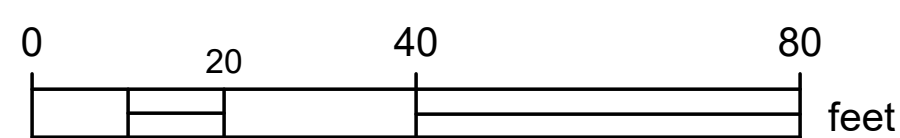
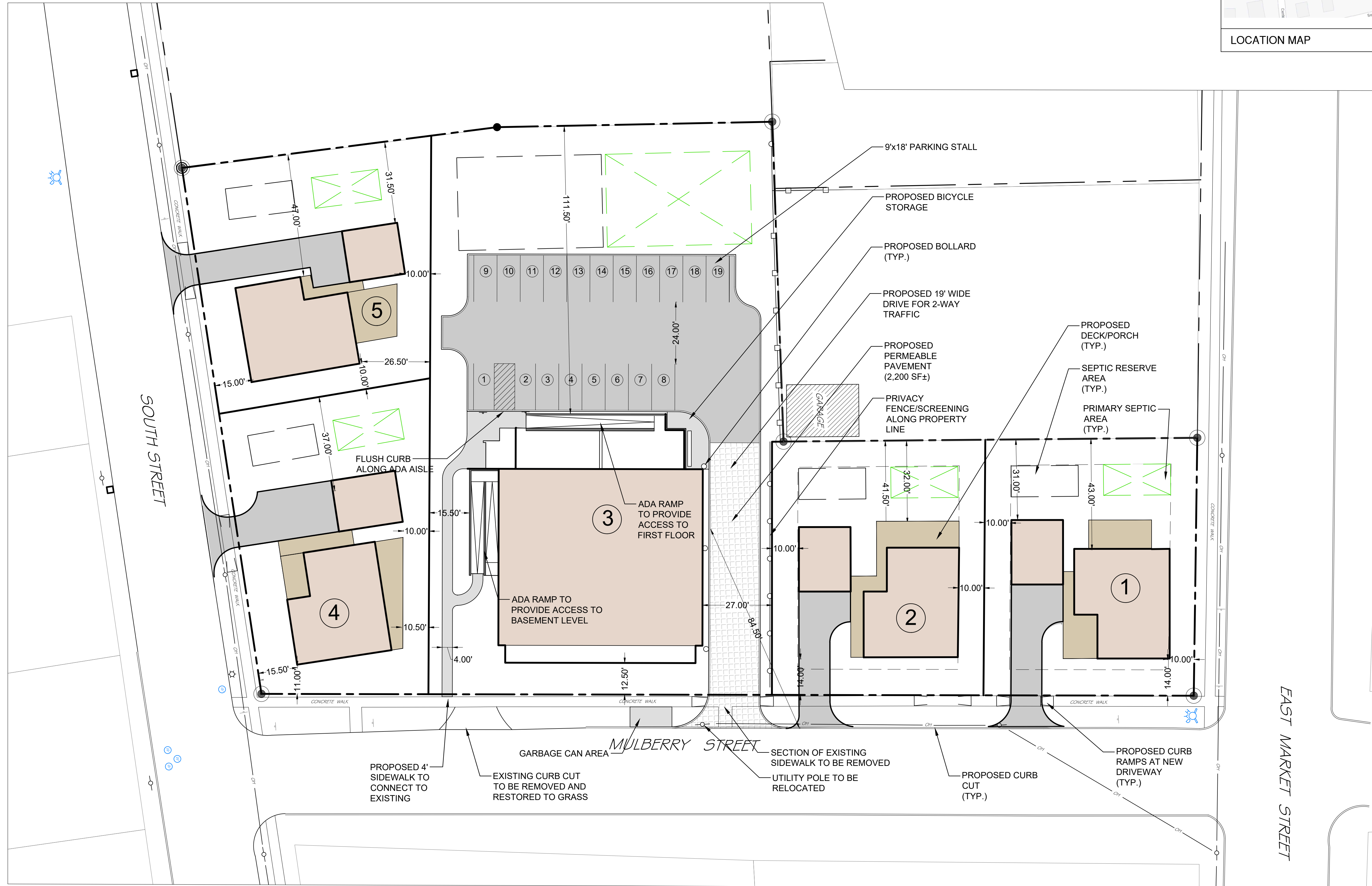
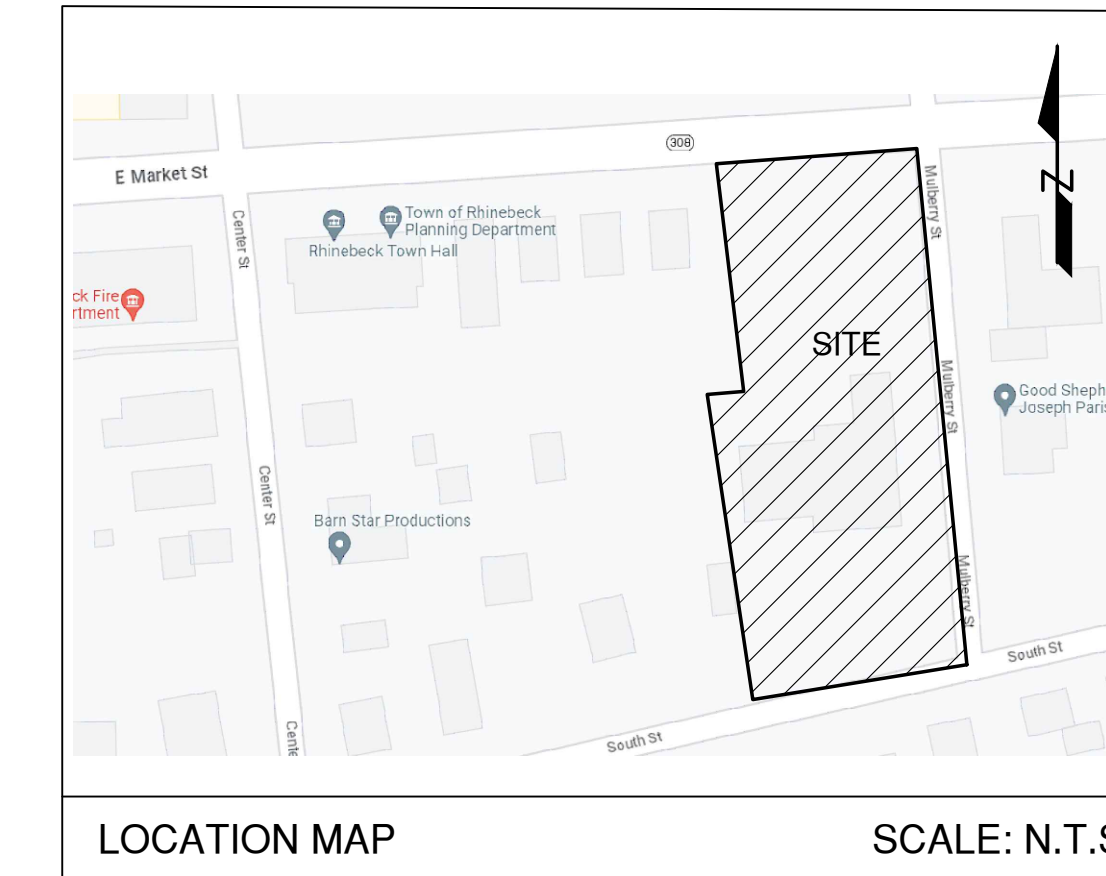


NOTES:

1. SURVEY INFORMATION IS BASED UPON A MAP ENTITLED "BOUNDARY SURVEY DUTCHESS SHEPARD, LLC", PREPARED BY DECK SURVEYING, DATED MARCH 17, 2021.

**VILLAGE OF RHINEBECK ZONING REQUIREMENTS
(RESIDENTIAL ZONING DISTRICT)**

	REQUIRED	LOT #1	LOT #2	LOT #3	LOT #4	LOT #5
MIN. LOT AREA (SF)	8,000	8,142	8,115	29,512	8,533	8,510
MIN. FRONT YARD (FT.)	10	13.95	13.96	12.27	15.31	15.03
MAX. FRONT YARD SETBACK (FT.)	25	13.95	13.96	12.27	15.31	15.03
MIN. SIDE YARD SETBACK (FT.)	10	10.00	10.0	15.51	10.76	10.01
MIN. REAR YARD SETBACK (FT.)	10	43.00	41.50	111.50	10.50	26.50
MIN. LOT FRONTAGE (FT.)	60	81	81	113	110	96
MIN. LOT WIDTH (FT.)	60	81	82	113	114	96
MAX. BUILDING HEIGHT (FT.)	35	< 35	< 35	< 35	< 35	< 35
MAX. LOT COVERAGE (%)	30	24	24	26	22	22
REQUIRED PARKING	2 SPACE / UNIT	2 SPACES	2 SPACES	18 SPACES	2 SPACES	2 SPACES
PROVIDED PARKING		2 SPACES	2 SPACES	18 SPACES	2 SPACES	2 SPACES



NO.	REVISION	DATE
1	REVISED PER VILLAGE CONSULTANT MEMO	9/1/23



LEGEND:

- EXISTING CONTOUR
- PROPOSED HOUSE
- PRIMARY SEPTIC AREA
- RESERVE SEPTIC AREA
- INFILTRATION SYSTEM
- RD ROOF LEADER
- WS DOMESTIC WATER
- FS FIRE SERVICE

Applicant: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Owner: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Site Data:
 SITE ADDRESS: 6 Mulberry Street Rhinebeck, NY
 LOT SIZE: 1.44 AC
 TAX MAP: 135001-6170-568209
 Zoning: RB-35

HILDENBRAND ENGINEERING, PLLC
 208 CREAMERY ROAD
 HOPEWELL JUNCTION, NY
 845.206.6994
 Brian@HildenEng.com

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**6 MULBERRY STREET
 VILLAGE OF RHINEBECK
 DUTCHESS COUNTY, NEW YORK**

**TITLE:
 SUBDIVISION SITE PLAN**

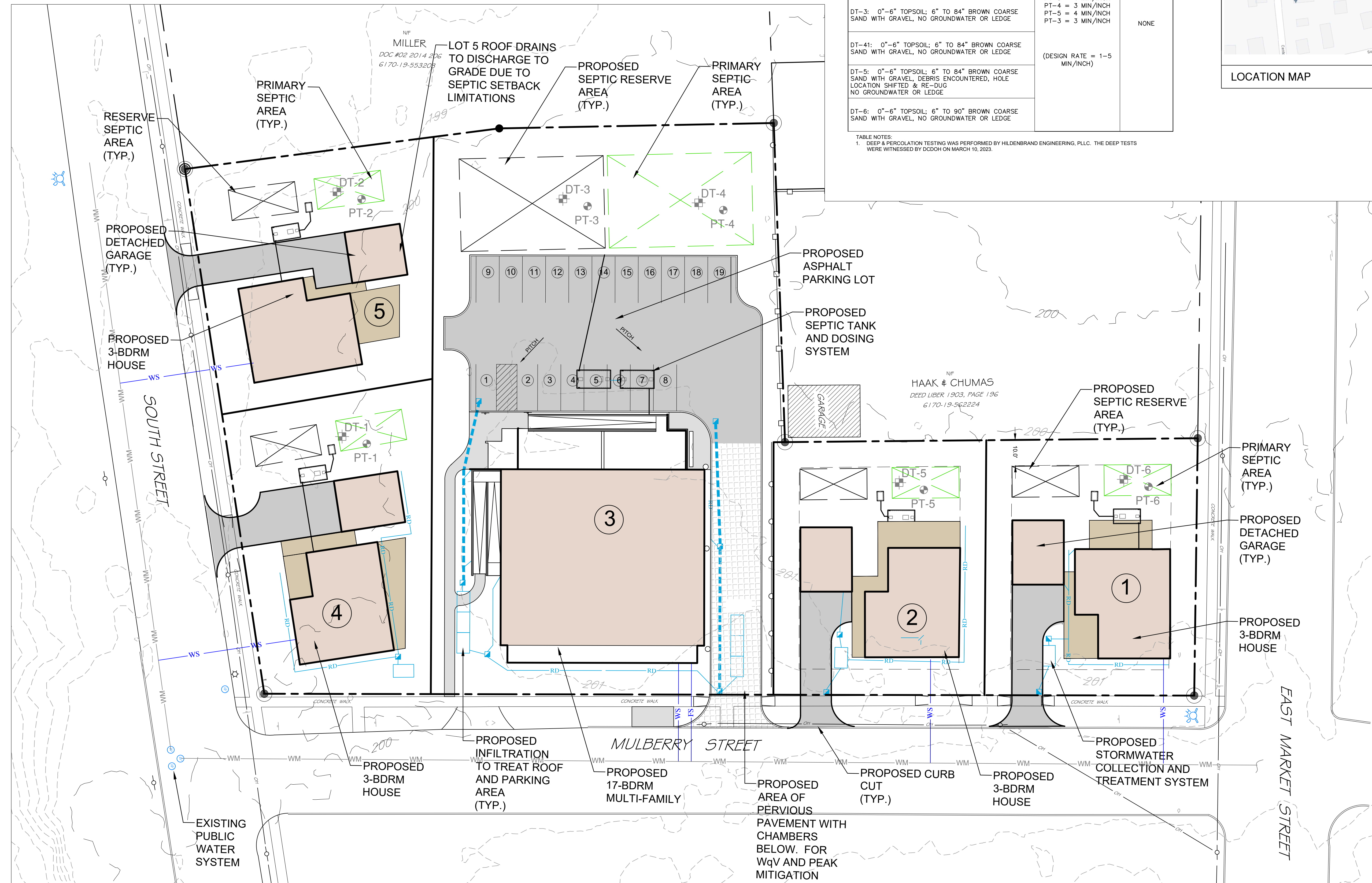
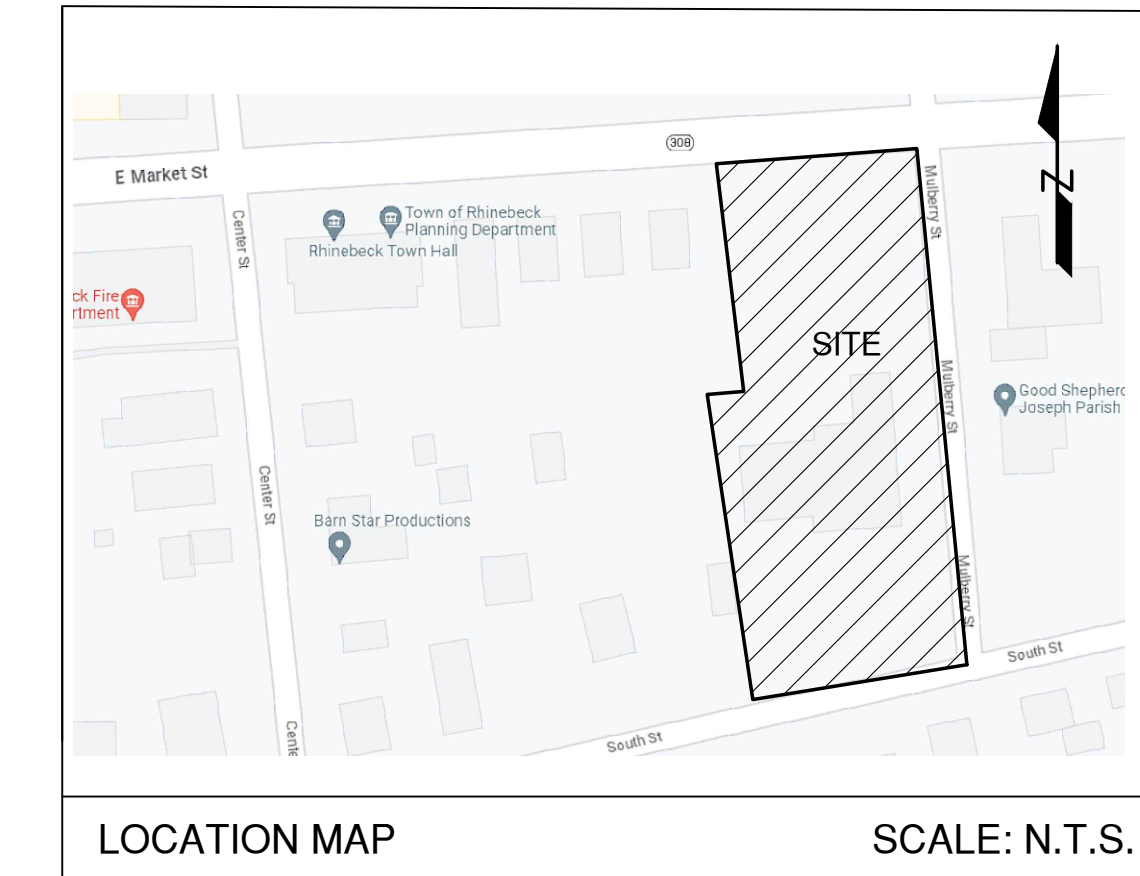
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Date:	April 1, 2023
Drawn By:	
Checked By:	BJH
Project No.:	
Sheet No.:	
Dwg. No.:	C-100

NOTES:

1. SURVEY INFORMATION IS BASED UPON A MAP ENTITLED "BOUNDARY SURVEY DUTCHESS SHEPARD, LLC", PREPARED BY DECK SURVEYING, DATED MARCH 17, 2021.
2. 1' TOPOGRAPHY SHOWN HEREON IS BASED OFF OF INFORMATION AVAILABLE FROM DUTCHESS COUNTY GIS.
3. SEPTIC AND STORMWATER AREAS SHOWN HEREON ARE DESIGNED TO MEET NYSDEC AND DCDOH REGULATIONS.
4. THE PROPOSED SEPTIC SYSTEMS ARE DESIGNED USING GRAVELLESS GEOTEXTILE SAND FILTER (GGSF) ABSORPTION SYSTEM MANUFACTURED BY ATL.

