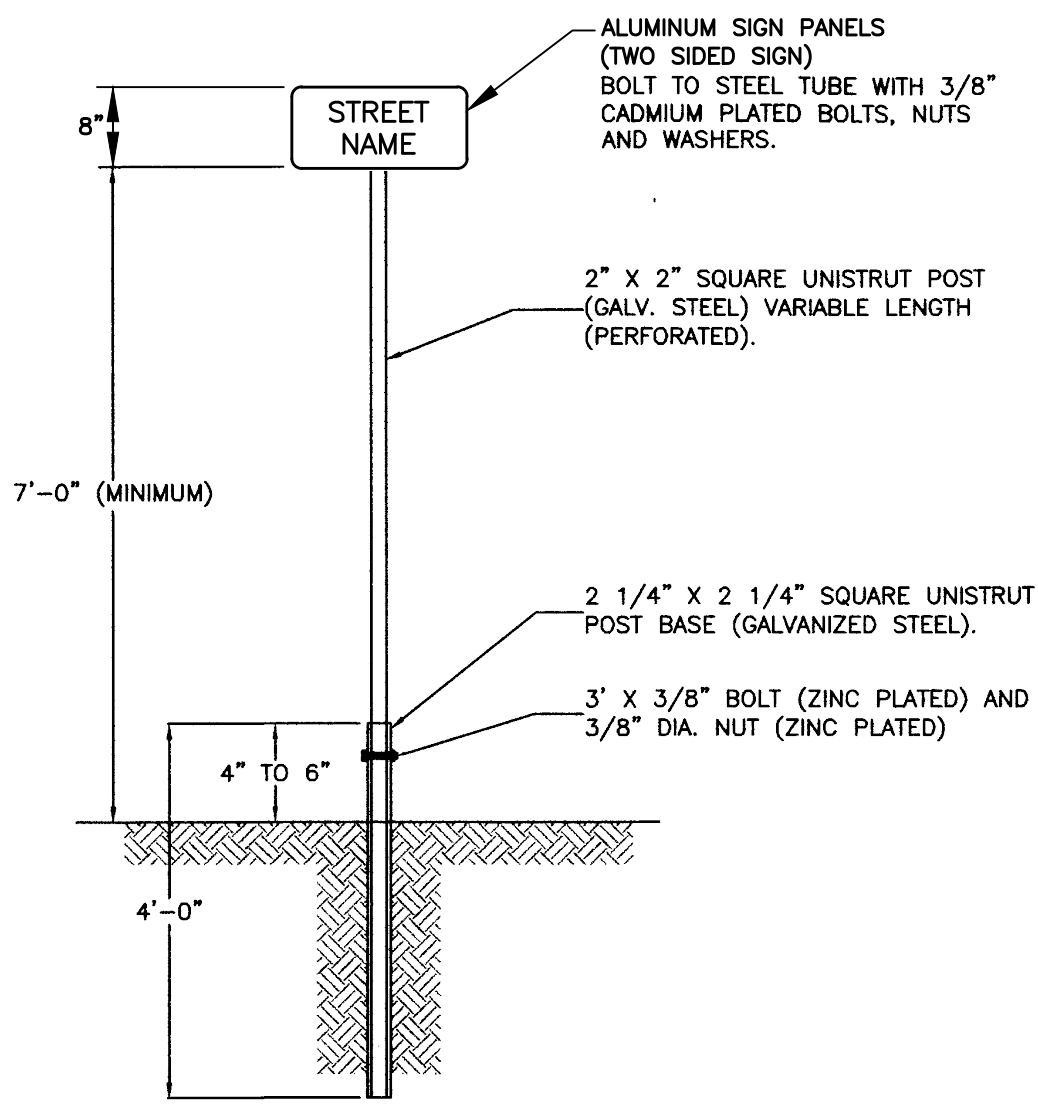
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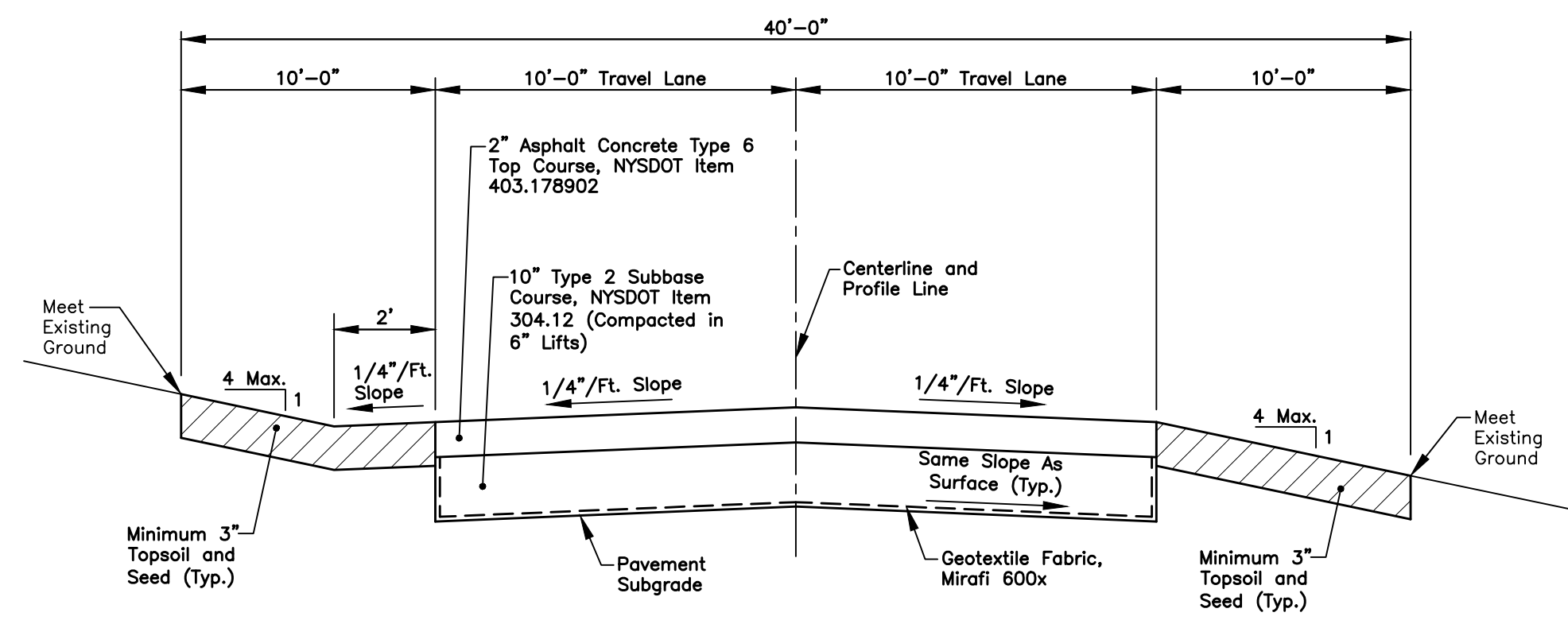
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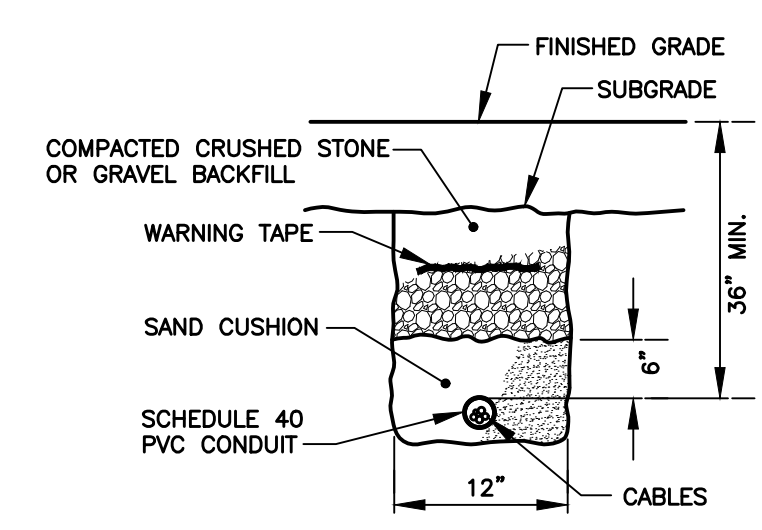


STREET SIGN INSTALLATION
NOT TO SCALE

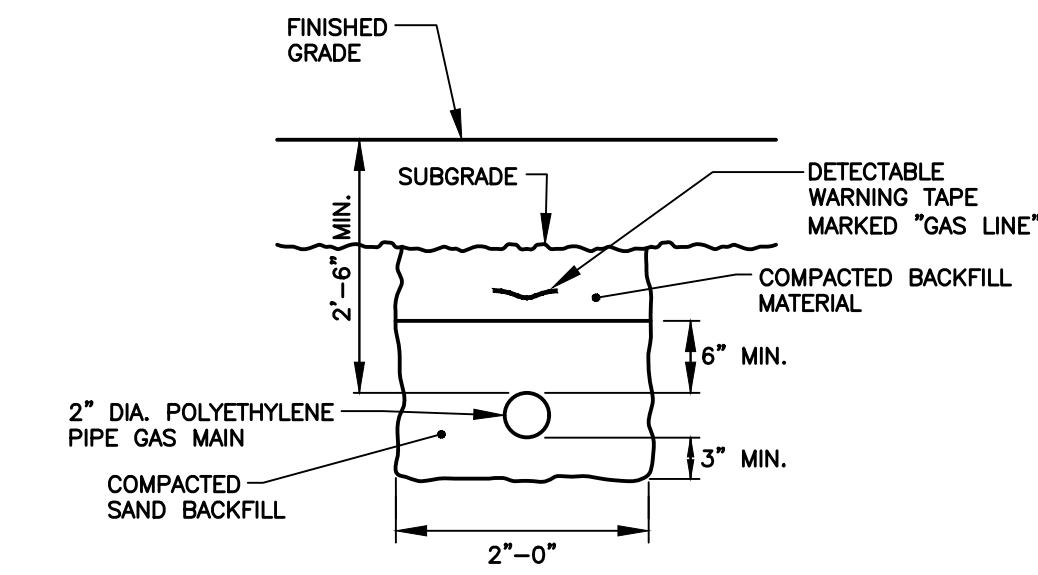


- NOTES**
- Pavement subgrade areas shall be compacted to a depth of 6 inches and to a density of not less than 95% of the maximum density as determined by ASTM D-1557.
 - Existing topsoil (6" minimum thickness) shall be removed from all proposed pavement areas. Areas below the pavement subgrade shall be filled with compacted granular subbase course.

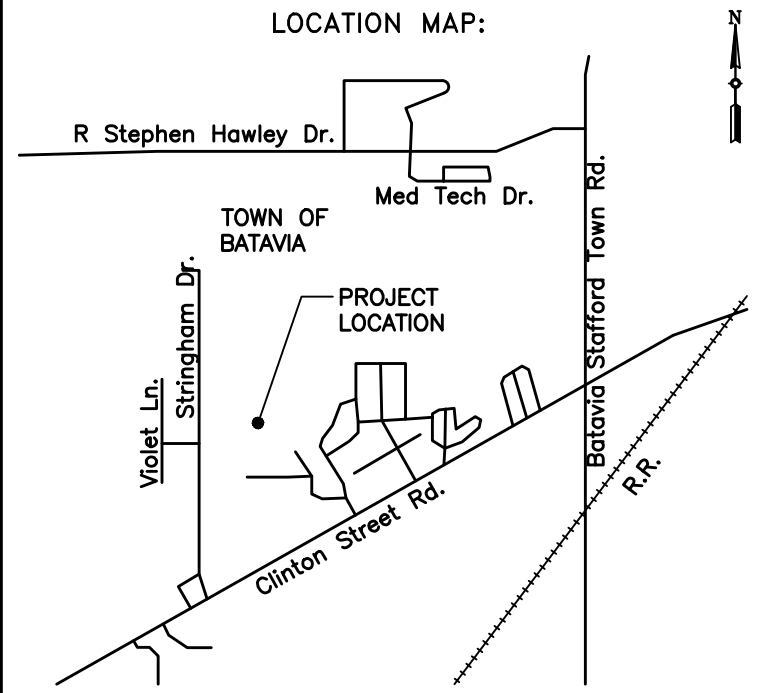
STREET PAVEMENT SECTION
NOT TO SCALE



ELECTRIC SERVICE TRENCH
NOT TO SCALE

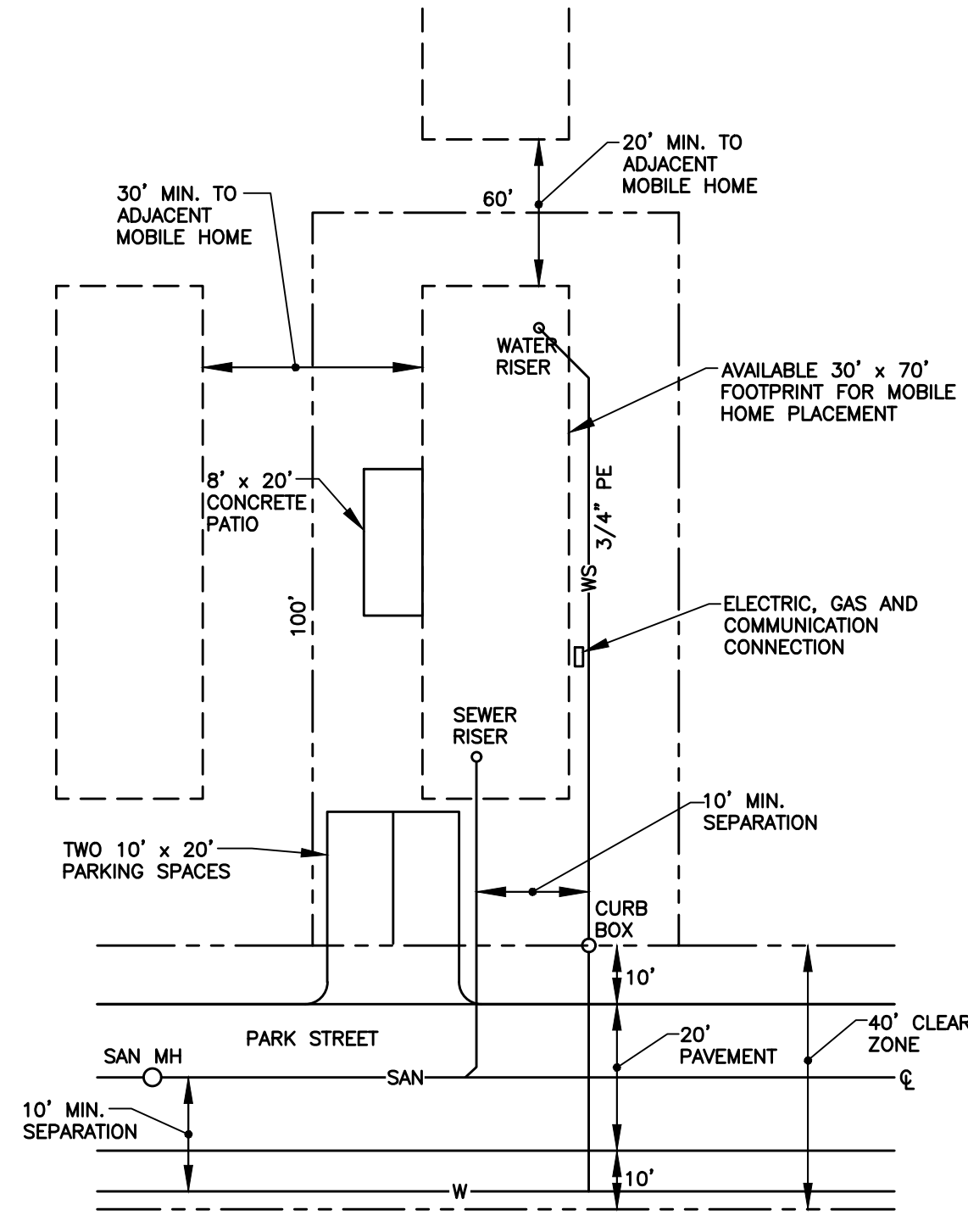


GAS MAIN (BY UTILITY COMPANY)
NOT TO SCALE

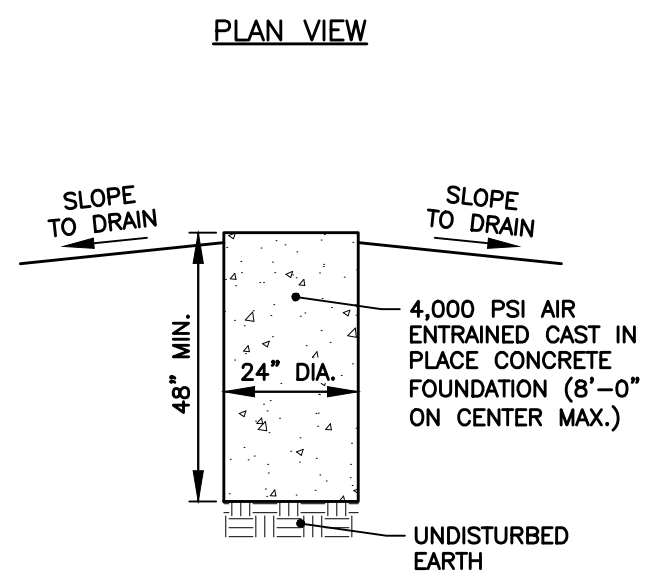
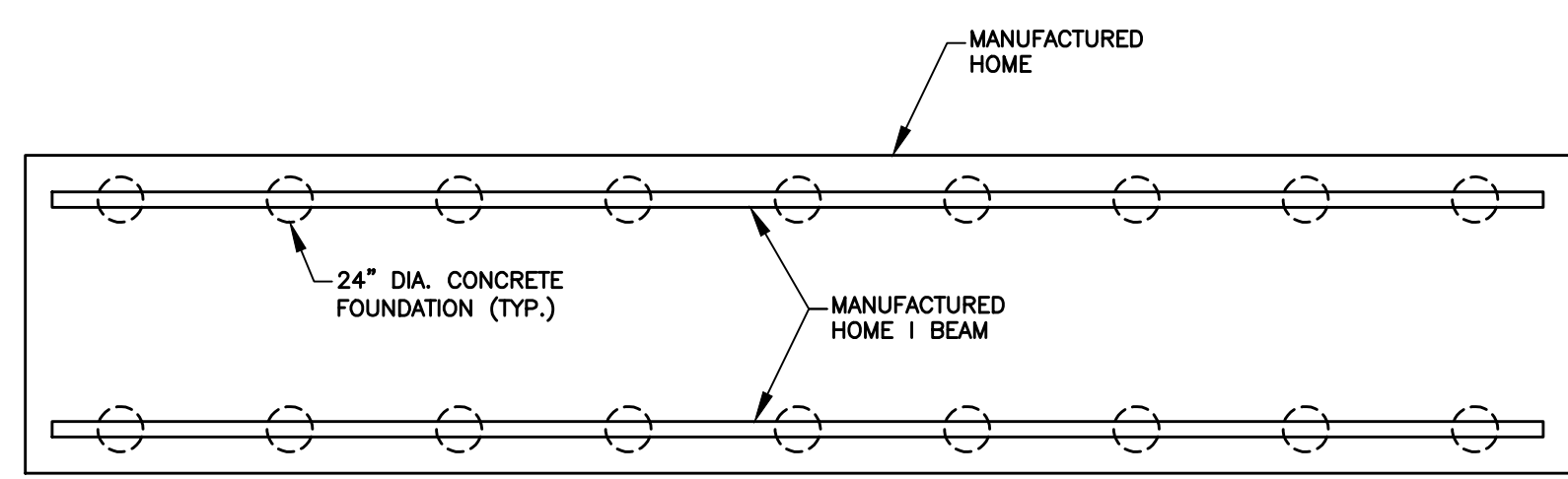


PROJECT NAME:
**Country Meadows
Manufactured Home
Community
Expansion**
5121 Clinton Street Road
Town of Batavia
Genesee County, NY

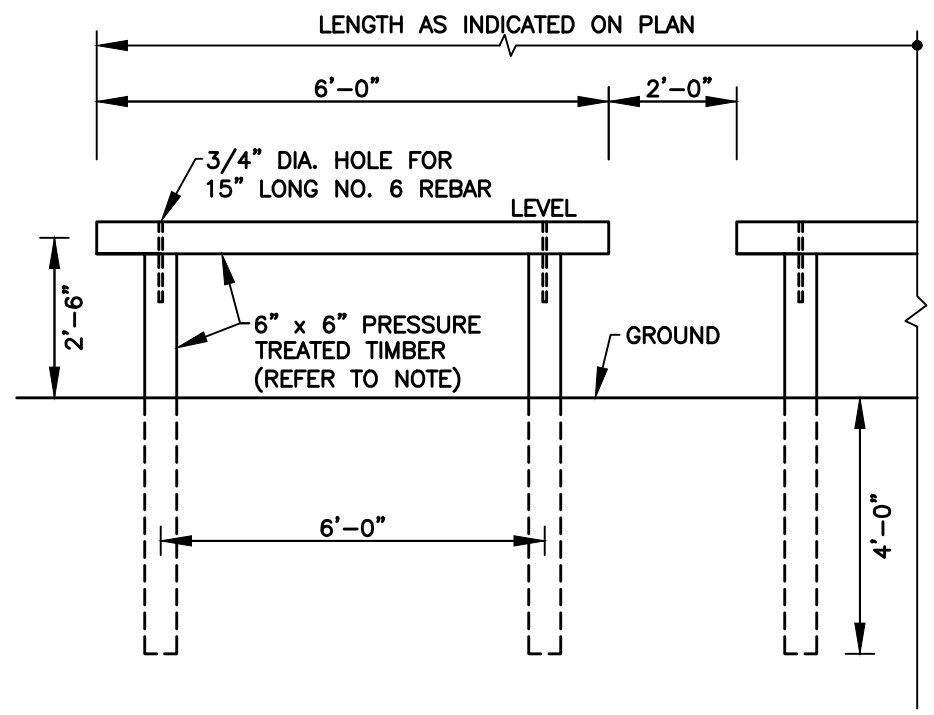
DRAWING TITLE:
**Miscellaneous
Details**



TYPICAL LOT LAYOUT
NOT TO SCALE



MANUFACTURED HOME FOUNDATION
NOT TO SCALE



NOTE: EXPOSED PORTIONS OF TIMBER POSTS AND RAILS SHALL BE STAINED PER OWNER'S REQUIREMENTS.

