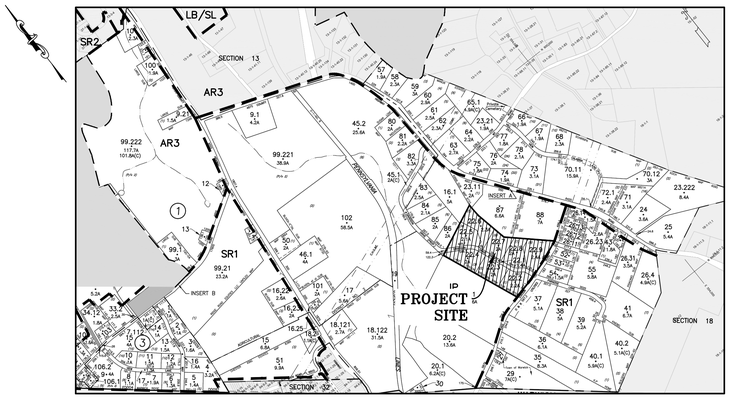
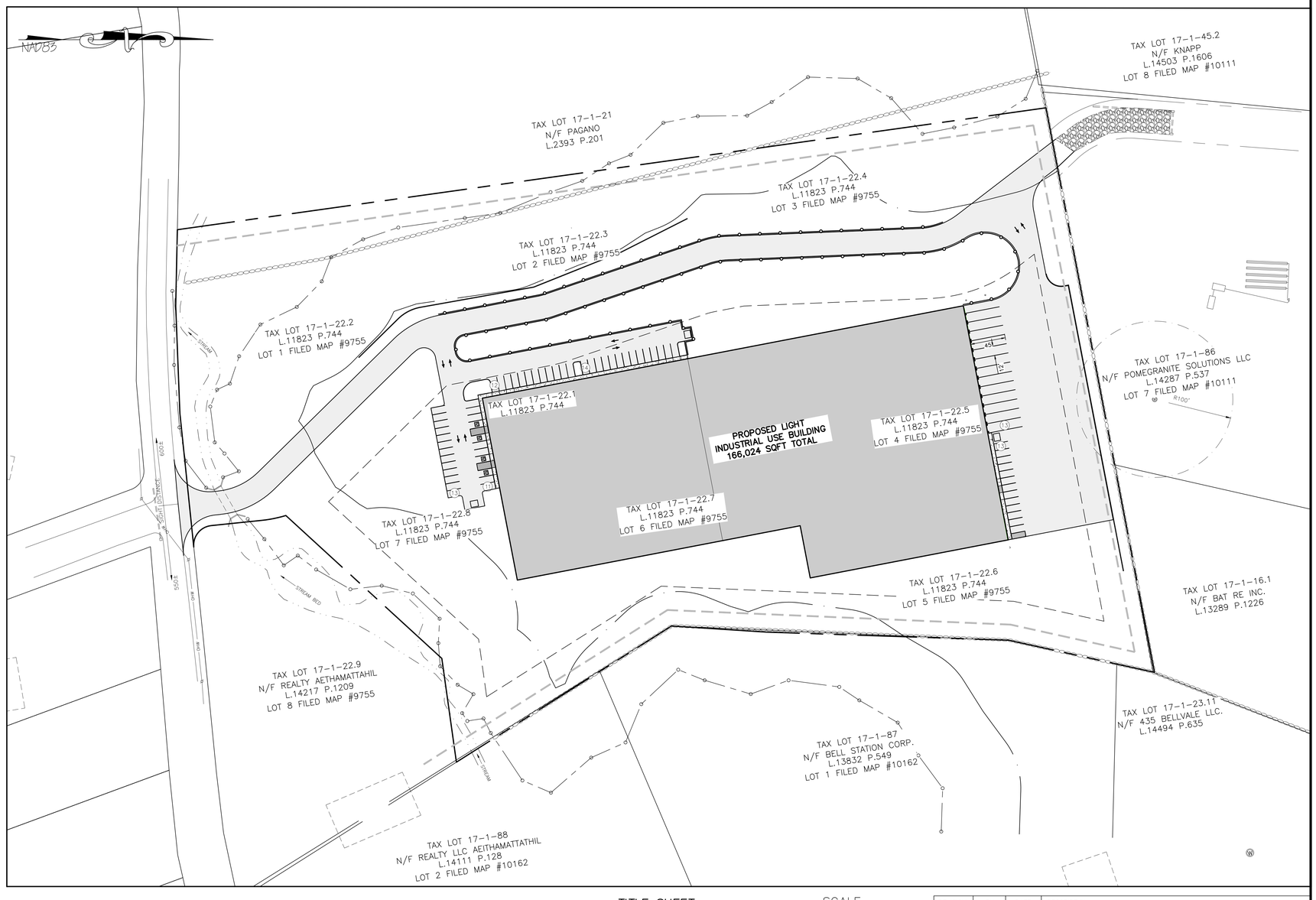
SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, ORANGE COUNTY, NY.



LOCATION MAP
SCALE: 1"=400'
SOURCE: TAX MAPS



TITLE SHEET
SCALE:1"=60'

SCALE
60 0 30 60 120
SCALE FEET

TAX MAP NUMBER

SECTION: 17
BLOCK: 1
LOT: 22.1, 22.2, 22.3, 22.4, 22.5, 22.6, 22.7, 22.8

DEED REFERENCE

LIBER: 14568
PAGE: 351

TOTAL TRACT AREA

699,971± S.F.
= 16.07± ACRES

OWNER & APPLICANT

DAVIDSON DRIVE HOLDINGS, LLC
99 FOREST ROAD UNIT 103
MONROE, NY 10950

DRAWING LIST

SHEET #	SHEET TITLE	ORIGINAL DATE/ LAST REVISED DATE
01 OF 20	TITLE SHEET	2-17-21/12-2-21
02 OF 20	EXISTING CONDITIONS MAP	2-17-21/12-2-21
03 OF 20	SLOPE ANALYSIS	2-17-21/12-2-21
04 OF 20	SITE PLAN	2-17-21/12-2-21
05 OF 20	GRADING & UTILITY PLAN	2-17-21/12-2-21
06 OF 20	DRIVEWAY PROFILES	2-17-21/12-2-21
07 OF 20	SECTION A-A	2-17-21/12-2-21
08 OF 20	DRAINAGE PROFILES 1	2-17-21/12-2-21
09 OF 20	DRAINAGE PROFILES 2	2-17-21/12-2-21
10 OF 20	EROSION AND SEDIMENT CONTROL PLAN	2-17-21/12-2-21
11 OF 20	EROSION AND SEDIMENT CONTROL DETAILS	2-17-21/12-2-21
12 OF 20	LIGHTING PLAN	2-17-21/12-2-21
13 OF 20	LANDSCAPING PLAN	2-17-21/12-2-21
14 OF 20	LANDSCAPING DETAILS	2-17-21/12-2-21
15 OF 20	TRUCK TURNING DIAGRAM	2-17-21/12-2-21
16 OF 20	TRUCK TURNING DIAGRAM – INTERSECTION 1	2-17-21/12-2-21
17 OF 20	TRUCK TURNING DIAGRAM – INTERSECTION 2	2-17-21/12-2-21
18 OF 20	SDS DETAILS	2-17-21/12-2-21
19 OF 20	CONSTRUCTION DETAILS	2-17-21/12-2-21
20 OF 20	STORMWATER CONSTRUCTION DETAILS	2-17-21/12-2-21

REVISION	BY	DATE	DESCRIPTION
4.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
3.	MM	9/16/21	PREPARATION OF PRELIMINARY PLANS
2.	MM	5/19/21	REVISION PER PB MTG. & COMMENT LETTERS
1.	MM	3/23/21	ROAD LAYOUT REVISION PER PB MTG.

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET

TOWN OF CHESTER PLANNING BOARD APPROVAL

OWNER'S CONSENT NOTE:
THE UNDERSIGNED OWNERS OF THE PROPERTY HEREON STATE THAT THEY ARE FAMILIAR WITH THIS PLAN, ITS CONTENTS AND ITS LEGENDS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON AND TO THE FILING OF THIS PLAN IN THE OFFICE OF THE CLERK OF THE COUNTY OF ORANGE, IF SO REQUIRED.

SIGNATURE OF OWNER(S) DATE

ARDEN CONSULTING ENGINEERS, PLLC
P.O. BOX 340 MONROE, N.Y.
T: 845-782-8114 E: MAM@ARDENCONSULTING.NET

STATE OF NEW YORK · MICHAEL A. MORGANTE · 078577 · LICENSED PROFESSIONAL ENGINEER
MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

TITLE SHEET

JOB#: 20-030
SCALE: AS NOTED
DATE: 2-17-21
DRAWN: MM
CHECKED: MM
SHEET NO. 01 OF 20

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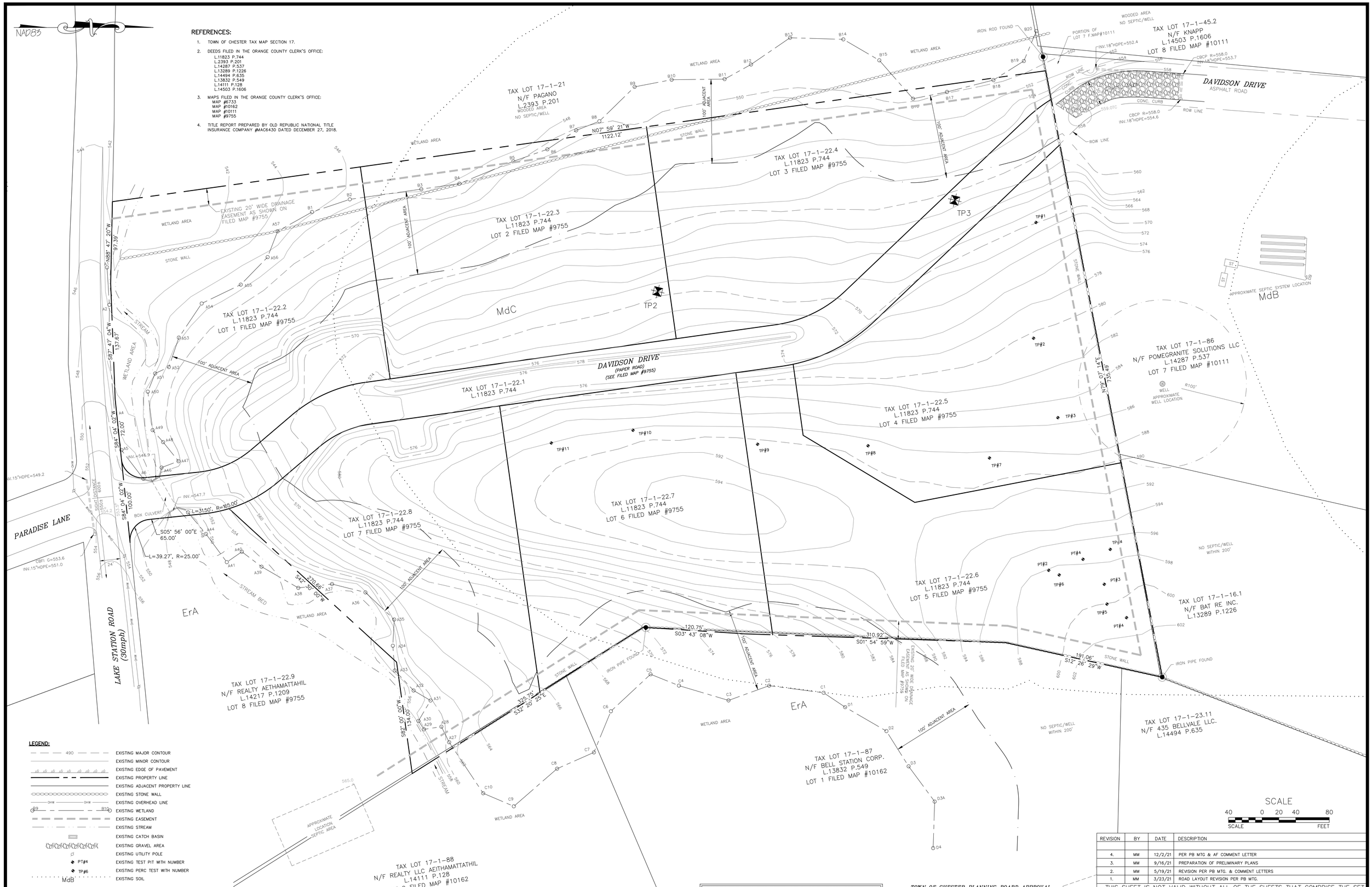
NAD83

REFERENCES:

1. TOWN OF CHESTER TAX MAP SECTION 17.
2. DEEDS FILED IN THE ORANGE COUNTY CLERK'S OFFICE:
   L.11823 P.744
   L.2393 P.201
   L.14287 P.537
   L.13289 P.1226
   L.14494 P.635
   L.13832 P.549
   L.14111 P.128
   L.14503 P.1606
3. MAPS FILED IN THE ORANGE COUNTY CLERK'S OFFICE:
   MAP #6733
   MAP #10162
   MAP #10111
   MAP #9755
4. TITLE REPORT PREPARED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY #MAC6430 DATED DECEMBER 27, 2018.



LEGEND:

490	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING EDGE OF PAVEMENT
	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE
	EXISTING STONE WALL
OHW	EXISTING OVERHEAD LINE
B9 B10	EXISTING WETLAND
	EXISTING EASEMENT
	EXISTING STREAM
	EXISTING CATCH BASIN
	EXISTING GRAVEL AREA
Ø	EXISTING UTILITY POLE
PT#4	EXISTING TEST PIT WITH NUMBER
TP#6	EXISTING PERC TEST WITH NUMBER
MdB	EXISTING SOIL

THERE ARE NO 100 YEAR FLOODPLAIN BOUNDARIES ON THE SUBJECT PARCEL

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EXISTING CONDITIONS MAP
SCALE: 1"=40'

NYSDEC FRESHWATER WETLAND BOUNDARY VALIDATION

The freshwater wetland boundary as represented on these plans accurately depicts the limits of Freshwater Wetland MO-3 as delineated by Michael Nowicki on August 18, 2021 and confirmed by Michael Frautz of the NYSDEC on August 25, 2021 and mapped by Heritage Land Surveying, P.C.

DEC Staff: Michael Frautz Surveyor/Engineer: HERITAGE LAND SURVEYING, P.C.

Date Valid: August 25, 2021 Expiration Date: August 25, 2026 SEAL

Wetland boundary delineations as validated by the New York State Department of Environmental Conservation remain valid for five (5) years **unless** existing exempt activities, area hydrology, or land use practices change (e.g., agricultural to residential). **After five (5) years the boundary must be revalidated by DEC Staff.** Revalidation may include a new delineation and survey of the wetland boundary.

Any proposed construction, grading, filling, excavating, clearing or other regulated activity in the freshwater wetland or within 100 feet of the wetland boundary as depicted on this plan requires a permit from the NYS Department of Environmental Conservation under Article 24 of the Environmental Conservation Law (Freshwater Wetlands Act) prior to commencement of work.

TOWN OF CHESTER PLANNING BOARD APPROVAL

SCALE
40 0 20 40 80
SCALE FEET

REVISION	BY	DATE	DESCRIPTION
4.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
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DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

EXISTING CONDITIONS MAP

JOB#: 20–030
SCALE: AS NOTED
DATE: 2–17–21
DRAWN: MM
CHECKED: MM
SHEET NO. 02 OF 20

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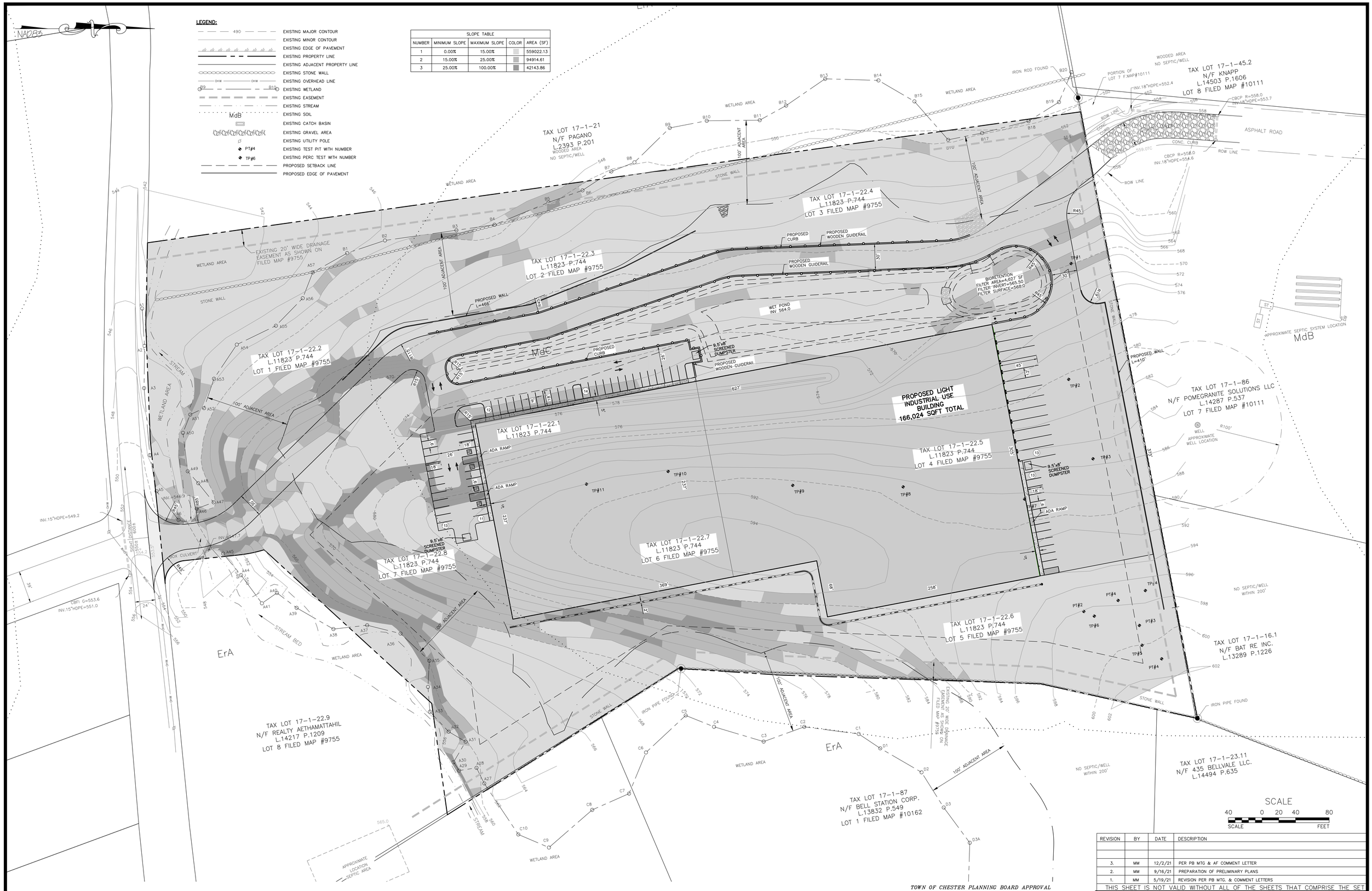
LEGEND:

- 490 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING STONE WALL
- OHW — EXISTING OVERHEAD LINE
- B9 — B10 EXISTING WETLAND
- EXISTING EASEMENT
- EXISTING STREAM
- MdB EXISTING SOIL
- EXISTING CATCH BASIN
- EXISTING GRAVEL AREA
- EXISTING UTILITY POLE
- PT#4 EXISTING TEST PIT WITH NUMBER
- TP#6 EXISTING PERC TEST WITH NUMBER
- PROPOSED SETBACK LINE
- PROPOSED EDGE OF PAVEMENT

SLOPE TABLE				
NUMBER	MINIMUM SLOPE	MAXIMUM SLOPE	COLOR	AREA (SF)
1	0.00%	15.00%		559022.13
2	15.00%	25.00%		94914.61
3	25.00%	100.00%		42143.86



SLOPE ANALYSIS
SCALE: 1"=40'

REVISION	BY	DATE	DESCRIPTION
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SLOPE ANALYSIS

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SHEET NO. 03 OF 20

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NAD83

TABLE OF ZONING REQUIREMENTS:

ZONE IP (LIGHT ENTERPRISE)
LIGHT INDUSTRIAL USE BUILDING

LOT DIMENSIONS

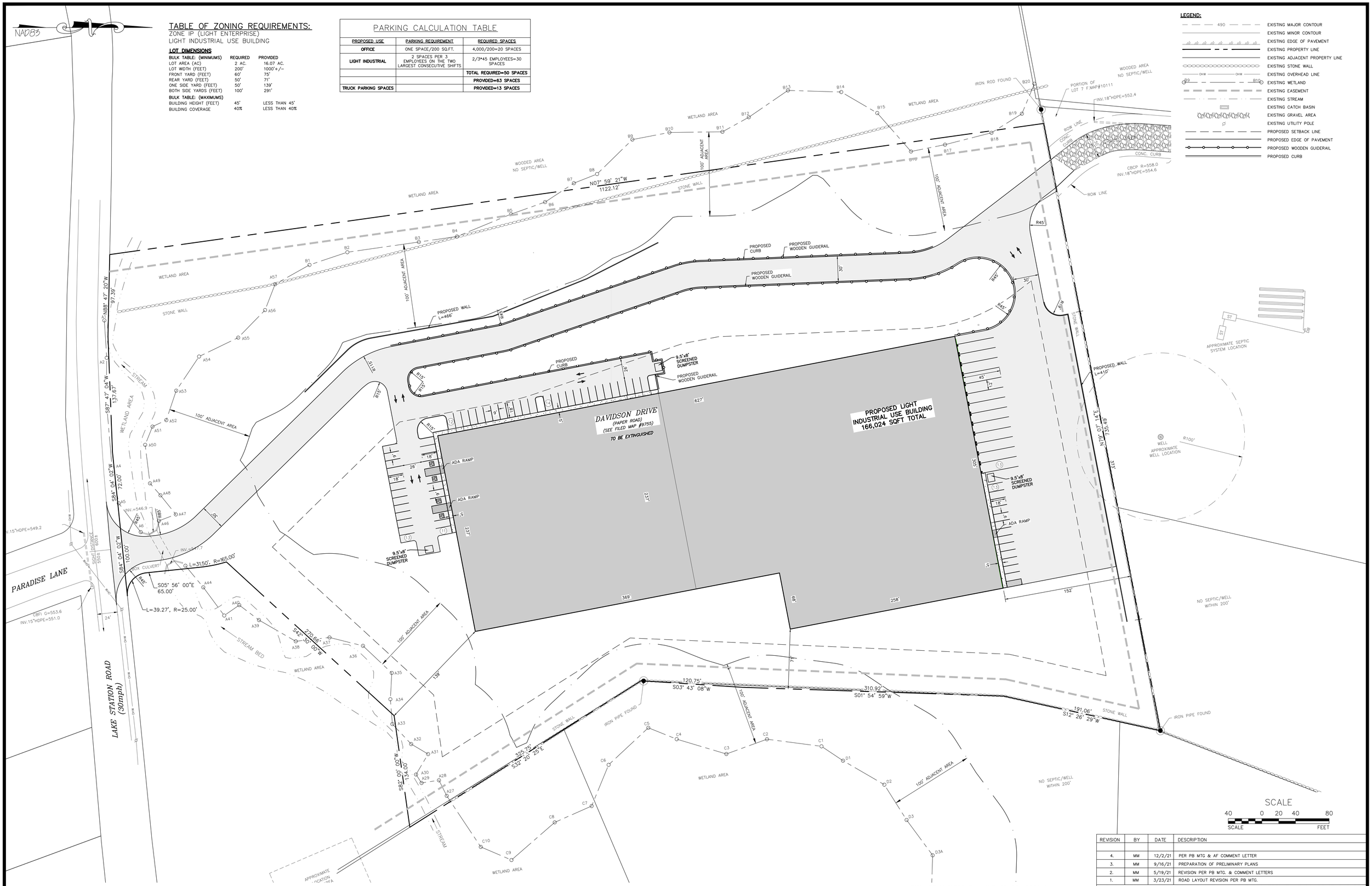
BULK TABLE: (MINIMUMS)	REQUIRED	PROVIDED
LOT AREA (AC)	2 AC.	16.07 AC.
LOT WIDTH (FEET)	200'	1000'+/-
FRONT YARD (FEET)	60'	75'
REAR YARD (FEET)	50'	71'
ONE SIDE YARD (FEET)	50'	139'
BOTH SIDE YARDS (FEET)	100'	291'
BULK TABLE: (MAXIMUMS)		
BUILDING HEIGHT (FEET)	45'	LESS THAN 45'
BUILDING COVERAGE	40%	LESS THAN 40%

PARKING CALCULATION TABLE

PROPOSED USE	PARKING REQUIREMENT	REQUIRED SPACES
OFFICE	ONE SPACE/200 SQ.FT.	4,000/200=20 SPACES
LIGHT INDUSTRIAL	2 SPACES PER 3 EMPLOYEES ON THE TWO LARGEST CONSECUTIVE SHIFTS	2/3*45 EMPLOYEES=30 SPACES
		TOTAL REQUIRED=50 SPACES
		PROVIDED=63 SPACES
TRUCK PARKING SPACES		PROVIDED=13 SPACES

LEGEND:

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING STONE WALL
- EXISTING OVERHEAD LINE
- EXISTING WETLAND
- EXISTING EASEMENT
- EXISTING STREAM
- EXISTING CATCH BASIN
- EXISTING GRAVEL AREA
- EXISTING UTILITY POLE
- PROPOSED SETBACK LINE
- PROPOSED EDGE OF PAVEMENT
- PROPOSED WOODEN GUIDERAIL
- PROPOSED CURB



SITE PLAN
SCALE: 1"=40'

REVISION	BY	DATE	DESCRIPTION
4.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
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SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

SITE PLAN

JOB#:	20-030
SCALE:	AS NOTED
DATE:	2-17-21
DRAWN:	MM
CHECKED:	MM
SHEET NO.	04 OF 20

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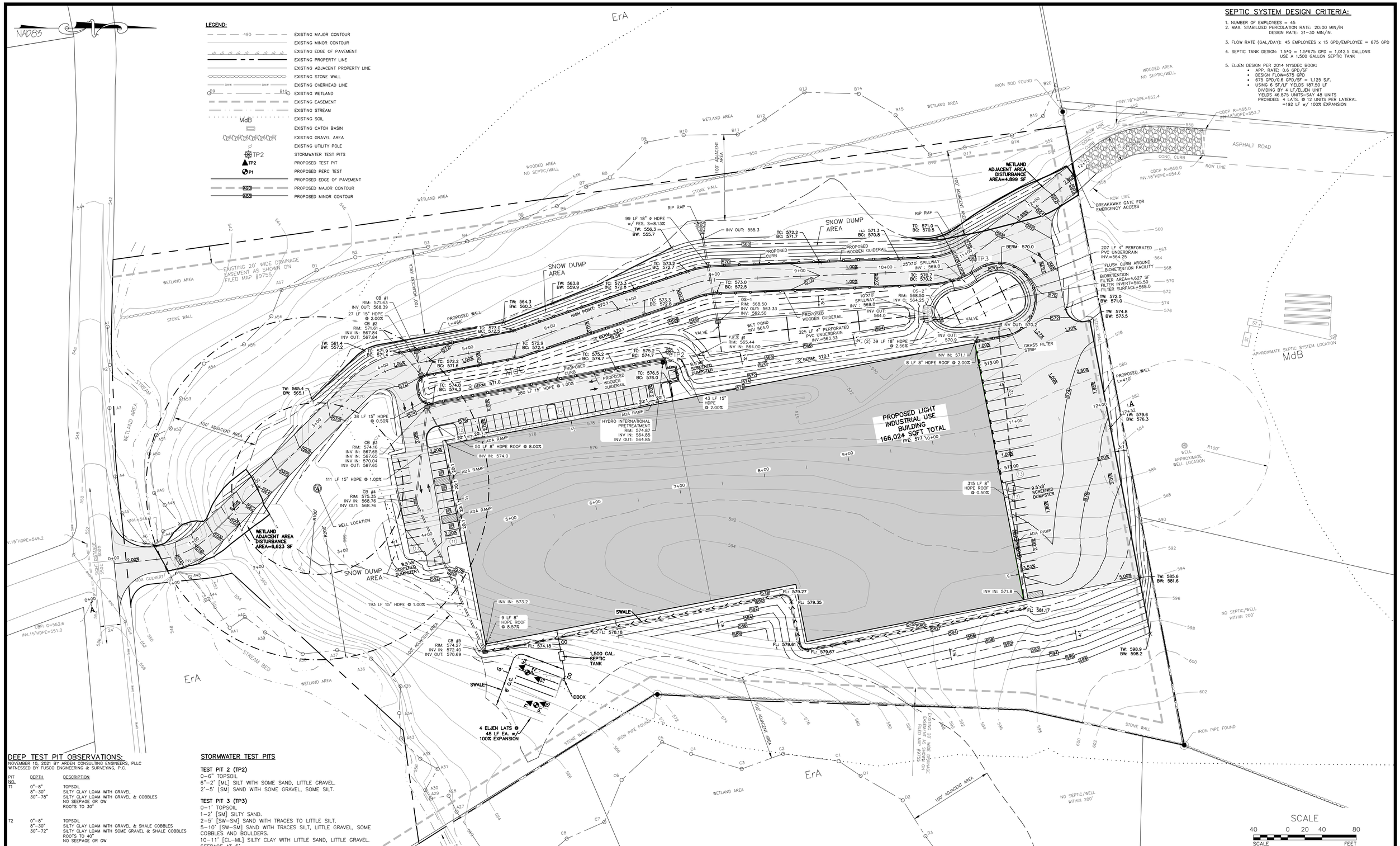

SEPTIC SYSTEM DESIGN CRITERIA:

1. NUMBER OF EMPLOYEES = 45
2. MAX. STABILIZED PERCOLATION RATE: 20:00 MIN/IN
   DESIGN RATE: 21–30 MIN/IN.
3. FLOW RATE (GAL/DAY): 45 EMPLOYEES x 15 GPD/EMPLOYEE = 675 GPD
4. SEPTIC TANK DESIGN: 1.5*Q = 1.5*675 GPD = 1,012.5 GALLONS
   USE A 1,500 GALLON SEPTIC TANK
5. ELJEN DESIGN PER 2014 NYSDEC BOOK:
   - APP. RATE: 0.6 GPD/SF
   - DESIGN FLOW=675 GPD
   - 675 GPD/0.6 GPD/SF = 1,125 S.F.
   - USING 6 SF/LF YIELDS 187.50 LF
     DIVIDING BY 4 LF/ELJEN UNIT
     YIELDS 46.875 UNITS–SAY 48 UNITS
     PROVIDED: 4 LATS. @ 12 UNITS PER LATERAL
     =192 LF w/ 100% EXPANSION

DEEP TEST PIT OBSERVATIONS:

NOVEMBER 10, 2021 BY ARDEN CONSULTING ENGINEERS, PLLC
WITNESSED BY FUSCO ENGINEERING & SURVEYING, P.C.