O.W.T.S. FIELD TESTING INFORMATION		
DEEP TEST HOLE DESCRIPTION	PERCOLATION RATE (MIN/IN)	R.O.B. GRAVEL FILL
DT-1: 0"-6" TOPSOIL; 6" TO 84" BROWN COARSE SAND WITH GRAVEL, NO GROUNDWATER OR LEDGE	PT-1 = 3 MIN/INCH PT-2 = 3 MIN/INCH PT-3 = 4 MIN/INCH PT-4 = 3 MIN/INCH PT-5 = 4 MIN/INCH PT-3 = 3 MIN/INCH (DESIGN RATE = 1-5 MIN/INCH)	NONE
DT-2: 0"-6" TOPSOIL; 6" TO 84" BROWN COARSE SAND WITH GRAVEL & FRACTURES COBBLES, NO GROUNDWATER OR LEDGE		
DT-3: 0"-6" TOPSOIL; 6" TO 84" BROWN COARSE SAND WITH GRAVEL, NO GROUNDWATER OR LEDGE		
DT-4: 0"-6" TOPSOIL; 6" TO 84" BROWN COARSE SAND WITH GRAVEL, NO GROUNDWATER OR LEDGE		
DT-5: 0"-6" TOPSOIL; 6" TO 84" BROWN COARSE SAND WITH GRAVEL, DEBRIS ENCOUNTERED, HOLE LOCATION SHIFTED & RE-DUG NO GROUNDWATER OR LEDGE		
DT-6: 0"-6" TOPSOIL; 6" TO 90" BROWN COARSE SAND WITH GRAVEL, NO GROUNDWATER OR LEDGE		

TABLE NOTES
1. DEEP & PERCOLATION TESTING WAS PERFORMED BY HILDENBRAND ENGINEERING, PLLC. THE DEEP TESTS WERE WITNESSED BY DCDOH ON MARCH 10, 2023.



NO.	REVISION	DATE
1	REVISED PER VILLAGE CONSULTANT MEMO	9/1/23



LEGEND:

	EXISTING CONTOUR
	PROPOSED HOUSE
	PRIMARY SEPTIC AREA
	RESERVE SEPTIC AREA
	INFILTRATION SYSTEM
	RD
	WS
	FS

Applicant: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Owner: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Site Data
SITE ADDRESS: 6 Mulberry Street
Rhinebeck, NY
LOT SIZE: 1.44 AC
TAX MAP: 135001-6170-568209
Zoning: RB-35



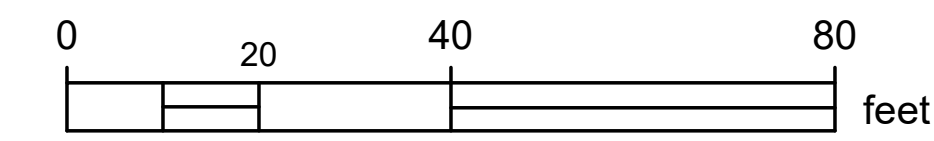
HILDENBRAND ENGINEERING, PLLC
208 CREAMERY ROAD
HOPEWELL JUNCTION, NY
845.206.6994
Brian@HildenEng.com

6 MULBERRY STREET
VILLAGE OF RHINEBECK
DUTCHESS COUNTY, NEW YORK

TITLE:
**PRELIMINARY OVERALL
SUBDIVISION UTILITY PLAN**

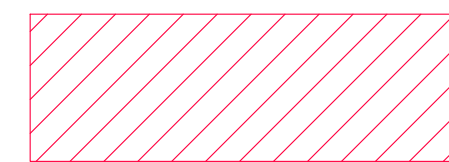
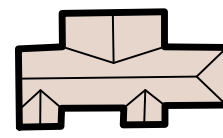

Scale: As Shown
Date: April 1, 2023
Drawn By:
Checked By: BJH
Project No.:
Sheet No.:
Dwg. No.:
BRIAN HILDENBRAND, P.E.
LIC# 092374

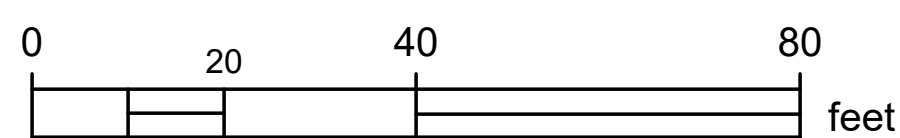
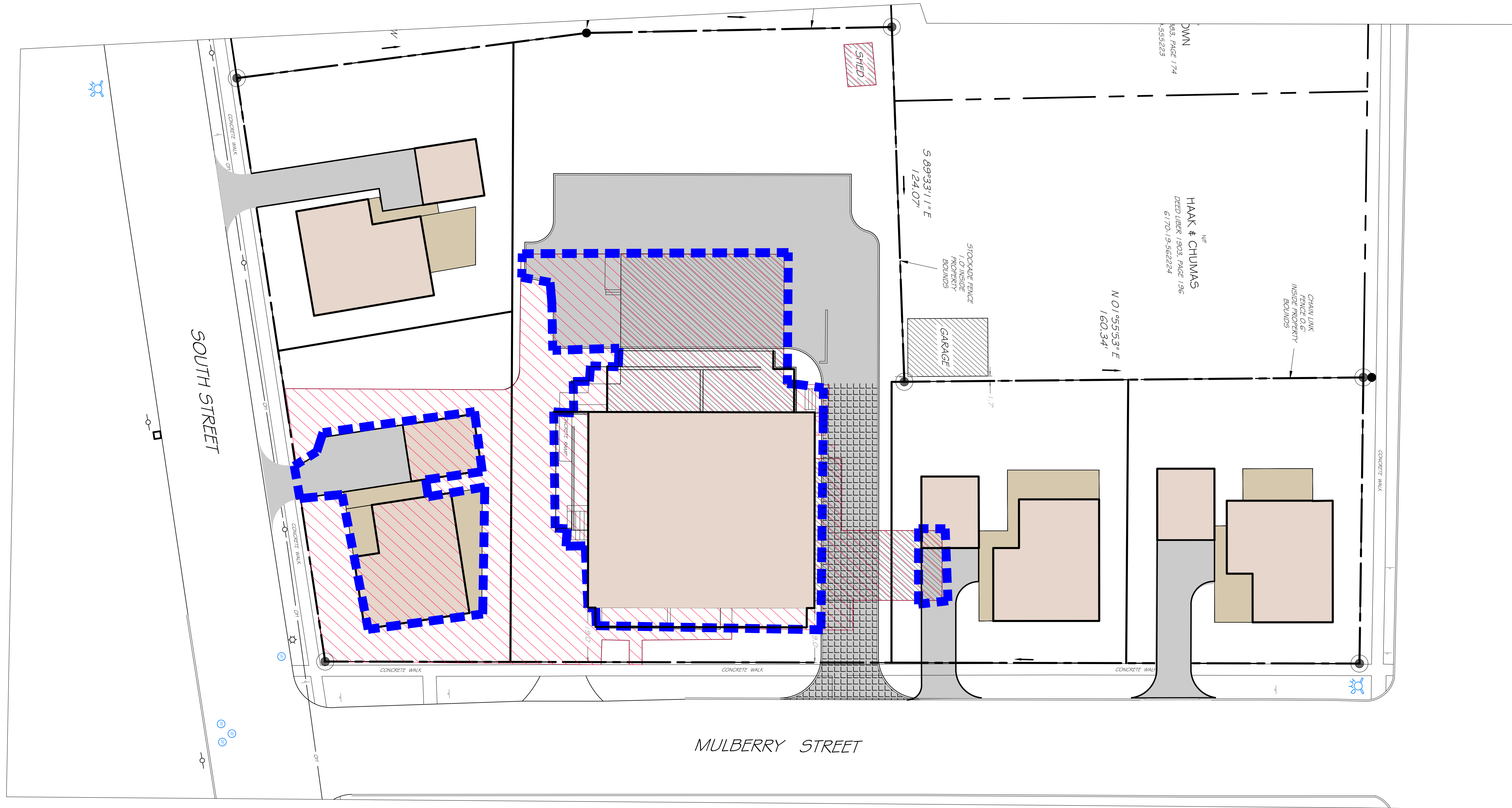
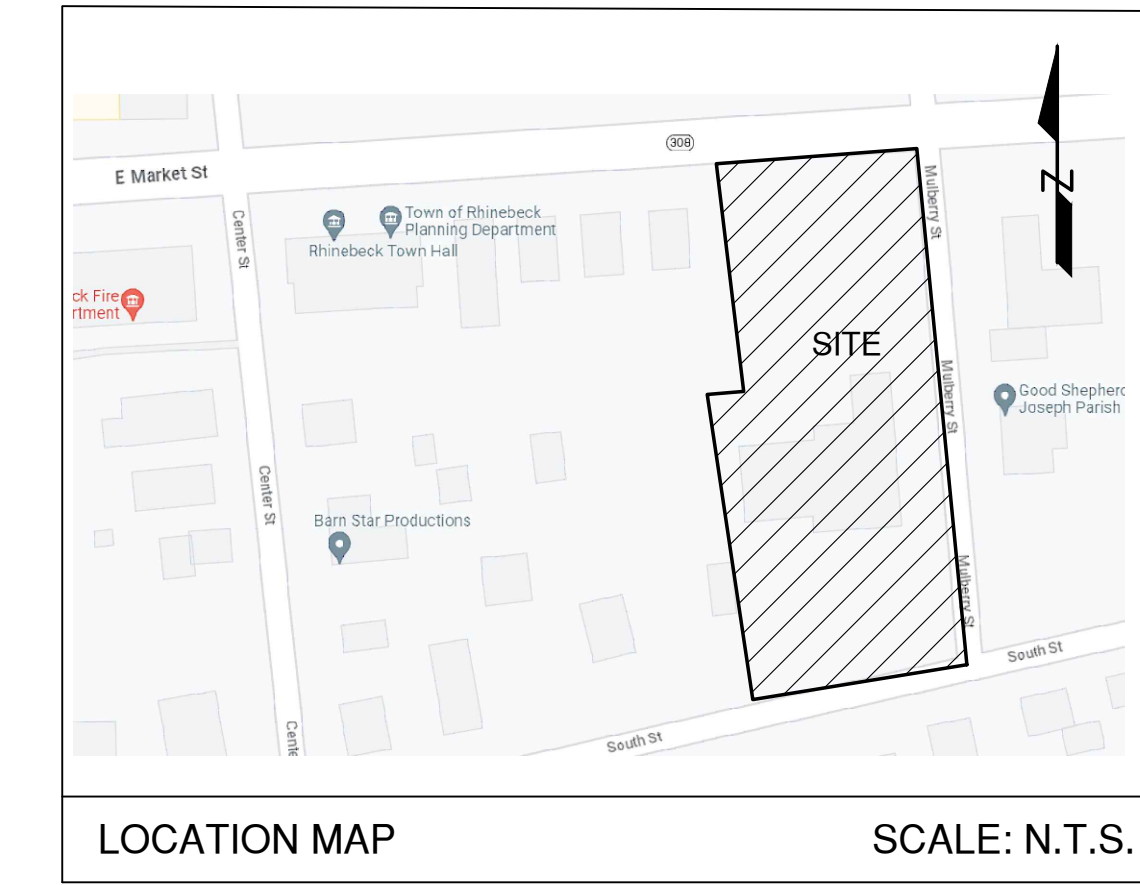
LOT	# BEDROOMS	DAILY FLOW	SEPTIC TANK	APPLICATION RATE	AREA REQUIRED	GGSFS PRODUCT RATING	TRENCH LENGTH REQUIRED	TRENCH LENGTH PROVIDED	RESERVE PROVIDED
1	3	330 GPD	1,000 GAL	1.2 GPD/SF	275 SF	6 SF/LF	46 LF	50 LF	50 LF
2	3	330 GPD	1,000 GAL	1.2 GPD/SF	275 SF	6 SF/LF	46 LF	50 LF	50 LF
3	17	1,870 GPD	(2) 1,500 GAL	1.2 GPD/SF	1,559 SF	6 SF/LF	260 LF	260 LF	260 LF
4	3	330 GPD	1,000 GAL	1.2 GPD/SF	275 SF	6 SF/LF	46 LF	50 LF	50 LF
5	3	330 GPD	1,000 GAL	1.2 GPD/SF	275 SF	6 SF/LF	46 LF	50 LF	50 LF



NOTES:

1. SURVEY INFORMATION IS BASED UPON A MAP ENTITLED "BOUNDARY SURVEY DUTCHESS SHEPARD, LLC", PREPARED BY DECK SURVEYING, DATED MARCH 17, 2021.