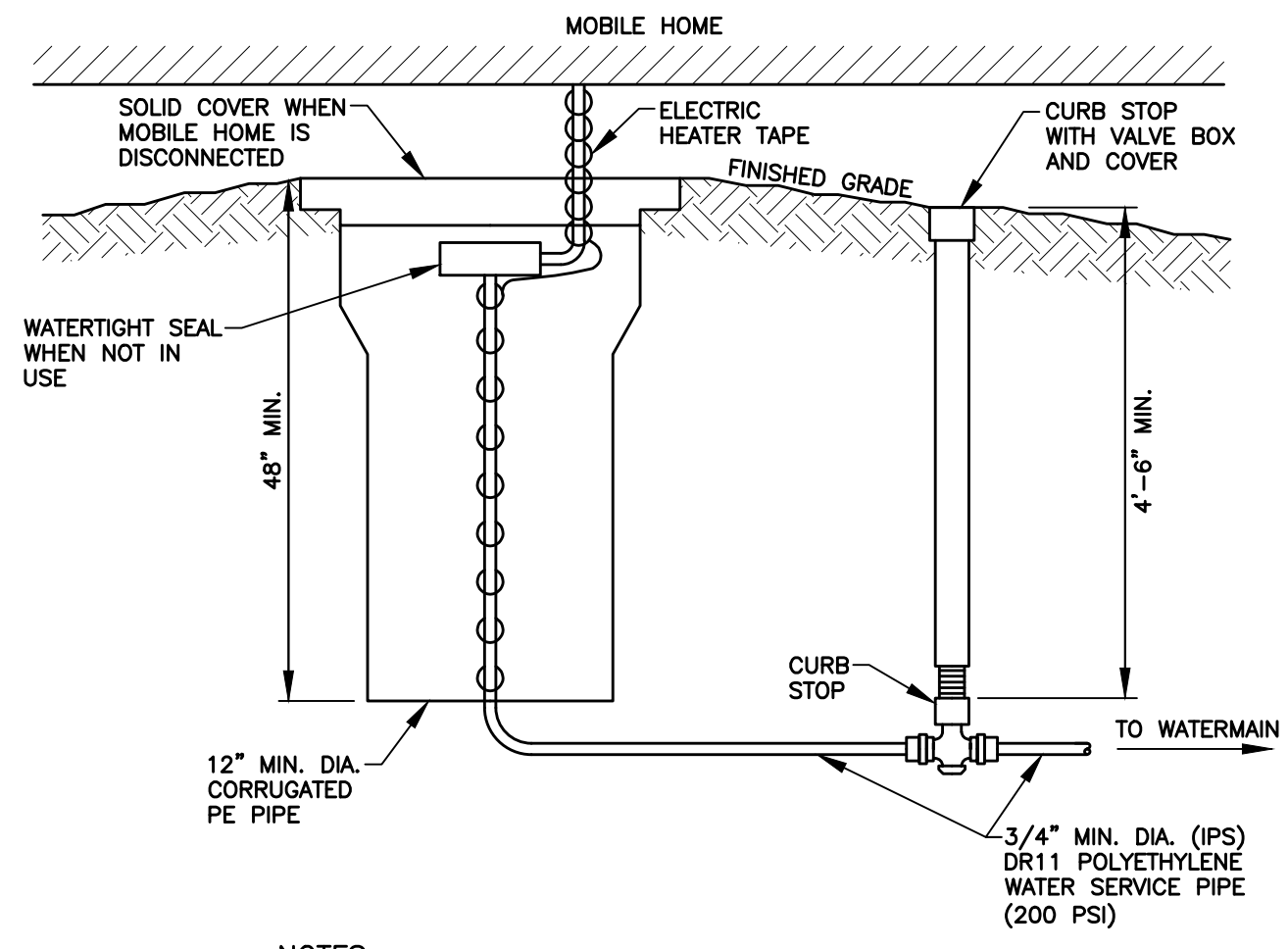
TIMBER BARRIER RAILING
NOT TO SCALE

APPROVAL SIGNATURE:
STEVEN J. MOUNTAIN, P.E., TOWN OF BATAVIA - TOWN ENGINEER
DATE

FILE NAME: DETAILS.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: NOT TO SCALE	PROJECT NO.: 21-816
SHEET NO.: 12 OF 19	DRAWING NO.: D-1

REVISIONS	DATE	DESCRIPTION	STANDARD MATERIAL LIST	ALTERNATE 1 MAKE/MODEL/MATERIAL	ALTERNATE 2 MAKE/MODEL/MATERIAL	COMMENTS
07/2021	06/2015	ISSUE DATE: JUNE 2015				
06/2018	06/2017	CONNECTIONS TO MATCH CURB BOX ALL				
06/2018	06/2017	UPDATED MODEL NUMBERS & QUANTITIES				
07/2021	07/2021	REVISED THE CURB STOP ASSEMBLY TO MATCH CURB BOX ALL				
			WATER MAIN (TRENCHED)	DR-18 PVC		
			GRADE RING; W-04B, W-18, W-19	KISTNER CONCRETE	LAKELANDS CONCRETE	ANCHORED WITH 5/8" STUD BOLTS, WASHER AND NUTS (501, 502 OR 505 5/8")
			MANHOLE FRAME AND COVER; W-16, W-19	PAMREX MODEL 36"	EAST JORDAN ERGO XL 36"	LID LABELED "WATER"
			PRECAST MANHOLE EXTERIOR COATING; W-18, W-19	3 COATS OF CARBOLINE BITUMASTIC 300M	3 COATS OF HI-BUILD TENE-TAR SERIES 48H-413	
			PRECAST MANHOLE PIPE CONNECTIONS; W-18, W-19	PRESS SEAL CAST A SEAL 12-08 CAST IN 9007	PRESS-SEAL PSX DIRECT DRIVE CONNECTOR	
			WATER MAIN DETECTABLE WARNING TAPE; W-16, W-17	PROPAK INDUSTRIES 5 MIL DETECTABLE WARNING TAPE, 3" WIDE	OR EQUAL	BLUE IN COLOR LABELED "BURIED WATER PIPE"
			TRACER WIRE; W-04, W-16, W-17, W-21	10-GAUGE, STRANDED COPPER, INSULATED TRACER WIRE	COPPERHEAD 12-GAUGE, SOLID STEEL CORE, COPPER PLATED, INSULATED TRACER WIRE	OR EQUAL; BLUE IN COLOR
			TEMPORARY RESTRAINING SYSTEM; W-07, W-10, W-11, W-12, W-13, W-20	EBMA IRON SERIES 1500 RESTRAINT	ROMAC SERIES 600 RESTRAINTS	
			FILTER FABRIC; W-11, W-19	MIRAFI 140N	TYPAR STYLE 3341	
			PIPE SUPPORT - AIR RELEASE MH; W-19	STANDON MODEL S92	PIPELINE PRODUCTS MODEL PS-S	BOLTS AND STRAPS SHALL BE STAINLESS STEEL
			AIR RELEASE VALVE; W-19	GA INDUSTRIES FIGURE 925	GA INDUSTRIES IS TOWN STANDARD, NO ALTERNATIVE AIR RELEASE ACCEPTED	AIR RELEASE VALVE SIZE TO BE DETERMINED BASED ON CONDITIONS, 1/2" AND 1" BALL VALVES (3 VALVES TOTAL) SHALL BE INCLUDED FOR FUTURE MAINTENANCE.
			MECHANICAL JOINT PIPE RESTRAINT; W-08, W-09, W-10, W-11, W-12, W-14A	ROMAC XXX-GRAP-IP GIR RING PIPE RESTRAINT	FORD UFR1500-X-U	
			MECHANICAL JOINT TEE; W-11	TYLER UNION MJ C153	ANY AMERICAN MJ TEE	
			TEES, WYES, BENDS	AMERICAN MADE DUCTILE IRON - CEMENT LINED	ANY AMERICAN MANUFACTURER	
			FIRE DEPARTMENT CONNECTION	SINGLE 3" STORZ CONNECTION WITH 30" ELBOW & CAP ON OUTSIDE OF BUILDING		

REVISIONS	DATE	DESCRIPTION	STANDARD MATERIAL LIST	ALTERNATE 1 MAKE/MODEL/MATERIAL	ALTERNATE 2 MAKE/MODEL/MATERIAL	COMMENTS
06/2017	06/2017	ISSUE DATE: JUNE 2015				
06/2018	06/2017	THE DEPARTMENT CONNECTION ADDED				
09/2018	09/2018	UPDATED MODEL NUMBERS & QUANTITIES				
07/2021	07/2021	ADDED HYDRANT MARKER & REBARRENDED				
			2" PERMANENT BLOW-OFF ASSEMBLY; W-07	SEE 2" WATER SERVICE - CURB BOX BELOW		
			2" QUICK JOINT COUPLING FORD C-84-77-Q	SEE 2" WATER SERVICE - CURB STOP ON BELOW		
			2" WATER SERVICE - SERVICE SADDLE; W-18	SEE WATER SERVICE - GRADE RING ON W-03E	MUELLER 110 COUPLING, H-15428N	
			2" WATER SERVICE - CURB STOP; W-18	EAST JORDAN 1566Z FRAME AND 1566 COVER	NEENAH R-1975-A2 FRAME AND COVER	
			2" WATER SERVICE - METER; W-18	FORD FS313-XXX-CC 5/5	SMITH BLAIR 372 5/5 SERVICE SADDLE	
			2" SENSUS OMNI T2 WATER METER	2" SENSUS OMNI T2 WATER METER	NO EQUAL - TOWN STANDARD	TOWN STANDARD IS SENSUS METERS
			36" SQUARE EAST JORDAN CASTING ALUMINUM HATCH - H-20 UNINTENDED VEHICULAR TRAFFIC GATE H363019001	36" SQUARE BILCO J-AL-H20 ALUMINUM HATCH	NO EQUAL - TOWN STANDARD	FOR TDB OF 4' SQUARE PRECAST METER VAULT
			GATE VALVE; W-07, W-10, W-13, W-20	RESILIENT SEAT, OPEN LEFT, NRS MUELLER MODEL A-2360 MJ/MJ WITH 5/5 FASTENERS	RESILIENT SEAT GATE VALVE NRS, OPEN LEFT KENNEDY 8571 WITH 5/5 FASTENERS	
			WATER MAIN - TAPPING SLEEVE; W-08, W-20	FORD MODEL FTSS STAINLESS STEEL TAPPING SLEEVE	SMITH BLAIR MODEL 665 STAINLESS STEEL TAPPING SLEEVE	
			HYDRANT MARKER; W-11	5" RODON HYDRANT MARKER WITH RED TAPE STRIPS ON FLAT MOUNTING BRACKET W/ 4"x5" WHITE MINI FLAG WITH RED STRIPE	NO EQUAL - TOWN STANDARD	FIELD APPLY SECOND COAT OF YELLOW PAINT AFTER INSTALL. WIRE BRUSH LOOSE OR CHIPPED PAINT
			HYDRANT - MUNICIPAL; W-11	5-1/4 BREAK AWAY KENNEDY NO 8814 - MUNICIPAL, PAINTED YELLOW	NO EQUAL - TOWN STANDARD	
			HYDRANT - PRIVATE	5-1/4 BREAK AWAY KENNEDY NO 8810 - MUNICIPAL, PAINTED RED	NO EQUAL - TOWN STANDARD	
			IN LINE / HYDRANT VALVE BOX; W-10, W-11, W-13	TYLER UNION 6855 SLIP TYPE VALVE BOX	BINGHAM AND TAYLOR FIGURE 4908 SLIP TYPE VALVE BOX	ALTERNATIVE 3: BIBBY STE-CROK TWO PIECE STYLE TOP FLANGE, CODE V683; OR EQUAL
			HYDRANT VALVE; W-11	6" RESILIENT SEAT, OPEN LEFT, NRS MUELLER MODEL A-2360 MJ/MJ WITH 5/5 FASTENERS	6" RESILIENT SEAT GATE VALVE NRS, OPEN LEFT KENNEDY 8571 WITH 5/5 FASTENERS	
			SANITARY YARD HYDRANT; W-21	FREEZE FLOW, EXECUTIVE SANITARY YARD HYDRANT, MODEL S135E		

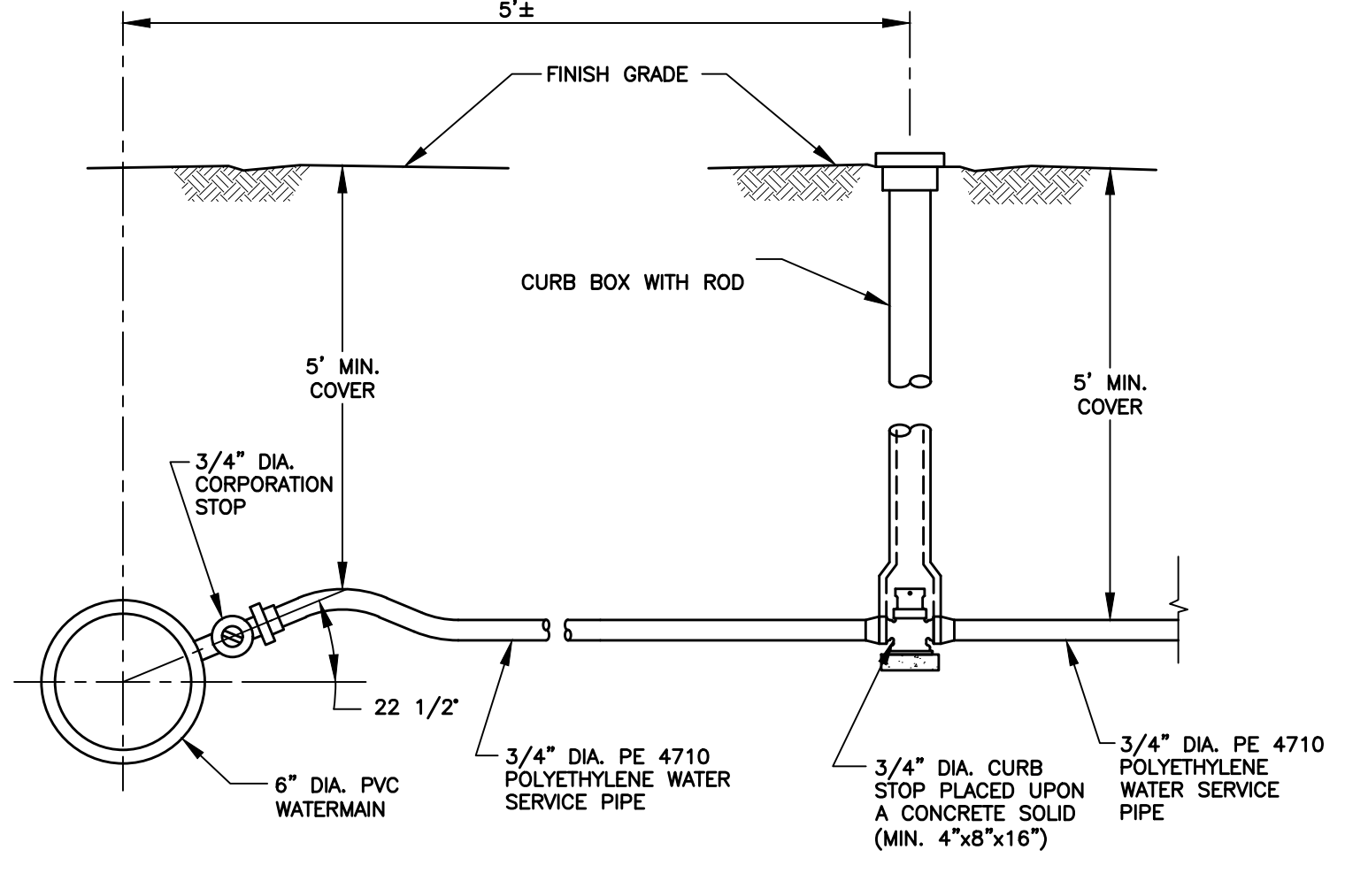


NOTES
1. CURB STOP TO BE PROVIDED WITH WEEP.