PIT NO.	DEPTH	DESCRIPTION
T1	0"–8"	TOPSOIL
	8"–30"	SILTY CLAY LOAM WITH GRAVEL
	30"–78"	SILTY CLAY LOAM WITH GRAVEL & COBBLES NO SEEPAGE OR GW ROOTS TO 30"
T2	0"–8"	TOPSOIL
	8"–30"	SILTY CLAY LOAM WITH GRAVEL & SHALE COBBLES
	30"–72"	SILTY CLAY LOAM WITH SOME GRAVEL & SHALE COBBLES ROOTS TO 40" NO SEEPAGE OR GW

STORMWATER TEST PITS

TEST PIT 2 (TP2)
0–6" TOPSOIL
6"–2' [ML] SILT WITH SOME SAND, LITTLE GRAVEL.
2'–5' [SM] SAND WITH SOME GRAVEL, SOME SILT.

TEST PIT 3 (TP3)
0–1' TOPSOIL
1–2' [SM] SILTY SAND.
2–5' [SW–SM] SAND WITH TRACES TO LITTLE SILT.
5–10' [SW–SM] SAND WITH TRACES SILT, LITTLE GRAVEL, SOME COBBLES AND BOULDERS.
10–11' [CL–ML] SILTY CLAY WITH LITTLE SAND, LITTLE GRAVEL.
SEEPAGE AT 5'

PERCOLATION TEST RESULTS

NOVEMBER 10, 2021
CONDUCTED BY ARDEN CONSULTING ENGINEERS, PLLC
WITNESSED BY FUSCO ENGINEERING & SURVEYING, P.C.

HOLE NO.	RUN	START	END	TIME (MIN)	DROP (INCHES)
P1	1	10:20:50	10:21:26	0:36	1
	2	10:21:41	10:22:26	0:45	1
	3	10:23:56	10:24:50	0:54	1
	4	10:25:07	10:25:59	0:52	1
	5	10:26:16	10:27:18	1:02	1

HOLE NO.	RUN	START	END	TIME (MIN)	DROP (INCHES)
P2	1	10:09:52	10:10:29	0:37	1
	2	10:10:47	10:11:39	0:52	1
	3	10:11:54	10:12:57	1:03	1
	4	10:13:25	10:14:24	0:59	1
	5	10:14:56	10:15:56	1:00	1

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GRADING & UTILITY PLAN
SCALE: 1"=40'

TOWN OF CHESTER PLANNING BOARD APPROVAL

THE PROPOSED SEWAGE DISPOSAL SYSTEM AND WATER SUPPLY SYSTEM SHOWN HAS BEEN DESIGNED IN ACCORDANCE WITH THE STANDARDS AND REQUIREMENTS ESTABLISHED BY THE NEW YORK STATE DEPARTMENT OF HEALTH FOR RESIDENTIAL LOTS. THE DESIGNS ARE BASED UPON ACTUAL SOIL AND SITE CONDITIONS FOUND UPON THE LOTS AT THE DESIGN LOCATION DURING THE TIME OF THE DESIGN.

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TOWN OF CHESTER, COUNTY OF ORANGE, NY

GRADING & UTILITY PLAN

JOB#: 20–030
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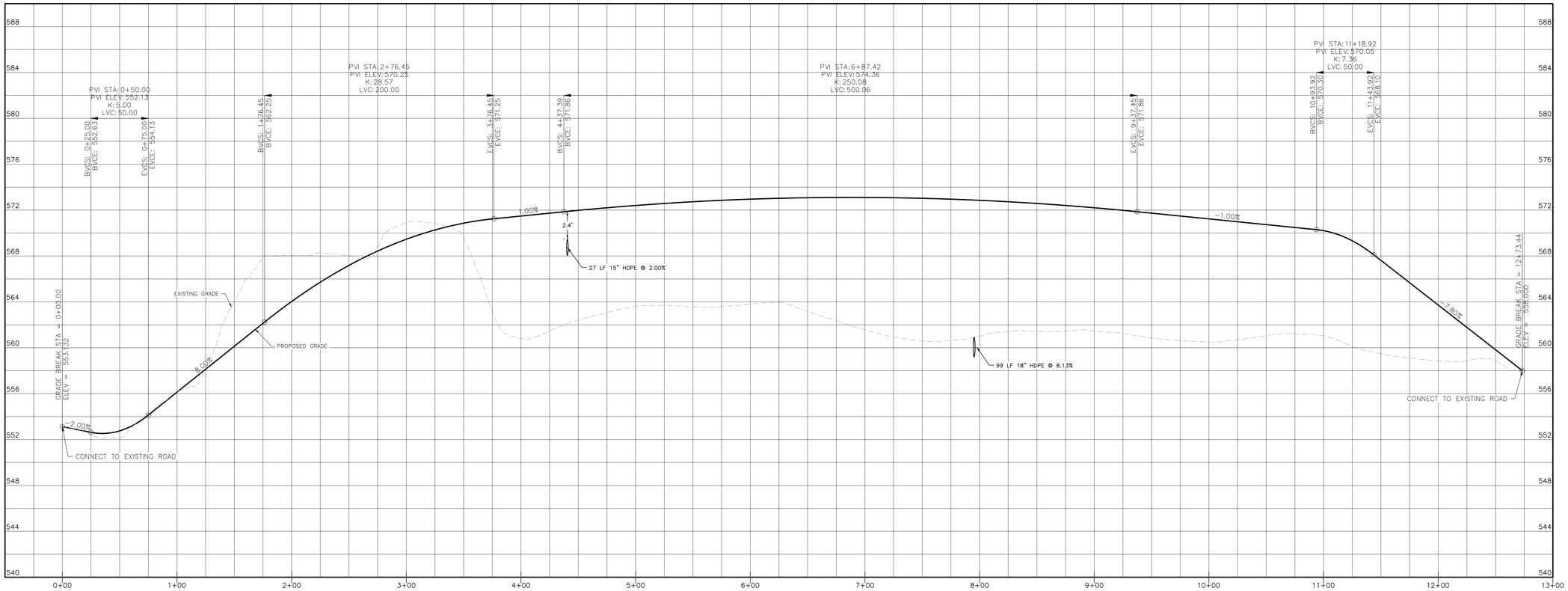
SHEET NO. 05 OF 20



DRIVEWAY PROFILE

HORIZONTAL SCALE: 1"=40'
VERTICAL SCALE; 1"=4'

REVISION	BY	DATE	DESCRIPTION
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DRIVEWAY PROFILES

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SHEET NO. 06 OF 20

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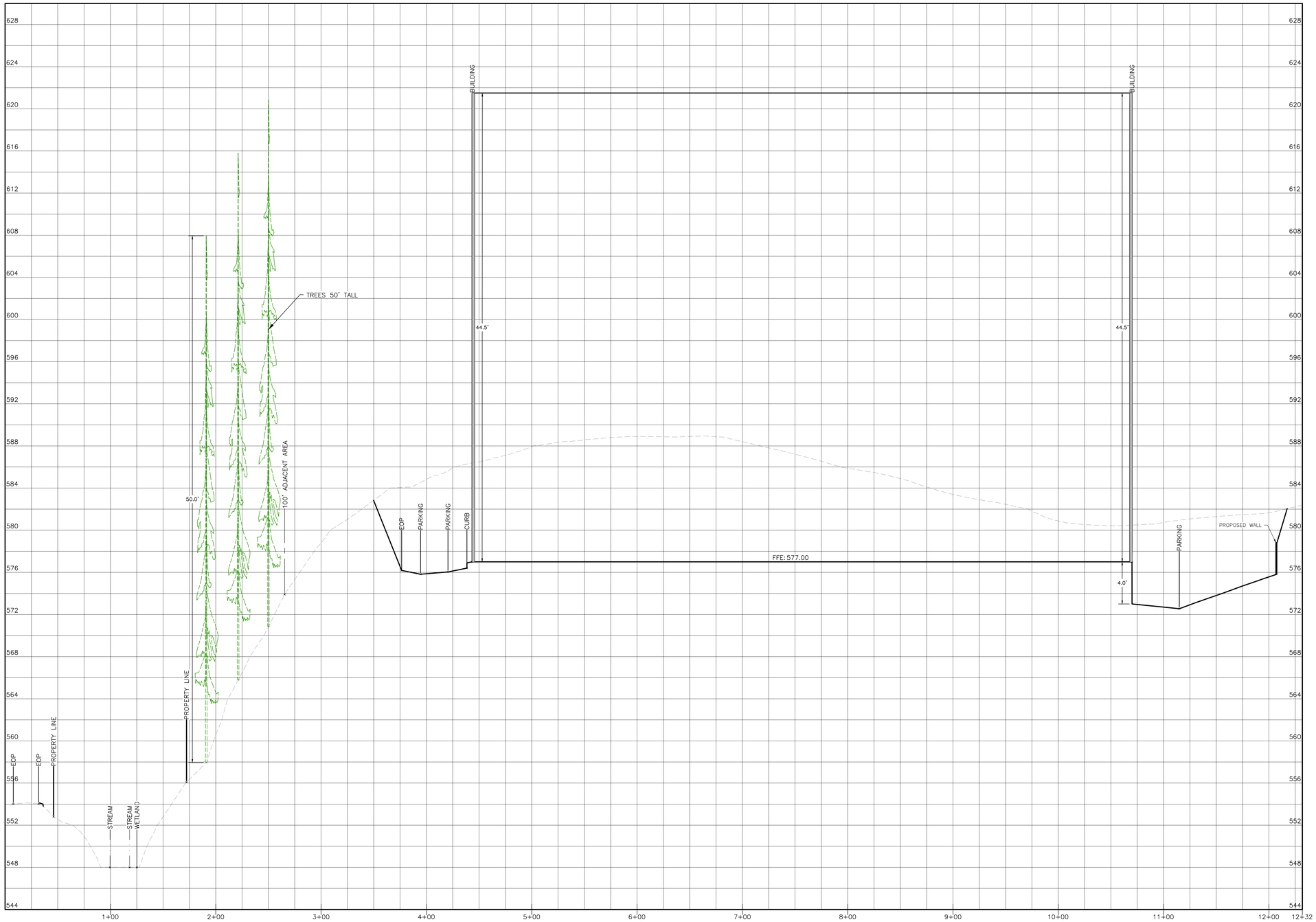

SECTION A–A

HORIZONTAL SCALE: 1"=40'

VERTICAL SCALE; 1"=4'

REVISION	BY	DATE	DESCRIPTION
4.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
3.	MM	9/16/21	PREPARATION OF PRELIMINARY PLANS
2.	MM	5/19/21	REVISION PER PB MTG. & COMMENT LETTERS
1.	MM	3/23/21	ROAD LAYOUT REVISION PER PB MTG.

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ARDEN CONSULTING ENGINEERS, PLLC
P.O. BOX 340 MONROE, N.Y.
T: 845-782-8114 E: MAM@ARDENCONSULTING.NET

STATE OF NEW YORK · MICHAEL A. MORGANTE · 078577 · LICENSED PROFESSIONAL ENGINEER

MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

SECTION A–A

JOB#: 20-030
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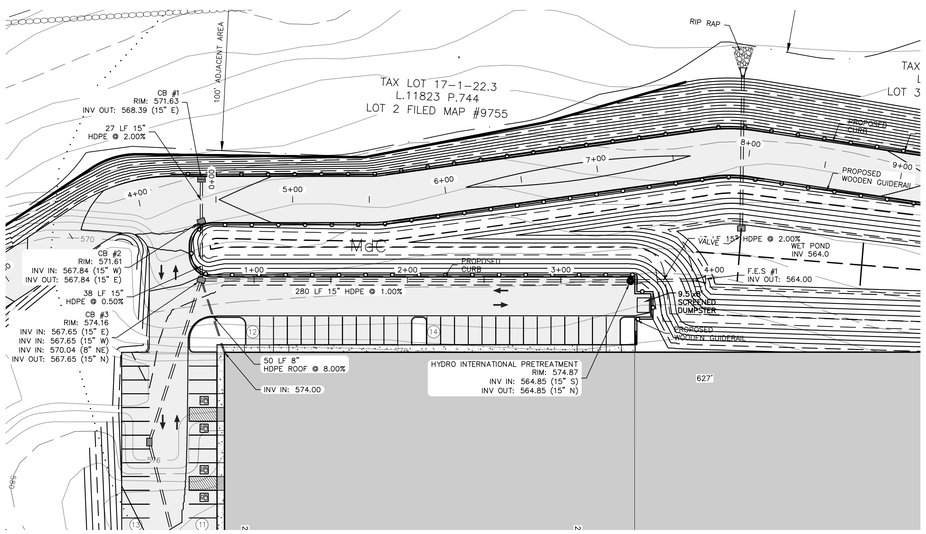

DRAINAGE PLAN #1
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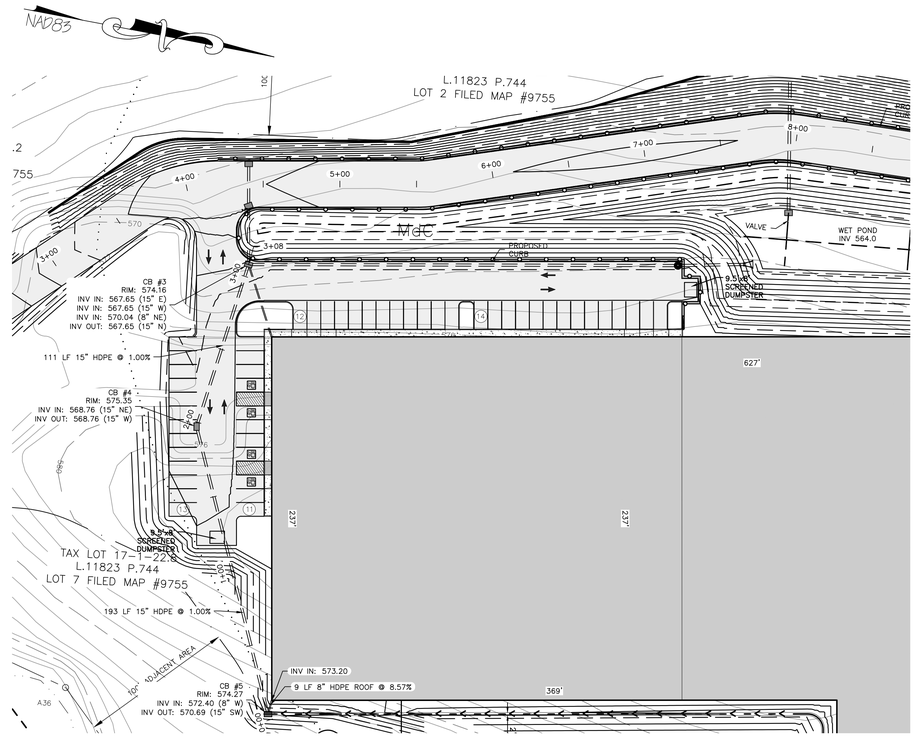

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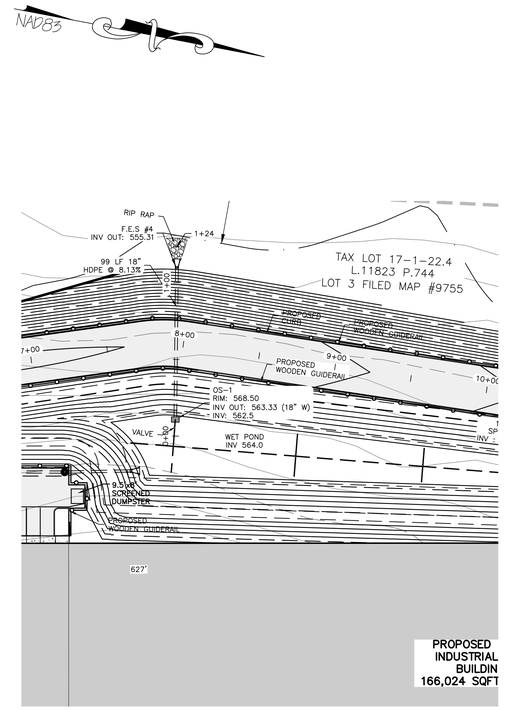

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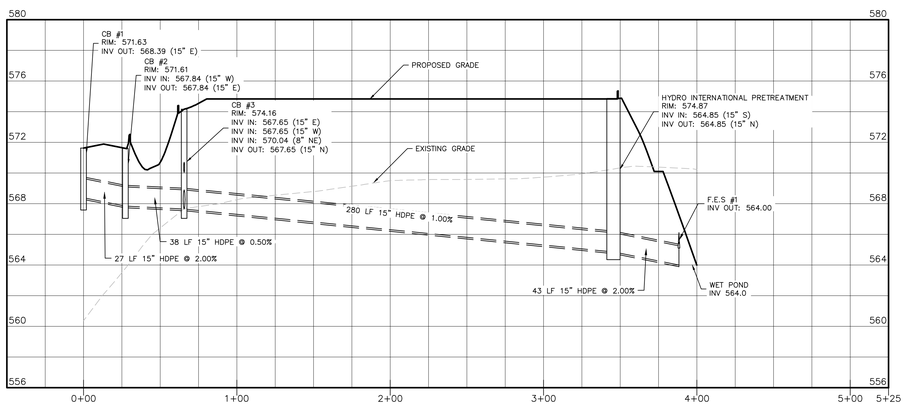

DRAINAGE PROFILES #1
HORIZONTAL SCALE: 1"=40'
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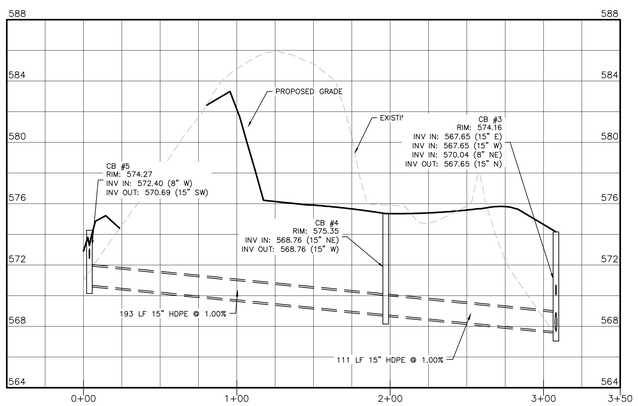

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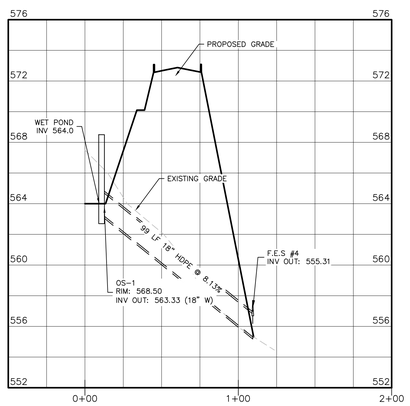

DRAINAGE PROFILES #3
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DRAINAGE PROFILES 1

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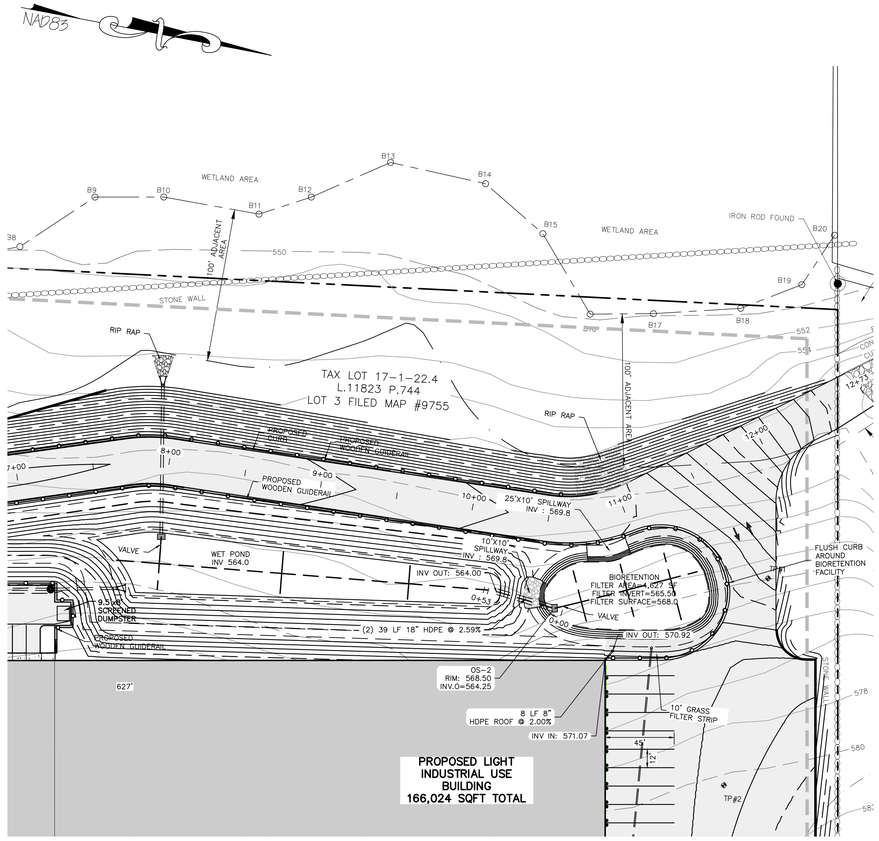
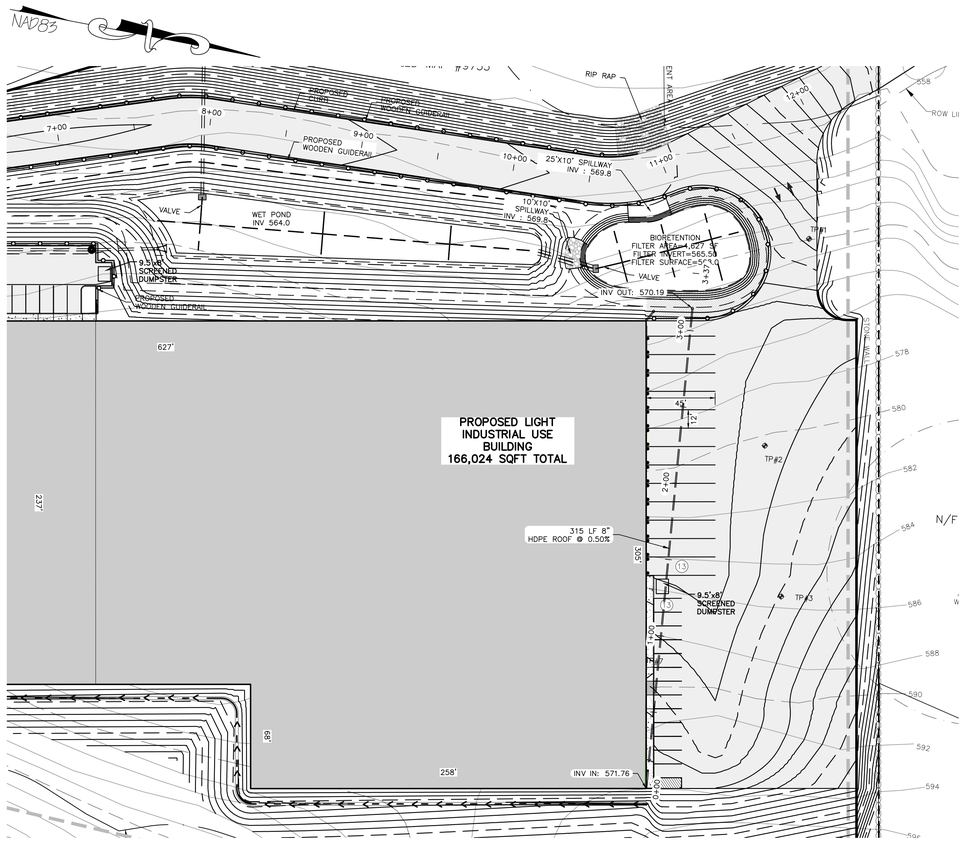


DRAINAGE PLAN #4
SCALE: 1"=40'



DRAINAGE PLAN #5
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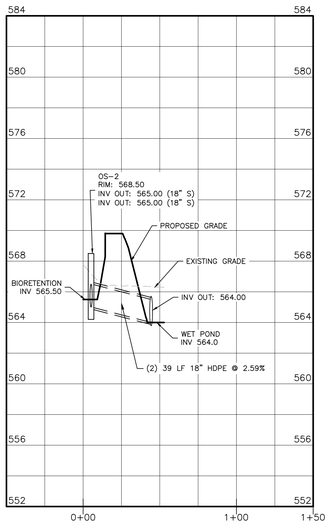

DRAINAGE PROFILES #4
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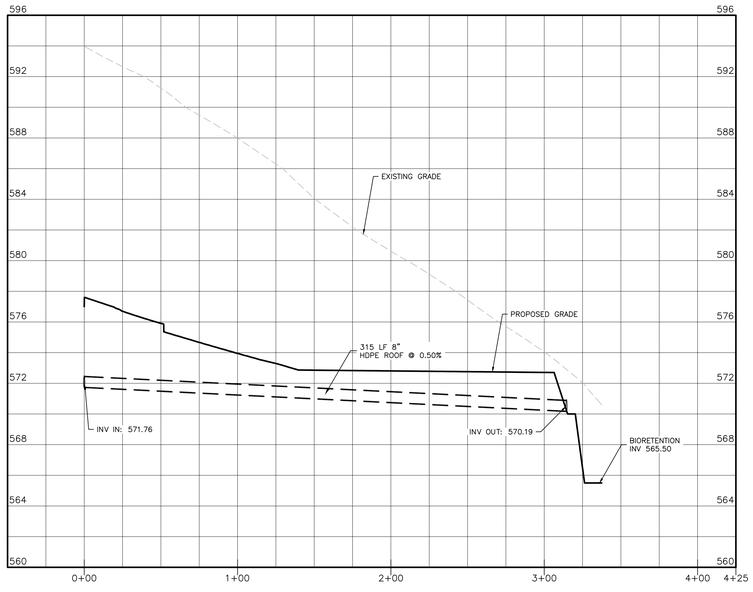
VERTICAL SCALE: 1"=4'



DRAINAGE PROFILES #5
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DRAINAGE PROFILES 2

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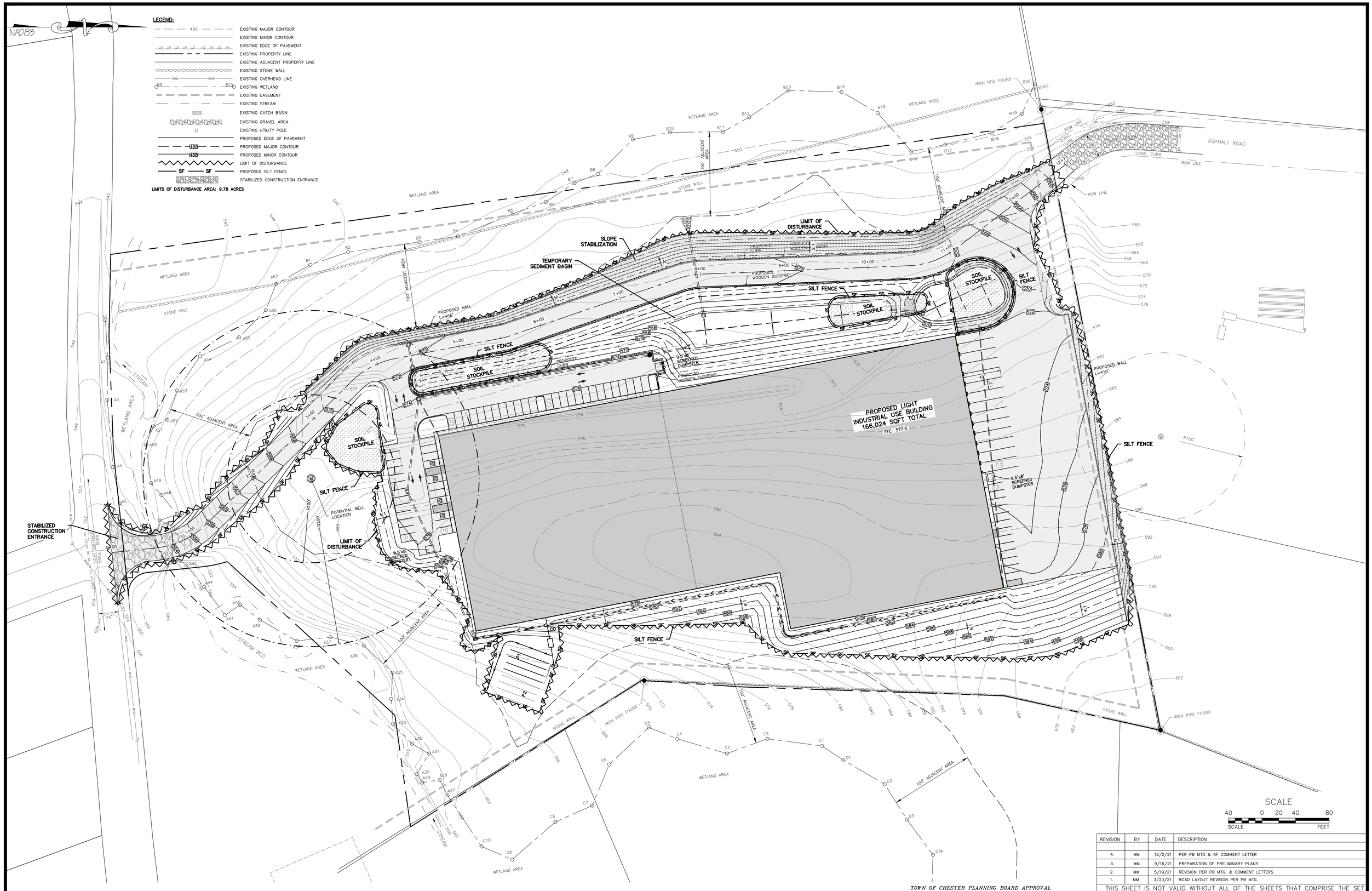

EROSION AND SEDIMENT CONTROL PLAN

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BEST MANAGEMENT PRACTICES FOR SITE FACILITY MAINTENANCE

THE OWNER WILL BE RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF ALL SITE RELATED FACILITIES, INCLUDING THE STORM WATER SEDIMENT AND DETENTION BASINS AND THE FOLLOWING MEASURES AND/OR STRUCTURES, AS APPLICABLE AND SHOWN ON THE PLANS:

WATER QUALITY INLETS

1. WATER QUALITY INLETS SHALL BE CLEANED OUT AT LEAST TWICE A YEAR TO REMOVE POLLUTANTS. REMOVED MATERIAL SHOULD BE TAKEN TO A TREATMENT PLANT OR APPROVED LANDFILL FOR DISPOSAL.
2. STORM WATER INLETS THROUGHOUT THE SITE SHALL BE INSPECTED ANNUALLY FOR ACCUMULATED SEDIMENT OR OTHER PROBLEMS AND REPAIRED AS NECESSARY.