	TOTAL EXISTING IMPERVIOUS	22,426 SF
	TOTAL PROPOSED IMPERVIOUS	29,032 SF
	REDEVELOPED IMPERVIOUS	14,854 SF



NO.	REVISION	DATE
1	REVISED PER VILLAGE CONSULTANT MEMO	9/1/23



LEGEND:



Applicant: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Owner: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Site Data
 SITE ADDRESS: 6 Mulberry Street
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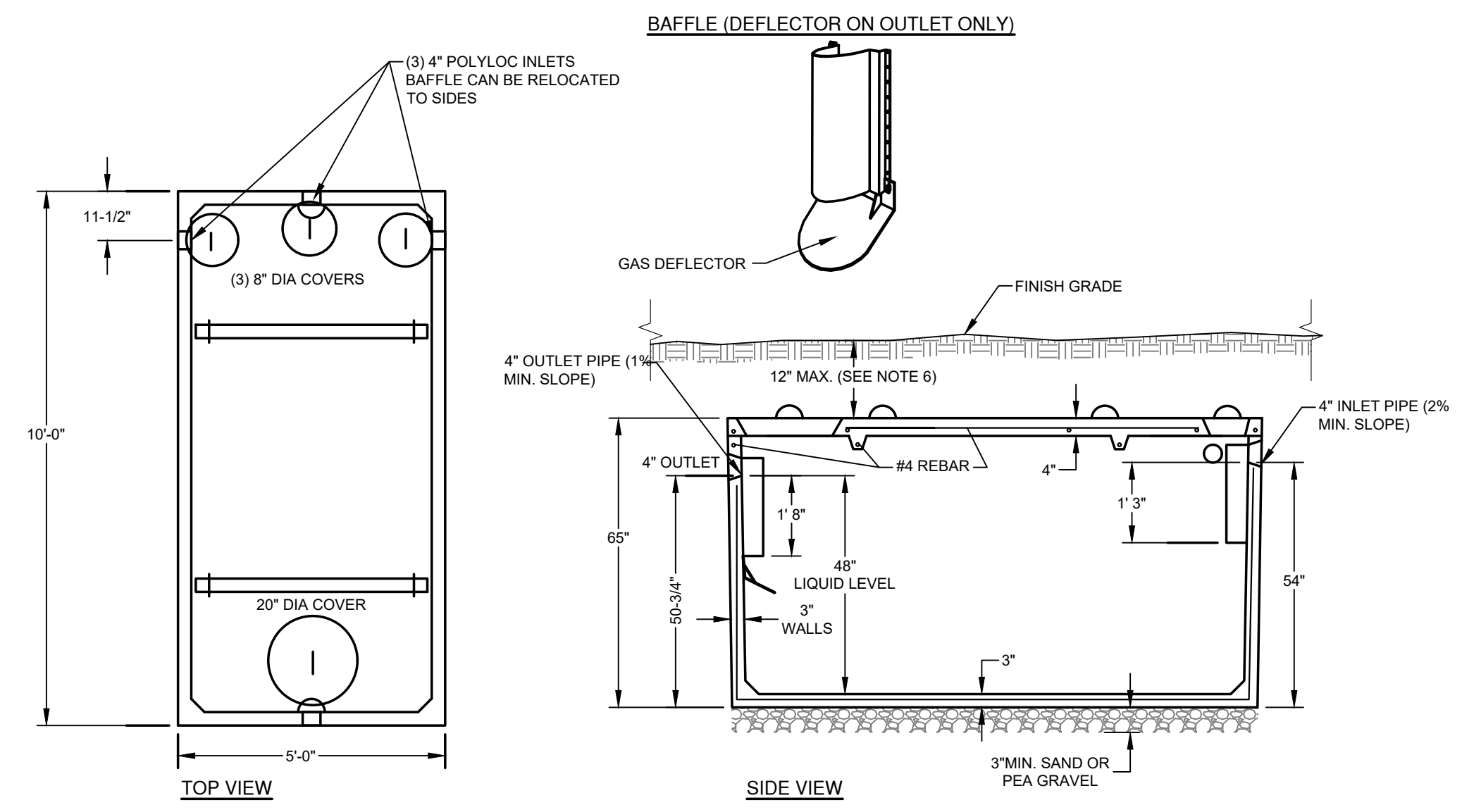
6 MULBERRY STREET
VILLAGE OF RHINEBECK
DUTCHESS COUNTY, NEW YORK

TITLE:
IMPERVIOUS FIGURE

Scale:	As Shown
Date:	April 1, 2023
Drawn By:	
Checked By:	BJH
Project No.:	
Sheet No.:	
Dwg. No.:	C-300

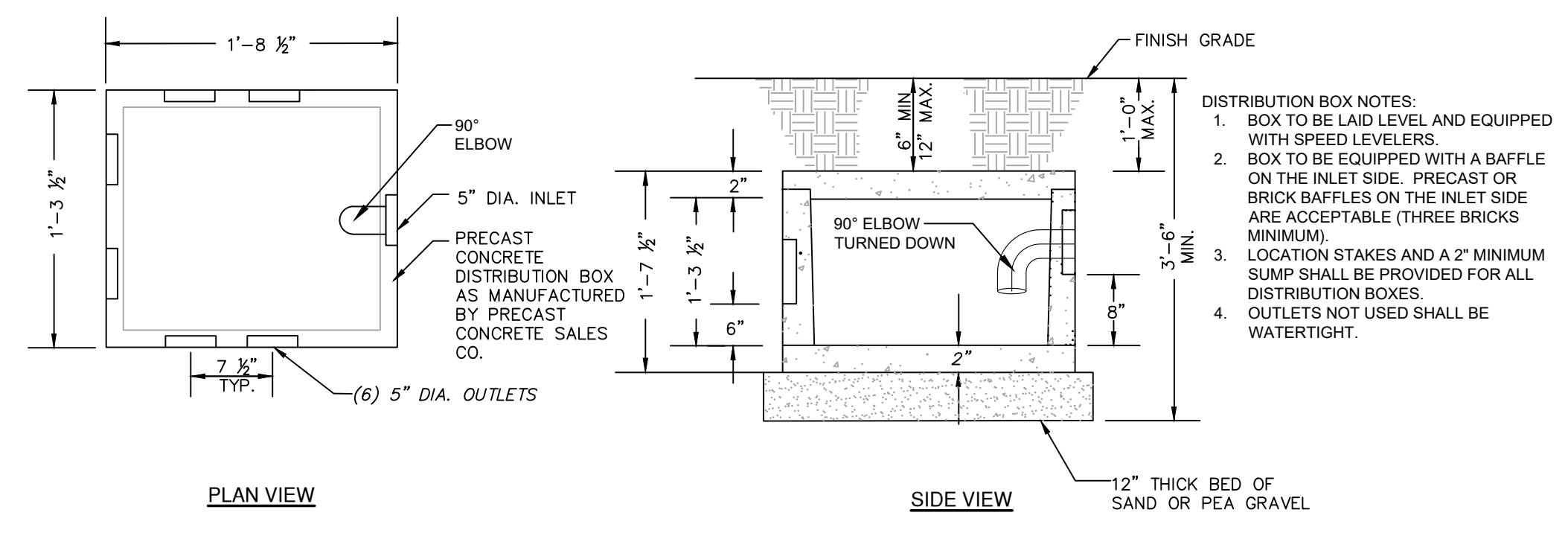
BRIAN HILDENBRAND, P.E.
LIC# 092374

NO.	REVISION	DATE
1	REVISED PER VILLAGE CONSULTANT MEMO	9/1/23

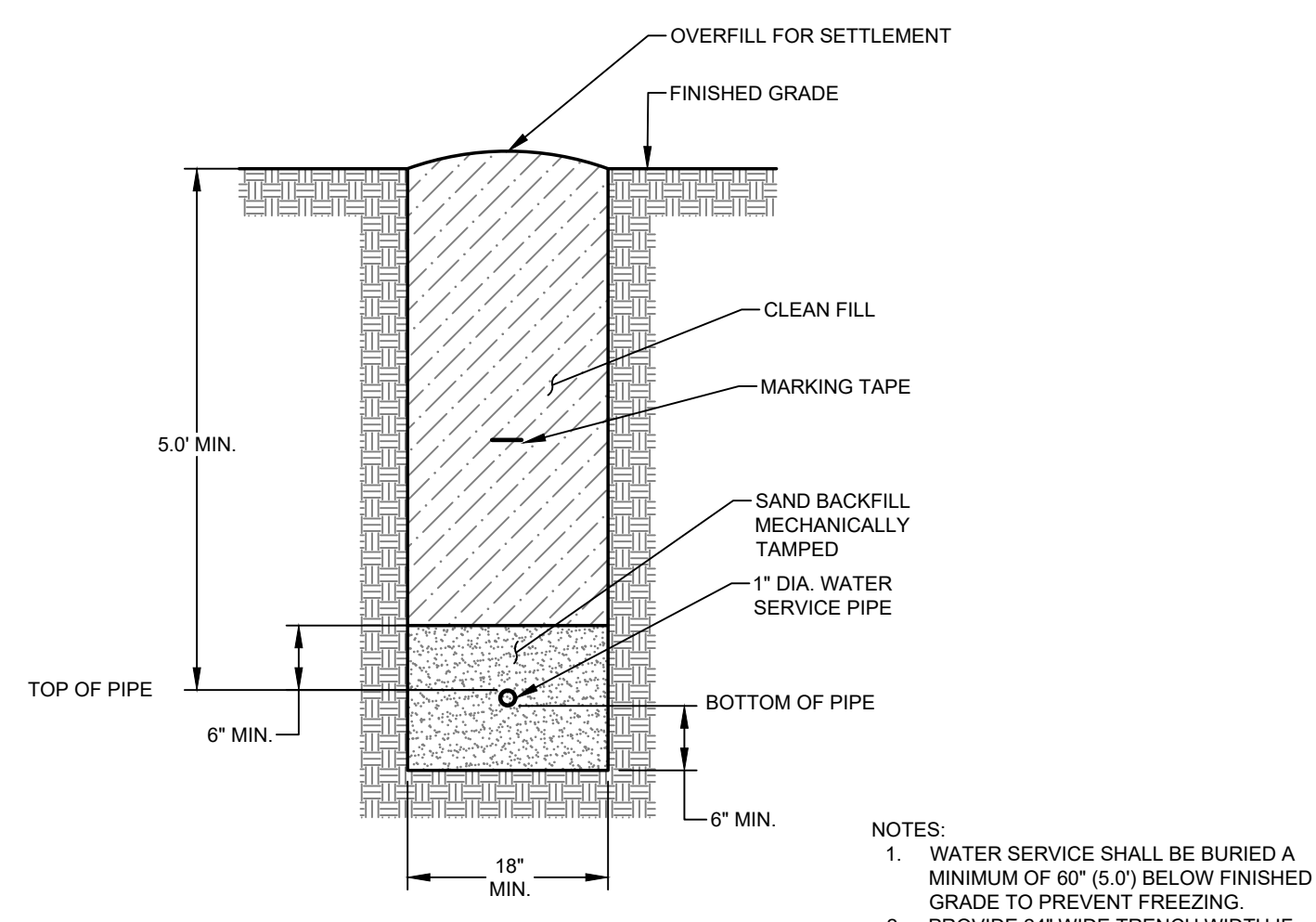


- NOTES:**
- SEPTIC TANK TO BE WATERTIGHT, CONSTRUCTED OF DURABLE MATERIAL AND NOT SUBJECT TO EXCESSIVE DECAY, FROST DAMAGE OR CRACKING. TOP OF TANK TO SUPPORT AT LEAST 300 P.S.F.
 - DIMENSIONS AND CONFIGURATIONS MAY VARY DEPENDING ON MANUFACTURER.
 - CONCRETE STRENGTH = 4,000 PSI AT 28 DAYS.
 - ALL PIPE PENETRATIONS TO BE WATERTIGHT.
 - CONTRACTOR SHALL DEMONSTRATE THAT THE SEPTIC TANK IS WATERTIGHT AND TEST SHALL BE WITNESSED BY DESIGN ENGINEER OR A HEALTH DEPARTMENT REPRESENTATIVE.
 - MAXIMUM DEPTH OVER TANK IS 12". IF THERE IS MORE THAN 12" OF COVER OVER THE SEPTIC TANK, AN ACCESS PORT SHALL BE REQUIRED. IF ACCESS PORT EXTENDS TO GRADE, THE ACCESS SHALL BE LOCKABLE.
 - RECOMMENDED MANUFACTURER:
WOODARD'S CONCRETE PRODUCTS, INC.
629 LYBOLT ROAD, BULLVILLE, NY 10915
(845) 361-3471 / Fax 361-1050

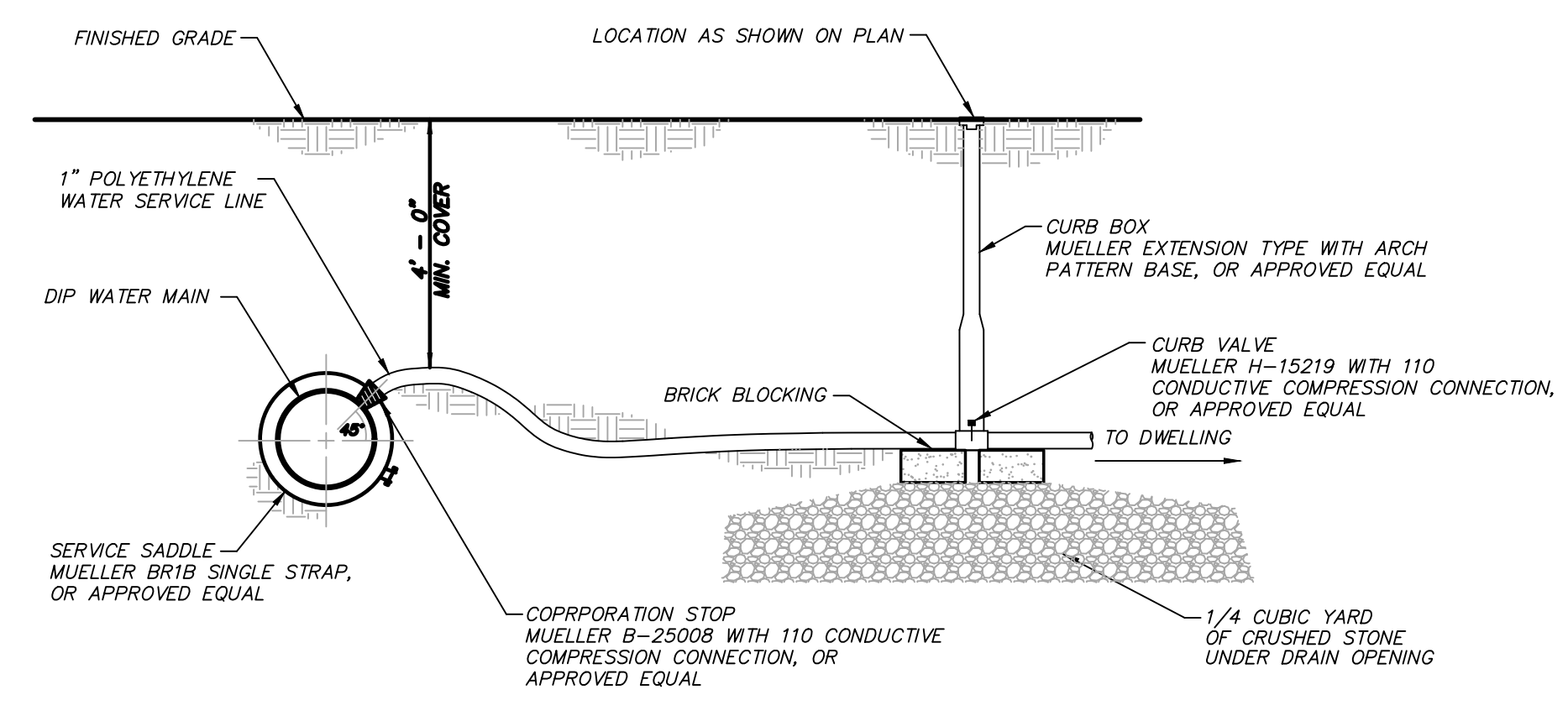
1,250 GALLON SEPTIC TANK (PRECAST CONCRETE)
SCALE: N.T.S.



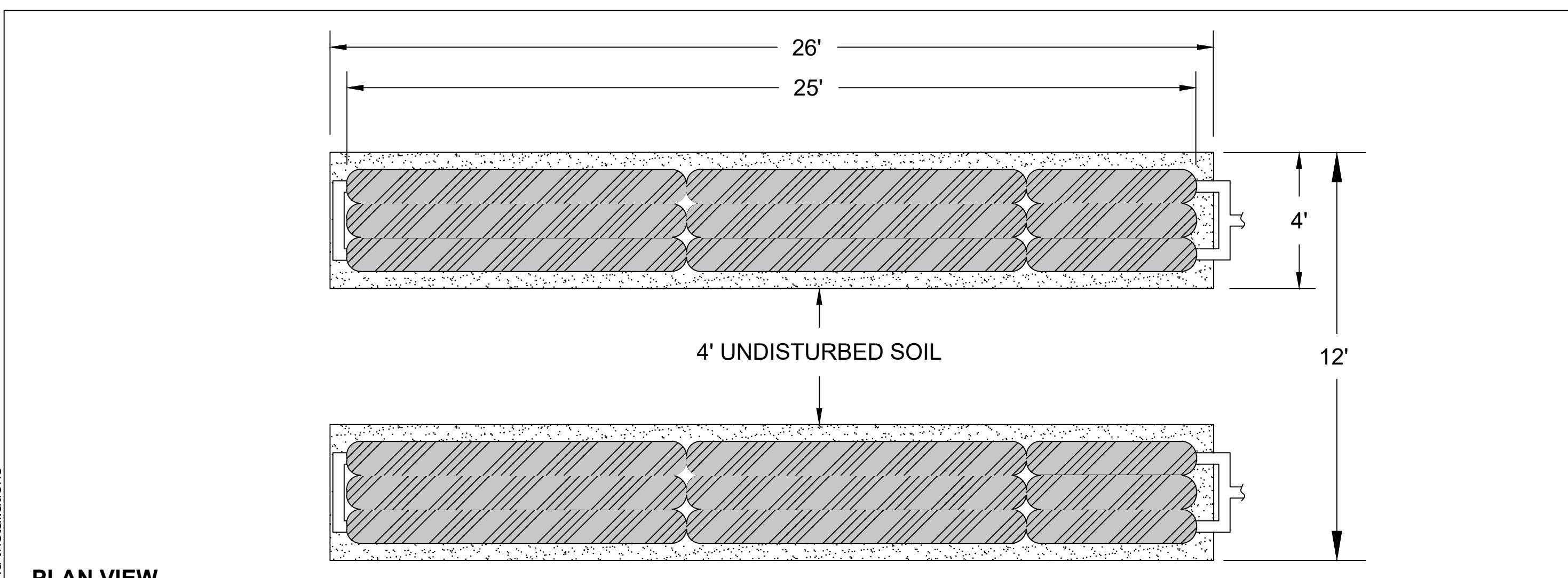
DISTRIBUTION BOX (6-WAY) DETAIL
SCALE: N.T.S.