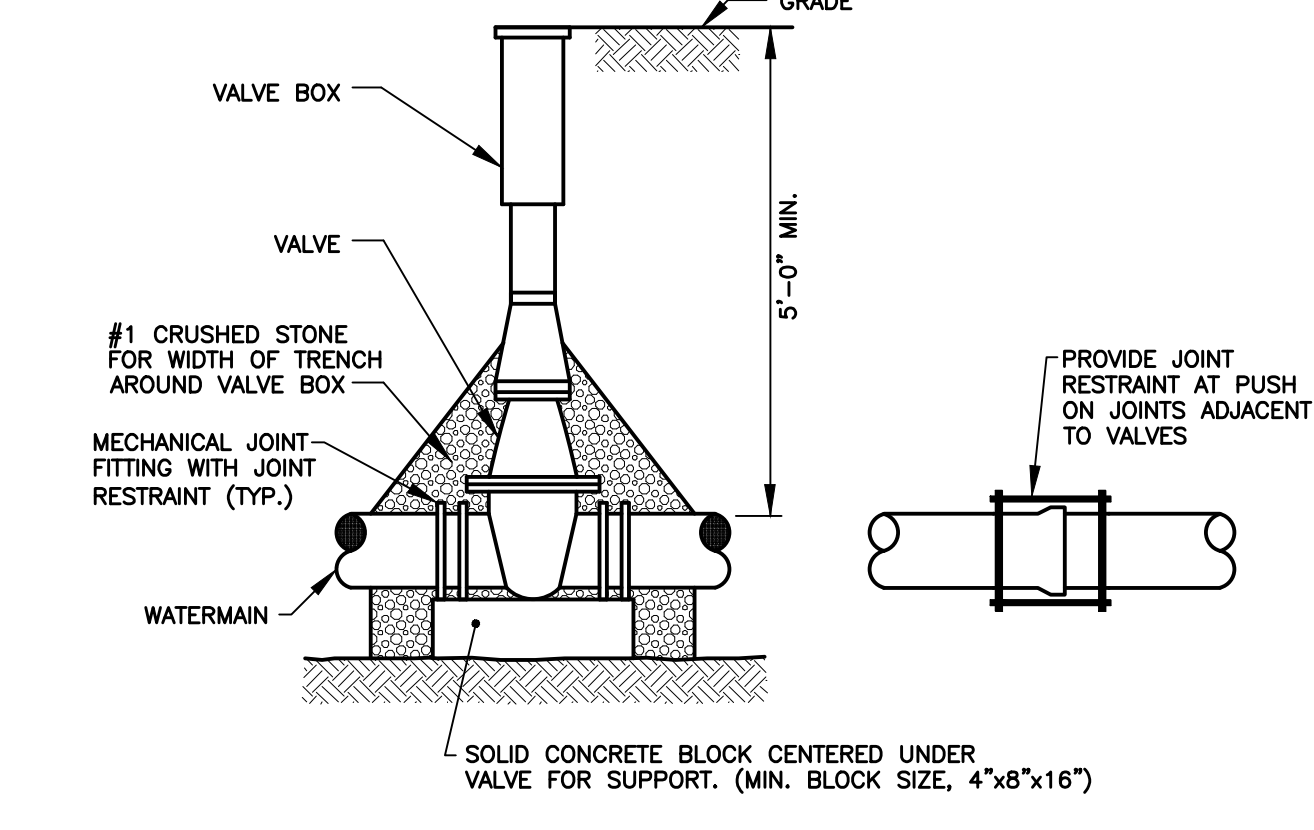
WATER SERVICE CONNECTION AT MOBILE HOME
NOT TO SCALE

STANDARD PUBLIC WATER SUPPLY IMPROVEMENT NOTES

- The proposed works shall be constructed in complete conformity with the plans and specifications approved this day or approved amendments thereto.
- Any changes to the approved plans and/or specifications shall require resubmittal and approval by the Seneca County Department of Health.
- The proposed works shall not be placed into operation until such time as an Approval of Completed Works is issued in accordance with Part 5 of the New York State Sanitary Code.
- Materials - NSF certification required for all materials
 - A. Polyvinyl chloride (PVC) pipe must be with integral bell and spigot joints; class 150, DR 18; conforming with the latest revision of ANSI/AWWA C900 (for 4"-12" pipe) or C905 (for larger pipe) standard. Installation to include tracer tape as per manufacturer's instructions.
 - B. Cement-lined ductile-iron (DI) pipe must be Class 52 minimum conforming with the latest revision of ANSI/AWWA C151 standard.
 - C. Polyethylene (PE) pressure pipe must be PE 3408 material minimum, conforming to the latest revision of ANSI/AWWA C906 standard.
- Depth - Water piping must have a minimum of 5 feet of cover from finished grade.
- Crossings - Adequate separation between water mains and storm or sanitary sewers must be provided as shown in the Water Main/Sewer Crossing Detail on Drawing No. D-3, minimum horizontal separation between water mains and storm or sanitary sewers to be 10 feet, measured from the outside of the pipes, unless shown otherwise.
- Hydrants - Hydrant type shall be as noted on the plans or as required by the applicant. Guard valves shall be used and all hydrant stub piping shall be mechanical joint. Should evidence of ground water be encountered within seven (7) feet of the finished grade, hydrant weep holes (drains) shall be plugged using mechanical metal plugs. All hydrants with plugged weep holes shall be appropriately tagged.
- Thrust blocks - All tees, stubs, bends and other fittings, or other areas as ordered by the Engineer, shall be backed with minimum 3000 psi concrete thrust blocks as indicated on the Drawings.
- Flushing/pressure and leakage testing - Water piping shall be flushed and tested in conformance with the latest revision of ANSI/AWWA C600 standard for ductile-iron pipe, C605 for PVC pipe, or equivalent of C600 and/or C605 for PE pipe.
- Disinfection - The proposed works must follow ANSI/AWWA C651 standard, tablet method excepted. Following flushing and testing, the Engineer shall oversee collection of an appropriate number of bacteriological samples for total and fecal coliform and for standard bacterial plate count after the field free chlorine residual is less than 1.5 ppm and the sampling points have been decontaminated. Prior to sampling the Engineer shall coordinate the appropriate number and location of samples to be collected with the County or State Health Department having jurisdiction. Bacteriological results are required on two consecutive days per AWWA C-651.
- Placing into operation - The completed works shall not be placed into service until an Approval of Completed Works form is issued by the County or State Health Department having jurisdiction. Prior to issuance, a NYS - licensed professional engineer must submit certification that they or their designated representative witnessed that construction was in conformance with the plans as approved; flushing, testing, and disinfection procedures noted herein had been properly performed; and, microbiological sample results from the completed works were acceptable. Copies of the official laboratory results are to be included with the certification.
- Erosion - Adequate control measures shall be employed during all phases of construction in accordance with all appropriate standards and requirements. Best management practices are to be followed.
- Fill areas - Where piping is to be placed within fill areas, the fill shall be placed and compacted to at least 95% modified proctor prior to trench excavation.
- Service interruption - Shutdown of existing water mains shall be in accordance with the local Water Department. The Water Department must be notified in advance of all proposed shutdowns in accordance with their direction. Water must be turned back on as soon as possible. All ends of water mains must be provided with adequate plug, block, and blow-off as indicated on the plans, as per details herein.
- Disconnection of wells - Prior to turning on a new service to an existing facility served by a private, on-site water supply, the existing source piping must be physically disconnected and removed from the facility (with no means of interconnection between the on-site service and the public supply service) or the service provided with a reduced - pressure zone (RPZ) backflow prevention protector (via proper application to and approval by the County or State Health Department having jurisdiction).

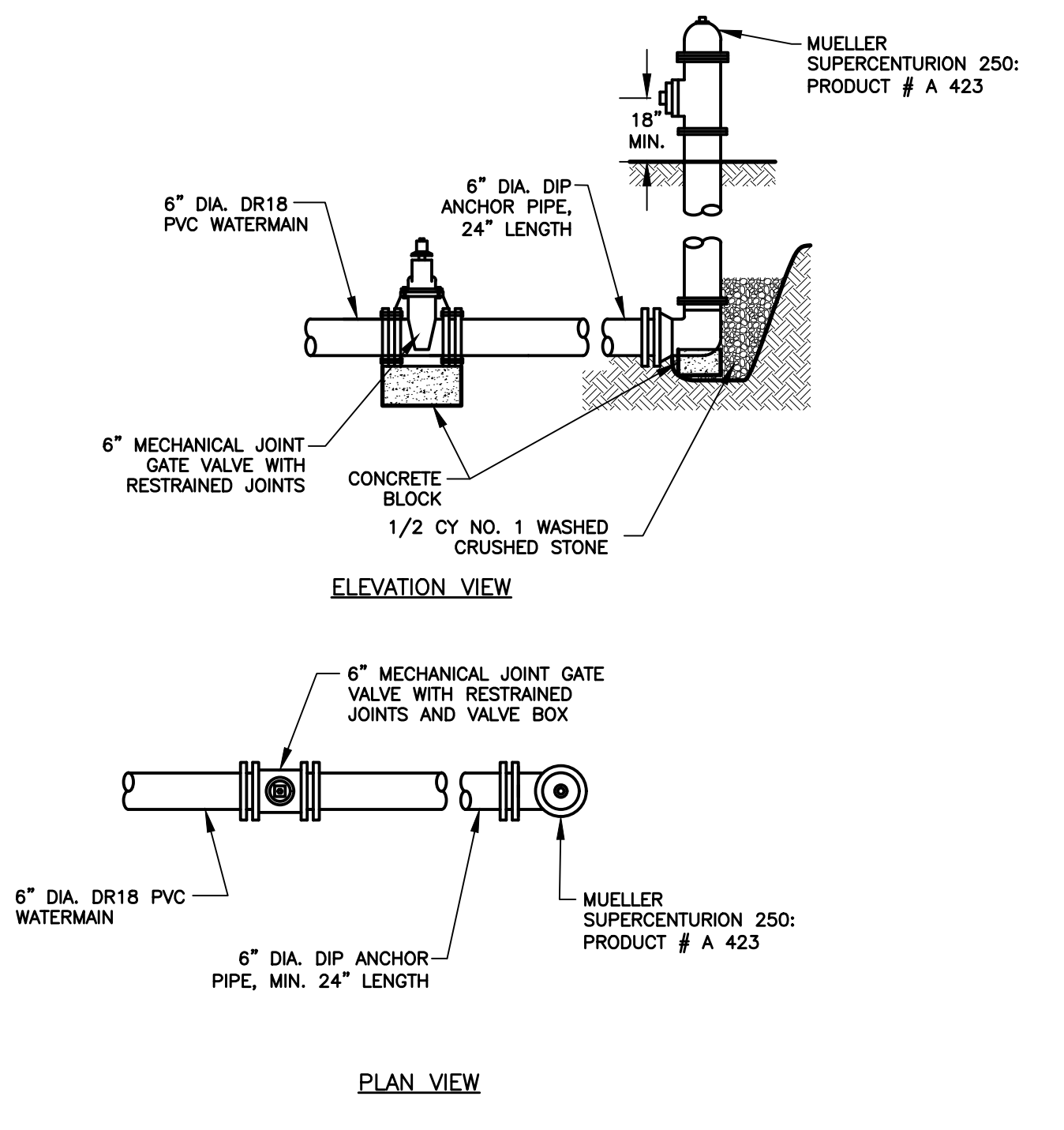


WATER SERVICE INSTALLATION
NOT TO SCALE

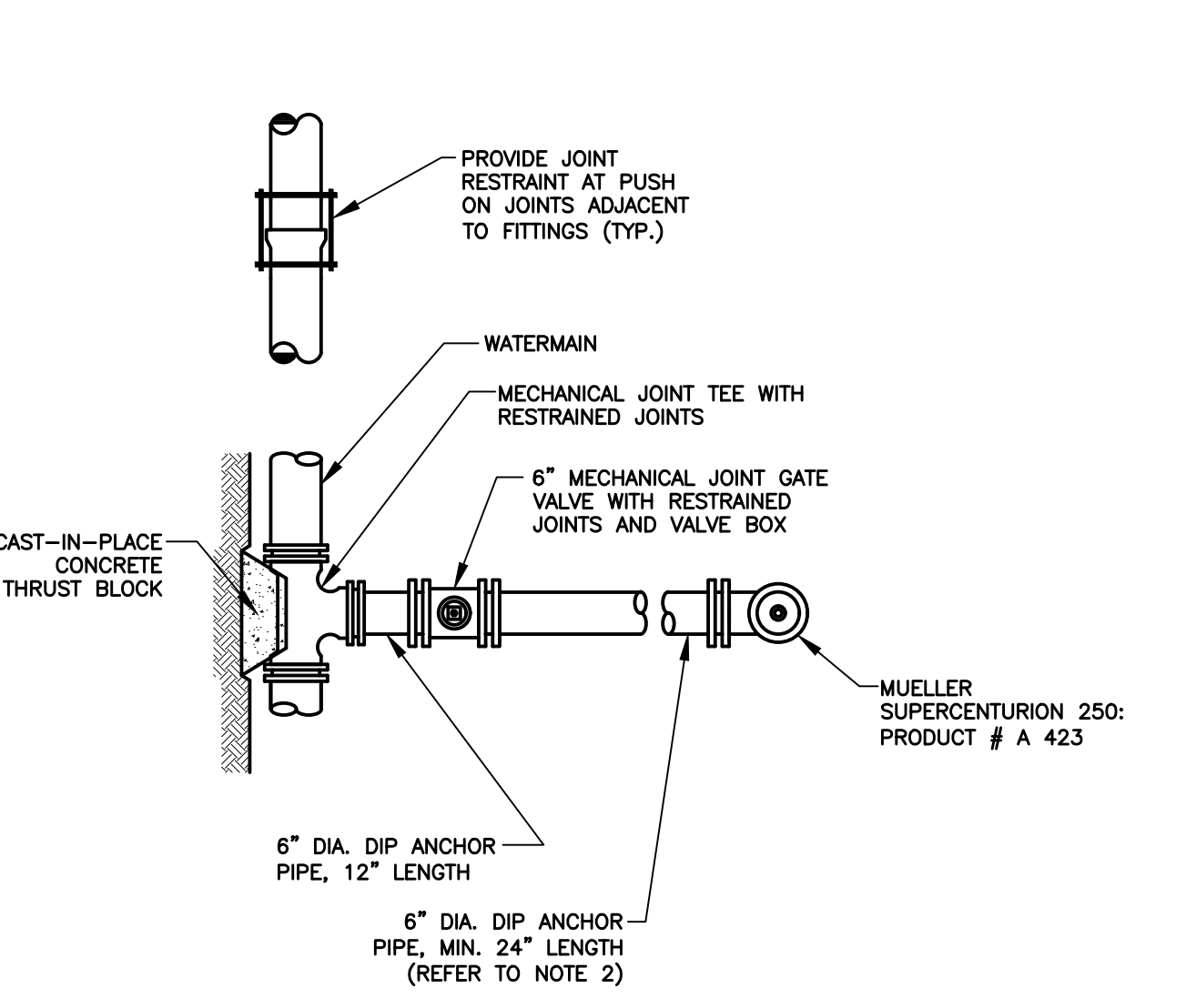


NOTES
1. VALVE BOX SHALL BE CENTERED ON VALVE AND SET ON COMPACTED BACKFILL IN NO CASE SHALL THE VALVE BOX BE SUPPORTED BY THE VALVE BODY.
2. ALL VALVE HARDWARE SHALL BE STAINLESS STEEL.

VALVE SETTING
NOT TO SCALE



HYDRANT INSTALLATION
NOT TO SCALE



NOTE
1. REFER TO PARALLEL HYDRANT ELEVATION VIEW FOR TYPICAL DIMENSIONS.
2. PERPENDICULAR HYDRANT INSTALLATIONS WILL TYPICALLY REQUIRE ADDITIONAL ANCHOR PIPE TO PLACE THE HYDRANT AT THE DESIRED LOCATION. THE ENGINEER WILL DETERMINE THE HYDRANT LOCATION DURING CONSTRUCTION.

PERPENDICULAR HYDRANT INSTALLATION
NOT TO SCALE

REVISIONS			
NO.	DESCRIPTION	DATE	BY

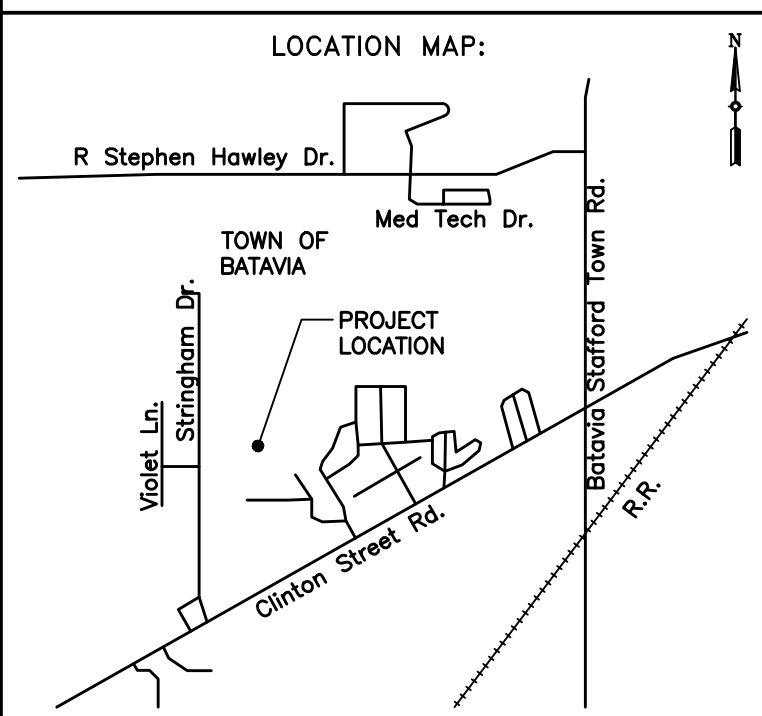
NOT APPROVED FOR CONSTRUCTION

It is a violation of New York State Education Law Article 145 Section 7209 for any person, unless he or she 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 or her seal and the notation "altered by" followed by his or her signature and the date of such alteration, and a specific description of the alteration.

THORNTON ENGINEERING LLP
30 Assembly Drive, Suite 106
Mendon, New York 14506
Tel. 585-624-4810
Consultant Engineers



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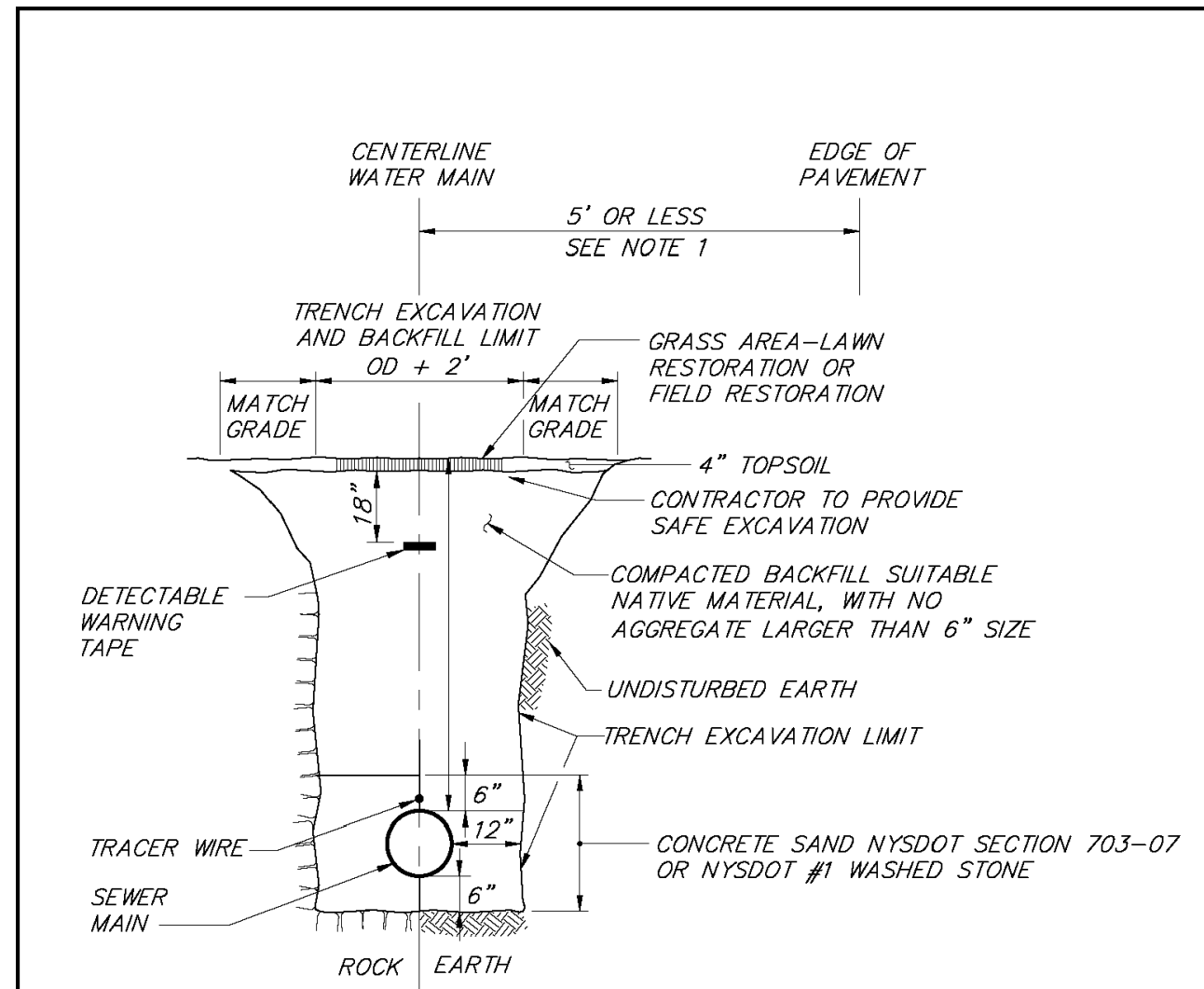


PROJECT NAME:
**Country Meadows
Manufactured Home
Community
Expansion**
5121 Clinton Street Road
Town of Batavia
Genesee County, NY

DRAWING TITLE:
**Water System
Details**

FILE NAME: DETAILS.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: NOT TO SCALE	PROJECT NO.: 21-816
SHEET NO.: 14 OF 19	DRAWING NO.: D-3

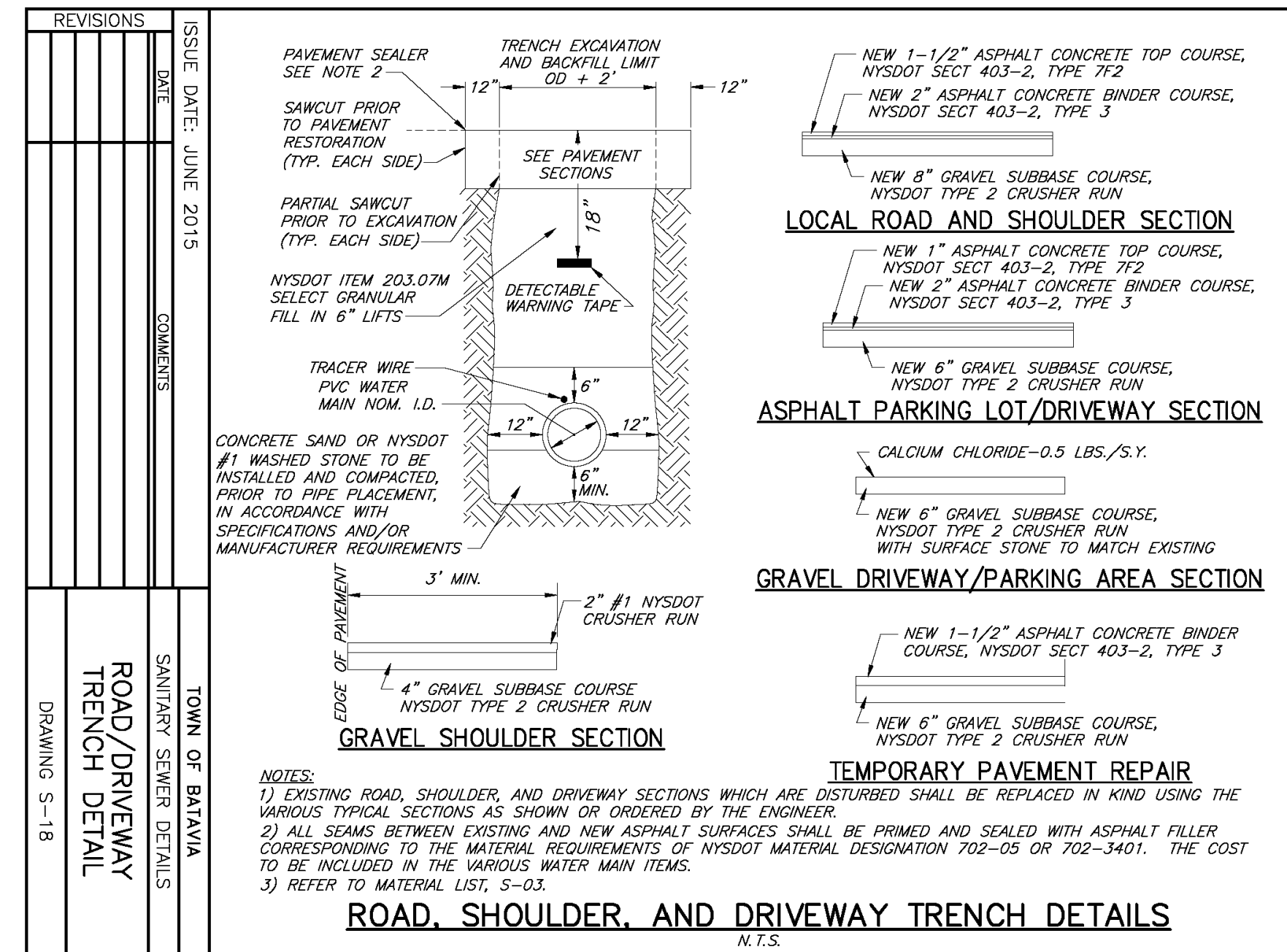
APPROVAL SIGNATURE:
STEVEN J. MOUNTAIN, P.E.,
TOWN OF BATAVIA - TOWN ENGINEER
DATE



