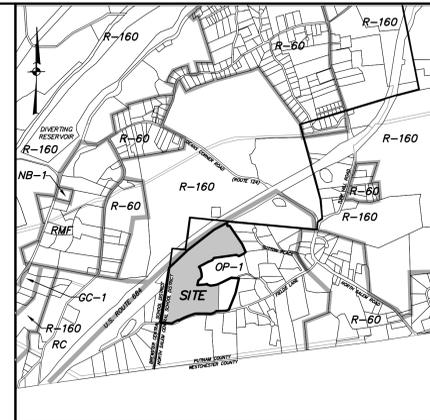


**LEGEND**

- EXISTING PROPERTY LINE
- - - - - EXISTING EASEMENT
- - - - - EXISTING STONE WALL
- - - - - EXISTING 10' CONTOUR
- - - - - EXISTING 2' CONTOUR
- - - - - EXISTING CHAIN LINK FENCE
- - - - - EXISTING GUIDE RAIL
- - - - - EXISTING UNDERGROUND DRAINAGE PIPE
- - - - - EXISTING WETLAND FLAG
- - - - - EXISTING WETLAND
- - - - - EXISTING NYSDEC WETLAND BUFFER
- - - - - EXISTING TOWN CONTROLLED AREA BUFFER



LOCATION MAP SCALE: 1" = 2,000'

**OWNER:**  
Drew Realty, LLC  
120 Fields Lane  
Brewster, NY 10509

**APPLICANT:**  
SiteOne Landscape Supply  
300 Colonial Center Parkway  
Suite 600  
Roswell, GA 30076

**SITE DATA:**  
Zone: OP-1  
Total Acreage: 73.63 AC± (Drew Realty, LLC)  
1.89 AC± (Glockenhaus Brewster Dev. Inc.)  
75.52 AC± TOTAL

Use: Commercial  
Tax Map No.: 78-2-5 (Drew Realty, LLC)  
78-2-4 (Glockenhaus Brewster Dev. Inc.)

**OP-1 ZONE REQUIREMENTS:**

	Required/Permitted:	LOT 1 Provided:	LOT 2 Provided:
Min. Lot Size:	120,000 sf	530,260 SF ±	2,759,095 SF ±
Area:			
Frontage:	250'	760' ±	1,009' ±
Lot Width:	250'	690' ±	1,010' ±
Lot Depth:	250'	1,090' ±	1,890' ±
Min. Yards:			
Front:	100'	110' ±	690' ±
Side:	50'	60' ±	98' ±
Rear:	50'	370' ±	75' ±
Max. Coverage:			
Building Coverage:	25%	2.3% ±	0.24% ±
F.A.R.:	0.35 ±	0.02 ±	0.002 ±
Lot Coverage:	55%	51.3% ±	5.6% ±
Min. Open Space Requirement:	45%	48.7% ±	94.4% ±
Max. Bldg Height:			
Stories:	3	1	1
Feet:	45'	Less than 45'	Less than 45'
Min. Parking Setback:			
Front:	50' (25')	31'	> 50'
Side:	25'	41'	26'
Rear:	25'	864'	57'
Max. Outside Storage:			
Based on lot area percentage:	75% <sup>2</sup> /25% <sup>3</sup>	37.5% ± <sup>2</sup>	5.5% ±

**Notes:**

- Lot frontage, front yard and front yard parking setback requirements may be reduced by up to 50% for interior site roads as part of the planned development or a campus park or any street or road other than a state or county road or highway.
- Per section 138-46L, landscape nurseries and commercial greenhouses allow for 65% of storage area to be dedicated to live plant material, and 10% to be dedicated to dry storage for a total outside storage area of 75%.
- Per section 135-46L, general business uses allow for 25% of lot area to be used for outdoor storage.

**GENERAL NOTES:**

- Property boundary, topography, and existing conditions shown hereon taken from "Partial Topographic Survey prepared for Andrew J. Durkin, Raymond C. Durkin, and Thomas R. Durkin...", prepared by Terry Bergendorff Collins, dated January 18, 2019.
- The owner, Drew Realty, LLC, currently has Site Plan approval for a barn located on the eastern portion of lot 2. These improvements are not a part of this application.
- The Town-regulated wetland and NYSDEC Wetland PE-2 boundaries as shown hereon delineated WLF A1 through WLF A54, and WLF B1 through WLF B15 were delineated by Jim Bates, Ecological Analysis, LLC on March 27, 2019 and survey located by Terry Bergendorff Collins on May 2, 2019.
- The Town-regulated wetland and NYSDEC Wetland PE-2 boundaries as shown hereon for wetlands 'C' & 'D' were delineated by Jim Bates in May of 2019, confirmed by Josh Fisher of NYSDEC in July of 2019, and survey located by Terry Bergendorff Collins in August of 2019.
- Existing tree lines shown hereon are approximate.
- The subject properties fall within the Brewster-Southeast Joint Fire District.
- The subject properties fall within the North Salem School District.

**LOT 1 - SiteOne**

**PARKING REQUIREMENTS:**  
Wholesale Nursery: 1 space per 1.5 employees  
20 employees / 1.5 =

Required: Total spaces required = 14 spaces  
Provided: Total spaces provided = 54 spaces

**LOADING REQUIREMENTS:**  
Loading Computations: 10,500 SF building

Required: Total loading spaces required = 2 spaces  
Provided: Total loading spaces provided = 2 spaces

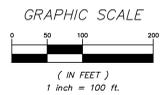
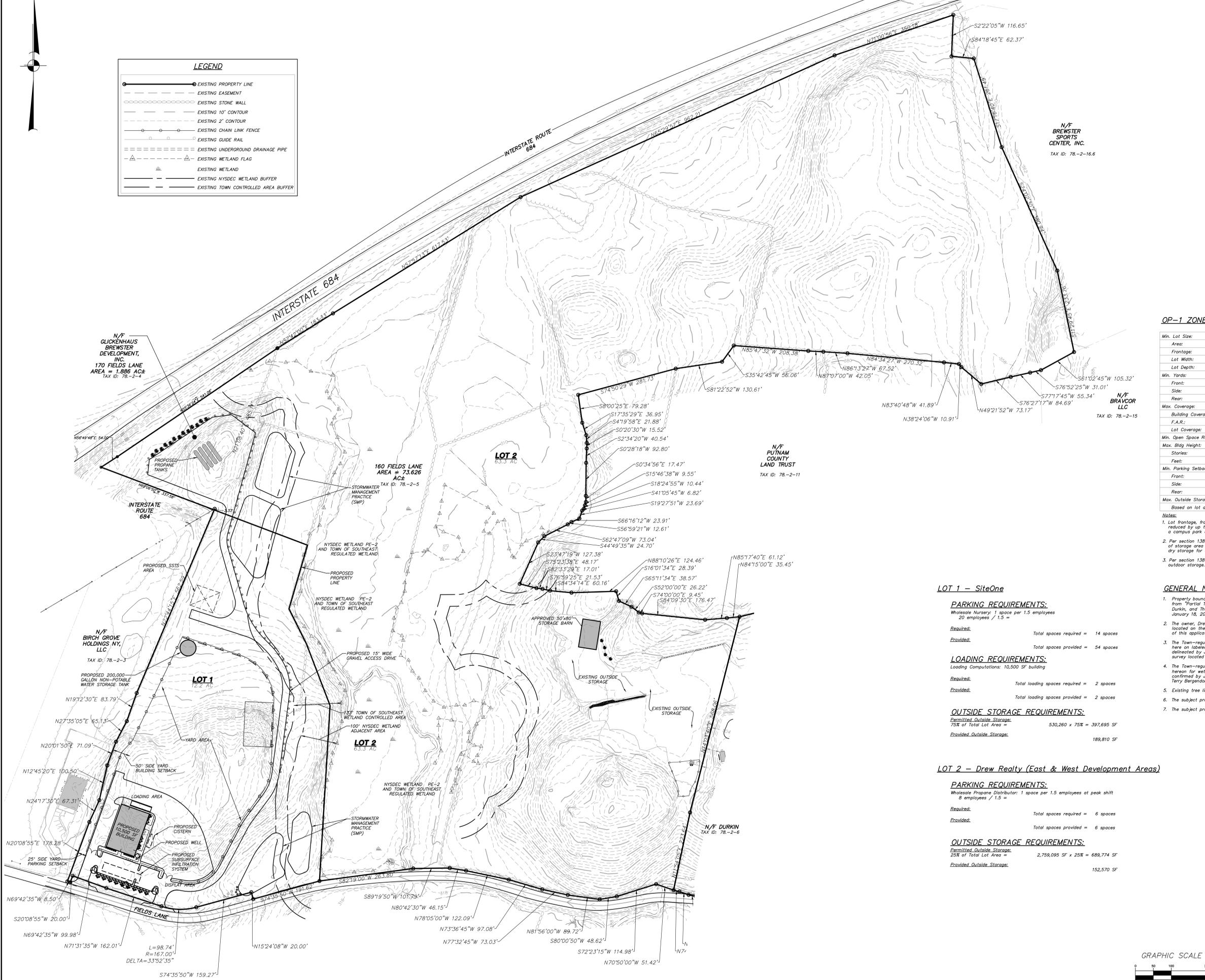
**OUTSIDE STORAGE REQUIREMENTS:**  
Permitted Outside Storage:  
75% of Total Lot Area = 530,260 x 75% = 397,695 SF  
Provided Outside Storage: 189,810 SF

**LOT 2 - Drew Realty (East & West Development Areas)**

**PARKING REQUIREMENTS:**  
Wholesale Propane Distributor: 1 space per 1.5 employees at peak shift  
8 employees / 1.5 =

Required: Total spaces required = 6 spaces  
Provided: Total spaces provided = 6 spaces

**OUTSIDE STORAGE REQUIREMENTS:**  
Permitted Outside Storage:  
25% of Total Lot Area = 2,759,095 SF x 25% = 689,774 SF  
Provided Outside Storage: 152,570 SF



NO.	DATE	REVISION	JFR
1	1-20-20	REVISED FOR PLANNING BOARD SUBMISSION	JFR

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**PROJECT:**  
DREW REALTY/SITEONE  
160 FIELDS LANE, TOWN OF SOUTHEAST, PUTNAM COUNTY, NEW YORK

**DRAWING:**  
AMENDED OVERALL PLAN

PROJECT NUMBER	PROJECT MANAGER	DRAWING NO.	SHEET
19166.100	J.J.C.	OP-1	1

DATE	DRAWN BY	CHECKED BY
12-23-19	J.F.R.	J.L.L.

SCALE: 1" = 100'

ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2209 OF ARTICLE 145 OF THE EDUCATION LAW.