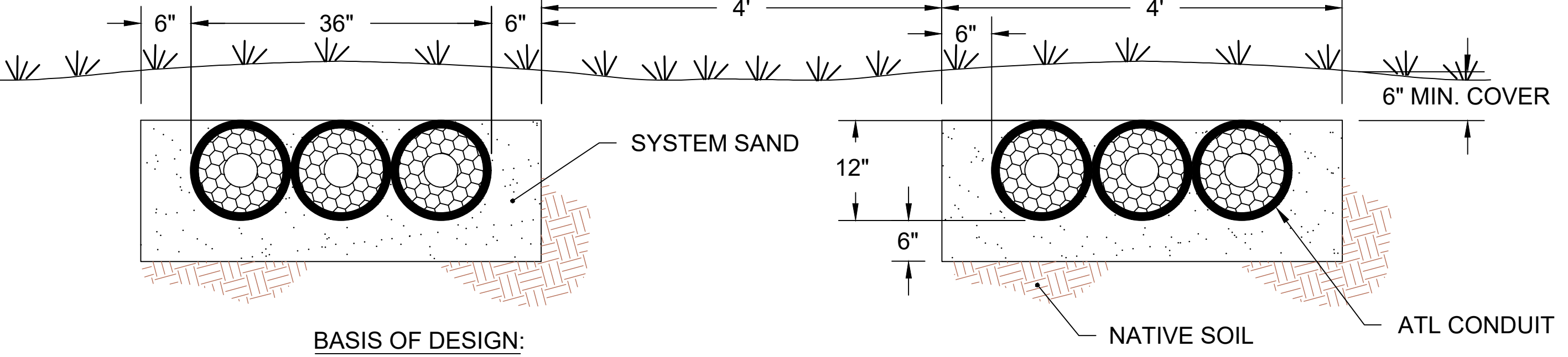
WATER SERVICE TRENCH
SCALE: N.T.S.



WATER SERVICE LINE CONNECTION TO DIP WATER MAIN DETAIL



PLAN VIEW
CROSS SECTION



BASIS OF DESIGN:

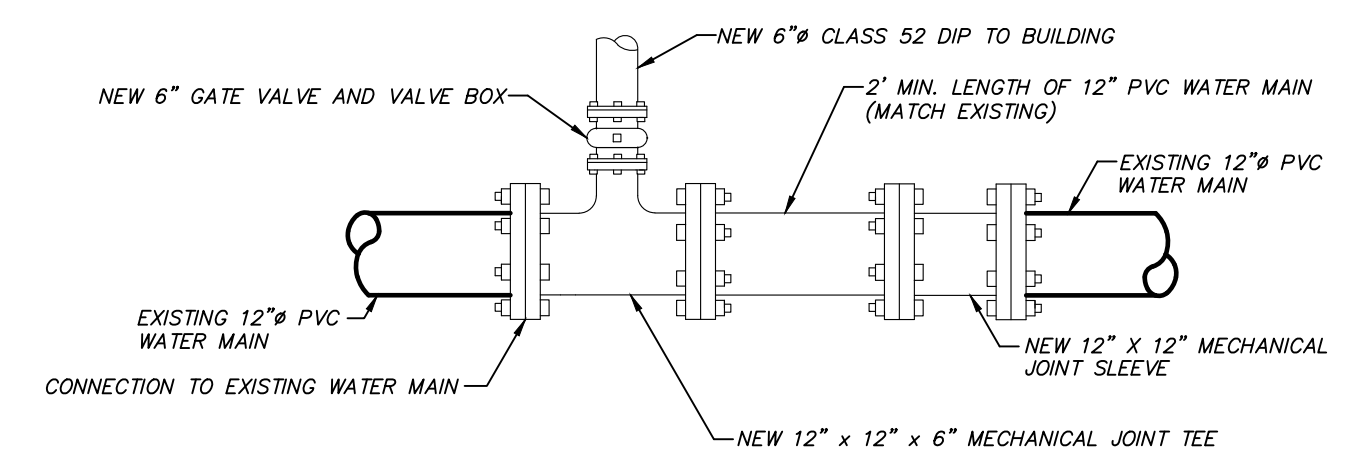
3 BEDROOM HOME
DAILY DESIGN FLOW: 330 GPD
SOIL TYPE: SAND/LOAMY SAND
PERCOLATION RATE: 1-5 MINUTES/in
APPLICATION RATE = 1.2 GPD/sf
AREA REQUIRED: (330 GPD) / (1.2 GPD/sf) = 275 sf
PRODUCT RATING: 6 sf/lf
ATL LENGTH REQUIRED: (275 sf) / (6 sf/lf) = 46 lf
ATL LENGTH PROVIDED: (25 ft LONG TRENCHES * 2 TRENCHES) = 50 lf

TYPICAL GGSF SEPTIC ABSORPTION SYSTEM DETAIL
SCALE: N.T.S.

INFILTRATOR WATER TECHNOLOGIES
4 Business Park Rd. Old Saybrook, CT 06475
(800) 221-4436

NY 3-BEDROOM ATL GGSF DESIGN
CROSS SECTION AND PLAN VIEW

Drawn by: JLK Date: 4/6/2023
Scale: NOT TO SCALE Checked by: DFH Sheet: 1 of 1



FIRE SERVICE LINE CONNECTION TO EXISTING WATER MAIN (N.T.S.)

- INSTALLATION:**
- SHUT DOWN EXISTING WATER MAIN (COORDINATE WITH LOCAL AUTHORITIES).
 - EXPOSE AND CUT OUT PORTION OF EXISTING WATER MAIN TO BE REMOVED.
 - INSTALL NEW TEE, VALVE, AND MECHANICAL JOINT SLEEVE WITH "MEGALUG" RESTRAINING GLANDS, OR APPROVED EQUAL.
 - INSTALL NEW 6" DIP TO NEW BUILDING.
 - BACKFILL WITH CONTROLLED LOW DENSITY BACKFILL (K-KRETE).

Applicant: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Owner: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Site Data: SITE ADDRESS: 6 Mulberry Street
Rhinebeck, NY
LOT SIZE: 1.44 AC
TAX MAP: 135001-6170-568209
Zoning: RB-35



HILDENBRAND ENGINEERING, PLLC
208 CREAMERY ROAD
HOPEWELL JUNCTION, NY
845.206.6994
Brian@HildenEng.com

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6 MULBERRY STREET
VILLAGE OF RHINEBECK
DUTCHESS COUNTY, NEW YORK

TITLE: PRELIMINARY
WATER & SEPTIC DETAILS

Scale: As Shown	Sheet No.: D-100
Date: April 1, 2023	
Drawn By: BIH	
Checked By: BIH	
Project No.:	
Sheet No.:	
Dwg. No.:	
BRIAN HILDENBRAND, P.E. LIC# 092374	

NO.	REVISION	DATE
1	REVISED PER VILLAGE CONSULTANT MEMO	9/1/23



LEGEND:

Applicant: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Owner: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Site Data:
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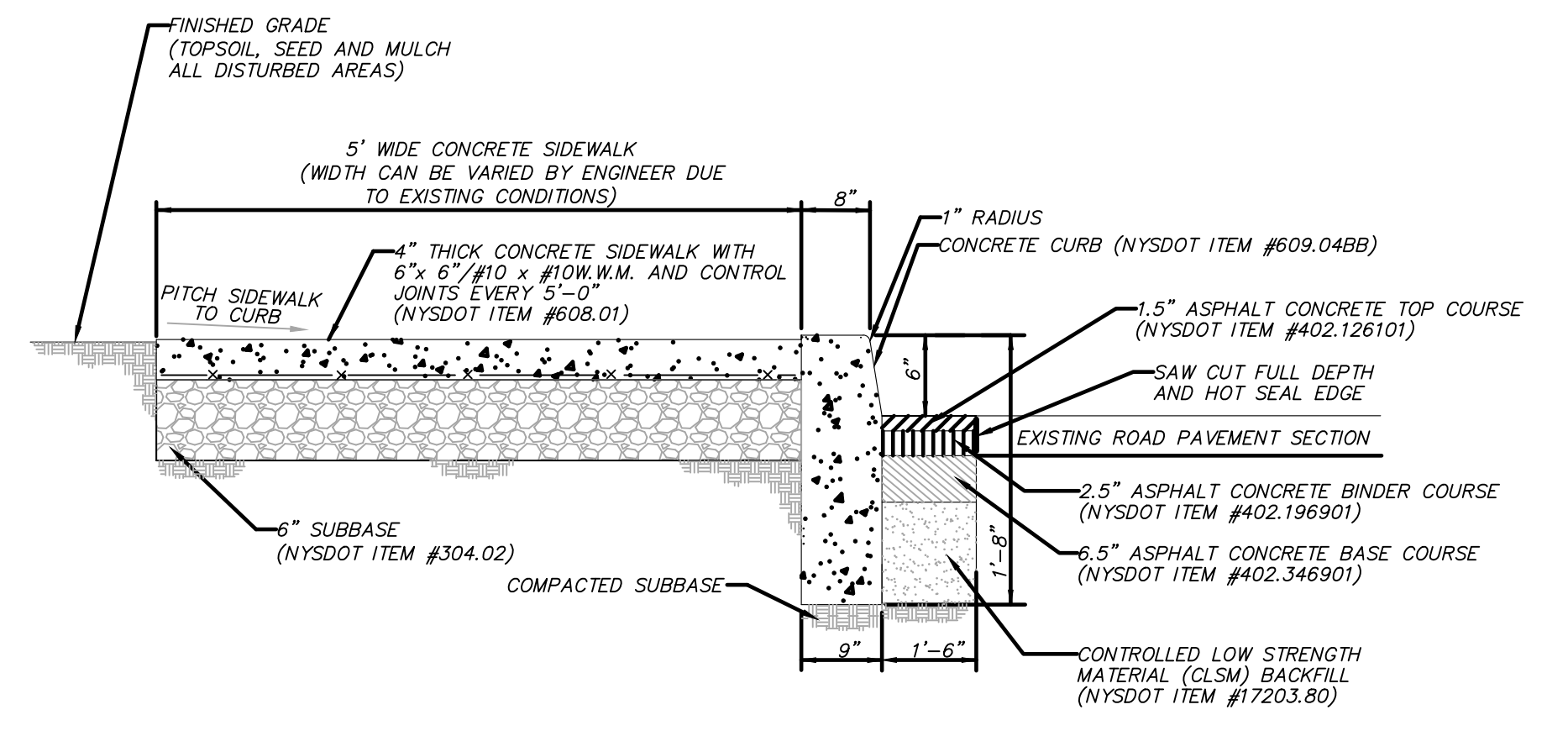


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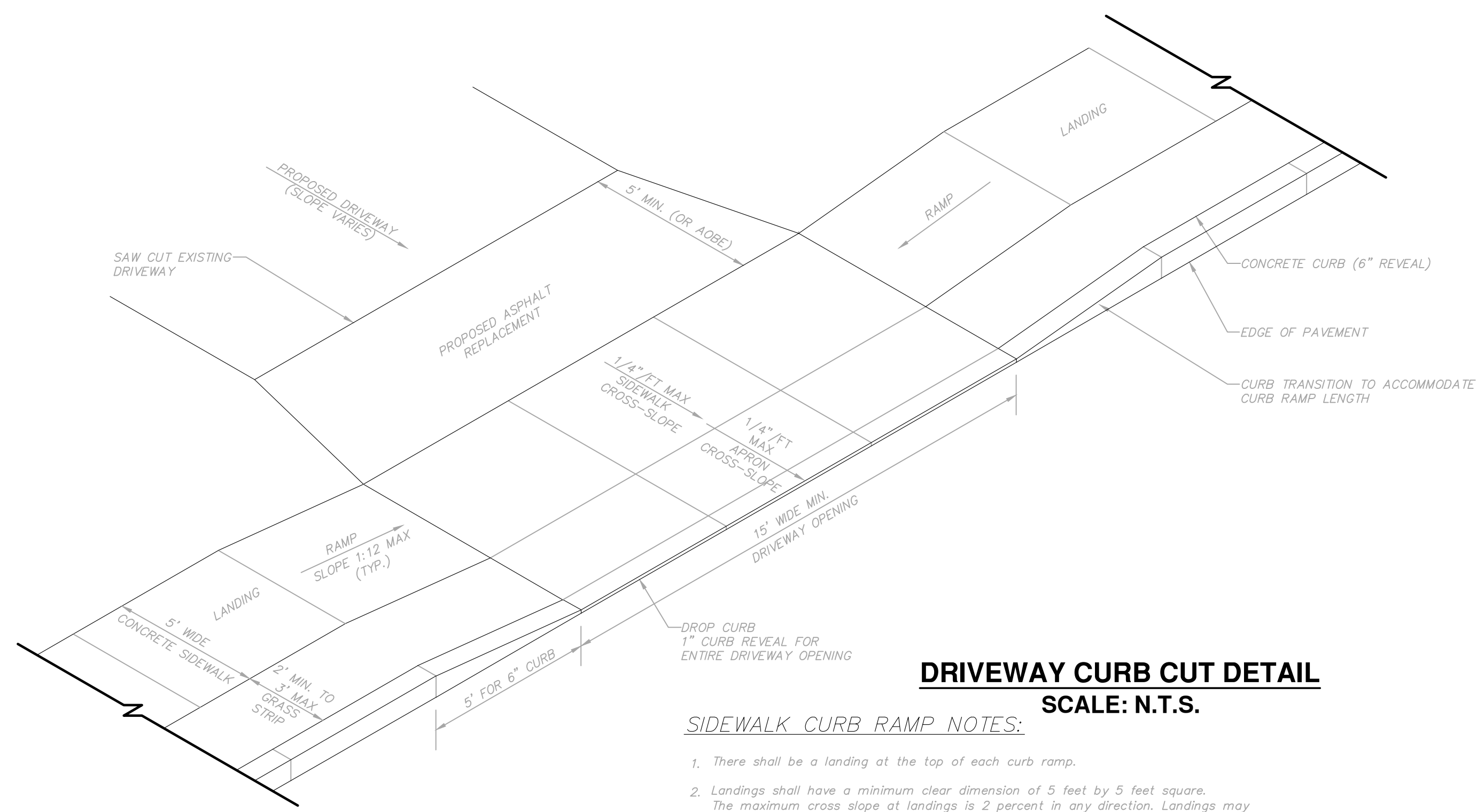
6 MULBERRY STREET
VILLAGE OF RHINEBECK
DUTCHESS COUNTY, NEW YORK

TITLE:
PRELIMINARY SITE DETAILS

Scale:	As Shown
Date:	April 1, 2023
Drawn By:	
Checked By:	BJH
Project No.:	
Sheet No.:	
Dwg. No.:	D-200