NOTE:
 1) SEWER MAIN PLACED 5 FEET OR LESS FROM CENTERLINE OF SEWER MAIN TO EDGE OF ASPHALT PAVEMENT (EITHER ROAD OR SHOULDER) SHALL MEET THE BACKFILL REQUIREMENTS OF ROAD, SHOULDER AND DRIVEWAY TRENCH DETAILS.
 2) REFER TO MATERIAL LIST, S-03

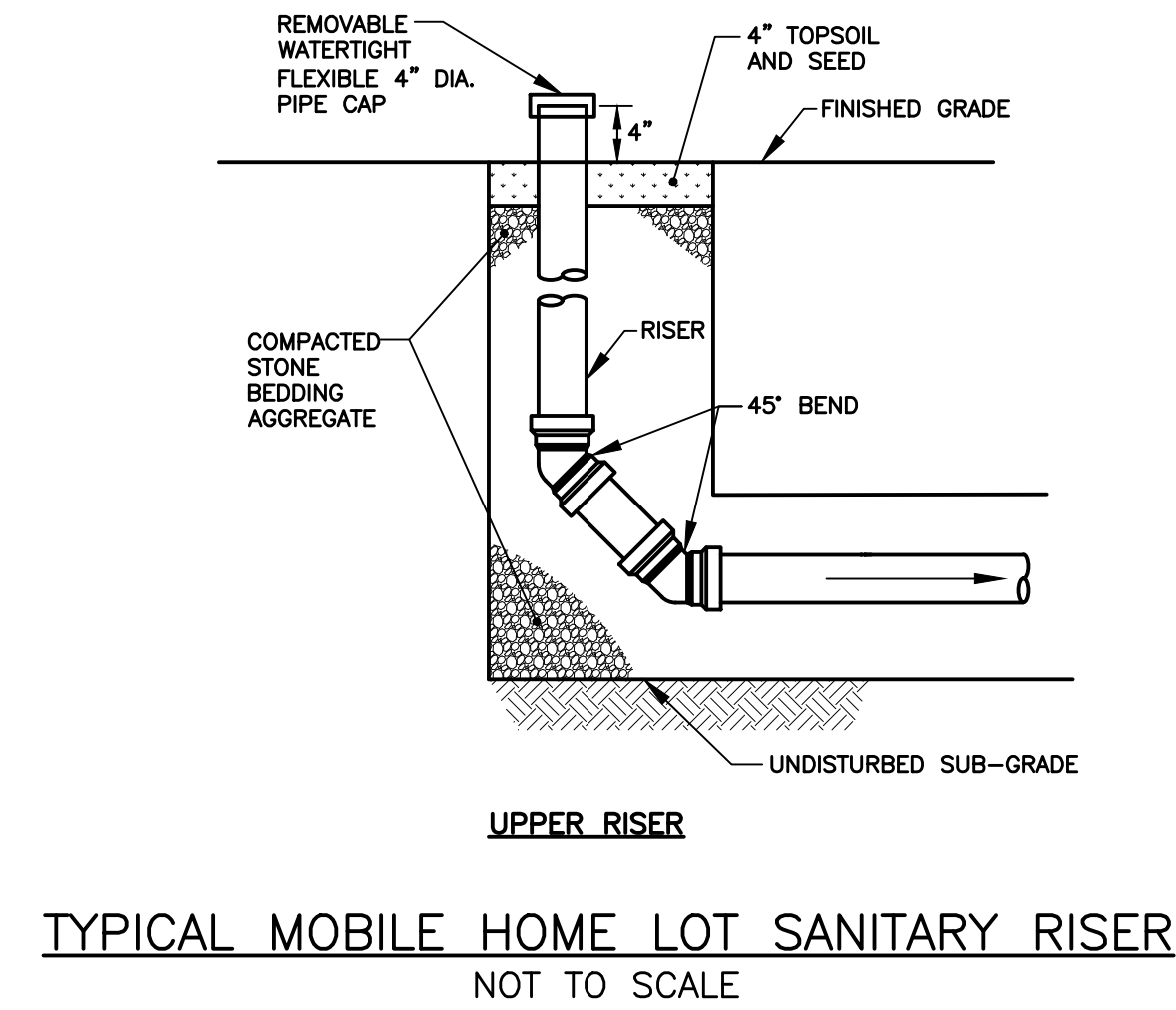
FIELD/LAWN AREA TYPICAL TRENCH
N.T.S.

ISSUE DATE: JUNE 2015		TOWN OF BATAVIA
DATE	COMMENTS	SANITARY SEWER DETAILS
		LAWN/FIELD AREA TRENCH DETAIL
		DRAWING S-20



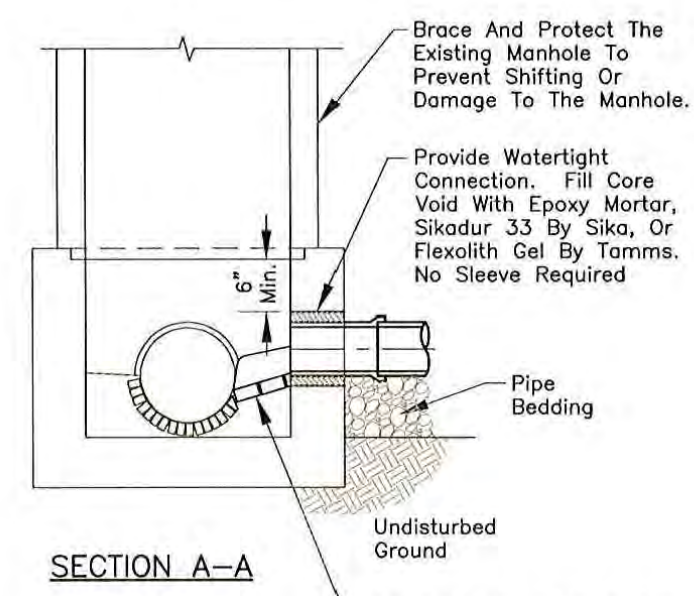
NOTE:
 1) EXISTING ROAD, SHOULDER, AND DRIVEWAY SECTIONS WHICH ARE DISTURBED SHALL BE REPLACED IN KIND USING THE VARIOUS TYPICAL SECTIONS AS SHOWN OR ORDERED BY THE ENGINEER.
 2) ALL SEAMS BETWEEN EXISTING AND NEW ASPHALT SURFACES SHALL BE PRIMED AND SEALED WITH ASPHALT FILLER CORRESPONDING TO THE MATERIAL REQUIREMENTS OF NYS DOT MATERIAL DESIGNATION 702-05 OR 702-3401. THE COST TO BE INCLUDED IN THE VARIOUS WATER MAIN ITEMS.
 3) REFER TO MATERIAL LIST, S-03.

ROAD, SHOULDER, AND DRIVEWAY TRENCH DETAILS
N.T.S.

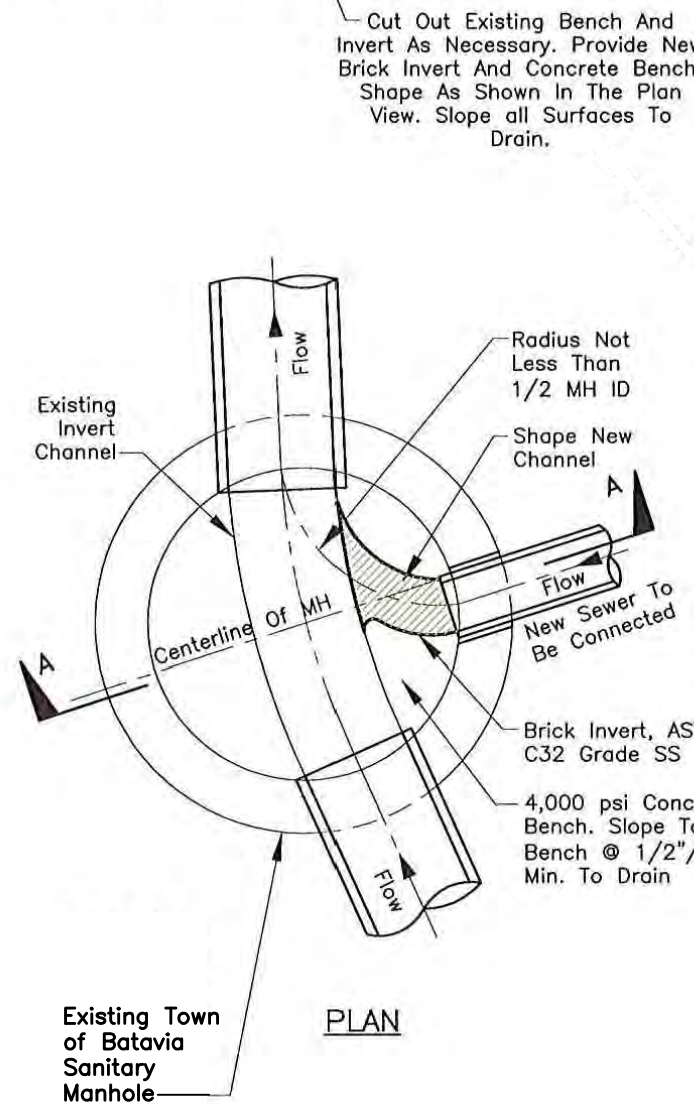


TYPICAL MOBILE HOME LOT SANITARY RISER
NOT TO SCALE

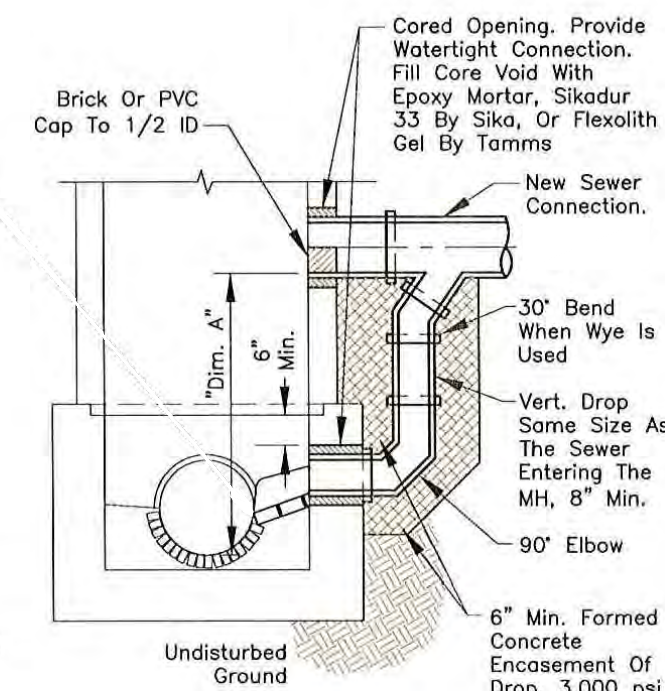
- NOTES:**
1. Notify Town of Batavia a min. of 48 hours in advance of construction for inspection of connection. Telephone 585-356-4900.
 2. New openings for pipe may be cored or drilled. Impact devices are not allowed for creating openings in existing manholes or chambers. Cored openings in manhole riser sections shall be not less than 6-inches from a riser joint.
 3. Stub at manhole shall not exceed 100 degrees alignment entering against the existing upstream sewer.
 4. Provide a pipe joint within 4-feet maximum of the outside face of manhole for reinforced concrete or ductile iron pipe.
 5. Construct the crown of new sewer not lower than the crown of the existing main sewer. Construct the invert of the new sewer 3-inches minimum above the existing main sewer invert.
 6. Construct top of new bench to springline of new sewer pipe.
 7. Coat all disturbed surfaces of the manhole with 2 coats of Durokote 500 epoxy or approved equal for interior of base and 2 coats of bitumastic for all exterior surfaces.



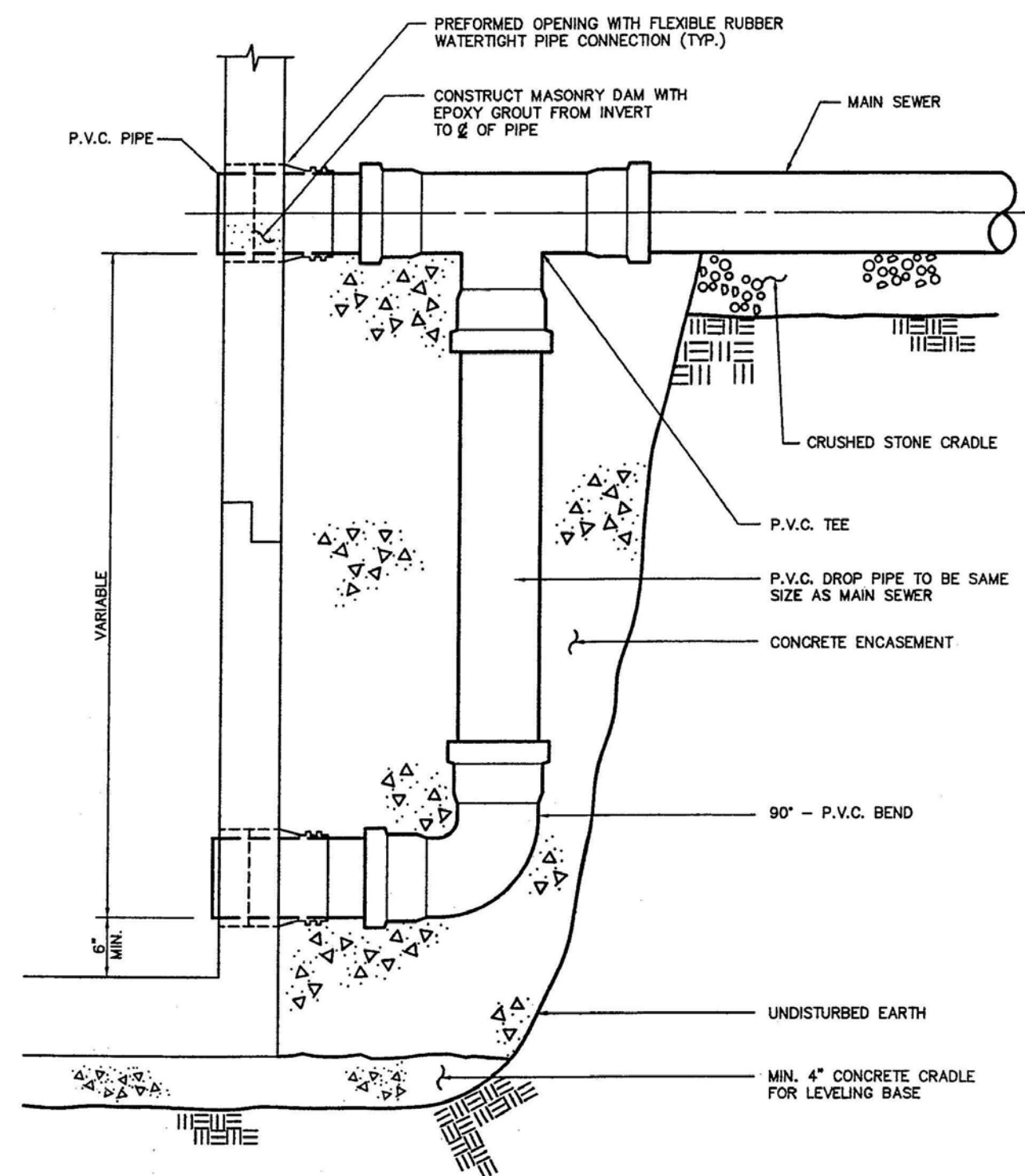
SECTION A-A



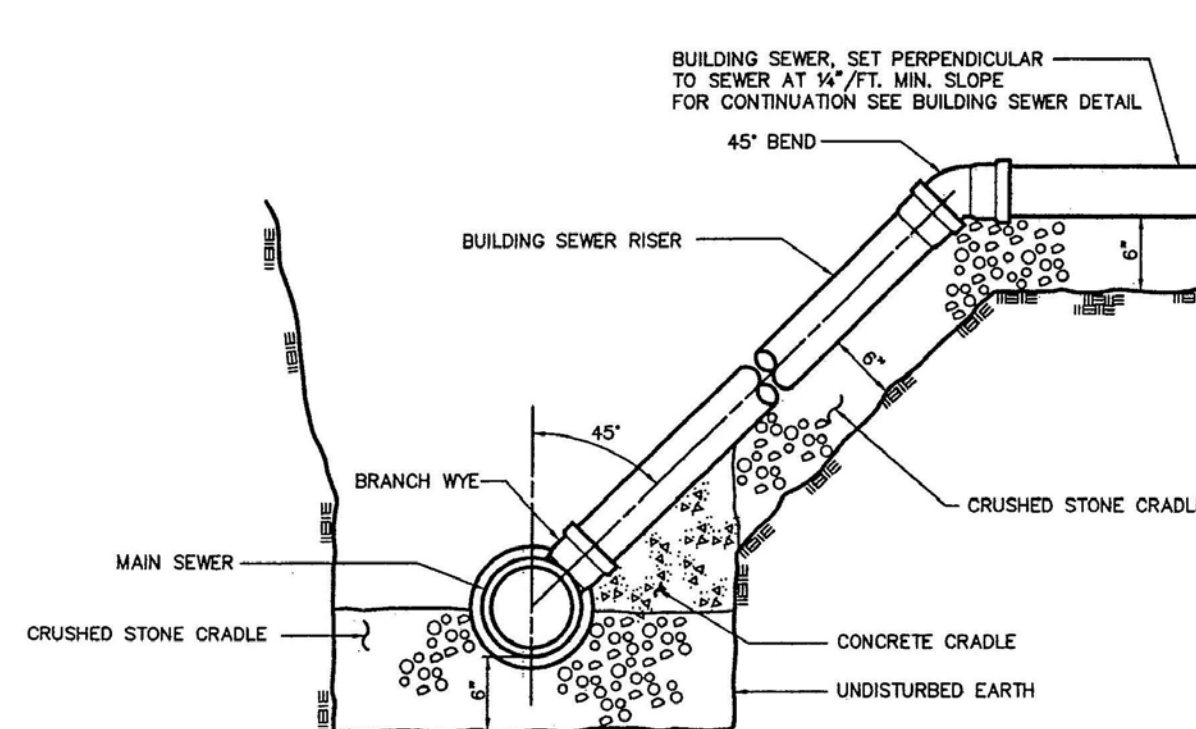
SEWER CONNECTION TO EXISTING MANHOLE
NOT TO SCALE



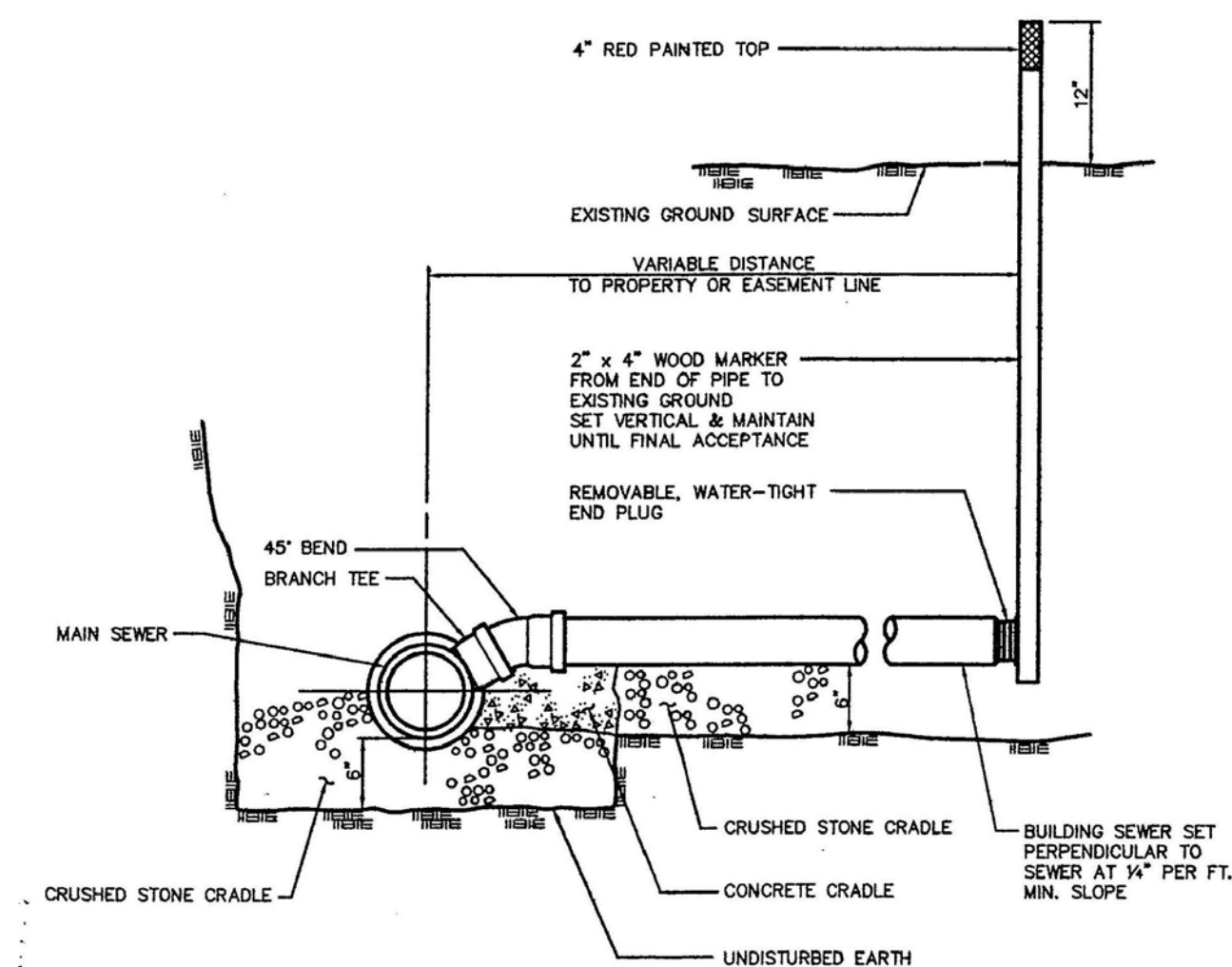
SECTION A-A (FOR OUTSIDE DROP CONNECTION)
Where Dim. "A" Is Equal To Or Greater Than 2' For Sanitary Sewers, Or Equal To Or Greater Than 5' For Storm Sewers