**LEGEND**

	EXISTING PROPERTY LINE
	EXISTING EASEMENT
	EXISTING STONE WALL
	EXISTING TREELINE
	EXISTING CHAIN LINK FENCE
	EXISTING GUIDE RAIL
	EXISTING WETLAND FLAG
	EXISTING WETLAND
	EXISTING NYSDEC WETLAND BUFFER
	EXISTING TOWN CONTROLLED AREA BUFFER
	PROPOSED PARKING STALLS
	PROPOSED PAINTED HANDICAP PARKING SYMBOL
	PROPOSED LANDSCAPING
	PROPOSED RETAINING WALL
	PROPOSED TREE LINE
	PROPOSED BUILDING MOUNTED LIGHT
	PROPOSED POLE MOUNTED LIGHT
	PROPOSED SINGLE POLE SIGN

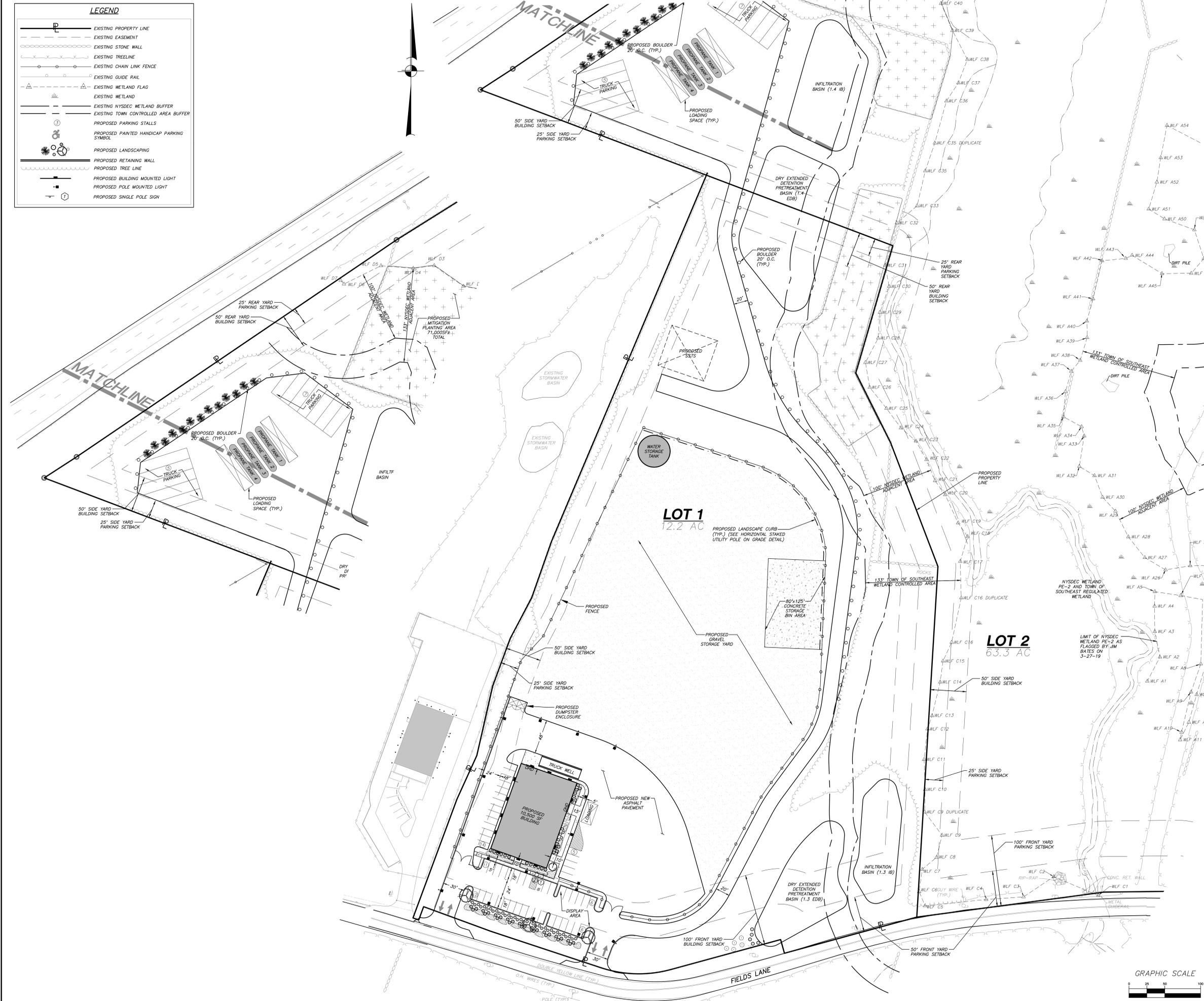
**BUFFER MITIGATION PLANT LIST**

QTY.	KEY	BOTANICAL/COMMON NAME	SIZE	ROOT
		<b>EVERGREEN TREES</b>		
PG	PG	Picea glauca / White Spruce	4' HT.	B&B
		<b>SHADE &amp; UNDERSTORY TREES</b>		
AR	AR	Acer rubrum / American Red Maple	1 1/2" CAL.	B&B
		<b>DECIDUOUS SHRUBS</b>		
AA	AA	Arcob. arbutifolius / Red Chokeberry	15-18" HT.	#2 CONT.
CS	CS	Cornus sericea / Red Twig Dogwood	15-18" HT.	#2 CONT.
HV	HV	Hamamelis virginiana / Witchhazel	24"-30" HT.	#3 CONT.
SC	SC	Sambucus canadensis / American Elderberry	15-18" HT.	#2 CONT.

**BUFFER DISTURBANCE AND MITIGATION AREA**

BUFFER DISTURBANCE	MITIGATION AREA
70,672 SF ±	71,000 SF ±

- GENERAL PLANTING AND SITE SEEDING NOTES:**
- All proposed seeded areas to receive 4" min. depth of topsoil. Soil amendments and fertilizer application rates shall be determined based on specific testing of topsoil material.
  - Upon final grading and placement of topsoil and any required soil amendments, areas to receive permanent vegetation cover in combination with suitable mulch as follows:
    - select seed mixture per drawings and seeding notes.
    - fertilizer applied at the manufacturer's recommended rate using phosphorus-free fertilizer or equivalent. Soil test shall be performed prior using any fertilizer on site.
    - mulch: soft hay or small grain straw applied at a rate of 90 lbs./1000 s.f. or 2 tons/acre, to be applied and anchored according to New York State Standards and Specifications for Erosion and Sediment Control, August 2005.
    - If the season prevents the establishment of a permanent vegetation cover, the disturbed areas will be mulched with straw or equivalent.
  - The seed mix for lawn areas to be planted between April 1 and May 15, or between August 15 and October 15, or as directed by project representative at a rate of 50 lbs. per acre:
    - Kentucky Bluegrass 20%
    - Creeping Red Fescue 40%
    - Perennial Ryegrass 20%
    - Annual Ryegrass 20%
  - All proposed planting beds to receive a 12" min. depth of topsoil. Soil amendments and fertilizer application rates shall be determined based on specific testing of topsoil material.
  - All plant material to be nursery grown.
  - Rooted cuttings shall conform with ANSI Z60.1 American Standard for Nursery Stock in all ways including dimensions.
  - Rooted cuttings shall be taken from healthy nursery stock.
  - Rooted cuttings shall be grown under climate conditions similar to those in the locality of the project.
  - Rooted cuttings as noted in Note #14B shall be planted in all locations designed on the plan.
  - The location and layout of landscape plants shown on the site plan shall take precedence in any discrepancies between the quantities of plants shown on the plans and the quantity of plants in the Plant List.
  - Provide a 3" layer of shredded mulch (or as specified) over entire watering saucer of all tree pits or over entire planting bed. Do not place mulch within 3" of tree or shrub trunks.
  - All landscape plantings shall be maintained in a healthy condition at all times. Any dead or diseased plants shall immediately be replaced "in kind" by the contractor (during warranty period) or project owner.
  - All landscape and mitigation plantings shall be installed by hand. No mechanical equipment shall be permitted.
  - The plantings as specified on these drawings are as follows:
    - A. Seed Mix for Existing Gravel Storage Area as shown on the drawings at a rate of 30 lbs. per acre:
      - Native Right-of-Way Woods Mix (ERNMX-132-1) from Ernst Conservation Seeds of Meadville, PA.



**SIGN DATA TABLE**

NO.	TEXT	M.U.T.C.D. NUMBER	SIZE OF SIGN (s.f.)	DESCRIPTION
1		NY R7-8	12" x 18"	Green on White Blue Symbol
		R7-8P	12" x 6"	Green on White
2		R7-1	12" x 18"	Red on White

1	1-20-20	REVISED FOR PLANNING BOARD SUBMISSION	JFR
NO.	DATE	REVISION	BY

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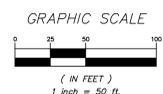
PROJECT: **DREW REALTY/SITEONE**

160 FIELDS LANE, TOWN OF SOUTHEAST, PUTNAM CO., NEW YORK

DRAWING: **LAYOUT & LANDSCAPE PLAN**

PROJECT NUMBER	19166.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	12-23-19	DRAWN BY	J.F.R.		2
SCALE	1" = 50'	CHECKED BY	J.L.L.		8

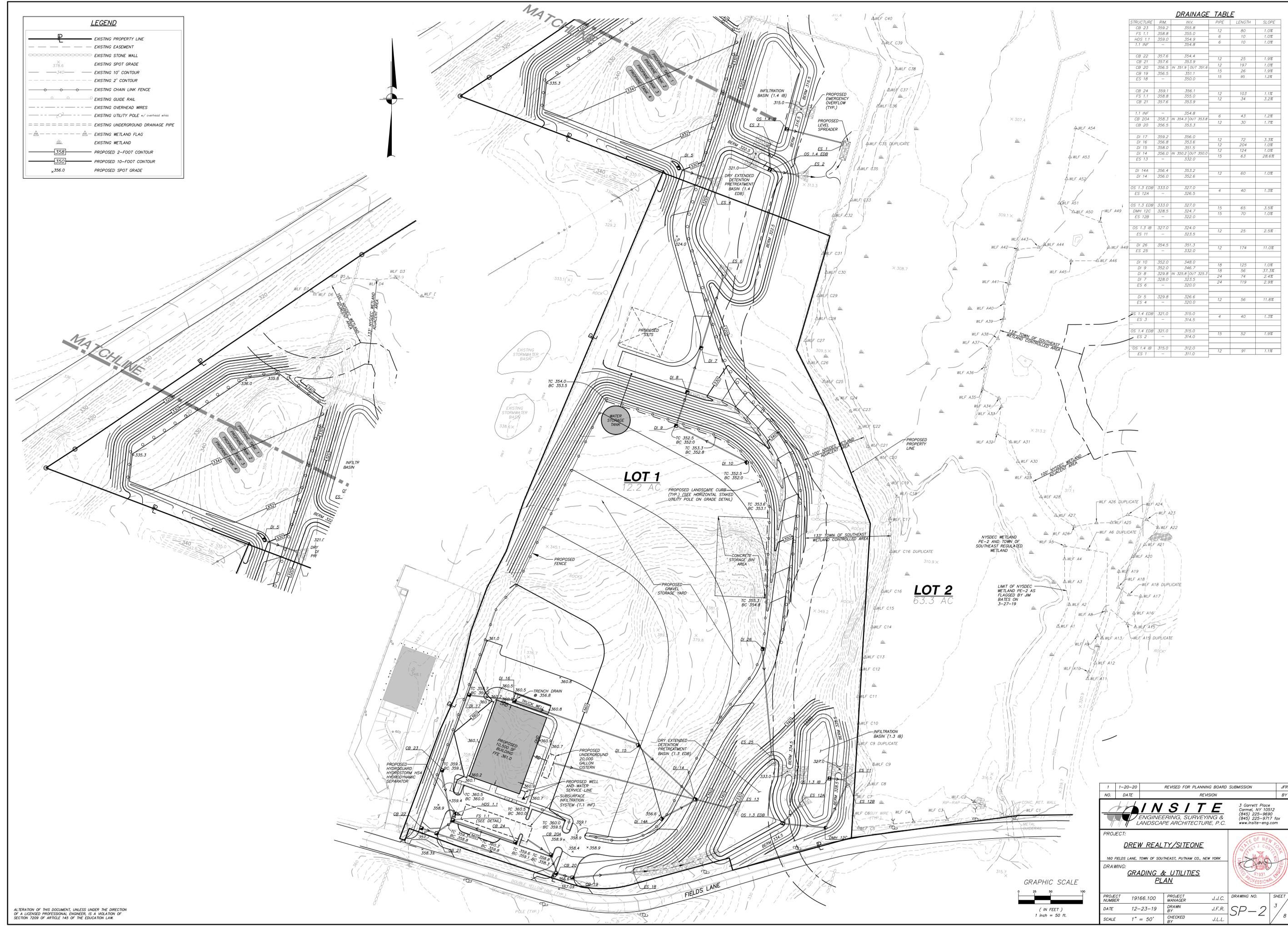
SP-1



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**LEGEND**

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	EXISTING EASEMENT
	EXISTING STONE WALL
	EXISTING SPOT GRADE
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	EXISTING CHAIN LINK FENCE
	EXISTING GRADE RAIL
	EXISTING OVERHEAD WIRES
	EXISTING UTILITY POLE w/ overhead wires
	EXISTING UNDERGROUND DRAINAGE PIPE
	EXISTING WETLAND FLAG
	EXISTING WETLAND
	PROPOSED 2-FOOT CONTOUR
	PROPOSED 10-FOOT CONTOUR
	PROPOSED SPOT GRADE