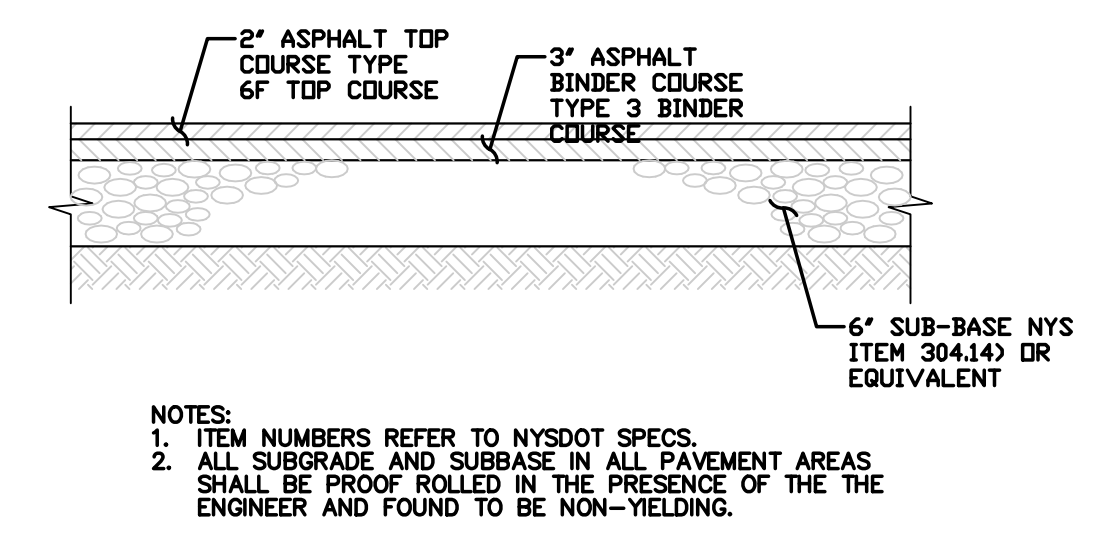


NOTE: 1. EXPANSION JOINTS 3/4 INCH IN WIDTH SHALL BE FORMED WITH "PREMOULDED RESILIENT JOINT FILLER," (ASTM D 1751) PLACED AT 10 FOOT INTERVALS OR SPECIFIED BY ENGINEER. THE FILLER MATERIAL SHALL BE CUT TO CONFORM TO THE CROSS SECTION OF THE CURB OR CURB AND GUTTER. WHEN CURB IS CAST ADJACENT TO CEMENT CONCRETE PAVEMENT CONSTRUCTED WITH EXPANSION JOINTS, EXPANSION JOINTS IN THE CURB OR CURB AND GUTTER SHALL BE LOCATED AT EXPANSION JOINTS IN THE PAVEMENT.
2. SIDEWALKS SHALL BE 5' IN WIDTH. WIDTHS LESS THAN 5' WILL BE ALLOWED ONLY IF EXISTING CONDITIONS PROHIBIT A 5' WIDTH AND A.O.B.E. A MAXIMUM WIDTH OF 6' WILL BE PERMITTED IF THE LOCATION OF AN EXISTING STONE WALL IS WITHIN 6' OF THE CURB. DO NOT LEAVE GRASS STRIPS LESS THAN 1" WIDE BETWEEN SIDEWALK AND ANY STONE WALL.

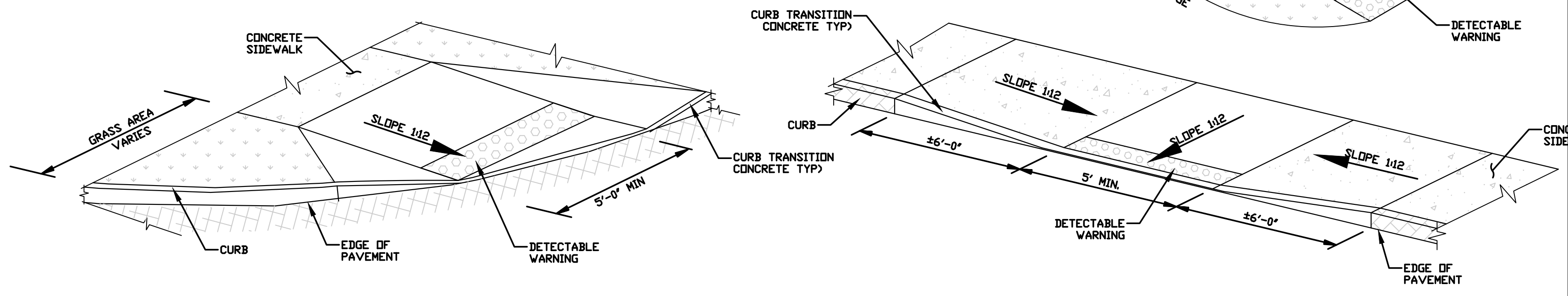
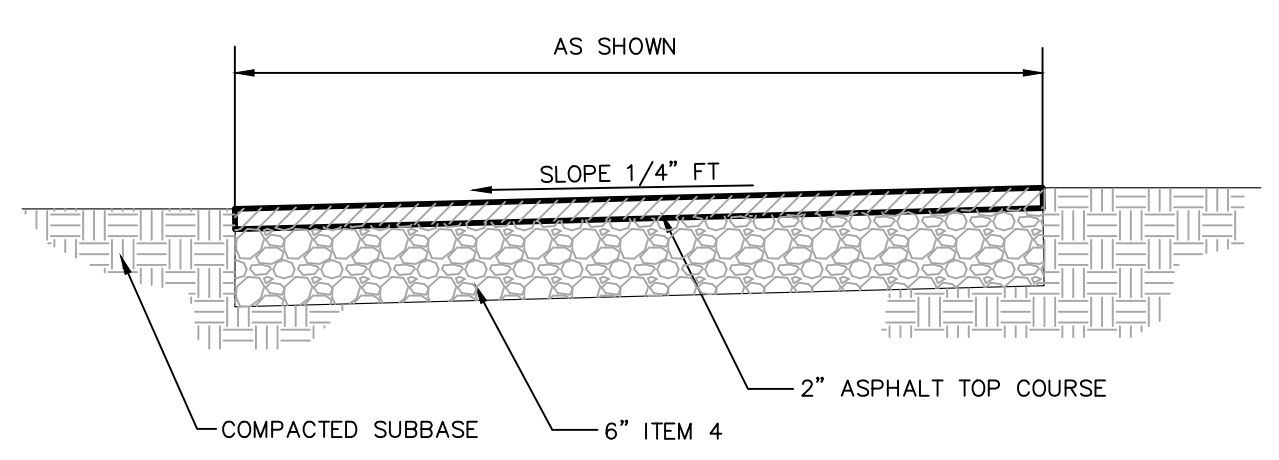
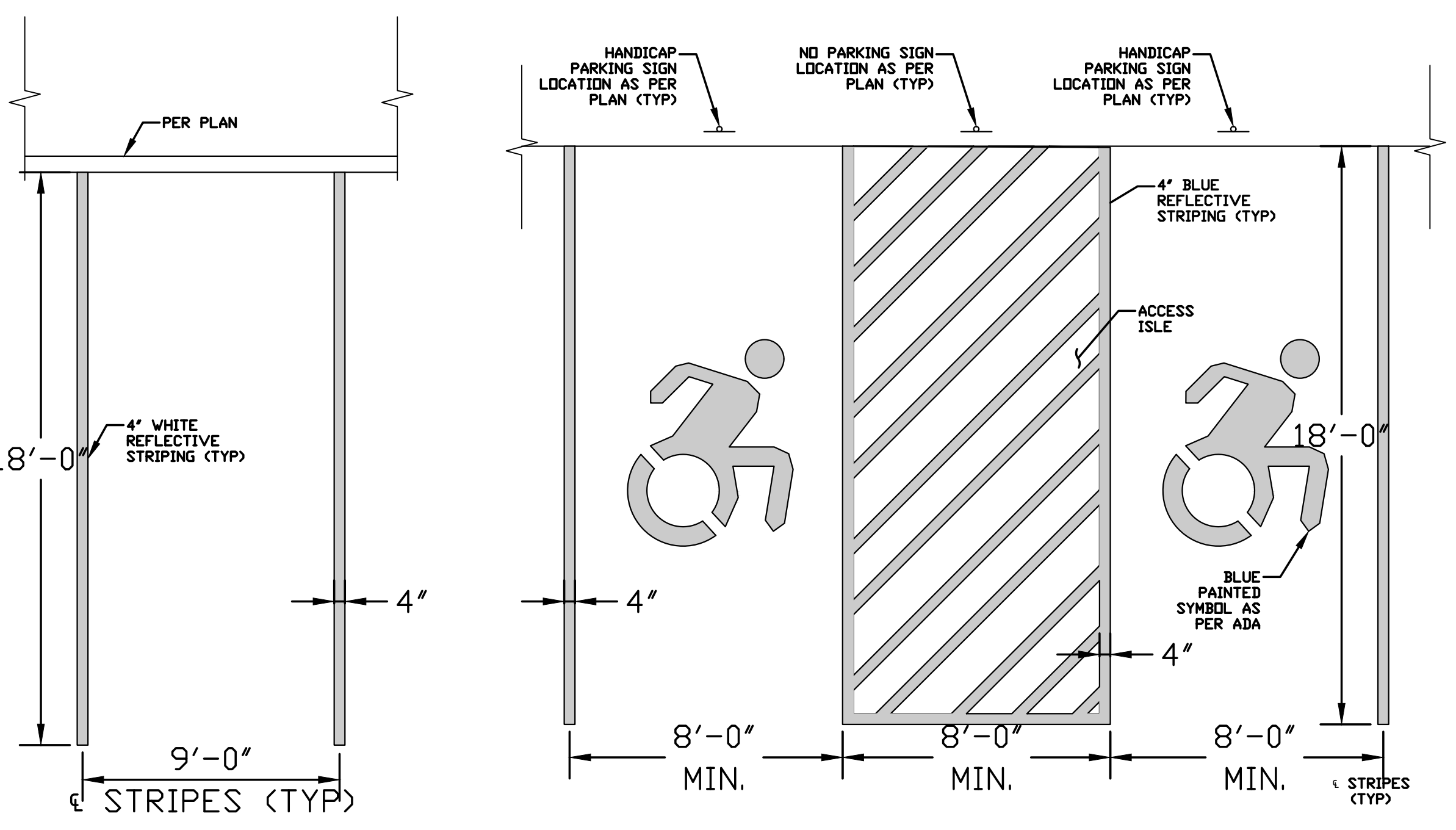


SIDEWALK CURB RAMP NOTES:

- There shall be a landing at the top of each curb ramp.
- Landings shall have a minimum clear dimension of 5 feet by 5 feet square. The maximum cross slope of landings is 2 percent in any direction. Landings may overlap with adjacent landings or a single landing may serve multiple curb ramps or parallel/perpendicular ramps.
- The maximum cross slope of curb ramps shall be 2 percent. Curb ramp surfaces shall generally lie in continuous planes with a minimum of surface warp.
- The running grade of curb ramps should be as flat as practicable. The maximum running grade of any portion of any curb shall be 1:12 (8.3%).
- Curb ramps located where pedestrians may walk across the curb ramp shall have flared sides. The length of the flares shall be at least ten (10) times the curb height, measured along the curb line. When infeasible or impracticable to provide a landing that is at least 5 feet wide (measured from the top of the ramp to the back of the sidewalk), the length of the flares shall be twelve (12) times the curb height measured along the curb line.
- The surface of all curb ramps shall be stable, firm and slip resistant. A coarse broom finish running perpendicular to the slope is recommended on concrete ramp surfaces, exclusive of the detectable warning fields.
- Ramp transitions between walks, gutters, or streets shall be flush and free of abrupt vertical changes.
- Coordinate all traffic control devices, utility locations, signs, street furniture and drainage to ensure a continuous pedestrian access route at all curb ramp locations. Guidance for crosswalk markings and traffic control devices is provided in the MUTCD. Drainage grates and utility access covers are not allowed in ramp walking surfaces or landings unless approved by the engineer.
- At marked crossings, the full width of the ramp shall be wholly contained within the markings. The sides of the ramps (the flares) need not be within the width of the markings.
- Details illustrate that detectable warnings are required. See the current detectable warning standard detail and notes for specific detectable warning requirements.
- Slopes on blended transitions shall not be steeper than 2% (1 on 50) in any direction.
- All concrete shall be 3500 psi air entrained concrete.

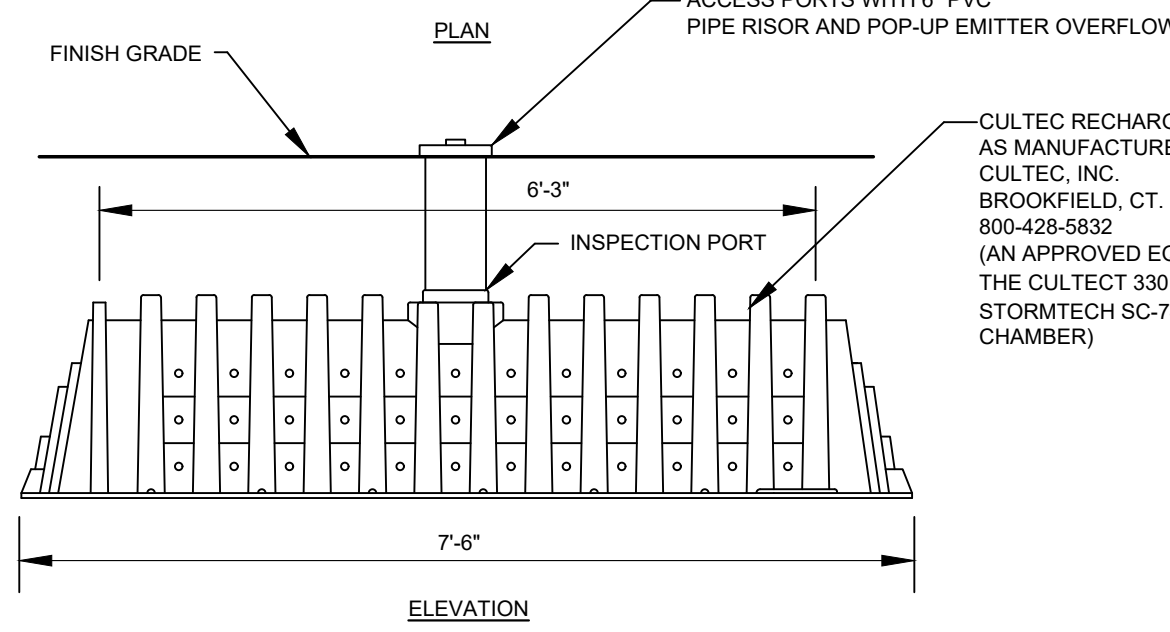
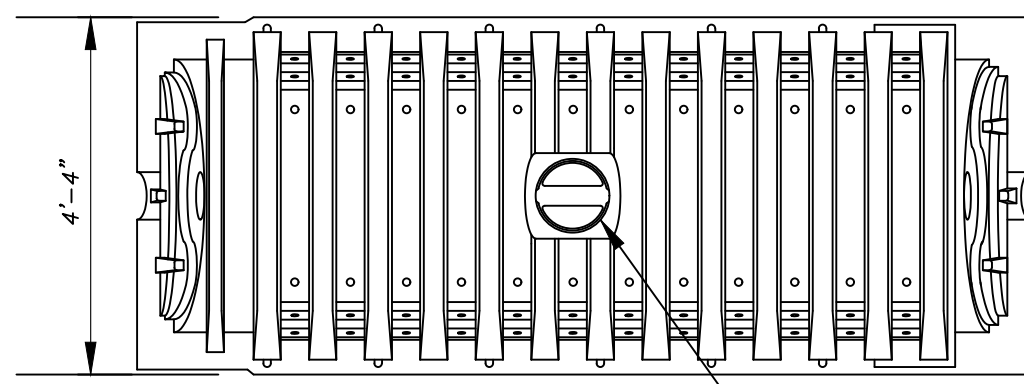


NOTES:
1. ITEM NUMBERS REFER TO NYSDOT SPECS.
2. ALL SUBGRADE AND SUBBASE IN ALL PAVEMENT AREAS SHALL BE PROOF ROLLED IN THE PRESENCE OF THE THE ENGINEER AND FOUND TO BE NON-YIELDING.