PARKING AND ROADWAY PAVEMENTS

1. PARKING AREA AND ROADWAY PAVEMENTS SHALL BE SWEPT ON A REGULAR BASIS TO REMOVE ACCUMULATED SEDIMENT. COLLECTED SEDIMENT SHALL BE REMOVED TO AN APPROVED DISPOSAL SITE WHICH WILL NOT ALLOW THE RE-ENTRANCE OF SILT INTO THE STORM WATER DRAINAGE SYSTEM.

VEGETATIVE STABILIZATION

1. ALL VEGETATIVE PLANTING ON AREAS WHICH HAVE BEEN DISTURBED AND ARE FINISH GRADED SHALL BE INSPECTED AFTER EACH RAIN EVENT. PLANTING (OR SEEDING) SHALL BE MAINTAINED IN A VIABLE CONDITION TO STABILIZE THE SOIL AND TO PREVENT SOIL EROSION. RESTORE ALL SITE PLANTING AND/OR SEEDING WHICH HAS BEEN DAMAGED TO A VIABLE CONDITION.
2. IF VEGETATIVE STABILIZATION HAS BEEN DAMAGED FROM STORM WATER EROSION, CORRECT UPSTREAM CONDITIONS WHICH CAUSED THE EROSION. CHECK DAMS MAY BE REQUIRED IN DRAINAGE WAYS, AND STONE OUTFALL APRONS MAY BE REQUIRED TO BE REPAIRED AT STORM WATER OUTLETS.

CONSTRUCTION ACTIVITY

1. CONSTRUCTION ACTIVITIES WILL OCCUR DURING WEEKDAYS COMMENCING AT 7:00 AM AND TERMINATING AT 6:00 PM

EROSION AND SILTATION CONTROL NOTES:

1. GRADED AREAS – UPPER ELEVATIONS: PROVIDE TEMPORARY DRAINAGE SWALES, 1% GRADE MIN., TO DIRECT RUNOFF AWAY FROM CONSTRUCTION SITES. DISCHARGE AREAS AND ENERGY DISPERSION REQUIREMENTS TO BE ACCEPTABLE TO OWNER.
2. GRADED AREAS – LOWER ELEVATIONS: PROVIDE DRAINAGE SWALES, 1% MIN. GRADES, WITH STAKED AND SECURED HAY BALE BERMS TO PREVENT DOWN STREAM AND DOWN GRADIENT SILTATION.

SEDIMENT & EROSION CONTROL NOTES & CONSTRUCTION SEQUENCING

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES FOR ALL ROAD AND DRIVE ENTRANCES. STREETS SHALL BE CLEANED DAILY.
2. INSTALL SEDIMENT BARRIERS/SWALES/DITCHES/DIKES AT DOWN SLOPE AREAS FROM ALL PROPOSED GRADING OPERATIONS, AND INSTALL OTHER SEDIMENTATION AND EROSION CONTROL STRUCTURES OR MEASURES AS SHOWN ON THE DRAWINGS.
3. LAND DISTURBANCE SHALL BE LIMITED TO ONLY THAT AREA NECESSARY FOR DEVELOPMENT. NO MORE THAN FIVE (5) ACRES OF UNPROTECTED SOIL SHALL BE DISTURBED AT ONE TIME. PREVIOUS EARTHWORK SHALL BE STABILIZED AS SPECIFIED BEFORE ADDITIONAL AREA IS EXPOSED. EXISTING DWELLINGS AND STRUCTURES SHALL BE REMOVED PRIOR TO ANY SITE CLEARING AND SOIL DISTURBANCE.
4. CLEAR EXISTING TREES AND VEGETATION FROM AREAS TO BE EXCAVATED OR FILLED, THEN STRIP AND STOCKPILE TOPSOIL FROM ALL AREAS TO BE DISTURBED. SEED STOCKPILED TOPSOIL WITH TEMPORARY RYEGRASS COVER AS SPECIFIED BELOW (SEE NOTE 8), AND ERECT A SILT FENCE AROUND THE STOCKPILE.
5. PROTECT ALL TREES WHICH ARE TO REMAIN AND WHICH ARE IN OR NEAR CONSTRUCTION AREAS.
6. PERFORM NECESSARY EXCAVATION OR FILL OPERATIONS TO BRING SITE TO DESIRED SUBGRADE.
7. INSTALL SEDIMENT BARRIERS AROUND ALL STORM DRAIN INLETS, OR MODIFY SEDIMENT CONTROL MEASURES INSTALLED IN #2 ABOVE AND MAINTAIN UNTIL ALL DISTURBED AREAS ARE STABILIZED WITH VEGETATION AND ALL PAVEMENTS ARE PAVED WITH A BASE COURSE.
8. TEMPORARILY SEED ALL DISTURBED AREAS WHICH WILL REMAIN UNDISTURBED FOR A PERIOD OF 15 DAYS OR MORE AND WHICH WILL NOT BE UNDER CONSTRUCTION WITHIN 30 DAYS IN ACCORDANCE WITH SPECIFICATION FOR VEGETATIVE ESTABLISHMENT.
9. IF CONSTRUCTION IS SUSPENDED OR COMPLETED, ALL DISTURBED AREAS SHALL BE SEEDED AND MULCHED IMMEDIATELY. ALL SLOPES STEEPER THAN ONE ON THREE (V/H) AND PERIMETER TRENCHES AND TRAP EMBANKMENTS SHALL, ON COMPLETION, BE IMMEDIATELY STABILIZED WITH TEMPORARY SEEDING AND MULCHING.
10. AFTER COMPLETION OF SITE CONSTRUCTION, FINE GRADE AND SPREAD TOPSOIL ON ALL LAWN AREAS AND SEED WITH PERMANENT LAWN MIX AS DISCUSSED ON THE SPECIFICATIONS FOR FOR VEGETATIVE ESTABLISHMENT ON THIS SHEET.
11. DURING THE PROGRESS OF CONSTRUCTION, MAINTAIN ALL SEDIMENT TRAPS, BARRIERS, AND FILTERS AS NECESSARY TO PREVENT THEIR BEING CLOGGED UP WITH SEDIMENT.
12. AFTER PAVEMENTS ARE INSTALLED AND PERMANENT VEGETATIVE COVER AND PLANTINGS ARE ESTABLISHED, REMOVE SEDIMENT BARRIERS AND SEED THOSE DISTURBED AREAS.
13. MAINTAIN ALL SEEDED AND PLANTED AREAS TO INSURE A VIABLE STABILIZED VEGETATIVE COVER.
14. STRUCTURAL MEASURES MUST BE MAINTAINED TO BE EFFECTIVE. IN GENERAL, THESE MEASURES MUST BE PERIODICALLY INSPECTED TO INSURE STRUCTURAL INTEGRITY, TO DETECT VANDALISM DAMAGE, AND FOR CLEANING AND REPAIR WHENEVER NECESSARY.
15. DURING CONSTRUCTION, ALL STRUCTURES SHOULD BE INSPECTED WEEKLY AND AFTER EVERY RAIN. REMOVE ACCUMULATED SEDIMENT AND STOCKPILE AND STABILIZE IN AN AREA NOT SUBJECT TO FURTHER EROSION.
16. AFTER CONSTRUCTION IS COMPLETED, PERMANENT SEDIMENT OR EROSION CONTROL STRUCTURES SHOULD BE INSPECTED AT LEAST SEMI-ANNUALLY AND AFTER EVERY RAIN.

SPECIFICATIONS FOR VEGETATIVE ESTABLISHMENT:

1. PERMANENT SEEDING:

A. SEEDBED PREPARATION: AREA TO BE SEEDED SHALL BE LOOSE AND FRIABLE TO A DEPTH OF AT LEAST 3 INCHES. THE TOP LAYER SHALL BE LOOSENED BY RAKING, DISKING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING OCCURS. FOR SITES LESS THAN 5 ACRES, APPLY 100 POUNDS OF DOLOMITIC LIMESTONE AND 21 POUNDS OF 10-20-20 FERTILIZER PER 1,000 SF. HARROW OR DISK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF AT LEAST 3 INCHES ON SLOPES FLATTER THAN 3:1.

B. SEEDING: APPLY 5-6 POUNDS PER 1,000 SF OF SEED MIX BETWEEN FEBRUARY 1 AND MAY 15 OR BETWEEN AUGUST 15 AND OCTOBER 31. APPLY SEED UNIFORMLY ON A MOIST FIRM SEEDBED WITH A CYCLONE SEEDED DRILL, CULTIPACKR SEEDER OR HYDROSEEDER (SLURRY INCLUDES SEEDS AND FERTILIZER, RECOMMENDED ON STEEP SLOPES ONLY). MAXIMUM SEED DEPTH SHOULD BE 1/4 INCH IN CLAYEY SOILS AND 1/2 INCH IN SANDY SOILS WHEN USING OTHER THAN THE HYDROSEEDER METHOD. IRRIGATE IF SOIL MOISTURE IS DEFICIENT TO SUPPORT ADEQUATE GROWTH UNTIL VEGETATION IS FIRMLY ESTABLISHED. SELECT SEED MIXTURES FROM SECTION 3, NYS GUIDELINES FOR URBAN EROSION & SEDIMENT CONTROL.

C. MULCHING: MULCH SHALL BE APPLIED TO ALL SEEDED AREAS IMMEDIATELY AFTER SEEDING. DURING THE TIME PERIODS WHEN SEEDING IS NOT PERMITTED, MULCH SHALL BE APPLIED IMMEDIATELY AFTER GRADING. MULCH SHALL BE UNROTTED, UNCHOPPED, SMALL GRAIN STRAW APPLIED AT A RATE OF 2 TONS PER ACRE OR 90 POUNDS PER 1,000 SQUARE FEET (2 BALES). IF A MULCH ANCHORING TOOL IS USED, APPLY 2.5 TONS PER ACRE. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE COMPLETELY FREE OF PROHIBITED NOXIOUS WEEDS. SPREAD MULCH UNIFORMLY, MECHANICALLY, OR BY HAND TO A DEPTH OF 1-2 INCHES.

D. SECURING STRAW MULCH: STRAW MULCH SHALL BE SECURED IMMEDIATELY FOLLOWING MULCH APPLICATIONS TO MIMIMIZE MOVEMENT OF WIND OR WATER. THE FOLLOWING METHODS ARE PERMITTED:

i. USE A MULCH ANCHORING TOOL WHICH IS DESIGNED TO PUNCH AND ANCHOR FABRIC TYPE MULCH INTO THE SOIL SURFACE TO A MINIMUM DEPTH OF 2 INCHES. THIS IS THE MOST EFFECTIVE METHOD FOR SECURING MULCH, HOWEVER, IT IS LIMITED TO RELATIVELY FLAT AREAS WHERE EQUIPMENT CAN OPERATE SAFELY.

ii. WOOD CELLULOSE FIBER MAY BE USED FOR ANCHORING STRAW. APPLY THE FIBER BINDER AT A NET DRY WEIGHT OF 750 POUNDS PER ACRE. IF MIXED WITH WATER, USE 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

iii. LIQUID BINDERS MAY BE USED AND APPLIED HEAVIER AT THE EDGES WHERE WIND CATCHES MULCH, SUCH AS IN VALLEYS AND ON CRESTS OF SLOPES. THE REMAINDER OF THE AREA SHOULD APPEAR UNIFORM AFTER BINDER APPLICATION.

iv. LIGHTWEIGHT NETTING, MAY BE USED TO SECURE MULCH. THE NETTING WILL BE STAPLED TO THE GROUND ACCORDING TO MANUFACTURERS' RECOMMENDATIONS.

2. TEMPORARY SEEDING:

LIME: 100 POUNDS OF DOLOMITIC LIMESTONE PER 1,000 SF
FERTILIZER: 15 POUNDS OF 10-10-10 PER 1,000 SF
SEED: PERENNIAL RYE-0.92 POUNDS PER 1,000 SF

3. FILL:

NO FILLS MAY BE PLACED ON FROZEN GROUND. ALL FILL TO BE PLACED IN APPROXIMATELY HORIZONTAL LAYERS, EACH LAYER HAVING A LOOSE THICKNESS OF NOT MORE THAN 8 INCHES. ALL FILL IN ROADWAYS AND PARKING AREAS IS TO BE CLASSIFIED TYPE 2 COMPACTED TO 90% DENSITY; COMPACTION TO BE DETERMINED BY ASTM D-1557-66T (MODIFIED PROCTOR). ANY FILL WITHIN THE BUILDING AREA IS TO BE COMPACTED TO A MINIMUM OF OF 95% AS DETERMINED BY METHODS PREVIOUSLY MENTIONED. FILLS FOR POND EMBANKMENTS SHALL BE COMPACTED AS PER THE PROJECT ENGINEER'S SPECIFICATIONS. ALL OTHER FILLS SHALL BE COMPACTED SUFFICIENTLY SO AS TO BE STABLE AND PREVENT EROSION AND SLIPPAGE.

4. PERMANENT SOD:

INSTALLATION OF SOD SHOULD FOLLOW THE PERMANENT SEEDING DATES. PERMANENT SOD IS TO BE STATE APPROVED SOD; LIME AND FERTILIZER PER PERMANENT SEEDING SPECIFICATIONS AND LIGHTLY IRRIGATE SOIL PRIOR TO LAYING SOD. SOD IS TO BE LAID ON THE CONTOUR WITH ALL ENDS TIGHTLY ABUTTING. JOINTS ARE TO BE STAGGERED BETWEEN ROWS. WATER AND ROLL OR TAMP SOD TO INSURE POSITIVE ROOT CONTACT WITH THE SOIL. ALL SLOPES STEEPER THAN 3:1, AS SHOWN, ARE TO BE PERMANENTLY SODDED OR PROTECTED WITH APPROVED EROSION CONTROL NETTING. ADDITIONAL WATERING FOR ESTABLISHMENT MAY BE REQUIRED. SOD IS NOT TO BE APPLIED ON FROZEN GROUND. SOD SHALL NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (DRY OR WET) AND/OR EXTREME TEMPERATURE MAY ADVERSELY AFFECT ITS SURVIVAL. IN THE ABSENCE OF ADEQUATE RAINFALL, IRRIGATION SHOULD BE PERFORMED TO INSURE ESTABLISHED SOD.

SLOPE STABLIZATION, SEEDING METHOD & MULCHING

SLOPES OR 4:1 OR GREATER (HORIZONTAL : VERTICAL)

SLOPES SHALL BE HYDROSEEDED WITH THE MIXTURES AND RATES INDICATED IN THE PERMANENT SEEDING MIXTURE SCHEDULE. STRAW OR HAY MULCH SHALL BE APPLIED AT A RATE OF 2,000 LBS./ACRE. STRAW OR HAY MULCH SHALL BE ANCHORED WITH BioD-Mesh60 NETTING AS MANUFACTURED BY RoLANKA INTERNATIONAL OR APPROVED EQUIVALENT. NETTING TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS.

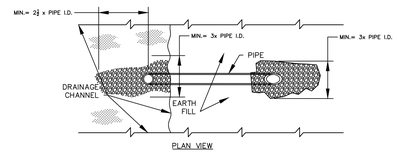
GENTLE SLOPE AND FLAT AREAS

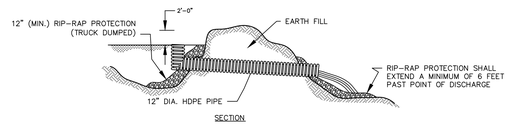
AREA SHALL BE SEEDED BY HYDROSEEDING OR BRODCASTING WITH THE MIXTURES AND RATES INDICATED ON THE PERMANENT SEEDING MIXTURE SCHEDULE. HYDROSEEDED AREAS SHALL BE MULCHED WITH A WOOD FIBER MULCH APPLIED AT A RATE OF 500 LBS./ACRE. BROADCAST AREAS SHAL BE MULCHED WITH HAY OR STRAW AT A RATE OF 2,000 LBS./ACRE. AREAS SEEDED BY BROADCASTING SHALL BE LIGHTLY RAKED AND PACED PRIOR TO PLACING MULCH.

AREAS REMAINING DISTURBED FOR 20 DAYS OR MORE SHALL BE STABLIZED AS FOLLOWS:

SCARIFY SOILS IF COMPACTED, LIME TO pH OF 6.0 IF REQUIRED, FERTILIZE WITH 600 LBS./ACRE. 5-10-10 FERTILIZER IF REQUIRED. SEED WITH SPECIES AND RATE SHOWN BELOW. MULCH WITH HAY OR STRAW AT A RATE OF 2,000 LBS./ACRE. ANCHOR MULCH WITH NETTING OF WOOD FIBER OR JUTE IF STEEP SLOPE OR HIGH POTENTIAL FOR EROSION.

SPECIES	APPLICATION RATE
RYEGRASS (ANNUAL OR PERENNIAL) (USE WINTER RYE IF SEEDING IN OCT./NOV.)	30 LBS./ACRE (0.7 LBS./1,000 SF)

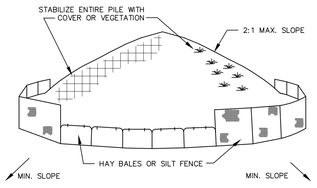




SMALL TEMPORARY SETTLING BASIN

NOT TO SCALE

NOTE:
TEMPORARY WEIR IS USED ACROSS STORM DRAINAGE CHANNELS TO FORM SETTLEMENT BASIN FOR DEWATERING OPERATIONS. ADDITIONAL LOCATIONS AND DESIGNS OF SETTLING BASINS OTHER THAN THOSE SHOWN ON THE PLANS SHALL BE APPROVED BY ENGINEER.

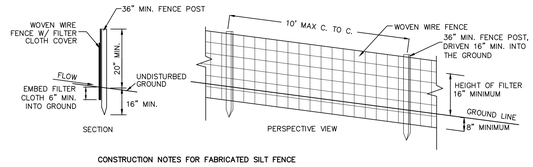


INSTALLATION NOTES:

1. AREA CHOSEN FOR STOCKPILING OPERATIONS SHALL BE DRY AND STABLE
2. MAXIMUM SLOPE OF STOCKPILES SHALL BE 2:1.
3. UPON COMPLETION OF SOIL STOCKPILING EACH PILE SHALL BE SURROUNDED WITH EITHER SILT FENCING OR HAY BALES, THEN STABILIZED WITH VEGETATION OR COVERED.
4. SEE SPECIFICATIONS FOR INSTALLATION OF SILT FENCE.

SOIL STOCKPILE DETAIL

NOT TO SCALE



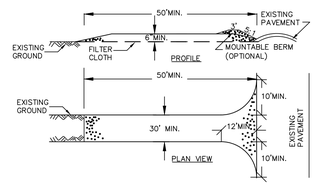
CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POST WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

POST: STEEL EITHER "T OR "U" TYPE OR 2" HARDWOOD
FENCE: WOVEN WIRE, 14 1/2 GA. 6" MAX. MESH OPENING
FILTER CLOTH: FILER X, MIRAFI 100X, STABILINKA T140N OR APPROVED EQUAL
PREFABRICATED UNIT: GEOFAB, ENVIROFENCE, OR APPROVED EQUAL.

SILT FENCE DETAIL

NOT TO SCALE



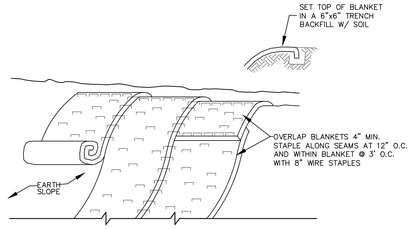
CONSTRUCTION SPECIFICATIONS

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

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

FOR CONSTRUCTION SPECIFICATIONS REFER TO "NY GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL"



SLOPE STABILIZATION DETAIL

NOT TO SCALE

NOTES:

1. STABILIZE PREPARED EARTHEN SLOPE WITH A BIODEGRADABLE NATURAL FIBER NETTING APPROVED TYPES ARE AS FOLLOWS:
   - C350 –NORTH AMERICAN GREEN #1-800-772-2040
   - ECOCOR 9000– EASTERN PRODUCTS, INC. #1-201-234-5050
   - ERO-MAT V125C– EROSION CONTROL TECH. #1-800-245-0551
   - ALL SLOPE RESTORATION TO GET 4" TOPSOIL
2. SEED SLOPE PRIOR TO INSTALLING EROSION CONTROL NETTING.
3. AFTER NETTING IS INSTALLED, PLANT GROUND-COVER, TREES & FORSYTHIA THROUGH SLITS CUT IN FABRIC.

REVISION	BY	DATE	DESCRIPTION
4.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
3.	MM	9/16/21	PREPARATION OF PRELIMINARY PLANS
2.	MM	5/19/21	REVISION PER PB MTG. & COMMENT LETTERS
1.	MM	3/23/21	ROAD LAYOUT REVISION PER PB MTG.

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET

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ARDEN CONSULTING ENGINEERS, PLLC
P.O. BOX 340 MONROE, N.Y.
T: 845-782-8114 E: MAM@ARDENCONSULTING.NET

STATE OF NEW YORK · MICHAEL A. MORGANTE · 078577 · LICENSED PROFESSIONAL ENGINEER

MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

11 EROSION AND SEDIMENT CONTROL DETAILS

JOB#: 20-030
SCALE: AS NOTED
DATE: 2-17-21
DRAWN: MM
CHECKED: MM
SHEET NO. 11 OF 20

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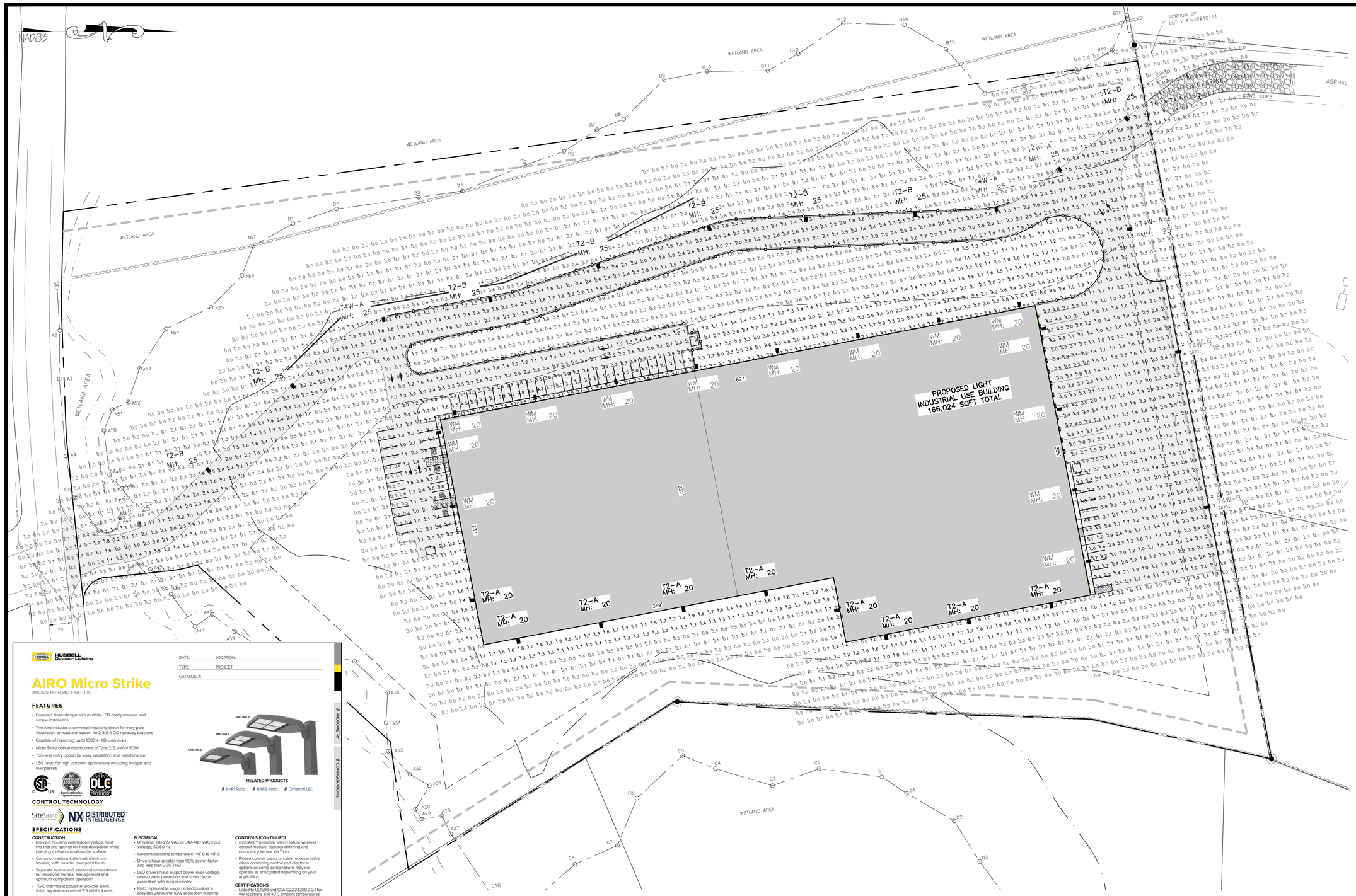
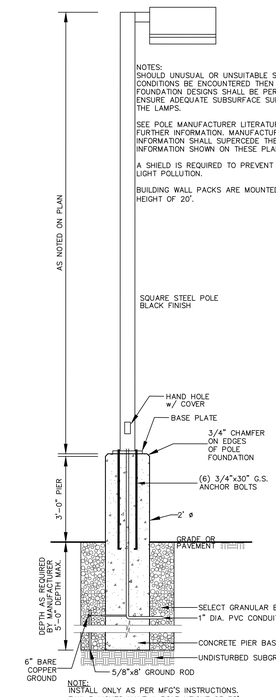


LIGHTING PLAN

SCALE: 1" = 40'

LEGEND:

- 490 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING STONE WALL
- OHW — EXISTING OVERHEAD LINE
- B9 — B10 EXISTING WETLAND
- EXISTING EASEMENT
- EXISTING STREAM
- MdB EXISTING SOIL
- EXISTING CATCH BASIN
- EXISTING GRAVEL AREA
- Ø EXISTING UTILITY POLE
- PT#4 EXISTING TEST PIT WITH NUMBER
- TP#6 EXISTING PERC TEST WITH NUMBER
- PROPOSED SETBACK LINE
- PROPOSED EDGE OF PAVEMENT



NOTES:
SHOULD UNUSUAL OR UNSUITABLE SOIL CONDITIONS BE ENCOUNTERED THEN ENGINEERED FOUNDATION DESIGNS SHALL BE PERFORMED TO ENSURE ADEQUATE SUBSURFACE SUPPORT FOR THE LAMPS.

SEE POLE MANUFACTURER LITERATURE FOR FURTHER INFORMATION. MANUFACTURER INFORMATION SHALL SUPERCEDE THE INFORMATION SHOWN ON THESE PLANS.

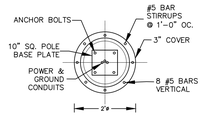
A SHIELD IS REQUIRED TO PREVENT UPWARDS LIGHT POLLUTION.

BUILDING WALL PACKS ARE MOUNTED AT A HEIGHT OF 20'.