**DRAINAGE TABLE**

STRUCTURE	R/W	INLET	PIPE	LENGTH	SLOPE
CB 23	359.2	355.8	12	80	1.0%
FS 1.1	358.8	355.0	6	10	1.0%
HDS 1.1	359.0	354.9	6	10	1.0%
1.1 INF	-	354.8	-	-	-
CB 22	357.6	354.4	12	25	1.9%
CB 21	357.6	353.9	12	197	1.0%
CB 20	356.5	351.9 [OUT] 351.6	15	26	1.9%
CB 19	356.5	351.1	15	95	1.2%
ES 18	-	350.0	-	-	-
CB 24	359.1	356.1	12	103	1.1%
FS 1.1	358.8	355.0	12	34	3.2%
CB 21	357.6	353.9	-	-	-
1.1 INF	-	354.8	6	43	1.2%
CB 20A	358.3	354.1 [OUT] 353.8	12	30	1.7%
CB 20	356.5	353.3	-	-	-
DI 17	359.2	356.0	12	72	3.3%
DI 16	358.8	353.6	12	204	1.0%
DI 15	358.0	351.5	12	124	1.0%
DI 14	356.0	350.2 [OUT] 350.0	15	63	28.6%
ES 13	-	352.0	-	-	-
DI 14A	356.4	353.2	12	60	1.0%
DI 14	356.0	352.6	-	-	-
OS 1.3 EDB	333.0	327.0	4	40	1.3%
ES 12A	-	326.5	-	-	-
OS 1.3 EDB	333.0	327.0	15	65	3.5%
DMH 12C	328.5	324.7	15	70	1.0%
ES 12B	-	322.0	-	-	-
OS 1.3 IB	327.0	324.0	12	25	2.5%
ES 11	-	323.5	-	-	-
DI 26	354.5	351.3	12	174	11.0%
ES 25	-	332.0	-	-	-
DI 10	352.0	348.0	18	125	1.0%
DI 9	353.0	346.7	18	56	37.3%
DI 8	329.8	325.8 [OUT] 325.3	24	74	2.4%
DI 7	328.0	323.5	24	119	2.9%
ES 6	-	320.0	-	-	-
DI 5	329.8	326.6	12	56	11.8%
ES 4	-	320.0	-	-	-
OS 1.4 EDB	321.0	315.0	4	40	1.3%
ES 3	-	314.5	-	-	-
OS 1.4 EDB	321.0	315.0	15	52	1.9%
ES 2	-	314.0	-	-	-
OS 1.4 IB	315.0	312.0	12	91	1.1%
ES 1	-	311.0	-	-	-

1	1-20-20	REVISED FOR PLANNING BOARD SUBMISSION	JFR
NO.	DATE	REVISION	BY

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PROJECT: **DREW REALTY/SITEONE**  
160 FIELDS LANE, TOWN OF SOUTHEAST, PUTNAM CO., NEW YORK

DRAWING: **GRADING & UTILITIES PLAN**

PROJECT NUMBER	19166.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	12-23-19	DRAWN BY	J.F.R.	<b>SP-2</b>	3
SCALE	1" = 50'	CHECKED BY	J.L.L.		8

GRAPHIC SCALE  
0 25 50 100  
(IN FEET)  
1 inch = 50 ft.

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LEGEND	
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	EXISTING EASEMENT
	EXISTING STONE WALL
	EXISTING SPOT GRADE
	EXISTING 10' CONTOUR
	EXISTING 2' CONTOUR
	EXISTING CHAIN LINK FENCE
	EXISTING GUIDE RAIL
	EXISTING OVERHEAD WIRES
	EXISTING UTILITY POLE
	EXISTING UNDERGROUND DRAINAGE PIPE
	EXISTING WETLAND FLAG
	EXISTING WETLAND
	PROPOSED 2-FOOT CONTOUR
	PROPOSED 10-FOOT CONTOUR
	PROPOSED SPOT GRADE
	PROPOSED SILT FENCE
	PROPOSED LIMITS OF DISTURBANCE

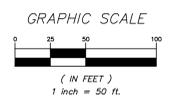


- OVERALL CONSTRUCTION SEQUENCE:**
- PHASE 1: (Total Disturbance 4.9 Ac. ±)**
    1. Install stabilized construction entrances in accordance with the notes and details at location shown on drawing.
    2. Install erosion control measures shown on the plan in accordance with the details. Install construction fence around the proposed subsurface infiltration system (1.1 INF).
    3. Clear trees and grub in the areas of stormwater basins within the limits of the phase.
    4. Install contractor staging area.
    5. Construct the Infiltration Basin (1.3 IB) and Extended Detention Basin (1.3 EDB). Plug the primary outlet pipe from OS 1.3 EDB to the infiltration basin.
    6. Construct and stabilize the temporary sediment basin within the limits of the phase in accordance with the notes and details.
    7. Begin earthwork associated with building pad and parking area.
    8. Install drainage structures with inlet protection as shown and pipes within limits of phase.
    9. Install the subsurface infiltration system (1.1 INF) and plug the outlet pipe to the infiltration practice in the upstream flow splitter (FS 1.1).
    10. Install building and cistern.
    11. Install gravel subbase in the proposed paved areas.
    12. Upon completion of all grading operations topsoil, seed, and mulch any and all disturbed areas as soon as practical in accordance with the sedimentation and erosion control notes. Phase 1 must be stabilized prior to the commencement of Phase 2A.
  - PHASE 2A: (Total Disturbance 2.4 Ac. ±)**
    1. Utilize a portion of the Phase 1 stabilized area as a staging area for Phase 2(A + B) and Phase 3.
    2. Install erosion control measures shown on the plan in accordance with the details.
    3. Clear trees and grub within the limits of the phase.
    4. Install construction fence around the proposed SS7S area.
    5. Construct the Infiltration Basin (1.4 IB) and Extended Detention Basin (1.4 EDB). Plug the primary outlet pipe from OS 1.4 EDB to the infiltration basin.
    6. Begin earthwork associated with the proposed gravel access way.
    7. Install drainage structures with inlet protection as shown and pipes within the limits of the phase.
    8. Install gravel surfaces.
    9. Upon completion of all grading operations topsoil, seed, and mulch any and all disturbed areas as soon as practical in accordance with the sedimentation and erosion control notes. Phase 2A must be stabilized prior to the commencement of Phase 2B. Should disturbance within the limits of the phase exceed the 5 acre threshold, all disturbed areas shall be stabilized within 7 days, in accordance with the special Requirements of Soil Disturbance > 5 Acres Notes on this plan. Should the 5 acre threshold not be exceeded disturbed areas shall be stabilized within 14 days, in accordance with the Erosion and Sediment Control Notes also shown on this plan.
  - PHASE 2B: (Total Disturbance 3.9 Ac. ±)**
    1. Install erosion control measures shown on the plan in accordance with the details.
    2. Clear trees and grub within the limits of the phase.
    3. Continue earthwork operations associated with the proposed gravel storage yard within the limits of the phase.
    4. Install drainage structures with inlet protection as shown and pipes within the limits of the phase.
    5. Install gravel surfaces.
    6. Upon completion of all grading operations topsoil, seed, and mulch any and all disturbed areas as soon as practical in accordance with the sedimentation and erosion control notes. Phase 2B must be stabilized prior to the commencement of Phase 3.
  - PHASE 3: (Total Disturbance 1.8 Ac. ±)**
    1. Install erosion control measures shown on the plan in accordance with the details.
    2. Clear trees and grub within the limits of the phase.
    3. Continue earthwork operations associated with the gravel pad within the limits of the phase.
    4. Install drainage structures with inlet protection as shown and pipes within the limits of the phase.
    5. Install retaining wall.
    6. Install gravel surfaces.
    7. Upon completion of grading operations topsoil, seed, and mulch all disturbed areas as soon as practical in accordance with the sedimentation and erosion control notes.
    8. Upon stabilization of all contributing area complete, convert the temporary sediment basins to the proposed stormwater management practices per the notes and details and remove plug from primary outlet in OS 1.3 EDB, OS 1.4 EDB and FS 1.1 to the infiltration practices.

**Requirements of Soil Disturbance > 5 Acres**

\* Limits of disturbance associated with phases 2(A+B) is greater than 5 acres. More than 5 acres may be disturbed at once under the conditions set forth in Part II.B.3 of the NYSDEC General Permit GP-0-15-002. The following requirements will be met in order to disturb more than five (5) acres at once:

1. The owner or operator shall have a qualified inspector conduct at least two (2) site inspections in accordance with Part IV.B. every seven (7) calendar days, for as long as great than five (5) acres of soil remain disturbed. When performing just two (2) inspections every seven (7) calendar days, the inspections shall be separated by a minimum of two (2) full calendar days.
2. In areas where soil disturbance activity has been temporarily or permanently ceased, temporary and/or permanent soil stabilization measures shall be installed and/or implemented within seven (7) days from the date the soil disturbance activity ceased. The soil stabilization measures selected must be in conformance with the most current version of the technical standard, New York Standards and Specifications for Erosion and Sediment Control.
3. The owner or operator shall prepare a phasing plan that defines maximum disturbed area per phase and shows required cuts and fills.
4. The owner operator shall install an additional site specific practices needed to protect water quality.



NO.	DATE	REVISION	JFR
1	1-20-20	REVISED FOR PLANNING BOARD SUBMISSION	JFR

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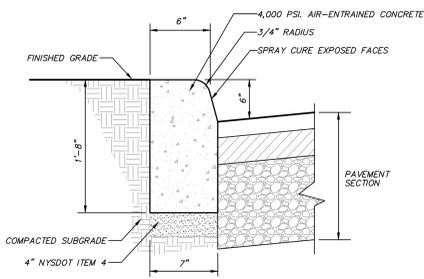
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PROJECT: **DREW REALTY/SITEONE**  
160 FIELDS LANE, TOWN OF SOUTHEAST, PUTNAM CO., NEW YORK

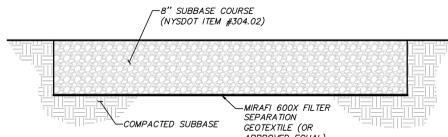
DRAWING: **EROSION & SEDIMENT CONTROL PLAN**

PROJECT NUMBER	19166.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	12-23-19	DRAWN BY	J.F.R.	SP-3	4
SCALE	1" = 50'	CHECKED BY	J.L.L.		8

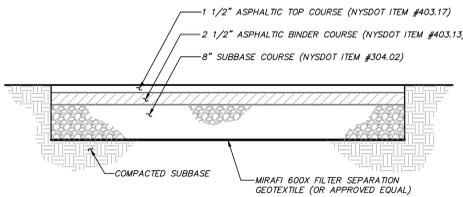
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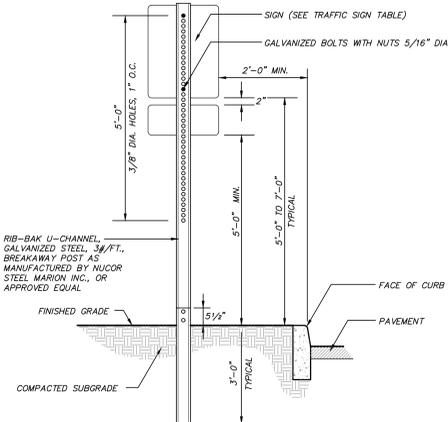
**CONCRETE CURB DETAIL**  
(N.T.S.)



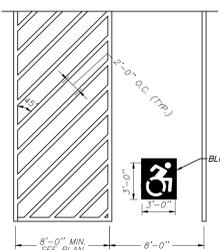
**GRAVEL PAVEMENT DETAIL**  
(N.T.S.)



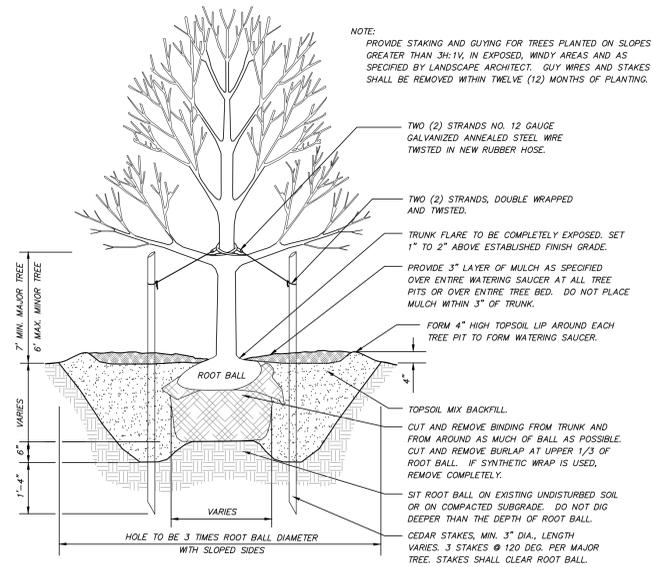
**ASPHALT PAVEMENT DETAIL**  
(N.T.S.)