DROP CONNECTION
NOT TO SCALE



BUILDING SEWER RISER
NOT TO SCALE



BUILDING SEWER
NOT TO SCALE

APPROVAL SIGNATURE:
 STEVEN J. MOUNTAIN, P.E.
 TOWN OF BATAVIA - TOWN ENGINEER
 DATE

REVISIONS			
NO.	DESCRIPTION	DATE	BY

NOT APPROVED FOR CONSTRUCTION

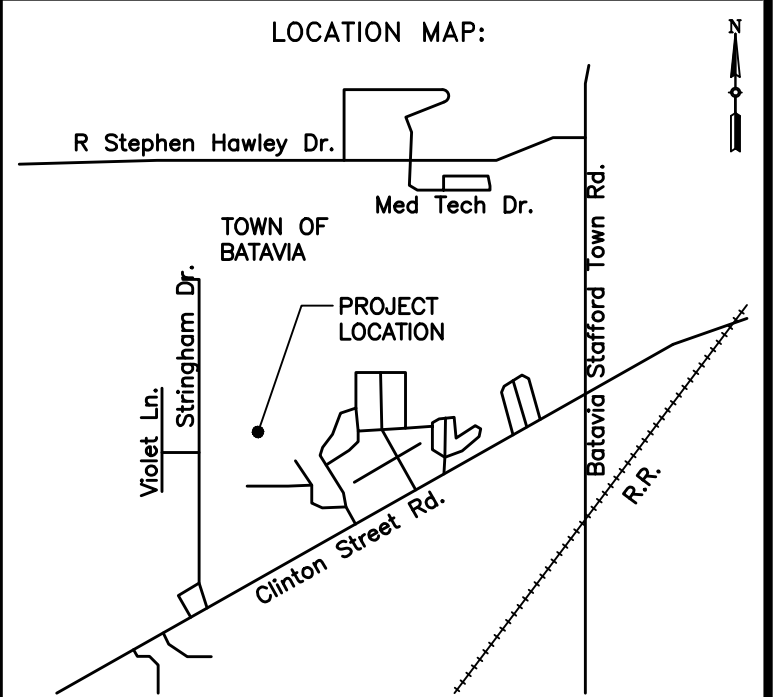
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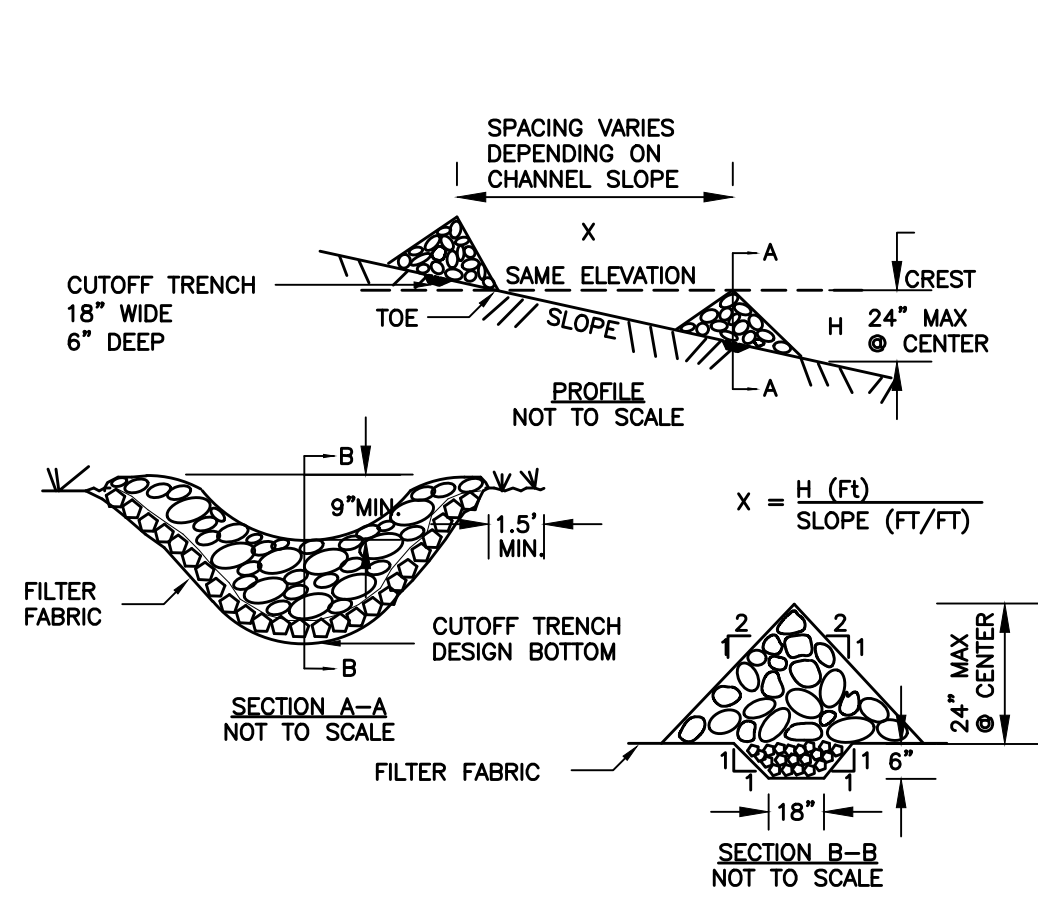
PROJECT NAME:

**Country Meadows
 Manufactured Home
 Community
 Expansion**
 5121 Clinton Street Road
 Town of Batavia
 Genesee County, NY

DRAWING TITLE:

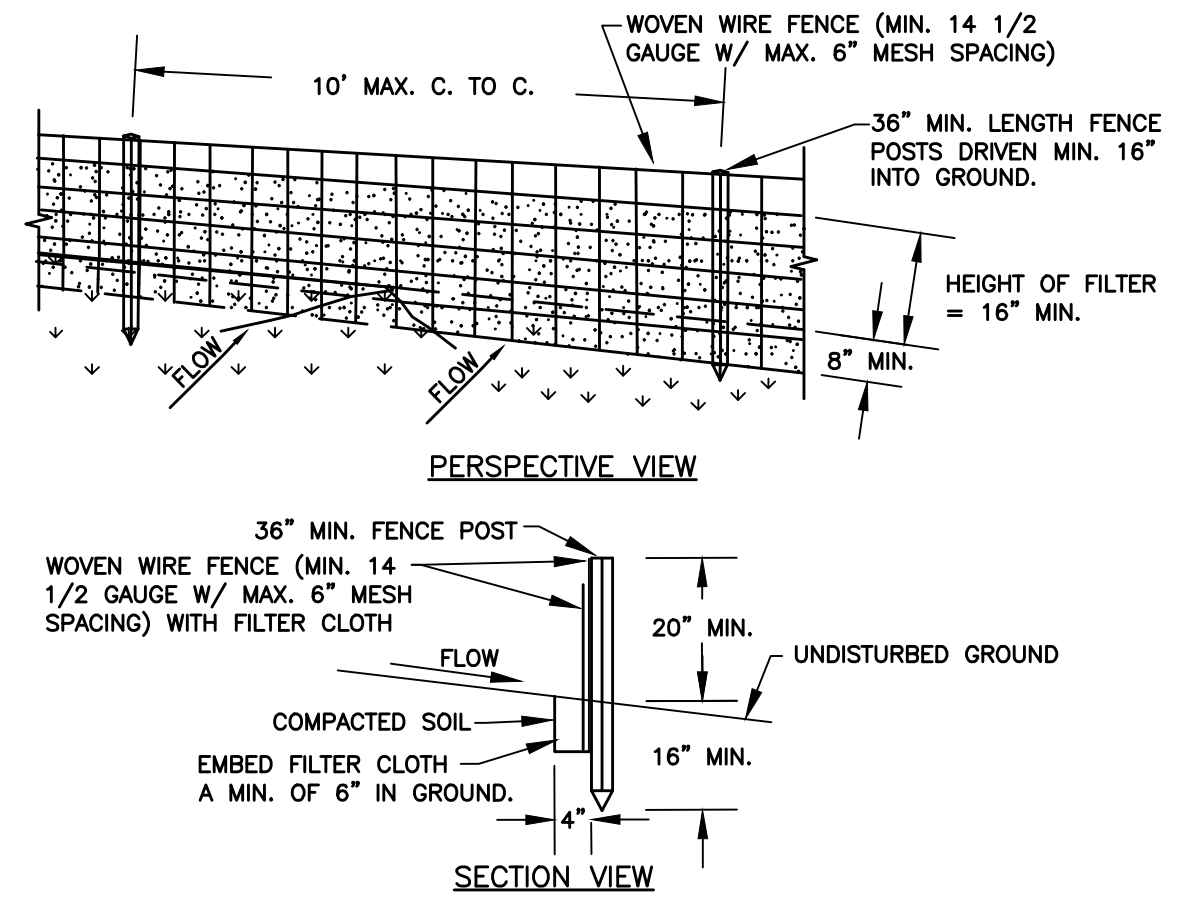
**Sanitary Sewer
 Details**

FILE NAME: DETAILS.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: NOT TO SCALE	PROJECT NO.: 21-816
SHEET NO.: 16 OF 19	DRAWING NO.: D-5



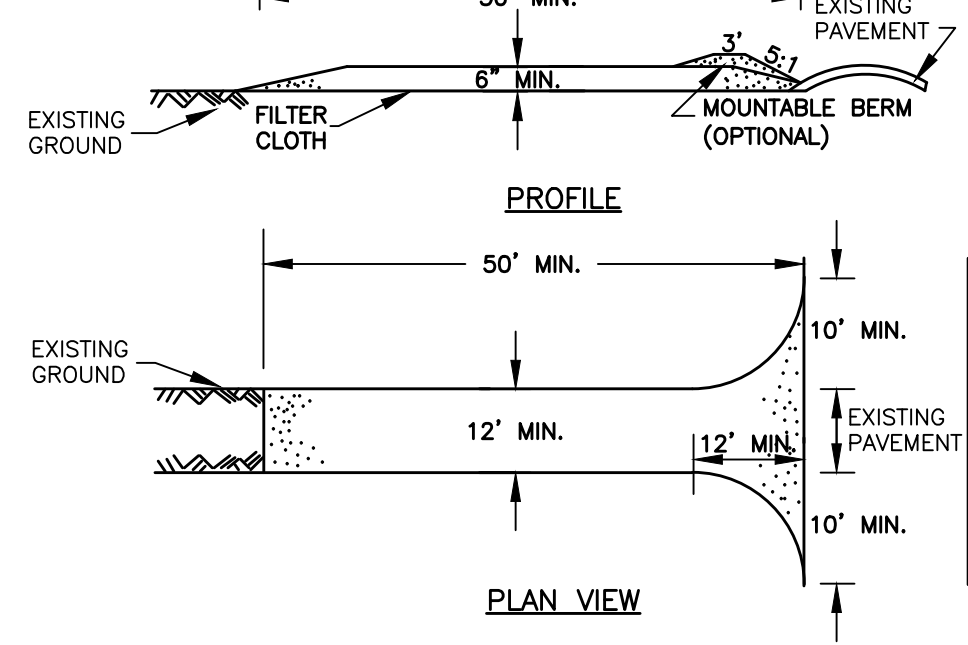
CONSTRUCTION SPECIFICATIONS

- STONE WILL BE PLACED ON A FILTER FABRIC FOUNDATION TO THE LINES, GRADES AND LOCATIONS SHOWN IN THE PLAN.
- SET SPACING OF CHECK DAMS TO ASSUME THAT THE ELEVATIONS OF THE CREST OF THE DOWNSTREAM DAM IS AT THE SAME ELEVATION OF THE TOE OF THE UPSTREAM DAM.
- EXTEND THE STONE A MINIMUM OF 1.5 FEET BEYOND THE DITCH BANKS TO PREVENT CUTTING AROUND THE DAM.
- PROTECT THE CHANNEL DOWNSTREAM OF THE LOWEST CHECK DAM FROM SCOUR AND EROSION WITH STONE OR LINER AS APPROPRIATE.
- ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE. MAXIMUM DRAINAGE AREA 2 ACRES.



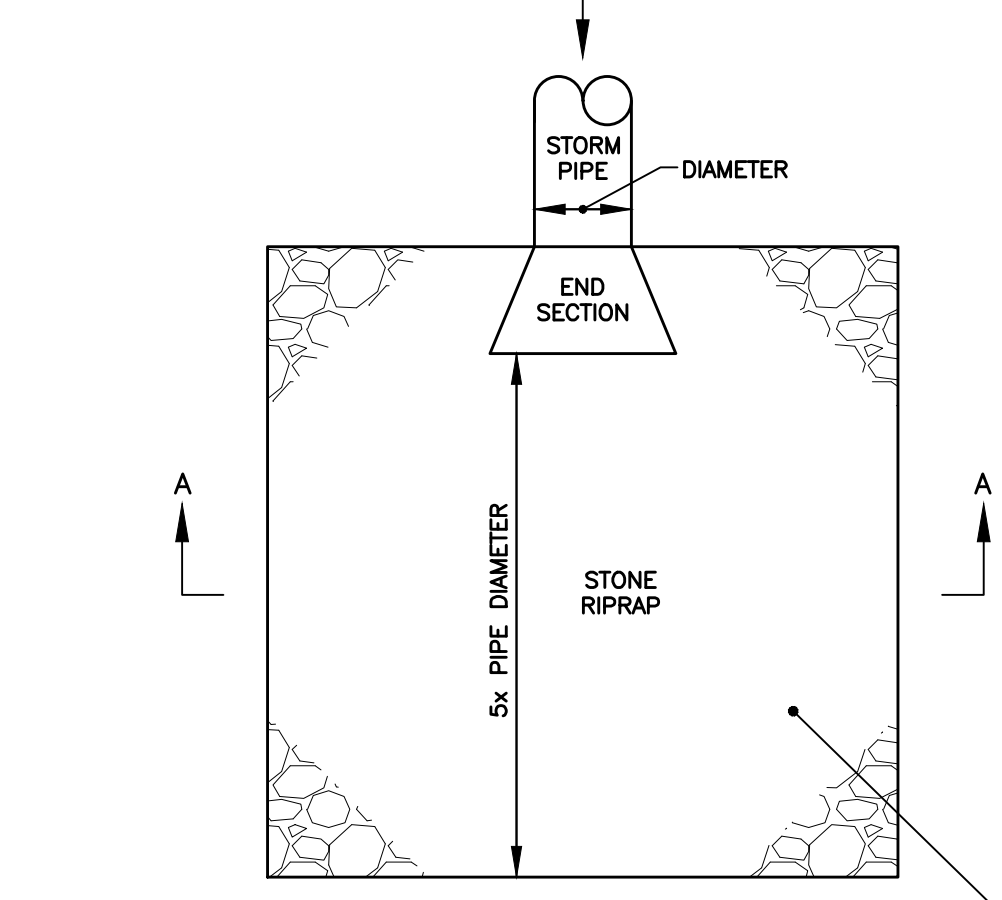
CONSTRUCTION SPECIFICATIONS

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



CONSTRUCTION SPECIFICATIONS

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



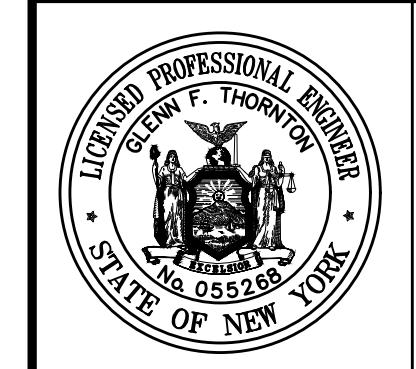
CONSTRUCTION SPECIFICATIONS

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

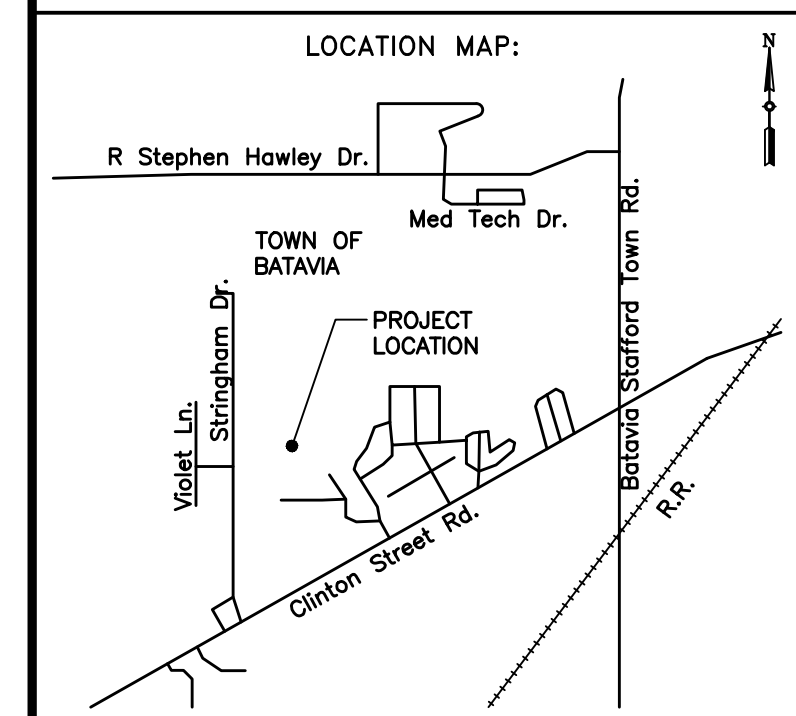
REVISIONS			
NO.	DESCRIPTION	DATE	BY
NOT APPROVED FOR CONSTRUCTION			

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 Consultant Engineers



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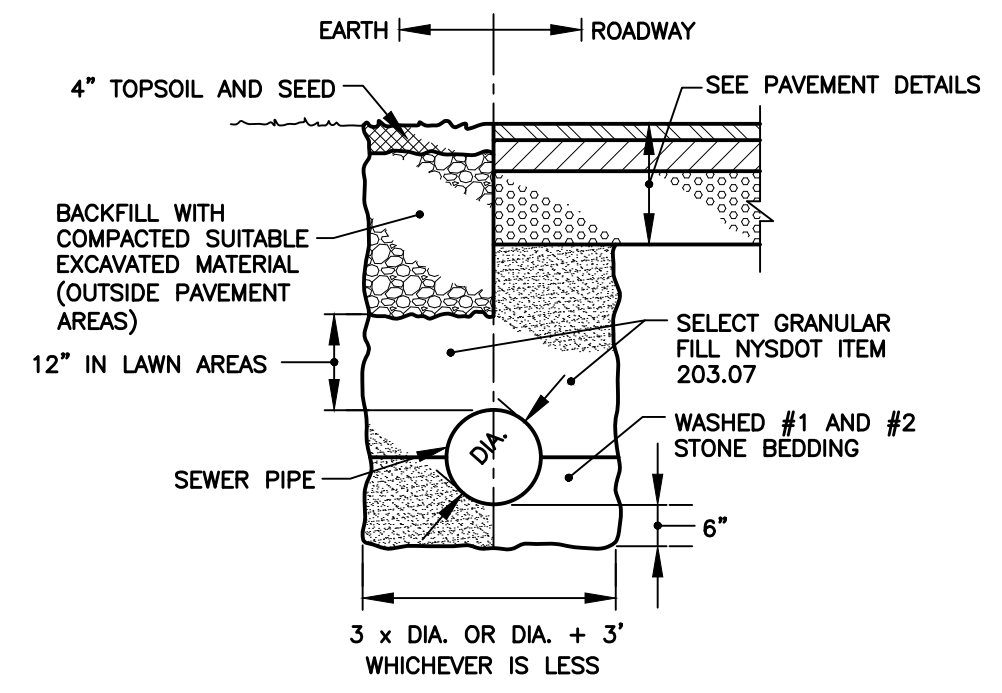