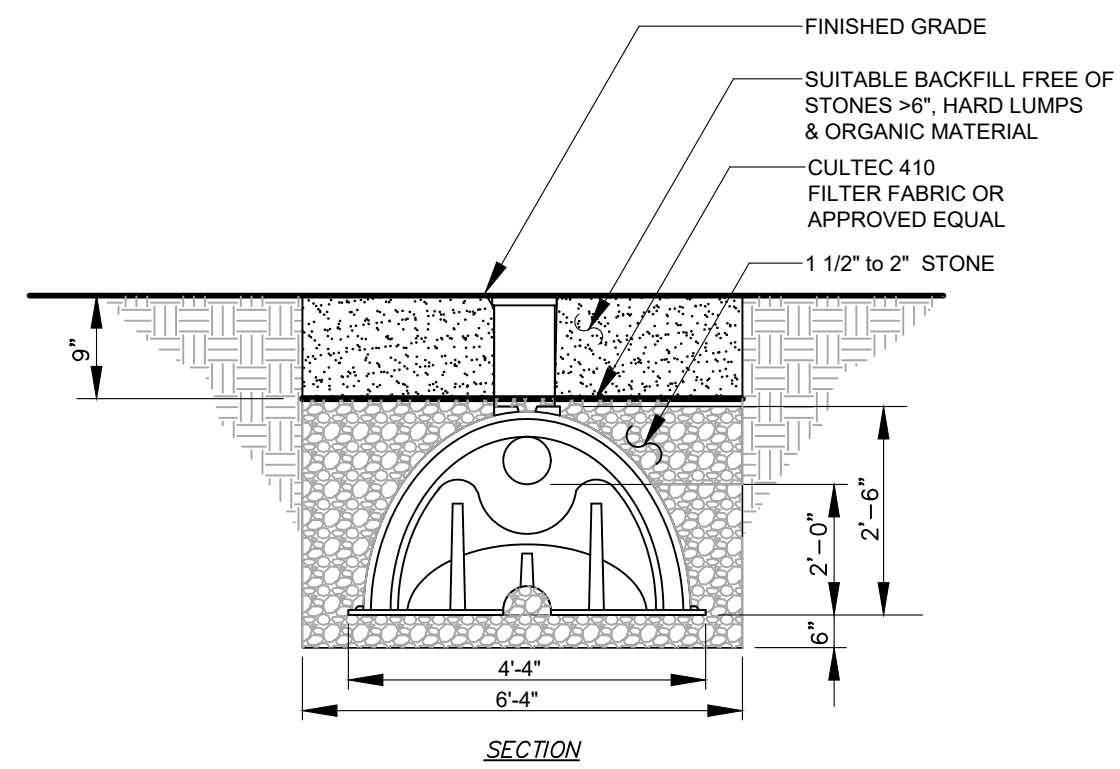


NOTES:
1. ALL SIDEWALKS AND RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH ALL CURRENT ADA STANDARDS.
2. CURB SHALL BE CAST IN PLACE CONCRETE WITH A STRENGTH OF 4,000 PSI AT 28 DAYS.
3. PEDESTRIAN RAMPS ALONG 17M SHALL BE INSTALLED AS PER NYSDOT STANDARD SHEET 608-01 SHEET 3 RAMP SIDE OPTION A: FLARED CONCRETE)

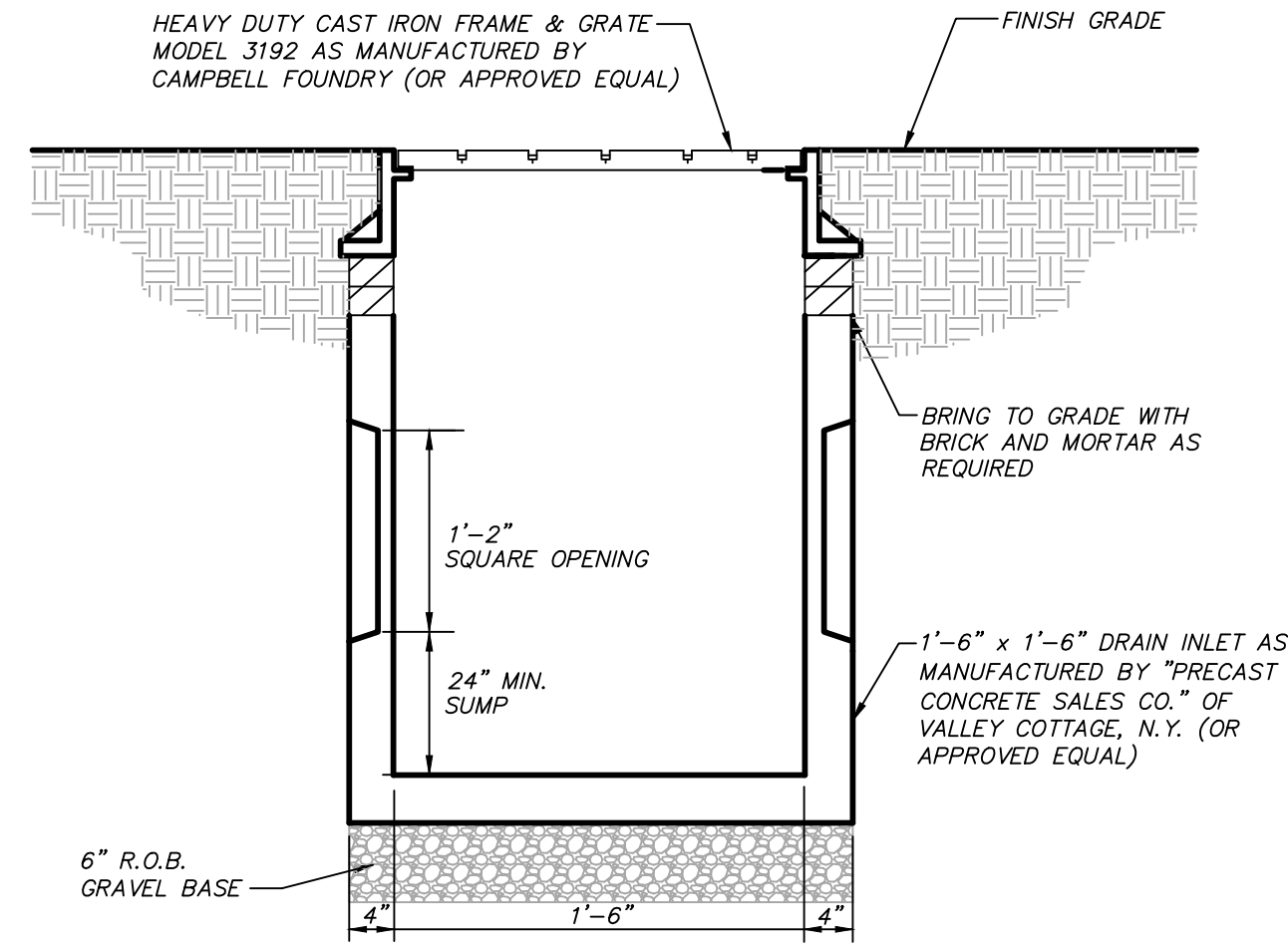
SIDEWALK CURB RAMP DETAILS
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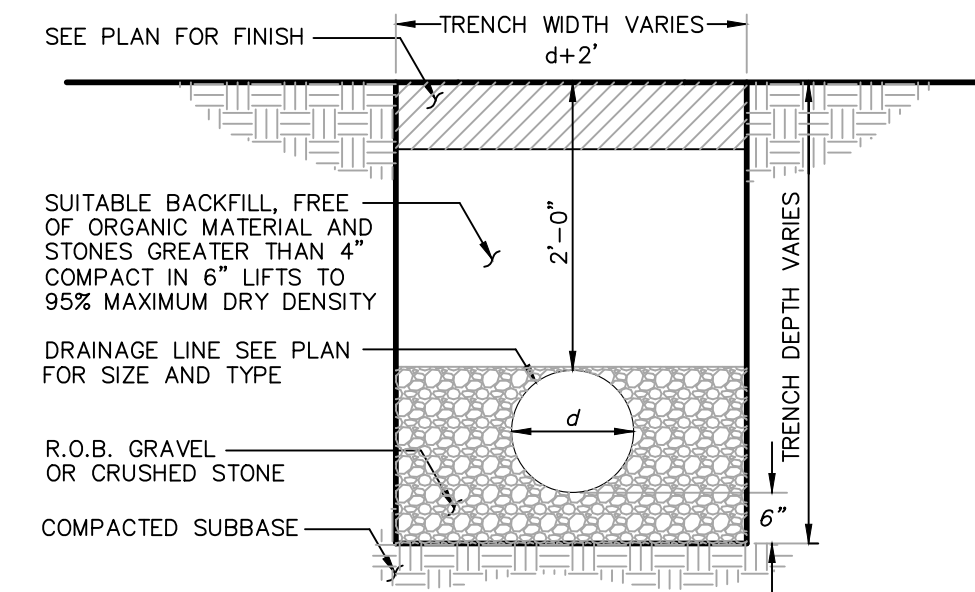
CULTEC RECHARGER 330 AS MANUFACTURED BY CULTEC, INC. BROOKFIELD, CT. 800-428-5832 (AN APPROVED EQUAL TO THE CULTEC 330 IS THE STORMTECH SC-740 CHAMBER)



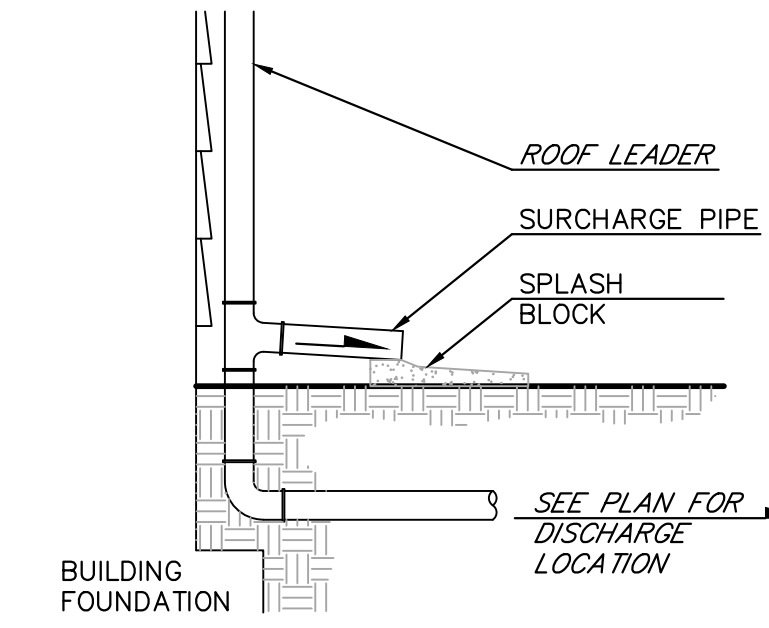
CULTEC 330 CHAMBER DETAIL
SCALE: N.T.S.



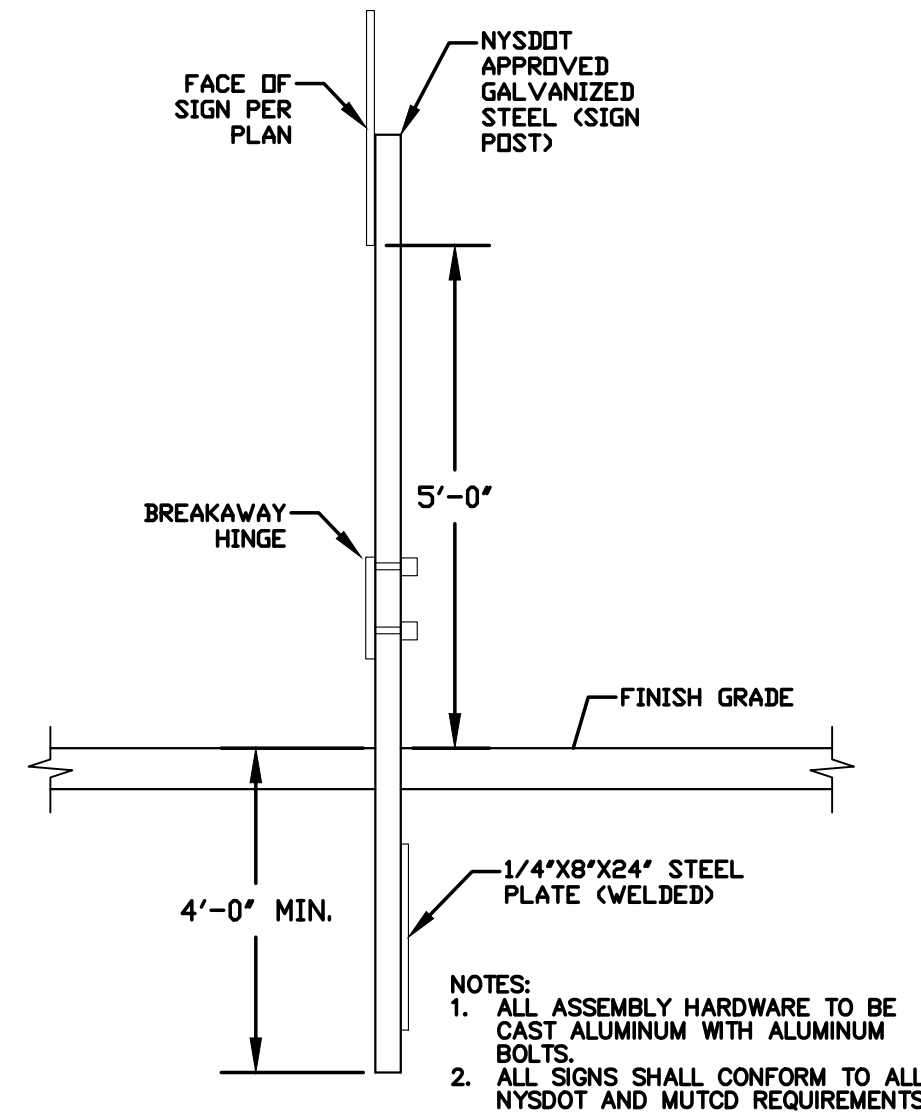
TYPICAL DRAIN INLET
SCALE: N.T.S.



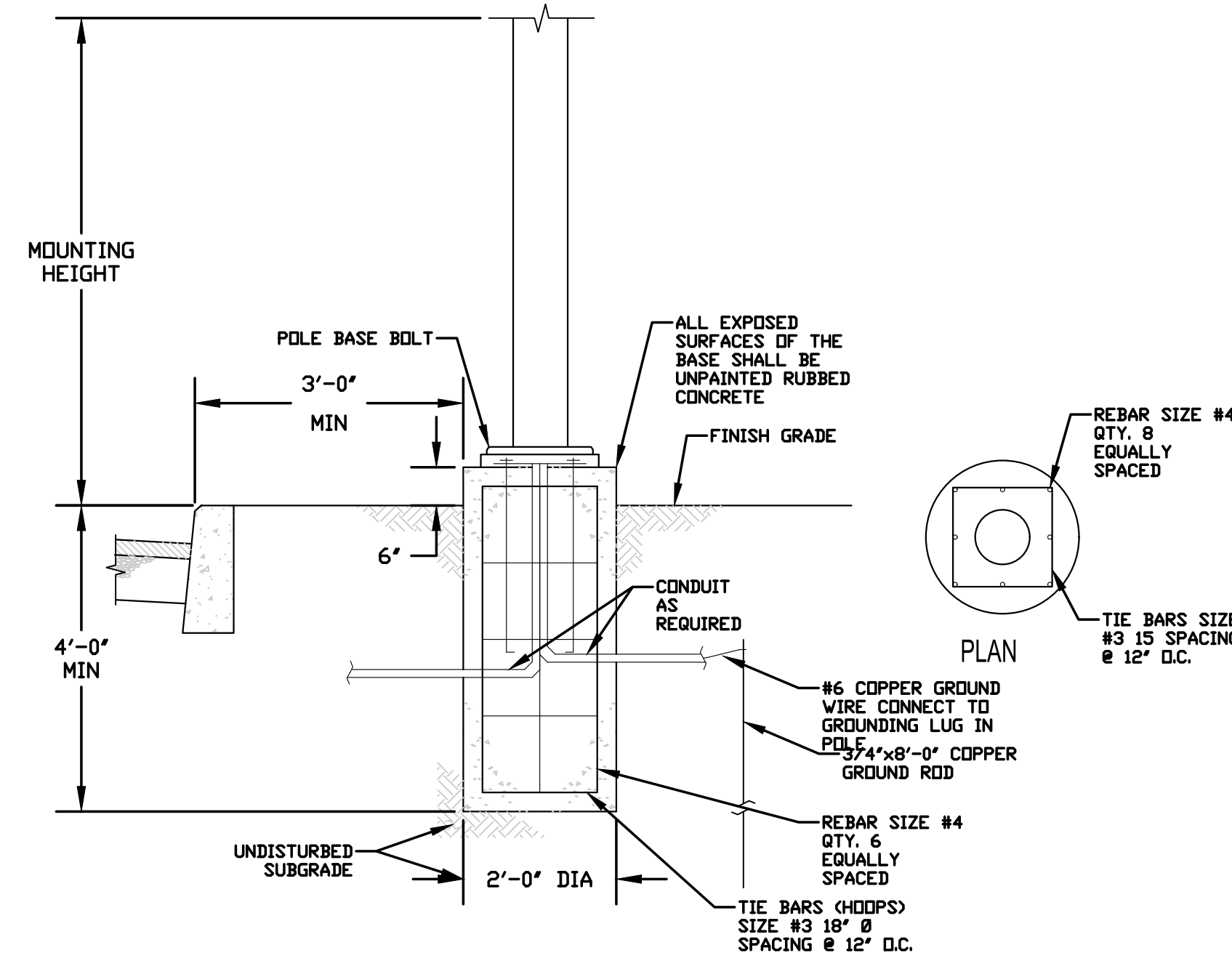
DRAINAGE TRENCH DETAIL
SCALE: N.T.S.