NOTE:
INSTALL ONLY AS PER MFG'S INSTRUCTIONS.
T4W-B LIGHTS HAVE A POLE HEIGHT OF 35'

POLE MOUNTED LIGHTING DETAIL

NOT TO SCALE



POLE FOUNDATION DETAIL

NOT TO SCALE

LUMINAIRE LABEL

T2-A
MH: 20

MOUNTING HEIGHT

HUBBELL Outdoor Lighting

DATE: LOCATION:
TYPE: PROJECT:
CATALOG #:

AIRO Micro Strike

AREA/SITE/ROAD LIGHTER

FEATURES

- Compact sleek design with multiple LED configurations and simple installation
- The Airo includes a universal mounting block for easy pole installation or mast arm option for 2-3/8 ft OD roadway brackets
- Capable of replacing up to 1000w HID luminaires
- Micro Strike optical distributions of Type 2, 3, 4W or 5QW
- Tool-less entry option for easy installation and maintenance
- 1.5G rated for high vibration applications including bridges and overpasses

CONTROL TECHNOLOGY

SiteSync NX DISTRIBUTED INTELLIGENCE

SPECIFICATIONS

CONSTRUCTION
- Die-cast housing with hidden vertical heat fins that are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with powder coat paint finish
- Separate optical and electrical compartment for improved thermal management and optimum component operation
- TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness

OPTICS
- Entire optical aperture illuminates to create a larger luminous surface area resulting in a low glare appearance without sacrificing optical performance
- Premium engineered individual acylic lenses deliver IES Type 2, 3, 4W and 5QW distributions
- Lens distributions are field rotatable (in 90° increments) or exchangeable for job site fine-tuning
- 3000K, 4000K, or 5000K (70 CRI) CCT
- 80, 160, or 320 midpower LEDs
- 3000K, 4000K or 5000K (70 CRI) CCT
- Zero uplight at 0 degrees of tilt
- Field rotatable optics

INSTALLATION
- Tool-less entry to wiring/driver compartment optional
- Universal mounting block works with #2 drill pattern
- Fixture ships with slotted mounting block to accommodate wide range of drill patterns for easy retrofit opportunities
- Mast arm fitter accessory or option available for 2-3/8" OD brackets with vertical tilt of +2°, 0° or -2°

ELECTRICAL
- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40° C to 40° C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20KA and 10KV protection meeting ANSI/IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is consumed

CONTROLS
- Photo control, occupancy sensor and wireless available for complete on/off and dimming control
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)
- Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6

- SiteSync® wireless control system is available via 7-pin See ordering information and details at: www.hubbelllighting.com/sitesync
- NX Distributed Intelligence® available with in fixture wireless control module, features dimming and occupancy sensor

CONTROLS (CONTINUED)
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor via 7-pin
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application

CERTIFICATIONS
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- DLC (DesignLights Consortium Qualified)with some Premium Qualified configurations.Please refer to the DLC website for specificproduct qualifications at www.designlights.org
- 1.5G rated for ANSI C136.31 high vibration applications
- IP65 optical assembly
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020. See Buy American Solutions

WARRANTY
- 5 Year warranty
- See HLI Standard Warranty for additional information

KEY DATA	
Lumen Range	3,200–36,000
Wattage Range	25–255
Efficacy Range (LPW)	118–148
Weight lbs. (kg)	14.5–17.5 (6.6–8.0)

RELATED PRODUCTS

RAR1 Ratio | RAR2 Ratio | Cimarron LED

IF PHOTOMETRY | IF CONFIGURATIONS

Page **1/11** Rev. **07/07/21**
AIROLED-SPEC

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HUBBELL Lighting

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LUMINAIRE SCHEDULE										
SYMBOL	LABEL	QTY	ARRANGEMENT	DESCRIPTION	LUM. LUMENS	LLF	LUM. WATTS	ARR. WATTS	TOTAL WATTS
	T2–A	9	SINGLE	ASL1–80L–40–4K7–2	5206	0.850	38	38	342
	T2–B	8	SINGLE	ASL1–160L–100–4K7–2	11885	0.850	87.6	87.6	700.8
	T3	1	SINGLE	ASL1–160L–100–4K7–3	12010	0.850	87.6	87.6	87.6
	T4W–A	4	SINGLE	ASL1–160L–100–4K7–4W	11787	0.850	87.6	87.6	350.4
	T4W–B	2	SINGLE	ASL2–320L–255–4K7–4W	35329	0.850	255	255	510
	WM	14	SINGLE	ASL1–160L–135–4K7–4W	17568	0.850	133.1	133.1	1863.4

CALCULATION SUMMARY									
LABEL	CALCTYPE	UNITS	AVG	MAX	MIN	AVG/MIN	MAX/MIN	PTSPCLR	PTSPCTB
ALL CALCPTS EXTENDING OUT TO ZERO FOOT–CANDLES	ILLUMINANCE	FC	0.88	9.1	0.0	N.A.	N.A.	10	10
STATAREA – BUILDING SOUTH PARKING	ILLUMINANCE	FC	3.00	5.1	1.0	3.00	5.10		
STATAREA – BUILDING WEST DRIVE	ILLUMINANCE	FC	2.88	5.1	1.1	2.62	4.64		
STATAREA – TRUCK DOCK AREA	ILLUMINANCE	FC	2.24	5.2	1.0	2.24	5.20		

SCALE

40 0 20 40 80

SCALE FEET

TOWN OF CHESTER PLANNING BOARD APPROVAL

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REVISION	BY	DATE	DESCRIPTION
2.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
1.	MM	9/16/21	PREPARATION OF PRELIMINARY PLANS

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET

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STATE OF NEW YORK — MICHAEL A. MORGANTE — 078577 — LICENSED PROFESSIONAL ENGINEER

MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

LIGHTING PLAN

JOB#: 20-030
SCALE: AS NOTED
DATE: 7-30-21
DRAWN: MM
CHECKED: MM
SHEET NO. 12 OF 20

LANDSCAPING PLAN
SCALE: 1"=40'

LEGEND:

490	EXISTING MAJOR CONTOUR
	EXISTING MINOR CONTOUR
	EXISTING EDGE OF PAVEMENT
	EXISTING PROPERTY LINE
	EXISTING ADJACENT PROPERTY LINE
	EXISTING STONE WALL
OHW	EXISTING OVERHEAD LINE
W2 — B10	EXISTING WETLAND
	EXISTING STREAM
	EXISTING CATCH BASIN
	EXISTING GRAVEL AREA
	EXISTING UTILITY POLE
	PROPOSED EDGE OF PAVEMENT
	PROPOSED LANDSCAPING

PLANT SCHEDULE

PLANT KEY	QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
DECIDUOUS TREES					
ACE. RUB.	**11**	ACER RUBRUM 'FRANKSRED'	RED SUNSET RED MAPLE	2.5"–3" CAL.	B&B
BET. NIG.	**4**	BETULA NIGRA "HERITAGE"	HERITAGE RIVER BIRCH	12'–14'	B&B MULTISTEM
QUE. RUB.	14	QUERCUS RUBRA	RED OAK	2.5"–3" CAL.	B&B
EVERGREEN TREES					
TSU. CAN.	2	TSUGA CANADENSIS	CANADIAN HEMLOCK	6'–8'	B&B
SHRUBS					
VIB. RHYT.	68	VIBURNUM RHYTIDOPHYLLUM	LEATHERLEAF VIBURNUM	5–6' MIN.	SPACE 8' APART
FOR. INT.	36	FORSYTHIA × INTERMEDIA	FORSYTHIA	5–6' MIN.	SPACE 8' APART
PERENNIALS, GROUND COVERS, AND GRASSES					
JUN. BAR.	25	JUNIPERUS HORIZONTALIS "BAR HARBOR"	BAR HARBOR CREEPING JUNIPER	#2 CANS	CONT. 36" O.C.
LIR. BIG.	25	LIRIOPE MUSCARI "BIG BLUE"	BIG BLUE LILYTURF	1 GAL.	CONT. 18" O.C.
PAN. VIR.	25	PANICUM VIRGATUM "SHENANDOAH"	SHENANDOAH SWITCHGRASS	1 GAL.	CONT. 36" O.C.
WET POND PLANTINGS					
BLU. JOI.	**84**	CALAMAGROTIS CANADENSIS	BLUE JOINT	1 GAL.	CONT. 36" O.C.
HAR. BUL.	74	SCIRPUS ACUTUS	HARDSTEM BULRUSH	1 GAL.	CONT. 36" O.C.
LIZ. TAIL.	71	SAURURUS CERNIUS	LIZARD'S TAIL	1 GAL.	CONT. 36" O.C.
BIORETENTION PLANTINGS					
CA	17	CLETHRA ALNIFOLIA	SUMMERSWEET	18"–24"	CONT. 36" O.C.
IV	16	ILEX VERTICILLATA	WINTERBERRY	18"–24"	CONT. 36" O.C.
SC	15	SAMBUCUS CANADENSIS	ELDERBERRY	18"–24"	CONT. 36" O.C.
EF	12	EUPATORIUM FISULOSUM	JOE PYE WEED	1 GAL.	CONT. 36" O.C.
JE	16	JUNCUS EFFUSUS	COMMON RUSH	#SP4 CONT.	CONT. 36" O.C.

SCALE

40 0 20 40 80

SCALE FEET

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CHECKED: MM
SHEET NO. 13 OF 20

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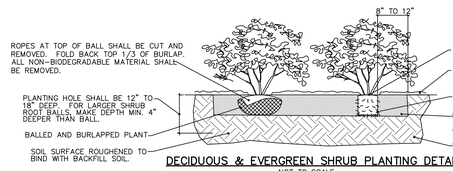
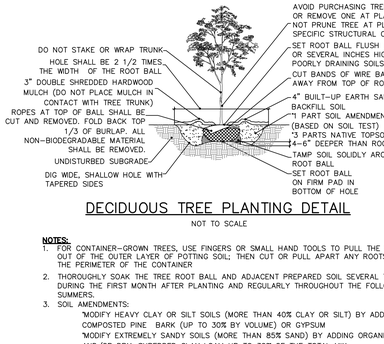


DECIDUOUS & EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE

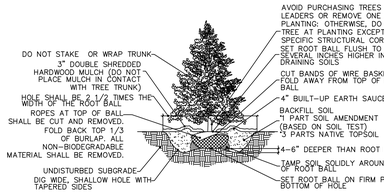
NOTES:
1. THOROUGHLY SOAK THE GROUND COVER ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
2. SOIL AMENDMENTS: MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
3. ALL GROUND COVER AREAS SHALL BE TREATED WITH A PRE-EMERGENT PER MANUFACTURER'S SPECIFICATIONS



DECIDUOUS TREE PLANTING DETAIL

NOT TO SCALE

NOTES:
1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER
2. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
3. SOIL AMENDMENTS:
   "MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   "MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX



EVERGREEN TREE PLANTING DETAIL

NOT TO SCALE

NOTES:
1. FOR CONTAINER-GROWN TREES, USE FINGERS OR SMALL HAND TOOLS TO PULL THE ROOTS OUT OF THE OUTER LAYER OF POTTING SOIL; THEN CUT OR PULL APART ANY ROOTS CIRCLING THE PERIMETER OF THE CONTAINER.
2. THOROUGHLY SOAK THE TREE ROOT BALL AND ADJACENT PREPARED SOIL SEVERAL TIMES DURING THE FIRST MONTH AFTER PLANTING AND REGULARLY THROUGHOUT THE FOLLOWING TWO SUMMERS.
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   "MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM
   "MODIFY EXTREMELY SANDY SOILS (MORE THAN 85% SAND) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX

ERNST SEED CO. NATIVE DETENTION AREA SEEDING SPECIFICATIONS (ERNMX-183):

SWITCHGRASS, "SHAWNEE" (PANICUM VIRGATUM, "SHAWNEE") REDTOP PANICGRASS, COASTAL PLAIN NC ECOTYPE (PANICUM RIGIDULUM (P. STIPITATUM), COASTAL PLAIN NC ECOTYPE) VIRGINIA WILDRYE, PA ECOTYPE (ELYMUS VIRGINICUS, PA ECOTYPE) GREEN BULRUSH, PA ECOTYPE (SCIRPUS ATROVIRENS, PA ECOTYPE) AUTUMN BENTGRASS, PA ECOTYPE (AGROSTIS PERENNANS, PA ECOTYPE) PATH RUSH, PA ECOTYPE (JUNCUS TENUIS, PA ECOTYPE)

1. SOW ABOVE MIX AT A RATE OF 20 LBS./ACRE OR 1/2 LB PER 1,000 S.F.
2. SUPPLEMENT ABOVE MIX WITH A COVER CROP OF GRAIN RYE AT 30 LBS/ACRE.
3. MOW SEEDED AREA ONCE PER YEAR IN LATE SPRING.

PLANT SELECTION

THE ROLE OF PLANTS IN ALL STORM WATER MANAGEMENT FACILITIES IS TO PREVENT EROSION AND SLOW WATER MOVEMENT, TO CONVERT POLLUTANTS, ENHANCE INFILTRATION AND EVAPOTRANSPIRATION, AND ENCOURAGE WILDLIFE. THE DESIGNER CAN SELECT PLANT SPECIES OR MIXES THAT MEET THE CRITICAL OBJECTIVES AND EXTREME CONDITIONS UNDER WHICH PLANTS MUST SURVIVE. NATIVE GRASSES ESTABLISH RAPIDLY, WITH FIBROUS ROOT SYSTEMS THAT TOLERATE FAST-MOVING WATER. HERBACEOUS SPECIES PLAY THE ROLE OF ADDING AESTHETICS, TEXTURE, AND PROVIDING WILDLIFE FOOD AND HABITAT. WOODY SPECIES ASSIST IN EVAPOTRANSPIRATION, WHILE PREVENTING EROSION.

GENERAL MAINTENANCE

IN ADDITION TO STRUCTURAL MAINTENANCE, SILTATION NEEDS TO BE REMOVED AS NEEDED. PLANTS NEED TO BE TRIMMED BACK TO MAINTAIN AESTHETIC VALUE AND INVASIVE SPECIES NEED TO BE CONTROLLED. CLOSE MOWING OR EXTENSIVE CHEMICAL USE IS NOT CONDUCIVE TO WATER QUALITY IMPROVEMENT AND WILDLIFE HABITAT.

SITE PREPARATION

INVASIVE SPECIES, PARTICULARLY THOSE THAT WILL ADAPT TO WET CONDITIONS, SHOULD BE REMOVED OR SPRAYED BEFORE THEY BECOME INCORPORATED INTO THE SITE. NORMAL VEGETATION CAN BE WORKED INTO THE TOPSOIL, WHICH SHOULD BE STOCKPILED UNTIL THE FINAL GRADE HAS BEEN ESTABLISHED. WITH THE ENGINEER'S SPECIFICATIONS AND DIMENSIONS IN HAND, ON-SITE CONSTRUCTION OF THE BERM AND OUTLETS MUST BE EXECUTED CAREFULLY IN ORDER TO MAINTAIN STRUCTURAL INTEGRITY. THE INFILTRATION AND PLANT GROWTH AREAS SHOULD BE LOOSE AND FRIABLE, HIGH IN ORGANIC MATTER, AND COMPLETED WITHOUT COMPACTIONS FROM HEAVY EQUIPMENT. BY USING THE 'DIG AND DROP' METHOD, ONE CAN USE AN EXCAVATOR TO DIG AND DROP EACH AREA OF THE BOTTOM SOIL IN A LOOSE MANNER. AT THIS POINT, ONE CAN INCORPORATE LIME, COMPOSTED LEAVES, AND/OR GRASS CLIPPINGS. THE EXCAVATION MACHINE DOES NOT MOVE OVER THE FINISHED SURFACE, THUS AVOIDING UNNECESSARY COMPACTION. NATIVE VEGETATION CAN BE PLANTED OR SEEDED OVER THIS UNEVEN, ABSORBENT SURFACE.

SEEDING AND PLANTING METHODS

SEEDING AND PLANTING SHOULD BEGIN IMMEDIATELY UPON COMPLETION OF THE STRUCTURE, WHEN THE SOIL IS STILL FRIABLE AND BEFORE INVASIVE WEEDS EMERGE. PLAN SEEDING AND PLANTING BEFORE THE BASIN IS FLOODED, OR ALLOW THE BASIN TO DRAIN TO A FEW INCHES BEFORE SEEDING. BROADCAST SEED EVENLY OVER EACH UNIT BY HAND OR WITH MOTORIZED SPREADER. SEEDING RATES ARE GENERALLY LOW (1/2 LB PER 1,000 SQ FT). THE USE OF A SEED FILLER, I.E., PAM-12, CAN BE USED TO CREATE A MIX OF 10 LB PER 1,000 SQ FT (I.E., 9-1/2 LB OF PAM-12 MIXED WITH 1/2 LB OF SEED), WHICH CAN BE BROADCAST EVENLY OVER THE AREA. BARLEY, OATS, OR RYE CAN PROVIDE TEMPORARY VEGETATION TO PROTECT THE SOIL IN STORM WATER MANAGEMENT FACILITIES UNTIL PERMANENT VEGETATION CAN BE ESTABLISHED. THE USE OF NATIVE SPECIES, I.E., VIRGINIA WILD RYE, CAN CREATE AN INTERMEDIATE VEGETATIVE COVER THAT SUCCEEDS TO NATIVE LONG-TERM VEGETATION. STRAW MULCH OR STRAW COCONUT MATS ARE FREQUENTLY USED TO CONTROL EROSION AND PROTECT EMERGING SEEDLINGS FROM EXTREME TEMPERATURES AND DRYING OUT. MULCH SHOULD BE SPARSE TO ALLOW SUNLIGHT TO REACH THE GROUND. TRANSPLANTED SEEDLINGS AND SHRUBS NEED TEMPORARY WATER UNTIL THEY BECOME WELL ROOTED. IRRIGATION OF SEEDED AREAS IS OF VALUE UNTIL SEEDLINGS BECOME ESTABLISHED.

NORTHEAST PREMIUM WILDFLOWER SEED MIXTURE

SEED AND PRODUCT CODE: WFAR-0605 [OR EQUAL]
PLANTING RATE: 5-10 LBS./ACRE OR
4 OZ./1000 SQ. FT. (1/2 ACRE OR LESS)
USE DOUBLE RATE IF HYDRO-SEEDING

REVISED 2/18/2015

PLANT QUALITY AND HANDLING NOTES:

1. ALL PLANT MATERIAL SHALL CONFORM TO THE AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004) OR LATEST REVISION AS PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.
2. IN ALL CASES, BOTANICAL NAMES LISTED WITHIN THE APPROVED OR FINAL PLANT LIST SHALL TAKE PRECEDENCE OVER COMMON NAMES.
3. ALL PLANTS SHALL BE OF SELECTED SPECIMEN QUALITY, EXCEPTIONALLY HEAVY, TIGHTLY KNOT, SO TRAINED OR FAVORED IN THEIR DEVELOPMENT AND APPEARANCE AS TO BE SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY. ALL PLANTS SHALL HAVE A NORMAL HABIT OR SOUND, HEALTHY, VIGOROUS PLANTS WITH WELL DEVELOPED ROOT SYSTEM. PLANTS SHALL BE FREE OF DISEASE, INSECT PESTS, EGGS OR LARVAE.
4. PLANTS SHALL NOT BE PRUNED BEFORE DELIVERY. TREES WITH ABRASION OF THE BARK, SUNSCALDS, DISFIGURING KNOTS OR FRESH CUTS OF LIMBS OVER ONE AND ONE-FOURTH INCHES (1-1/4") WHICH HAVE NOT COMPLETELY CALLOUSED SHALL BE REJECTED.
5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH AND BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE.
6. THE ROOT SYSTEM OF EACH PLANT SHALL BE WELL PROVIDED WITH FIBROUS ROOTS. ALL PARTS SHALL BE SOUND, HEALTHY, VIGOROUS, WELL-BRANCHED AND DENSELY FOLIATED WHEN IN LEAF.
   ALL PLANTS DESIGNATED BALL AND BURLAP (B&B) MUST BE MOVED WITH THE ROOT SYSTEM AS SOLID UNITS WITH BALLS OF EARTH FIRMLY WRAPPED WITH BURLAP. THE DIAMETER AND DEPTH OF THE BALLS OF EARTH MUST BE SUFFICIENT TO ENCOMPASS THE FIBROUS ROOT FEEDING SYSTEMS NECESSARY FOR THE HEALTHY DEVELOPMENT OF THE PLANT. NO PLANT SHALL BE ACCEPTED WHEN THE BALL OF EARTH SURROUNDING ITS ROOTS HAS BEEN BADLY CRACKED OR BROKEN PREPARATORY TO OR DURING THE PROCESS OF PLANTING. THE BALLS SHALL REMAIN INTACT DURING ALL OPERATIONS. ALL PLANTS THAT CANNOT BE PLANTED AT ONCE MUST BE HEELED-IN BY SETTING IN THE GROUND AND COVERING THE BALLS WITH SOIL OR MULCH AND THEN WATERING. HEMP BURLAP AND TWINE IS PREFERABLE TO TREATED. IF TREATED BURLAP IS USED, ALL TWINE IS TO BE CUT FROM AROUND THE TRUNK WHEN THE TREE IS PLANTED. ALL BURLAP IS TO BE REMOVED.
8. PLANTS TRANSPORTED TO THE PROJECT IN OPEN VEHICLES SHALL BE COVERED WITH TARPS OR OTHER SUITABLE COVERS SECURELY FASTENED TO THE BODY OF THE VEHICLE TO PREVENT INJURY TO THE PLANTS. CLOSED VEHICLES SHALL BE ADEQUATELY VENTILATED TO PREVENT OVERHEATING OF THE PLANTS. EVIDENCE OF INADEQUATE PROTECTION FOLLOWING DIGGING, CARELESSNESS WHILE IN TRANSIT, OR IMPROPER HANDLING OR STORAGE SHALL BE CAUSE FOR REJECTION OF PLANT MATERIAL. ALL PLANTS SHALL BE KEPT MOIST, FRESH, AND PROTECTED. SUCH PROTECTION SHALL ENCOMPASS THE ENTIRE PERIOD DURING WHICH THE PLANTS ARE IN TRANSIT, BEING HANDLED, OR ARE IN TEMPORARY STORAGE.
9. ALL PLANT MATERIAL SHALL BE INSTALLED IN ACCORDANCE WITH THE CORRESPONDING LANDSCAPE PLAN AND PLANTING DETAILS.
10. LANDSCAPE CONTRACTOR SHALL MAKE BEST EFFORT TO INSTALL PLANTINGS ON THE SAME DAY AS DELIVERY. IF PLANTS ARE NOT PLANTED IMMEDIATELY ON SITE, PROPER CARE SHALL BE TAKEN TO PLACE THE PLANTINGS IN PARTIAL SHADE WHEN POSSIBLE. THE ROOT BALL SHALL BE KEPT MOIST AT ALL TIME AND COVERED WITH MOISTENED MULCH OR AGED WOODCHIPS. PROPER IRRIGATION SHALL BE SUPPLIED SO AS TO NOT ALLOW THE ROOT BALL TO DRY OUT. PLANTINGS SHALL BE UNTIED AND PROPER SPACING SHALL BE ALLOTTED FOR AIR CIRCULATION AND TO PREVENT DISEASE, WILTING, AND LEAF LOSS. PLANTS THAT REMAIN UNPLANTED FOR A PERIOD OF TIME GREATER THAN THREE (3) DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH AND WATERED AS REQUIRED TO PRESERVE ROOT MOISTURE.
11. NO PLANT MATERIAL SHALL BE PLANTED IN MUDDY OR FROZEN SOIL.
12. PLANTS WITH INJURED ROOTS OR BRANCHES SHALL BE PRUNED PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY DISEASED OR INJURED PLANTS SHALL BE REMOVED.
13. IF ROCK OR OTHER UNDERGROUND OBSTRUCTION IS ENCOUNTERED, THE LANDSCAPE DESIGNER RESERVES THE RIGHT TO RELOCATE OR ENLARGE PLANTING PITS OR DELETE PLANT MATERIAL FROM THE CONTRACT.
14. IF PLANTS ARE PROPOSED WITHIN SIGHT TRIANGLES, TREES SHALL BE LIMBED AND MAINTAINED TO A HEIGHT OF SEVEN FEET (7') ABOVE GRADE, AND SHRUBS, GROUND COVER, PERENNIALS, AND ANNUALS SHALL BE MAINTAINED TO A HEIGHT NOT TO EXCEED TWO FEET (2') ABOVE GRADE UNLESS OTHERWISE NOTED OR SPECIFIED BY THE GOVERNING MUNICIPALITY OR AGENCY.
15. INSTALLATION SHALL OCCUR DURING THE FOLLOWING SEASONS:
   PLANTS (MARCH 15 - DECEMBER 15)
   LAWNS (MARCH 15 - JUNE 15 OR SEPTEMBER 1 - DECEMBER 1)
16. THE FOLLOWING TREES ARE SUSCEPTIBLE TO TRANSPLANT SHOCK AND SHALL NOT BE PLANTED DURING THE FALL SEASON (STARTING SEPTEMBER 15):

ABIES CONCOLOR	CORNUS VARIETIES	OSTRYA VIRGINIANA
ACER BUERGERIANUM	CRATAEGUS VARIETIES	PINUS NIGRA
ACER FREEMANII	CUPRESSOCYPARIS LEYLANDII	PLATANUS VARIETIES
ACER RUBRUM	FAGUS VARIETIES	POPULUS VARIETIES
ACER SACCHARINUM	HALESIA VARIETIES	PRUNUS VARIETIES
BETULA VARIETIES	ILEX X FOSTERII	PYRUS VARIETIES
CARPINUS VARIETIES	ILEX NELLIE STEVENS	QUERCUS VARIETIES (NOT Q. PALUSTRIS)
CEDRUS DEODARA	ILEX OPACA	SALIX WEEPING VARIETIES
CELTIS VARIETIES	JUNIPERUS VIRGINIANA	SORBUS VARIETIES
CERCIDIPHYLLUM VARIETIES	KOELREUTERIA PANICULATA	TAXODIUM VARIETIES
CERCIS CANADENSIS	LIQUIDAMBAR VARIETIES	TAXUS B REPANDENS
CORNUS VARIETIES	LIRIODENDRON VARIETIES	TILIA TOMENTOSA VARIETIES
CRATAEGUS VARIETIES	MALUS IN LEAF	ULMUS PARVIFOLIA VARIETIES
	NYSSA SYLVATICA	ZELKOVA VARIETIES

17. IF A PROPOSED PLANT IS UNATTAINABLE ON THE FALL DIGGING HAZARD LIST, AN EQUIVALENT SPECIES OF THE SAME SIZE MAY BE REQUESTED FOR SUBSTITUTION OF THE ORIGINAL PLANT. ALL SUBSTITUTIONS SHALL BE APPROVED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL PRIOR TO ORDERING AND INSTALLATION.
18. DURING THE COURSE OF CONSTRUCTION/PLANT INSTALLATION, EXCESS AND WASTE MATERIALS SHALL BE CONTINUOUSLY AND PROMPTLY REMOVED AT THE END OF EACH WORK DAY. ALL DEBRIS, MATERIALS, AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF AND ALL PAVED AREAS SHALL BE CLEANED.
19. THE LANDSCAPE CONTRACTOR SHALL DISPOSE OF ALL RUBBISH AND EXCESS SOIL AT HIS EXPENSE TO AN OFF-SITE LOCATION AS APPROVED BY THE LOCAL MUNICIPALITY.
20. A 90-DAY MAINTENANCE PERIOD SHALL BEGIN IMMEDIATELY AFTER ALL PLANTS HAVE BEEN SATISFACTORILY INSTALLED.
21. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS IF ORIGINALLY REQUIRED, WATERING WHEN NEEDED OR DIRECTED, WEEDING, PRUNING, SPRAYING, FERTILIZING, MOWING THE LAWN, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
22. MOW ALL GRASS AREAS AT REGULAR INTERVALS TO KEEP THE GRASS HEIGHT FROM EXCEEDING THREE INCHES (3"). MOWING SHALL BE PERFORMED ONLY WHEN GRASS IS DRY. MOWER BLADE SHALL BE SET TO REMOVE NO MORE THAN ONE THIRD (1/3) OF THE GRASS LENGTH. WHEN THE AMOUNT OF GRASS IS HEAVY, IT SHALL BE REMOVED TO PREVENT DESTRUCTION OF THE UNDERLYING TURF. MOW GRASS AREAS IN SUCH A MANNER AS TO PREVENT CLIPPINGS FROM BLOWING ON PAVED AREAS, AND SIDEWALKS. CLEANUP AFTER MOWING SHALL INCLUDE SWEEPING OR BLOWING OF PAVED AREAS AND SIDEWALKS TO CLEAR THEM FROM MOWING DEBRIS.
23. GRASSED AREAS DAMAGED DURING THE PROCESS OF THE WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL RESTORE THE DISTURBED AREAS TO A CONDITION SATISFACTORY TO THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIAL, OR OWNER/OWNER'S REPRESENTATIVE. THIS MAY INCLUDE FILLING TO GRADE, FERTILIZING, SEEDING, AND MULCHING.
24. SHOULD THE OWNER REQUIRE MAINTENANCE BEYOND THE STANDARD 90-DAY MAINTENANCE PERIOD, A SEPARATE CONTRACT SHALL BE ESTABLISHED.
25. LANDSCAPE CONTRACTOR SHALL WATER NEW PLANTINGS FROM TIME OF INSTALL AND THROUGHOUT REQUIRED 90-DAY MAINTENANCE PERIOD UNTIL PLANTS ARE ESTABLISHED. IF ON-SITE WATER IS NOT AVAILABLE AT THE PROJECT LOCATION, THE LANDSCAPE CONTRACTOR SHALL FURNISH IT BY MEANS OF A WATERING TRUCK OR OTHER ACCEPTABLE MANNER.
26. THE QUANTITY OF WATER APPLIED AT ONE TIME SHALL BE SUFFICIENT TO PENETRATE THE SOIL TO A MINIMUM OF EIGHT INCHES (8") IN SHRUB BEDS AND SIX INCHES (6") IN TURF AREAS AT A RATE WHICH WILL PREVENT SATURATION OF THE SOIL.
27. IF AN AUTOMATIC IRRIGATION SYSTEM HAS BEEN INSTALLED, IT CAN BE USED FOR WATERING PLANT MATERIAL. HOWEVER, FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE LANDSCAPE CONTRACTOR'S RESPONSIBILITY OF PLANT HEALTH AND ESTABLISHMENT.