PROJECT NAME:
**Country Meadows
 Manufactured Home
 Community
 Expansion**
 5121 Clinton Street Road
 Town of Batavia
 Genesee County, NY

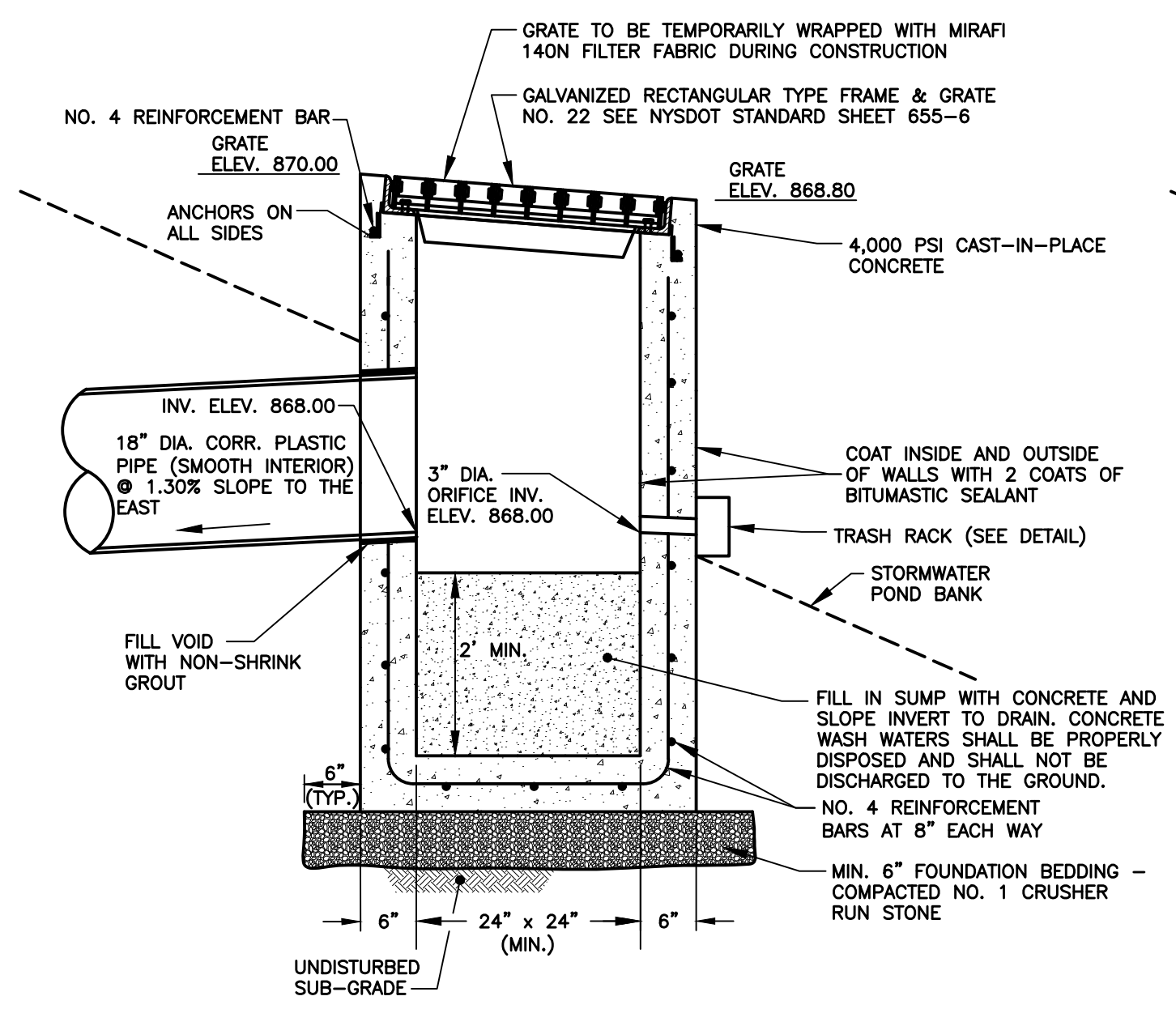
DRAWING TITLE:
**Storm System
 Details**

FILE NAME: DETAILS.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: NOT TO SCALE	PROJECT NO.: 21-816
SHEET NO.: 17 OF 19	DRAWING NO.: D-6

ROCK CHECK DAM
NOT TO SCALE

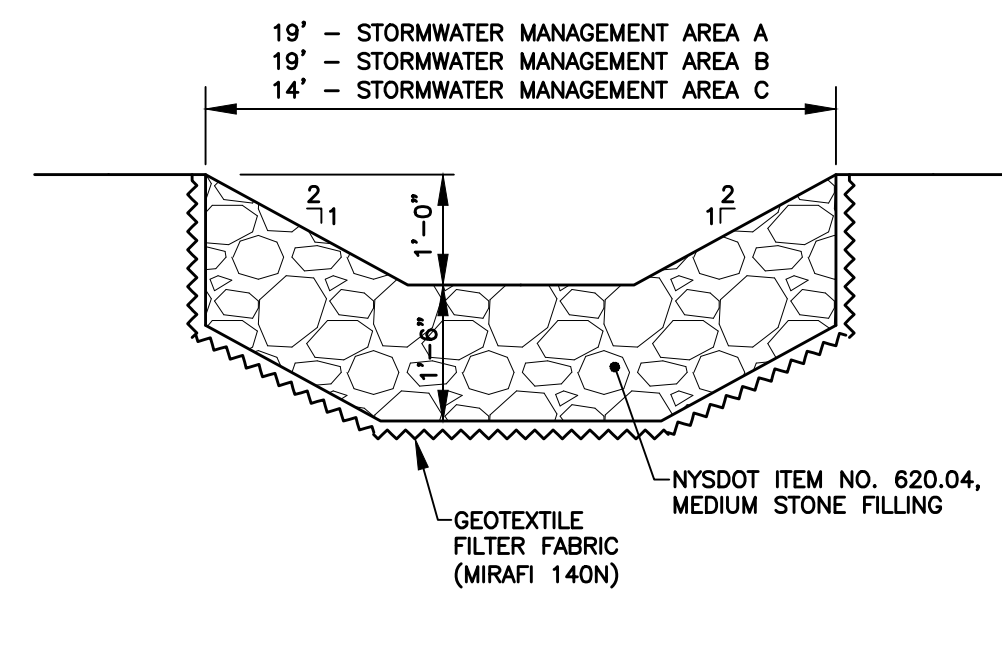


**STORM SEWER AND
CULVERT INSTALLATION**
NOT TO SCALE



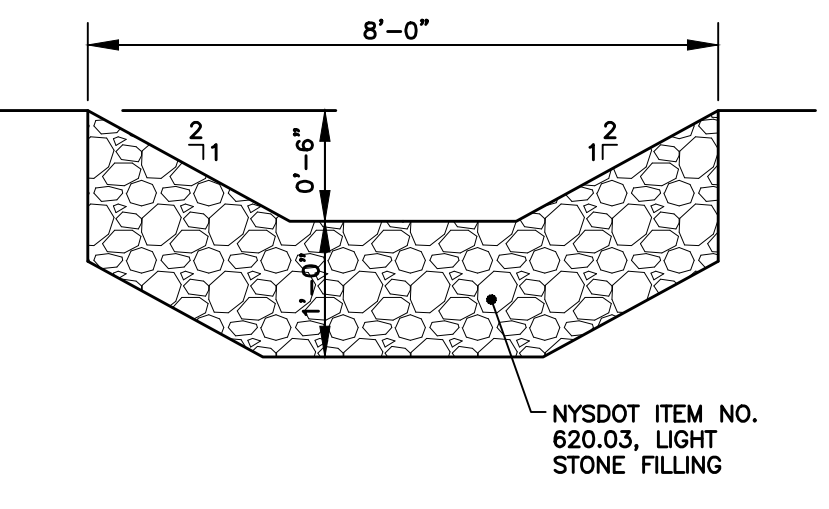
OUTLET CONTROL STRUCTURE A
NOT TO SCALE

TEMPORARY SILT FENCE
NOT TO SCALE



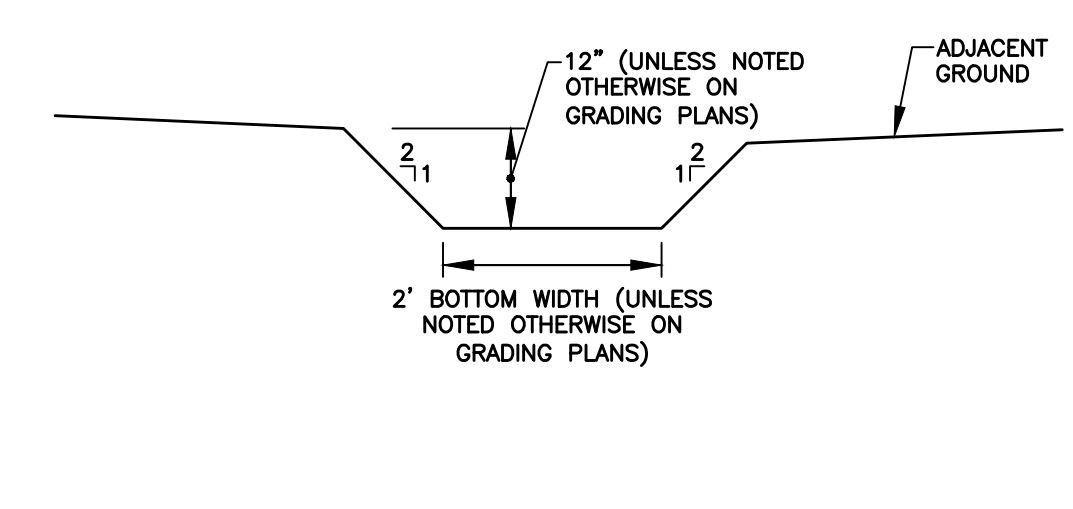
STONE RIPRAP SPILLWAY
NOT TO SCALE

RIPRAP PILOT CHANNEL
NOT TO SCALE



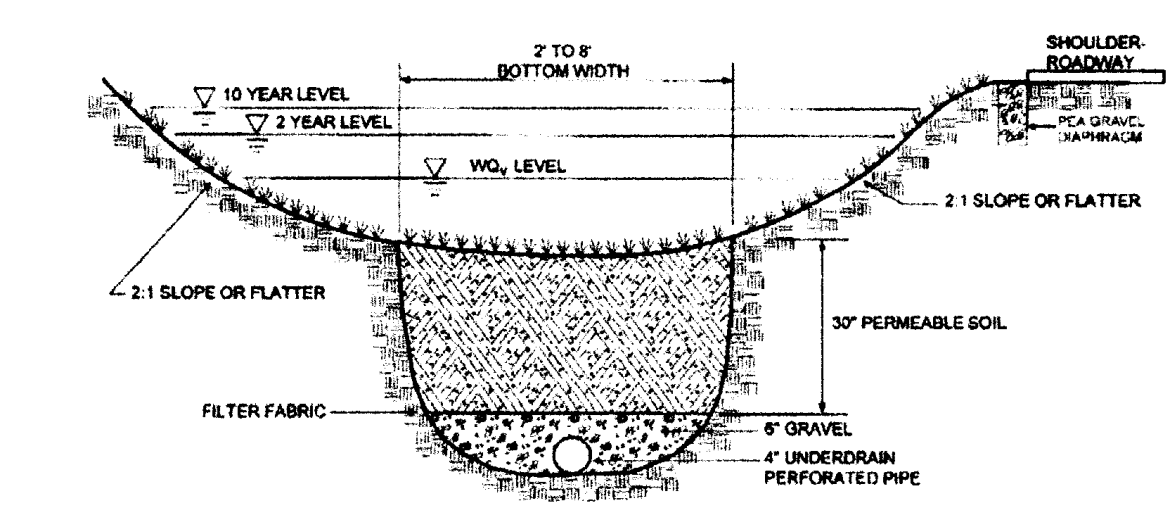
RIPRAP PILOT CHANNEL
NOT TO SCALE

**TEMPORARY STABILIZED
CONSTRUCTION ENTRANCE**
NOT TO SCALE

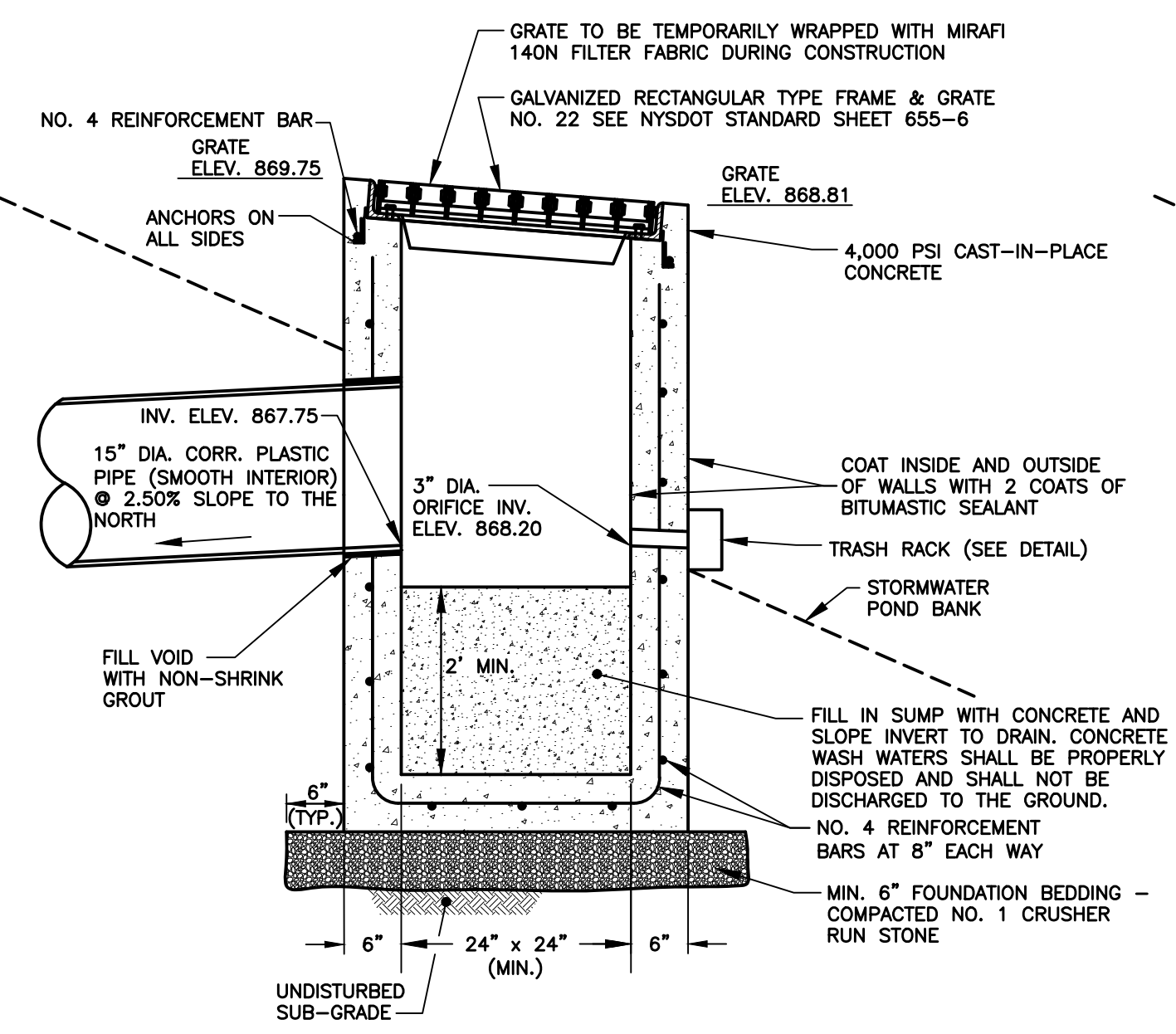


DIVERSION SWALE
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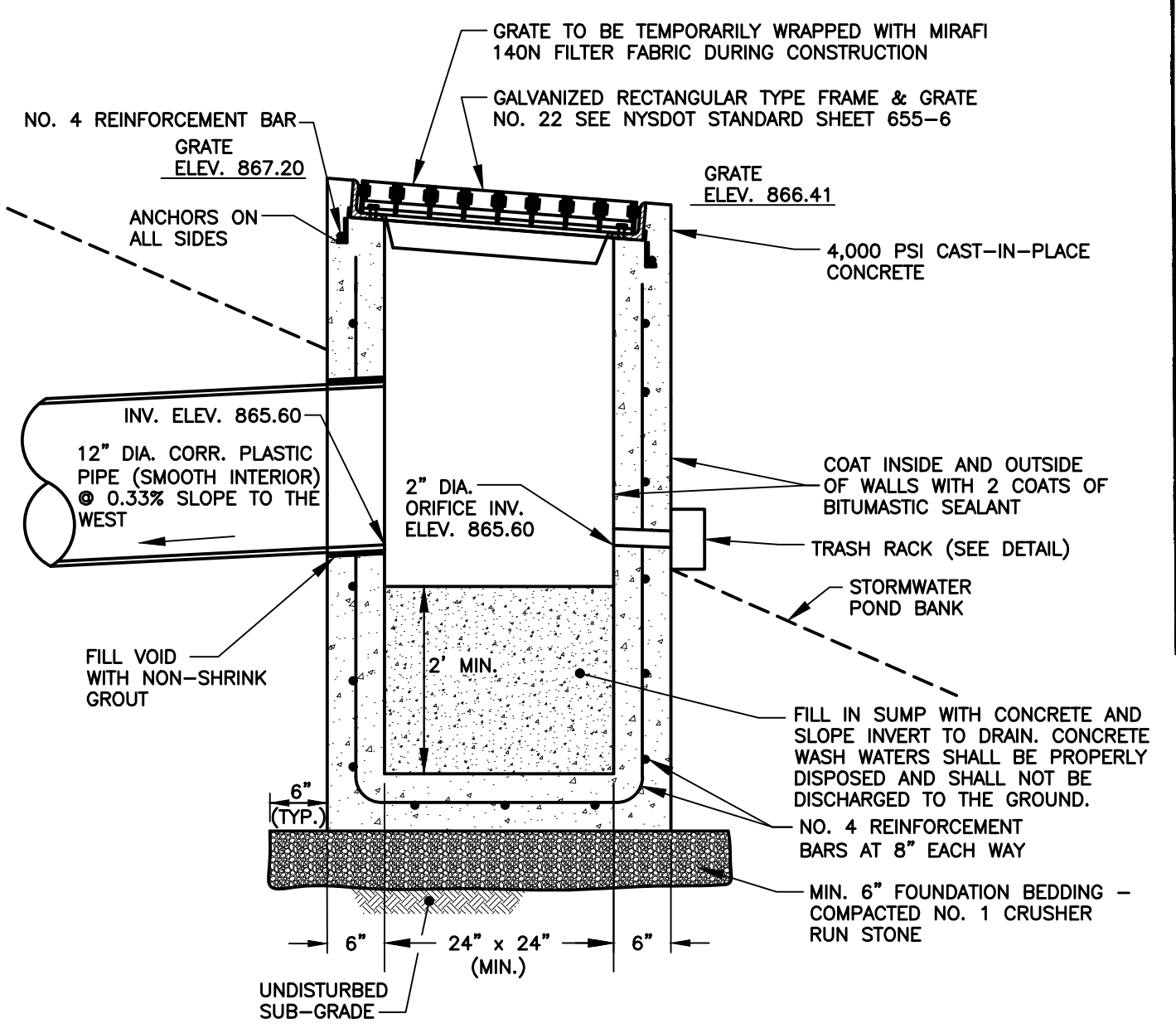
STONE RIPRAP OUTLET PROTECTION
NOT TO SCALE