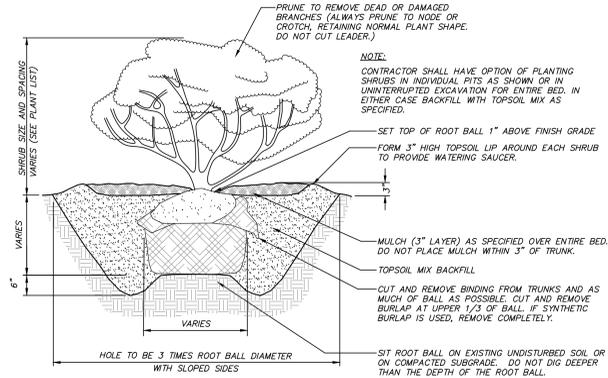
**TRAFFIC SIGN DETAIL**  
(N.T.S.)



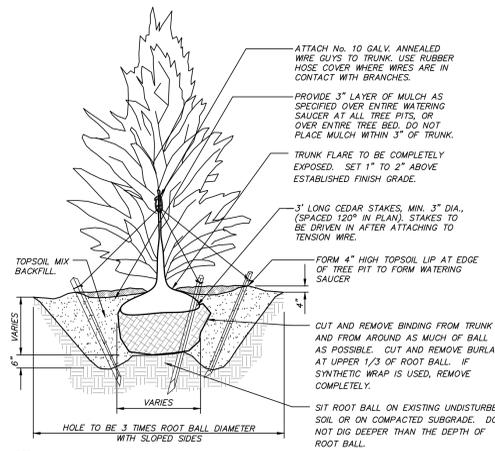
**PAINTED NYS ACCESSIBLE PARKING DETAIL**  
(N.T.S.)



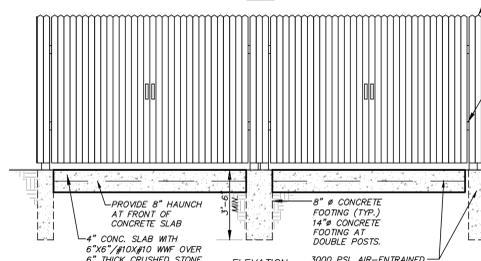
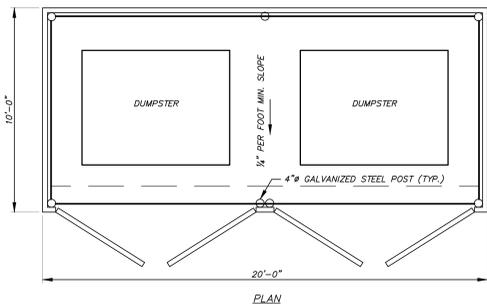
**TREE PLANTING DETAIL**  
(N.T.S.)



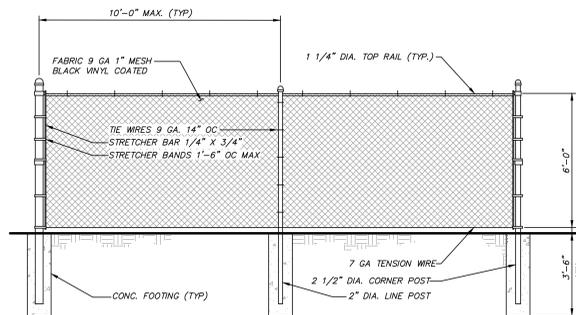
**SHRUB PLANTING DETAIL**  
(N.T.S.)



**EVERGREEN TREE PLANTING DETAIL**  
(N.T.S.)



**REFUSE ENCLOSURE DETAIL**  
(N.T.S.)



**CHAIN LINK FENCE DETAIL**  
(N.T.S.)

**BREX LIGHTING**  
LED WALL PACK WP-B1

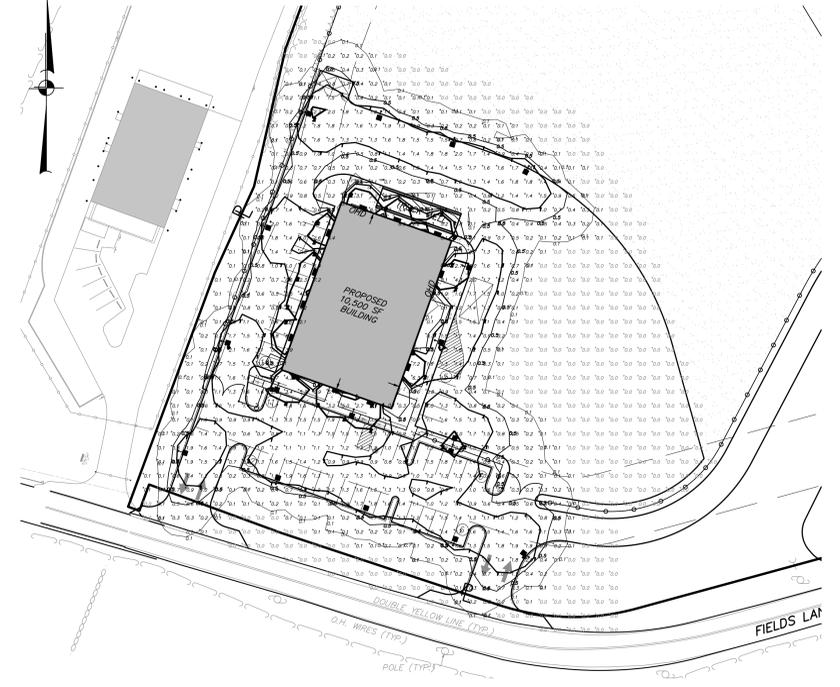
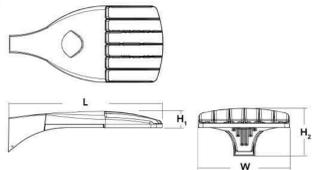
Product Number: BR-1-KL164A-B  
Wattage: 25W  
Voltage: 120/277V  
CCT: 5000K  
CRI: 90  
Distribution: Type 3  
Finish: Matte Black  
Mounting: 10-0"

**FEATURES**  
• Wattage: 25W  
• Delivered Lumens: 2200  
• Voltage: 120/277V  
• CCT: 5000K  
• CRI: 90  
• Housing: Die-Cast Aluminum  
• Warranty: 5-Year  
• Distribution: Type 3  
• LED: CRIE  
• Driver: Inverterless

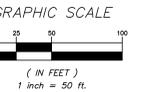
**ORDERING**

**D-Series Size 0 LED Area Luminaire**

**Specifications**  
EPA: 0.95 ft  
Length: 26"  
Width: 13"  
Height: 3"  
Height: 7"  
Weight: 16 lbs (max)



**LIGHTING PLAN**  
SCALE: 1" = 50'



**LUMINAIRE SCHEDULE**

Sym	Qty	Catalog Number	Description	Lamp	Mounting Height	Watts
■	17	DSXO LED 20C 530	LITHONIA LIGHTING - DSXO LED WITH 20 LEADS @ 530 mA, 5000K TYPE 3 LED MEDIUM OPTICS WITH HOUSE SIDE SHIELD	LED	16'-0"	74
■	12	BR-1-KL164A-B	BREX LIGHTING LED 2200 LUMENS 5000K TYPE 3 DISTRIBUTION	LED	10'-0"	25

**STATISTICS**

DESCRIPTION	SYMBOL	AVG	MAX	MIN	AVG/MAX	AVG/MIN
Project Area		0.6 fc	9.1 fc	0.0 fc	N/A	N/A

**LIGHT CONTOUR LEGEND**

0.1	0.10 Foot Candles
0.5	0.50 Foot Candles
1	1.00 Foot Candles
2	2.00 Foot Candles

\* Photometric calculations shown on plan are in foot candles.

**LIGHTING NOTES:**

- All lighting shall be as noted on the plan or approved equal.
- Style and finish of all luminaires to be selected by owner.
- Calculation values shown in this plan are taken on a horizontal plane at ground level using a 0.91 light loss factor for LEDs. Topographical information and landscaping have not been accounted for in these calculations.
- All lighting on this plan shall be directed and/or shielded so as to preclude objectionable glare from being observable from adjoining streets and properties.
- Photometric modeling based on specified fixtures.

NO.	DATE	REVISION	JFR	BY
1	1-20-20	REVISED FOR PLANNING BOARD SUBMISSION		

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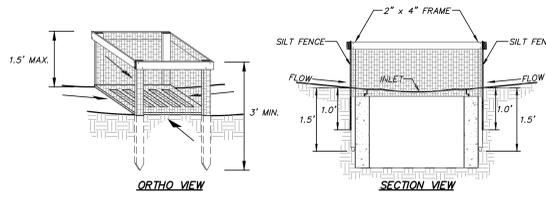
PROJECT: **DREW REALTY/SITEONE**  
160 FIELDS LANE, TOWN OF SOUTHEAST, PUTNAM CO., NEW YORK

DRAWING: **DETAILS**

PROJECT NUMBER	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
19166.100	J.F.R.	J.L.L.	D-1	5
DATE	12-23-19	CHECKED BY		8
SCALE	AS NOTED			

**EROSION & SEDIMENT CONTROL NOTES:**

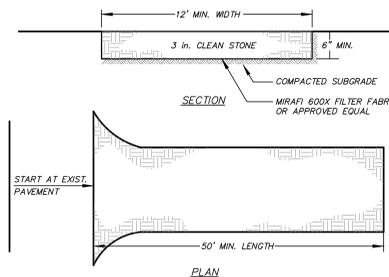
- The owner's field representative (O.F.R.) will be responsible for the implementation and maintenance of erosion and sediment control measures on this site prior to and during construction.
- All construction activities involving the removal or disposition of soil are to be provided with appropriate protective measures to minimize erosion and contain sediment disposition within. Minimum soil erosion and sediment control measures shall be implemented as shown on the plans and shall be installed in accordance with "New York Standards and Specifications For Erosion and Sediment Control," latest edition.
- Wherever feasible, natural vegetation should be retained and protected. Disturbance shall be minimized in the areas required to perform construction. No more than 5 acres of unprotected soil shall be exposed at any one time.
- When land is exposed during development, the exposure shall be kept to the shortest practical period of time. In the areas where soil disturbance activity has temporarily or permanently ceased, the application of soil stabilization measures must be initiated by the end of the next business day and completed within seven (7) days from the date the current soil disturbance activity ceased. Disturbance shall be minimized to the areas required to perform construction.
- Silt fence shall be installed as shown on the plans prior to beginning any clearing, grubbing or earthwork.
- All topsoil to be stripped from the area being developed shall be stockpiled and immediately seeded for temporary stabilization. Ryegrass (annual or perennial) at a rate of 50 lbs. per acre shall be used for temporary seeding in spring, summer or early fall. "Birdfoot" Winter Rye (cereal rye) shall be used for temporary seeding in late fall and winter.
- Any disturbed areas not subject to further disturbance or construction traffic, permanent or temporary, shall have soil stabilization measures initiated for permanent vegetation cover in combination with a suitable mulch within 1 business day of final grading. All seeded areas to receive a minimum 4" topsoil (from stockpile area) and be seeded and mulched as follows:
  - Seed mixture to be planted between March 21 and May 20, or between August 15 and October 15 or as directed by project representative at a rate of 100 pounds per acre in the following proportions:
    - Kentucky Bluegrass - 20%
    - Creeping Red Fescue - 40%
    - Perennial Ryegrass - 20%
    - Annual Ryegrass - 20%
  - Mulch: Soft hay or small grain straw applied at a rate of 90 lbs./1000 S.F. or 2 tons/acre, to be applied and anchored according to "New York Standards and Specification For Erosion and Sediment Control," latest edition.
- Grass seed mix may be applied by either mechanical or hydroseeding methods. Seeding shall be performed in accordance with the current edition of the "NYSDOT Standard Specification, Construction and Materials, Section 610-3.02, Method No. 1". Hydroseeding shall be performed using materials and methods as approved by the site engineer.
- Cut or fill slopes steeper than 3:1 shall be stabilized immediately after grading with Curlex 1 Single Net Erosion Control Blanket, or approved equal.
- Paved roadways shall be kept clean at all times.
- The site shall at all times be graded and maintained such that all stormwater runoff is diverted to soil erosion and sediment control facilities.
- All storm drainage outlets shall be stabilized, as required, before the discharge points become operational.
- Stormwater from disturbed areas must be passed through erosion control barriers before discharge beyond disturbed areas or discharged into other drainage systems.
- Erosion and sediment control measures shall be inspected and maintained on a daily basis by the O.F.R. to insure that channels, temporary and permanent ditches and pipes are clear of debris, that embankments and berms have not been breached and that all straw bales and silt fences are intact. Any failure of erosion and sediment control measures shall be immediately repaired by the contractor and inspected for approval by the O.F.R. and/or site engineer.
- Dust shall be controlled by sprinkling or other approved methods as necessary, or as directed by the O.F.R.
- Cut and fills shall not endanger adjoining property, nor divert water onto the property of others.
- All fills shall be placed and compacted in 6" lifts to provide stability of material and to prevent settlement.
- The O.F.R. shall inspect downstream conditions for evidence of sedimentation on a weekly basis and after rainstorms.
- As warranted by field conditions, special additional erosion and sediment control measures, as specified by the site engineer and/or the Town Engineer shall be installed by the contractor.
- Erosion and sediment control measures shall remain in place until all disturbed areas are suitably stabilized.