LAWN (SEED OR SOD) NOTES:

1. SEED MIXTURE SHALL BE FRESH, CLEAN, NEW CROP SEED. SOD SHALL BE STRONGLY ROOTED, UNIFORM IN THICKNESS, AND FREE OF WEEDS, DISEASE, AND PESTS.
2. SEED OR SOD SHALL BE PURCHASED FROM A RECOGNIZED DISTRIBUTOR AND SHALL BE COMPOSED OF THE MIX OR BLEND WITHIN THE PROVIDED "SEED SPECIFICATION" OR "SOD SPECIFICATION."
3. REFERENCE LANDSCAPE PLAN FOR AREAS TO BE SEEDED OR LAID WITH SOD.
4. SEEDING SHALL NOT BE PERFORMED IN WINDY WEATHER. IF THE SEASON OF THE PROJECT COMPLETION PROHIBITS PERMANENT STABILIZATION, TEMPORARY STABILIZATION SHALL BE PROVIDED IN ACCORDANCE WITH THE "TEMPORARY SEEDING SPECIFICATION."
5. PROTECT NEW LAWN AREAS AGAINST TRESPASSING WHILE THE SEED IS GERMINATING. FURNISH AND INSTALL FENCES, SIGNS, BARRIERS OR ANY OTHER NECESSARY TEMPORARY PROTECTIVE DEVICES. DAMAGE RESULTING FROM TRESPASS, EROSION, WASHOUT, SETTLEMENT OR OTHER CAUSES SHALL BE REPAIRED BY THE LANDSCAPE CONTRACTOR AT HIS EXPENSE. REMOVE ALL FENCES, SIGNS, BARRIERS OR OTHER TEMPORARY PROTECTIVE DEVICES ONCE LAWN HAS BEEN ESTABLISHED.

GENERAL LANDSCAPING NOTES:

REVISED 2/18/2015

1. THE LANDSCAPE CONTRACTOR SHALL FURNISH ALL MATERIALS AND PERFORM ALL WORK IN ACCORDANCE WITH THESE SPECIFICATIONS, APPROVED OR FINAL DRAWINGS, AND INSTRUCTIONS PROVIDED BY THE PROJECT LANDSCAPE DESIGNER, MUNICIPAL OFFICIALS, OR OWNER/OWNER'S REPRESENTATIVE. ALL WORK COMPLETED AND MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH THE INTENTION OF THE SPECIFICATIONS, DRAWINGS, AND INSTRUCTIONS AND EXECUTED WITH THE STANDARD LEVEL OF CARE FOR THE LANDSCAPE INDUSTRY.
2. WORK MUST BE CARRIED OUT ONLY DURING WEATHER CONDITIONS FAVORABLE TO LANDSCAPE CONSTRUCTION AND TO THE HEALTH AND WELFARE OF PLANTS. THE SUITABILITY OF SUCH WEATHER CONDITIONS SHALL BE DETERMINED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL.
3. IT IS THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR, BEFORE ORDERING OR PURCHASING MATERIALS, TO PROVIDE SAMPLES OF THOSE MATERIALS TO THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL FOR APPROVAL, IF SO REQUESTED.
4. IF SAMPLES ARE REQUESTED, THE LANDSCAPE CONTRACTOR IS TO SUBMIT CERTIFICATION TAGS FROM TREES, SHRUBS AND SEED VERIFYING TYPE AND PURITY.
5. UNLESS OTHERWISE AUTHORIZED BY THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL, THE LANDSCAPE CONTRACTOR SHALL PROVIDE NOTICE AT LEAST FORTY-EIGHT HOURS (48 HRS.) IN ADVANCE OF THE ANTICIPATED DELIVERY DATE OF ANY PLANT MATERIALS TO THE PROJECT SITE. A LEGIBLE COPY OF THE INVOICE, SHOWING VARIETIES AND SIZES OF MATERIALS INCLUDED FOR EACH SHIPMENT SHALL BE FURNISHED TO THE PROJECT LANDSCAPE DESIGNER, OR GOVERNING MUNICIPAL OFFICIAL.
6. THE PROJECT LANDSCAPE DESIGNER OR GOVERNING MUNICIPAL OFFICIAL RESERVES THE RIGHT TO INSPECT AND REJECT PLANTS AT ANY TIME AND AT ANY PLACE.
7. EXCESS SNOW THAT CANNOT BE ACCOMMODATED WITHIN THE SNOW DUMP AREAS MUST BE REMOVED FROM THE SITE.

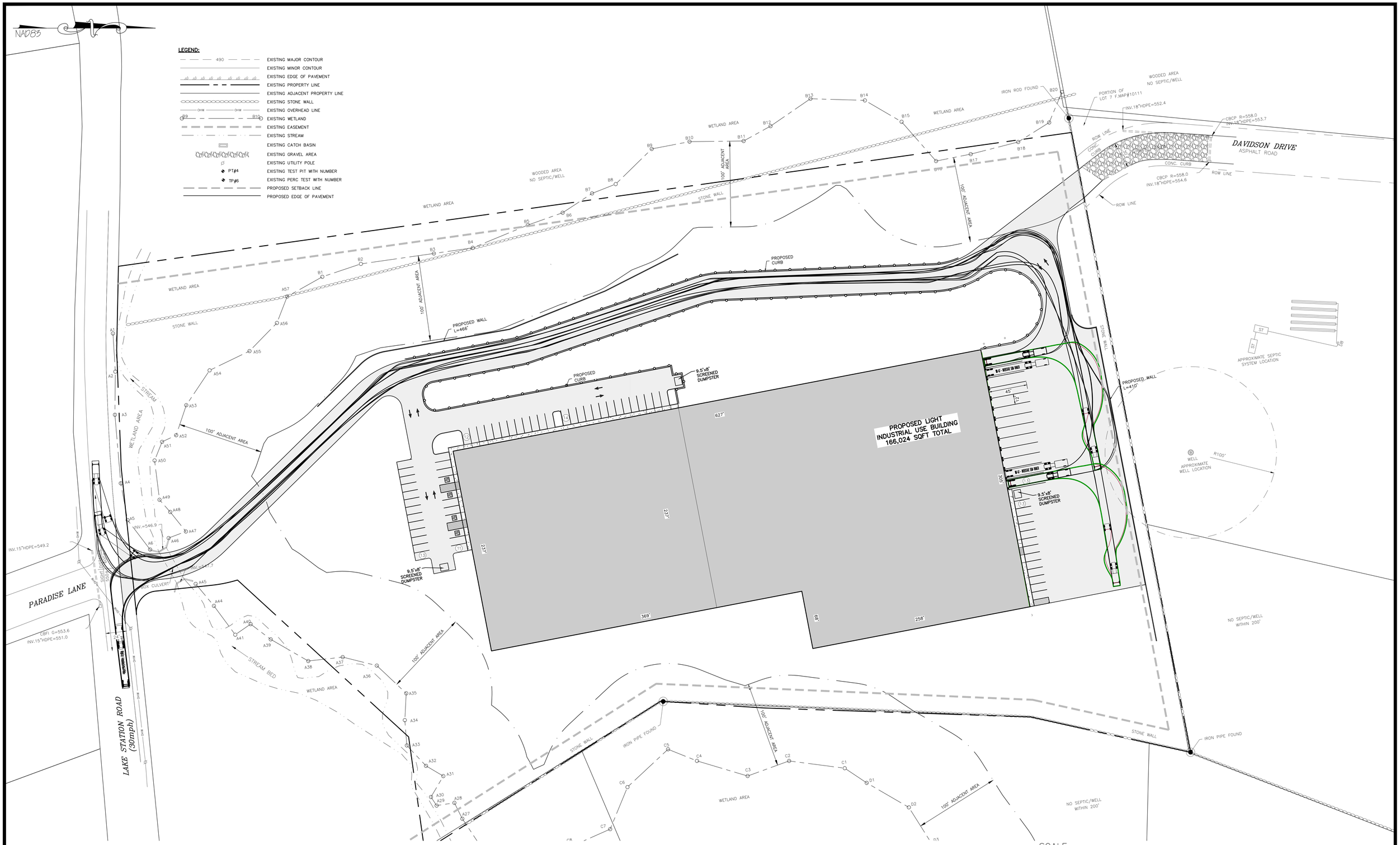
SOIL PREPARATION AND MULCH NOTES:

1. LANDSCAPE CONTRACTOR SHALL OBTAIN A SOIL TEST OF THE IN-SITU TOPSOIL BY A CERTIFIED SOIL LABORATORY PRIOR TO PLANTING. LANDSCAPE CONTRACTOR SHALL ALLOW FOR A TWO WEEK TURNAROUND TIME FROM SUBMITTAL OF SAMPLE TO NOTIFICATION OF RESULTS.
2. BASED ON SOIL TEST RESULTS, ADJUST THE RATES OF LIME AND FERTILIZER THAT SHALL BE MIXED INTO THE TOP SIX INCHES (6") OF TOPSOIL. THE LIME AND FERTILIZER RATES PROVIDED WITHIN THE "SEED SPECIFICATION" OR "SOD SPECIFICATION" IS APPROXIMATE AND FOR BIDDING PURPOSES ONLY. IF ADDITIONAL AMENDMENTS ARE NECESSARY, ADJUST THE TOPSOIL AS FOLLOWS:
   - MODIFY HEAVY CLAY OR SILT SOILS (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) OR GYPSUM.
   - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
3. TOPSOIL SHALL BE FERTILE, FRIABLE, NATURAL TOPSOIL OF LOAMING CHARACTER, WITHOUT ADMIXTURE OF SUBSOIL MATERIAL, OBTAINED FROM A WELL-DRAINED ARABLE SITE, FREE FROM ALL CLAY, LUMPS, COARSE SANDS, STONES, PLANTS, ROOTS, STICKS, AND OTHER FOREIGN MATERIAL GREATER THAN ONE INCH (1:).
4. TOPSOIL SHALL HAVE A PH RANGE OF 5.0-7.0 AND SHALL NOT CONTAIN LESS THAN 6% ORGANIC MATTER BY WEIGHT.
5. OBTAIN TOPSOIL ONLY FROM LOCAL SOURCES OR FROM AREAS HAVING SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT THE PROJECT SITE.
6. CONTRACTOR SHALL PROVIDE A SIX INCH (6") DEEP LAYER OF TOPSOIL IN ALL PLANTING AREAS. TOPSOIL SHALL BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN SOIL CONDITIONS.
7. UNLESS OTHERWISE NOTED IN THE CONTRACT, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBED AREA OF THE SITE.
8. LANDSCAPE CONTRACTOR SHALL VERIFY THAT THE SUB-GRADE ELEVATION MEETS THE FINISHED GRADE ELEVATION (LESS THE REQUIRED TOPSOIL), IN ACCORDANCE WITH THE APPROVED OR FINAL GRADING PLAN.
9. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THE APPROVED OR FINAL CONSTRUCTION SET UNLESS OTHERWISE DIRECTED BY THE PROJECT LANDSCAPE DESIGNER OR MUNICIPAL OFFICIAL.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPER SURFACE AND SUBSURFACE PLANT BED DRAINAGE PRIOR TO THE INSTALLATION OF PLANTINGS. IF POOR DRAINAGE CONDITIONS EXIST, CORRECTIVE ACTION SHALL BE TAKEN PRIOR TO INSTALLATION. ALL PLANTING AND LAWN AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW A FREE FLOW OF SURFACE WATER.
11. DOUBLE SHREDDED HARDWOOD MULCH OR APPROVED EQUAL SHALL BE USED AS A THREE INCH (3") TOP DRESSING IN ALL SHRUB PLANTING BEDS AND AROUND ALL TREES PLANTED BY LANDSCAPE CONTRACTOR. GROUND COVER, PERENNIAL, AND ANNUAL PLANTING BEDS SHALL BE MULCHED WITH A TWO INCH (2:) TOP DRESSING. SINGLE TREES OR SHRUBS SHALL BE MULCHED TO AVOID CONTACT WITH TRUNK OR PLANT STEM. MULCH SHALL BE OF SUFFICIENT CHARACTER AS NOT TO BE EASILY DISPLACED BY WIND OR WATER RUNOFF.
12. WHENEVER POSSIBLE, THE SOIL PREPARATION AREA SHALL BE CONNECTED FROM PLANTING TO PLANTING.
13. SOIL SHALL BE LOOSENED WITH A BACKHOE OR OTHER LARGE COARSE-TILING EQUIPMEN

NAD83

LEGEND:

- 490 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING STONE WALL
- OHW — EXISTING OVERHEAD LINE
- B9 — B10 EXISTING WETLAND
- EXISTING EASEMENT
- EXISTING STREAM
- EXISTING CATCH BASIN
- EXISTING GRAVEL AREA
- EXISTING UTILITY POLE
- PT#4 EXISTING TEST PIT WITH NUMBER
- TP#6 EXISTING PERC TEST WITH NUMBER
- PROPOSED SETBACK LINE
- PROPOSED EDGE OF PAVEMENT



TRUCK TURNING DIAGRAM
SCALE: 1"=40'

SCALE
40 0 20 40 80
SCALE FEET

TOWN OF CHESTER PLANNING BOARD APPROVAL

REVISION	BY	DATE	DESCRIPTION
3.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
2.	MM	9/16/21	PREPARATION OF PRELIMINARY PLANS
1.	MM	3/23/21	ROAD LAYOUT REVISION PER PB MTG.

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET

ARDEN CONSULTING ENGINEERS, PLLC
P.O. BOX 340 MONROE, N.Y.
T: 845-782-8114 E: MAM@ARDENCONSULTING.NET

STATE OF NEW YORK · MICHAEL A. MORGANTE · 078577 · LICENSED PROFESSIONAL ENGINEER

MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

TRUCK TURNING DIAGRAM

JOB#: 20-030
SCALE: AS NOTED
DATE: 8-17-21
DRAWN: MM
CHECKED: MM
SHEET NO. 15 OF 20

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LEGEND:

- EXISTING MAJOR CONTOUR (490)
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING STONE WALL
- EXISTING OVERHEAD LINE (OHW)
- EXISTING WETLAND (B9, B10)
- EXISTING EASEMENT
- EXISTING STREAM
- EXISTING CATCH BASIN
- EXISTING GRAVEL AREA
- EXISTING UTILITY POLE
- PROPOSED EDGE OF PAVEMENT

SCALE

120 0 60 120 240

SCALE FEET

TOWN OF CHESTER PLANNING BOARD APPROVAL

REVISION	BY	DATE	DESCRIPTION
3.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
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SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

TRUCK TURNING DIAGRAM – INTERSECTION 1

JOB#: 20-030
SCALE: AS NOTED
DATE: 2-17-21
DRAWN: MM
CHECKED: MM
SHEET NO. 16 OF 20

TRUCK TURNING DIAGRAM – INTERSECTION 1
SCALE: 1"=120'

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LEGEND:

- 490 — EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING EDGE OF PAVEMENT
- EXISTING PROPERTY LINE
- EXISTING ADJACENT PROPERTY LINE
- EXISTING STONE WALL
- OHW — EXISTING OVERHEAD LINE
- B9 — B10 EXISTING WETLAND
- EXISTING EASEMENT
- EXISTING STREAM
- EXISTING CATCH BASIN
- EXISTING GRAVEL AREA
- EXISTING UTILITY POLE
- PROPOSED EDGE OF PAVEMENT

SCALE

120 0 60 120 240

SCALE FEET

TOWN OF CHESTER PLANNING BOARD APPROVAL

REVISION	BY	DATE	DESCRIPTION
3.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
2.	MM	9/16/21	PREPARATION OF PRELIMINARY PLANS
1.	MM	3/23/21	ROAD LAYOUT REVISION PER PB MTG.

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MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

TRUCK TURNING DIAGRAM – INTERSECTION 2

JOB#: 20-030
SCALE: AS NOTED
DATE: 2-17-21
DRAWN: MM
CHECKED: MM
SHEET NO. 17 OF 20

TRUCK TURNING DIAGRAM – INTERSECTION 2
SCALE: 1"=120'

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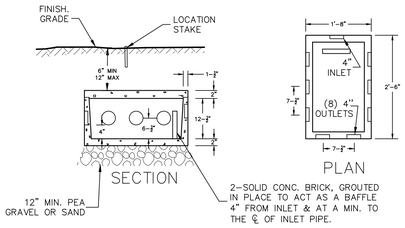
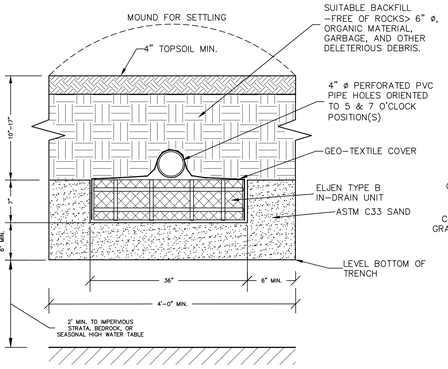


SPECIFICATIONS:
1. CONCRETE MINIMUM STRENGTH – 4,000 PSI @ 28 DAYS
2. STEEL REINFORCEMENT – 6" X 6" X 6 GA. WWF
3. AIR ENTRAINMENT – 5 %
4. CONSTRUCTION JOINT – BUTYL RUBBER BASE
5. CEMENT PIPE CONSTRUCTION – "POLYLOC SEAL" (PAT.)
6. DIST. BOX AS MANUFACTURED BY WOODARD'S CONCRETE, OR EQUAL

NOTES:
1. PIPE JOINTS TO BE SEALED WITH ASPHALTIC MATERIAL OR EQUIVALENT.
2. INVERT ELEVATIONS OF ALL OUTLET PIPES MUST BE EQUAL USE OF SPEED LEVELING DEVICES IS RECOMMENDED.
3. THE SLOPE OF OUTLET PIPES BETWEEN THE DISTRIBUTION BOX AND DISTRIBUTOR LATERALS SHOULD BE AT LEAST 1/32" PER FOOT.
4. BAFFLE REQUIRED FOR SIPHON OR AUTOMATIC DOSING OR IF INLET PIPE SLOPE EXCEEDS 1/2" PER FOOT.
5. OUTLETS MUST BE USED IN A MANNER THAT WILL ALLOW ACCESS TO THE EXPANSION AREA WITHOUT DISTURBING EXISTING PIPING.

8–OUTLET DISTRIBUTION BOX

NOT TO SCALE

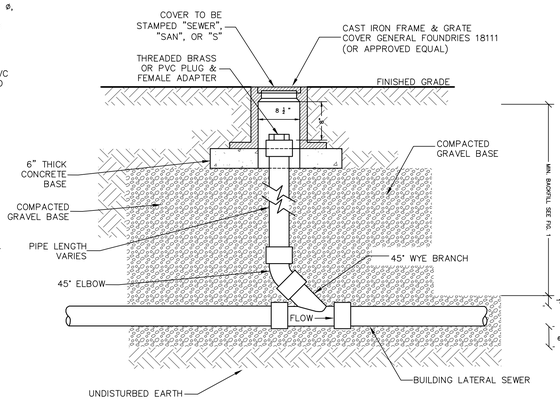


NOTES:
1. SYSTEM TO BE INSTALLED IN CONFORMANCE WITH ALL NYSDOH REQUIREMENTS FOR RESIDENTIAL WASTEWATER TREATMENT SYSTEMS.
2. SYSTEM TO MEET ALL SEPARATION REQUIREMENTS.
3. PERFORATED PIPE SHALL BE PLACED SO THAT HOLES ARE FACING 5 & 7 O'CLOCK POSITIONS.
4. TRENCH BOTTOM SHALL BE FLAT. LATERALS SHALL BE INSTALLED AT 1/32" TO 1/16" PER FOOT FOR GRAVITY FED SYSTEMS & SET NEARLY LEVEL FOR DOSED SYSTEMS.
5. ALL TRENCHES TO HAVE IDENTICAL NUMBER OF ELJEN UNITS.
6. END OF ALL DISTRIBUTION PIPES MUST BE PLUGGED.
7. RAKE SIDES & BOTTOM OF TRENCH PRIOR TO PLACING SAND.
8. DO NOT INSTALL TRENCHES IN WET SOIL.
9. TRENCHES TO BE INSTALLED PARALLEL WITH EXISTING CONTOURS. SPACING SHALL BE A MIN. OF 8 FT. ON CENTER WITH A MINIMUM OF 4 FEET OF UNDISTURBED SOIL BETWEEN TRENCHES.
10. NO SYSTEM IS TO BE CONSTRUCTED ON GROUND WITH A SLOPE IN EXCESS OF 15% GRADE.
11. THE BACKFILL IN THE TRENCHES MUST BE MOUNDED FOR SETTLING.
12. SEE TABLE BELOW FOR ASTM C33 SAND SPECIFICATIONS.

SEIVE SIZE	SEIVE SIZE SQ. OPENING	% PASSING BY WEIGHT (WET SIEVE)	
		MINIMUM	MAXIMUM
3/8"	9.5 mm	100	100
NO. 4	4.75 mm	95	100
NO. 8	2.36 mm	80	100
NO. 16	1.18 mm	50	85
NO. 30	600 µm	25	60
NO. 50	300 µm	5	30
NO. 100	150 µm	0	<10
NO. 200	75 µm	0	<5

ELJEN IN–DRAIN SECTION

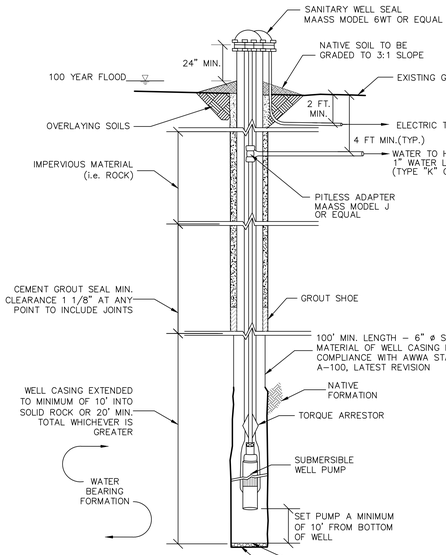
NOT TO SCALE



NOTES:
1. EACH BUILDING LATERAL SEWER SHALL HAVE A CLEANOUT INSTALLED APPROXIMATELY 2'DOWNSTREAM OF THE BUILDING PIPE TO BUILDING LATERAL SEWER CONNECTION. HEREAFTER, CLEANOUTS SHALL BE INSTALLED ALONG THE BUILDING LATERAL SEWER APPROXIMATELY EVERY 100'(MAXIMUM). FOR THE PURPOSE OF CLEANOUT LOCATIONS, DISTANCE SHALL BE MEASURED FROM THE FIRST CLEANOUT LOCATED DOWNSTREAM OF THE BUILDING PIPE TO BUILDING LATERAL SEWER CONNECTION, HENCE DOWNSTREAM ALONG THE BUILDING LATERAL SEWER TO THE CENTER OF THE SEWER MAIN LINE (GENERALLY LOCATED IN THE CENTER OF THE STREET).
2. CLEANOUT LOCATED IN A ROAD, DRIVEWAY OR PARKING AREA SHALL REQUIRE A CAMBELL FOUNDRY #4164 CAST IRON FRAME AND COVER. (OR APPROVED EQUAL).

BUILDING LATERAL SEWER CLEANOUT (C.O.)

NOT TO SCALE



NOTES:
1. WELL TO BE INSTALLED IN ACCORDANCE WITH 10NYCRR APPENDIX 5–B & 5–D STANDARDS FOR WATER WELLS.
2. SANITARY WELL SEAL & PITLESS ADAPTER SHALL BE APPROVED BY THE WATER SYSTEMS COUNCIL.
3. GROUTING FOR THE WELL CASING SHALL EXTEND THE ENTIRE DEPTH OR A MINIMUM OF 100'.

WELL DETAIL

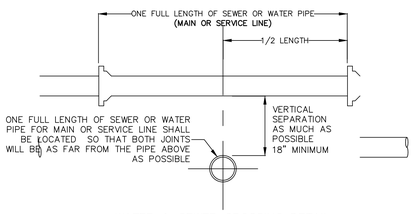
NO SCALE

ADDITIONAL WELL NOTES:
1. THE LISTED WATER WELL SEPARATION DISTANCES FROM CONTAMINANT SOURCES SHALL BE INCREASED BY 50% WHENEVER AQUIFER WATER ENTERS THE WATER WELL AT LESS THAN 50 FEET BELOW GRADE. IF A 50% INCREASE IN SEPARATION DISTANCES CAN NOT BE ACHIEVED, THEN THE GREATEST POSSIBLE INCREASE IN SEPARATION DISTANCE SHALL BE PROVIDED WITH SUCH ADDITIONAL MEASURES AS NEEDED TO PREVENT CONTAMINATION. SEE ALSO NOTE 1 TO TABLE 1 OF APPENDIX 5–D.

SANITARY NOTES

1. THE DESIGN AND LOCATION OF SANITARY (WATER & SEWER) SYSTEMS SHALL NOT BE CHANGED.
2. ALL WELLS W/I 200' OF THE PROJECT HAVE BEEN LOCATED AND SHOWN ON THE PLANS.
3. TRENCHES SHALL NOT BE INSTALLED IN WET SOIL. THE SIDES AND BOTTOM OF TRENCHES MUST BE RAKED. THE ENDS OF ALL OF THE LATERALS MUST BE CAPPED.
4. THERE SHALL BE NO REGRADING, EXCEPT AS SHOWN ON THE APPROVED PLANS, IN THE AREA OF THE ABSORPTION FIELDS.
5. HEAVY EQUIPMENT SHALL BE KEPT OFF THE AREA OF THE ABSORPTION FIELDS EXCEPT DURING THE ACTUAL CONSTRUCTION. THERE SHALL BE NO UNNECESSARY MOVEMENT OF CONSTRUCTION EQUIPMENT IN THE ABSORPTION FIELD AREA BEFORE, DURING, OR AFTER CONSTRUCTION. EXTREME CARE MUST BE TAKEN DURING THE ACTUAL CONSTRUCTION SO AS TO AVOID ANY UNDUE COMPACTION THAT COULD RESULT IN A CHANGE OF THE ABSORPTION CAPACITY OF THE SOIL ON WHICH THE DESIGN WAS BASED.
6. THIS SYSTEM WAS NOT DESIGNED TO ACCOMMODATE GARBAGE GRINDERS, JACUZZI TYPE SPA TUBS OVER 100 GALLONS, OR WATER CONDITIONERS. AS SUCH, THESE ITEMS SHALL NOT BE INSTALLED UNLESS THE SYSTEM IS REDESIGNED TO ACCOUNT FOR THEM AND REAPPROVED BY THE OCDOH.
7. THERE MUST BE AN UNINTERRUPTED POSITIVE SLOPE FROM THE SEPTIC (OR ANY PUMPING OR DOSING CHAMBER) TO THE BUILDING, ALLOWING SEPTIC GASES TO DISCHARGE THROUGH THE STACK VENT.
8. THE OWNER/APPLICANT SHALL BE PROVIDED WITH A COPY OF THE APPROVED PLANS AND AN ACCURATE AS–BUILT DRAWING OF ANY EXISTING SANITARY FACILITIES. THE OWNER/APPLICANT SHALL ALSO BE ADVISED OF ANY ROUTINE OR SPECIAL MAINTENANCE PROCEDURES THAT MAY BE NECESSARY.
9. INDIVIDUAL WELLS AND SEWAGE DISPOSAL SYSTEMS SHALL NO LONGER BE CONSTRUCTED OR USED WHEN PUBLIC FACILITIES BECOME AVAILABLE. CONNECTION TO THE PUBLIC SEWER SYSTEM IS REQUIRED W/I 1 YEAR OF AVAILABILITY.
10. A NEW YORK STATE LICENSED PROFESSIONAL ENGINEER SHALL INSPECT THE SANITARY FACILITIES AT THE TIME OF CONSTRUCTION. THE ENGINEER SHALL CERTIFY TO THE LOCAL CODE ENFORCEMENT OFFICER AND THE OCDOH THAT THE FACILITIES HAVE BEEN INSTALLED IN ACCORDANCE WITH THE APPOVED PLANS AND THAT ANY SEPTIC TANK JOINTS HAVE BEEN SEALED AND TESTED FOR WATER TIGHTNESS.
11. AEROBIC SEPTIC TANK AND PUMP CHAMBER TO BE REINFORCED CONCRETE.
12. PIPE FROM HOUSE TO SEPTIC TANK TO BE STRAIGHT.
13. NO CELLAR, FOOTING, OR ROOF DRAINS SHALL DISCHARGE INTO SEPTIC TANKS OR DRAIN FIELDS. THERE ARE NO FOOTING DRAINS FOR THE EXISTING SUBJECT RESIDENCE.
14. THE SEWAGE DISPOSAL SYSTEM SHALL BE DESIGNED, LOCATED AND CONSTRUCTED TO ALLOW FOR A 50% EXPANSION FOR TILE FIELDS AND 100% EXPANSION FOR ELJEN SYSTEMS CAPABILITY FOR FUTURE USE.
15. INSTALL TRENCHES PARALLEL TO CONTOURS.
16. DRIVEWAYS AND OTHER STRUCTURES WHICH MAY COMPACT THE SOILS SHALL NOT BE CONSTRUCTED ON TOP OF ABSORPTION FIELD.
17. DIVERSION SWALES TO BE LOCATED UPHILL FROM THE SEWAGE DISPOSAL AREA. THE DIVERSION SWALES ARE TO DIVERT RUNOFF AWAY FROM THE SEWAGE DISPOSAL AREA AND THE FUTURE EXPANSION AREA.
18. SEPTIC TANK INLETS TO BE OPPOSITE OUTLETS.
19. ALL ON SITE SANITATION AND WATER SUPPLY FACILITIES SHALL BE BUILT IN ACCORDANCE WITH "WASTE TREATMENT HANDBOOK" INDIVIDUAL HOUSEHOLD SYSTEMS (10 NYCRR 75) OF THE N.Y.S. DEPARTMENT OF HEALTH 1996 DESIGN HANDBOOK.
20. ALL TREES, STUMPS, BRUSH, WEEDS, ETC. SHALL BE CUT TO GRADE AND REMOVED. ALL LEAVES, LIMBS, AND BOULDERS ABOVE GRADE SHALL BE CAREFULLY REMOVED.
21. CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE AND PROPERLY ABANDON EXISTING SEPTIC TANK AND LEACHFIELDS.
22. THE SUBJECT PROPERTY DOES NOT LIE WITHIN A PUBLIC WATERSHED, AND THERE WILL BE NO CONSTRUCTION ON WATERSHED LANDS.
23. ORANGE COUNTY DEPARTMENT OF HEALTH PLAN APPROVAL IS LIMITED TO 5 YEARS. TIME EXTENSIONS FOR APPROVAL MAY BE GRANTED BY THE ORANGE COUNTY DEPARTMENT OF HEALTH BASED UPON REGULATIONS IN EFFECT AT THAT TIME. A NEW PLAN SYBMISSION MAY BE REQUIRED TO OBTAIN A TIME EXTENSION.
24. ALL ROOF AND FOOTING DRAINS MUST DISCHARGE AWAY FROM SANITARY ABSORPTION FACILITIES.
25. NO LOT IS TO BE FURTHER SUBDIVIDED WITHOUT ORANGE COUNTY DEPARTMENT OF HEALTH REVIEW AND APPROVAL.
26. SEPTIC TANKS SHALL BE INSPECTED PERIODICALLY AND PUMPED EVERY 2–3 YEARS.
27. PUMP STATIONS/DOSING CHAMBERS SHOULD BE INSPECTED PERIODICALLY BY A TRAINED PERSON FOR PROPER OPERATION, INCLUDING HIGH WATER ALARMS, VENTING & ANY PHYSICAL DAMAGE.
28. DISTRIBUTION BOXES SHOULD BE INSPECTED PERIODICALLY TO ASSURE THAT THEY ARE LEVEL AND OPERATING PROPERLY.
29. THE APPROVED PLANS MUST BE FILED WITH THE ORANGE COUNTY CLERK'S OFFICE PRIOR TO OFFERING LOTS FOR SALE AND WITHIN 90 DAYS OF THE LAST APPROVAL OF FINAL PLANS.