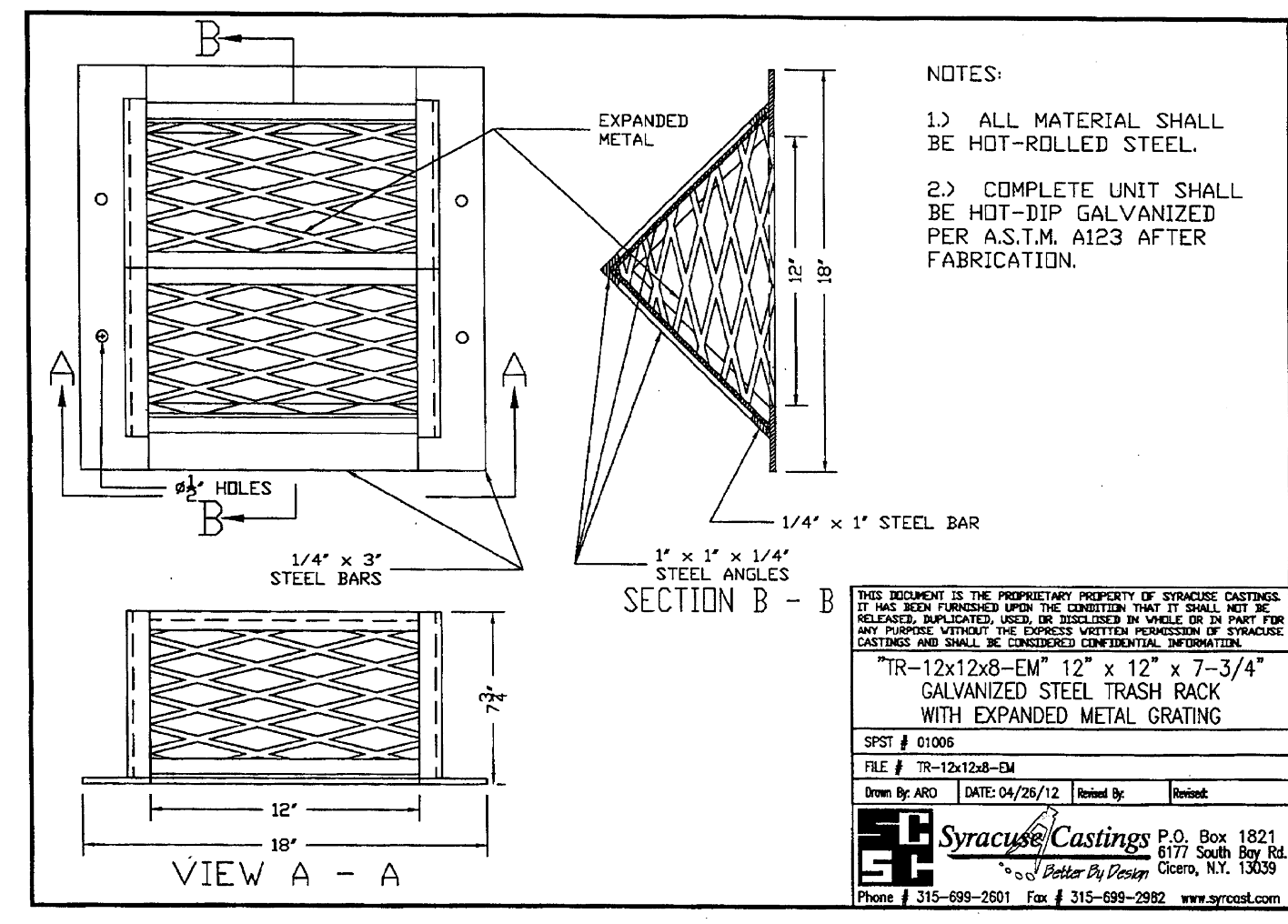
DRY SWALE
NOT TO SCALE



OUTLET CONTROL STRUCTURE B
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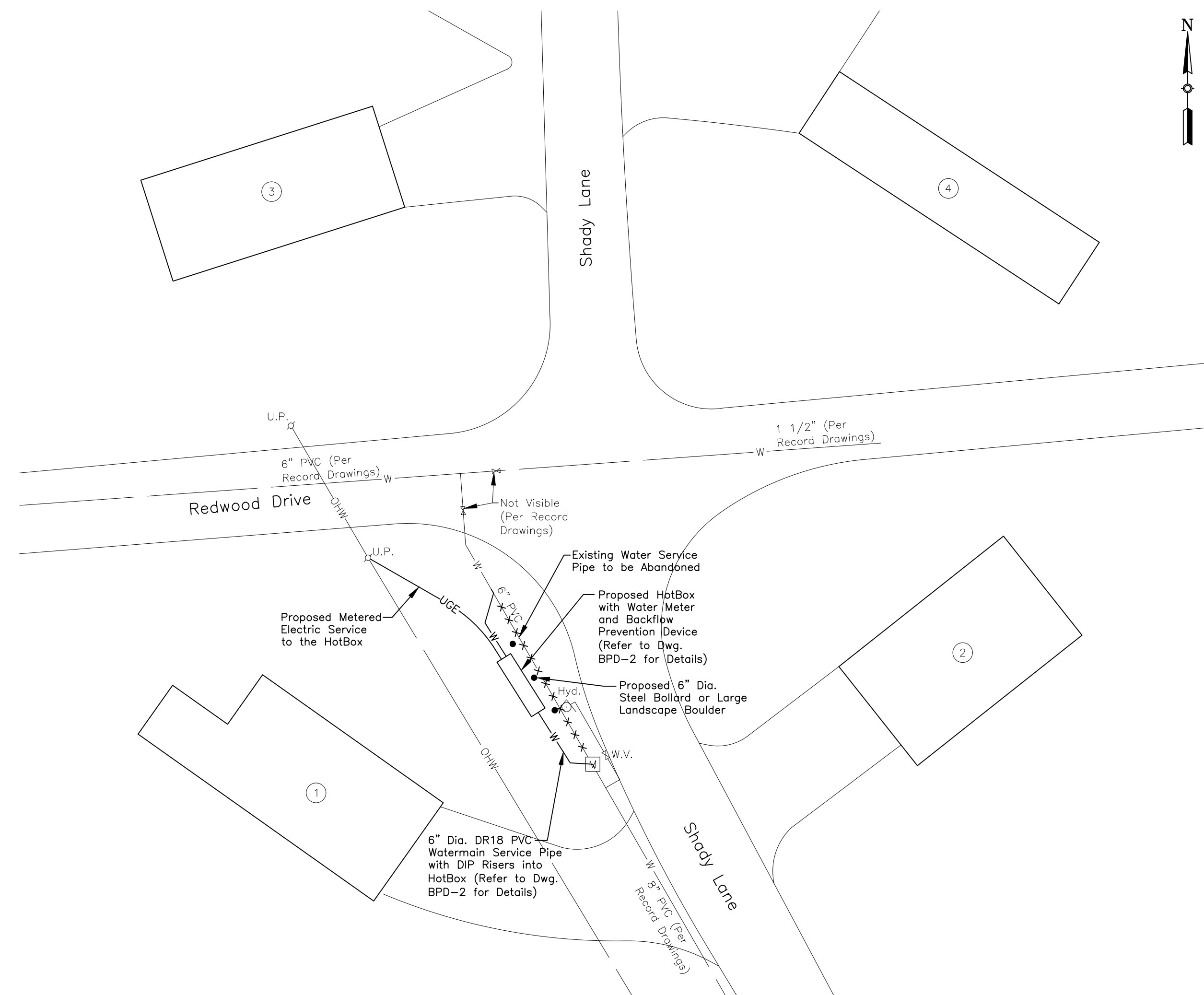


OUTLET CONTROL STRUCTURE C
NOT TO SCALE



TRASH RACK
NOT TO SCALE

APPROVAL SIGNATURE:
 STEVEN J. MOUNTAIN, P.E.
 TOWN OF BATAVIA - TOWN ENGINEER



INSTALLATION PLAN
SCALE: 1" = 20'
SCALE (FEET)

LEGEND

Existing	Proposed	
---	---	Property Line/R.O.W.
U.P.	U.P.	Utility Pole
OHW	OHW	Overhead Wire
Hyd.	UGE	Underground Electric
M	W	Water Meter in Vault
W	W	Watermain
W.V.	W.V.	Water Valve

NOTE
The locations of other known buried utilities such as sewer, gas, electric, and communications have not been depicted on this plan and must be verified by the Contractor prior to construction.

CONSTRUCTION SEQUENCE

- Step 1. Excavate and expose the water service pipe preceding the meter vault (south of) to locate the service valve and to verify the pipe connection to the fire hydrant.
- Step 2. Install the new 6" dia. DR18 PVC pipe and ductile iron pipe risers between the existing water meter vault and service pipe as depicted on the plan. Provide temporary plugs on the ends of the new water pipe for pressure testing and disinfection.
- Step 3. Install the new electric service to the HotBox.
- Step 4. Construct the concrete floor slab for the HotBox.
- Step 5. Install the new water meter, backflow prevention device, valves, strainer, and aboveground pipe on the concrete floor slab.
- Step 6. Following notification to mobile home park residents, the Town of Batavia Water Department will close the service valve to the park.
- Step 7. Cut the existing water service pipe at an adequate distance beyond the service valve and beyond the existing meter vault. Remove an adequate length of existing water service pipe to accomplish the new pipe connections.
- Step 8. Swab disinfect pipe fittings and connect the new water service pipes routed to and from the HotBox to the existing water service pipe using restrained joint fittings.
- Step 9. Remove the existing pipe, meter, and equipment from the existing meter vault. Remove the roof slab, demolish structure walls and floor slab, and backfill with compacted soil.
- Step 10. Restore all disturbed areas to lawn.

STANDARD NEW YORK STATE DEPARTMENT OF HEALTH NOTES

1. **MATERIALS** -
 - A. POLYVINYL CHLORIDE (PVC) PIPE MUST BE WITH INTEGRAL BELL AND SPIGOT JOINTS; CLASS 150, DR 18; CONFORMING WITH THE LATEST REVISION OF ANSI/AWWA C900 (FOR 4"-12" PIPE) OR C605 (FOR LARGER PIPE) STANDARD. INSTALLATION TO INCLUDE TRACER TAPE AS PER MANUFACTURER'S INSTRUCTIONS.
 - B. CEMENT-LINED DUCTILE-IRON (DI) PIPE MUST BE CLASS 52 MINIMUM CONFORMING WITH THE LATEST REVISION OF ANSI/AWWA C151 STANDARD.
 - C. POLYETHYLENE (PE) PRESSURE PIPE MUST BE PE 3408 MATERIAL MINIMUM, CONFORMING TO THE LATEST REVISION OF ANSI/AWWA C906 STANDARD.
2. **DEPTH** - WATER PIPING MUST HAVE A MINIMUM OF 5 FEET OF COVER FROM FINISHED GRADE.
3. **CROSSINGS** - ADEQUATE SEPARATION BETWEEN WATER MAINS AND STORM OR SANITARY SEWERS MUST BE PROVIDED AS SHOWN IN THE WATER MAIN/SEWER CROSSING DETAIL ON DRAWING NO. D-1. MINIMUM HORIZONTAL SEPARATION BETWEEN WATER MAINS AND STORM OR SANITARY SEWERS TO BE 10 FEET, MEASURED FROM THE OUTSIDE OF THE PIPES, UNLESS SHOWN OTHERWISE.
4. **HYDRANTS** - HYDRANT TYPE SHALL BE AS NOTED ON THE PLANS OR AS REQUIRED BY THE APPLICANT. GUARD VALVES SHALL BE USED AND ALL HYDRANT STUB PIPING SHALL BE MECHANICAL JOINT. SHOULD EVIDENCE OF GROUND WATER BE ENCOUNTERED WITHIN SEVEN (7) FEET OF THE FINISHED GRADE, HYDRANT WEEP HOLES (DRAINS) SHALL BE PLUGGED USING MECHANICAL METAL PLUGS. ALL HYDRANTS WITH PLUGGED WEEP HOLES SHALL BE APPROPRIATELY TAGGED.
5. **THRUST BLOCKS** - ALL TEES, STUBS, BENDS AND OTHER FITTINGS, OR OTHER AREAS AS ORDERED BY THE ENGINEER, SHALL BE BACKED WITH MINIMUM 3000 PSI CONCRETE THRUST BLOCKS AS INDICATED ON THE DRAWINGS.
6. **FLUSHING/PRESSURE AND LEAKAGE TESTING** - WATER PIPING SHALL BE FLUSHED AND TESTED IN CONFORMANCE WITH THE LATEST REVISION OF ANSI/AWWA C600 STANDARD FOR DUCTILE-IRON PIPE, C605 FOR PVC PIPE, OR EQUIVALENT OF C600 AND/OR C605 FOR PE PIPE.
7. **DISINFECTION** - THE PROPOSED WORKS MUST FOLLOW ANSI/AWWA C651 STANDARD, TABLET METHOD EXCEPTED. FOLLOWING FLUSHING AND TESTING, THE ENGINEER SHALL OVERSEE COLLECTION OF AN APPROPRIATE NUMBER OF BACTERIOLOGICAL SAMPLES FOR TOTAL AND FECAL COLIFORM AND FOR STANDARD BACTERIAL PLATE COUNT AFTER THE FIELD FREE CHLORINE RESIDUAL IS LESS THAN 1.5 PPM AND THE SAMPLING POINTS HAVE BEEN DECONTAMINATED. PRIOR TO SAMPLING THE ENGINEER SHALL COORDINATE THE APPROPRIATE NUMBER AND LOCATION OF SAMPLES TO BE COLLECTED WITH THE COUNTY OR STATE HEALTH DEPARTMENT HAVING JURISDICTION.
8. **PLACING INTO OPERATION** - THE COMPLETED WORKS SHALL NOT BE PLACED INTO SERVICE UNTIL AN APPROVAL OF COMPLETED WORKS FORM IS ISSUED BY THE COUNTY OR STATE HEALTH DEPARTMENT HAVING JURISDICTION. PRIOR TO ISSUANCE, A NYS - LICENSED PROFESSIONAL ENGINEER MUST SUBMIT CERTIFICATION THAT: THEY OR THEIR DESIGNATED REPRESENTATIVE WITNESSED THAT CONSTRUCTION WAS IN CONFORMANCE WITH THE PLANS AS APPROVED; FLUSHING, TESTING, AND DISINFECTION PROCEDURES NOTED HEREIN HAD BEEN PROPERLY PERFORMED; AND, MICROBIOLOGICAL SAMPLE RESULTS FROM THE COMPLETED WORKS WERE ACCEPTABLE. COPIES OF THE OFFICIAL LABORATORY RESULTS ARE TO BE INCLUDED WITH THE CERTIFICATION.
9. **EROSION** - ADEQUATE CONTROL MEASURES SHALL BE EMPLOYED DURING ALL PHASES OF CONSTRUCTION IN ACCORDANCE WITH ALL APPROPRIATE STANDARDS AND REQUIREMENTS. BEST MANAGEMENT PRACTICES ARE TO BE FOLLOWED.
10. **FILL AREAS** - WHERE PIPING IS TO BE PLACED WITHIN FILL AREAS, THE FILL SHALL BE PLACED AND COMPACTED TO AT LEAST 95% MODIFIED PROCTOR PRIOR TO TRENCH EXCAVATION.
11. **SERVICE INTERRUPTION** - SHUTDOWN OF EXISTING WATER MAINS SHALL BE IN ACCORDANCE WITH THE LOCAL WATER DEPARTMENT. THE WATER DEPARTMENT MUST BE NOTIFIED IN ADVANCE OF ALL PROPOSED SHUTDOWNS IN ACCORDANCE WITH THEIR DIRECTION. WATER MUST BE TURNED BACK ON AS SOON AS POSSIBLE. ALL ENDS OF WATER MAINS MUST BE PROVIDED WITH ADEQUATE PLUG, BLOCK, AND BLOW-OFF AS INDICATED ON THE PLANS, AS PER DETAILS HEREIN.
12. **DISCONNECTION OF WELLS** - PRIOR TO TURNING ON A NEW SERVICE TO AN EXISTING FACILITY SERVED BY A PRIVATE, ON-SITE WATER SUPPLY, THE EXISTING SOURCE PIPING MUST BE PHYSICALLY DISCONNECTED AND REMOVED FROM THE FACILITY (WITH NO MEANS OF INTERCONNECTION BETWEEN THE ON-SITE SERVICE AND THE PUBLIC SUPPLY SERVICE) OR THE SERVICE PROVIDED WITH A REDUCED - PRESSURE ZONE (RPZ) BACKFLOW PREVENTION PROTECTOR (VIA PROPER APPLICATION TO AND APPROVAL BY THE COUNTY OR STATE HEALTH DEPARTMENT HAVING JURISDICTION).

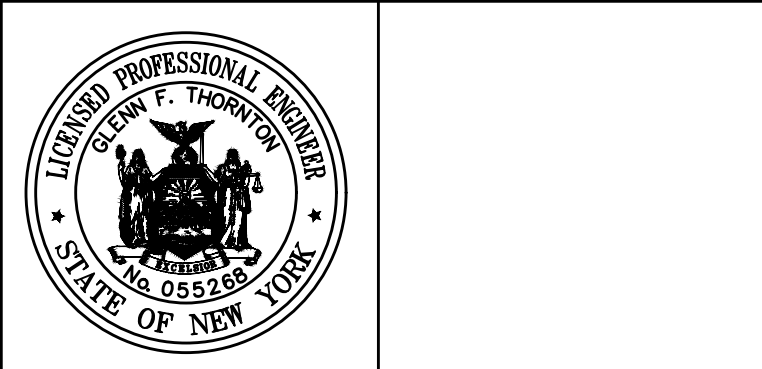
REVISIONS

NO.	DESCRIPTION	DATE	BY

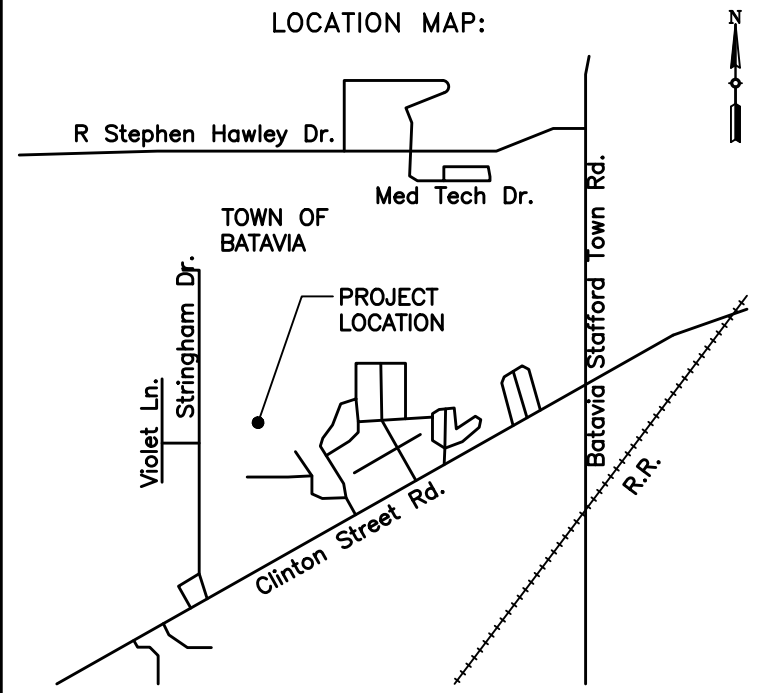
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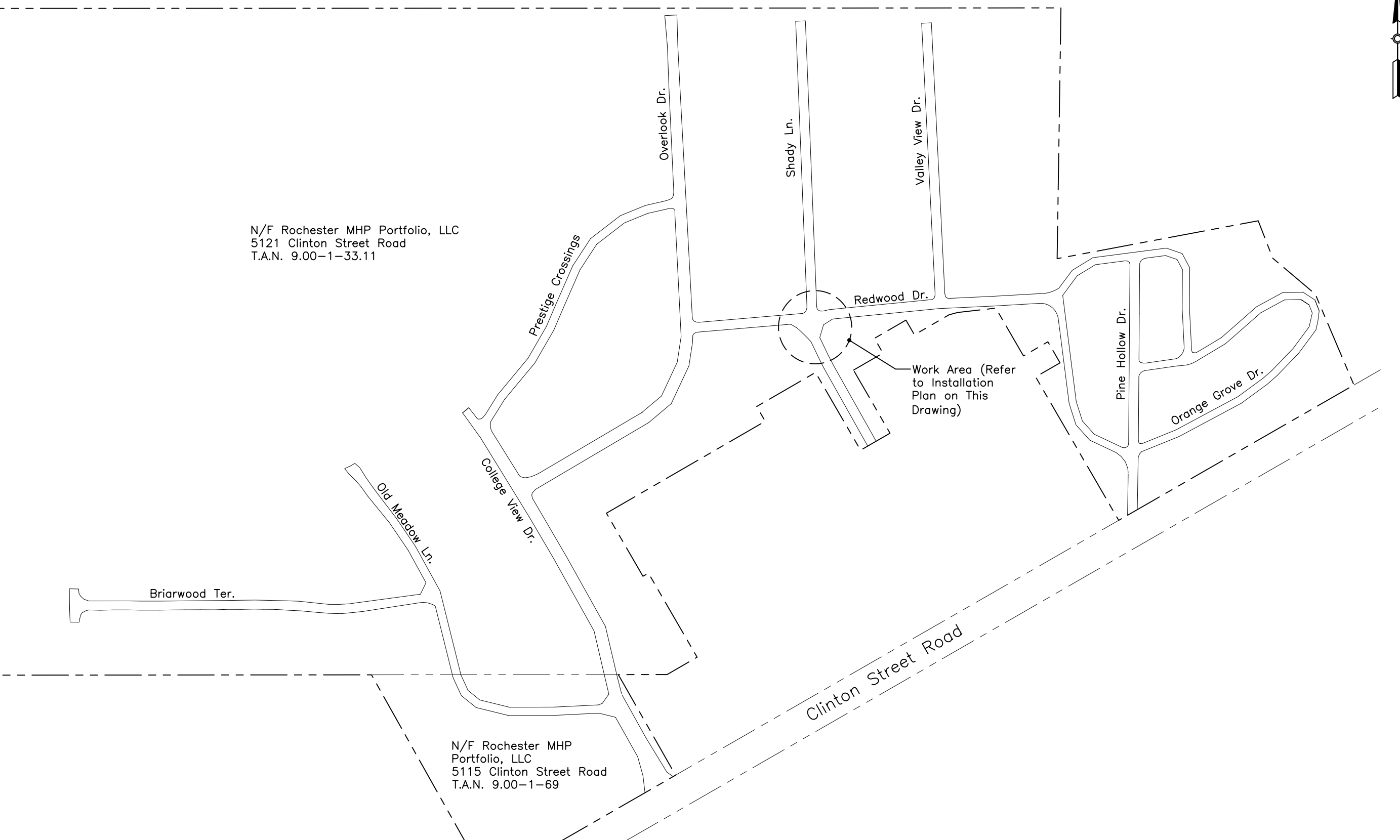