**INSTALLATION NOTES**

- FILTER FABRIC SHALL HAVE AN EOS OF 40-85. BURLAP MAYBE USED FOR SHORT TERM APPLICATIONS.
- CUT FABRIC FROM A CONTINUOUS ROLL TO ELIMINATE JOINTS. IF JOINTS ARE NEEDED THEY WILL BE OVERLAPPED TO THE NEXT STAKE.
- STAKE MATERIALS WILL BE STANDARD 2" x 4" WOOD OR EQUIVALENT. METAL WITH A MINIMUM LENGTH OF 3 FEET.
- SPACE STAKES EVENLY AROUND INLET 3 FEET APART AND DRIVE A MINIMUM 18 INCHES DEEP. SPACES GREATER THAN 3 FEET MAY BE BRIDGED WITH THE USE OF WIRE MESH BEHIND THE FILTER FABRIC FOR SUPPORT.
- FABRIC SHALL BE EMBEDDED 1 FOOT MINIMUM BELOW GROUND AND BACKFILLED. IT SHALL BE SECURELY FASTENED TO THE STAKES AND FRAME.
- A 2" x 4" WOOD FRAME SHALL BE COMPLETED AROUND THE CREST OF THE FABRIC FOR OVER FLOW STABILITY. MAXIMUM DRAINAGE AREA 1 ACRE

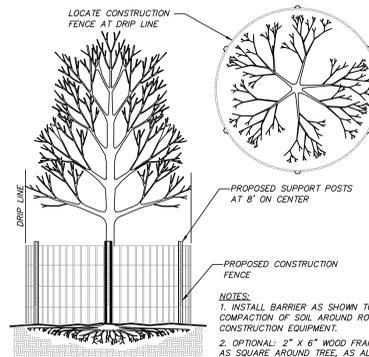
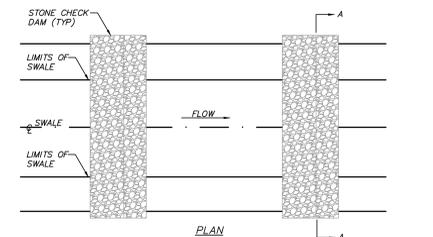
**FILTER FABRIC INLET PROTECTION DETAIL (N.T.S.)**



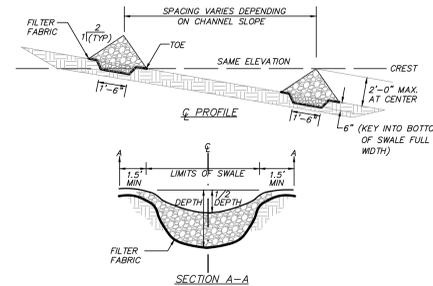
**INSTALLATION NOTES**

- STONE SIZE - USE 3" STONE
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 50 FEET (EXCEPT ON A SINGLE RESIDENCE LOT WHERE A 30 FOOT MINIMUM LENGTH WILL APPLY.)
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - 12 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE, IF PIPING IS IMPRACTICAL, A MOUNTAINABLE BERM WITH 3:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. 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.

**STABILIZED CONSTRUCTION ENTRANCE DETAIL (N.T.S.)**



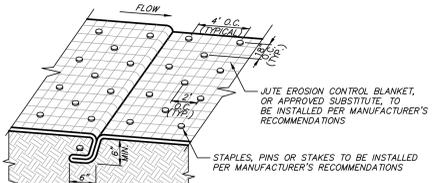
**TREE PROTECTION DETAIL (N.T.S.)**



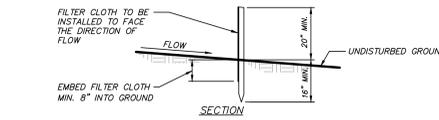
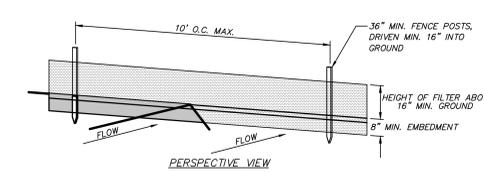
**NOTES:**

- STONE SHALL BE PLACED ON A FILTER FABRIC FOUNDATION.
- SET SPACING OF CHECK DAMS SO 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 LINER AS APPROPRIATE.
- ENSURE THAT CHANNEL APPURTENANCES SUCH AS CULVERT ENTRANCES BELOW CHECK DAMS ARE NOT SUBJECT TO DAMAGE OR BLOCKAGE FROM DISPLACED STONE.

**STONE CHECK DAM DETAIL (N.T.S.)**



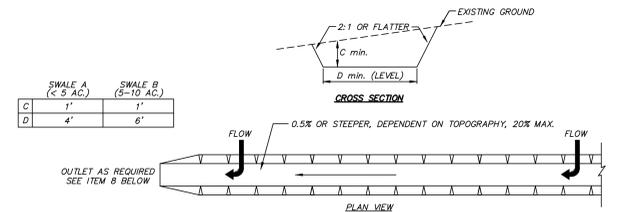
**TYPICAL GEOTEXTILE ANCHORING DETAIL (N.T.S.)**



**CONSTRUCTION NOTES FOR FABRICATED SILT FENCE**

- FILTER CLOTH TO BE FASTENED SECURELY TO POSTS AT TOP AND MID SECTION.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

**SILT FENCE DETAIL (N.T.S.)**



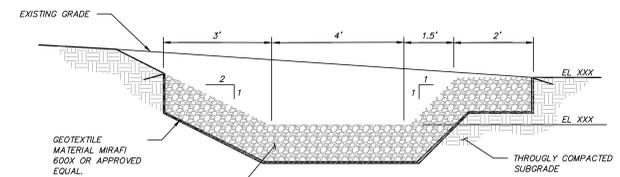
**CONSTRUCTION SPECIFICATIONS**

- ALL TEMPORARY SWALES SHALL HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET.
- DIVERTED RUNOFF FROM A DISTURBED AREA SHALL BE CONVEYED TO A SEDIMENT TRAPPING DEVICE.
- DIVERTED RUNOFF FROM AN UNDISTURBED STABILIZED AREA AT NON-EROSIVE VELOCITY.
- ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE SWALE.
- THE SWALE SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDIC NORMAL FLOW.
- FILLS SHALL BE COMPACTED BY EARTH MOVING EQUIPMENT.
- ALL EARTH REMOVED AND NOT NEEDED ON CONSTRUCTION SHALL BE PLACED SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE SWALE.
- PERIODIC INSPECTION AND REQUIRED MAINTENANCE MUST BE PROVIDED AFTER EACH RAIN EVENT.
- STABILIZATION SHALL BE AS PER THE CHART BELOW.

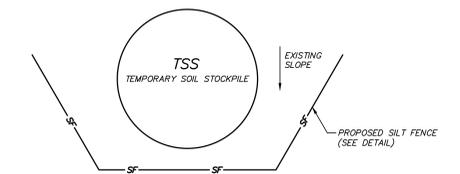
**FLOW CHANNEL STABILIZATION**

TYPE OF TREATMENT	CHANNEL GRADE	A (5 AC. OR LESS)	B (5-10 AC.)
1	0.5-3.0%	SEED AND STRAW MULCH	SEED AND STRAW MULCH
2	3.1-5.0%	SEED AND STRAW MULCH OR EXCELSIOR	SEED USING JUTE OR EXCELSIOR
3	5.1-8.0%	SEED WITH JUTE OR EXCELSIOR; SOO	LINED RIP-RAP 4-8\"/>

**TEMPORARY SWALE DETAIL (N.T.S.)**



**LEVEL SPREADER DETAIL (N.T.S.)**



**NOTES:**

- AREA CHOSEN FOR STOCKPILE LOCATION SHALL BE DRY AND STABLE.
- MAXIMUM SLOPE OF STOCKPILE SHALL BE 2:1.
- UPON COMPLETION OF SOIL STOCKPILING, EACH PILE SHALL BE IMMEDIATELY SEEDED WITH K31 PERENNIAL TALL FESCUE.
- ALL STOCKPILES SHALL BE PROTECTED WITH SILT FENCING INSTALLED ON THE DOWNGRADIENT SIDE.

**TEMPORARY SOIL STOCKPILE DETAIL (N.T.S.)**

**EROSION AND SEDIMENT CONTROL MAINTENANCE SCHEDULE**

PRACTICE	MONITORING REQUIREMENTS			MAINTENANCE REQUIREMENTS		
	DAILY	WEEKLY	AFTER RAINFALL	DURING CONSTRUCTION	AFTER CONSTRUCTION	
SILT FENCE BARRIER	-	Inspect	Inspect	Clean/Replace	Remove	
STABILIZED CONSTRUCTION ENTRANCE	Inspect	-	Inspect	Clean/Replace Stone and Fabric	Remove	
INLET PROTECTION	-	Inspect	Inspect	Clean/Repair/Replace	Remove	
DUST CONTROL	Inspect	-	Inspect	Mulching/Spraying Water	N/A	
*VEGETATIVE ESTABLISHMENT	-	Inspect	Inspect	Water/Reseed/Remulch	Reseed to 80% Coverage	
SOIL STOCKPILES	-	Inspect	Inspect	Mulching/Silt Fence Repair	Remove	
SWALES	-	Inspect	Inspect	Clean/Mulch/Repair	Mow Permanent Grass/Repair/Repair Rip Rap	
CONCRETE DRAINAGE STRUCTURES	-	Inspect	Inspect	Clean Sumps/Remove Debris/Repair/Replace	See Permanent Stormwater Facilities Maintenance Schedule on Drawing D-10	
DRAINAGE PIPES	-	Inspect	Inspect	Clean/Repair		
ACCESS ROAD / PAVEMENT	-	Inspect	Inspect	Clean	Clean	
SEDIMENT TRAPS / STORMWATER PONDS*	-	Inspect	Inspect	Clean/Mulch/Repair/Reseed	See Permanent Stormwater Facilities Maintenance Schedule on Drawing D-10	

\* Permanent vegetation is considered stabilized when 80% of the plant density is established. Erosion control measures shall remain in place until all disturbed areas are permanently stabilized.

1	1-20-20	REVISED FOR PLANNING BOARD SUBMISSION	JFR
NO.	DATE	REVISION	BY

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www.insite-eng.com

PROJECT: **DREW REALTY/SITEONE**

160 FIELDS LANE, TOWN OF SOUTHEAST, PUTNAM CO., NEW YORK

DRAWING: **DETAILS**

PROJECT NUMBER	19166.100	PROJECT MANAGER	J.J.C.
DATE	12-23-19	DRAWN BY	J.F.R.
SCALE	AS NOTED	CHECKED BY	J.L.L.