ORANGE COUNTY HEALTH DEPT. AEROBIC UNIT NOTES
1. PRIOR TO COMPLETION OF CONSTRUCTION AND/OR ISSUANCE OF A CERTIFICATE OF OCCUPANCY, A SIGNED SERVICE CONTRACT MUST BE SUBMITTED TO THE ORANGE COUNTY DEPT. OF HEALTH AND THE LOCAL CODE ENFORCEMENT OFFICER. THIS CONTRACT MUST INCLUDE THE FOLLOWING:
   A. A MINIMUM DURATION OF 3 YEARS.
   B. SEMI–ANNUAL SERVICE INSPECTIONS BY A QUALIFIED INDIVIDUAL.
   C. AT THE TIME ANY AEROBIC UNITS ARE INSTALLED, AND THE AEROBIC UNIT(S) EFFECTIVENESS IS IN QUESTION, SEMI–ANNUAL EFFLUENT TESTING FOR BIOLOGICAL OXYGEN DEMAND (BOD), TOTAL SUSPENDED SOLIDS (TSS), AND ANY OTHER PARAMETERS THAT MAY BE NECESSARY TO SHOW COMPLIANCE WITH NSF STANDARD 40, CLASS 1 (USEPA SECONDARY TREATMENT GUIDELINES). ANALYSES SHALL BE PERFORMED BY A NYS CERTIFIED LABORATORY.
   D. THE UNIT SHALL BE PUMPED OUT AT LEAST EVERY 3 YEARS, OR MORE FREQUENTLY IF DETERMINED NECESSARY BY THE SERVICE PERSONNEL.
   E. A NOTATION STATING THAT AFTER THE CONTRACT HAS EXPIRED, IF THE HOMEOWNER SO CHOOSES, A DIFFERENT QUALIFIED SERVICE PROVIDER CAN BE CHOSEN.
2. A SERVICE CONTRACT MEETING ALL REQUIREMENTS OF NOTE #1 MUST BE IN EFFECT FOR THE LIFE OF THE AEROBIC UNIT.



WATER & SEWER CROSSING DETAIL

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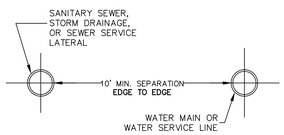


WATER & SEWER HORIZONTAL SEPARATION

NOT TO SCALE

SEWER & WATER SEPARATION NOTES

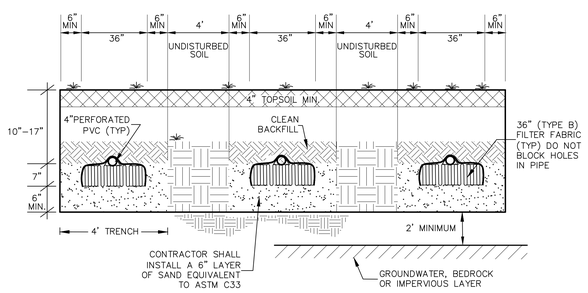
1. WHEN IT IS IMPOSSIBLE TO MAINTAIN PROPER HORIZONTAL OR VERTICAL SEPARATION AS SHOWN, THE SEWER SHALL BE DESIGNED AND CONSTRUCTED EQUAL TO THE WATER MAIN, AND SHALL BE PRESSURE TESTED TO ASSURE WATERTIGHTNESS PRIOR TO BACKFILLING.
2. A FULL LENGTH OF BOTH PIPES CROSSING MUST BE CENTERED AT THE CROSSING.
3. BEDDING MATERIAL SHALL BE INCREASED TO 12" BELOW THE LENGTH OF WATER MAIN PIPE FOR 10' ON EITHER SIDE OF THE CROSSING.
4. TWO LAYERS OF CAUTION TRACER TAPE SHALL BE PLACED 18" MINIMUM ABOVE STORM SEWER MAINS.

NOTES

1. SEPARATION DISTANCE BETWEEN WATER MAINS AND STORM/SEWER MAINS SHALL BE 10' HORIZONTAL AND 18" AT CROSSINGS. THESE SEPARATION DISTANCES MUST BE MAINTAINED UNLESS SPECIFICALLY SHOWN AND INDICATED OTHERWISE ON THE PLANS. THE PREFERRED CROSSING OPTION IS FOR THE WATER MAIN TO BE CONSTRUCTED ABOVE STORM/SEWER MAINS.
2. SEWER MAIN INCLUDES SEWER LATERALS AND STORM DRAIN.
3. WATER MAIN INCLUDES WATER SERVICE LATERALS.
4. DEFLECT WATER MAIN IN AN ARC BENEATH THE SEWER/STORM LINE. DO NOT USE FITTINGS TO DEFLECT THE WATER MAIN.

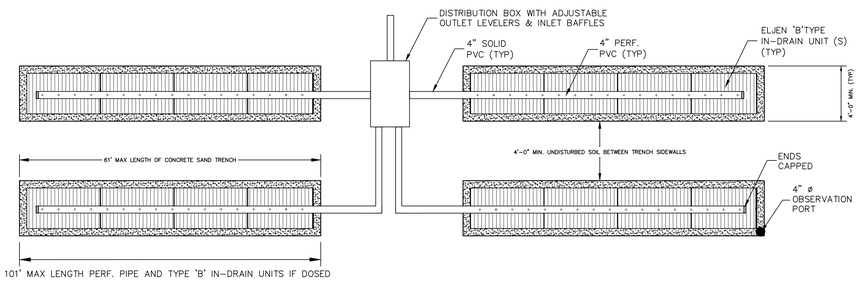
WATER OVER SEWER SEPARATION NOTES

1. FULL LENGTH OF BOTH PIPES CROSSING MUST BE CENTERED AT THE CROSSING SO THAT PIPE JOINTS WILL BE AS FAR FROM EACH OTHER AS POSSIBLE (10' MIN.).
2. CONTRACTOR SHALL PROVIDE STRUCTURAL SUPPORT FOR EXISTING WATER MAIN OVER THE ENTIRE TRENCH WIDTH TO PREVENT DAMAGE TO THE WATER MAIN.
3. WATER TIGHT JOINTS WHERE WATERLINES ARE CROSSED ABOVE OR BELOW.



TYPICAL ELJEN TRENCH CROSS SECTION

NOT TO SCALE

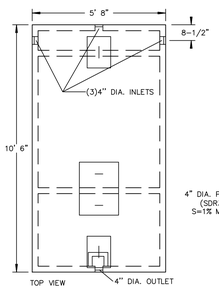


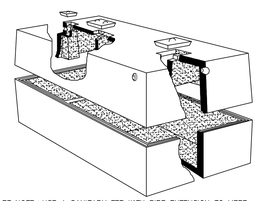
NOTES:
1. LATERALS TO BE INSTALLED IN CONFORMANCE WITH ALL STATE AND LOCAL DEPARTMENT OF HEALTH REQUIREMENTS.
2. ALL SEPARATION DISTANCES TO BE MAINTAINED.
3. 50% EXPANSION AREA REQUIRED FOR ALL NEWLY INSTALLED RESIDENTIAL SYSTEMS. 100% EXPANSION REQUIRED ON COMMERCIAL SYSTEMS.

ELJEN ABSORPTION TRENCH CONFIGURATION

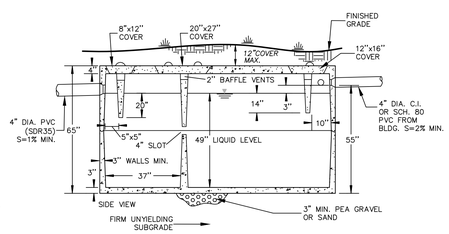
NOT TO SCALE

SPECIFICATIONS
CONCRETE MIN. STRENGTH: 4,000 PSI AT 28 DAYS
REINFORCEMENT: 6x6x10GA. WWM
AIR ENTRAINMENT: 6%
CONSTRUCTION JOINT: BUTYL RUBBER SEALANT
PIPE CONNECTION: POLYLOK SEAL (PATENTED)
WEIGHT = 11,500 LBS
LOAD RATING: 300 PSF





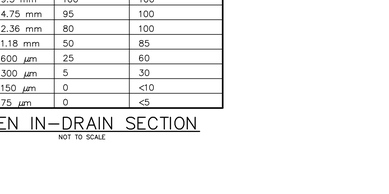
INLET NOTE: USE A SANITARY TEE WITH PIPE EXTENSION TO MEET THE NYSDOH REQUIREMENT FOR BAFFLE 16" BELOW LIQUID LEVEL.



1,500 GALLON SEPTIC TANK

NOT TO SCALE

NOTES:
1. TYPICAL PRECAST CONCRETE SEPTIC TANK, WOODARD CONCRETE PRODUCTS, INC. MODEL ST–1500, OR EQUAL (PROVIDE WATER TIGHT SEAL AT ANY CONSTRUCTION JOINT.)
2. SEPTIC TANK SHALL HAVE A SANITARY TEE W/ GAS DEFLECTOR.
3. ACCESS HATCHES TO SEPTIC TANK IN PARKING LOT MUST BE ACCESSIBLE.



SEPTIC/SWALE CROSS SECTION

NOT TO SCALE

TOWN OF CHESTER PLANNING BOARD APPROVAL

REVISION	BY	DATE	DESCRIPTION
4.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
3.	MM	9/16/21	PREPARATION OF PRELIMINARY PLANS
2.	MM	5/19/21	REVISION PER PB MTG. & COMMENT LETTERS
1.	MM	3/23/21	ROAD LAYOUT REVISION PER PB MTG.

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET

ARDEN CONSULTING ENGINEERS, PLLC
P.O. BOX 340 MONROE, N.Y.
T: 845–782–8114 E: MAM@ARDENCONSULTING.NET

STATE OF NEW YORK · MICHAEL A. MORGANTE · 78577 · LICENSED PROFESSIONAL ENGINEER

MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

18 SDS DETAILS

JOB#: 20–030
SCALE: AS NOTED
DATE: 2–17–21
DRAWN: MM
CHECKED: MM
SHEET NO. 18 OF 20

WARNING– IT IS A VIOLATION OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2

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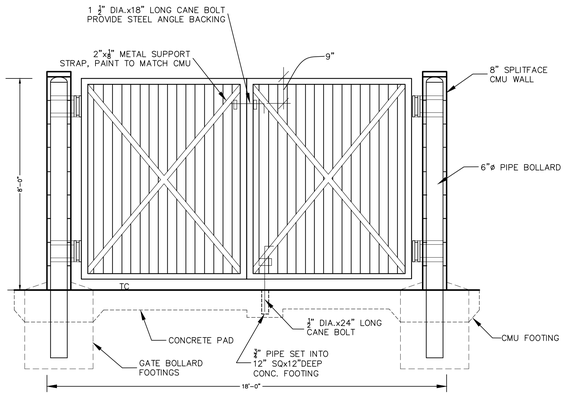
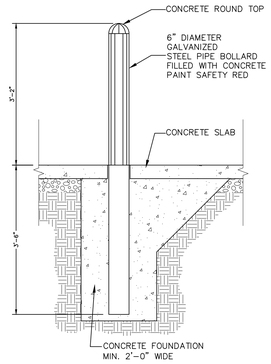


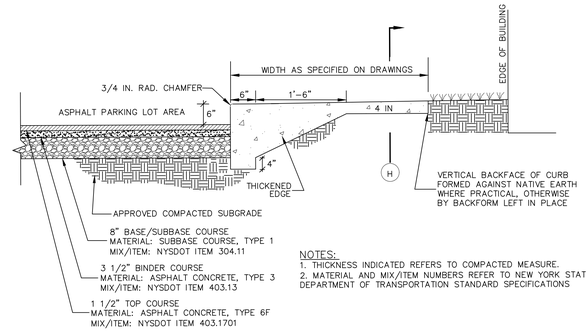
PICK UP ENTRANCE

NOT TO SCALE



BOLLARD DETAIL

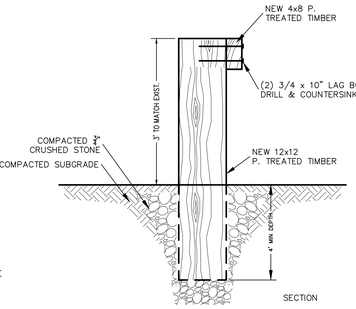
NOT TO SCALE



NOTES:
1. THICKNESS INDICATED REFERS TO COMPACTED MEASURE.
2. MATERIAL AND MIX/ITEM NUMBERS REFER TO NEW YORK STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS

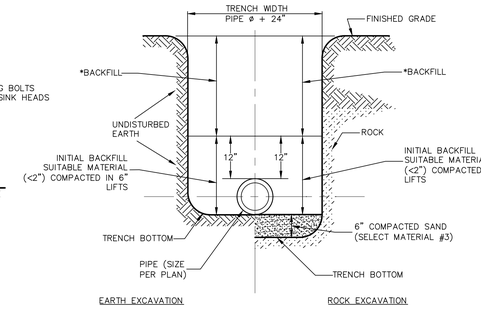
PAVEMENT & SIDEWALK WITH MONOLITHIC CURB

NOT TO SCALE



TIMBER GUIDE RAIL

NOT TO SCALE

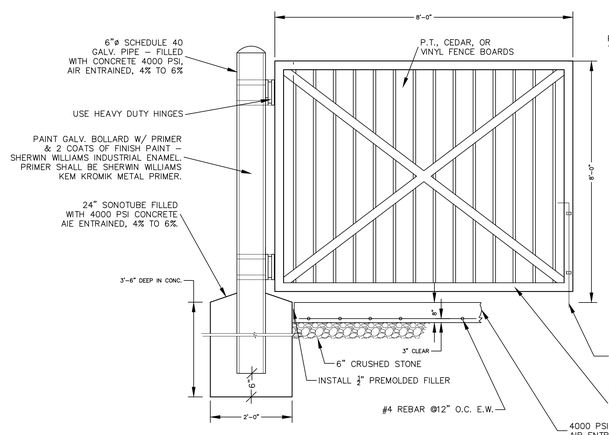


* BACKFILL TO BE COMPACTED IN 8" LIFTS WITH NO STONES OVER 8" IN ANY DIMENSION.

TRENCH CROSS SECTION

NOT TO SCALE

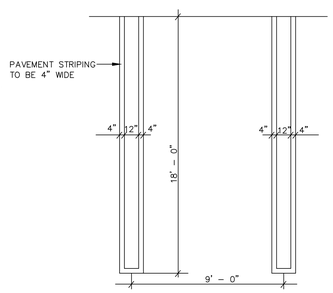
NOTES:
1. TRENCHES IN PAVED AREAS SHALL UTILIZE THE PAVEMENT REPLACEMENT DETAIL FOUND ON THIS SHEET.
2. FULL DEPTH ROB GRAVEL OR ITEM 4 COMPACTED TO 95% MODIFIED PROCTOR UNDER PAVED AREAS.



NOTES:
1. TREAT ALL CEDAR WITH 1 COAT CLEAR WATER REPELLANT.
2. PROVIDE DOUBLE GATE – ONLY ONE HALF SHOWN.

CMU DUMPSTER
ENCLOSURE GATE

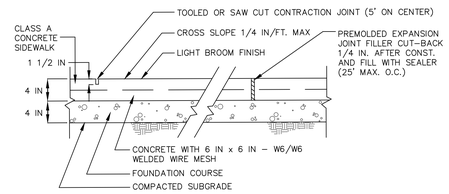
NOT TO SCALE



PARKING LOT STRIPING DETAIL

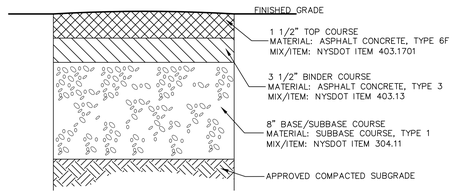
NOT TO SCALE

NOTE: ALL PARKING AREAS TO BE RESTRIPED YEARLY OR AS REQUIRED



TYPICAL SIDEWALK SECTION (H)

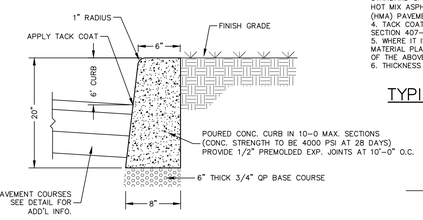
NOT TO SCALE



NOTES:
1. MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION (NYSDOT) STANDARD SPECIFICATIONS FOR: CONSTRUCTION AND MATERIALS, LATEST EDITION, AND ALL ADDENDA THERETO.
2. SUBBASE MATERIAL SHALL CONFORM WITH SECTION 304 – SUBBASE COURSE OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWINGS.
3. HOT MIX ASPHALT (HMA) PAVEMENT SHALL CONFORM WTH SECTION 400 HOT MIX ASPHALT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS AND THE TYPE CALLED OUT IN THESE DRAWNGS. ALTHOUGH SECTION 400 IN ITS ENTIRETY IS REFERENCED, THE HOT MIX ASPHALT (HMA) PAVEMENT(S) BFECIFIED FOR TL-LIS CONTRACT SHALL BE AS SPECIFIED UNDER SECTION 402-HOT MIX ASPHALT (HMA) PAVEMENTS.
4. TACK COAT SPECIFIED OR CALLED OUT IN THESE DRAWNGS OR REQUIRED BY THE REFERENCED SFECIFICATIONS SHALL CONFORM WITH SECTION 407-TACK COAT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
5. WHERE IT IS NECESSARY TO PLACE FILL FOR PURPOSES OF BRINGING THE SUBGRADE ELEVATION UP TO A SPECIFIED GRADE, THE FILL MATERIAL PLACED SHALL BE IN CONFORMANCE WTH SECTION. 203-EXCAVATION AND EMBANKMENT OF THE ABOVE REFERENCED NYSDOT STANDARD SPECIFICATIONS.
6. THICKNESS INDICATED REFER TO COMPACTED MEASURE.

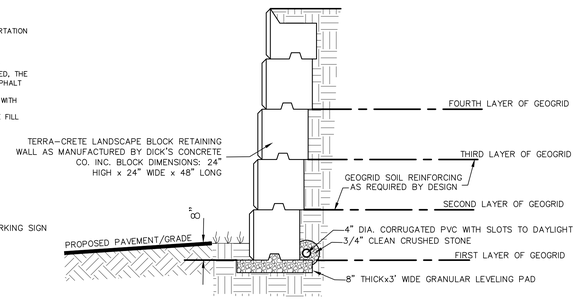
TYPICAL ASPHALT DETAIL FOR PARKING AREAS

NOT TO SCALE



CONCRETE CURB DETAIL

NOT TO SCALE



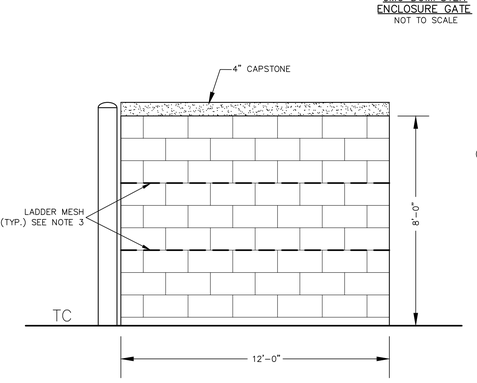
TERRA-CRETE RETAINING WALL

NOT TO SCALE

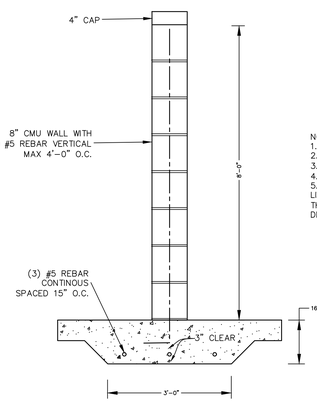
NOTES:
1. INSTALL PER MANUFACTURERS SPECIFICATIONS.
2. BACKFILL MUST BE AN ENGINEERED PRODUCT – COMPACTED IN LIFTS TO A 95% MAX. DENSITY & A MOISTURE CONTENT OF 0%-3%.
3. DESIGN IS BASED ON A 27 DEGREE FRICTION ANGLE OF SOIL.
4. GEOGRID MUST BE MANUFACTURER'S SPECIFIED MATERIAL.

TYPICAL DESIGN:
1. NUMBER OF BLOCKS 2 – NO GEOGRID LAYER
2. NUMBER OF BLOCKS 3 – FIRST LAYER OF GEOGRID – 5' WIDE
   SECOND LAYER OF GEOGRID – 6.5' WIDE
3. NUMBER OF BLOCKS 4 – FIRST LAYER OF GEOGRID – 6' WIDE
   SECOND LAYER OF GEOGRID – 6' WIDE
   THIRD LAYER OF GEOGRID – 7.5' WIDE
4. NUMBER OF BLOCKS 5 – FIRST LAYER OF GEOGRID – 7' WIDE
   SECOND LAYER OF GEOGRID – 7' WIDE
   THIRD LAYER OF GEOGRID – 7' WIDE
   FOURTH LAYER OF GEOGRID – 9' WIDE

RETAINING WALL NOTES:
1. CONTRACTOR MUST VERIFY SOIL CHARACTERISTICS ENCOUNTERED UPON EXCAVATION TO PREPARE RETAINING WALL DESIGN. ADDITIONAL TESTS & REVIEW OF SOILS AT FOOTING BEARING DEPTH IS REQUIRED & SHALL BE CONDUCTED BY A LICENSED GEOTECHNICAL ENGINEER IN THE STATE OF NEW YORK PRIOR TO INSTALLATION. RETAINING WALL DESIGN SHALL BE SUBMITTED TO THE BUILDING INSPECTOR FOR RECORD PRIOR TO CONSTRUCTION. SUCH DESIGN DRAWINGS (OR SHOP DRAWINGS) SHALL BEAR THE STAMP AND SIGNATURE OF SUCH ENGINEER, AND SHALL BE SPECIFIC FOR THE SITE AND SPECIFIC TO THE RETAINING WALL SYSTEM TO BE UTILIZED AND SHALL CONSIDER ALL APPROPRIATE AND NECESSARY POSSIBLE LOADINGS AND CONDITIONS RELATED TO THIS PROJECT.
2. THE AFOREMENTIONED DESIGN AND DETAILS SHALL CONSIDER / IDENTIFY / INCLUDE BUT SHALL NOT BE
   LIMITED TO:
   a. SIGNED AND SEALED DESIGN CALCULATIONS; COMPLETE AND SPECIFIC CONSTRUCTION PLANS AND DETAILS FOR ALL WALLS;
   b. APPROPRIATE SIZING FOR DRAINAGE SYSTEM TO HANDLE INTENSE STORM CONDITIONS;
   c. MAINTENANCE ABILITY TO CLEAN STORMWATER PIPING SYSTEMS;
   d. APPROPRIATE BACKFILL MATERIAL WITH SUFFICIENT POROSITY TO ALLOW FREE DRAINAGE OF WATER; EVALUATE POTENTIAL FAILURE BY INTERNAL/EXTERNAL FAILURE MECHANISMS, GLOBAL FAILURE OR OTHER POTENTIAL FAILURES AND SEISMIC DESIGN CONSIDERATIONS.
6. DURING CONSTRUCTION, THE WORK MUST BE INSPECTED BY A NYS LICENSED PROFESSIONAL ENGINEER WHO SHALL PROVIDE WRITTEN VERIFICATION TO THE BUILDING INSPECTOR PRIOR TO THE REQUEST FOR A CERTIFICATE OF OCCUPANCY, THAT HE/SHE HAS PERSONALLY INSPECTED THE WORK, AND THE INSTALLATION IS IN COMPLIANCE THE DESIGN DRAWINGS AND MANUFACTURER'S INSTALLATION RECOMMENDATIONS.
3. IF DEEMED NECESSARY BY THE DESIGN ENGINEER AND/OR THE MUNICIPALITY, THIRD PARTY TESTING WILL BE PERFORMED REGARDING MATERIAL COMPACTION, FILL QUALITY, ETC. A COPY OF ALL SUCH TESTING RECORDS SHALL BE PROVIDED TO THE MUNICIPAL BUILDING DEPARTMENT FOR RECORD.
4. DUE TO THE HEIGHT OF THE PROPOSED RETAINING WALL, SAFETY FENCING IS TO BE PROVIDED ON THE UPHILL SIDE OF THE PROPOSED RETAINING WALL AND IS TO BE INCLUDED IN THE DESIGN PREPARED BY A NYS LICENSED PROFESSIONAL ENGINEER.



ENCLOSED SIDES

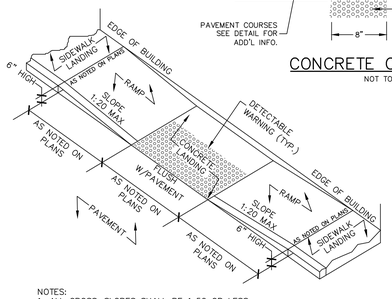


CMU WALL SECTION

NOTES:
1. REFUSE ENCLOSURE TO BE CONSTRUCTED OF 8" SOLID TEXTURED MASONRY BLOCK WITH FACADE TO MATCH PROPOSED BUILDING OR AS APPROVED BY PLANNING BOARD.
2. CONCRETE SLAB TO HAVE 2" RAISED LIP AROUND THREE SIDES.
3. LADDER MESH REINFORCEMENT EVERY EVERY THIRD VERTICAL ROW (24" O.C. TYP.) OR AS RECOMMENDED BY THE MANUFACTURER.
4. ALL CONCRETE SHALL BE 4,000 PSI & 4%-6% AIR ENTRAINED.
5. INSTALL (2) CONCRETE BOLLARDS SPACED 6 FT. APART ALONG REAR WALL OF THE REFUSE ENCLOSURE.

CMU DUMPSTER ENCLOSURE

NOT TO SCALE



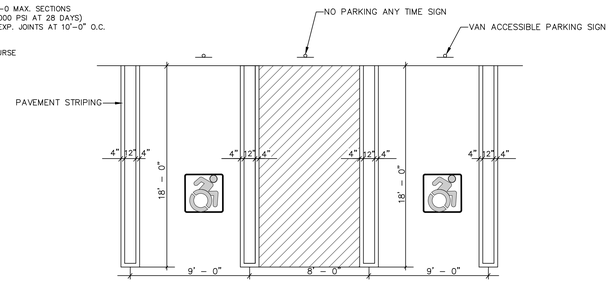
NOTES:
1. ALL CROSS-SLOPES SHALL BE 1:50 OR LESS.
2. ALL RUNNING SLOPES LEADING TO ACCESSIBLE LANDING SHALL NOT EXCEED 1:20.
3. SIDEWALK LANDINGS SHALL BE 5'x5' MIN.
4. ENTRANCE TO BUILDING SHALL HAVE A 5'x5' CLEAR AREA WHEN DOORS ARE OPEN.
5. DETECTABLE WARNING STRIP TO CONTRAST VISUALLY WITH ADJOINING SURFACES EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.
THE CONTRACTOR IS REQUIRED TO CONFORM TO THE AMERICANS WITH DISABILITIES ACT (ADA) DETAILS, SPECIFICATIONS, AND STANDARDS WHICH MAY SUPERCEDE THE DETAILS SHOWN.