ROOF LEADER DETAIL
SCALE: N.T.S.



SIGN POST DETAIL DETAIL
SCALE: N.T.S.



LIGHT POLE BASE BEHIND CURB DETAIL
SCALE: N.T.S.

NO.	REVISION	DATE
1	REVISED PER VILLAGE CONSULTANT MEMO	9/1/23



LEGEND:

Applicant: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Owner: Dutchess Shepard LLC
333 Cedar Heights Road
Rhinebeck, NY 12572

Site Data: SITE ADDRESS: 6 Mulberry Street
Rhinebeck, NY
LOT SIZE: 1.44 AC
TAX MAP: 135001-6170-568209
Zoning: RB-35



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UNDER NEW YORK STATE EDUCATION LAW ARTICLE 145 (ENGINEERING), SECTION 7209 (E), IT IS A VIOLATION OF THIS LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT
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6 MULBERRY STREET
VILLAGE OF RHINEBECK
DUTCHESS COUNTY, NEW YORK

TITLE:
PRELIMINARY SITE DETAILS

Scale:	As Shown
Date:	April 1, 2023
Drawn By:	
Checked By:	BJH
Project No.:	
Sheet No.:	
Dwg. No.:	D-300

BRIAN HILDENBRAND, P.E.
LIC# 092374

NO.	REVISION	DATE
1	REVISED PER VILLAGE CONSULTANT MEMO	9/1/23



EROSION AND SEDIMENT CONTROL PLAN

THIS SWPPP AND ACCOMPANYING PROJECT PLANS IDENTIFY BOTH TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURES, WHICH HAVE BEEN DESIGNED IN ACCORDANCE WITH THE NEW YORK STATE STANDARDS AND SPECIFICATIONS FOR EROSION AND SEDIMENT CONTROL, LATEST REVISION. TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED DURING CONSTRUCTION TO MINIMIZE SOIL EROSION AND CONTROL SEDIMENT TRANSPORT OFF-SITE. PERMANENT EROSION AND SEDIMENT CONTROL MEASURES WILL BE IMPLEMENTED AFTER CONSTRUCTION TO CONTROL THE QUALITY AND QUANTITY OF STORMWATER RUNOFF FROM THE DEVELOPED SITE.

EROSION AND SEDIMENT CONTROL MEASURES

TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES TO BE UTILIZED DURING CONSTRUCTION GENERALLY INCLUDE THE FOLLOWING:

1. STABILIZED CONSTRUCTION ENTRANCE - PRIOR TO CONSTRUCTION, STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED TO REDUCE THE TRACKING OF SEDIMENT ONTO PUBLIC ROADWAYS. CONSTRUCTION TRAFFIC MUST ENTER AND EXIT THE SITE AT THE STABILIZED CONSTRUCTION ENTRANCE. THE ENTRANCE SHALL BE MAINTAINED IN GOOD CONDITION, WHICH WILL CONTROL TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY OR STREETS. WHEN NECESSARY, THE PLACEMENT OF ADDITIONAL AGGREGATE ATOP THE FILTER FABRIC SHALL BE DONE TO ASSURE THE MINIMUM THICKNESS IS MAINTAINED. ALL SEDIMENTS AND SOILS SPILLED, DROPPED, OR WASHED ONTO THE PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH SUBSTANTIAL RAINFALL EVENT.
2. DUST CONTROL - WATER TRUCKS SHALL BE USED, AS NEEDED, DURING CONSTRUCTION TO REDUCE DUST GENERATED ON THE SITE. DUST CONTROL MUST BE PROVIDED BY THE GENERAL CONTRACTOR TO A DEGREE THAT IS ACCEPTABLE TO THE OWNER/OPERATOR, AND IN COMPLIANCE WITH THE APPLICABLE LOCAL AND STATE DUST CONTROL REQUIREMENTS.
3. TEMPORARY SOIL STOCKPILE - MATERIALS, SUCH AS TOPSOIL, SHALL BE TEMPORARILY STOCKPILED (IF NECESSARY) ON THE SITE DURING THE CONSTRUCTION PROCESS. STOCKPILES SHALL BE LOCATED IN AN AREA AWAY FROM STORM DRAINAGE, WATER BODIES AND/OR COURSES, AND SHALL BE PROPERLY PROTECTED FROM EROSION BY A SURROUNDING SILT FENCE BARRIER OR HAY BALES WHEN LOCATED ON PAVED AREAS.
4. SILT FENCING - PRIOR TO THE INITIATION OF AND DURING CONSTRUCTION ACTIVITIES, SILT FENCING SHALL BE ESTABLISHED ALONG THE PERIMETER OF ALL AREAS TO BE DISTURBED AS A RESULT OF THE CONSTRUCTION WHICH LIE UP GRADIENT OF WATER COURSES OR ADJACENT PROPERTIES. THESE BARRIERS MAY EXTEND INTO NON-IMPACT AREAS TO ENSURE ADEQUATE PROTECTION OF ADJACENT LANDS. CLEARING AND GRUBBING SHALL BE PERFORMED ONLY AS NECESSARY FOR THE INSTALLATION OF THE SEDIMENT CONTROL BARRIER. TO ENSURE EFFECTIVENESS OF THE SILT FENCING, DAILY INSPECTIONS AND INSPECTIONS IMMEDIATELY AFTER SIGNIFICANT STORM EVENTS SHALL BE PERFORMED BY SITE PERSONNEL. MAINTENANCE OF THE FENCE SHALL BE PERFORMED AS NEEDED.
5. TEMPORARY SEEDING - WITHIN SEVEN DAYS AFTER CONSTRUCTION ACTIVITY CEASES ON ANY PARTICULAR AREA OF THE SITE, ALL DISTURBED AREAS WHERE THERE SHALL NOT BE CONSTRUCTION FOR LONGER THAN 14 DAYS SHALL BE TEMPORARILY SEEDED AND MULCHED TO MINIMIZE EROSION AND SEDIMENT LOSS.
6. TEMPORARY SEDIMENT BASIN - A TEMPORARY SEDIMENT BASIN SHALL BE CONSTRUCTED TO INTERCEPT SEDIMENT LADEN RUNOFF. REDUCE THE AMOUNT OF SEDIMENT LEAVING THE DISTURBED AREAS, AND PROTECT DRAINAGE WAYS, PROPERTIES, AND RIGHTS-OF-WAY. PROJECTS THAT HAVE PROPOSED STORMWATER PONDS CAN BE USED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION. TEMPORARY SEDIMENT BASINS SHALL BE INSPECTED AT LEAST EVERY SEVEN CALENDAR DAYS. ALL DAMAGES CAUSED BY SOIL EROSION AND CONSTRUCTION EQUIPMENT SHALL BE REPAIRED UPON DISCOVERY. ACCUMULATED SEDIMENT SHALL BE REMOVED FROM THE SEDIMENT BASIN/TRAP WHEN IT REACHES 50 PERCENT OF THE DESIGN CAPACITY AND SHALL NOT EXCEED 50 PERCENT. SEDIMENT SHALL NOT BE PLACED DOWNSTREAM FROM THE EMBANKMENT, ADJACENT TO A STREAM, OR FLOODPLAIN.
7. DEWATERING - DEWATERING, IF REQUIRED, SHALL NOT BE DISCHARGED DIRECTLY INTO WETLANDS, WATER COURSES, WATER BODIES, AND STORM SEWER SYSTEMS. PROPER METHODS AND DEVICES SHALL BE UTILIZED TO THE EXTENT PERMITTED BY LAW, SUCH AS PUMPING WATER INTO TEMPORARY SEDIMENT BASINS, PROVIDING SURGE PROTECTION AT THE INLET AND OUTLET OF PUMPS, FLOATING THE INTAKE OF THE PUMP, OR OTHER METHODS TO MINIMIZE AND RETAIN THE SUSPENDED SOLIDS.

PERMANENT EROSION AND SEDIMENT CONTROL MEASURES TO BE UTILIZED AFTER CONSTRUCTION GENERALLY INCLUDE THE FOLLOWING:

1. ESTABLISHMENT OF PERMANENT VEGETATION - DISTURBED AREAS THAT ARE NOT COVERED BY IMPERVIOUS SURFACES SHALL BE SEEDED IN ACCORDANCE WITH THE ACCOMPANYING PLANS. THE TYPE OF SEED, MULCH, AND MAINTENANCE MEASURES SHALL BE FOLLOWED. ALL AREAS AT FINAL GRADE SHALL BE SEEDED AND MULCHED WITHIN SEVEN (7) DAYS AFTER COMPLETION OF THE MAJOR CONSTRUCTION ACTIVITY. ALL SEEDED AREAS SHALL BE PROTECTED WITH MULCH AND/OR HAY. FINAL SITE STABILIZATION IS ACHIEVED WHEN ALL SOIL-DISTURBING ACTIVITIES AT THE SITE HAS BEEN COMPLETED AND A UNIFORM, PERENNIAL VEGETATIVE COVER WITH A DENSITY OF 80 PERCENT HAS BEEN ESTABLISHED OR EQUIVALENT STABILIZATION MEASURES (SUCH AS THE USE OF MULCHES OR GEOTEXTILES) HAVE BEEN EMPLOYED ON ALL UNPAVED AREAS AND AREAS NOT COVERED BY PERMANENT STRUCTURES.
2. FINAL SEEDING AND PLANTING - FINAL SEEDING AND PLANTING SHALL BE INSTALLED AS SHOWN ON THE ACCOMPANYING PLANS. FINAL SEEDING AND PLANTING WILL HELP MINIMIZE EROSION AND SEDIMENT LOSS.
3. ROCK OUTLET PROTECTION - ROCK OUTLET PROTECTION SHALL BE INSTALLED AT THE LOCATIONS AS SHOWN ON THE ACCOMPANYING PLANS. THE INSTALLATION OF ROCK OUTLET PROTECTION WILL REDUCE THE DEPTH, VELOCITY, AND ENERGY OF WATER, SUCH THAT THE FLOW WILL NOT ERODE THE RECEIVING WATER COURSE OR WATER BODY.

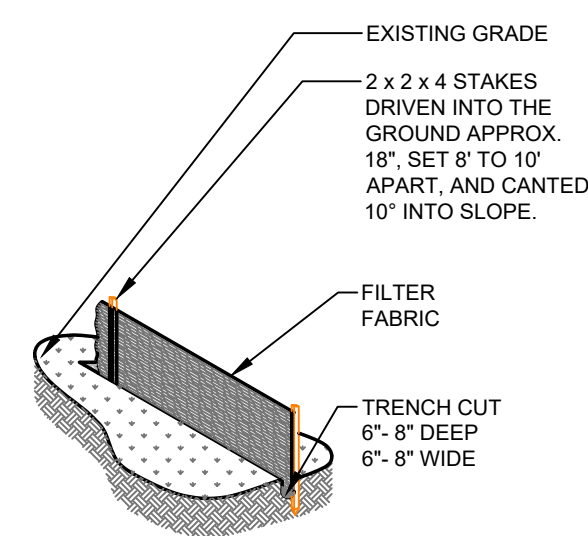
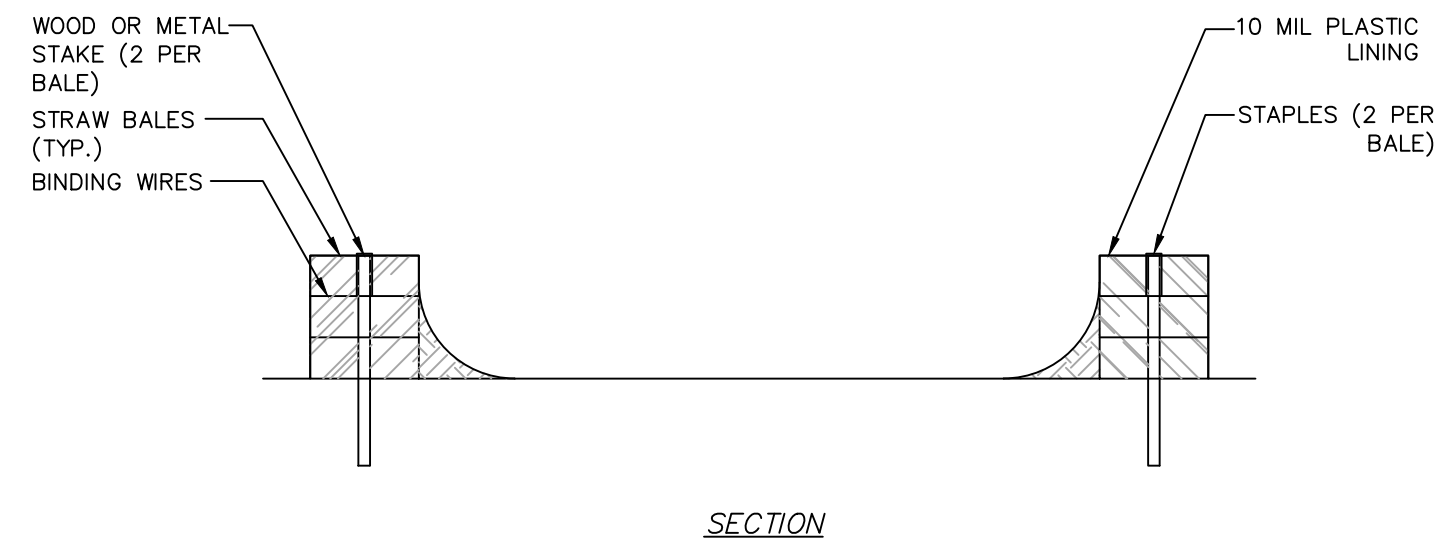
SPECIFIC EROSION AND SEDIMENT CONTROL MEASURES, INSPECTION FREQUENCY, AND REMEDIATION PROCEDURES ARE PROVIDED IN THE SUBSEQUENT SECTIONS AND ON THE ACCOMPANYING PROJECT PLANS.