DRAWING NO. SHEET: **D-2** / 6

STATE OF NEW YORK PROFESSIONAL ENGINEER 19191

**POND EMBANKMENT CONSTRUCTION NOTES:**

- General Notes:**
- These notes are generally appropriate to all proposed onsite ponds. All references to ASTM and AASHTO specifications apply to the most recent version.
  - Site Preparation:**
    - Areas designated for borrow areas, pond embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 3:1. All trees shall be cleared and grubbed within 15 feet of the toe of the pond.
    - Areas to be covered by the ponds shall be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush, and stumps shall be cut approximately level with the ground surface.
    - All cleared and grubbed material in the location of the pond embankments shall be disposed of outside the limits of the embankment, emergency overflow and permanent pool of the pond to a natural impervious clay barrier. No tree clearing or grubbed material shall be used in the construction of any portion of the embankment and shall be disposed of in accordance with the sections. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

- Earth Fill:**
- The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Consideration may be given to the use of other materials in the embankment if designed by a geotechnical engineer. Such special designs must have construction supervised by a geotechnical engineer. If alternative material is proposed for construction, the Town Site Engineer and Highway Superintendent must approve the material.
  - Materials used in the embankment must have the capability to support vegetation at a density required to prevent erosion of embankment.
  - Areas on which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers which are to be continuous over the entire length of the fill. The most permeable borrow material shall be placed in the downstream portions of the embankment. The emergency overflow and / or weir overflows must be installed concurrently with fill placement and not excavated into the embankment.
  - The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of heavy equipment or compaction shall be achieved by a minimum of four complete passes of a sheepsfoot, rubber tired vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture to be moist to touch, but not so wet that water can be squeezed out.
  - The minimum required density shall not be less than 95% of maximum dry density with a moisture content within 2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction tests shall be performed in accordance with AASHTO Method T-99 (Standard Proctor). If the compaction tests for the remainder of the site improvements is using Modified Proctor (AASHTO T-100), then the minimum consistency on-site, modified proctor may be used in lieu of standard proctor (AASHTO T-99). The minimum required density using the modified proctor test method shall be at least 92% of maximum dry density with a moisture content of ±2% of the optimum.
  - For all stormwater management facilities, a geotechnical engineer must be present to verify compaction with the standard test method noted above. This information needs to be provided in a report to the design engineer, so that certification of the construction of the facility can be made.
  - If flowable fill is proposed, the methods must be discussed and approved by the Town of Gardiner Engineer and Highway Superintendent at the required preconstruction meeting.

- Structure Backfill:**
- Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material.
  - The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment as the material needs to fill completely all spaces under and adjacent to the pipe.
  - At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure and under no circumstances shall equipment be driven over any part of a concrete structure or pipe, unless there is a compacted fill of 24" or greater over the structure or pipe.
  - Structure backfill may be flowable fill.
  - The flowable fill mixture shall have a 100-200 psi, 28 day unconfined compressive strength and shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm.
  - Material shall be placed such that a minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be under (bedding), over, and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits.
  - Average slump of the fill shall be 7" to assure flowability of the material.
  - Adequate measures shall be taken (sand bags, etc.) to prevent flexing the pipe.
  - Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment and shall completely fill all voids adjacent to the flowable fill zone.
  - At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure and under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe.
  - Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for embankment materials.

- Pipe Conduits:**
- All pipes shall be circular in cross section.
  - Anti-seep collars shall be installed concurrently with the piping installation in accordance with the notes and details shown on the project plans.
  - The proposed pipe shall be corrugated High Density Polyethylene (HDPE) pipe, couplings and fittings shall conform to the following: 4" - 10" inch pipe shall meet the requirements of AASHTO M252 Type 5, and 12" through 48" inch shall meet the requirements of AASHTO M24 Type 5.
  - All pipe joints and connections to anti-seep collars shall be watertight.
  - The pipe shall be firmly and uniformly bedded throughout its entire length, where rock or soft, spongy or other unstable soil is encountered, such material shall be removed and replaced with suitable earth compacted to provide adequate support.
  - Backfilling of the pipes shall conform to "Structure Backfill" section above.

- Care of Water during Construction:**
- All work on permanent structures shall be carried out in areas free from water.
  - The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the work to be occupied by the permanent works.
  - The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the work area and for maintaining the excavations, foundation, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work.
  - After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent necessary to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure.
  - The removal of water from the required excavation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom required excavations and will allow satisfactory performance of all construction operations.
  - During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water sumps from which the water shall be pumped.

- Stabilization:**
- All exposed surfaces of the embankment, emergency overflow, spill and borrow areas, and berms shall be stabilized in accordance with the Erosion and Sediment Control Notes on the project plans.

**REQUIRED POST-CONSTRUCTION STORMWATER MANAGEMENT PRACTICE COMPONENTS:**

- Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-15-002), all construction projects needing a post-construction stormwater management practices shall prepare a SWPPP that also includes practices designed in conformance with the most current version of the technical standard, New York State Stormwater Management Design Manual (Design Manual). Where post-construction stormwater management practices are not designed in conformance with the technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of required SWPPP components is provided in accordance with Part III.B.2.a-1 and III.B.3.
  - Identification of all post-construction stormwater management practices to be constructed as part of the project. This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
  - A site map/construction drawing(s) showing the specific location and size of each post-construction stormwater management practice. This plan, and details/notes shown hereon serve to satisfy this SWPPP requirement.
  - A Stormwater Modeling and Analysis Report including pre-development conditions, post-development conditions, the results of the stormwater modeling, a summary table demonstrating that each practice has been designed in conformance with the design criteria, identification of and justification for any deviations from the Design Manual, and identification of any design criteria that are not required. The required analysis is provided in the report titled Amended Stormwater Pollution Prevention Plan for Kent Materials.
  - Soil testing results and locations. This SWPPP requirement is provided in the report titled Amended Stormwater Pollution Prevention Plan for Kent Materials.
  - Infiltration testing results. This SWPPP requirement is provided in the report titled Amended Stormwater Pollution Prevention Plan for Kent Materials.
  - An operations and maintenance plan that includes inspection and maintenance schedules and actions to ensure continuous and effective operation of each post-construction stormwater management practice. The plan shall identify the entity that will be responsible for the long term operation and maintenance of each practice. The Permanent Stormwater Facilities Maintenance Schedule provided on these plans serves to satisfy this requirement.

- Enhanced Phosphorus Removal Standards - Beginning on September 30, 2008, all construction projects identified in Table 2 of Appendix B that are located in the watersheds identified in Appendix C shall prepare a SWPPP that includes post-construction stormwater management practices designed in conformance with the Enhanced Phosphorus Removal Standards included in the most current version of the technical standard, New York State Stormwater Management Design Manual. At a minimum, the post-construction stormwater management practice component of the SWPPP shall include items 5.a - 2.f above. The permanent stormwater practices for this project have been sized according to chapter 10 of the Design Manual Enhanced Phosphorus Removal Standards. Please see 5.a - 2.f above.

**REQUIRED EROSION CONTROL SWPPP CONTENTS:**

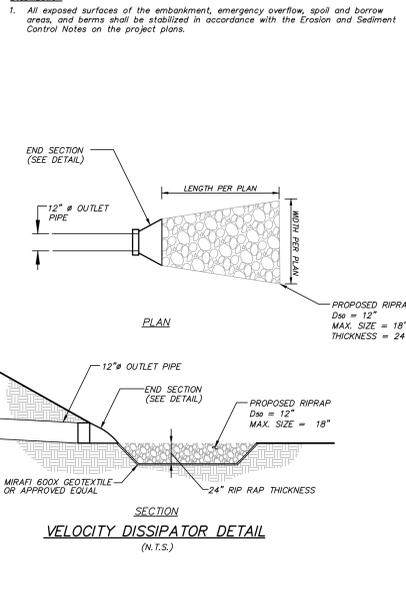
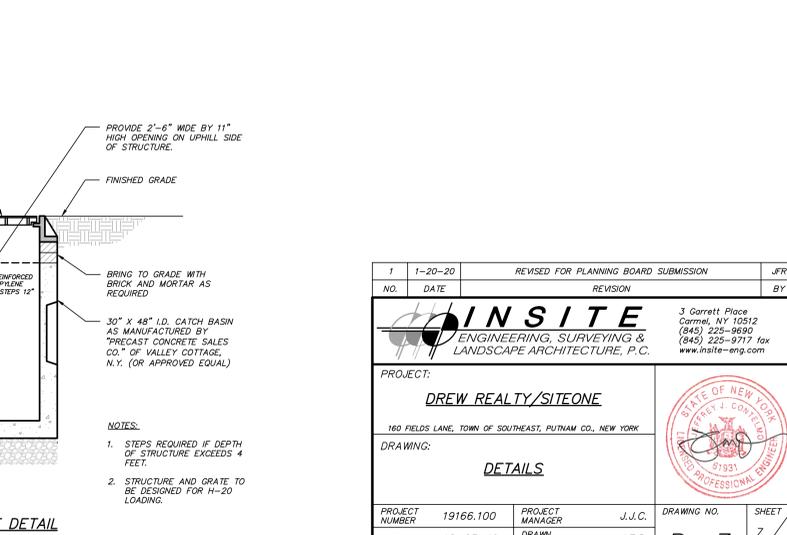
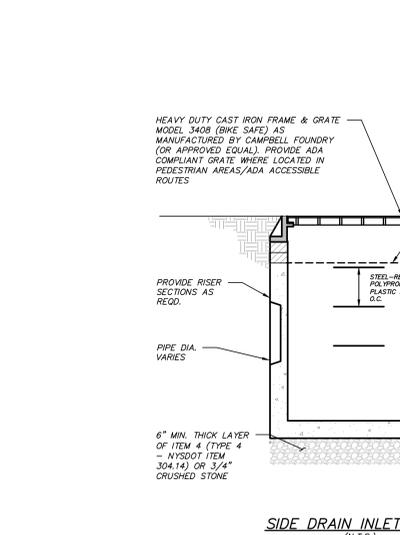
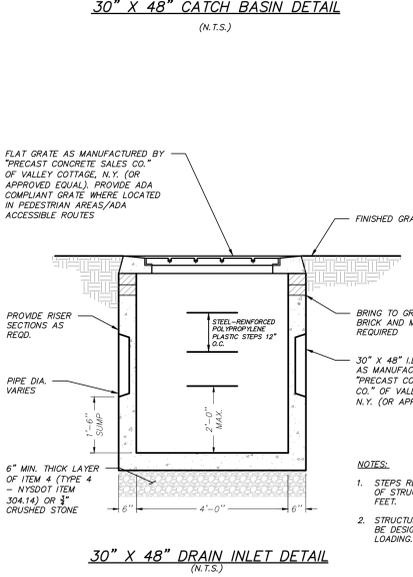
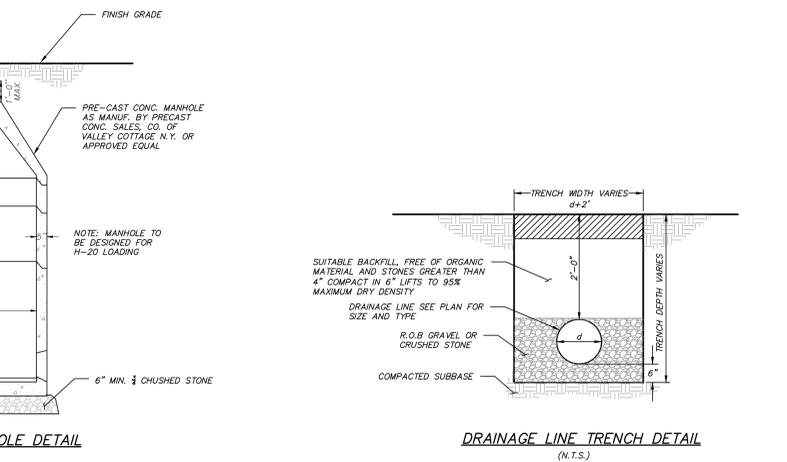
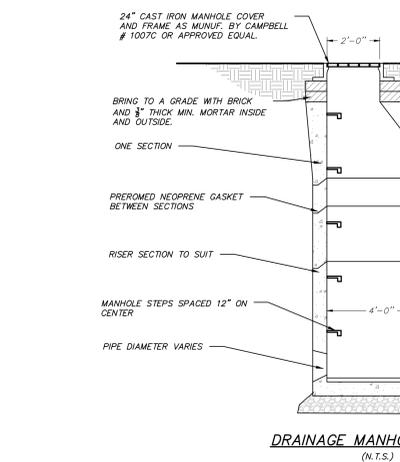
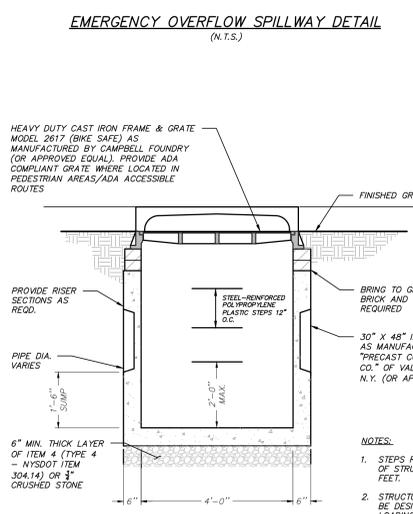
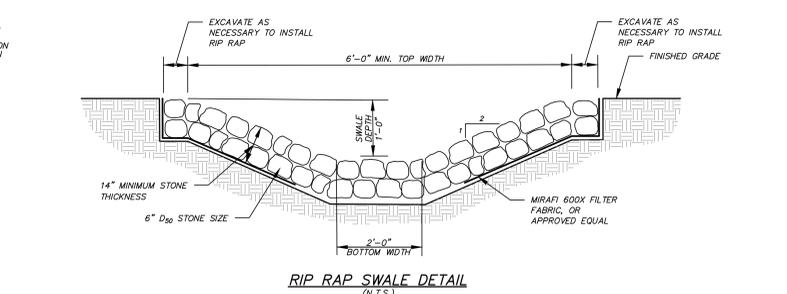
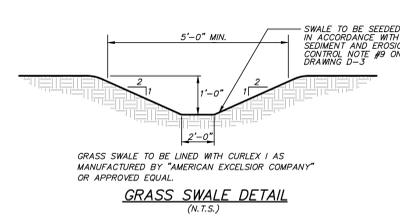
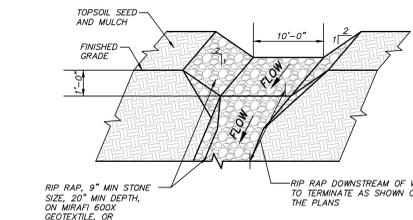
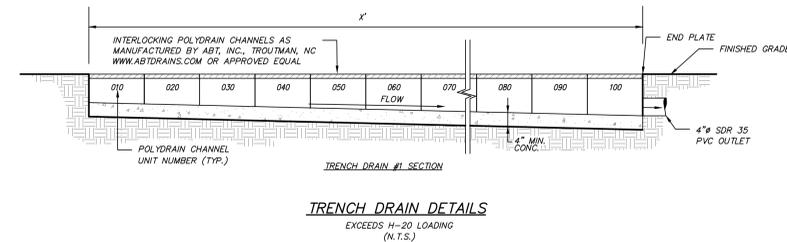
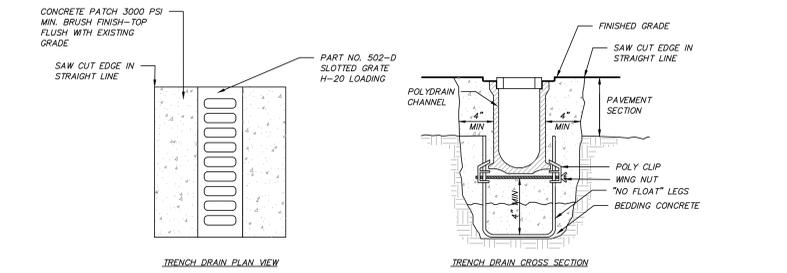
- Pursuant to the NYSDEC "SPDES General Permit for Stormwater Discharges from Construction Activity" (GP-0-15-002), all Stormwater Pollution Prevention Plans (SWPPP) shall include erosion and sediment control practices designed in conformance with the most current version of the technical standard, New York State Standards and Specifications for Erosion and Sediment Control. Where erosion and sediment control practices are not designed in conformance with this technical standard, the owner or operator must demonstrate equivalence to the technical standard. The following list of required SWPPP components is provided in accordance with Part III.B.1.a-1 of General Permit GP-0-15-002.