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PROJECT NAME:
Country Meadows
Manufactured Home
Community
Expansion
5121 Clinton Street Road
Town of Batavia
Genesee County, NY

DRAWING TITLE:
Backflow
Prevention Device
and Meter
Installation Plan
and Notes



LOCATION PLAN
SCALE: 1" = 200'
SCALE (FEET)

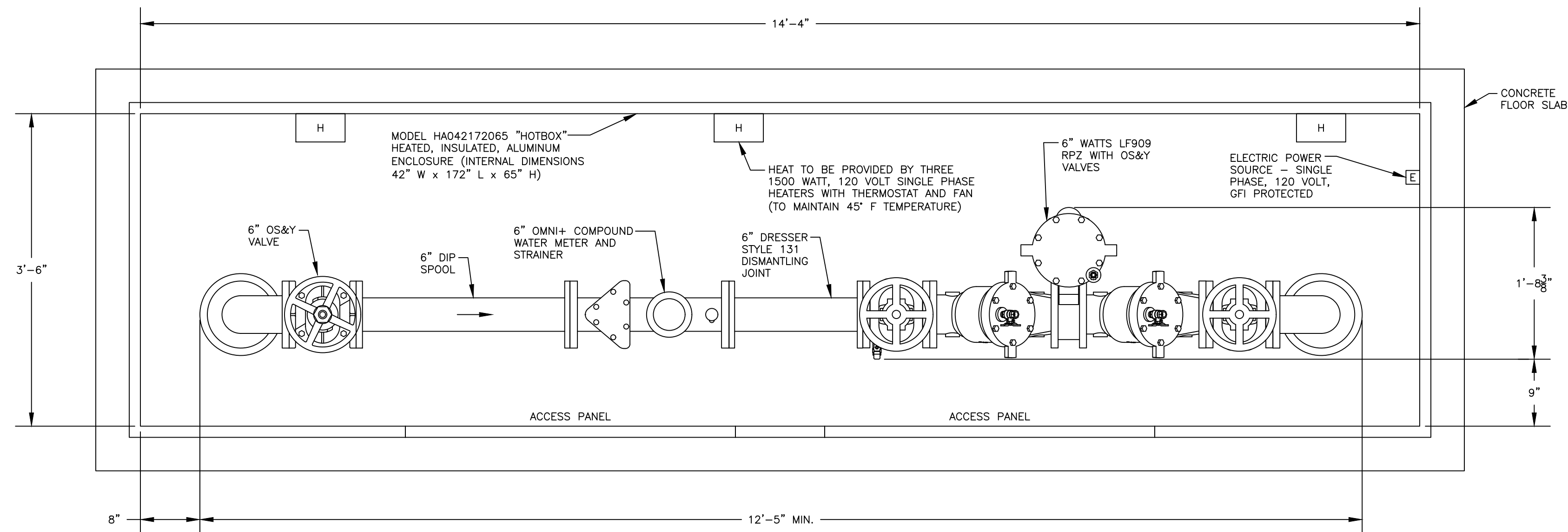
APPROVAL SIGNATURE:
STEVEN J. MOUNTAIN, P.E.
TOWN OF BATAVIA - TOWN ENGINEER
DATE

GENERAL NOTES

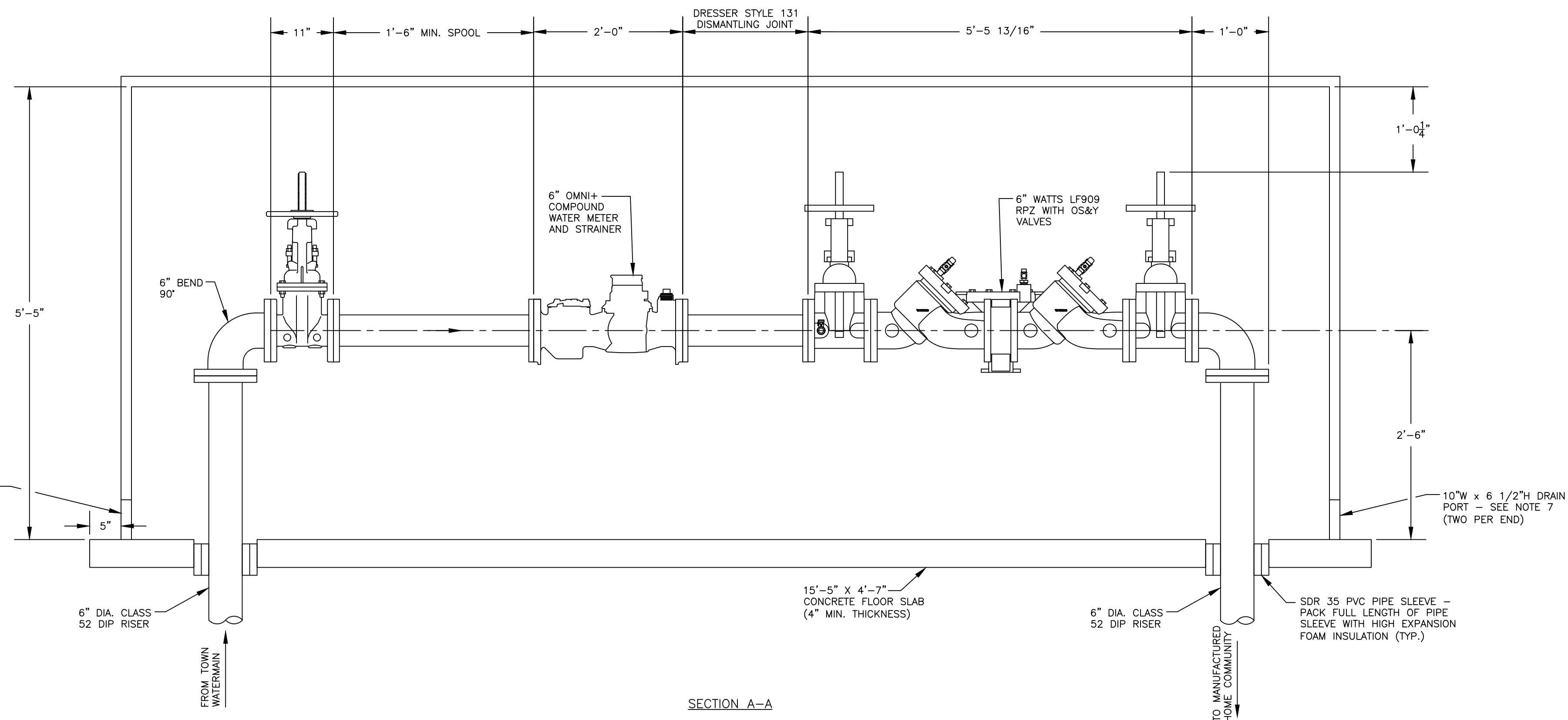
1. The accuracy of existing utilities are not guaranteed. Existing utilities shown on the plans have been established based upon field surveys and record maps and are for general information only. It shall be the Contractor's responsibility to determine the location of any pertinent utilities by field investigation. The Contractor shall take the necessary measures to protect the existing utilities to remain in service.
2. Prior to construction the Contractor shall notify Dig Safely New York, telephone no. 811.
3. The Contractor shall be responsible for obtaining and incurring the cost of all required permits, inspections, certificates, etc. and shall comply with all required permits.
4. All work shall be done in strict compliance with all applicable National, State, and local codes, standards, ordinances, rules, and regulations.
5. Miscellaneous work not specifically shown on the contract drawings such as patching, blocking, trimming, etc. shall be performed as required to make the work complete.
6. The Engineer shall be notified in writing of any conditions that vary from those shown on the plans. The Contractor's work shall not vary from the plans without the expressed approval of the Engineer.
7. The Contractor shall maintain in service all existing sewers, culverts, ditches, manholes, and catch basins during construction.
8. Existing roadway drainage shall be maintained throughout the entire period of construction.
9. Construction Stakeout. The Contractor is responsible for all construction stakeout as shown on the plans.
10. Accurate Record Drawings/As-Built Plans of final watermain construction shall be prepared by the Contractor for conveyance to the Owner.
11. Unsuitable material shall be removed from the site and properly disposed.
12. The Contractor shall provide a minimum of 24 hours advance notice to all customers affected by a watermain shutdown. Notification must be made in writing and shall include date and time of expected shutdown and the duration of shutdown.
13. The Contractor shall notify each customer of water shut off for service change-over at least one hour in advance of shut off.
14. Minimum cover on all new pipelines shall be five (5) feet, measured from proposed and existing grade over the watermain, except as otherwise specified, or noted.
15. Where the clearance between the watermain and any existing utility or service connection is less than one (1) foot, a sand cushion shall be provided at no additional cost to the owner. This note does not cover sanitary sewers. Refer to the Construction Details sheets for sewer - watermain crossings. Existing utilities shall be supported and protected to the satisfaction of the utility owner.
16. All fittings shall be backed up by 3000 psi cast-in-place concrete thrust blocks. Refer to the Construction Details sheet for thrust block sizes and concrete type.
17. Contractor shall provide and install all horizontal and vertical fittings required to follow the watermain alignment and to avoid existing substructures and utilities.

SEQUENCE OF CONSTRUCTION

- Step 1. Excavate and expose the water service pipe between the Town watermain and the meter pit to locate the existing service valve.
- Step 2. Install the new water service pipe between the vicinity of the existing water service pipe (on the service side of the service valve) and the HotBox. Do not connect the new water service pipe to the existing pipe at this time. Provide temporary plugs on the ends of the new pipes as required for pressure testing and disinfection.
- Step 3. Install the new electric service to the HotBox.
- Step 4. Construct the concrete floor slab for the HotBox.
- Step 5. Install the new meter, backflow prevention device, valves, strainer and aboveground pipe on the concrete floor slab.
- Step 6. Following notification to manufactured home community residents, the Town of Batavia Water Department will close the service valve to the park.
- Step 7. Cut the existing watermain at adequate distances beyond the service valve and beyond the existing water meter and remove the meter vault, meter and abandoned pipe.
- Step 8. Swab disinfect pipe fittings and connect the new water service pipes routed to and from the HotBox to the existing service pipe using restrained joint bends.

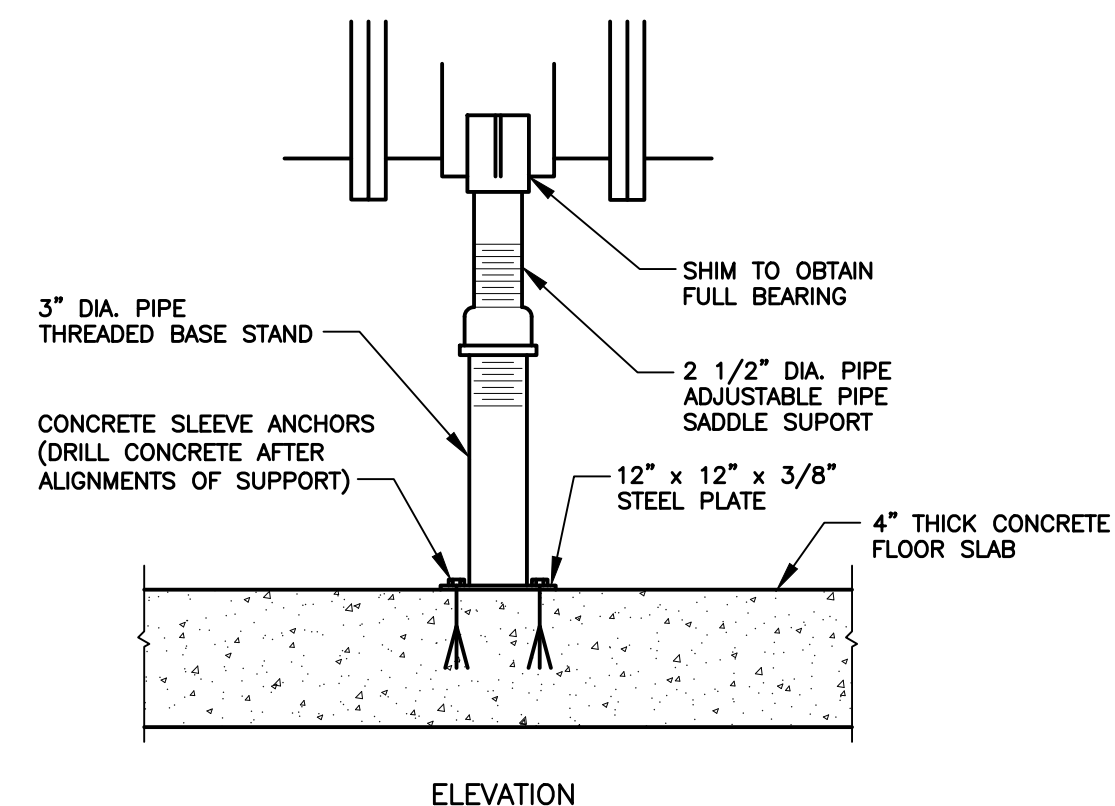


PLAN VIEW

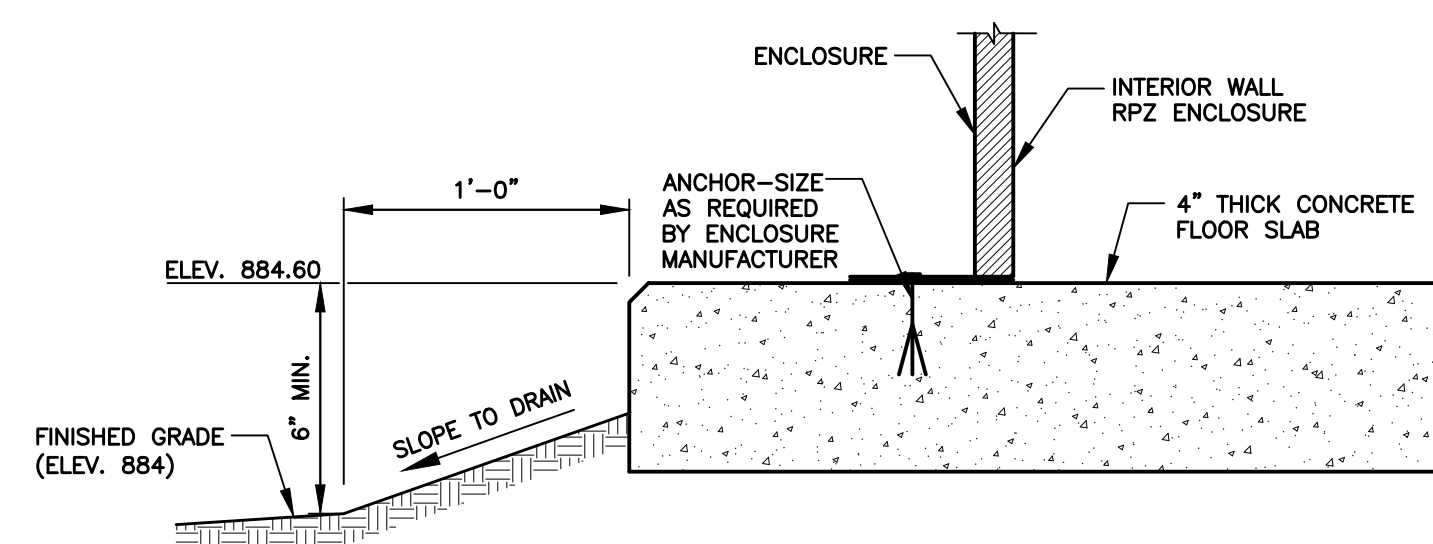


SECTION A-A

HOTBOX, METER, AND BACKFLOW PREVENTION DEVICE INSTALLATION
NOT TO SCALE



PIPE AND EQUIPMENT SUPPORT
NOT TO SCALE



ANCHORAGE
NOT TO SCALE

NOTES

1. THE "HOTBOX" WILL BE EQUIPPED WITH "POWER OUT" AND "LOW TEMPERATURE" ALARMS.
2. ABOVEGROUND PIPING SHALL BE ADEQUATELY SUPPORTED.
3. ALL ACCESS DOORS SHALL BE LOCKABLE.
4. THE CONTRACTOR SHALL PROVIDE CERTIFICATION OF ACCEPTABLE BACKFLOW PREVENTION DEVICE INSTALLATION FROM A CERTIFIED BACKFLOW PREVENTION DEVICE TESTER.
5. THE DETAILS SHOW DIMENSIONS THAT ARE BASED ON THE "WATTS SERIES BACKFLOW PREVENTERS" AND "HOT BOX" INSULATED ENCLOSURES. THE MANUFACTURER MAY MODIFY CONSTRUCTION DETAILS OF THEIR PRODUCTS WHICH WOULD REQUIRE THE DETAILS TO BE CONSTRUCTED TO DIMENSIONS OTHER THAN SHOWN.
6. CONCRETE FLOOR SLABS SHALL BE CONSTRUCTED UPON 6 INCHES OF COMPACTED TYPE 2 GRANULAR SUBBASE COURSE, NYSOT ITEM 304.12.
7. THE DRAIN PORTS SHALL BE KEPT FREE OF ICE AND SNOW DURING WINTER.

APPROVAL SIGNATURE:

STEVEN J. MOUNTAIN, P.E.
TOWN OF BATAVIA - TOWN ENGINEER

DATE

REVISIONS			
NO.	DESCRIPTION	DATE	BY

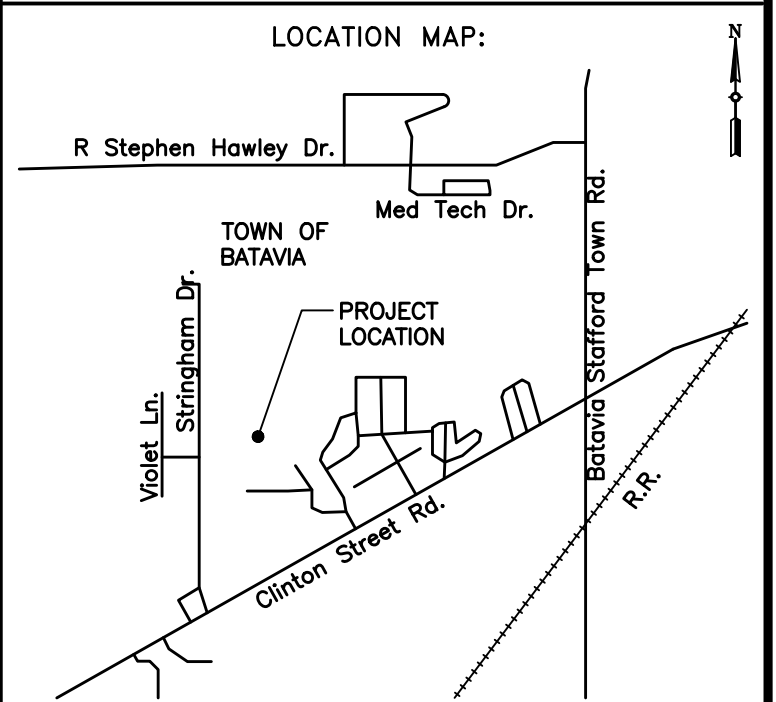
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**Country Meadows
Manufactured Home
Community
Expansion**
5121 Clinton Street Road
Town of Batavia
Genesee County, NY

DRAWING TITLE:
**Backflow
Prevention Device
and Meter
Installation Details**

FILE NAME: BPDPLANS.DWG	DESIGNED BY: GFT
DRAWN BY: HKT	CHECKED BY: GFT
APPROVED BY: GFT	DATE: MAY 2022
SCALE: NOT TO SCALE	PROJECT NO.: 21-816
SHEET NO.: 19 OF 19	DRAWING NO.: BPD-2

T-09-BAT-6-22



03/23/2021

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