IN-LINE ACCESSIBLE RAMP

NOT TO SCALE

SITE ACCESSIBILITY NOTES:

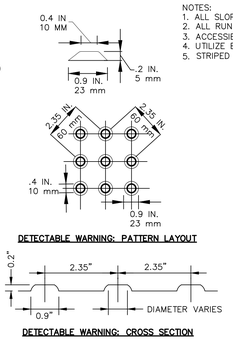
1. REFER TO SITE PLAN FOR EXACT LOCATION OF HANDICAP PARKING, WALKWAYS AND RAMPS.
2. ALL WALKWAYS, RAMPS, AND HANDICAP PARKING SIGNAGE, ETC. SHALL MEET APPROVED AMERICANS WITH DISABILITIES ACT (ADA) STANDARDS AND LOCAL ACCESSIBILITY CODE.
3. ONE OUT OF EVERY EIGHT (8) ACCESSIBLE PARKING SPACES, BUT NOT LESS THAN ONE, IS REQUIRED TO BE VAN ACCESSIBLE.
4. ALL CONCRETE ACCESSIBLE RAMPS (3000 PSI) SURFACES SHALL HAVE TRUNCATED DOMES PER ADA STANDARDS AND LOCAL ACCESSIBILITY CODE.
5. ALL CONCRETE ACCESSIBLE RAMPS SHALL BE COLOR IMPREGNATED TO PROVIDE VISUAL CONTRAST (DARK TO LIGHT) WITH ADJOINING CONCRETE SURFACES (MINIMUM 70% COLOR CONTRAST).
6. THE MATERIAL USED TO PROVIDE COLOR CONTRAST IN CONCRETE ACCESSIBLE RAMPS SHALL BE AN INTEGRAL (PERMANENT) PART OF THE CONCRETE AND SHALL NOT BE PAINTED ON OR CAPABLE OF FADING OR WEARING OFF.
7. FINISHED GRADES OF PAVEMENT IN HC PARKING AND ACCESSIBILITY AISLE SHALL NOT EXCEED 1:50 SLOPE IN ANY DIRECTION.



ACCESSIBLE PARKING SPACE
& STRIPING DETAIL

NOT TO SCALE

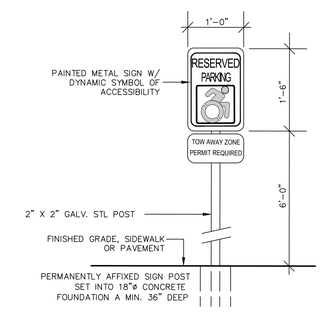
NOTES:
1. ALL SLOPES WITHIN THE HANDICAP PARKING AND LOADING AREAS SHALL BE 1:50 OR LESS.
2. ALL RUNNING SLOPES LEADING TO ACCESSIBLE PARKING SHALL NOT EXCEED 1:20.
3. ACCESSIBLE AISLE STRIPING SPACED 2' O.C. AT A 45° ANGLE.
4. UTILIZE BLUE & WHITE EPOXY RESIN DYNAMIC SYMBOL OF ACCESSIBILITY.
5. STRIPED LOADING AND UNLOADING AREA: 60" MIN. OR 96" MIN. FOR VANS.



DETECTABLE WARNING PAD DETAIL

NOT TO SCALE

NOTES:
1. TRUNCATED DOME PATTERN.
2. ROWS OF TRUNCATED DOMES ALIGNED PERPENDICULAR TO THE GRADE BREAK BETWEEN THE CURB RAMP/LANDING AND THE STREET.
3. FULL WIDTH OF CURB RAMP/LANDING CONNECTION TO THE STREET.
4. DEPTH: 24-INCH MINIMUM.
5. INSTALLED AT BACK OF CURB.
6. CONTRASTS WITH BACKGROUND (LIGHT-ON-DARK OR DARK-ON-LIGHT).



ACCESSIBLE PARKING SIGN

NOT TO SCALE

REVISION	BY	DATE	DESCRIPTION
4.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
3.	MM	9/16/21	PREPARATION OF PRELIMINARY PLANS
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TOWN OF CHESTER PLANNING BOARD APPROVAL

ARDEN CONSULTING ENGINEERS, PLLC
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STATE OF NEW YORK · MICHAEL A. MORGANTE · 078577 · LICENSED PROFESSIONAL ENGINEER

MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

19 CONSTRUCTION
DETAILS

JOB#: 20-030
SCALE: AS NOTED
DATE: 2-17-21
DRAWN: MM
CHECKED: MM
SHEET NO. 1 OF 20

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SOIL RESTORATION NOTES:

DURING PERIODS OF RELATIVELY LOW TO MODERATE SUBSOIL MOISTURE, THE DISTURBED SUBSOILS ARE RETURNED TO ROUGH GRADE AND THE FOLLOWING SOIL RESTORATION STEPS APPLIED:
1) APPLY 3 INCHES OF COMPOST OVER SUBSOIL
2) TILL COMPOST INTO SUBSOIL TO A DEPTH OF AT LEAST 12 INCHES USING A CAT-MOUNTED RIPPER, TRACTOR-MOUNTED DISC, OR TILLER, MIXING AND CIRCULATING AIR AND COMPOST INTO SUBSOILS.
3) ROCK-PICK UNTIL UPLIFTED STONE/ROCK MATERIALS OF FOUR INCHES AND LARGER SIZE ARE CLEANED OFF THE SITE
4) APPLY TOPSOIL TO A DEPTH OF SIX INCHES.
5) VEGETATE AS REQUIRED BY APPROVED PLAN

COMPOST SPECIFICATIONS:

1) COMPOST SHALL BE AGED, FROM PLANT DERIVED MATERIALS, FREE OF VIABLE WEED SEEDS, HAVE NO VISIBLE FREE WATER OR DUST PRODUCED WHEN HANDLING, PASS THROUGH A HALF INCH SCREEN AND HAVE A PH SUITABLE TO GROW DESIRED PLANTS.

MAINTENANCE:

1) SIMPLE MAINTENANCE SHOULD IDENTIFY WHERE SOIL RESTORATION IS APPLIED, WHERE NEWLY RESTORED AREAS ARE/CANNOT BE CLEARED, WHO THE RESPONSIBLE PARTIES ARE TO ENSURE THAT ROUTINE VEGETATION IMPROVEMENTS ARE MADE (THINNING, INVASIVE PLANT REMOVAL ETC.)
2) SOIL COMPOST AMENDMENTS WITHIN A FILTER STRIP OR GRASS CHANNEL SHOULD BE LOCATED IN PUBLIC RIGHT OF WAY, OR WITHIN A DEDICATED STORMWATER OR DRAINAGE EASEMENT.
3) FIVE YEAR MAINTENANCE OPERATIONS INCLUDES;
a) INITIAL INSPECTIONS FOR THE FIRST SIX MONTHS (ONCE AFTER EACH STORM GREATER THAN HALF-INCH)
b) RESEEDING TO REPAIR BARE OR ERODING AREAS TO ASSURE GRASS STABILIZATION
c) WATER ONCE EVERY THREE DAYS FOR THE FIRST MONTH, AND THEN PROVIDE A HALF INCH OF WATER PER WEEK DURING THE FIRST YEAR. IRRIGATION PLAN MAY BE ADJUSTED ACCORDING TO THE RAIN EVENT.
d) FERTILIZATION MAY BE NEEDED IN THE FALL AFTER THE FIRST GROWING SEASON TO INCREASE PLANT VIGOR.

4) TO ASSIST IN ONGOING MAINTENANCE, PLANTING THE APPROPRIATE GROUND COVER WITH DEEP ROOTS TO MAINTAIN THE SOIL STRUCTURE, AND KEEP THE SITE FREE OF VEHICULAR AND FOOT TRAFFIC OR OTHER WEIGHT LOADS. SOMETIMES IT MAY BE NECESSARY TO DE-THATCH THE TURF EVERY FEW YEARS.

INFILTRATION FACILTY NOTES:

1. 6" TOPSOIL SUITABLE FOR VEGETATIVE COVER WILL BE APPLIED TO VEGETATIVE AREAS. THE PLANTING SOIL SHOULD BE A SANDY LOAM, LOAMY SAND, LOAM (USDA), OR A LOAM / SAND MIX. SOILS SHOULD FALL WITHIN THE SM, OR ML CLASSIFICATIONS OF THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCD). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5"/HR.) IS REQUIRED. SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER. BRUSH OR SEEDS FROM NOXIOUS WEEDS.
2. THE INFILTRATION SYSTEM SHALL BE PLANTED PRIMARILY WITH GRASSES OF THE FESCUE FAMILY IN ACCORDANCE WITH THE NEW YORK STATE STORMWATER MANAGEMENT MANUAL, APPENDIX C, SECTION C.2 CONSTRUCTION SPECIFICATIONS FOR INFILTRATION PRACTICES. ADDITIONAL PLANTINGS ARE ACCEPTABLE IF THEY DO NOT INTERFERE WITH THE MAINTENANCE OF THE SYSTEM, BUT ARE NOT REQUIRED, AND MAY BE ELIMINATED.
3. IN NORMAL CONDITIONS, INFILTRATION WILL BE DRY, AND BALL VALVE IN CURB EXTENSION WILL BE IN THE CLOSED POSITION. GRAVEL TRENCH AND PERFORATED PIPE DRAIN IS PROVIDED IN CASE OF LONG TERM STANDING WATER. BALL VALVE CAN BE ACCESSED THROUGH CURB EXTENSION TO OPEN BALL VALVE FOR DRAINAGE.
4. THE APPROXIMATE OUTER LIMITS OF THE PRETREATMENT AREA IS AS SHOWN ON THE PLAN. THIS AREA IS PART OF THE STORMWATER FACILITY, AND ANY FUTURE MODIFICATIONS TO THIS AREA WILL REQUIRE REVIEW AND APPROVAL BY THE NYS DEC.
5. ASSURANCE MUST BE TAKEN THAT ANY LANDSCAPING INSTALLED DOES NOT INHIBIT FUNCTION OR MAINTENANCE OF STORMWATER MANAGEMENT STRUCTURES.

INFILTRATION BASIN CONSTRUCTION NOTES & SPECIFICATIONS:

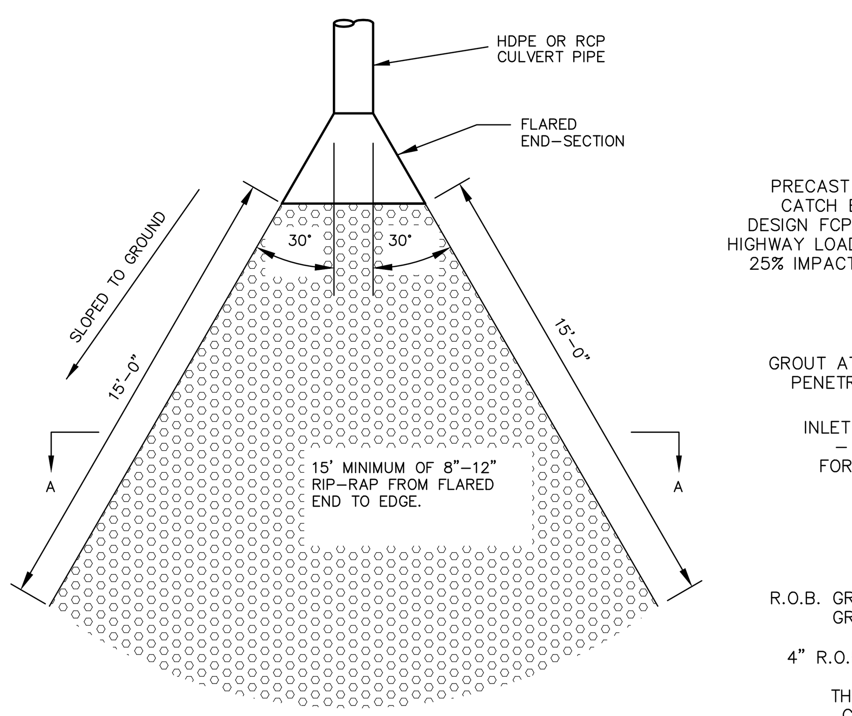
1. THE SEQUENCE OF VARIOUS PHASES OF BASIN CONSTRUCTION SHALL BE COORDINATED WITH THE OVERALL PROJECT CONSTRUCTION SCHEDULE. A PROGRAM SHOULD SCHEDULE ROUGH EXCAVATION OF THE BASIN (TO NOT LESS THAN 2'FROM FINAL GRADE) WITH THE ROUGH GRADING PHASE OF THE PROJECT TO PERMIT USE OF THE MATERIAL AS FILL IN EARTHWORK AREAS. THE PARTIALLY EXCAVATED BASIN, HOWEVER, CANNOT SERVE AS A SEDIMENTATION BASIN.
SPECIFICATIONS FOR BASIN CONSTRUCTION SHOULD STATE: (1) THE EARLIEST POINT IN PROGRESS WHEN STORM DRAINAGE MAY BE DIRECTED TO THE BASIN, AND (2) THE MEANS BY WHICH THIS DELAY IN USE IS TO BE ACCOMPLISHED. DUE TO THE WIDE VARIETY OF CONDITIONS ENCOUNTERED AMONG PROJECTS, EACH SHOULD BE SEPARATELY EVALUATED IN ORDER TO POSTPONE USE AS LONG AS IS REASONABLY POSSIBLE.
2. INITIAL BASIN EXCAVATION SHOULD BE CARRIED TO WITHIN 2 FEET OF THE FINAL ELEVATION OF THE BASIN FLOOR. FINAL EXCAVATION TO THE FINISHED GRADE SHOULD BE DEFERRED UNTIL ALL DISTURBED AREAS ON THE WATERSHED HAVE BEEN STABILIZED OR PROTECTED. THE FINAL PHASE EXCAVATION SHOULD REMOVE ALL ACCUMULATED SEDIMENT. RELATIVELY LIGHT TRACKED EQUIPMENT IS RECOMMENDED FOR THIS OPERATION TO AVOID COMPACTION OF THE BASIN FLOOR. AFTER THE FINAL GRADING IS COMPLETED, THE BASIN SHOULD RETAIN A HIGHLY POROUS SURFACE TEXTURE.
3. INFILTRATION BASINS MAY BE LINED WITH A 6- TO 12-INCH LAYER OF FILTER MATERIAL SUCH AS COARSE SAND (AASHTO STD. M-43, SIZES 9 OR 10) TO HELP PREVENT THE BUILDUP OF IMPERVIOUS DEPOSITS ON THE SOIL SURFACE. THE FILTER LAYER CAN BE REPLACED OR CLEANED WHEN IT BECOMES CLOGGED. WHEN A 6-INCH LAYER OF COARSE ORGANIC MATERIAL IS SPECIFIED FOR DISCING (SUCH AS HULLS, LEAVES, STEMS, ETC.) OR SPADING INTO THE BASIN FLOOR TO INCREASE THE PERMEABILITY OF THE SOILS, THE BASIN FLOOR SHOULD BE SOAKED OR INUNDATED FOR A BRIEF PERIOD, THEN ALLOWED TO DRY SUBSEQUENT TO THIS OPERATION. THIS INDUCES THE ORGANIC MATERIAL TO DECAY RAPIDLY, LOOSENING THE UPPER SOIL LAYER.
4. ESTABLISHING DENSE VEGETATION ON THE BASIN SIDE SLOPES AND FLOOR IS RECOMMENDED. A DENSE VEGETATIVE STAND WILL NOT ONLY PREVENT EROSION AND SLOUGHING, BUT WILL ALSO PROVIDE A NATURAL MEANS OF MAINTAINING RELATIVELY HIGH INFILTRATION RATES. EROSION PROTECTION OF INFLOW POINTS TO THE BASIN SHALL ALSO BE PROVIDED.
5. SELECTION OF SUITABLE VEGETATIVE MATERIALS FOR THE SIDE SLOPE AND ALL OTHER AREAS TO BE STABILIZED WITH VEGETATION AND APPLICATION OF REQUIRED LIME, FERTILIZER, ETC. SHALL BE DONE IN ACCORDANCE WITH THE NRCS STANDARDS AND SPECIFICATIONS OR YOUR LOCAL STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
6. GRASSES OF THE FESCUE FAMILY ARE RECOMMENDED FOR SEEDING PRIMARILY DUE TO THEIR ADAPTABILITY TO DRY SANDY SOILS, DROUGHT RESISTANCE, HARDINESS, AND ABILITY TO WITHSTAND BRIEF INUNDATIONS. THE USE OF FESCUES WILL ALSO PERMIT LONG INTERVALS BETWEEN MOWINGS. THIS IS IMPORTANT DUE TO THE RELATIVELY STEEP SLOPES WHICH MAKE MOWING DIFFICULT. MOWING TWICE A YEAR, ONCE IN JUNE AND AGAIN IN SEPTEMBER, IS GENERALLY SATISFACTORY.

OUTLET STRUCTURE NOTES:

1. ALL CONCRETE SHALL BE A MINIMUM 4,000 PSI.
2. ALL TRASH RACK CONNECTIONS TO OUTLET STRUCTURE SHALL BE ALUMINUM.
3. UPON COMPLETION OF STORMWATER CONSTRUCTION, OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE DRAINAGE FACILITIES IN ACCORDANCE WITH THE NYSDEC STORMWATER MANAGEMENT DESIGN MANUAL. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO:
   A. REMOVAL OF DEBRIS FROM TRASH RACKS
   B. ROUTINE GRASS CUTTING AROUND INLET PIPES, ORIFICES
   C. SEDIMENT AND GRIT REMOVAL
4. TRASH RACKS FOR OS-1 RIM & RECTANGULAR WEIR PROVIDED BY WOODARDS CONCRETE PRODUCTS, OR EQUAL.
5. PIPES ARE TO BE FLUSH WITH THE INSIDE OF THE OUTLET STRUCTURE WALLS.

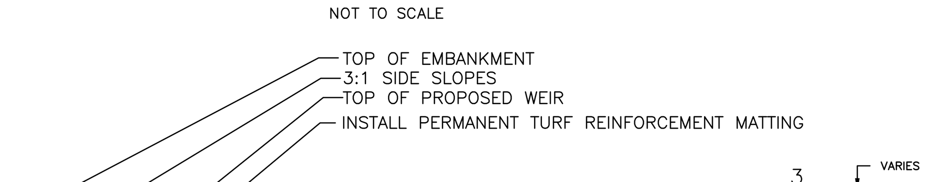
DRAINAGE NOTES:

1. ALL CONCRETE SHALL BE A MINIMUM 4,000 PSI.
2. UPON COMPLETION OF INFILTRATION BASINS CONSTRUCTION, OWNER SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE DRAINAGE FACILITIES IN ACCORDANCE WITH THE NYSDEC STORMWATER MANAGEMENT DESIGN MANUAL. THESE ITEMS INCLUDE, BUT ARE NOT LIMITED TO:
   A. REMOVAL OF DEBRIS FROM TRASH RACKS
   B. ROUTINE GRASS CUTTING AROUND INLET PIPES, ORIFICES
   C. SEDIMENT AND GRIT REMOVAL
3. TRASH RACK IS MANF. BY PLASTIC SOLUTIONS, OR EQUAL.
4. PIPES ARE TO BE FLUSH WITH THE INSIDE OF THE OUTLET STRUCTURE WALLS.



FLARED CULVERT END SECTION

NOT TO SCALE

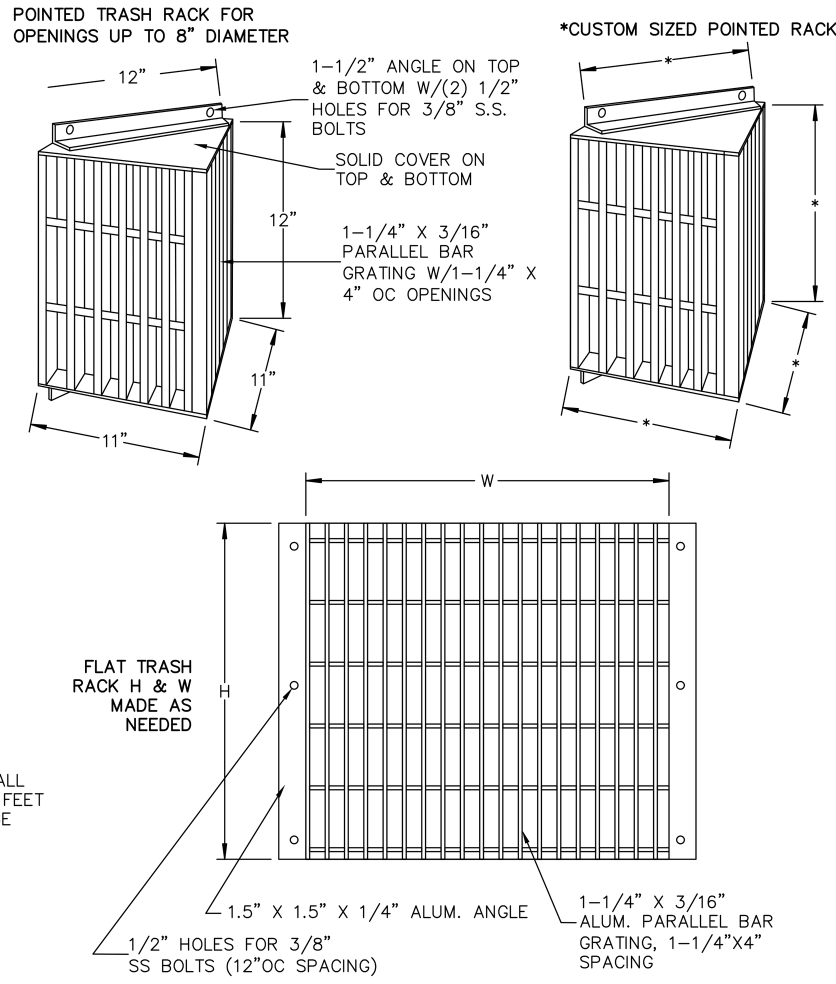


BIORETENTION WEIR

NOT TO SCALE

WARNING- IT IS A VIOLATION OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2, FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR, TO ALTER THIS DOCUMENT IN ANY WAY. IF ALTERED, THE ALTERING PERSON SHALL COMPLY WITH THE REQUIREMENTS OF NEW YORK EDUCATIONAL LAW, SECTION 7209.2

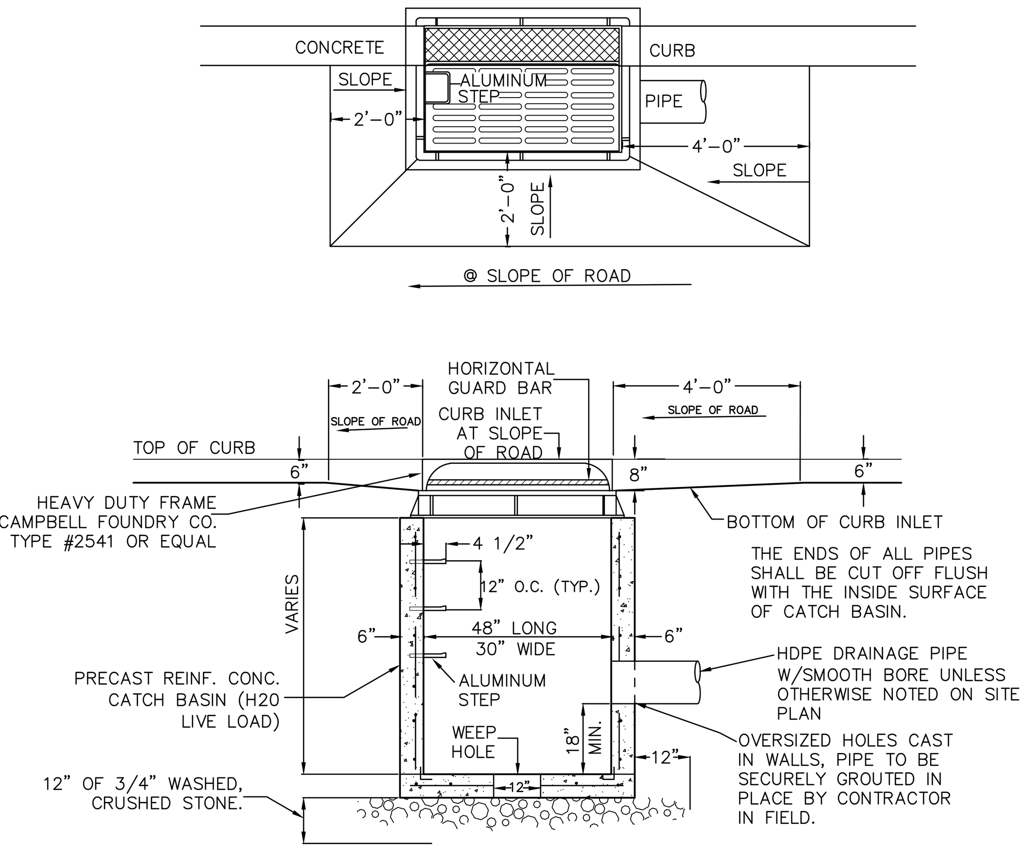
ONLY MAPS WITH EMBOSSED SEALS ARE GENUINE COPIES OF THE ORIGINAL WORK AND OPINION. MAPS NOT BEARING EMBOSSED SEALS SHOULD NOT BE RELIED UPON SINCE OTHER THAN EMBOSSED-SEAL COPIES MAY CONTAIN UNAUTHORIZED AND UNDETECTABLE MODIFICATIONS, DELETIONS, ADDITIONS AND CHANGES.



RIP-RAP PROTECTION SHALL EXTEND A MINIMUM OF 6 FEET PAST POINT OF DISCHARGE

ALUMINUM TRASH RACK FOR CONCRETE WEIR

NOT TO SCALE

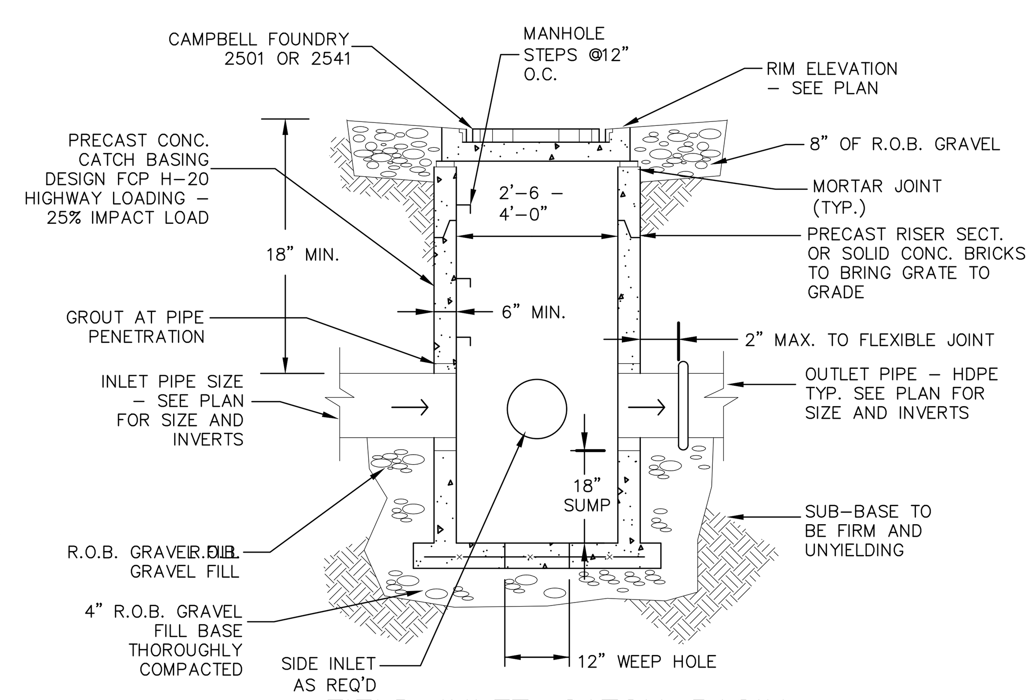


CONCRETE STRENGTH: 4000 P.S.I. @ 28 DAYS.