- Background information: The subject project consists of the construction of a commercial building and outdoor storage yard.
- Site map / construction drawing: These plans serve to satisfy this SWPPP requirement.
- Description of the soils present at the site: Onsite soils located within the proposed limits of disturbance consist of Chertfield-Chariton Complex (C6d), Chertfield-Chariton Complex (C7c), Chertfield-Holts-Rock outcrop complex (C1c), Fluvaquents-Udulfuents complex (F7) and Hickley Loamy Sand (H8b), as identified on the Soil Conservation Service Web Soil Survey. These soil types belong to the Hydrologic Soil Group "A", "B" and "D".
- Construction phasing plan / sequence of operations: The Construction Sequence and phasing found on these plans provide the required phasing. A Construction Sequence and Erosion and Sediment Control Maintenance Schedule has been provided. The Erosion and Sediment Control Notes contained hereon outline a general sequence of operations for the proposed project. In general all erosion and sediment control facilities shall be installed prior to commencement with land disturbing activities, and areas of disturbance shall be limited to the shortest period of time as practicable.
- Description of erosion and sediment control practices: This plan, and details / notes shown hereon serve to satisfy this SWPPP requirement.
- Temporary and permanent soil stabilization plan: The Sedimentation and Erosion Control Notes and Details provided hereon identify temporary and permanent stabilization measures to be employed with respect to specific elements of the project, and at the various stages of development.
- Site map / construction drawing: This plan serves to satisfy this SWPPP requirement.
- The dimensions, material specifications, installation details, and operation and maintenance requirements for all erosion and sediment control practices: The Details, Erosion and Sediment Control Notes, and Erosion and Sediment Control Maintenance Schedule serve to satisfy this SWPPP requirement.

- An inspection schedule: Inspections are to be performed twice weekly and by a qualified professional as required by the General Permit (GP-0-15-002). In addition the NYSDEC Trained Contractor shall perform additional inspections as cited in the Sedimentation and Erosion Control Notes.
- A description of pollution prevention measures that will be used to control litter, construction chemicals and construction debris: In general, all construction litter / debris shall be collected and removed from the site. The general contractor shall supply either waste barrels or dumpster for proper waste disposal. Any construction chemicals utilized during construction shall either be removed from site daily by the contractor or stored in a structurally sound and weatherproof building. No hazardous waste shall be disposed of onsite, and shall ultimately be disposed of in accordance with all federal, state and local regulations. Material Safety Data Sheets (MSDS), material inventory, and emergency contact numbers shall be maintained by the general contractor for all construction chemicals utilized onsite. Finally, temporary sanitary facilities (portable toilets) shall be provided onsite during the entire length of construction, and inspected weekly for evidence of leaking holding tanks.
- A description and location of any stormwater discharges associated with industrial activities other than construction at the site: There are no known industrial stormwater discharges present or proposed at the site.
- Identification of any elements of the design that are not in conformance with the technical standard, New York State Standards and Specifications for Erosion and Sediment Control: All proposed elements of this SWPPP have been designed in accordance with the "New York State Standards and Specifications for Erosion and Sediment Control."

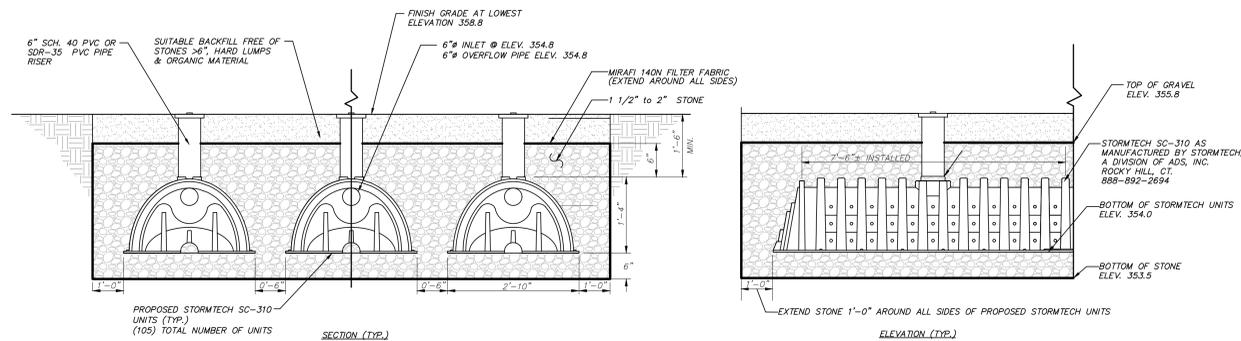
PRACTICE/FACILITY	MONTHLY	AFTER MAJOR STORM EVENTS	BI-ANNUALLY	YEARLY	EVERY 5 TO 10 YEARS
GRASS & RIP RAP SWALES	Ensure contributing areas clean of debris, no evidence of erosion, & mowing performed.	Inspect for erosion, soil permeability, & evidence of flow going around structures.	-	Inspect & clean accumulated sediment.	-
INFILTRATION BASIN	Inspect first few months after construction for eroding soils & slumpage & repair immediately.	Inspect for eroding soils on the basin berm & embankments, & sources of erosion; & stabilize and/or repair immediately.	How berms and exterior embankments. Remove debris & litter from basins & outlet structures. Remove Sediment if accumulated greater than an 1".	-	Inspect for & remove accumulated sediment
INFILTRATION UNITS	-	Confirm infiltrators de-water within 40 hours	Inspect & clean	Inspect outlet structures & remove accumulated sediment	Clean infiltrator row per manufactures recommendations
SUBSURFACE STORMWATER COLLECTION SYSTEMS	-	-	Inspect & clean	Inspect, clean, repair and/or replace structures. Remove debris.	-
STORMWATER BASIN	Inspect first few months after construction for eroding soils & slumpage & repair immediately.	Inspect orifices, inlets & outlets for clogging, eroding soils on the basin berm & embankments, & sources of erosion, & stabilize and/or repair immediately.	Inspect for damage to frame and grates, and pipe inlets/outlets. Clean accumulated sediment in sump.	-	Inspect for & remove accumulated sediment
DEEP SUMP CATCH BASINS	-	-	-	-	-
GRASS SWALES	Inspect first few months after construction for eroding soils & slumpage & repair immediately.	-	Inspect & clean Mow & remove debris & litter. Revegetate as needed.	-	Inspect for & remove accumulated sediment

Note: The party responsible for implementation of the maintenance schedule during and after construction is:  
 DREW REALTY, LLC  
 120 FIELDS LANE  
 BREWSTER, NY 10509  
 DURKIN WATER CO.  
 P.O. BOX 372  
 BREWSTER, NY 10509  
 and/or the current owner(s) of the subject property.

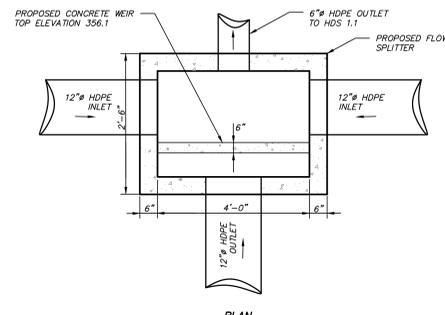


1	1-20-20	REVISED FOR PLANNING BOARD SUBMISSION	JFR
NO.	DATE	REVISION	BY
PROJECT: 160 FIELDS LANE, TOWN OF SOUTHWEST, PUTNAM CO., NEW YORK			
DRAWING: DETAILS			
PROJECT NUMBER	19166.100	PROJECT MANAGER	J.J.C.
DATE	12-23-19	DRAWN BY	J.F.R.
SCALE	AS NOTED	CHECKED BY	J.L.L.
DRAWING NO.			SHEET
D-3			7
			8

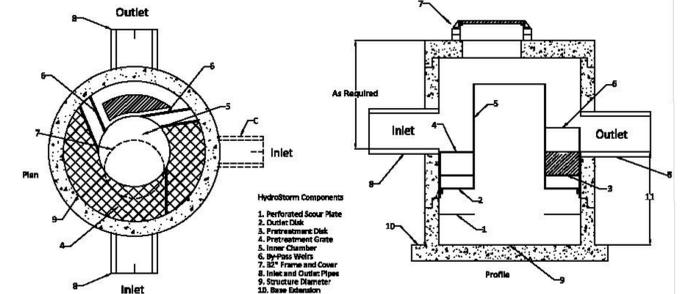
ALTERATION OF THIS DOCUMENT, UNLESS UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, IS A VIOLATION OF SECTION 2209 OF ARTICLE 145 OF THE EDUCATION LAW.