POLLUTION PREVENTION CONTROLS

GOOD HOUSEKEEPING PRACTICES ARE DESIGNED TO MAINTAIN A CLEAN AND ORDERLY WORK ENVIRONMENT. GOOD HOUSEKEEPING MEASURES SHALL BE MAINTAINED THROUGHOUT THE CONSTRUCTION PROCESS BY THOSE PARTIES INVOLVED WITH THE DIRECT CARE AND DEVELOPMENT OF THE SITE. THE FOLLOWING MEASURES SHOULD BE IMPLEMENTED TO CONTROL THE POSSIBLE EXPOSURE OF HARMFUL SUBSTANCES AND MATERIALS TO STORMWATER RUNOFF:

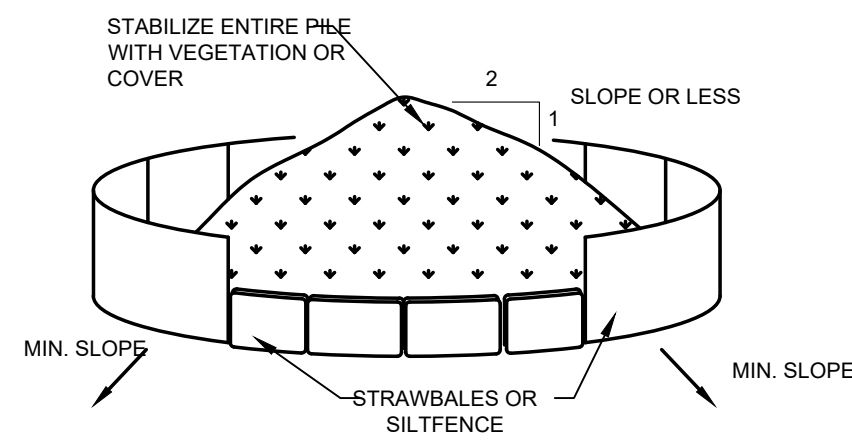
1. MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATION SHALL BE STOCKPILED AWAY FROM STORM DRAINAGE, WATER BODIES AND/OR WATERCOURSES AND SURROUNDED WITH ADEQUATE EROSION AND SEDIMENT CONTROL MEASURES. SOIL STOCKPILE LOCATIONS SHALL BE EXPOSED NO LONGER THAN 14 DAYS BEFORE SEEDING.
2. EQUIPMENT MAINTENANCE AREAS SHALL BE PROTECTED FROM STORMWATER FLOWS AND SHALL BE SUPPLIED WITH APPROPRIATE WASTE RECEPTACLES FOR SPENT CHEMICALS, SOLVENTS, OILS, GREASES, GASOLINE, AND ANY POLLUTANTS THAT MIGHT CONTAMINATE THE SURROUNDING HABITAT AND/OR WATER SUPPLY. EQUIPMENT WASH-DOWN ZONES SHALL BE LOCATED WITHIN AREAS DRAINING TO SEDIMENT CONTROL DEVICES.
3. THE USE OF DETERGENTS FOR LARGE-SCALE (I.E., VEHICLES, BUILDINGS, PAVEMENT SURFACES, ETC.) WASHING IS PROHIBITED.
4. MATERIAL STORAGE LOCATIONS AND FACILITIES (I.E., COVERED STORAGE AREAS, STORAGE SHEDS, ETC.) SHALL BE LOCATED ONSITE AND SHALL BE STORED ACCORDING TO THE MANUFACTURER'S STANDARDS IN A DESIGNATED STAGING AREA. CHEMICALS, PAINTS, SOLVENTS, FERTILIZERS, AND OTHER TOXIC MATERIAL MUST BE STORED IN WATERPROOF CONTAINERS. RUNOFF CONTAINING SUCH MATERIALS MUST BE COLLECTED, REMOVED FROM THE SITE, TREATED AND DISPOSED AT AN APPROVED SOLID WASTE OR CHEMICAL DISPOSAL FACILITY.
5. HAZARDOUS SPILLS SHALL BE IMMEDIATELY CONTAINED TO PREVENT POLLUTANTS FROM ENTERING THE SURROUNDING HABITAT AND/OR WATER SUPPLY. SPILL KITS SHALL BE PROVIDED ONSITE AND SHALL BE DISPLAYED IN A PROMINENT LOCATION FOR EASE OF ACCESS AND USE. SPILLS GREATER THAN FIVE (5) GALLONS SHALL BE REPORTED TO THE NYSDEC RESPONSE UNIT AT 1-800-457-7362. IN ADDITION, A RECORD OF THE INCIDENT(S) AND/OR NOTIFICATIONS SHALL BE DOCUMENTED AND ATTACHED TO THE SWPPP.
6. PORTABLE SANITARY WASTE FACILITIES SHALL BE PROVIDED ONSITE FOR WORKERS AND SHALL BE PROPERLY MAINTAINED.
7. DUMPSTERS AND/OR DEBRIS CONTAINERS SHALL BE LOCATED ONSITE AND SHALL BE OF ADEQUATE SIZE TO MANAGE RESPECTIVE MATERIALS. REGULAR COLLECTION AND DISPOSAL OF WASTES SHALL OCCUR AS REQUIRED.
8. TEMPORARY CONCRETE WASHOUT FACILITIES SHOULD BE LOCATED A MINIMUM OF 50 FEET FROM STORM DRAIN INLETS, OPEN DRAINAGE FACILITIES, AND WATERCOURSES. EACH FACILITY SHOULD BE LOCATED AWAY FROM CONSTRUCTION TRAFFIC OR ACCESS AREAS TO PREVENT DISTURBANCE OR TRACKING. A SIGN SHOULD BE INSTALLED ADJACENT TO EACH WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. WHEN TEMPORARY CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE SHALL BE REMOVED AND DISPOSED OF. MATERIALS USED TO CONSTRUCT THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED AND DISPOSED OF. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED AND/OR REPAIRED, SEEDED, AND MULCHED FOR FINAL STABILIZATION.
9. NON-STORMWATER COMPONENTS OF SITE DISCHARGE MUST BE CLEAN WATER. WATER USED FOR CONSTRUCTION, WHICH DISCHARGES FROM THE SITE, MUST ORIGINATE FROM A PUBLIC WATER SUPPLY OR PRIVATE WELL APPROVED BY THE HEALTH DEPARTMENT. WATER USED FOR CONSTRUCTION THAT DOES NOT ORIGINATE FROM AN APPROVED PUBLIC SUPPLY MUST NOT DISCHARGE FROM THE SITE. IT CAN BE RETAINED IN THE PONDS UNTIL IT INFILTRATES AND EVAPORATES.

GENERAL SITE EROSION CONTROL INSPECTION AND MAINTENANCE TABLE			
MAINTENANCE ITEM	FREQUENCY	DESCRIPTION OF INSPECTION PARAMETERS	DESCRIPTION OF REMEDY PROCEDURES
SITE STRUCTURES	ANNUAL & AFTER MAJOR STORMS	-ACCUMULATED SEDIMENT IN CATCH BASIN SUMPS	-REMOVE
		-ACCUMULATED DEBRIS AND LITTER	-REMOVE
		-DAMAGE OR FATIGUE OF STORM STRUCTURES OR ASSOC. COMPONENTS	-REPAIR AND/OR REPLACE, AS NECESSARY
PAVEMENT	BIANNUAL/ANNUAL	-ACCUMULATION OF POLLUTANTS, INCLUDING OILS OR GREASE, IN CATCH BASIN SUMPS	-REMOVE POLLUTANTS FROM CATCH BASINS. REMOVE AND/OR REPAIR POLLUTANT SOURCE
		-ACCUMULATED SEDIMENT IN PAVED AREAS	-REMOVE (SWEEP MIN 2 TIMES/YEAR)
		-ACCUMULATED DEBRIS AND LITTER	-REMOVE
EMBANKMENTS	ANNUAL	-DIFFERENTIAL SETTLEMENT OF EMBANKMENTS	-STABILIZE AND RESTORE TO ORIGINAL SPECIFICATIONS
		-EMBANKMENT EROSION	-STABILIZE AND RESTORE TO ORIGINAL SPECIFICATIONS
		-ANNUAL BURROWS	-REMOVE
LAWN AND LANDSCAPED AREAS	ANNUAL	-CRACKING, BULGING, OR SLIDING OF EMBANKMENT	-STABILIZE AND RESTORE TO ORIGINAL SPECIFICATIONS
		-VEGETATION: 80% COVERAGE + LESS THAN 15% INVASIVE PLANT SPECIES	-RESTORE TO ORIGINAL SPECIFICATIONS AS PER PLANTING PLAN
		-UNAUTHORIZED PLANTINGS	-REMOVE
WINTER MAINTENANCE	MONTHLY	-UNDESIRABLE VEGETATIVE GROWTH	-MOW A MIN. OF 3 TIMES A YEAR. MAY INCREASE FOR AESTHETIC REASONS.
		-ACCUMULATED DEBRIS AND LITTER	-REMOVE
		-ACCUMULATION OF SNOW AND ICE ON CATCH BASINS, INLET AND OUTLET STRUCTURES, AND END SECTIONS	-REMOVE
		-STOCK PILED SNOW NEAR INLETS AND OUTLETS	-REMOVE
		-REMAINING DEICING MATERIALS	-REMOVE IN EARLY SPRING BY SWEEPING



NOTE: AFTER FOLDING FABRIC EDGE, BACKFILL TRENCH WITH ORIGINAL SOIL AND BUTTRESS THE SPLY WITH MULCH OR LEAF LITTER.

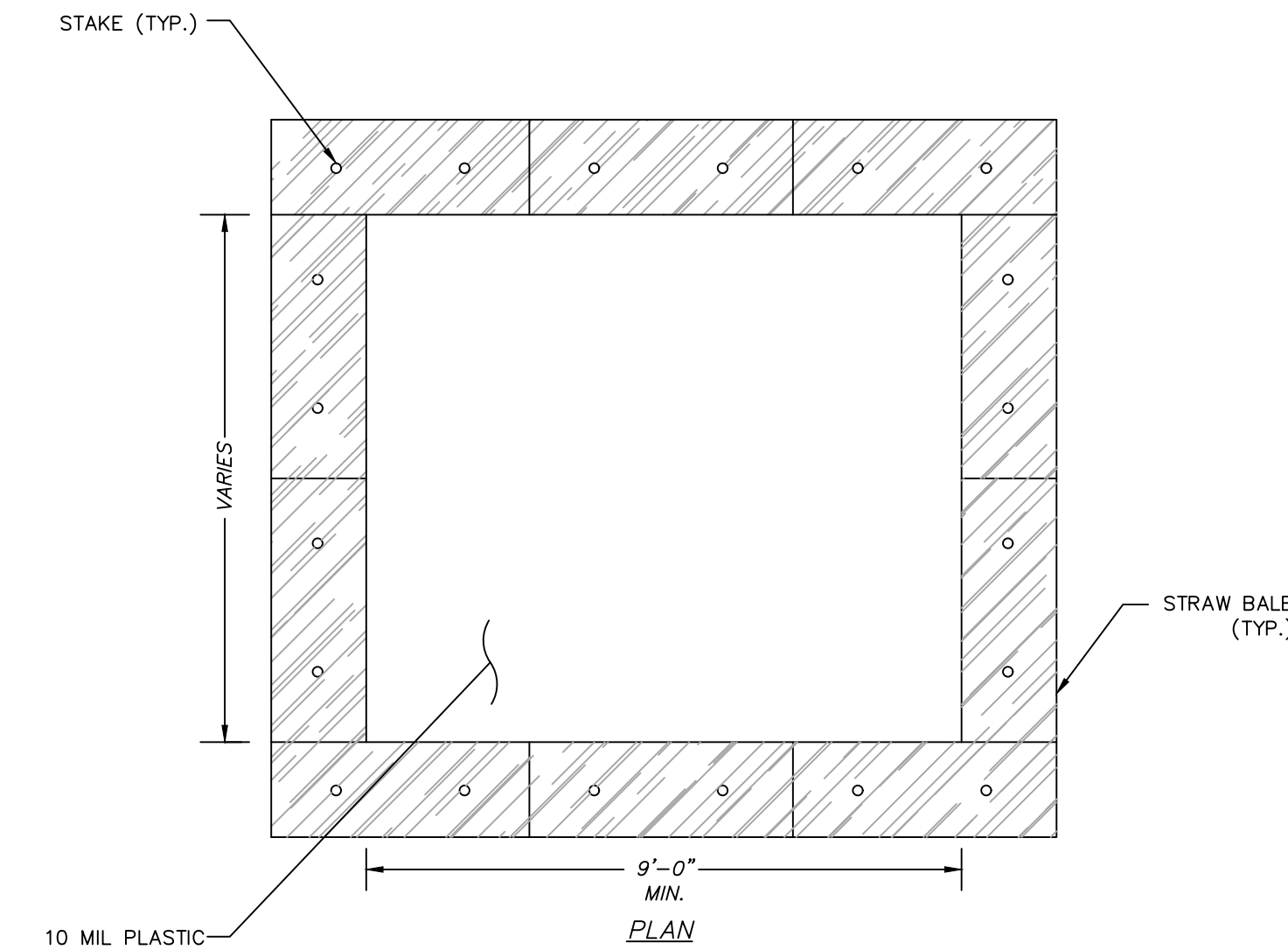
SILT FENCE DETAIL SCALE: N.T.S.



INSTALLATION NOTES:

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

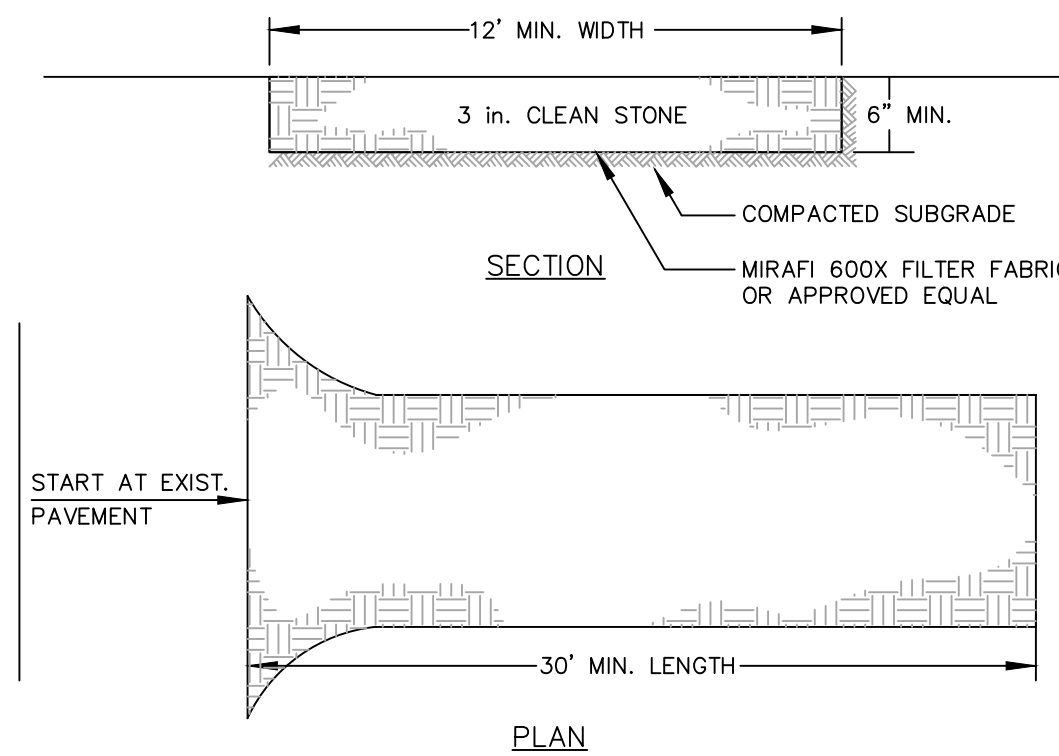
SOIL STOCKPILING DETAIL SCALE: N.T.S.



NOTES

1. TEMPORARY CONCRETE WASHOUT TYPE ABOVE GRADE WILL BE CONSTRUCTED AS SHOWN ABOVE, WITH RECOMMENDED MINIMUM LENGTH AND MINIMUM WIDTH OF 10 FT.
2. THE WASHOUT WILL BE MINIMUM OF 50 FT FROM STORM DRAIN INLETS.
3. PLASTIC LINING WILL BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.

CONCRETE WASHOUT DETAIL SCALE: N.T.S.



INSTALLATION NOTES

1. STONE SIZE - USE 3" STONE
2. LENGTH - AS REQUIRED, BUT 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 - 10 FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCUR.
5. FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER CLOTH WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
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 RIGHT OF WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY.
8. WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
9. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

STABILIZED CONSTRUCTION ENTRANCE DETAIL SCALE: N.T.S.

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Rhinebeck, NY 12572

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6 MULBERRY STREET
VILLAGE OF RHINEBECK
DUTCHESS COUNTY, NEW YORK

TITLE: PRELIMINARY EROSION CONTROL DETAILS

Scale: As Shown
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BRIAN HILDENBRAND, P.E.
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