CURB INLET-CATCH BASIN

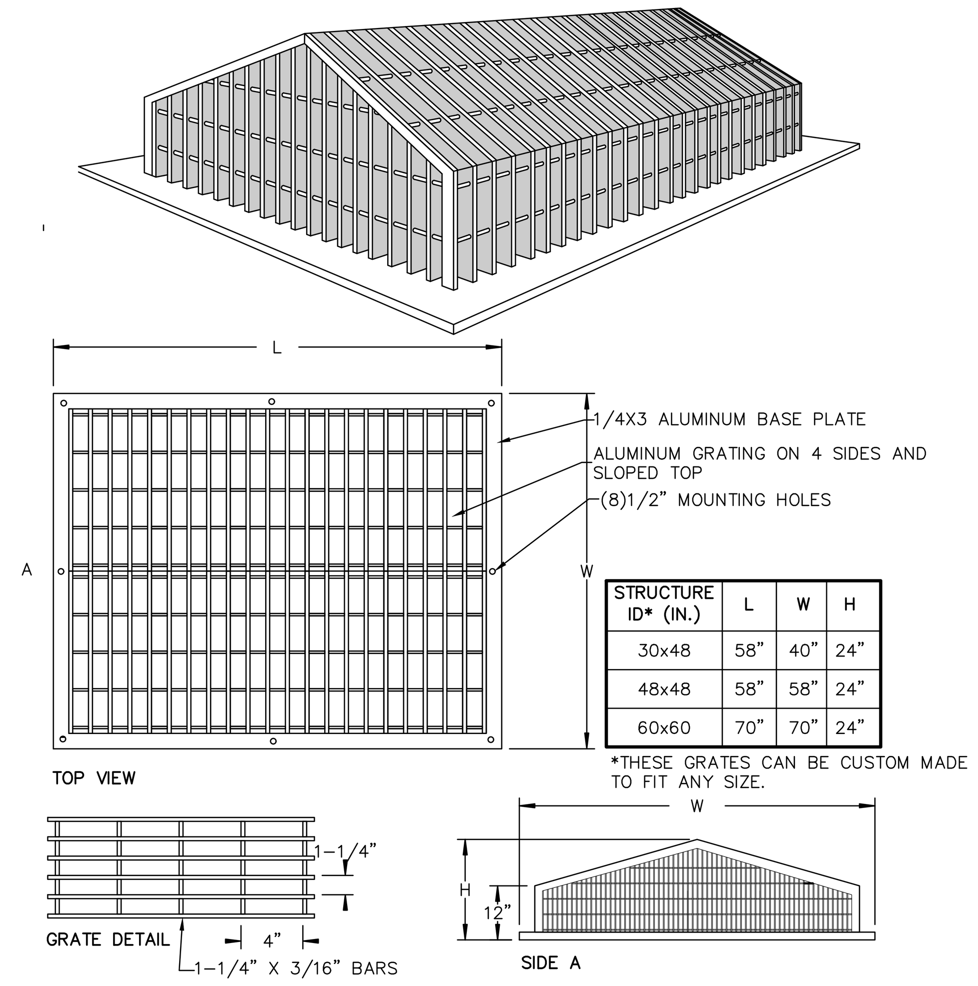
NOT TO SCALE

NOTES:
1. RETAINER GLANDS ARE REQUIRED ON ALL FITTINGS IN ADDITION TO TIE RODS AND THRUST BLOCKS.
2. ALL UTILITY TRENCHES WITHIN PAVED AREAS SHALL BE BACKFILLED FULL DEPTH WITH RUN-OF-BANK GRAVEL.
ALL UTILITIES TO BE DEDICATED TO THE TOWN SHALL MEET TOWN OF WALLKILL SPECIFICATIONS.



FIELD INLET-CATCH BASIN

NOT TO SCALE

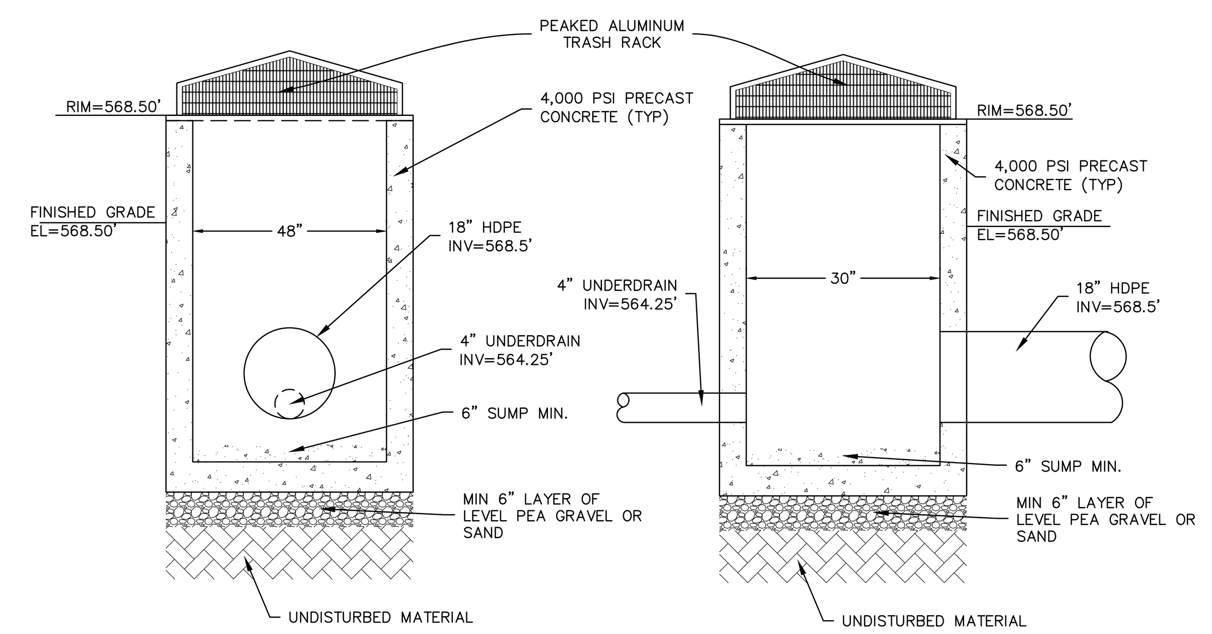


STRUCTURE ID* (IN.)	L	W	H
30x48	58"	40"	24"
48x48	58"	58"	24"
60x60	70"	70"	24"

*THESE GRATES CAN BE CUSTOM MADE TO FIT ANY SIZE.

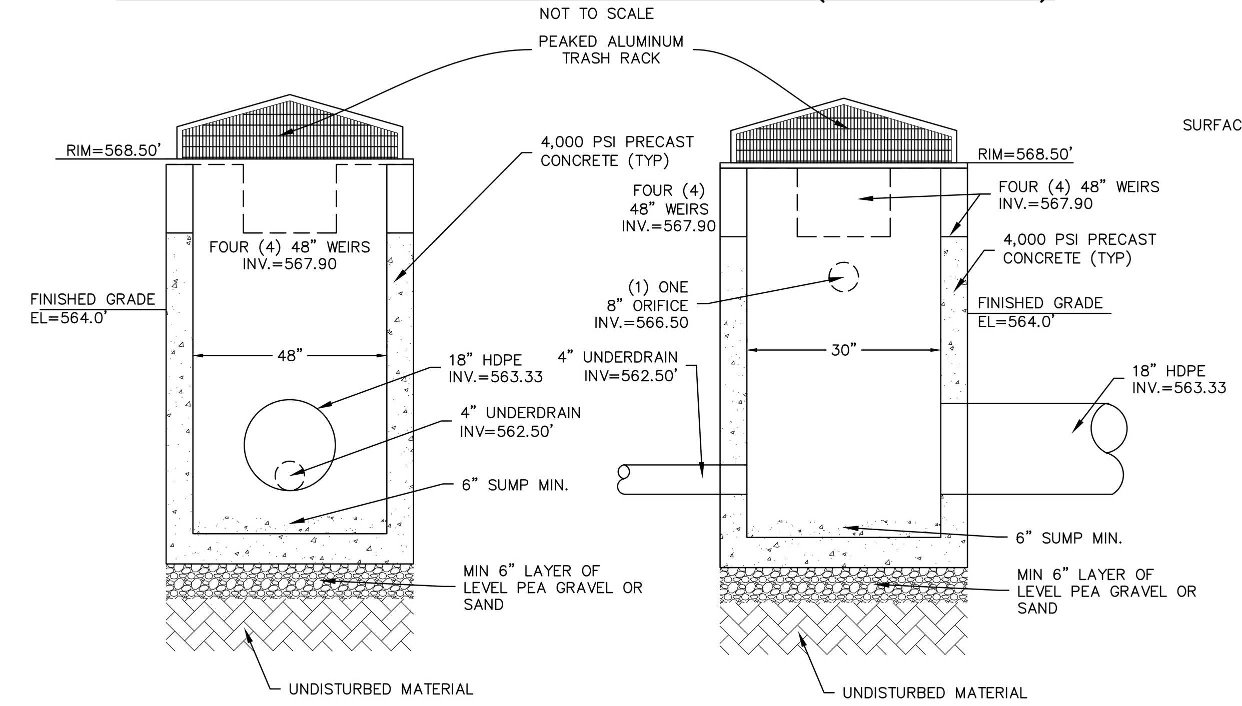
PEAKED ALUMINUM TRASH RACK FOR POND OUTLET

NOT TO SCALE



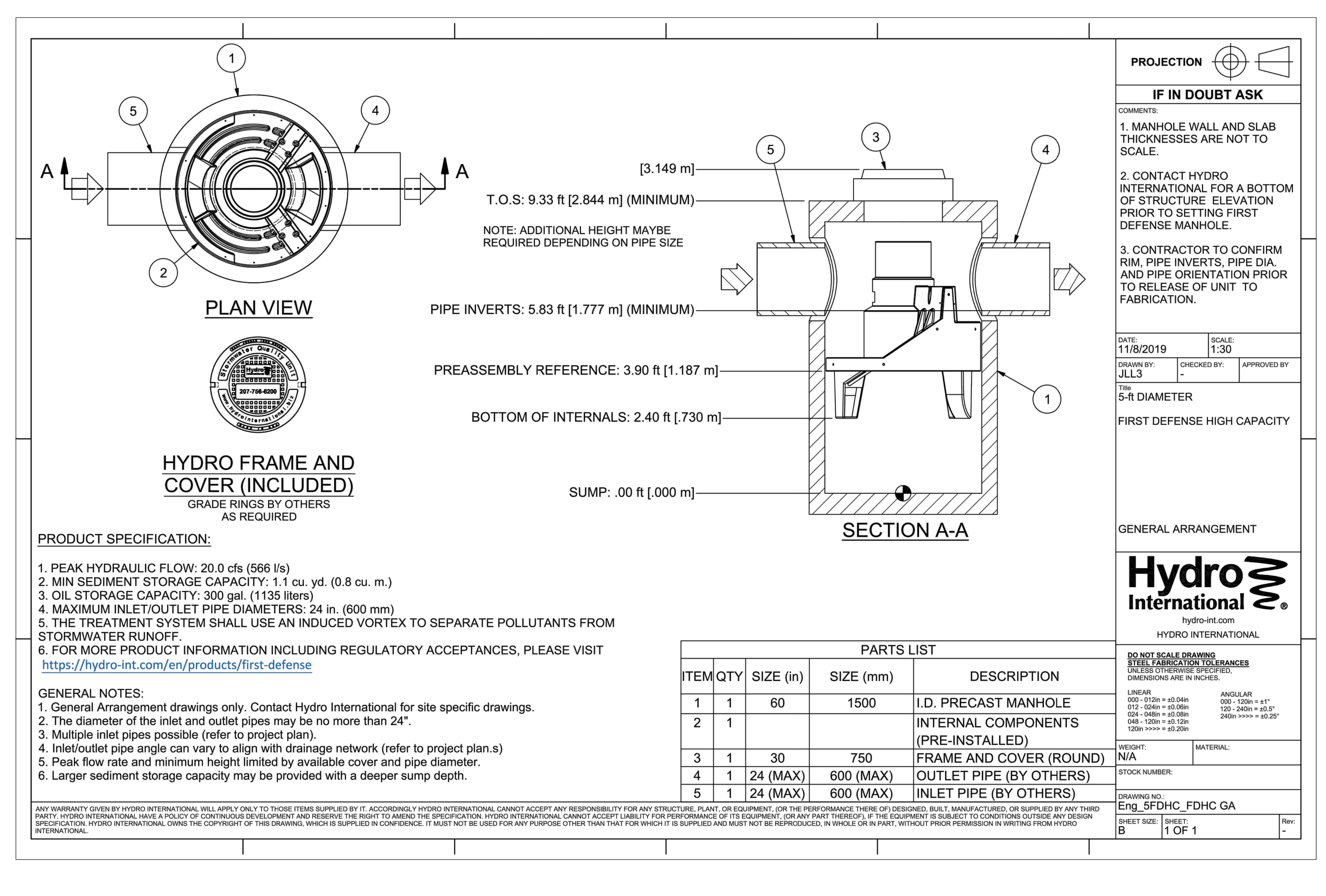
OS-2 OUTLET CONTROL STRUCTURE DETAIL (BIORETENTION)

NOT TO SCALE



OS-1 OUTLET CONTROL STRUCTURE DETAIL (WETPOND)

NOT TO SCALE



PROJECTION

IF IN DOUBT ASK

COMMENTS:
1. MANHOLE WALL AND SLAB THICKNESSES ARE NOT TO SCALE.
2. CONTACT HYDRO INTERNATIONAL FOR A BOTTOM OF STRUCTURE ELEVATION PRIOR TO SETTING FIRST DEFENSE MANHOLE.
3. CONTRACTOR TO CONFIRM RIM, PIPE INVERTS, PIPE DIA. AND PIPE ORIENTATION PRIOR TO RELEASE OF UNIT TO FABRICATION.

DATE: 11/8/2019 SCALE: 1:30
DRAWN BY: JLL3 CHECKED BY: - APPROVED BY
Title: 5-ft DIAMETER
FIRST DEFENSE HIGH CAPACITY
GENERAL ARRANGEMENT

Hydro International
hydro-int.com
HYDRO INTERNATIONAL

DO NOT SCALE DRAWING
STEEL FABRICATION TOLERANCES
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN INCHES.
LINEAR: 000 - 012in = ±0.04in; 012 - 024in = ±0.06in; 024 - 048in = ±0.08in; 048 - 120in = ±0.12in; 120in >>>> = ±0.20in
ANGULAR: 000 - 120in = ±1°; 120 - 240in = ±0.5°; 240in >>>> = ±0.25°
WEIGHT: N/A MATERIAL:
STOCK NUMBER:
DRAWING NO.: Eng_5FDHC_FDHC GA
SHEET SIZE: B SHEET: 1 OF 1 Rev: -

HYDRO FRAME AND COVER (INCLUDED)
GRADE RINGS BY OTHERS AS REQUIRED

PRODUCT SPECIFICATION:

1. PEAK HYDRAULIC FLOW: 20.0 cfs (566 l/s)
2. MIN SEDIMENT STORAGE CAPACITY: 1.1 cu. yd. (0.8 cu. m.)
3. OIL STORAGE CAPACITY: 300 gal. (1135 liters)
4. MAXIMUM INLET/OUTLET PIPE DIAMETERS: 24 in. (600 mm)
5. THE TREATMENT SYSTEM SHALL USE AN INDUCED VORTEX TO SEPARATE POLLUTANTS FROM STORMWATER RUNOFF.
6. FOR MORE PRODUCT INFORMATION INCLUDING REGULATORY ACCEPTANCES, PLEASE VISIT https://hydro-int.com/en/products/first-defense

GENERAL NOTES:
1. General Arrangement drawings only. Contact Hydro International for site specific drawings.
2. The diameter of the inlet and outlet pipes may be no more than 24".
3. Multiple inlet pipes possible (refer to project plan).
4. Inlet/outlet pipe angle can vary to align with drainage network (refer to project plan.s)
5. Peak flow rate and minimum height limited by available cover and pipe diameter.
6. Larger sediment storage capacity may be provided with a deeper sump depth.

PARTS LIST

ITEM	QTY	SIZE (in)	SIZE (mm)	DESCRIPTION
1	1	60	1500	I.D. PRECAST MANHOLE
2	1			INTERNAL COMPONENTS (PRE-INSTALLED)
3	1	30	750	FRAME AND COVER (ROUND)
4	1	24 (MAX)	600 (MAX)	OUTLET PIPE (BY OTHERS)
5	1	24 (MAX)	600 (MAX)	INLET PIPE (BY OTHERS)

ANY WARRANTY GIVEN BY HYDRO INTERNATIONAL WILL APPLY ONLY TO THOSE ITEMS SUPPLIED BY IT. ACCORDINGLY HYDRO INTERNATIONAL CANNOT ACCEPT ANY RESPONSIBILITY FOR ANY STRUCTURE, PLANT, OR EQUIPMENT, (OR THE PERFORMANCE THERE OF) DESIGNED, BUILT, MANUFACTURED, OR SUPPLIED BY ANY THIRD PARTY. HYDRO INTERNATIONAL HAVE A POLICY OF CONTINUOUS DEVELOPMENT AND RESERVE THE RIGHT TO AMEND THE SPECIFICATION. HYDRO INTERNATIONAL CANNOT ACCEPT LIABILITY FOR PERFORMANCE OF ITS EQUIPMENT, (OR ANY PART THEREOF), IF THE EQUIPMENT IS SUBJECT TO CONDITIONS OUTSIDE ANY DESIGN SPECIFICATION. HYDRO INTERNATIONAL OWNS THE COPYRIGHT OF THIS DRAWING, WHICH IS SUPPLIED IN CONFIDENCE. IT MUST NOT BE USED FOR ANY PURPOSE OTHER THAN THAT FOR WHICH IT IS SUPPLIED AND MUST NOT BE REPRODUCED, IN WHOLE OR IN PART, WITHOUT PRIOR PERMISSION IN WRITING FROM HYDRO INTERNATIONAL.

STORMWATER FACILITY MAINTENANCE NOTES:

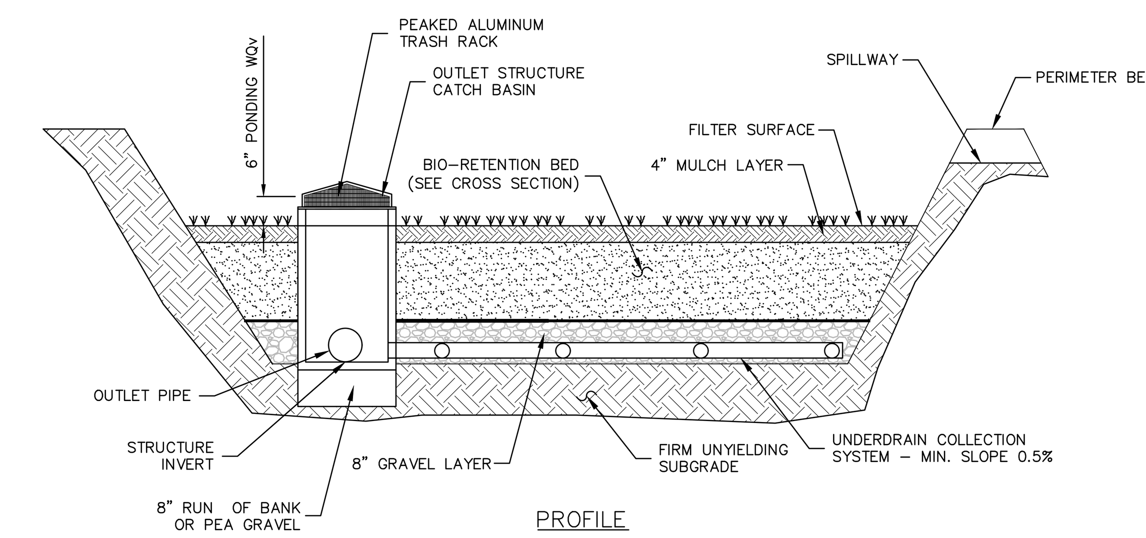
STORMWATER MANAGEMENT FACILITIES SHALL BE REGULARLY MAINTAINED TO ENSURE THEY FUNCTION AT DESIGN CAPACITY AND TO PREVENT HEALTH HAZARDS ASSOCIATED WITH DEBRIS AND STAGNANT WATER. THE PRIVATELY OWNED PORTION OF THE SYSTEM MUST BE PRIVATELY MAINTAINED.

RESPONSIBILITY FOR THE OPERATION AND MAINTENANCE OF THE STORM WATER FACILITIES, INCLUDING PERIODIC REMOVAL AND DISPOSAL OF ACCUMULATED PARTICULATE MATERIAL AND DEBRIS, BUT NOT LIMITED TO THE FOLLOWING: VISUAL INSPECTION OF ALL SYSTEM COMPONENTS AT LEAST TWICE A YEAR; VACUUMING OF ALL STORM SEWER INLETS ONCE EVERY SIX MONTHS (FREQUENCY MAY BE ADJUSTED TO ONCE A YEAR IF FIRST YEAR MAINTENANCE RECORDS INDICATE THAT SEDIMENT AND DEBRIS ACCUMULATION IS INSIGNIFICANT); REVERSE FLUSHING AND VACUUMING IF SYSTEM INSPECTION INDICATE SIGNIFICANT ACCUMULATION OF SEDIMENT IN THE PIPES; AND PERIODIC REMOVAL AND DISPOSAL OF OTHER MATERIAL AND DEBRIS, SHALL REMAIN WITH THE OWNER OR OWNERS OF THE PROPERTY, WITH PERMANENT ARRANGEMENTS THAT SHALL PASS TO ANY SUCCESSIVE OWNER, UNLESS ASSUMED BY A GOVERNMENTAL AGENCY.

IN THE EVENT THAT THE FACILITY BECOMES A DANGER TO PUBLIC SAFETY OR PUBLIC HEALTH, OR IT IS IN NEED OF MAINTENANCE, THE OWNER SHALL EFFECT SUCH MAINTENANCE AND REPAIR OF THE FACILITY IN A MANNER THAT IS APPROVED BY THE TOWN ENGINEER OR HIS DESIGNEE, IF THE OWNER FAILS TO PERFORM SUCH MAINTENANCE AND REPAIR, THE MUNICIPALITY MAY IMMEDIATELY PROCEED TO DO SO AND SHALL BILL THE COST TO THE OWNER.

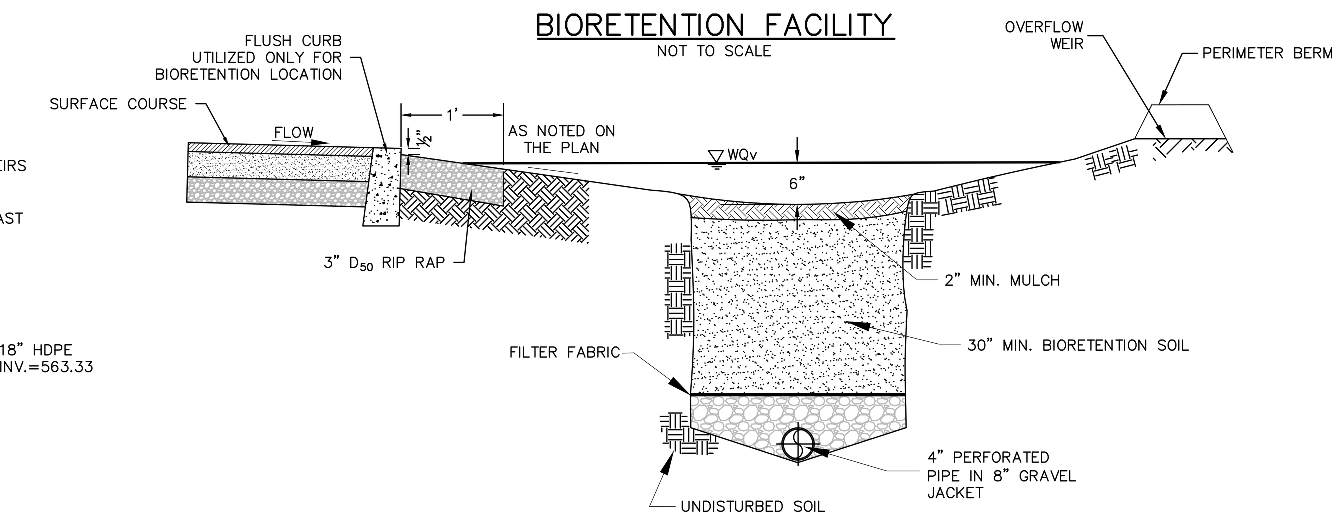
SEDIMENT TRAP & BASIN CONSTRUCTION SPECIFICATIONS:

1. THE AREA OF THE PROPOSED SEDIMENT BASIN SHALL BE USED AS A SEDIMENT TRAP PRIOR TO FINAL CONSTRUCTION OF THE INFILTRATION BASIN. SEDIMENT TRAP SHALL BE CLEARED, GRUBBED AND STRIPPED OF ANY VEGETATION AND ROOT MAT. INCLUSION OF VEGETATION, ORGANIC MATERIAL, OR FROZEN SOIL IN THE EMBANKMENT, AS WELL AS PLACING OF EMBANKMENT MATERIAL ON A FROZEN SURFACE IS PROHIBITED.
2. THE FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION AS WELL AS OVER-SIZED STONES, ROCKS, ORGANIC MATERIAL OR OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHALL BE COMPACTED BY TRAVERSING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED IF POSSIBLE. MAXIMUM HEIGHT OF EMBANKMENT SHALL BE FIVE (5) FEET. MEASURED AT CENTERLINE OF EMBANKMENT. PLACE FILL IN LIFTS NOT TO EXCEED 9" AND MACHINE COMPACT.
3. ALL FILL SLOPES SHALL BE 2:1 OR FLATTER, CUT SLOPES 1:1 OR FLATTER.
4. ELEVATION OF THE TOP OF ANY DIKE DIRECTING WATER INTO TRAP MUST EQUAL OR EXCEED HEIGHT OF EMBANKMENT.
5. ENSURE THAT THE SPILLWAY CREST IS LEVEL AND AT LEAST 1.5' BELOW THE TOP OF THE DAM AT ALL POINTS.
6. FILTER CLOTH SHALL BE PLACED OVER THE BOTTOM OF THE OUTLET CHANNEL PRIOR TO PLACEMENT OF STONE. SECTIONS OF FABRIC MUST OVERLAP AT LEAST ONE (1) FOOT WITH SECTION NEAREST THE ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHED INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
7. STONE USED IN OUTLET CHANNEL SHALL BE FOUR (4) TO EIGHT (8) INCHES (RIP RAP). TO PROVIDE A FILTERING EFFECT. STONE USED FOR SPILLWAY SECTION-CLASS "B" EROSION CONTROL STONE. STONE USED ON INSIDE SPILLWAY FACE TO CONTROL DRAINAGE - D.O.T. #57 WASHED STONE. A LAYER OF FILTER CLOTH SHALL BE EMBEDDED ONE (1) FOOT WITH SECTION NEAREST ENTRANCE PLACED ON TOP. FABRIC SHALL BE EMBEDDED AT LEAST SIX (6) INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
8. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
9. THE SEDIMENT TRAP SHALL BE INSPECTED AFTER EACH RAIN AND SHALL BE REPAIRED AS NEEDED.
10. CONSTRUCT EMBANKMENT AND STONE SPILLWAY TO DIMENSIONS, SLOPES AND ELEVATIONS SHOWN ON THE PLAN.
11. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE MINIMIZED.
12. THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.
13. DRAINAGE AREA FOR THIS PRACTICE IS LIMITED TO 15 ACRES.
15. ENSURE THAT THE TOP OF THE EMBANKMENT AT ALL POINTS IF 0.5' ABOVE NATURAL SURROUNDING GROUND.
16. IMMEDIATELY STABILIZE THE EMBANKMENT AND ALL DISTURBED AREAS AS IN ACCORDANCE WITH THE SPECIFICATIONS SHOWN ON THE GENERAL PLANSET AND EROSION AND SEDIMENT CONTROL PLANS.



BIORETENTION FACILITY

NOT TO SCALE



BIORETENTION BED SECTION

NOT TO SCALE

BIORETENTION PLANTING SOIL

THE PLANTING SOIL SHOULD BE A SANDY LOAM, LOAMY SAND, LOAM (USDA). OR A LOAM/SAND MIX (SHOULD CONTAIN A MINIMUM 35 TO 60% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 25% BY VOLUME. SOILS SHOULD FALL WITHIN THE SM, OR ML CLASSIFICATIONS OD THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0 5"/HR) IS REQUIRED (A CONSERVATIVE VALUE OF 0.5 FEET PER DAY IS USED FOR DESIGN). THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS. OR OTHER WOODY MATERIAL OVER I" IN DIAMETER. AND BRUSH OR SEED FROM NOXIOUS WEEDS. PLACEMENT OF THE PLANTING SOIL SHOULD BE IN LIFTS OF IT TO 18", LOOSELY COMPACTED (TAMPED LIGHTLY WITH A DOZER OR BACKHOE BUCKET). THE SPECIFIC CHARACTERISTICS ARE AS FOLLOWS:

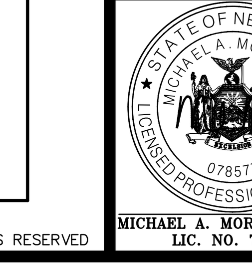
PARAMETER	VALUE
PH RANGE	52 TO 7.0
ORGANIC MATTER	1.5 TO 4.0%
MAGNESIUM	35 LBS PER ACRE, MINIMUM
PHOSPHORUS (P_2O_5)	75 LBS PER ACRE, MINIMUM
POTASSRA1 (K_2O)	85 LBS PER ACRE, MINIMUM
SOLUBLE SALTS	500 ppm
CLAY	10 TO 25%
SILT	30 TO 55%
SAND	35 TO 65%

REVISION	BY	DATE	DESCRIPTION
4.	MM	12/2/21	PER PB MTG & AF COMMENT LETTER
3.	MM	9/16/21	PREPARATION OF PRELIMINARY PLANS
2.	MM	5/19/21	REVISION PER PB MTG. & COMMENT LETTERS
1.	MM	3/23/21	ROAD LAYOUT REVISION PER PB MTG.

THIS SHEET IS NOT VALID WITHOUT ALL OF THE SHEETS THAT COMPRISE THE SET

TOWN OF CHESTER PLANNING BOARD APPROVAL

ARDEN CONSULTING ENGINEERS, PLLC
P.O. BOX 340 MONROE, N.Y.
T: 845-782-8114 E: MAM@ARDENCONSULTING.NET



MICHAEL A. MORGANTE, P.E.
LIC. NO. 78577

SITE PLAN & LOT LINE COMBINATION FOR
DAVIDSON DRIVE HOLDINGS, LLC
LAKE STATION ROAD
TOWN OF CHESTER, COUNTY OF ORANGE, NY

20 STORMWATER CONSTRUCTION DETAILS

JOB#: 20-030
SCALE: AS NOTED
DATE: 2-17-21
DRAWN: MM
CHECKED: MM
SHEET NO. ---OF 20

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