**STORMWATER INFILTRATION SYSTEM 1.1 INF (NYSDEC DESIGN I-4) DETAIL**  
(N.T.S.)



**FLOW SPLITTER FS 1.1 DETAIL**  
(N.T.S.)

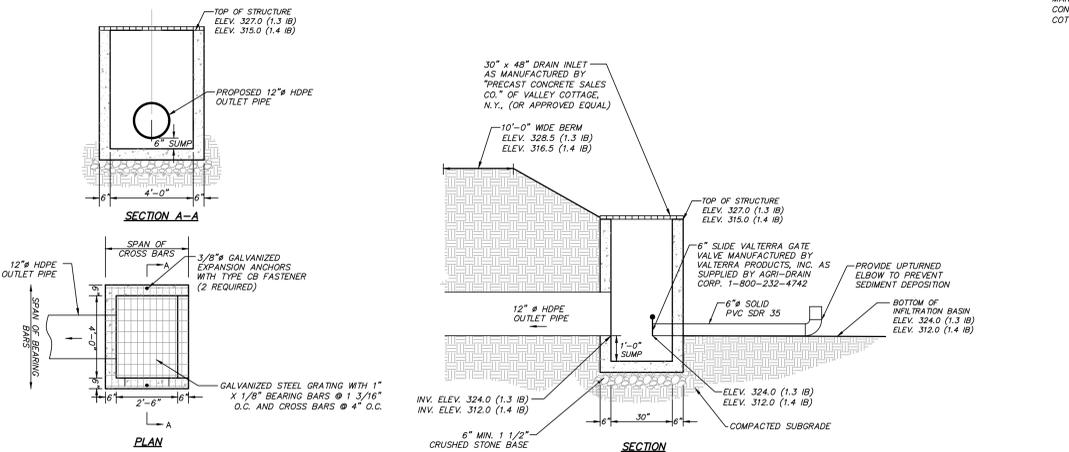


**HydroStorm Dimensions / Capacities**

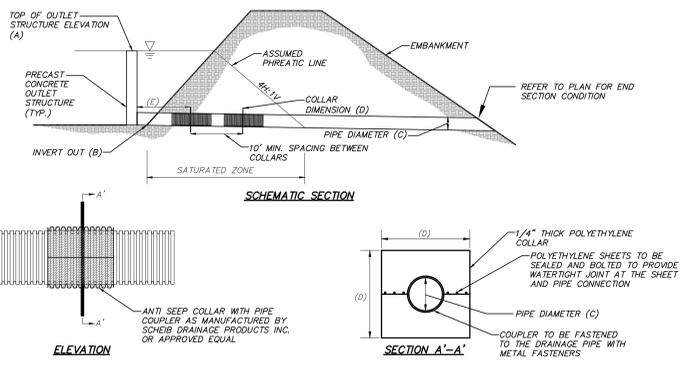
Model	Diameter (ft)	Sample Depth (ft)	Inner Chamber (ft)	Max. Flow (ft³)	Volume (gal)	Of (ft)	Setback (ft)
HS 4	4	4	2	24	375	35	30
HS 5	5	4	2.5	30	485	35	45
HS 6	6	4	3	36	645	220	65

- HydroStorm Components**
1. Perforated Scur Plate
  2. Outlet Dike
  3. Pre-treatment Grate
  4. Inlet Chamber
  5. By-Pass Weir
  6. 12" Frame and Cover
  7. Inlet and Outlet Pipes
  8. Structure Diameter
  9. Base Extension
  10. Sump Depth
- Notes:**
- Use a headloss K factor of 1.04 for hydraulic gradient calculations.
  - Sample depths shown are minimum. Additional depth can be added for site specific capacities.
  - Multiple line flows allowed.
  - Drop or lower.
  - Inlet elevations should be the same or higher than the outlet invert elevation. It can be up to 12" lower than outlet if pre-treatment area is certified but 12" must be added to sump depth to maintain overall treatment volume.
  - 12" cover shown. HydroStorm can be detailed with an 18" grate if required.
  - On capacities given are used on plan. All should be covered from the unit once an oil depth of 2" or more is measured in the year.
  - Sediment depths are maximum holding capacities and not recommended capacities for regular maintenance. Maintenance is recommended annually or every 2 years.
  - Capacities are rounded down to nearest 5 gal or ft³.
- HydroStorm by Hydroworks, LLC  
Patent Pending  
www.hydroworks.com  
888-290-7900

**HYDROWORKS HYDROSTORM HYDRODYNAMIC SEPARATOR DETAIL**  
(N.T.S.)



**INFILTRATION BASIN 1.3 IB & 1.4 IB OUTLET STRUCTURE DETAIL (NYSDEC DESIGN I-2)**  
(N.T.S.)



**ANTI-SEEP COLLAR DETAIL**  
(N.T.S.)

Outlet Structure	Top of Outlet Structure Elevation (A)	Invert Out Elevation (B)	Pipe Diameter (Inches) (C)	Collar Dimension (Ft.) (D)	Number of Collars Required	Distance from Outlet Structure to First Collar (E)
OS 1.3 EDB	333.0	327.0	15"	6'-0"	2	5'
OS 1.3 IB	327.0	324.0	12"	4'-0"	2	5'
OS 1.4 EDB	321.0	315.0	15"	5'-3"	2	7'
OS 1.4 IB	315.0	312.0	12"	4'-0"	1	5'

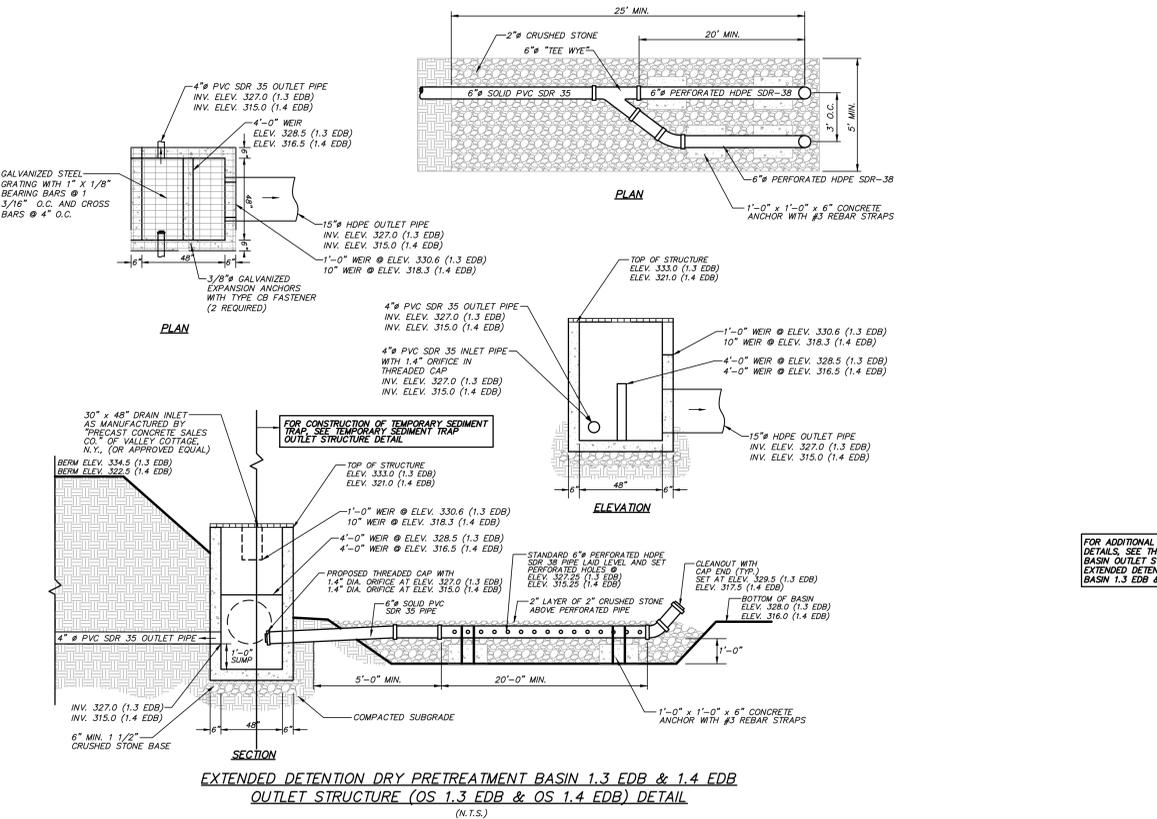
**EXTENDED DETENTION DRY PRETREATMENT BASIN & INFILTRATION BASIN OUTLET NOTES**

1. THE BASINS ARE PROPOSED TO BE UTILIZED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION.
2. AFTER THE CONTRIBUTING AREAS TO THE BASINS HAVE BEEN PERMANENTLY STABILIZED, THE FOLLOWING SHALL BE ACCOMPLISHED:  
A. CLEAN BASIN AND OUTLET STRUCTURE AND REMOVE 6" PERFORATED VERTICAL RISER PIPE, CRUSHED STONE AND FILTER FABRIC.  
B. ADD THREADED CAP WITH ORIFICE AT DISCHARGE END OF 6" SOLID PVC SDR 35 PIPES PER DETAIL.  
C. REPLACE THE PERFORATED PIPE AND CRUSHED STONE. DO NOT REPLACE FILTER FABRIC.  
D. ESTABLISH THE FINAL VEGETATION IN THE BASIN IN ACCORDANCE WITH THE TYPICAL DRY STORMWATER / INFILTRATION BASIN PLANTING DETAIL.

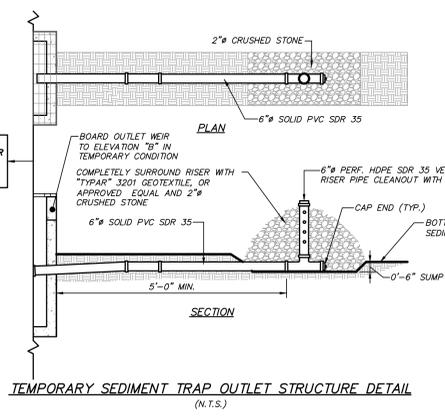
**FOR INFILTRATION BASINS 1.3 IB & 1.4 IB**

- A. INFILTRATION BASIN CONSTRUCTED IN ITS FINAL CONDITION PER THE DETAILS SHOWN HEREON DURING INITIAL PHASES OF CONSTRUCTION AND STABILIZED.
- B. ALL FLOW SHALL BE DIVERTED AWAY FROM THE BASIN UNTIL ALL CONTRIBUTING AREAS HAVE BEEN STABILIZED IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL NOTES.
- C. UPON COMPLETE STABILIZATION OF ALL CONTRIBUTING AREAS AND CONVERSION OF THE TEMPORARY SEDIMENT TRAP TO THE PERMANENT EXTENDED DETENTION DRY PRETREATMENT STORMWATER BASIN, DIRECT ALL TO INFILTRATION BASIN.

3. FOLLOWS: \* WHEN INITIALLY USED AS THE TEMPORARY SEDIMENT BASIN, DEWATERING DEVICE THE RISER SHALL BE WRAPPED WITH TYRAP 3201 GEOTEXTILE OR APPROVED EQUAL AND SURROUNDED WITH 2" STONE. THE TOP OF THE RISER SHALL BE SET AT THE SAME ELEVATION AS THE WEIRS AS SHOWN IN THE STORMWATER BASIN OUTLET STRUCTURE DETAILS.



**EXTENDED DETENTION DRY PRETREATMENT BASIN 1.3 EDB & 1.4 EDB OUTLET STRUCTURE (OS 1.3 EDB & OS 1.4 EDB) DETAIL**  
(N.T.S.)



**TEMPORARY SEDIMENT TRAP OUTLET STRUCTURE DETAIL**  
(N.T.S.)

Outlet Structure	Bottom of Temporary Sediment Trap (A)	Board Outlet Weir Elevation (B)
OS 1.3 EDB	329.0	331.2
OS 1.4 EDB	317.0	318.8

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1	1-20-20	REVISED FOR PLANNING BOARD SUBMISSION	JFR
NO.	DATE	REVISION	BY

**INSITE**  
ENGINEERING, SURVEYING & LANDSCAPE ARCHITECTURE, P.C.

3 Garrett Place  
Carmel, NY 10512  
(845) 225-9690  
(845) 225-9717 fax  
www.insite-eng.com

PROJECT: **DREW REALTY/SITEONE**

160 FIELDS LANE, TOWN OF SOUTHEAST, PUTNAM CO., NEW YORK

DRAWING: **DETAILS**

PROJECT NUMBER	19166.100	PROJECT MANAGER	J.J.C.	DRAWING NO.	SHEET
DATE	12-23-19	DRAWN BY	J.F.R.	<b>D-4</b>	8
SCALE	AS NOTED	CHECKED BY	J.L.L.		8